

FEB. '22

STRUCTURAL DESIGN REPORT

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INTRODUCTION

The designs presented in this report consists of beams, columns, slabs and footings of a three-storey reinforced concrete structure. The various components are modelled and analysed with PROTASTRUCTURE and RC CONCRETE EXCEL SPREADSHEET. The components are designed to resist lateral loads, as well as withstand loads imposed at various periods of its usability. Lateral loads emanating from seismic concerns have also been included in the design similarly. Wind loading was factored in the design.

The components were modelled into various sections using concrete material and maintaining their heights to analyse the effect of wind and earthquake on them.

Material strengths and properties

Concrete grade, f_{cu} : 30N/mm²

Unit Weight of Concrete: 24kN/m³

Steel grade, f_y : 460N/mm²

Minimum bar diameter: 12mm

Structural Detailing and supervision

The drawings accompanying this report are intended to guide the construction process. The Structural Engineer expects that supervision is carried out by suitably qualified professional and may consult the structural designer where need be.

Design Codes and Design Guides

The following codes guided the selection of loads, the analysis and design:

1. The load selection and computation was guided by BS 6399 Part1:1996 *Code of practice for Dead and Imposed load*
2. Seismic load generation was based on Uniform Building Code, UBC 1997
3. Concrete Design was based on BS 8110:1-3

Load Cases and Combinations

34.5 Primary Load Cases

Six (6) primary load cases were analysed:

Earthquake loads in two principal direction

Ground acceleration of 0.2g was used to generate the seismic loads on the foundation structure in the X, and Z directions

Dead loads

The total Dead Loads approximate to 7.1kN/m^2 was applied to the suspended floors(First and Second Floors) and 2.5kN/m^2 at the roof.

Imposed loads

An imposed load applied range from 1.5kN/m^2 - 4.8kN/m^2 depending on the use of floor and guided by BS 6399 Part1:1996 *Code of practice for Dead and Imposed load*.

Load combinations

A total of Twenty-six (25) load combinations were considered based on the recommendations in the Civil Technical Specification and UBC 1997.

Implementing software

The structural frames were modelled in 3D for analysis and design. Modelling, analysis and design were implemented using PROTASTRUCTURE, a popular Structural Engineering Software.

The foundations reactions were transferred to PROTASTRUCTURE.

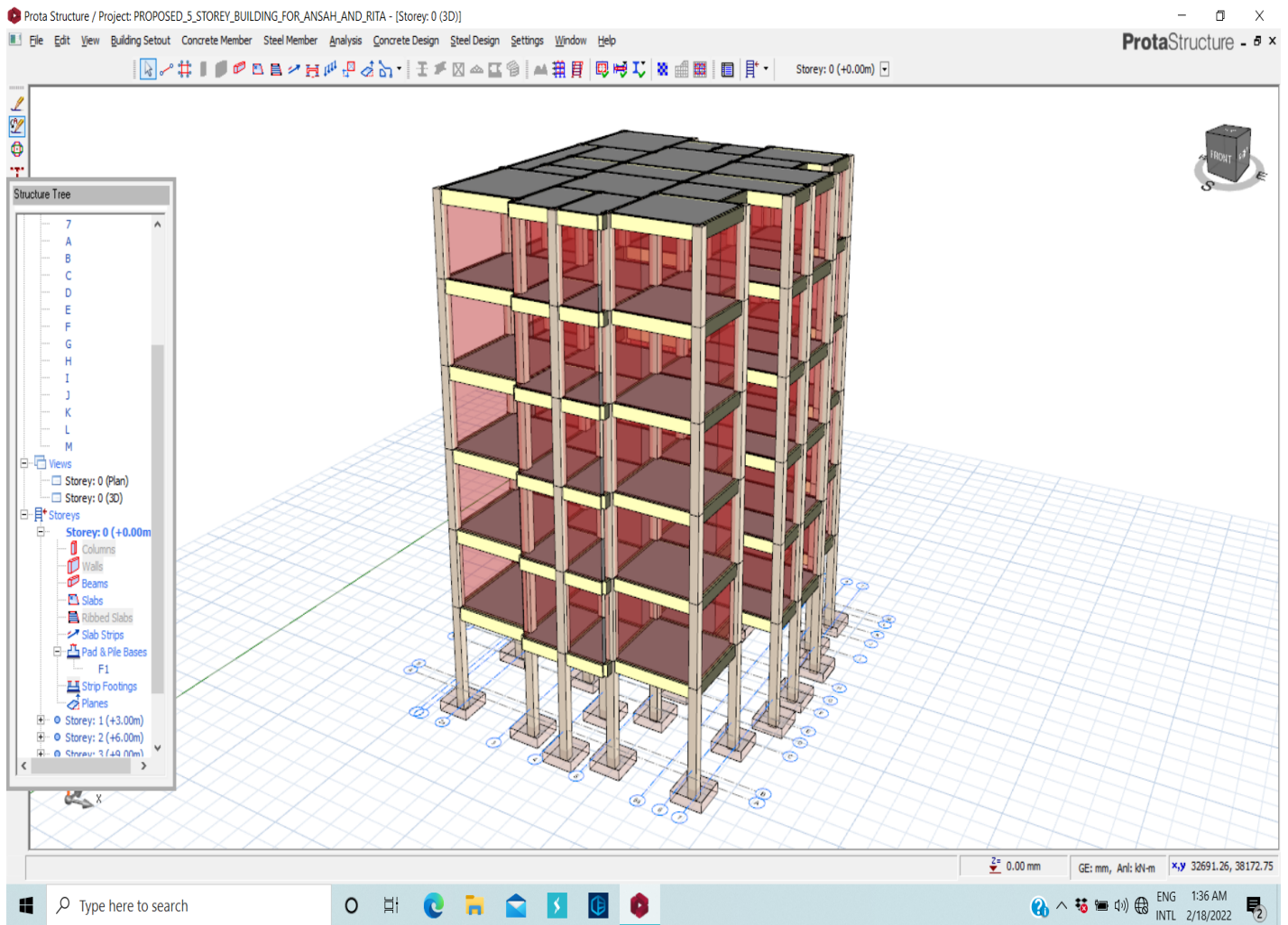
The Report

Modelling in 3D gives a better and economic analysis results because it is close to the actual construction. However, it generates a rather large volume of information that runs into thousands of pages, thus discouraging a printout of the entire input and output files. This report is thus an extract of the calculation processes and results for the analysis and design of the three storey reinforced concrete structure. The design contained in this report assumes a three-storey reinforced concrete building supported on isolated footings. Reactions calculated at these supports are designed for at the foundation.

February, 2022

APPENDIX

STRUCTURAL MODEL



SLAB

PROPOSED 5-STOREY ADMINISTRATION BLOCK	Fenerbahce Kadikoy (0001907)
Slab Reinforcement Design 1 15/02/2021 Rev: 1	Calc. By: SAMORA Checked By: MICHAEL

Slab Reinforcement Design

LEGEND:

d/h = Slab Effective/Total Depths (d=h-cover)
 g/q = Dead/Live Loads (not factored)
 L1 = Width of the Slab Along the Strip Direction
 L2 = Width of the Slab Perpendicular to the Strip Direction
 C = Moment Coefficient $M=C p / L^2$
 M-span = Ultimate Span Moment
 M-sup = Ultimate Support Moment
 Mc = Balanced Support Moment
 As = Steel Area (Required/Supplied)

Slab Strip: X1 -- Storey: 1

Materials: C25/30 / Grade 250 (Plain)

Slab	Type d/h (mm)	g q (kN/m2)	L1 L2 (mm)	C-sup M-sup (kN.m)	C-span M-span (kN.m)	As Req/Sup (mm2)	S T E E L B A R S
Support Mc = 0.7Support As = 322.78/251.33 (X) SupTop: R8-							
200 (T1)							
1S1	1 121/150	5.600 3.000	4025.00 4050.00	0.0314 5.8	0.0242 4.5	322.78/287.23 (X)	StrBot: R8-175 (B1)
Support Mc = 5.1Support As = 322.78/251.33 (X) SupTop: R8-							
200 (T1)							
1S8	1 121/150	5.600 3.000	2675.00 2846.40	0.0348 2.9	0.0266 2.2	322.78/287.23 (X)	StrBot: R8-175 (B1)
Support Mc = 2.9Support As = 322.78/251.33 (X) SupTop: R8-							
200 (T1)							
1S9	1 121/150	5.600 3.000	2150.00 2846.40	0.0470 2.5	0.0355 1.9	322.78/287.23 (X)	StrBot: R8-175 (B1)
Support Mc = 2.2Support As = 322.78/251.33 (X) SupTop: R8-							
200 (T1)							
1S10	1 121/150	5.600 3.000	1475.00 2846.40	0.0619 1.5	0.0469 1.2	322.78/287.23 (X)	StrBot: R8-175 (B1)
Support Mc = 5.4Support As = 301.43/201.06 (X) SupTop: R8-							
250 (T1)							
1S11	1 113/150	5.600 3.000	4650.00 4050.00	0.0320 6.0	0.0240 4.5	301.43/251.33 (X)	StrBot: R8-200 (B2)
Support Mc = 0.7 Support As = 301.43/0.00							

Slab Strip: X2 -- Storey: 1

Materials: C25/30 / Grade 250 (Plain)

PROPOSED 5-STOREY ADMINISTRATION BLOCK	Fenerbahce Kadikoy (0001907)
Slab Reinforcement Design 1 15/02/2021 Rev: 1	Calc. By: SAMORA Checked By: MICHAEL

Slab	Type d/h (mm)	g q (kN/m2)	L1 L2 (mm)	C-sup M-sup (kN.m)	C-span M-span (kN.m)	As Req/Sup (mm2)	S T E E L B A R S
Support Mc = 0.0Support As = 301.43/201.06 (X) SupTop: R8-							
250 (T1)							
1S7	1 113/150	5.600 3.000	6300.00 1203.60	0.0000 0.0	0.0000 0.0	301.43/251.33 (X)	StrBot: R8-200 (B2)
Support Mc = 0.0 Support As = 301.43/0.00							

Slab Strip: X3 -- Storey: 1

Materials: C25/30 / Grade 250 (Plain)

Slab	Type d/h (mm)	g q (kN/m2)	L1 L2 (mm)	C-sup M-sup (kN.m)	C-span M-span (kN.m)	As Req/Sup (mm2)	S T E E L B A R S
Support Mc = 0.2Support As = 322.78/251.33 (X) SupTop: R8-							
200 (T1)							
1S2	1 121/150	5.600 3.000	1950.00 2100.00	0.0356 1.6	0.0271 1.2	322.78/287.23 (X)	StrBot: R8-175 (B1)
Support Mc = 5.5Support As = 322.78/251.33 (X) SupTop: R8-							
200 (T1)							
1S6	1 121/150	5.600 3.000	4150.00 4300.00	0.0332 6.6	0.0254 5.0	322.78/287.23 (X)	StrBot: R8-175 (B1)
Support Mc = 0.8 Support As = 322.78/0.00							

Slab Strip: X4 -- Storey: 1

Materials: C25/30 / Grade 250 (Plain)

Slab	Type d/h (mm)	g q (kN/m2)	L1 L2 (mm)	C-sup M-sup (kN.m)	C-span M-span (kN.m)	As Req/Sup (mm2)	S T E E L B A R S
Support Mc = 0.7Support As = 322.78/251.33 (X) SupTop: R8-							
200 (T1)							
1S12	1 121/150	5.600 3.000	3425.00 4300.00	0.0442 6.0	0.0337 4.5	322.78/287.23 (X)	StrBot: R8-175 (B1)
Support Mc = 4.6Support As = 301.43/201.06 (X) SupTop: R8-							
250 (T1)							
1S14	1 113/150	5.600 3.000	3300.00 2200.00	0.0320 1.8	0.0240 1.3	301.43/251.33 (X)	StrBot: R8-200 (B2)
Support Mc = 0.2 Support As = 301.43/0.00							

Slab Strip: X5 -- Storey: 1

PROPOSED 5-STOREY ADMINISTRATION BLOCK	Fenerbahce Kadikoy (0001907)
Slab Reinforcement Design 1 15/02/2021 Rev: 1	Calc. By: SAMORA Checked By: MICHAEL

Materials: C25/30 / Grade 250 (Plain)

Slab	Type d/h (mm)	g q (kN/m2)	L1 L2 (mm)	C-sup M-sup (kN.m)	C-span M-span (kN.m)	As Req/Sup (mm2)	S T E E L	B A R S
Support Mc = 0.2Support As = 322.78/251.33 (X) SupTop: R8-								
200 (T1)								
1S3	1 121/150	5.600 3.000	1950.00 2000.00	0.0325 1.4	0.0250 1.1	322.78/287.23 (X)		StrBot: R8-175 (B1)
Support Mc = 5.5Support As = 322.78/251.33 (X) SupTop: R8-								
200 (T1)								
1S6	1 121/150	5.600 3.000	4150.00 4300.00	0.0332 6.6	0.0254 5.0	322.78/287.23 (X)		StrBot: R8-175 (B1)
Support Mc = 0.8 Support As = 322.78/0.00								

Slab Strip: X6 -- Storey: 1

Materials: C25/30 / Grade 250 (Plain)

Slab	Type d/h (mm)	g q (kN/m2)	L1 L2 (mm)	C-sup M-sup (kN.m)	C-span M-span (kN.m)	As Req/Sup (mm2)	S T E E L	B A R S
Support Mc = 0.7Support As = 322.78/251.33 (X) SupTop: R8-								
200 (T1)								
1S12	1 121/150	5.600 3.000	3425.00 4300.00	0.0442 6.0	0.0337 4.5	322.78/287.23 (X)		StrBot: R8-175 (B1)
Support Mc = 4.5Support As = 301.43/201.06 (X) SupTop: R8-								
250 (T1)								
1S13	1 113/150	5.600 3.000	3300.00 2100.00	0.0320 1.6	0.0240 1.2	301.43/251.33 (X)		StrBot: R8-200 (B2)
Support Mc = 0.2 Support As = 301.43/0.00								

Slab Strip: X7 -- Storey: 1

Materials: C25/30 / Grade 250 (Plain)

Slab	Type d/h (mm)	g q (kN/m2)	L1 L2 (mm)	C-sup M-sup (kN.m)	C-span M-span (kN.m)	As Req/Sup (mm2)	S T E E L	B A R S
Support Mc = 0.5Support As = 322.78/251.33 (X) SupTop: R8-								
200 (T1)								
1S4	1 121/150	5.600 3.000	2550.00 4050.00	0.0551 4.1	0.0414 3.1	322.78/287.23 (X)		StrBot: R8-175 (B1)
Support Mc = 3.5Support As = 322.78/251.33 (X) SupTop: R8-								
200 (T1)								

PROPOSED 5-STOREY ADMINISTRATION BLOCK	Fenerbahce Kadikoy (0001907)
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1S5	1	5.600	1475.00	0.0630	0.0630	322.78/287.23 (X)	
	121/150	3.000	2989.50	1.6	1.6		StrBot: R8-175 (B1)
Support Mc = 4.2Support As = 322.78/251.33 (X) SupTop: R8-							
200 (T1)							
1S17	1	5.600	2675.00	0.0606	0.0456	322.78/287.23 (X)	
	121/150	3.000	4950.00	5.0	3.8		StrBot: R8-175 (B1)
Support Mc = 4.5Support As = 322.78/251.33 (X) SupTop: R8-							
200 (T1)							
1S16	1	5.600	2150.00	0.0630	0.0630	322.78/287.23 (X)	
	121/150	3.000	4950.00	3.3	3.3		StrBot: R8-175 (B1)
Support Mc = 3.3Support As = 322.78/251.33 (X) SupTop: R8-							
200 (T1)							
1S18	1	5.600	2375.00	0.0443	0.0338	322.78/287.23 (X)	
	121/150	3.000	2989.50	2.9	2.2		StrBot: R8-175 (B1)
Support Mc = 5.1Support As = 322.78/251.33 (X) SupTop: R8-							
200 (T1)							
1S15	1	5.600	3750.00	0.0358	0.0272	322.78/287.23 (X)	
	121/150	3.000	4050.00	5.8	4.4		StrBot: R8-175 (B1)
Support Mc = 0.7 Support As = 322.78/0.00							

Slab Strip: X8 -- Storey: 1

Materials: C25/30 / Grade 250 (Plain)

Slab	Type d/h (mm)	g q (kN/m2)	L1 L2 (mm)	C-sup M-sup (kN.m)	C-span M-span (kN.m)	As Req/Sup (mm2)	S T E E L B A R S
Support Mc = 0.2Support As = 322.78/251.33 (X) SupTop: R8-							
200 (T1)							
1S7	1	5.600	1203.60	0.0860	0.0860	322.78/287.23 (X)	
	121/150	3.000	6300.00	1.4	1.4		StrBot: R8-175 (B1)
Support Mc = 2.4Support As = 301.43/201.06 (X) SupTop: R8-							
250 (T1)							
1S8	1	5.600	2846.40	0.0320	0.0240	301.43/251.33 (X)	
	113/150	3.000	2675.00	2.6	2.0		StrBot: R8-200 (B2)
Support Mc = 5.4Support As = 301.43/201.06 (X) SupTop: R8-							
250 (T1)							
1S6	1	5.600	4300.00	0.0320	0.0240	301.43/251.33 (X)	
	113/150	3.000	4150.00	6.3	4.8		StrBot: R8-200 (B2)
Support Mc = 5.0Support As = 301.43/201.06 (X) SupTop: R8-							
250 (T1)							
1S17	1	5.600	4950.00	0.0320	0.0240	301.43/251.33 (X)	
	113/150	3.000	2675.00	2.6	2.0		StrBot: R8-200 (B2)

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Support Mc = 0.3 Support As = 301.43/0.00

Slab Strip: X9 -- Storey: 1

Materials: C25/30 / Grade 250 (Plain)

Slab	Type d/h (mm)	g q (kN/m2)	L1 L2 (mm)	C-sup M-sup (kN.m)	C-span M-span (kN.m)	As Req/Sup (mm2)	S T E E L	B A R S
Support Mc = 0.7Support As = 322.78/251.33 (X) SupTop: R8-								
200 (T1)								
1S1	1 121/150	5.600 3.000	4050.00 4025.00	0.0320 6.0	0.0240 4.5	322.78/287.23 (X)		StrBot: R8-175 (B1)
Support Mc = 4.9Support As = 301.43/201.06 (X) SupTop: R8-								
250 (T1)								
1S2	1 113/150	5.600 3.000	2200.00 1950.00	0.0320 1.4	0.0240 1.0	301.43/251.33 (X)		StrBot: R8-200 (B2)
Support Mc = 1.4Support As = 301.43/201.06 (X) SupTop: R8-								
250 (T1)								
1S3	1 113/150	5.600 3.000	2100.00 1950.00	0.0320 1.4	0.0240 1.0	301.43/251.33 (X)		StrBot: R8-200 (B2)
Support Mc = 2.2Support As = 301.43/201.06 (X) SupTop: R8-								
250 (T1)								
1S4	1 113/150	5.600 3.000	4050.00 2550.00	0.0320 2.4	0.0240 1.8	301.43/251.33 (X)		StrBot: R8-200 (B2)
Support Mc = 0.3 Support As = 301.43/0.00								

Slab Strip: X10 -- Storey: 1

Materials: C25/30 / Grade 250 (Plain)

Slab	Type d/h (mm)	g q (kN/m2)	L1 L2 (mm)	C-sup M-sup (kN.m)	C-span M-span (kN.m)	As Req/Sup (mm2)	S T E E L	B A R S
Support Mc = 0.7Support As = 301.43/201.06 (X) SupTop: R8-								
250 (T1)								
1S6	1 113/150	5.600 3.000	4300.00 4150.00	0.0320 6.3	0.0240 4.8	301.43/251.33 (X)		StrBot: R8-200 (B2)
Support Mc = 6.3Support As = 301.43/201.06 (X) SupTop: R8-								
250 (T1)								
1S5	1 113/150	5.600 3.000	2989.50 1475.00	0.0000 0.0	0.0000 0.0	301.43/251.33 (X)		StrBot: R8-200 (B2)
Support Mc = 0.0 Support As = 301.43/0.00								

PROPOSED 5-STOREY ADMINISTRATION BLOCK	Fenerbahce Kadikoy (0001907)
Slab Reinforcement Design 1 15/02/2021 Rev: 1	Calc. By: SAMORA Checked By: MICHAEL

Slab Strip: X11 -- Storey: 1

Materials: C25/30 / Grade 250 (Plain)

Slab	Type d/h (mm)	g q (kN/m2)	L1 L2 (mm)	C-sup M-sup (kN.m)	C-span M-span (kN.m)	As Req/Sup (mm2)	S T E E L	B A R S
Support Mc = 0.2Support As = 322.78/251.33 (X) SupTop: R8-								
200 (T1)								
1S7	1 121/150	5.600 3.000	1203.60 6300.00	0.1000 1.7	0.0860 1.4	322.78/287.23 (X)		StrBot: R8-175 (B1)
Support Mc = 1.7Support As = 301.43/201.06 (X) SupTop: R8-								
250 (T1)								
1S9	1 113/150	5.600 3.000	2846.40 2150.00	0.0320 1.7	0.0240 1.3	301.43/251.33 (X)		StrBot: R8-200 (B2)
Support Mc = 0.2 Support As = 301.43/0.00								

Slab Strip: X12 -- Storey: 1

Materials: C25/30 / Grade 250 (Plain)

Slab	Type d/h (mm)	g q (kN/m2)	L1 L2 (mm)	C-sup M-sup (kN.m)	C-span M-span (kN.m)	As Req/Sup (mm2)	S T E E L	B A R S
Support Mc = 0.0Support As = 301.43/201.06 (X) SupTop: R8-								
250 (T1)								
1S16	1 113/150	5.600 3.000	4950.00 2150.00	0.0000 0.0	0.0000 0.0	301.43/251.33 (X)		StrBot: R8-200 (B2)
Support Mc = 0.0 Support As = 301.43/0.00								

Slab Strip: X13 -- Storey: 1

Materials: C25/30 / Grade 250 (Plain)

Slab	Type d/h (mm)	g q (kN/m2)	L1 L2 (mm)	C-sup M-sup (kN.m)	C-span M-span (kN.m)	As Req/Sup (mm2)	S T E E L	B A R S
Support Mc = 0.8Support As = 322.78/251.33 (X) SupTop: R8-								
200 (T1)								
1S11	1 121/150	5.600 3.000	4050.00 4650.00	0.0394 7.4	0.0299 5.6	322.78/287.23 (X)		StrBot: R8-175 (B1)
Support Mc = 6.3Support As = 301.43/201.06 (X) SupTop: R8-								
250 (T1)								
1S12	1 113/150	5.600 3.000	4300.00 3325.00	0.0320 4.1	0.0240 3.1	301.43/251.33 (X)		StrBot: R8-200 (B2)

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Support Mc = 3.5Support As = 301.43/201.06 (X) SupTop: R8-
250 (T1)

1S18	1	5.600	2989.50	0.0320	0.0240	301.43/251.33 (X)	
	113/150	3.000	2375.00	2.1	1.6		StrBot: R8-200 (B2)

Support Mc = 0.2 Support As = 301.43/0.00

Slab Strip: X14 -- Storey: 1

Materials: C25/30 / Grade 250 (Plain)

Slab	Type d/h (mm)	g q (kN/m2)	L1 L2 (mm)	C-sup M-sup (kN.m)	C-span M-span (kN.m)	As Req/Sup (mm2)	S T E E L B A R S
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Support Mc = 0.2Support As = 322.78/251.33 (X) SupTop: R8-
200 (T1)

1S7	1	5.600	1203.60	0.0860	0.0860	322.78/287.23 (X)	
	121/150	3.000	6300.00	1.4	1.4		StrBot: R8-175 (B1)

Support Mc = 1.1Support As = 301.43/201.06 (X) SupTop: R8-
250 (T1)

1S10	1	5.600	2846.40	0.0320	0.0240	301.43/251.33 (X)	
	113/150	3.000	1475.00	0.8	0.6		StrBot: R8-200 (B2)

Support Mc = 3.2Support As = 301.43/201.06 (X) SupTop: R8-
250 (T1)

1S12	1	5.600	4300.00	0.0320	0.0240	301.43/251.33 (X)	
	113/150	3.000	3325.00	4.1	3.1		StrBot: R8-200 (B2)

Support Mc = 3.5Support As = 301.43/201.06 (X) SupTop: R8-
250 (T1)

1S18	1	5.600	2989.50	0.0320	0.0240	301.43/251.33 (X)	
	113/150	3.000	2375.00	2.1	1.6		StrBot: R8-200 (B2)

Support Mc = 0.2 Support As = 301.43/0.00

Slab Strip: X15 -- Storey: 1

Materials: C25/30 / Grade 250 (Plain)

Slab	Type d/h (mm)	g q (kN/m2)	L1 L2 (mm)	C-sup M-sup (kN.m)	C-span M-span (kN.m)	As Req/Sup (mm2)	S T E E L B A R S
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Support Mc = 0.8Support As = 322.78/251.33 (X) SupTop: R8-
200 (T1)

1S11	1	5.600	4050.00	0.0394	0.0299	322.78/287.23 (X)	
	121/150	3.000	4650.00	7.4	5.6		StrBot: R8-175 (B1)

Support Mc = 6.4Support As = 322.78/251.33 (X) SupTop: R8-
200 (T1)

PROPOSED 5-STOREY ADMINISTRATION BLOCK	Fenerbahce Kadikoy (0001907)
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1S14 1 5.600 2200.00 0.0530 0.0400 322.78/287.23 (X) StrBot: R8-175 (B1)
 121/150 3.000 3300.00 2.9 2.2

Support Mc = 2.9Support As = 322.78/251.33 (X) SupTop: R8-
 200 (T1)

1S13 1 5.600 2100.00 0.0547 0.0411 322.78/287.23 (X) StrBot: R8-175 (B1)
 121/150 3.000 3300.00 2.8 2.1

Support Mc = 4.6Support As = 301.43/201.06 (X) SupTop: R8-
 250 (T1)

1S15 1 5.600 4050.00 0.0320 0.0240 301.43/251.33 (X) StrBot: R8-200 (B2)
 113/150 3.000 3750.00 5.2 3.9

Support Mc = 0.6 Support As = 301.43/0.00

Slab Strip: X15 -- Storey: 2

 Materials: C25/30 / Grade 250 (Plain)

Slab	Type d/h (mm)	g q (kN/m2)	L1 L2 (mm)	C-sup M-sup (kN.m)	C-span M-span (kN.m)	As Req/Sup (mm2)	S T E E L B A R S
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Support Mc = 0.7Support As = 322.78/251.33 (X) SupTop: R8-
 200 (T1)

2S1 1 5.600 4025.00 0.0314 0.0242 322.78/287.23 (X) StrBot: R8-175 (B1)
 121/150 3.000 4050.00 5.8 4.5

Support Mc = 5.1Support As = 322.78/251.33 (X) SupTop: R8-
 200 (T1)

2S8 1 5.600 2675.00 0.0348 0.0266 322.78/287.23 (X) StrBot: R8-175 (B1)
 121/150 3.000 2846.40 2.9 2.2

Support Mc = 2.9Support As = 322.78/251.33 (X) SupTop: R8-
 200 (T1)

2S9 1 5.600 2150.00 0.0470 0.0355 322.78/287.23 (X) StrBot: R8-175 (B1)
 121/150 3.000 2846.40 2.5 1.9

Support Mc = 2.2Support As = 322.78/251.33 (X) SupTop: R8-
 200 (T1)

2S10 1 5.600 1475.00 0.0619 0.0469 322.78/287.23 (X) StrBot: R8-175 (B1)
 121/150 3.000 2846.40 1.5 1.2

Support Mc = 5.4Support As = 301.43/201.06 (X) SupTop: R8-
 250 (T1)

2S11 1 5.600 4650.00 0.0320 0.0240 301.43/251.33 (X) StrBot: R8-200 (B2)
 113/150 3.000 4050.00 6.0 4.5

Support Mc = 0.7 Support As = 301.43/0.00

Slab Strip: X16 -- Storey: 2

PROPOSED 5-STOREY ADMINISTRATION BLOCK	Fenerbahce Kadikoy (0001907)
Slab Reinforcement Design 1 15/02/2021 Rev: 1	Calc. By: SAMORA Checked By: MICHAEL

Materials: C25/30 / Grade 250 (Plain)

Slab	Type d/h (mm)	g q (kN/m2)	L1 L2 (mm)	C-sup M-sup (kN.m)	C-span M-span (kN.m)	As Req/Sup (mm2)	S T E E L B A R S
Support Mc = 0.0Support As = 301.43/201.06 (X) SupTop: R8-							
250 (T1)							
2S7	1 113/150	5.600 3.000	6300.00 1203.60	0.0000 0.0	0.0000 0.0	301.43/251.33 (X)	StrBot: R8-200 (B2)
Support Mc = 0.0 Support As = 301.43/0.00							

Slab Strip: X17 -- Storey: 2

Materials: C25/30 / Grade 250 (Plain)

Slab	Type d/h (mm)	g q (kN/m2)	L1 L2 (mm)	C-sup M-sup (kN.m)	C-span M-span (kN.m)	As Req/Sup (mm2)	S T E E L B A R S
Support Mc = 0.2Support As = 322.78/251.33 (X) SupTop: R8-							
200 (T1)							
2S2	1 121/150	5.600 3.000	1950.00 2100.00	0.0356 1.6	0.0271 1.2	322.78/287.23 (X)	StrBot: R8-175 (B1)
Support Mc = 5.5Support As = 322.78/251.33 (X) SupTop: R8-							
200 (T1)							
2S6	1 121/150	5.600 3.000	4150.00 4300.00	0.0332 6.6	0.0254 5.0	322.78/287.23 (X)	StrBot: R8-175 (B1)
Support Mc = 0.8 Support As = 322.78/0.00							

Slab Strip: X18 -- Storey: 2

Materials: C25/30 / Grade 250 (Plain)

Slab	Type d/h (mm)	g q (kN/m2)	L1 L2 (mm)	C-sup M-sup (kN.m)	C-span M-span (kN.m)	As Req/Sup (mm2)	S T E E L B A R S
Support Mc = 0.7Support As = 322.78/251.33 (X) SupTop: R8-							
200 (T1)							
2S12	1 121/150	5.600 3.000	3425.00 4300.00	0.0442 6.0	0.0337 4.5	322.78/287.23 (X)	StrBot: R8-175 (B1)
Support Mc = 4.6Support As = 301.43/201.06 (X) SupTop: R8-							
250 (T1)							
2S14	1 113/150	5.600 3.000	3300.00 2200.00	0.0320 1.8	0.0240 1.3	301.43/251.33 (X)	StrBot: R8-200 (B2)
Support Mc = 0.2 Support As = 301.43/0.00							

PROPOSED 5-STOREY ADMINISTRATION BLOCK	Fenerbahce Kadikoy (0001907)
Slab Reinforcement Design 1 15/02/2021 Rev: 1	Calc. By: SAMORA Checked By: MICHAEL

Slab Strip: X19 -- Storey: 2

Materials: C25/30 / Grade 250 (Plain)

Slab	Type d/h (mm)	g q (kN/m2)	L1 L2 (mm)	C-sup M-sup (kN.m)	C-span M-span (kN.m)	As Req/Sup (mm2)	S T E E L	B A R S
Support Mc = 0.2Support As = 301.43/201.06 (X) SupTop: R8-								
250 (T1)								
2S13	1 113/150	5.600 3.000	3300.00 2100.00	0.0000 0.2	0.0240 1.2	301.43/251.33 (X)		StrBot: R8-200 (B2)
Support Mc = 0.2 Support As = 301.43/0.00								

Slab Strip: X20 -- Storey: 2

Materials: C25/30 / Grade 250 (Plain)

Slab	Type d/h (mm)	g q (kN/m2)	L1 L2 (mm)	C-sup M-sup (kN.m)	C-span M-span (kN.m)	As Req/Sup (mm2)	S T E E L	B A R S
Support Mc = 0.2Support As = 322.78/251.33 (X) SupTop: R8-								
200 (T1)								
2S3	1 121/150	5.600 3.000	1950.00 2000.00	0.0000 0.2	0.0250 1.1	322.78/287.23 (X)		StrBot: R8-175 (B1)
Support Mc = 0.2 Support As = 322.78/0.00								

Slab Strip: X21 -- Storey: 2

Materials: C25/30 / Grade 250 (Plain)

Slab	Type d/h (mm)	g q (kN/m2)	L1 L2 (mm)	C-sup M-sup (kN.m)	C-span M-span (kN.m)	As Req/Sup (mm2)	S T E E L	B A R S
Support Mc = 0.5Support As = 322.78/251.33 (X) SupTop: R8-								
200 (T1)								
2S4	1 121/150	5.600 3.000	2550.00 4050.00	0.0551 4.1	0.0414 3.1	322.78/287.23 (X)		StrBot: R8-175 (B1)
Support Mc = 3.5Support As = 322.78/251.33 (X) SupTop: R8-								
200 (T1)								
2S5	1 121/150	5.600 3.000	1475.00 2989.50	0.0630 1.6	0.0630 1.6	322.78/287.23 (X)		StrBot: R8-175 (B1)
Support Mc = 4.2Support As = 322.78/251.33 (X) SupTop: R8-								
200 (T1)								
2S17	1	5.600	2675.00	0.0606	0.0456	322.78/287.23 (X)		

PROPOSED 5-STOREY ADMINISTRATION BLOCK	Fenerbahce Kadikoy (0001907)
Slab Reinforcement Design 1 15/02/2021 Rev: 1	Calc. By: SAMORA Checked By: MICHAEL

	121/150	3.000	4950.00	5.0	3.8		StrBot: R8-175 (B1)
200 (T1)						Support Mc = 4.5Support As = 322.78/251.33 (X) SupTop: R8-	
2S16	1	5.600	2150.00	0.0630	0.0630	322.78/287.23 (X)	
	121/150	3.000	4950.00	3.3	3.3		StrBot: R8-175 (B1)
200 (T1)						Support Mc = 3.3Support As = 322.78/251.33 (X) SupTop: R8-	
2S18	1	5.600	2375.00	0.0443	0.0338	322.78/287.23 (X)	
	121/150	3.000	2989.50	2.9	2.2		StrBot: R8-175 (B1)
200 (T1)						Support Mc = 5.1Support As = 322.78/251.33 (X) SupTop: R8-	
2S15	1	5.600	3750.00	0.0358	0.0272	322.78/287.23 (X)	
	121/150	3.000	4050.00	5.8	4.4		StrBot: R8-175 (B1)
						Support Mc = 0.7 Support As = 322.78/0.00	

Slab Strip: X22 -- Storey: 2

Materials: C25/30 / Grade 250 (Plain)

Slab	Type d/h (mm)	g q (kN/m2)	L1 L2 (mm)	C-sup M-sup (kN.m)	C-span M-span (kN.m)	As Req/Sup (mm2)	S T E E L	B A R S
200 (T1)						Support Mc = 0.7Support As = 322.78/251.33 (X) SupTop: R8-		
2S1	1	5.600	4050.00	0.0320	0.0240	322.78/287.23 (X)		
	121/150	3.000	4025.00	6.0	4.5		StrBot: R8-175 (B1)	
250 (T1)						Support Mc = 4.9Support As = 301.43/201.06 (X) SupTop: R8-		
2S2	1	5.600	2200.00	0.0320	0.0240	301.43/251.33 (X)		
	113/150	3.000	1950.00	1.4	1.0		StrBot: R8-200 (B2)	
250 (T1)						Support Mc = 1.4Support As = 301.43/201.06 (X) SupTop: R8-		
2S3	1	5.600	2100.00	0.0320	0.0240	301.43/251.33 (X)		
	113/150	3.000	1950.00	1.4	1.0		StrBot: R8-200 (B2)	
250 (T1)						Support Mc = 2.2Support As = 301.43/201.06 (X) SupTop: R8-		
2S4	1	5.600	4050.00	0.0320	0.0240	301.43/251.33 (X)		
	113/150	3.000	2550.00	2.4	1.8		StrBot: R8-200 (B2)	
						Support Mc = 0.3 Support As = 301.43/0.00		

Slab Strip: X23 -- Storey: 2

Materials: C25/30 / Grade 250 (Plain)

PROPOSED 5-STOREY ADMINISTRATION BLOCK	Fenerbahce Kadikoy (0001907)
Slab Reinforcement Design 1 15/02/2021 Rev: 1	Calc. By: SAMORA Checked By: MICHAEL

Slab	Type d/h (mm)	g q (kN/m2)	L1 L2 (mm)	C-sup M-sup (kN.m)	C-span M-span (kN.m)	As Req/Sup (mm2)	S T E E L B A R S
Support Mc = 0.7Support As = 301.43/201.06 (X) SupTop: R8-							
250 (T1)							
2S6	1 113/150	5.600 3.000	4300.00 4150.00	0.0320 6.3	0.0240 4.8	301.43/251.33 (X)	StrBot: R8-200 (B2)
Support Mc = 6.3Support As = 301.43/201.06 (X) SupTop: R8-							
250 (T1)							
2S5	1 113/150	5.600 3.000	2989.50 1475.00	0.0000 0.0	0.0000 0.0	301.43/251.33 (X)	StrBot: R8-200 (B2)
Support Mc = 0.0 Support As = 301.43/0.00							

Slab Strip: X24 -- Storey: 2

Materials: C25/30 / Grade 250 (Plain)

Slab	Type d/h (mm)	g q (kN/m2)	L1 L2 (mm)	C-sup M-sup (kN.m)	C-span M-span (kN.m)	As Req/Sup (mm2)	S T E E L B A R S
Support Mc = 0.2Support As = 322.78/251.33 (X) SupTop: R8-							
200 (T1)							
2S7	1 121/150	5.600 3.000	1203.60 6300.00	0.0860 1.4	0.0860 1.4	322.78/287.23 (X)	StrBot: R8-175 (B1)
Support Mc = 2.4Support As = 301.43/201.06 (X) SupTop: R8-							
250 (T1)							
2S8	1 113/150	5.600 3.000	2846.40 2675.00	0.0320 2.6	0.0240 2.0	301.43/251.33 (X)	StrBot: R8-200 (B2)
Support Mc = 5.4Support As = 301.43/201.06 (X) SupTop: R8-							
250 (T1)							
2S6	1 113/150	5.600 3.000	4300.00 4150.00	0.0320 6.3	0.0240 4.8	301.43/251.33 (X)	StrBot: R8-200 (B2)
Support Mc = 5.0Support As = 301.43/201.06 (X) SupTop: R8-							
250 (T1)							
2S17	1 113/150	5.600 3.000	4950.00 2675.00	0.0320 2.6	0.0240 2.0	301.43/251.33 (X)	StrBot: R8-200 (B2)
Support Mc = 0.3 Support As = 301.43/0.00							

Slab Strip: X25 -- Storey: 2

Materials: C25/30 / Grade 250 (Plain)

Type	g	L1	C-sup	C-span	As
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PROPOSED 5-STOREY ADMINISTRATION BLOCK	Fenerbahce Kadikoy (0001907)
Slab Reinforcement Design 1 15/02/2021 Rev: 1	Calc. By: SAMORA Checked By: MICHAEL

Slab	d/h (mm)	q (kN/m ²)	L2 (mm)	M-sup (kN.m)	M-span (kN.m)	Req/Sup (mm ²)	S T E E L B A R S
Support Mc = 0.2Support As = 322.78/251.33 (X) SupTop: R8-							
200 (T1)							
2S7	1 121/150	5.600 3.000	1203.60 6300.00	0.1000 1.7	0.0860 1.4	322.78/287.23 (X)	StrBot: R8-175 (B1)
Support Mc = 1.7Support As = 301.43/201.06 (X) SupTop: R8-							
250 (T1)							
2S9	1 113/150	5.600 3.000	2846.40 2150.00	0.0320 1.7	0.0240 1.3	301.43/251.33 (X)	StrBot: R8-200 (B2)
Support Mc = 0.2 Support As = 301.43/0.00							

Slab Strip: X26 -- Storey: 2

Materials: C25/30 / Grade 250 (Plain)

Slab	Type d/h (mm)	g q (kN/m ²)	L1 L2 (mm)	C-sup M-sup (kN.m)	C-span M-span (kN.m)	As Req/Sup (mm ²)	S T E E L B A R S
Support Mc = 0.0Support As = 301.43/201.06 (X) SupTop: R8-							
250 (T1)							
2S16	1 113/150	5.600 3.000	4950.00 2150.00	0.0000 0.0	0.0000 0.0	301.43/251.33 (X)	StrBot: R8-200 (B2)
Support Mc = 0.0 Support As = 301.43/0.00							

Slab Strip: X27 -- Storey: 2

Materials: C25/30 / Grade 250 (Plain)

Slab	Type d/h (mm)	g q (kN/m ²)	L1 L2 (mm)	C-sup M-sup (kN.m)	C-span M-span (kN.m)	As Req/Sup (mm ²)	S T E E L B A R S
Support Mc = 0.1Support As = 301.43/201.06 (X) SupTop: R8-							
250 (T1)							
2S10	1 113/150	5.600 3.000	2846.40 1475.00	0.0320 0.8	0.0240 0.6	301.43/251.33 (X)	StrBot: R8-200 (B2)
Support Mc = 3.2Support As = 301.43/201.06 (X) SupTop: R8-							
250 (T1)							
2S12	1 113/150	5.600 3.000	4300.00 3325.00	0.0320 4.1	0.0240 3.1	301.43/251.33 (X)	StrBot: R8-200 (B2)
Support Mc = 3.5Support As = 301.43/201.06 (X) SupTop: R8-							
250 (T1)							
2S18	1 113/150	5.600 3.000	2989.50 2375.00	0.0320 2.1	0.0240 1.6	301.43/251.33 (X)	StrBot: R8-200 (B2)

PROPOSED 5-STOREY ADMINISTRATION BLOCK	Fenerbahce Kadikoy (0001907)
Slab Reinforcement Design 1 15/02/2021 Rev: 1	Calc. By: SAMORA Checked By: MICHAEL

Support Mc = 0.2 Support As = 301.43/0.00

Slab Strip: X28 -- Storey: 2

Materials: C25/30 / Grade 250 (Plain)

Slab	Type d/h (mm)	g q (kN/m2)	L1 L2 (mm)	C-sup M-sup (kN.m)	C-span M-span (kN.m)	As Req/Sup (mm2)	S T E E L	B A R S
Support Mc = 0.8Support As = 322.78/251.33 (X) SupTop: R8-								
200 (T1)								
2S11	1 121/150	5.600 3.000	4050.00 4650.00	0.0394 7.4	0.0299 5.6	322.78/287.23 (X)		StrBot: R8-175 (B1)
Support Mc = 6.4Support As = 322.78/251.33 (X) SupTop: R8-								
200 (T1)								
2S14	1 121/150	5.600 3.000	2200.00 3300.00	0.0530 2.9	0.0400 2.2	322.78/287.23 (X)		StrBot: R8-175 (B1)
Support Mc = 2.9Support As = 322.78/251.33 (X) SupTop: R8-								
200 (T1)								
2S13	1 121/150	5.600 3.000	2100.00 3300.00	0.0547 2.8	0.0411 2.1	322.78/287.23 (X)		StrBot: R8-175 (B1)
Support Mc = 4.6Support As = 301.43/201.06 (X) SupTop: R8-								
250 (T1)								
2S15	1 113/150	5.600 3.000	4050.00 3750.00	0.0320 5.2	0.0240 3.9	301.43/251.33 (X)		StrBot: R8-200 (B2)
Support Mc = 0.6 Support As = 301.43/0.00								

Slab Strip: X28 -- Storey: 3

Materials: C25/30 / Grade 250 (Plain)

Slab	Type d/h (mm)	g q (kN/m2)	L1 L2 (mm)	C-sup M-sup (kN.m)	C-span M-span (kN.m)	As Req/Sup (mm2)	S T E E L	B A R S
Support Mc = 0.7Support As = 322.78/251.33 (X) SupTop: R8-								
200 (T1)								
3S1	1 121/150	5.600 3.000	4025.00 4050.00	0.0314 5.8	0.0242 4.5	322.78/287.23 (X)		StrBot: R8-175 (B1)
Support Mc = 5.1Support As = 322.78/251.33 (X) SupTop: R8-								
200 (T1)								
3S8	1 121/150	5.600 3.000	2675.00 2846.40	0.0348 2.9	0.0266 2.2	322.78/287.23 (X)		StrBot: R8-175 (B1)
Support Mc = 2.9Support As = 322.78/251.33 (X) SupTop: R8-								
200 (T1)								

PROPOSED 5-STOREY ADMINISTRATION BLOCK	Fenerbahce Kadikoy (0001907)
Slab Reinforcement Design 1 15/02/2021 Rev: 1	Calc. By: SAMORA Checked By: MICHAEL

3S9	1	5.600	2150.00	0.0470	0.0355	322.78/287.23 (X)	
	121/150	3.000	2846.40	2.5	1.9		StrBot: R8-175 (B1)
Support Mc = 2.2Support As = 322.78/251.33 (X) SupTop: R8-							
200 (T1)							
3S10	1	5.600	1475.00	0.0619	0.0469	322.78/287.23 (X)	
	121/150	3.000	2846.40	1.5	1.2		StrBot: R8-175 (B1)
Support Mc = 5.4Support As = 301.43/201.06 (X) SupTop: R8-							
250 (T1)							
3S11	1	5.600	4650.00	0.0320	0.0240	301.43/251.33 (X)	
	113/150	3.000	4050.00	6.0	4.5		StrBot: R8-200 (B2)
Support Mc = 0.7 Support As = 301.43/0.00							
Slab Strip: X29 -- Storey: 3							

Materials: C25/30 / Grade 250 (Plain)							
Slab	Type d/h (mm)	g q (kN/m2)	L1 L2 (mm)	C-sup M-sup (kN.m)	C-span M-span (kN.m)	As Req/Sup (mm2)	S T E E L B A R S
Support Mc = 0.5Support As = 322.78/251.33 (X) SupTop: R8-							
200 (T1)							
3S4	1	5.600	2550.00	0.0551	0.0414	322.78/287.23 (X)	
	121/150	3.000	4050.00	4.1	3.1		StrBot: R8-175 (B1)
Support Mc = 3.5Support As = 322.78/251.33 (X) SupTop: R8-							
200 (T1)							
3S5	1	5.600	1475.00	0.0630	0.0630	322.78/287.23 (X)	
	121/150	3.000	2989.50	1.6	1.6		StrBot: R8-175 (B1)
Support Mc = 4.2Support As = 322.78/251.33 (X) SupTop: R8-							
200 (T1)							
3S17	1	5.600	2675.00	0.0606	0.0456	322.78/287.23 (X)	
	121/150	3.000	4950.00	5.0	3.8		StrBot: R8-175 (B1)
Support Mc = 4.5Support As = 322.78/251.33 (X) SupTop: R8-							
200 (T1)							
3S16	1	5.600	2150.00	0.0630	0.0630	322.78/287.23 (X)	
	121/150	3.000	4950.00	3.3	3.3		StrBot: R8-175 (B1)
Support Mc = 3.3Support As = 322.78/251.33 (X) SupTop: R8-							
200 (T1)							
3S18	1	5.600	2375.00	0.0443	0.0338	322.78/287.23 (X)	
	121/150	3.000	2989.50	2.9	2.2		StrBot: R8-175 (B1)
Support Mc = 5.1Support As = 322.78/251.33 (X) SupTop: R8-							
200 (T1)							
3S15	1	5.600	3750.00	0.0358	0.0272	322.78/287.23 (X)	
	121/150	3.000	4050.00	5.8	4.4		StrBot: R8-175 (B1)

PROPOSED 5-STOREY ADMINISTRATION BLOCK	Fenerbahce Kadikoy (0001907)
Slab Reinforcement Design 1 15/02/2021 Rev: 1	Calc. By: SAMORA Checked By: MICHAEL

Support Mc = 0.7 Support As = 322.78/0.00

Slab Strip: X30 -- Storey: 3

Materials: C25/30 / Grade 250 (Plain)

Slab	Type d/h (mm)	g q (kN/m2)	L1 L2 (mm)	C-sup M-sup (kN.m)	C-span M-span (kN.m)	As Req/Sup (mm2)	S T E E L	B A R S
Support Mc = 0.7Support As = 322.78/251.33 (X) SupTop: R8-								
200 (T1)								
3S1	1 121/150	5.600 3.000	4050.00 4025.00	0.0320 6.0	0.0240 4.5	322.78/287.23 (X)		StrBot: R8-175 (B1)
Support Mc = 4.9Support As = 301.43/201.06 (X) SupTop: R8-								
250 (T1)								
3S2	1 113/150	5.600 3.000	2200.00 1950.00	0.0320 1.4	0.0240 1.0	301.43/251.33 (X)		StrBot: R8-200 (B2)
Support Mc = 1.4Support As = 301.43/201.06 (X) SupTop: R8-								
250 (T1)								
3S3	1 113/150	5.600 3.000	2100.00 1950.00	0.0320 1.4	0.0240 1.0	301.43/251.33 (X)		StrBot: R8-200 (B2)
Support Mc = 2.2Support As = 301.43/201.06 (X) SupTop: R8-								
250 (T1)								
3S4	1 113/150	5.600 3.000	4050.00 2550.00	0.0320 2.4	0.0240 1.8	301.43/251.33 (X)		StrBot: R8-200 (B2)
Support Mc = 0.3 Support As = 301.43/0.00								

Slab Strip: X31 -- Storey: 3

Materials: C25/30 / Grade 250 (Plain)

Slab	Type d/h (mm)	g q (kN/m2)	L1 L2 (mm)	C-sup M-sup (kN.m)	C-span M-span (kN.m)	As Req/Sup (mm2)	S T E E L	B A R S
Support Mc = 0.7Support As = 301.43/201.06 (X) SupTop: R8-								
250 (T1)								
3S6	1 113/150	5.600 3.000	4300.00 4150.00	0.0320 6.3	0.0240 4.8	301.43/251.33 (X)		StrBot: R8-200 (B2)
Support Mc = 6.3Support As = 301.43/201.06 (X) SupTop: R8-								
250 (T1)								
3S5	1 113/150	5.600 3.000	2989.50 1475.00	0.0000 0.0	0.0000 0.0	301.43/251.33 (X)		StrBot: R8-200 (B2)
Support Mc = 0.0 Support As = 301.43/0.00								

PROPOSED 5-STOREY ADMINISTRATION BLOCK	Fenerbahce Kadikoy (0001907)
Slab Reinforcement Design 1 15/02/2021 Rev: 1	Calc. By: SAMORA Checked By: MICHAEL

Slab Strip: X32 -- Storey: 3

Materials: C25/30 / Grade 250 (Plain)

Slab	Type d/h (mm)	g q (kN/m2)	L1 L2 (mm)	C-sup M-sup (kN.m)	C-span M-span (kN.m)	As Req/Sup (mm2)	S T E E L	B A R S
Support Mc = 0.2Support As = 322.78/251.33 (X) SupTop: R8-								
200 (T1)								
3S7	1 121/150	5.600 3.000	1203.60 6300.00	0.0860 1.4	0.0860 1.4	322.78/287.23 (X)		StrBot: R8-175 (B1)
Support Mc = 2.4Support As = 301.43/201.06 (X) SupTop: R8-								
250 (T1)								
3S8	1 113/150	5.600 3.000	2846.40 2675.00	0.0320 2.6	0.0240 2.0	301.43/251.33 (X)		StrBot: R8-200 (B2)
Support Mc = 5.4Support As = 301.43/201.06 (X) SupTop: R8-								
250 (T1)								
3S6	1 113/150	5.600 3.000	4300.00 4150.00	0.0320 6.3	0.0240 4.8	301.43/251.33 (X)		StrBot: R8-200 (B2)
Support Mc = 5.0Support As = 301.43/201.06 (X) SupTop: R8-								
250 (T1)								
3S17	1 113/150	5.600 3.000	4950.00 2675.00	0.0320 2.6	0.0240 2.0	301.43/251.33 (X)		StrBot: R8-200 (B2)
Support Mc = 0.3 Support As = 301.43/0.00								

Slab Strip: X33 -- Storey: 3

Materials: C25/30 / Grade 250 (Plain)

Slab	Type d/h (mm)	g q (kN/m2)	L1 L2 (mm)	C-sup M-sup (kN.m)	C-span M-span (kN.m)	As Req/Sup (mm2)	S T E E L	B A R S
Support Mc = 0.0Support As = 301.43/201.06 (X) SupTop: R8-								
250 (T1)								
3S16	1 113/150	5.600 3.000	4950.00 2150.00	0.0000 0.0	0.0000 0.0	301.43/251.33 (X)		StrBot: R8-200 (B2)
Support Mc = 0.0 Support As = 301.43/0.00								

Slab Strip: X34 -- Storey: 3

Materials: C25/30 / Grade 250 (Plain)

Slab	Type d/h (mm)	g q (kN/m2)	L1 L2 (mm)	C-sup M-sup (kN.m)	C-span M-span (kN.m)	As Req/Sup (mm2)	S T E E L	B A R S
Support Mc = 0.2Support As = 301.43/201.06 (X) SupTop: R8-								

PROPOSED 5-STOREY ADMINISTRATION BLOCK	Fenerbahce Kadikoy (0001907)
Slab Reinforcement Design 1 15/02/2021 Rev: 1	Calc. By: SAMORA Checked By: MICHAEL

250 (T1)

3S9	1	5.600	2846.40	0.0000	0.0240	301.43/251.33	(X)	
	113/150	3.000	2150.00	0.2	1.3			StrBot: R8-200 (B2)

Support Mc = 0.2 Support As = 301.43/0.00

Slab Strip: X35 -- Storey: 3

Materials: C25/30 / Grade 250 (Plain)

Slab	Type d/h (mm)	g q (kN/m2)	L1 L2 (mm)	C-sup M-sup (kN.m)	C-span M-span (kN.m)	As Req/Sup (mm2)	S T E E L	B A R S
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Support Mc = 0.0 Support As = 301.43/201.06 (X) SupTop: R8-

250 (T1)

3S7	1	5.600	6300.00	0.0000	0.0000	301.43/251.33	(X)	
	113/150	3.000	1203.60	0.0	0.0			StrBot: R8-200 (B2)

Support Mc = 0.0 Support As = 301.43/0.00

Slab Strip: X36 -- Storey: 3

Materials: C25/30 / Grade 250 (Plain)

Slab	Type d/h (mm)	g q (kN/m2)	L1 L2 (mm)	C-sup M-sup (kN.m)	C-span M-span (kN.m)	As Req/Sup (mm2)	S T E E L	B A R S
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Support Mc = 0.1 Support As = 301.43/201.06 (X) SupTop: R8-

250 (T1)

3S10	1	5.600	2846.40	0.0320	0.0240	301.43/251.33	(X)	
	113/150	3.000	1475.00	0.8	0.6			StrBot: R8-200 (B2)

Support Mc = 3.2 Support As = 301.43/201.06 (X) SupTop: R8-

250 (T1)

3S12	1	5.600	4300.00	0.0320	0.0240	301.43/251.33	(X)	
	113/150	3.000	3325.00	4.1	3.1			StrBot: R8-200 (B2)

Support Mc = 3.5 Support As = 301.43/201.06 (X) SupTop: R8-

250 (T1)

3S18	1	5.600	2989.50	0.0320	0.0240	301.43/251.33	(X)	
	113/150	3.000	2375.00	2.1	1.6			StrBot: R8-200 (B2)

Support Mc = 0.2 Support As = 301.43/0.00

Slab Strip: X37 -- Storey: 3

Materials: C25/30 / Grade 250 (Plain)

Slab	Type d/h	g q	L1 L2	C-sup M-sup	C-span M-span	As Req/Sup	S T E E L	B A R S
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PROPOSED 5-STOREY ADMINISTRATION BLOCK	Fenerbahce Kadikoy (0001907)
Slab Reinforcement Design 1 15/02/2021 Rev: 1	Calc. By: SAMORA Checked By: MICHAEL

	(mm)	(kN/m2)	(mm)	(kN.m)	(kN.m)	(mm2)	
Support Mc = 0.8Support As = 322.78/251.33 (X) SupTop: R8-							
200 (T1)							
3S11	1	5.600	4050.00	0.0394	0.0299	322.78/287.23 (X)	
	121/150	3.000	4650.00	7.4	5.6		StrBot: R8-175 (B1)
Support Mc = 6.4Support As = 322.78/251.33 (X) SupTop: R8-							
200 (T1)							
3S14	1	5.600	2200.00	0.0530	0.0400	322.78/287.23 (X)	
	121/150	3.000	3300.00	2.9	2.2		StrBot: R8-175 (B1)
Support Mc = 2.9Support As = 322.78/251.33 (X) SupTop: R8-							
200 (T1)							
3S13	1	5.600	2100.00	0.0547	0.0411	322.78/287.23 (X)	
	121/150	3.000	3300.00	2.8	2.1		StrBot: R8-175 (B1)
Support Mc = 4.6Support As = 301.43/201.06 (X) SupTop: R8-							
250 (T1)							
3S15	1	5.600	4050.00	0.0320	0.0240	301.43/251.33 (X)	
	113/150	3.000	3750.00	5.2	3.9		StrBot: R8-200 (B2)
Support Mc = 0.6 Support As = 301.43/0.00							

Slab Strip: X38 -- Storey: 3

Materials: C25/30 / Grade 250 (Plain)

Slab	Type d/h (mm)	g q (kN/m2)	L1 L2 (mm)	C-sup M-sup (kN.m)	C-span M-span (kN.m)	As Req/Sup (mm2)	S T E E L	B A R S
Support Mc = 0.7Support As = 322.78/251.33 (X) SupTop: R8-								
200 (T1)								
3S12	1	5.600	3425.00	0.0442	0.0337	322.78/287.23 (X)		
	121/150	3.000	4300.00	6.0	4.5			StrBot: R8-175 (B1)
Support Mc = 4.6Support As = 301.43/201.06 (X) SupTop: R8-								
250 (T1)								
3S14	1	5.600	3300.00	0.0320	0.0240	301.43/251.33 (X)		
	113/150	3.000	2200.00	1.8	1.3			StrBot: R8-200 (B2)
Support Mc = 0.2 Support As = 301.43/0.00								

Slab Strip: X39 -- Storey: 3

Materials: C25/30 / Grade 250 (Plain)

Slab	Type d/h (mm)	g q (kN/m2)	L1 L2 (mm)	C-sup M-sup (kN.m)	C-span M-span (kN.m)	As Req/Sup (mm2)	S T E E L	B A R S
Support Mc = 0.2Support As = 301.43/201.06 (X) SupTop: R8-								

PROPOSED 5-STOREY ADMINISTRATION BLOCK	Fenerbahce Kadikoy (0001907)
Slab Reinforcement Design 1 15/02/2021 Rev: 1	Calc. By: SAMORA Checked By: MICHAEL

250 (T1)

3S13	1	5.600	3300.00	0.0000	0.0240	301.43/251.33	(X)	
	113/150	3.000	2100.00	0.2	1.2			StrBot: R8-200 (B2)

Support Mc = 0.2 Support As = 301.43/0.00

Slab Strip: X40 -- Storey: 3

Materials: C25/30 / Grade 250 (Plain)

Slab	Type d/h (mm)	g q (kN/m2)	L1 L2 (mm)	C-sup M-sup (kN.m)	C-span M-span (kN.m)	As Req/Sup (mm2)	S T E E L	B A R S
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Support Mc = 0.2Support As = 322.78/251.33 (X) SupTop: R8-

200 (T1)

3S3	1	5.600	1950.00	0.0325	0.0250	322.78/287.23	(X)	
	121/150	3.000	2000.00	1.4	1.1			StrBot: R8-175 (B1)

Support Mc = 5.5Support As = 322.78/251.33 (X) SupTop: R8-

200 (T1)

3S6	1	5.600	4150.00	0.0332	0.0254	322.78/287.23	(X)	
	121/150	3.000	4300.00	6.6	5.0			StrBot: R8-175 (B1)

Support Mc = 0.8 Support As = 322.78/0.00

Slab Strip: X41 -- Storey: 3

Materials: C25/30 / Grade 250 (Plain)

Slab	Type d/h (mm)	g q (kN/m2)	L1 L2 (mm)	C-sup M-sup (kN.m)	C-span M-span (kN.m)	As Req/Sup (mm2)	S T E E L	B A R S
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Support Mc = 0.2Support As = 322.78/251.33 (X) SupTop: R8-

200 (T1)

3S2	1	5.600	1950.00	0.0356	0.0271	322.78/287.23	(X)	
	121/150	3.000	2100.00	1.6	1.2			StrBot: R8-175 (B1)

Support Mc = 5.5Support As = 322.78/251.33 (X) SupTop: R8-

200 (T1)

3S6	1	5.600	4150.00	0.0332	0.0254	322.78/287.23	(X)	
	121/150	3.000	4300.00	6.6	5.0			StrBot: R8-175 (B1)

Support Mc = 0.8 Support As = 322.78/0.00

Slab Strip: X41 -- Storey: 4

Materials: C25/30 / Grade 250 (Plain)

Slab	Type d/h	g q	L1 L2	C-sup M-sup	C-span M-span	As Req/Sup	S T E E L	B A R S
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PROPOSED 5-STOREY ADMINISTRATION BLOCK	Fenerbahce Kadikoy (0001907)
Slab Reinforcement Design 1 15/02/2021 Rev: 1	Calc. By: SAMORA Checked By: MICHAEL

	(mm)	(kN/m2)	(mm)	(kN.m)	(kN.m)	(mm2)	
Support Mc = 0.7Support As = 322.78/251.33 (X) SupTop: R8-							
200 (T1)							
4S1	1	5.600	4025.00	0.0314	0.0242	322.78/287.23 (X)	
	121/150	3.000	4050.00	5.8	4.5		StrBot: R8-175 (B1)
Support Mc = 5.1Support As = 322.78/251.33 (X) SupTop: R8-							
200 (T1)							
4S8	1	5.600	2675.00	0.0348	0.0266	322.78/287.23 (X)	
	121/150	3.000	2846.40	2.9	2.2		StrBot: R8-175 (B1)
Support Mc = 2.9Support As = 322.78/251.33 (X) SupTop: R8-							
200 (T1)							
4S9	1	5.600	2150.00	0.0470	0.0355	322.78/287.23 (X)	
	121/150	3.000	2846.40	2.5	1.9		StrBot: R8-175 (B1)
Support Mc = 2.2Support As = 322.78/251.33 (X) SupTop: R8-							
200 (T1)							
4S10	1	5.600	1475.00	0.0619	0.0469	322.78/287.23 (X)	
	121/150	3.000	2846.40	1.5	1.2		StrBot: R8-175 (B1)
Support Mc = 5.4Support As = 301.43/201.06 (X) SupTop: R8-							
250 (T1)							
4S11	1	5.600	4650.00	0.0320	0.0240	301.43/251.33 (X)	
	113/150	3.000	4050.00	6.0	4.5		StrBot: R8-200 (B2)
Support Mc = 0.7 Support As = 301.43/0.00							

Slab Strip: X42 -- Storey: 4

Materials: C25/30 / Grade 250 (Plain)

Slab	Type d/h (mm)	g q (kN/m2)	L1 L2 (mm)	C-sup M-sup (kN.m)	C-span M-span (kN.m)	As Req/Sup (mm2)	S T E E L	B A R S
Support Mc = 0.5Support As = 322.78/251.33 (X) SupTop: R8-								
200 (T1)								
4S4	1	5.600	2550.00	0.0551	0.0414	322.78/287.23 (X)		
	121/150	3.000	4050.00	4.1	3.1			StrBot: R8-175 (B1)
Support Mc = 3.5Support As = 322.78/251.33 (X) SupTop: R8-								
200 (T1)								
4S5	1	5.600	1475.00	0.0630	0.0630	322.78/287.23 (X)		
	121/150	3.000	2989.50	1.6	1.6			StrBot: R8-175 (B1)
Support Mc = 4.2Support As = 322.78/251.33 (X) SupTop: R8-								
200 (T1)								
4S17	1	5.600	2675.00	0.0606	0.0456	322.78/287.23 (X)		
	121/150	3.000	4950.00	5.0	3.8			StrBot: R8-175 (B1)
Support Mc = 4.5Support As = 322.78/251.33 (X) SupTop: R8-								

PROPOSED 5-STOREY ADMINISTRATION BLOCK	Fenerbahce Kadikoy (0001907)
Slab Reinforcement Design 1 15/02/2021 Rev: 1	Calc. By: SAMORA Checked By: MICHAEL

200 (T1)

4S16	1	5.600	2150.00	0.0630	0.0630	322.78/287.23 (X)	
	121/150	3.000	4950.00	3.3	3.3		StrBot: R8-175 (B1)

Support Mc = 3.3Support As = 322.78/251.33 (X) SupTop: R8-

200 (T1)

4S18	1	5.600	2375.00	0.0443	0.0338	322.78/287.23 (X)	
	121/150	3.000	2989.50	2.9	2.2		StrBot: R8-175 (B1)

Support Mc = 5.1Support As = 322.78/251.33 (X) SupTop: R8-

200 (T1)

4S15	1	5.600	3750.00	0.0358	0.0272	322.78/287.23 (X)	
	121/150	3.000	4050.00	5.8	4.4		StrBot: R8-175 (B1)

Support Mc = 0.7 Support As = 322.78/0.00

Slab Strip: X43 -- Storey: 4

Materials: C25/30 / Grade 250 (Plain)

Slab	Type d/h (mm)	g q (kN/m2)	L1 L2 (mm)	C-sup M-sup (kN.m)	C-span M-span (kN.m)	As Req/Sup (mm2)	S T E E L B A R S
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Support Mc = 0.0Support As = 301.43/201.06 (X) SupTop: R8-

250 (T1)

4S7	1	5.600	6300.00	0.0000	0.0000	301.43/251.33 (X)	
	113/150	3.000	1203.60	0.0	0.0		StrBot: R8-200 (B2)

Support Mc = 0.0 Support As = 301.43/0.00

Slab Strip: X44 -- Storey: 4

Materials: C25/30 / Grade 250 (Plain)

Slab	Type d/h (mm)	g q (kN/m2)	L1 L2 (mm)	C-sup M-sup (kN.m)	C-span M-span (kN.m)	As Req/Sup (mm2)	S T E E L B A R S
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Support Mc = 0.2Support As = 322.78/251.33 (X) SupTop: R8-

200 (T1)

4S2	1	5.600	1950.00	0.0356	0.0271	322.78/287.23 (X)	
	121/150	3.000	2100.00	1.6	1.2		StrBot: R8-175 (B1)

Support Mc = 5.5Support As = 322.78/251.33 (X) SupTop: R8-

200 (T1)

4S6	1	5.600	4150.00	0.0332	0.0254	322.78/287.23 (X)	
	121/150	3.000	4300.00	6.6	5.0		StrBot: R8-175 (B1)

Support Mc = 0.8 Support As = 322.78/0.00

Slab Strip: X45 -- Storey: 4

PROPOSED 5-STOREY ADMINISTRATION BLOCK	Fenerbahce Kadikoy (0001907)
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Materials: C25/30 / Grade 250 (Plain)

Slab	Type d/h (mm)	g q (kN/m2)	L1 L2 (mm)	C-sup M-sup (kN.m)	C-span M-span (kN.m)	As Req/Sup (mm2)	S T E E L	B A R S
Support Mc = 0.2Support As = 322.78/251.33 (X) SupTop: R8-								
200 (T1)								
4S3	1 121/150	5.600 3.000	1950.00 2000.00	0.0325 1.4	0.0250 1.1	322.78/287.23 (X)		StrBot: R8-175 (B1)
Support Mc = 5.5Support As = 322.78/251.33 (X) SupTop: R8-								
200 (T1)								
4S6	1 121/150	5.600 3.000	4150.00 4300.00	0.0332 6.6	0.0254 5.0	322.78/287.23 (X)		StrBot: R8-175 (B1)
Support Mc = 0.8 Support As = 322.78/0.00								

Slab Strip: X46 -- Storey: 4

Materials: C25/30 / Grade 250 (Plain)

Slab	Type d/h (mm)	g q (kN/m2)	L1 L2 (mm)	C-sup M-sup (kN.m)	C-span M-span (kN.m)	As Req/Sup (mm2)	S T E E L	B A R S
Support Mc = 0.7Support As = 322.78/251.33 (X) SupTop: R8-								
200 (T1)								
4S12	1 121/150	5.600 3.000	3425.00 4300.00	0.0442 6.0	0.0337 4.5	322.78/287.23 (X)		StrBot: R8-175 (B1)
Support Mc = 4.6Support As = 301.43/201.06 (X) SupTop: R8-								
250 (T1)								
4S14	1 113/150	5.600 3.000	3300.00 2200.00	0.0320 1.8	0.0240 1.3	301.43/251.33 (X)		StrBot: R8-200 (B2)
Support Mc = 0.2 Support As = 301.43/0.00								

Slab Strip: X47 -- Storey: 4

Materials: C25/30 / Grade 250 (Plain)

Slab	Type d/h (mm)	g q (kN/m2)	L1 L2 (mm)	C-sup M-sup (kN.m)	C-span M-span (kN.m)	As Req/Sup (mm2)	S T E E L	B A R S
Support Mc = 0.7Support As = 322.78/251.33 (X) SupTop: R8-								
200 (T1)								
4S12	1 121/150	5.600 3.000	3425.00 4300.00	0.0442 6.0	0.0337 4.5	322.78/287.23 (X)		StrBot: R8-175 (B1)
Support Mc = 4.5Support As = 301.43/201.06 (X) SupTop: R8-								
250 (T1)								

PROPOSED 5-STOREY ADMINISTRATION BLOCK	Fenerbahce Kadikoy (0001907)
Slab Reinforcement Design 1 15/02/2021 Rev: 1	Calc. By: SAMORA Checked By: MICHAEL

Support Mc = 0.0 Support As = 301.43/0.00

Slab Strip: X50 -- Storey: 4

Materials: C25/30 / Grade 250 (Plain)

Slab	Type d/h (mm)	g q (kN/m2)	L1 L2 (mm)	C-sup M-sup (kN.m)	C-span M-span (kN.m)	As Req/Sup (mm2)	S T E E L	B A R S
Support Mc = 0.2Support As = 322.78/251.33 (X) SupTop: R8-								
200 (T1)								
4S7	1 121/150	5.600 3.000	1203.60 6300.00	0.0860 1.4	0.0860 1.4	322.78/287.23 (X)		StrBot: R8-175 (B1)
Support Mc = 2.4Support As = 301.43/201.06 (X) SupTop: R8-								
250 (T1)								
4S8	1 113/150	5.600 3.000	2846.40 2675.00	0.0320 2.6	0.0240 2.0	301.43/251.33 (X)		StrBot: R8-200 (B2)
Support Mc = 5.4Support As = 301.43/201.06 (X) SupTop: R8-								
250 (T1)								
4S6	1 113/150	5.600 3.000	4300.00 4150.00	0.0320 6.3	0.0240 4.8	301.43/251.33 (X)		StrBot: R8-200 (B2)
Support Mc = 5.0Support As = 301.43/201.06 (X) SupTop: R8-								
250 (T1)								
4S17	1 113/150	5.600 3.000	4950.00 2675.00	0.0320 2.6	0.0240 2.0	301.43/251.33 (X)		StrBot: R8-200 (B2)
Support Mc = 0.3 Support As = 301.43/0.00								

Slab Strip: X51 -- Storey: 4

Materials: C25/30 / Grade 250 (Plain)

Slab	Type d/h (mm)	g q (kN/m2)	L1 L2 (mm)	C-sup M-sup (kN.m)	C-span M-span (kN.m)	As Req/Sup (mm2)	S T E E L	B A R S
Support Mc = 0.2Support As = 301.43/201.06 (X) SupTop: R8-								
250 (T1)								
4S9	1 113/150	5.600 3.000	2846.95 2150.40	0.0000 0.2	0.0240 1.3	301.43/251.33 (X)		StrBot: R8-200 (B2)
Support Mc = 0.2 Support As = 301.43/0.00								

Slab Strip: X52 -- Storey: 4

Materials: C25/30 / Grade 250 (Plain)

PROPOSED 5-STOREY ADMINISTRATION BLOCK	Fenerbahce Kadikoy (0001907)
Slab Reinforcement Design 1 15/02/2021 Rev: 1	Calc. By: SAMORA Checked By: MICHAEL

Slab	Type d/h (mm)	g q (kN/m2)	L1 L2 (mm)	C-sup M-sup (kN.m)	C-span M-span (kN.m)	As Req/Sup (mm2)	S T E E L B A R S
250 (T1)				Support Mc = 0.0	Support As = 301.43/201.06	(X)	SupTop: R8-
4S16	1 113/150	5.600 3.000	4950.00 2150.00	0.0000 0.0	0.0000 0.0	301.43/251.33	(X) StrBot: R8-200 (B2)
				Support Mc = 0.0	Support As = 301.43/0.00		

Slab Strip: X53 -- Storey: 4

Materials: C25/30 / Grade 250 (Plain)

Slab	Type d/h (mm)	g q (kN/m2)	L1 L2 (mm)	C-sup M-sup (kN.m)	C-span M-span (kN.m)	As Req/Sup (mm2)	S T E E L B A R S
250 (T1)				Support Mc = 0.1	Support As = 301.43/201.06	(X)	SupTop: R8-
4S10	1 113/150	5.600 3.000	2846.40 1475.00	0.0320 0.8	0.0240 0.6	301.43/251.33	(X) StrBot: R8-200 (B2)
250 (T1)				Support Mc = 3.2	Support As = 301.43/201.06	(X)	SupTop: R8-
4S12	1 113/150	5.600 3.000	4300.00 3325.00	0.0320 4.1	0.0240 3.1	301.43/251.33	(X) StrBot: R8-200 (B2)
250 (T1)				Support Mc = 3.5	Support As = 301.43/201.06	(X)	SupTop: R8-
4S18	1 113/150	5.600 3.000	2989.50 2375.00	0.0320 2.1	0.0240 1.6	301.43/251.33	(X) StrBot: R8-200 (B2)
				Support Mc = 0.2	Support As = 301.43/0.00		

Slab Strip: X54 -- Storey: 4

Materials: C25/30 / Grade 250 (Plain)

Slab	Type d/h (mm)	g q (kN/m2)	L1 L2 (mm)	C-sup M-sup (kN.m)	C-span M-span (kN.m)	As Req/Sup (mm2)	S T E E L B A R S
200 (T1)				Support Mc = 0.8	Support As = 322.78/251.33	(X)	SupTop: R8-
4S11	1 121/150	5.600 3.000	4050.00 4650.00	0.0394 7.4	0.0299 5.6	322.78/287.23	(X) StrBot: R8-175 (B1)
200 (T1)				Support Mc = 6.4	Support As = 322.78/251.33	(X)	SupTop: R8-
4S14	1 121/150	5.600 3.000	2200.00 3300.00	0.0530 2.9	0.0400 2.2	322.78/287.23	(X) StrBot: R8-175 (B1)

PROPOSED 5-STOREY ADMINISTRATION BLOCK	Fenerbahce Kadikoy (0001907)
Slab Reinforcement Design 1 15/02/2021 Rev: 1	Calc. By: SAMORA Checked By: MICHAEL

Support Mc = 2.9Support As = 322.78/251.33 (X) SupTop: R8-
200 (T1)

4S13	1	5.600	2100.00	0.0547	0.0411	322.78/287.23 (X)	
	121/150	3.000	3300.00	2.8	2.1		StrBot: R8-175 (B1)

Support Mc = 4.6Support As = 301.43/201.06 (X) SupTop: R8-
250 (T1)

4S15	1	5.600	4050.00	0.0320	0.0240	301.43/251.33 (X)	
	113/150	3.000	3750.00	5.2	3.9		StrBot: R8-200 (B2)

Support Mc = 0.6 Support As = 301.43/0.00

Slab Strip: X54 -- Storey: 5

Materials: C25/30 / Grade 250 (Plain)

Slab	Type d/h (mm)	g q (kN/m2)	L1 L2 (mm)	C-sup M-sup (kN.m)	C-span M-span (kN.m)	As Req/Sup (mm2)	S T E E L	B A R S
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Support Mc = 0.7Support As = 322.78/251.33 (X) SupTop: R8-
200 (T1)

5S1	1	5.600	4025.00	0.0314	0.0242	322.78/287.23 (X)	
	121/150	3.000	4050.00	5.8	4.5		StrBot: R8-175 (B1)

Support Mc = 5.1Support As = 322.78/251.33 (X) SupTop: R8-
200 (T1)

5S8	1	5.600	2675.00	0.0348	0.0266	322.78/287.23 (X)	
	121/150	3.000	2846.40	2.9	2.2		StrBot: R8-175 (B1)

Support Mc = 2.9Support As = 322.78/251.33 (X) SupTop: R8-
200 (T1)

5S9	1	5.600	2150.00	0.0470	0.0355	322.78/287.23 (X)	
	121/150	3.000	2846.40	2.5	1.9		StrBot: R8-175 (B1)

Support Mc = 2.2Support As = 322.78/251.33 (X) SupTop: R8-
200 (T1)

5S10	1	5.600	1475.00	0.0619	0.0469	322.78/287.23 (X)	
	121/150	3.000	2846.40	1.5	1.2		StrBot: R8-175 (B1)

Support Mc = 5.4Support As = 301.43/201.06 (X) SupTop: R8-
250 (T1)

5S11	1	5.600	4650.00	0.0320	0.0240	301.43/251.33 (X)	
	113/150	3.000	4050.00	6.0	4.5		StrBot: R8-200 (B2)

Support Mc = 0.7 Support As = 301.43/0.00

Slab Strip: X55 -- Storey: 5

Materials: C25/30 / Grade 250 (Plain)

PROPOSED 5-STOREY ADMINISTRATION BLOCK	Fenerbahce Kadikoy (0001907)
Slab Reinforcement Design 1 15/02/2021 Rev: 1	Calc. By: SAMORA Checked By: MICHAEL

Slab	Type d/h (mm)	g q (kN/m2)	L1 L2 (mm)	C-sup M-sup (kN.m)	C-span M-span (kN.m)	As Req/Sup (mm2)	S T E E L	B A R S
Support Mc = 0.2Support As = 322.78/251.33 (X) SupTop: R8-								
200 (T1)								
5S2	1 121/150	5.600 3.000	1950.00 2100.00	0.0356 1.6	0.0271 1.2	322.78/287.23 (X)		StrBot: R8-175 (B1)
Support Mc = 5.5Support As = 322.78/251.33 (X) SupTop: R8-								
200 (T1)								
5S6	1 121/150	5.600 3.000	4150.00 4300.00	0.0332 6.6	0.0254 5.0	322.78/287.23 (X)		StrBot: R8-175 (B1)
Support Mc = 0.8 Support As = 322.78/0.00								

Slab Strip: X56 -- Storey: 5

Materials: C25/30 / Grade 250 (Plain)

Slab	Type d/h (mm)	g q (kN/m2)	L1 L2 (mm)	C-sup M-sup (kN.m)	C-span M-span (kN.m)	As Req/Sup (mm2)	S T E E L	B A R S
Support Mc = 0.7Support As = 322.78/251.33 (X) SupTop: R8-								
200 (T1)								
5S12	1 121/150	5.600 3.000	3425.00 4300.00	0.0442 6.0	0.0337 4.5	322.78/287.23 (X)		StrBot: R8-175 (B1)
Support Mc = 4.6Support As = 301.43/201.06 (X) SupTop: R8-								
250 (T1)								
5S14	1 113/150	5.600 3.000	3300.00 2200.00	0.0320 1.8	0.0240 1.3	301.43/251.33 (X)		StrBot: R8-200 (B2)
Support Mc = 0.2 Support As = 301.43/0.00								

Slab Strip: X57 -- Storey: 5

Materials: C25/30 / Grade 250 (Plain)

Slab	Type d/h (mm)	g q (kN/m2)	L1 L2 (mm)	C-sup M-sup (kN.m)	C-span M-span (kN.m)	As Req/Sup (mm2)	S T E E L	B A R S
Support Mc = 0.2Support As = 322.78/251.33 (X) SupTop: R8-								
200 (T1)								
5S3	1 121/150	5.600 3.000	1950.00 2000.00	0.0325 1.4	0.0250 1.1	322.78/287.23 (X)		StrBot: R8-175 (B1)
Support Mc = 5.5Support As = 322.78/251.33 (X) SupTop: R8-								
200 (T1)								
5S6	1 121/150	5.600 3.000	4150.00 4300.00	0.0332 6.6	0.0254 5.0	322.78/287.23 (X)		StrBot: R8-175 (B1)

PROPOSED 5-STOREY ADMINISTRATION BLOCK	Fenerbahce Kadikoy (0001907)
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Support Mc = 0.8 Support As = 322.78/0.00

Slab Strip: X58 -- Storey: 5

Materials: C25/30 / Grade 250 (Plain)

Slab	Type d/h (mm)	g q (kN/m2)	L1 L2 (mm)	C-sup M-sup (kN.m)	C-span M-span (kN.m)	As Req/Sup (mm2)	S T E E L	B A R S
Support Mc = 0.7Support As = 322.78/251.33 (X) SupTop: R8-								
200 (T1)								
5S12	1 121/150	5.600 3.000	3425.00 4300.00	0.0442 6.0	0.0337 4.5	322.78/287.23 (X)		StrBot: R8-175 (B1)
Support Mc = 4.5Support As = 301.43/201.06 (X) SupTop: R8-								
250 (T1)								
5S13	1 113/150	5.600 3.000	3300.00 2100.00	0.0320 1.6	0.0240 1.2	301.43/251.33 (X)		StrBot: R8-200 (B2)
Support Mc = 0.2 Support As = 301.43/0.00								

Slab Strip: X59 -- Storey: 5

Materials: C25/30 / Grade 250 (Plain)

Slab	Type d/h (mm)	g q (kN/m2)	L1 L2 (mm)	C-sup M-sup (kN.m)	C-span M-span (kN.m)	As Req/Sup (mm2)	S T E E L	B A R S
Support Mc = 0.5Support As = 322.78/251.33 (X) SupTop: R8-								
200 (T1)								
5S4	1 121/150	5.600 3.000	2550.00 4050.00	0.0551 4.1	0.0414 3.1	322.78/287.23 (X)		StrBot: R8-175 (B1)
Support Mc = 3.5Support As = 322.78/251.33 (X) SupTop: R8-								
200 (T1)								
5S5	1 121/150	5.600 3.000	1475.00 2989.50	0.0630 1.6	0.0630 1.6	322.78/287.23 (X)		StrBot: R8-175 (B1)
Support Mc = 4.2Support As = 322.78/251.33 (X) SupTop: R8-								
200 (T1)								
5S17	1 121/150	5.600 3.000	2675.00 4950.00	0.0606 5.0	0.0456 3.8	322.78/287.23 (X)		StrBot: R8-175 (B1)
Support Mc = 4.5Support As = 322.78/251.33 (X) SupTop: R8-								
200 (T1)								
5S16	1 121/150	5.600 3.000	2150.00 4950.00	0.0630 3.3	0.0630 3.3	322.78/287.23 (X)		StrBot: R8-175 (B1)
Support Mc = 3.3Support As = 322.78/251.33 (X) SupTop: R8-								
200 (T1)								

PROPOSED 5-STOREY ADMINISTRATION BLOCK	Fenerbahce Kadikoy (0001907)
Slab Reinforcement Design 1 15/02/2021 Rev: 1	Calc. By: SAMORA Checked By: MICHAEL

5S18 1 5.600 2375.00 0.0443 0.0338 322.78/287.23 (X) StrBot: R8-175 (B1)
 121/150 3.000 2989.50 2.9 2.2

Support Mc = 5.1 Support As = 322.78/251.33 (X) SupTop: R8-
 200 (T1)

5S15 1 5.600 3750.00 0.0358 0.0272 322.78/287.23 (X) StrBot: R8-175 (B1)
 121/150 3.000 4050.00 5.8 4.4

Support Mc = 0.7 Support As = 322.78/0.00

Slab Strip: X60 -- Storey: 5

Materials: C25/30 / Grade 250 (Plain)

Slab	Type d/h (mm)	g q (kN/m2)	L1 L2 (mm)	C-sup M-sup (kN.m)	C-span M-span (kN.m)	As Req/Sup (mm2)	S T E E L B A R S
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Support Mc = 0.7 Support As = 322.78/251.33 (X) SupTop: R8-
 200 (T1)

5S1 1 5.600 4050.00 0.0320 0.0240 322.78/287.23 (X) StrBot: R8-175 (B1)
 121/150 3.000 4025.00 6.0 4.5

Support Mc = 4.9 Support As = 301.43/201.06 (X) SupTop: R8-
 250 (T1)

5S2 1 5.600 2200.00 0.0320 0.0240 301.43/251.33 (X) StrBot: R8-200 (B2)
 113/150 3.000 1950.00 1.4 1.0

Support Mc = 1.4 Support As = 301.43/201.06 (X) SupTop: R8-
 250 (T1)

5S3 1 5.600 2100.00 0.0320 0.0240 301.43/251.33 (X) StrBot: R8-200 (B2)
 113/150 3.000 1950.00 1.4 1.0

Support Mc = 2.2 Support As = 301.43/201.06 (X) SupTop: R8-
 250 (T1)

5S4 1 5.600 4050.00 0.0320 0.0240 301.43/251.33 (X) StrBot: R8-200 (B2)
 113/150 3.000 2550.00 2.4 1.8

Support Mc = 0.3 Support As = 301.43/0.00

Slab Strip: X61 -- Storey: 5

Materials: C25/30 / Grade 250 (Plain)

Slab	Type d/h (mm)	g q (kN/m2)	L1 L2 (mm)	C-sup M-sup (kN.m)	C-span M-span (kN.m)	As Req/Sup (mm2)	S T E E L B A R S
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Support Mc = 0.7 Support As = 301.43/201.06 (X) SupTop: R8-
 250 (T1)

5S6 1 5.600 4300.00 0.0320 0.0240 301.43/251.33 (X) StrBot: R8-200 (B2)
 113/150 3.000 4150.00 6.3 4.8

PROPOSED 5-STOREY ADMINISTRATION BLOCK	Fenerbahce Kadikoy (0001907)
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Support Mc = 6.3 Support As = 301.43/201.06 (X) SupTop: R8-
250 (T1)

5S5	1	5.600	2989.50	0.0000	0.0000	301.43/251.33 (X)	
	113/150	3.000	1475.00	0.0	0.0		StrBot: R8-200 (B2)

Support Mc = 0.0 Support As = 301.43/0.00

Slab Strip: X62 -- Storey: 5

Materials: C25/30 / Grade 250 (Plain)

