

Sonuç

Kontrol Parametreleri :	
Bilgi Düzeyi	Sınırlı
Bilgi Düzeyi Katsayısı	0.90
Deprem Yüğü Belirleme Yöntemi	Mod birleştirme yöntemi
Yapı periyodu	2.3990 s
Bodrum Katlar Dahil Bina Toplam Yüksekliği	24.00
Rjtit Bodrum Dahil Kat Sayısı	6
Elastik (Azaltılmamış) İvme Spektrumu Kullanılmıştır.	Ra=1
Bina Bilgi Düzeyi Katsayısı Kullanılmamıştır.	I=1
Eksantriste	Uygulanmadı
Kiriş ve Perdeler İçin Etkin Eğilme Rijitliği	0.30(EcmI)0
Kolonlar İçin Etkin Eğilme Rijitliği	0.50(EcmI)0
Mevcut Beton Elastisite Modülü (Ecm)	5000(fcm)^0.5
Mevcut Beton Basınç Dayanımı (fcm)	24.579 MPa
Enine donatının mevcut akma dayanımı (fywm)	198 MPa
ϕ (Perde Kesme Kuvveti Oranları)-X	0.00
ϕ (Perde Kesme Kuvveti Oranları)-Y	0.00

Kat Kuvvetleri

Kat	$\delta/h - X$	$\delta/h - Y$	FX [tf]	FY [tf]
4. KAT	0.0011	0.0027	135.99	102.60
3. KAT	0.0018	0.0041	111.49	75.64
2. KAT	0.0026	0.0059	88.03	53.00
1. KAT	0.0039	0.0089	73.84	43.47
ZEMİN KAT	0.0066	0.0129	66.98	42.51
1. BODRUM	0.0104	0.0126	551.89	551.89

Yapı Risk Değerlendirmesi - ZEMİN KAT

Eleman Durumları					Kesme Kuvvetleri			
Eleman	Elastisite Modülü [tf/m ²]	Eksenel Kuvvet [tf]	Eksenel Basınç Gerilmesi [tf/m ²]	Sınır Dahilinde	+EX [tf]	-EX [tf]	+EY [tf]	-EY [tf]
SZ01	2527734.37	217.64	518.18	✓	13.08	13.08	15.84	15.84
SZ07	2527734.37	310.85	740.12	✓	17.49	17.49	34.20	34.20
SZ13	2527734.37	220.95	526.06	✓	13.84	13.84	15.36	15.36
SZ02	2527734.37	251.69	513.65	✓	30.56	30.56	11.08	11.08
SZ14	2527734.37	252.49	515.29	✓	32.01	32.01	10.45	10.45
SZ08	2527734.37	321.89	572.25	✓	36.34	36.34	29.10	29.10
SZ03	2527734.37	247.06	504.20	✓	30.00	30.00	10.82	10.82
SZ09	2527734.37	312.69	555.89	✓	36.57	36.57	26.48	26.48
SZ15	2527734.37	250.68	511.58	✓	31.23	31.23	10.13	10.13
SZ04	2527734.37	259.91	530.44	✓	30.00	30.00	11.67	11.67
SZ10	2527734.37	321.04	570.73	✓	36.46	36.46	27.22	27.22

Eleman Durumları					Kesme Kuvvetleri			
Eleman	Elastisite Modülü [tf/m ²]	Eksenel Kuvvet [tf]	Eksenel Basınç Gerilmesi [tf/m ²]	Sınır Dahilinde	+EX [tf]	-EX [tf]	+EY [tf]	-EY [tf]
SZ16	2527734.37	245.31	500.63	✓	31.22	31.22	10.57	10.57
SZ05	2527734.37	237.55	484.79	✓	31.28	31.28	15.21	15.21
SZ11	2527734.37	338.98	602.62	✓	39.55	39.55	30.43	30.43
SZ17	2527734.37	266.96	544.82	✓	32.31	32.31	11.12	11.12
SZ06	2527734.37	116.75	238.27	✓	6.91	6.91	11.14	11.14
SZ12	2527734.37	205.77	391.94	✓	13.47	13.47	25.97	25.97
SZ18	2527734.37	166.34	396.05	✓	14.03	14.03	10.42	10.42

'Riskli Yapıların Tespit edilmesine İlişkin Esaslar' yönetmeliğine göre inceleme kattaki kolonların 18'si B tipi göçme göstermemiştir.

+EX,-EX,+EY,-EY deprem yüklemelerinde yapı göçme bölgesinde değildir. Maksimum görelî kat ötelenmesi zemin katta **0,0066** olarak hesaplanmıştır. Riskli Bina Tespit Esasına Göre yapılan hesapta yapı riskli değildir.

Yapıdaki bazı taşıyıcı elemanlar, RYTEİE2019, TS500 ve TS 498 yönetmeliklerinin koşullarını (minimum kesit, kesitin kenarları oranı, beton kalitesi (**27,31 MPA**), donatı kalitesi (S220) vb. sağlamaktadır. Kat kesme kuvveti sınır değeri aşıldığından bina riskli değildir.

Risk Değerlendirmesi - ZEMİN KAT	
Eksenel basınç gerilmeleri ortalaması :	512.08 tf/m ²
0.65*fc _m :	1629.13 tf/m ²
0.1*fc _m :	250.64 tf/m ²
Kat kesme kuvvetleri oranı sınır değeri:	0.28
Risk sınırını aşan eleman sayısı :	0
Toplam eleman sayısı :	18
En büyük m değeri	1.12 (S207)
[+EX] - Risk sınırını aşan kolon ve perdelerin kesme kuvvetleri toplamı / Toplam kat kesme kuvveti :	0 / 476.34 tf
[+EX] - Kat kesme kuvveti oranı :	0 <= 0.284
[-EX] - Risk sınırını aşan kolon ve perdelerin kesme kuvvetleri toplamı / Toplam kat kesme kuvveti :	0 / 476.34 tf
[-EX] - Kat kesme kuvveti oranı :	0 <= 0.284
[+EY] - Risk sınırını aşan kolon ve perdelerin kesme kuvvetleri toplamı / Toplam kat kesme kuvveti :	0 / 317.21 tf
[+EY] - Kat kesme kuvveti oranı :	0 <= 0.284
[-EY] - Risk sınırını aşan kolon ve perdelerin kesme kuvvetleri toplamı / Toplam kat kesme kuvveti :	0 / 317.21 tf
[-EY] - Kat kesme kuvveti oranı :	0 <= 0.284

Kat kesme kuvveti sınır değeri =0,28

[+ EX] yönünde Kat kesme kuvveti oranı= 0<0,284

[-EX] Yönünde Kat kesme kuvveti oranı= 0<0,284

[+EY] Yönünde Kat kesme kuvveti oranı= 0<0,284

[-EY] Yönünde Kat kesme kuvveti oranı= 0<0,284

BİNA İÇİN RİSK DEĞERLENDİRMESİ	
Riskli bina olarak değerlendirilmemelidir.	✓

Kat kesme kuvveti sınır değerleri aşmadığı için yapının riskli olmadığı tespit edilmiştir.

Bu rapordaki analiz sonuçlarına göre İSTANBUL İli ŞİŞLİ İlçesi ESENTEPE Mahallesi 1948 Ada 1 Parsel de bulunan yapının **RİSKLİ OLMADIĞI** belirlenmiştir.

Hesap ve Raporları Hazırlayan;
Tarih

ALKİLİÇ KENTSEL DÖNÜŞÜM
PROJE LTD. ŞTİ.
İdealtepe Mah. Turgut Özal Bulvarı
No:127/D:2 Maltepe / İSTANBUL
Küçükyalı V.D.: 2110695331

2019 YILI RİSKLİ BİNALARIN TESPİT EDİLMESİNE İLİŞKİN ESASLARINA GÖRE YAPININ DEĞERLENDİRİLMESİ

A, B, C : Kolon sınıfları

A_{sh} : Enine donatı aralığına karşı gelen yükseklik boyunca, kolonda veya perdede tüm etriye kollarının ve çiroz enkesit alanı değerlerinin izdüşümlerinin toplamı

f_{cm} : Mevcut beton basınç dayanımı

f_{ywm} : Enine donatı mevcut akma dayanımı

H_w : Temel üstünden itibaren ölçülen toplam perde yüksekliği

l_w : Perdenin plandaki uzunluğu

V_e : Düşey yükler ve deprem etkileri altında hesaplanan kesme kuvveti

V_r : Kolon, giriş veya perde kesme dayanımı

V_e/V_r : Deprem kesme kuvvetinin eleman kesme kapasitesine oranı

Bilgi Düzeyi	Bilgi Düzeyi Katsayısı
Asgari	0.90
Kapsamlı	1.00

Tablo 4.2 Kolon Sınıflandırma Tablosu

$\frac{V_e}{V_r}$	Aralığı $s \leq 100$ mm olan, her iki ucunda 135° kancalı etriyesi bulunan ve toplam enine donatı alanı $A_{sh} \geq 0.06s_b k (f_{cm}/f_{ywm})$ denklemini sağlayan kolonlar	Diğer durumlar
$V_e/V_r \leq 0.7$	A	B
$0.7 < V_e/V_r \leq 1.1$	B	B
$1.1 < V_e/V_r$	B	C

Tablo 4.3 Perde Sınıflandırma Tablosu

	$V_e/V_r < 1.0$	$1.0 \leq V_e/V_r$
$2.0 \leq H_w/l_w$	A	B
$H_w/l_w < 2.0$	B	B

Kontrol Parametreleri :

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Eksantriste	Uygulanmadı
Kiriş ve Perdeler İçin Etkin Eğilme Rijitliği	0.30(Ecm)0
Kolonlar İçin Etkin Eğilme Rijitliği	0.50(Ecm)0
Mevcut Beton Elastisite Modülü (Ecm)	5000(fcm)^0.5
Mevcut Beton Basınç Dayanımı (fcm)	24.579 MPa
Enine donatının mevcut akma dayanımı (f _{ywm})	198 MPa
ç ₆ (Perde Kesme Kuvveti Oranları)-X	0.00
ç ₆ (Perde Kesme Kuvveti Oranları)-Y	0.00

Kat Kuvvetleri

Kat	$\delta/h - X$	$\delta/h - Y$	FX [tf]	FY [tf]
4. KAT	0.0011	0.0027	135.99	102.60
3. KAT	0.0018	0.0041	111.49	75.64
2. KAT	0.0026	0.0059	88.03	53.00
1. KAT	0.0039	0.0089	73.84	43.47
ZEMİN KAT	0.0066	0.0129	66.98	42.51
1. BODRUM	0.0104	0.0126	551.89	551.89

A_c : Brüt kolon enkesit alanı

A_{sh} : Enine donatı aralığına karşı gelen yükseklik boyunca, kolonda veya perdede tüm etriye kollarının ve çiroz enkesit alanı değerlerinin izdüşümlerinin toplamı

b_w : Eleman genişliği

d : Eleman faydalı yüksekliği

f_{cm} : Mevcut beton basınç dayanımı

f_{yw} : Enine donatı mevcut akma dayanımı

H_w : Temel üstünden itibaren ölçülen toplam perde yüksekliği

m : Etki/Kapasite oranı

$m_{sınır}$: Etki/Kapasite oranı sınır değeri

N_k : Düşey yükler ve azaltılmış deprem etkileri altında ($G+nQ±E/6$) elde edilen kolon eksenel kuvveti

V_e : Düşey yükler ve deprem etkileri altında hesaplanan kesme kuvveti

V_r : Kolon, giriş veya perde kesme dayanımı

V_e/V_r : Deprem kesme kuvvetinin eleman kesme kapasitesine oranı

δ/h : Etkin görelî kat ötelemesi oranı

$(\delta/h)_{sınır}$: Etkin görelî kat ötelemesi oranı sınır değeri

Tablo 4.4 Kolonlar için $m_{sınır}$ ve $(\delta/h)_{sınır}$ Değerleri

A grubu kolonlar			
$N_k/(f_{cm}A_c)$	$m_{sınır}$	$(\delta/h)_{sınır}$	
≤ 0.1	5.0	0.035	
≥ 0.6	2.5	0.0125	
B grubu kolonlar			
$N_k/(f_{cm}A_c)$	$A_{sh}/(sb_k)$	$m_{sınır}$	$(\delta/h)_{sınır}$
≤ 0.1	≤ 0.0005	2.0	0.01
	≥ 0.006	5.0	0.03
≥ 0.6	≤ 0.0005	1.0	0.005
	≥ 0.006	2.5	0.0075
C grubu kolonlar			
$m_{sınır}$		$(\delta/h)_{sınır}$	
1.0		0.005	

Tablo 4.5 Perdeler için $m_{sınır}$ ve $(\delta/h)_{sınır}$ Değerleri

A grubu perdeler				
$N_k/(f_{cm}A_c)$	$V_e/(b_w d f_{ctm})$	Başlık Bölgesi	$m_{sınır}$	$(\delta/h)_{sınır}$
<0.1	≤ 0.9	Var	6.0	0.0300
		Yok	4.0	0.0150
	≥ 1.3	Var	3.5	0.0150
		Yok	2.0	0.0075
>0.25	≤ 0.9	Var	3.5	0.0200
		Yok	2.0	0.0100
	≥ 1.3	Var	2.0	0.0100
		Yok	1.5	0.0050
B grubu perdeler				
$V_e/(b_w d f_{ctm})$		$m_{sınır}$	$(\delta/h)_{sınır}$	
≤ 0.9		4.0	0.0200	
≥ 1.3		2.0	0.0100	

Kat Kolonlarının Sınır Değerleri - 4. KAT Birimler : [tf-m]

Eleman	Yön	Sınıflandırma		Sınır Değerleri				Kontrol
		V_e/V_r	Grup	$N_k/f_{cm}A_c$	A_{sh}/sb_k	$m=(MG+nQ+E)/M_k$ <>sınır	δ/h <>sınır	
S418 60/70	+X	4.23/90.11 = 0.05	B	0.033	3.93/432 = 0.009	19.87/34.92 = 0.57 <= 5	0.001 <= 0.03	√
	-X	1.41/90.11 = 0.02	B	0.032	3.93/432 = 0.009	4.43/37.08 = 0.12 <= 5	0.001 <= 0.03	√
	+Y	6.22/90.05 = 0.07	B	0.032	3.14/512 = 0.006	18.11/40.97 = 0.44 <= 5	0.0027 <= 0.03	√
	-Y	5.53/89.82 = 0.06	B	0.033	3.14/512 = 0.006	15.92/41.74 = 0.38 <= 5	0.0027 <= 0.03	√
ø10/16/8/10				$f_{cm}A_c = 1052.67$		$h = 3.6$		
S412 70/75	+X	11.53/111 = 0.1	B	0.033	3.93/512 = 0.008	29.92/55.23 = 0.54 <= 5	0.0011 <= 0.03	√
	-X	8.33/112.44 = 0.07	B	0.032	3.93/512 = 0.008	14.4/54.28 = 0.27 <= 5	0.0011 <= 0.03	√
	+Y	7.32/109.74 = 0.07	B	0.032	3.93/552 = 0.007	18.15/56.32 = 0.32 <= 5	0.0027 <= 0.03	√
	-Y	13.36/112.76 = 0.12	B	0.032	3.93/552 = 0.007	43.1/55.35 = 0.78 <= 5	0.0027 <= 0.03	√
ø10/16/8/10				$f_{cm}A_c = 1315.84$		$h = 3.6$		
S406 70/70	+X	10.02/106.29 = 0.09	B	0.02	3.93/512 = 0.008	25.45/46.1 = 0.55 <= 5	0.0011 <= 0.03	√
	-X	4.98/106.29 = 0.05	B	0.019	3.93/512 = 0.008	18.43/41.3 = 0.45 <= 5	0.0011 <= 0.03	√
	+Y	10.15/106.29 = 0.1	B	0.02	3.93/512 = 0.008	33.06/42.22 = 0.78 <= 5	0.0027 <= 0.03	√
	-Y	4.54/106.29 = 0.04	B	0.019	3.93/512 = 0.008	14.43/45.43 = 0.32 <= 5	0.0027 <= 0.03	√
ø10/16/8/10				$f_{cm}A_c = 1228.12$		$h = 3.6$		
S417 70/70	+X	3.12/106.29 = 0.03	B	0.046	3.93/512 = 0.008	15.28/54.89 = 0.28 <= 5	0.001 <= 0.03	√
	-X	6.01/106.29 = 0.06	B	0.046	3.93/512 = 0.008	21.98/54.27 = 0.41 <= 5	0.001 <= 0.03	√
	+Y	3.44/106.29 = 0.03	B	0.046	3.93/512 = 0.008	17.13/53.91 = 0.32 <= 5	0.0026 <= 0.03	√
	-Y	2.43/106.29 = 0.02	B	0.046	3.93/512 = 0.008	11.71/57.38 = 0.2 <= 5	0.0026 <= 0.03	√
ø10/16/8/10				$f_{cm}A_c = 1228.12$		$h = 3.6$		
S411 75/75	+X	7.96/117.48 = 0.07	B	0.05	3.93/552 = 0.007	25.69/69.77 = 0.37 <= 5	0.0011 <= 0.03	√
	-X	8.79/117.48 = 0.07	B	0.05	3.93/552 = 0.007	28.14/69.43 = 0.41 <= 5	0.0011 <= 0.03	√
	+Y	1.87/117.48 = 0.02	B	0.05	3.93/552 = 0.007	13.64/66.37 = 0.21 <= 5	0.0026 <= 0.03	√
	-Y	11.27/117.48 = 0.1	B	0.05	3.93/552 = 0.007	41.09/66.52 = 0.62 <= 5	0.0026 <= 0.03	√
ø10/16/8/10				$f_{cm}A_c = 1409.83$		$h = 3.6$		
S405 70/70	+X	8.64/106.29 = 0.08	B	0.041	3.93/512 = 0.008	26.53/51.07 = 0.52 <= 5	0.0011 <= 0.03	√
	-X	5.47/106.29 = 0.05	B	0.04	3.93/512 = 0.008	17.47/52.85 = 0.33 <= 5	0.0011 <= 0.03	√
	+Y	7.59/106.29 = 0.07	B	0.041	3.93/512 = 0.008	26.52/49.23 = 0.54 <= 5	0.0026 <= 0.03	√
	-Y	4.71/106.29 = 0.04	B	0.04	3.93/512 = 0.008	10.55/51.31 = 0.21 <= 5	0.0026 <= 0.03	√
ø10/16/8/10				$f_{cm}A_c = 1228.12$		$h = 3.6$		