Slab	Type d/h (mm)	g q (kN/m2)	L1 L2 (mm)	C-sup M-sup (kN.m)	C-span M-span (kN.m)	As Req/Sup (mm2)	S T E E L B A R S
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Support Mc = 0.2 Support As = 322.78/251.33 (X) SupTop: R8-
200 (T1)

5S7	1	5.600	1203.60	0.0860	0.0860	322.78/287.23 (X)	
	121/150	3.000	6300.00	1.4	1.4		StrBot: R8-175 (B1)

Support Mc = 2.4 Support As = 301.43/201.06 (X) SupTop: R8-
250 (T1)

5S8	1	5.600	2846.40	0.0320	0.0240	301.43/251.33 (X)	
	113/150	3.000	2675.00	2.6	2.0		StrBot: R8-200 (B2)

Support Mc = 5.4 Support As = 301.43/201.06 (X) SupTop: R8-
250 (T1)

5S6	1	5.600	4300.00	0.0320	0.0240	301.43/251.33 (X)	
	113/150	3.000	4150.00	6.3	4.8		StrBot: R8-200 (B2)

Support Mc = 5.0 Support As = 301.43/201.06 (X) SupTop: R8-
250 (T1)

5S17	1	5.600	4950.00	0.0320	0.0240	301.43/251.33 (X)	
	113/150	3.000	2675.00	2.6	2.0		StrBot: R8-200 (B2)

Support Mc = 0.3 Support As = 301.43/0.00

Slab Strip: X63 -- Storey: 5

Materials: C25/30 / Grade 250 (Plain)

Slab	Type d/h (mm)	g q (kN/m2)	L1 L2 (mm)	C-sup M-sup (kN.m)	C-span M-span (kN.m)	As Req/Sup (mm2)	S T E E L B A R S
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Support Mc = 0.2 Support As = 301.43/201.06 (X) SupTop: R8-
250 (T1)

5S9	1	5.600	2846.40	0.0000	0.0240	301.43/251.33 (X)	
	113/150	3.000	2150.00	0.2	1.3		StrBot: R8-200 (B2)

Support Mc = 0.2 Support As = 301.43/0.00

PROPOSED 5-STOREY ADMINISTRATION BLOCK	Fenerbahce Kadikoy (0001907)
Slab Reinforcement Design 1 15/02/2021 Rev: 1	Calc. By: SAMORA Checked By: MICHAEL

Slab Strip: X64 -- Storey: 5

Materials: C25/30 / Grade 250 (Plain)

Slab	Type d/h (mm)	g q (kN/m2)	L1 L2 (mm)	C-sup M-sup (kN.m)	C-span M-span (kN.m)	As Req/Sup (mm2)	S T E E L B A R S
Support Mc = 0.0Support As = 301.43/201.06 (X) SupTop: R8-							
250 (T1)							
5S16	1 113/150	5.600 3.000	4950.00 2150.00	0.0000 0.0	0.0000 0.0	301.43/251.33 (X)	StrBot: R8-200 (B2)
Support Mc = 0.0 Support As = 301.43/0.00							

Slab Strip: X65 -- Storey: 5

Materials: C25/30 / Grade 250 (Plain)

Slab	Type d/h (mm)	g q (kN/m2)	L1 L2 (mm)	C-sup M-sup (kN.m)	C-span M-span (kN.m)	As Req/Sup (mm2)	S T E E L B A R S
Support Mc = 0.1Support As = 301.43/201.06 (X) SupTop: R8-							
250 (T1)							
5S10	1 113/150	5.600 3.000	2846.40 1475.00	0.0320 0.8	0.0240 0.6	301.43/251.33 (X)	StrBot: R8-200 (B2)
Support Mc = 3.2Support As = 301.43/201.06 (X) SupTop: R8-							
250 (T1)							
5S12	1 113/150	5.600 3.000	4300.00 3325.00	0.0320 4.1	0.0240 3.1	301.43/251.33 (X)	StrBot: R8-200 (B2)
Support Mc = 3.5Support As = 301.43/201.06 (X) SupTop: R8-							
250 (T1)							
5S18	1 113/150	5.600 3.000	2989.50 2375.00	0.0320 2.1	0.0240 1.6	301.43/251.33 (X)	StrBot: R8-200 (B2)
Support Mc = 0.2 Support As = 301.43/0.00							

Slab Strip: X66 -- Storey: 5

Materials: C25/30 / Grade 250 (Plain)

Slab	Type d/h (mm)	g q (kN/m2)	L1 L2 (mm)	C-sup M-sup (kN.m)	C-span M-span (kN.m)	As Req/Sup (mm2)	S T E E L B A R S
Support Mc = 0.8Support As = 322.78/251.33 (X) SupTop: R8-							
200 (T1)							
5S11	1 121/150	5.600 3.000	4050.00 4650.00	0.0394 7.4	0.0299 5.6	322.78/287.23 (X)	StrBot: R8-175 (B1)

PROPOSED 5-STOREY ADMINISTRATION BLOCK	Fenerbahce Kadikoy (0001907)
Slab Reinforcement Design 1 15/02/2021 Rev: 1	Calc. By: SAMORA Checked By: MICHAEL

Support Mc = 6.4Support As = 322.78/251.33 (X) SupTop: R8-
200 (T1)

5S14	1	5.600	2200.00	0.0530	0.0400	322.78/287.23 (X)	
	121/150	3.000	3300.00	2.9	2.2		StrBot: R8-175 (B1)

Support Mc = 2.9Support As = 322.78/251.33 (X) SupTop: R8-
200 (T1)

5S13	1	5.600	2100.00	0.0547	0.0411	322.78/287.23 (X)	
	121/150	3.000	3300.00	2.8	2.1		StrBot: R8-175 (B1)

Support Mc = 4.6Support As = 301.43/201.06 (X) SupTop: R8-
250 (T1)

5S15	1	5.600	4050.00	0.0320	0.0240	301.43/251.33 (X)	
	113/150	3.000	3750.00	5.2	3.9		StrBot: R8-200 (B2)

Support Mc = 0.6 Support As = 301.43/0.00

Slab Strip: X66 -- Storey: 6

Materials: C25/30 / Grade 250 (Plain)

Slab	Type d/h (mm)	g q (kN/m2)	L1 L2 (mm)	C-sup M-sup (kN.m)	C-span M-span (kN.m)	As Req/Sup (mm2)	S T E E L	B A R S
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Support Mc = 0.7Support As = 322.78/251.33 (X) SupTop: R8-
200 (T1)

6S1	1	5.600	4025.00	0.0314	0.0242	322.78/287.23 (X)	
	121/150	3.000	4050.00	5.8	4.5		StrBot: R8-175 (B1)

Support Mc = 5.1Support As = 322.78/251.33 (X) SupTop: R8-
200 (T1)

6S8	1	5.600	2675.00	0.0348	0.0266	322.78/287.23 (X)	
	121/150	3.000	2846.40	2.9	2.2		StrBot: R8-175 (B1)

Support Mc = 2.9Support As = 322.78/251.33 (X) SupTop: R8-
200 (T1)

6S9	1	5.600	2150.00	0.0470	0.0355	322.78/287.23 (X)	
	121/150	3.000	2846.40	2.5	1.9		StrBot: R8-175 (B1)

Support Mc = 2.2Support As = 322.78/251.33 (X) SupTop: R8-
200 (T1)

6S10	1	5.600	1475.00	0.0619	0.0469	322.78/287.23 (X)	
	121/150	3.000	2846.40	1.5	1.2		StrBot: R8-175 (B1)

Support Mc = 5.4Support As = 301.43/201.06 (X) SupTop: R8-
250 (T1)

6S11	1	5.600	4650.00	0.0320	0.0240	301.43/251.33 (X)	
	113/150	3.000	4050.00	6.0	4.5		StrBot: R8-200 (B2)

Support Mc = 0.7 Support As = 301.43/0.00

PROPOSED 5-STOREY ADMINISTRATION BLOCK	Fenerbahce Kadikoy (0001907)
Slab Reinforcement Design 1 15/02/2021 Rev: 1	Calc. By: SAMORA Checked By: MICHAEL

Slab Strip: X67 -- Storey: 6

Materials: C25/30 / Grade 250 (Plain)

Slab	Type d/h (mm)	g q (kN/m2)	L1 L2 (mm)	C-sup M-sup (kN.m)	C-span M-span (kN.m)	As Req/Sup (mm2)	S T E E L	B A R S
Support Mc = 0.5Support As = 322.78/251.33 (X) SupTop: R8-								
200 (T1)								
6S4	1 121/150	5.600 3.000	2550.00 4050.00	0.0551 4.1	0.0414 3.1	322.78/287.23 (X)		StrBot: R8-175 (B1)
Support Mc = 3.5Support As = 322.78/251.33 (X) SupTop: R8-								
200 (T1)								
6S5	1 121/150	5.600 3.000	1475.00 2989.50	0.0630 1.6	0.0630 1.6	322.78/287.23 (X)		StrBot: R8-175 (B1)
Support Mc = 4.2Support As = 322.78/251.33 (X) SupTop: R8-								
200 (T1)								
6S17	1 121/150	5.600 3.000	2675.00 4950.00	0.0606 5.0	0.0456 3.8	322.78/287.23 (X)		StrBot: R8-175 (B1)
Support Mc = 4.5Support As = 322.78/251.33 (X) SupTop: R8-								
200 (T1)								
6S16	1 121/150	5.600 3.000	2150.00 4950.00	0.0630 3.3	0.0630 3.3	322.78/287.23 (X)		StrBot: R8-175 (B1)
Support Mc = 3.3Support As = 322.78/251.33 (X) SupTop: R8-								
200 (T1)								
6S18	1 121/150	5.600 3.000	2375.00 2989.50	0.0443 2.9	0.0338 2.2	322.78/287.23 (X)		StrBot: R8-175 (B1)
Support Mc = 5.1Support As = 322.78/251.33 (X) SupTop: R8-								
200 (T1)								
6S15	1 121/150	5.600 3.000	3750.00 4050.00	0.0358 5.8	0.0272 4.4	322.78/287.23 (X)		StrBot: R8-175 (B1)
Support Mc = 0.7 Support As = 322.78/0.00								

Slab Strip: X68 -- Storey: 6

Materials: C25/30 / Grade 250 (Plain)

Slab	Type d/h (mm)	g q (kN/m2)	L1 L2 (mm)	C-sup M-sup (kN.m)	C-span M-span (kN.m)	As Req/Sup (mm2)	S T E E L	B A R S
Support Mc = 0.2Support As = 322.78/251.33 (X) SupTop: R8-								
200 (T1)								
6S2	1	5.600	1950.00	0.0356	0.0271	322.78/287.23 (X)		

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	121/150	3.000	2100.00	1.6	1.2		StrBot: R8-175 (B1)
200 (T1)						Support Mc = 5.5Support As = 322.78/251.33 (X) SupTop: R8-	
6S6	1	5.600	4150.00	0.0332	0.0254	322.78/287.23 (X)	
	121/150	3.000	4300.00	6.6	5.0		StrBot: R8-175 (B1)
200 (T1)						Support Mc = 5.9Support As = 322.78/251.33 (X) SupTop: R8-	
6S20	1	5.600	2150.00	0.0630	0.0480	322.78/287.23 (X)	
	121/150	3.000	4300.00	3.3	2.6		StrBot: R8-175 (B1)
200 (T1)						Support Mc = 5.3Support As = 322.78/251.33 (X) SupTop: R8-	
6S12	1	5.600	3425.00	0.0442	0.0337	322.78/287.23 (X)	
	121/150	3.000	4300.00	6.0	4.5		StrBot: R8-175 (B1)
250 (T1)						Support Mc = 4.6Support As = 301.43/201.06 (X) SupTop: R8-	
6S14	1	5.600	3300.00	0.0320	0.0240	301.43/251.33 (X)	
	113/150	3.000	2200.00	1.8	1.3		StrBot: R8-200 (B2)
						Support Mc = 0.2 Support As = 301.43/0.00	

Slab Strip: X69 -- Storey: 6

Materials: C25/30 / Grade 250 (Plain)

Slab	Type d/h (mm)	g q (kN/m2)	L1 L2 (mm)	C-sup M-sup (kN.m)	C-span M-span (kN.m)	As Req/Sup (mm2)	S T E E L B A R S
250 (T1)						Support Mc = 0.0Support As = 301.43/201.06 (X) SupTop: R8-	
6S7	1	5.600	6300.00	0.0000	0.0000	301.43/251.33 (X)	
	113/150	3.000	1203.60	0.0	0.0		StrBot: R8-200 (B2)
						Support Mc = 0.0 Support As = 301.43/0.00	

Slab Strip: X70 -- Storey: 6

Materials: C25/30 / Grade 250 (Plain)

Slab	Type d/h (mm)	g q (kN/m2)	L1 L2 (mm)	C-sup M-sup (kN.m)	C-span M-span (kN.m)	As Req/Sup (mm2)	S T E E L B A R S
200 (T1)						Support Mc = 0.7Support As = 322.78/251.33 (X) SupTop: R8-	
6S1	1	5.600	4050.00	0.0320	0.0240	322.78/287.23 (X)	
	121/150	3.000	4025.00	6.0	4.5		StrBot: R8-175 (B1)
						Support Mc = 4.9Support As = 301.43/201.06 (X) SupTop: R8-	

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250 (T1)

6S2	1	5.600	2200.00	0.0320	0.0240	301.43/251.33	(X)	
	113/150	3.000	1950.00	1.4	1.0			StrBot: R8-200 (B2)

Support Mc = 1.4Support As = 301.43/201.06 (X) SupTop: R8-

250 (T1)

6S3	1	5.600	2100.00	0.0320	0.0240	301.43/251.33	(X)	
	113/150	3.000	1950.00	1.4	1.0			StrBot: R8-200 (B2)

Support Mc = 2.2Support As = 301.43/201.06 (X) SupTop: R8-

250 (T1)

6S4	1	5.600	4050.00	0.0320	0.0240	301.43/251.33	(X)	
	113/150	3.000	2550.00	2.4	1.8			StrBot: R8-200 (B2)

Support Mc = 0.3 Support As = 301.43/0.00

Slab Strip: X71 -- Storey: 6

Materials: C25/30 / Grade 250 (Plain)

Slab	Type d/h (mm)	g q (kN/m2)	L1 L2 (mm)	C-sup M-sup (kN.m)	C-span M-span (kN.m)	As Req/Sup (mm2)	S T E E L	B A R S
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Support Mc = 0.7Support As = 301.43/201.06 (X) SupTop: R8-

250 (T1)

6S6	1	5.600	4300.00	0.0320	0.0240	301.43/251.33	(X)	
	113/150	3.000	4150.00	6.3	4.8			StrBot: R8-200 (B2)

Support Mc = 6.3Support As = 301.43/201.06 (X) SupTop: R8-

250 (T1)

6S5	1	5.600	2989.50	0.0000	0.0000	301.43/251.33	(X)	
	113/150	3.000	1475.00	0.0	0.0			StrBot: R8-200 (B2)

Support Mc = 0.0 Support As = 301.43/0.00

Slab Strip: X72 -- Storey: 6

Materials: C25/30 / Grade 250 (Plain)

Slab	Type d/h (mm)	g q (kN/m2)	L1 L2 (mm)	C-sup M-sup (kN.m)	C-span M-span (kN.m)	As Req/Sup (mm2)	S T E E L	B A R S
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Support Mc = 0.2Support As = 322.78/251.33 (X) SupTop: R8-

200 (T1)

6S7	1	5.600	1203.60	0.0860	0.0860	322.78/287.23	(X)	
	121/150	3.000	6300.00	1.4	1.4			StrBot: R8-175 (B1)

Support Mc = 2.4Support As = 301.43/201.06 (X) SupTop: R8-

250 (T1)

6S8	1	5.600	2846.40	0.0320	0.0240	301.43/251.33	(X)	
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PROPOSED 5-STOREY ADMINISTRATION BLOCK	Fenerbahce Kadikoy (0001907)
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113/150	3.000	2675.00	2.6	2.0	StrBot: R8-200 (B2)
Support Mc = 5.4Support As = 301.43/201.06 (X) SupTop: R8-					
250 (T1)					
6S6	1	5.600	4300.00	0.0320	0.0240 301.43/251.33 (X)
113/150	3.000	4150.00	6.3	4.8	StrBot: R8-200 (B2)
Support Mc = 5.0Support As = 301.43/201.06 (X) SupTop: R8-					
250 (T1)					
6S17	1	5.600	4950.00	0.0320	0.0240 301.43/251.33 (X)
113/150	3.000	2675.00	2.6	2.0	StrBot: R8-200 (B2)
Support Mc = 0.3 Support As = 301.43/0.00					

Slab Strip: X73 -- Storey: 6

Materials: C25/30 / Grade 250 (Plain)

Slab	Type d/h (mm)	g q (kN/m2)	L1 L2 (mm)	C-sup M-sup (kN.m)	C-span M-span (kN.m)	As Req/Sup (mm2)	S T E E L B A R S
Support Mc = 0.2Support As = 301.43/201.06 (X) SupTop: R8-							
250 (T1)							
6S9	1	5.600	2846.40	0.0320	0.0240 301.43/251.33 (X)		
113/150	3.000	2150.00	1.7	1.3	StrBot: R8-200 (B2)		
Support Mc = 1.7Support As = 301.43/201.06 (X) SupTop: R8-							
250 (T1)							
6S20	1	5.600	4300.00	0.0320	0.0240 301.43/251.33 (X)		
113/150	3.000	2150.00	1.7	1.3	StrBot: R8-200 (B2)		
Support Mc = 1.7Support As = 301.43/201.06 (X) SupTop: R8-							
250 (T1)							
6S16	1	5.600	4950.00	0.0000	0.0000 301.43/251.33 (X)		
113/150	3.000	2150.00	0.0	0.0	StrBot: R8-200 (B2)		
Support Mc = 0.0 Support As = 301.43/0.00							

Slab Strip: X74 -- Storey: 6

Materials: C25/30 / Grade 250 (Plain)

Slab	Type d/h (mm)	g q (kN/m2)	L1 L2 (mm)	C-sup M-sup (kN.m)	C-span M-span (kN.m)	As Req/Sup (mm2)	S T E E L B A R S
Support Mc = 0.1Support As = 301.43/201.06 (X) SupTop: R8-							
250 (T1)							
6S10	1	5.600	2846.40	0.0320	0.0240 301.43/251.33 (X)		
113/150	3.000	1475.00	0.8	0.6	StrBot: R8-200 (B2)		
Support Mc = 3.2Support As = 301.43/201.06 (X) SupTop: R8-							

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250 (T1)

6S12	1	5.600	4300.00	0.0320	0.0240	301.43/251.33 (X)	
	113/150	3.000	3325.00	4.1	3.1		StrBot: R8-200 (B2)

Support Mc = 3.5Support As = 301.43/201.06 (X) SupTop: R8-

250 (T1)

6S18	1	5.600	2989.50	0.0320	0.0240	301.43/251.33 (X)	
	113/150	3.000	2375.00	2.1	1.6		StrBot: R8-200 (B2)

Support Mc = 0.2 Support As = 301.43/0.00

Slab Strip: X75 -- Storey: 6

Materials: C25/30 / Grade 250 (Plain)

Slab	Type d/h (mm)	g q (kN/m2)	L1 L2 (mm)	C-sup M-sup (kN.m)	C-span M-span (kN.m)	As Req/Sup (mm2)	S T E E L B A R S
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Support Mc = 0.8Support As = 322.78/251.33 (X) SupTop: R8-

200 (T1)

6S11	1	5.600	4050.00	0.0394	0.0299	322.78/287.23 (X)	
	121/150	3.000	4650.00	7.4	5.6		StrBot: R8-175 (B1)

Support Mc = 6.4Support As = 322.78/251.33 (X) SupTop: R8-

200 (T1)

6S14	1	5.600	2200.00	0.0530	0.0400	322.78/287.23 (X)	
	121/150	3.000	3300.00	2.9	2.2		StrBot: R8-175 (B1)

Support Mc = 2.9Support As = 322.78/251.33 (X) SupTop: R8-

200 (T1)

6S13	1	5.600	2100.00	0.0547	0.0411	322.78/287.23 (X)	
	121/150	3.000	3300.00	2.8	2.1		StrBot: R8-175 (B1)

Support Mc = 4.6Support As = 301.43/201.06 (X) SupTop: R8-

250 (T1)

6S15	1	5.600	4050.00	0.0320	0.0240	301.43/251.33 (X)	
	113/150	3.000	3750.00	5.2	3.9		StrBot: R8-200 (B2)

Support Mc = 0.6 Support As = 301.43/0.00

PROPOSED 5-STOREY ADMINISTRATION BLOCK	Fenerbahce Kadikoy (0001907)
Slab Deflection Check 1 15/02/2021 Rev: 1	Calc. By: SAMORA Checked By: MICHAEL

Slab Deflection Check

1S1 - Storey: 1

Flexural Member Type : Two-way Slab
Span Type : Interior Span
Clear Span / Height : 3825.0 / 150.0 mm = 25.5 ≤ 35 (TS-500 Table 13.1)

Section Dimensions: 1000.0 / 150.0 mm d = 121.0 mm d' = 29.0 mm
Flange Dimensions: b = 1000.0 mm h_f = 0.0 mm
Uncracked Section: I_c = 0.000281 m⁴ y(b) = 75.0 mm y(t) = 75.0 mm
Concrete: F_{cd} = 16.67 N/mm² F_{ctd} = 1.17 N/mm² E_c = 31000.0 N/mm²
Steel: F_{yd} = 217.39 N/mm² E_s = 200000.0 N/mm² E_s/E_c = 6.5

	Left Support	Right Support	Span
A _s (t)/A _s (b)	402.12 / 335.10 mm ²	402.12 / 335.10 mm ²	0.00 / 335.10 mm ²
M(g) / M(g+q)	0.0 / 0.0 kN.m	2.8 / 4.4 kN.m	2.2 / 3.4 kN.m
M _{cr}	10.9 kN.m	10.9 kN.m	10.9 kN.m
Cracking Status (G)	NO	NO	NO
Cracking Status (G+Q)	NO	NO	NO
Cracked Inertia (G)	-	-	-
Cracked Inertia (G+Q)	-	-	-
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴

Effective Inertia (G)	0.000281 m ⁴
Effective Inertia (G+Q)	0.000281 m ⁴
Immediate Def. (G)	0.000 m
Immediate Def. (G+Q)	0.001 m
Immediate Def. (Q)	0.000 m
Loading Time	FIVE YEARS OR MORE
Total Time Dep. Deflection	0.001 m

Flexural Member and Position: Member Not Supporting Partition Wall
Immediate Def. (Q) = 0.179 mm ≤ 10.625 mm (3825/360) ... **Adequate** ✓

Crack Width Check (Span)::

Required/Supplied A _s	335.10 / 322.78 mm ²	Steel Bar Stress	152.17 N/mm ²
No. of Tension Bars	7	Steel Bar CG (a)	29.000
Max. Bar Size	8.0 mm	Concrete Cover (c)	29.0
Effective Concrete Area	58000.0 mm ²	Environmental Conditions	Interior: Normal

Crack Width (w) = 0.13 mm ≤ 0.4 mm ... **Adequate** ✓

1S2 - Storey: 1

Flexural Member Type : Two-way Slab
Span Type : Interior Span
Clear Span / Height : 1750.0 / 150.0 mm = 11.7 ≤ 35 (TS-500 Table 13.1)

Section Dimensions: 1000.0 / 150.0 mm d = 121.0 mm d' = 29.0 mm
Flange Dimensions: b = 1000.0 mm h_f = 0.0 mm
Uncracked Section: I_c = 0.000281 m⁴ y(b) = 75.0 mm y(t) = 75.0 mm
Concrete: F_{cd} = 16.67 N/mm² F_{ctd} = 1.17 N/mm² E_c = 31000.0 N/mm²
Steel: F_{yd} = 217.39 N/mm² E_s = 200000.0 N/mm² E_s/E_c = 6.5

	Left Support	Right Support	Span
A _s (t)/A _s (b)	402.12 / 335.10 mm ²	402.12 / 335.10 mm ²	0.00 / 335.10 mm ²
M(g) / M(g+q)	0.0 / 0.0 kN.m	0.8 / 1.2 kN.m	0.6 / 0.9 kN.m
M _{cr}	10.9 kN.m	10.9 kN.m	10.9 kN.m
Cracking Status (G)	NO	NO	NO
Cracking Status (G+Q)	NO	NO	NO
Cracked Inertia (G)	-	-	-
Cracked Inertia (G+Q)	-	-	-
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴

PROPOSED 5-STOREY ADMINISTRATION BLOCK	Fenerbahce Kadikoy (0001907)
Slab Deflection Check 1 15/02/2021 Rev: 1	Calc. By: SAMORA Checked By: MICHAEL

Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴
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Effective Inertia (G)	0.000281 m ⁴
Effective Inertia (G+Q)	0.000281 m ⁴
Immediate Def. (G)	0.000 m
Immediate Def. (G+Q)	0.000 m
Immediate Def. (Q)	0.000 m
Loading Time	FIVE YEARS OR MORE
Total Time Dep. Deflection	0.000 m

Flexural Member and Position: Member Not Supporting Partition Wall
Immediate Def. (Q) = 0.010 mm ≤ 4.861 mm (1750/360) ... **Adequate** ✓

Crack Width Check (Span)::

Required/Supplied A _s	335.10 / 322.78 mm ²	Steel Bar Stress	152.17 N/mm ²
No. of Tension Bars	7	Steel Bar CG (a)	29.000
Max. Bar Size	8.0 mm	Concrete Cover (c)	29.0
Effective Concrete Area	58000.0 mm ²	Environmental Conditions	Interior: Normal

Crack Width (w) = 0.13 mm ≤ 0.4 mm ... **Adequate** ✓

1S3 - Storey: 1

Flexural Member Type : Two-way Slab
Span Type : Interior Span
Clear Span / Height : 1750.0 / 150.0 mm = 11.7 ≤ 35 (TS-500 Table 13.1)

Section Dimensions: 1000.0 / 150.0 mm d = 121.0 mm d' = 29.0 mm
Flange Dimensions: b = 1000.0 mm h_f = 0.0 mm
Uncracked Section: I_c = 0.000281 m⁴ y(b) = 75.0 mm y(t) = 75.0 mm
Concrete: F_{cd} = 16.67 N/mm² F_{ctd} = 1.17 N/mm² E_c = 31000.0 N/mm²
Steel: F_{yd} = 217.39 N/mm² E_s = 200000.0 N/mm² E_s/E_c = 6.5

	Left Support	Right Support	Span
A _s (t)/A _s (b)	402.12 / 335.10 mm ²	402.12 / 335.10 mm ²	0.00 / 335.10 mm ²
M(g) / M(g+q)	0.0 / 0.0 kN.m	0.7 / 1.1 kN.m	0.5 / 0.8 kN.m
M _{or}	10.9 kN.m	10.9 kN.m	10.9 kN.m
Cracking Status (G)	NO	NO	NO
Cracking Status (G+Q)	NO	NO	NO
Cracked Inertia (G)	-	-	-
Cracked Inertia (G+Q)	-	-	-
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴

Effective Inertia (G)	0.000281 m ⁴
Effective Inertia (G+Q)	0.000281 m ⁴
Immediate Def. (G)	0.000 m
Immediate Def. (G+Q)	0.000 m
Immediate Def. (Q)	0.000 m
Loading Time	FIVE YEARS OR MORE
Total Time Dep. Deflection	0.000 m

Flexural Member and Position: Member Not Supporting Partition Wall
Immediate Def. (Q) = 0.009 mm ≤ 4.861 mm (1750/360) ... **Adequate** ✓

Crack Width Check (Span)::

Required/Supplied A _s	335.10 / 322.78 mm ²	Steel Bar Stress	152.17 N/mm ²
No. of Tension Bars	7	Steel Bar CG (a)	29.000
Max. Bar Size	8.0 mm	Concrete Cover (c)	29.0
Effective Concrete Area	58000.0 mm ²	Environmental Conditions	Interior: Normal

Crack Width (w) = 0.13 mm ≤ 0.4 mm ... **Adequate** ✓

1S4 - Storey: 1

Flexural Member Type : Two-way Slab
Span Type : Interior Span
Clear Span / Height : 2350.0 / 150.0 mm = 15.7 ≤ 35 (TS-500 Table 13.1)

PROPOSED 5-STOREY ADMINISTRATION BLOCK	Fenerbahce Kadikoy (0001907)
Slab Deflection Check 1 15/02/2021 Rev: 1	Calc. By: SAMORA Checked By: MICHAEL

Section Dimensions:	1000.0 / 150.0 mm	d = 121.0 mm	d' = 29.0 mm
Flange Dimensions:	b = 1000.0 mm	h _f = 0.0 mm	
Uncracked Section:	I _c = 0.000281 m ⁴	y(b) = 75.0 mm	y(t) = 75.0 mm
Concrete:	F _{cd} = 16.67 N/mm ²	F _{ctd} = 1.17 N/mm ²	E _c = 31000.0 N/mm ²
Steel:	F _{yd} = 217.39 N/mm ²	E _s = 200000.0 N/mm ²	E _s /E _c = 6.5

	Left Support	Right Support	Span
A _s (t)/A _s (b)	402.12 / 335.10 mm ²	402.12 / 335.10 mm ²	0.00 / 335.10 mm ²
M(g) / M(g+q)	0.0 / 0.0 kN.m	2.0 / 3.1 kN.m	1.5 / 2.3 kN.m
M _{cr}	10.9 kN.m	10.9 kN.m	10.9 kN.m
Cracking Status (G)	NO	NO	NO
Cracking Status (G+Q)	NO	NO	NO
Cracked Inertia (G)	-	-	-
Cracked Inertia (G+Q)	-	-	-
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴

Effective Inertia (G)	0.000281 m ⁴
Effective Inertia (G+Q)	0.000281 m ⁴
Immediate Def. (G)	0.000 m
Immediate Def. (G+Q)	0.000 m
Immediate Def. (Q)	0.000 m
Loading Time	FIVE YEARS OR MORE
Total Time Dep. Deflection	0.000 m

Flexural Member and Position: Member Not Supporting Partition Wall
Immediate Def. (Q) = 0.046 mm ≤ 6.528 mm (2350/360) ... **Adequate** ✓

Crack Width Check (Span)::

Required/Supplied A _s	335.10 / 322.78 mm ²	Steel Bar Stress	152.17 N/mm ²
No. of Tension Bars	7	Steel Bar CG (a)	29.000
Max. Bar Size	8.0 mm	Concrete Cover (c)	29.0
Effective Concrete Area	58000.0 mm ²	Environmental Conditions	Interior: Normal

Crack Width (w) = 0.13 mm ≤ 0.4 mm ... **Adequate** ✓

1S5 - Storey: 1

Flexural Member Type : One-way Slab
Span Type : Interior Span
Clear Span / Height : 1275.0 / 150.0 mm = 8.5 ≤ 30 (TS-500 Table 13.1)

Section Dimensions:	1000.0 / 150.0 mm	d = 121.0 mm	d' = 29.0 mm
Flange Dimensions:	b = 1000.0 mm	h _f = 0.0 mm	
Uncracked Section:	I _c = 0.000281 m ⁴	y(b) = 75.0 mm	y(t) = 75.0 mm
Concrete:	F _{cd} = 16.67 N/mm ²	F _{ctd} = 1.17 N/mm ²	E _c = 31000.0 N/mm ²
Steel:	F _{yd} = 217.39 N/mm ²	E _s = 200000.0 N/mm ²	E _s /E _c = 6.5

	Left Support	Right Support	Span
A _s (t)/A _s (b)	402.12 / 335.10 mm ²	402.12 / 335.10 mm ²	0.00 / 335.10 mm ²
M(g) / M(g+q)	0.8 / 1.2 kN.m	0.8 / 1.2 kN.m	0.8 / 1.2 kN.m
M _{cr}	10.9 kN.m	10.9 kN.m	10.9 kN.m
Cracking Status (G)	NO	NO	NO
Cracking Status (G+Q)	NO	NO	NO
Cracked Inertia (G)	-	-	-
Cracked Inertia (G+Q)	-	-	-
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴

Effective Inertia (G)	0.000281 m ⁴
Effective Inertia (G+Q)	0.000281 m ⁴
Immediate Def. (G)	0.000 m
Immediate Def. (G+Q)	0.000 m
Immediate Def. (Q)	0.000 m
Loading Time	FIVE YEARS OR MORE

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Total Time Dep. Deflection	0.000 m
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Flexural Member and Position: Member Not Supporting Partition Wall
Immediate Def. (Q) = 0.006 mm $\leq$ 3.542 mm (1275/360) ... **Adequate** ✓

Crack Width Check (Span)::

Required/Supplied A_s	335.10 / 322.78 mm ²	Steel Bar Stress	152.17 N/mm ²
No. of Tension Bars	7	Steel Bar CG (a)	29.000
Max. Bar Size	8.0 mm	Concrete Cover (c)	29.0
Effective Concrete Area	58000.0 mm ²	Environmental Conditions	Interior: Normal

Crack Width (w) = 0.13 mm $\leq$ 0.4 mm ... **Adequate** ✓

1S6 - Storey: 1

Flexural Member Type : Two-way Slab
Span Type : Interior Span
Clear Span / Height : 3950.0 / 150.0 mm = 26.3 $\leq$ 35 (TS-500 Table 13.1)

Section Dimensions: 1000.0 / 150.0 mm d = 121.0 mm d' = 29.0 mm
Flange Dimensions: b = 1000.0 mm h_f = 0.0 mm
Uncracked Section: I_c = 0.000281 m⁴ y(b) = 75.0 mm y(t) = 75.0 mm
Concrete: F_{cd} = 16.67 N/mm² F_{ctd} = 1.17 N/mm² E_c = 31000.0 N/mm²
Steel: F_{yd} = 217.39 N/mm² E_s = 200000.0 N/mm² E_s/E_c = 6.5

	Left Support	Right Support	Span
A _s (t)/A _s (b)	402.12 / 335.10 mm ²	402.12 / 335.10 mm ²	0.00 / 335.10 mm ²
M(g) / M(g+q)	3.2 / 4.9 kN.m	0.0 / 0.0 kN.m	2.5 / 3.8 kN.m
M _{cr}	10.9 kN.m	10.9 kN.m	10.9 kN.m
Cracking Status (G)	NO	NO	NO
Cracking Status (G+Q)	NO	NO	NO
Cracked Inertia (G)	-	-	-
Cracked Inertia (G+Q)	-	-	-
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴

Effective Inertia (G)	0.000281 m ⁴
Effective Inertia (G+Q)	0.000281 m ⁴
Immediate Def. (G)	0.000 m
Immediate Def. (G+Q)	0.001 m
Immediate Def. (Q)	0.000 m
Loading Time	FIVE YEARS OR MORE
Total Time Dep. Deflection	0.001 m

Flexural Member and Position: Member Not Supporting Partition Wall
Immediate Def. (Q) = 0.213 mm $\leq$ 10.972 mm (3950/360) ... **Adequate** ✓

Crack Width Check (Span)::

Required/Supplied A_s	335.10 / 322.78 mm ²	Steel Bar Stress	152.17 N/mm ²
No. of Tension Bars	7	Steel Bar CG (a)	29.000
Max. Bar Size	8.0 mm	Concrete Cover (c)	29.0
Effective Concrete Area	58000.0 mm ²	Environmental Conditions	Interior: Normal

Crack Width (w) = 0.13 mm $\leq$ 0.4 mm ... **Adequate** ✓

1S7 - Storey: 1

Flexural Member Type : One-way Slab
Span Type : Interior Span
Clear Span / Height : 978.6 / 150.0 mm = 6.5 $\leq$ 30 (TS-500 Table 13.1)

Section Dimensions: 1000.0 / 150.0 mm d = 121.0 mm d' = 29.0 mm
Flange Dimensions: b = 1000.0 mm h_f = 0.0 mm
Uncracked Section: I_c = 0.000281 m⁴ y(b) = 75.0 mm y(t) = 75.0 mm
Concrete: F_{cd} = 16.67 N/mm² F_{ctd} = 1.17 N/mm² E_c = 31000.0 N/mm²
Steel: F_{yd} = 217.39 N/mm² E_s = 200000.0 N/mm² E_s/E_c = 6.5

	Left Support	Right Support	Span
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$A_s(t)/A_s(b)$	402.12 / 335.10 mm ²	335.10 / 335.10 mm ²	0.00 / 335.10 mm ²
$M(g) / M(g+q)$	0.0 / 0.0 kN.m	0.7 / 1.1 kN.m	0.7 / 1.1 kN.m
M_{cr}	10.9 kN.m	10.9 kN.m	10.9 kN.m
Cracking Status (G)	NO	NO	NO
Cracking Status (G+Q)	NO	NO	NO
Cracked Inertia (G)	-	-	-
Cracked Inertia (G+Q)	-	-	-
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴

Effective Inertia (G)	0.000281 m ⁴
Effective Inertia (G+Q)	0.000281 m ⁴
Immediate Def. (G)	0.000 m
Immediate Def. (G+Q)	0.000 m
Immediate Def. (Q)	0.000 m
Loading Time	FIVE YEARS OR MORE
Total Time Dep. Deflection	0.000 m

Flexural Member and Position: Member Not Supporting Partition Wall
Immediate Def. (Q) = 0.004 mm $\leq$ 2.718 mm (979/360) ... **Adequate** ✓

Crack Width Check (Span)::

Required/Supplied A_s	335.10 / 322.78 mm ²	Steel Bar Stress	152.17 N/mm ²
No. of Tension Bars	7	Steel Bar CG (a)	29.000
Max. Bar Size	8.0 mm	Concrete Cover (c)	29.0
Effective Concrete Area	58000.0 mm ²	Environmental Conditions	Interior: Normal

Crack Width (w) = 0.13 mm $\leq$ 0.4 mm ... **Adequate** ✓

1S8 - Storey: 1

Flexural Member Type : Two-way Slab
Span Type : Interior Span
Clear Span / Height : 2475.0 / 150.0 mm = 16.5 $\leq$ 35 (TS-500 Table 13.1)

Section Dimensions: 1000.0 / 150.0 mm d = 121.0 mm d' = 29.0 mm
Flange Dimensions: b = 1000.0 mm h_f = 0.0 mm
Uncracked Section: I_c = 0.000281 m⁴ y(b) = 75.0 mm y(t) = 75.0 mm
Concrete: F_{cd} = 16.67 N/mm² F_{ctd} = 1.17 N/mm² E_c = 31000.0 N/mm²
Steel: F_{yd} = 217.39 N/mm² E_s = 200000.0 N/mm² E_s/E_c = 6.5

	Left Support	Right Support	Span
$A_s(t)/A_s(b)$	402.12 / 335.10 mm ²	402.12 / 335.10 mm ²	0.00 / 335.10 mm ²
$M(g) / M(g+q)$	1.4 / 2.1 kN.m	1.4 / 2.1 kN.m	1.1 / 1.6 kN.m
M_{cr}	10.9 kN.m	10.9 kN.m	10.9 kN.m
Cracking Status (G)	NO	NO	NO
Cracking Status (G+Q)	NO	NO	NO
Cracked Inertia (G)	-	-	-
Cracked Inertia (G+Q)	-	-	-
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴

Effective Inertia (G)	0.000281 m ⁴
Effective Inertia (G+Q)	0.000281 m ⁴
Immediate Def. (G)	0.000 m
Immediate Def. (G+Q)	0.000 m
Immediate Def. (Q)	0.000 m
Loading Time	FIVE YEARS OR MORE
Total Time Dep. Deflection	0.000 m

Flexural Member and Position: Member Not Supporting Partition Wall
Immediate Def. (Q) = 0.031 mm $\leq$ 6.875 mm (2475/360) ... **Adequate** ✓

Crack Width Check (Span)::

Required/Supplied A_s	335.10 / 322.78 mm ²	Steel Bar Stress	152.17 N/mm ²
No. of Tension Bars	7	Steel Bar CG (a)	29.000
Max. Bar Size	8.0 mm	Concrete Cover (c)	29.0

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Effective Concrete Area	58000.0 mm ²	Environmental Conditions	Interior: Normal
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Crack Width (w) = 0.13 mm ≤ 0.4 mm ... **Adequate** ✓

1S9 - Storey: 1

Flexural Member Type : Two-way Slab
Span Type : Interior Span
Clear Span / Height : 1950.0 / 150.0 mm = 13.0 ≤ 35 (TS-500 Table 13.1)

Section Dimensions: 1000.0 / 150.0 mm d = 121.0 mm d' = 29.0 mm
Flange Dimensions: b = 1000.0 mm h_f = 0.0 mm
Uncracked Section: I_c = 0.000281 m⁴ y(b) = 75.0 mm y(t) = 75.0 mm
Concrete: F_{cd} = 16.67 N/mm² F_{ctd} = 1.17 N/mm² E_c = 31000.0 N/mm²
Steel: F_{yd} = 217.39 N/mm² E_s = 200000.0 N/mm² E_s/E_c = 6.5

	Left Support	Right Support	Span
A _s (t)/A _s (b)	402.12 / 335.10 mm ²	402.12 / 335.10 mm ²	0.00 / 335.10 mm ²
M(g) / M(g+q)	1.2 / 1.9 kN.m	1.2 / 1.9 kN.m	0.9 / 1.4 kN.m
M _{cr}	10.9 kN.m	10.9 kN.m	10.9 kN.m
Cracking Status (G)	NO	NO	NO
Cracking Status (G+Q)	NO	NO	NO
Cracked Inertia (G)	-	-	-
Cracked Inertia (G+Q)	-	-	-
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴

Effective Inertia (G)	0.000281 m ⁴
Effective Inertia (G+Q)	0.000281 m ⁴
Immediate Def. (G)	0.000 m
Immediate Def. (G+Q)	0.000 m
Immediate Def. (Q)	0.000 m
Loading Time	FIVE YEARS OR MORE
Total Time Dep. Deflection	0.000 m

Flexural Member and Position: Member Not Supporting Partition Wall
Immediate Def. (Q) = 0.016 mm ≤ 5.417 mm (1950/360) ... **Adequate** ✓

Crack Width Check (Span)::

Required/Supplied A _s	335.10 / 322.78 mm ²	Steel Bar Stress	152.17 N/mm ²
No. of Tension Bars	7	Steel Bar CG (a)	29.000
Max. Bar Size	8.0 mm	Concrete Cover (c)	29.0
Effective Concrete Area	58000.0 mm ²	Environmental Conditions	Interior: Normal

Crack Width (w) = 0.13 mm ≤ 0.4 mm ... **Adequate** ✓

1S10 - Storey: 1

Flexural Member Type : One-way Slab
Span Type : Interior Span
Clear Span / Height : 1275.0 / 150.0 mm = 8.5 ≤ 30 (TS-500 Table 13.1)

Section Dimensions: 1000.0 / 150.0 mm d = 121.0 mm d' = 29.0 mm
Flange Dimensions: b = 1000.0 mm h_f = 0.0 mm
Uncracked Section: I_c = 0.000281 m⁴ y(b) = 75.0 mm y(t) = 75.0 mm
Concrete: F_{cd} = 16.67 N/mm² F_{ctd} = 1.17 N/mm² E_c = 31000.0 N/mm²
Steel: F_{yd} = 217.39 N/mm² E_s = 200000.0 N/mm² E_s/E_c = 6.5

	Left Support	Right Support	Span
A _s (t)/A _s (b)	402.12 / 335.10 mm ²	335.10 / 335.10 mm ²	0.00 / 335.10 mm ²
M(g) / M(g+q)	0.8 / 1.2 kN.m	0.8 / 1.2 kN.m	0.6 / 0.9 kN.m
M _{cr}	10.9 kN.m	10.9 kN.m	10.9 kN.m
Cracking Status (G)	NO	NO	NO
Cracking Status (G+Q)	NO	NO	NO
Cracked Inertia (G)	-	-	-
Cracked Inertia (G+Q)	-	-	-
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴

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Effective Inertia (G)	0.000281 m ⁴
Effective Inertia (G+Q)	0.000281 m ⁴
Immediate Def. (G)	0.000 m
Immediate Def. (G+Q)	0.000 m
Immediate Def. (Q)	0.000 m
Loading Time	FIVE YEARS OR MORE
Total Time Dep. Deflection	0.000 m

Flexural Member and Position: Member Not Supporting Partition Wall
Immediate Def. (Q) = 0.004 mm $\leq$ 3.542 mm (1275/360) ... **Adequate** ✓

Crack Width Check (Span)::

Required/Supplied A _s	335.10 / 322.78 mm ²	Steel Bar Stress	152.17 N/mm ²
No. of Tension Bars	7	Steel Bar CG (a)	29.000
Max. Bar Size	8.0 mm	Concrete Cover (c)	29.0
Effective Concrete Area	58000.0 mm ²	Environmental Conditions	Interior: Normal

Crack Width (w) = 0.13 mm $\leq$ 0.4 mm ... **Adequate** ✓

1S11 - Storey: 1

Flexural Member Type : Two-way Slab
Span Type : Interior Span
Clear Span / Height : 3825.0 / 150.0 mm = 25.5 $\leq$ 35 (TS-500 Table 13.1)

Section Dimensions: 1000.0 / 150.0 mm d = 121.0 mm d' = 29.0 mm
Flange Dimensions: b = 1000.0 mm h_f = 0.0 mm
Uncracked Section: I_c = 0.000281 m⁴ y(b) = 75.0 mm y(t) = 75.0 mm
Concrete: F_{cd} = 16.67 N/mm² F_{ctd} = 1.17 N/mm² E_c = 31000.0 N/mm²
Steel: F_{yd} = 217.39 N/mm² E_s = 200000.0 N/mm² E_s/E_c = 6.5

	Left Support	Right Support	Span
A _s (t)/A _s (b)	402.12 / 335.10 mm ²	335.10 / 335.10 mm ²	0.00 / 335.10 mm ²
M(g) / M(g+q)	0.0 / 0.0 kN.m	3.6 / 5.6 kN.m	2.7 / 4.2 kN.m
M _{cr}	10.9 kN.m	10.9 kN.m	10.9 kN.m
Cracking Status (G)	NO	NO	NO
Cracking Status (G+Q)	NO	NO	NO
Cracked Inertia (G)	-	-	-
Cracked Inertia (G+Q)	-	-	-
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴

Effective Inertia (G)	0.000281 m ⁴
Effective Inertia (G+Q)	0.000281 m ⁴
Immediate Def. (G)	0.000 m
Immediate Def. (G+Q)	0.001 m
Immediate Def. (Q)	0.000 m
Loading Time	FIVE YEARS OR MORE
Total Time Dep. Deflection	0.001 m

Flexural Member and Position: Member Not Supporting Partition Wall
Immediate Def. (Q) = 0.224 mm $\leq$ 10.625 mm (3825/360) ... **Adequate** ✓

Crack Width Check (Span)::

Required/Supplied A _s	335.10 / 322.78 mm ²	Steel Bar Stress	152.17 N/mm ²
No. of Tension Bars	7	Steel Bar CG (a)	29.000
Max. Bar Size	8.0 mm	Concrete Cover (c)	29.0
Effective Concrete Area	58000.0 mm ²	Environmental Conditions	Interior: Normal

Crack Width (w) = 0.13 mm $\leq$ 0.4 mm ... **Adequate** ✓

1S12 - Storey: 1

Flexural Member Type : Two-way Slab
Span Type : Interior Span
Clear Span / Height : 3225.0 / 150.0 mm = 21.5 $\leq$ 35 (TS-500 Table 13.1)

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Section Dimensions:	1000.0 / 150.0 mm	d = 121.0 mm	d' = 29.0 mm
Flange Dimensions:	b = 1000.0 mm	h _f = 0.0 mm	
Uncracked Section:	I _c = 0.000281 m ⁴	y(b) = 75.0 mm	y(t) = 75.0 mm
Concrete:	F _{cd} = 16.67 N/mm ²	F _{ctd} = 1.17 N/mm ²	E _c = 31000.0 N/mm ²
Steel:	F _{yd} = 217.39 N/mm ²	E _s = 200000.0 N/mm ²	E _s /E _c = 6.5

	Left Support	Right Support	Span
A _s (t)/A _s (b)	402.12 / 335.10 mm ²	335.10 / 335.10 mm ²	0.00 / 335.10 mm ²
M(g) / M(g+q)	0.0 / 0.0 kN.m	2.9 / 4.5 kN.m	2.2 / 3.4 kN.m
M _{cr}	10.9 kN.m	10.9 kN.m	10.9 kN.m
Cracking Status (G)	NO	NO	NO
Cracking Status (G+Q)	NO	NO	NO
Cracked Inertia (G)	-	-	-
Cracked Inertia (G+Q)	-	-	-
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴

Effective Inertia (G)	0.000281 m ⁴
Effective Inertia (G+Q)	0.000281 m ⁴
Immediate Def. (G)	0.000 m
Immediate Def. (G+Q)	0.000 m
Immediate Def. (Q)	0.000 m
Loading Time	FIVE YEARS OR MORE
Total Time Dep. Deflection	0.001 m

Flexural Member and Position: Member Not Supporting Partition Wall
Immediate Def. (Q) = 0.128 mm ≤ 8.958 mm (3225/360) ... **Adequate** ✓

Crack Width Check (Span)::

Required/Supplied A _s	335.10 / 322.78 mm ²	Steel Bar Stress	152.17 N/mm ²
No. of Tension Bars	7	Steel Bar CG (a)	29.000
Max. Bar Size	8.0 mm	Concrete Cover (c)	29.0
Effective Concrete Area	58000.0 mm ²	Environmental Conditions	Interior: Normal

Crack Width (w) = 0.13 mm ≤ 0.4 mm ... **Adequate** ✓

1S13 - Storey: 1

Flexural Member Type : Two-way Slab
Span Type : Interior Span
Clear Span / Height : 1900.0 / 150.0 mm = 12.7 ≤ 35 (TS-500 Table 13.1)

Section Dimensions:	1000.0 / 150.0 mm	d = 121.0 mm	d' = 29.0 mm
Flange Dimensions:	b = 1000.0 mm	h _f = 0.0 mm	
Uncracked Section:	I _c = 0.000281 m ⁴	y(b) = 75.0 mm	y(t) = 75.0 mm
Concrete:	F _{cd} = 16.67 N/mm ²	F _{ctd} = 1.17 N/mm ²	E _c = 31000.0 N/mm ²
Steel:	F _{yd} = 217.39 N/mm ²	E _s = 200000.0 N/mm ²	E _s /E _c = 6.5

	Left Support	Right Support	Span
A _s (t)/A _s (b)	402.12 / 335.10 mm ²	335.10 / 335.10 mm ²	0.00 / 335.10 mm ²
M(g) / M(g+q)	1.4 / 2.1 kN.m	1.4 / 2.1 kN.m	1.0 / 1.6 kN.m
M _{cr}	10.9 kN.m	10.9 kN.m	10.9 kN.m
Cracking Status (G)	NO	NO	NO
Cracking Status (G+Q)	NO	NO	NO
Cracked Inertia (G)	-	-	-
Cracked Inertia (G+Q)	-	-	-
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴

Effective Inertia (G)	0.000281 m ⁴
Effective Inertia (G+Q)	0.000281 m ⁴
Immediate Def. (G)	0.000 m
Immediate Def. (G+Q)	0.000 m
Immediate Def. (Q)	0.000 m
Loading Time	FIVE YEARS OR MORE
Total Time Dep. Deflection	0.000 m

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Flexural Member and Position: Member Not Supporting Partition Wall
Immediate Def. (Q) = 0.017 mm $\leq$ 5.278 mm (1900/360) ... **Adequate** ✓

Crack Width Check (Span)::

Required/Supplied A_s	335.10 / 322.78 mm ²	Steel Bar Stress	152.17 N/mm ²
No. of Tension Bars	7	Steel Bar CG (a)	29.000
Max. Bar Size	8.0 mm	Concrete Cover (c)	29.0
Effective Concrete Area	58000.0 mm ²	Environmental Conditions	Interior: Normal

Crack Width (w) = 0.13 mm $\leq$ 0.4 mm ... **Adequate** ✓

1S14 - Storey: 1

Flexural Member Type : Two-way Slab
Span Type : Interior Span
Clear Span / Height : 2000.0 / 150.0 mm = 13.3 $\leq$ 35 (TS-500 Table 13.1)

Section Dimensions: 1000.0 / 150.0 mm d = 121.0 mm d' = 29.0 mm
Flange Dimensions: b = 1000.0 mm h_f = 0.0 mm
Uncracked Section: I_c = 0.000281 m⁴ y(b) = 75.0 mm y(t) = 75.0 mm
Concrete: F_{cd} = 16.67 N/mm² F_{ctd} = 1.17 N/mm² E_c = 31000.0 N/mm²
Steel: F_{yd} = 217.39 N/mm² E_s = 200000.0 N/mm² E_s/E_c = 6.5

	Left Support	Right Support	Span
A _s (t)/A _s (b)	402.12 / 335.10 mm ²	402.12 / 335.10 mm ²	0.00 / 335.10 mm ²
M(g) / M(g+q)	1.4 / 2.2 kN.m	1.4 / 2.2 kN.m	1.1 / 1.7 kN.m
M _{cr}	10.9 kN.m	10.9 kN.m	10.9 kN.m
Cracking Status (G)	NO	NO	NO
Cracking Status (G+Q)	NO	NO	NO
Cracked Inertia (G)	-	-	-
Cracked Inertia (G+Q)	-	-	-
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴

Effective Inertia (G)	0.000281 m ⁴
Effective Inertia (G+Q)	0.000281 m ⁴
Immediate Def. (G)	0.000 m
Immediate Def. (G+Q)	0.000 m
Immediate Def. (Q)	0.000 m
Loading Time	FIVE YEARS OR MORE
Total Time Dep. Deflection	0.000 m

Flexural Member and Position: Member Not Supporting Partition Wall
Immediate Def. (Q) = 0.020 mm $\leq$ 5.556 mm (2000/360) ... **Adequate** ✓

Crack Width Check (Span)::

Required/Supplied A_s	335.10 / 322.78 mm ²	Steel Bar Stress	152.17 N/mm ²
No. of Tension Bars	7	Steel Bar CG (a)	29.000
Max. Bar Size	8.0 mm	Concrete Cover (c)	29.0
Effective Concrete Area	58000.0 mm ²	Environmental Conditions	Interior: Normal

Crack Width (w) = 0.13 mm $\leq$ 0.4 mm ... **Adequate** ✓

1S15 - Storey: 1

Flexural Member Type : Two-way Slab
Span Type : Interior Span
Clear Span / Height : 3550.0 / 150.0 mm = 23.7 $\leq$ 35 (TS-500 Table 13.1)

Section Dimensions: 1000.0 / 150.0 mm d = 121.0 mm d' = 29.0 mm
Flange Dimensions: b = 1000.0 mm h_f = 0.0 mm
Uncracked Section: I_c = 0.000281 m⁴ y(b) = 75.0 mm y(t) = 75.0 mm
Concrete: F_{cd} = 16.67 N/mm² F_{ctd} = 1.17 N/mm² E_c = 31000.0 N/mm²
Steel: F_{yd} = 217.39 N/mm² E_s = 200000.0 N/mm² E_s/E_c = 6.5

	Left Support	Right Support	Span
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PROPOSED 5-STOREY ADMINISTRATION BLOCK	Fenerbahce Kadikoy (0001907)
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$A_s(t)/A_s(b)$	402.12 / 335.10 mm ²	402.12 / 335.10 mm ²	0.00 / 335.10 mm ²
$M(g) / M(g+q)$	2.8 / 4.3 kN.m	0.0 / 0.0 kN.m	2.1 / 3.3 kN.m
M_{cr}	10.9 kN.m	10.9 kN.m	10.9 kN.m
Cracking Status (G)	NO	NO	NO
Cracking Status (G+Q)	NO	NO	NO
Cracked Inertia (G)	-	-	-
Cracked Inertia (G+Q)	-	-	-
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴

Effective Inertia (G)	0.000281 m ⁴
Effective Inertia (G+Q)	0.000281 m ⁴
Immediate Def. (G)	0.000 m
Immediate Def. (G+Q)	0.000 m
Immediate Def. (Q)	0.000 m
Loading Time	FIVE YEARS OR MORE
Total Time Dep. Deflection	0.001 m

Flexural Member and Position: Member Not Supporting Partition Wall
Immediate Def. (Q) = 0.150 mm $\leq$ 9.861 mm (3550/360) ... **Adequate** ✓

Crack Width Check (Span)::

Required/Supplied A_s	335.10 / 322.78 mm ²	Steel Bar Stress	152.17 N/mm ²
No. of Tension Bars	7	Steel Bar CG (a)	29.000
Max. Bar Size	8.0 mm	Concrete Cover (c)	29.0
Effective Concrete Area	58000.0 mm ²	Environmental Conditions	Interior: Normal

Crack Width (w) = 0.13 mm $\leq$ 0.4 mm ... **Adequate** ✓

1S16 - Storey: 1

Flexural Member Type : One-way Slab
Span Type : Interior Span
Clear Span / Height : 1950.0 / 150.0 mm = 13.0 $\leq$ 30 (TS-500 Table 13.1)

Section Dimensions: 1000.0 / 150.0 mm $d = 121.0$ mm $d' = 29.0$ mm
Flange Dimensions: $b = 1000.0$ mm $h_f = 0.0$ mm
Uncracked Section: $I_c = 0.000281$ m⁴ $y(b) = 75.0$ mm $y(t) = 75.0$ mm
Concrete: $F_{cd} = 16.67$ N/mm² $F_{ctd} = 1.17$ N/mm² $E_c = 31000.0$ N/mm²
Steel: $F_{yd} = 217.39$ N/mm² $E_s = 200000.0$ N/mm² $E_s/E_c = 6.5$

	Left Support	Right Support	Span
$A_s(t)/A_s(b)$	402.12 / 335.10 mm ²	402.12 / 335.10 mm ²	0.00 / 335.10 mm ²
$M(g) / M(g+q)$	1.6 / 2.5 kN.m	1.6 / 2.5 kN.m	1.6 / 2.5 kN.m
M_{cr}	10.9 kN.m	10.9 kN.m	10.9 kN.m
Cracking Status (G)	NO	NO	NO
Cracking Status (G+Q)	NO	NO	NO
Cracked Inertia (G)	-	-	-
Cracked Inertia (G+Q)	-	-	-
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴

Effective Inertia (G)	0.000281 m ⁴
Effective Inertia (G+Q)	0.000281 m ⁴
Immediate Def. (G)	0.000 m
Immediate Def. (G+Q)	0.000 m
Immediate Def. (Q)	0.000 m
Loading Time	FIVE YEARS OR MORE
Total Time Dep. Deflection	0.000 m

Flexural Member and Position: Member Not Supporting Partition Wall
Immediate Def. (Q) = 0.032 mm $\leq$ 5.417 mm (1950/360) ... **Adequate** ✓

Crack Width Check (Span)::

Required/Supplied A_s	335.10 / 322.78 mm ²	Steel Bar Stress	152.17 N/mm ²
No. of Tension Bars	7	Steel Bar CG (a)	29.000
Max. Bar Size	8.0 mm	Concrete Cover (c)	29.0

PROPOSED 5-STOREY ADMINISTRATION BLOCK	Fenerbahce Kadikoy (0001907)
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Effective Concrete Area	58000.0 mm ²	Environmental Conditions	Interior: Normal
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Crack Width (w) = 0.13 mm ≤ 0.4 mm ... **Adequate** ✓

1S17 - Storey: 1

Flexural Member Type : Two-way Slab
Span Type : Interior Span
Clear Span / Height : 2475.0 / 150.0 mm = 16.5 ≤ 35 (TS-500 Table 13.1)

Section Dimensions: 1000.0 / 150.0 mm d = 121.0 mm d' = 29.0 mm
Flange Dimensions: b = 1000.0 mm h_f = 0.0 mm
Uncracked Section: I_c = 0.000281 m⁴ y(b) = 75.0 mm y(t) = 75.0 mm
Concrete: F_{cd} = 16.67 N/mm² F_{ctd} = 1.17 N/mm² E_c = 31000.0 N/mm²
Steel: F_{yd} = 217.39 N/mm² E_s = 200000.0 N/mm² E_s/E_c = 6.5

	Left Support	Right Support	Span
A _s (t)/A _s (b)	402.12 / 335.10 mm ²	402.12 / 335.10 mm ²	0.00 / 335.10 mm ²
M(g) / M(g+q)	2.4 / 3.7 kN.m	2.4 / 3.7 kN.m	1.8 / 2.8 kN.m
M _{cr}	10.9 kN.m	10.9 kN.m	10.9 kN.m
Cracking Status (G)	NO	NO	NO
Cracking Status (G+Q)	NO	NO	NO
Cracked Inertia (G)	-	-	-
Cracked Inertia (G+Q)	-	-	-
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴

Effective Inertia (G)	0.000281 m ⁴
Effective Inertia (G+Q)	0.000281 m ⁴
Immediate Def. (G)	0.000 m
Immediate Def. (G+Q)	0.000 m
Immediate Def. (Q)	0.000 m
Loading Time	FIVE YEARS OR MORE
Total Time Dep. Deflection	0.000 m

Flexural Member and Position: Member Not Supporting Partition Wall
Immediate Def. (Q) = 0.053 mm ≤ 6.875 mm (2475/360) ... **Adequate** ✓

Crack Width Check (Span)::

Required/Supplied A _s	335.10 / 322.78 mm ²	Steel Bar Stress	152.17 N/mm ²
No. of Tension Bars	7	Steel Bar CG (a)	29.000
Max. Bar Size	8.0 mm	Concrete Cover (c)	29.0
Effective Concrete Area	58000.0 mm ²	Environmental Conditions	Interior: Normal

Crack Width (w) = 0.13 mm ≤ 0.4 mm ... **Adequate** ✓

1S18 - Storey: 1

Flexural Member Type : Two-way Slab
Span Type : Interior Span
Clear Span / Height : 2175.0 / 150.0 mm = 14.5 ≤ 35 (TS-500 Table 13.1)

Section Dimensions: 1000.0 / 150.0 mm d = 121.0 mm d' = 29.0 mm
Flange Dimensions: b = 1000.0 mm h_f = 0.0 mm
Uncracked Section: I_c = 0.000281 m⁴ y(b) = 75.0 mm y(t) = 75.0 mm
Concrete: F_{cd} = 16.67 N/mm² F_{ctd} = 1.17 N/mm² E_c = 31000.0 N/mm²
Steel: F_{yd} = 217.39 N/mm² E_s = 200000.0 N/mm² E_s/E_c = 6.5

	Left Support	Right Support	Span
A _s (t)/A _s (b)	402.12 / 335.10 mm ²	402.12 / 335.10 mm ²	0.00 / 335.10 mm ²
M(g) / M(g+q)	1.4 / 2.2 kN.m	1.4 / 2.2 kN.m	1.1 / 1.6 kN.m
M _{cr}	10.9 kN.m	10.9 kN.m	10.9 kN.m
Cracking Status (G)	NO	NO	NO
Cracking Status (G+Q)	NO	NO	NO
Cracked Inertia (G)	-	-	-
Cracked Inertia (G+Q)	-	-	-
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴

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Effective Inertia (G)	0.000281 m ⁴
Effective Inertia (G+Q)	0.000281 m ⁴
Immediate Def. (G)	0.000 m
Immediate Def. (G+Q)	0.000 m
Immediate Def. (Q)	0.000 m
Loading Time	FIVE YEARS OR MORE
Total Time Dep. Deflection	0.000 m

Flexural Member and Position: Member Not Supporting Partition Wall
Immediate Def. (Q) = 0.024 mm ≤ 6.042 mm (2175/360) ... **Adequate** ✓

Crack Width Check (Span)::

Required/Supplied A _s	335.10 / 322.78 mm ²	Steel Bar Stress	152.17 N/mm ²
No. of Tension Bars	7	Steel Bar CG (a)	29.000
Max. Bar Size	8.0 mm	Concrete Cover (c)	29.0
Effective Concrete Area	58000.0 mm ²	Environmental Conditions	Interior: Normal

Crack Width (w) = 0.13 mm ≤ 0.4 mm ... **Adequate** ✓

2S1 - Storey: 2

Flexural Member Type : Two-way Slab
Span Type : Interior Span
Clear Span / Height : 3825.0 / 150.0 mm = 25.5 ≤ 35 (TS-500 Table 13.1)

Section Dimensions: 1000.0 / 150.0 mm d = 121.0 mm d' = 29.0 mm
Flange Dimensions: b = 1000.0 mm h_f = 0.0 mm
Uncracked Section: I_c = 0.000281 m⁴ y(b) = 75.0 mm y(t) = 75.0 mm
Concrete: F_{cd} = 16.67 N/mm² F_{ctd} = 1.17 N/mm² E_c = 31000.0 N/mm²
Steel: F_{yd} = 217.39 N/mm² E_s = 200000.0 N/mm² E_s/E_c = 6.5

	Left Support	Right Support	Span
A _s (t)/A _s (b)	402.12 / 335.10 mm ²	402.12 / 335.10 mm ²	0.00 / 335.10 mm ²
M(g) / M(g+q)	0.0 / 0.0 kN.m	2.8 / 4.4 kN.m	2.2 / 3.4 kN.m
M _{cr}	10.9 kN.m	10.9 kN.m	10.9 kN.m
Cracking Status (G)	NO	NO	NO
Cracking Status (G+Q)	NO	NO	NO
Cracked Inertia (G)	-	-	-
Cracked Inertia (G+Q)	-	-	-
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴

Effective Inertia (G)	0.000281 m ⁴
Effective Inertia (G+Q)	0.000281 m ⁴
Immediate Def. (G)	0.000 m
Immediate Def. (G+Q)	0.001 m
Immediate Def. (Q)	0.000 m
Loading Time	FIVE YEARS OR MORE
Total Time Dep. Deflection	0.001 m

Flexural Member and Position: Member Not Supporting Partition Wall
Immediate Def. (Q) = 0.179 mm ≤ 10.625 mm (3825/360) ... **Adequate** ✓

Crack Width Check (Span)::

Required/Supplied A _s	335.10 / 322.78 mm ²	Steel Bar Stress	152.17 N/mm ²
No. of Tension Bars	7	Steel Bar CG (a)	29.000
Max. Bar Size	8.0 mm	Concrete Cover (c)	29.0
Effective Concrete Area	58000.0 mm ²	Environmental Conditions	Interior: Normal

Crack Width (w) = 0.13 mm ≤ 0.4 mm ... **Adequate** ✓

2S2 - Storey: 2

Flexural Member Type : Two-way Slab
Span Type : Interior Span
Clear Span / Height : 1750.0 / 150.0 mm = 11.7 ≤ 35 (TS-500 Table 13.1)

PROPOSED 5-STOREY ADMINISTRATION BLOCK	Fenerbahce Kadikoy (0001907)
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Section Dimensions:	1000.0 / 150.0 mm	d = 121.0 mm	d' = 29.0 mm
Flange Dimensions:	b = 1000.0 mm	h _f = 0.0 mm	
Uncracked Section:	I _c = 0.000281 m ⁴	y(b) = 75.0 mm	y(t) = 75.0 mm
Concrete:	F _{cd} = 16.67 N/mm ²	F _{ctd} = 1.17 N/mm ²	E _c = 31000.0 N/mm ²
Steel:	F _{yd} = 217.39 N/mm ²	E _s = 200000.0 N/mm ²	E _s /E _c = 6.5

	Left Support	Right Support	Span
A _s (t)/A _s (b)	402.12 / 335.10 mm ²	402.12 / 335.10 mm ²	0.00 / 335.10 mm ²
M(g) / M(g+q)	0.0 / 0.0 kN.m	0.8 / 1.2 kN.m	0.6 / 0.9 kN.m
M _{cr}	10.9 kN.m	10.9 kN.m	10.9 kN.m
Cracking Status (G)	NO	NO	NO
Cracking Status (G+Q)	NO	NO	NO
Cracked Inertia (G)	-	-	-
Cracked Inertia (G+Q)	-	-	-
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴

Effective Inertia (G)	0.000281 m ⁴
Effective Inertia (G+Q)	0.000281 m ⁴
Immediate Def. (G)	0.000 m
Immediate Def. (G+Q)	0.000 m
Immediate Def. (Q)	0.000 m
Loading Time	FIVE YEARS OR MORE
Total Time Dep. Deflection	0.000 m

Flexural Member and Position: Member Not Supporting Partition Wall
Immediate Def. (Q) = 0.010 mm ≤ 4.861 mm (1750/360) ... **Adequate** ✓

Crack Width Check (Span)::

Required/Supplied A _s	335.10 / 322.78 mm ²	Steel Bar Stress	152.17 N/mm ²
No. of Tension Bars	7	Steel Bar CG (a)	29.000
Max. Bar Size	8.0 mm	Concrete Cover (c)	29.0
Effective Concrete Area	58000.0 mm ²	Environmental Conditions	Interior: Normal

Crack Width (w) = 0.13 mm ≤ 0.4 mm ... **Adequate** ✓

2S3 - Storey: 2

Flexural Member Type : Two-way Slab
Span Type : Simple Support
Clear Span / Height : 1750.0 / 150.0 mm = 11.7 ≤ 25 (TS-500 Table 13.1)

Section Dimensions:	1000.0 / 150.0 mm	d = 121.0 mm	d' = 29.0 mm
Flange Dimensions:	b = 1000.0 mm	h _f = 0.0 mm	
Uncracked Section:	I _c = 0.000281 m ⁴	y(b) = 75.0 mm	y(t) = 75.0 mm
Concrete:	F _{cd} = 16.67 N/mm ²	F _{ctd} = 1.17 N/mm ²	E _c = 31000.0 N/mm ²
Steel:	F _{yd} = 217.39 N/mm ²	E _s = 200000.0 N/mm ²	E _s /E _c = 6.5

	Left Support	Right Support	Span
A _s (t)/A _s (b)	402.12 / 335.10 mm ²	402.12 / 335.10 mm ²	0.00 / 335.10 mm ²
M(g) / M(g+q)	0.0 / 0.0 kN.m	0.0 / 0.0 kN.m	0.5 / 0.8 kN.m
M _{cr}	10.9 kN.m	10.9 kN.m	10.9 kN.m
Cracking Status (G)	NO	NO	NO
Cracking Status (G+Q)	NO	NO	NO
Cracked Inertia (G)	-	-	-
Cracked Inertia (G+Q)	-	-	-
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴

Effective Inertia (G)	0.000281 m ⁴
Effective Inertia (G+Q)	0.000281 m ⁴
Immediate Def. (G)	0.000 m
Immediate Def. (G+Q)	0.000 m
Immediate Def. (Q)	0.000 m
Loading Time	FIVE YEARS OR MORE
Total Time Dep. Deflection	0.000 m

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Flexural Member and Position: Member Not Supporting Partition Wall
Immediate Def. (Q) = 0.010 mm $\leq$ 4.861 mm (1750/360) ... **Adequate** ✓

Crack Width Check (Span)::

Required/Supplied A_s	335.10 / 322.78 mm ²	Steel Bar Stress	152.17 N/mm ²
No. of Tension Bars	7	Steel Bar CG (a)	29.000
Max. Bar Size	8.0 mm	Concrete Cover (c)	29.0
Effective Concrete Area	58000.0 mm ²	Environmental Conditions	Interior: Normal

Crack Width (w) = 0.13 mm $\leq$ 0.4 mm ... **Adequate** ✓

2S4 - Storey: 2

Flexural Member Type : Two-way Slab
Span Type : Interior Span
Clear Span / Height : 2350.0 / 150.0 mm = 15.7 $\leq$ 35 (TS-500 Table 13.1)

Section Dimensions: 1000.0 / 150.0 mm d = 121.0 mm d' = 29.0 mm
Flange Dimensions: b = 1000.0 mm h_f = 0.0 mm
Uncracked Section: I_c = 0.000281 m⁴ y(b) = 75.0 mm y(t) = 75.0 mm
Concrete: F_{cd} = 16.67 N/mm² F_{ctd} = 1.17 N/mm² E_c = 31000.0 N/mm²
Steel: F_{yd} = 217.39 N/mm² E_s = 200000.0 N/mm² E_s/E_c = 6.5

	Left Support	Right Support	Span
A _s (t)/A _s (b)	402.12 / 335.10 mm ²	402.12 / 335.10 mm ²	0.00 / 335.10 mm ²
M(g) / M(g+q)	0.0 / 0.0 kN.m	2.0 / 3.1 kN.m	1.5 / 2.3 kN.m
M _{cr}	10.9 kN.m	10.9 kN.m	10.9 kN.m
Cracking Status (G)	NO	NO	NO
Cracking Status (G+Q)	NO	NO	NO
Cracked Inertia (G)	-	-	-
Cracked Inertia (G+Q)	-	-	-
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴

Effective Inertia (G)	0.000281 m ⁴
Effective Inertia (G+Q)	0.000281 m ⁴
Immediate Def. (G)	0.000 m
Immediate Def. (G+Q)	0.000 m
Immediate Def. (Q)	0.000 m
Loading Time	FIVE YEARS OR MORE
Total Time Dep. Deflection	0.000 m

Flexural Member and Position: Member Not Supporting Partition Wall
Immediate Def. (Q) = 0.046 mm $\leq$ 6.528 mm (2350/360) ... **Adequate** ✓

Crack Width Check (Span)::

Required/Supplied A_s	335.10 / 322.78 mm ²	Steel Bar Stress	152.17 N/mm ²
No. of Tension Bars	7	Steel Bar CG (a)	29.000
Max. Bar Size	8.0 mm	Concrete Cover (c)	29.0
Effective Concrete Area	58000.0 mm ²	Environmental Conditions	Interior: Normal

Crack Width (w) = 0.13 mm $\leq$ 0.4 mm ... **Adequate** ✓

2S5 - Storey: 2

Flexural Member Type : One-way Slab
Span Type : Interior Span
Clear Span / Height : 1275.0 / 150.0 mm = 8.5 $\leq$ 30 (TS-500 Table 13.1)

Section Dimensions: 1000.0 / 150.0 mm d = 121.0 mm d' = 29.0 mm
Flange Dimensions: b = 1000.0 mm h_f = 0.0 mm
Uncracked Section: I_c = 0.000281 m⁴ y(b) = 75.0 mm y(t) = 75.0 mm
Concrete: F_{cd} = 16.67 N/mm² F_{ctd} = 1.17 N/mm² E_c = 31000.0 N/mm²
Steel: F_{yd} = 217.39 N/mm² E_s = 200000.0 N/mm² E_s/E_c = 6.5

	Left Support	Right Support	Span
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PROPOSED 5-STOREY ADMINISTRATION BLOCK	Fenerbahce Kadikoy (0001907)
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$A_s(t)/A_s(b)$	402.12 / 335.10 mm ²	402.12 / 335.10 mm ²	0.00 / 335.10 mm ²
M(g) / M(g+q)	0.8 / 1.2 kN.m	0.8 / 1.2 kN.m	0.8 / 1.2 kN.m
M _{cr}	10.9 kN.m	10.9 kN.m	10.9 kN.m
Cracking Status (G)	NO	NO	NO
Cracking Status (G+Q)	NO	NO	NO
Cracked Inertia (G)	-	-	-
Cracked Inertia (G+Q)	-	-	-
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴

Effective Inertia (G)	0.000281 m ⁴
Effective Inertia (G+Q)	0.000281 m ⁴
Immediate Def. (G)	0.000 m
Immediate Def. (G+Q)	0.000 m
Immediate Def. (Q)	0.000 m
Loading Time	FIVE YEARS OR MORE
Total Time Dep. Deflection	0.000 m

Flexural Member and Position: Member Not Supporting Partition Wall
Immediate Def. (Q) = 0.006 mm ≤ 3.542 mm (1275/360) ... **Adequate** ✓

Crack Width Check (Span)::

Required/Supplied A _s	335.10 / 322.78 mm ²	Steel Bar Stress	152.17 N/mm ²
No. of Tension Bars	7	Steel Bar CG (a)	29.000
Max. Bar Size	8.0 mm	Concrete Cover (c)	29.0
Effective Concrete Area	58000.0 mm ²	Environmental Conditions	Interior: Normal

Crack Width (w) = 0.13 mm ≤ 0.4 mm ... **Adequate** ✓

2S6 - Storey: 2

Flexural Member Type : Two-way Slab
Span Type : Interior Span
Clear Span / Height : 3950.0 / 150.0 mm = 26.3 ≤ 35 (TS-500 Table 13.1)

Section Dimensions: 1000.0 / 150.0 mm d = 121.0 mm d' = 29.0 mm
Flange Dimensions: b = 1000.0 mm h_f = 0.0 mm
Uncracked Section: I_c = 0.000281 m⁴ y(b) = 75.0 mm y(t) = 75.0 mm
Concrete: F_{cd} = 16.67 N/mm² F_{ctd} = 1.17 N/mm² E_c = 31000.0 N/mm²
Steel: F_{yd} = 217.39 N/mm² E_s = 200000.0 N/mm² E_s/E_c = 6.5

	Left Support	Right Support	Span
$A_s(t)/A_s(b)$	402.12 / 335.10 mm ²	402.12 / 335.10 mm ²	0.00 / 335.10 mm ²
M(g) / M(g+q)	3.2 / 4.9 kN.m	0.0 / 0.0 kN.m	2.5 / 3.8 kN.m
M _{cr}	10.9 kN.m	10.9 kN.m	10.9 kN.m
Cracking Status (G)	NO	NO	NO
Cracking Status (G+Q)	NO	NO	NO
Cracked Inertia (G)	-	-	-
Cracked Inertia (G+Q)	-	-	-
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴

Effective Inertia (G)	0.000281 m ⁴
Effective Inertia (G+Q)	0.000281 m ⁴
Immediate Def. (G)	0.000 m
Immediate Def. (G+Q)	0.001 m
Immediate Def. (Q)	0.000 m
Loading Time	FIVE YEARS OR MORE
Total Time Dep. Deflection	0.001 m

Flexural Member and Position: Member Not Supporting Partition Wall
Immediate Def. (Q) = 0.213 mm ≤ 10.972 mm (3950/360) ... **Adequate** ✓

Crack Width Check (Span)::

Required/Supplied A _s	335.10 / 322.78 mm ²	Steel Bar Stress	152.17 N/mm ²
No. of Tension Bars	7	Steel Bar CG (a)	29.000
Max. Bar Size	8.0 mm	Concrete Cover (c)	29.0

PROPOSED 5-STOREY ADMINISTRATION BLOCK	Fenerbahce Kadikoy (0001907)
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Effective Concrete Area	58000.0 mm ²	Environmental Conditions	Interior: Normal
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Crack Width (w) = 0.13 mm ≤ 0.4 mm ... **Adequate** ✓

2S7 - Storey: 2

Flexural Member Type : One-way Slab
Span Type : Interior Span
Clear Span / Height : 978.6 / 150.0 mm = 6.5 ≤ 30 (TS-500 Table 13.1)

Section Dimensions: 1000.0 / 150.0 mm d = 121.0 mm d' = 29.0 mm
Flange Dimensions: b = 1000.0 mm h_f = 0.0 mm
Uncracked Section: I_c = 0.000281 m⁴ y(b) = 75.0 mm y(t) = 75.0 mm
Concrete: F_{cd} = 16.67 N/mm² F_{ctd} = 1.17 N/mm² E_c = 31000.0 N/mm²
Steel: F_{yd} = 217.39 N/mm² E_s = 200000.0 N/mm² E_s/E_c = 6.5

	Left Support	Right Support	Span
A _s (t)/A _s (b)	402.12 / 335.10 mm ²	335.10 / 335.10 mm ²	0.00 / 335.10 mm ²
M(g) / M(g+q)	0.0 / 0.0 kN.m	0.7 / 1.1 kN.m	0.7 / 1.1 kN.m
M _{cr}	10.9 kN.m	10.9 kN.m	10.9 kN.m
Cracking Status (G)	NO	NO	NO
Cracking Status (G+Q)	NO	NO	NO
Cracked Inertia (G)	-	-	-
Cracked Inertia (G+Q)	-	-	-
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴

Effective Inertia (G)	0.000281 m ⁴
Effective Inertia (G+Q)	0.000281 m ⁴
Immediate Def. (G)	0.000 m
Immediate Def. (G+Q)	0.000 m
Immediate Def. (Q)	0.000 m
Loading Time	FIVE YEARS OR MORE
Total Time Dep. Deflection	0.000 m

Flexural Member and Position: Member Not Supporting Partition Wall
Immediate Def. (Q) = 0.004 mm ≤ 2.718 mm (979/360) ... **Adequate** ✓

Crack Width Check (Span)::

Required/Supplied A _s	335.10 / 322.78 mm ²	Steel Bar Stress	152.17 N/mm ²
No. of Tension Bars	7	Steel Bar CG (a)	29.000
Max. Bar Size	8.0 mm	Concrete Cover (c)	29.0
Effective Concrete Area	58000.0 mm ²	Environmental Conditions	Interior: Normal

Crack Width (w) = 0.13 mm ≤ 0.4 mm ... **Adequate** ✓

2S8 - Storey: 2

Flexural Member Type : Two-way Slab
Span Type : Interior Span
Clear Span / Height : 2475.0 / 150.0 mm = 16.5 ≤ 35 (TS-500 Table 13.1)

Section Dimensions: 1000.0 / 150.0 mm d = 121.0 mm d' = 29.0 mm
Flange Dimensions: b = 1000.0 mm h_f = 0.0 mm
Uncracked Section: I_c = 0.000281 m⁴ y(b) = 75.0 mm y(t) = 75.0 mm
Concrete: F_{cd} = 16.67 N/mm² F_{ctd} = 1.17 N/mm² E_c = 31000.0 N/mm²
Steel: F_{yd} = 217.39 N/mm² E_s = 200000.0 N/mm² E_s/E_c = 6.5

	Left Support	Right Support	Span
A _s (t)/A _s (b)	402.12 / 335.10 mm ²	402.12 / 335.10 mm ²	0.00 / 335.10 mm ²
M(g) / M(g+q)	1.4 / 2.1 kN.m	1.4 / 2.1 kN.m	1.1 / 1.6 kN.m
M _{cr}	10.9 kN.m	10.9 kN.m	10.9 kN.m
Cracking Status (G)	NO	NO	NO
Cracking Status (G+Q)	NO	NO	NO
Cracked Inertia (G)	-	-	-
Cracked Inertia (G+Q)	-	-	-
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴

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Effective Inertia (G)	0.000281 m ⁴
Effective Inertia (G+Q)	0.000281 m ⁴
Immediate Def. (G)	0.000 m
Immediate Def. (G+Q)	0.000 m
Immediate Def. (Q)	0.000 m
Loading Time	FIVE YEARS OR MORE
Total Time Dep. Deflection	0.000 m

Flexural Member and Position: Member Not Supporting Partition Wall
Immediate Def. (Q) = 0.031 mm ≤ 6.875 mm (2475/360) ... **Adequate** ✓

Crack Width Check (Span)::

Required/Supplied A _s	335.10 / 322.78 mm ²	Steel Bar Stress	152.17 N/mm ²
No. of Tension Bars	7	Steel Bar CG (a)	29.000
Max. Bar Size	8.0 mm	Concrete Cover (c)	29.0
Effective Concrete Area	58000.0 mm ²	Environmental Conditions	Interior: Normal

Crack Width (w) = 0.13 mm ≤ 0.4 mm ... **Adequate** ✓

2S9 - Storey: 2

Flexural Member Type : Two-way Slab
Span Type : Interior Span
Clear Span / Height : 1950.0 / 150.0 mm = 13.0 ≤ 35 (TS-500 Table 13.1)

Section Dimensions: 1000.0 / 150.0 mm d = 121.0 mm d' = 29.0 mm
Flange Dimensions: b = 1000.0 mm h_f = 0.0 mm
Uncracked Section: I_c = 0.000281 m⁴ y(b) = 75.0 mm y(t) = 75.0 mm
Concrete: F_{cd} = 16.67 N/mm² F_{ctd} = 1.17 N/mm² E_c = 31000.0 N/mm²
Steel: F_{yd} = 217.39 N/mm² E_s = 200000.0 N/mm² E_s/E_c = 6.5

	Left Support	Right Support	Span
A _s (t)/A _s (b)	402.12 / 335.10 mm ²	402.12 / 335.10 mm ²	0.00 / 335.10 mm ²
M(g) / M(g+q)	1.2 / 1.9 kN.m	1.2 / 1.9 kN.m	0.9 / 1.4 kN.m
M _{cr}	10.9 kN.m	10.9 kN.m	10.9 kN.m
Cracking Status (G)	NO	NO	NO
Cracking Status (G+Q)	NO	NO	NO
Cracked Inertia (G)	-	-	-
Cracked Inertia (G+Q)	-	-	-
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴

Effective Inertia (G)	0.000281 m ⁴
Effective Inertia (G+Q)	0.000281 m ⁴
Immediate Def. (G)	0.000 m
Immediate Def. (G+Q)	0.000 m
Immediate Def. (Q)	0.000 m
Loading Time	FIVE YEARS OR MORE
Total Time Dep. Deflection	0.000 m

Flexural Member and Position: Member Not Supporting Partition Wall
Immediate Def. (Q) = 0.016 mm ≤ 5.417 mm (1950/360) ... **Adequate** ✓

Crack Width Check (Span)::

Required/Supplied A _s	335.10 / 322.78 mm ²	Steel Bar Stress	152.17 N/mm ²
No. of Tension Bars	7	Steel Bar CG (a)	29.000
Max. Bar Size	8.0 mm	Concrete Cover (c)	29.0
Effective Concrete Area	58000.0 mm ²	Environmental Conditions	Interior: Normal

Crack Width (w) = 0.13 mm ≤ 0.4 mm ... **Adequate** ✓

2S10 - Storey: 2

Flexural Member Type : One-way Slab
Span Type : Interior Span
Clear Span / Height : 1275.0 / 150.0 mm = 8.5 ≤ 30 (TS-500 Table 13.1)

PROPOSED 5-STOREY ADMINISTRATION BLOCK	Fenerbahce Kadikoy (0001907)
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Section Dimensions:	1000.0 / 150.0 mm	d = 121.0 mm	d' = 29.0 mm
Flange Dimensions:	b = 1000.0 mm	h _f = 0.0 mm	
Uncracked Section:	I _c = 0.000281 m ⁴	y(b) = 75.0 mm	y(t) = 75.0 mm
Concrete:	F _{cd} = 16.67 N/mm ²	F _{ctd} = 1.17 N/mm ²	E _c = 31000.0 N/mm ²
Steel:	F _{yd} = 217.39 N/mm ²	E _s = 200000.0 N/mm ²	E _s /E _c = 6.5