Kat Kolonlarının Sınır Değerleri - 4. KAT Birimler : [tf-m]

Eleman	Yön	Sınıflandırma		Sınır Değerleri				Kontrol
		Ve/Vr	Grup	Nk/fcmAc	Ash/sbk	$m=(MG+nQ+E)/Mk$ <>sınır	δ/h <>sınır	
S416	+X	3.73/106.29 = 0.04	B	0.042	3.93/512 = 0.008	17.81/53.29 = 0.33 <= 5	0.001 <= 0.03	✓
70/70	-X	6.44/106.29 = 0.06	B	0.042	3.93/512 = 0.008	23.41/52.98 = 0.44 <= 5	0.001 <= 0.03	✓
	+Y	3.53/106.29 = 0.03	B	0.041	3.93/512 = 0.008	16.91/52.5 = 0.32 <= 5	0.0025 <= 0.03	✓
	-Y	2.41/106.29 = 0.02	B	0.042	3.93/512 = 0.008	10.66/56.3 = 0.19 <= 5	0.0025 <= 0.03	✓
ø10/16/8/10				fcmAc = 1228.12			h = 3.6	
S410	+X	3.3/117.48 = 0.03	B	0.047	3.93/552 = 0.007	19.91/65.4 = 0.3 <= 5	0.0011 <= 0.03	✓
75/75	-X	8.88/117.48 = 0.08	B	0.047	3.93/552 = 0.007	31.3/65 = 0.48 <= 5	0.0011 <= 0.03	✓
	+Y	3.76/117.48 = 0.03	B	0.047	3.93/552 = 0.007	21.58/65.8 = 0.33 <= 5	0.0025 <= 0.03	✓
	-Y	6.76/117.48 = 0.06	B	0.047	3.93/552 = 0.007	30.05/65.28 = 0.46 <= 5	0.0025 <= 0.03	✓
ø10/16/8/10				fcmAc = 1409.83			h = 3.6	
S404	+X	3.04/106.29 = 0.03	B	0.044	3.93/512 = 0.008	16.94/50.41 = 0.34 <= 5	0.0011 <= 0.03	✓
70/70	-X	6.62/106.29 = 0.06	B	0.044	3.93/512 = 0.008	24.14/50.44 = 0.48 <= 5	0.0011 <= 0.03	✓
	+Y	2.9/106.29 = 0.03	B	0.045	3.93/512 = 0.008	13.94/53.64 = 0.26 <= 5	0.0025 <= 0.03	✓
	-Y	2.61/106.29 = 0.02	B	0.044	3.93/512 = 0.008	14.36/50.29 = 0.29 <= 5	0.0025 <= 0.03	✓
ø10/16/8/10				fcmAc = 1228.12			h = 3.6	
S415	+X	3.7/106.29 = 0.03	B	0.043	3.93/512 = 0.008	17.67/53.46 = 0.33 <= 5	0.001 <= 0.03	✓
70/70	-X	6.37/106.29 = 0.06	B	0.043	3.93/512 = 0.008	23.3/53.18 = 0.44 <= 5	0.001 <= 0.03	✓
	+Y	3.4/106.29 = 0.03	B	0.042	3.93/512 = 0.008	16.23/52.8 = 0.31 <= 5	0.0024 <= 0.03	✓
	-Y	2.4/106.29 = 0.02	B	0.043	3.93/512 = 0.008	10.75/56.59 = 0.19 <= 5	0.0024 <= 0.03	✓
ø10/16/8/10				fcmAc = 1228.12			h = 3.6	
S409	+X	3.1/117.48 = 0.03	B	0.046	3.93/552 = 0.007	19.93/64.54 = 0.31 <= 5	0.0011 <= 0.03	✓
75/75	-X	8.2/117.48 = 0.07	B	0.046	3.93/552 = 0.007	29.78/64.57 = 0.46 <= 5	0.0011 <= 0.03	✓
	+Y	4.38/117.48 = 0.04	B	0.046	3.93/552 = 0.007	23.63/64.84 = 0.36 <= 5	0.0024 <= 0.03	✓
	-Y	5.35/117.48 = 0.05	B	0.046	3.93/552 = 0.007	26.56/64.64 = 0.41 <= 5	0.0024 <= 0.03	✓
ø10/16/8/10				fcmAc = 1409.83			h = 3.6	
S403	+X	3.69/106.29 = 0.03	B	0.042	3.93/512 = 0.008	18.07/53.11 = 0.34 <= 5	0.0011 <= 0.03	✓
70/70	-X	6.44/106.29 = 0.06	B	0.042	3.93/512 = 0.008	23.59/52.98 = 0.45 <= 5	0.0011 <= 0.03	✓
	+Y	2.4/106.29 = 0.02	B	0.042	3.93/512 = 0.008	11.25/56.26 = 0.2 <= 5	0.0024 <= 0.03	✓
	-Y	3.23/106.29 = 0.03	B	0.042	3.93/512 = 0.008	15.75/52.63 = 0.3 <= 5	0.0024 <= 0.03	✓
ø10/16/8/10				fcmAc = 1228.12			h = 3.6	
S408	+X	3.32/117.48 = 0.03	B	0.047	3.93/552 = 0.007	18.63/64.94 = 0.29 <= 5	0.0011 <= 0.03	✓
75/75	-X	6.35/117.48 = 0.05	B	0.047	3.93/552 = 0.007	24.89/65.09 = 0.38 <= 5	0.0011 <= 0.03	✓
	+Y	4.81/117.48 = 0.04	B	0.047	3.93/552 = 0.007	26.34/64.84 = 0.41 <= 5	0.0023 <= 0.03	✓
	-Y	5.29/117.48 = 0.05	B	0.047	3.93/552 = 0.007	27.72/64.84 = 0.43 <= 5	0.0023 <= 0.03	✓
ø10/16/8/10				fcmAc = 1409.83			h = 3.6	
S414	+X	2.91/106.29 = 0.03	B	0.043	3.93/512 = 0.008	15.45/53.23 = 0.29 <= 5	0.001 <= 0.03	✓
70/70	-X	5.52/106.29 = 0.05	B	0.043	3.93/512 = 0.008	20.75/53.33 = 0.39 <= 5	0.001 <= 0.03	✓
	+Y	2.57/106.29 = 0.02	B	0.042	3.93/512 = 0.008	14.21/52.88 = 0.27 <= 5	0.0023 <= 0.03	✓
	-Y	2.23/106.29 = 0.02	B	0.043	3.93/512 = 0.008	12.74/55.43 = 0.23 <= 5	0.0023 <= 0.03	✓
ø10/16/8/10				fcmAc = 1228.12			h = 3.6	
S402	+X	2.92/106.29 = 0.03	B	0.043	3.93/512 = 0.008	15.78/53.22 = 0.3 <= 5	0.0011 <= 0.03	✓
70/70	-X	5.69/106.29 = 0.05	B	0.043	3.93/512 = 0.008	21.27/53.31 = 0.4 <= 5	0.0011 <= 0.03	✓
	+Y	2.32/106.29 = 0.02	B	0.043	3.93/512 = 0.008	12.87/55.45 = 0.23 <= 5	0.0023 <= 0.03	✓
	-Y	2.56/106.29 = 0.02	B	0.042	3.93/512 = 0.008	14.18/52.87 = 0.27 <= 5	0.0023 <= 0.03	✓
ø10/16/8/10				fcmAc = 1228.12			h = 3.6	
S413	+X	1.13/87.38 = 0.01	B	0.043	3.93/432 = 0.009	11.47/47.52 = 0.24 <= 5	0.001 <= 0.03	✓
60/70	-X	3.39/87.38 = 0.04	B	0.044	3.93/432 = 0.009	14.44/47 = 0.31 <= 5	0.001 <= 0.03	✓
	+Y	0.93/87.54 = 0.01	B	0.043	3.14/512 = 0.006	7.57/47.37 = 0.16 <= 5	0.0022 <= 0.03	✓
	-Y	2.8/87.54 = 0.03	B	0.045	3.14/512 = 0.006	25.88/47.65 = 0.54 <= 5	0.0022 <= 0.03	✓
ø10/16/8/10				fcmAc = 1052.67			h = 3.6	
S407	+X	3.54/90.18 = 0.04	B	0.063	3.93/432 = 0.009	12.75/42.62 = 0.3 <= 5	0.0011 <= 0.03	✓
60/70	-X	0.44/89.47 = 0	B	0.064	3.93/432 = 0.009	5.29/42.95 = 0.12 <= 5	0.0011 <= 0.03	✓
	+Y	6.2/87.54 = 0.07	B	0.063	3.14/512 = 0.006	27.39/49.56 = 0.55 <= 5	0.0022 <= 0.03	✓
	-Y	6.53/87.53 = 0.07	B	0.063	3.14/512 = 0.006	28.19/49.57 = 0.57 <= 5	0.0022 <= 0.03	✓
ø10/16/8/10				fcmAc = 1052.67			h = 3.6	
S401	+X	2.29/89.62 = 0.03	B	0.043	3.93/432 = 0.009	11.62/44.55 = 0.26 <= 5	0.0011 <= 0.03	✓
60/70	-X	3.79/88.39 = 0.04	B	0.044	3.93/432 = 0.009	14.53/43.71 = 0.33 <= 5	0.0011 <= 0.03	✓
	+Y	2.69/87.64 = 0.03	B	0.044	3.14/512 = 0.006	25.74/44.54 = 0.58 <= 5	0.0022 <= 0.03	✓
	-Y	0.9/87.64 = 0.01	B	0.043	3.14/512 = 0.006	7.75/44.44 = 0.17 <= 5	0.0022 <= 0.03	✓
ø10/16/8/10				fcmAc = 1052.67			h = 3.6	

M_{aki} : 1.4G+1.6Q yük birleşiminden hesaplanan kiriş uç momenti

M_{pki} : i' inci kiriş plastik uç momenti

M_{pkx} , M_{pky} : Birleşim bölgesinde hesaplanan toplam kiriş plastik momentinin x ve y bileşenleri

M_{pk22} , M_{pk33} : Birleşim bölgesinde hesaplanan toplam kiriş plastik momentinin 2-2 ve 3-3 bileşenleri

M_{22e} , M_{33e} : Düşey yükler ve deprem etkileri altında 2-2 ve 3-3 aksı etrafındaki kolon/perde momentleri

M_{22k} , M_{33k} : Kirişlerin plastik mafsallaşması ile kolona/perdeye aktarılan 2-2 ve 3-3 aksları etrafındaki kolon/perde momentleri

m : Etki/Kapasite oranı

N_k : Düşey yükler ve azaltılmış deprem etkileri altında ($G+nQ \pm E/6$) elde edilen kolon eksenel kuvveti

M_{22p} , M_{33p} : 2-2 ve 3-3 aksı etrafındaki kolon/perde plastik momentleri

$M_{22kr}^{üst}$, $M_{33kr}^{üst}$: KiM, KoM durumuna göre kritik olarak seçilen kolon üst uç 2-2 ve 3-3 yönü momentleri

M_{22kr}^{alt} , M_{33kr}^{alt} : KiM, KoM durumuna göre kritik olarak seçilen kolon alt uç 2-2 ve 3-3 yönü momentleri

V_{22e} , V_{33e} : Düşey yükler ve deprem etkileri altında hesaplanan 2-2 ve 3-3 yönü kolon/perde kesme kuvveti

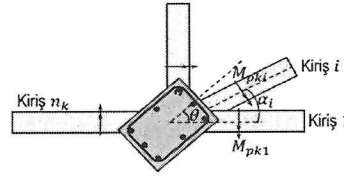
V_e : Düşey yükler ve deprem etkileri altında hesaplanan kesme kuvveti

V_{22r} , V_{33r} : 2-2 ve 3-3 yönü kolon/perde kesme kapasitesi

V_r : Kolon, kiriş veya perde kesme dayanımı

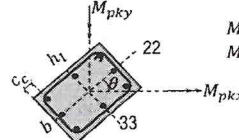
V_{22u} , V_{33u} : 2-2 veya 3-3 yönü tek eksenli kolon/perde kesme kapasitesi

$$V_e = \frac{\sqrt{(V_{22e})^2 + (V_{33e})^2}}{\sqrt{(V_{22r})^2 + (V_{33r})^2}}$$



Kolonlara dağılımsı gereken toplam plastik global moment $M_{pkx} = \sum_{i=1}^n M_{pki} \sin \alpha_i$
 $M_{pky} = \sum_{i=1}^n M_{pki} \cos \alpha_i$

a) Kolon-kiriş birleşim bölgesi

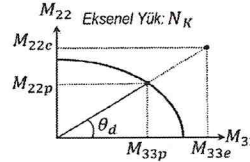


$$M_{pk22} = M_{pkx} \cos \theta - M_{pky} \sin \theta$$

$$M_{pk33} = M_{pkx} \sin \theta + M_{pky} \cos \theta$$

b) Kirişlerin mafsallaşması ile oluşan kolon momentleri

	1.4G + 1.6Q	Deprem	Plastik Moment (Bölüm 4)
$M_{22k} = M_{pk22} \frac{ M_{22}^{üst} }{ M_{22}^{üst} + M_{22}^{alt} }$	M_{aki} (→)	(←) $M_{pki} = M_{aki}$ (→)	$M_{pki} = M_{aki}$ (→)
$M_{33k} = M_{pk33} \frac{ M_{33}^{üst} }{ M_{33}^{üst} + M_{33}^{alt} }$	M_{aki} (→)	(←) $M_{pki} = \frac{M_{aki}}{3}$ (→)	$M_{pki} = \frac{M_{aki}}{3}$ (→)



$$V_{22e} = \frac{|M_{33kr}^{üst}| + |M_{33kr}^{alt}|}{\ell_n}$$

$$V_{33e} = \frac{|M_{22kr}^{üst}| + |M_{22kr}^{alt}|}{\ell_n}$$

$$V_r = V_{22u} V_{33u} \sqrt{\frac{(V_{22e})^2 + (V_{33e})^2}{(V_{33u} V_{22e})^2 + (V_{33e} V_{22u})^2}}$$

$$\left(\frac{V_{33r}}{V_{33u}}\right)^2 + \left(\frac{V_{22r}}{V_{22u}}\right)^2 = 1$$

$$V_{22u} = 0.5 f_{ctm} b (h_1 - c_c) \zeta + A_{s22} f_{yw} \frac{(h_1 - c_c)}{s_{22}} + V_{manto} \leq 0.22 f_{cm} b h_1$$

$$V_{33u} = 0.5 f_{ctm} h_1 (b - c_c) \zeta + A_{s33} f_{yw} \frac{(b - c_c)}{s_{33}} + V_{manto} \leq 0.22 f_{cm} b h_1$$

$$f_{ctm} = 0.35 \sqrt{f_{cm}}$$

$$\zeta = 1 + 0.07 N_k / A_c \quad : \text{kolon basınç kuvveti altında}$$

$$\zeta = 1 - 0.3 N_k / A_c \quad : \text{kolon çekme kuvveti altında}$$

Kesme Kuvveti Değerlendirmesi - 4. KAT

Eleman Uç	Yön	Vr		D.1		D.2												
		V22u [tf]	V33u [tf]	Ve [tf]	Vr [tf]	Mafsals	Mpk22 [tfm]	Mpk33 [tfm]	M22k [tfm]	M33k [tfm]	V22e [tf]	V33e [tf]	M22kr [tfm]	M33kr [tfm]	Nk [tf]	zeta	Ve [tf]	Vr [tf]
S418	+EX	87.37	90.18	7.41	90.18	Kiriş	14.83	1.30	3.27	0.63	0.65	4.18	3.27	0.63	-34.52	1.00	4.23	90.11
Alt	-EX	87.37	90.18	3.87	90.16	Kiriş	-4.94	-0.43	-1.09	-0.21	0.22	1.39	-1.09	-0.21	-33.47	1.00	1.41	90.11
In22=3 m	+EY	87.37	90.18	6.22	90.05	Kiriş	14.83	-15.57	5.29	-0.44	5.68	4.86	5.29	-0.44	-33.68	1.00	7.47	88.52
In33=3 m	-EY	87.37	90.18	5.53	89.82	Kiriş	-4.94	16.44	-1.76	0.46	5.98	1.62	-1.76	0.46	-34.31	1.00	6.20	87.55
S418	+EX	87.37	90.18	7.41	90.18	Kiriş	9.28	1.33	9.28	1.33	0.65	4.18	9.28	1.33	-30.74	1.00	4.23	90.11
Üst	-EX	87.37	90.18	3.87	90.16	Kiriş	-3.09	-0.44	-3.09	-0.44	0.22	1.39	-3.09	-0.44	-29.69	1.00	1.41	90.11
As22=3.14 cm²	+EY	87.37	90.18	6.22	90.05	Kiriş	9.28	-16.60	9.28	-16.60	5.68	4.86	9.28	-16.60	-29.90	1.00	7.47	88.52
As33=3.93 cm²	-EY	87.37	90.18	5.53	89.82	Kiriş	-3.09	17.49	-3.09	17.49	5.98	1.62	-3.09	17.49	-30.53	1.00	6.20	87.55
S412	+EX	114.34	109.21	11.53	111.00	Kiriş	18.77	35.70	2.93	12.76	16.84	4.99	2.93	12.76	-42.83	1.00	17.56	113.90
Alt	-EX	114.34	109.21	8.33	112.44	Kiriş	-6.26	-20.79	-0.98	-7.43	10.41	1.66	-0.98	-7.43	-41.47	1.00	10.54	114.20
In22=3 m	+EY	114.34	109.21	7.32	109.74	Kiriş	-6.26	-20.79	-3.07	-2.88	8.89	2.36	-3.07	-2.88	-42.09	1.00	9.20	113.98
In33=3 m	-EY	114.34	109.21	13.36	112.76	Kiriş	18.77	35.70	9.21	4.95	14.24	7.08	9.21	4.95	-42.22	1.00	15.90	113.26
S412	+EX	114.34	109.21	11.53	111.00	Kiriş	12.03	37.76	12.03	37.76	16.84	4.99	12.03	37.76	-38.11	1.00	17.56	113.90
Üst	-EX	114.34	109.21	8.33	112.44	Kiriş	-4.01	-23.80	-4.01	-23.80	10.41	1.66	-4.01	-23.80	-36.75	1.00	10.54	114.20
As22=3.93 cm²	+EY	114.34	109.21	7.32	109.74	Kiriş	-4.01	-23.80	-4.01	-23.80	8.89	2.36	-4.01	-23.80	-37.37	1.00	9.20	113.98

Kesme Kuvveti Değerlendirmesi - 4. KAT

Eleman Uç	Yön	Vr		D.1		D.2												Nk	ζ	Ve	Vr
		V22u [tf]	V33u [tf]	Ve	Vr	Mafsals	Mpk22 [tfm]	Mpk33 [tfm]	M22k [tfm]	M33k [tfm]	V22e [tf]	V33e [tf]	M22kr [tfm]	M33kr [tfm]							
As33=3.93 cm ²	-EY	114.34	109.21	13.36	112.76	Kiriş	12.03	37.76	12.03	37.76	14.24	7.08	12.03	37.76	-37.49	1.00	15.90	113.26			
S406	+EX	106.29	106.29	10.02	106.29	Kiriş	10.34	-29.69	1.07	-15.48	14.68	2.72	1.07	-15.48	-24.27	1.00	14.93	106.29			
Alt	-EX	106.29	106.29	8.61	106.29	Kiriş	-3.45	9.90	-0.36	5.16	4.89	0.91	-0.36	5.16	-23.14	1.00	4.98	106.29			
In22=3 m	+EY	106.29	106.29	10.71	106.29	Kiriş	-3.45	-29.69	-0.68	-1.74	10.10	1.02	-0.68	-1.74	-24.09	1.00	10.15	106.29			
In33=3 m	-EY	106.29	106.29	7.79	106.29	Kiriş	10.34	9.90	2.05	0.58	3.37	3.05	2.05	0.58	-23.33	1.00	4.54	106.29			
S406	+EX	106.29	106.29	10.02	106.29	Kiriş	7.10	-28.57	7.10	-28.57	14.68	2.72	7.10	-28.57	-19.86	1.00	14.93	106.29			
Üst	-EX	106.29	106.29	8.61	106.29	Kiriş	-2.37	9.52	-2.37	9.52	4.89	0.91	-2.37	9.52	-18.73	1.00	4.98	106.29			
As22=3.93 cm ²	+EY	106.29	106.29	10.71	106.29	Kiriş	-2.37	-28.57	-2.37	-28.57	10.10	1.02	-2.37	-28.57	-19.68	1.00	10.15	106.29			
As33=3.93 cm ²	-EY	106.29	106.29	7.79	106.29	Kiriş	7.10	9.52	7.10	9.52	3.37	3.05	7.10	9.52	-18.92	1.00	4.54	106.29			
S417	+EX	106.29	106.29	3.12	106.29	Kiriş	6.30	18.90	4.77	5.34	9.08	3.91	4.77	5.34	-56.53	1.00	9.89	106.29			
Alt	-EX	106.29	106.29	6.01	106.29	Kiriş	-2.10	-23.17	-1.59	-6.55	10.84	1.30	-1.59	-6.55	-56.20	1.00	10.92	106.29			
In22=3 m	+EY	106.29	106.29	3.44	106.29	Kiriş	24.25	18.90	1.38	7.09	9.66	9.34	1.38	7.09	-55.92	1.00	13.44	106.29			
In33=3 m	-EY	106.29	106.29	2.43	106.29	Kiriş	-20.05	-23.17	-1.14	-8.69	11.55	7.71	-1.14	-8.69	-56.82	1.00	13.89	106.29			
S417	+EX	106.29	106.29	3.12	106.29	Kiriş	6.95	21.90	6.95	21.90	9.08	3.91	6.95	21.90	-52.12	1.00	9.89	106.29			
Üst	-EX	106.29	106.29	6.01	106.29	Kiriş	-2.32	-25.96	-2.32	-25.96	10.84	1.30	-2.32	-25.96	-51.79	1.00	10.92	106.29			
As22=3.93 cm ²	+EY	106.29	106.29	3.44	106.29	Kiriş	26.63	21.90	26.63	21.90	9.66	9.34	26.63	21.90	-51.51	1.00	13.44	106.29			
As33=3.93 cm ²	-EY	106.29	106.29	2.43	106.29	Kiriş	-22.00	-25.96	-22.00	-25.96	11.55	7.71	-22.00	-25.96	-52.41	1.00	13.89	106.29			
S411	+EX	117.48	117.48	7.96	117.48	Kiriş	25.13	-8.93	6.92	-4.26	4.28	11.59	6.92	-4.26	-70.95	1.00	12.35	117.48			
Alt	-EX	117.48	117.48	8.79	117.48	Kiriş	-24.36	26.80	-6.70	12.77	12.84	11.67	-6.70	12.77	-70.61	1.00	17.35	117.48			
In22=3 m	+EY	117.48	117.48	1.87	117.48	Kiriş	1.15	-21.49	0.58	-3.19	9.16	0.43	0.58	-3.19	-70.71	1.00	9.17	117.48			
In33=3 m	-EY	117.48	117.48	11.27	117.48	Kiriş	-0.38	39.35	-0.19	5.84	15.76	0.14	-0.19	5.84	-70.85	1.00	15.76	117.48			
S411	+EX	117.48	117.48	7.96	117.48	Kiriş	27.84	-8.58	27.84	-8.58	4.28	11.59	27.84	-8.58	-65.89	1.00	12.35	117.48			
Üst	-EX	117.48	117.48	8.79	117.48	Kiriş	-28.31	25.75	-28.31	25.75	12.84	11.67	-28.31	25.75	-65.55	1.00	17.35	117.48			
As22=3.93 cm ²	+EY	117.48	117.48	1.87	117.48	Kiriş	-0.70	-24.28	-0.70	-24.28	9.16	0.43	-0.70	-24.28	-65.65	1.00	9.17	117.48			
As33=3.93 cm ²	-EY	117.48	117.48	11.27	117.48	Kiriş	0.23	41.45	0.23	41.45	15.76	0.14	0.23	41.45	-65.79	1.00	15.76	117.48			
S405	+EX	106.29	106.29	8.64	106.29	Kiriş	-22.24	15.38	-9.20	4.38	6.60	10.97	-9.20	4.38	-49.89	1.00	12.80	106.29			
Alt	-EX	106.29	106.29	5.47	106.29	Kiriş	37.43	-9.44	15.49	-2.69	5.04	18.01	15.49	-2.69	-49.65	1.00	18.70	106.29			
In22=3 m	+EY	106.29	106.29	7.59	106.29	Kiriş	37.43	-9.44	1.17	-3.61	5.35	13.24	1.17	-3.61	-50.28	1.00	14.28	106.29			
In33=3 m	-EY	106.29	106.29	4.71	106.29	Kiriş	-22.24	15.38	-0.70	5.89	7.10	8.13	-0.70	5.89	-49.26	1.00	10.80	106.29			
S405	+EX	106.29	106.29	8.64	106.29	Kiriş	-23.70	15.42	-23.70	15.42	6.60	10.97	-23.70	15.42	-45.48	1.00	12.80	106.29			
Üst	-EX	106.29	106.29	5.47	106.29	Kiriş	38.55	-12.44	38.55	-12.44	5.04	18.01	38.55	-12.44	-45.24	1.00	18.70	106.29			
As22=3.93 cm ²	+EY	106.29	106.29	7.59	106.29	Kiriş	38.55	-12.44	38.55	-12.44	5.35	13.24	38.55	-12.44	-45.87	1.00	14.28	106.29			
As33=3.93 cm ²	-EY	106.29	106.29	4.71	106.29	Kiriş	-23.70	15.42	-23.70	15.42	7.10	8.13	-23.70	15.42	-44.85	1.00	10.80	106.29			
S416	+EX	106.29	106.29	3.73	106.29	Kiriş	-19.66	26.79	-0.59	8.04	11.92	7.49	-0.59	8.04	-51.19	1.00	14.08	106.29			
Alt	-EX	106.29	106.29	6.44	106.29	Kiriş	23.26	-30.17	0.70	-9.06	12.88	8.69	0.70	-9.06	-51.26	1.00	15.54	106.29			
In22=3 m	+EY	106.29	106.29	3.53	106.29	Kiriş	-1.80	26.79	-0.12	10.30	12.67	0.62	-0.12	10.30	-50.77	1.00	12.69	106.29			
In33=3 m	-EY	106.29	106.29	2.41	106.29	Kiriş	5.40	-30.17	0.35	-11.60	13.73	1.87	0.35	-11.60	-51.68	1.00	13.85	106.29			
S416	+EX	106.29	106.29	3.73	106.29	Kiriş	-21.87	27.72	-21.87	27.72	11.92	7.49	-21.87	27.72	-46.78	1.00	14.08	106.29			
Üst	-EX	106.29	106.29	6.44	106.29	Kiriş	25.38	-29.58	25.38	-29.58	12.88	8.69	25.38	-29.58	-46.85	1.00	15.54	106.29			
As22=3.93 cm ²	+EY	106.29	106.29	3.53	106.29	Kiriş	-1.76	27.72	-1.76	27.72	12.67	0.62	-1.76	27.72	-46.36	1.00	12.69	106.29			
As33=3.93 cm ²	-EY	106.29	106.29	2.41	106.29	Kiriş	5.27	-29.58	5.27	-29.58	13.73	1.87	5.27	-29.58	-47.27	1.00	13.85	106.29			
S410	+EX	117.48	117.48	3.30	117.48	Kiriş	-14.72	37.42	-14.33	10.89	16.62	10.03	-14.33	10.89	-66.16	1.00	19.41	117.48			
Alt	-EX	117.48	117.48	8.88	117.48	Kiriş	13.04	-45.59	12.70	-13.26	19.47	9.16	12.70	-13.26	-66.28	1.00	21.52	117.48			
In22=3 m	+EY	117.48	117.48	3.76	117.48	Kiriş	13.04	4.08	1.64	2.31	1.80	5.47	1.64	2.31	-66.20	1.00	5.76	117.48			
In33=3 m	-EY	117.48	117.48	6.76	117.48	Kiriş	-14.72	-12.25	-1.85	-6.94	5.40	5.86	-1.85	-6.94	-66.24	1.00	7.97	117.48			
S410	+EX	117.48	117.48	3.30	117.48	Kiriş	-15.74	38.96	-15.74	38.96	16.62	10.03	-15.74	38.96	-61.09	1.00	19.41	117.48			
Üst	-EX	117.48	117.48	8.88	117.48	Kiriş	14.77	-45.15	14.77	-45.15	19.47	9.16	14.77	-45.15	-61.22	1.00	21.52	117.48			
As22=3.93 cm ²	+EY	117.48	117.48	3.76	117.48	Kiriş	14.77	3.09	14.77	3.09	1.80	5.47	14.77	3.09	-61.14	1.00	5.76	117.48			
As33=3.93 cm ²	-EY	117.48	117.48	6.76	117.48	Kiriş	-15.74	-9.27	-15.74	-9.27	5.40	5.86	-15.74	-9.27	-61.17	1.00	7.97	117.48			
S404	+EX	106.29	106.29	3.04	106.29	Kiriş	2.69	21.55	0.84	6.48	9.90	1.18	0.84	6.48	-54.44	1.00	9.97	106.29			
Alt	-EX	106.29	106.29	6.62	106.29	Kiriş	-8.07	-26.87	-2.53	-8.07	11.94	3.53	-2.53	-8.07	-54.49	1.00	12.45	106.29			
In22=3 m	+EY	106.29	106.29	2.90	106.29	Kiriş	-8.07	-26.87	-0.42	-10.51	12.75	2.83	-0.42	-10.51	-54.93	1.00	13.06	106.29			
In33=3 m	-EY	106.29	106.29	2.61	106.29	Kiriş	2.69	21.55	0.14	8.43	10.55	0.94	0.14	8.43	-53.99	1.00	10.59	106.29			
S404	+EX	106.29	106.29	3.04	106.29	Kiriş	2.69	23.22	2.69	23.22	9.90	1.18	2.69	23.22	-50.03	1.00	9.97	106.29			
Üst	-EX	106.29	106.29	6.62	106.29	Kiriş	-8.06	-27.74	-8.06	-27.74	11.94	3.53	-8.06	-27.74	-50.08	1.00	12.45	106.29			
As22=3.93 cm ²	+EY	106.29	106.29	2.90	106.29	Kiriş	-8.06	-27.74	-8.06	-27.74	12.75	2.83	-8.06	-27.74	-50.52	1.00	13.06	106.29			
As33=3.93 cm ²	-EY	106.29	106.29	2.61	106.29	Kiriş	2.69	23.22	2.69	23.22	10.55	0.94	2.69	23.22	-49.58	1.00	10.59	106.29			
S415	+EX	1																			