	Left Support	Right Support	Span
A _s (t)/A _s (b)	402.12 / 335.10 mm ²	335.10 / 335.10 mm ²	0.00 / 335.10 mm ²
M(g) / M(g+q)	0.8 / 1.2 kN.m	0.8 / 1.2 kN.m	0.6 / 0.9 kN.m
M _{cr}	10.9 kN.m	10.9 kN.m	10.9 kN.m
Cracking Status (G)	NO	NO	NO
Cracking Status (G+Q)	NO	NO	NO
Cracked Inertia (G)	-	-	-
Cracked Inertia (G+Q)	-	-	-
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴

Effective Inertia (G)	0.000281 m ⁴
Effective Inertia (G+Q)	0.000281 m ⁴
Immediate Def. (G)	0.000 m
Immediate Def. (G+Q)	0.000 m
Immediate Def. (Q)	0.000 m
Loading Time	FIVE YEARS OR MORE
Total Time Dep. Deflection	0.000 m

Flexural Member and Position: Member Not Supporting Partition Wall
Immediate Def. (Q) = 0.004 mm ≤ 3.542 mm (1275/360) ... **Adequate** ✓

Crack Width Check (Span)::

Required/Supplied A _s	335.10 / 322.78 mm ²	Steel Bar Stress	152.17 N/mm ²
No. of Tension Bars	7	Steel Bar CG (a)	29.000
Max. Bar Size	8.0 mm	Concrete Cover (c)	29.0
Effective Concrete Area	58000.0 mm ²	Environmental Conditions	Interior: Normal

Crack Width (w) = 0.13 mm ≤ 0.4 mm ... **Adequate** ✓

2S11 - Storey: 2

Flexural Member Type : Two-way Slab
Span Type : Interior Span
Clear Span / Height : 3825.0 / 150.0 mm = 25.5 ≤ 35 (TS-500 Table 13.1)

Section Dimensions:	1000.0 / 150.0 mm	d = 121.0 mm	d' = 29.0 mm
Flange Dimensions:	b = 1000.0 mm	h _f = 0.0 mm	
Uncracked Section:	I _c = 0.000281 m ⁴	y(b) = 75.0 mm	y(t) = 75.0 mm
Concrete:	F _{cd} = 16.67 N/mm ²	F _{ctd} = 1.17 N/mm ²	E _c = 31000.0 N/mm ²
Steel:	F _{yd} = 217.39 N/mm ²	E _s = 200000.0 N/mm ²	E _s /E _c = 6.5

	Left Support	Right Support	Span
A _s (t)/A _s (b)	402.12 / 335.10 mm ²	402.12 / 335.10 mm ²	0.00 / 335.10 mm ²
M(g) / M(g+q)	0.0 / 0.0 kN.m	3.6 / 5.6 kN.m	2.7 / 4.2 kN.m
M _{cr}	10.9 kN.m	10.9 kN.m	10.9 kN.m
Cracking Status (G)	NO	NO	NO
Cracking Status (G+Q)	NO	NO	NO
Cracked Inertia (G)	-	-	-
Cracked Inertia (G+Q)	-	-	-
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴

Effective Inertia (G)	0.000281 m ⁴
Effective Inertia (G+Q)	0.000281 m ⁴
Immediate Def. (G)	0.000 m
Immediate Def. (G+Q)	0.001 m
Immediate Def. (Q)	0.000 m
Loading Time	FIVE YEARS OR MORE
Total Time Dep. Deflection	0.001 m

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Flexural Member and Position: Member Not Supporting Partition Wall
Immediate Def. (Q) = 0.224 mm $\leq$ 10.625 mm (3825/360) ... **Adequate** ✓

Crack Width Check (Span)::

Required/Supplied A_s	335.10 / 322.78 mm ²	Steel Bar Stress	152.17 N/mm ²
No. of Tension Bars	7	Steel Bar CG (a)	29.000
Max. Bar Size	8.0 mm	Concrete Cover (c)	29.0
Effective Concrete Area	58000.0 mm ²	Environmental Conditions	Interior: Normal

Crack Width (w) = 0.13 mm $\leq$ 0.4 mm ... **Adequate** ✓

2S12 - Storey: 2

Flexural Member Type : Two-way Slab
Span Type : Interior Span
Clear Span / Height : 3225.0 / 150.0 mm = 21.5 $\leq$ 35 (TS-500 Table 13.1)

Section Dimensions: 1000.0 / 150.0 mm d = 121.0 mm d' = 29.0 mm
Flange Dimensions: b = 1000.0 mm h_f = 0.0 mm
Uncracked Section: I_c = 0.000281 m⁴ y(b) = 75.0 mm y(t) = 75.0 mm
Concrete: F_{cd} = 16.67 N/mm² F_{ctd} = 1.17 N/mm² E_c = 31000.0 N/mm²
Steel: F_{yd} = 217.39 N/mm² E_s = 200000.0 N/mm² E_s/E_c = 6.5

	Left Support	Right Support	Span
A _s (t)/A _s (b)	402.12 / 335.10 mm ²	335.10 / 335.10 mm ²	0.00 / 335.10 mm ²
M(g) / M(g+q)	0.0 / 0.0 kN.m	2.9 / 4.5 kN.m	2.2 / 3.4 kN.m
M _{cr}	10.9 kN.m	10.9 kN.m	10.9 kN.m
Cracking Status (G)	NO	NO	NO
Cracking Status (G+Q)	NO	NO	NO
Cracked Inertia (G)	-	-	-
Cracked Inertia (G+Q)	-	-	-
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴

Effective Inertia (G)	0.000281 m ⁴
Effective Inertia (G+Q)	0.000281 m ⁴
Immediate Def. (G)	0.000 m
Immediate Def. (G+Q)	0.000 m
Immediate Def. (Q)	0.000 m
Loading Time	FIVE YEARS OR MORE
Total Time Dep. Deflection	0.001 m

Flexural Member and Position: Member Not Supporting Partition Wall
Immediate Def. (Q) = 0.128 mm $\leq$ 8.958 mm (3225/360) ... **Adequate** ✓

Crack Width Check (Span)::

Required/Supplied A_s	335.10 / 322.78 mm ²	Steel Bar Stress	152.17 N/mm ²
No. of Tension Bars	7	Steel Bar CG (a)	29.000
Max. Bar Size	8.0 mm	Concrete Cover (c)	29.0
Effective Concrete Area	58000.0 mm ²	Environmental Conditions	Interior: Normal

Crack Width (w) = 0.13 mm $\leq$ 0.4 mm ... **Adequate** ✓

2S13 - Storey: 2

Flexural Member Type : Two-way Slab
Span Type : Interior Span
Clear Span / Height : 1900.0 / 150.0 mm = 12.7 $\leq$ 35 (TS-500 Table 13.1)

Section Dimensions: 1000.0 / 150.0 mm d = 121.0 mm d' = 29.0 mm
Flange Dimensions: b = 1000.0 mm h_f = 0.0 mm
Uncracked Section: I_c = 0.000281 m⁴ y(b) = 75.0 mm y(t) = 75.0 mm
Concrete: F_{cd} = 16.67 N/mm² F_{ctd} = 1.17 N/mm² E_c = 31000.0 N/mm²
Steel: F_{yd} = 217.39 N/mm² E_s = 200000.0 N/mm² E_s/E_c = 6.5

	Left Support	Right Support	Span
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PROPOSED 5-STOREY ADMINISTRATION BLOCK	Fenerbahce Kadikoy (0001907)
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$A_s(t)/A_s(b)$	402.12 / 335.10 mm ²	335.10 / 335.10 mm ²	0.00 / 335.10 mm ²
M(g) / M(g+q)	1.4 / 2.1 kN.m	1.4 / 2.1 kN.m	1.0 / 1.6 kN.m
M _{cr}	10.9 kN.m	10.9 kN.m	10.9 kN.m
Cracking Status (G)	NO	NO	NO
Cracking Status (G+Q)	NO	NO	NO
Cracked Inertia (G)	-	-	-
Cracked Inertia (G+Q)	-	-	-
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴

Effective Inertia (G)	0.000281 m ⁴
Effective Inertia (G+Q)	0.000281 m ⁴
Immediate Def. (G)	0.000 m
Immediate Def. (G+Q)	0.000 m
Immediate Def. (Q)	0.000 m
Loading Time	FIVE YEARS OR MORE
Total Time Dep. Deflection	0.000 m

Flexural Member and Position: Member Not Supporting Partition Wall
Immediate Def. (Q) = 0.017 mm ≤ 5.278 mm (1900/360) ... **Adequate** ✓

Crack Width Check (Span)::

Required/Supplied A _s	335.10 / 322.78 mm ²	Steel Bar Stress	152.17 N/mm ²
No. of Tension Bars	7	Steel Bar CG (a)	29.000
Max. Bar Size	8.0 mm	Concrete Cover (c)	29.0
Effective Concrete Area	58000.0 mm ²	Environmental Conditions	Interior: Normal

Crack Width (w) = 0.13 mm ≤ 0.4 mm ... **Adequate** ✓

2S14 - Storey: 2

Flexural Member Type : Two-way Slab
Span Type : Interior Span
Clear Span / Height : 2000.0 / 150.0 mm = 13.3 ≤ 35 (TS-500 Table 13.1)

Section Dimensions: 1000.0 / 150.0 mm d = 121.0 mm d' = 29.0 mm
Flange Dimensions: b = 1000.0 mm h_f = 0.0 mm
Uncracked Section: I_c = 0.000281 m⁴ y(b) = 75.0 mm y(t) = 75.0 mm
Concrete: F_{cd} = 16.67 N/mm² F_{ctd} = 1.17 N/mm² E_c = 31000.0 N/mm²
Steel: F_{yd} = 217.39 N/mm² E_s = 200000.0 N/mm² E_s/E_c = 6.5

	Left Support	Right Support	Span
$A_s(t)/A_s(b)$	402.12 / 335.10 mm ²	402.12 / 335.10 mm ²	0.00 / 335.10 mm ²
M(g) / M(g+q)	1.4 / 2.2 kN.m	1.4 / 2.2 kN.m	1.1 / 1.7 kN.m
M _{cr}	10.9 kN.m	10.9 kN.m	10.9 kN.m
Cracking Status (G)	NO	NO	NO
Cracking Status (G+Q)	NO	NO	NO
Cracked Inertia (G)	-	-	-
Cracked Inertia (G+Q)	-	-	-
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴

Effective Inertia (G)	0.000281 m ⁴
Effective Inertia (G+Q)	0.000281 m ⁴
Immediate Def. (G)	0.000 m
Immediate Def. (G+Q)	0.000 m
Immediate Def. (Q)	0.000 m
Loading Time	FIVE YEARS OR MORE
Total Time Dep. Deflection	0.000 m

Flexural Member and Position: Member Not Supporting Partition Wall
Immediate Def. (Q) = 0.020 mm ≤ 5.556 mm (2000/360) ... **Adequate** ✓

Crack Width Check (Span)::

Required/Supplied A _s	335.10 / 322.78 mm ²	Steel Bar Stress	152.17 N/mm ²
No. of Tension Bars	7	Steel Bar CG (a)	29.000
Max. Bar Size	8.0 mm	Concrete Cover (c)	29.0

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Effective Concrete Area	58000.0 mm ²	Environmental Conditions	Interior: Normal
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Crack Width (w) = 0.13 mm ≤ 0.4 mm ... **Adequate** ✓

2S15 - Storey: 2

Flexural Member Type : Two-way Slab
Span Type : Interior Span
Clear Span / Height : 3550.0 / 150.0 mm = 23.7 ≤ 35 (TS-500 Table 13.1)

Section Dimensions: 1000.0 / 150.0 mm d = 121.0 mm d' = 29.0 mm
Flange Dimensions: b = 1000.0 mm h_f = 0.0 mm
Uncracked Section: I_c = 0.000281 m⁴ y(b) = 75.0 mm y(t) = 75.0 mm
Concrete: F_{cd} = 16.67 N/mm² F_{ctd} = 1.17 N/mm² E_c = 31000.0 N/mm²
Steel: F_{yd} = 217.39 N/mm² E_s = 200000.0 N/mm² E_s/E_c = 6.5

	Left Support	Right Support	Span
A _s (t)/A _s (b)	402.12 / 335.10 mm ²	402.12 / 335.10 mm ²	0.00 / 335.10 mm ²
M(g) / M(g+q)	2.8 / 4.3 kN.m	0.0 / 0.0 kN.m	2.1 / 3.3 kN.m
M _{cr}	10.9 kN.m	10.9 kN.m	10.9 kN.m
Cracking Status (G)	NO	NO	NO
Cracking Status (G+Q)	NO	NO	NO
Cracked Inertia (G)	-	-	-
Cracked Inertia (G+Q)	-	-	-
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴

Effective Inertia (G)	0.000281 m ⁴
Effective Inertia (G+Q)	0.000281 m ⁴
Immediate Def. (G)	0.000 m
Immediate Def. (G+Q)	0.000 m
Immediate Def. (Q)	0.000 m
Loading Time	FIVE YEARS OR MORE
Total Time Dep. Deflection	0.001 m

Flexural Member and Position: Member Not Supporting Partition Wall
Immediate Def. (Q) = 0.150 mm ≤ 9.861 mm (3550/360) ... **Adequate** ✓

Crack Width Check (Span)::

Required/Supplied A _s	335.10 / 322.78 mm ²	Steel Bar Stress	152.17 N/mm ²
No. of Tension Bars	7	Steel Bar CG (a)	29.000
Max. Bar Size	8.0 mm	Concrete Cover (c)	29.0
Effective Concrete Area	58000.0 mm ²	Environmental Conditions	Interior: Normal

Crack Width (w) = 0.13 mm ≤ 0.4 mm ... **Adequate** ✓

2S16 - Storey: 2

Flexural Member Type : One-way Slab
Span Type : Interior Span
Clear Span / Height : 1950.0 / 150.0 mm = 13.0 ≤ 30 (TS-500 Table 13.1)

Section Dimensions: 1000.0 / 150.0 mm d = 121.0 mm d' = 29.0 mm
Flange Dimensions: b = 1000.0 mm h_f = 0.0 mm
Uncracked Section: I_c = 0.000281 m⁴ y(b) = 75.0 mm y(t) = 75.0 mm
Concrete: F_{cd} = 16.67 N/mm² F_{ctd} = 1.17 N/mm² E_c = 31000.0 N/mm²
Steel: F_{yd} = 217.39 N/mm² E_s = 200000.0 N/mm² E_s/E_c = 6.5

	Left Support	Right Support	Span
A _s (t)/A _s (b)	402.12 / 335.10 mm ²	402.12 / 335.10 mm ²	0.00 / 335.10 mm ²
M(g) / M(g+q)	1.6 / 2.5 kN.m	1.6 / 2.5 kN.m	1.6 / 2.5 kN.m
M _{cr}	10.9 kN.m	10.9 kN.m	10.9 kN.m
Cracking Status (G)	NO	NO	NO
Cracking Status (G+Q)	NO	NO	NO
Cracked Inertia (G)	-	-	-
Cracked Inertia (G+Q)	-	-	-
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴

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Effective Inertia (G)	0.000281 m ⁴
Effective Inertia (G+Q)	0.000281 m ⁴
Immediate Def. (G)	0.000 m
Immediate Def. (G+Q)	0.000 m
Immediate Def. (Q)	0.000 m
Loading Time	FIVE YEARS OR MORE
Total Time Dep. Deflection	0.000 m

Flexural Member and Position: Member Not Supporting Partition Wall
Immediate Def. (Q) = 0.032 mm ≤ 5.417 mm (1950/360) ... **Adequate** ✓

Crack Width Check (Span)::

Required/Supplied A _s	335.10 / 322.78 mm ²	Steel Bar Stress	152.17 N/mm ²
No. of Tension Bars	7	Steel Bar CG (a)	29.000
Max. Bar Size	8.0 mm	Concrete Cover (c)	29.0
Effective Concrete Area	58000.0 mm ²	Environmental Conditions	Interior: Normal

Crack Width (w) = 0.13 mm ≤ 0.4 mm ... **Adequate** ✓

2S17 - Storey: 2

Flexural Member Type : Two-way Slab
Span Type : Interior Span
Clear Span / Height : 2475.0 / 150.0 mm = 16.5 ≤ 35 (TS-500 Table 13.1)

Section Dimensions: 1000.0 / 150.0 mm d = 121.0 mm d' = 29.0 mm
Flange Dimensions: b = 1000.0 mm h_f = 0.0 mm
Uncracked Section: I_c = 0.000281 m⁴ y(b) = 75.0 mm y(t) = 75.0 mm
Concrete: F_{cd} = 16.67 N/mm² F_{ctd} = 1.17 N/mm² E_c = 31000.0 N/mm²
Steel: F_{yd} = 217.39 N/mm² E_s = 200000.0 N/mm² E_s/E_c = 6.5

	Left Support	Right Support	Span
A _s (t)/A _s (b)	402.12 / 335.10 mm ²	402.12 / 335.10 mm ²	0.00 / 335.10 mm ²
M(g) / M(g+q)	2.4 / 3.7 kN.m	2.4 / 3.7 kN.m	1.8 / 2.8 kN.m
M _{cr}	10.9 kN.m	10.9 kN.m	10.9 kN.m
Cracking Status (G)	NO	NO	NO
Cracking Status (G+Q)	NO	NO	NO
Cracked Inertia (G)	-	-	-
Cracked Inertia (G+Q)	-	-	-
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴

Effective Inertia (G)	0.000281 m ⁴
Effective Inertia (G+Q)	0.000281 m ⁴
Immediate Def. (G)	0.000 m
Immediate Def. (G+Q)	0.000 m
Immediate Def. (Q)	0.000 m
Loading Time	FIVE YEARS OR MORE
Total Time Dep. Deflection	0.000 m

Flexural Member and Position: Member Not Supporting Partition Wall
Immediate Def. (Q) = 0.053 mm ≤ 6.875 mm (2475/360) ... **Adequate** ✓

Crack Width Check (Span)::

Required/Supplied A _s	335.10 / 322.78 mm ²	Steel Bar Stress	152.17 N/mm ²
No. of Tension Bars	7	Steel Bar CG (a)	29.000
Max. Bar Size	8.0 mm	Concrete Cover (c)	29.0
Effective Concrete Area	58000.0 mm ²	Environmental Conditions	Interior: Normal

Crack Width (w) = 0.13 mm ≤ 0.4 mm ... **Adequate** ✓

2S18 - Storey: 2

Flexural Member Type : Two-way Slab
Span Type : Interior Span
Clear Span / Height : 2175.0 / 150.0 mm = 14.5 ≤ 35 (TS-500 Table 13.1)

PROPOSED 5-STOREY ADMINISTRATION BLOCK	Fenerbahce Kadikoy (0001907)
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Section Dimensions:	1000.0 / 150.0 mm	d = 121.0 mm	d' = 29.0 mm
Flange Dimensions:	b = 1000.0 mm	h _f = 0.0 mm	
Uncracked Section:	I _c = 0.000281 m ⁴	y(b) = 75.0 mm	y(t) = 75.0 mm
Concrete:	F _{cd} = 16.67 N/mm ²	F _{ctd} = 1.17 N/mm ²	E _c = 31000.0 N/mm ²
Steel:	F _{yd} = 217.39 N/mm ²	E _s = 200000.0 N/mm ²	E _s /E _c = 6.5

	Left Support	Right Support	Span
A _s (t)/A _s (b)	402.12 / 335.10 mm ²	402.12 / 335.10 mm ²	0.00 / 335.10 mm ²
M(g) / M(g+q)	1.4 / 2.2 kN.m	1.4 / 2.2 kN.m	1.1 / 1.6 kN.m
M _{cr}	10.9 kN.m	10.9 kN.m	10.9 kN.m
Cracking Status (G)	NO	NO	NO
Cracking Status (G+Q)	NO	NO	NO
Cracked Inertia (G)	-	-	-
Cracked Inertia (G+Q)	-	-	-
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴

Effective Inertia (G)	0.000281 m ⁴
Effective Inertia (G+Q)	0.000281 m ⁴
Immediate Def. (G)	0.000 m
Immediate Def. (G+Q)	0.000 m
Immediate Def. (Q)	0.000 m
Loading Time	FIVE YEARS OR MORE
Total Time Dep. Deflection	0.000 m

Flexural Member and Position: Member Not Supporting Partition Wall
Immediate Def. (Q) = 0.024 mm ≤ 6.042 mm (2175/360) ... **Adequate** ✓

Crack Width Check (Span)::

Required/Supplied A _s	335.10 / 322.78 mm ²	Steel Bar Stress	152.17 N/mm ²
No. of Tension Bars	7	Steel Bar CG (a)	29.000
Max. Bar Size	8.0 mm	Concrete Cover (c)	29.0
Effective Concrete Area	58000.0 mm ²	Environmental Conditions	Interior: Normal

Crack Width (w) = 0.13 mm ≤ 0.4 mm ... **Adequate** ✓

3S1 - Storey: 3

Flexural Member Type : Two-way Slab
Span Type : Interior Span
Clear Span / Height : 3825.0 / 150.0 mm = 25.5 ≤ 35 (TS-500 Table 13.1)

Section Dimensions:	1000.0 / 150.0 mm	d = 121.0 mm	d' = 29.0 mm
Flange Dimensions:	b = 1000.0 mm	h _f = 0.0 mm	
Uncracked Section:	I _c = 0.000281 m ⁴	y(b) = 75.0 mm	y(t) = 75.0 mm
Concrete:	F _{cd} = 16.67 N/mm ²	F _{ctd} = 1.17 N/mm ²	E _c = 31000.0 N/mm ²
Steel:	F _{yd} = 217.39 N/mm ²	E _s = 200000.0 N/mm ²	E _s /E _c = 6.5

	Left Support	Right Support	Span
A _s (t)/A _s (b)	402.12 / 335.10 mm ²	402.12 / 335.10 mm ²	0.00 / 335.10 mm ²
M(g) / M(g+q)	0.0 / 0.0 kN.m	2.8 / 4.4 kN.m	2.2 / 3.4 kN.m
M _{cr}	10.9 kN.m	10.9 kN.m	10.9 kN.m
Cracking Status (G)	NO	NO	NO
Cracking Status (G+Q)	NO	NO	NO
Cracked Inertia (G)	-	-	-
Cracked Inertia (G+Q)	-	-	-
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴

Effective Inertia (G)	0.000281 m ⁴
Effective Inertia (G+Q)	0.000281 m ⁴
Immediate Def. (G)	0.000 m
Immediate Def. (G+Q)	0.001 m
Immediate Def. (Q)	0.000 m
Loading Time	FIVE YEARS OR MORE
Total Time Dep. Deflection	0.001 m

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Flexural Member and Position: Member Not Supporting Partition Wall
Immediate Def. (Q) = 0.179 mm $\leq$ 10.625 mm (3825/360) ... **Adequate** ✓

Crack Width Check (Span)::

Required/Supplied A_s	335.10 / 322.78 mm ²	Steel Bar Stress	152.17 N/mm ²
No. of Tension Bars	7	Steel Bar CG (a)	29.000
Max. Bar Size	8.0 mm	Concrete Cover (c)	29.0
Effective Concrete Area	58000.0 mm ²	Environmental Conditions	Interior: Normal

Crack Width (w) = 0.13 mm $\leq$ 0.4 mm ... **Adequate** ✓

3S2 - Storey: 3

Flexural Member Type : Two-way Slab
Span Type : Interior Span
Clear Span / Height : 1750.0 / 150.0 mm = 11.7 $\leq$ 35 (TS-500 Table 13.1)

Section Dimensions: 1000.0 / 150.0 mm d = 121.0 mm d' = 29.0 mm
Flange Dimensions: b = 1000.0 mm h_f = 0.0 mm
Uncracked Section: I_c = 0.000281 m⁴ y(b) = 75.0 mm y(t) = 75.0 mm
Concrete: F_{cd} = 16.67 N/mm² F_{ctd} = 1.17 N/mm² E_c = 31000.0 N/mm²
Steel: F_{yd} = 217.39 N/mm² E_s = 200000.0 N/mm² E_s/E_c = 6.5

	Left Support	Right Support	Span
A _s (t)/A _s (b)	402.12 / 335.10 mm ²	402.12 / 335.10 mm ²	0.00 / 335.10 mm ²
M(g) / M(g+q)	0.0 / 0.0 kN.m	0.8 / 1.2 kN.m	0.6 / 0.9 kN.m
M _{cr}	10.9 kN.m	10.9 kN.m	10.9 kN.m
Cracking Status (G)	NO	NO	NO
Cracking Status (G+Q)	NO	NO	NO
Cracked Inertia (G)	-	-	-
Cracked Inertia (G+Q)	-	-	-
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴

Effective Inertia (G)	0.000281 m ⁴
Effective Inertia (G+Q)	0.000281 m ⁴
Immediate Def. (G)	0.000 m
Immediate Def. (G+Q)	0.000 m
Immediate Def. (Q)	0.000 m
Loading Time	FIVE YEARS OR MORE
Total Time Dep. Deflection	0.000 m

Flexural Member and Position: Member Not Supporting Partition Wall
Immediate Def. (Q) = 0.010 mm $\leq$ 4.861 mm (1750/360) ... **Adequate** ✓

Crack Width Check (Span)::

Required/Supplied A_s	335.10 / 322.78 mm ²	Steel Bar Stress	152.17 N/mm ²
No. of Tension Bars	7	Steel Bar CG (a)	29.000
Max. Bar Size	8.0 mm	Concrete Cover (c)	29.0
Effective Concrete Area	58000.0 mm ²	Environmental Conditions	Interior: Normal

Crack Width (w) = 0.13 mm $\leq$ 0.4 mm ... **Adequate** ✓

3S3 - Storey: 3

Flexural Member Type : Two-way Slab
Span Type : Interior Span
Clear Span / Height : 1750.0 / 150.0 mm = 11.7 $\leq$ 35 (TS-500 Table 13.1)

Section Dimensions: 1000.0 / 150.0 mm d = 121.0 mm d' = 29.0 mm
Flange Dimensions: b = 1000.0 mm h_f = 0.0 mm
Uncracked Section: I_c = 0.000281 m⁴ y(b) = 75.0 mm y(t) = 75.0 mm
Concrete: F_{cd} = 16.67 N/mm² F_{ctd} = 1.17 N/mm² E_c = 31000.0 N/mm²
Steel: F_{yd} = 217.39 N/mm² E_s = 200000.0 N/mm² E_s/E_c = 6.5

	Left Support	Right Support	Span
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$A_s(t)/A_s(b)$	402.12 / 335.10 mm ²	402.12 / 335.10 mm ²	0.00 / 335.10 mm ²
$M(g) / M(g+q)$	0.0 / 0.0 kN.m	0.7 / 1.1 kN.m	0.5 / 0.8 kN.m
M_{cr}	10.9 kN.m	10.9 kN.m	10.9 kN.m
Cracking Status (G)	NO	NO	NO
Cracking Status (G+Q)	NO	NO	NO
Cracked Inertia (G)	-	-	-
Cracked Inertia (G+Q)	-	-	-
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴

Effective Inertia (G)	0.000281 m ⁴
Effective Inertia (G+Q)	0.000281 m ⁴
Immediate Def. (G)	0.000 m
Immediate Def. (G+Q)	0.000 m
Immediate Def. (Q)	0.000 m
Loading Time	FIVE YEARS OR MORE
Total Time Dep. Deflection	0.000 m

Flexural Member and Position: Member Not Supporting Partition Wall
Immediate Def. (Q) = 0.009 mm $\leq$ 4.861 mm (1750/360) ... **Adequate** ✓

Crack Width Check (Span)::

Required/Supplied A_s	335.10 / 322.78 mm ²	Steel Bar Stress	152.17 N/mm ²
No. of Tension Bars	7	Steel Bar CG (a)	29.000
Max. Bar Size	8.0 mm	Concrete Cover (c)	29.0
Effective Concrete Area	58000.0 mm ²	Environmental Conditions	Interior: Normal

Crack Width (w) = 0.13 mm $\leq$ 0.4 mm ... **Adequate** ✓

3S4 - Storey: 3

Flexural Member Type : Two-way Slab
Span Type : Interior Span
Clear Span / Height : 2350.0 / 150.0 mm = 15.7 $\leq$ 35 (TS-500 Table 13.1)

Section Dimensions: 1000.0 / 150.0 mm d = 121.0 mm d' = 29.0 mm
Flange Dimensions: b = 1000.0 mm h_f = 0.0 mm
Uncracked Section: I_c = 0.000281 m⁴ y(b) = 75.0 mm y(t) = 75.0 mm
Concrete: F_{cd} = 16.67 N/mm² F_{ctd} = 1.17 N/mm² E_c = 31000.0 N/mm²
Steel: F_{yd} = 217.39 N/mm² E_s = 200000.0 N/mm² E_s/E_c = 6.5

	Left Support	Right Support	Span
$A_s(t)/A_s(b)$	402.12 / 335.10 mm ²	402.12 / 335.10 mm ²	0.00 / 335.10 mm ²
$M(g) / M(g+q)$	0.0 / 0.0 kN.m	2.0 / 3.1 kN.m	1.5 / 2.3 kN.m
M_{cr}	10.9 kN.m	10.9 kN.m	10.9 kN.m
Cracking Status (G)	NO	NO	NO
Cracking Status (G+Q)	NO	NO	NO
Cracked Inertia (G)	-	-	-
Cracked Inertia (G+Q)	-	-	-
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴

Effective Inertia (G)	0.000281 m ⁴
Effective Inertia (G+Q)	0.000281 m ⁴
Immediate Def. (G)	0.000 m
Immediate Def. (G+Q)	0.000 m
Immediate Def. (Q)	0.000 m
Loading Time	FIVE YEARS OR MORE
Total Time Dep. Deflection	0.000 m

Flexural Member and Position: Member Not Supporting Partition Wall
Immediate Def. (Q) = 0.046 mm $\leq$ 6.528 mm (2350/360) ... **Adequate** ✓

Crack Width Check (Span)::

Required/Supplied A_s	335.10 / 322.78 mm ²	Steel Bar Stress	152.17 N/mm ²
No. of Tension Bars	7	Steel Bar CG (a)	29.000
Max. Bar Size	8.0 mm	Concrete Cover (c)	29.0

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Effective Concrete Area	58000.0 mm ²	Environmental Conditions	Interior: Normal
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Crack Width (w) = 0.13 mm ≤ 0.4 mm ... **Adequate** ✓

3S5 - Storey: 3

Flexural Member Type : One-way Slab
Span Type : Interior Span
Clear Span / Height : 1275.0 / 150.0 mm = 8.5 ≤ 30 (TS-500 Table 13.1)

Section Dimensions: 1000.0 / 150.0 mm d = 121.0 mm d' = 29.0 mm
Flange Dimensions: b = 1000.0 mm h_f = 0.0 mm
Uncracked Section: I_c = 0.000281 m⁴ y(b) = 75.0 mm y(t) = 75.0 mm
Concrete: F_{cd} = 16.67 N/mm² F_{ctd} = 1.17 N/mm² E_c = 31000.0 N/mm²
Steel: F_{yd} = 217.39 N/mm² E_s = 200000.0 N/mm² E_s/E_c = 6.5

	Left Support	Right Support	Span
A _s (t)/A _s (b)	402.12 / 335.10 mm ²	402.12 / 335.10 mm ²	0.00 / 335.10 mm ²
M(g) / M(g+q)	0.8 / 1.2 kN.m	0.8 / 1.2 kN.m	0.8 / 1.2 kN.m
M _{cr}	10.9 kN.m	10.9 kN.m	10.9 kN.m
Cracking Status (G)	NO	NO	NO
Cracking Status (G+Q)	NO	NO	NO
Cracked Inertia (G)	-	-	-
Cracked Inertia (G+Q)	-	-	-
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴

Effective Inertia (G)	0.000281 m ⁴
Effective Inertia (G+Q)	0.000281 m ⁴
Immediate Def. (G)	0.000 m
Immediate Def. (G+Q)	0.000 m
Immediate Def. (Q)	0.000 m
Loading Time	FIVE YEARS OR MORE
Total Time Dep. Deflection	0.000 m

Flexural Member and Position: Member Not Supporting Partition Wall
Immediate Def. (Q) = 0.006 mm ≤ 3.542 mm (1275/360) ... **Adequate** ✓

Crack Width Check (Span)::

Required/Supplied A _s	335.10 / 322.78 mm ²	Steel Bar Stress	152.17 N/mm ²
No. of Tension Bars	7	Steel Bar CG (a)	29.000
Max. Bar Size	8.0 mm	Concrete Cover (c)	29.0
Effective Concrete Area	58000.0 mm ²	Environmental Conditions	Interior: Normal

Crack Width (w) = 0.13 mm ≤ 0.4 mm ... **Adequate** ✓

3S6 - Storey: 3

Flexural Member Type : Two-way Slab
Span Type : Interior Span
Clear Span / Height : 3950.0 / 150.0 mm = 26.3 ≤ 35 (TS-500 Table 13.1)

Section Dimensions: 1000.0 / 150.0 mm d = 121.0 mm d' = 29.0 mm
Flange Dimensions: b = 1000.0 mm h_f = 0.0 mm
Uncracked Section: I_c = 0.000281 m⁴ y(b) = 75.0 mm y(t) = 75.0 mm
Concrete: F_{cd} = 16.67 N/mm² F_{ctd} = 1.17 N/mm² E_c = 31000.0 N/mm²
Steel: F_{yd} = 217.39 N/mm² E_s = 200000.0 N/mm² E_s/E_c = 6.5

	Left Support	Right Support	Span
A _s (t)/A _s (b)	402.12 / 335.10 mm ²	402.12 / 335.10 mm ²	0.00 / 335.10 mm ²
M(g) / M(g+q)	3.2 / 4.9 kN.m	0.0 / 0.0 kN.m	2.5 / 3.8 kN.m
M _{cr}	10.9 kN.m	10.9 kN.m	10.9 kN.m
Cracking Status (G)	NO	NO	NO
Cracking Status (G+Q)	NO	NO	NO
Cracked Inertia (G)	-	-	-
Cracked Inertia (G+Q)	-	-	-
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴

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Effective Inertia (G)	0.000281 m ⁴
Effective Inertia (G+Q)	0.000281 m ⁴
Immediate Def. (G)	0.000 m
Immediate Def. (G+Q)	0.001 m
Immediate Def. (Q)	0.000 m
Loading Time	FIVE YEARS OR MORE
Total Time Dep. Deflection	0.001 m

Flexural Member and Position: Member Not Supporting Partition Wall
Immediate Def. (Q) = 0.213 mm ≤ 10.972 mm (3950/360) ... **Adequate** ✓

Crack Width Check (Span)::

Required/Supplied A _s	335.10 / 322.78 mm ²	Steel Bar Stress	152.17 N/mm ²
No. of Tension Bars	7	Steel Bar CG (a)	29.000
Max. Bar Size	8.0 mm	Concrete Cover (c)	29.0
Effective Concrete Area	58000.0 mm ²	Environmental Conditions	Interior: Normal

Crack Width (w) = 0.13 mm ≤ 0.4 mm ... **Adequate** ✓

3S7 - Storey: 3

Flexural Member Type : One-way Slab
Span Type : Interior Span
Clear Span / Height : 978.6 / 150.0 mm = 6.5 ≤ 30 (TS-500 Table 13.1)

Section Dimensions: 1000.0 / 150.0 mm d = 121.0 mm d' = 29.0 mm
Flange Dimensions: b = 1000.0 mm h_f = 0.0 mm
Uncracked Section: I_c = 0.000281 m⁴ y(b) = 75.0 mm y(t) = 75.0 mm
Concrete: F_{cd} = 16.67 N/mm² F_{ctd} = 1.17 N/mm² E_c = 31000.0 N/mm²
Steel: F_{yd} = 217.39 N/mm² E_s = 200000.0 N/mm² E_s/E_c = 6.5

	Left Support	Right Support	Span
A _s (t)/A _s (b)	402.12 / 335.10 mm ²	335.10 / 335.10 mm ²	0.00 / 335.10 mm ²
M(g) / M(g+q)	0.0 / 0.0 kN.m	0.7 / 1.1 kN.m	0.7 / 1.1 kN.m
M _{cr}	10.9 kN.m	10.9 kN.m	10.9 kN.m
Cracking Status (G)	NO	NO	NO
Cracking Status (G+Q)	NO	NO	NO
Cracked Inertia (G)	-	-	-
Cracked Inertia (G+Q)	-	-	-
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴

Effective Inertia (G)	0.000281 m ⁴
Effective Inertia (G+Q)	0.000281 m ⁴
Immediate Def. (G)	0.000 m
Immediate Def. (G+Q)	0.000 m
Immediate Def. (Q)	0.000 m
Loading Time	FIVE YEARS OR MORE
Total Time Dep. Deflection	0.000 m

Flexural Member and Position: Member Not Supporting Partition Wall
Immediate Def. (Q) = 0.004 mm ≤ 2.718 mm (979/360) ... **Adequate** ✓

Crack Width Check (Span)::

Required/Supplied A _s	335.10 / 322.78 mm ²	Steel Bar Stress	152.17 N/mm ²
No. of Tension Bars	7	Steel Bar CG (a)	29.000
Max. Bar Size	8.0 mm	Concrete Cover (c)	29.0
Effective Concrete Area	58000.0 mm ²	Environmental Conditions	Interior: Normal

Crack Width (w) = 0.13 mm ≤ 0.4 mm ... **Adequate** ✓

3S8 - Storey: 3

Flexural Member Type : Two-way Slab
Span Type : Interior Span
Clear Span / Height : 2475.0 / 150.0 mm = 16.5 ≤ 35 (TS-500 Table 13.1)

PROPOSED 5-STOREY ADMINISTRATION BLOCK	Fenerbahce Kadikoy (0001907)
Slab Deflection Check 1 15/02/2021 Rev: 1	Calc. By: SAMORA Checked By: MICHAEL

Section Dimensions:	1000.0 / 150.0 mm	d = 121.0 mm	d' = 29.0 mm
Flange Dimensions:	b = 1000.0 mm	h _f = 0.0 mm	
Uncracked Section:	I _c = 0.000281 m ⁴	y(b) = 75.0 mm	y(t) = 75.0 mm
Concrete:	F _{cd} = 16.67 N/mm ²	F _{ctd} = 1.17 N/mm ²	E _c = 31000.0 N/mm ²
Steel:	F _{yd} = 217.39 N/mm ²	E _s = 200000.0 N/mm ²	E _s /E _c = 6.5

	Left Support	Right Support	Span
A _s (t)/A _s (b)	402.12 / 335.10 mm ²	402.12 / 335.10 mm ²	0.00 / 335.10 mm ²
M(g) / M(g+q)	1.4 / 2.1 kN.m	1.4 / 2.1 kN.m	1.1 / 1.6 kN.m
M _{cr}	10.9 kN.m	10.9 kN.m	10.9 kN.m
Cracking Status (G)	NO	NO	NO
Cracking Status (G+Q)	NO	NO	NO
Cracked Inertia (G)	-	-	-
Cracked Inertia (G+Q)	-	-	-
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴

Effective Inertia (G)	0.000281 m ⁴
Effective Inertia (G+Q)	0.000281 m ⁴
Immediate Def. (G)	0.000 m
Immediate Def. (G+Q)	0.000 m
Immediate Def. (Q)	0.000 m
Loading Time	FIVE YEARS OR MORE
Total Time Dep. Deflection	0.000 m

Flexural Member and Position: Member Not Supporting Partition Wall
Immediate Def. (Q) = 0.031 mm ≤ 6.875 mm (2475/360) ... **Adequate** ✓

Crack Width Check (Span)::

Required/Supplied A _s	335.10 / 322.78 mm ²	Steel Bar Stress	152.17 N/mm ²
No. of Tension Bars	7	Steel Bar CG (a)	29.000
Max. Bar Size	8.0 mm	Concrete Cover (c)	29.0
Effective Concrete Area	58000.0 mm ²	Environmental Conditions	Interior: Normal

Crack Width (w) = 0.13 mm ≤ 0.4 mm ... **Adequate** ✓

3S9 - Storey: 3

Flexural Member Type : Two-way Slab
Span Type : Interior Span
Clear Span / Height : 1950.0 / 150.0 mm = 13.0 ≤ 35 (TS-500 Table 13.1)

Section Dimensions:	1000.0 / 150.0 mm	d = 121.0 mm	d' = 29.0 mm
Flange Dimensions:	b = 1000.0 mm	h _f = 0.0 mm	
Uncracked Section:	I _c = 0.000281 m ⁴	y(b) = 75.0 mm	y(t) = 75.0 mm
Concrete:	F _{cd} = 16.67 N/mm ²	F _{ctd} = 1.17 N/mm ²	E _c = 31000.0 N/mm ²
Steel:	F _{yd} = 217.39 N/mm ²	E _s = 200000.0 N/mm ²	E _s /E _c = 6.5

	Left Support	Right Support	Span
A _s (t)/A _s (b)	402.12 / 335.10 mm ²	402.12 / 335.10 mm ²	0.00 / 335.10 mm ²
M(g) / M(g+q)	1.2 / 1.9 kN.m	1.2 / 1.9 kN.m	0.9 / 1.4 kN.m
M _{cr}	10.9 kN.m	10.9 kN.m	10.9 kN.m
Cracking Status (G)	NO	NO	NO
Cracking Status (G+Q)	NO	NO	NO
Cracked Inertia (G)	-	-	-
Cracked Inertia (G+Q)	-	-	-
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴

Effective Inertia (G)	0.000281 m ⁴
Effective Inertia (G+Q)	0.000281 m ⁴
Immediate Def. (G)	0.000 m
Immediate Def. (G+Q)	0.000 m
Immediate Def. (Q)	0.000 m
Loading Time	FIVE YEARS OR MORE
Total Time Dep. Deflection	0.000 m

PROPOSED 5-STOREY ADMINISTRATION BLOCK	Fenerbahce Kadikoy (0001907)
Slab Deflection Check 1 15/02/2021 Rev: 1	Calc. By: SAMORA Checked By: MICHAEL

Flexural Member and Position: Member Not Supporting Partition Wall
Immediate Def. (Q) = 0.016 mm $\leq$ 5.417 mm (1950/360) ... **Adequate** ✓

Crack Width Check (Span)::

Required/Supplied A_s	335.10 / 322.78 mm ²	Steel Bar Stress	152.17 N/mm ²
No. of Tension Bars	7	Steel Bar CG (a)	29.000
Max. Bar Size	8.0 mm	Concrete Cover (c)	29.0
Effective Concrete Area	58000.0 mm ²	Environmental Conditions	Interior: Normal

Crack Width (w) = 0.13 mm $\leq$ 0.4 mm ... **Adequate** ✓

3S10 - Storey: 3

Flexural Member Type : One-way Slab
Span Type : Interior Span
Clear Span / Height : 1275.0 / 150.0 mm = 8.5 $\leq$ 30 (TS-500 Table 13.1)

Section Dimensions: 1000.0 / 150.0 mm d = 121.0 mm d' = 29.0 mm
Flange Dimensions: b = 1000.0 mm h_f = 0.0 mm
Uncracked Section: I_c = 0.000281 m⁴ y(b) = 75.0 mm y(t) = 75.0 mm
Concrete: F_{cd} = 16.67 N/mm² F_{ctd} = 1.17 N/mm² E_c = 31000.0 N/mm²
Steel: F_{yd} = 217.39 N/mm² E_s = 200000.0 N/mm² E_s/E_c = 6.5

	Left Support	Right Support	Span
A _s (t)/A _s (b)	402.12 / 335.10 mm ²	335.10 / 335.10 mm ²	0.00 / 335.10 mm ²
M(g) / M(g+q)	0.8 / 1.2 kN.m	0.8 / 1.2 kN.m	0.6 / 0.9 kN.m
M _{cr}	10.9 kN.m	10.9 kN.m	10.9 kN.m
Cracking Status (G)	NO	NO	NO
Cracking Status (G+Q)	NO	NO	NO
Cracked Inertia (G)	-	-	-
Cracked Inertia (G+Q)	-	-	-
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴

Effective Inertia (G)	0.000281 m ⁴
Effective Inertia (G+Q)	0.000281 m ⁴
Immediate Def. (G)	0.000 m
Immediate Def. (G+Q)	0.000 m
Immediate Def. (Q)	0.000 m
Loading Time	FIVE YEARS OR MORE
Total Time Dep. Deflection	0.000 m

Flexural Member and Position: Member Not Supporting Partition Wall
Immediate Def. (Q) = 0.004 mm $\leq$ 3.542 mm (1275/360) ... **Adequate** ✓

Crack Width Check (Span)::

Required/Supplied A_s	335.10 / 322.78 mm ²	Steel Bar Stress	152.17 N/mm ²
No. of Tension Bars	7	Steel Bar CG (a)	29.000
Max. Bar Size	8.0 mm	Concrete Cover (c)	29.0
Effective Concrete Area	58000.0 mm ²	Environmental Conditions	Interior: Normal

Crack Width (w) = 0.13 mm $\leq$ 0.4 mm ... **Adequate** ✓

3S11 - Storey: 3

Flexural Member Type : Two-way Slab
Span Type : Interior Span
Clear Span / Height : 3825.0 / 150.0 mm = 25.5 $\leq$ 35 (TS-500 Table 13.1)

Section Dimensions: 1000.0 / 150.0 mm d = 121.0 mm d' = 29.0 mm
Flange Dimensions: b = 1000.0 mm h_f = 0.0 mm
Uncracked Section: I_c = 0.000281 m⁴ y(b) = 75.0 mm y(t) = 75.0 mm
Concrete: F_{cd} = 16.67 N/mm² F_{ctd} = 1.17 N/mm² E_c = 31000.0 N/mm²
Steel: F_{yd} = 217.39 N/mm² E_s = 200000.0 N/mm² E_s/E_c = 6.5

	Left Support	Right Support	Span
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PROPOSED 5-STOREY ADMINISTRATION BLOCK	Fenerbahce Kadikoy (0001907)
Slab Deflection Check 1 15/02/2021 Rev: 1	Calc. By: SAMORA Checked By: MICHAEL

$A_s(t)/A_s(b)$	402.12 / 335.10 mm ²	402.12 / 335.10 mm ²	0.00 / 335.10 mm ²
M(g) / M(g+q)	0.0 / 0.0 kN.m	3.6 / 5.6 kN.m	2.7 / 4.2 kN.m
M _{cr}	10.9 kN.m	10.9 kN.m	10.9 kN.m
Cracking Status (G)	NO	NO	NO
Cracking Status (G+Q)	NO	NO	NO
Cracked Inertia (G)	-	-	-
Cracked Inertia (G+Q)	-	-	-
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴

Effective Inertia (G)	0.000281 m ⁴
Effective Inertia (G+Q)	0.000281 m ⁴
Immediate Def. (G)	0.000 m
Immediate Def. (G+Q)	0.001 m
Immediate Def. (Q)	0.000 m
Loading Time	FIVE YEARS OR MORE
Total Time Dep. Deflection	0.001 m

Flexural Member and Position: Member Not Supporting Partition Wall
Immediate Def. (Q) = 0.224 mm ≤ 10.625 mm (3825/360) ... **Adequate** ✓

Crack Width Check (Span)::

Required/Supplied A _s	335.10 / 322.78 mm ²	Steel Bar Stress	152.17 N/mm ²
No. of Tension Bars	7	Steel Bar CG (a)	29.000
Max. Bar Size	8.0 mm	Concrete Cover (c)	29.0
Effective Concrete Area	58000.0 mm ²	Environmental Conditions	Interior: Normal

Crack Width (w) = 0.13 mm ≤ 0.4 mm ... **Adequate** ✓

3S12 - Storey: 3

Flexural Member Type : Two-way Slab
Span Type : Interior Span
Clear Span / Height : 3225.0 / 150.0 mm = 21.5 ≤ 35 (TS-500 Table 13.1)

Section Dimensions: 1000.0 / 150.0 mm d = 121.0 mm d' = 29.0 mm
Flange Dimensions: b = 1000.0 mm h_f = 0.0 mm
Uncracked Section: I_c = 0.000281 m⁴ y(b) = 75.0 mm y(t) = 75.0 mm
Concrete: F_{cd} = 16.67 N/mm² F_{ctd} = 1.17 N/mm² E_c = 31000.0 N/mm²
Steel: F_{yd} = 217.39 N/mm² E_s = 200000.0 N/mm² E_s/E_c = 6.5

	Left Support	Right Support	Span
$A_s(t)/A_s(b)$	402.12 / 335.10 mm ²	335.10 / 335.10 mm ²	0.00 / 335.10 mm ²
M(g) / M(g+q)	0.0 / 0.0 kN.m	2.9 / 4.5 kN.m	2.2 / 3.4 kN.m
M _{cr}	10.9 kN.m	10.9 kN.m	10.9 kN.m
Cracking Status (G)	NO	NO	NO
Cracking Status (G+Q)	NO	NO	NO
Cracked Inertia (G)	-	-	-
Cracked Inertia (G+Q)	-	-	-
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴

Effective Inertia (G)	0.000281 m ⁴
Effective Inertia (G+Q)	0.000281 m ⁴
Immediate Def. (G)	0.000 m
Immediate Def. (G+Q)	0.000 m
Immediate Def. (Q)	0.000 m
Loading Time	FIVE YEARS OR MORE
Total Time Dep. Deflection	0.001 m

Flexural Member and Position: Member Not Supporting Partition Wall
Immediate Def. (Q) = 0.128 mm ≤ 8.958 mm (3225/360) ... **Adequate** ✓

Crack Width Check (Span)::

Required/Supplied A _s	335.10 / 322.78 mm ²	Steel Bar Stress	152.17 N/mm ²
No. of Tension Bars	7	Steel Bar CG (a)	29.000
Max. Bar Size	8.0 mm	Concrete Cover (c)	29.0

PROPOSED 5-STOREY ADMINISTRATION BLOCK	Fenerbahce Kadikoy (0001907)
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Effective Concrete Area	58000.0 mm ²	Environmental Conditions	Interior: Normal
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Crack Width (w) = 0.13 mm ≤ 0.4 mm ... **Adequate** ✓

3S13 - Storey: 3

Flexural Member Type : Two-way Slab
Span Type : Interior Span
Clear Span / Height : 1900.0 / 150.0 mm = 12.7 ≤ 35 (TS-500 Table 13.1)

Section Dimensions: 1000.0 / 150.0 mm d = 121.0 mm d' = 29.0 mm
Flange Dimensions: b = 1000.0 mm h_f = 0.0 mm
Uncracked Section: I_c = 0.000281 m⁴ y(b) = 75.0 mm y(t) = 75.0 mm
Concrete: F_{cd} = 16.67 N/mm² F_{ctd} = 1.17 N/mm² E_c = 31000.0 N/mm²
Steel: F_{yd} = 217.39 N/mm² E_s = 200000.0 N/mm² E_s/E_c = 6.5

	Left Support	Right Support	Span
A _s (t)/A _s (b)	402.12 / 335.10 mm ²	335.10 / 335.10 mm ²	0.00 / 335.10 mm ²
M(g) / M(g+q)	1.4 / 2.1 kN.m	1.4 / 2.1 kN.m	1.0 / 1.6 kN.m
M _{cr}	10.9 kN.m	10.9 kN.m	10.9 kN.m
Cracking Status (G)	NO	NO	NO
Cracking Status (G+Q)	NO	NO	NO
Cracked Inertia (G)	-	-	-
Cracked Inertia (G+Q)	-	-	-
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴

Effective Inertia (G)	0.000281 m ⁴
Effective Inertia (G+Q)	0.000281 m ⁴
Immediate Def. (G)	0.000 m
Immediate Def. (G+Q)	0.000 m
Immediate Def. (Q)	0.000 m
Loading Time	FIVE YEARS OR MORE
Total Time Dep. Deflection	0.000 m

Flexural Member and Position: Member Not Supporting Partition Wall
Immediate Def. (Q) = 0.017 mm ≤ 5.278 mm (1900/360) ... **Adequate** ✓

Crack Width Check (Span)::

Required/Supplied A _s	335.10 / 322.78 mm ²	Steel Bar Stress	152.17 N/mm ²
No. of Tension Bars	7	Steel Bar CG (a)	29.000
Max. Bar Size	8.0 mm	Concrete Cover (c)	29.0
Effective Concrete Area	58000.0 mm ²	Environmental Conditions	Interior: Normal

Crack Width (w) = 0.13 mm ≤ 0.4 mm ... **Adequate** ✓

3S14 - Storey: 3

Flexural Member Type : Two-way Slab
Span Type : Interior Span
Clear Span / Height : 2000.0 / 150.0 mm = 13.3 ≤ 35 (TS-500 Table 13.1)

Section Dimensions: 1000.0 / 150.0 mm d = 121.0 mm d' = 29.0 mm
Flange Dimensions: b = 1000.0 mm h_f = 0.0 mm
Uncracked Section: I_c = 0.000281 m⁴ y(b) = 75.0 mm y(t) = 75.0 mm
Concrete: F_{cd} = 16.67 N/mm² F_{ctd} = 1.17 N/mm² E_c = 31000.0 N/mm²
Steel: F_{yd} = 217.39 N/mm² E_s = 200000.0 N/mm² E_s/E_c = 6.5

	Left Support	Right Support	Span
A _s (t)/A _s (b)	402.12 / 335.10 mm ²	402.12 / 335.10 mm ²	0.00 / 335.10 mm ²
M(g) / M(g+q)	1.4 / 2.2 kN.m	1.4 / 2.2 kN.m	1.1 / 1.7 kN.m
M _{cr}	10.9 kN.m	10.9 kN.m	10.9 kN.m
Cracking Status (G)	NO	NO	NO
Cracking Status (G+Q)	NO	NO	NO
Cracked Inertia (G)	-	-	-
Cracked Inertia (G+Q)	-	-	-
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴

PROPOSED 5-STOREY ADMINISTRATION BLOCK	Fenerbahce Kadikoy (0001907)
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Effective Inertia (G)	0.000281 m ⁴
Effective Inertia (G+Q)	0.000281 m ⁴
Immediate Def. (G)	0.000 m
Immediate Def. (G+Q)	0.000 m
Immediate Def. (Q)	0.000 m
Loading Time	FIVE YEARS OR MORE
Total Time Dep. Deflection	0.000 m

Flexural Member and Position: Member Not Supporting Partition Wall
Immediate Def. (Q) = 0.020 mm $\leq$ 5.556 mm (2000/360) ... **Adequate** ✓

Crack Width Check (Span)::

Required/Supplied A _s	335.10 / 322.78 mm ²	Steel Bar Stress	152.17 N/mm ²
No. of Tension Bars	7	Steel Bar CG (a)	29.000
Max. Bar Size	8.0 mm	Concrete Cover (c)	29.0
Effective Concrete Area	58000.0 mm ²	Environmental Conditions	Interior: Normal

Crack Width (w) = 0.13 mm $\leq$ 0.4 mm ... **Adequate** ✓

3S15 - Storey: 3

Flexural Member Type : Two-way Slab
Span Type : Interior Span
Clear Span / Height : 3550.0 / 150.0 mm = 23.7 $\leq$ 35 (TS-500 Table 13.1)

Section Dimensions: 1000.0 / 150.0 mm d = 121.0 mm d' = 29.0 mm
Flange Dimensions: b = 1000.0 mm h_f = 0.0 mm
Uncracked Section: I_c = 0.000281 m⁴ y(b) = 75.0 mm y(t) = 75.0 mm
Concrete: F_{cd} = 16.67 N/mm² F_{ctd} = 1.17 N/mm² E_c = 31000.0 N/mm²
Steel: F_{yd} = 217.39 N/mm² E_s = 200000.0 N/mm² E_s/E_c = 6.5

	Left Support	Right Support	Span
A _s (t)/A _s (b)	402.12 / 335.10 mm ²	402.12 / 335.10 mm ²	0.00 / 335.10 mm ²
M(g) / M(g+q)	2.8 / 4.3 kN.m	0.0 / 0.0 kN.m	2.1 / 3.3 kN.m
M _{cr}	10.9 kN.m	10.9 kN.m	10.9 kN.m
Cracking Status (G)	NO	NO	NO
Cracking Status (G+Q)	NO	NO	NO
Cracked Inertia (G)	-	-	-
Cracked Inertia (G+Q)	-	-	-
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴

Effective Inertia (G)	0.000281 m ⁴
Effective Inertia (G+Q)	0.000281 m ⁴
Immediate Def. (G)	0.000 m
Immediate Def. (G+Q)	0.000 m
Immediate Def. (Q)	0.000 m
Loading Time	FIVE YEARS OR MORE
Total Time Dep. Deflection	0.001 m

Flexural Member and Position: Member Not Supporting Partition Wall
Immediate Def. (Q) = 0.150 mm $\leq$ 9.861 mm (3550/360) ... **Adequate** ✓

Crack Width Check (Span)::

Required/Supplied A _s	335.10 / 322.78 mm ²	Steel Bar Stress	152.17 N/mm ²
No. of Tension Bars	7	Steel Bar CG (a)	29.000
Max. Bar Size	8.0 mm	Concrete Cover (c)	29.0
Effective Concrete Area	58000.0 mm ²	Environmental Conditions	Interior: Normal

Crack Width (w) = 0.13 mm $\leq$ 0.4 mm ... **Adequate** ✓

3S16 - Storey: 3

Flexural Member Type : One-way Slab
Span Type : Interior Span
Clear Span / Height : 1950.0 / 150.0 mm = 13.0 $\leq$ 30 (TS-500 Table 13.1)

PROPOSED 5-STOREY ADMINISTRATION BLOCK	Fenerbahce Kadikoy (0001907)
Slab Deflection Check 1 15/02/2021 Rev: 1	Calc. By: SAMORA Checked By: MICHAEL

Section Dimensions:	1000.0 / 150.0 mm	d = 121.0 mm	d' = 29.0 mm
Flange Dimensions:	b = 1000.0 mm	h _f = 0.0 mm	
Uncracked Section:	I _c = 0.000281 m ⁴	y(b) = 75.0 mm	y(t) = 75.0 mm
Concrete:	F _{cd} = 16.67 N/mm ²	F _{ctd} = 1.17 N/mm ²	E _c = 31000.0 N/mm ²
Steel:	F _{yd} = 217.39 N/mm ²	E _s = 200000.0 N/mm ²	E _s /E _c = 6.5

	Left Support	Right Support	Span
A _s (t)/A _s (b)	402.12 / 335.10 mm ²	402.12 / 335.10 mm ²	0.00 / 335.10 mm ²
M(g) / M(g+q)	1.6 / 2.5 kN.m	1.6 / 2.5 kN.m	1.6 / 2.5 kN.m
M _{cr}	10.9 kN.m	10.9 kN.m	10.9 kN.m
Cracking Status (G)	NO	NO	NO
Cracking Status (G+Q)	NO	NO	NO
Cracked Inertia (G)	-	-	-
Cracked Inertia (G+Q)	-	-	-
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴

Effective Inertia (G)	0.000281 m ⁴
Effective Inertia (G+Q)	0.000281 m ⁴
Immediate Def. (G)	0.000 m
Immediate Def. (G+Q)	0.000 m
Immediate Def. (Q)	0.000 m
Loading Time	FIVE YEARS OR MORE
Total Time Dep. Deflection	0.000 m

Flexural Member and Position: Member Not Supporting Partition Wall
Immediate Def. (Q) = 0.032 mm ≤ 5.417 mm (1950/360) ... **Adequate** ✓

Crack Width Check (Span)::

Required/Supplied A _s	335.10 / 322.78 mm ²	Steel Bar Stress	152.17 N/mm ²
No. of Tension Bars	7	Steel Bar CG (a)	29.000
Max. Bar Size	8.0 mm	Concrete Cover (c)	29.0
Effective Concrete Area	58000.0 mm ²	Environmental Conditions	Interior: Normal

Crack Width (w) = 0.13 mm ≤ 0.4 mm ... **Adequate** ✓

3S17 - Storey: 3

Flexural Member Type : Two-way Slab
Span Type : Interior Span
Clear Span / Height : 2475.0 / 150.0 mm = 16.5 ≤ 35 (TS-500 Table 13.1)

Section Dimensions:	1000.0 / 150.0 mm	d = 121.0 mm	d' = 29.0 mm
Flange Dimensions:	b = 1000.0 mm	h _f = 0.0 mm	
Uncracked Section:	I _c = 0.000281 m ⁴	y(b) = 75.0 mm	y(t) = 75.0 mm
Concrete:	F _{cd} = 16.67 N/mm ²	F _{ctd} = 1.17 N/mm ²	E _c = 31000.0 N/mm ²
Steel:	F _{yd} = 217.39 N/mm ²	E _s = 200000.0 N/mm ²	E _s /E _c = 6.5

	Left Support	Right Support	Span
A _s (t)/A _s (b)	402.12 / 335.10 mm ²	402.12 / 335.10 mm ²	0.00 / 335.10 mm ²
M(g) / M(g+q)	2.4 / 3.7 kN.m	2.4 / 3.7 kN.m	1.8 / 2.8 kN.m
M _{cr}	10.9 kN.m	10.9 kN.m	10.9 kN.m
Cracking Status (G)	NO	NO	NO
Cracking Status (G+Q)	NO	NO	NO
Cracked Inertia (G)	-	-	-
Cracked Inertia (G+Q)	-	-	-
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴

Effective Inertia (G)	0.000281 m ⁴
Effective Inertia (G+Q)	0.000281 m ⁴
Immediate Def. (G)	0.000 m
Immediate Def. (G+Q)	0.000 m
Immediate Def. (Q)	0.000 m
Loading Time	FIVE YEARS OR MORE
Total Time Dep. Deflection	0.000 m

PROPOSED 5-STOREY ADMINISTRATION BLOCK	Fenerbahce Kadikoy (0001907)
Slab Deflection Check 1 15/02/2021 Rev: 1	Calc. By: SAMORA Checked By: MICHAEL

Flexural Member and Position: Member Not Supporting Partition Wall
Immediate Def. (Q) = 0.053 mm $\leq$ 6.875 mm (2475/360) ... **Adequate** ✓

Crack Width Check (Span)::

Required/Supplied A_s	335.10 / 322.78 mm ²	Steel Bar Stress	152.17 N/mm ²
No. of Tension Bars	7	Steel Bar CG (a)	29.000
Max. Bar Size	8.0 mm	Concrete Cover (c)	29.0
Effective Concrete Area	58000.0 mm ²	Environmental Conditions	Interior: Normal

Crack Width (w) = 0.13 mm $\leq$ 0.4 mm ... **Adequate** ✓

3S18 - Storey: 3

Flexural Member Type : Two-way Slab
Span Type : Interior Span
Clear Span / Height : 2175.0 / 150.0 mm = 14.5 $\leq$ 35 (TS-500 Table 13.1)

Section Dimensions: 1000.0 / 150.0 mm d = 121.0 mm d' = 29.0 mm
Flange Dimensions: b = 1000.0 mm h_f = 0.0 mm
Uncracked Section: I_c = 0.000281 m⁴ y(b) = 75.0 mm y(t) = 75.0 mm
Concrete: F_{cd} = 16.67 N/mm² F_{ctd} = 1.17 N/mm² E_c = 31000.0 N/mm²
Steel: F_{yd} = 217.39 N/mm² E_s = 200000.0 N/mm² E_s/E_c = 6.5

	Left Support	Right Support	Span
A _s (t)/A _s (b)	402.12 / 335.10 mm ²	402.12 / 335.10 mm ²	0.00 / 335.10 mm ²
M(g) / M(g+q)	1.4 / 2.2 kN.m	1.4 / 2.2 kN.m	1.1 / 1.6 kN.m
M _{cr}	10.9 kN.m	10.9 kN.m	10.9 kN.m
Cracking Status (G)	NO	NO	NO
Cracking Status (G+Q)	NO	NO	NO
Cracked Inertia (G)	-	-	-
Cracked Inertia (G+Q)	-	-	-
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴

Effective Inertia (G)	0.000281 m ⁴
Effective Inertia (G+Q)	0.000281 m ⁴
Immediate Def. (G)	0.000 m
Immediate Def. (G+Q)	0.000 m
Immediate Def. (Q)	0.000 m
Loading Time	FIVE YEARS OR MORE
Total Time Dep. Deflection	0.000 m

Flexural Member and Position: Member Not Supporting Partition Wall
Immediate Def. (Q) = 0.024 mm $\leq$ 6.042 mm (2175/360) ... **Adequate** ✓

Crack Width Check (Span)::

Required/Supplied A_s	335.10 / 322.78 mm ²	Steel Bar Stress	152.17 N/mm ²
No. of Tension Bars	7	Steel Bar CG (a)	29.000
Max. Bar Size	8.0 mm	Concrete Cover (c)	29.0
Effective Concrete Area	58000.0 mm ²	Environmental Conditions	Interior: Normal

Crack Width (w) = 0.13 mm $\leq$ 0.4 mm ... **Adequate** ✓

4S1 - Storey: 4

Flexural Member Type : Two-way Slab
Span Type : Interior Span
Clear Span / Height : 3825.0 / 150.0 mm = 25.5 $\leq$ 35 (TS-500 Table 13.1)

Section Dimensions: 1000.0 / 150.0 mm d = 121.0 mm d' = 29.0 mm
Flange Dimensions: b = 1000.0 mm h_f = 0.0 mm
Uncracked Section: I_c = 0.000281 m⁴ y(b) = 75.0 mm y(t) = 75.0 mm
Concrete: F_{cd} = 16.67 N/mm² F_{ctd} = 1.17 N/mm² E_c = 31000.0 N/mm²
Steel: F_{yd} = 217.39 N/mm² E_s = 200000.0 N/mm² E_s/E_c = 6.5

	Left Support	Right Support	Span
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PROPOSED 5-STOREY ADMINISTRATION BLOCK	Fenerbahce Kadikoy (0001907)
Slab Deflection Check 1 15/02/2021 Rev: 1	Calc. By: SAMORA Checked By: MICHAEL

$A_s(t)/A_s(b)$	402.12 / 335.10 mm ²	402.12 / 335.10 mm ²	0.00 / 335.10 mm ²
M(g) / M(g+q)	0.0 / 0.0 kN.m	2.8 / 4.4 kN.m	2.2 / 3.4 kN.m
M _{cr}	10.9 kN.m	10.9 kN.m	10.9 kN.m
Cracking Status (G)	NO	NO	NO
Cracking Status (G+Q)	NO	NO	NO
Cracked Inertia (G)	-	-	-
Cracked Inertia (G+Q)	-	-	-
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴

Effective Inertia (G)	0.000281 m ⁴
Effective Inertia (G+Q)	0.000281 m ⁴
Immediate Def. (G)	0.000 m
Immediate Def. (G+Q)	0.001 m
Immediate Def. (Q)	0.000 m
Loading Time	FIVE YEARS OR MORE
Total Time Dep. Deflection	0.001 m

Flexural Member and Position: Member Not Supporting Partition Wall
Immediate Def. (Q) = 0.179 mm ≤ 10.625 mm (3825/360) ... **Adequate** ✓

Crack Width Check (Span)::

Required/Supplied A _s	335.10 / 322.78 mm ²	Steel Bar Stress	152.17 N/mm ²
No. of Tension Bars	7	Steel Bar CG (a)	29.000
Max. Bar Size	8.0 mm	Concrete Cover (c)	29.0
Effective Concrete Area	58000.0 mm ²	Environmental Conditions	Interior: Normal

Crack Width (w) = 0.13 mm ≤ 0.4 mm ... **Adequate** ✓

4S2 - Storey: 4

Flexural Member Type : Two-way Slab
Span Type : Interior Span
Clear Span / Height : 1750.0 / 150.0 mm = 11.7 ≤ 35 (TS-500 Table 13.1)

Section Dimensions: 1000.0 / 150.0 mm d = 121.0 mm d' = 29.0 mm
Flange Dimensions: b = 1000.0 mm h_f = 0.0 mm
Uncracked Section: I_c = 0.000281 m⁴ y(b) = 75.0 mm y(t) = 75.0 mm
Concrete: F_{cd} = 16.67 N/mm² F_{ctd} = 1.17 N/mm² E_c = 31000.0 N/mm²
Steel: F_{yd} = 217.39 N/mm² E_s = 200000.0 N/mm² E_s/E_c = 6.5

	Left Support	Right Support	Span
$A_s(t)/A_s(b)$	402.12 / 335.10 mm ²	402.12 / 335.10 mm ²	0.00 / 335.10 mm ²
M(g) / M(g+q)	0.0 / 0.0 kN.m	0.8 / 1.2 kN.m	0.6 / 0.9 kN.m
M _{cr}	10.9 kN.m	10.9 kN.m	10.9 kN.m
Cracking Status (G)	NO	NO	NO
Cracking Status (G+Q)	NO	NO	NO
Cracked Inertia (G)	-	-	-
Cracked Inertia (G+Q)	-	-	-
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴

Effective Inertia (G)	0.000281 m ⁴
Effective Inertia (G+Q)	0.000281 m ⁴
Immediate Def. (G)	0.000 m
Immediate Def. (G+Q)	0.000 m
Immediate Def. (Q)	0.000 m
Loading Time	FIVE YEARS OR MORE
Total Time Dep. Deflection	0.000 m

Flexural Member and Position: Member Not Supporting Partition Wall
Immediate Def. (Q) = 0.010 mm ≤ 4.861 mm (1750/360) ... **Adequate** ✓

Crack Width Check (Span)::

Required/Supplied A _s	335.10 / 322.78 mm ²	Steel Bar Stress	152.17 N/mm ²
No. of Tension Bars	7	Steel Bar CG (a)	29.000
Max. Bar Size	8.0 mm	Concrete Cover (c)	29.0

PROPOSED 5-STOREY ADMINISTRATION BLOCK	Fenerbahce Kadikoy (0001907)
Slab Deflection Check 1 15/02/2021 Rev: 1	Calc. By: SAMORA Checked By: MICHAEL

Effective Concrete Area	58000.0 mm ²	Environmental Conditions	Interior: Normal
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Crack Width (w) = 0.13 mm ≤ 0.4 mm ... **Adequate** ✓

4S3 - Storey: 4

Flexural Member Type : Two-way Slab
Span Type : Interior Span
Clear Span / Height : 1750.0 / 150.0 mm = 11.7 ≤ 35 (TS-500 Table 13.1)

Section Dimensions: 1000.0 / 150.0 mm d = 121.0 mm d' = 29.0 mm
Flange Dimensions: b = 1000.0 mm h_f = 0.0 mm
Uncracked Section: I_c = 0.000281 m⁴ y(b) = 75.0 mm y(t) = 75.0 mm
Concrete: F_{cd} = 16.67 N/mm² F_{ctd} = 1.17 N/mm² E_c = 31000.0 N/mm²
Steel: F_{yd} = 217.39 N/mm² E_s = 200000.0 N/mm² E_s/E_c = 6.5

	Left Support	Right Support	Span
A _s (t)/A _s (b)	402.12 / 335.10 mm ²	402.12 / 335.10 mm ²	0.00 / 335.10 mm ²
M(g) / M(g+q)	0.0 / 0.0 kN.m	0.7 / 1.1 kN.m	0.5 / 0.8 kN.m
M _{cr}	10.9 kN.m	10.9 kN.m	10.9 kN.m
Cracking Status (G)	NO	NO	NO
Cracking Status (G+Q)	NO	NO	NO
Cracked Inertia (G)	-	-	-
Cracked Inertia (G+Q)	-	-	-
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴

Effective Inertia (G)	0.000281 m ⁴
Effective Inertia (G+Q)	0.000281 m ⁴
Immediate Def. (G)	0.000 m
Immediate Def. (G+Q)	0.000 m
Immediate Def. (Q)	0.000 m
Loading Time	FIVE YEARS OR MORE
Total Time Dep. Deflection	0.000 m

Flexural Member and Position: Member Not Supporting Partition Wall
Immediate Def. (Q) = 0.009 mm ≤ 4.861 mm (1750/360) ... **Adequate** ✓

Crack Width Check (Span)::

Required/Supplied A _s	335.10 / 322.78 mm ²	Steel Bar Stress	152.17 N/mm ²
No. of Tension Bars	7	Steel Bar CG (a)	29.000
Max. Bar Size	8.0 mm	Concrete Cover (c)	29.0
Effective Concrete Area	58000.0 mm ²	Environmental Conditions	Interior: Normal

Crack Width (w) = 0.13 mm ≤ 0.4 mm ... **Adequate** ✓

4S4 - Storey: 4

Flexural Member Type : Two-way Slab
Span Type : Interior Span
Clear Span / Height : 2350.0 / 150.0 mm = 15.7 ≤ 35 (TS-500 Table 13.1)

Section Dimensions: 1000.0 / 150.0 mm d = 121.0 mm d' = 29.0 mm
Flange Dimensions: b = 1000.0 mm h_f = 0.0 mm
Uncracked Section: I_c = 0.000281 m⁴ y(b) = 75.0 mm y(t) = 75.0 mm
Concrete: F_{cd} = 16.67 N/mm² F_{ctd} = 1.17 N/mm² E_c = 31000.0 N/mm²
Steel: F_{yd} = 217.39 N/mm² E_s = 200000.0 N/mm² E_s/E_c = 6.5

	Left Support	Right Support	Span
A _s (t)/A _s (b)	402.12 / 335.10 mm ²	402.12 / 335.10 mm ²	0.00 / 335.10 mm ²
M(g) / M(g+q)	0.0 / 0.0 kN.m	2.0 / 3.1 kN.m	1.5 / 2.3 kN.m
M _{cr}	10.9 kN.m	10.9 kN.m	10.9 kN.m
Cracking Status (G)	NO	NO	NO
Cracking Status (G+Q)	NO	NO	NO
Cracked Inertia (G)	-	-	-
Cracked Inertia (G+Q)	-	-	-
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴

PROPOSED 5-STOREY ADMINISTRATION BLOCK	Fenerbahce Kadikoy (0001907)
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Effective Inertia (G)	0.000281 m ⁴
Effective Inertia (G+Q)	0.000281 m ⁴
Immediate Def. (G)	0.000 m
Immediate Def. (G+Q)	0.000 m
Immediate Def. (Q)	0.000 m
Loading Time	FIVE YEARS OR MORE
Total Time Dep. Deflection	0.000 m

Flexural Member and Position: Member Not Supporting Partition Wall
Immediate Def. (Q) = 0.046 mm ≤ 6.528 mm (2350/360) ... **Adequate** ✓

Crack Width Check (Span)::

Required/Supplied A _s	335.10 / 322.78 mm ²	Steel Bar Stress	152.17 N/mm ²
No. of Tension Bars	7	Steel Bar CG (a)	29.000
Max. Bar Size	8.0 mm	Concrete Cover (c)	29.0
Effective Concrete Area	58000.0 mm ²	Environmental Conditions	Interior: Normal

Crack Width (w) = 0.13 mm ≤ 0.4 mm ... **Adequate** ✓

4S5 - Storey: 4

Flexural Member Type : One-way Slab
Span Type : Interior Span
Clear Span / Height : 1275.0 / 150.0 mm = 8.5 ≤ 30 (TS-500 Table 13.1)

Section Dimensions: 1000.0 / 150.0 mm d = 121.0 mm d' = 29.0 mm
Flange Dimensions: b = 1000.0 mm h_f = 0.0 mm
Uncracked Section: I_c = 0.000281 m⁴ y(b) = 75.0 mm y(t) = 75.0 mm
Concrete: F_{cd} = 16.67 N/mm² F_{ctd} = 1.17 N/mm² E_c = 31000.0 N/mm²
Steel: F_{yd} = 217.39 N/mm² E_s = 200000.0 N/mm² E_s/E_c = 6.5

	Left Support	Right Support	Span
A _s (t)/A _s (b)	402.12 / 335.10 mm ²	402.12 / 335.10 mm ²	0.00 / 335.10 mm ²
M(g) / M(g+q)	0.8 / 1.2 kN.m	0.8 / 1.2 kN.m	0.8 / 1.2 kN.m
M _{cr}	10.9 kN.m	10.9 kN.m	10.9 kN.m
Cracking Status (G)	NO	NO	NO
Cracking Status (G+Q)	NO	NO	NO
Cracked Inertia (G)	-	-	-
Cracked Inertia (G+Q)	-	-	-
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴

Effective Inertia (G)	0.000281 m ⁴
Effective Inertia (G+Q)	0.000281 m ⁴
Immediate Def. (G)	0.000 m
Immediate Def. (G+Q)	0.000 m
Immediate Def. (Q)	0.000 m
Loading Time	FIVE YEARS OR MORE
Total Time Dep. Deflection	0.000 m

Flexural Member and Position: Member Not Supporting Partition Wall
Immediate Def. (Q) = 0.006 mm ≤ 3.542 mm (1275/360) ... **Adequate** ✓

Crack Width Check (Span)::

Required/Supplied A _s	335.10 / 322.78 mm ²	Steel Bar Stress	152.17 N/mm ²
No. of Tension Bars	7	Steel Bar CG (a)	29.000
Max. Bar Size	8.0 mm	Concrete Cover (c)	29.0
Effective Concrete Area	58000.0 mm ²	Environmental Conditions	Interior: Normal

Crack Width (w) = 0.13 mm ≤ 0.4 mm ... **Adequate** ✓

4S6 - Storey: 4

Flexural Member Type : Two-way Slab
Span Type : Interior Span
Clear Span / Height : 3950.0 / 150.0 mm = 26.3 ≤ 35 (TS-500 Table 13.1)

PROPOSED 5-STOREY ADMINISTRATION BLOCK	Fenerbahce Kadikoy (0001907)
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Section Dimensions:	1000.0 / 150.0 mm	d = 121.0 mm	d' = 29.0 mm
Flange Dimensions:	b = 1000.0 mm	h _f = 0.0 mm	
Uncracked Section:	I _c = 0.000281 m ⁴	y(b) = 75.0 mm	y(t) = 75.0 mm
Concrete:	F _{cd} = 16.67 N/mm ²	F _{ctd} = 1.17 N/mm ²	E _c = 31000.0 N/mm ²
Steel:	F _{yd} = 217.39 N/mm ²	E _s = 200000.0 N/mm ²	E _s /E _c = 6.5

	Left Support	Right Support	Span
A _s (t)/A _s (b)	402.12 / 335.10 mm ²	402.12 / 335.10 mm ²	0.00 / 335.10 mm ²
M(g) / M(g+q)	3.2 / 4.9 kN.m	0.0 / 0.0 kN.m	2.5 / 3.8 kN.m
M _{cr}	10.9 kN.m	10.9 kN.m	10.9 kN.m
Cracking Status (G)	NO	NO	NO
Cracking Status (G+Q)	NO	NO	NO
Cracked Inertia (G)	-	-	-
Cracked Inertia (G+Q)	-	-	-
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴

Effective Inertia (G)	0.000281 m ⁴
Effective Inertia (G+Q)	0.000281 m ⁴
Immediate Def. (G)	0.000 m
Immediate Def. (G+Q)	0.001 m
Immediate Def. (Q)	0.000 m
Loading Time	FIVE YEARS OR MORE
Total Time Dep. Deflection	0.001 m

Flexural Member and Position: Member Not Supporting Partition Wall
Immediate Def. (Q) = 0.213 mm ≤ 10.972 mm (3950/360) ... **Adequate** ✓

Crack Width Check (Span)::

Required/Supplied A _s	335.10 / 322.78 mm ²	Steel Bar Stress	152.17 N/mm ²
No. of Tension Bars	7	Steel Bar CG (a)	29.000
Max. Bar Size	8.0 mm	Concrete Cover (c)	29.0
Effective Concrete Area	58000.0 mm ²	Environmental Conditions	Interior: Normal

Crack Width (w) = 0.13 mm ≤ 0.4 mm ... **Adequate** ✓

4S7 - Storey: 4

Flexural Member Type : One-way Slab
Span Type : Interior Span
Clear Span / Height : 978.6 / 150.0 mm = 6.5 ≤ 30 (TS-500 Table 13.1)

Section Dimensions:	1000.0 / 150.0 mm	d = 121.0 mm	d' = 29.0 mm
Flange Dimensions:	b = 1000.0 mm	h _f = 0.0 mm	
Uncracked Section:	I _c = 0.000281 m ⁴	y(b) = 75.0 mm	y(t) = 75.0 mm
Concrete:	F _{cd} = 16.67 N/mm ²	F _{ctd} = 1.17 N/mm ²	E _c = 31000.0 N/mm ²
Steel:	F _{yd} = 217.39 N/mm ²	E _s = 200000.0 N/mm ²	E _s /E _c = 6.5

	Left Support	Right Support	Span
A _s (t)/A _s (b)	402.12 / 335.10 mm ²	335.10 / 335.10 mm ²	0.00 / 335.10 mm ²
M(g) / M(g+q)	0.0 / 0.0 kN.m	0.7 / 1.1 kN.m	0.7 / 1.1 kN.m
M _{cr}	10.9 kN.m	10.9 kN.m	10.9 kN.m
Cracking Status (G)	NO	NO	NO
Cracking Status (G+Q)	NO	NO	NO
Cracked Inertia (G)	-	-	-
Cracked Inertia (G+Q)	-	-	-
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴

Effective Inertia (G)	0.000281 m ⁴
Effective Inertia (G+Q)	0.000281 m ⁴
Immediate Def. (G)	0.000 m
Immediate Def. (G+Q)	0.000 m
Immediate Def. (Q)	0.000 m
Loading Time	FIVE YEARS OR MORE
Total Time Dep. Deflection	0.000 m

PROPOSED 5-STOREY ADMINISTRATION BLOCK	Fenerbahce Kadikoy (0001907)
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Flexural Member and Position: Member Not Supporting Partition Wall
Immediate Def. (Q) = 0.004 mm $\leq$ 2.718 mm (979/360) ... **Adequate** ✓

Crack Width Check (Span)::

Required/Supplied A_s	335.10 / 322.78 mm ²	Steel Bar Stress	152.17 N/mm ²
No. of Tension Bars	7	Steel Bar CG (a)	29.000
Max. Bar Size	8.0 mm	Concrete Cover (c)	29.0
Effective Concrete Area	58000.0 mm ²	Environmental Conditions	Interior: Normal

Crack Width (w) = 0.13 mm $\leq$ 0.4 mm ... **Adequate** ✓

4S8 - Storey: 4

Flexural Member Type : Two-way Slab
Span Type : Interior Span
Clear Span / Height : 2475.0 / 150.0 mm = 16.5 $\leq$ 35 (TS-500 Table 13.1)

Section Dimensions: 1000.0 / 150.0 mm d = 121.0 mm d' = 29.0 mm
Flange Dimensions: b = 1000.0 mm h_f = 0.0 mm
Uncracked Section: I_c = 0.000281 m⁴ y(b) = 75.0 mm y(t) = 75.0 mm
Concrete: F_{cd} = 16.67 N/mm² F_{ctd} = 1.17 N/mm² E_c = 31000.0 N/mm²
Steel: F_{yd} = 217.39 N/mm² E_s = 200000.0 N/mm² E_s/E_c = 6.5

	Left Support	Right Support	Span
A _s (t)/A _s (b)	402.12 / 335.10 mm ²	402.12 / 335.10 mm ²	0.00 / 335.10 mm ²
M(g) / M(g+q)	1.4 / 2.1 kN.m	1.4 / 2.1 kN.m	1.1 / 1.6 kN.m
M _{cr}	10.9 kN.m	10.9 kN.m	10.9 kN.m
Cracking Status (G)	NO	NO	NO
Cracking Status (G+Q)	NO	NO	NO
Cracked Inertia (G)	-	-	-
Cracked Inertia (G+Q)	-	-	-
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴

Effective Inertia (G)	0.000281 m ⁴
Effective Inertia (G+Q)	0.000281 m ⁴
Immediate Def. (G)	0.000 m
Immediate Def. (G+Q)	0.000 m
Immediate Def. (Q)	0.000 m
Loading Time	FIVE YEARS OR MORE
Total Time Dep. Deflection	0.000 m

Flexural Member and Position: Member Not Supporting Partition Wall
Immediate Def. (Q) = 0.031 mm $\leq$ 6.875 mm (2475/360) ... **Adequate** ✓

Crack Width Check (Span)::

Required/Supplied A_s	335.10 / 322.78 mm ²	Steel Bar Stress	152.17 N/mm ²
No. of Tension Bars	7	Steel Bar CG (a)	29.000
Max. Bar Size	8.0 mm	Concrete Cover (c)	29.0
Effective Concrete Area	58000.0 mm ²	Environmental Conditions	Interior: Normal

Crack Width (w) = 0.13 mm $\leq$ 0.4 mm ... **Adequate** ✓

4S9 - Storey: 4

Flexural Member Type : Two-way Slab
Span Type : Interior Span
Clear Span / Height : 1950.0 / 150.0 mm = 13.0 $\leq$ 35 (TS-500 Table 13.1)

Section Dimensions: 1000.0 / 150.0 mm d = 121.0 mm d' = 29.0 mm
Flange Dimensions: b = 1000.0 mm h_f = 0.0 mm
Uncracked Section: I_c = 0.000281 m⁴ y(b) = 75.0 mm y(t) = 75.0 mm
Concrete: F_{cd} = 16.67 N/mm² F_{ctd} = 1.17 N/mm² E_c = 31000.0 N/mm²
Steel: F_{yd} = 217.39 N/mm² E_s = 200000.0 N/mm² E_s/E_c = 6.5

	Left Support	Right Support	Span
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PROPOSED 5-STOREY ADMINISTRATION BLOCK	Fenerbahce Kadikoy (0001907)
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$A_s(t)/A_s(b)$	402.12 / 335.10 mm ²	402.12 / 335.10 mm ²	0.00 / 335.10 mm ²
M(g) / M(g+q)	1.2 / 1.9 kN.m	1.2 / 1.9 kN.m	0.9 / 1.4 kN.m
M _{cr}	10.9 kN.m	10.9 kN.m	10.9 kN.m
Cracking Status (G)	NO	NO	NO
Cracking Status (G+Q)	NO	NO	NO
Cracked Inertia (G)	-	-	-
Cracked Inertia (G+Q)	-	-	-
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴

Effective Inertia (G)	0.000281 m ⁴
Effective Inertia (G+Q)	0.000281 m ⁴
Immediate Def. (G)	0.000 m
Immediate Def. (G+Q)	0.000 m
Immediate Def. (Q)	0.000 m
Loading Time	FIVE YEARS OR MORE
Total Time Dep. Deflection	0.000 m

Flexural Member and Position: Member Not Supporting Partition Wall
Immediate Def. (Q) = 0.016 mm ≤ 5.417 mm (1950/360) ... **Adequate** ✓

Crack Width Check (Span)::

Required/Supplied A _s	335.10 / 322.78 mm ²	Steel Bar Stress	152.17 N/mm ²
No. of Tension Bars	7	Steel Bar CG (a)	29.000
Max. Bar Size	8.0 mm	Concrete Cover (c)	29.0
Effective Concrete Area	58000.0 mm ²	Environmental Conditions	Interior: Normal