Kesme Kuvveti Değerlendirmesi - 4. KAT

Eleman Uç	Yön	Vr		D.1		D.2												
		V22u [tf]	V33u [tf]	Ve [tf]	Vr [tf]	Mafsals	Mpk22 [tfm]	Mpk33 [tfm]	M22k [tfm]	M33k [tfm]	V22e [tf]	V33e [tf]	M22kr [tfm]	M33kr [tfm]	Nk [tf]	ζ	Ve [tf]	Vr [tf]
In22=3 m	+EY	117.48	117.48	4.38	117.48	Kiriş	13.39	-47.13	1.72	-25.57	24.06	5.53	1.72	-25.57	-64.37	1.00	24.68	117.48
In33=3 m	-EY	117.48	117.48	5.35	117.48	Kiriş	-14.40	41.68	-1.85	22.61	21.87	5.77	-1.85	22.61	-64.37	1.00	22.62	117.48
S409	+EX	117.48	117.48	3.10	117.48	Kiriş	-15.46	42.99	-15.46	42.99	18.33	7.41	-15.46	42.99	-59.34	1.00	19.77	117.48
Üst	-EX	117.48	117.48	8.20	117.48	Kiriş	14.86	-46.60	14.86	-46.60	20.06	7.05	14.86	-46.60	-59.28	1.00	21.26	117.48
As22=3.93 cm ²	+EY	117.48	117.48	4.38	117.48	Kiriş	14.86	-46.60	14.86	-46.60	24.06	5.53	14.86	-46.60	-59.31	1.00	24.68	117.48
As33=3.93 cm ²	-EY	117.48	117.48	5.35	117.48	Kiriş	-15.46	42.99	-15.46	42.99	21.87	5.77	-15.46	42.99	-59.30	1.00	22.62	117.48
S403	+EX	106.29	106.29	3.69	106.29	Kiriş	26.55	22.88	7.99	12.90	12.62	11.80	7.99	12.90	-51.69	1.00	17.28	106.29
Alt	-EX	106.29	106.29	6.44	106.29	Kiriş	-29.52	-17.76	-8.89	-10.01	10.04	12.73	-8.89	-10.01	-51.63	1.00	16.21	106.29
In22=3 m	+EY	106.29	106.29	2.40	106.29	Kiriş	-29.52	-17.76	-11.50	-1.07	7.06	13.60	-11.50	-1.07	-52.07	1.00	15.32	106.29
In33=3 m	-EY	106.29	106.29	3.23	106.29	Kiriş	26.55	22.88	10.35	1.38	8.78	12.59	10.35	1.38	-51.25	1.00	15.35	106.29
S403	+EX	106.29	106.29	3.69	106.29	Kiriş	27.42	24.97	27.42	24.97	12.62	11.80	27.42	24.97	-47.28	1.00	17.28	106.29
Üst	-EX	106.29	106.29	6.44	106.29	Kiriş	-29.30	-20.11	-29.30	-20.11	10.04	12.73	-29.30	-20.11	-47.22	1.00	16.21	106.29
As22=3.93 cm ²	+EY	106.29	106.29	2.40	106.29	Kiriş	-29.30	-20.11	-29.30	-20.11	7.06	13.60	-29.30	-20.11	-47.66	1.00	15.32	106.29
As33=3.93 cm ²	-EY	106.29	106.29	3.23	106.29	Kiriş	27.42	24.97	27.42	24.97	8.78	12.59	27.42	24.97	-46.84	1.00	15.35	106.29
S408	+EX	117.48	117.48	3.32	117.48	Kiriş	-1.05	47.81	-0.30	12.61	19.97	0.33	-0.30	12.61	-65.59	1.00	19.97	117.48
Alt	-EX	117.48	117.48	6.35	117.48	Kiriş	0.35	-50.43	0.10	-13.30	20.89	0.11	0.10	-13.30	-66.08	1.00	20.89	117.48
In22=3 m	+EY	117.48	117.48	4.81	117.48	Kiriş	13.48	-50.43	2.36	-23.40	24.26	5.86	2.36	-23.40	-65.83	1.00	24.96	117.48
In33=3 m	-EY	117.48	117.48	5.29	117.48	Kiriş	-14.18	47.81	-2.49	22.19	23.16	6.05	-2.49	22.19	-65.83	1.00	23.94	117.48
S408	+EX	117.48	117.48	3.32	117.48	Kiriş	-0.68	47.30	-0.68	47.30	19.97	0.33	-0.68	47.30	-60.53	1.00	19.97	117.48
Üst	-EX	117.48	117.48	6.35	117.48	Kiriş	0.23	-49.38	0.23	-49.38	20.89	0.11	0.23	-49.38	-61.01	1.00	20.89	117.48
As22=3.93 cm ²	+EY	117.48	117.48	4.81	117.48	Kiriş	15.21	-49.38	15.21	-49.38	24.26	5.86	15.21	-49.38	-60.77	1.00	24.96	117.48
As33=3.93 cm ²	-EY	117.48	117.48	5.29	117.48	Kiriş	-15.66	47.30	-15.66	47.30	23.16	6.05	-15.66	47.30	-60.77	1.00	23.94	117.48
S414	+EX	106.29	106.29	2.91	106.29	Kiriş	-2.25	26.69	-1.47	7.50	11.90	1.28	-1.47	7.50	-52.42	1.00	11.97	106.29
Alt	-EX	106.29	106.29	5.52	106.29	Kiriş	6.76	-30.31	4.41	-8.52	12.88	3.84	4.41	-8.52	-52.76	1.00	13.45	106.29
In22=3 m	+EY	106.29	106.29	2.57	106.29	Kiriş	23.62	26.69	0.61	9.27	12.49	8.73	0.61	9.27	-52.14	1.00	15.24	106.29
In33=3 m	-EY	106.29	106.29	2.23	106.29	Kiriş	-19.12	-30.31	-0.49	-10.52	13.55	7.11	-0.49	-10.52	-53.04	1.00	15.31	106.29
S414	+EX	106.29	106.29	2.91	106.29	Kiriş	-2.37	28.19	-2.37	28.19	11.90	1.28	-2.37	28.19	-48.01	1.00	11.97	106.29
Üst	-EX	106.29	106.29	5.52	106.29	Kiriş	7.12	-30.14	7.12	-30.14	12.88	3.84	7.12	-30.14	-48.35	1.00	13.45	106.29
As22=3.93 cm ²	+EY	106.29	106.29	2.57	106.29	Kiriş	25.59	28.19	25.59	28.19	12.49	8.73	25.59	28.19	-47.73	1.00	15.24	106.29
As33=3.93 cm ²	-EY	106.29	106.29	2.23	106.29	Kiriş	-20.84	-30.14	-20.84	-30.14	13.55	7.11	-20.84	-30.14	-48.63	1.00	15.31	106.29
S402	+EX	106.29	106.29	2.92	106.29	Kiriş	26.64	-2.52	7.53	-1.01	1.19	11.86	7.53	-1.01	-52.37	1.00	11.92	106.29
Alt	-EX	106.29	106.29	5.69	106.29	Kiriş	-30.10	7.55	-8.50	3.02	3.58	12.90	-8.50	3.02	-52.70	1.00	13.39	106.29
In22=3 m	+EY	106.29	106.29	2.32	106.29	Kiriş	-30.10	-18.01	-10.51	-0.46	6.79	13.57	-10.51	-0.46	-52.98	1.00	15.17	106.29
In33=3 m	-EY	106.29	106.29	2.56	106.29	Kiriş	26.64	23.04	9.30	0.58	8.55	12.45	9.30	0.58	-52.08	1.00	15.10	106.29
S402	+EX	106.29	106.29	2.92	106.29	Kiriş	28.05	-2.57	28.05	-2.57	1.19	11.86	28.05	-2.57	-47.96	1.00	11.92	106.29
Üst	-EX	106.29	106.29	5.69	106.29	Kiriş	-30.19	7.71	-30.19	7.71	3.58	12.90	-30.19	7.71	-48.29	1.00	13.39	106.29
As22=3.93 cm ²	+EY	106.29	106.29	2.32	106.29	Kiriş	-30.19	-19.92	-30.19	-19.92	6.79	13.57	-30.19	-19.92	-48.57	1.00	15.17	106.29
As33=3.93 cm ²	-EY	106.29	106.29	2.56	106.29	Kiriş	28.05	25.06	28.05	25.06	8.55	12.45	28.05	25.06	-47.67	1.00	15.10	106.29
S413	+EX	87.37	90.18	4.80	87.37	Kiriş	1.18	-2.64	0.26	-1.14	1.13	0.09	0.26	-1.14	-45.78	1.00	1.13	87.38
Alt	-EX	87.37	90.18	5.59	88.16	Kiriş	-3.55	7.93	-0.77	3.41	3.38	0.26	-0.77	3.41	-46.82	1.00	3.39	87.38
In22=3 m	+EY	87.37	90.18	2.57	88.81	Kiriş	1.18	-2.64	0.69	-0.47	0.90	0.23	0.69	-0.47	-45.53	1.00	0.93	87.54
In33=3 m	-EY	87.37	90.18	7.74	87.37	Kiriş	-3.55	7.93	-2.08	1.40	2.71	0.70	-2.08	1.40	-47.07	1.00	2.80	87.54
S413	+EX	87.37	90.18	4.80	87.37	Kiriş	0.01	-2.24	0.01	-2.24	1.13	0.09	0.01	-2.24	-42.00	1.00	1.13	87.38
Üst	-EX	87.37	90.18	5.59	88.16	Kiriş	-0.02	6.72	-0.02	6.72	3.38	0.26	-0.02	6.72	-43.04	1.00	3.39	87.38
As22=3.14 cm ²	+EY	87.37	90.18	2.57	88.81	Kiriş	0.01	-2.24	0.01	-2.24	0.90	0.23	0.01	-2.24	-41.75	1.00	0.93	87.54
As33=3.93 cm ²	-EY	87.37	90.18	7.74	87.37	Kiriş	-0.02	6.72	-0.02	6.72	2.71	0.70	-0.02	6.72	-43.29	1.00	2.80	87.54
S407	+EX	87.37	90.19	3.54	90.18	Kiriş	47.56	0.66	11.19	0.23	0.31	17.94	11.19	0.23	-65.85	1.00	17.94	90.18
Alt	-EX	87.37	90.19	0.44	89.47	Kiriş	-45.52	-0.22	-10.71	-0.08	1.63	17.80	-10.71	-0.08	-66.97	1.00	17.87	90.16
In22=3 m	+EY	87.37	90.19	6.20	87.54	Kiriş	3.05	-21.68	1.18	-6.59	10.29	2.18	1.18	-6.59	-66.41	1.00	10.52	87.48
In33=3 m	-EY	87.37	90.19	6.53	87.53	Kiriş	-1.02	22.12	-0.39	6.73	10.43	0.73	-0.39	6.73	-66.41	1.00	10.45	87.38
S407	+EX	87.37	90.19	3.54	90.18	Kolon	53.46	0.41	53.46	0.41	0.31	17.94	-42.61	0.70	-62.07	1.00	17.94	90.18
Üst	-EX	87.37	90.19	0.44	89.47	Kolon	-49.89	-0.14	-49.89	-0.14	1.63	17.80	42.68	4.83	-63.19	1.00	17.87	90.16
As22=3.14 cm ²	+EY	87.37	90.19	6.20	87.54	Kiriş	5.36	-24.28	5.36	-24.28	10.29	2.18	5.36	-24.28	-62.63	1.00	10.52	87.48
As33=3.93 cm ²	-EY	87.37	90.19	6.53	87.53	Kiriş	-1.79	24.55	-1.79	24.55	10.43	0.73	-1.79	24.55	-62.63	1.00	10.45	87.38
S401	+EX	87.37	90.18	4.80	87.37	Kiriş	27.41	2.46	6.05	0.88	1.00	2.06	6.05	0.88	-45.45	1.00	2.29	89.62
Alt	-EX	87.37	90.18	5.60	88.26	Kiriş	-29.91	-7.39	-6.61	-2.65	3.00	2.32	-6.61	-2.65	-46.51	1.00	3.79	88.39
In22=3 m	+EY	87.37	90.18	7.70	87.40	Kiriş	-3.74	-7.39	-2.21	-1.30	2.55	0.85	-2.21	-1.30	-46.75	1.00	2.69	87.64
In33=3 m	-EY	87.37	90.18	2.61	88.92	Kiriş	1.25	2.46	0.74	0.43	0.85	0.28	0.74	0.43	-45.21	1.00	0.90	87.64
S401	+EX	87.37	90.18	4.80	87.37	Kiriş	0.11	2.12	0.11	2.12	1.00	2.06	0.11	2.12	-41.67	1.00	2.29	89.62
Üst	-EX	87.37	90.18	5.60	88.26	Kiriş	-0.34	-6.36	-0.34	-6.36	3.00	2.32	-0.34	-6.36	-42.73	1.00	3.79	88.39
As22=3.14 cm ²	+EY	87.37	90.18	7.70	87.40	Kiriş	-0.34	-6.36	-0.34	-6.36	2.55	0.85	-0.34	-6.36	-42.97	1.00	2.69	87.64
As33=3.93 cm ²	-EY	87.37	90.18	2.61	88.92	Kiriş	0.11	2.12	0.11	2.12	0.85	0.28	0.11	2.12	-41.43	1.00	0.90	87.64

Yapı Risk Değerlendirmesi - 4. KAT

Yapı Risk Değerlendirmesi - 4. KAT

Eleman	Eleman Durumları				Kesme Kuvvetleri			
	Elastisite Modülü [tf/m ²]	Eksenel Kuvvet [tf]	Eksenel Basınç Gerilmesi [tf/m ²]	Sınır Dahilinde	+EX [tf]	-EX [tf]	+EY [tf]	-EY [tf]
S418	2527734.37	33.99	80.94	√	3.55	3.55	3.28	3.28
S412	2527734.37	42.15	80.29	√	4.23	4.23	8.78	8.78
S406	2527734.37	23.71	48.38	√	3.13	3.13	3.42	3.42
S417	2527734.37	56.37	115.04	√	8.37	8.37	3.31	3.31
S411	2527734.37	70.78	125.83	√	10.48	10.48	9.46	9.46
S405	2527734.37	49.77	101.57	√	8.55	8.55	4.53	4.53
S416	2527734.37	51.23	104.54	√	9.33	9.33	3.10	3.10
S410	2527734.37	66.22	117.72	√	11.42	11.42	8.41	8.41
S404	2527734.37	54.46	111.15	√	9.50	9.50	3.29	3.29
S415	2527734.37	52.25	106.64	√	9.30	9.30	3.03	3.03
S409	2527734.37	64.37	114.44	√	11.22	11.22	8.25	8.25
S403	2527734.37	51.66	105.43	√	9.52	9.52	3.07	3.07
S408	2527734.37	65.83	117.04	√	9.66	9.66	9.63	9.63
S414	2527734.37	52.59	107.33	√	8.26	8.26	3.41	3.41
S402	2527734.37	52.53	107.21	√	8.47	8.47	3.42	3.42
S413	2527734.37	46.30	110.24	√	3.47	3.47	5.94	5.94
S407	2527734.37	66.41	158.12	√	3.92	3.92	12.33	12.33
S401	2527734.37	45.98	109.48	√	3.61	3.61	5.93	5.93

Risk Değerlendirmesi - 4. KAT	
Eksenel basınç gerilmeleri ortalaması :	106.74 tf/m ²
0.65* f_{cm} :	1629.13 tf/m ²
0.1* f_{cm} :	250.64 tf/m ²
Kat kesme kuvvetleri oranı sınır değeri:	0.35
Risk sınırını aşan eleman sayısı :	0
Toplam eleman sayısı :	18
En büyük m değeri	0.78 (S406)
[+EX] - Risk sınırını aşan kolon ve perdelerin kesme kuvvetleri toplamı / Toplam kat kesme kuvveti :	0 / 135.99 tf
[+EX] - Kat kesme kuvveti oranı :	0 <= 0.35
[-EX] - Risk sınırını aşan kolon ve perdelerin kesme kuvvetleri toplamı / Toplam kat kesme kuvveti :	0 / 135.99 tf
[-EX] - Kat kesme kuvveti oranı :	0 <= 0.35
[+EY] - Risk sınırını aşan kolon ve perdelerin kesme kuvvetleri toplamı / Toplam kat kesme kuvveti :	0 / 102.6 tf
[+EY] - Kat kesme kuvveti oranı :	0 <= 0.35
[-EY] - Risk sınırını aşan kolon ve perdelerin kesme kuvvetleri toplamı / Toplam kat kesme kuvveti :	0 / 102.6 tf
[-EY] - Kat kesme kuvveti oranı :	0 <= 0.35

Kat Kolonlarının Sınır Değerleri - 3. KAT Birimler : [tf-m]

Eleman	Yön	Sınıflandırma		Sınır Değerleri				Kontrol
		Ve/Vr	Grup	Nk/fcmAc	Ash/sbk	$m=(MG+nQ+E)/M_k$ <>sınır	δ/h <>sınır	
S301 60/70	+X	4.22/88.35 = 0.05	B	0.083	3.93/432 = 0.009	14.91/49.73 = 0.3 <= 5	0.0018 <= 0.03	√
	-X	5.87/89.4 = 0.07	B	0.087	3.93/432 = 0.009	18.64/48.88 = 0.38 <= 5	0.0018 <= 0.03	√
	+Y	2.91/87.83 = 0.03	B	0.087	3.14/512 = 0.006	30.37/56.27 = 0.54 <= 5	0.0034 <= 0.03	√
	-Y	0.97/87.83 = 0.01	B	0.083	3.14/512 = 0.006	19.59/54.7 = 0.36 <= 5	0.0034 <= 0.03	√
ø10/16/8/10				fcmAc = 1052.67			h = 3.6	
S307 60/70	+X	4.65/90.19 = 0.05	B	0.119	3.93/432 = 0.009	17.62/55.37 = 0.32 <= 4.9	0.0018 <= 0.0291	√
	-X	3.44/90.17 = 0.04	B	0.123	3.93/432 = 0.009	15.62/56.05 = 0.28 <= 4.89	0.0018 <= 0.029	√
	+Y	7.55/87.39 = 0.09	B	0.121	3.14/512 = 0.006	38.17/64.28 = 0.59 <= 4.89	0.0034 <= 0.0291	√
	-Y	7.69/87.37 = 0.09	B	0.121	3.14/512 = 0.006	38.89/64.28 = 0.6 <= 4.89	0.0034 <= 0.0291	√
ø10/16/8/10				fcmAc = 1052.67			h = 3.6	
S313 60/70	+X	1.07/87.85 = 0.01	B	0.084	3.93/432 = 0.009	14.48/52.76 = 0.27 <= 5	0.0018 <= 0.03	√
	-X	3.21/87.85 = 0.04	B	0.088	3.93/432 = 0.009	18.69/52.18 = 0.36 <= 5	0.0018 <= 0.03	√
	+Y	1.03/87.78 = 0.01	B	0.084	3.14/512 = 0.006	19.2/57.65 = 0.33 <= 5	0.0034 <= 0.03	√
	-Y	3.1/87.78 = 0.04	B	0.088	3.14/512 = 0.006	30.86/58.93 = 0.52 <= 5	0.0034 <= 0.03	√
ø10/16/8/10				fcmAc = 1052.67			h = 3.6	
S302 70/70	+X	6.69/106.29 = 0.06	B	0.083	3.93/512 = 0.008	28.85/66.62 = 0.43 <= 5	0.0018 <= 0.03	√
	-X	8.66/106.29 = 0.08	B	0.084	3.93/512 = 0.008	32.25/66.78 = 0.48 <= 5	0.0018 <= 0.03	√
	+Y	3.28/106.29 = 0.03	B	0.085	3.93/512 = 0.008	20.25/66.37 = 0.31 <= 5	0.0035 <= 0.03	√
	-Y	4.39/106.29 = 0.04	B	0.083	3.93/512 = 0.008	23.06/65.73 = 0.35 <= 5	0.0035 <= 0.03	√
ø10/16/8/10				fcmAc = 1228.12			h = 3.6	
S314 70/70	+X	6.3/106.29 = 0.06	B	0.084	3.93/512 = 0.008	27.77/66.7 = 0.42 <= 5	0.0018 <= 0.03	√
	-X	8.73/106.29 = 0.08	B	0.084	3.93/512 = 0.008	32.13/66.89 = 0.48 <= 5	0.0018 <= 0.03	√
	+Y	4.22/106.29 = 0.04	B	0.083	3.93/512 = 0.008	22.5/65.75 = 0.34 <= 5	0.0035 <= 0.03	√
	-Y	3.55/106.29 = 0.03	B	0.085	3.93/512 = 0.008	20.88/66.48 = 0.31 <= 5	0.0035 <= 0.03	√
ø10/16/8/10				fcmAc = 1228.12			h = 3.6	
S308 75/75	+X	8.22/117.49 = 0.07	B	0.092	3.93/552 = 0.007	35.4/82.8 = 0.43 <= 5	0.0018 <= 0.03	√
	-X	9.64/117.49 = 0.08	B	0.093	3.93/552 = 0.007	37.4/83.1 = 0.45 <= 5	0.0018 <= 0.03	√

Kat Kolonlarının Sınır Değerleri - 3. KAT Birimler : [tf-m]

Eleman	Yön	Sınıflandırma		Sınır Değerleri				Kontrol
		Ve/Vr	Grup	Nk/fcmAc	Ash/sbk	$m=(MG+nQ+E)/Mk$ <>sınır	δ/h <>sınır	
ø10/16/8/10	+Y	7.2/117.49 = 0.06	B	0.093	3.93/552 = 0.007	36.5/82.98 = 0.44 <= 5	0.0035 <= 0.03	√
	-Y	7.52/117.49 = 0.06	B	0.093	3.93/552 = 0.007	37.19/82.98 = 0.45 <= 5	0.0035 <= 0.03	√
				fcmAc = 1409.83			h = 3.6	
S303	+X	7.09/106.29 = 0.07	B	0.082	3.93/512 = 0.008	30.13/66.18 = 0.46 <= 5	0.0018 <= 0.03	√
70/70	-X	9.12/106.29 = 0.09	B	0.082	3.93/512 = 0.008	33.7/66.19 = 0.51 <= 5	0.0018 <= 0.03	√
ø10/16/8/10	+Y	2.89/106.29 = 0.03	B	0.083	3.93/512 = 0.008	19.45/66.14 = 0.29 <= 5	0.0037 <= 0.03	√
	-Y	4.71/106.29 = 0.04	B	0.081	3.93/512 = 0.008	23.75/65.3 = 0.36 <= 5	0.0037 <= 0.03	√
				fcmAc = 1228.12			h = 3.6	
S309	+X	7.85/117.49 = 0.07	B	0.09	3.93/552 = 0.007	35.66/81.94 = 0.44 <= 5	0.0018 <= 0.03	√
75/75	-X	11.24/117.49 = 0.1	B	0.09	3.93/552 = 0.007	41.49/81.92 = 0.51 <= 5	0.0018 <= 0.03	√
ø10/16/8/10	+Y	6.46/117.49 = 0.05	B	0.09	3.93/552 = 0.007	34.29/81.96 = 0.42 <= 5	0.0037 <= 0.03	√
	-Y	6.95/117.49 = 0.06	B	0.09	3.93/552 = 0.007	35.18/81.98 = 0.43 <= 5	0.0037 <= 0.03	√
				fcmAc = 1409.83			h = 3.6	
S315	+X	6.65/106.29 = 0.06	B	0.083	3.93/512 = 0.008	28.99/66.52 = 0.44 <= 5	0.0018 <= 0.03	√
70/70	-X	9.21/106.29 = 0.09	B	0.083	3.93/512 = 0.008	33.62/66.53 = 0.51 <= 5	0.0018 <= 0.03	√
ø10/16/8/10	+Y	4.44/106.29 = 0.04	B	0.082	3.93/512 = 0.008	22.97/65.57 = 0.35 <= 5	0.0037 <= 0.03	√
	-Y	3.25/106.29 = 0.03	B	0.084	3.93/512 = 0.008	20.27/66.48 = 0.3 <= 5	0.0037 <= 0.03	√
				fcmAc = 1228.12			h = 3.6	
S304	+X	6.98/106.29 = 0.07	B	0.086	3.93/512 = 0.008	30.09/64.08 = 0.47 <= 5	0.0018 <= 0.03	√
70/70	-X	9.17/106.29 = 0.09	B	0.086	3.93/512 = 0.008	33.8/64.15 = 0.53 <= 5	0.0018 <= 0.03	√
ø10/16/8/10	+Y	3.32/106.29 = 0.03	B	0.087	3.93/512 = 0.008	20.94/64.51 = 0.32 <= 5	0.0038 <= 0.03	√
	-Y	4.49/106.29 = 0.04	B	0.085	3.93/512 = 0.008	24.05/63.69 = 0.38 <= 5	0.0038 <= 0.03	√
				fcmAc = 1228.12			h = 3.6	
S310	+X	7.75/117.49 = 0.07	B	0.093	3.93/552 = 0.007	35.56/82.87 = 0.43 <= 5	0.0018 <= 0.03	√
75/75	-X	11.51/117.49 = 0.1	B	0.093	3.93/552 = 0.007	42.01/82.91 = 0.51 <= 5	0.0018 <= 0.03	√
ø10/16/8/10	+Y	4.85/117.49 = 0.04	B	0.093	3.93/552 = 0.007	34.46/82.9 = 0.42 <= 5	0.0038 <= 0.03	√
	-Y	6.48/117.49 = 0.06	B	0.093	3.93/552 = 0.007	37.08/82.92 = 0.45 <= 5	0.0038 <= 0.03	√
				fcmAc = 1409.83			h = 3.6	
S316	+X	6.64/106.29 = 0.06	B	0.082	3.93/512 = 0.008	28.95/66.07 = 0.44 <= 5	0.0018 <= 0.03	√
70/70	-X	9.21/106.29 = 0.09	B	0.082	3.93/512 = 0.008	33.66/66.12 = 0.51 <= 5	0.0018 <= 0.03	√
ø10/16/8/10	+Y	4.47/106.29 = 0.04	B	0.081	3.93/512 = 0.008	23.52/65.12 = 0.36 <= 5	0.0038 <= 0.03	√
	-Y	3.34/106.29 = 0.03	B	0.083	3.93/512 = 0.008	21.01/65.99 = 0.32 <= 5	0.0038 <= 0.03	√
				fcmAc = 1228.12			h = 3.6	
S305	+X	9.28/106.29 = 0.09	B	0.079	3.93/512 = 0.008	35.04/61.65 = 0.57 <= 5	0.0018 <= 0.03	√
70/70	-X	6.27/106.29 = 0.06	B	0.078	3.93/512 = 0.008	26.75/61.75 = 0.43 <= 5	0.0018 <= 0.03	√
ø10/16/8/10	+Y	7.68/106.29 = 0.07	B	0.08	3.93/512 = 0.008	30.66/62.14 = 0.49 <= 5	0.0039 <= 0.03	√
	-Y	3.72/106.29 = 0.04	B	0.078	3.93/512 = 0.008	21.35/62.37 = 0.34 <= 5	0.0039 <= 0.03	√
				fcmAc = 1228.12			h = 3.6	
S311	+X	9.89/117.49 = 0.08	B	0.098	3.93/552 = 0.007	39.71/84.68 = 0.47 <= 5	0.0018 <= 0.03	√
75/75	-X	10.05/117.49 = 0.09	B	0.097	3.93/552 = 0.007	38.18/84.48 = 0.45 <= 5	0.0018 <= 0.03	√
ø10/16/8/10	+Y	3.52/117.49 = 0.03	B	0.097	3.93/552 = 0.007	32.1/84.6 = 0.38 <= 5	0.0039 <= 0.03	√
	-Y	11.21/117.49 = 0.1	B	0.098	3.93/552 = 0.007	44.94/84.67 = 0.53 <= 5	0.0039 <= 0.03	√
				fcmAc = 1409.83			h = 3.6	
S317	+X	6.76/106.29 = 0.06	B	0.089	3.93/512 = 0.008	28.8/68.25 = 0.42 <= 5	0.0018 <= 0.03	√
70/70	-X	8.56/106.29 = 0.08	B	0.088	3.93/512 = 0.008	31.81/68.11 = 0.47 <= 5	0.0018 <= 0.03	√
ø10/16/8/10	+Y	4.61/106.29 = 0.04	B	0.088	3.93/512 = 0.008	24.52/67.17 = 0.37 <= 5	0.0039 <= 0.03	√
	-Y	3.16/106.29 = 0.03	B	0.09	3.93/512 = 0.008	21.47/67.74 = 0.32 <= 5	0.0039 <= 0.03	√
				fcmAc = 1228.12			h = 3.6	
S306	+X	8.45/106.29 = 0.08	B	0.04	3.93/512 = 0.008	24.58/50.99 = 0.48 <= 5	0.0018 <= 0.03	√
70/70	-X	3.84/106.29 = 0.04	B	0.037	3.93/512 = 0.008	16.06/51.33 = 0.31 <= 5	0.0018 <= 0.03	√
ø10/16/8/10	+Y	9.18/106.29 = 0.09	B	0.04	3.93/512 = 0.008	32.34/48.73 = 0.66 <= 5	0.0041 <= 0.03	√
	-Y	3.44/106.29 = 0.03	B	0.038	3.93/512 = 0.008	15.48/50.56 = 0.31 <= 5	0.0041 <= 0.03	√
				fcmAc = 1228.12			h = 3.6	
S312	+X	10.73/109.83 = 0.1	B	0.065	3.93/512 = 0.008	31.76/62.95 = 0.5 <= 5	0.0018 <= 0.03	√
70/75	-X	3.4/114.33 = 0.03	B	0.062	3.93/512 = 0.008	14.43/63.12 = 0.23 <= 5	0.0018 <= 0.03	√
ø10/16/8/10	+Y	5.72/110.7 = 0.05	B	0.063	3.93/552 = 0.007	31.35/66.11 = 0.47 <= 5	0.0041 <= 0.03	√
	-Y	11.6/113.28 = 0.1	B	0.064	3.93/552 = 0.007	43.03/66.13 = 0.65 <= 5	0.0041 <= 0.03	√
				fcmAc = 1315.84			h = 3.6	
S318	+X	5.45/90.17 = 0.06	B	0.066	3.93/432 = 0.009	22.35/43.44 = 0.51 <= 5	0.0018 <= 0.03	√
60/70	-X	0.34/87.39 = 0	B	0.063	3.93/432 = 0.009	9.09/42.65 = 0.21 <= 5	0.0018 <= 0.03	√
ø10/16/8/10	+Y	5.39/89.22 = 0.06	B	0.064	3.14/512 = 0.006	22.16/49.55 = 0.45 <= 5	0.0041 <= 0.03	√
	-Y	4.76/88.62 = 0.05	B	0.065	3.14/512 = 0.006	21.32/49.93 = 0.43 <= 5	0.0041 <= 0.03	√
				fcmAc = 1052.67			h = 3.6	

Kesme Kuvveti Değerlendirmesi - 3. KAT

Kesme Kuvveti Değerlendirmesi - 3. KAT

Eleman Uç	Yön	Vr				D.1				D.2								
		V22u [tf]	V33u [tf]	Ve [tf]	Vr [tf]	Mafsals	Mpk22 [tfm]	Mpk33 [tfm]	M22k [tfm]	M33k [tfm]	V22e [tf]	V33e [tf]	M22kr [tfm]	M33kr [tfm]	Nk [tf]	ζ	Ve [tf]	Vr [tf]
S301	+EX	87.37	90.19	4.22	88.35	Kiriş	27.12	2.32	9.52	0.85	0.81	10.29	9.52	0.85	-87.72	1.00	10.32	90.17
Alt	-EX	87.37	90.19	5.87	89.40	Kiriş	-29.41	-6.97	-10.32	-2.54	2.43	11.21	-10.32	-2.54	-91.38	1.00	11.47	90.05
In22=3 m	+EY	87.37	90.19	8.33	87.39	Kiriş	-3.43	-6.97	-2.07	-1.85	2.65	1.20	-2.07	-1.85	-91.75	1.00	2.91	87.83
In33=3 m	-EY	87.37	90.19	2.62	88.71	Kiriş	1.14	2.32	0.69	0.62	0.88	0.40	0.69	0.62	-87.35	1.00	0.97	87.83
S301	+EX	87.37	90.19	4.22	88.35	Kiriş	27.41	2.46	21.36	1.58	0.81	10.29	21.36	1.58	-83.94	1.00	10.32	90.17
Üst	-EX	87.37	90.19	5.87	89.40	Kiriş	-29.91	-7.39	-23.30	-4.74	2.43	11.21	-23.30	-4.74	-87.60	1.00	11.47	90.05
As22=3.14 cm ²	+EY	87.37	90.19	8.33	87.39	Kiriş	-3.74	-7.39	-1.54	-6.08	2.65	1.20	-1.54	-6.08	-87.97	1.00	2.91	87.83
As33=3.93 cm ²	-EY	87.37	90.19	2.62	88.71	Kiriş	1.25	2.46	0.51	2.03	0.88	0.40	0.51	2.03	-83.57	1.00	0.97	87.83
S307	+EX	87.37	90.19	4.65	90.19	Kiriş	47.94	0.85	17.09	0.23	0.22	17.82	17.09	0.23	-125.45	1.00	17.82	90.19
Alt	-EX	87.37	90.19	3.44	90.18	Kiriş	-46.12	-0.28	-16.44	-0.08	0.07	17.08	-16.44	-0.08	-129.39	1.00	17.08	90.19
In22=3 m	+EY	87.37	90.19	9.07	87.38	Kiriş	2.74	-21.93	0.24	-7.47	7.52	0.71	0.24	-7.47	-127.42	1.00	7.55	87.39
In33=3 m	-EY	87.37	90.19	9.42	87.38	Kiriş	-0.91	22.49	-0.08	7.67	7.69	0.24	-0.08	7.67	-127.42	1.00	7.69	87.37
S307	+EX	87.37	90.19	4.65	90.19	Kiriş	47.56	0.66	36.37	0.43	0.22	17.82	36.37	0.43	-121.67	1.00	17.82	90.19
Üst	-EX	87.37	90.19	3.44	90.17	Kiriş	-45.52	-0.22	-34.81	-0.14	0.07	17.08	-34.81	-0.14	-125.61	1.00	17.08	90.19
As22=3.14 cm ²	+EY	87.37	90.19	9.07	87.38	Kiriş	3.05	-21.68	1.88	-15.08	7.52	0.71	1.88	-15.08	-123.64	1.00	7.55	87.39
As33=3.93 cm ²	-EY	87.37	90.19	9.42	87.38	Kiriş	-1.02	22.12	-0.63	15.39	7.69	0.24	-0.63	15.39	-123.64	1.00	7.69	87.37
S313	+EX	87.37	90.19	4.23	88.23	Kiriş	1.20	-2.57	0.42	-1.41	0.97	0.45	0.42	-1.41	-88.52	1.00	1.07	87.85
Alt	-EX	87.37	90.19	5.97	89.30	Kiriş	-3.60	7.70	-1.27	4.24	2.92	1.35	-1.27	4.24	-92.13	1.00	3.21	87.85
In22=3 m	+EY	87.37	90.19	2.55	88.89	Kiriş	1.20	-2.57	0.72	-0.68	0.95	0.40	0.72	-0.68	-88.13	1.00	1.03	87.78
In33=3 m	-EY	87.37	90.19	8.52	87.39	Kiriş	-3.60	7.70	-2.15	2.05	2.86	1.21	-2.15	2.05	-92.52	1.00	3.10	87.78
S313	+EX	87.37	90.19	4.23	88.23	Kiriş	1.18	-2.64	0.93	-1.51	0.97	0.45	0.93	-1.51	-84.74	1.00	1.07	87.85
Üst	-EX	87.37	90.19	5.97	89.30	Kiriş	-3.55	7.93	-2.78	4.52	2.92	1.35	-2.78	4.52	-88.35	1.00	3.21	87.85
As22=3.14 cm ²	+EY	87.37	90.19	2.55	88.89	Kiriş	1.18	-2.64	0.49	-2.18	0.95	0.40	0.49	-2.18	-84.35	1.00	1.03	87.78
As33=3.93 cm ²	-EY	87.37	90.19	8.52	87.39	Kiriş	-3.55	7.93	-1.47	6.53	2.86	1.21	-1.47	6.53	-88.74	1.00	3.10	87.78
S302	+EX	106.29	106.29	6.69	106.29	Kiriş	26.96	-17.82	9.99	-4.11	1.87	9.70	9.99	-4.11	-102.52	1.00	9.88	106.29
Alt	-EX	106.29	106.29	8.66	106.29	Kiriş	-29.97	22.99	-11.11	5.30	3.28	10.90	-11.11	5.30	-103.22	1.00	11.38	106.29
In22=3 m	+EY	106.29	106.29	3.28	106.29	Kiriş	-29.97	-17.82	-10.36	-2.26	6.60	9.98	-10.36	-2.26	-104.05	1.00	11.97	106.29
In33=3 m	-EY	106.29	106.29	4.39	106.29	Kiriş	26.96	22.99	9.32	2.91	8.46	8.89	9.32	2.91	-101.69	1.00	12.27	106.29
S302	+EX	106.29	106.29	6.69	106.29	Kiriş	26.64	-2.52	19.12	-1.51	1.87	9.70	19.12	-1.51	-98.11	1.00	9.88	106.29
Üst	-EX	106.29	106.29	8.66	106.29	Kiriş	-30.10	7.55	-21.59	4.53	3.28	10.90	-21.59	4.53	-98.81	1.00	11.38	106.29
As22=3.93 cm ²	+EY	106.29	106.29	3.28	106.29	Kiriş	-30.10	-18.01	-19.59	-17.55	6.60	9.98	-19.59	-17.55	-99.64	1.00	11.97	106.29
As33=3.93 cm ²	-EY	106.29	106.29	4.39	106.29	Kiriş	26.64	23.04	17.34	22.46	8.46	8.89	17.34	22.46	-97.28	1.00	12.27	106.29
S314	+EX	106.29	106.29	6.30	106.29	Kiriş	-2.23	26.70	-1.73	9.93	9.71	0.84	-1.73	9.93	-102.69	1.00	9.74	106.29
Alt	-EX	106.29	106.29	8.73	106.29	Kiriş	6.69	-30.34	5.19	-11.28	11.02	2.51	5.19	-11.28	-103.42	1.00	11.31	106.29
In22=3 m	+EY	106.29	106.29	4.22	106.29	Kiriş	23.63	26.70	3.01	9.22	8.88	8.67	3.01	9.22	-101.87	1.00	12.41	106.29
In33=3 m	-EY	106.29	106.29	3.55	106.29	Kiriş	-19.17	-30.34	-2.44	-10.48	10.09	7.02	-2.44	-10.48	-104.24	1.00	12.29	106.29
S314	+EX	106.29	106.29	6.30	106.29	Kiriş	-2.25	26.69	-0.78	19.19	9.71	0.84	-0.78	19.19	-98.28	1.00	9.74	106.29
Üst	-EX	106.29	106.29	8.73	106.29	Kiriş	6.76	-30.31	2.35	-21.79	11.02	2.51	2.35	-21.79	-99.01	1.00	11.31	106.29
As22=3.93 cm ²	+EY	106.29	106.29	4.22	106.29	Kiriş	23.62	26.69	23.01	17.42	8.88	8.67	23.01	17.42	-97.46	1.00	12.41	106.29
As33=3.93 cm ²	-EY	106.29	106.29	3.55	106.29	Kiriş	-19.12	-30.31	-18.62	-19.78	10.09	7.02	-18.62	-19.78	-99.83	1.00	12.29	106.29
S308	+EX	117.49	117.49	8.22	117.49	Kiriş	13.49	47.41	1.46	17.22	17.47	0.74	1.46	17.22	-130.38	1.00	17.49	117.49
Alt	-EX	117.49	117.49	9.64	117.49	Kiriş	-14.32	-49.61	-1.55	-18.02	18.38	0.60	-1.55	-18.02	-131.50	1.00	18.39	117.49
In22=3 m	+EY	117.49	117.49	7.20	117.49	Kiriş	13.49	-49.61	3.24	-13.05	13.36	4.79	3.24	-13.05	-130.94	1.00	14.19	117.49
In33=3 m	-EY	117.49	117.49	7.52	117.49	Kiriş	-14.32	47.41	-3.44	12.47	12.70	5.05	-3.44	12.47	-130.94	1.00	13.66	117.49
S308	+EX	117.49	117.49	8.22	117.49	Kiriş	-1.05	47.81	-0.75	35.20	17.47	0.74	-0.75	35.20	-125.32	1.00	17.49	117.49
Üst	-EX	117.49	117.49	9.64	117.49	Kiriş	0.35	-50.43	0.25	-37.13	18.38	0.60	0.25	-37.13	-126.44	1.00	18.39	117.49
As22=3.93 cm ²	+EY	117.49	117.49	7.20	117.49	Kiriş	13.48	-50.43	11.12	-27.02	13.36	4.79	11.12	-27.02	-125.88	1.00	14.19	117.49
As33=3.93 cm ²	-EY	117.49	117.49	7.52	117.49	Kiriş	-14.18	47.81	-11.70	25.62	12.70	5.05	-11.70	25.62	-125.88	1.00	13.66	117.49
S303	+EX	106.29	106.29	7.09	106.29	Kiriş	26.63	7.74	10.02	7.55	5.84	9.53	10.02	7.55	-101.13	1.00	11.18	106.29
Alt	-EX	106.29	106.29	9.12	106.29	Kiriş	-29.12	-2.58	-10.96	-2.52	3.42	10.53	-10.96	-2.52	-101.05	1.00	11.07	106.29
In22=3 m	+EY	106.29	106.29	2.89	106.29	Kiriş	-29.12	-17.65	-10.49	-1.66	6.12	9.50	-10.49	-1.66	-102.18	1.00	11.30	106.29
In33=3 m	-EY	106.29	106.29	4.71	106.29	Kiriş	26.63	22.81	9.59	2.15	7.88	8.60	9.59	2.15	-100.00	1.00	11.66	106.29
S303	+EX	106.29	106.29	7.09	106.29	Kiriş	26.55	22.88	18.56	9.98	5.84	9.53	18.56	9.98	-96.72	1.00	11.18	106.29
Üst	-EX	106.29	106.29	9.12	106.29	Kiriş	-29.52	-17.76	-20.63	-7.75	3.42	10.53	-20.63	-7.75	-96.64	1.00	11.07	106.29
As22=3.93 cm ²	+EY	106.29	106.29	2.89	106.29	Kiriş	-29.52	-17.76	-18.01	-16.69	6.12	9.50	-18.01	-16.69	-97.77	1.00	11.30	106.29
As33=3.93 cm ²	-EY	106.29	106.29	4.71	106.29	Kiriş	26.55	22.88	16.20	21.50	7.88	8.60	16.20	21.50	-95.59	1.00	11.66	106.29
S309	+EX	117.49	117.49	7.85	117.49	Kiriş	-14.45	42.11	-2.83	15.60	15.10	3.49	-2.83	15.60	-126.96	1.00	15.49	117.49
Alt	-EX	117.49	117.49	11.24	117.49	Kiriş	13.37	-46.63	2.62	-17.28	16.95	3.24	2.62	-17.28	-126.89	1.00	17.25	117.49
In22=3 m	+EY	117.49	117.49	6.46	117.49	Kiriş	13.37	-46.63	2.74	-12.95	11.51	4.80	2.74	-12.95	-126.93	1.00	12.47	117.49
In33=3 m	-EY	117.49	117.49	6.95	117.49	Kiriş	-14.45	42.11	-2.96	11.70	10.26	5.17	-2.96	11.70	-126.92	1.00	11.49	117.49
S309	+EX	117.49	117.49	7.85	117.49	Kiriş	-14.40	41.68	-7.64	29.68	15.10	3.49	-7.64	29.68	-121.89	1.00	15.49	117.49
Üst	-EX	117.49	117.49	11.24	117.49	Kiriş	13.39	-47.13	7.10	-33.56	16.95	3.24	7.10	-33.56	-121.83	1.00	17.25	117.49
As22=3.93 cm ²	+EY	117.49	117.49	6.46	117.49	Kiriş	13.39	-47.13	11.67	-21.57	11.51	4.80	11.67	-21.57	-121.86	1.00	12.47	117.49
As33=3.93 cm ²	-EY	117.49	117.49	6.95	117.49	Kiriş	-14.40	41.68	-12.55	19.07	10.26	5.17	-12.55	19.07	-121.86	1.00	11.49	117.49
S3																		