Crack Width (w) = 0.13 mm ≤ 0.4 mm ... **Adequate** ✓

4S10 - Storey: 4

Flexural Member Type : One-way Slab
Span Type : Interior Span
Clear Span / Height : 1275.0 / 150.0 mm = 8.5 ≤ 30 (TS-500 Table 13.1)

Section Dimensions: 1000.0 / 150.0 mm d = 121.0 mm d' = 29.0 mm
Flange Dimensions: b = 1000.0 mm h_f = 0.0 mm
Uncracked Section: I_c = 0.000281 m⁴ y(b) = 75.0 mm y(t) = 75.0 mm
Concrete: F_{cd} = 16.67 N/mm² F_{ctd} = 1.17 N/mm² E_c = 31000.0 N/mm²
Steel: F_{yd} = 217.39 N/mm² E_s = 200000.0 N/mm² E_s/E_c = 6.5

	Left Support	Right Support	Span
$A_s(t)/A_s(b)$	402.12 / 335.10 mm ²	335.10 / 335.10 mm ²	0.00 / 335.10 mm ²
M(g) / M(g+q)	0.8 / 1.2 kN.m	0.8 / 1.2 kN.m	0.6 / 0.9 kN.m
M _{cr}	10.9 kN.m	10.9 kN.m	10.9 kN.m
Cracking Status (G)	NO	NO	NO
Cracking Status (G+Q)	NO	NO	NO
Cracked Inertia (G)	-	-	-
Cracked Inertia (G+Q)	-	-	-
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴

Effective Inertia (G)	0.000281 m ⁴
Effective Inertia (G+Q)	0.000281 m ⁴
Immediate Def. (G)	0.000 m
Immediate Def. (G+Q)	0.000 m
Immediate Def. (Q)	0.000 m
Loading Time	FIVE YEARS OR MORE
Total Time Dep. Deflection	0.000 m

Flexural Member and Position: Member Not Supporting Partition Wall
Immediate Def. (Q) = 0.004 mm ≤ 3.542 mm (1275/360) ... **Adequate** ✓

Crack Width Check (Span)::

Required/Supplied A _s	335.10 / 322.78 mm ²	Steel Bar Stress	152.17 N/mm ²
No. of Tension Bars	7	Steel Bar CG (a)	29.000
Max. Bar Size	8.0 mm	Concrete Cover (c)	29.0

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Effective Concrete Area	58000.0 mm ²	Environmental Conditions	Interior: Normal
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Crack Width (w) = 0.13 mm ≤ 0.4 mm ... **Adequate** ✓

4S11 - Storey: 4

Flexural Member Type : Two-way Slab
Span Type : Interior Span
Clear Span / Height : 3825.0 / 150.0 mm = 25.5 ≤ 35 (TS-500 Table 13.1)

Section Dimensions: 1000.0 / 150.0 mm d = 121.0 mm d' = 29.0 mm
Flange Dimensions: b = 1000.0 mm h_f = 0.0 mm
Uncracked Section: I_c = 0.000281 m⁴ y(b) = 75.0 mm y(t) = 75.0 mm
Concrete: F_{cd} = 16.67 N/mm² F_{ctd} = 1.17 N/mm² E_c = 31000.0 N/mm²
Steel: F_{yd} = 217.39 N/mm² E_s = 200000.0 N/mm² E_s/E_c = 6.5

	Left Support	Right Support	Span
A _s (t)/A _s (b)	402.12 / 335.10 mm ²	402.12 / 335.10 mm ²	0.00 / 335.10 mm ²
M(g) / M(g+q)	0.0 / 0.0 kN.m	3.6 / 5.6 kN.m	2.7 / 4.2 kN.m
M _{cr}	10.9 kN.m	10.9 kN.m	10.9 kN.m
Cracking Status (G)	NO	NO	NO
Cracking Status (G+Q)	NO	NO	NO
Cracked Inertia (G)	-	-	-
Cracked Inertia (G+Q)	-	-	-
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴

Effective Inertia (G)	0.000281 m ⁴
Effective Inertia (G+Q)	0.000281 m ⁴
Immediate Def. (G)	0.000 m
Immediate Def. (G+Q)	0.001 m
Immediate Def. (Q)	0.000 m
Loading Time	FIVE YEARS OR MORE
Total Time Dep. Deflection	0.001 m

Flexural Member and Position: Member Not Supporting Partition Wall
Immediate Def. (Q) = 0.224 mm ≤ 10.625 mm (3825/360) ... **Adequate** ✓

Crack Width Check (Span)::

Required/Supplied A _s	335.10 / 322.78 mm ²	Steel Bar Stress	152.17 N/mm ²
No. of Tension Bars	7	Steel Bar CG (a)	29.000
Max. Bar Size	8.0 mm	Concrete Cover (c)	29.0
Effective Concrete Area	58000.0 mm ²	Environmental Conditions	Interior: Normal

Crack Width (w) = 0.13 mm ≤ 0.4 mm ... **Adequate** ✓

4S12 - Storey: 4

Flexural Member Type : Two-way Slab
Span Type : Interior Span
Clear Span / Height : 3225.0 / 150.0 mm = 21.5 ≤ 35 (TS-500 Table 13.1)

Section Dimensions: 1000.0 / 150.0 mm d = 121.0 mm d' = 29.0 mm
Flange Dimensions: b = 1000.0 mm h_f = 0.0 mm
Uncracked Section: I_c = 0.000281 m⁴ y(b) = 75.0 mm y(t) = 75.0 mm
Concrete: F_{cd} = 16.67 N/mm² F_{ctd} = 1.17 N/mm² E_c = 31000.0 N/mm²
Steel: F_{yd} = 217.39 N/mm² E_s = 200000.0 N/mm² E_s/E_c = 6.5

	Left Support	Right Support	Span
A _s (t)/A _s (b)	402.12 / 335.10 mm ²	335.10 / 335.10 mm ²	0.00 / 335.10 mm ²
M(g) / M(g+q)	0.0 / 0.0 kN.m	2.9 / 4.5 kN.m	2.2 / 3.4 kN.m
M _{cr}	10.9 kN.m	10.9 kN.m	10.9 kN.m
Cracking Status (G)	NO	NO	NO
Cracking Status (G+Q)	NO	NO	NO
Cracked Inertia (G)	-	-	-
Cracked Inertia (G+Q)	-	-	-
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴

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Effective Inertia (G)	0.000281 m ⁴
Effective Inertia (G+Q)	0.000281 m ⁴
Immediate Def. (G)	0.000 m
Immediate Def. (G+Q)	0.000 m
Immediate Def. (Q)	0.000 m
Loading Time	FIVE YEARS OR MORE
Total Time Dep. Deflection	0.001 m

Flexural Member and Position: Member Not Supporting Partition Wall
Immediate Def. (Q) = 0.128 mm $\leq$ 8.958 mm (3225/360) ... **Adequate** ✓

Crack Width Check (Span)::

Required/Supplied A _s	335.10 / 322.78 mm ²	Steel Bar Stress	152.17 N/mm ²
No. of Tension Bars	7	Steel Bar CG (a)	29.000
Max. Bar Size	8.0 mm	Concrete Cover (c)	29.0
Effective Concrete Area	58000.0 mm ²	Environmental Conditions	Interior: Normal

Crack Width (w) = 0.13 mm $\leq$ 0.4 mm ... **Adequate** ✓

4S13 - Storey: 4

Flexural Member Type : Two-way Slab
Span Type : Interior Span
Clear Span / Height : 1900.0 / 150.0 mm = 12.7 $\leq$ 35 (TS-500 Table 13.1)

Section Dimensions: 1000.0 / 150.0 mm d = 121.0 mm d' = 29.0 mm
Flange Dimensions: b = 1000.0 mm h_f = 0.0 mm
Uncracked Section: I_c = 0.000281 m⁴ y(b) = 75.0 mm y(t) = 75.0 mm
Concrete: F_{cd} = 16.67 N/mm² F_{ctd} = 1.17 N/mm² E_c = 31000.0 N/mm²
Steel: F_{yd} = 217.39 N/mm² E_s = 200000.0 N/mm² E_s/E_c = 6.5

	Left Support	Right Support	Span
A _s (t)/A _s (b)	402.12 / 335.10 mm ²	335.10 / 335.10 mm ²	0.00 / 335.10 mm ²
M(g) / M(g+q)	1.4 / 2.1 kN.m	1.4 / 2.1 kN.m	1.0 / 1.6 kN.m
M _{cr}	10.9 kN.m	10.9 kN.m	10.9 kN.m
Cracking Status (G)	NO	NO	NO
Cracking Status (G+Q)	NO	NO	NO
Cracked Inertia (G)	-	-	-
Cracked Inertia (G+Q)	-	-	-
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴

Effective Inertia (G)	0.000281 m ⁴
Effective Inertia (G+Q)	0.000281 m ⁴
Immediate Def. (G)	0.000 m
Immediate Def. (G+Q)	0.000 m
Immediate Def. (Q)	0.000 m
Loading Time	FIVE YEARS OR MORE
Total Time Dep. Deflection	0.000 m

Flexural Member and Position: Member Not Supporting Partition Wall
Immediate Def. (Q) = 0.017 mm $\leq$ 5.278 mm (1900/360) ... **Adequate** ✓

Crack Width Check (Span)::

Required/Supplied A _s	335.10 / 322.78 mm ²	Steel Bar Stress	152.17 N/mm ²
No. of Tension Bars	7	Steel Bar CG (a)	29.000
Max. Bar Size	8.0 mm	Concrete Cover (c)	29.0
Effective Concrete Area	58000.0 mm ²	Environmental Conditions	Interior: Normal

Crack Width (w) = 0.13 mm $\leq$ 0.4 mm ... **Adequate** ✓

4S14 - Storey: 4

Flexural Member Type : Two-way Slab
Span Type : Interior Span
Clear Span / Height : 2000.0 / 150.0 mm = 13.3 $\leq$ 35 (TS-500 Table 13.1)

PROPOSED 5-STOREY ADMINISTRATION BLOCK	Fenerbahce Kadikoy (0001907)
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Section Dimensions:	1000.0 / 150.0 mm	d = 121.0 mm	d' = 29.0 mm
Flange Dimensions:	b = 1000.0 mm	h _f = 0.0 mm	
Uncracked Section:	I _c = 0.000281 m ⁴	y(b) = 75.0 mm	y(t) = 75.0 mm
Concrete:	F _{cd} = 16.67 N/mm ²	F _{ctd} = 1.17 N/mm ²	E _c = 31000.0 N/mm ²
Steel:	F _{yd} = 217.39 N/mm ²	E _s = 200000.0 N/mm ²	E _s /E _c = 6.5

	Left Support	Right Support	Span
A _s (t)/A _s (b)	402.12 / 335.10 mm ²	402.12 / 335.10 mm ²	0.00 / 335.10 mm ²
M(g) / M(g+q)	1.4 / 2.2 kN.m	1.4 / 2.2 kN.m	1.1 / 1.7 kN.m
M _{cr}	10.9 kN.m	10.9 kN.m	10.9 kN.m
Cracking Status (G)	NO	NO	NO
Cracking Status (G+Q)	NO	NO	NO
Cracked Inertia (G)	-	-	-
Cracked Inertia (G+Q)	-	-	-
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴

Effective Inertia (G)	0.000281 m ⁴
Effective Inertia (G+Q)	0.000281 m ⁴
Immediate Def. (G)	0.000 m
Immediate Def. (G+Q)	0.000 m
Immediate Def. (Q)	0.000 m
Loading Time	FIVE YEARS OR MORE
Total Time Dep. Deflection	0.000 m

Flexural Member and Position: Member Not Supporting Partition Wall
Immediate Def. (Q) = 0.020 mm ≤ 5.556 mm (2000/360) ... **Adequate** ✓

Crack Width Check (Span)::

Required/Supplied A _s	335.10 / 322.78 mm ²	Steel Bar Stress	152.17 N/mm ²
No. of Tension Bars	7	Steel Bar CG (a)	29.000
Max. Bar Size	8.0 mm	Concrete Cover (c)	29.0
Effective Concrete Area	58000.0 mm ²	Environmental Conditions	Interior: Normal

Crack Width (w) = 0.13 mm ≤ 0.4 mm ... **Adequate** ✓

4S15 - Storey: 4

Flexural Member Type : Two-way Slab
Span Type : Interior Span
Clear Span / Height : 3550.0 / 150.0 mm = 23.7 ≤ 35 (TS-500 Table 13.1)

Section Dimensions:	1000.0 / 150.0 mm	d = 121.0 mm	d' = 29.0 mm
Flange Dimensions:	b = 1000.0 mm	h _f = 0.0 mm	
Uncracked Section:	I _c = 0.000281 m ⁴	y(b) = 75.0 mm	y(t) = 75.0 mm
Concrete:	F _{cd} = 16.67 N/mm ²	F _{ctd} = 1.17 N/mm ²	E _c = 31000.0 N/mm ²
Steel:	F _{yd} = 217.39 N/mm ²	E _s = 200000.0 N/mm ²	E _s /E _c = 6.5

	Left Support	Right Support	Span
A _s (t)/A _s (b)	402.12 / 335.10 mm ²	402.12 / 335.10 mm ²	0.00 / 335.10 mm ²
M(g) / M(g+q)	2.8 / 4.3 kN.m	0.0 / 0.0 kN.m	2.1 / 3.3 kN.m
M _{cr}	10.9 kN.m	10.9 kN.m	10.9 kN.m
Cracking Status (G)	NO	NO	NO
Cracking Status (G+Q)	NO	NO	NO
Cracked Inertia (G)	-	-	-
Cracked Inertia (G+Q)	-	-	-
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴

Effective Inertia (G)	0.000281 m ⁴
Effective Inertia (G+Q)	0.000281 m ⁴
Immediate Def. (G)	0.000 m
Immediate Def. (G+Q)	0.000 m
Immediate Def. (Q)	0.000 m
Loading Time	FIVE YEARS OR MORE
Total Time Dep. Deflection	0.001 m

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Flexural Member and Position: Member Not Supporting Partition Wall
Immediate Def. (Q) = 0.150 mm $\leq$ 9.861 mm (3550/360) ... **Adequate** ✓

Crack Width Check (Span)::

Required/Supplied A_s	335.10 / 322.78 mm ²	Steel Bar Stress	152.17 N/mm ²
No. of Tension Bars	7	Steel Bar CG (a)	29.000
Max. Bar Size	8.0 mm	Concrete Cover (c)	29.0
Effective Concrete Area	58000.0 mm ²	Environmental Conditions	Interior: Normal

Crack Width (w) = 0.13 mm $\leq$ 0.4 mm ... **Adequate** ✓

4S16 - Storey: 4

Flexural Member Type : One-way Slab
Span Type : Interior Span
Clear Span / Height : 1950.0 / 150.0 mm = 13.0 $\leq$ 30 (TS-500 Table 13.1)

Section Dimensions: 1000.0 / 150.0 mm d = 121.0 mm d' = 29.0 mm
Flange Dimensions: b = 1000.0 mm h_f = 0.0 mm
Uncracked Section: I_c = 0.000281 m⁴ y(b) = 75.0 mm y(t) = 75.0 mm
Concrete: F_{cd} = 16.67 N/mm² F_{ctd} = 1.17 N/mm² E_c = 31000.0 N/mm²
Steel: F_{yd} = 217.39 N/mm² E_s = 200000.0 N/mm² E_s/E_c = 6.5

	Left Support	Right Support	Span
A _s (t)/A _s (b)	402.12 / 335.10 mm ²	402.12 / 335.10 mm ²	0.00 / 335.10 mm ²
M(g) / M(g+q)	1.6 / 2.5 kN.m	1.6 / 2.5 kN.m	1.6 / 2.5 kN.m
M _{cr}	10.9 kN.m	10.9 kN.m	10.9 kN.m
Cracking Status (G)	NO	NO	NO
Cracking Status (G+Q)	NO	NO	NO
Cracked Inertia (G)	-	-	-
Cracked Inertia (G+Q)	-	-	-
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴

Effective Inertia (G)	0.000281 m ⁴
Effective Inertia (G+Q)	0.000281 m ⁴
Immediate Def. (G)	0.000 m
Immediate Def. (G+Q)	0.000 m
Immediate Def. (Q)	0.000 m
Loading Time	FIVE YEARS OR MORE
Total Time Dep. Deflection	0.000 m

Flexural Member and Position: Member Not Supporting Partition Wall
Immediate Def. (Q) = 0.032 mm $\leq$ 5.417 mm (1950/360) ... **Adequate** ✓

Crack Width Check (Span)::

Required/Supplied A_s	335.10 / 322.78 mm ²	Steel Bar Stress	152.17 N/mm ²
No. of Tension Bars	7	Steel Bar CG (a)	29.000
Max. Bar Size	8.0 mm	Concrete Cover (c)	29.0
Effective Concrete Area	58000.0 mm ²	Environmental Conditions	Interior: Normal

Crack Width (w) = 0.13 mm $\leq$ 0.4 mm ... **Adequate** ✓

4S17 - Storey: 4

Flexural Member Type : Two-way Slab
Span Type : Interior Span
Clear Span / Height : 2475.0 / 150.0 mm = 16.5 $\leq$ 35 (TS-500 Table 13.1)

Section Dimensions: 1000.0 / 150.0 mm d = 121.0 mm d' = 29.0 mm
Flange Dimensions: b = 1000.0 mm h_f = 0.0 mm
Uncracked Section: I_c = 0.000281 m⁴ y(b) = 75.0 mm y(t) = 75.0 mm
Concrete: F_{cd} = 16.67 N/mm² F_{ctd} = 1.17 N/mm² E_c = 31000.0 N/mm²
Steel: F_{yd} = 217.39 N/mm² E_s = 200000.0 N/mm² E_s/E_c = 6.5

	Left Support	Right Support	Span
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$A_s(t)/A_s(b)$	402.12 / 335.10 mm ²	402.12 / 335.10 mm ²	0.00 / 335.10 mm ²
M(g) / M(g+q)	2.4 / 3.7 kN.m	2.4 / 3.7 kN.m	1.8 / 2.8 kN.m
M _{cr}	10.9 kN.m	10.9 kN.m	10.9 kN.m
Cracking Status (G)	NO	NO	NO
Cracking Status (G+Q)	NO	NO	NO
Cracked Inertia (G)	-	-	-
Cracked Inertia (G+Q)	-	-	-
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴

Effective Inertia (G)	0.000281 m ⁴
Effective Inertia (G+Q)	0.000281 m ⁴
Immediate Def. (G)	0.000 m
Immediate Def. (G+Q)	0.000 m
Immediate Def. (Q)	0.000 m
Loading Time	FIVE YEARS OR MORE
Total Time Dep. Deflection	0.000 m

Flexural Member and Position: Member Not Supporting Partition Wall
Immediate Def. (Q) = 0.053 mm ≤ 6.875 mm (2475/360) ... **Adequate** ✓

Crack Width Check (Span)::

Required/Supplied A _s	335.10 / 322.78 mm ²	Steel Bar Stress	152.17 N/mm ²
No. of Tension Bars	7	Steel Bar CG (a)	29.000
Max. Bar Size	8.0 mm	Concrete Cover (c)	29.0
Effective Concrete Area	58000.0 mm ²	Environmental Conditions	Interior: Normal

Crack Width (w) = 0.13 mm ≤ 0.4 mm ... **Adequate** ✓

4S18 - Storey: 4

Flexural Member Type : Two-way Slab
Span Type : Interior Span
Clear Span / Height : 2175.0 / 150.0 mm = 14.5 ≤ 35 (TS-500 Table 13.1)

Section Dimensions: 1000.0 / 150.0 mm d = 121.0 mm d' = 29.0 mm
Flange Dimensions: b = 1000.0 mm h_f = 0.0 mm
Uncracked Section: I_c = 0.000281 m⁴ y(b) = 75.0 mm y(t) = 75.0 mm
Concrete: F_{cd} = 16.67 N/mm² F_{ctd} = 1.17 N/mm² E_c = 31000.0 N/mm²
Steel: F_{yd} = 217.39 N/mm² E_s = 200000.0 N/mm² E_s/E_c = 6.5

	Left Support	Right Support	Span
$A_s(t)/A_s(b)$	402.12 / 335.10 mm ²	402.12 / 335.10 mm ²	0.00 / 335.10 mm ²
M(g) / M(g+q)	1.4 / 2.2 kN.m	1.4 / 2.2 kN.m	1.1 / 1.6 kN.m
M _{cr}	10.9 kN.m	10.9 kN.m	10.9 kN.m
Cracking Status (G)	NO	NO	NO
Cracking Status (G+Q)	NO	NO	NO
Cracked Inertia (G)	-	-	-
Cracked Inertia (G+Q)	-	-	-
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴

Effective Inertia (G)	0.000281 m ⁴
Effective Inertia (G+Q)	0.000281 m ⁴
Immediate Def. (G)	0.000 m
Immediate Def. (G+Q)	0.000 m
Immediate Def. (Q)	0.000 m
Loading Time	FIVE YEARS OR MORE
Total Time Dep. Deflection	0.000 m

Flexural Member and Position: Member Not Supporting Partition Wall
Immediate Def. (Q) = 0.024 mm ≤ 6.042 mm (2175/360) ... **Adequate** ✓

Crack Width Check (Span)::

Required/Supplied A _s	335.10 / 322.78 mm ²	Steel Bar Stress	152.17 N/mm ²
No. of Tension Bars	7	Steel Bar CG (a)	29.000
Max. Bar Size	8.0 mm	Concrete Cover (c)	29.0

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Effective Concrete Area	58000.0 mm ²	Environmental Conditions	Interior: Normal
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Crack Width (w) = 0.13 mm ≤ 0.4 mm ... **Adequate** ✓

5S1 - Storey: 5

Flexural Member Type : Two-way Slab
Span Type : Interior Span
Clear Span / Height : 3825.0 / 150.0 mm = 25.5 ≤ 35 (TS-500 Table 13.1)

Section Dimensions: 1000.0 / 150.0 mm d = 121.0 mm d' = 29.0 mm
Flange Dimensions: b = 1000.0 mm h_f = 0.0 mm
Uncracked Section: I_c = 0.000281 m⁴ y(b) = 75.0 mm y(t) = 75.0 mm
Concrete: F_{cd} = 16.67 N/mm² F_{ctd} = 1.17 N/mm² E_c = 31000.0 N/mm²
Steel: F_{yd} = 217.39 N/mm² E_s = 200000.0 N/mm² E_s/E_c = 6.5

	Left Support	Right Support	Span
A _s (t)/A _s (b)	402.12 / 335.10 mm ²	402.12 / 335.10 mm ²	0.00 / 335.10 mm ²
M(g) / M(g+q)	0.0 / 0.0 kN.m	2.8 / 4.4 kN.m	2.2 / 3.4 kN.m
M _{cr}	10.9 kN.m	10.9 kN.m	10.9 kN.m
Cracking Status (G)	NO	NO	NO
Cracking Status (G+Q)	NO	NO	NO
Cracked Inertia (G)	-	-	-
Cracked Inertia (G+Q)	-	-	-
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴

Effective Inertia (G)	0.000281 m ⁴
Effective Inertia (G+Q)	0.000281 m ⁴
Immediate Def. (G)	0.000 m
Immediate Def. (G+Q)	0.001 m
Immediate Def. (Q)	0.000 m
Loading Time	FIVE YEARS OR MORE
Total Time Dep. Deflection	0.001 m

Flexural Member and Position: Member Not Supporting Partition Wall
Immediate Def. (Q) = 0.179 mm ≤ 10.625 mm (3825/360) ... **Adequate** ✓

Crack Width Check (Span)::

Required/Supplied A _s	335.10 / 322.78 mm ²	Steel Bar Stress	152.17 N/mm ²
No. of Tension Bars	7	Steel Bar CG (a)	29.000
Max. Bar Size	8.0 mm	Concrete Cover (c)	29.0
Effective Concrete Area	58000.0 mm ²	Environmental Conditions	Interior: Normal

Crack Width (w) = 0.13 mm ≤ 0.4 mm ... **Adequate** ✓

5S2 - Storey: 5

Flexural Member Type : Two-way Slab
Span Type : Interior Span
Clear Span / Height : 1750.0 / 150.0 mm = 11.7 ≤ 35 (TS-500 Table 13.1)

Section Dimensions: 1000.0 / 150.0 mm d = 121.0 mm d' = 29.0 mm
Flange Dimensions: b = 1000.0 mm h_f = 0.0 mm
Uncracked Section: I_c = 0.000281 m⁴ y(b) = 75.0 mm y(t) = 75.0 mm
Concrete: F_{cd} = 16.67 N/mm² F_{ctd} = 1.17 N/mm² E_c = 31000.0 N/mm²
Steel: F_{yd} = 217.39 N/mm² E_s = 200000.0 N/mm² E_s/E_c = 6.5

	Left Support	Right Support	Span
A _s (t)/A _s (b)	402.12 / 335.10 mm ²	402.12 / 335.10 mm ²	0.00 / 335.10 mm ²
M(g) / M(g+q)	0.0 / 0.0 kN.m	0.8 / 1.2 kN.m	0.6 / 0.9 kN.m
M _{cr}	10.9 kN.m	10.9 kN.m	10.9 kN.m
Cracking Status (G)	NO	NO	NO
Cracking Status (G+Q)	NO	NO	NO
Cracked Inertia (G)	-	-	-
Cracked Inertia (G+Q)	-	-	-
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴

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Effective Inertia (G)	0.000281 m ⁴
Effective Inertia (G+Q)	0.000281 m ⁴
Immediate Def. (G)	0.000 m
Immediate Def. (G+Q)	0.000 m
Immediate Def. (Q)	0.000 m
Loading Time	FIVE YEARS OR MORE
Total Time Dep. Deflection	0.000 m

Flexural Member and Position: Member Not Supporting Partition Wall
Immediate Def. (Q) = 0.010 mm ≤ 4.861 mm (1750/360) ... **Adequate** ✓

Crack Width Check (Span)::

Required/Supplied A _s	335.10 / 322.78 mm ²	Steel Bar Stress	152.17 N/mm ²
No. of Tension Bars	7	Steel Bar CG (a)	29.000
Max. Bar Size	8.0 mm	Concrete Cover (c)	29.0
Effective Concrete Area	58000.0 mm ²	Environmental Conditions	Interior: Normal

Crack Width (w) = 0.13 mm ≤ 0.4 mm ... **Adequate** ✓

5S3 - Storey: 5

Flexural Member Type : Two-way Slab
Span Type : Interior Span
Clear Span / Height : 1750.0 / 150.0 mm = 11.7 ≤ 35 (TS-500 Table 13.1)

Section Dimensions: 1000.0 / 150.0 mm d = 121.0 mm d' = 29.0 mm
Flange Dimensions: b = 1000.0 mm h_f = 0.0 mm
Uncracked Section: I_c = 0.000281 m⁴ y(b) = 75.0 mm y(t) = 75.0 mm
Concrete: F_{cd} = 16.67 N/mm² F_{ctd} = 1.17 N/mm² E_c = 31000.0 N/mm²
Steel: F_{yd} = 217.39 N/mm² E_s = 200000.0 N/mm² E_s/E_c = 6.5

	Left Support	Right Support	Span
A _s (t)/A _s (b)	402.12 / 335.10 mm ²	402.12 / 335.10 mm ²	0.00 / 335.10 mm ²
M(g) / M(g+q)	0.0 / 0.0 kN.m	0.7 / 1.1 kN.m	0.5 / 0.8 kN.m
M _{cr}	10.9 kN.m	10.9 kN.m	10.9 kN.m
Cracking Status (G)	NO	NO	NO
Cracking Status (G+Q)	NO	NO	NO
Cracked Inertia (G)	-	-	-
Cracked Inertia (G+Q)	-	-	-
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴

Effective Inertia (G)	0.000281 m ⁴
Effective Inertia (G+Q)	0.000281 m ⁴
Immediate Def. (G)	0.000 m
Immediate Def. (G+Q)	0.000 m
Immediate Def. (Q)	0.000 m
Loading Time	FIVE YEARS OR MORE
Total Time Dep. Deflection	0.000 m

Flexural Member and Position: Member Not Supporting Partition Wall
Immediate Def. (Q) = 0.009 mm ≤ 4.861 mm (1750/360) ... **Adequate** ✓

Crack Width Check (Span)::

Required/Supplied A _s	335.10 / 322.78 mm ²	Steel Bar Stress	152.17 N/mm ²
No. of Tension Bars	7	Steel Bar CG (a)	29.000
Max. Bar Size	8.0 mm	Concrete Cover (c)	29.0
Effective Concrete Area	58000.0 mm ²	Environmental Conditions	Interior: Normal

Crack Width (w) = 0.13 mm ≤ 0.4 mm ... **Adequate** ✓

5S4 - Storey: 5

Flexural Member Type : Two-way Slab
Span Type : Interior Span
Clear Span / Height : 2350.0 / 150.0 mm = 15.7 ≤ 35 (TS-500 Table 13.1)

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Section Dimensions:	1000.0 / 150.0 mm	d = 121.0 mm	d' = 29.0 mm
Flange Dimensions:	b = 1000.0 mm	h _f = 0.0 mm	
Uncracked Section:	I _c = 0.000281 m ⁴	y(b) = 75.0 mm	y(t) = 75.0 mm
Concrete:	F _{cd} = 16.67 N/mm ²	F _{ctd} = 1.17 N/mm ²	E _c = 31000.0 N/mm ²
Steel:	F _{yd} = 217.39 N/mm ²	E _s = 200000.0 N/mm ²	E _s /E _c = 6.5

	Left Support	Right Support	Span
A _s (t)/A _s (b)	402.12 / 335.10 mm ²	402.12 / 335.10 mm ²	0.00 / 335.10 mm ²
M(g) / M(g+q)	0.0 / 0.0 kN.m	2.0 / 3.1 kN.m	1.5 / 2.3 kN.m
M _{cr}	10.9 kN.m	10.9 kN.m	10.9 kN.m
Cracking Status (G)	NO	NO	NO
Cracking Status (G+Q)	NO	NO	NO
Cracked Inertia (G)	-	-	-
Cracked Inertia (G+Q)	-	-	-
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴

Effective Inertia (G)	0.000281 m ⁴
Effective Inertia (G+Q)	0.000281 m ⁴
Immediate Def. (G)	0.000 m
Immediate Def. (G+Q)	0.000 m
Immediate Def. (Q)	0.000 m
Loading Time	FIVE YEARS OR MORE
Total Time Dep. Deflection	0.000 m

Flexural Member and Position: Member Not Supporting Partition Wall
Immediate Def. (Q) = 0.046 mm ≤ 6.528 mm (2350/360) ... **Adequate** ✓

Crack Width Check (Span)::

Required/Supplied A _s	335.10 / 322.78 mm ²	Steel Bar Stress	152.17 N/mm ²
No. of Tension Bars	7	Steel Bar CG (a)	29.000
Max. Bar Size	8.0 mm	Concrete Cover (c)	29.0
Effective Concrete Area	58000.0 mm ²	Environmental Conditions	Interior: Normal

Crack Width (w) = 0.13 mm ≤ 0.4 mm ... **Adequate** ✓

5S5 - Storey: 5

Flexural Member Type : One-way Slab
Span Type : Interior Span
Clear Span / Height : 1275.0 / 150.0 mm = 8.5 ≤ 30 (TS-500 Table 13.1)

Section Dimensions:	1000.0 / 150.0 mm	d = 121.0 mm	d' = 29.0 mm
Flange Dimensions:	b = 1000.0 mm	h _f = 0.0 mm	
Uncracked Section:	I _c = 0.000281 m ⁴	y(b) = 75.0 mm	y(t) = 75.0 mm
Concrete:	F _{cd} = 16.67 N/mm ²	F _{ctd} = 1.17 N/mm ²	E _c = 31000.0 N/mm ²
Steel:	F _{yd} = 217.39 N/mm ²	E _s = 200000.0 N/mm ²	E _s /E _c = 6.5

	Left Support	Right Support	Span
A _s (t)/A _s (b)	402.12 / 335.10 mm ²	402.12 / 335.10 mm ²	0.00 / 335.10 mm ²
M(g) / M(g+q)	0.8 / 1.2 kN.m	0.8 / 1.2 kN.m	0.8 / 1.2 kN.m
M _{cr}	10.9 kN.m	10.9 kN.m	10.9 kN.m
Cracking Status (G)	NO	NO	NO
Cracking Status (G+Q)	NO	NO	NO
Cracked Inertia (G)	-	-	-
Cracked Inertia (G+Q)	-	-	-
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴

Effective Inertia (G)	0.000281 m ⁴
Effective Inertia (G+Q)	0.000281 m ⁴
Immediate Def. (G)	0.000 m
Immediate Def. (G+Q)	0.000 m
Immediate Def. (Q)	0.000 m
Loading Time	FIVE YEARS OR MORE
Total Time Dep. Deflection	0.000 m

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Flexural Member and Position: Member Not Supporting Partition Wall
Immediate Def. (Q) = 0.006 mm $\leq$ 3.542 mm (1275/360) ... **Adequate** ✓

Crack Width Check (Span)::

Required/Supplied A_s	335.10 / 322.78 mm ²	Steel Bar Stress	152.17 N/mm ²
No. of Tension Bars	7	Steel Bar CG (a)	29.000
Max. Bar Size	8.0 mm	Concrete Cover (c)	29.0
Effective Concrete Area	58000.0 mm ²	Environmental Conditions	Interior: Normal

Crack Width (w) = 0.13 mm $\leq$ 0.4 mm ... **Adequate** ✓

5S6 - Storey: 5

Flexural Member Type : Two-way Slab
Span Type : Interior Span
Clear Span / Height : 3950.0 / 150.0 mm = 26.3 $\leq$ 35 (TS-500 Table 13.1)

Section Dimensions: 1000.0 / 150.0 mm d = 121.0 mm d' = 29.0 mm
Flange Dimensions: b = 1000.0 mm h_f = 0.0 mm
Uncracked Section: I_c = 0.000281 m⁴ y(b) = 75.0 mm y(t) = 75.0 mm
Concrete: F_{cd} = 16.67 N/mm² F_{ctd} = 1.17 N/mm² E_c = 31000.0 N/mm²
Steel: F_{yd} = 217.39 N/mm² E_s = 200000.0 N/mm² E_s/E_c = 6.5

	Left Support	Right Support	Span
A _s (t)/A _s (b)	402.12 / 335.10 mm ²	402.12 / 335.10 mm ²	0.00 / 335.10 mm ²
M(g) / M(g+q)	3.2 / 4.9 kN.m	0.0 / 0.0 kN.m	2.5 / 3.8 kN.m
M _{cr}	10.9 kN.m	10.9 kN.m	10.9 kN.m
Cracking Status (G)	NO	NO	NO
Cracking Status (G+Q)	NO	NO	NO
Cracked Inertia (G)	-	-	-
Cracked Inertia (G+Q)	-	-	-
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴

Effective Inertia (G)	0.000281 m ⁴
Effective Inertia (G+Q)	0.000281 m ⁴
Immediate Def. (G)	0.000 m
Immediate Def. (G+Q)	0.001 m
Immediate Def. (Q)	0.000 m
Loading Time	FIVE YEARS OR MORE
Total Time Dep. Deflection	0.001 m

Flexural Member and Position: Member Not Supporting Partition Wall
Immediate Def. (Q) = 0.213 mm $\leq$ 10.972 mm (3950/360) ... **Adequate** ✓

Crack Width Check (Span)::

Required/Supplied A_s	335.10 / 322.78 mm ²	Steel Bar Stress	152.17 N/mm ²
No. of Tension Bars	7	Steel Bar CG (a)	29.000
Max. Bar Size	8.0 mm	Concrete Cover (c)	29.0
Effective Concrete Area	58000.0 mm ²	Environmental Conditions	Interior: Normal

Crack Width (w) = 0.13 mm $\leq$ 0.4 mm ... **Adequate** ✓

5S7 - Storey: 5

Flexural Member Type : One-way Slab
Span Type : Interior Span
Clear Span / Height : 978.6 / 150.0 mm = 6.5 $\leq$ 30 (TS-500 Table 13.1)

Section Dimensions: 1000.0 / 150.0 mm d = 121.0 mm d' = 29.0 mm
Flange Dimensions: b = 1000.0 mm h_f = 0.0 mm
Uncracked Section: I_c = 0.000281 m⁴ y(b) = 75.0 mm y(t) = 75.0 mm
Concrete: F_{cd} = 16.67 N/mm² F_{ctd} = 1.17 N/mm² E_c = 31000.0 N/mm²
Steel: F_{yd} = 217.39 N/mm² E_s = 200000.0 N/mm² E_s/E_c = 6.5

	Left Support	Right Support	Span
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$A_s(t)/A_s(b)$	402.12 / 335.10 mm ²	335.10 / 335.10 mm ²	0.00 / 335.10 mm ²
M(g) / M(g+q)	0.0 / 0.0 kN.m	0.7 / 1.1 kN.m	0.7 / 1.1 kN.m
M _{cr}	10.9 kN.m	10.9 kN.m	10.9 kN.m
Cracking Status (G)	NO	NO	NO
Cracking Status (G+Q)	NO	NO	NO
Cracked Inertia (G)	-	-	-
Cracked Inertia (G+Q)	-	-	-
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴

Effective Inertia (G)	0.000281 m ⁴
Effective Inertia (G+Q)	0.000281 m ⁴
Immediate Def. (G)	0.000 m
Immediate Def. (G+Q)	0.000 m
Immediate Def. (Q)	0.000 m
Loading Time	FIVE YEARS OR MORE
Total Time Dep. Deflection	0.000 m

Flexural Member and Position:

Member Not Supporting Partition Wall

Immediate Def. (Q) = 0.004 mm ≤ 2.718 mm (979/360) ... **Adequate** ✓

Crack Width Check (Span)::

Required/Supplied A _s	335.10 / 322.78 mm ²	Steel Bar Stress	152.17 N/mm ²
No. of Tension Bars	7	Steel Bar CG (a)	29.000
Max. Bar Size	8.0 mm	Concrete Cover (c)	29.0
Effective Concrete Area	58000.0 mm ²	Environmental Conditions	Interior: Normal

Crack Width (w) = 0.13 mm ≤ 0.4 mm ... **Adequate** ✓

5S8 - Storey: 5

Flexural Member Type

: Two-way Slab

Span Type

: Interior Span

Clear Span / Height

: 2475.0 / 150.0 mm = 16.5 ≤ 35 (TS-500 Table 13.1)

Section Dimensions:

1000.0 / 150.0 mm

d = 121.0 mm

d' = 29.0 mm

Flange Dimensions:

b = 1000.0 mm

h_f = 0.0 mm

Uncracked Section:

I_c = 0.000281 m⁴

y(b) = 75.0 mm

y(t) = 75.0 mm

Concrete:

F_{cd} = 16.67 N/mm²

F_{ctd} = 1.17 N/mm²

E_c = 31000.0 N/mm²

Steel:

F_{yd} = 217.39 N/mm²

E_s = 200000.0 N/mm²

E_s/E_c = 6.5

	Left Support	Right Support	Span
$A_s(t)/A_s(b)$	402.12 / 335.10 mm ²	402.12 / 335.10 mm ²	0.00 / 335.10 mm ²
M(g) / M(g+q)	1.4 / 2.1 kN.m	1.4 / 2.1 kN.m	1.1 / 1.6 kN.m
M _{cr}	10.9 kN.m	10.9 kN.m	10.9 kN.m
Cracking Status (G)	NO	NO	NO
Cracking Status (G+Q)	NO	NO	NO
Cracked Inertia (G)	-	-	-
Cracked Inertia (G+Q)	-	-	-
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴

Effective Inertia (G)	0.000281 m ⁴
Effective Inertia (G+Q)	0.000281 m ⁴
Immediate Def. (G)	0.000 m
Immediate Def. (G+Q)	0.000 m
Immediate Def. (Q)	0.000 m
Loading Time	FIVE YEARS OR MORE
Total Time Dep. Deflection	0.000 m

Flexural Member and Position:

Member Not Supporting Partition Wall

Immediate Def. (Q) = 0.031 mm ≤ 6.875 mm (2475/360) ... **Adequate** ✓

Crack Width Check (Span)::

Required/Supplied A _s	335.10 / 322.78 mm ²	Steel Bar Stress	152.17 N/mm ²
No. of Tension Bars	7	Steel Bar CG (a)	29.000
Max. Bar Size	8.0 mm	Concrete Cover (c)	29.0

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Effective Concrete Area	58000.0 mm ²	Environmental Conditions	Interior: Normal
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Crack Width (w) = 0.13 mm ≤ 0.4 mm ... **Adequate** ✓

5S9 - Storey: 5

Flexural Member Type : Two-way Slab
Span Type : Interior Span
Clear Span / Height : 1950.0 / 150.0 mm = 13.0 ≤ 35 (TS-500 Table 13.1)

Section Dimensions: 1000.0 / 150.0 mm d = 121.0 mm d' = 29.0 mm
Flange Dimensions: b = 1000.0 mm h_f = 0.0 mm
Uncracked Section: I_c = 0.000281 m⁴ y(b) = 75.0 mm y(t) = 75.0 mm
Concrete: F_{cd} = 16.67 N/mm² F_{ctd} = 1.17 N/mm² E_c = 31000.0 N/mm²
Steel: F_{yd} = 217.39 N/mm² E_s = 200000.0 N/mm² E_s/E_c = 6.5

	Left Support	Right Support	Span
A _s (t)/A _s (b)	402.12 / 335.10 mm ²	402.12 / 335.10 mm ²	0.00 / 335.10 mm ²
M(g) / M(g+q)	1.2 / 1.9 kN.m	1.2 / 1.9 kN.m	0.9 / 1.4 kN.m
M _{cr}	10.9 kN.m	10.9 kN.m	10.9 kN.m
Cracking Status (G)	NO	NO	NO
Cracking Status (G+Q)	NO	NO	NO
Cracked Inertia (G)	-	-	-
Cracked Inertia (G+Q)	-	-	-
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴

Effective Inertia (G)	0.000281 m ⁴
Effective Inertia (G+Q)	0.000281 m ⁴
Immediate Def. (G)	0.000 m
Immediate Def. (G+Q)	0.000 m
Immediate Def. (Q)	0.000 m
Loading Time	FIVE YEARS OR MORE
Total Time Dep. Deflection	0.000 m

Flexural Member and Position: Member Not Supporting Partition Wall
Immediate Def. (Q) = 0.016 mm ≤ 5.417 mm (1950/360) ... **Adequate** ✓

Crack Width Check (Span)::

Required/Supplied A _s	335.10 / 322.78 mm ²	Steel Bar Stress	152.17 N/mm ²
No. of Tension Bars	7	Steel Bar CG (a)	29.000
Max. Bar Size	8.0 mm	Concrete Cover (c)	29.0
Effective Concrete Area	58000.0 mm ²	Environmental Conditions	Interior: Normal

Crack Width (w) = 0.13 mm ≤ 0.4 mm ... **Adequate** ✓

5S10 - Storey: 5

Flexural Member Type : One-way Slab
Span Type : Interior Span
Clear Span / Height : 1275.0 / 150.0 mm = 8.5 ≤ 30 (TS-500 Table 13.1)

Section Dimensions: 1000.0 / 150.0 mm d = 121.0 mm d' = 29.0 mm
Flange Dimensions: b = 1000.0 mm h_f = 0.0 mm
Uncracked Section: I_c = 0.000281 m⁴ y(b) = 75.0 mm y(t) = 75.0 mm
Concrete: F_{cd} = 16.67 N/mm² F_{ctd} = 1.17 N/mm² E_c = 31000.0 N/mm²
Steel: F_{yd} = 217.39 N/mm² E_s = 200000.0 N/mm² E_s/E_c = 6.5

	Left Support	Right Support	Span
A _s (t)/A _s (b)	402.12 / 335.10 mm ²	335.10 / 335.10 mm ²	0.00 / 335.10 mm ²
M(g) / M(g+q)	0.8 / 1.2 kN.m	0.8 / 1.2 kN.m	0.6 / 0.9 kN.m
M _{cr}	10.9 kN.m	10.9 kN.m	10.9 kN.m
Cracking Status (G)	NO	NO	NO
Cracking Status (G+Q)	NO	NO	NO
Cracked Inertia (G)	-	-	-
Cracked Inertia (G+Q)	-	-	-
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴

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Effective Inertia (G)	0.000281 m ⁴
Effective Inertia (G+Q)	0.000281 m ⁴
Immediate Def. (G)	0.000 m
Immediate Def. (G+Q)	0.000 m
Immediate Def. (Q)	0.000 m
Loading Time	FIVE YEARS OR MORE
Total Time Dep. Deflection	0.000 m

Flexural Member and Position: Member Not Supporting Partition Wall
Immediate Def. (Q) = 0.004 mm $\leq$ 3.542 mm (1275/360) ... **Adequate** ✓

Crack Width Check (Span)::

Required/Supplied A _s	335.10 / 322.78 mm ²	Steel Bar Stress	152.17 N/mm ²
No. of Tension Bars	7	Steel Bar CG (a)	29.000
Max. Bar Size	8.0 mm	Concrete Cover (c)	29.0
Effective Concrete Area	58000.0 mm ²	Environmental Conditions	Interior: Normal

Crack Width (w) = 0.13 mm $\leq$ 0.4 mm ... **Adequate** ✓

5S11 - Storey: 5

Flexural Member Type : Two-way Slab
Span Type : Interior Span
Clear Span / Height : 3825.0 / 150.0 mm = 25.5 $\leq$ 35 (TS-500 Table 13.1)

Section Dimensions: 1000.0 / 150.0 mm d = 121.0 mm d' = 29.0 mm
Flange Dimensions: b = 1000.0 mm h_f = 0.0 mm
Uncracked Section: I_c = 0.000281 m⁴ y(b) = 75.0 mm y(t) = 75.0 mm
Concrete: F_{cd} = 16.67 N/mm² F_{ctd} = 1.17 N/mm² E_c = 31000.0 N/mm²
Steel: F_{yd} = 217.39 N/mm² E_s = 200000.0 N/mm² E_s/E_c = 6.5

	Left Support	Right Support	Span
A _s (t)/A _s (b)	402.12 / 335.10 mm ²	402.12 / 335.10 mm ²	0.00 / 335.10 mm ²
M(g) / M(g+q)	0.0 / 0.0 kN.m	3.6 / 5.6 kN.m	2.7 / 4.2 kN.m
M _{cr}	10.9 kN.m	10.9 kN.m	10.9 kN.m
Cracking Status (G)	NO	NO	NO
Cracking Status (G+Q)	NO	NO	NO
Cracked Inertia (G)	-	-	-
Cracked Inertia (G+Q)	-	-	-
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴

Effective Inertia (G)	0.000281 m ⁴
Effective Inertia (G+Q)	0.000281 m ⁴
Immediate Def. (G)	0.000 m
Immediate Def. (G+Q)	0.001 m
Immediate Def. (Q)	0.000 m
Loading Time	FIVE YEARS OR MORE
Total Time Dep. Deflection	0.001 m

Flexural Member and Position: Member Not Supporting Partition Wall
Immediate Def. (Q) = 0.224 mm $\leq$ 10.625 mm (3825/360) ... **Adequate** ✓

Crack Width Check (Span)::

Required/Supplied A _s	335.10 / 322.78 mm ²	Steel Bar Stress	152.17 N/mm ²
No. of Tension Bars	7	Steel Bar CG (a)	29.000
Max. Bar Size	8.0 mm	Concrete Cover (c)	29.0
Effective Concrete Area	58000.0 mm ²	Environmental Conditions	Interior: Normal

Crack Width (w) = 0.13 mm $\leq$ 0.4 mm ... **Adequate** ✓

5S12 - Storey: 5

Flexural Member Type : Two-way Slab
Span Type : Interior Span
Clear Span / Height : 3225.0 / 150.0 mm = 21.5 $\leq$ 35 (TS-500 Table 13.1)

PROPOSED 5-STOREY ADMINISTRATION BLOCK	Fenerbahce Kadikoy (0001907)
Slab Deflection Check 1 15/02/2021 Rev: 1	Calc. By: SAMORA Checked By: MICHAEL

Section Dimensions:	1000.0 / 150.0 mm	d = 121.0 mm	d' = 29.0 mm
Flange Dimensions:	b = 1000.0 mm	h _f = 0.0 mm	
Uncracked Section:	I _c = 0.000281 m ⁴	y(b) = 75.0 mm	y(t) = 75.0 mm
Concrete:	F _{cd} = 16.67 N/mm ²	F _{ctd} = 1.17 N/mm ²	E _c = 31000.0 N/mm ²
Steel:	F _{yd} = 217.39 N/mm ²	E _s = 200000.0 N/mm ²	E _s /E _c = 6.5

	Left Support	Right Support	Span
A _s (t)/A _s (b)	402.12 / 335.10 mm ²	335.10 / 335.10 mm ²	0.00 / 335.10 mm ²
M(g) / M(g+q)	0.0 / 0.0 kN.m	2.9 / 4.5 kN.m	2.2 / 3.4 kN.m
M _{cr}	10.9 kN.m	10.9 kN.m	10.9 kN.m
Cracking Status (G)	NO	NO	NO
Cracking Status (G+Q)	NO	NO	NO
Cracked Inertia (G)	-	-	-
Cracked Inertia (G+Q)	-	-	-
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴

Effective Inertia (G)	0.000281 m ⁴
Effective Inertia (G+Q)	0.000281 m ⁴
Immediate Def. (G)	0.000 m
Immediate Def. (G+Q)	0.000 m
Immediate Def. (Q)	0.000 m
Loading Time	FIVE YEARS OR MORE
Total Time Dep. Deflection	0.001 m

Flexural Member and Position: Member Not Supporting Partition Wall
Immediate Def. (Q) = 0.128 mm ≤ 8.958 mm (3225/360) ... **Adequate** ✓

Crack Width Check (Span)::

Required/Supplied A _s	335.10 / 322.78 mm ²	Steel Bar Stress	152.17 N/mm ²
No. of Tension Bars	7	Steel Bar CG (a)	29.000
Max. Bar Size	8.0 mm	Concrete Cover (c)	29.0
Effective Concrete Area	58000.0 mm ²	Environmental Conditions	Interior: Normal

Crack Width (w) = 0.13 mm ≤ 0.4 mm ... **Adequate** ✓

5S13 - Storey: 5

Flexural Member Type : Two-way Slab
Span Type : Interior Span
Clear Span / Height : 1900.0 / 150.0 mm = 12.7 ≤ 35 (TS-500 Table 13.1)

Section Dimensions:	1000.0 / 150.0 mm	d = 121.0 mm	d' = 29.0 mm
Flange Dimensions:	b = 1000.0 mm	h _f = 0.0 mm	
Uncracked Section:	I _c = 0.000281 m ⁴	y(b) = 75.0 mm	y(t) = 75.0 mm
Concrete:	F _{cd} = 16.67 N/mm ²	F _{ctd} = 1.17 N/mm ²	E _c = 31000.0 N/mm ²
Steel:	F _{yd} = 217.39 N/mm ²	E _s = 200000.0 N/mm ²	E _s /E _c = 6.5

	Left Support	Right Support	Span
A _s (t)/A _s (b)	402.12 / 335.10 mm ²	335.10 / 335.10 mm ²	0.00 / 335.10 mm ²
M(g) / M(g+q)	1.4 / 2.1 kN.m	1.4 / 2.1 kN.m	1.0 / 1.6 kN.m
M _{cr}	10.9 kN.m	10.9 kN.m	10.9 kN.m
Cracking Status (G)	NO	NO	NO
Cracking Status (G+Q)	NO	NO	NO
Cracked Inertia (G)	-	-	-
Cracked Inertia (G+Q)	-	-	-
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴

Effective Inertia (G)	0.000281 m ⁴
Effective Inertia (G+Q)	0.000281 m ⁴
Immediate Def. (G)	0.000 m
Immediate Def. (G+Q)	0.000 m
Immediate Def. (Q)	0.000 m
Loading Time	FIVE YEARS OR MORE
Total Time Dep. Deflection	0.000 m

PROPOSED 5-STOREY ADMINISTRATION BLOCK	Fenerbahce Kadikoy (0001907)
Slab Deflection Check 1 15/02/2021 Rev: 1	Calc. By: SAMORA Checked By: MICHAEL

Flexural Member and Position: Member Not Supporting Partition Wall
Immediate Def. (Q) = 0.017 mm $\leq$ 5.278 mm (1900/360) ... **Adequate** ✓

Crack Width Check (Span)::

Required/Supplied A_s	335.10 / 322.78 mm ²	Steel Bar Stress	152.17 N/mm ²
No. of Tension Bars	7	Steel Bar CG (a)	29.000
Max. Bar Size	8.0 mm	Concrete Cover (c)	29.0
Effective Concrete Area	58000.0 mm ²	Environmental Conditions	Interior: Normal

Crack Width (w) = 0.13 mm $\leq$ 0.4 mm ... **Adequate** ✓

5S14 - Storey: 5

Flexural Member Type : Two-way Slab
Span Type : Interior Span
Clear Span / Height : 2000.0 / 150.0 mm = 13.3 $\leq$ 35 (TS-500 Table 13.1)

Section Dimensions: 1000.0 / 150.0 mm d = 121.0 mm d' = 29.0 mm
Flange Dimensions: b = 1000.0 mm h_f = 0.0 mm
Uncracked Section: I_c = 0.000281 m⁴ y(b) = 75.0 mm y(t) = 75.0 mm
Concrete: F_{cd} = 16.67 N/mm² F_{ctd} = 1.17 N/mm² E_c = 31000.0 N/mm²
Steel: F_{yd} = 217.39 N/mm² E_s = 200000.0 N/mm² E_s/E_c = 6.5

	Left Support	Right Support	Span
A _s (t)/A _s (b)	402.12 / 335.10 mm ²	402.12 / 335.10 mm ²	0.00 / 335.10 mm ²
M(g) / M(g+q)	1.4 / 2.2 kN.m	1.4 / 2.2 kN.m	1.1 / 1.7 kN.m
M _{cr}	10.9 kN.m	10.9 kN.m	10.9 kN.m
Cracking Status (G)	NO	NO	NO
Cracking Status (G+Q)	NO	NO	NO
Cracked Inertia (G)	-	-	-
Cracked Inertia (G+Q)	-	-	-
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴

Effective Inertia (G)	0.000281 m ⁴
Effective Inertia (G+Q)	0.000281 m ⁴
Immediate Def. (G)	0.000 m
Immediate Def. (G+Q)	0.000 m
Immediate Def. (Q)	0.000 m
Loading Time	FIVE YEARS OR MORE
Total Time Dep. Deflection	0.000 m

Flexural Member and Position: Member Not Supporting Partition Wall
Immediate Def. (Q) = 0.020 mm $\leq$ 5.556 mm (2000/360) ... **Adequate** ✓

Crack Width Check (Span)::

Required/Supplied A_s	335.10 / 322.78 mm ²	Steel Bar Stress	152.17 N/mm ²
No. of Tension Bars	7	Steel Bar CG (a)	29.000
Max. Bar Size	8.0 mm	Concrete Cover (c)	29.0
Effective Concrete Area	58000.0 mm ²	Environmental Conditions	Interior: Normal

Crack Width (w) = 0.13 mm $\leq$ 0.4 mm ... **Adequate** ✓

5S15 - Storey: 5

Flexural Member Type : Two-way Slab
Span Type : Interior Span
Clear Span / Height : 3550.0 / 150.0 mm = 23.7 $\leq$ 35 (TS-500 Table 13.1)

Section Dimensions: 1000.0 / 150.0 mm d = 121.0 mm d' = 29.0 mm
Flange Dimensions: b = 1000.0 mm h_f = 0.0 mm
Uncracked Section: I_c = 0.000281 m⁴ y(b) = 75.0 mm y(t) = 75.0 mm
Concrete: F_{cd} = 16.67 N/mm² F_{ctd} = 1.17 N/mm² E_c = 31000.0 N/mm²
Steel: F_{yd} = 217.39 N/mm² E_s = 200000.0 N/mm² E_s/E_c = 6.5

	Left Support	Right Support	Span
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PROPOSED 5-STOREY ADMINISTRATION BLOCK	Fenerbahce Kadikoy (0001907)
Slab Deflection Check 1 15/02/2021 Rev: 1	Calc. By: SAMORA Checked By: MICHAEL

$A_s(t)/A_s(b)$	402.12 / 335.10 mm ²	402.12 / 335.10 mm ²	0.00 / 335.10 mm ²
$M(g) / M(g+q)$	2.8 / 4.3 kN.m	0.0 / 0.0 kN.m	2.1 / 3.3 kN.m
M_{cr}	10.9 kN.m	10.9 kN.m	10.9 kN.m
Cracking Status (G)	NO	NO	NO
Cracking Status (G+Q)	NO	NO	NO
Cracked Inertia (G)	-	-	-
Cracked Inertia (G+Q)	-	-	-
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴

Effective Inertia (G)	0.000281 m ⁴
Effective Inertia (G+Q)	0.000281 m ⁴
Immediate Def. (G)	0.000 m
Immediate Def. (G+Q)	0.000 m
Immediate Def. (Q)	0.000 m
Loading Time	FIVE YEARS OR MORE
Total Time Dep. Deflection	0.001 m

Flexural Member and Position: Member Not Supporting Partition Wall
Immediate Def. (Q) = 0.150 mm $\leq$ 9.861 mm (3550/360) ... **Adequate** ✓

Crack Width Check (Span)::

Required/Supplied A_s	335.10 / 322.78 mm ²	Steel Bar Stress	152.17 N/mm ²
No. of Tension Bars	7	Steel Bar CG (a)	29.000
Max. Bar Size	8.0 mm	Concrete Cover (c)	29.0
Effective Concrete Area	58000.0 mm ²	Environmental Conditions	Interior: Normal

Crack Width (w) = 0.13 mm $\leq$ 0.4 mm ... **Adequate** ✓

5S16 - Storey: 5

Flexural Member Type : One-way Slab
Span Type : Interior Span
Clear Span / Height : 1950.0 / 150.0 mm = 13.0 $\leq$ 30 (TS-500 Table 13.1)

Section Dimensions: 1000.0 / 150.0 mm $d = 121.0$ mm $d' = 29.0$ mm
Flange Dimensions: $b = 1000.0$ mm $h_f = 0.0$ mm
Uncracked Section: $I_c = 0.000281$ m⁴ $y(b) = 75.0$ mm $y(t) = 75.0$ mm
Concrete: $F_{cd} = 16.67$ N/mm² $F_{ctd} = 1.17$ N/mm² $E_c = 31000.0$ N/mm²
Steel: $F_{yd} = 217.39$ N/mm² $E_s = 200000.0$ N/mm² $E_s/E_c = 6.5$

	Left Support	Right Support	Span
$A_s(t)/A_s(b)$	402.12 / 335.10 mm ²	402.12 / 335.10 mm ²	0.00 / 335.10 mm ²
$M(g) / M(g+q)$	1.6 / 2.5 kN.m	1.6 / 2.5 kN.m	1.6 / 2.5 kN.m
M_{cr}	10.9 kN.m	10.9 kN.m	10.9 kN.m
Cracking Status (G)	NO	NO	NO
Cracking Status (G+Q)	NO	NO	NO
Cracked Inertia (G)	-	-	-
Cracked Inertia (G+Q)	-	-	-
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴

Effective Inertia (G)	0.000281 m ⁴
Effective Inertia (G+Q)	0.000281 m ⁴
Immediate Def. (G)	0.000 m
Immediate Def. (G+Q)	0.000 m
Immediate Def. (Q)	0.000 m
Loading Time	FIVE YEARS OR MORE
Total Time Dep. Deflection	0.000 m

Flexural Member and Position: Member Not Supporting Partition Wall
Immediate Def. (Q) = 0.032 mm $\leq$ 5.417 mm (1950/360) ... **Adequate** ✓

Crack Width Check (Span)::

Required/Supplied A_s	335.10 / 322.78 mm ²	Steel Bar Stress	152.17 N/mm ²
No. of Tension Bars	7	Steel Bar CG (a)	29.000
Max. Bar Size	8.0 mm	Concrete Cover (c)	29.0

PROPOSED 5-STOREY ADMINISTRATION BLOCK	Fenerbahce Kadikoy (0001907)
Slab Deflection Check 1 15/02/2021 Rev: 1	Calc. By: SAMORA Checked By: MICHAEL

Effective Concrete Area	58000.0 mm ²	Environmental Conditions	Interior: Normal
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Crack Width (w) = 0.13 mm ≤ 0.4 mm ... **Adequate** ✓

5S17 - Storey: 5

Flexural Member Type : Two-way Slab
Span Type : Interior Span
Clear Span / Height : 2475.0 / 150.0 mm = 16.5 ≤ 35 (TS-500 Table 13.1)

Section Dimensions: 1000.0 / 150.0 mm d = 121.0 mm d' = 29.0 mm
Flange Dimensions: b = 1000.0 mm h_f = 0.0 mm
Uncracked Section: I_c = 0.000281 m⁴ y(b) = 75.0 mm y(t) = 75.0 mm
Concrete: F_{cd} = 16.67 N/mm² F_{ctd} = 1.17 N/mm² E_c = 31000.0 N/mm²
Steel: F_{yd} = 217.39 N/mm² E_s = 200000.0 N/mm² E_s/E_c = 6.5

	Left Support	Right Support	Span
A _s (t)/A _s (b)	402.12 / 335.10 mm ²	402.12 / 335.10 mm ²	0.00 / 335.10 mm ²
M(g) / M(g+q)	2.4 / 3.7 kN.m	2.4 / 3.7 kN.m	1.8 / 2.8 kN.m
M _{cr}	10.9 kN.m	10.9 kN.m	10.9 kN.m
Cracking Status (G)	NO	NO	NO
Cracking Status (G+Q)	NO	NO	NO
Cracked Inertia (G)	-	-	-
Cracked Inertia (G+Q)	-	-	-
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴

Effective Inertia (G)	0.000281 m ⁴
Effective Inertia (G+Q)	0.000281 m ⁴
Immediate Def. (G)	0.000 m
Immediate Def. (G+Q)	0.000 m
Immediate Def. (Q)	0.000 m
Loading Time	FIVE YEARS OR MORE
Total Time Dep. Deflection	0.000 m

Flexural Member and Position: Member Not Supporting Partition Wall
Immediate Def. (Q) = 0.053 mm ≤ 6.875 mm (2475/360) ... **Adequate** ✓

Crack Width Check (Span)::

Required/Supplied A _s	335.10 / 322.78 mm ²	Steel Bar Stress	152.17 N/mm ²
No. of Tension Bars	7	Steel Bar CG (a)	29.000
Max. Bar Size	8.0 mm	Concrete Cover (c)	29.0
Effective Concrete Area	58000.0 mm ²	Environmental Conditions	Interior: Normal

Crack Width (w) = 0.13 mm ≤ 0.4 mm ... **Adequate** ✓

5S18 - Storey: 5

Flexural Member Type : Two-way Slab
Span Type : Interior Span
Clear Span / Height : 2175.0 / 150.0 mm = 14.5 ≤ 35 (TS-500 Table 13.1)

Section Dimensions: 1000.0 / 150.0 mm d = 121.0 mm d' = 29.0 mm
Flange Dimensions: b = 1000.0 mm h_f = 0.0 mm
Uncracked Section: I_c = 0.000281 m⁴ y(b) = 75.0 mm y(t) = 75.0 mm
Concrete: F_{cd} = 16.67 N/mm² F_{ctd} = 1.17 N/mm² E_c = 31000.0 N/mm²
Steel: F_{yd} = 217.39 N/mm² E_s = 200000.0 N/mm² E_s/E_c = 6.5

	Left Support	Right Support	Span
A _s (t)/A _s (b)	402.12 / 335.10 mm ²	402.12 / 335.10 mm ²	0.00 / 335.10 mm ²
M(g) / M(g+q)	1.4 / 2.2 kN.m	1.4 / 2.2 kN.m	1.1 / 1.6 kN.m
M _{cr}	10.9 kN.m	10.9 kN.m	10.9 kN.m
Cracking Status (G)	NO	NO	NO
Cracking Status (G+Q)	NO	NO	NO
Cracked Inertia (G)	-	-	-
Cracked Inertia (G+Q)	-	-	-
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴

PROPOSED 5-STOREY ADMINISTRATION BLOCK	Fenerbahce Kadikoy (0001907)
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Effective Inertia (G)	0.000281 m ⁴
Effective Inertia (G+Q)	0.000281 m ⁴
Immediate Def. (G)	0.000 m
Immediate Def. (G+Q)	0.000 m
Immediate Def. (Q)	0.000 m
Loading Time	FIVE YEARS OR MORE
Total Time Dep. Deflection	0.000 m

Flexural Member and Position: Member Not Supporting Partition Wall
Immediate Def. (Q) = 0.024 mm ≤ 6.042 mm (2175/360) ... **Adequate** ✓

Crack Width Check (Span)::

Required/Supplied A _s	335.10 / 322.78 mm ²	Steel Bar Stress	152.17 N/mm ²
No. of Tension Bars	7	Steel Bar CG (a)	29.000
Max. Bar Size	8.0 mm	Concrete Cover (c)	29.0
Effective Concrete Area	58000.0 mm ²	Environmental Conditions	Interior: Normal

Crack Width (w) = 0.13 mm ≤ 0.4 mm ... **Adequate** ✓

6S14 - Storey: 6

Flexural Member Type : Two-way Slab
Span Type : Interior Span
Clear Span / Height : 2000.0 / 150.0 mm = 13.3 ≤ 35 (TS-500 Table 13.1)

Section Dimensions: 1000.0 / 150.0 mm d = 121.0 mm d' = 29.0 mm
Flange Dimensions: b = 1000.0 mm h_f = 0.0 mm
Uncracked Section: I_c = 0.000281 m⁴ y(b) = 75.0 mm y(t) = 75.0 mm
Concrete: F_{cd} = 16.67 N/mm² F_{ctd} = 1.17 N/mm² E_c = 31000.0 N/mm²
Steel: F_{yd} = 217.39 N/mm² E_s = 200000.0 N/mm² E_s/E_c = 6.5

	Left Support	Right Support	Span
A _s (t)/A _s (b)	402.12 / 335.10 mm ²	402.12 / 335.10 mm ²	0.00 / 335.10 mm ²
M(g) / M(g+q)	1.4 / 2.2 kN.m	1.4 / 2.2 kN.m	1.1 / 1.7 kN.m
M _{cr}	10.9 kN.m	10.9 kN.m	10.9 kN.m
Cracking Status (G)	NO	NO	NO
Cracking Status (G+Q)	NO	NO	NO
Cracked Inertia (G)	-	-	-
Cracked Inertia (G+Q)	-	-	-
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴

Effective Inertia (G)	0.000281 m ⁴
Effective Inertia (G+Q)	0.000281 m ⁴
Immediate Def. (G)	0.000 m
Immediate Def. (G+Q)	0.000 m
Immediate Def. (Q)	0.000 m
Loading Time	FIVE YEARS OR MORE
Total Time Dep. Deflection	0.000 m

Flexural Member and Position: Roof Member not Supporting Partitions
Immediate Def. (Q) = 0.020 mm ≤ 11.111 mm (2000/180) ... **Adequate** ✓

Crack Width Check (Span)::

Required/Supplied A _s	335.10 / 322.78 mm ²	Steel Bar Stress	152.17 N/mm ²
No. of Tension Bars	7	Steel Bar CG (a)	29.000
Max. Bar Size	8.0 mm	Concrete Cover (c)	29.0
Effective Concrete Area	58000.0 mm ²	Environmental Conditions	Interior: Normal

Crack Width (w) = 0.13 mm ≤ 0.4 mm ... **Adequate** ✓

6S13 - Storey: 6

Flexural Member Type : Two-way Slab
Span Type : Interior Span
Clear Span / Height : 1900.0 / 150.0 mm = 12.7 ≤ 35 (TS-500 Table 13.1)

PROPOSED 5-STOREY ADMINISTRATION BLOCK	Fenerbahce Kadikoy (0001907)
Slab Deflection Check 1 15/02/2021 Rev: 1	Calc. By: SAMORA Checked By: MICHAEL

Section Dimensions:	1000.0 / 150.0 mm	d = 121.0 mm	d' = 29.0 mm
Flange Dimensions:	b = 1000.0 mm	h _f = 0.0 mm	
Uncracked Section:	I _c = 0.000281 m ⁴	y(b) = 75.0 mm	y(t) = 75.0 mm
Concrete:	F _{cd} = 16.67 N/mm ²	F _{ctd} = 1.17 N/mm ²	E _c = 31000.0 N/mm ²
Steel:	F _{yd} = 217.39 N/mm ²	E _s = 200000.0 N/mm ²	E _s /E _c = 6.5

	Left Support	Right Support	Span
A _s (t)/A _s (b)	402.12 / 335.10 mm ²	335.10 / 335.10 mm ²	0.00 / 335.10 mm ²
M(g) / M(g+q)	1.4 / 2.1 kN.m	1.4 / 2.1 kN.m	1.0 / 1.6 kN.m
M _{cr}	10.9 kN.m	10.9 kN.m	10.9 kN.m
Cracking Status (G)	NO	NO	NO
Cracking Status (G+Q)	NO	NO	NO
Cracked Inertia (G)	-	-	-
Cracked Inertia (G+Q)	-	-	-
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴

Effective Inertia (G)	0.000281 m ⁴
Effective Inertia (G+Q)	0.000281 m ⁴
Immediate Def. (G)	0.000 m
Immediate Def. (G+Q)	0.000 m
Immediate Def. (Q)	0.000 m
Loading Time	FIVE YEARS OR MORE
Total Time Dep. Deflection	0.000 m

Flexural Member and Position: Roof Member not Supporting Partitions
Immediate Def. (Q) = 0.017 mm ≤ 10.556 mm (1900/180) ... **Adequate** ✓

Crack Width Check (Span)::

Required/Supplied A _s	335.10 / 322.78 mm ²	Steel Bar Stress	152.17 N/mm ²
No. of Tension Bars	7	Steel Bar CG (a)	29.000
Max. Bar Size	8.0 mm	Concrete Cover (c)	29.0
Effective Concrete Area	58000.0 mm ²	Environmental Conditions	Interior: Normal

Crack Width (w) = 0.13 mm ≤ 0.4 mm ... **Adequate** ✓

6S15 - Storey: 6

Flexural Member Type : Two-way Slab
Span Type : Interior Span
Clear Span / Height : 3550.0 / 150.0 mm = 23.7 ≤ 35 (TS-500 Table 13.1)

Section Dimensions:	1000.0 / 150.0 mm	d = 121.0 mm	d' = 29.0 mm
Flange Dimensions:	b = 1000.0 mm	h _f = 0.0 mm	
Uncracked Section:	I _c = 0.000281 m ⁴	y(b) = 75.0 mm	y(t) = 75.0 mm
Concrete:	F _{cd} = 16.67 N/mm ²	F _{ctd} = 1.17 N/mm ²	E _c = 31000.0 N/mm ²
Steel:	F _{yd} = 217.39 N/mm ²	E _s = 200000.0 N/mm ²	E _s /E _c = 6.5

	Left Support	Right Support	Span
A _s (t)/A _s (b)	402.12 / 335.10 mm ²	402.12 / 335.10 mm ²	0.00 / 335.10 mm ²
M(g) / M(g+q)	2.8 / 4.3 kN.m	0.0 / 0.0 kN.m	2.1 / 3.3 kN.m
M _{cr}	10.9 kN.m	10.9 kN.m	10.9 kN.m
Cracking Status (G)	NO	NO	NO
Cracking Status (G+Q)	NO	NO	NO
Cracked Inertia (G)	-	-	-
Cracked Inertia (G+Q)	-	-	-
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴

Effective Inertia (G)	0.000281 m ⁴
Effective Inertia (G+Q)	0.000281 m ⁴
Immediate Def. (G)	0.000 m
Immediate Def. (G+Q)	0.000 m
Immediate Def. (Q)	0.000 m
Loading Time	FIVE YEARS OR MORE
Total Time Dep. Deflection	0.001 m

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Flexural Member and Position: Roof Member not Supporting Partitions
Immediate Def. (Q) = 0.150 mm $\leq$ 19.722 mm (3550/180) ... **Adequate** ✓

Crack Width Check (Span)::

Required/Supplied A_s	335.10 / 322.78 mm ²	Steel Bar Stress	152.17 N/mm ²
No. of Tension Bars	7	Steel Bar CG (a)	29.000
Max. Bar Size	8.0 mm	Concrete Cover (c)	29.0
Effective Concrete Area	58000.0 mm ²	Environmental Conditions	Interior: Normal

Crack Width (w) = 0.13 mm $\leq$ 0.4 mm ... **Adequate** ✓

6S18 - Storey: 6

Flexural Member Type : Two-way Slab
Span Type : Interior Span
Clear Span / Height : 2175.0 / 150.0 mm = 14.5 $\leq$ 35 (TS-500 Table 13.1)

Section Dimensions: 1000.0 / 150.0 mm d = 121.0 mm d' = 29.0 mm
Flange Dimensions: b = 1000.0 mm h_f = 0.0 mm
Uncracked Section: I_c = 0.000281 m⁴ y(b) = 75.0 mm y(t) = 75.0 mm
Concrete: F_{cd} = 16.67 N/mm² F_{ctd} = 1.17 N/mm² E_c = 31000.0 N/mm²
Steel: F_{yd} = 217.39 N/mm² E_s = 200000.0 N/mm² E_s/E_c = 6.5

	Left Support	Right Support	Span
A _s (t)/A _s (b)	402.12 / 335.10 mm ²	402.12 / 335.10 mm ²	0.00 / 335.10 mm ²
M(g) / M(g+q)	1.4 / 2.2 kN.m	1.4 / 2.2 kN.m	1.1 / 1.6 kN.m
M _{cr}	10.9 kN.m	10.9 kN.m	10.9 kN.m
Cracking Status (G)	NO	NO	NO
Cracking Status (G+Q)	NO	NO	NO
Cracked Inertia (G)	-	-	-
Cracked Inertia (G+Q)	-	-	-
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴

Effective Inertia (G)	0.000281 m ⁴
Effective Inertia (G+Q)	0.000281 m ⁴
Immediate Def. (G)	0.000 m
Immediate Def. (G+Q)	0.000 m
Immediate Def. (Q)	0.000 m
Loading Time	FIVE YEARS OR MORE
Total Time Dep. Deflection	0.000 m

Flexural Member and Position: Roof Member not Supporting Partitions
Immediate Def. (Q) = 0.024 mm $\leq$ 12.083 mm (2175/180) ... **Adequate** ✓

Crack Width Check (Span)::

Required/Supplied A_s	335.10 / 322.78 mm ²	Steel Bar Stress	152.17 N/mm ²
No. of Tension Bars	7	Steel Bar CG (a)	29.000
Max. Bar Size	8.0 mm	Concrete Cover (c)	29.0
Effective Concrete Area	58000.0 mm ²	Environmental Conditions	Interior: Normal

Crack Width (w) = 0.13 mm $\leq$ 0.4 mm ... **Adequate** ✓

6S12 - Storey: 6

Flexural Member Type : Two-way Slab
Span Type : Interior Span
Clear Span / Height : 3225.0 / 150.0 mm = 21.5 $\leq$ 35 (TS-500 Table 13.1)

Section Dimensions: 1000.0 / 150.0 mm d = 121.0 mm d' = 29.0 mm
Flange Dimensions: b = 1000.0 mm h_f = 0.0 mm
Uncracked Section: I_c = 0.000281 m⁴ y(b) = 75.0 mm y(t) = 75.0 mm
Concrete: F_{cd} = 16.67 N/mm² F_{ctd} = 1.17 N/mm² E_c = 31000.0 N/mm²
Steel: F_{yd} = 217.39 N/mm² E_s = 200000.0 N/mm² E_s/E_c = 6.5

	Left Support	Right Support	Span
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PROPOSED 5-STOREY ADMINISTRATION BLOCK	Fenerbahce Kadikoy (0001907)
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$A_s(t)/A_s(b)$	402.12 / 335.10 mm ²	335.10 / 335.10 mm ²	0.00 / 335.10 mm ²
M(g) / M(g+q)	2.9 / 4.5 kN.m	2.9 / 4.5 kN.m	2.2 / 3.4 kN.m
M _{cr}	10.9 kN.m	10.9 kN.m	10.9 kN.m
Cracking Status (G)	NO	NO	NO
Cracking Status (G+Q)	NO	NO	NO
Cracked Inertia (G)	-	-	-
Cracked Inertia (G+Q)	-	-	-
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴

Effective Inertia (G)	0.000281 m ⁴
Effective Inertia (G+Q)	0.000281 m ⁴
Immediate Def. (G)	0.000 m
Immediate Def. (G+Q)	0.000 m
Immediate Def. (Q)	0.000 m
Loading Time	FIVE YEARS OR MORE
Total Time Dep. Deflection	0.001 m

Flexural Member and Position: Roof Member not Supporting Partitions
Immediate Def. (Q) = 0.109 mm ≤ 17.917 mm (3225/180) ... **Adequate** ✓

Crack Width Check (Span)::

Required/Supplied A _s	335.10 / 322.78 mm ²	Steel Bar Stress	152.17 N/mm ²
No. of Tension Bars	7	Steel Bar CG (a)	29.000
Max. Bar Size	8.0 mm	Concrete Cover (c)	29.0
Effective Concrete Area	58000.0 mm ²	Environmental Conditions	Interior: Normal

Crack Width (w) = 0.13 mm ≤ 0.4 mm ... **Adequate** ✓

6S11 - Storey: 6

Flexural Member Type : Two-way Slab
Span Type : Interior Span
Clear Span / Height : 3825.0 / 150.0 mm = 25.5 ≤ 35 (TS-500 Table 13.1)

Section Dimensions: 1000.0 / 150.0 mm d = 121.0 mm d' = 29.0 mm
Flange Dimensions: b = 1000.0 mm h_f = 0.0 mm
Uncracked Section: I_c = 0.000281 m⁴ y(b) = 75.0 mm y(t) = 75.0 mm
Concrete: F_{cd} = 16.67 N/mm² F_{ctd} = 1.17 N/mm² E_c = 31000.0 N/mm²
Steel: F_{yd} = 217.39 N/mm² E_s = 200000.0 N/mm² E_s/E_c = 6.5

	Left Support	Right Support	Span
$A_s(t)/A_s(b)$	402.12 / 335.10 mm ²	402.12 / 335.10 mm ²	0.00 / 335.10 mm ²
M(g) / M(g+q)	0.0 / 0.0 kN.m	3.6 / 5.6 kN.m	2.7 / 4.2 kN.m
M _{cr}	10.9 kN.m	10.9 kN.m	10.9 kN.m
Cracking Status (G)	NO	NO	NO
Cracking Status (G+Q)	NO	NO	NO
Cracked Inertia (G)	-	-	-
Cracked Inertia (G+Q)	-	-	-
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴

Effective Inertia (G)	0.000281 m ⁴
Effective Inertia (G+Q)	0.000281 m ⁴
Immediate Def. (G)	0.000 m
Immediate Def. (G+Q)	0.001 m
Immediate Def. (Q)	0.000 m
Loading Time	FIVE YEARS OR MORE
Total Time Dep. Deflection	0.001 m

Flexural Member and Position: Roof Member not Supporting Partitions
Immediate Def. (Q) = 0.224 mm ≤ 21.250 mm (3825/180) ... **Adequate** ✓

Crack Width Check (Span)::

Required/Supplied A _s	335.10 / 322.78 mm ²	Steel Bar Stress	152.17 N/mm ²
No. of Tension Bars	7	Steel Bar CG (a)	29.000
Max. Bar Size	8.0 mm	Concrete Cover (c)	29.0

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Effective Concrete Area	58000.0 mm ²	Environmental Conditions	Interior: Normal
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Crack Width (w) = 0.13 mm ≤ 0.4 mm ... **Adequate** ✓

6S10 - Storey: 6

Flexural Member Type : One-way Slab
Span Type : Interior Span
Clear Span / Height : 1275.0 / 150.0 mm = 8.5 ≤ 30 (TS-500 Table 13.1)

Section Dimensions: 1000.0 / 150.0 mm d = 121.0 mm d' = 29.0 mm
Flange Dimensions: b = 1000.0 mm h_f = 0.0 mm
Uncracked Section: I_c = 0.000281 m⁴ y(b) = 75.0 mm y(t) = 75.0 mm
Concrete: F_{cd} = 16.67 N/mm² F_{ctd} = 1.17 N/mm² E_c = 31000.0 N/mm²
Steel: F_{yd} = 217.39 N/mm² E_s = 200000.0 N/mm² E_s/E_c = 6.5

	Left Support	Right Support	Span
A _s (t)/A _s (b)	402.12 / 335.10 mm ²	335.10 / 335.10 mm ²	0.00 / 335.10 mm ²
M(g) / M(g+q)	0.8 / 1.2 kN.m	0.8 / 1.2 kN.m	0.6 / 0.9 kN.m
M _{cr}	10.9 kN.m	10.9 kN.m	10.9 kN.m
Cracking Status (G)	NO	NO	NO
Cracking Status (G+Q)	NO	NO	NO
Cracked Inertia (G)	-	-	-
Cracked Inertia (G+Q)	-	-	-
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴

Effective Inertia (G)	0.000281 m ⁴
Effective Inertia (G+Q)	0.000281 m ⁴
Immediate Def. (G)	0.000 m
Immediate Def. (G+Q)	0.000 m
Immediate Def. (Q)	0.000 m
Loading Time	FIVE YEARS OR MORE
Total Time Dep. Deflection	0.000 m

Flexural Member and Position: Roof Member not Supporting Partitions
Immediate Def. (Q) = 0.004 mm ≤ 7.083 mm (1275/180) ... **Adequate** ✓

Crack Width Check (Span)::

Required/Supplied A _s	335.10 / 322.78 mm ²	Steel Bar Stress	152.17 N/mm ²
No. of Tension Bars	7	Steel Bar CG (a)	29.000
Max. Bar Size	8.0 mm	Concrete Cover (c)	29.0
Effective Concrete Area	58000.0 mm ²	Environmental Conditions	Interior: Normal

Crack Width (w) = 0.13 mm ≤ 0.4 mm ... **Adequate** ✓

6S9 - Storey: 6

Flexural Member Type : Two-way Slab
Span Type : Interior Span
Clear Span / Height : 1950.0 / 150.0 mm = 13.0 ≤ 35 (TS-500 Table 13.1)

Section Dimensions: 1000.0 / 150.0 mm d = 121.0 mm d' = 29.0 mm
Flange Dimensions: b = 1000.0 mm h_f = 0.0 mm
Uncracked Section: I_c = 0.000281 m⁴ y(b) = 75.0 mm y(t) = 75.0 mm
Concrete: F_{cd} = 16.67 N/mm² F_{ctd} = 1.17 N/mm² E_c = 31000.0 N/mm²
Steel: F_{yd} = 217.39 N/mm² E_s = 200000.0 N/mm² E_s/E_c = 6.5

	Left Support	Right Support	Span
A _s (t)/A _s (b)	402.12 / 335.10 mm ²	402.12 / 335.10 mm ²	0.00 / 335.10 mm ²
M(g) / M(g+q)	1.2 / 1.9 kN.m	1.2 / 1.9 kN.m	0.9 / 1.4 kN.m
M _{cr}	10.9 kN.m	10.9 kN.m	10.9 kN.m
Cracking Status (G)	NO	NO	NO
Cracking Status (G+Q)	NO	NO	NO
Cracked Inertia (G)	-	-	-
Cracked Inertia (G+Q)	-	-	-
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴

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Effective Inertia (G)	0.000281 m ⁴
Effective Inertia (G+Q)	0.000281 m ⁴
Immediate Def. (G)	0.000 m
Immediate Def. (G+Q)	0.000 m
Immediate Def. (Q)	0.000 m
Loading Time	FIVE YEARS OR MORE
Total Time Dep. Deflection	0.000 m

Flexural Member and Position: Roof Member not Supporting Partitions
Immediate Def. (Q) = 0.016 mm ≤ 10.833 mm (1950/180) ... **Adequate** ✓

Crack Width Check (Span)::

Required/Supplied A _s	335.10 / 322.78 mm ²	Steel Bar Stress	152.17 N/mm ²
No. of Tension Bars	7	Steel Bar CG (a)	29.000
Max. Bar Size	8.0 mm	Concrete Cover (c)	29.0
Effective Concrete Area	58000.0 mm ²	Environmental Conditions	Interior: Normal

Crack Width (w) = 0.13 mm ≤ 0.4 mm ... **Adequate** ✓

6S16 - Storey: 6

Flexural Member Type : One-way Slab
Span Type : Interior Span
Clear Span / Height : 1950.0 / 150.0 mm = 13.0 ≤ 30 (TS-500 Table 13.1)

Section Dimensions: 1000.0 / 150.0 mm d = 121.0 mm d' = 29.0 mm
Flange Dimensions: b = 1000.0 mm h_f = 0.0 mm
Uncracked Section: I_c = 0.000281 m⁴ y(b) = 75.0 mm y(t) = 75.0 mm
Concrete: F_{cd} = 16.67 N/mm² F_{ctd} = 1.17 N/mm² E_c = 31000.0 N/mm²
Steel: F_{yd} = 217.39 N/mm² E_s = 200000.0 N/mm² E_s/E_c = 6.5

	Left Support	Right Support	Span
A _s (t)/A _s (b)	402.12 / 335.10 mm ²	402.12 / 335.10 mm ²	0.00 / 335.10 mm ²
M(g) / M(g+q)	1.6 / 2.5 kN.m	1.6 / 2.5 kN.m	1.6 / 2.5 kN.m
M _{cr}	10.9 kN.m	10.9 kN.m	10.9 kN.m
Cracking Status (G)	NO	NO	NO
Cracking Status (G+Q)	NO	NO	NO
Cracked Inertia (G)	-	-	-
Cracked Inertia (G+Q)	-	-	-
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴

Effective Inertia (G)	0.000281 m ⁴
Effective Inertia (G+Q)	0.000281 m ⁴
Immediate Def. (G)	0.000 m
Immediate Def. (G+Q)	0.000 m
Immediate Def. (Q)	0.000 m
Loading Time	FIVE YEARS OR MORE
Total Time Dep. Deflection	0.000 m

Flexural Member and Position: Roof Member not Supporting Partitions
Immediate Def. (Q) = 0.032 mm ≤ 10.833 mm (1950/180) ... **Adequate** ✓

Crack Width Check (Span)::

Required/Supplied A _s	335.10 / 322.78 mm ²	Steel Bar Stress	152.17 N/mm ²
No. of Tension Bars	7	Steel Bar CG (a)	29.000
Max. Bar Size	8.0 mm	Concrete Cover (c)	29.0
Effective Concrete Area	58000.0 mm ²	Environmental Conditions	Interior: Normal

Crack Width (w) = 0.13 mm ≤ 0.4 mm ... **Adequate** ✓

6S17 - Storey: 6

Flexural Member Type : Two-way Slab
Span Type : Interior Span
Clear Span / Height : 2475.0 / 150.0 mm = 16.5 ≤ 35 (TS-500 Table 13.1)

PROPOSED 5-STOREY ADMINISTRATION BLOCK	Fenerbahce Kadikoy (0001907)
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Section Dimensions:	1000.0 / 150.0 mm	d = 121.0 mm	d' = 29.0 mm
Flange Dimensions:	b = 1000.0 mm	h _f = 0.0 mm	
Uncracked Section:	I _c = 0.000281 m ⁴	y(b) = 75.0 mm	y(t) = 75.0 mm
Concrete:	F _{cd} = 16.67 N/mm ²	F _{ctd} = 1.17 N/mm ²	E _c = 31000.0 N/mm ²
Steel:	F _{yd} = 217.39 N/mm ²	E _s = 200000.0 N/mm ²	E _s /E _c = 6.5

	Left Support	Right Support	Span
A _s (t)/A _s (b)	402.12 / 335.10 mm ²	402.12 / 335.10 mm ²	0.00 / 335.10 mm ²
M(g) / M(g+q)	2.4 / 3.7 kN.m	2.4 / 3.7 kN.m	1.8 / 2.8 kN.m
M _{cr}	10.9 kN.m	10.9 kN.m	10.9 kN.m
Cracking Status (G)	NO	NO	NO
Cracking Status (G+Q)	NO	NO	NO
Cracked Inertia (G)	-	-	-
Cracked Inertia (G+Q)	-	-	-
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴

Effective Inertia (G)	0.000281 m ⁴
Effective Inertia (G+Q)	0.000281 m ⁴
Immediate Def. (G)	0.000 m
Immediate Def. (G+Q)	0.000 m
Immediate Def. (Q)	0.000 m
Loading Time	FIVE YEARS OR MORE
Total Time Dep. Deflection	0.000 m

Flexural Member and Position: Roof Member not Supporting Partitions
Immediate Def. (Q) = 0.053 mm ≤ 13.750 mm (2475/180) ... **Adequate** ✓

Crack Width Check (Span)::

Required/Supplied A _s	335.10 / 322.78 mm ²	Steel Bar Stress	152.17 N/mm ²
No. of Tension Bars	7	Steel Bar CG (a)	29.000
Max. Bar Size	8.0 mm	Concrete Cover (c)	29.0
Effective Concrete Area	58000.0 mm ²	Environmental Conditions	Interior: Normal

Crack Width (w) = 0.13 mm ≤ 0.4 mm ... **Adequate** ✓

6S5 - Storey: 6

Flexural Member Type : One-way Slab
Span Type : Interior Span
Clear Span / Height : 1275.0 / 150.0 mm = 8.5 ≤ 30 (TS-500 Table 13.1)

Section Dimensions:	1000.0 / 150.0 mm	d = 121.0 mm	d' = 29.0 mm
Flange Dimensions:	b = 1000.0 mm	h _f = 0.0 mm	
Uncracked Section:	I _c = 0.000281 m ⁴	y(b) = 75.0 mm	y(t) = 75.0 mm
Concrete:	F _{cd} = 16.67 N/mm ²	F _{ctd} = 1.17 N/mm ²	E _c = 31000.0 N/mm ²
Steel:	F _{yd} = 217.39 N/mm ²	E _s = 200000.0 N/mm ²	E _s /E _c = 6.5

	Left Support	Right Support	Span
A _s (t)/A _s (b)	402.12 / 335.10 mm ²	402.12 / 335.10 mm ²	0.00 / 335.10 mm ²
M(g) / M(g+q)	0.8 / 1.2 kN.m	0.8 / 1.2 kN.m	0.8 / 1.2 kN.m
M _{cr}	10.9 kN.m	10.9 kN.m	10.9 kN.m
Cracking Status (G)	NO	NO	NO
Cracking Status (G+Q)	NO	NO	NO
Cracked Inertia (G)	-	-	-
Cracked Inertia (G+Q)	-	-	-
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴

Effective Inertia (G)	0.000281 m ⁴
Effective Inertia (G+Q)	0.000281 m ⁴
Immediate Def. (G)	0.000 m
Immediate Def. (G+Q)	0.000 m
Immediate Def. (Q)	0.000 m
Loading Time	FIVE YEARS OR MORE
Total Time Dep. Deflection	0.000 m

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Flexural Member and Position: Roof Member not Supporting Partitions
Immediate Def. (Q) = 0.006 mm $\leq$ 7.083 mm (1275/180) ... **Adequate** ✓

Crack Width Check (Span)::

Required/Supplied A_s	335.10 / 322.78 mm ²	Steel Bar Stress	152.17 N/mm ²
No. of Tension Bars	7	Steel Bar CG (a)	29.000
Max. Bar Size	8.0 mm	Concrete Cover (c)	29.0
Effective Concrete Area	58000.0 mm ²	Environmental Conditions	Interior: Normal

Crack Width (w) = 0.13 mm $\leq$ 0.4 mm ... **Adequate** ✓

6S8 - Storey: 6

Flexural Member Type : Two-way Slab
Span Type : Interior Span
Clear Span / Height : 2475.0 / 150.0 mm = 16.5 $\leq$ 35 (TS-500 Table 13.1)

Section Dimensions: 1000.0 / 150.0 mm d = 121.0 mm d' = 29.0 mm
Flange Dimensions: b = 1000.0 mm h_f = 0.0 mm
Uncracked Section: I_c = 0.000281 m⁴ y(b) = 75.0 mm y(t) = 75.0 mm
Concrete: F_{cd} = 16.67 N/mm² F_{ctd} = 1.17 N/mm² E_c = 31000.0 N/mm²
Steel: F_{yd} = 217.39 N/mm² E_s = 200000.0 N/mm² E_s/E_c = 6.5

	Left Support	Right Support	Span
A _s (t)/A _s (b)	402.12 / 335.10 mm ²	402.12 / 335.10 mm ²	0.00 / 335.10 mm ²
M(g) / M(g+q)	1.4 / 2.1 kN.m	1.4 / 2.1 kN.m	1.1 / 1.6 kN.m
M _{cr}	10.9 kN.m	10.9 kN.m	10.9 kN.m
Cracking Status (G)	NO	NO	NO
Cracking Status (G+Q)	NO	NO	NO
Cracked Inertia (G)	-	-	-
Cracked Inertia (G+Q)	-	-	-
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴

Effective Inertia (G)	0.000281 m ⁴
Effective Inertia (G+Q)	0.000281 m ⁴
Immediate Def. (G)	0.000 m
Immediate Def. (G+Q)	0.000 m
Immediate Def. (Q)	0.000 m
Loading Time	FIVE YEARS OR MORE
Total Time Dep. Deflection	0.000 m

Flexural Member and Position: Roof Member not Supporting Partitions
Immediate Def. (Q) = 0.031 mm $\leq$ 13.750 mm (2475/180) ... **Adequate** ✓

Crack Width Check (Span)::

Required/Supplied A_s	335.10 / 322.78 mm ²	Steel Bar Stress	152.17 N/mm ²
No. of Tension Bars	7	Steel Bar CG (a)	29.000
Max. Bar Size	8.0 mm	Concrete Cover (c)	29.0
Effective Concrete Area	58000.0 mm ²	Environmental Conditions	Interior: Normal

Crack Width (w) = 0.13 mm $\leq$ 0.4 mm ... **Adequate** ✓

6S7 - Storey: 6

Flexural Member Type : One-way Slab
Span Type : Interior Span
Clear Span / Height : 978.6 / 150.0 mm = 6.5 $\leq$ 30 (TS-500 Table 13.1)

Section Dimensions: 1000.0 / 150.0 mm d = 121.0 mm d' = 29.0 mm
Flange Dimensions: b = 1000.0 mm h_f = 0.0 mm
Uncracked Section: I_c = 0.000281 m⁴ y(b) = 75.0 mm y(t) = 75.0 mm
Concrete: F_{cd} = 16.67 N/mm² F_{ctd} = 1.17 N/mm² E_c = 31000.0 N/mm²
Steel: F_{yd} = 217.39 N/mm² E_s = 200000.0 N/mm² E_s/E_c = 6.5

	Left Support	Right Support	Span
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$A_s(t)/A_s(b)$	402.12 / 335.10 mm ²	335.10 / 335.10 mm ²	0.00 / 335.10 mm ²
$M(g) / M(g+q)$	0.0 / 0.0 kN.m	0.7 / 1.1 kN.m	0.7 / 1.1 kN.m
M_{cr}	10.9 kN.m	10.9 kN.m	10.9 kN.m
Cracking Status (G)	NO	NO	NO
Cracking Status (G+Q)	NO	NO	NO
Cracked Inertia (G)	-	-	-
Cracked Inertia (G+Q)	-	-	-
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴

Effective Inertia (G)	0.000281 m ⁴
Effective Inertia (G+Q)	0.000281 m ⁴
Immediate Def. (G)	0.000 m
Immediate Def. (G+Q)	0.000 m
Immediate Def. (Q)	0.000 m
Loading Time	FIVE YEARS OR MORE
Total Time Dep. Deflection	0.000 m

Flexural Member and Position:

Roof Member not Supporting Partitions

Immediate Def. (Q) = 0.004 mm ≤ 5.437 mm (979/180) ... **Adequate** ✓

Crack Width Check (Span)::

Required/Supplied A_s	335.10 / 322.78 mm ²	Steel Bar Stress	152.17 N/mm ²
No. of Tension Bars	7	Steel Bar CG (a)	29.000
Max. Bar Size	8.0 mm	Concrete Cover (c)	29.0
Effective Concrete Area	58000.0 mm ²	Environmental Conditions	Interior: Normal

Crack Width (w) = 0.13 mm ≤ 0.4 mm ... **Adequate** ✓

6S6 - Storey: 6

Flexural Member Type : Two-way Slab
Span Type : Interior Span
Clear Span / Height : 3950.0 / 150.0 mm = 26.3 ≤ 35 (TS-500 Table 13.1)

Section Dimensions: 1000.0 / 150.0 mm d = 121.0 mm d' = 29.0 mm
Flange Dimensions: b = 1000.0 mm h_f = 0.0 mm
Uncracked Section: I_c = 0.000281 m⁴ y(b) = 75.0 mm y(t) = 75.0 mm
Concrete: F_{cd} = 16.67 N/mm² F_{ctd} = 1.17 N/mm² E_c = 31000.0 N/mm²
Steel: F_{yd} = 217.39 N/mm² E_s = 200000.0 N/mm² E_s/E_c = 6.5

	Left Support	Right Support	Span
$A_s(t)/A_s(b)$	402.12 / 335.10 mm ²	402.12 / 335.10 mm ²	0.00 / 335.10 mm ²
$M(g) / M(g+q)$	3.2 / 4.9 kN.m	3.2 / 4.9 kN.m	2.5 / 3.8 kN.m
M_{cr}	10.9 kN.m	10.9 kN.m	10.9 kN.m
Cracking Status (G)	NO	NO	NO
Cracking Status (G+Q)	NO	NO	NO
Cracked Inertia (G)	-	-	-
Cracked Inertia (G+Q)	-	-	-
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴

Effective Inertia (G)	0.000281 m ⁴
Effective Inertia (G+Q)	0.000281 m ⁴
Immediate Def. (G)	0.000 m
Immediate Def. (G+Q)	0.001 m
Immediate Def. (Q)	0.000 m
Loading Time	FIVE YEARS OR MORE
Total Time Dep. Deflection	0.001 m

Flexural Member and Position:

Roof Member not Supporting Partitions

Immediate Def. (Q) = 0.181 mm ≤ 21.944 mm (3950/180) ... **Adequate** ✓

Crack Width Check (Span)::

Required/Supplied A_s	335.10 / 322.78 mm ²	Steel Bar Stress	152.17 N/mm ²
No. of Tension Bars	7	Steel Bar CG (a)	29.000
Max. Bar Size	8.0 mm	Concrete Cover (c)	29.0

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Effective Concrete Area	58000.0 mm ²	Environmental Conditions	Interior: Normal
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Crack Width (w) = 0.13 mm ≤ 0.4 mm ... **Adequate** ✓

6S4 - Storey: 6

Flexural Member Type : Two-way Slab
Span Type : Interior Span
Clear Span / Height : 2350.0 / 150.0 mm = 15.7 ≤ 35 (TS-500 Table 13.1)

Section Dimensions: 1000.0 / 150.0 mm d = 121.0 mm d' = 29.0 mm
Flange Dimensions: b = 1000.0 mm h_f = 0.0 mm
Uncracked Section: I_c = 0.000281 m⁴ y(b) = 75.0 mm y(t) = 75.0 mm
Concrete: F_{cd} = 16.67 N/mm² F_{ctd} = 1.17 N/mm² E_c = 31000.0 N/mm²
Steel: F_{yd} = 217.39 N/mm² E_s = 200000.0 N/mm² E_s/E_c = 6.5

	Left Support	Right Support	Span
A _s (t)/A _s (b)	402.12 / 335.10 mm ²	402.12 / 335.10 mm ²	0.00 / 335.10 mm ²
M(g) / M(g+q)	0.0 / 0.0 kN.m	2.0 / 3.1 kN.m	1.5 / 2.3 kN.m
M _{cr}	10.9 kN.m	10.9 kN.m	10.9 kN.m
Cracking Status (G)	NO	NO	NO
Cracking Status (G+Q)	NO	NO	NO
Cracked Inertia (G)	-	-	-
Cracked Inertia (G+Q)	-	-	-
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴

Effective Inertia (G)	0.000281 m ⁴
Effective Inertia (G+Q)	0.000281 m ⁴
Immediate Def. (G)	0.000 m
Immediate Def. (G+Q)	0.000 m
Immediate Def. (Q)	0.000 m
Loading Time	FIVE YEARS OR MORE
Total Time Dep. Deflection	0.000 m

Flexural Member and Position: Roof Member not Supporting Partitions
Immediate Def. (Q) = 0.046 mm ≤ 13.056 mm (2350/180) ... **Adequate** ✓

Crack Width Check (Span)::

Required/Supplied A _s	335.10 / 322.78 mm ²	Steel Bar Stress	152.17 N/mm ²
No. of Tension Bars	7	Steel Bar CG (a)	29.000
Max. Bar Size	8.0 mm	Concrete Cover (c)	29.0
Effective Concrete Area	58000.0 mm ²	Environmental Conditions	Interior: Normal

Crack Width (w) = 0.13 mm ≤ 0.4 mm ... **Adequate** ✓

6S2 - Storey: 6

Flexural Member Type : Two-way Slab
Span Type : Interior Span
Clear Span / Height : 1750.0 / 150.0 mm = 11.7 ≤ 35 (TS-500 Table 13.1)

Section Dimensions: 1000.0 / 150.0 mm d = 121.0 mm d' = 29.0 mm
Flange Dimensions: b = 1000.0 mm h_f = 0.0 mm
Uncracked Section: I_c = 0.000281 m⁴ y(b) = 75.0 mm y(t) = 75.0 mm
Concrete: F_{cd} = 16.67 N/mm² F_{ctd} = 1.17 N/mm² E_c = 31000.0 N/mm²
Steel: F_{yd} = 217.39 N/mm² E_s = 200000.0 N/mm² E_s/E_c = 6.5

	Left Support	Right Support	Span
A _s (t)/A _s (b)	402.12 / 335.10 mm ²	402.12 / 335.10 mm ²	0.00 / 335.10 mm ²
M(g) / M(g+q)	0.0 / 0.0 kN.m	0.8 / 1.2 kN.m	0.6 / 0.9 kN.m
M _{cr}	10.9 kN.m	10.9 kN.m	10.9 kN.m
Cracking Status (G)	NO	NO	NO
Cracking Status (G+Q)	NO	NO	NO
Cracked Inertia (G)	-	-	-
Cracked Inertia (G+Q)	-	-	-
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴

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Effective Inertia (G)	0.000281 m ⁴
Effective Inertia (G+Q)	0.000281 m ⁴
Immediate Def. (G)	0.000 m
Immediate Def. (G+Q)	0.000 m
Immediate Def. (Q)	0.000 m
Loading Time	FIVE YEARS OR MORE
Total Time Dep. Deflection	0.000 m

Flexural Member and Position: Roof Member not Supporting Partitions
Immediate Def. (Q) = 0.010 mm ≤ 9.722 mm (1750/180) ... **Adequate** ✓

Crack Width Check (Span)::

Required/Supplied A _s	335.10 / 322.78 mm ²	Steel Bar Stress	152.17 N/mm ²
No. of Tension Bars	7	Steel Bar CG (a)	29.000
Max. Bar Size	8.0 mm	Concrete Cover (c)	29.0
Effective Concrete Area	58000.0 mm ²	Environmental Conditions	Interior: Normal

Crack Width (w) = 0.13 mm ≤ 0.4 mm ... **Adequate** ✓

6S1 - Storey: 6

Flexural Member Type : Two-way Slab
Span Type : Interior Span
Clear Span / Height : 3825.0 / 150.0 mm = 25.5 ≤ 35 (TS-500 Table 13.1)

Section Dimensions: 1000.0 / 150.0 mm d = 121.0 mm d' = 29.0 mm
Flange Dimensions: b = 1000.0 mm h_f = 0.0 mm
Uncracked Section: I_c = 0.000281 m⁴ y(b) = 75.0 mm y(t) = 75.0 mm
Concrete: F_{cd} = 16.67 N/mm² F_{ctd} = 1.17 N/mm² E_c = 31000.0 N/mm²
Steel: F_{yd} = 217.39 N/mm² E_s = 200000.0 N/mm² E_s/E_c = 6.5

	Left Support	Right Support	Span
A _s (t)/A _s (b)	402.12 / 335.10 mm ²	402.12 / 335.10 mm ²	0.00 / 335.10 mm ²
M(g) / M(g+q)	0.0 / 0.0 kN.m	2.8 / 4.4 kN.m	2.2 / 3.4 kN.m
M _{cr}	10.9 kN.m	10.9 kN.m	10.9 kN.m
Cracking Status (G)	NO	NO	NO
Cracking Status (G+Q)	NO	NO	NO
Cracked Inertia (G)	-	-	-
Cracked Inertia (G+Q)	-	-	-
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴

Effective Inertia (G)	0.000281 m ⁴
Effective Inertia (G+Q)	0.000281 m ⁴
Immediate Def. (G)	0.000 m
Immediate Def. (G+Q)	0.001 m
Immediate Def. (Q)	0.000 m
Loading Time	FIVE YEARS OR MORE
Total Time Dep. Deflection	0.001 m

Flexural Member and Position: Roof Member not Supporting Partitions
Immediate Def. (Q) = 0.179 mm ≤ 21.250 mm (3825/180) ... **Adequate** ✓

Crack Width Check (Span)::

Required/Supplied A _s	335.10 / 322.78 mm ²	Steel Bar Stress	152.17 N/mm ²
No. of Tension Bars	7	Steel Bar CG (a)	29.000
Max. Bar Size	8.0 mm	Concrete Cover (c)	29.0
Effective Concrete Area	58000.0 mm ²	Environmental Conditions	Interior: Normal

Crack Width (w) = 0.13 mm ≤ 0.4 mm ... **Adequate** ✓

6S20 - Storey: 6

Flexural Member Type : One-way Slab
Span Type : Interior Span
Clear Span / Height : 1950.0 / 150.0 mm = 13.0 ≤ 30 (TS-500 Table 13.1)

PROPOSED 5-STOREY ADMINISTRATION BLOCK	Fenerbahce Kadikoy (0001907)
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Section Dimensions:	1000.0 / 150.0 mm	d = 121.0 mm	d' = 29.0 mm
Flange Dimensions:	b = 1000.0 mm	h _f = 0.0 mm	
Uncracked Section:	I _c = 0.000281 m ⁴	y(b) = 75.0 mm	y(t) = 75.0 mm
Concrete:	F _{cd} = 16.67 N/mm ²	F _{ctd} = 1.17 N/mm ²	E _c = 31000.0 N/mm ²
Steel:	F _{yd} = 217.39 N/mm ²	E _s = 200000.0 N/mm ²	E _s /E _c = 6.5

	Left Support	Right Support	Span
A _s (t)/A _s (b)	402.12 / 335.10 mm ²	402.12 / 335.10 mm ²	0.00 / 335.10 mm ²
M(g) / M(g+q)	1.6 / 2.5 kN.m	1.6 / 2.5 kN.m	1.2 / 1.9 kN.m
M _{cr}	10.9 kN.m	10.9 kN.m	10.9 kN.m
Cracking Status (G)	NO	NO	NO
Cracking Status (G+Q)	NO	NO	NO
Cracked Inertia (G)	-	-	-
Cracked Inertia (G+Q)	-	-	-
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴
Effective Inertia (G)	0.000281 m ⁴	0.000281 m ⁴	0.000281 m ⁴

Effective Inertia (G)	0.000281 m ⁴
Effective Inertia (G+Q)	0.000281 m ⁴
Immediate Def. (G)	0.000 m
Immediate Def. (G+Q)	0.000 m
Immediate Def. (Q)	0.000 m
Loading Time	FIVE YEARS OR MORE
Total Time Dep. Deflection	0.000 m

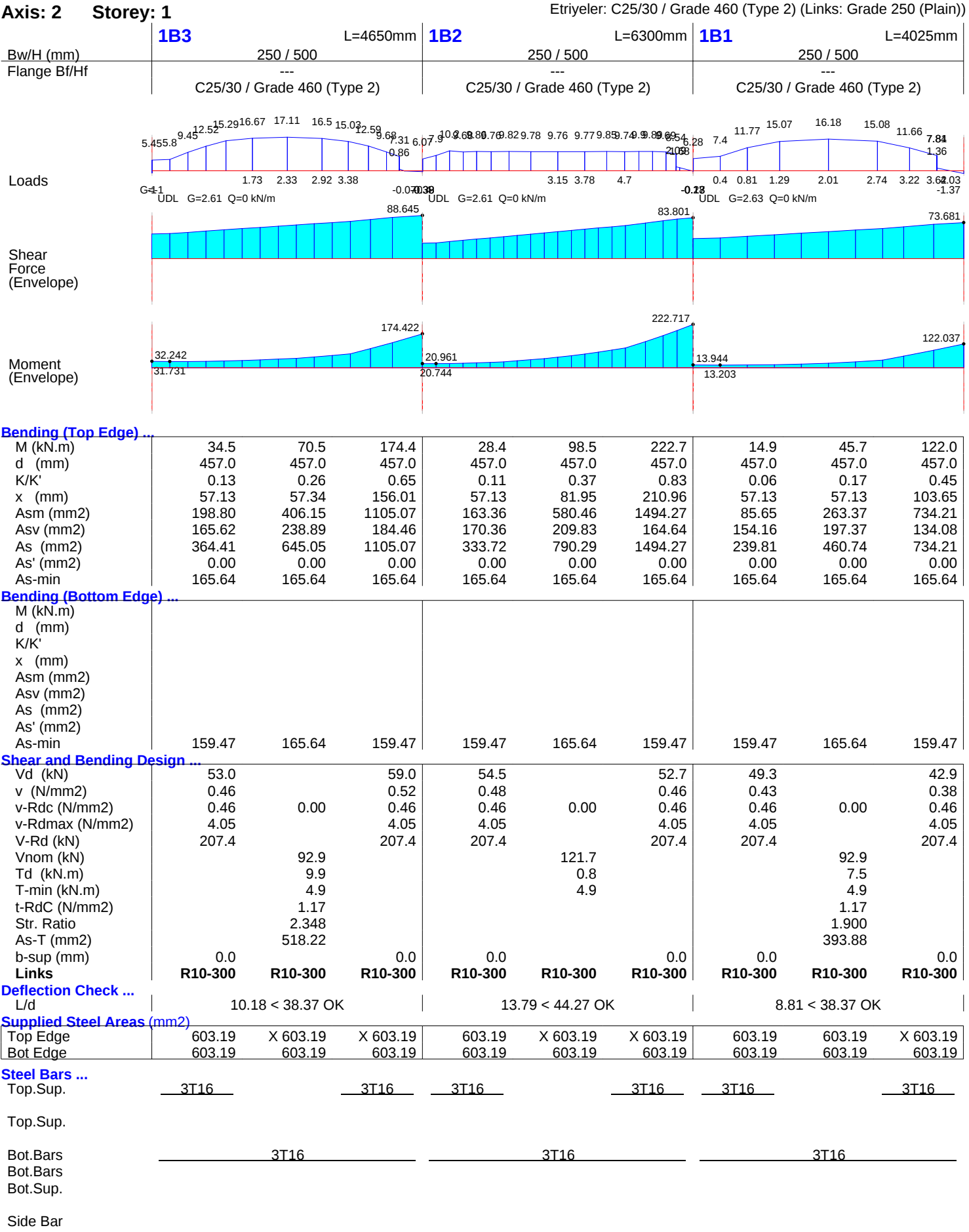
Flexural Member and Position: Roof Member not Supporting Partitions
Immediate Def. (Q) = 0.022 mm ≤ 10.833 mm (1950/180) ... **Adequate** ✓

Crack Width Check (Span)::

Required/Supplied A _s	335.10 / 322.78 mm ²	Steel Bar Stress	152.17 N/mm ²
No. of Tension Bars	7	Steel Bar CG (a)	29.000
Max. Bar Size	8.0 mm	Concrete Cover (c)	29.0
Effective Concrete Area	58000.0 mm ²	Environmental Conditions	Interior: Normal

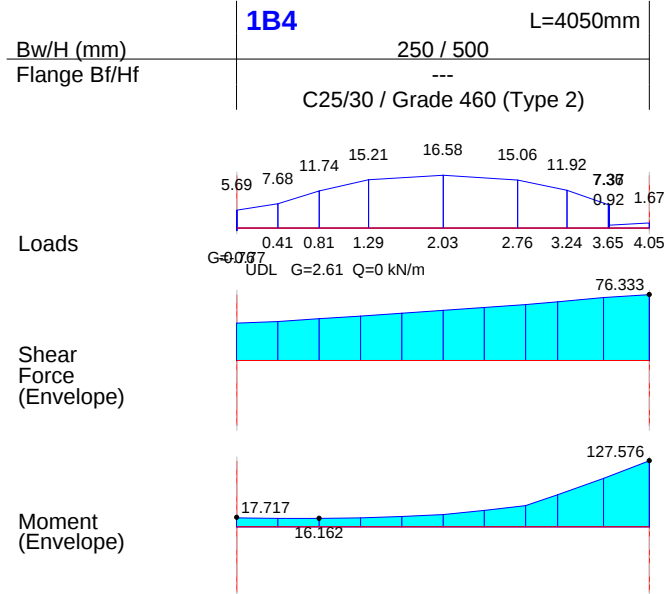
Crack Width (w) = 0.13 mm ≤ 0.4 mm ... **Adequate** ✓

BEAM



Axis: B Storey: 1

Etriyeler: C25/30 / Grade 460 (Type 2) (Links: Grade 250 (Plain))



Bending (Top Edge) ...

M (kN.m)	17.7	47.9	127.6
d (mm)	457.0	457.0	457.0
K/K'	0.07	0.18	0.47
x (mm)	57.13	57.13	108.91
Asm (mm ²)	102.02	275.93	771.44
Asv (mm ²)	157.33	205.53	147.43
As (mm ²)	259.35	481.46	771.44
As' (mm ²)	0.00	0.00	0.00
As-min	165.64	165.64	165.64

Bending (Bottom Edge) ...

M (kN.m)			
d (mm)			
K/K'			
x (mm)			
Asm (mm ²)			
Asv (mm ²)			
As (mm ²)			
As' (mm ²)			
As-min	159.47	165.64	159.47

Shear and Bending Design ...

Vd (kN)	50.3		47.2
v (N/mm ²)	0.44		0.41
v-Rdc (N/mm ²)	0.46	0.00	0.46
v-Rdmax (N/mm ²)	4.05		4.05
V-Rd (kN)	207.4		207.4
Vnom (kN)		92.9	
Td (kN.m)		9.7	
T-min (kN.m)		4.9	
t-RdC (N/mm ²)		1.17	
Str. Ratio		2.111	
As-T (mm ²)		509.33	
b-sup (mm)	0.0		0.0
Links	R10-300	R10-300	R10-300

Deflection Check ...

L/d	8.86 < 29.52 OK
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Supplied Steel Areas (mm²)

Top Edge	603.19	X 603.19	X 603.19
Bot Edge	603.19	603.19	603.19

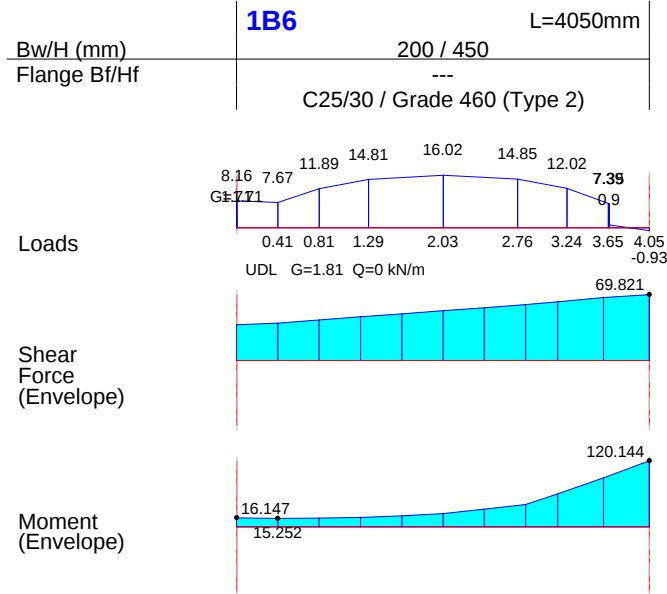
Steel Bars ...

Top.Sup.	<u>3T16</u>	<u>3T16</u>
Top.Sup.		
Bot.Bars	<u>3T16</u>	
Bot.Bars		
Bot.Sup.	<u>3T16</u>	<u>3T16</u>
Bot.Sup.		

Side Bar

Axis: B Storey: 1 (/ 2)

Etriyeler: C25/30 / Grade 460 (Type 2) (Links: Grade 250 (Plain))



Bending (Top Edge) ...

M (kN.m)	16.7	47.2	120.1
d (mm)	407.0	409.0	407.0
K/K'	0.10	0.27	0.70
x (mm)	50.88	53.70	153.34
Asm (mm ²)	107.95	304.30	868.94
Asv (mm ²)	142.66	188.28	139.32
As (mm ²)	250.61	492.58	868.94
As' (mm ²)	0.00	0.00	0.00
As-min	118.01	118.59	118.01

Bending (Bottom Edge) ...

M (kN.m)			
d (mm)			
K/K'			
x (mm)			
Asm (mm ²)			
Asv (mm ²)			
As (mm ²)			
As' (mm ²)			
As-min	113.08	118.59	113.08

Shear and Bending Design ...

Vd (kN)	45.6		44.6
v (N/mm ²)	0.56		0.55
v-Rdc (N/mm ²)	0.46	0.00	0.46
v-Rdmax (N/mm ²)	4.05		4.05
V-Rd (kN)	183.8		183.8
Vnom (kN)		66.5	
Td (kN.m)		4.9	
T-min (kN.m)		2.9	
t-RdC (N/mm ²)		1.17	
Str. Ratio		2.758	
As-T (mm ²)		316.95	
b-sup (mm)	0.0		0.0
Links	R10-300	R10-300	R10-300

Deflection Check ...

L/d	9.9 < 59.0 OK
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Supplied Steel Areas (mm²)

Top Edge	402.12	X 226.19	X 402.12
Bot Edge	226.19	226.19	226.19

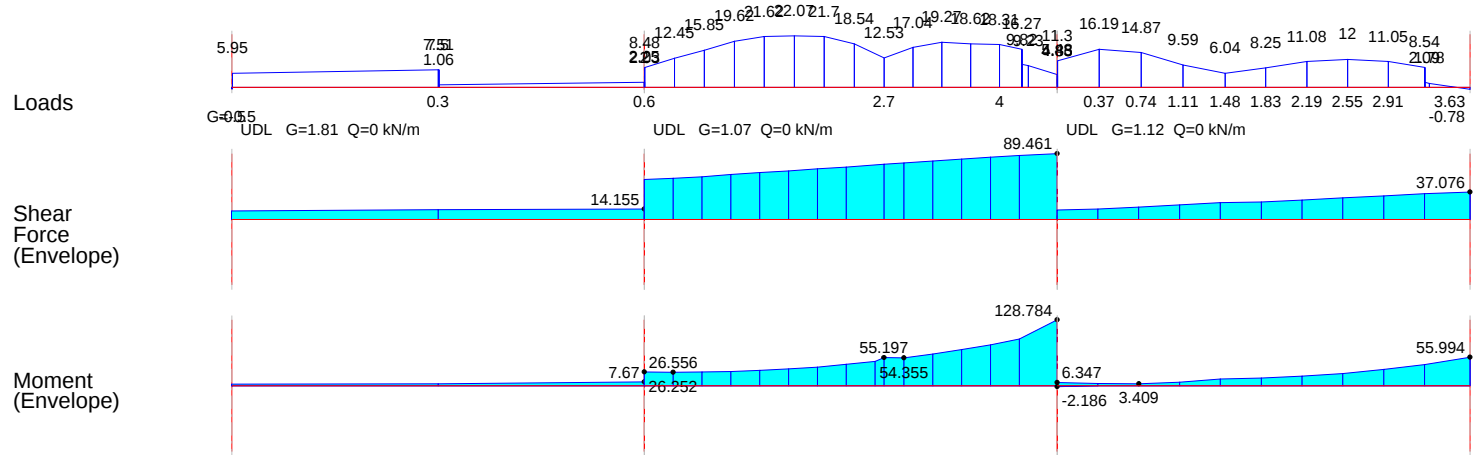
Steel Bars ...

Top.Sup.	<u>2T16</u>	<u>2T16</u>
Top.Sup.		
Bot.Bars	<u>2T12</u>	
Bot.Bars		
Bot.Sup.		
Side Bar		

Axis: 3 Storey: 1

Etriyeler: C25/30 / Grade 460 (Type 2) (Links: Grade 250 (Plain))

	1B11	L=600mm	1B10	L=4650mm	1B9	L=3625mm
Bw/H (mm)	200 / 450		200 / 450		200 / 450	
Flange Bf/Hf	---		---		---	
	C25/30 / Grade 460 (Type 2)		C25/30 / Grade 460 (Type 2)		C25/30 / Grade 460 (Type 2)	



Bending (Top Edge) ...									
M (kN.m)	3.2	3.9	7.7	29.7	65.8	128.8	6.3	26.2	56.0
d (mm)	407.0	407.0	407.0	407.0	407.0	407.0	407.0	407.0	407.0
K/K'	0.02	0.02	0.04	0.17	0.38	0.75	0.04	0.15	0.33
x (mm)	50.88	50.88	50.88	50.88	77.15	167.01	50.88	50.88	64.83
Asm (mm2)	20.78	24.97	49.60	192.04	437.19	946.40	41.04	169.42	367.35
Asv (mm2)	28.97	34.84	25.26	234.64	251.35	241.67	95.76	94.18	55.72
As (mm2)	24.97	49.60	49.60	426.68	688.54	946.40	136.80	263.60	367.34
As' (mm2)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
As-min	0.00	118.01	118.01	118.01	118.01	118.01	118.01	118.01	118.01

Bending (Bottom Edge) ...									
M (kN.m)							2.2		
d (mm)							390.0		
K/K'							0.01		
x (mm)							48.75		
Asm (mm2)							14.75		
Asv (mm2)							95.76		
As (mm2)							14.75		
As' (mm2)							0.00		
As-min	0.00	118.01	113.08	113.08	118.01	113.08	113.08	118.01	113.08

Shear and Bending Design ...									
Vd (kN)	15.9		16.7	75.1		77.3	30.6		17.8
v (N/mm2)	0.19		0.21	0.92		0.95	0.38		0.22
v-Rdc (N/mm2)	0.53	0.00	0.53	0.53	0.00	0.53	0.53	0.00	0.53
v-Rdmax (N/mm2)	4.05		4.05	4.05		4.05	4.05		4.05
V-Rd (kN)	191.8		183.8	183.8		183.8	183.8		183.8
Vnom (kN)		66.5			66.5			66.5	
Td (kN.m)		2.4			1.4			1.8	
T-min (kN.m)		2.9			2.9			2.9	
b-sup (mm)	0.0		0.0	0.0		0.0	0.0		0.0
Links			R10-300	R10-300	R10-300	R10-300	R10-300	R10-300	R10-300

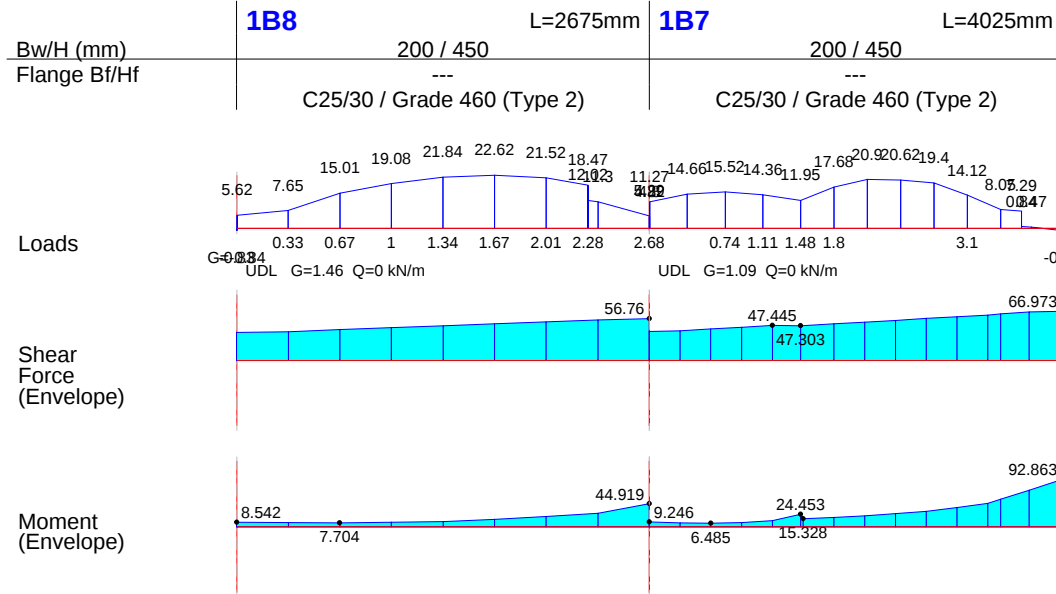
Deflection Check ...									
L/d	1.47 < 10.47 OK			11.43 < 39.28 OK			8.91 < 39.28 OK		

Supplied Steel Areas (mm2)									
Top Edge	603.19	603.19	603.19	603.19	X 603.19	X 603.19	603.19	603.19	603.19
Bot Edge	603.19	603.19	603.19	603.19	603.19	603.19	603.19	603.19	603.19

Steel Bars ...									
Top.Sup.		3T16	3T16		3T16	3T16		3T16	
Top.Sup.									
Bot.Bars		3T16		3T16				3T16	
Bot.Bars									
Bot.Sup.									
Side Bar									

Axis: 3 Storey: 1 ...

Etriyeler: C25/30 / Grade 460 (Type 2) (Links: Grade 250 (Plain))



Bending (Top Edge) ...

M (kN.m)	8.5	18.3	44.9	10.5	35.7	92.9
d (mm)	407.0	407.0	407.0	407.0	407.0	407.0
K/K'	0.05	0.11	0.26	0.06	0.21	0.54
x (mm)	50.88	50.88	51.28	50.88	50.88	113.27
Asm (mm ²)	55.23	118.50	290.56	67.88	231.00	641.87
Asv (mm ²)	114.36	161.57	148.14	94.87	183.26	115.20
As (mm ²)	118.50	280.07	290.56	162.75	414.27	641.87
As' (mm ²)	0.00	0.00	0.00	0.00	0.00	0.00
As-min	118.01	118.01	118.01	118.01	118.01	118.01

Bending (Bottom Edge) ...

M (kN.m)						
d (mm)						
K/K'						
x (mm)						
Asm (mm ²)						
Asv (mm ²)						
As (mm ²)						
As' (mm ²)						
As-min	113.08	118.01	113.08	113.08	118.01	113.08

Shear and Bending Design ...

Vd (kN)	36.6		47.4	30.4		36.9
v (N/mm ²)	0.45		0.58	0.37		0.45
v-Rdc (N/mm ²)	0.53	0.00	0.53	0.53	0.00	0.53
v-Rdmax (N/mm ²)	4.05		4.05	4.05		4.05
V-Rd (kN)	183.8		183.8	183.8		183.8
Vnom (kN)		66.5			66.5	
Td (kN.m)		3.4			1.4	
T-min (kN.m)		2.9			2.9	
t-RdC (N/mm ²)		1.17				
Str. Ratio		1.690				
As-T (mm ²)		219.14				
b-sup (mm)	0.0		0.0	0.0		0.0
Links	R10-300	R10-300	R10-300	R10-300	R10-300	R10-300

Deflection Check ...

L/d	6.57 < 39.28 OK	9.89 < 34.04 OK
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Supplied Steel Areas (mm²)

Top Edge	603.19	603.19	603.19	603.19	603.19	X 603.19
Bot Edge	603.19	603.19	603.19	603.19	603.19	603.19

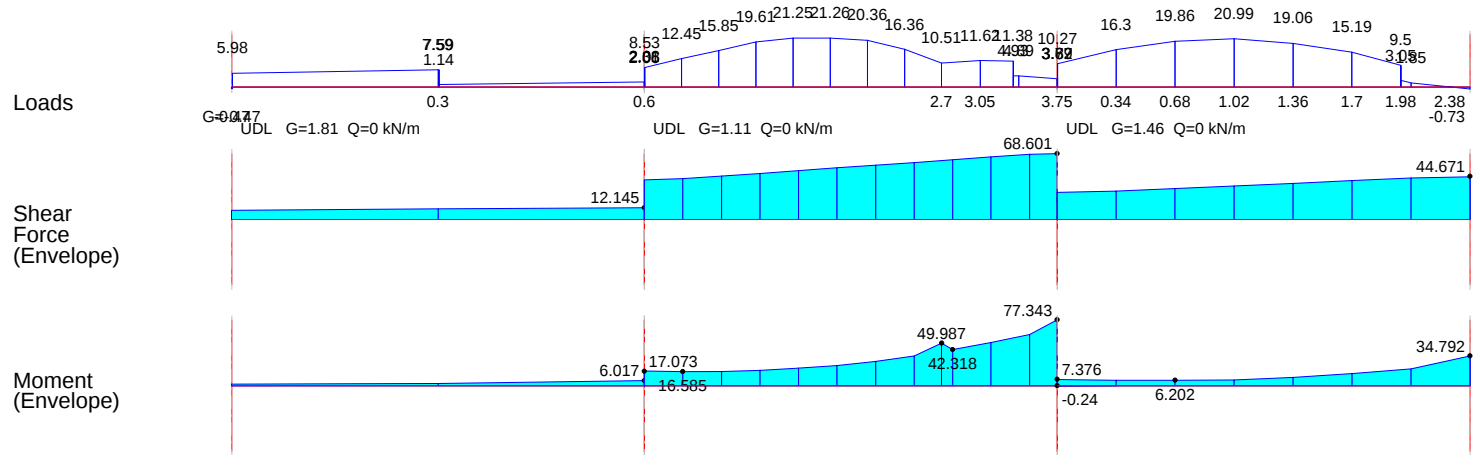
Steel Bars ...

Top.Sup.	3T16	3T16	3T16	3T16
Top.Sup.				
Bot.Bars	3T16	3T16		
Bot.Bars				
Bot.Sup.				
Side Bar				

Axis: 5 Storey: 1

Etriyeler: C25/30 / Grade 460 (Type 2) (Links: Grade 250 (Plain))

	1B18	L=600mm	1B17	L=3750mm	1B16	L=2375mm
Bw/H (mm)	200 / 450		200 / 450		200 / 450	
Flange Bf/Hf	---		---		---	
	C25/30 / Grade 460 (Type 2)		C25/30 / Grade 460 (Type 2)		C25/30 / Grade 460 (Type 2)	



Bending (Top Edge) ...									
M (kN.m)	2.1	2.8	6.0	18.2	50.0	77.3	7.4	14.0	34.8
d (mm)	407.0	407.0	407.0	407.0	407.0	407.0	407.0	407.0	407.0
K/K'	0.01	0.02	0.04	0.11	0.29	0.45	0.04	0.08	0.20
x (mm)	50.88	50.88	50.88	50.88	57.43	92.19	50.88	50.88	50.88
Asm (mm2)	13.89	17.86	38.91	117.59	325.41	522.41	47.69	90.35	224.96
Asv (mm2)	33.30	34.67	53.23	181.51	193.18	170.12	137.95	125.71	77.53
As (mm2)	17.86	38.91	38.91	299.10	518.60	522.41	90.35	216.06	224.96
As' (mm2)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
As-min	0.00	118.01	118.01	118.01	118.01	118.01	118.01	118.01	118.01

Bending (Bottom Edge) ...									
M (kN.m)							0.2		
d (mm)							390.0		
K/K'							0.00		
x (mm)							48.75		
Asm (mm2)							1.62		
Asv (mm2)							137.95		
As (mm2)							1.62		
As' (mm2)							0.00		
As-min	0.00	118.01	113.08	113.08	118.01	113.08	113.08	118.01	113.08

Shear and Bending Design ...									
Vd (kN)	14.0		17.0	58.1		54.4	44.1		24.8
v (N/mm2)	0.17		0.21	0.71		0.67	0.54		0.30
v-Rdc (N/mm2)	0.66	0.00	0.53	0.53	0.00	0.53	0.53	0.00	0.53
v-Rdmax (N/mm2)	4.05		4.05	4.05		4.05	4.05		4.05
V-Rd (kN)	191.8		183.8	183.8		183.8	183.8		183.8
Vnom (kN)		66.5			66.5			108.8	
Td (kN.m)		2.2			0.9			0.0	
T-min (kN.m)		2.9			2.9			2.9	
b-sup (mm)	0.0		0.0	0.0		0.0	0.0		0.0
Links			R10-300	R10-300	R10-300	R10-300	R10-300	R10-300	R10-300

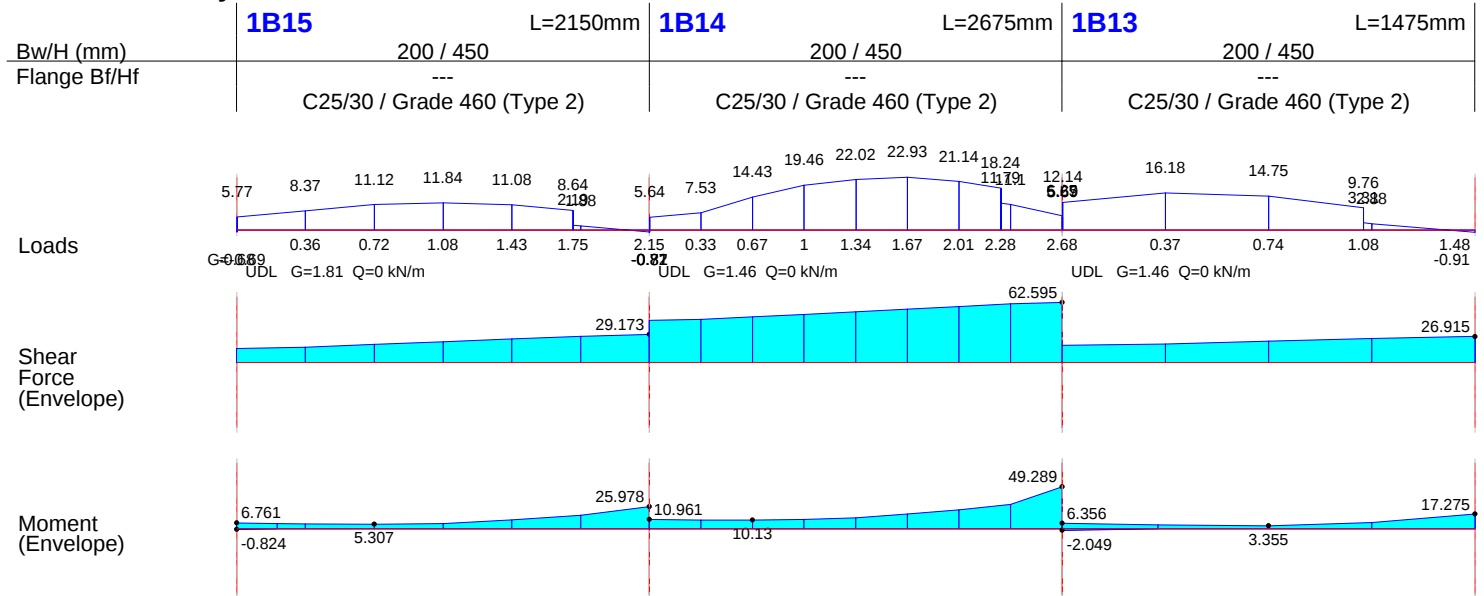
Deflection Check ...									
L/d	1.47 < 10.47 OK		9.21 < 39.28 OK			5.84 < 39.28 OK			

Supplied Steel Areas (mm2)									
Top Edge	1206.37	603.19	603.19	603.19	603.19	603.19	603.19	603.19	603.19
Bot Edge	603.19	603.19	603.19	603.19	603.19	603.19	603.19	603.19	603.19

Steel Bars ...									
Top.Sup.	<u>3T16</u>	<u>3T16</u>	<u>3T16</u>	<u>3T16</u>	<u>3T16</u>	<u>3T16</u>	<u>3T16</u>	<u>3T16</u>	<u>3T16</u>
Top.Sup.									
Bot.Bars	<u>3T16</u>	<u>3T16</u>	<u>3T16</u>	<u>3T16</u>	<u>3T16</u>	<u>3T16</u>	<u>3T16</u>	<u>3T16</u>	<u>3T16</u>
Bot.Bars									
Bot.Sup.									
Side Bar									

Axis: 5 Storey: 1 ...

Etriyeler: C25/30 / Grade 460 (Type 2) (Links: Grade 250 (Plain))



Bending (Top Edge) ...

M (kN.m)	6.8	11.6	26.0	11.0	20.7	49.3	6.4	6.4	17.3
d (mm)	407.0	407.0	407.0	407.0	407.0	407.0	407.0	407.0	407.0
K/K'	0.04	0.07	0.15	0.06	0.12	0.29	0.04	0.04	0.10
x (mm)	50.88	50.88	50.88	50.88	50.88	56.57	50.88	50.88	50.88
Asm (mm ²)	43.72	74.83	167.97	70.87	134.16	320.58	41.10	41.40	111.70
Asv (mm ²)	62.31	78.18	56.53	108.37	179.81	154.21	73.17	76.08	28.97
As (mm ²)	74.83	153.01	167.97	134.16	313.97	320.58	41.40	111.70	111.70
As' (mm ²)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
As-min	118.01	118.01	118.01	118.01	118.01	118.01	118.01	118.01	118.01

Bending (Bottom Edge) ...

M (kN.m)	0.8						2.0		
d (mm)	390.0						390.0		
K/K'	0.01						0.01		
x (mm)	48.75						48.75		
Asm (mm ²)	5.56						13.83		
Asv (mm ²)	62.31						73.17		
As (mm ²)	5.56						13.83		
As' (mm ²)	0.00						0.00		
As-min	113.08	118.01	113.08	113.08	118.01	113.08	113.08	118.01	113.08

Shear and Bending Design ...

Vd (kN)	19.9		18.1	34.7		49.3	23.4		15.9
v (N/mm ²)	0.24		0.22	0.43		0.61	0.29		0.19
v-Rdc (N/mm ²)	0.53	0.00	0.53	0.53	0.00	0.53	0.53	0.00	0.53
v-Rdmax (N/mm ²)	4.05		4.05	4.05		4.05	4.05		4.05
V-Rd (kN)	183.8		183.8	183.8		183.8	183.8		183.8
Vnom (kN)		66.5			66.5			108.8	
Td (kN.m)		4.7			1.6			0.3	
T-min (kN.m)		2.9			2.9			2.9	
t-RdC (N/mm ²)		1.17							
Str. Ratio		1.232							
As-T (mm ²)		300.46							
b-sup (mm)	0.0		0.0	0.0		0.0	0.0		0.0
Links	R10-300	R10-300	R10-300	R10-300	R10-300	R10-300	R10-300	R10-300	R10-300

Deflection Check ...

L/d	5.28 < 39.28 OK			6.57 < 39.28 OK			3.62 < 39.28 OK		
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Supplied Steel Areas (mm²)

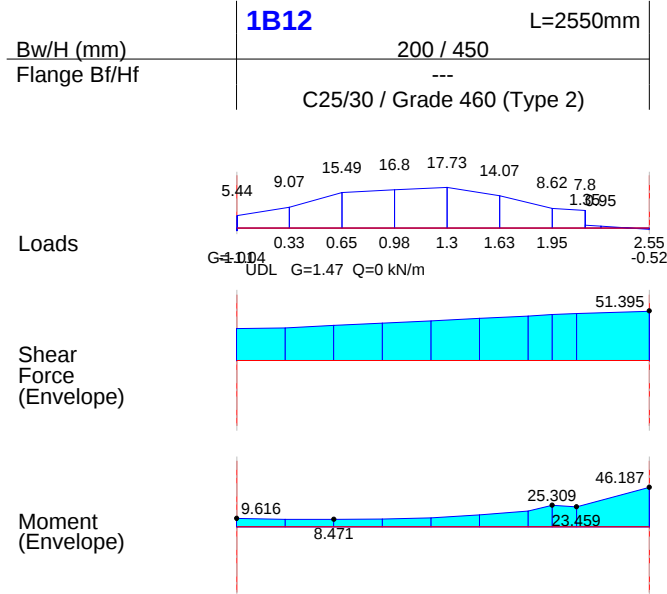
Top Edge	603.19	603.19	603.19	603.19	603.19	603.19	603.19	603.19	603.19
Bot Edge	603.19	603.19	603.19	603.19	603.19	603.19	603.19	603.19	603.19

Steel Bars ...

Top.Sup.	3T16		3T16	3T16		3T16	3T16		3T16
Top.Sup.									
Bot.Bars		3T16		3T16			3T16		
Bot.Bars									
Bot.Sup.									
Side Bar									

Axis: 5 Storey: 1 ...

Etriyeler: C25/30 / Grade 460 (Type 2) (Links: Grade 250 (Plain))



Bending (Top Edge) ...

M (kN.m)	9.6	18.9	46.2
d (mm)	407.0	407.0	407.0
K/K'	0.06	0.11	0.27
x (mm)	50.88	50.88	52.81
Asm (mm ²)	62.17	122.03	299.23
Asv (mm ²)	91.77	144.41	112.08
As (mm ²)	122.03	266.44	299.23
As' (mm ²)	0.00	0.00	0.00
As-min	118.01	118.01	118.01

Bending (Bottom Edge) ...

M (kN.m)			
d (mm)			
K/K'			
x (mm)			
Asm (mm ²)			
Asv (mm ²)			
As (mm ²)			
As' (mm ²)			
As-min	113.08	118.01	113.08

Shear and Bending Design ...

Vd (kN)	29.4		35.9
v (N/mm ²)	0.36		0.44
v-Rdc (N/mm ²)	0.53	0.00	0.53
v-Rdmax (N/mm ²)	4.05		4.05
V-Rd (kN)	183.8		183.8
Vnom (kN)		66.5	
Td (kN.m)		1.2	
T-min (kN.m)		2.9	
b-sup (mm)	0.0		0.0
Links	R10-300	R10-300	R10-300

Deflection Check ...

L/d	6.27 < 34.04 OK
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Supplied Steel Areas (mm²)

Top Edge	603.19	603.19	603.19
Bot Edge	603.19	603.19	603.19

Steel Bars ...

Top.Sup. 3T16 3T16

Top.Sup.

Bot.Bars 3T16

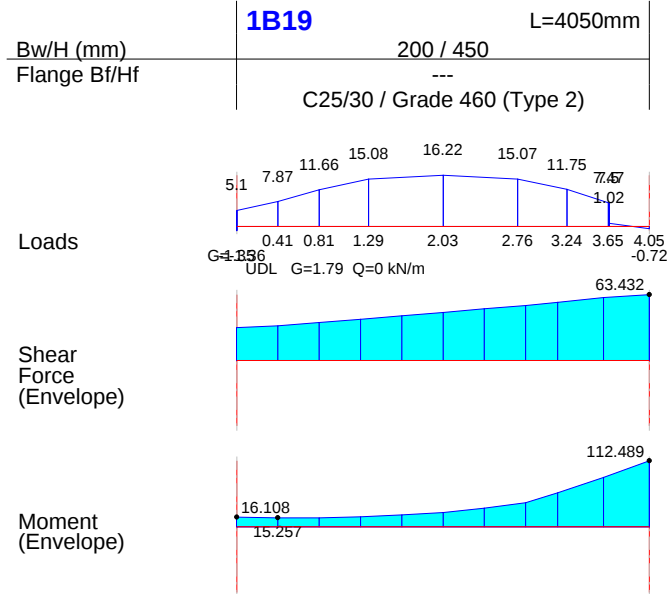
Bot.Bars

Bot.Sup.

Side Bar

Axis: M Storey: 1

Etriyeler: C25/30 / Grade 460 (Type 2) (Links: Grade 250 (Plain))



Bending (Top Edge) ...

M (kN.m)	16.8	46.6	112.5
d (mm)	407.0	407.0	407.0
K/K'	0.10	0.27	0.66
x (mm)	50.88	53.31	141.66
Asm (mm ²)	108.47	302.10	802.72
Asv (mm ²)	140.51	168.40	138.94
As (mm ²)	248.98	470.50	802.72
As' (mm ²)	0.00	0.00	0.00
As-min	118.01	118.01	118.01

Bending (Bottom Edge) ...

M (kN.m)			
d (mm)			
K/K'			
x (mm)			
Asm (mm ²)			
Asv (mm ²)			
As (mm ²)			
As' (mm ²)			
As-min	113.08	118.01	113.08

Shear and Bending Design ...

Vd (kN)	45.0		44.5
v (N/mm ²)	0.55		0.55
v-Rdc (N/mm ²)	0.53	0.00	0.53
v-Rdmax (N/mm ²)	4.05		4.05
V-Rd (kN)	183.8		183.8
Vnom (kN)		66.5	
Td (kN.m)		3.1	
T-min (kN.m)		2.9	
t-RdC (N/mm ²)		1.17	
Str. Ratio		1.802	
As-T (mm ²)		200.23	
b-sup (mm)	0.0		0.0
Links	R10-300	R10-300	R10-300

Deflection Check ...

L/d	9.95 < 26.19 OK
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Supplied Steel Areas (mm²)

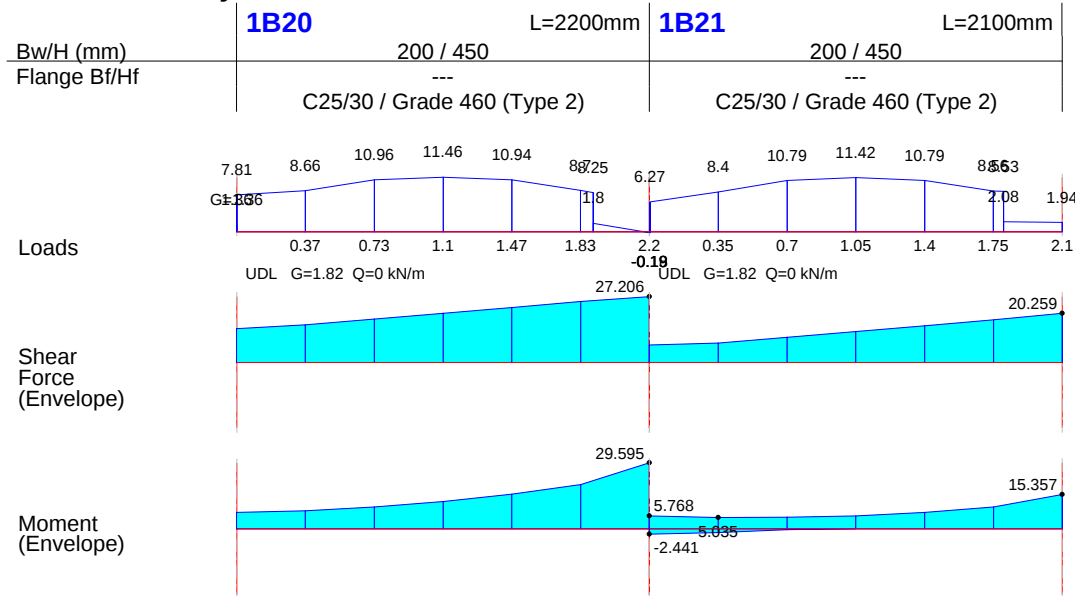
Top Edge	603.19	603.19	X 603.19
Bot Edge	603.19	603.19	603.19

Steel Bars ...

Top.Sup.	<u>3T16</u>	<u>3T16</u>
Top.Sup.		
Bot.Bars	<u>3T16</u>	
Bot.Bars		
Bot.Sup.		
Side Bar		

Axis: L Storey: 1

Etriyeler: C25/30 / Grade 460 (Type 2) (Links: Grade 250 (Plain))



Bending (Top Edge) ...

M (kN.m)	9.0	16.3	29.6	5.8	8.5	15.4
d (mm)	409.0	409.0	409.0	409.0	409.0	409.0
K/K'	0.05	0.09	0.17	0.03	0.05	0.09
x (mm)	51.13	51.13	51.13	51.13	51.13	51.13
Asm (mm ²)	58.12	104.73	190.42	37.11	54.40	98.81
Asv (mm ²)	35.45	72.31	76.89	76.59	28.17	35.16
As (mm ²)	93.57	177.04	190.42	54.40	82.57	98.81
As' (mm ²)	0.00	0.00	0.00	0.00	0.00	0.00
As-min	118.59	118.59	118.59	118.59	118.59	118.59

Bending (Bottom Edge) ...

M (kN.m)				2.4	0.7	
d (mm)				390.0	409.0	
K/K'				0.02	0.00	
x (mm)				48.75	51.13	
Asm (mm ²)				16.47	4.35	
Asv (mm ²)				76.59	28.17	
As (mm ²)				16.47	16.47	
As' (mm ²)				0.00	0.00	
As-min	113.08	118.59	113.08	113.08	118.59	113.08

Shear and Bending Design ...

Vd (kN)	12.9		24.6	24.5		11.3
v (N/mm ²)	0.16		0.30	0.30		0.14
v-Rdc (N/mm ²)	0.38	0.00	0.38	0.38	0.00	0.38
v-Rdmax (N/mm ²)	4.05		4.05	4.05		4.05
V-Rd (kN)	183.8		183.8	183.8		183.8
Vnom (kN)		66.5			108.8	
Td (kN.m)		1.0			0.5	
T-min (kN.m)		2.9			2.9	
b-sup (mm)						
Links	R10-300	R10-300	R10-300	R10-300	R10-300	R10-300

Deflection Check ...

L/d	5.38 < 76.7 OK			5.13 < 76.7 OK		
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Supplied Steel Areas (mm²)

Top Edge	226.19	226.19	226.19	226.19	226.19	226.19
Bot Edge	226.19	226.19	226.19	226.19	226.19	226.19

Steel Bars ...

Top.Sup.	2T12	2T12	2T12	2T12
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Top.Sup.

Bot.Bars	2T12	2T12
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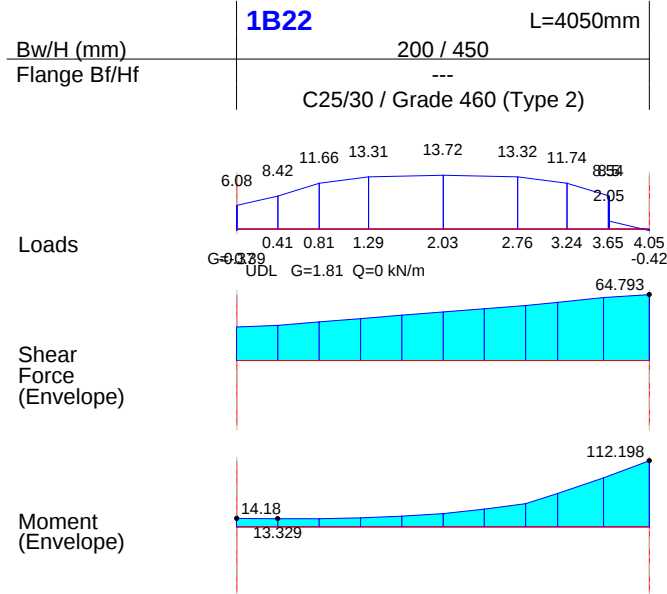
Bot.Bars

Bot.Sup.

Side Bar

Axis: M Storey: 1 (/ 2)

Etriyeler: C25/30 / Grade 460 (Type 2) (Links: Grade 250 (Plain))



Bending (Top Edge) ...

M (kN.m)	14.8	44.8	112.2
d (mm)	409.0	409.0	409.0
K/K'	0.09	0.26	0.65
x (mm)	51.13	51.13	140.27
Asm (mm ²)	95.54	288.37	794.85
Asv (mm ²)	130.45	172.56	129.68
As (mm ²)	225.99	460.92	794.85
As' (mm ²)	0.00	0.00	0.00
As-min	118.59	118.59	118.59

Bending (Bottom Edge) ...

M (kN.m)			
d (mm)			
K/K'			
x (mm)			
Asm (mm ²)			
Asv (mm ²)			
As (mm ²)			
As' (mm ²)			
As-min	113.08	118.59	113.08

Shear and Bending Design ...

Vd (kN)	41.7		41.5
v (N/mm ²)	0.51		0.51
v-Rdc (N/mm ²)	0.38	0.00	0.38
v-Rdmax (N/mm ²)	4.05		4.05
V-Rd (kN)	183.8		183.8
Vnom (kN)		66.5	
Td (kN.m)		2.6	
T-min (kN.m)		2.9	
b-sup (mm)	0.0		0.0
Links	R10-300	R10-300	R10-300

Deflection Check ...

L/d	9.9 < 59.0 OK
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Supplied Steel Areas (mm²)

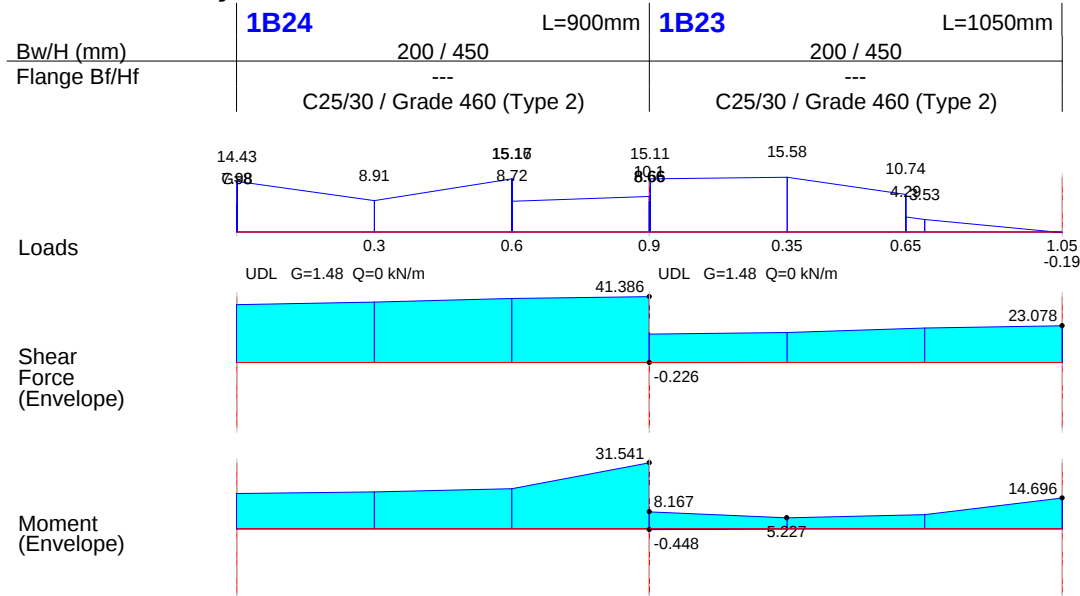
Top Edge	226.19	X 226.19	X 226.19
Bot Edge	226.19	226.19	226.19

Steel Bars ...

Top.Sup.	2T12	2T12
Top.Sup.		
Bot.Bars	2T12	
Bot.Bars		
Bot.Sup.		
Side Bar		

Axis: 4 Storey: 1

Etriyeler: C25/30 / Grade 460 (Type 2) (Links: Grade 250 (Plain))



Bending (Top Edge) ...

M (kN.m)	17.5	18.9	31.5	8.2	6.6	14.7
d (mm)	390.0	390.0	399.0	399.0	409.0	409.0
K/K'	0.11	0.12	0.19	0.05	0.04	0.08
x (mm)	48.75	48.75	49.88	49.88	51.13	51.13
Asm (mm ²)	118.28	127.86	208.02	53.87	42.58	94.56
Asv (mm ²)	145.49	124.68	187.52	90.78	67.14	31.75
As (mm ²)	127.86	208.02	208.02	53.87	94.56	94.56
As' (mm ²)	0.00	0.00	0.00	0.00	0.00	0.00
As-min	0.00	113.08	115.69	115.69	118.59	118.59

Bending (Bottom Edge) ...

M (kN.m)				0.4		
d (mm)				390.0		
K/K'				0.00		
x (mm)				48.75		
Asm (mm ²)				3.03		
Asv (mm ²)				90.78		
As (mm ²)				3.03		
As' (mm ²)				0.00		
As-min	0.00	118.59	113.08	113.08	118.59	113.08

Shear and Bending Design ...

Vd (kN)	46.6		60.0	29.0		14.9
v (N/mm ²)	0.60		0.75	0.36		0.18
v-Rdc (N/mm ²)	0.75	0.00	0.73	0.73	0.00	0.38
v-Rdmax (N/mm ²)	4.05		4.05	4.05		4.05
V-Rd (kN)	192.8		183.8	183.8		183.8
Vnom (kN)		108.8			108.8	
Td (kN.m)		0.1			0.0	
T-min (kN.m)		2.9			2.9	
b-sup (mm)	0.0		0.0	0.0		0.0
Links			R10-300	R10-300	R10-300	R10-300

Deflection Check ...

L/d	2.26 < 8.39 OK		2.57 < 76.7 OK		
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Supplied Steel Areas (mm²)

Top Edge	1963.50	1963.50	1608.49	1608.49	226.19	226.19
Bot Edge	226.19	226.19	226.19	226.19	226.19	226.19

Steel Bars ...

Top.Sup. 2T32 2T32 2T12

Top.Sup.

Bot.Bars 2T12 2T12

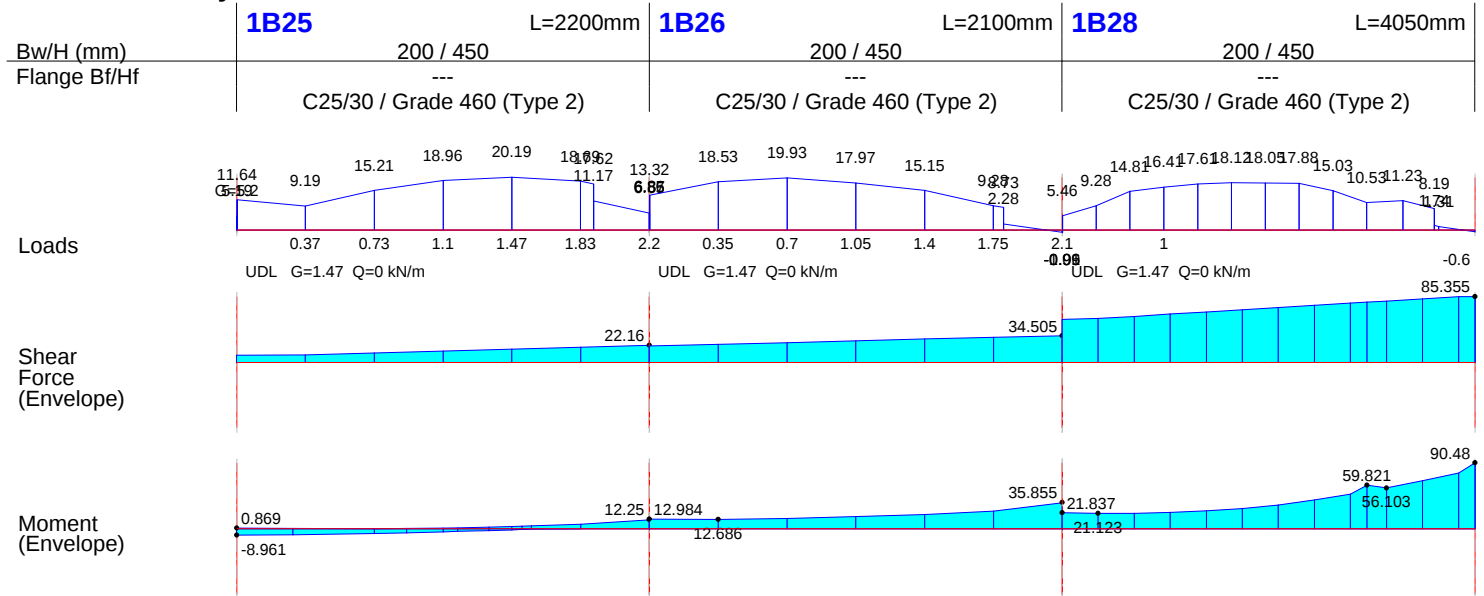
Bot.Bars

Bot.Sup.

Side Bar

Axis: J Storey: 1

Etriyeler: C25/30 / Grade 460 (Type 2) (Links: Grade 250 (Plain))



Bending (Top Edge) ...

M (kN.m)	1.7	4.4	12.3	13.4	20.4	35.9	22.7	55.8	90.5
d (mm)	409.0	409.0	409.0	409.0	409.0	407.0	407.0	409.0	407.0
K/K'	0.01	0.03	0.07	0.08	0.12	0.21	0.13	0.32	0.53
x (mm)	51.13	51.13	51.13	51.13	51.13	50.88	50.88	64.20	109.96
Asm (mm ²)	11.22	28.22	78.82	86.36	131.41	231.83	146.77	363.79	623.11
Asv (mm ²)	126.91	56.52	76.89	59.79	95.95	123.37	175.33	243.51	168.25
As (mm ²)	28.22	78.82	78.82	131.41	227.35	231.83	322.09	607.29	623.11
As' (mm ²)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
As-min	118.59	118.59	118.59	118.59	118.59	118.01	118.01	118.59	118.01

Bending (Bottom Edge) ...

M (kN.m)	9.0	7.0	0.0						
d (mm)	390.0	409.0	390.0						
K/K'	0.06	0.04	0.00						
x (mm)	48.75	51.13	48.75						
Asm (mm ²)	60.47	44.89	0.16						
Asv (mm ²)	126.91	56.52	76.89						
As (mm ²)	60.47	60.47	44.89						
As' (mm ²)	0.00	0.00	0.00						
As-min	113.08	118.59	113.08	113.08	118.59	113.08	113.08	118.59	113.08

Shear and Bending Design ...

Vd (kN)	40.6		24.6	19.1		39.5	56.1		53.8
v (N/mm ²)	0.50		0.30	0.23		0.48	0.69		0.66
v-Rdc (N/mm ²)	0.38	0.00	0.38	0.38	0.00	0.46	0.46	0.00	0.46
v-Rdmax (N/mm ²)	4.05		4.05	4.05		4.05	4.05		4.05
V-Rd (kN)	183.8		183.8	183.8		183.8	183.8		183.8
Vnom (kN)		108.8			66.5			66.5	
Td (kN.m)		0.6			1.7			1.5	
T-min (kN.m)		2.9			2.9			2.9	
b-sup (mm)									
Links	R10-300	R10-300	R10-300	R10-300	R10-300	R10-300	R10-300	R10-300	R10-300

Deflection Check ...

L/d	5.38 < 76.7 OK			5.13 < 88.5 OK			9.9 < 70.5 OK		
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Supplied Steel Areas (mm²)

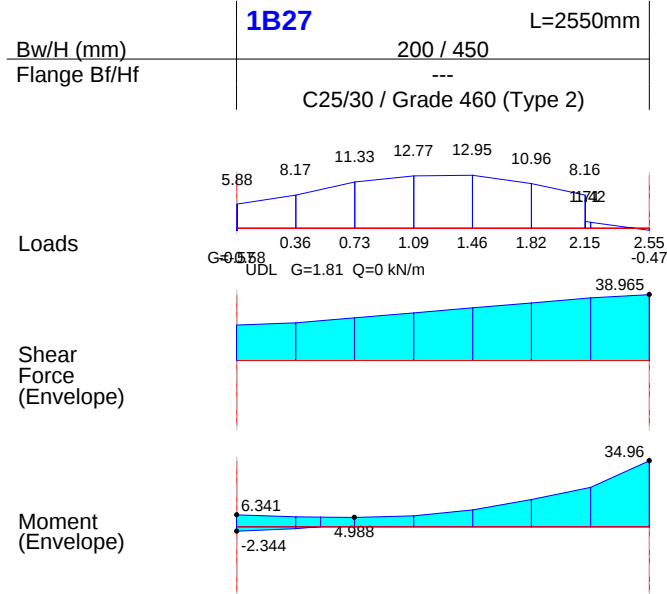
Top Edge	226.19	226.19	226.19	226.19	X 226.19	402.12	402.12	X 226.19	X 402.12
Bot Edge	226.19	226.19	226.19	226.19	226.19	226.19	226.19	226.19	226.19

Steel Bars ...

Top.Sup.	2T12	2T12	2T12	2T16	2T16	2T16
Top.Sup.						
Bot.Bars	2T12	2T12	2T12	2T12	2T12	2T12
Bot.Bars						
Bot.Sup.						
Side Bar						

Axis: 6 Storey: 1

Etriyeler: C25/30 / Grade 460 (Type 2) (Links: Grade 250 (Plain))



Bending (Top Edge) ...

M (kN.m)	6.3	14.3	35.0
d (mm)	409.0	409.0	409.0
K/K'	0.04	0.08	0.20
x (mm)	51.13	51.13	51.13
Asm (mm ²)	40.80	92.15	224.94
Asv (mm ²)	74.79	106.14	73.37
As (mm ²)	92.15	198.29	224.94
As' (mm ²)	0.00	0.00	0.00
As-min	118.59	118.59	118.59

Bending (Bottom Edge) ...

M (kN.m)	2.3		
d (mm)	390.0		
K/K'	0.01		
x (mm)	48.75		
Asm (mm ²)	15.82		
Asv (mm ²)	74.79		
As (mm ²)	15.82		
As' (mm ²)	0.00		
As-min	113.08	118.59	113.08

Shear and Bending Design ...

Vd (kN)	23.9		23.5
v (N/mm ²)	0.29		0.29
v-Rdc (N/mm ²)	0.38	0.00	0.38
v-Rdmax (N/mm ²)	4.05		4.05
V-Rd (kN)	183.8		183.8
Vnom (kN)		66.5	
Td (kN.m)		3.4	
T-min (kN.m)		2.9	
t-RdC (N/mm ²)		1.17	
Str. Ratio		1.621	
As-T (mm ²)		219.07	
b-sup (mm)	0.0		0.0
Links	R10-300	R10-300	R10-300

Deflection Check ...

L/d	6.23 < 59.0 OK
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Supplied Steel Areas (mm²)

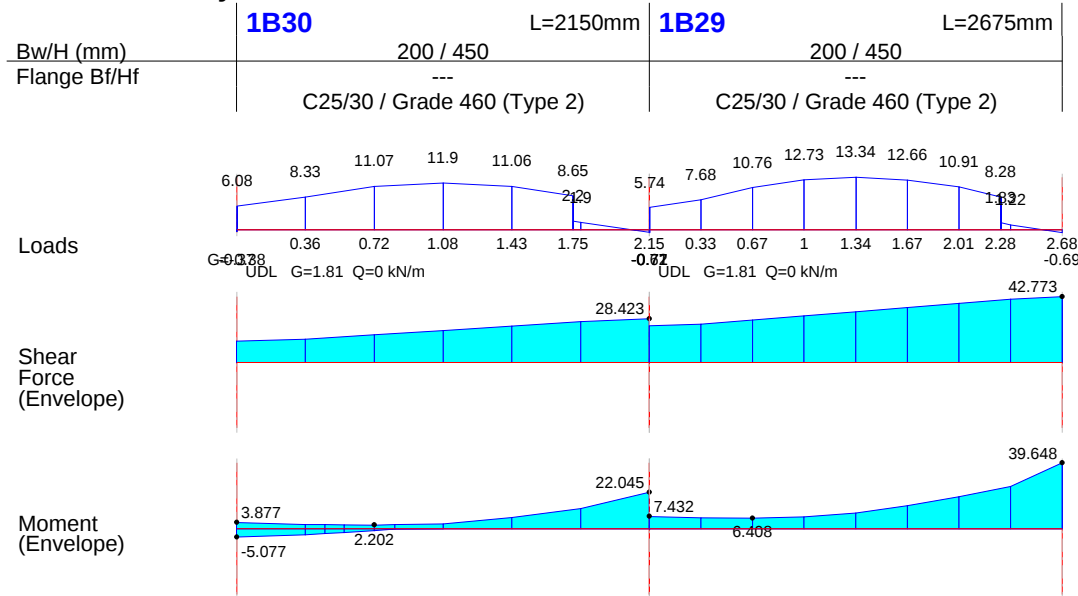
Top Edge	226.19	X 226.19	X 226.19
Bot Edge	226.19	226.19	226.19

Steel Bars ...

Top.Sup.	<u>2T12</u>	<u>2T12</u>
Top.Sup.		
Bot.Bars	<u>2T12</u>	
Bot.Bars		
Bot.Sup.		
Side Bar		

Axis: 7 Storey: 1

Etriyeler: C25/30 / Grade 460 (Type 2) (Links: Grade 250 (Plain))



Bending (Top Edge) ...

M (kN.m)	3.9	7.9	22.0	7.4	17.6	39.6
d (mm)	409.0	409.0	409.0	409.0	409.0	409.0
K/K'	0.02	0.05	0.13	0.04	0.10	0.23
x (mm)	51.13	51.13	51.13	51.13	51.13	51.13
Asm (mm ²)	24.94	50.59	141.84	47.82	113.49	255.10
Asv (mm ²)	66.47	75.83	54.90	78.34	117.40	76.53
As (mm ²)	50.59	126.43	141.84	113.49	230.89	255.10
As' (mm ²)	0.00	0.00	0.00	0.00	0.00	0.00
As-min	118.59	118.59	118.59	118.59	118.59	118.59

Bending (Bottom Edge) ...

M (kN.m)	5.1	1.7				
d (mm)	390.0	409.0				
K/K'	0.03	0.01				
x (mm)	48.75	51.13				
Asm (mm ²)	34.26	11.25				
Asv (mm ²)	66.47	75.83				
As (mm ²)	34.26	34.26				
As' (mm ²)	0.00	0.00				
As-min	113.08	118.59	113.08	113.08	118.59	113.08

Shear and Bending Design ...

Vd (kN)	21.3		17.6	25.1		24.5
v (N/mm ²)	0.26		0.21	0.31		0.30
v-Rdc (N/mm ²)	0.38	0.00	0.38	0.38	0.00	0.38
v-Rdmax (N/mm ²)	4.05		4.05	4.05		4.05
V-Rd (kN)	183.8		183.8	183.8		183.8
Vnom (kN)		66.5			66.5	
Td (kN.m)		3.9			5.7	
T-min (kN.m)		2.9			2.9	
t-RdC (N/mm ²)		1.17			1.17	
Str. Ratio		1.359			2.018	
As-T (mm ²)		251.33			363.71	
b-sup (mm)	0.0		0.0	0.0		0.0
Links	R10-300	R10-300	R10-300	R10-300	R10-300	R10-300

Deflection Check ...

L/d	5.26 < 76.7 OK	6.54 < 76.7 OK
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Supplied Steel Areas (mm²)

Top Edge	226.19	226.19	226.19	226.19	X 226.19	X 226.19
Bot Edge	226.19	226.19	226.19	226.19	226.19	226.19

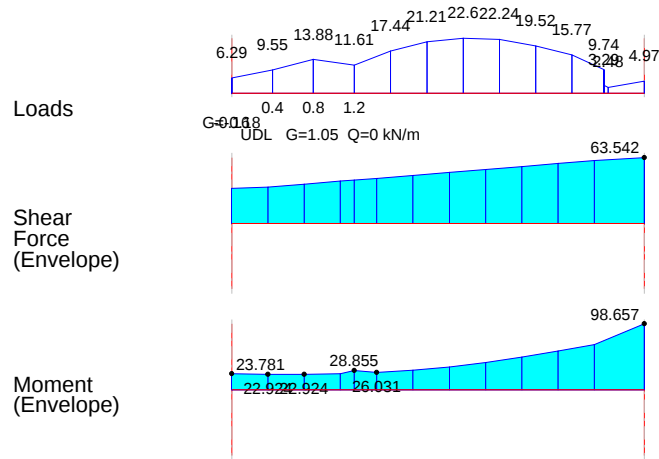
Steel Bars ...