Kesme Kuvveti Değerlendirmesi - 3. KAT

		Vr				D.1				D.2								
Eleman	Yön	V22u	V33u	Ve	Vr	Mafsals	Mpk22	Mpk33	M22k	M33k	V22e	V33e	M22kr	M33kr	Nk	ζ	Ve	Vr
Uç		[tf]	[tf]	[tf]	[tf]		[tfm]	[tfm]	[tfm]	[tfm]	[tf]	[tf]	[tfm]	[tfm]	[tf]		[tf]	[tf]
In33=3 m	-EY	106.29	106.29	3.25	106.29	Kiriş	-19.31	-30.05	-1.82	-10.83	9.71	6.60	-1.82	-10.83	-103.31	1.00	11.74	106.29
S315	+EX	106.29	106.29	6.65	106.29	Kiriş	6.06	26.53	0.14	18.57	9.54	2.34	0.14	18.57	-97.85	1.00	9.82	106.29
Üst	-EX	106.29	106.29	9.21	106.29	Kiriş	-2.02	-29.97	-0.05	-20.98	10.78	1.92	-0.05	-20.98	-97.75	1.00	10.95	106.29
As22=3.93 cm ²	+EY	106.29	106.29	4.44	106.29	Kiriş	23.21	26.53	21.76	16.21	8.59	7.98	21.76	16.21	-96.70	1.00	11.73	106.29
As33=3.93 cm ²	-EY	106.29	106.29	3.25	106.29	Kiriş	-19.17	-29.97	-17.97	-18.31	9.71	6.60	-17.97	-18.31	-98.90	1.00	11.74	106.29
S304	+EX	106.29	106.29	6.98	106.29	Kiriş	2.72	22.04	0.48	8.30	7.79	0.78	0.48	8.30	-106.09	1.00	7.83	106.29
Alt	-EX	106.29	106.29	9.17	106.29	Kiriş	-8.15	-26.80	-1.45	-10.10	9.63	2.33	-1.45	-10.10	-106.21	1.00	9.91	106.29
In22=3 m	+EY	106.29	106.29	3.32	106.29	Kiriş	-8.15	-26.80	-0.79	-9.73	8.69	2.82	-0.79	-9.73	-107.38	1.00	9.14	106.29
In33=3 m	-EY	106.29	106.29	4.49	106.29	Kiriş	2.72	22.04	0.26	8.00	7.04	0.94	0.26	8.00	-104.93	1.00	7.10	106.29
S304	+EX	106.29	106.29	6.98	106.29	Kiriş	2.69	21.55	1.85	15.07	7.79	0.78	1.85	15.07	-101.68	1.00	7.83	106.29
Üst	-EX	106.29	106.29	9.17	106.29	Kiriş	-8.07	-26.87	-5.55	-18.79	9.63	2.33	-5.55	-18.79	-101.80	1.00	9.91	106.29
As22=3.93 cm ²	+EY	106.29	106.29	3.32	106.29	Kiriş	-8.07	-26.87	-7.66	-16.36	8.69	2.82	-7.66	-16.36	-102.97	1.00	9.14	106.29
As33=3.93 cm ²	-EY	106.29	106.29	4.49	106.29	Kiriş	2.69	21.55	2.55	13.12	7.04	0.94	2.55	13.12	-100.52	1.00	7.10	106.29
S310	+EX	117.49	117.49	7.75	117.49	Kiriş	-14.69	37.83	-10.37	14.06	13.53	3.59	-10.37	14.06	-130.46	1.00	14.00	117.49
Alt	-EX	117.49	117.49	11.51	117.49	Kiriş	13.14	-44.82	9.27	-16.65	16.33	3.21	9.27	-16.65	-130.64	1.00	16.64	117.49
In22=3 m	+EY	117.49	117.49	6.09	117.49	Kiriş	13.14	3.49	2.64	2.00	1.26	4.68	2.64	2.00	-130.51	1.00	4.85	117.49
In33=3 m	-EY	117.49	117.49	7.71	117.49	Kiriş	-14.69	-10.48	-2.95	-6.00	3.77	5.27	-2.95	-6.00	-130.59	1.00	6.48	117.49
S310	+EX	117.49	117.49	7.75	117.49	Kiriş	-14.72	37.42	-0.39	26.54	13.53	3.59	-0.39	26.54	-125.40	1.00	14.00	117.49
Üst	-EX	117.49	117.49	11.51	117.49	Kiriş	13.04	-45.59	0.34	-32.33	16.33	3.21	0.34	-32.33	-125.58	1.00	16.64	117.49
As22=3.93 cm ²	+EY	117.49	117.49	6.09	117.49	Kiriş	13.04	4.08	11.40	1.77	1.26	4.68	11.40	1.77	-125.45	1.00	4.85	117.49
As33=3.93 cm ²	-EY	117.49	117.49	7.71	117.49	Kiriş	-14.72	-12.25	-12.87	-5.32	3.77	5.27	-12.87	-5.32	-125.53	1.00	6.48	117.49
S316	+EX	106.29	106.29	6.64	106.29	Kiriş	-19.69	26.56	-2.87	10.04	9.59	7.31	-2.87	10.04	-100.37	1.00	12.06	106.29
Alt	-EX	106.29	106.29	9.21	106.29	Kiriş	23.21	-29.82	3.39	-11.27	10.79	8.65	3.39	-11.27	-100.48	1.00	13.83	106.29
In22=3 m	+EY	106.29	106.29	4.47	106.29	Kiriş	23.21	26.56	2.09	9.55	8.68	1.26	2.09	9.55	-99.24	1.00	8.77	106.29
In33=3 m	-EY	106.29	106.29	3.34	106.29	Kiriş	-19.69	-29.82	-1.77	-10.72	9.76	2.27	-1.77	-10.72	-101.62	1.00	10.02	106.29
S316	+EX	106.29	106.29	6.64	106.29	Kiriş	-19.66	26.79	-19.07	18.74	9.59	7.31	-19.07	18.74	-95.96	1.00	12.06	106.29
Üst	-EX	106.29	106.29	9.21	106.29	Kiriş	23.26	-30.17	22.56	-21.11	10.79	8.65	22.56	-21.11	-96.07	1.00	13.83	106.29
As22=3.93 cm ²	+EY	106.29	106.29	4.47	106.29	Kiriş	-1.80	26.79	-1.68	16.48	8.68	1.26	-1.68	16.48	-94.83	1.00	8.77	106.29
As33=3.93 cm ²	-EY	106.29	106.29	3.34	106.29	Kiriş	5.40	-30.17	5.05	-18.56	9.76	2.27	5.05	-18.56	-97.21	1.00	10.02	106.29
S305	+EX	106.29	106.29	10.42	106.29	Kiriş	-22.24	15.76	-9.15	5.82	5.61	7.40	-9.15	5.82	-96.99	1.00	9.28	106.29
Alt	-EX	106.29	106.29	6.27	106.29	Kiriş	37.31	-10.23	15.35	-3.78	3.51	12.43	15.35	-3.78	-96.31	1.00	12.92	106.29
In22=3 m	+EY	106.29	106.29	7.68	106.29	Kiriş	37.31	-10.23	5.67	-3.64	3.16	13.97	5.67	-3.64	-98.02	1.00	14.33	106.29
In33=3 m	-EY	106.29	106.29	3.72	106.29	Kiriş	-22.24	15.76	-3.38	5.61	5.03	8.31	-3.38	5.61	-95.29	1.00	9.71	106.29
S305	+EX	106.29	106.29	10.42	106.29	Kiriş	-22.24	15.38	-13.04	11.00	5.61	7.40	-13.04	11.00	-92.58	1.00	9.28	106.29
Üst	-EX	106.29	106.29	6.27	106.29	Kiriş	37.43	-9.44	21.94	-6.75	3.51	12.43	21.94	-6.75	-91.90	1.00	12.92	106.29
As22=3.93 cm ²	+EY	106.29	106.29	7.68	106.29	Kiriş	37.43	-9.44	36.26	-5.82	3.16	13.97	36.26	-5.82	-93.61	1.00	14.33	106.29
As33=3.93 cm ²	-EY	106.29	106.29	3.72	106.29	Kiriş	-22.24	15.38	-21.55	9.49	5.03	8.31	-21.55	9.49	-90.88	1.00	9.71	106.29
S311	+EX	117.49	117.49	10.54	117.49	Kiriş	26.49	-8.75	9.73	-5.28	3.32	9.32	9.73	-5.28	-137.70	1.00	9.89	117.49
Alt	-EX	117.49	117.49	10.05	117.49	Kiriş	-25.35	26.26	-9.32	15.83	9.95	8.99	-9.32	15.83	-137.22	1.00	13.41	117.49
In22=3 m	+EY	117.49	117.49	3.52	117.49	Kiriş	1.70	-21.84	0.75	-4.70	7.66	0.44	0.75	-4.70	-137.25	1.00	7.68	117.49
In33=3 m	-EY	117.49	117.49	11.21	117.49	Kiriş	-0.57	39.35	-0.25	8.46	13.99	0.15	-0.25	8.46	-137.67	1.00	13.99	117.49
S311	+EX	117.49	117.49	10.54	117.49	Kiriş	25.13	-8.93	18.22	-4.68	3.32	9.32	18.22	-4.68	-132.63	1.00	9.89	117.49
Üst	-EX	117.49	117.49	10.05	117.49	Kiriş	-24.36	26.80	-17.66	14.03	9.95	8.99	-17.66	14.03	-132.16	1.00	13.41	117.49
As22=3.93 cm ²	+EY	117.49	117.49	3.52	117.49	Kiriş	1.15	-21.49	0.58	-18.30	7.66	0.44	0.58	-18.30	-132.19	1.00	7.68	117.49
As33=3.93 cm ²	-EY	117.49	117.49	11.21	117.49	Kiriş	-0.38	39.35	-0.19	33.51	13.99	0.15	-0.19	33.51	-132.60	1.00	13.99	117.49
S317	+EX	106.29	106.29	6.76	106.29	Kiriş	6.55	19.69	5.14	7.34	6.97	2.22	5.14	7.34	-109.24	1.00	7.31	106.29
Alt	-EX	106.29	106.29	8.56	106.29	Kiriş	-2.18	-24.10	-1.71	-8.98	8.54	0.74	-1.71	-8.98	-108.58	1.00	8.57	106.29
In22=3 m	+EY	106.29	106.29	4.61	106.29	Kiriş	24.31	19.69	2.24	6.98	6.26	8.37	2.24	6.98	-107.73	1.00	10.45	106.29
In33=3 m	-EY	106.29	106.29	3.16	106.29	Kiriş	-19.94	-24.10	-1.84	-8.54	7.67	6.92	-1.84	-8.54	-110.10	1.00	10.33	106.29
S317	+EX	106.29	106.29	6.76	106.29	Kiriş	6.30	18.90	1.53	13.56	6.97	2.22	1.53	13.56	-104.83	1.00	7.31	106.29
Üst	-EX	106.29	106.29	8.56	106.29	Kiriş	-2.10	-23.17	-0.51	-16.63	8.54	0.74	-0.51	-16.63	-104.17	1.00	8.57	106.29
As22=3.93 cm ²	+EY	106.29	106.29	4.61	106.29	Kiriş	24.25	18.90	22.87	11.81	6.26	8.37	22.87	11.81	-103.32	1.00	10.45	106.29
As33=3.93 cm ²	-EY	106.29	106.29	3.16	106.29	Kiriş	-20.05	-23.17	-18.91	-14.48	7.67	6.92	-18.91	-14.48	-105.69	1.00	10.33	106.29
S306	+EX	106.29	106.29	8.45	106.29	Kiriş	9.55	-29.38	2.94	-18.08	10.76	4.07	2.94	-18.08	-49.41	1.00	11.51	106.29
Alt	-EX	106.29	106.29	5.34	106.29	Kiriş	-3.18	9.79	-0.98	6.03	3.59	1.36	-0.98	6.03	-45.72	1.00	3.84	106.29
In22=3 m	+EY	106.29	106.29	9.18	106.29	Kiriş	-3.18	-29.38	-0.76	-2.58	10.18	1.18	-0.76	-2.58	-48.52	1.00	10.25	106.29
In33=3 m	-EY	106.29	106.29	3.44	106.29	Kiriş	9.55	9.79	2.29	0.86	3.39	3.53	2.29	0.86	-46.61	1.00	4.89	106.29
S306	+EX	106.29	106.29	8.45	106.29	Kiriş	10.34	-29.69	9.28	-14.21	10.76	4.07	9.28	-14.21	-45.00	1.00	11.51	106.29
Üst	-EX	106.29	106.29	5.34	106.29	Kiriş	-3.45	9.90	-3.09	4.74	3.59	1.36	-3.09	4.74	-41.31	1.00	3.84	106.29
As22=3.93 cm ²	+EY	106.29	106.29	9.18	106.29	Kiriş	-3.45	-29.69	-2.76	-27.95	10.18	1.18	-2.76	-27.95	-44.11	1.00	10.25	106.29
As33=3.93 cm ²	-EY	106.29	106.29	3.44	106.29	Kiriş	10.34	9.90	8.29	9.32	3.39	3.53	8.29	9.32	-42.20	1.00	4.89	106.29
S312	+EX	114.34	109.21	10.73	109.83	Kiriş	17.55	35.58	5.82	12.04	11.66	7.22	5.82	12.04	-86.09	1.00	13.71	112.85
Alt	-EX	114.34	109.21	3.40	114.33	Kiriş	-5.85	-21.17	-1.94	-7.16	6.84	2.41	-1.94	-7.16	-81.32	1.00	7.25	113.74
In22=3 m	+EY	114.34	109.2															