Top.Sup.	<u>2T12</u>	<u>2T12</u>	<u>2T12</u>	<u>2T12</u>
Top.Sup.				
Bot.Bars	<u>2T12</u>	<u>2T12</u>		
Bot.Bars				
Bot.Sup.				
Side Bar				

Axis: I Storey: 1

Etriyeler: C25/30 / Grade 460 (Type 2) (Links: Grade 250 (Plain))

	1B31	L=4050mm
Bw/H (mm)	200 / 450	
Flange Bf/Hf	---	
	C25/30 / Grade 460 (Type 2)	



Bending (Top Edge) ...			
M (kN.m)	25.6	51.2	98.7
d (mm)	407.0	409.0	407.0
K/K'	0.15	0.30	0.58
x (mm)	50.88	58.54	121.43
Asm (mm2)	165.31	331.74	688.13
Asv (mm2)	208.03	173.98	205.64
As (mm2)	331.74	505.71	688.13
As' (mm2)	0.00	0.00	0.00
As-min	118.01	118.59	118.01

Bending (Bottom Edge) ...			
M (kN.m)			
d (mm)			
K/K'			
x (mm)			
Asm (mm2)			
Asv (mm2)			
As (mm2)			
As' (mm2)			
As-min	113.08	118.59	113.08

Shear and Bending Design ...			
Vd (kN)	66.6		65.8
v (N/mm2)	0.82		0.81
v-Rdc (N/mm2)	0.46	0.00	0.46
v-Rdmax (N/mm2)	4.05		4.05
V-Rd (kN)	183.8		183.8
Vnom (kN)		66.5	
Td (kN.m)		0.8	
T-min (kN.m)		2.9	
b-sup (mm)	0.0		0.0
Links	R10-300	R10-300	R10-300

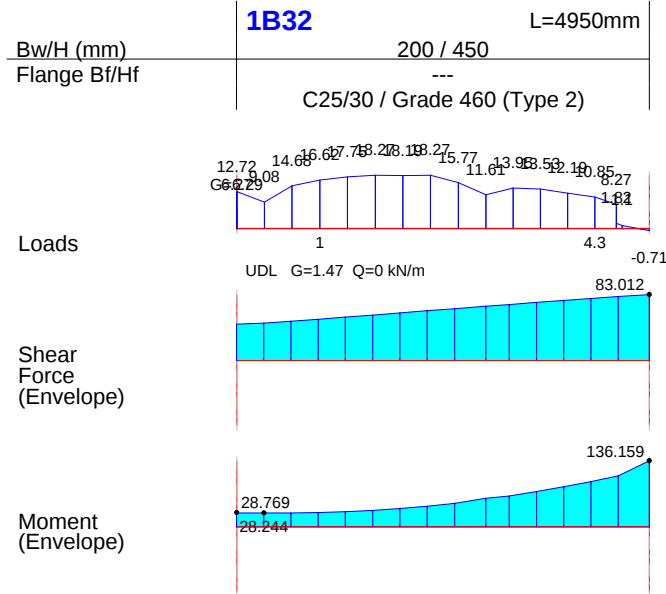
Deflection Check ...	
L/d	9.9 < 42.16 OK

Supplied Steel Areas (mm2)			
Top Edge	402.12	X 226.19	X 402.12
Bot Edge	226.19	226.19	226.19

Steel Bars ...	
Top.Sup.	<u>2T16</u> <u>2T16</u>
Top.Sup.	
Bot.Bars	<u>2T12</u>
Bot.Bars	
Bot.Sup.	
Side Bar	

Axis: I Storey: 1 (/ 2)

Etriyeler: C25/30 / Grade 460 (Type 2) (Links: Grade 250 (Plain))



Bending (Top Edge) ...

M (kN.m)	31.6	73.3	136.2
d (mm)	405.0	409.0	407.0
K/K'	0.19	0.42	0.80
x (mm)	50.63	86.38	179.13
Asm (mm ²)	205.30	489.46	1015.06
Asv (mm ²)	223.73	228.88	197.80
As (mm ²)	429.03	718.33	1015.06
As' (mm ²)	0.00	0.00	0.00
As-min	117.43	118.59	118.01

Bending (Bottom Edge) ...

M (kN.m)			
d (mm)			
K/K'			
x (mm)			
Asm (mm ²)			
Asv (mm ²)			
As (mm ²)			
As' (mm ²)			
As-min	113.08	118.01	113.08

Shear and Bending Design ...

Vd (kN)	71.6		63.3
v (N/mm ²)	0.88		0.78
v-Rdc (N/mm ²)	0.53	0.00	0.46
v-Rdmax (N/mm ²)	4.05		4.05
V-Rd (kN)	183.8		183.8
Vnom (kN)		66.5	
Td (kN.m)		3.8	
T-min (kN.m)		2.9	
t-RdC (N/mm ²)		1.17	
Str. Ratio		2.589	
As-T (mm ²)		242.80	
b-sup (mm)	0.0		0.0
Links	R10-300	R10-300	R10-300

Deflection Check ...

L/d	12.16 < 30.35 OK
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Supplied Steel Areas (mm²)

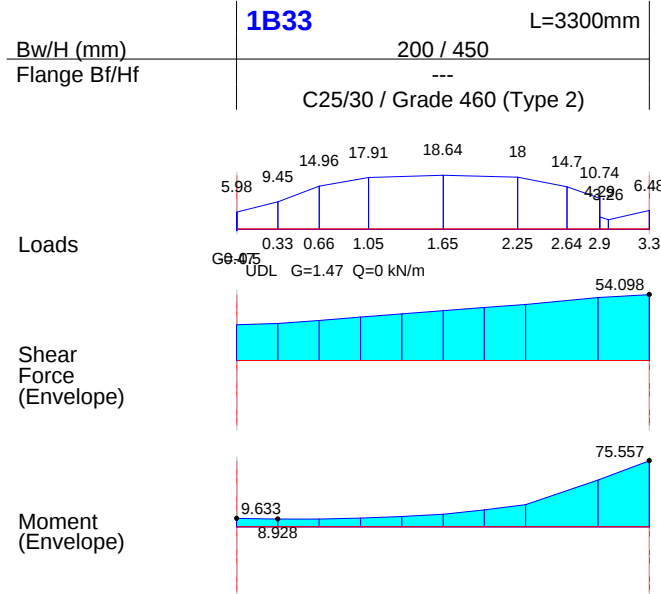
Top Edge	628.32	X 226.19	X 402.12
Bot Edge	402.12	402.12	402.12

Steel Bars ...

Top.Sup.	2T20	2T16
Top.Sup.		
Bot.Bars	2T16	
Bot.Bars		
Bot.Sup.		
Side Bar		

Axis: 4 Storey: 1 (/ 2)

Etriyeler: C25/30 / Grade 460 (Type 2) (Links: Grade 250 (Plain))



Bending (Top Edge) ...

M (kN.m)	9.6	28.4	75.6
d (mm)	409.0	409.0	409.0
K/K'	0.06	0.16	0.44
x (mm)	51.13	51.13	89.30
Asm (mm ²)	62.07	182.98	506.03
Asv (mm ²)	144.85	146.45	136.73
As (mm ²)	182.98	329.43	506.03
As' (mm ²)	0.00	0.00	0.00
As-min	118.59	118.59	118.59

Bending (Bottom Edge) ...

M (kN.m)			
d (mm)			
K/K'			
x (mm)			
Asm (mm ²)			
Asv (mm ²)			
As (mm ²)			
As' (mm ²)			
As-min	113.08	118.59	113.08

Shear and Bending Design ...

Vd (kN)	46.4		43.7
v (N/mm ²)	0.57		0.53
v-Rdc (N/mm ²)	0.38	0.00	0.38
v-Rdmax (N/mm ²)	4.05		4.05
V-Rd (kN)	183.8		183.8
Vnom (kN)		108.8	
Td (kN.m)		0.4	
T-min (kN.m)		2.9	
b-sup (mm)	0.0		0.0
Links	R10-300	R10-300	R10-300

Deflection Check ...

L/d	8.07 < 59.0 OK
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Supplied Steel Areas (mm²)

Top Edge	226.19	X 226.19	X 226.19
Bot Edge	226.19	226.19	226.19

Steel Bars ...

Top.Sup. 2T12 2T12

Top.Sup.

Bot.Bars 2T12

Bot.Bars

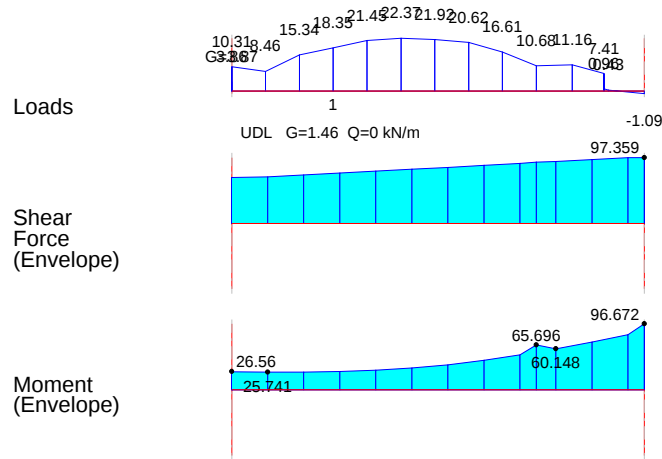
Bot.Sup.

Side Bar

Axis: D Storey: 1

Etriyeler: C25/30 / Grade 460 (Type 2) (Links: Grade 250 (Plain))

	1B34	L=4050mm
Bw/H (mm)	200 / 450	
Flange Bf/Hf	---	
	C25/30 / Grade 460 (Type 2)	



Bending (Top Edge) ...			
M (kN.m)	27.1	61.0	96.7
d (mm)	407.0	409.0	407.0
K/K'	0.16	0.35	0.56
x (mm)	50.88	70.72	118.62
Asm (mm2)	175.15	400.76	672.17
Asv (mm2)	203.68	281.02	213.44
As (mm2)	378.82	672.17	672.17
As' (mm2)	0.00	0.00	0.00
As-min	118.01	118.59	118.01

Bending (Bottom Edge) ...			
M (kN.m)			
d (mm)			
K/K'			
x (mm)			
Asm (mm2)			
Asv (mm2)			
As (mm2)			
As' (mm2)			
As-min	113.08	118.59	113.08

Shear and Bending Design ...			
Vd (kN)	65.2		68.3
v (N/mm2)	0.80		0.84
v-Rdc (N/mm2)	0.46	0.00	0.46
v-Rdmax (N/mm2)	4.05		4.05
V-Rd (kN)	183.8		183.8
Vnom (kN)		108.8	
Td (kN.m)		0.1	
T-min (kN.m)		2.9	
b-sup (mm)	0.0		0.0
Links	R10-300	R10-300	R10-300

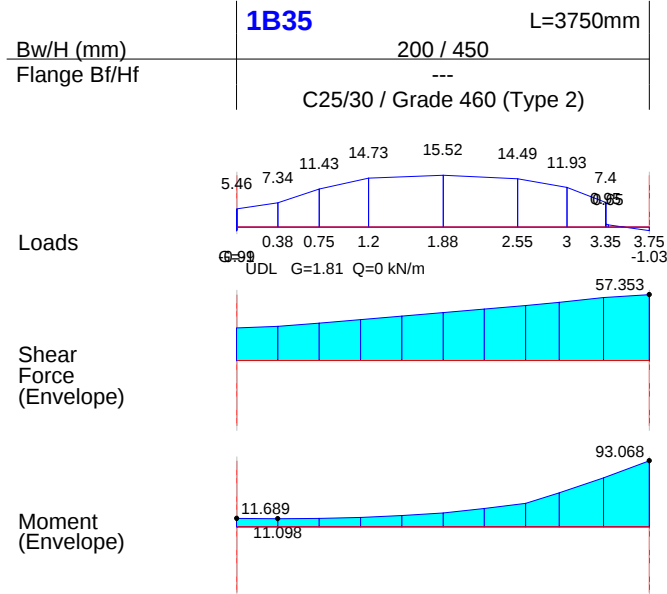
Deflection Check ...	
L/d	9.9 < 42.01 OK

Supplied Steel Areas (mm2)			
Top Edge	402.12	X 226.19	X 402.12
Bot Edge	226.19	226.19	226.19

Steel Bars ...	
Top.Sup.	2T16
Top.Sup.	2T16
Bot.Bars	2T12
Bot.Bars	
Bot.Sup.	
Side Bar	

Axis: 6 Storey: 1 (/ 2)

Etriyeler: C25/30 / Grade 460 (Type 2) (Links: Grade 250 (Plain))



Bending (Top Edge) ...

M (kN.m)	12.6	37.5	93.1
d (mm)	409.0	409.0	409.0
K/K'	0.07	0.22	0.54
x (mm)	51.13	51.13	112.84
Asm (mm ²)	81.28	241.60	639.44
Asv (mm ²)	126.82	151.74	119.87
As (mm ²)	208.11	393.34	639.44
As' (mm ²)	0.00	0.00	0.00
As-min	118.59	118.59	118.59

Bending (Bottom Edge) ...

M (kN.m)			
d (mm)			
K/K'			
x (mm)			
Asm (mm ²)			
Asv (mm ²)			
As (mm ²)			
As' (mm ²)			
As-min	113.08	118.59	113.08

Shear and Bending Design ...

Vd (kN)	40.6		38.4
v (N/mm ²)	0.50		0.47
v-Rdc (N/mm ²)	0.38	0.00	0.38
v-Rdmax (N/mm ²)	4.05		4.05
V-Rd (kN)	183.8		183.8
Vnom (kN)		66.5	
Td (kN.m)		4.4	
T-min (kN.m)		2.9	
t-RdC (N/mm ²)		1.17	
Str. Ratio		2.309	
As-T (mm ²)		282.70	
b-sup (mm)	0.0		0.0
Links	R10-300	R10-300	R10-300

Deflection Check ...

L/d	9.17 < 59.0 OK
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Supplied Steel Areas (mm²)

Top Edge	X 226.19	X 226.19	X 226.19
Bot Edge	226.19	226.19	226.19

Steel Bars ...

Top.Sup.	<u>2T12</u>	<u>2T12</u>
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Top.Sup.

Bot.Bars	<u>2T12</u>
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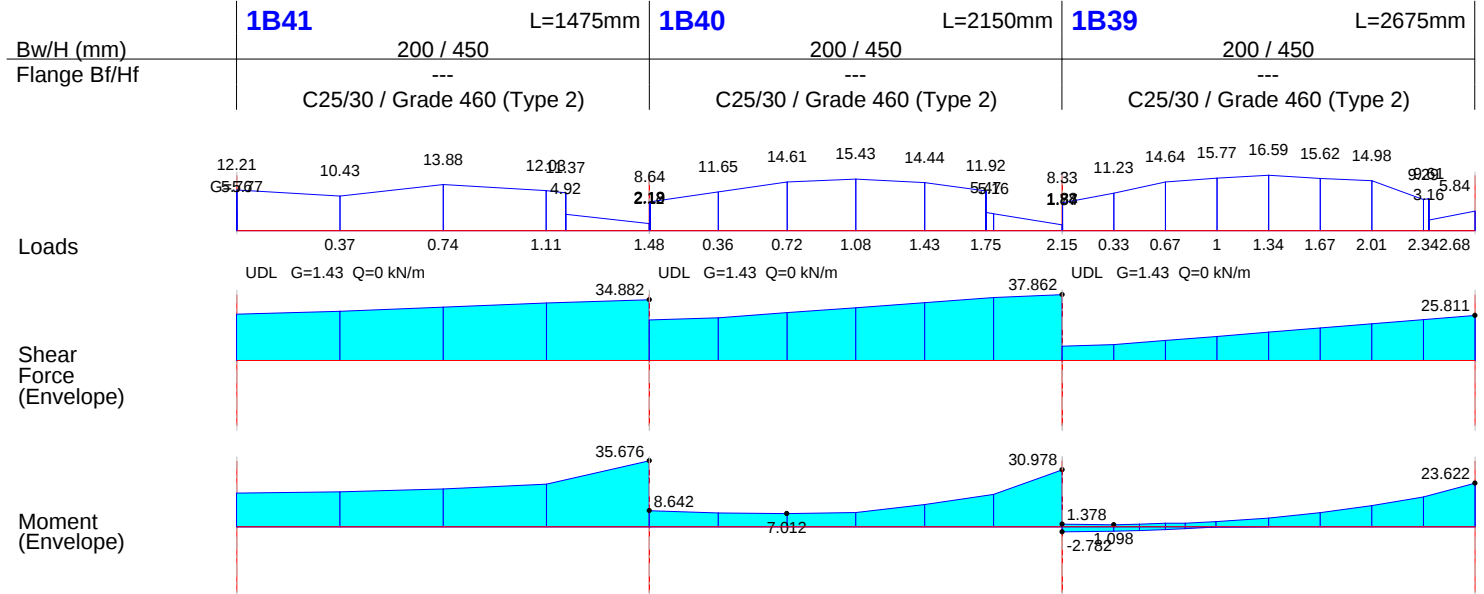
Bot.Bars

Bot.Sup.

Side Bar

Axis: 2a Storey: 1

Etriyeler: C25/30 / Grade 460 (Type 2) (Links: Grade 250 (Plain))



Bending (Top Edge) ...									
M (kN.m)	19.0	22.2	35.7	8.6	13.4	31.0	1.9	11.2	23.6
d (mm)	390.0	390.0	399.0	399.0	409.0	407.0	407.0	409.0	409.0
K/K'	0.12	0.14	0.22	0.05	0.08	0.18	0.01	0.06	0.14
x (mm)	48.75	48.75	49.88	49.88	51.13	50.88	50.88	51.13	51.13
Asm (mm ²)	128.40	149.57	235.30	57.00	85.97	200.30	12.25	72.07	151.99
Asv (mm ²)	57.11	100.78	117.21	85.05	105.87	77.40	138.04	65.14	60.99
As (mm ²)	149.57	235.30	235.30	85.97	191.83	200.30	72.07	137.21	151.99
As' (mm ²)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
As-min	0.00	113.08	115.69	115.69	118.59	118.01	118.01	118.59	118.59

Bending (Bottom Edge) ...									
M (kN.m)							2.8	1.0	
d (mm)							390.0	409.0	
K/K'							0.02	0.01	
x (mm)							48.75	51.13	
Asm (mm ²)							18.77	6.74	
Asv (mm ²)							138.04	65.14	
As (mm ²)							18.77	18.77	
As' (mm ²)							0.00	0.00	
As-min	0.00	118.59	113.08	113.08	118.59	113.08	113.08	118.59	113.08

Shear and Bending Design ...									
Vd (kN)	18.3		37.5	27.2		24.8	44.2		19.5
v (N/mm ²)	0.23		0.47	0.34		0.30	0.54		0.24
v-Rdc (N/mm ²)	0.75	0.00	0.73	0.73	0.00	0.46	0.46	0.00	0.38
v-Rdmax (N/mm ²)	4.05		4.05	4.05		4.05	4.05		4.05
V-Rd (kN)	192.8		183.8	183.8		183.8	183.8		183.8
Vnom (kN)		66.5			66.5			66.5	
Td (kN.m)		0.9			2.2			0.9	
T-min (kN.m)		2.9			2.9			2.9	
b-sup (mm)	0.0		0.0	0.0		0.0	0.0		0.0
Links			R10-300	R10-300	R10-300	R10-300	R10-300	R10-300	R10-300

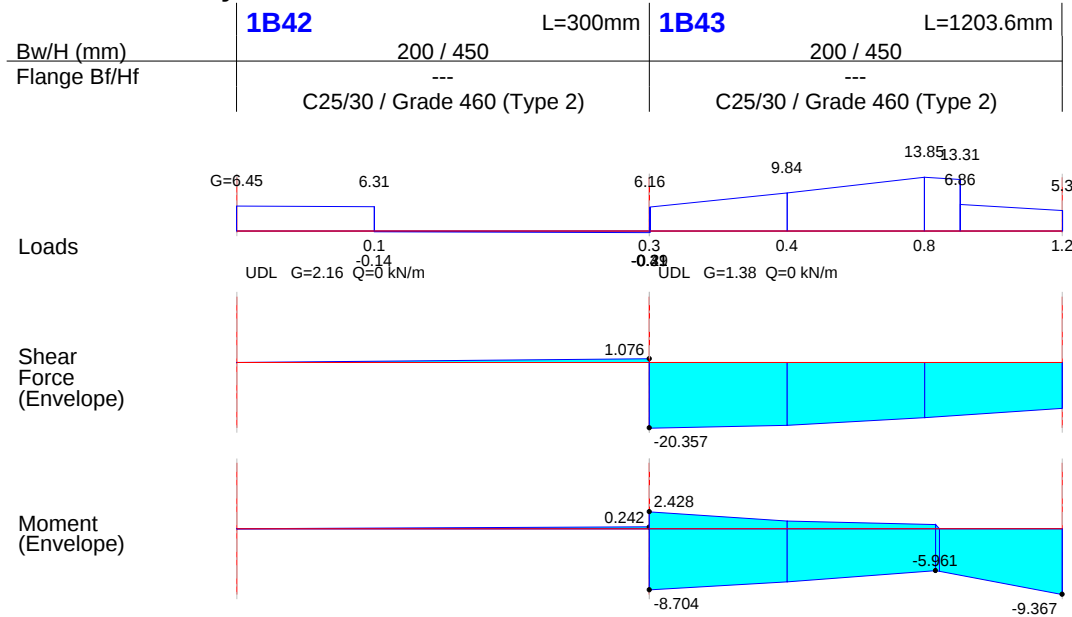
Deflection Check ...									
L/d	3.7 < 8.39 OK			5.26 < 88.5 OK			6.54 < 76.7 OK		

Supplied Steel Areas (mm ²)									
Top Edge	1963.50	1963.50	1608.49	1608.49	226.19	402.12	402.12	226.19	226.19
Bot Edge	226.19	226.19	226.19	226.19	226.19	226.19	226.19	226.19	226.19

Steel Bars ...									
Top.Sup.			2T32	2T32		2T16	2T16		2T12
Top.Sup.									
Bot.Bars			2T12	2T12				2T12	
Bot.Bars									
Bot.Sup.									
Side Bar									

Axis: E Storey: 1

Etriyeler: C25/30 / Grade 460 (Type 2) (Links: Grade 250 (Plain))



Bending (Top Edge) ...

	0.0	0.1	0.2	2.4	1.1	1.9
M (kN.m)	390.0	390.0	399.0	399.0	409.0	409.0
d (mm)	0.00	0.00	0.00	0.01	0.01	0.01
K/K'	48.75	48.75	49.88	49.88	51.13	51.13
x (mm)	0.14	0.41	1.60	16.01	6.77	12.02
Asm (mm ²)	0.31	0.84	0.73	141.33	60.69	103.12
Asv (mm ²)	0.41	1.25	1.60	16.01	16.01	12.02
As' (mm ²)	0.00	0.00	0.00	0.00	0.00	0.00
As-min	0.00	113.08	115.69	115.69	118.59	0.00

Bending (Bottom Edge) ...

				8.7	7.5	7.2
M (kN.m)				390.0	409.0	409.0
d (mm)				0.06	0.04	0.04
K/K'				48.75	51.13	51.13
x (mm)				58.73	48.07	46.30
Asm (mm ²)				141.33	60.69	103.12
Asv (mm ²)				58.73	58.73	48.07
As' (mm ²)				0.00	0.00	0.00
As-min	0.00	118.59	113.08	113.08	118.59	0.00

Shear and Bending Design ...

	0.1	0.2	45.2	33.0
Vd (kN)	0.00	0.00	0.57	0.40
v (N/mm ²)	0.75	0.00	0.58	0.38
v-Rdc (N/mm ²)	4.05	4.05	4.05	4.05
v-Rdmax (N/mm ²)	192.8	183.8	183.8	192.8
V-Rd (kN)		108.8		66.5
Vnom (kN)		0.0		2.2
Td (kN.m)		2.9		2.9
T-min (kN.m)	0.0	0.0	0.0	0.0
b-sup (mm)				
Links		R10-300		R10-300

Deflection Check ...

	0.75 < 9.6 OK	3.02 < 9.6 OK
L/d		

Supplied Steel Areas (mm²)

	1963.50	1963.50	804.25	804.25	X 0.00	X 0.00
Top Edge	226.19	226.19	226.19	226.19	226.19	226.19
Bot Edge						

Steel Bars ...

Top.Sup. 1T32 1T32

Top.Sup.

Bot.Bars 2T12 2T12

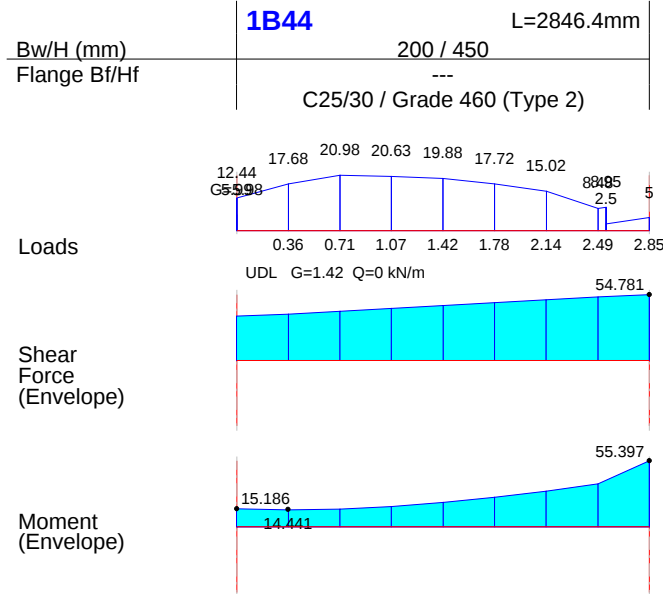
Bot.Bars

Bot.Sup.

Side Bar

Axis: E Storey: 1 (/ 2)

Etriyeler: C25/30 / Grade 460 (Type 2) (Links: Grade 250 (Plain))



Bending (Top Edge) ...

M (kN.m)	15.2	28.2	55.4
d (mm)	409.0	409.0	407.0
K/K'	0.09	0.16	0.32
x (mm)	51.13	51.13	64.09
Asm (mm ²)	97.71	181.34	363.15
Asv (mm ²)	104.68	155.38	172.66
As (mm ²)	181.34	336.72	363.15
As' (mm ²)	0.00	0.00	0.00
As-min	118.59	118.59	118.01

Bending (Bottom Edge) ...

M (kN.m)			
d (mm)			
K/K'			
x (mm)			
Asm (mm ²)			
Asv (mm ²)			
As (mm ²)			
As' (mm ²)			
As-min	113.08	118.59	113.08

Shear and Bending Design ...

Vd (kN)	33.5		55.2
v (N/mm ²)	0.41		0.68
v-Rdc (N/mm ²)	0.38	0.00	0.46
v-Rdmax (N/mm ²)	4.05		4.05
V-Rd (kN)	183.8		183.8
Vnom (kN)		66.5	
Td (kN.m)		4.1	
T-min (kN.m)		2.9	
t-RdC (N/mm ²)		1.17	
Str. Ratio		2.186	
As-T (mm ²)		260.24	
b-sup (mm)	0.0		0.0
Links	R10-300	R10-300	R10-300

Deflection Check ...

L/d	6.96 < 53.21 OK
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Supplied Steel Areas (mm²)

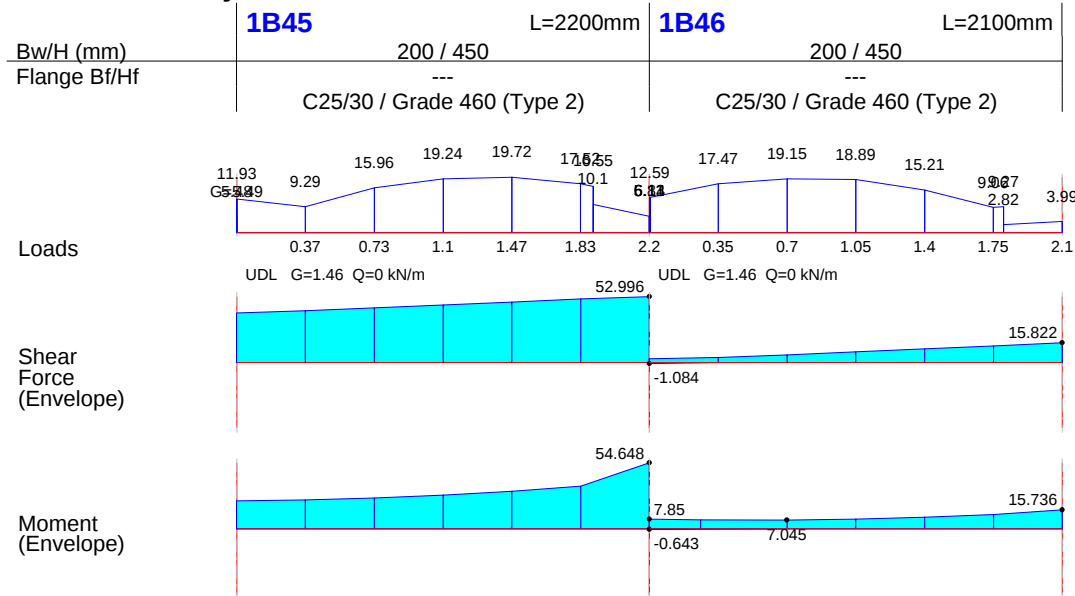
Top Edge	X 226.19	X 226.19	X 402.12
Bot Edge	226.19	226.19	226.19

Steel Bars ...

Top.Sup.	<u>2T12</u>	<u>2T16</u>
Top.Sup.		
Bot.Bars	<u>2T12</u>	
Bot.Bars		
Bot.Sup.		
Side Bar		

Axis: C Storey: 1

Etriyeler: C25/30 / Grade 460 (Type 2) (Links: Grade 250 (Plain))



Bending (Top Edge) ...						
M (kN.m)	24.7	31.9	54.6	7.9	10.5	15.7
d (mm)	407.0	407.0	407.0	407.0	409.0	409.0
K/K'	0.14	0.19	0.32	0.05	0.06	0.09
x (mm)	50.88	50.88	63.16	50.88	51.13	51.13
Asm (mm ²)	159.94	206.12	357.89	50.76	67.54	101.25
Asv (mm ²)	35.93	153.42	174.02	151.30	36.68	34.10
As (mm ²)	195.87	357.89	357.89	67.54	101.25	101.25
As' (mm ²)	0.00	0.00	0.00	0.00	0.00	0.00
As-min	118.01	118.01	118.01	118.01	118.59	118.59

Bending (Bottom Edge) ...						
M (kN.m)				0.6		
d (mm)				390.0		
K/K'				0.00		
x (mm)				48.75		
Asm (mm ²)				4.34		
Asv (mm ²)				151.30		
As (mm ²)				4.34		
As' (mm ²)				0.00		
As-min	113.08	118.59	113.08	113.08	118.59	113.08

Shear and Bending Design ...						
Vd (kN)	12.3		55.7	48.4		10.9
v (N/mm ²)	0.15		0.68	0.59		0.13
v-Rdc (N/mm ²)	0.46	0.00	0.46	0.46	0.00	0.38
v-Rdmax (N/mm ²)	4.05		4.05	4.05		4.05
V-Rd (kN)	183.8		183.8	183.8		183.8
Vnom (kN)		66.5			66.5	
Td (kN.m)		1.1			1.2	
T-min (kN.m)		2.9			2.9	
b-sup (mm)						
Links	R10-300	R10-300	R10-300	R10-300	R10-300	R10-300

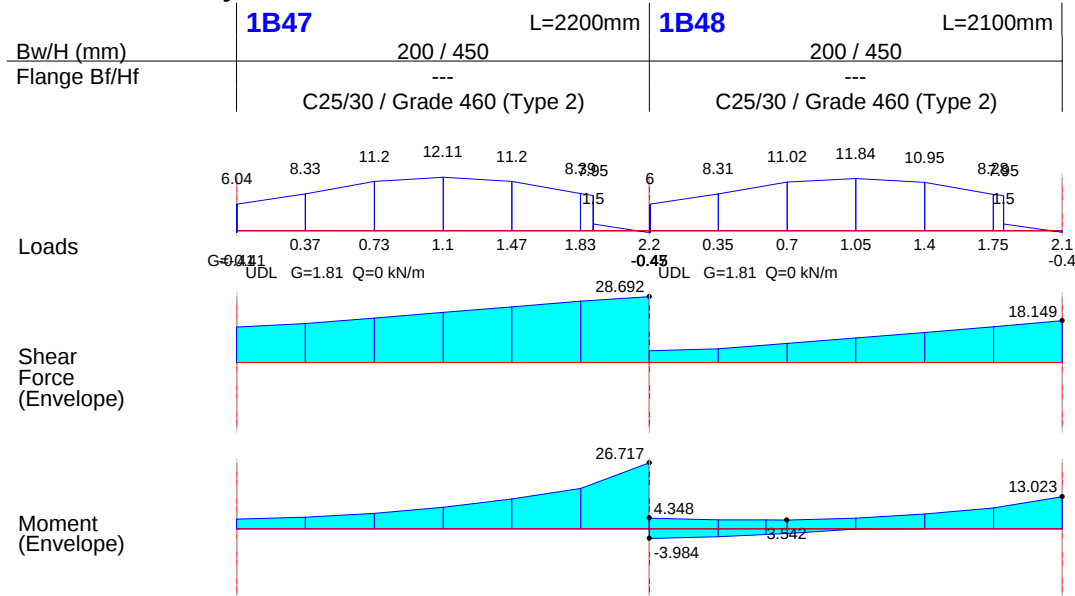
Deflection Check ...						
L/d	5.38 < 76.7 OK			5.13 < 76.7 OK		

Supplied Steel Areas (mm²)						
Top Edge	402.12	402.12	402.12	402.12	226.19	226.19
Bot Edge	226.19	226.19	226.19	226.19	226.19	226.19

Steel Bars ...		
Top.Sup.	<u>2T16</u>	<u>2T16</u> <u>2T12</u>
Top.Sup.		
Bot.Bars	<u>2T12</u>	<u>2T12</u>
Bot.Bars		
Bot.Sup.		
Side Bar		

Axis: A Storey: 1

Etriyeler: C25/30 / Grade 460 (Type 2) (Links: Grade 250 (Plain))



Bending (Top Edge) ...

M (kN.m)	5.5	12.8	26.7	4.3	7.0	13.0
d (mm)	409.0	409.0	409.0	409.0	409.0	409.0
K/K'	0.03	0.07	0.15	0.03	0.04	0.08
x (mm)	51.13	51.13	51.13	51.13	51.13	51.13
Asm (mm ²)	35.52	82.58	171.90	27.97	44.99	83.79
Asv (mm ²)	32.67	76.89	71.37	70.82	33.50	35.74
As (mm ²)	68.18	159.47	171.90	44.99	78.49	83.79
As' (mm ²)	0.00	0.00	0.00	0.00	0.00	0.00
As-min	118.59	118.59	118.59	118.59	118.59	118.59

Bending (Bottom Edge) ...

M (kN.m)				4.0	2.2	
d (mm)				390.0	409.0	
K/K'				0.03	0.01	
x (mm)				48.75	51.13	
Asm (mm ²)				26.88	14.09	
Asv (mm ²)				70.82	33.50	
As (mm ²)				26.88	26.88	
As' (mm ²)				0.00	0.00	
As-min	113.08	118.59	113.08	113.08	118.59	113.08

Shear and Bending Design ...

Vd (kN)	14.5		22.8	22.7		12.7
v (N/mm ²)	0.18		0.28	0.28		0.15
v-Rdc (N/mm ²)	0.38	0.00	0.38	0.38	0.00	0.38
v-Rdmax (N/mm ²)	4.05		4.05	4.05		4.05
V-Rd (kN)	183.8		183.8	183.8		183.8
Vnom (kN)		66.5			108.8	
Td (kN.m)		2.1			0.1	
T-min (kN.m)		2.9			2.9	
b-sup (mm)						
Links	R10-300	R10-300	R10-300	R10-300	R10-300	R10-300

Deflection Check ...

L/d	5.38 < 76.7 OK		5.13 < 76.7 OK	
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Supplied Steel Areas (mm²)

Top Edge	226.19	226.19	226.19	226.19	226.19	226.19
Bot Edge	226.19	226.19	226.19	226.19	226.19	226.19

Steel Bars ...

Top.Sup.	2T12	2T12	2T12	2T12
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Top.Sup.

Bot.Bars	2T12	2T12
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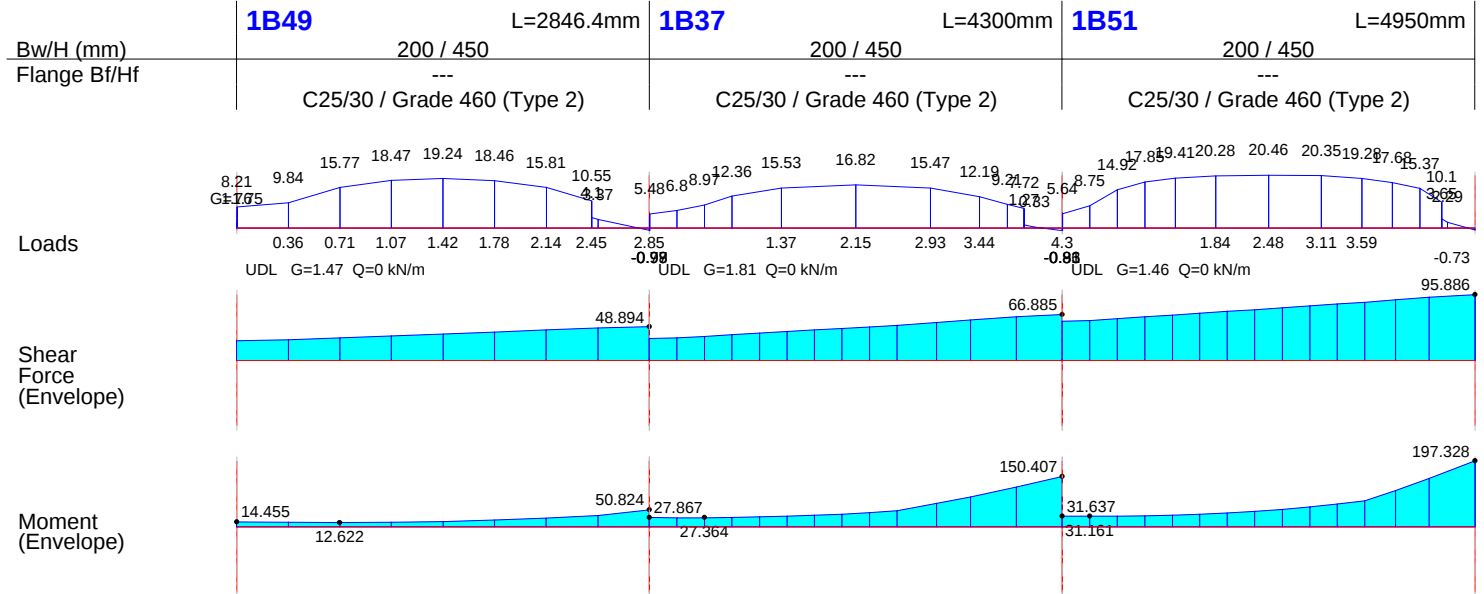
Bot.Bars

Bot.Sup.

Side Bar

Axis: H Storey: 1

Etriyeler: C25/30 / Grade 460 (Type 2) (Links: Grade 250 (Plain))



Bending (Top Edge) ...

M (kN.m)	14.5	24.3	50.8	29.5	77.2	150.4	34.7	76.7	197.3
d (mm)	409.0	409.0	407.0	407.0	409.0	405.0	405.0	409.0	405.0
K/K'	0.08	0.14	0.30	0.17	0.45	0.89	0.20	0.44	1.16
x (mm)	51.13	51.13	58.45	50.88	91.43	205.58	50.63	90.82	243.00
Asm (mm ²)	93.01	156.27	331.21	191.01	518.11	1164.98	225.17	514.66	1578.39
Asv (mm ²)	118.67	135.78	124.58	146.88	177.08	155.74	240.60	264.38	231.76
As (mm ²)	156.27	292.05	331.21	337.89	695.20	1164.98	465.77	779.03	1578.39
As' (mm ²)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	201.39
As-min	118.59	118.59	118.01	118.01	118.59	117.43	117.43	118.59	117.43

Bending (Bottom Edge) ...

M (kN.m)									
d (mm)									
K/K'									
x (mm)									
Asm (mm ²)									
Asv (mm ²)									
As (mm ²)									
As' (mm ²)									
As-min	113.08	118.59	113.08	113.08	118.59	113.08	113.08	118.01	113.08

Shear and Bending Design ...

Vd (kN)	38.0		39.9	47.0		49.8	77.0		74.2
v (N/mm ²)	0.46		0.49	0.58		0.62	0.95		0.92
v-Rdc (N/mm ²)	0.38	0.00	0.46	0.46	0.00	0.53	0.53	0.00	0.53
v-Rdmax (N/mm ²)	4.05		4.05	4.05		4.05	4.05		4.05
V-Rd (kN)	183.8		183.8	183.8		183.8	183.8		183.8
Vnom (kN)		108.8			66.5			108.8	
Td (kN.m)		0.3			2.8			0.6	
T-min (kN.m)		2.9			2.9			2.9	
b-sup (mm)	0.0		0.0	0.0		0.0	0.0		0.0
Links	R10-300	R10-300	R10-300	R10-300	R10-300	R10-300	R10-300	R10-300	R10-300

Deflection Check ...

L/d	6.96 < 76.7 OK			10.51 < 88.5 OK			12.16 < 38.6 OK		
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Supplied Steel Areas (mm²)

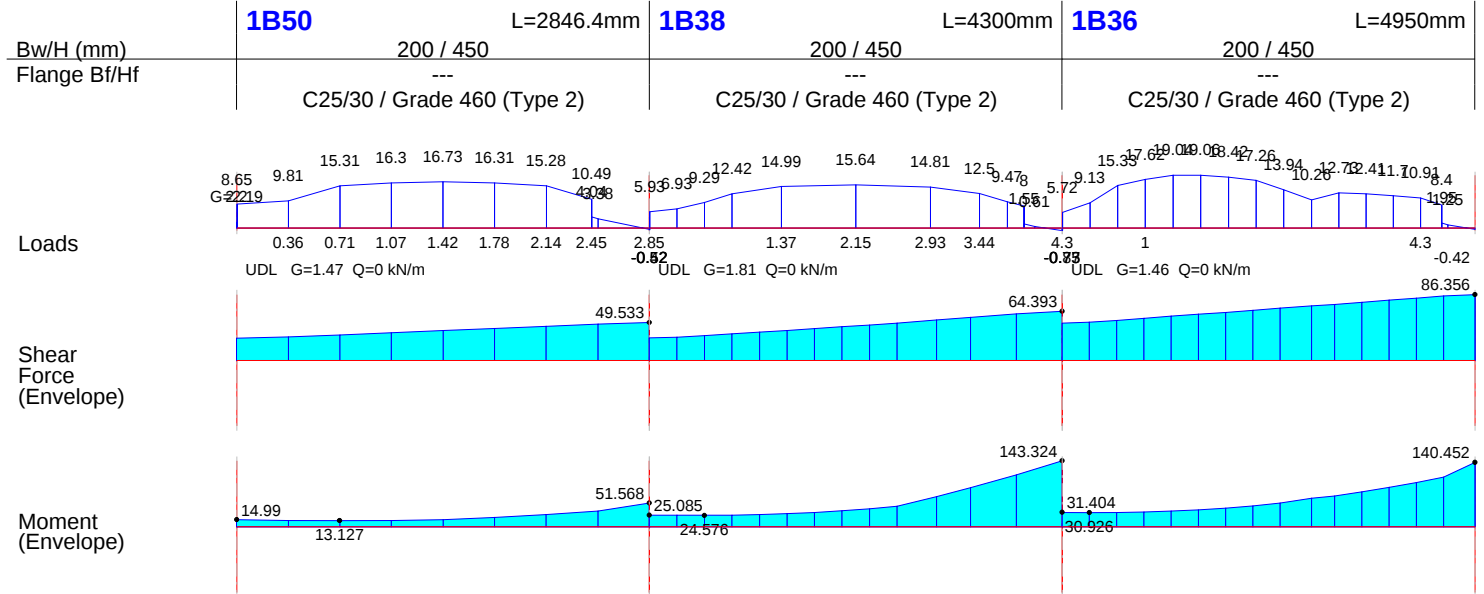
Top Edge	226.19	X 226.19	402.12	402.12	X 226.19	X 628.32	628.32	X 226.19	X 628.32
Bot Edge	226.19	226.19	226.19	226.19	226.19	226.19	402.12	402.12	402.12

Steel Bars ...

Top.Sup.	2T12	2T16	2T16	2T20	2T20	2T20
Top.Sup.						
Bot.Bars	2T12	2T12	2T16			
Bot.Bars						
Bot.Sup.						
Side Bar						

Axis: F Storey: 1

Etriyeler: C25/30 / Grade 460 (Type 2) (Links: Grade 250 (Plain))



Bending (Top Edge) ...

M (kN.m)	15.0	24.8	51.6	26.7	73.0	143.3	34.4	76.5	140.5
d (mm)	409.0	409.0	407.0	407.0	409.0	405.0	405.0	409.0	405.0
K/K'	0.09	0.14	0.30	0.16	0.42	0.85	0.20	0.44	0.83
x (mm)	51.13	51.13	59.36	50.88	86.01	192.86	50.63	90.52	187.85
Asm (mm ²)	96.45	159.48	336.38	172.95	487.39	1092.89	223.66	512.93	1064.48
Asv (mm ²)	108.65	137.77	117.87	143.95	169.29	151.23	233.06	239.33	204.24
As (mm ²)	159.48	297.24	336.38	316.90	656.69	1092.90	456.72	752.25	1064.48
As' (mm ²)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
As-min	118.59	118.59	118.01	118.01	118.59	117.43	117.43	118.59	117.43

Bending (Bottom Edge) ...

M (kN.m)									
d (mm)									
K/K'									
x (mm)									
Asm (mm ²)									
Asv (mm ²)									
As (mm ²)									
As' (mm ²)									
As-min	113.08	118.59	113.08	113.08	118.59	113.08	113.08	118.01	113.08

Shear and Bending Design ...

Vd (kN)	34.8		37.7	46.1		48.4	74.6		65.4
v (N/mm ²)	0.43		0.46	0.57		0.60	0.92		0.81
v-Rdc (N/mm ²)	0.38	0.00	0.46	0.46	0.00	0.53	0.53	0.00	0.53
v-Rdmax (N/mm ²)	4.05		4.05	4.05		4.05	4.05		4.05
V-Rd (kN)	183.8		183.8	183.8		183.8	183.8		183.8
Vnom (kN)		108.8			66.5			66.5	
Td (kN.m)		0.2			2.1			2.4	
T-min (kN.m)		2.9			2.9			2.9	
b-sup (mm)									
Links	R10-300	R10-300	R10-300	R10-300	R10-300	R10-300	R10-300	R10-300	R10-300

Deflection Check ...

L/d	6.96 < 76.7 OK			10.51 < 88.5 OK			12.16 < 39.45 OK		
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Supplied Steel Areas (mm²)

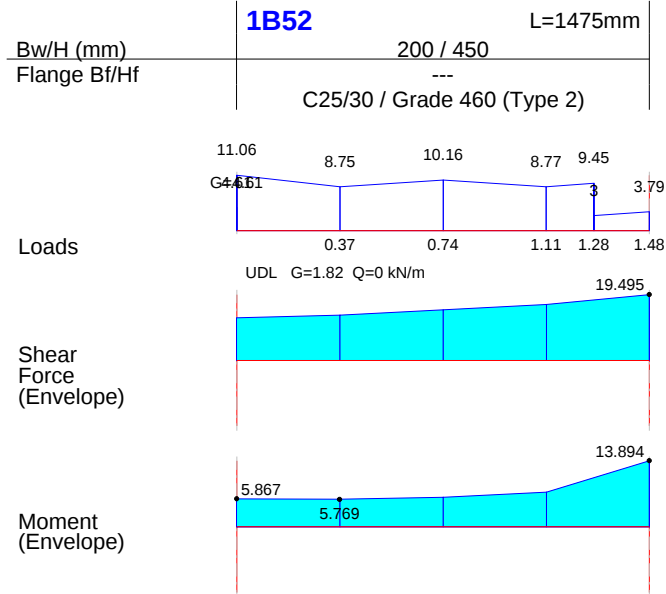
Top Edge	226.19	X 226.19	402.12	402.12	X 226.19	X 628.32	628.32	X 226.19	X 628.32
Bot Edge	226.19	226.19	226.19	226.19	226.19	226.19	402.12	402.12	402.12

Steel Bars ...

Top.Sup.	2T12	2T16	2T16	2T20	2T20	2T20
Top.Sup.						
Bot.Bars	2T12	2T12	2T16			
Bot.Bars						
Bot.Sup.						
Side Bar						

Axis: 6a Storey: 1

Etriyeler: C25/30 / Grade 460 (Type 2) (Links: Grade 250 (Plain))



Bending (Top Edge) ...

M (kN.m)	5.9	7.1	13.9
d (mm)	409.0	409.0	409.0
K/K'	0.03	0.04	0.08
x (mm)	51.13	51.13	51.13
Asm (mm ²)	37.75	45.85	89.39
Asv (mm ²)	35.36	27.38	13.63
As (mm ²)	45.85	73.23	89.39
As' (mm ²)	0.00	0.00	0.00
As-min	118.59	118.59	118.59

Bending (Bottom Edge) ...

M (kN.m)			
d (mm)			
K/K'			
x (mm)			
Asm (mm ²)			
Asv (mm ²)			
As (mm ²)			
As' (mm ²)			
As-min	113.08	118.59	113.08

Shear and Bending Design ...

Vd (kN)	11.3		4.4
v (N/mm ²)	0.14		0.05
v-Rdc (N/mm ²)	0.38	0.00	0.38
v-Rdmax (N/mm ²)	4.05		4.05
V-Rd (kN)	183.8		183.8
Vnom (kN)		66.5	
Td (kN.m)		2.0	
T-min (kN.m)		2.9	
b-sup (mm)	0.0		0.0
Links	R10-300	R10-300	R10-300

Deflection Check ...

L/d	3.61 < 59.0 OK
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Supplied Steel Areas (mm²)

Top Edge	226.19	226.19	226.19
Bot Edge	226.19	226.19	226.19

Steel Bars ...

Top.Sup.	2T12	2T12
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Top.Sup.

Bot.Bars	2T12
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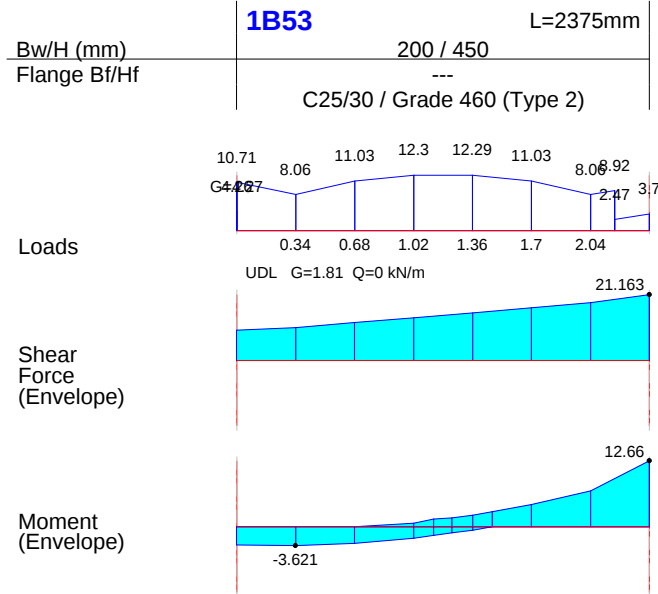
Bot.Bars

Bot.Sup.

Side Bar

Axis: 6a Storey: 1 (/ 2)

Etriyeler: C25/30 / Grade 460 (Type 2) (Links: Grade 250 (Plain))



Bending (Top Edge) ...

M (kN.m)	0.8	4.5	12.7
d (mm)	409.0	409.0	409.0
K/K'	0.00	0.03	0.07
x (mm)	51.13	51.13	51.13
Asm (mm ²)	5.20	29.27	81.45
Asv (mm ²)	65.96	53.45	65.11
As (mm ²)	29.27	81.45	81.45
As' (mm ²)	0.00	0.00	0.00
As-min	118.59	118.59	118.59

Bending (Bottom Edge) ...

M (kN.m)	3.6	3.2	
d (mm)	390.0	409.0	
K/K'	0.02	0.02	
x (mm)	48.75	51.13	
Asm (mm ²)	24.43	20.81	
Asv (mm ²)	65.96	53.45	
As (mm ²)	24.43	24.43	
As' (mm ²)	0.00	0.00	
As-min	113.08	118.59	113.08

Shear and Bending Design ...

Vd (kN)	21.1		20.8
v (N/mm ²)	0.26		0.25
v-Rdc (N/mm ²)	0.38	0.00	0.38
v-Rdmax (N/mm ²)	4.05		4.05
V-Rd (kN)	183.8		183.8
Vnom (kN)		66.5	
Td (kN.m)		1.4	
T-min (kN.m)		2.9	
b-sup (mm)	0.0		0.0
Links	R10-300	R10-300	R10-300

Deflection Check ...

L/d	5.81 < 59.0 OK
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Supplied Steel Areas (mm²)

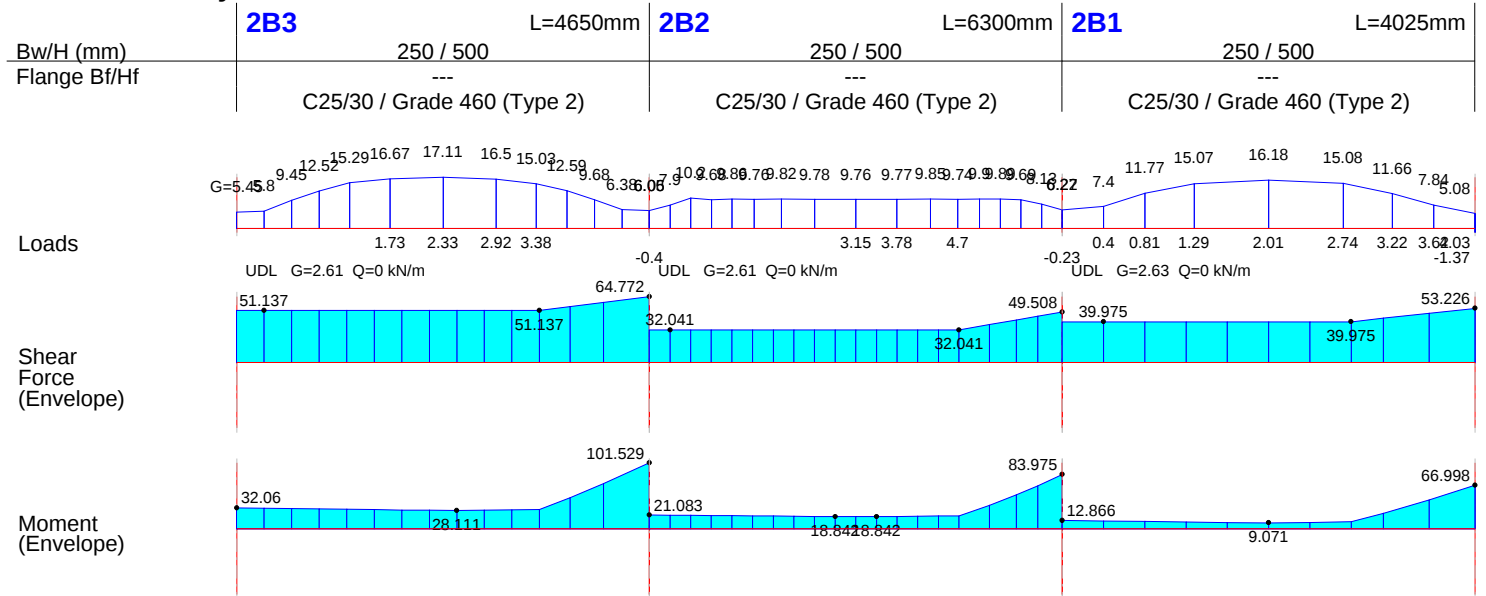
Top Edge	226.19	226.19	226.19
Bot Edge	226.19	226.19	226.19

Steel Bars ...

Top.Sup.	2T12	2T12
Top.Sup.		
Bot.Bars	2T12	
Bot.Bars		
Bot.Sup.		
Side Bar		

Axis: 2 Storey: 2

Etriyeler: C25/30 / Grade 460 (Type 2) (Links: Grade 250 (Plain))



Bending (Top Edge) ...

M (kN.m)	32.1	29.9	101.5	21.1	19.7	84.0	12.9	14.9	67.0
d (mm)	457.0	457.0	457.0	457.0	457.0	457.0	457.0	457.0	457.0
K/K'	0.12	0.11	0.38	0.08	0.07	0.31	0.05	0.06	0.25
x (mm)	57.13	57.13	84.69	57.13	57.13	69.02	57.13	57.13	57.13
Asm (mm ²)	184.62	172.44	599.88	121.41	113.41	488.92	74.09	86.09	385.80
Asv (mm ²)	176.32	159.82	182.93	176.11	100.14	168.74	152.01	128.40	145.08
As (mm ²)	184.62	332.26	599.88	121.41	213.55	488.92	86.09	214.49	385.80
As' (mm ²)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
As-min	165.64	165.64	165.64	165.64	165.64	165.64	165.64	165.64	165.64

Bending (Bottom Edge) ...

M (kN.m)									
d (mm)									
K/K'									
x (mm)									
Asm (mm ²)									
Asv (mm ²)									
As (mm ²)									
As' (mm ²)									
As-min	159.47	165.64	159.47	159.47	165.64	159.47	159.47	165.64	159.47

Shear and Bending Design ...

Vd (kN)	56.4		58.5	56.4		54.0	48.6		46.4
v (N/mm ²)	0.49		0.51	0.49		0.47	0.43		0.41
v-Rdc (N/mm ²)	0.46	0.00	0.46	0.46	0.00	0.46	0.46	0.00	0.46
v-Rdmax (N/mm ²)	4.05		4.05	4.05		4.05	4.05		4.05
V-Rd (kN)	207.4		207.4	207.4		207.4	207.4		207.4
Vnom (kN)		92.9			121.7			92.9	
Td (kN.m)		9.8			0.7			7.5	
T-min (kN.m)		4.9			4.9			4.9	
t-RdC (N/mm ²)		1.17						1.17	
Str. Ratio		1.910						1.525	
As-T (mm ²)		516.20						393.08	
b-sup (mm)	0.0		0.0	0.0		0.0	0.0		0.0
Links	R10-300	R10-300	R10-300	R10-300	R10-300	R10-300	R10-300	R10-300	R10-300

Deflection Check ...

L/d	10.18 < 38.37 OK	13.79 < 44.27 OK	8.81 < 38.37 OK
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Supplied Steel Areas (mm²)

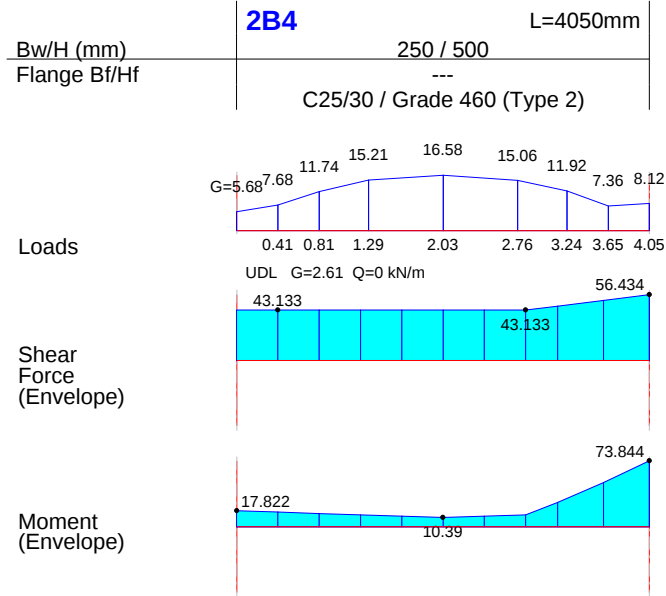
Top Edge	603.19	603.19	X 603.19	603.19	603.19	603.19	603.19	603.19	603.19
Bot Edge	603.19	603.19	603.19	603.19	603.19	603.19	603.19	603.19	603.19

Steel Bars ...

Top.Sup.	<u>3T16</u>	<u>3T16</u>	<u>3T16</u>	<u>3T16</u>	<u>3T16</u>	<u>3T16</u>
Top.Sup.						
Bot.Bars	<u>3T16</u>	<u>3T16</u>	<u>3T16</u>	<u>3T16</u>	<u>3T16</u>	<u>3T16</u>
Bot.Bars						
Bot.Sup.						
Side Bar						

Axis: B Storey: 2

Etriyeler: C25/30 / Grade 460 (Type 2) (Links: Grade 250 (Plain))



Bending (Top Edge) ...

M (kN.m)	17.8	18.0	73.8
d (mm)	457.0	457.0	457.0
K/K'	0.07	0.07	0.27
x (mm)	57.13	57.13	60.20
Asm (mm ²)	102.63	103.39	426.43
Asv (mm ²)	165.59	138.30	148.60
As (mm ²)	103.39	241.70	426.43
As' (mm ²)	0.00	0.00	0.00
As-min	165.64	165.64	165.64

Bending (Bottom Edge) ...

M (kN.m)			
d (mm)			
K/K'			
x (mm)			
Asm (mm ²)			
Asv (mm ²)			
As (mm ²)			
As' (mm ²)			
As-min	159.47	165.64	159.47

Shear and Bending Design ...

Vd (kN)	53.0		47.5
v (N/mm ²)	0.46		0.42
v-Rdc (N/mm ²)	0.46	0.00	0.46
v-Rdmax (N/mm ²)	4.05		4.05
V-Rd (kN)	207.4		207.4
Vnom (kN)		92.9	
Td (kN.m)		9.7	
T-min (kN.m)		4.9	
t-RdC (N/mm ²)		1.17	
Str. Ratio		1.746	
As-T (mm ²)		507.76	
b-sup (mm)	0.0		0.0
Links	R10-300	R10-300	R10-300

Deflection Check ...

L/d	8.86 < 29.52 OK
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Supplied Steel Areas (mm²)

Top Edge	603.19	603.19	603.19
Bot Edge	603.19	603.19	603.19

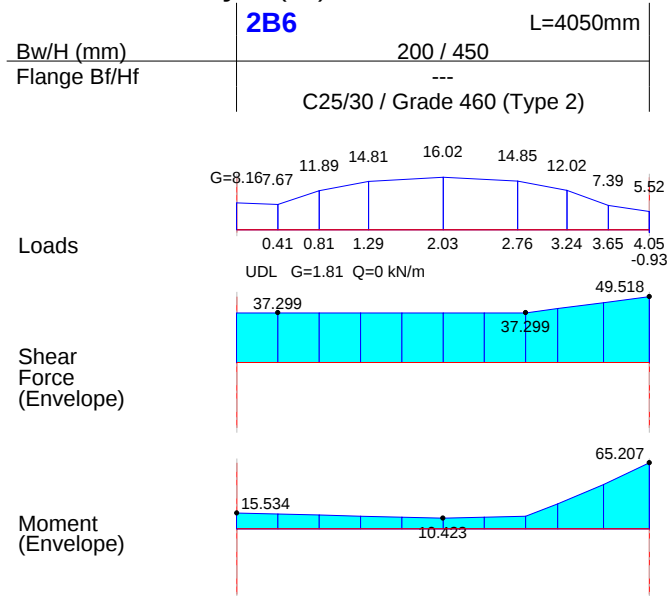
Steel Bars ...

Top.Sup.	<u>3T16</u>	<u>3T16</u>
Top.Sup.		
Bot.Bars	<u>3T16</u>	
Bot.Bars		
Bot.Sup.	<u>3T16</u>	<u>3T16</u>
Bot.Sup.		

Side Bar

Axis: B Storey: 2 (/ 2)

Etriyeler: C25/30 / Grade 460 (Type 2) (Links: Grade 250 (Plain))



Bending (Top Edge) ...

M (kN.m)	15.5	16.5	65.2
d (mm)	407.0	409.0	407.0
K/K'	0.09	0.10	0.38
x (mm)	50.88	51.13	76.42
Asm (mm ²)	100.44	105.85	433.06
Asv (mm ²)	146.17	119.79	145.22
As (mm ²)	105.85	225.64	433.06
As' (mm ²)	0.00	0.00	0.00
As-min	118.01	118.59	118.01

Bending (Bottom Edge) ...

M (kN.m)			
d (mm)			
K/K'			
x (mm)			
Asm (mm ²)			
Asv (mm ²)			
As (mm ²)			
As' (mm ²)			
As-min	113.08	118.59	113.08

Shear and Bending Design ...

Vd (kN)	46.8		46.5
v (N/mm ²)	0.57		0.57
v-Rdc (N/mm ²)	0.46	0.00	0.46
v-Rdmax (N/mm ²)	4.05		4.05
V-Rd (kN)	183.8		183.8
Vnom (kN)		66.5	
Td (kN.m)		4.9	
T-min (kN.m)		2.9	
t-RdC (N/mm ²)		1.17	
Str. Ratio		2.126	
As-T (mm ²)		312.71	
b-sup (mm)	0.0		0.0
Links	R10-300	R10-300	R10-300

Deflection Check ...

L/d	9.9 < 59.0 OK
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Supplied Steel Areas (mm²)

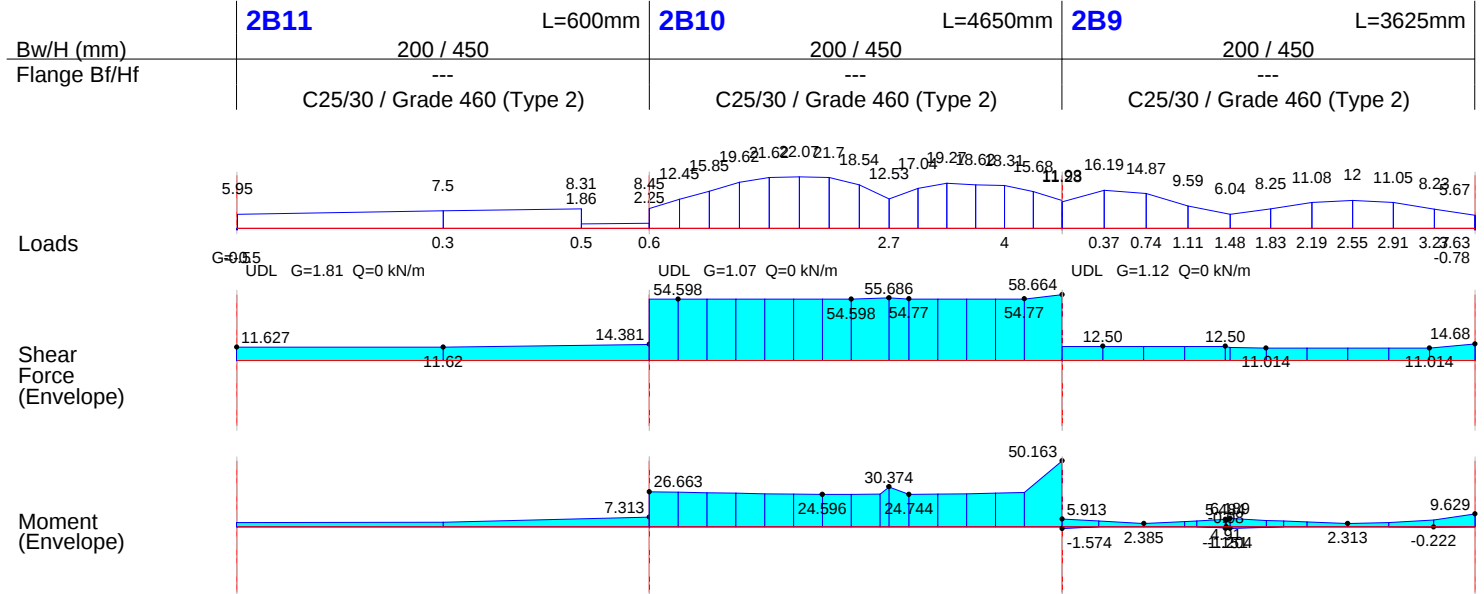
Top Edge	402.12	X 226.19	X 402.12
Bot Edge	226.19	226.19	226.19

Steel Bars ...

Top.Sup.	<u>2T16</u>	<u>2T16</u>
Top.Sup.		
Bot.Bars	<u>2T12</u>	
Bot.Bars		
Bot.Sup.		
Side Bar		

Axis: 3 Storey: 2

Etriyeler: C25/30 / Grade 460 (Type 2) (Links: Grade 250 (Plain))



Bending (Top Edge) ...

M (kN.m)	3.2	3.7	7.3	26.7	30.4	50.2	5.9	6.2	9.6
d (mm)	407.0	407.0	407.0	407.0	407.0	407.0	407.0	407.0	407.0
K/K'	0.02	0.02	0.04	0.16	0.18	0.29	0.03	0.04	0.06
x (mm)	50.88	50.88	50.88	50.88	50.88	57.64	50.88	50.88	50.88
Asm (mm ²)	20.98	24.17	47.29	172.40	196.39	326.63	38.23	40.02	62.26
Asv (mm ²)	32.60	36.53	30.56	242.28	174.03	244.48	75.42	35.70	28.26
As (mm ²)	24.17	47.29	47.29	196.39	326.63	326.63	40.02	62.26	62.26
As' (mm ²)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
As-min	0.00	118.01	118.01	118.01	118.01	118.01	118.01	118.01	118.01

Bending (Bottom Edge) ...

M (kN.m)							1.6	1.2	0.0
d (mm)							390.0	407.0	390.0
K/K'							0.01	0.01	0.00
x (mm)							48.75	50.88	48.75
Asm (mm ²)							10.62	7.78	0.28
Asv (mm ²)							75.42	35.70	23.84
As (mm ²)							10.62	10.62	7.78
As' (mm ²)							0.00	0.00	0.00
As-min	0.00	118.01	113.08	113.08	118.01	113.08	113.08	118.01	113.08

Shear and Bending Design ...

Vd (kN)	14.4		15.3	77.5		78.2	24.1		16.1
v (N/mm ²)	0.18		0.19	0.95		0.96	0.30		0.20
v-Rdc (N/mm ²)	0.53	0.00	0.53	0.53	0.00	0.53	0.53	0.00	0.53
v-Rdmax (N/mm ²)	4.05		4.05	4.05		4.05	4.05		4.05
V-Rd (kN)	191.8		183.8	183.8		183.8	183.8		183.8
Vnom (kN)		66.5			66.5			66.5	
Td (kN.m)		2.8			1.4			1.7	
T-min (kN.m)		2.9			2.9			2.9	
b-sup (mm)	0.0		0.0	0.0		0.0	0.0		0.0
Links			R10-300	R10-300	R10-300	R10-300	R10-300	R10-300	R10-300

Deflection Check ...

L/d	1.47 < 10.47 OK			11.43 < 39.28 OK			8.91 < 39.28 OK		
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Supplied Steel Areas (mm²)

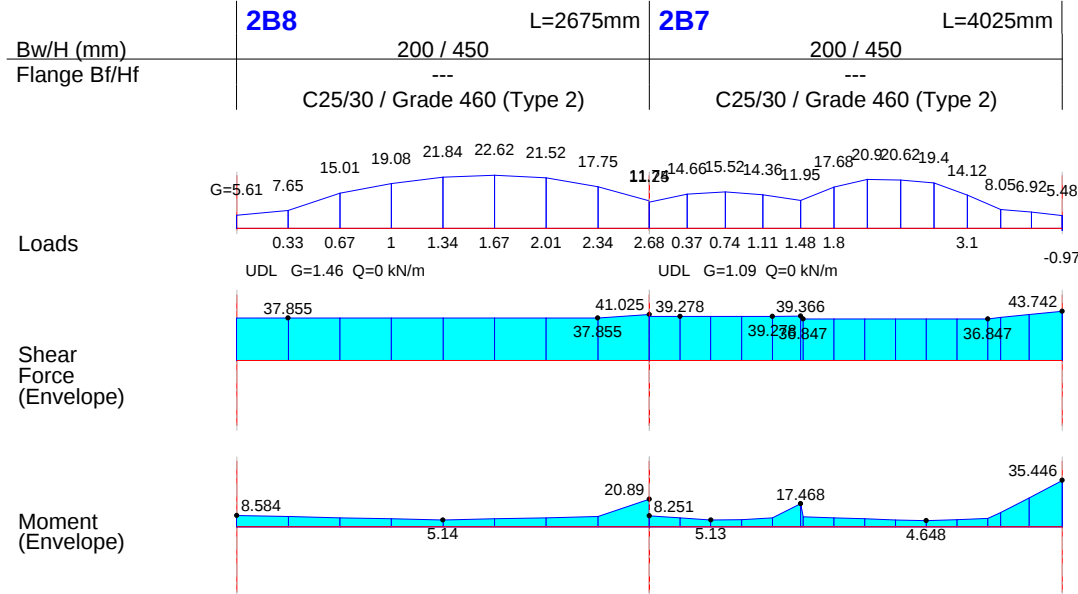
Top Edge	603.19	603.19	603.19	603.19	603.19	603.19	603.19	603.19	603.19
Bot Edge	603.19	603.19	603.19	603.19	603.19	603.19	603.19	603.19	603.19

Steel Bars ...

Top.Sup.		<u>3T16</u>	<u>3T16</u>		<u>3T16</u>	<u>3T16</u>		<u>3T16</u>	
Top.Sup.									
Bot.Bars		<u>3T16</u>	<u>3T16</u>		<u>3T16</u>	<u>3T16</u>		<u>3T16</u>	
Bot.Bars									
Bot.Sup.									
Side Bar									

Axis: 3 Storey: 2 ...

Etriyeler: C25/30 / Grade 460 (Type 2) (Links: Grade 250 (Plain))



Bending (Top Edge) ...

M (kN.m)	8.6	6.6	20.9	8.3	17.5	35.4
d (mm)	407.0	407.0	407.0	407.0	407.0	407.0
K/K'	0.05	0.04	0.12	0.05	0.10	0.21
x (mm)	50.88	50.88	50.88	50.88	50.88	50.88
Asm (mm ²)	55.50	42.59	135.07	53.35	112.94	229.19
Asv (mm ²)	119.58	118.30	153.10	89.21	123.03	120.96
As (mm ²)	55.50	135.07	135.07	112.94	229.19	229.19
As' (mm ²)	0.00	0.00	0.00	0.00	0.00	0.00
As-min	118.01	118.01	118.01	118.01	118.01	118.01

Bending (Bottom Edge) ...

M (kN.m)						
d (mm)						
K/K'						
x (mm)						
Asm (mm ²)						
Asv (mm ²)						
As (mm ²)						
As' (mm ²)						
As-min	113.08	118.01	113.08	113.08	118.01	113.08

Shear and Bending Design ...

Vd (kN)	38.3		49.0	28.5		38.7
v (N/mm ²)	0.47		0.60	0.35		0.48
v-Rdc (N/mm ²)	0.53	0.00	0.53	0.53	0.00	0.53
v-Rdmax (N/mm ²)	4.05		4.05	4.05		4.05
V-Rd (kN)	183.8		183.8	183.8		183.8
Vnom (kN)		66.5			66.5	
Td (kN.m)		3.4			1.2	
T-min (kN.m)		2.9			2.9	
t-RdC (N/mm ²)		1.17				
Str. Ratio		1.338				
As-T (mm ²)		218.41				
b-sup (mm)	0.0		0.0	0.0		0.0
Links	R10-300	R10-300	R10-300	R10-300	R10-300	R10-300

Deflection Check ...

L/d	6.57 < 39.28 OK	9.89 < 34.04 OK
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Supplied Steel Areas (mm²)

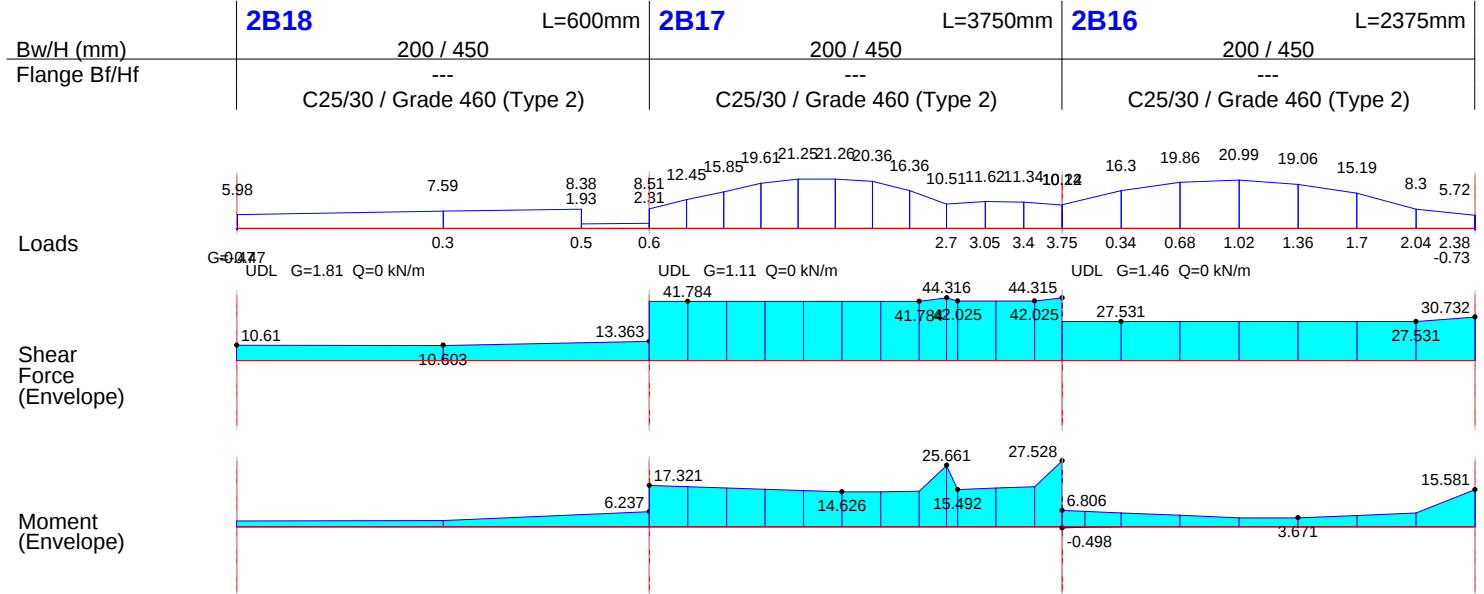
Top Edge	603.19	603.19	603.19	603.19	603.19	603.19
Bot Edge	603.19	603.19	603.19	603.19	603.19	603.19

Steel Bars ...

Top.Sup.	<u>3T16</u>	<u>3T16</u>	<u>3T16</u>	<u>3T16</u>
Top.Sup.				
Bot.Bars	<u>3T16</u>	<u>3T16</u>		
Bot.Bars				
Bot.Sup.				
Side Bar				

Axis: 5 Storey: 2

Etriyeler: C25/30 / Grade 460 (Type 2) (Links: Grade 250 (Plain))



Bending (Top Edge) ...

M (kN.m)	2.5	2.9	6.2	17.3	25.7	27.5	6.8	4.7	15.6
d (mm)	390.0	390.0	399.0	399.0	409.0	407.0	407.0	409.0	409.0
K/K'	0.02	0.02	0.04	0.11	0.15	0.16	0.04	0.03	0.09
x (mm)	48.75	48.75	49.88	49.88	51.13	50.88	50.88	51.13	51.13
Asm (mm ²)	16.62	19.85	41.14	114.24	165.11	177.99	44.01	30.46	100.25
Asv (mm ²)	33.16	33.85	54.00	190.87	138.50	170.87	143.55	86.04	81.35
As (mm ²)	19.85	41.14	41.14	165.11	177.99	177.99	44.01	100.25	100.25
As' (mm ²)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
As-min	0.00	113.08	115.69	115.69	118.59	118.01	118.01	118.59	118.59

Bending (Bottom Edge) ...

M (kN.m)							0.5		
d (mm)							390.0		
K/K'							0.00		
x (mm)							48.75		
Asm (mm ²)							3.36		
Asv (mm ²)							143.55		
As (mm ²)							3.36		
As' (mm ²)							0.00		
As-min	0.00	118.59	113.08	113.08	118.59	113.08	113.08	118.59	113.08

Shear and Bending Design ...

Vd (kN)	12.7		17.3	61.1		54.7	45.9		26.0
v (N/mm ²)	0.16		0.22	0.77		0.67	0.56		0.32
v-Rdc (N/mm ²)	0.75	0.00	0.73	0.73	0.00	0.46	0.46	0.00	0.38
v-Rdmax (N/mm ²)	4.05		4.05	4.05		4.05	4.05		4.05
V-Rd (kN)	192.8		183.8	183.8		183.8	183.8		183.8
Vnom (kN)		66.5			66.5			108.8	
Td (kN.m)		2.5			0.8			0.0	
T-min (kN.m)		2.9			2.9			2.9	
b-sup (mm)	0.0		0.0	0.0		0.0	0.0		0.0
Links			R10-300	R10-300	R10-300	R10-300	R10-300	R10-300	R10-300

Deflection Check ...

L/d	1.5 < 8.39 OK			9.17 < 88.02 OK			5.81 < 88.5 OK		
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Supplied Steel Areas (mm²)

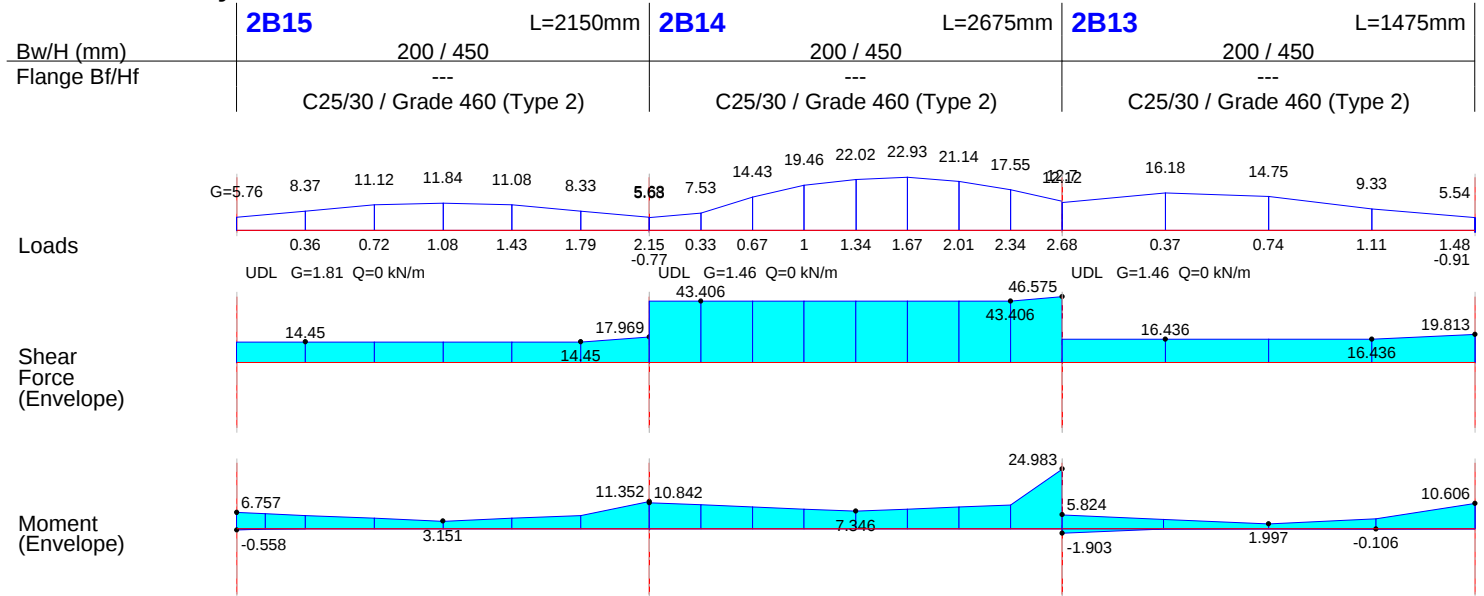
Top Edge	1963.50	1963.50	1608.49	1608.49	226.19	402.12	402.12	226.19	226.19
Bot Edge	226.19	226.19	226.19	226.19	226.19	226.19	226.19	226.19	226.19

Steel Bars ...

Top.Sup.		<u>2T32</u>	<u>2T32</u>		<u>2T16</u>	<u>2T16</u>		<u>2T12</u>	
Top.Sup.									
Bot.Bars		<u>2T12</u>	<u>2T12</u>		<u>2T12</u>	<u>2T12</u>		<u>2T12</u>	
Bot.Bars									
Bot.Sup.									
Side Bar									

Axis: 5 Storey: 2 ...

Etriyeler: C25/30 / Grade 460 (Type 2) (Links: Grade 250 (Plain))



Bending (Top Edge) ...

M (kN.m)	6.8	4.6	11.4	10.8	8.8	25.0	5.8	3.4	10.6
d (mm)	409.0	409.0	409.0	409.0	409.0	409.0	409.0	409.0	409.0
K/K'	0.04	0.03	0.07	0.06	0.05	0.14	0.03	0.02	0.06
x (mm)	51.13	51.13	51.13	51.13	51.13	51.13	51.13	51.13	51.13
Asm (mm ²)	43.48	29.62	73.04	69.76	56.83	160.74	37.47	21.87	68.24
Asv (mm ²)	72.82	32.80	55.13	109.48	135.65	163.44	73.13	27.26	57.13
As (mm ²)	43.48	62.42	73.04	69.76	160.74	160.74	37.47	49.13	68.24
As' (mm ²)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
As-min	118.59	118.59	118.59	118.59	118.59	118.59	118.59	118.59	118.59

Bending (Bottom Edge) ...

M (kN.m)	0.6						1.9		0.1
d (mm)	390.0						390.0		390.0
K/K'	0.00						0.01		0.00
x (mm)	48.75						48.75		48.75
Asm (mm ²)	3.76						12.84		0.70
Asv (mm ²)	72.82						73.13		57.13
As (mm ²)	3.76						12.84		0.70
As' (mm ²)	0.00						0.00		0.00
As-min	113.08	118.59	113.08	113.08	118.59	113.08	113.08	118.59	113.08

Shear and Bending Design ...

Vd (kN)	23.3		17.6	35.0		52.3	23.4		18.3
v (N/mm ²)	0.28		0.22	0.43		0.64	0.29		0.22
v-Rdc (N/mm ²)	0.38	0.00	0.38	0.38	0.00	0.38	0.38	0.00	0.38
v-Rdmax (N/mm ²)	4.05		4.05	4.05		4.05	4.05		4.05
V-Rd (kN)	183.8		183.8	183.8		183.8	183.8		183.8
Vnom (kN)		66.5			66.5			108.8	
Td (kN.m)		4.7			1.6			0.3	
T-min (kN.m)		2.9			2.9			2.9	
t-RdC (N/mm ²)		1.17							
Str. Ratio		1.137							
As-T (mm ²)		302.11							
b-sup (mm)	0.0		0.0	0.0		0.0	0.0		0.0
Links	R10-300	R10-300	R10-300	R10-300	R10-300	R10-300	R10-300	R10-300	R10-300

Deflection Check ...

L/d	5.26 < 88.5 OK			6.54 < 88.5 OK			3.61 < 88.5 OK		
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Supplied Steel Areas (mm²)

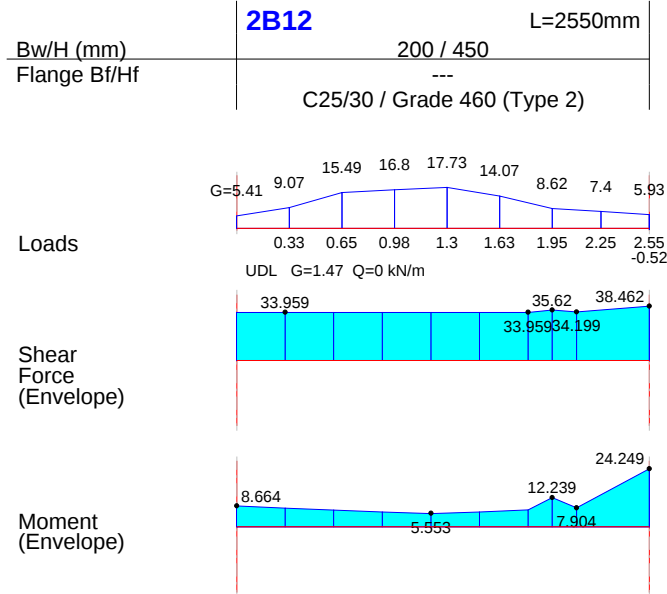
Top Edge	226.19	226.19	226.19	226.19	226.19	226.19	226.19	226.19	226.19
Bot Edge	226.19	226.19	226.19	226.19	226.19	226.19	226.19	226.19	226.19

Steel Bars ...

Top.Sup.	2T12	2T12	2T12	2T12	2T12	2T12	2T12
Top.Sup.							
Bot.Bars	2T12	2T12	2T12	2T12	2T12	2T12	2T12
Bot.Bars							
Bot.Sup.							
Side Bar							

Axis: 5 Storey: 2 ...

Etriyeler: C25/30 / Grade 460 (Type 2) (Links: Grade 250 (Plain))



Bending (Top Edge) ...

M (kN.m)	8.7	7.5	24.2
d (mm)	409.0	409.0	409.0
K/K'	0.05	0.04	0.14
x (mm)	51.13	51.13	51.13
Asm (mm ²)	55.75	48.06	156.02
Asv (mm ²)	88.21	106.56	120.80
As (mm ²)	55.75	154.62	156.02
As' (mm ²)	0.00	0.00	0.00
As-min	118.59	118.59	118.59

Bending (Bottom Edge) ...

M (kN.m)			
d (mm)			
K/K'			
x (mm)			
Asm (mm ²)			
Asv (mm ²)			
As (mm ²)			
As' (mm ²)			
As-min	113.08	118.59	113.08

Shear and Bending Design ...

Vd (kN)	28.2		38.7
v (N/mm ²)	0.35		0.47
v-Rdc (N/mm ²)	0.38	0.00	0.38
v-Rdmax (N/mm ²)	4.05		4.05
V-Rd (kN)	183.8		183.8
Vnom (kN)		66.5	
Td (kN.m)		1.0	
T-min (kN.m)		2.9	
b-sup (mm)	0.0		0.0
Links	R10-300	R10-300	R10-300

Deflection Check ...

L/d	6.23 < 76.7 OK
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Supplied Steel Areas (mm²)

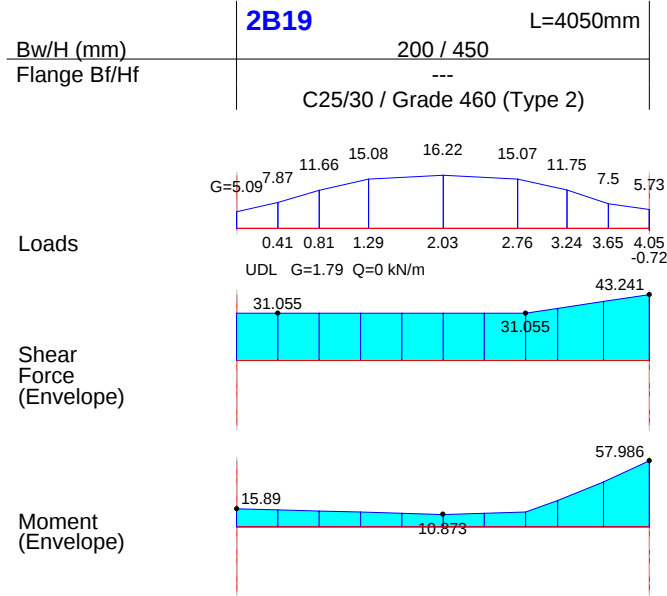
Top Edge	226.19	226.19	226.19
Bot Edge	226.19	226.19	226.19

Steel Bars ...

Top.Sup.	2T12	2T12
Top.Sup.		
Bot.Bars	2T12	
Bot.Bars		
Bot.Sup.		
Side Bar		

Axis: M Storey: 2

Etriyeler: C25/30 / Grade 460 (Type 2) (Links: Grade 250 (Plain))



Bending (Top Edge) ...

M (kN.m)	15.9	16.2	58.0
d (mm)	407.0	409.0	407.0
K/K'	0.09	0.09	0.34
x (mm)	50.88	51.13	67.31
Asm (mm ²)	102.74	104.21	381.41
Asv (mm ²)	145.89	100.26	143.46
As (mm ²)	104.21	204.48	381.41
As' (mm ²)	0.00	0.00	0.00
As-min	118.01	118.59	118.01

Bending (Bottom Edge) ...

M (kN.m)			
d (mm)			
K/K'			
x (mm)			
Asm (mm ²)			
Asv (mm ²)			
As (mm ²)			
As' (mm ²)			
As-min	113.08	118.59	113.08

Shear and Bending Design ...

Vd (kN)	46.7		45.9
v (N/mm ²)	0.57		0.56
v-Rdc (N/mm ²)	0.46	0.00	0.46
v-Rdmax (N/mm ²)	4.05		4.05
V-Rd (kN)	183.8		183.8
Vnom (kN)		66.5	
Td (kN.m)		3.0	
T-min (kN.m)		2.9	
t-RdC (N/mm ²)		1.17	
Str. Ratio		1.702	
As-T (mm ²)		193.20	
b-sup (mm)	0.0		0.0
Links	R10-300	R10-300	R10-300

Deflection Check ...

L/d	9.9 < 59.0 OK
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Supplied Steel Areas (mm²)

Top Edge	402.12	X 226.19	X 402.12
Bot Edge	226.19	226.19	226.19

Steel Bars ...

Top.Sup.	2T16	2T16
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Top.Sup.

Bot.Bars	2T12
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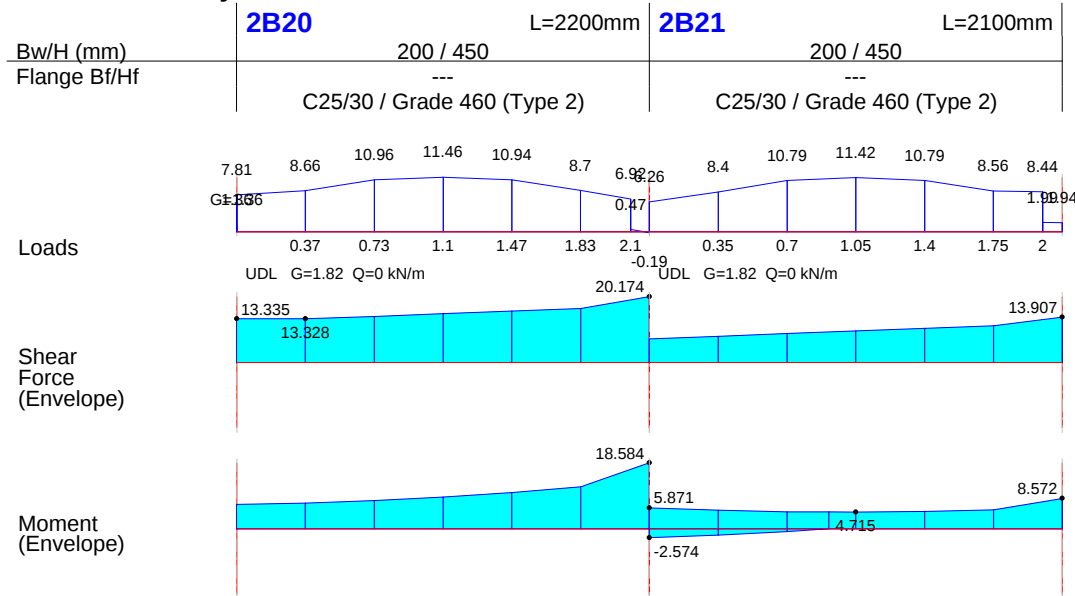
Bot.Bars

Bot.Sup.

Side Bar

Axis: L Storey: 2

Etriyeler: C25/30 / Grade 460 (Type 2) (Links: Grade 250 (Plain))



Bending (Top Edge) ...

M (kN.m)	7.6	10.5	18.6	5.9	5.1	8.6
d (mm)	409.0	409.0	409.0	409.0	409.0	409.0
K/K'	0.04	0.06	0.11	0.03	0.03	0.05
x (mm)	51.13	51.13	51.13	51.13	51.13	51.13
Asm (mm ²)	49.20	67.68	119.57	37.77	32.76	55.15
Asv (mm ²)	36.07	29.39	83.63	85.31	33.66	31.84
As (mm ²)	67.68	97.07	119.57	37.77	55.15	55.15
As' (mm ²)	0.00	0.00	0.00	0.00	0.00	0.00
As-min	118.59	118.59	118.59	118.59	118.59	118.59

Bending (Bottom Edge) ...

M (kN.m)				2.6	1.0	
d (mm)				390.0	409.0	
K/K'				0.02	0.01	
x (mm)				48.75	51.13	
Asm (mm ²)				17.37	6.17	
Asv (mm ²)				85.31	33.66	
As (mm ²)				17.37	17.37	
As' (mm ²)				0.00	0.00	
As-min	113.08	118.59	113.08	113.08	118.59	113.08

Shear and Bending Design ...

Vd (kN)	12.4		26.8	27.3		10.2
v (N/mm ²)	0.15		0.33	0.33		0.12
v-Rdc (N/mm ²)	0.38	0.00	0.38	0.38	0.00	0.38
v-Rdmax (N/mm ²)	4.05		4.05	4.05		4.05
V-Rd (kN)	183.8		183.8	183.8		183.8
Vnom (kN)		66.5			108.8	
Td (kN.m)		1.0			0.6	
T-min (kN.m)		2.9			2.9	
b-sup (mm)						
Links	R10-300	R10-300	R10-300	R10-300	R10-300	R10-300

Deflection Check ...

L/d	5.38 < 76.7 OK		5.13 < 76.7 OK	
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Supplied Steel Areas (mm²)

Top Edge	226.19	226.19	226.19	226.19	226.19	226.19
Bot Edge	226.19	226.19	226.19	226.19	226.19	226.19

Steel Bars ...

Top.Sup.	2T12	2T12	2T12	2T12
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Top.Sup.

Bot.Bars	2T12	2T12
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Bot.Bars

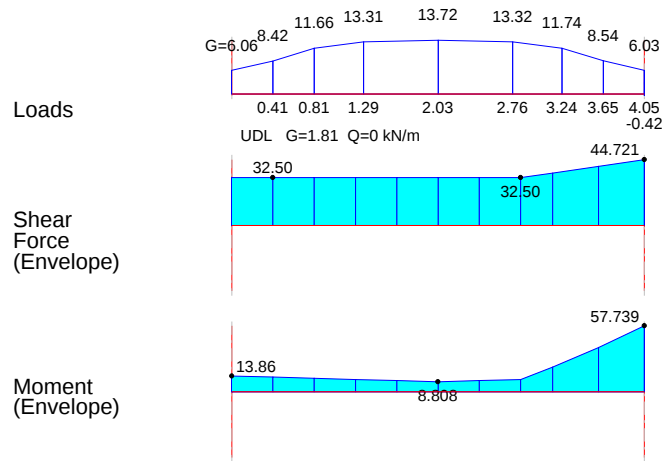
Bot.Sup.

Side Bar

Axis: M Storey: 2 (/ 2)

Etriyeler: C25/30 / Grade 460 (Type 2) (Links: Grade 250 (Plain))

	2B22	L=4050mm
Bw/H (mm)	200 / 450	
Flange Bf/Hf	---	
	C25/30 / Grade 460 (Type 2)	



Bending (Top Edge) ...			
M (kN.m)	13.9	14.3	57.7
d (mm)	409.0	409.0	409.0
K/K'	0.08	0.08	0.33
x (mm)	51.13	51.13	66.62
Asm (mm2)	89.18	92.14	377.53
Asv (mm2)	135.62	104.79	134.41
As (mm2)	92.14	196.93	377.53
As' (mm2)	0.00	0.00	0.00
As-min	118.59	118.59	118.59

Bending (Bottom Edge) ...			
M (kN.m)			
d (mm)			
K/K'			
x (mm)			
Asm (mm2)			
Asv (mm2)			
As (mm2)			
As' (mm2)			
As-min	113.08	118.59	113.08

Shear and Bending Design ...			
Vd (kN)	43.4		43.0
v (N/mm2)	0.53		0.53
v-Rdc (N/mm2)	0.38	0.00	0.38
v-Rdmax (N/mm2)	4.05		4.05
V-Rd (kN)	183.8		183.8
Vnom (kN)		66.5	
Td (kN.m)		2.5	
T-min (kN.m)		2.9	
b-sup (mm)	0.0		0.0
Links	R10-300	R10-300	R10-300

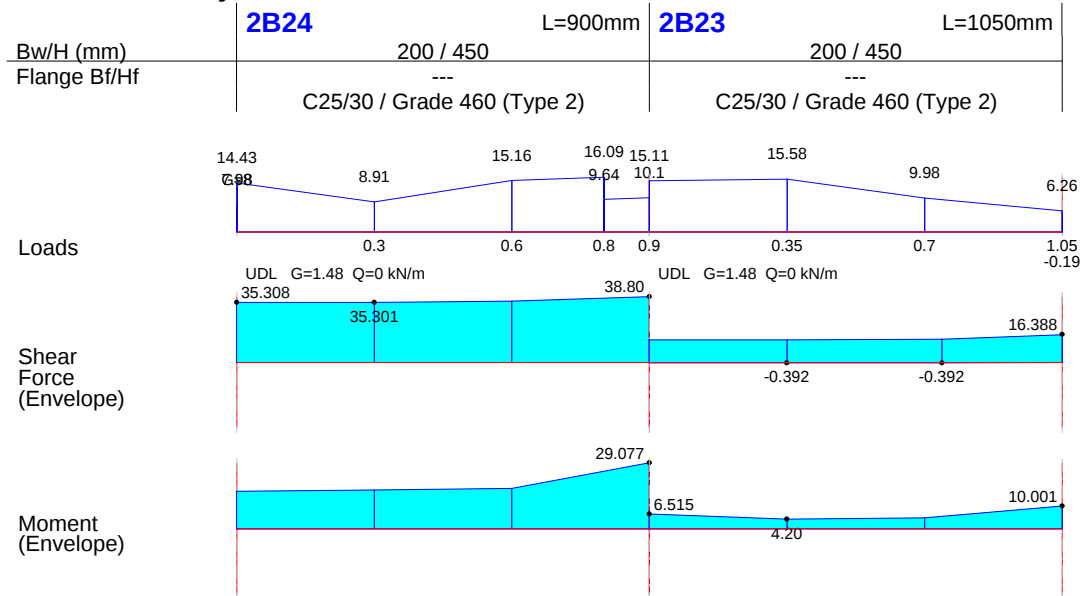
Deflection Check ...	
L/d	9.9 < 59.0 OK

Supplied Steel Areas (mm2)			
Top Edge	226.19	226.19	X 226.19
Bot Edge	226.19	226.19	226.19

Steel Bars ...	
Top.Sup.	2T12
Top.Sup.	
Bot.Bars	2T12
Bot.Bars	
Bot.Sup.	
Side Bar	

Axis: 4 Storey: 2

Etriyeler: C25/30 / Grade 460 (Type 2) (Links: Grade 250 (Plain))



Bending (Top Edge) ...						
M (kN.m)	16.9	17.7	29.1	6.5	4.7	10.0
d (mm)	390.0	390.0	399.0	399.0	409.0	409.0
K/K'	0.11	0.11	0.18	0.04	0.03	0.06
x (mm)	48.75	48.75	49.88	49.88	51.13	51.13
Asm (mm ²)	114.31	119.48	191.78	42.97	30.40	64.35
Asv (mm ²)	159.81	112.40	206.88	67.13	34.83	34.95
As (mm ²)	119.48	191.78	191.78	42.97	64.35	64.35
As' (mm ²)	0.00	0.00	0.00	0.00	0.00	0.00
As-min	0.00	113.08	115.69	115.69	118.59	118.59

Bending (Bottom Edge) ...						
M (kN.m)						
d (mm)						
K/K'						
x (mm)						
Asm (mm ²)						
Asv (mm ²)						
As (mm ²)						
As' (mm ²)						
As-min	0.00	118.59	113.08	113.08	118.59	113.08

Shear and Bending Design ...						
Vd (kN)	51.1		66.2	21.5		13.2
v (N/mm ²)	0.66		0.83	0.27		0.16
v-Rdc (N/mm ²)	0.75	0.00	0.73	0.73	0.00	0.38
v-Rdmax (N/mm ²)	4.05		4.05	4.05		4.05
V-Rd (kN)	192.8		183.8	183.8		183.8
Vnom (kN)		108.8			108.8	
Td (kN.m)		0.1			0.0	
T-min (kN.m)		2.9			2.9	
b-sup (mm)	0.0		0.0	0.0		0.0
Links			R10-300	R10-300	R10-300	R10-300

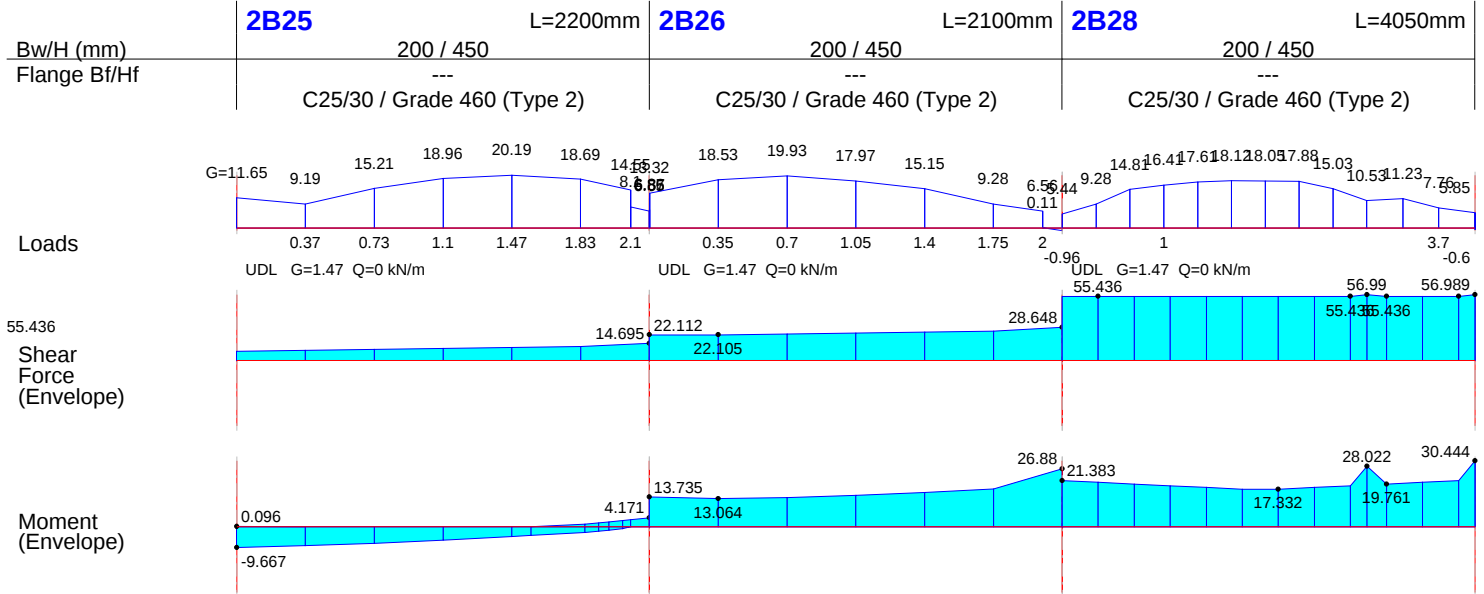
Deflection Check ...						
L/d	2.26 < 8.39 OK			---		

Supplied Steel Areas (mm²)						
Top Edge	1963.50	1963.50	1608.49	1608.49	226.19	226.19
Bot Edge	226.19	226.19	226.19	226.19	226.19	226.19

Steel Bars ...		
Top.Sup.	<u>2T32</u>	<u>2T32</u> <u>2T12</u>
Top.Sup.		
Bot.Bars	<u>2T12</u>	<u>2T12</u>
Bot.Bars		
Bot.Sup.		
Side Bar		

Axis: J Storey: 2

Etriyeler: C25/30 / Grade 460 (Type 2) (Links: Grade 250 (Plain))



Bending (Top Edge) ...

M (kN.m)	2.0	0.4	4.2	13.7	16.1	26.9	21.4	25.1	30.4
d (mm)	409.0	409.0	409.0	409.0	409.0	407.0	407.0	409.0	407.0
K/K'	0.01	0.00	0.02	0.08	0.09	0.16	0.12	0.15	0.18
x (mm)	51.13	51.13	51.13	51.13	51.13	50.88	50.88	51.13	50.88
Asm (mm ²)	12.65	2.45	26.83	88.37	103.51	173.80	138.26	161.46	196.84
Asv (mm ²)	128.75	36.03	79.82	70.52	76.92	118.19	176.66	176.54	176.91
As (mm ²)	12.65	26.83	26.83	103.51	173.80	173.80	161.46	196.84	196.84
As' (mm ²)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
As-min	118.59	118.59	118.59	118.59	118.59	118.01	118.01	118.59	118.01

Bending (Bottom Edge) ...

M (kN.m)	9.7	7.9	2.9						
d (mm)	390.0	409.0	390.0						
K/K'	0.06	0.05	0.02						
x (mm)	48.75	51.13	48.75						
Asm (mm ²)	65.23	50.58	19.65						
Asv (mm ²)	128.75	36.03	79.82						
As (mm ²)	65.23	65.23	50.58						
As' (mm ²)	0.00	0.00	0.00						
As-min	113.08	118.59	113.08	113.08	118.59	113.08	113.08	118.59	113.08

Shear and Bending Design ...

Vd (kN)	41.2		25.5	22.6		37.8	56.5		56.6
v (N/mm ²)	0.50		0.31	0.28		0.46	0.69		0.70
v-Rdc (N/mm ²)	0.38	0.00	0.38	0.38	0.00	0.46	0.46	0.00	0.46
v-Rdmax (N/mm ²)	4.05		4.05	4.05		4.05	4.05		4.05
V-Rd (kN)	183.8		183.8	183.8		183.8	183.8		183.8
Vnom (kN)		108.8			66.5			66.5	
Td (kN.m)		0.6			1.6			1.5	
T-min (kN.m)		2.9			2.9			2.9	
b-sup (mm)									
Links	R10-300	R10-300	R10-300	R10-300	R10-300	R10-300	R10-300	R10-300	R10-300

Deflection Check ...

L/d	5.38 < 76.7 OK			5.13 < 88.5 OK			9.9 < 71.92 OK		
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Supplied Steel Areas (mm²)

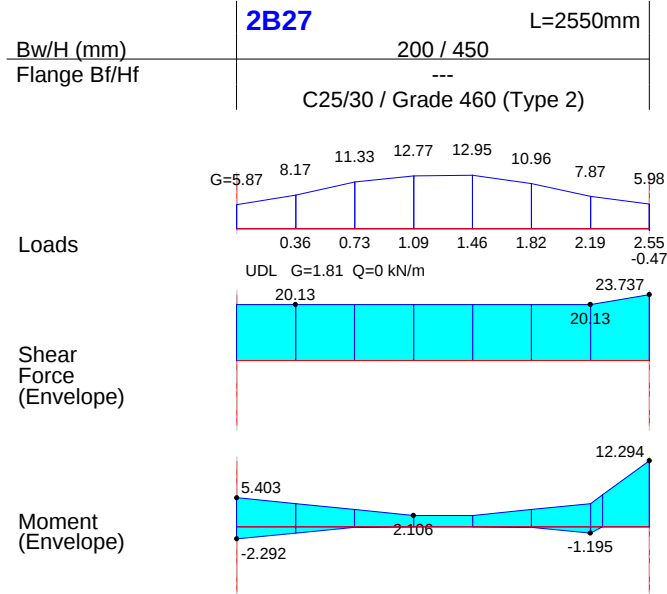
Top Edge	226.19	226.19	226.19	226.19	226.19	402.12	402.12	226.19	402.12
Bot Edge	226.19	226.19	226.19	226.19	226.19	226.19	226.19	226.19	226.19

Steel Bars ...

Top.Sup.	2T12	2T12	2T12	2T16	2T16	2T16
Top.Sup.						
Bot.Bars	2T12	2T12	2T12	2T12	2T12	2T12
Bot.Bars						
Bot.Sup.						
Side Bar						

Axis: 6 Storey: 2

Etriyeler: C25/30 / Grade 460 (Type 2) (Links: Grade 250 (Plain))



Bending (Top Edge) ...

M (kN.m)	5.4	3.2	12.3
d (mm)	409.0	409.0	409.0
K/K'	0.03	0.02	0.07
x (mm)	51.13	51.13	51.13
Asm (mm ²)	34.77	20.46	79.10
Asv (mm ²)	78.02	62.91	77.79
As (mm ²)	34.77	79.10	79.10
As' (mm ²)	0.00	0.00	0.00
As-min	118.59	118.59	118.59

Bending (Bottom Edge) ...

M (kN.m)	2.3	0.1	0.7
d (mm)	390.0	409.0	390.0
K/K'	0.01	0.00	0.00
x (mm)	48.75	51.13	48.75
Asm (mm ²)	15.46	0.44	4.84
Asv (mm ²)	78.02	62.91	77.79
As (mm ²)	15.46	15.46	4.84
As' (mm ²)	0.00	0.00	0.00
As-min	113.08	118.59	113.08

Shear and Bending Design ...

Vd (kN)	25.0		24.9
v (N/mm ²)	0.31		0.30
v-Rdc (N/mm ²)	0.38	0.00	0.38
v-Rdmax (N/mm ²)	4.05		4.05
V-Rd (kN)	183.8		183.8
Vnom (kN)		66.5	
Td (kN.m)		3.4	
T-min (kN.m)		2.9	
t-RdC (N/mm ²)		1.17	
Str. Ratio		1.147	
As-T (mm ²)		216.01	
b-sup (mm)	0.0		0.0
Links	R10-300	R10-300	R10-300

Deflection Check ...

L/d	6.23 < 59.0 OK
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Supplied Steel Areas (mm²)

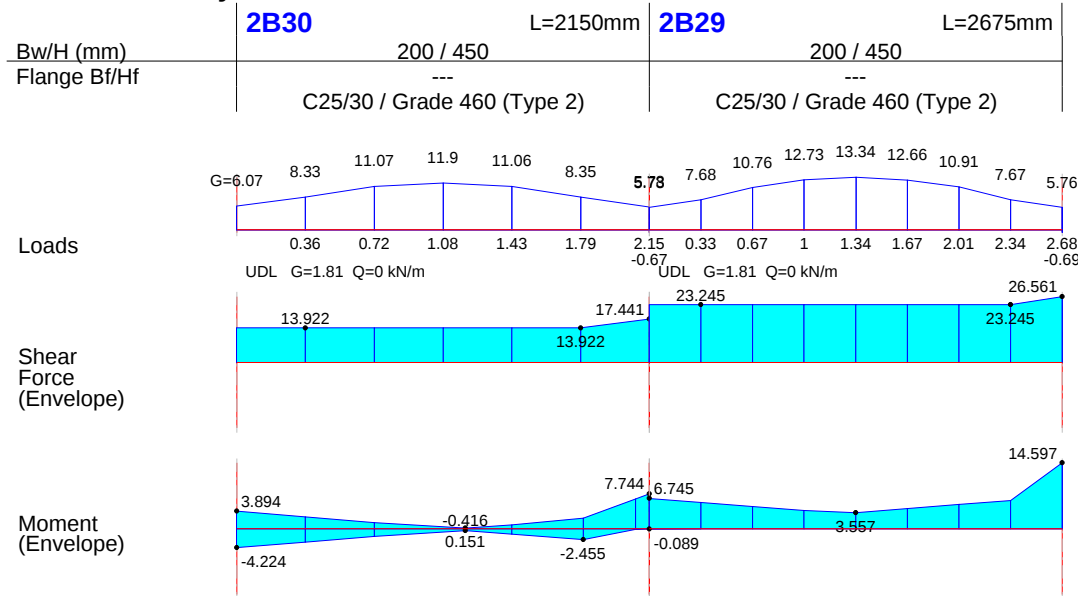
Top Edge	226.19	226.19	226.19
Bot Edge	226.19	226.19	226.19

Steel Bars ...

Top.Sup.	<u>2T12</u>	<u>2T12</u>
Top.Sup.		
Bot.Bars	<u>2T12</u>	
Bot.Bars		
Bot.Sup.		
Side Bar		

Axis: 7 Storey: 2

Etriyeler: C25/30 / Grade 460 (Type 2) (Links: Grade 250 (Plain))



Bending (Top Edge) ...

M (kN.m)	3.9	1.6	7.7	6.7	5.1	14.6
d (mm)	409.0	409.0	409.0	409.0	409.0	409.0
K/K'	0.02	0.01	0.04	0.04	0.03	0.08
x (mm)	51.13	51.13	51.13	51.13	51.13	51.13
Asm (mm ²)	25.06	10.52	49.82	43.40	32.77	93.92
Asv (mm ²)	79.73	33.78	29.25	79.98	72.65	84.03
As (mm ²)	25.06	44.30	49.82	43.40	93.92	93.92
As' (mm ²)	0.00	0.00	0.00	0.00	0.00	0.00
As-min	118.59	118.59	118.59	118.59	118.59	118.59

Bending (Bottom Edge) ...

M (kN.m)	4.2	2.0	2.1	0.1		
d (mm)	390.0	409.0	390.0	390.0		
K/K'	0.03	0.01	0.01	0.00		
x (mm)	48.75	51.13	48.75	48.75		
Asm (mm ²)	28.50	12.65	13.85	0.60		
Asv (mm ²)	79.73	33.78	24.92	79.98		
As (mm ²)	28.50	28.50	13.85	0.60		
As' (mm ²)	0.00	0.00	0.00	0.00		
As-min	113.08	118.59	113.08	113.08	118.59	113.08

Shear and Bending Design ...

Vd (kN)	25.5		15.9	25.6		26.9
v (N/mm ²)	0.31		0.19	0.31		0.33
v-Rdc (N/mm ²)	0.38	0.00	0.38	0.38	0.00	0.38
v-Rdmax (N/mm ²)	4.05		4.05	4.05		4.05
V-Rd (kN)	183.8		183.8	183.8		183.8
Vnom (kN)		66.5			66.5	
Td (kN.m)		3.9			5.6	
T-min (kN.m)		2.9			2.9	
t-RdC (N/mm ²)		1.17			1.17	
Str. Ratio		1.018			1.513	
As-T (mm ²)		248.98			360.01	
b-sup (mm)	0.0		0.0	0.0		0.0
Links	R10-300	R10-300	R10-300	R10-300	R10-300	R10-300

Deflection Check ...

L/d	5.26 < 76.7 OK		6.54 < 76.7 OK	
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Supplied Steel Areas (mm²)

Top Edge	226.19	226.19	226.19	226.19	226.19	226.19
Bot Edge	226.19	226.19	226.19	226.19	226.19	226.19

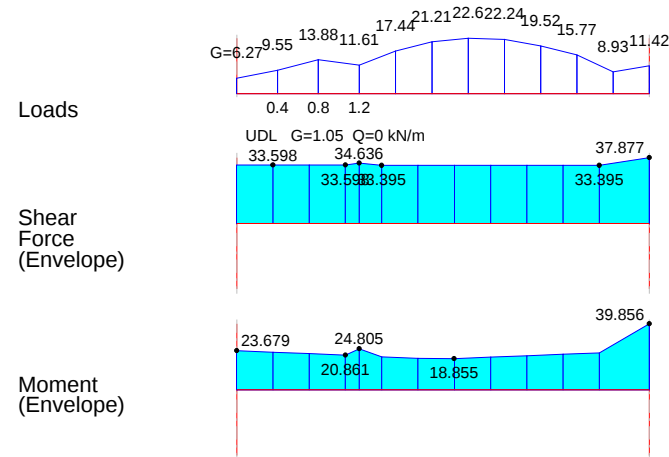
Steel Bars ...

Top.Sup.	<u>2T12</u>	<u>2T12</u>	<u>2T12</u>	<u>2T12</u>
Top.Sup.				
Bot.Bars	<u>2T12</u>	<u>2T12</u>	<u>2T12</u>	<u>2T12</u>
Bot.Bars				
Bot.Sup.				
Side Bar				

Axis: I Storey: 2

Etriyeler: C25/30 / Grade 460 (Type 2) (Links: Grade 250 (Plain))

	2B31	L=4050mm
Bw/H (mm)	200 / 450	
Flange Bf/Hf	---	
	C25/30 / Grade 460 (Type 2)	



Bending (Top Edge) ...

M (kN.m)	23.7	24.8	39.9
d (mm)	407.0	409.0	407.0
K/K'	0.14	0.14	0.23
x (mm)	50.88	51.13	50.88
Asm (mm ²)	153.10	159.60	257.70
Asv (mm ²)	209.68	108.24	210.83
As (mm ²)	159.60	257.70	257.70
As' (mm ²)	0.00	0.00	0.00
As-min	118.01	118.59	118.01

Bending (Bottom Edge) ...

M (kN.m)			
d (mm)			
K/K'			
x (mm)			
Asm (mm ²)			
Asv (mm ²)			
As (mm ²)			
As' (mm ²)			
As-min	113.08	118.59	113.08

Shear and Bending Design ...

Vd (kN)	67.1		67.5
v (N/mm ²)	0.82		0.83
v-Rdc (N/mm ²)	0.46	0.00	0.46
v-Rdmax (N/mm ²)	4.05		4.05
V-Rd (kN)	183.8		183.8
Vnom (kN)		66.5	
Td (kN.m)		0.8	
T-min (kN.m)		2.9	
b-sup (mm)	0.0		0.0
Links	R10-300	R10-300	R10-300

Deflection Check ...

L/d	9.9 < 43.97 OK
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Supplied Steel Areas (mm²)

Top Edge	402.12	X 226.19	402.12
Bot Edge	226.19	226.19	226.19

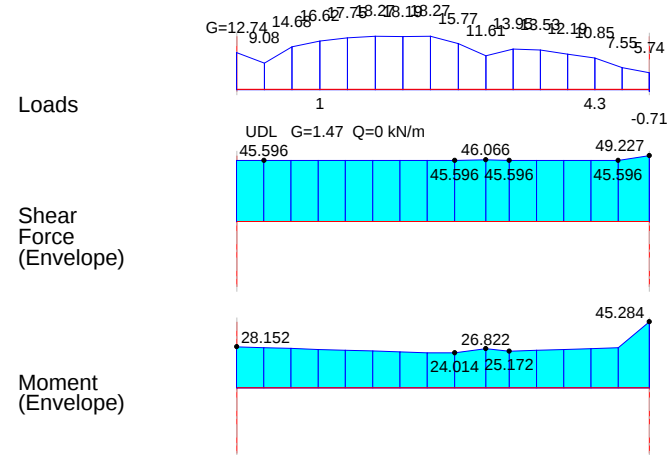
Steel Bars ...

Top.Sup.	2T16	2T16
Top.Sup.		
Bot.Bars	2T12	
Bot.Bars		
Bot.Sup.		
Side Bar		

Axis: I Storey: 2 (/ 2)

Etriyeler: C25/30 / Grade 460 (Type 2) (Links: Grade 250 (Plain))

2B32	L=4950mm
Bw/H (mm)	200 / 450
Flange Bf/Hf	---
	C25/30 / Grade 460 (Type 2)



Bending (Top Edge) ...

M (kN.m)	28.2	26.8	45.3
d (mm)	405.0	409.0	405.0
K/K'	0.17	0.16	0.27
x (mm)	50.63	51.13	52.00
Asm (mm ²)	182.92	172.57	294.67
Asv (mm ²)	227.70	143.97	203.64
As (mm ²)	182.92	294.67	294.67
As' (mm ²)	0.00	0.00	0.00
As-min	117.43	118.59	117.43

Bending (Bottom Edge) ...

M (kN.m)			
d (mm)			
K/K'			
x (mm)			
Asm (mm ²)			
Asv (mm ²)			
As (mm ²)			
As' (mm ²)			
As-min	113.08	118.01	113.08

Shear and Bending Design ...

Vd (kN)	72.9		65.2
v (N/mm ²)	0.90		0.80
v-Rdc (N/mm ²)	0.53	0.00	0.53
v-Rdmax (N/mm ²)	4.05		4.05
V-Rd (kN)	183.8		183.8
Vnom (kN)		66.5	
Td (kN.m)		3.7	
T-min (kN.m)		2.9	
t-RdC (N/mm ²)		1.17	
Str. Ratio		1.717	
As-T (mm ²)		237.88	
b-sup (mm)	0.0		0.0
Links	R10-300	R10-300	R10-300

Deflection Check ...

L/d	12.16 < 30.35 OK
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Supplied Steel Areas (mm²)

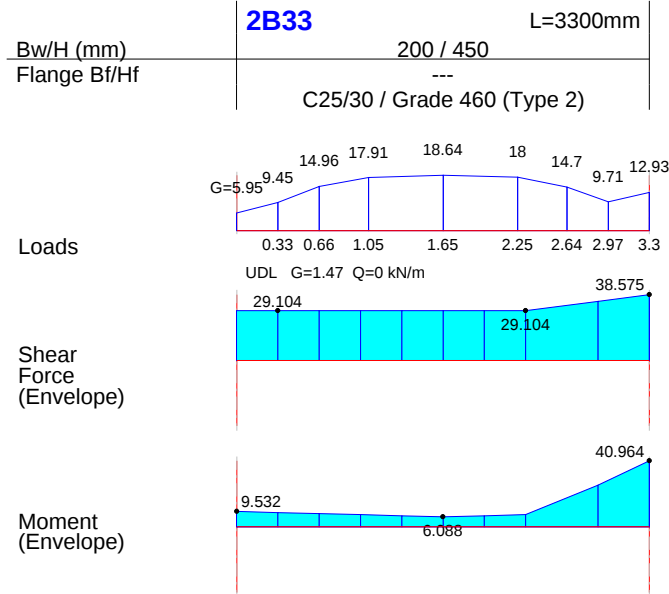
Top Edge	628.32	X 226.19	628.32
Bot Edge	402.12	402.12	402.12

Steel Bars ...

Top.Sup.	2T20	2T20
Top.Sup.		
Bot.Bars	2T16	
Bot.Bars		
Bot.Sup.		
Side Bar		

Axis: 4 Storey: 2 (/ 2)

Etriyeler: C25/30 / Grade 460 (Type 2) (Links: Grade 250 (Plain))



Bending (Top Edge) ...

M (kN.m)	9.5	9.5	41.0
d (mm)	407.0	409.0	409.0
K/K'	0.06	0.06	0.24
x (mm)	50.88	51.13	51.13
Asm (mm ²)	61.63	61.35	263.57
Asv (mm ²)	155.29	92.90	134.74
As (mm ²)	61.63	154.24	263.57
As' (mm ²)	0.00	0.00	0.00
As-min	118.01	118.59	118.59

Bending (Bottom Edge) ...

M (kN.m)			
d (mm)			
K/K'			
x (mm)			
Asm (mm ²)			
Asv (mm ²)			
As (mm ²)			
As' (mm ²)			
As-min	113.08	118.59	113.08

Shear and Bending Design ...

Vd (kN)	49.7		43.1
v (N/mm ²)	0.61		0.53
v-Rdc (N/mm ²)	0.46	0.00	0.38
v-Rdmax (N/mm ²)	4.05		4.05
V-Rd (kN)	183.8		183.8
Vnom (kN)		108.8	
Td (kN.m)		0.4	
T-min (kN.m)		2.9	
b-sup (mm)	0.0		0.0
Links	R10-300	R10-300	R10-300

Deflection Check ...

L/d	8.07 < 59.0 OK
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Supplied Steel Areas (mm²)

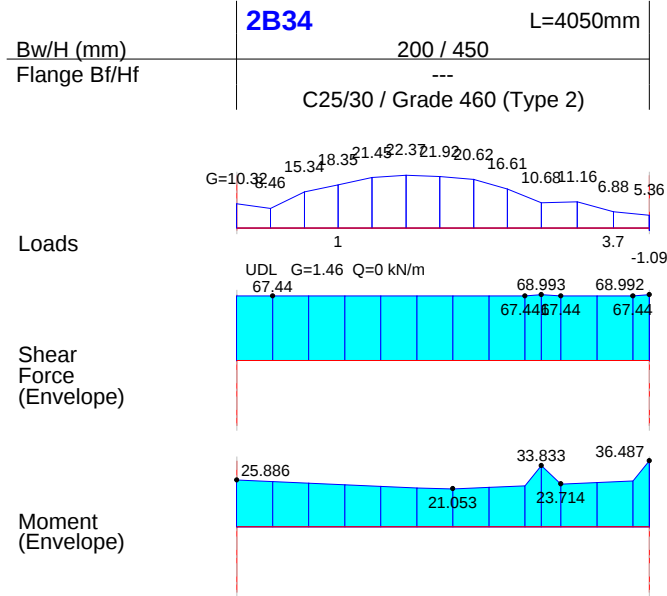
Top Edge	402.12	226.19	X 226.19
Bot Edge	226.19	226.19	226.19

Steel Bars ...

Top.Sup.	2T16	2T12
Top.Sup.		
Bot.Bars	2T12	
Bot.Bars		
Bot.Sup.		
Side Bar		

Axis: D Storey: 2

Etriyeler: C25/30 / Grade 460 (Type 2) (Links: Grade 250 (Plain))



Bending (Top Edge) ...

M (kN.m)	25.9	30.3	36.5
d (mm)	407.0	409.0	407.0
K/K'	0.15	0.18	0.21
x (mm)	50.88	51.13	50.88
Asm (mm ²)	167.38	194.84	235.92
Asv (mm ²)	206.00	214.05	220.61
As (mm ²)	194.84	235.92	235.92
As' (mm ²)	0.00	0.00	0.00
As-min	118.01	118.59	118.01

Bending (Bottom Edge) ...

M (kN.m)			
d (mm)			
K/K'			
x (mm)			
Asm (mm ²)			
Asv (mm ²)			
As (mm ²)			
As' (mm ²)			
As-min	113.08	118.59	113.08

Shear and Bending Design ...

Vd (kN)	65.9		70.6
v (N/mm ²)	0.81		0.87
v-Rdc (N/mm ²)	0.46	0.00	0.46
v-Rdmax (N/mm ²)	4.05		4.05
V-Rd (kN)	183.8		183.8
Vnom (kN)		108.8	
Td (kN.m)		0.1	
T-min (kN.m)		2.9	
b-sup (mm)	0.0		0.0
Links	R10-300	R10-300	R10-300

Deflection Check ...

L/d	9.9 < 43.52 OK
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Supplied Steel Areas (mm²)

Top Edge	402.12	X 226.19	402.12
Bot Edge	226.19	226.19	226.19

Steel Bars ...

Top.Sup.	2T16	2T16
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Top.Sup.

Bot.Bars	2T12
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Bot.Bars

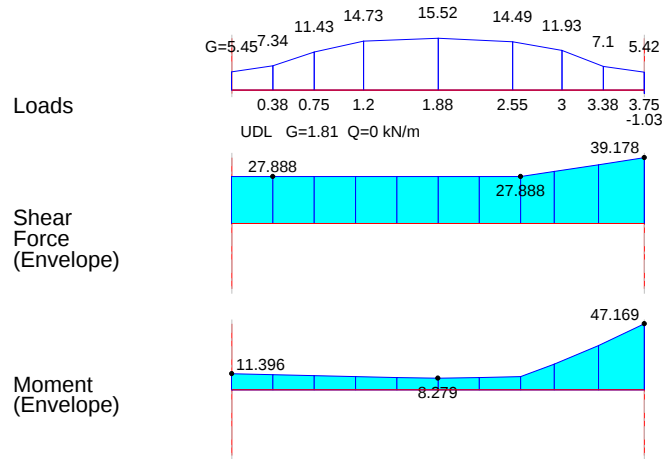
Bot.Sup.

Side Bar

Axis: 6 Storey: 2 (/ 2)

Etriyeler: C25/30 / Grade 460 (Type 2) (Links: Grade 250 (Plain))

	2B35	L=3750mm
Bw/H (mm)	200 / 450	
Flange Bf/Hf	---	
	C25/30 / Grade 460 (Type 2)	



Bending (Top Edge) ...			
M (kN.m)	11.4	12.0	47.2
d (mm)	409.0	409.0	409.0
K/K'	0.07	0.07	0.27
x (mm)	51.13	51.13	53.70
Asm (mm2)	73.33	77.33	304.30
Asv (mm2)	133.78	89.90	121.89
As (mm2)	77.33	167.23	304.30
As' (mm2)	0.00	0.00	0.00
As-min	118.59	118.59	118.59

Bending (Bottom Edge) ...			
M (kN.m)			
d (mm)			
K/K'			
x (mm)			
Asm (mm2)			
Asv (mm2)			
As (mm2)			
As' (mm2)			
As-min	113.08	118.59	113.08

Shear and Bending Design ...			
Vd (kN)	42.8		39.0
v (N/mm2)	0.52		0.48
v-Rdc (N/mm2)	0.38	0.00	0.38
v-Rdmax (N/mm2)	4.05		4.05
V-Rd (kN)	183.8		183.8
Vnom (kN)		66.5	
Td (kN.m)		4.3	
T-min (kN.m)		2.9	
t-RdC (N/mm2)		1.17	
Str. Ratio		1.743	
As-T (mm2)		278.68	
b-sup (mm)	0.0		0.0
Links	R10-300	R10-300	R10-300

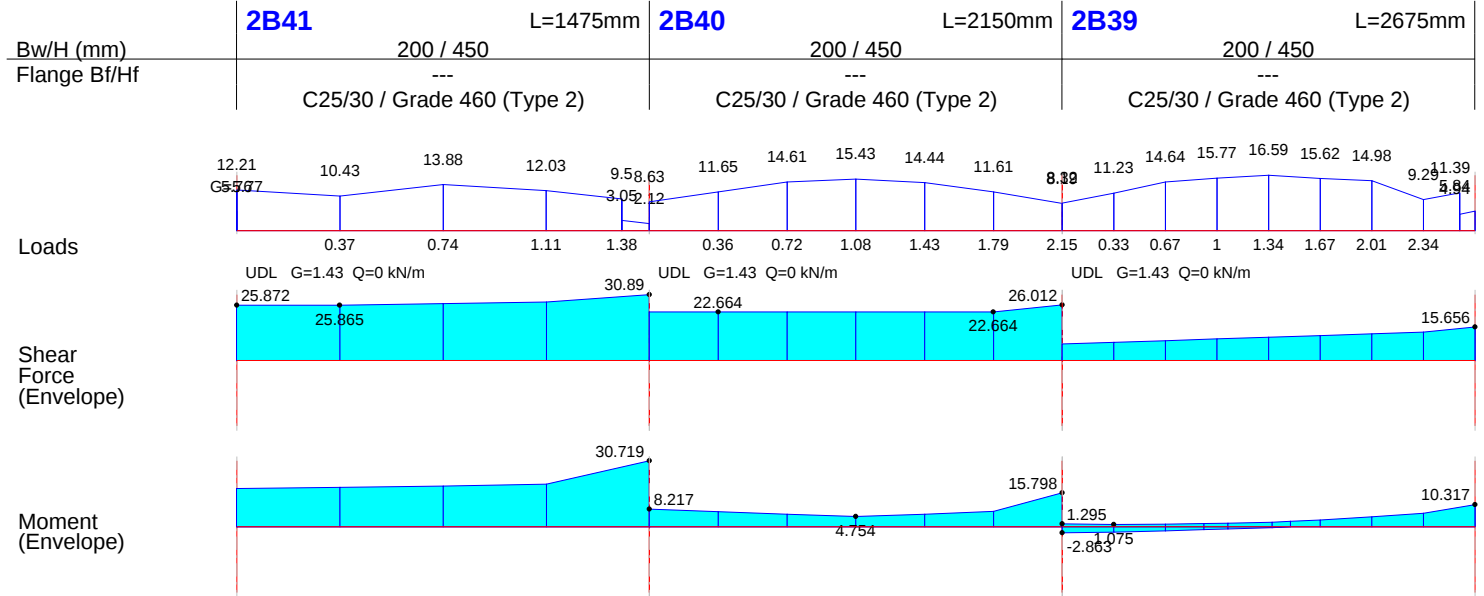
Deflection Check ...	
L/d	9.17 < 59.0 OK

Supplied Steel Areas (mm2)			
Top Edge	226.19	X 226.19	X 226.19
Bot Edge	226.19	226.19	226.19

Steel Bars ...	
Top.Sup.	<u>2T12</u> <u>2T12</u>
Top.Sup.	
Bot.Bars	<u>2T12</u>
Bot.Bars	
Bot.Sup.	
Side Bar	

Axis: 2a Storey: 2

Etriyeler: C25/30 / Grade 460 (Type 2) (Links: Grade 250 (Plain))



Bending (Top Edge) ...

M (kN.m)	18.4	19.6	30.7	8.2	6.1	15.8	1.3	4.5	10.3
d (mm)	407.0	407.0	407.0	407.0	409.0	407.0	407.0	409.0	409.0
K/K'	0.11	0.11	0.18	0.05	0.04	0.09	0.01	0.03	0.06
x (mm)	50.88	50.88	50.88	50.88	51.13	50.88	50.88	51.13	51.13
Asm (mm2)	118.80	126.94	198.62	53.13	39.49	102.15	8.37	28.64	66.38
Asv (mm2)	65.34	84.97	130.48	93.24	70.83	76.71	145.97	36.08	58.09
As (mm2)	126.94	198.62	198.62	53.13	102.15	102.15	28.64	64.72	66.38
As' (mm2)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
As-min	118.01	118.01	118.01	118.01	118.59	118.01	118.01	118.59	118.59

Bending (Bottom Edge) ...

M (kN.m)							2.9	1.7	
d (mm)							390.0	409.0	
K/K'							0.02	0.01	
x (mm)							48.75	51.13	
Asm (mm2)							19.32	10.97	
Asv (mm2)							145.97	36.08	
As (mm2)							19.32	19.32	
As' (mm2)							0.00	0.00	
As-min	113.08	118.59	113.08	113.08	118.59	113.08	113.08	118.59	113.08

Shear and Bending Design ...

Vd (kN)	20.9		41.8	29.8		24.5	46.7		18.6
v (N/mm2)	0.26		0.51	0.37		0.30	0.57		0.23
v-Rdc (N/mm2)	0.46	0.00	0.46	0.46	0.00	0.46	0.46	0.00	0.38
v-Rdmax (N/mm2)	4.05		4.05	4.05		4.05	4.05		4.05
V-Rd (kN)	183.8		183.8	183.8		183.8	183.8		183.8
Vnom (kN)		66.5			66.5			66.5	
Td (kN.m)		1.0			2.1			0.9	
T-min (kN.m)		2.9			2.9			2.9	
b-sup (mm)									
Links	R10-300	R10-300	R10-300	R10-300	R10-300	R10-300	R10-300	R10-300	R10-300

Deflection Check ...

L/d	3.61 < 76.7 OK	5.26 < 88.5 OK	6.54 < 76.7 OK
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Supplied Steel Areas (mm2)

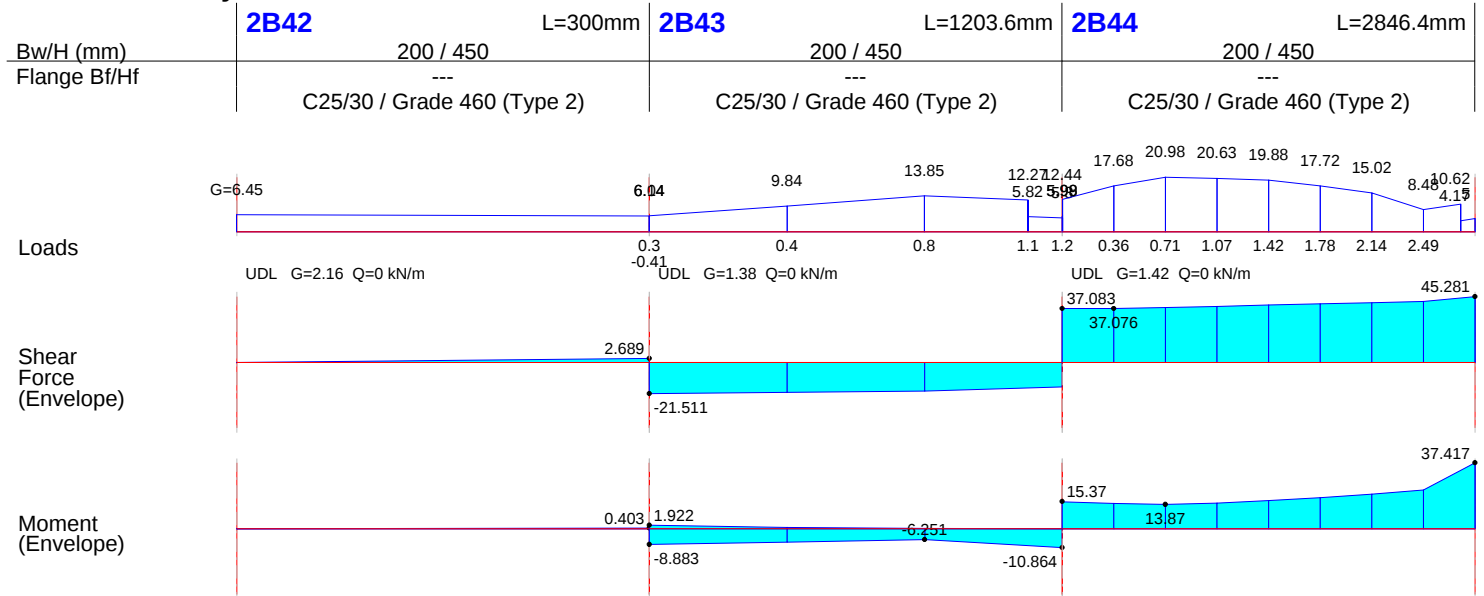
Top Edge	402.12	402.12	402.12	402.12	226.19	402.12	402.12	226.19	226.19
Bot Edge	226.19	226.19	226.19	226.19	226.19	226.19	226.19	226.19	226.19

Steel Bars ...

Top.Sup.	2T16	2T16	2T16	2T16	2T12
Top.Sup.					
Bot.Bars	2T12	2T12	2T12	2T12	
Bot.Bars					
Bot.Sup.					
Side Bar					

Axis: E Storey: 2

Etriyeler: C25/30 / Grade 460 (Type 2) (Links: Grade 250 (Plain))



Bending (Top Edge) ...

M (kN.m)	0.0	0.1	0.4	1.9	0.7	1.9	15.4	18.9	37.4
d (mm)	390.0	390.0	399.0	399.0	407.0	409.0	409.0	409.0	407.0
K/K'	0.00	0.00	0.00	0.01	0.00	0.01	0.09	0.11	0.22
x (mm)	48.75	48.75	49.88	49.88	50.88	51.13	51.13	51.13	50.88
Asm (mm ²)	0.23	0.68	2.66	12.68	4.79	12.10	98.90	121.83	241.93
Asv (mm ²)	0.82	2.10	1.90	140.15	64.55	96.90	106.63	127.46	175.03
As (mm ²)	0.68	2.66	2.66	12.68	12.68	12.10	121.83	241.93	241.93
As' (mm ²)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
As-min	0.00	113.08	115.69	115.69	118.01	118.59	118.59	118.59	118.01

Bending (Bottom Edge) ...

M (kN.m)				8.9	7.5	8.2			
d (mm)				390.0	409.0	390.0			
K/K'				0.06	0.04	0.05			
x (mm)				48.75	51.13	48.75			
Asm (mm ²)				59.94	48.40	55.01			
Asv (mm ²)				140.15	64.55	96.90			
As (mm ²)				59.94	59.94	55.01			
As' (mm ²)				0.00	0.00	0.00			
As-min	0.00	118.59	113.08	113.08	118.59	113.08	113.08	118.59	113.08

Shear and Bending Design ...

Vd (kN)	0.3		0.6	44.8		31.0	34.1		56.0
v (N/mm ²)	0.00		0.01	0.56		0.38	0.42		0.69
v-Rdc (N/mm ²)	0.75	0.00	0.73	0.73	0.00	0.38	0.38	0.00	0.46
v-Rdmax (N/mm ²)	4.05		4.05	4.05		4.05	4.05		4.05
V-Rd (kN)	192.8		183.8	183.8		183.8	183.8		183.8
Vnom (kN)		108.8			66.5			66.5	
Td (kN.m)		0.0			2.2			4.0	
T-min (kN.m)		2.9			2.9			2.9	
t-RdC (N/mm ²)								1.17	
Str. Ratio								1.888	
As-T (mm ²)								256.73	
b-sup (mm)	0.0		0.0	0.0		0.0	0.0		0.0
Links			R10-300	R10-300	R10-300	R10-300	R10-300	R10-300	R10-300

Deflection Check ...

L/d	0.75 < 8.39 OK			2.94 < 88.5 OK			6.96 < 72.82 OK		
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Supplied Steel Areas (mm²)

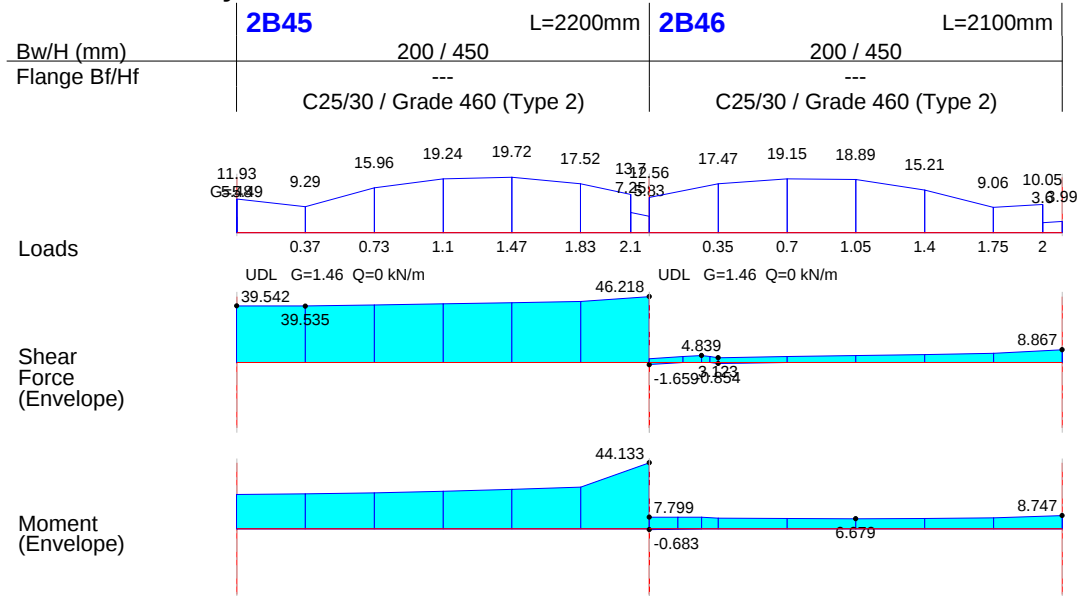
Top Edge	1963.50	1963.50	1608.49	1608.49	402.12	226.19	226.19	X 226.19	402.12
Bot Edge	226.19	226.19	226.19	226.19	226.19	226.19	226.19	226.19	226.19

Steel Bars ...

Top.Sup.		<u>2T32</u>	<u>2T32</u>		<u>2T12</u>	<u>2T12</u>		<u>2T16</u>	
Top.Sup.									
Bot.Bars		<u>2T12</u>		<u>2T12</u>			<u>2T12</u>		
Bot.Bars									
Bot.Sup.									
Side Bar									

Axis: C Storey: 2

Etriyeler: C25/30 / Grade 460 (Type 2) (Links: Grade 250 (Plain))



Bending (Top Edge) ...

M (kN.m)	23.8	26.5	44.1	7.8	7.1	8.7
d (mm)	407.0	407.0	407.0	407.0	409.0	409.0
K/K'	0.14	0.15	0.26	0.05	0.04	0.05
x (mm)	50.88	50.88	50.88	50.88	51.13	51.13
Asm (mm ²)	153.85	171.55	285.35	50.43	45.51	56.28
Asv (mm ²)	36.01	131.43	178.46	155.77	18.40	34.63
As (mm ²)	171.55	285.35	285.35	50.43	56.28	56.28
As' (mm ²)	0.00	0.00	0.00	0.00	0.00	0.00
As-min	118.01	118.01	118.01	118.01	118.59	118.59

Bending (Bottom Edge) ...

M (kN.m)				0.7		
d (mm)				390.0		
K/K'				0.00		
x (mm)				48.75		
Asm (mm ²)				4.61		
Asv (mm ²)				155.77		
As (mm ²)				4.61		
As' (mm ²)				0.00		
As-min	113.08	118.59	113.08	113.08	118.59	113.08

Shear and Bending Design ...

Vd (kN)	12.3		57.1	49.8		11.1
v (N/mm ²)	0.15		0.70	0.61		0.14
v-Rdc (N/mm ²)	0.46	0.00	0.46	0.46	0.00	0.38
v-Rdmax (N/mm ²)	4.05		4.05	4.05		4.05
V-Rd (kN)	183.8		183.8	183.8		183.8
Vnom (kN)		66.5			66.5	
Td (kN.m)		1.1			1.2	
T-min (kN.m)		2.9			2.9	
b-sup (mm)						
Links	R10-300	R10-300	R10-300	R10-300	R10-300	R10-300

Deflection Check ...

L/d	5.38 < 76.7 OK			5.13 < 76.7 OK		
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Supplied Steel Areas (mm²)

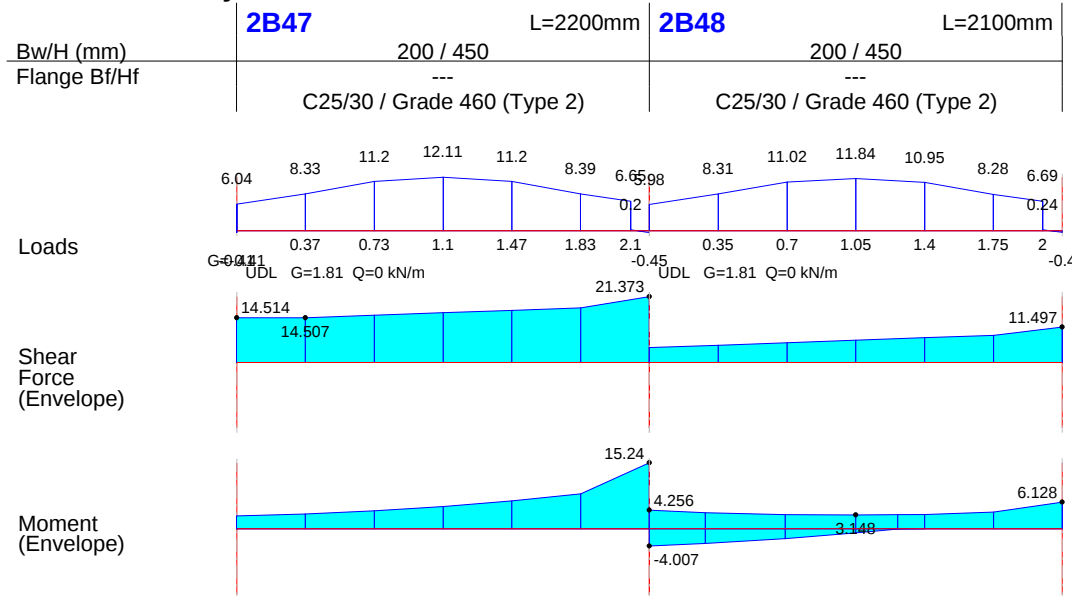
Top Edge	402.12	402.12	402.12	402.12	226.19	226.19
Bot Edge	226.19	226.19	226.19	226.19	226.19	226.19

Steel Bars ...

Top.Sup.	<u>2T16</u>	<u>2T16</u>	<u>2T12</u>
Top.Sup.			
Bot.Bars	<u>2T12</u>	<u>2T12</u>	
Bot.Bars			
Bot.Sup.			
Side Bar			

Axis: A Storey: 2

Etriyeler: C25/30 / Grade 460 (Type 2) (Links: Grade 250 (Plain))



Bending (Top Edge) ...

M (kN.m)	3.8	6.7	15.2	4.3	3.5	6.1
d (mm)	409.0	409.0	409.0	409.0	409.0	409.0
K/K'	0.02	0.04	0.09	0.02	0.02	0.04
x (mm)	51.13	51.13	51.13	51.13	51.13	51.13
Asm (mm ²)	24.64	43.30	98.06	27.38	22.82	39.43
Asv (mm ²)	35.18	23.30	81.00	80.01	26.06	35.30
As (mm ²)	43.30	66.60	98.06	27.38	39.43	39.43
As' (mm ²)	0.00	0.00	0.00	0.00	0.00	0.00
As-min	118.59	118.59	118.59	118.59	118.59	118.59

Bending (Bottom Edge) ...

M (kN.m)				4.0	2.4	
d (mm)				390.0	409.0	
K/K'				0.03	0.01	
x (mm)				48.75	51.13	
Asm (mm ²)				27.04	15.48	
Asv (mm ²)				80.01	26.06	
As (mm ²)				27.04	27.04	
As' (mm ²)				0.00	0.00	
As-min	113.08	118.59	113.08	113.08	118.59	113.08

Shear and Bending Design ...

Vd (kN)	13.1		25.9	25.6		11.3
v (N/mm ²)	0.16		0.32	0.31		0.14
v-Rdc (N/mm ²)	0.38	0.00	0.38	0.38	0.00	0.38
v-Rdmax (N/mm ²)	4.05		4.05	4.05		4.05
V-Rd (kN)	183.8		183.8	183.8		183.8
Vnom (kN)		66.5			108.8	
Td (kN.m)		2.0			0.1	
T-min (kN.m)		2.9			2.9	
b-sup (mm)	0.0		0.0	0.0		0.0
Links	R10-300	R10-300	R10-300	R10-300	R10-300	R10-300

Deflection Check ...

L/d	5.38 < 76.7 OK			5.13 < 76.7 OK		
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Supplied Steel Areas (mm²)

Top Edge	226.19	226.19	226.19	226.19	226.19	226.19
Bot Edge	226.19	226.19	226.19	226.19	226.19	226.19

Steel Bars ...

Top.Sup.	2T12	2T12	2T12	2T12
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Top.Sup.

Bot.Bars	2T12	2T12
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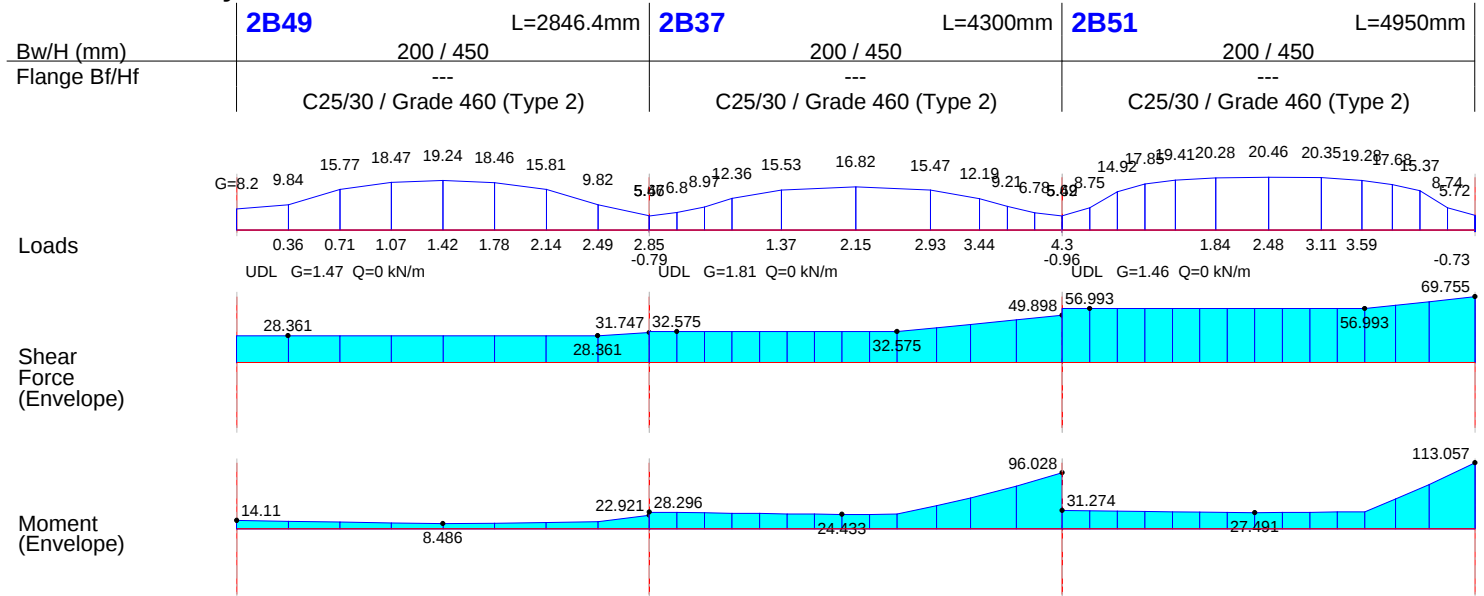
Bot.Bars

Bot.Sup.

Side Bar

Axis: H Storey: 2

Etriyeler: C25/30 / Grade 460 (Type 2) (Links: Grade 250 (Plain))



Bending (Top Edge) ...

M (kN.m)	14.1	10.9	22.9	28.3	44.5	96.0	31.3	29.4	113.1
d (mm)	409.0	409.0	407.0	407.0	409.0	405.0	405.0	409.0	405.0
K/K'	0.08	0.06	0.13	0.17	0.26	0.57	0.18	0.17	0.67
x (mm)	51.13	51.13	50.88	50.88	51.13	118.47	50.63	51.13	143.49
Asm (mm ²)	90.79	70.15	148.20	182.95	286.31	671.31	203.21	188.98	813.12
Asv (mm ²)	130.20	88.64	122.45	156.09	118.96	157.01	242.47	178.11	239.81
As (mm ²)	90.79	148.20	148.20	286.31	405.27	671.31	203.21	367.09	813.12
As' (mm ²)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
As-min	118.59	118.59	118.01	118.01	118.59	117.43	117.43	118.59	117.43

Bending (Bottom Edge) ...

M (kN.m)									
d (mm)									
K/K'									
x (mm)									
Asm (mm ²)									
Asv (mm ²)									
As (mm ²)									
As' (mm ²)									
As-min	113.08	118.59	113.08	113.08	118.59	113.08	113.08	118.01	113.08

Shear and Bending Design ...

Vd (kN)	41.7		39.2	49.9		50.2	77.6		76.7
v (N/mm ²)	0.51		0.48	0.61		0.62	0.96		0.95
v-Rdc (N/mm ²)	0.38	0.00	0.46	0.46	0.00	0.53	0.53	0.00	0.53
v-Rdmax (N/mm ²)	4.05		4.05	4.05		4.05	4.05		4.05
V-Rd (kN)	183.8		183.8	183.8		183.8	183.8		183.8
Vnom (kN)		108.8			66.5			108.8	
Td (kN.m)		0.3			2.8			0.6	
T-min (kN.m)		2.9			2.9			2.9	
b-sup (mm)									
Links	R10-300	R10-300	R10-300	R10-300	R10-300	R10-300	R10-300	R10-300	R10-300

Deflection Check ...

L/d	6.96 < 76.7 OK			10.51 < 88.5 OK			12.16 < 39.41 OK		
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Supplied Steel Areas (mm²)

Top Edge	226.19	226.19	402.12	402.12	X 226.19	X 628.32	628.32	X 226.19	X 628.32
Bot Edge	226.19	226.19	226.19	226.19	226.19	226.19	402.12	402.12	402.12

Steel Bars ...

Top.Sup.	2T12	2T16	2T16	2T20	2T20	2T20
Top.Sup.						
Bot.Bars	2T12	2T12	2T16			
Bot.Bars						
Bot.Sup.						
Side Bar						

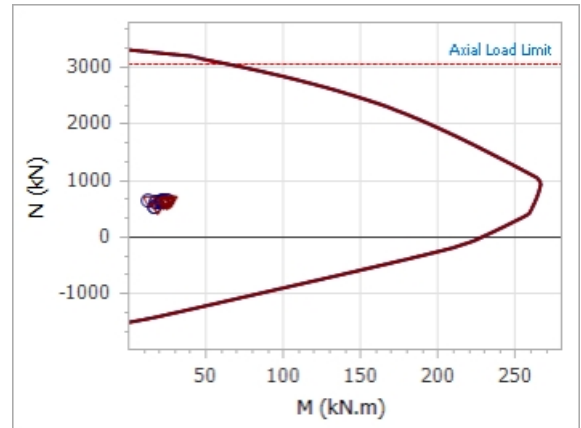
COLUMN

PROPOSED 5-STOREY ADMINISTRATION BLOCK	Fenerbahçe Kadiköy (0001907)
Column Reinforcement Design 1 15/02/2021 Rev: 1	Calc. By: SAMORA Checked By: MICHAEL

Column Reinforcement Design

1C1 (B-2) (400/400)
(C25/30 / Grade 460 (Type 2))

No	N _{Top/Bot} (kN)	M _{11 Top/Bot} (kN.m)	M _{22 Top/Bot} (kN.m)
1	636.8, 636.8	22.5, -10.8	18.7, -9.0
2	616.8, 616.8	22.3, -10.7	18.4, -8.9
3	537.1, 537.1	16.9, -8.1	14.1, -6.8
4	623.2, 623.2	22.7, -11.0	15.4, -2.6
5	650.4, 650.4	22.4, -10.6	22.1, -15.4
6	630.3, 630.3	20.3, -6.5	18.8, -9.1
7	643.3, 643.3	24.8, -15.2	18.6, -8.9

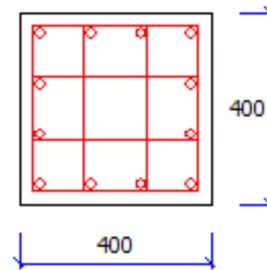


Critical Loading: 1 - (G*F)

	min	Design
N	678.6	- 678.6 kN
M ₁₁	16.3	13.6 19.1 kN.m
M ₂₂	13.6	13.6 16.5 kN.m
N _{max}	2561.1	

Concrete Cover = 25.0 mm

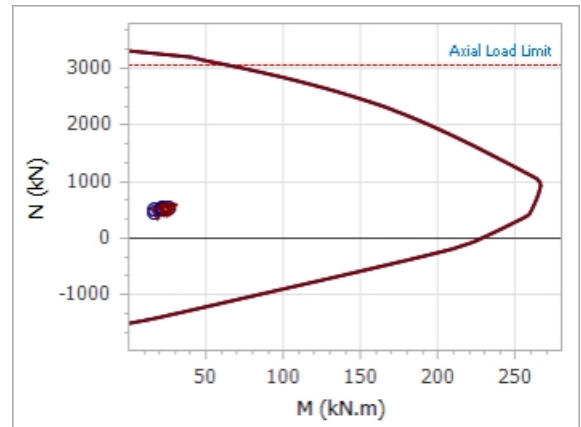
Neutral Axis: 224.1 mm / 12.74 °



V _{Ed(1/2)} = 10.3 / 10.4 kN	Short Column...	As (Req): %0.20 (min) 320.00 mm ²
V _{Ed} = 0.07 / 0.07 N/mm ²	λ ₁ /Lim ₁ = 14.8 < 66.0 ✓	As (Sup): %2.36 3769.91 mm ²
V _{Rdc} = 1.18 / 1.18 N/mm ²	λ ₂ /Lim ₂ = 14.7 < 64.6 ✓	12T20
V _{Rd Max} = 4.86 / 4.86 N/mm ²	M _{add(1/2)} = 0.0 / 0.0 kN.m	
Links = R10-300		

2C1 (B-2) (400/400)
(C25/30 / Grade 460 (Type 2))

No	N _{Top/Bot} (kN)	M _{11 Top/Bot} (kN.m)	M _{22 Top/Bot} (kN.m)
1	523.2, 523.2	22.4, -22.5	18.5, -18.7
2	503.6, 503.6	22.2, -22.3	18.3, -18.4
3	443.8, 443.8	16.7, -16.9	13.9, -14.1
4	513.4, 513.4	22.4, -22.5	14.2, -14.4
5	533.1, 533.1	22.3, -22.5	22.9, -23.1
6	518.5, 518.5	20.0, -20.3	18.6, -18.7
7	528.0, 528.0	24.8, -24.7	18.5, -18.7

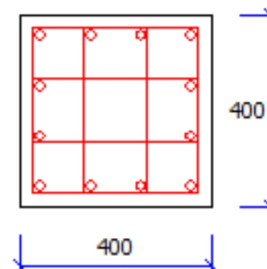


Critical Loading: 1 - (G*F)

	min	Design
N	566.4	- 566.4 kN
M ₁₁	-24.2	-11.3 -27.1 kN.m
M ₂₂	-20.1	-11.3 -23.0 kN.m
N _{max}	2561.1	

Concrete Cover = 25.0 mm

Neutral Axis: 220.1 mm / 17.46 °



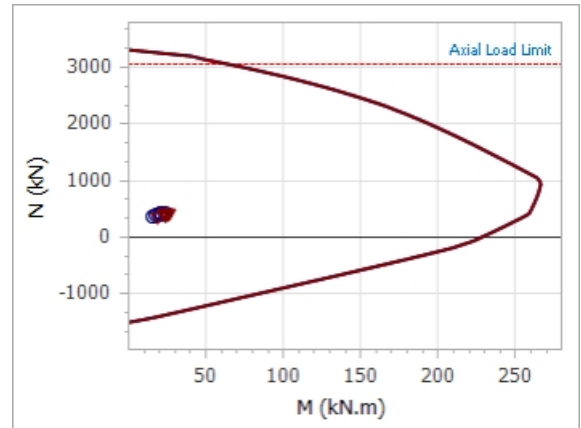
V _{Ed(1/2)} = 15.9 / 17.2 kN	Short Column...	As (Req): %0.20 (min) 320.00 mm ²
V _{Ed} = 0.10 / 0.10 N/mm ²	λ ₁ /Lim ₁ = 17.8 < 81.9 ✓	As (Sup): %2.36 3769.91 mm ²
V _{Rdc} = 1.18 / 1.18 N/mm ²	λ ₂ /Lim ₂ = 17.6 < 81.8 ✓	12T20
V _{Rd Max} = 4.86 / 4.86 N/mm ²	M _{add(1/2)} = 0.0 / 0.0 kN.m	

PROPOSED 5-STOREY ADMINISTRATION BLOCK	Fenerbahçe Kadikoy (0001907)
Column Reinforcement Design 1 15/02/2021 Rev: 1	Calc. By: SAMORA Checked By: MICHAEL

Links = R10-300

3C1 (B-2) (400/400) (C25/30 / Grade 460 (Type 2))

No	N _{Top/Bot} (kN)	M _{11 Top/Bot} (kN.m)	M _{22 Top/Bot} (kN.m)
1	410.1, 410.1	22.1, -22.4	18.2, -18.5
2	390.5, 390.5	21.9, -22.2	18.0, -18.3
3	350.7, 350.7	16.5, -16.7	13.6, -13.9
4	403.8, 403.8	22.2, -22.4	14.5, -15.4
5	416.3, 416.3	22.1, -22.4	21.9, -21.6
6	407.0, 407.0	20.1, -20.7	18.2, -18.5
7	413.1, 413.1	24.2, -24.0	18.2, -18.5

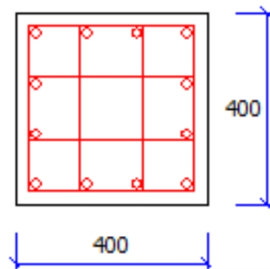


Critical Loading: 1 - (G*F)

	min	Design
N	448.0	- 448.0 kN
M ₁₁	23.2	9.0 25.2 kN.m
M ₂₂	18.9	9.0 20.8 kN.m
N _{max}	2561.1	

Concrete Cover = 25.0 mm

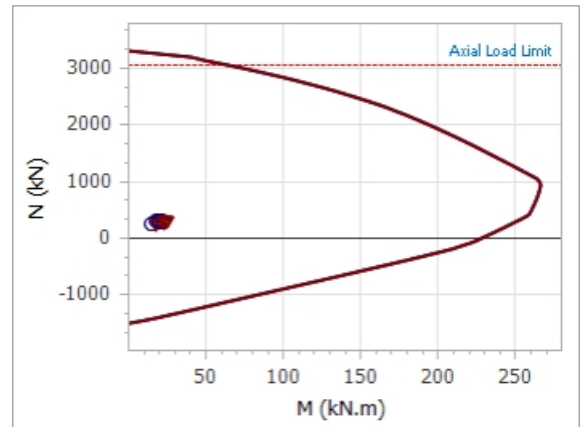
Neutral Axis: 185.1 mm / 15.88 °



V _{Ed(1/2)} = 14.7 / 16.7 kN	Short Column...	As (Req): %0.20 _(min) 320.00 mm ²
V _{Ed} = 0.10 / 0.10 N/mm ²	λ ₁ /Lim ₁ = 15.4 < 93.3 ✓	As (Sup): %2.36 3769.91 mm ²
V _{Rdc} = 1.09 / 1.08 N/mm ²	λ ₂ /Lim ₂ = 15.4 < 93.9 ✓	
V _{Rd Max} = 4.72 / 4.71 N/mm ²	M _{add(1/2)} = 0.0 / 0.0 kN.m	
Links = R10-300		12T20

4C1 (B-2) (400/400) (C25/30 / Grade 460 (Type 2))

No	N _{Top/Bot} (kN)	M _{11 Top/Bot} (kN.m)	M _{22 Top/Bot} (kN.m)
1	297.5, 297.5	21.9, -22.1	17.9, -18.2
2	278.0, 278.0	21.7, -21.9	17.8, -18.0
3	258.2, 258.2	16.3, -16.5	13.3, -13.6
4	294.1, 294.1	21.9, -22.2	15.1, -16.1
5	300.9, 300.9	21.9, -22.1	20.7, -20.3
6	295.7, 295.7	20.3, -21.0	17.9, -18.2
7	299.2, 299.2	23.5, -23.3	17.9, -18.2

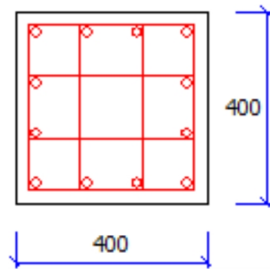


Critical Loading: 1 - (G*F)

	min	Design
N	327.9	- 327.9 kN
M ₁₁	-24.6	-6.6 -26.1 kN.m
M ₂₂	19.8	6.6 21.2 kN.m
N _{max}	2561.1	

Concrete Cover = 25.0 mm

Neutral Axis: 175.4 mm / 19.60 °



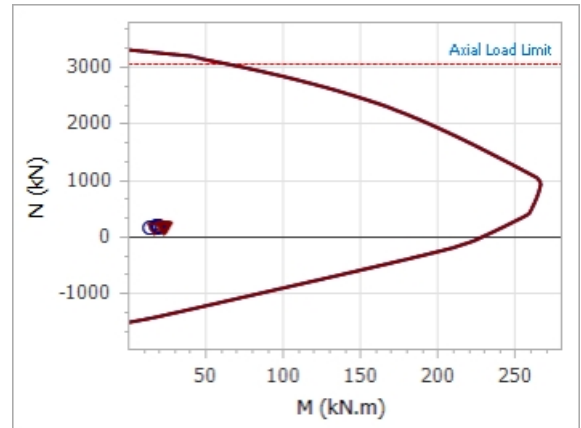
V _{Ed(1/2)} = 14.8 / 17.3 kN	Short Column...	As (Req): %0.20 _(min) 320.00 mm ²
V _{Ed} = 0.10 / 0.10 N/mm ²	λ ₁ /Lim ₁ = 15.4 < 109.5 ✓	As (Sup): %2.36 3769.91 mm ²
V _{Rdc} = 0.97 / 0.97 N/mm ²	λ ₂ /Lim ₂ = 15.4 < 109.9 ✓	
V _{Rd Max} = 4.53 / 4.53 N/mm ²	M _{add(1/2)} = 0.0 / 0.0 kN.m	
		12T20

PROPOSED 5-STOREY ADMINISTRATION BLOCK	Fenerbahçe Kadikoy (0001907)
Column Reinforcement Design 1 15/02/2021 Rev: 1	Calc. By: SAMORA Checked By: MICHAEL

Links = R10-300

5C1 (B-2) (400/400) (C25/30 / Grade 460 (Type 2))

No	N _{Top/Bot} (kN)	M _{11 Top/Bot} (kN.m)	M _{22 Top/Bot} (kN.m)
1	185.6, 185.6	21.6, -21.9	17.5, -17.9
2	166.1, 166.1	21.4, -21.7	17.5, -17.8
3	166.3, 166.3	16.1, -16.3	13.0, -13.3
4	184.1, 184.1	21.6, -21.9	15.7, -16.7
5	187.0, 187.0	21.6, -21.9	19.4, -19.1
6	184.8, 184.8	20.5, -21.2	17.5, -17.9
7	186.4, 186.4	22.7, -22.6	17.5, -17.9

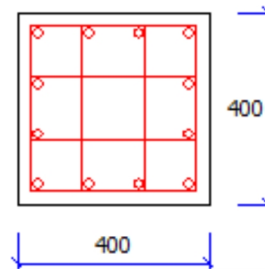


Critical Loading: 1 - (G*F)

	min	Design
N	206.8	- 206.8 kN
M ₁₁	-24.8	-4.1 -25.7 kN.m
M ₂₂	-19.5	-4.1 -20.4 kN.m
N _{max}	2561.1	