Kesme Kuvveti Değerlendirmesi - 3. KAT

Eleman Uç	Yön	Vr		D.1		D.2												
		V22u [tf]	V33u [tf]	Ve [tf]	Vr [tf]	Mafsals	Mpk22 [tfm]	Mpk33 [tfm]	M22k [tfm]	M33k [tfm]	V22e [tf]	V33e [tf]	M22kr [tfm]	M33kr [tfm]	Nk [tf]	ç	Ve [tf]	Vr [tf]
As22=3.93 cm ²	+EY	114.34	109.21	5.72	110.70	Kiriş	-6.26	-20.79	-3.19	-17.91	7.42	3.55	-3.19	-17.91	-78.82	1.00	8.22	113.33
As33=3.93 cm ²	-EY	114.34	109.21	11.60	113.28	Kiriş	18.77	35.70	9.56	30.75	12.68	4.02	9.56	30.75	-79.14	1.00	13.30	113.84
S318	+EX	87.37	90.19	7.59	90.19	Kiriş	13.38	1.09	4.74	0.63	0.43	5.43	4.74	0.63	-69.51	1.00	5.45	90.17
Alt	-EX	87.37	90.19	0.34	87.39	Kiriş	-4.46	-0.36	-1.58	-0.21	0.14	1.81	-1.58	-0.21	-65.85	1.00	1.82	90.17
In22=3 m	+EY	87.37	90.19	5.39	89.22	Kiriş	13.38	-15.43	4.59	-1.71	5.61	4.71	4.59	-1.71	-66.91	1.00	7.33	88.50
In33=3 m	-EY	87.37	90.19	4.76	88.62	Kiriş	-4.46	16.16	-1.53	1.79	5.92	1.57	-1.53	1.79	-68.45	1.00	6.13	87.54
S318	+EX	87.37	90.19	7.59	90.19	Kiriş	14.83	1.30	11.56	0.67	0.43	5.43	11.56	0.67	-65.73	1.00	5.45	90.17
Üst	-EX	87.37	90.19	0.34	87.39	Kiriş	-4.94	-0.43	-3.85	-0.22	0.14	1.81	-3.85	-0.22	-62.07	1.00	1.82	90.17
As22=3.14 cm ²	+EY	87.37	90.19	5.39	89.22	Kiriş	14.83	-15.57	9.54	-15.14	5.61	4.71	9.54	-15.14	-63.13	1.00	7.33	88.50
As33=3.93 cm ²	-EY	87.37	90.19	4.76	88.62	Kiriş	-4.94	16.44	-3.18	15.98	5.92	1.57	-3.18	15.98	-64.67	1.00	6.13	87.54

Yapı Risk Değerlendirmesi - 3. KAT

Eleman	Eleman Durumları				Kesme Kuvvetleri			
	Elastisite Modülü [tf/m ²]	Eksenel Kuvvet [tf]	Eksenel Basınç Gerilmesi [tf/m ²]	Sınır Dahilinde	+EX [tf]	-EX [tf]	+EY [tf]	-EY [tf]
S301	2527734.37	89.55	213.21	√	7.55	7.55	10.18	10.18
S307	2527734.37	127.42	303.38	√	8.08	8.08	18.45	18.45
S313	2527734.37	90.33	215.06	√	7.37	7.37	10.20	10.20
S302	2527734.37	102.87	209.94	√	15.24	15.24	6.97	6.97
S314	2527734.37	103.06	210.32	√	14.96	14.96	6.97	6.97
S308	2527734.37	130.94	232.79	√	17.86	17.86	14.65	14.65
S303	2527734.37	101.09	206.31	√	15.96	15.96	6.60	6.60
S309	2527734.37	126.92	225.64	√	19.09	19.09	12.98	12.98
S315	2527734.37	102.21	208.59	√	15.69	15.69	6.59	6.59
S304	2527734.37	106.15	216.64	√	16.01	16.01	6.91	6.91
S310	2527734.37	130.55	232.09	√	19.19	19.19	13.27	13.27
S316	2527734.37	100.43	204.96	√	15.69	15.69	6.76	6.76
S305	2527734.37	96.65	197.25	√	15.11	15.11	8.57	8.57
S311	2527734.37	137.46	244.37	√	19.08	19.08	14.70	14.70
S317	2527734.37	108.91	222.27	√	15.16	15.16	7.06	7.06
S306	2527734.37	47.57	97.07	√	7.76	7.76	7.20	7.20
S312	2527734.37	83.70	159.44	√	10.15	10.15	13.56	13.56
S318	2527734.37	67.68	161.15	√	7.55	7.55	6.61	6.61

Risk Değerlendirmesi - 3. KAT

Eksenel basınç gerilmeleri ortalaması :	208.92 tf/m ²
0.65*fc _m :	1629.13 tf/m ²
0.1*fc _m :	250.64 tf/m ²
Kat kesme kuvvetleri oranı sınır değeri:	0.35
Risk sınırını aşan eleman sayısı :	0
Toplam eleman sayısı :	18
En büyük m değeri	0.66 (S306)
[+EX] - Risk sınırını aşan kolon ve perdelerin kesme kuvvetleri toplamı / Toplam kat kesme kuvveti :	0 / 247.49 tf
[+EX] - Kat kesme kuvveti oranı :	0 <= 0.35
[-EX] - Risk sınırını aşan kolon ve perdelerin kesme kuvvetleri toplamı / Toplam kat kesme kuvveti :	0 / 247.49 tf
[-EX] - Kat kesme kuvveti oranı :	0 <= 0.35
[+EY] - Risk sınırını aşan kolon ve perdelerin kesme kuvvetleri toplamı / Toplam kat kesme kuvveti :	0 / 178.24 tf
[+EY] - Kat kesme kuvveti oranı :	0 <= 0.35
[-EY] - Risk sınırını aşan kolon ve perdelerin kesme kuvvetleri toplamı / Toplam kat kesme kuvveti :	0 / 178.24 tf
[-EY] - Kat kesme kuvveti oranı :	0 <= 0.35

Kat Kolonlarının Sınır Değerleri - 2. KAT Birimler : [tf-m]

Eleman	Yön	Sınıflandırma		Sınır Değerleri				Kontrol
		Ve/Vr	Grup	Nk/fc _{mAc}	Ash/sbk	$m=(MG+nQ+E)/Mk$ <>sınır	δ/h <>sınır	
S201 60/70	+X	5.26/88.84 = 0.06	B	0.123	3.93/432 = 0.009	20.09/56.63 = 0.35 <= 4.89	0.0026 <= 0.029	√
	-X	7.1/89.66 = 0.08	B	0.13	3.93/432 = 0.009	23.81/57.44 = 0.41 <= 4.85	0.0026 <= 0.0287	√
	+Y	2.42/87.84 = 0.03	B	0.13	3.14/512 = 0.006	38.62/66.39 = 0.58 <= 4.85	0.0048 <= 0.0286	√
	-Y	0.81/87.84 = 0.01	B	0.122	3.14/512 = 0.006	27.19/64.35 = 0.42 <= 4.89	0.0048 <= 0.029	√
ø10/16/8/10				fc _{mAc} = 1052.67			h = 3.6	
S207 60/70	+X	6.23/90.19 = 0.07	B	0.175	3.93/432 = 0.009	23.82/65.39 = 0.36 <= 4.62	0.0025 <= 0.0266	√
	-X	4.98/90.17 = 0.06	B	0.183	3.93/432 = 0.009	21.21/66.77 = 0.32 <= 4.58	0.0025 <= 0.0262	√
	+Y	7.31/87.45 = 0.08	B	0.179	3.14/512 = 0.006	53.41/76.58 = 0.7 <= 4.6	0.0048 <= 0.0264	√
	-Y	7.43/87.38 = 0.09	B	0.179	3.14/512 = 0.006	54.62/76.57 = 0.71 <= 4.6	0.0048 <= 0.0264	√
ø10/16/8/10				fc _{mAc} = 1052.67			h = 3.6	
S213	+X	0.97/87.81 = 0.01	B	0.124	3.93/432 = 0.009	19.31/59.55 = 0.32 <= 4.88	0.0025 <= 0.0289	√

Kat Kolonlarının Sınır Değerleri - 2. KAT Birimler : [tf-m]

Eleman	Yön	Sınıflandırma		Sınır Değerleri				Kontrol
		Ve/Vr	Grup	Nk/fcmAc	Ash/sbk	$m=(MG+nQ+E)/M_k$ <>sınır	δ/h <>sınır	
60/70	-X	2.9/87.81 = 0.03	B	0.131	3.93/432 = 0.009	23.71/60.53 = 0.39 <= 4.84	0.0025 <= 0.0286	✓
	+Y	0.89/87.8 = 0.01	B	0.123	3.14/512 = 0.006	26.66/66.96 = 0.4 <= 4.88	0.0048 <= 0.0289	✓
	-Y	2.68/87.8 = 0.03	B	0.132	3.14/512 = 0.006	39.19/69.23 = 0.57 <= 4.84	0.0048 <= 0.0286	✓
ø10/16/8/10				fcmAc = 1052.67			h = 3.6	
S202	+X	9.64/106.29 = 0.09	B	0.124	3.93/512 = 0.008	39.81/78.25 = 0.51 <= 4.88	0.0026 <= 0.0289	✓
70/70	-X	11.42/106.29 = 0.11	B	0.125	3.93/512 = 0.008	43.04/78.47 = 0.55 <= 4.87	0.0026 <= 0.0289	✓
	+Y	4.25/106.29 = 0.04	B	0.126	3.93/512 = 0.008	26.54/77.42 = 0.34 <= 4.87	0.005 <= 0.0288	✓
	-Y	5.1/106.29 = 0.05	B	0.123	3.93/512 = 0.008	28.98/76.82 = 0.38 <= 4.89	0.005 <= 0.029	✓
ø10/16/8/10				fcmAc = 1228.12			h = 3.6	
S214	+X	8.93/106.29 = 0.08	B	0.125	3.93/512 = 0.008	38.27/78.31 = 0.49 <= 4.88	0.0025 <= 0.0289	✓
70/70	-X	10.33/106.29 = 0.1	B	0.125	3.93/512 = 0.008	42.6/78.53 = 0.54 <= 4.87	0.0025 <= 0.0289	✓
	+Y	4.98/106.29 = 0.05	B	0.123	3.93/512 = 0.008	28.38/76.95 = 0.37 <= 4.88	0.005 <= 0.029	✓
	-Y	4.44/106.29 = 0.04	B	0.127	3.93/512 = 0.008	27.09/77.49 = 0.35 <= 4.87	0.005 <= 0.0288	✓
ø10/16/8/10				fcmAc = 1228.12			h = 3.6	
S208	+X	11.5/117.49 = 0.1	B	0.138	3.93/552 = 0.007	47.57/98.46 = 0.48 <= 4.81	0.0025 <= 0.0283	✓
75/75	-X	12.94/117.49 = 0.11	B	0.139	3.93/552 = 0.007	50.21/98.9 = 0.51 <= 4.8	0.0025 <= 0.0282	✓
	+Y	9.82/117.49 = 0.08	B	0.139	3.93/552 = 0.007	49.65/98.71 = 0.5 <= 4.81	0.005 <= 0.0283	✓
	-Y	10.38/117.49 = 0.09	B	0.139	3.93/552 = 0.007	50.98/98.71 = 0.52 <= 4.81	0.005 <= 0.0283	✓
ø10/16/8/10				fcmAc = 1409.83			h = 3.6	
S203	+X	9.03/106.29 = 0.08	B	0.123	3.93/512 = 0.008	40.88/77.77 = 0.53 <= 4.89	0.0026 <= 0.029	✓
70/70	-X	9.71/106.29 = 0.09	B	0.122	3.93/512 = 0.008	44.29/77.75 = 0.57 <= 4.89	0.0026 <= 0.029	✓
	+Y	3.75/106.29 = 0.04	B	0.124	3.93/512 = 0.008	25.38/76.88 = 0.33 <= 4.88	0.0052 <= 0.0289	✓
	-Y	5.33/106.29 = 0.05	B	0.121	3.93/512 = 0.008	29.52/76.22 = 0.39 <= 4.9	0.0052 <= 0.0291	✓
ø10/16/8/10				fcmAc = 1228.12			h = 3.6	
S209	+X	11.23/117.49 = 0.1	B	0.134	3.93/552 = 0.007	48.32/97.29 = 0.5 <= 4.83	0.0025 <= 0.0285	✓
75/75	-X	14.5/117.49 = 0.12	B	0.134	3.93/552 = 0.007	54.09/97.28 = 0.56 <= 4.83	0.0025 <= 0.0285	✓
	+Y	8.63/117.49 = 0.07	B	0.134	3.93/552 = 0.007	46.11/97.31 = 0.47 <= 4.83	0.0052 <= 0.0285	✓
	-Y	9.47/117.49 = 0.08	B	0.134	3.93/552 = 0.007	47.99/97.31 = 0.49 <= 4.83	0.0052 <= 0.0285	✓
ø10/16/8/10				fcmAc = 1409.83			h = 3.6	
S215	+X	9.33/106.29 = 0.09	B	0.124	3.93/512 = 0.008	39.21/78.17 = 0.5 <= 4.88	0.0025 <= 0.0289	✓
70/70	-X	11.08/106.29 = 0.1	B	0.124	3.93/512 = 0.008	43.97/78.14 = 0.56 <= 4.88	0.0025 <= 0.0289	✓
	+Y	5.19/106.29 = 0.05	B	0.122	3.93/512 = 0.008	28.86/76.68 = 0.38 <= 4.89	0.0052 <= 0.029	✓
	-Y	4/106.29 = 0.04	B	0.126	3.93/512 = 0.008	25.92/77.18 = 0.34 <= 4.87	0.0052 <= 0.0288	✓
ø10/16/8/10				fcmAc = 1228.12			h = 3.6	
S204	+X	7.35/106.29 = 0.07	B	0.129	3.93/512 = 0.008	40.63/76.01 = 0.53 <= 4.86	0.0026 <= 0.0287	✓
70/70	-X	9.14/106.29 = 0.09	B	0.129	3.93/512 = 0.008	44.63/76.06 = 0.59 <= 4.86	0.0026 <= 0.0287	✓
	+Y	4.34/106.29 = 0.04	B	0.13	3.93/512 = 0.008	27.54/76.08 = 0.36 <= 4.85	0.0054 <= 0.0286	✓
	-Y	5.06/106.29 = 0.05	B	0.127	3.93/512 = 0.008	29.91/75.44 = 0.4 <= 4.87	0.0054 <= 0.0288	✓
ø10/16/8/10				fcmAc = 1228.12			h = 3.6	
S210	+X	11.11/117.49 = 0.09	B	0.138	3.93/552 = 0.007	48.1/98.51 = 0.49 <= 4.81	0.0025 <= 0.0283	✓
75/75	-X	14.73/117.49 = 0.13	B	0.138	3.93/552 = 0.007	54.58/98.56 = 0.55 <= 4.81	0.0025 <= 0.0283	✓
	+Y	4.45/117.49 = 0.04	B	0.138	3.93/552 = 0.007	46.26/98.48 = 0.47 <= 4.81	0.0054 <= 0.0283	✓
	-Y	5.6/117.49 = 0.05	B	0.138	3.93/552 = 0.007	50.65/98.51 = 0.51 <= 4.81	0.0054 <= 0.0283	✓
ø10/16/8/10				fcmAc = 1409.83			h = 3.6	
S216	+X	9.36/106.29 = 0.09	B	0.122	3.93/512 = 0.008	39.26/77.53 = 0.51 <= 4.89	0.0025 <= 0.029	✓
70/70	-X	11.92/106.29 = 0.11	B	0.122	3.93/512 = 0.008	43.92/77.56 = 0.57 <= 4.89	0.0025 <= 0.029	✓
	+Y	5.24/106.29 = 0.05	B	0.12	3.93/512 = 0.008	29.71/76.05 = 0.39 <= 4.9	0.0054 <= 0.0291	✓
	-Y	4.01/106.29 = 0.04	B	0.124	3.93/512 = 0.008	26.67/76.62 = 0.35 <= 4.88	0.0054 <= 0.0289	✓
ø10/16/8/10				fcmAc = 1228.12			h = 3.6	
S205	+X	8.95/106.29 = 0.08	B	0.118	3.93/512 = 0.008	45.67/73.05 = 0.63 <= 4.91	0.0026 <= 0.0292	✓
70/70	-X	9.16/106.29 = 0.09	B	0.117	3.93/512 = 0.008	37.84/72.6 = 0.52 <= 4.92	0.0026 <= 0.0292	✓
	+Y	9.02/106.29 = 0.08	B	0.119	3.93/512 = 0.008	39.01/73.53 = 0.53 <= 4.9	0.0057 <= 0.0291	✓
	-Y	4.33/106.29 = 0.04	B	0.115	3.93/512 = 0.008	28.21/72.3 = 0.39 <= 4.93	0.0057 <= 0.0293	✓
ø10/16/8/10				fcmAc = 1228.12			h = 3.6	
S211	+X	9.32/117.49 = 0.08	B	0.145	3.93/552 = 0.007	52.86/100.37 = 0.53 <= 4.77	0.0025 <= 0.028	✓
75/75	-X	11.62/117.49 = 0.1	B	0.145	3.93/552 = 0.007	52.62/100.23 = 0.53 <= 4.77	0.0025 <= 0.028	✓
	+Y	5.77/117.49 = 0.05	B	0.145	3.93/552 = 0.007	44.49/100.65 = 0.44 <= 4.78	0.0057 <= 0.028	✓
	-Y	13.06/117.49 = 0.11	B	0.146	3.93/552 = 0.007	60.58/100.8 = 0.6 <= 4.77	0.0057 <= 0.028	✓
ø10/16/8/10				fcmAc = 1409.83			h = 3.6	
S217	+X	6.83/106.29 = 0.06	B	0.132	3.93/512 = 0.008	38.83/80.33 = 0.48 <= 4.84	0.0025 <= 0.0286	✓
70/70	-X	8.15/106.29 = 0.08	B	0.131	3.93/512 = 0.008	43.15/80.16 = 0.54 <= 4.84	0.0025 <= 0.0286	✓
	+Y	5.39/106.29 = 0.05	B	0.13	3.93/512 = 0.008	30.87/78.7 = 0.39 <= 4.85	0.0057 <= 0.0287	✓
	-Y	4.03/106.29 = 0.04	B	0.134	3.93/512 = 0.008	27.63/79.1 = 0.35 <= 4.83	0.0057 <= 0.0285	✓
ø10/16/8/10				fcmAc = 1228.12			h = 3.6	
S206	+X	9.36/106.29 = 0.09	B	0.061	3.93/512 = 0.008	29.1/57.18 = 0.51 <= 5	0.0026 <= 0.03	✓
70/70	-X	3.12/106.29 = 0.03	B	0.055	3.93/512 = 0.008	20.01/56.44 = 0.35 <= 5	0.0026 <= 0.03	✓
	+Y	9.16/106.29 = 0.09	B	0.059	3.93/512 = 0.008	39.68/55.59 = 0.71 <= 5	0.0059 <= 0.03	✓