Concrete Cover = 25.0 mm

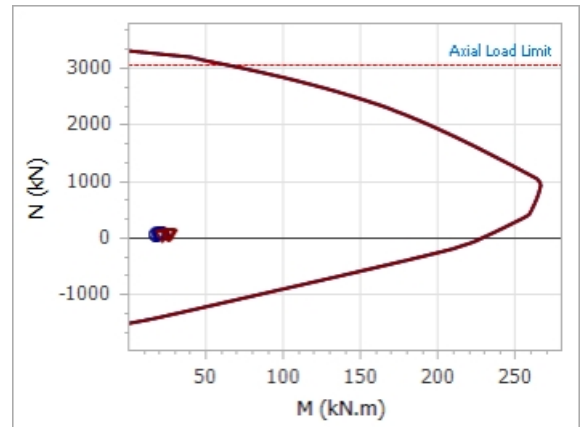
Neutral Axis: 128.6 mm / 15.81 °



V _{Ed(1/2)} = 13.8 / 16.9 kN	Short Column...	As (Req): %0.20 _(min) 320.00 mm ²
V _{Ed} = 0.09 / 0.09 N/mm ²	λ ₁ /Lim ₁ = 15.4 < 137.1 ✓	As (Sup): %2.36 3769.91 mm ²
V _{Rdc} = 0.86 / 0.86 N/mm ²	λ ₂ /Lim ₂ = 15.4 < 136.8 ✓	
V _{Rd Max} = 4.34 / 4.34 N/mm ²	M _{add(1/2)} = 0.0 / 0.0 kN.m	
Links = R10-300		12T20

6C1 (B-2) (400/400) (C25/30 / Grade 460 (Type 2))

No	N _{Top/Bot} (kN)	M _{11 Top/Bot} (kN.m)	M _{22 Top/Bot} (kN.m)
1	74.3, 74.3	25.7, -21.6	20.3, -17.5
2	54.9, 54.9	16.6, -21.4	13.2, -17.5
3	75.0, 75.0	25.7, -16.1	20.3, -13.0
4	73.9, 73.9	25.7, -21.6	19.4, -17.2
5	74.8, 74.8	25.6, -21.6	21.1, -17.9
6	74.1, 74.1	25.1, -21.4	20.3, -17.5
7	74.6, 74.6	26.2, -21.8	20.3, -17.5

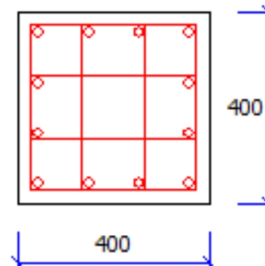


Critical Loading: 7 - (G+Q-Nx)

	min	Design
N	84.8	- 84.8 kN
M ₁₁	32.2	1.7 32.6 kN.m
M ₂₂	25.0	1.7 25.4 kN.m
N _{max}	2561.1	

Concrete Cover = 25.0 mm

Neutral Axis: 146.5 mm / 28.55 °



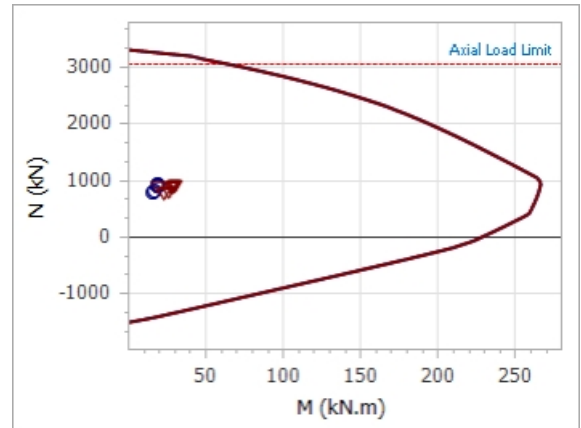
V _{Ed(1/2)} = 16.0 / 19.9 kN	Short Column...	As (Req): %0.20 _(min) 320.00 mm ²
V _{Ed} = 0.11 / 0.11 N/mm ²	λ ₁ /Lim ₁ = 15.4 < 227.0 ✓	As (Sup): %2.36 3769.91 mm ²
V _{Rdc} = 0.74 / 0.74 N/mm ²	λ ₂ /Lim ₂ = 15.4 < 225.4 ✓	
V _{Rd Max} = 4.16 / 4.16 N/mm ²	M _{add(1/2)} = 0.0 / 0.0 kN.m	
		12T20

PROPOSED 5-STOREY ADMINISTRATION BLOCK	Fenerbahçe Kadiköy (0001907)
Column Reinforcement Design 1 15/02/2021 Rev: 1	Calc. By: SAMORA Checked By: MICHAEL

Links = R10-300

1C2 (B-3) (400/400) (C25/30 / Grade 460 (Type 2))

No	N _{Top/Bot} (kN)	M _{11 Top/Bot} (kN.m)	M _{22 Top/Bot} (kN.m)
1	914.6, 914.6	24.8, -11.9	-11.8, 5.7
2	829.2, 829.2	22.4, -10.8	-12.6, 6.1
3	794.3, 794.3	19.1, -9.2	-8.1, 3.9
4	918.3, 918.3	24.9, -12.0	-15.1, 12.0
5	911.0, 911.0	24.7, -11.8	-8.4, -0.7
6	911.2, 911.2	23.2, -7.9	-11.6, 5.5
7	918.1, 918.1	26.4, -16.0	-11.9, 5.8

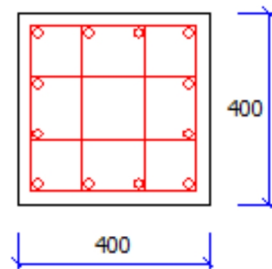


Critical Loading: 1 - (G*F)

	min	Design
N	853.9	- 853.9 kN
M ₁₁	20.9	17.1 24.5 kN.m
M ₂₂	-11.3	-17.1 kN.m
N _{max}	2561.1	

Concrete Cover = 25.0 mm

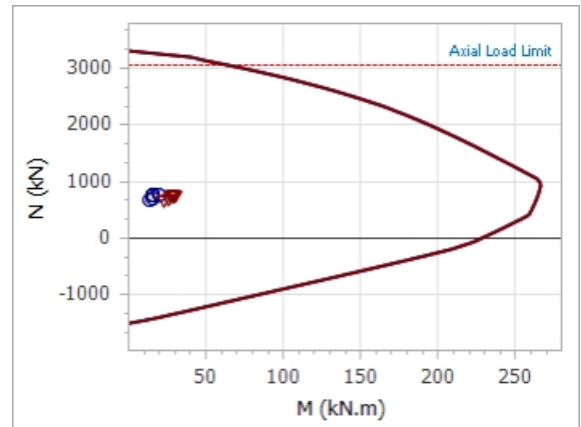
Neutral Axis: 291.7 mm / 18.54 °



V _{Ed(1/2)} = 8.5 / 12.4 kN	Short Column...	As (Req): %0.20 _(min) 320.00 mm ²
V _{Ed} = 0.06 / 0.06 N/mm ²	λ ₁ /Lim ₁ = 13.0 < 56.2 ✓	As (Sup): %2.36 3769.91 mm ²
V _{Rdc} = 1.18 / 1.18 N/mm ²	λ ₂ /Lim ₂ = 15.0 < 57.5 ✓	
V _{Rd Max} = 4.86 / 4.86 N/mm ²	M _{add(1/2)} = 0.0 / 0.0 kN.m	
Links = R10-300		
12T20		

2C2 (B-3) (400/400) (C25/30 / Grade 460 (Type 2))

No	N _{Top/Bot} (kN)	M _{11 Top/Bot} (kN.m)	M _{22 Top/Bot} (kN.m)
1	762.3, 762.3	24.5, -24.8	-11.9, 11.8
2	689.3, 689.3	22.2, -22.4	-12.7, 12.6
3	662.6, 662.6	18.9, -19.1	-8.2, 8.1
4	764.7, 764.7	24.7, -24.9	-16.2, 16.1
5	759.8, 759.8	24.4, -24.7	-7.5, 7.4
6	759.6, 759.6	22.8, -23.3	-11.8, 11.8
7	764.9, 764.9	26.2, -26.3	-11.9, 11.7

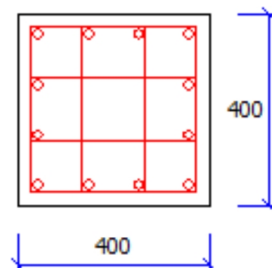


Critical Loading: 1 - (G*F)

	min	Design
N	705.2	- 705.2 kN
M ₁₁	-30.0	-14.1 -33.6 kN.m
M ₂₂	14.4	14.1 17.6 kN.m
N _{max}	2561.1	

Concrete Cover = 25.0 mm

Neutral Axis: 288.2 mm / 24.68 °



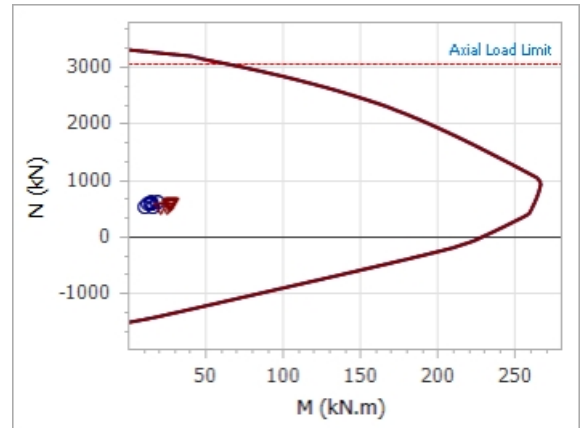
V _{Ed(1/2)} = 12.1 / 20.3 kN	Short Column...	As (Req): %0.20 _(min) 320.00 mm ²
V _{Ed} = 0.08 / 0.08 N/mm ²	λ ₁ /Lim ₁ = 15.6 < 72.9 ✓	As (Sup): %2.36 3769.91 mm ²
V _{Rdc} = 1.18 / 1.18 N/mm ²	λ ₂ /Lim ₂ = 17.6 < 72.9 ✓	
V _{Rd Max} = 4.86 / 4.86 N/mm ²	M _{add(1/2)} = 0.0 / 0.0 kN.m	
12T20		

PROPOSED 5-STOREY ADMINISTRATION BLOCK	Fenerbahçe Kadikoy (0001907)
Column Reinforcement Design 1 15/02/2021 Rev: 1	Calc. By: SAMORA Checked By: MICHAEL

Links = R10-300

3C2 (B-3) (400/400) (C25/30 / Grade 460 (Type 2))

No	N _{Top/Bot} (kN)	M _{11 Top/Bot} (kN.m)	M _{22 Top/Bot} (kN.m)
1	603.6, 603.6	24.3, -24.5	-11.8, 11.9
2	543.1, 543.1	22.0, -22.2	-12.6, 12.7
3	525.1, 525.1	18.7, -18.9	-8.3, 8.2
4	604.9, 604.9	24.4, -24.6	-15.5, 15.0
5	602.3, 602.3	24.2, -24.4	-8.1, 8.8
6	601.7, 601.7	22.8, -23.4	-11.8, 11.9
7	605.4, 605.4	25.8, -25.6	-11.8, 11.9

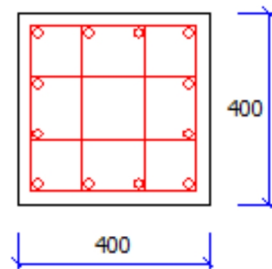


Critical Loading: 1 - (G*F)

	min	Design
N	553.4	- 553.4 kN
M ₁₁	27.1	11.1 29.5 kN.m
M ₂₂	-11.7	-11.1 -14.2 kN.m
N _{max}	2561.1	

Concrete Cover = 25.0 mm

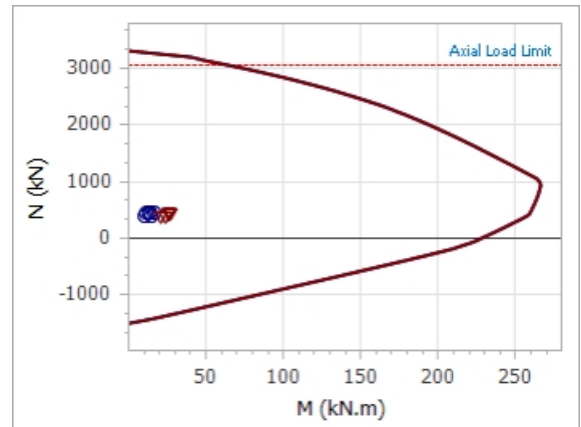
Neutral Axis: 239.6 mm / 22.02 °



V _{Ed(1/2)} = 10.1 / 18.9 kN	Short Column...	As (Req): %0.20 _(min) 320.00 mm ²
V _{Ed} = 0.07 / 0.07 N/mm ²	λ ₁ /Lim ₁ = 15.4 < 84.5 ✓	As (Sup): %2.36 3769.91 mm ²
V _{Rdc} = 1.18 / 1.18 N/mm ²	λ ₂ /Lim ₂ = 15.4 < 84.4 ✓	
V _{Rd Max} = 4.86 / 4.86 N/mm ²	M _{add(1/2)} = 0.0 / 0.0 kN.m	
Links = R10-300		
12T20		

4C2 (B-3) (400/400) (C25/30 / Grade 460 (Type 2))

No	N _{Top/Bot} (kN)	M _{11 Top/Bot} (kN.m)	M _{22 Top/Bot} (kN.m)
1	443.4, 443.4	24.0, -24.3	-11.8, 11.8
2	395.4, 395.4	21.8, -22.0	-12.5, 12.6
3	386.3, 386.3	18.5, -18.7	-8.3, 8.3
4	444.0, 444.0	24.1, -24.4	-14.6, 14.0
5	442.9, 442.9	24.0, -24.2	-9.0, 9.7
6	442.3, 442.3	22.8, -23.5	-11.8, 11.8
7	444.6, 444.6	25.3, -25.0	-11.8, 11.8

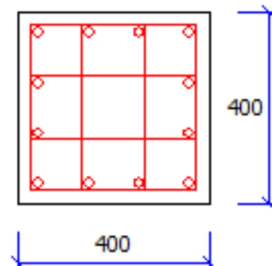


Critical Loading: 1 - (G*F)

	min	Design
N	402.8	- 402.8 kN
M ₁₁	28.5	8.1 30.3 kN.m
M ₂₂	11.5	8.1 13.3 kN.m
N _{max}	2561.1	

Concrete Cover = 25.0 mm

Neutral Axis: 148.6 mm / 10.20 °



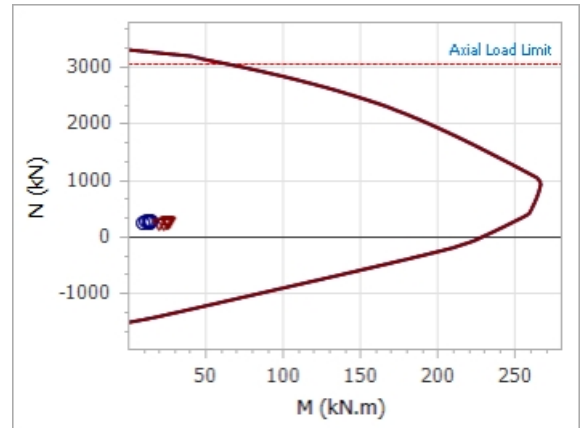
V _{Ed(1/2)} = 9.3 / 19.6 kN	Short Column...	As (Req): %0.20 _(min) 320.00 mm ²
V _{Ed} = 0.06 / 0.06 N/mm ²	λ ₁ /Lim ₁ = 15.4 < 98.8 ✓	As (Sup): %2.36 3769.91 mm ²
V _{Rdc} = 1.04 / 1.04 N/mm ²	λ ₂ /Lim ₂ = 15.4 < 99.1 ✓	
V _{Rd Max} = 4.64 / 4.64 N/mm ²	M _{add(1/2)} = 0.0 / 0.0 kN.m	
12T20		

PROPOSED 5-STOREY ADMINISTRATION BLOCK	Fenerbahce Kadikoy (0001907)
Column Reinforcement Design 1 15/02/2021 Rev: 1	Calc. By: SAMORA Checked By: MICHAEL

Links = R10-300

5C2 (B-3) (400/400) (C25/30 / Grade 460 (Type 2))

No	N _{Top/Bot} (kN)	M _{11 Top/Bot} (kN.m)	M _{22 Top/Bot} (kN.m)
1	281.7, 281.7	23.8, -24.0	-11.7, 11.8
2	246.2, 246.2	21.6, -21.8	-12.4, 12.5
3	246.4, 246.4	18.2, -18.5	-8.3, 8.3
4	281.8, 281.8	23.8, -24.1	-13.6, 13.0
5	281.6, 281.6	23.7, -24.0	-9.8, 10.6
6	281.0, 281.0	22.9, -23.6	-11.7, 11.8
7	282.3, 282.3	24.7, -24.5	-11.7, 11.8

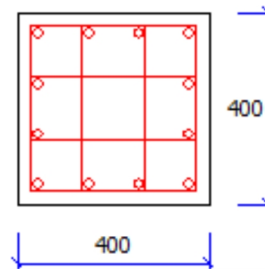


Critical Loading: 1 - (G*F)

	min	Design
N	253.1	- 253.1 kN
M ₁₁	-27.8	-5.1 -29.0 kN.m
M ₂₂	11.0	5.1 12.1 kN.m
N _{max}	2561.1	

Concrete Cover = 25.0 mm

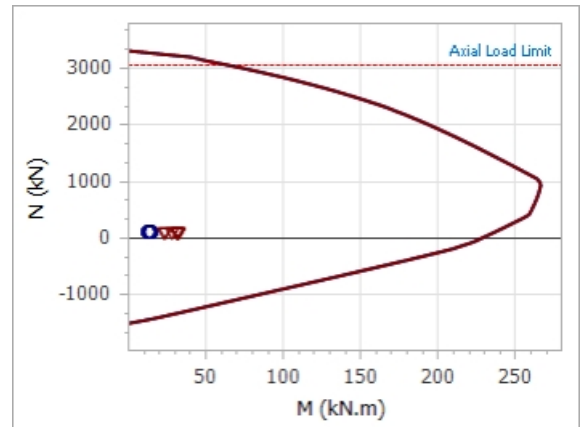
Neutral Axis: 175.7 mm / 24.11 °



V _{Ed(1/2)} = 8.1 / 18.5 kN	Short Column...	As (Req): %0.20 (min) 320.00 mm ²
V _{Ed} = 0.05 / 0.05 N/mm ²	λ ₁ /Lim ₁ = 15.4 < 124.0 ✓	As (Sup): %2.36 3769.91 mm ²
V _{Rdc} = 0.87 / 0.90 N/mm ²	λ ₂ /Lim ₂ = 15.4 < 122.6 ✓	
V _{Rd Max} = 4.36 / 4.41 N/mm ²	M _{add(1/2)} = 0.0 / 0.0 kN.m	
Links = R10-300		
12T20		

6C2 (B-3) (400/400) (C25/30 / Grade 460 (Type 2))

No	N _{Top/Bot} (kN)	M _{11 Top/Bot} (kN.m)	M _{22 Top/Bot} (kN.m)
1	118.3, 118.3	31.2, -23.8	-12.7, 11.7
2	95.2, 95.2	22.4, -21.6	-7.4, 12.4
3	105.3, 105.3	28.1, -18.2	-13.8, 8.3
4	118.2, 118.2	31.3, -23.8	-13.6, 12.0
5	118.3, 118.3	31.2, -23.7	-11.9, 11.4
6	118.0, 118.0	30.7, -23.7	-12.7, 11.7
7	118.5, 118.5	31.7, -23.9	-12.7, 11.7

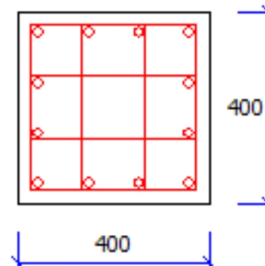


Critical Loading: 7 - (G+Q-Nx)

	min	Design
N	104.2	- 104.2 kN
M ₁₁	40.5	2.1 41.0 kN.m
M ₂₂	-11.7	-2.1 -12.1 kN.m
N _{max}	2561.1	

Concrete Cover = 25.0 mm

Neutral Axis: 543.5 mm / 81.32 °



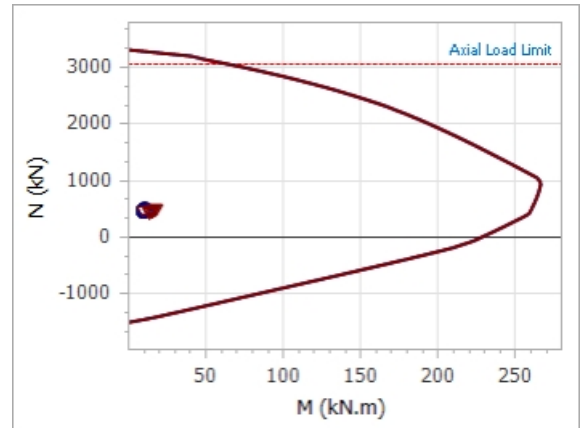
V _{Ed(1/2)} = 8.9 / 24.2 kN	Short Column...	As (Req): %0.21 329.98 mm ²
V _{Ed} = 0.06 / 0.06 N/mm ²	λ ₁ /Lim ₁ = 15.4 < 210.0 ✓	As (Sup): %2.36 3769.91 mm ²
V _{Rdc} = 0.74 / 0.76 N/mm ²	λ ₂ /Lim ₂ = 15.4 < 198.7 ✓	
V _{Rd Max} = 4.16 / 4.19 N/mm ²	M _{add(1/2)} = 0.0 / 0.0 kN.m	
12T20		

PROPOSED 5-STOREY ADMINISTRATION BLOCK	Fenerbahçe Kadikoy (0001907)
Column Reinforcement Design 1 15/02/2021 Rev: 1	Calc. By: SAMORA Checked By: MICHAEL

Links = R10-300

1C3 (A-4) (400/400) (C25/30 / Grade 460 (Type 2))

No	N _{Top/Bot} (kN)	M _{11 Top/Bot} (kN.m)	M _{22 Top/Bot} (kN.m)
1	489.6, 489.6	13.3, -6.4	-0.5, 0.2
2	444.7, 444.7	11.4, -5.5	0.5, -0.2
3	453.3, 453.3	11.3, -5.4	-1.4, 0.7
4	489.4, 489.4	13.3, -6.4	-4.1, 6.8
5	489.8, 489.8	13.3, -6.4	3.1, -6.3
6	479.5, 479.5	11.3, -2.2	-0.4, 0.1
7	499.7, 499.7	15.2, -10.6	-0.6, 0.4

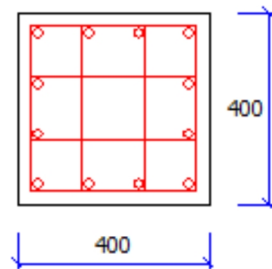


Critical Loading: 1 - (G*F)

	min	Design
N	631.7	- 631.7 kN
M ₁₁	11.0	12.6 13.6 kN.m
M ₂₂	-1.1	-12.6 kN.m
N _{max}	2561.1	

Concrete Cover = 25.0 mm

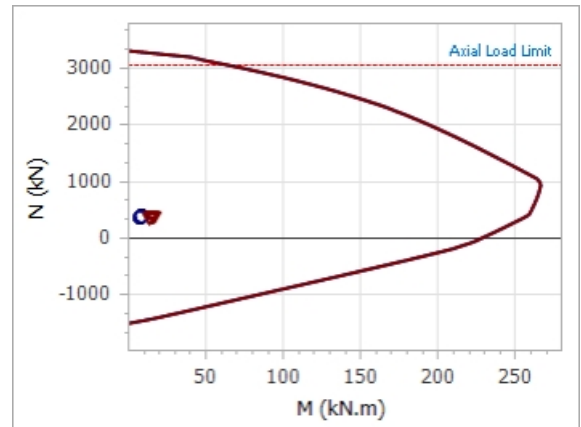
Neutral Axis: 203.1 mm / 10.49 °



V _{Ed(1/2)} = 3.8 / 7.7 kN	Short Column...	As (Req): %0.20 (min) 320.00 mm ²
V _{Ed} = 0.03 / 0.03 N/mm ²	λ ₁ /Lim ₁ = 15.3 < 20.5 ✓	As (Sup): %2.36 3769.91 mm ²
V _{Rdc} = 1.18 / 1.18 N/mm ²	λ ₂ /Lim ₂ = 14.0 < 68.1 ✓	
V _{Rd Max} = 4.86 / 4.86 N/mm ²	M _{add(1/2)} = 0.0 / 0.0 kN.m	
Links = R10-300		12T20

2C3 (A-4) (400/400) (C25/30 / Grade 460 (Type 2))

No	N _{Top/Bot} (kN)	M _{11 Top/Bot} (kN.m)	M _{22 Top/Bot} (kN.m)
1	397.2, 397.2	12.8, -13.3	-0.4, 0.5
2	360.4, 360.4	11.0, -11.4	0.5, -0.5
3	368.6, 368.6	10.8, -11.3	-1.3, 1.4
4	397.1, 397.1	12.8, -13.3	-5.1, 5.2
5	397.3, 397.3	12.8, -13.3	4.3, -4.2
6	390.2, 390.2	10.7, -11.4	-0.4, 0.6
7	404.1, 404.1	14.9, -15.2	-0.4, 0.5

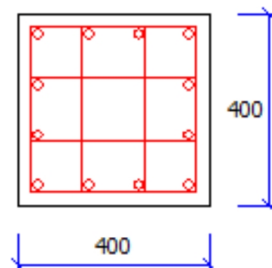


Critical Loading: 1 - (G*F)

	min	Design
N	531.7	- 531.7 kN
M ₁₁	-16.7	-10.6 -19.3 kN.m
M ₂₂	-1.1	-10.6 kN.m
N _{max}	2561.1	

Concrete Cover = 25.0 mm

Neutral Axis: 170.3 mm / 8.35 °



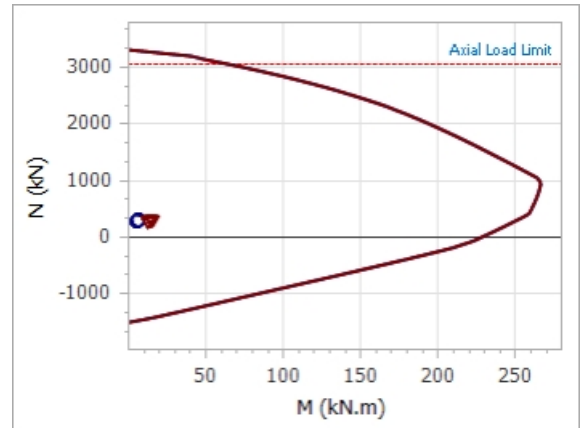
V _{Ed(1/2)} = 3.7 / 12.1 kN	Short Column...	As (Req): %0.20 (min) 320.00 mm ²
V _{Ed} = 0.02 / 0.02 N/mm ²	λ ₁ /Lim ₁ = 18.0 < 22.4 ✓	As (Sup): %2.36 3769.91 mm ²
V _{Rdc} = 1.16 / 1.17 N/mm ²	λ ₂ /Lim ₂ = 16.5 < 84.5 ✓	
V _{Rd Max} = 4.84 / 4.85 N/mm ²	M _{add(1/2)} = 0.0 / 0.0 kN.m	
		12T20

PROPOSED 5-STOREY ADMINISTRATION BLOCK	Fenerbahçe Kadiköy (0001907)
Column Reinforcement Design 1 15/02/2021 Rev: 1	Calc. By: SAMORA Checked By: MICHAEL

Links = R10-300

3C3 (A-4) (400/400) (C25/30 / Grade 460 (Type 2))

No	N _{Top/Bot} (kN)	M _{11 Top/Bot} (kN.m)	M _{22 Top/Bot} (kN.m)
1	305.2, 305.2	12.2, -12.8	-0.3, 0.4
2	276.4, 276.4	10.6, -11.0	0.6, -0.5
3	283.6, 283.6	10.4, -10.8	-1.1, 1.3
4	305.1, 305.1	12.2, -12.8	-4.4, 3.9
5	305.2, 305.2	12.2, -12.8	3.8, -3.1
6	300.9, 300.9	10.5, -11.4	-0.3, 0.5
7	309.4, 309.4	14.0, -14.2	-0.2, 0.3

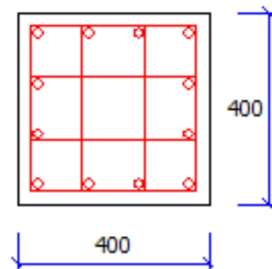


Critical Loading: 1 - (G*F)

	min	Design
N	422.1	- 422.1 kN
M ₁₁	16.5	8.4 18.3 kN.m
M ₂₂	-0.3	-8.4 kN.m
N _{max}	2561.1	

Concrete Cover = 25.0 mm

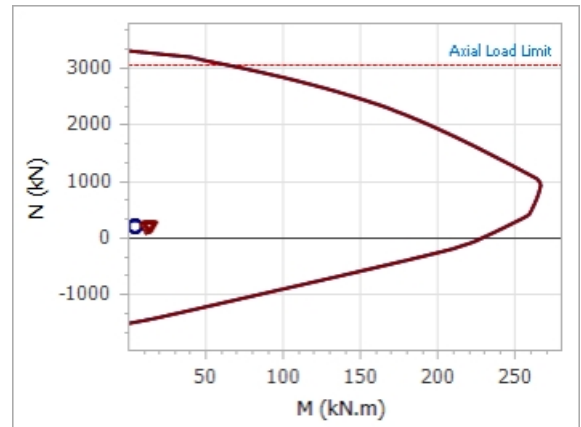
Neutral Axis: 170.8 mm / 14.08 °



V _{Ed(1/2)} = 2.7 / 12.0 kN	Short Column...	As (Req): %0.20 _(min) 320.00 mm ²
V _{Ed} = 0.02 / 0.02 N/mm ²	λ ₁ /Lim ₁ = 15.4 < 25.1 ✓	As (Sup): %2.36 3769.91 mm ²
V _{Rdc} = 1.06 / 1.06 N/mm ²	λ ₂ /Lim ₂ = 15.4 < 96.5 ✓	
V _{Rd Max} = 4.67 / 4.68 N/mm ²	M _{add(1/2)} = 0.0 / 0.0 kN.m	12T20
Links = R10-300		

4C3 (A-4) (400/400) (C25/30 / Grade 460 (Type 2))

No	N _{Top/Bot} (kN)	M _{11 Top/Bot} (kN.m)	M _{22 Top/Bot} (kN.m)
1	215.7, 215.7	11.6, -12.2	-0.1, 0.3
2	195.0, 195.0	10.1, -10.6	0.6, -0.6
3	200.5, 200.5	9.9, -10.4	-0.9, 1.1
4	215.7, 215.7	11.7, -12.2	-3.3, 2.8
5	215.7, 215.7	11.6, -12.2	3.1, -2.3
6	213.5, 213.5	10.3, -11.3	-0.2, 0.3
7	217.9, 217.9	13.0, -13.1	-0.1, 0.2

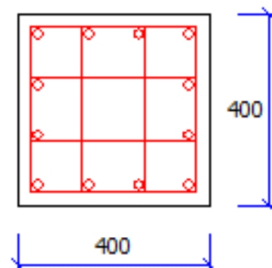


Critical Loading: 1 - (G*F)

	min	Design
N	309.3	- 309.3 kN
M ₁₁	17.9	6.2 19.3 kN.m
M ₂₂	-0.1	-6.2 kN.m
N _{max}	2561.1	

Concrete Cover = 25.0 mm

Neutral Axis: 147.3 mm / 14.61 °



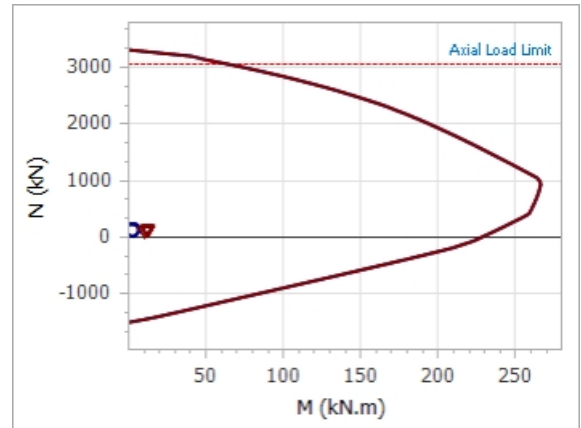
V _{Ed(1/2)} = 2.0 / 12.6 kN	Short Column...	As (Req): %0.20 _(min) 320.00 mm ²
V _{Ed} = 0.01 / 0.01 N/mm ²	λ ₁ /Lim ₁ = 15.4 < 29.3 ✓	As (Sup): %2.36 3769.91 mm ²
V _{Rdc} = 0.95 / 0.95 N/mm ²	λ ₂ /Lim ₂ = 15.4 < 112.9 ✓	
V _{Rd Max} = 4.50 / 4.50 N/mm ²	M _{add(1/2)} = 0.0 / 0.0 kN.m	12T20

PROPOSED 5-STOREY ADMINISTRATION BLOCK	Fenerbahçe Kadikoy (0001907)
Column Reinforcement Design 1 15/02/2021 Rev: 1	Calc. By: SAMORA Checked By: MICHAEL

Links = R10-300

5C3 (A-4) (400/400) (C25/30 / Grade 460 (Type 2))

No	N _{Top/Bot} (kN)	M _{11 Top/Bot} (kN.m)	M _{22 Top/Bot} (kN.m)
1	129.0, 129.0	11.0, -11.6	0.0, 0.1
2	116.3, 116.3	9.6, -10.1	0.7, -0.6
3	119.4, 119.4	9.3, -9.9	-0.7, 0.9
4	129.0, 129.0	11.0, -11.6	-2.2, 1.7
5	128.9, 128.9	11.0, -11.6	2.2, -1.4
6	128.1, 128.1	10.1, -11.2	-0.1, 0.2
7	129.8, 129.8	12.0, -12.1	0.1, 0.0

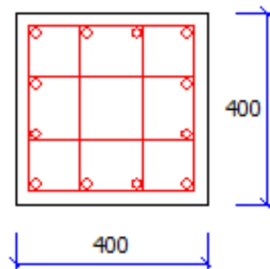


Critical Loading: 1 - (G*F)

	min	Design
N	194.5	- 194.5 kN
M ₁₁	-18.0	-3.9 -18.9 kN.m
M ₂₂	-0.4	-3.9 -3.9 kN.m
N _{max}	2561.1	

Concrete Cover = 25.0 mm

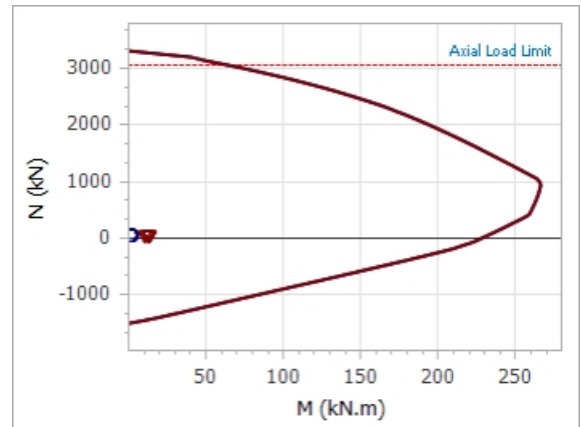
Neutral Axis: 68.8 mm / 2.94 °



V _{Ed(1/2)} = 1.5 / 12.2 kN	Short Column...	As (Req): %0.20 _(min) 320.00 mm ²
V _{Ed} = 0.01 / 0.01 N/mm ²	λ ₁ /Lim ₁ = 15.4 < 37.0 ✓	As (Sup): %2.36 3769.91 mm ²
V _{Rdc} = 0.84 / 0.84 N/mm ²	λ ₂ /Lim ₂ = 15.4 < 140.5 ✓	
V _{Rd Max} = 4.32 / 4.32 N/mm ²	M _{add(1/2)} = 0.0 / 0.0 kN.m	
Links = R10-300		
12T20		

6C3 (A-4) (400/400) (C25/30 / Grade 460 (Type 2))

No	N _{Top/Bot} (kN)	M _{11 Top/Bot} (kN.m)	M _{22 Top/Bot} (kN.m)
1	45.2, 45.2	12.9, -11.0	0.5, 0.0
2	40.5, 40.5	10.3, -9.6	-1.0, -0.7
3	40.3, 40.3	10.7, -9.3	1.9, 0.7
4	45.2, 45.2	12.9, -11.0	-0.8, 0.7
5	45.1, 45.1	12.9, -11.0	1.9, -0.7
6	45.0, 45.0	12.6, -11.0	0.4, 0.1
7	45.3, 45.3	13.3, -11.1	0.7, -0.1

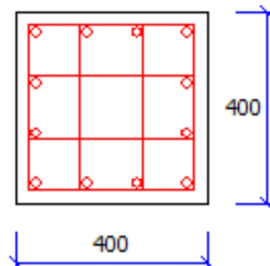


Critical Loading: 1 - (G*F)

	min	Design
N	77.5	- 77.5 kN
M ₁₁	25.4	1.6 25.8 kN.m
M ₂₂	0.1	1.6 1.6 kN.m
N _{max}	2561.1	

Concrete Cover = 25.0 mm

Neutral Axis: 36.3 mm / 1.08 °



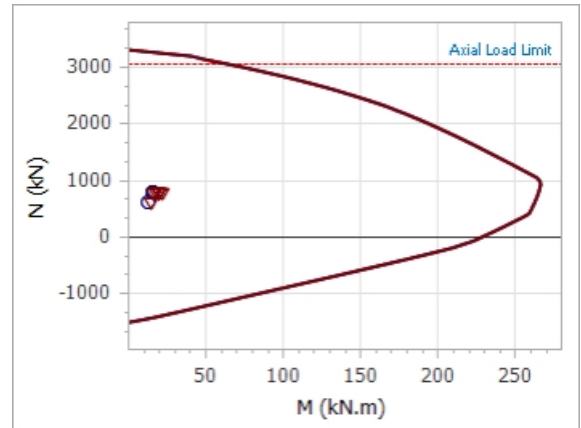
V _{Ed(1/2)} = 0.7 / 15.5 kN	Short Column...	As (Req): %0.20 _(min) 320.00 mm ²
V _{Ed} = 0.00 / 0.00 N/mm ²	λ ₁ /Lim ₁ = 15.4 < 58.6 ✓	As (Sup): %2.36 3769.91 mm ²
V _{Rdc} = 0.73 / 0.73 N/mm ²	λ ₂ /Lim ₂ = 15.4 < 210.5 ✓	
V _{Rd Max} = 4.15 / 4.15 N/mm ²	M _{add(1/2)} = 0.0 / 0.0 kN.m	
12T20		

PROPOSED 5-STOREY ADMINISTRATION BLOCK	Fenerbahçe Kadiköy (0001907)
Column Reinforcement Design 1 15/02/2021 Rev: 1	Calc. By: SAMORA Checked By: MICHAEL

Links = R10-300

1C4 (B-5) (400/400) (C25/30 / Grade 460 (Type 2))

No	N _{Top/Bot} (kN)	M _{11 Top/Bot} (kN.m)	M _{22 Top/Bot} (kN.m)
1	783.0, 783.0	16.4, -7.9	10.7, -5.1
2	774.4, 774.4	15.9, -7.7	10.9, -5.3
3	622.8, 622.8	11.5, -5.5	7.9, -3.8
4	782.7, 782.7	16.1, -7.7	8.3, 0.8
5	783.2, 783.2	16.6, -8.0	13.0, -11.0
6	778.0, 778.0	14.6, -3.8	10.7, -5.2
7	788.0, 788.0	18.2, -12.0	10.6, -5.0

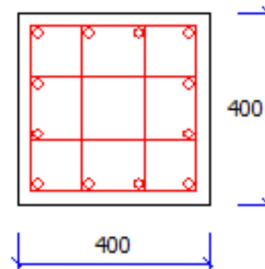


Critical Loading: 1 - (G*F)

	min	Design
N	751.8	- 751.8 kN
M ₁₁	12.1	15.0 15.5 kN.m
M ₂₂	12.4	15.0 15.2 kN.m
N _{max}	2561.1	

Concrete Cover = 25.0 mm

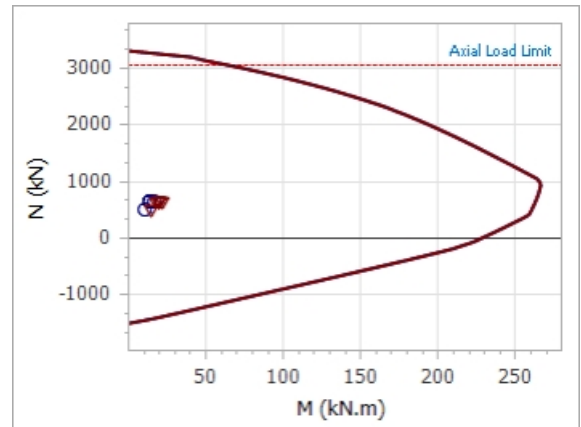
Neutral Axis: 237.3 mm / 11.87 °



V _{Ed(1/2)} = 9.2 / 8.2 kN	Short Column...	As (Req): %0.20 _(min) 320.00 mm ²
V _{Ed} = 0.06 / 0.06 N/mm ²	λ ₁ /Lim ₁ = 13.2 < 63.0 ✓	As (Sup): %2.36 3769.91 mm ²
V _{Rdc} = 1.18 / 1.18 N/mm ²	λ ₂ /Lim ₂ = 15.6 < 62.7 ✓	
V _{Rd Max} = 4.86 / 4.86 N/mm ²	M _{add(1/2)} = 0.0 / 0.0 kN.m	
Links = R10-300		12T20

2C4 (B-5) (400/400) (C25/30 / Grade 460 (Type 2))

No	N _{Top/Bot} (kN)	M _{11 Top/Bot} (kN.m)	M _{22 Top/Bot} (kN.m)
1	650.8, 650.8	15.8, -16.4	10.6, -10.7
2	642.4, 642.4	15.5, -15.9	10.9, -10.9
3	517.9, 517.9	10.9, -11.5	8.0, -7.9
4	650.7, 650.7	15.5, -16.1	7.5, -7.7
5	650.9, 650.9	16.1, -16.7	13.7, -13.7
6	647.1, 647.1	13.8, -14.6	10.6, -10.6
7	654.5, 654.5	17.8, -18.1	10.6, -10.7

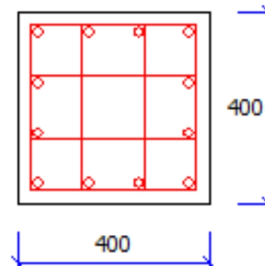


Critical Loading: 1 - (G*F)

	min	Design
N	622.9	- 622.9 kN
M ₁₁	-18.2	-12.5 -21.5 kN.m
M ₂₂	-17.7	-12.5 -20.5 kN.m
N _{max}	2561.1	

Concrete Cover = 25.0 mm

Neutral Axis: 224.8 mm / 15.65 °



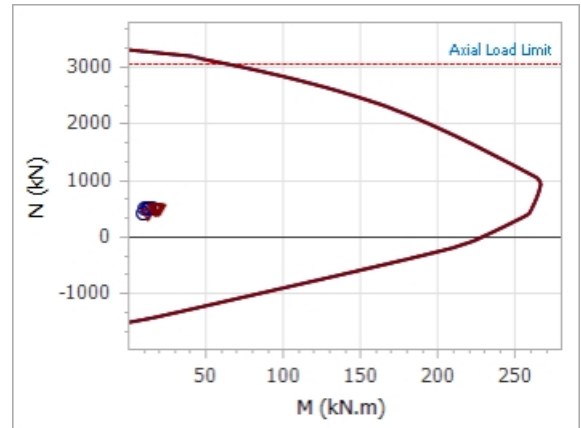
V _{Ed(1/2)} = 13.2 / 13.0 kN	Short Column...	As (Req): %0.20 _(min) 320.00 mm ²
V _{Ed} = 0.09 / 0.09 N/mm ²	λ ₁ /Lim ₁ = 15.5 < 77.0 ✓	As (Sup): %2.36 3769.91 mm ²
V _{Rdc} = 1.18 / 1.18 N/mm ²	λ ₂ /Lim ₂ = 18.3 < 78.1 ✓	
V _{Rd Max} = 4.86 / 4.86 N/mm ²	M _{add(1/2)} = 0.0 / 0.0 kN.m	
		12T20

PROPOSED 5-STOREY ADMINISTRATION BLOCK	Fenerbahçe Kadiköy (0001907)
Column Reinforcement Design 1 15/02/2021 Rev: 1	Calc. By: SAMORA Checked By: MICHAEL

Links = R10-300

3C4 (B-5) (400/400) (C25/30 / Grade 460 (Type 2))

No	N _{Top/Bot} (kN)	M _{11 Top/Bot} (kN.m)	M _{22 Top/Bot} (kN.m)
1	514.3, 514.3	15.4, -15.8	10.6, -10.6
2	505.7, 505.7	15.2, -15.5	10.7, -10.9
3	409.2, 409.2	10.5, -10.9	8.0, -8.0
4	514.2, 514.2	15.2, -15.5	7.9, -8.6
5	514.3, 514.3	15.7, -16.1	13.3, -12.7
6	511.8, 511.8	13.7, -14.5	10.6, -10.6
7	516.8, 516.8	17.2, -17.1	10.6, -10.7

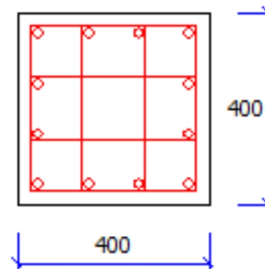


Critical Loading: 1 - (G*F)

	min	Design
N	489.4	- 489.4 kN
M ₁₁	17.6	9.8 19.8 kN.m
M ₂₂	14.5	9.8 16.7 kN.m
N _{max}	2561.1	

Concrete Cover = 25.0 mm

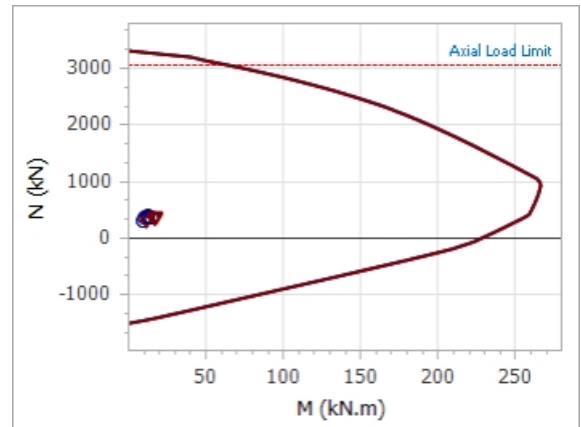
Neutral Axis: 180.7 mm / 12.87 °



V _{Ed(1/2)} = 11.2 / 12.7 kN	Short Column...	As (Req): %0.20 _(min) 320.00 mm ²
V _{Ed} = 0.07 / 0.07 N/mm ²	λ ₁ /Lim ₁ = 15.4 < 89.8 ✓	As (Sup): %2.36 3769.91 mm ²
V _{Rdc} = 1.12 / 1.12 N/mm ²	λ ₂ /Lim ₂ = 15.4 < 89.7 ✓	
V _{Rd Max} = 4.77 / 4.78 N/mm ²	M _{add(1/2)} = 0.0 / 0.0 kN.m	
Links = R10-300		12T20

4C4 (B-5) (400/400) (C25/30 / Grade 460 (Type 2))

No	N _{Top/Bot} (kN)	M _{11 Top/Bot} (kN.m)	M _{22 Top/Bot} (kN.m)
1	376.8, 376.8	15.1, -15.4	10.5, -10.6
2	367.8, 367.8	15.0, -15.2	10.6, -10.7
3	300.1, 300.1	10.2, -10.5	8.0, -8.0
4	376.8, 376.8	14.9, -15.2	8.4, -9.2
5	376.8, 376.8	15.3, -15.7	12.6, -11.9
6	375.3, 375.3	13.7, -14.5	10.5, -10.5
7	378.3, 378.3	16.4, -16.4	10.5, -10.6

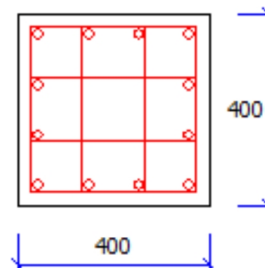


Critical Loading: 1 - (G*F)

	min	Design
N	356.2	- 356.2 kN
M ₁₁	18.9	7.1 20.5 kN.m
M ₂₂	-14.7	-7.1 -16.3 kN.m
N _{max}	2561.1	

Concrete Cover = 25.0 mm

Neutral Axis: 162.7 mm / 15.57 °



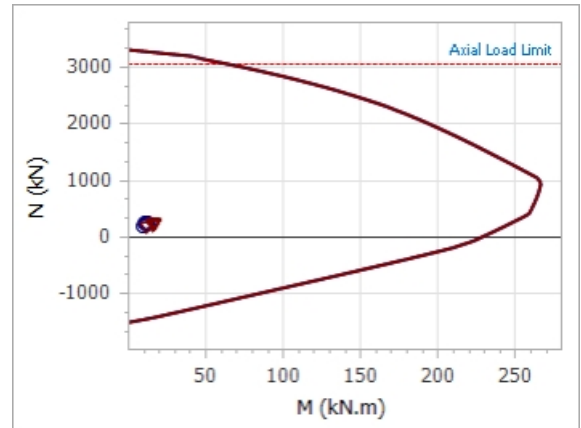
V _{Ed(1/2)} = 10.5 / 13.3 kN	Short Column...	As (Req): %0.20 _(min) 320.00 mm ²
V _{Ed} = 0.07 / 0.07 N/mm ²	λ ₁ /Lim ₁ = 15.4 < 105.2 ✓	As (Sup): %2.36 3769.91 mm ²
V _{Rdc} = 0.95 / 1.00 N/mm ²	λ ₂ /Lim ₂ = 15.4 < 105.2 ✓	
V _{Rd Max} = 4.50 / 4.57 N/mm ²	M _{add(1/2)} = 0.0 / 0.0 kN.m	
		12T20

PROPOSED 5-STOREY ADMINISTRATION BLOCK	Fenerbahçe Kadikoy (0001907)
Column Reinforcement Design 1 15/02/2021 Rev: 1	Calc. By: SAMORA Checked By: MICHAEL

Links = R10-300

5C4 (B-5) (400/400) (C25/30 / Grade 460 (Type 2))

No	N _{Top/Bot} (kN)	M _{11 Top/Bot} (kN.m)	M _{22 Top/Bot} (kN.m)
1	238.4, 238.4	14.7, -15.1	10.4, -10.5
2	228.4, 228.4	14.8, -15.0	10.5, -10.6
3	190.6, 190.6	9.8, -10.2	8.0, -8.0
4	238.4, 238.4	14.6, -14.9	8.9, -9.8
5	238.3, 238.3	14.8, -15.2	11.9, -11.2
6	237.6, 237.6	13.7, -14.6	10.4, -10.5
7	239.1, 239.1	15.7, -15.6	10.5, -10.6

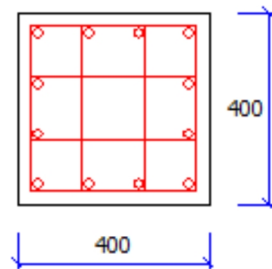


Critical Loading: 1 - (G*F)

	min	Design
N	223.2	- 223.2 kN
M ₁₁	-18.8	-4.5 -19.8 kN.m
M ₂₂	-14.0	-4.5 -15.0 kN.m
N _{max}	2561.1	

Concrete Cover = 25.0 mm

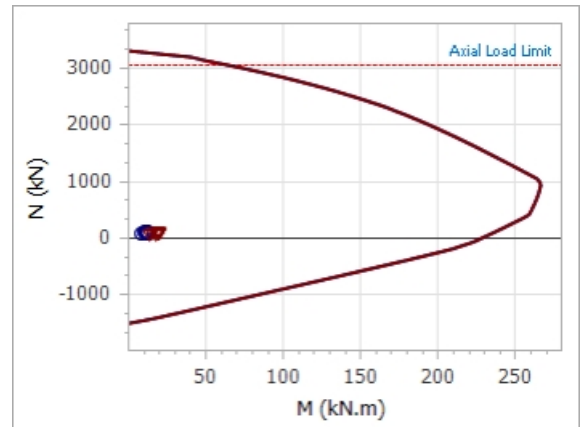
Neutral Axis: 112.9 mm / 11.45 °



V _{Ed(1/2)} = 9.9 / 12.8 kN	Short Column...	As (Req): %0.20 _(min) 320.00 mm ²
V _{Ed} = 0.07 / 0.07 N/mm ²	λ ₁ /Lim ₁ = 15.4 < 131.4 ✓	As (Sup): %2.36 3769.91 mm ²
V _{Rdc} = 0.84 / 0.87 N/mm ²	λ ₂ /Lim ₂ = 15.4 < 131.2 ✓	
V _{Rd Max} = 4.32 / 4.37 N/mm ²	M _{add(1/2)} = 0.0 / 0.0 kN.m	
Links = R10-300		12T20

6C4 (B-5) (400/400) (C25/30 / Grade 460 (Type 2))

No	N _{Top/Bot} (kN)	M _{11 Top/Bot} (kN.m)	M _{22 Top/Bot} (kN.m)
1	98.8, 98.8	18.9, -14.7	11.0, -10.4
2	87.6, 87.6	16.9, -14.8	12.1, -10.5
3	80.6, 80.6	13.6, -9.8	6.0, -8.0
4	98.8, 98.8	18.8, -14.6	10.3, -10.3
5	98.8, 98.8	19.0, -14.8	11.7, -10.6
6	98.5, 98.5	18.4, -14.5	10.9, -10.4
7	99.0, 99.0	19.4, -14.9	11.0, -10.5

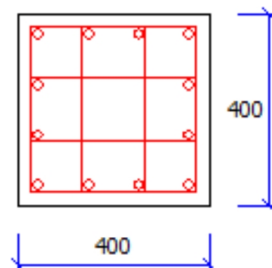


Critical Loading: 7 - (G+Q-Nx)

	min	Design
N	90.3	- 90.3 kN
M ₁₁	27.5	1.8 27.9 kN.m
M ₂₂	16.8	1.8 17.2 kN.m
N _{max}	2561.1	

Concrete Cover = 25.0 mm

Neutral Axis: 102.1 mm / 16.97 °



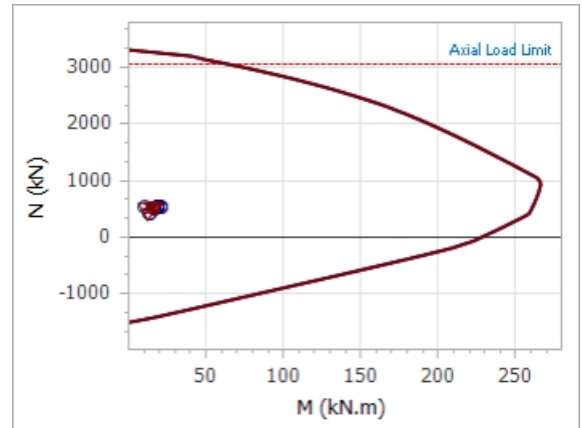
V _{Ed(1/2)} = 11.7 / 16.5 kN	Short Column...	As (Req): %0.20 _(min) 320.00 mm ²
V _{Ed} = 0.08 / 0.08 N/mm ²	λ ₁ /Lim ₁ = 15.4 < 221.8 ✓	As (Sup): %2.36 3769.91 mm ²
V _{Rdc} = 0.73 / 0.75 N/mm ²	λ ₂ /Lim ₂ = 15.4 < 213.8 ✓	
V _{Rd Max} = 4.14 / 4.17 N/mm ²	M _{add(1/2)} = 0.0 / 0.0 kN.m	
		12T20

PROPOSED 5-STOREY ADMINISTRATION BLOCK	Fenerbahçe Kadiköy (0001907)
Column Reinforcement Design 1 15/02/2021 Rev: 1	Calc. By: SAMORA Checked By: MICHAEL

Links = R10-300

1C5 (B-6) (400/400) (C25/30 / Grade 460 (Type 2))

No	N _{Top/Bot} (kN)	M _{11 Top/Bot} (kN.m)	M _{22 Top/Bot} (kN.m)
1	526.7, 526.7	13.9, -6.7	-16.2, 7.8
2	528.6, 528.6	13.9, -6.7	-16.2, 7.8
3	430.0, 430.0	10.4, -5.0	-12.1, 5.8
4	536.4, 536.4	13.8, -6.5	-18.6, 13.7
5	517.0, 517.0	14.0, -6.8	-13.9, 1.9
6	520.1, 520.1	12.1, -2.6	-16.2, 7.7
7	533.3, 533.3	15.7, -10.7	-16.3, 7.9

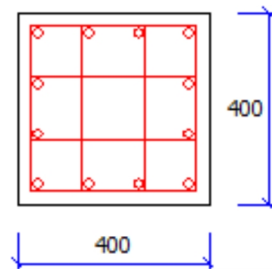


Critical Loading: 1 - (G*F)

	min	Design
N	566.4	- 566.4 kN
M ₁₁	10.9	11.3 13.4 kN.m
M ₂₂	-13.0	-11.3 -15.5 kN.m
N _{max}	2561.1	

Concrete Cover = 25.0 mm

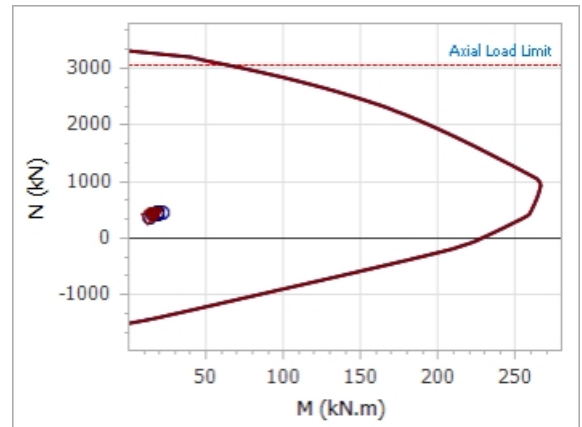
Neutral Axis: 187.3 mm / 10.40 °



V _{Ed(1/2)} = 8.9 / 7.5 kN	Short Column...	As (Req): %0.20 _(min) 320.00 mm ²
V _{Ed} = 0.06 / 0.06 N/mm ²	λ ₁ /Lim ₁ = 15.5 < 68.2 ✓	As (Sup): %2.36 3769.91 mm ²
V _{Rdc} = 1.18 / 1.18 N/mm ²	λ ₂ /Lim ₂ = 15.6 < 72.2 ✓	
V _{Rd Max} = 4.86 / 4.86 N/mm ²	M _{add(1/2)} = 0.0 / 0.0 kN.m	
Links = R10-300		
12T20		

2C5 (B-6) (400/400) (C25/30 / Grade 460 (Type 2))

No	N _{Top/Bot} (kN)	M _{11 Top/Bot} (kN.m)	M _{22 Top/Bot} (kN.m)
1	435.4, 435.4	13.8, -13.9	-16.2, 16.2
2	436.9, 436.9	13.8, -13.9	-16.2, 16.2
3	355.0, 355.0	10.3, -10.4	-12.2, 12.1
4	442.5, 442.5	13.8, -13.9	-19.3, 19.2
5	428.3, 428.3	13.8, -13.9	-13.2, 13.3
6	430.7, 430.7	11.8, -12.1	-16.2, 16.3
7	440.0, 440.0	15.7, -15.7	-16.2, 16.2

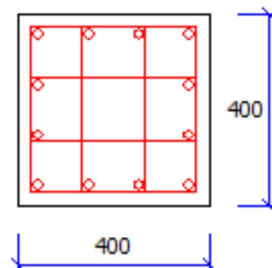


Critical Loading: 1 - (G*F)

	min	Design
N	471.4	- 471.4 kN
M ₁₁	-16.1	-9.4 -18.6 kN.m
M ₂₂	17.3	9.4 19.7 kN.m
N _{max}	2561.1	

Concrete Cover = 25.0 mm

Neutral Axis: 183.0 mm / 14.27 °



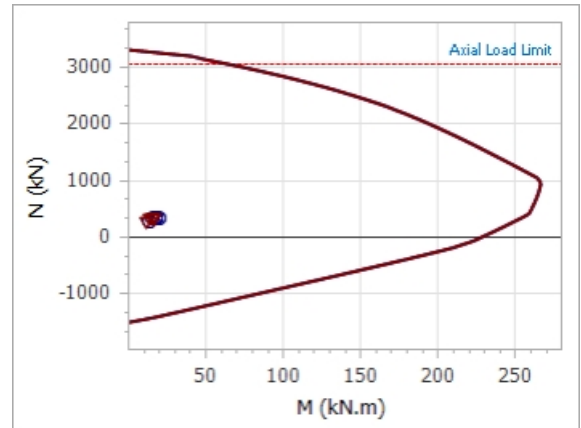
V _{Ed(1/2)} = 13.2 / 11.5 kN	Short Column...	As (Req): %0.20 _(min) 320.00 mm ²
V _{Ed} = 0.09 / 0.09 N/mm ²	λ ₁ /Lim ₁ = 18.2 < 90.1 ✓	As (Sup): %2.36 3769.91 mm ²
V _{Rdc} = 1.11 / 1.11 N/mm ²	λ ₂ /Lim ₂ = 18.3 < 89.1 ✓	
V _{Rd Max} = 4.75 / 4.75 N/mm ²	M _{add(1/2)} = 0.0 / 0.0 kN.m	
12T20		

PROPOSED 5-STOREY ADMINISTRATION BLOCK	Fenerbahçe Kadiköy (0001907)
Column Reinforcement Design 1 15/02/2021 Rev: 1	Calc. By: SAMORA Checked By: MICHAEL

Links = R10-300

3C5 (B-6) (400/400) (C25/30 / Grade 460 (Type 2))

No	N _{Top/Bot} (kN)	M _{11 Top/Bot} (kN.m)	M _{22 Top/Bot} (kN.m)
1	341.1, 341.1	13.6, -13.8	-16.0, 16.2
2	342.4, 342.4	13.6, -13.8	-16.0, 16.2
3	277.1, 277.1	10.1, -10.3	-12.0, 12.2
4	345.6, 345.6	13.6, -13.8	-18.7, 18.3
5	336.5, 336.5	13.6, -13.8	-13.3, 14.2
6	338.1, 338.1	11.9, -12.5	-16.0, 16.3
7	344.0, 344.0	15.3, -15.1	-16.0, 16.2

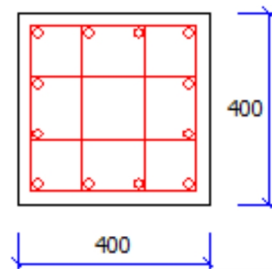


Critical Loading: 1 - (G*F)

	min	Design
N	372.0	- 372.0 kN
M ₁₁	14.7	7.4 16.4 kN.m
M ₂₂	-16.1	-7.4 -17.7 kN.m
N _{max}	2561.1	

Concrete Cover = 25.0 mm

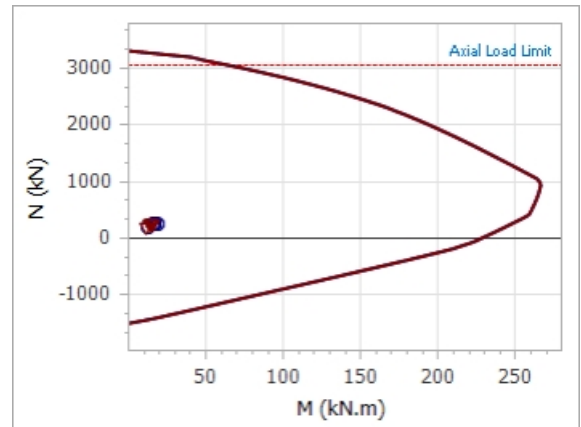
Neutral Axis: 151.9 mm / 12.48 °



V _{Ed(1/2)} = 12.2 / 10.8 kN	Short Column...	As (Req): %0.20 _(min) 320.00 mm ²
V _{Ed} = 0.08 / 0.08 N/mm ²	λ ₁ /Lim ₁ = 15.4 < 102.1 ✓	As (Sup): %2.36 3769.91 mm ²
V _{Rdc} = 1.01 / 1.01 N/mm ²	λ ₂ /Lim ₂ = 15.4 < 102.9 ✓	
V _{Rd Max} = 4.60 / 4.60 N/mm ²	M _{add(1/2)} = 0.0 / 0.0 kN.m	
Links = R10-300		12T20

4C5 (B-6) (400/400) (C25/30 / Grade 460 (Type 2))

No	N _{Top/Bot} (kN)	M _{11 Top/Bot} (kN.m)	M _{22 Top/Bot} (kN.m)
1	247.2, 247.2	13.4, -13.6	-15.8, 16.0
2	248.2, 248.2	13.5, -13.6	-15.8, 16.0
3	199.4, 199.4	10.0, -10.1	-11.9, 12.0
4	249.8, 249.8	13.4, -13.6	-17.9, 17.4
5	244.6, 244.6	13.4, -13.6	-13.7, 14.7
6	245.6, 245.6	12.1, -12.7	-15.8, 16.1
7	248.8, 248.8	14.7, -14.5	-15.8, 16.0

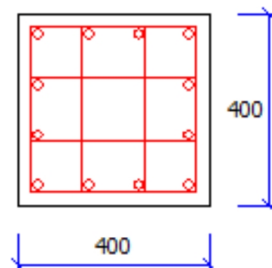


Critical Loading: 1 - (G*F)

	min	Design
N	271.6	- 271.6 kN
M ₁₁	-15.5	-5.4 -16.7 kN.m
M ₂₂	-16.8	-5.4 -18.0 kN.m
N _{max}	2561.1	

Concrete Cover = 25.0 mm

Neutral Axis: 134.1 mm / 13.65 °



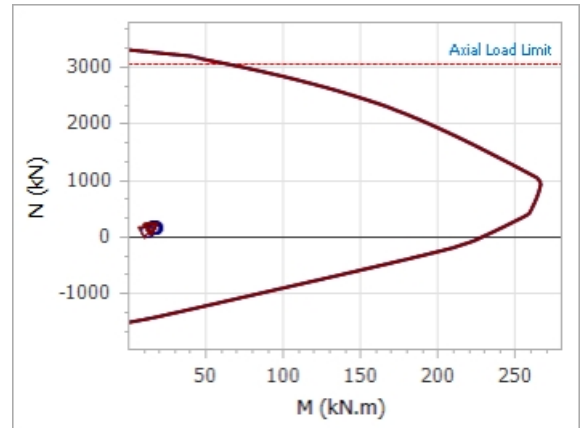
V _{Ed(1/2)} = 12.3 / 11.0 kN	Short Column...	As (Req): %0.20 _(min) 320.00 mm ²
V _{Ed} = 0.08 / 0.08 N/mm ²	λ ₁ /Lim ₁ = 15.4 < 120.3 ✓	As (Sup): %2.36 3769.91 mm ²
V _{Rdc} = 0.92 / 0.92 N/mm ²	λ ₂ /Lim ₂ = 15.4 < 120.7 ✓	
V _{Rd Max} = 4.44 / 4.44 N/mm ²	M _{add(1/2)} = 0.0 / 0.0 kN.m	
		12T20

PROPOSED 5-STOREY ADMINISTRATION BLOCK	Fenerbahce Kadikoy (0001907)
Column Reinforcement Design 1 15/02/2021 Rev: 1	Calc. By: SAMORA Checked By: MICHAEL

Links = R10-300

5C5 (B-6) (400/400) (C25/30 / Grade 460 (Type 2))

No	N _{Top/Bot} (kN)	M _{11 Top/Bot} (kN.m)	M _{22 Top/Bot} (kN.m)
1	153.8, 153.8	13.2, -13.4	-15.6, 15.8
2	154.5, 154.5	13.3, -13.5	-15.5, 15.8
3	122.1, 122.1	9.8, -10.0	-11.7, 11.9
4	154.9, 154.9	13.2, -13.4	-17.0, 16.5
5	152.6, 152.6	13.2, -13.4	-14.1, 15.1
6	153.0, 153.0	12.3, -13.0	-15.6, 15.8
7	154.5, 154.5	14.2, -13.9	-15.5, 15.7

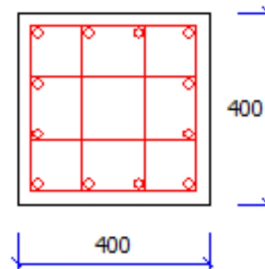


Critical Loading: 1 - (G*F)

	min	Design
N	170.5	- 170.5 kN
M ₁₁	-15.4	-3.4 -16.1 kN.m
M ₂₂	16.5	3.4 17.3 kN.m
N _{max}	2561.1	

Concrete Cover = 25.0 mm

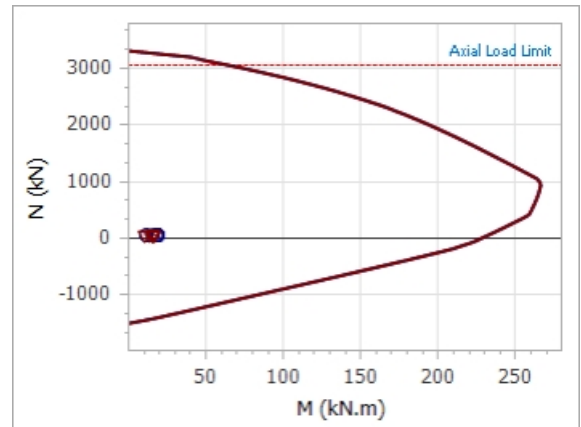
Neutral Axis: 105.6 mm / 12.46 °



V _{Ed(1/2)} = 11.6 / 10.6 kN	Short Column...	As (Req): %0.20 _(min) 320.00 mm ²
V _{Ed} = 0.08 / 0.08 N/mm ²	λ ₁ /Lim ₁ = 15.4 < 150.7 ✓	As (Sup): %2.36 3769.91 mm ²
V _{Rdc} = 0.82 / 0.82 N/mm ²	λ ₂ /Lim ₂ = 15.4 < 150.7 ✓	
V _{Rd Max} = 4.29 / 4.29 N/mm ²	M _{add(1/2)} = 0.0 / 0.0 kN.m	
Links = R10-300		12T20

6C5 (B-6) (400/400) (C25/30 / Grade 460 (Type 2))

No	N _{Top/Bot} (kN)	M _{11 Top/Bot} (kN.m)	M _{22 Top/Bot} (kN.m)
1	60.7, 60.7	15.8, -13.2	-18.2, 15.6
2	61.2, 61.2	15.8, -13.3	-18.2, 15.5
3	45.1, 45.1	10.2, -9.8	-11.7, 11.7
4	61.1, 61.1	15.8, -13.3	-18.9, 15.7
5	60.4, 60.4	15.8, -13.2	-17.5, 15.4
6	60.5, 60.5	15.3, -13.1	-18.3, 15.6
7	60.9, 60.9	16.2, -13.3	-18.1, 15.5

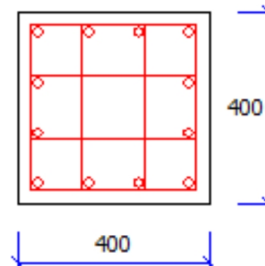


Critical Loading: 4 - (G+QP1 *F)

	min	Design
N	69.3	- 69.3 kN
M ₁₁	19.5	1.4 19.8 kN.m
M ₂₂	-21.8	-1.4 -22.1 kN.m
N _{max}	2561.1	

Concrete Cover = 25.0 mm

Neutral Axis: 142.9 mm / 35.08 °



V _{Ed(1/2)} = 13.3 / 12.3 kN	Short Column...	As (Req): %0.20 _(min) 320.00 mm ²
V _{Ed} = 0.09 / 0.09 N/mm ²	λ ₁ /Lim ₁ = 15.4 < 247.8 ✓	As (Sup): %2.36 3769.91 mm ²
V _{Rdc} = 0.73 / 0.73 N/mm ²	λ ₂ /Lim ₂ = 15.4 < 249.6 ✓	
V _{Rd Max} = 4.13 / 4.13 N/mm ²	M _{add(1/2)} = 0.0 / 0.0 kN.m	
		12T20

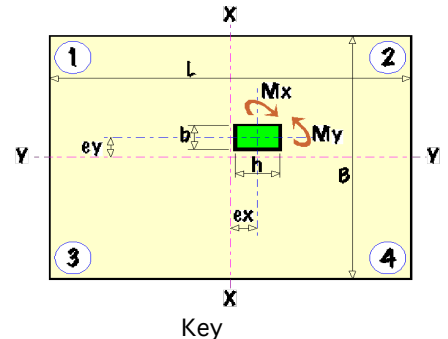
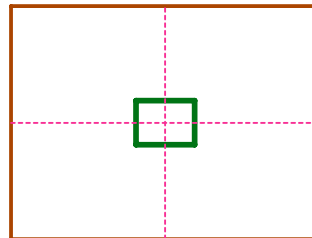
PROPOSED 5-STOREY ADMINISTRATION BLOCK	Fenerbahce Kadikoy (0001907)
Column Reinforcement Design 1 15/02/2021 Rev: 1	Calc. By: SAMORA Checked By: MICHAEL
Links = R10-300	

FOUNDATION

Project	PROPOSED 5-STOREY ADMINISTRATION	REINFORCED CONCRETE COUNCIL	REINFORCED CONCRETE COUNCIL
Client	ANSAH AND RITA AGYEMANG BARIMAH	Made by	SAM
Location	Level -1 Base F1	Date	15/02/2022
	PAD FOUNDATION DESIGN to BS 8110:1997	Checked	MICHAEL
	Originated from RCC81.xls on CD	Revision	-
	© 1999 BCA for RCC	Job No	-

MATERIALS fcu 25 N/mm² h agg 19 mm γ_c 1.5 concrete
 fy 460 N/mm² cover 25 mm γ_s 1.05 steel
 Densities - Concrete 25 kN/m³ Soil 18 kN/m³
 Bearing pressure 490 kN/m² (net allowable increase)

DIMENSIONS mm
 BASE COLUMN
 L = 2100 h = 400
 B = 2100 b = 400
 depth H = 400
 ex = 0 ey = 0



COLUMN REACTIONS kN, kNm *characteristic*

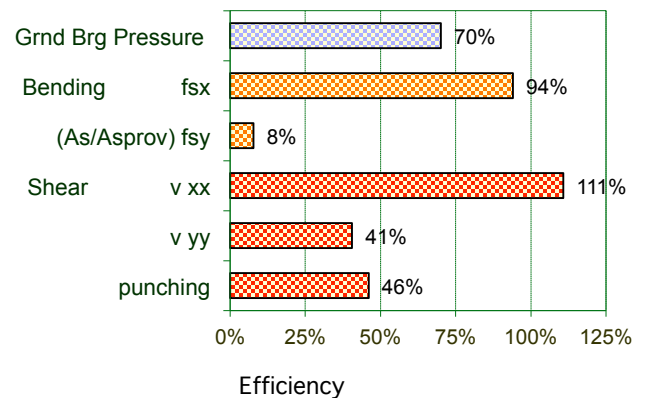
	DEAD	IMPOSED	WIND
Axial (kN)	215.0	341.0	
Mx (kNm)	118.0	186.0	
My (kNm)			
Hx (kN)			
Hy (kN)			

Plot (to scale)

STATUS **VALID DESIGN**

BEARING PRESSURES kN/m² *characteristic*

CORNER	1	2	3	4
no wind	0.0	343.4	0.0	343.4
with wind	0.0	343.4	0.0	343.4



REINFORCEMENT

Mxx = 259.2 kNm
 b = 2100 mm
 d = 355 mm
 As = 1754 mm²

Myy = 145.6 kNm
 b = 2100 mm
 d = 329 mm
 As = 1064 mm²

PROVIDE 18 T40 @ 125 B1

PROVIDE 10 T12 @ 200 & 200 B2

As prov = 22619 mm²

As prov = 1131 mm²

Asx increased 1,175% for shear

BEAM SHEAR

Vxx = 432.0 kN at d from col face
 v = 0.579 N/mm²
 or Vxx = 775.3 kN at 2d from col face
 v = 1.040 N/mm²
 vc = 0.939 N/mm²

Vyy = 203.6 kN at d from col face
 v = 0.295 N/mm²
 or Vyy = 64.5 kN at 2d from col face
 v = 0.093 N/mm²
 vc = 0.363 N/mm²

PUNCHING SHEAR

d ave = 342 mm
 As prov = 1.599 %
 v = 0.354 N/mm²

u crit = 4200 mm
 v max = 1.621 N/mm² at col face
 vc = 0.769 N/mm²

CALCULATIONS - SINGLE BASE

Gross base wt 44.10
CHARACTERISTIC PRESSURES

L= 2.1 B= 2.1

		G + Q	G + Q + W	G + W
P	kN	600.10	600.10	259.10
Mx	kNm	304.00	304.00	118.00
My	kNm	0.00	0.00	0.00
ex	m	0.507	0.507	0.455
ey	m	0.000	0.000	0.000
6ex/L		1.4474	1.4474	1.3012
if ex>L/6		2.5763	2.5763	2.3546
k 2-4		2.5763	2.5763	2.3546
k 1-3		0.0000	0.0000	0.0000
6ey/B		0.0000	0.0000	0.0000
if ey>B/6		1.3333	1.3333	1.3333
k 1-2		1.0000	1.0000	1.0000
k 3-4		1.0000	1.0000	1.0000
P/A	kN/m ²	136.08	136.08	58.75
corner 1	kN/m ²	0.00	0.00	0.00
corner 2	kN/m ²	350.57	350.57	138.34
corner 3	kN/m ²	0.00	0.00	0.00
corner 4	kN/m ²	350.57	350.57	138.34

Text Asx increased F/S OVERTURNING <1.5
 Asy increased OVERTURNS at ULTIMATE

FS o'turn 2.072714
FS o'turn 100 0

Rebar ares

Area	Dia
50.3	8
78.5	10
113.1	12
201.1	16
314.2	20
490.9	25
804.2	32
1256.6	40

ULTIMATE PRESSURES

		1.4G+1.6Q	1.2(G+Q+W)	1.0G+1.4W
N	kN	908.34	720.12	276.74
Mx	kNm	462.80	364.80	118.00
My	kNm	0.00	0.00	0.00
ex	m	0.510	0.507	0.426
ey	m	0.000	0.000	0.000
6ex/L		1.4557	1.4474	1.2183
if ex>L/6		2.5902	2.5763	2.2450
k 2-4		2.5902	2.5763	2.2450
k 1-3		0.0000	0.0000	0.0000
6ey/B		0.0000	0.0000	0.0000
if ey>B/6		1.3333	1.3333	1.3333
k 1-2		1.0000	1.0000	1.0000
k 3-4		1.0000	1.0000	1.0000
N/L	kN/m	432.54	342.91	131.78
edge 2-4	kN/m	1120.37	883.45	295.85
edge 1-3	kN/m	0.00	0.00	0.00
N/B	kN/m	432.54	342.91	131.78
edge 1-2	kN/m	432.54	342.91	131.78
edge 3-4	kN/m	432.54	342.91	131.78
3(L/2-ex)	m	1.621	1.630	1.871
3(B/2-ey)	m	3.150	3.150	3.150

FS o'turn 2.060841
FS o'turn 100 0

XX MOMENTS

		1.4G+1.6Q		1.2(G+Q+W)		1.0G+1.4W	
		LEFT	RIGHT	LEFT	RIGHT	LEFT	RIGHT
from right	m	1.250	0.850				
from left	m	0.850	1.250				
to zero press	m	0.371	0.371	0.380	0.380	0.621	0.621
local press	kN/m	256.69	0.00	206.06	0.00	98.18	0.00
M1	kNm	30.9	269.8	24.8	212.8	11.8	71.3
M2	kNm	25.5	0.0	20.9	0.0	17.1	0.0
choose M	kNm	14.8	259.2	11.8	203.7	9.5	63.7
Design Mxx	kNm	259.2					

3.11.2.2
3.11.2.2

XX SHEARS @ d from col face

		1.4G+1.6Q		1.2(G+Q+W)		1.0G+1.4W	
		LEFT	RIGHT	LEFT	RIGHT	LEFT	RIGHT
from right	m	1.615	0.485				
from left	m	0.485	1.615				
to zero press	m	1.136	0.006	1.145	0.015	1.386	0.256
local press	kN/m	785.26	4.49	620.62	8.27	219.15	40.46
V1	kN	190.4	272.8	150.5	216.2	53.1	81.6
V2	kN	446.2	2.6	355.4	4.7	151.9	28.0
choose V	kN	432.0	258.5	343.2	204.0	141.7	71.4
Design Vxx	kN	432.0					

3.4.5.10
3.4.5.8

@ 2d from col face

		1.4G+1.6Q		1.2(G+Q+W)		1.0G+1.4W	
		LEFT	RIGHT	LEFT	RIGHT	LEFT	RIGHT
from right	m	1.980	0.120				
from left	m	0.120	1.980				
to zero press	m	1.501	-0.359	1.510	-0.350	1.751	-0.109
local press	kN/m	1037.46	-247.71	818.42	-189.53	276.87	-17.27
V1	kN	908.3	52.4	720.1	41.6	276.7	16.7
V2	kN	778.9	-186.0	618.0	-143.1	242.4	-15.1
choose V	kN	775.3	48.8	615.0	38.6	239.9	14.2
Design Vxx	kN	775.3					

3.4.5.10
3.4.5.8

YY MOMENTS									
from top	m	1.250	0.850					3.11.2.2	
from btm	m	0.850	1.250					3.11.2.2	
to zero press	m	2.300	2.300	2.300	2.300	2.300	2.300		
local press	kN/m	432.54	432.54	342.91	342.91	131.78	131.78		
M1	kNm	156.3	156.3	123.9	123.9	47.6	47.6		
M2	kNm	381.4	381.4	302.3	302.3	116.2	116.2		
choose M	kNm	145.6	145.6	114.8	114.8	40.0	40.0		
Design Myy	kNm	145.6							
YY SHEARS		@ d from col face							
from top	m	1.595	0.505					3.4.5.10	
from btm	m	0.505	1.595					3.4.5.8	
to zero press	m	2.645	2.645	2.645	2.645	2.645	2.645		
local press	kN/m	432.54	432.54	342.91	342.91	131.78	131.78		
V1	kN	218.4	218.4	173.2	173.2	66.5	66.5		
V2	kN	572.0	572.0	453.5	453.5	174.3	174.3		
choose V	kN	203.6	203.6	160.4	160.4	55.9	55.9		
Design Vyy	kN	203.6							
		@ 2d from col face							
from top	m	1.940	0.160					3.4.5.10	
from btm	m	0.160	1.940					3.4.5.8	
to zero press	m	2.990	2.990	2.990	2.990	2.990	2.990		
local press	kN/m	432.54	432.54	342.91	342.91	131.78	131.78		
V1	kN	69.2	69.2	54.9	54.9	21.1	21.1		
V2	kN	646.7	646.7	512.7	512.7	197.0	197.0		
choose V	kN	64.5	64.5	50.8	50.8	17.7	17.7		
Design Vyy	kN	64.5							

REINFORCEMENT		min As 0.13%							
		X-X		Y-Y					
b	mm	2100	choose dia	2100	choose dia				
dia	mm	40	20	12	20				
d	mm	355	365	329	345				
K'		0.1558		0.1558					
K		0.0392	0.0371	0.0256	0.0233				
z	mm	337.3	346.8	312.6	327.8	Punching			
As	mm²	1754	1706	1064	1014	ave ρ	0.00097	0.81252	
As shear	mm²	22365	22995	815	522	As X	930	0.48299	
required	mm²	22365	22995	1092	1092	As Y	522	1.29551	
No		18	7.09	10	6.85	ave ρ	0.00156	0.83541	
ave centres	mm	125	325	225	325	As X	1450	0.50648	
As prov	mm²	22619		1131		As Y	815	1.34188	
=	%	3.034		0.164					
Lc	mm	1050		1050					
Lc max	mm	1099	> 1,050	1040	< 1,050				
b central	mm	1465		1387					
Final centres	mm	125		200 & 200					

BEAM SHEAR									
v @ d	N/mm²	0.5794	0.5636	0.2947	0.2810				
v @ 2d	N/mm²	1.0400	1.0115	0.0934	0.0890				
vc	N/mm²	0.9391	FAILS	0.3630	OK				
As enhanced	%	#####	1247.66%	0.00%	0.00%				

PUNCHING SHEAR									
d ave	mm	342	1.5 x d ave 513			355			
		L	R	B	T	532.5			
to edges	mm	1050	1050	1050	1050				
to 1.5d per	mm	713	713	713	713				
standard perimeter?	Y,N	0	0	0	0	732.5	732.5		
U	mm	0	0	0	0			732.5	732.5
within base?	Y,N	1	1	1	1	1	1	1	1
		perimeter falls within base and on 2 sides							
U crit	mm	4200				5860			
Area	m²	2.995				2.146			
As prov	%	1.599							
vc	N/mm²	0.7685							
		1.4G+1.6Q		1.2(G+Q+W)					
N	kN	908.3		720.1					
v max	N/mm²	1.621	OK	1.285	OK	2	1	0	
ave press	kN/m²	133.54		106.18					
V	kN	508.4		402.2		621.7	492.2	184.3	
v	N/mm²	0.3540	OK	0.2800	OK	0.2989	0.2366	0.0886	

SIZING TIPS

Net press = 487.2

		G + Q	G + Q + W	G + W	
N	kN	556.0	556.0	215.0	
Mx	kNm	304.0	304.0	118.0	
My	kNm	0.0	0.0	0.0	
ex	m	547	547	549	
ey	m	0	0	0	
min A	m ²	1.14	0.91	0.35	
min L	mm	400			
min B	mm	400			
sq base iteration 0		1.068	1.068	0.664	
		0	0	0	
		-1824	-1824	-708	
sq base iteration 1		2.137	2.137	1.329	
		3564	3564	857	
		1740	1740	149	
sq base iteration 2		1.693	1.693	1.235	
		1424	1424	651	
		-400	-400	-57	
sq base iteration 3		1.830	1.830	1.274	
		1969	1969	733	
		145	145	25	
SQUARE SIZE					
L & B	mm	1785	1785	1257	1785 SQ
if L = 2100		678	678	263	
B	mm	1392	1114	432	or 2100 x 1395
if B = 2100		265	265	102	
L	mm	1634	1431	833	or 1635 x 2100