Kat Kolonlarının Sınır Değerleri - 2. KAT Birimler : [tf-m]

Eleman	Yön	Sınıflandırma		Sınır Değerleri				Kontrol
		Ve/Vr	Grup	Nk/fcmAc	Ash/sbk	$m=(MG+nQ+E)/Mk$ <>sınır	δ/h <>sınır	
ø10/16/8/10	-Y	3.6/106.29 = 0.03	B	0.057 fcmAc = 1228.12	3.93/512 = 0.008	20.34/55.93 = 0.36 <= 5	0.0059 <= 0.03 h = 3.6	✓
S212	+X	12.7/109.83 = 0.12	B	0.099	3.93/512 = 0.008	39.37/73.98 = 0.53 <= 5	0.0025 <= 0.03	✓
70/75	-X	4.04/113.7 = 0.04	B	0.091	3.93/512 = 0.008	20.23/71.92 = 0.28 <= 5	0.0025 <= 0.03	✓
	+Y	7.07/111.73 = 0.06	B	0.095	3.93/552 = 0.007	42.22/76.84 = 0.55 <= 5	0.0059 <= 0.03	✓
	-Y	11.89/114.18 = 0.1	B	0.095	3.93/552 = 0.007	57.92/77.08 = 0.75 <= 5	0.0059 <= 0.03	✓
ø10/16/8/10				0.095 fcmAc = 1315.84	3.93/552 = 0.007	57.92/77.08 = 0.75 <= 5	0.0059 <= 0.03 h = 3.6	✓
S218	+X	4.36/90.16 = 0.05	B	0.1	3.93/432 = 0.009	28.16/51.26 = 0.55 <= 5	0.0025 <= 0.03	✓
60/70	-X	1.2/89.97 = 0.01	B	0.092	3.93/432 = 0.009	13.75/49.62 = 0.28 <= 5	0.0025 <= 0.03	✓
	+Y	6.15/89.1 = 0.07	B	0.095	3.14/512 = 0.006	28.01/56.93 = 0.49 <= 5	0.0059 <= 0.03	✓
	-Y	5.1/88.37 = 0.06	B	0.097	3.14/512 = 0.006	26.73/58.55 = 0.46 <= 5	0.0059 <= 0.03	✓
ø10/16/8/10				0.097 fcmAc = 1052.67	3.14/512 = 0.006	26.73/58.55 = 0.46 <= 5	0.0059 <= 0.03 h = 3.6	✓

Kesme Kuvveti Değerlendirmesi - 2. KAT

Eleman	Yön	Vr		D.1		D.2												Ve	Vr
		V22u	V33u	Ve	Vr	Mafsal	Mpk22	Mpk33	M22k	M33k	V22e	V33e	M22kr	M33kr	Nk	ζ	Ve		
Uç		[tf]	[tf]	[tf]	[tf]		[tfm]	[tfm]	[tfm]	[tfm]	[tf]	[tf]	[tfm]	[tfm]	[tf]		[tf]	[tf]	
S201	+EX	87.37	90.19	5.26	88.84	Kiriş	26.79	-20.78	8.98	-7.53	3.00	8.86	8.98	-7.53	-128.98	1.00	9.36	89.89	
Alt	-EX	87.37	90.19	7.10	89.66	Kiriş	-28.94	16.35	-9.70	5.92	3.45	9.60	-9.70	5.92	-136.81	1.00	10.20	89.85	
In22=3 m	+EY	87.37	90.19	9.91	87.38	Kiriş	-3.23	-6.64	-1.66	-1.48	2.20	1.01	-1.66	-1.48	-137.29	1.00	2.42	87.84	
In33=3 m	-EY	87.37	90.19	3.82	88.08	Kiriş	1.08	2.21	0.55	0.49	0.73	0.34	0.55	0.49	-128.49	1.00	0.81	87.84	
S201	+EX	87.37	90.19	5.26	88.84	Kiriş	27.12	2.32	17.60	1.48	3.00	8.86	17.60	1.48	-125.20	1.00	9.36	89.89	
Üst	-EX	87.37	90.19	7.10	89.66	Kiriş	-29.41	-6.97	-19.09	-4.43	3.45	9.60	-19.09	-4.43	-133.03	1.00	10.20	89.85	
As22=3.14 cm ²	+EY	87.37	90.19	9.91	87.38	Kiriş	-3.43	-6.97	-1.36	-5.12	2.20	1.01	-1.36	-5.12	-133.51	1.00	2.42	87.84	
As33=3.93 cm ²	-EY	87.37	90.19	3.82	88.08	Kiriş	1.14	2.32	0.45	1.71	0.73	0.34	0.45	1.71	-124.71	1.00	0.81	87.84	
S207	+EX	87.37	90.19	6.23	90.19	Kiriş	48.21	-22.08	17.06	-6.25	2.29	15.97	17.06	-6.25	-184.52	1.00	16.13	90.13	
Alt	-EX	87.37	90.19	4.98	90.17	Kiriş	-46.26	22.88	-16.37	6.48	2.23	15.35	-16.37	6.48	-193.04	1.00	15.51	90.13	
In22=3 m	+EY	87.37	90.19	12.67	87.38	Kiriş	2.92	-22.08	1.10	-7.18	7.21	1.20	1.10	-7.18	-188.79	1.00	7.31	87.45	
In33=3 m	-EY	87.37	90.19	13.26	87.38	Kiriş	-0.97	22.88	-0.37	7.43	7.42	0.40	-0.37	7.43	-188.77	1.00	7.43	87.38	
S207	+EX	87.37	90.19	6.23	90.19	Kiriş	47.94	0.85	30.85	0.62	2.29	15.97	30.85	0.62	-180.74	1.00	16.13	90.13	
Üst	-EX	87.37	90.19	4.98	90.17	Kiriş	-46.12	-0.28	-29.68	-0.21	2.23	15.35	-29.68	-0.21	-189.26	1.00	15.51	90.13	
As22=3.14 cm ²	+EY	87.37	90.19	12.67	87.38	Kiriş	2.74	-21.93	2.50	-14.45	7.21	1.20	2.50	-14.45	-185.01	1.00	7.31	87.45	
As33=3.93 cm ²	-EY	87.37	90.19	13.26	87.38	Kiriş	-0.91	22.49	-0.83	14.83	7.42	0.40	-0.83	14.83	-184.99	1.00	7.43	87.38	
S213	+EX	87.37	90.19	5.12	88.75	Kiriş	1.14	-2.58	0.39	-1.50	0.89	0.39	0.39	-1.50	-130.47	1.00	0.97	87.81	
Alt	-EX	87.37	90.19	7.21	89.57	Kiriş	-3.41	7.74	-1.17	4.50	2.66	1.17	-1.17	4.50	-138.19	1.00	2.90	87.81	
In22=3 m	+EY	87.37	90.19	3.73	88.21	Kiriş	1.14	-2.58	0.59	-0.57	0.82	0.36	0.59	-0.57	-129.94	1.00	0.89	87.80	
In33=3 m	-EY	87.37	90.19	10.08	87.39	Kiriş	-3.41	7.74	-1.77	1.72	2.46	1.07	-1.77	1.72	-138.72	1.00	2.68	87.81	
S213	+EX	87.37	90.19	5.12	88.75	Kiriş	1.20	-2.57	0.78	-1.15	0.89	0.39	0.78	-1.15	-126.69	1.00	0.97	87.81	
Üst	-EX	87.37	90.19	7.21	89.57	Kiriş	-3.60	7.70	-2.33	3.46	2.66	1.17	-2.33	3.46	-134.41	1.00	2.90	87.81	
As22=3.14 cm ²	+EY	87.37	90.19	3.73	88.21	Kiriş	1.20	-2.57	0.48	-1.88	0.82	0.36	0.48	-1.88	-126.16	1.00	0.89	87.80	
As33=3.93 cm ²	-EY	87.37	90.19	10.08	87.39	Kiriş	-3.60	7.70	-1.45	5.65	2.46	1.07	-1.45	5.65	-134.94	1.00	2.68	87.80	
S202	+EX	106.29	106.29	9.64	106.29	Kiriş	27.20	8.11	9.95	3.06	5.59	8.97	9.95	3.06	-152.69	1.00	10.57	106.29	
Alt	-EX	106.29	106.29	11.42	106.29	Kiriş	-30.06	-2.70	-10.99	-1.02	6.23	9.95	-10.99	-1.02	-153.67	1.00	11.74	106.29	
In22=3 m	+EY	106.29	106.29	4.25	106.29	Kiriş	-30.06	-17.51	-9.76	-1.47	5.68	9.79	-9.76	-1.47	-155.33	1.00	11.32	106.29	
In33=3 m	-EY	106.29	106.29	5.10	106.29	Kiriş	27.20	22.91	8.83	1.92	7.33	8.82	8.83	1.92	-151.03	1.00	11.47	106.29	
S202	+EX	106.29	106.29	9.64	106.29	Kiriş	26.96	-17.82	16.97	-13.71	5.59	8.97	16.97	-13.71	-148.28	1.00	10.57	106.29	
Üst	-EX	106.29	106.29	11.42	106.29	Kiriş	-29.97	22.99	-18.87	17.68	6.23	9.95	-18.87	17.68	-149.26	1.00	11.74	106.29	
As22=3.93 cm ²	+EY	106.29	106.29	4.25	106.29	Kiriş	-29.97	-17.82	-19.61	-15.57	5.68	9.79	-19.61	-15.57	-150.92	1.00	11.32	106.29	
As33=3.93 cm ²	-EY	106.29	106.29	5.10	106.29	Kiriş	26.96	22.99	17.65	20.08	7.33	8.82	17.65	20.08	-146.62	1.00	11.47	106.29	
S214	+EX	106.29	106.29	9.14	106.29	Kiriş	-2.19	26.78	-1.49	9.96	8.91	0.66	-1.49	9.96	-152.98	1.00	8.93	106.29	
Alt	-EX	106.29	106.29	11.48	106.29	Kiriş	6.58	-30.54	4.46	-11.36	10.14	1.99	4.46	-11.36	-154.00	1.00	10.33	106.29	
In22=3 m	+EY	106.29	106.29	4.98	106.29	Kiriş	23.70	26.78	1.92	8.59	8.69	7.52	1.92	8.59	-151.33	1.00	11.49	106.29	
In33=3 m	-EY	106.29	106.29	4.44	106.29	Kiriş	-19.31	-30.54	-1.57	-9.79	9.88	6.10	-1.57	-9.79	-155.65	1.00	11.61	106.29	
S214	+EX	106.29	106.29	9.14	106.29	Kiriş	-2.23	26.70	-0.50	16.77	8.91	0.66	-0.50	16.77	-148.57	1.00	8.93	106.29	
Üst	-EX	106.29	106.29	11.48	106.29	Kiriş	6.69	-30.34	1.50	-19.06	10.14	1.99	1.50	-19.06	-149.59	1.00	10.33	106.29	
As22=3.93 cm ²	+EY	106.29	106.29	4.98	106.29	Kiriş	23.63	26.70	20.63	17.48	8.69	7.52	20.63	17.48	-146.92	1.00	11.49	106.29	
As33=3.93 cm ²	-EY	106.29	106.29	4.44	106.29	Kiriş	-19.17	-30.34	-16.73	-19.86	9.88	6.10	-16.73	-19.86	-151.24	1.00	11.61	106.29	
S208	+EX	117.49	117.49	11.50	117.49	Kiriş	13.47	46.93	4.78	16.91	15.70	5.61	4.78	16.91	-194.79	1.00	16.67	117.49	
Alt	-EX	117.49	117.49	12.94	117.49	Kiriş	-14.57	-49.51	-5.18	-17.84	16.48	5.98	-5.18	-17.84	-196.56	1.00	17.53	117.49	
In22=3 m	+EY	117.49	117.49	9.82	117.49	Kiriş	13.47	-49.51	3.17	-31.70	22.75	4.47	3.17	-31.70	-195.67	1.00	23.19	117.49	
In33=3 m	-EY	117.49	117.49	10.38	117.49	Kiriş	-14.57	46.93	-3.43	30.05	21.66	4.77	-3.43	30.05	-195.67	1.00	22.18	117.49	
S208	+EX	117.49	117.49	11.50	117.49	Kiriş	13.49	47.41	12.03	30.19	15.70	5.61	12.03	30.19	-189.73	1.00	16.67	117.49	
Üst	-EX	117.49	117.49	12.94	117.49	Kiriş	-14.32	-49.61	-12.77	-31.59	16.48	5.98	-12.77	-31.59	-191.49	1.00	17.53	117.49	
As22=3.93 cm ²	+EY	117.49	117.49	9.82	117.49	Kiriş	13.49	-49.61	10.25	-36.56	22.75	4.47	10.25	-36.56	-190.61	1.00	23.19	117.49	
As33=3.93 cm ²	-EY	117.49	117.49	10.38	117.49	Kiriş	-14.32	47.41	-10.88	34.94	21.66	4.77	-10.88	34.94	-190.61	1.00	22.18	117.49	
S203	+EX	106.29	106.29																

Kesme Kuvveti Değerlendirmesi - 2. KAT

Eleman Uç	Yön	Vr		D.1		D.2											ζ	Ve [tf]	Vr [tf]
		V22u [tf]	V33u [tf]	Ve [tf]	Vr [tf]	Mafsals	Mpk22 [tfm]	Mpk33 [tfm]	M22k [tfm]	M33k [tfm]	V22e [tf]	V33e [tf]	M22kr [tfm]	M33kr [tfm]	Nk [tf]				
In22=3 m	+EY	106.29	106.29	3.75	106.29	Kiriş	-28.84	-17.30	-9.86	-0.87	5.62	9.50	-9.86	-0.87	-152.56	1.00	11.03	106.29	
In33=3 m	-EY	106.29	106.29	5.33	106.29	Kiriş	26.60	22.68	9.09	1.13	7.27	8.71	9.09	1.13	-148.32	1.00	11.34	106.29	
S203	+EX	106.29	106.29	9.89	106.29	Kiriş	26.63	7.74	16.61	0.19	1.99	8.80	16.61	0.19	-146.09	1.00	9.03	106.29	
Üst	-EX	106.29	106.29	11.83	106.29	Kiriş	-29.12	-2.58	-18.16	-0.06	1.49	9.60	-18.16	-0.06	-145.97	1.00	9.71	106.29	
As22=3.93 cm ²	+EY	106.29	106.29	3.75	106.29	Kiriş	-29.12	-17.65	-18.63	-15.99	5.62	9.50	-18.63	-15.99	-148.15	1.00	11.03	106.29	
As33=3.93 cm ²	-EY	106.29	106.29	5.33	106.29	Kiriş	26.63	22.81	17.04	20.66	7.27	8.71	17.04	20.66	-143.91	1.00	11.34	106.29	
S209	+EX	117.49	117.49	11.23	117.49	Kiriş	-14.71	42.03	-10.91	15.40	13.97	7.51	-10.91	15.40	-189.53	1.00	15.86	117.49	
Alt	-EX	117.49	117.49	14.50	117.49	Kiriş	13.34	-46.31	9.90	-16.97	15.44	6.88	9.90	-16.97	-189.45	1.00	16.90	117.49	
In22=3 m	+EY	117.49	117.49	8.63	117.49	Kiriş	13.34	-46.31	2.71	-29.96	21.21	4.45	2.71	-29.96	-189.50	1.00	21.67	117.49	
In33=3 m	-EY	117.49	117.49	9.47	117.49	Kiriş	-14.71	42.03	-2.99	27.19	19.20	4.82	-2.99	27.19	-189.49	1.00	19.80	117.49	
S209	+EX	117.49	117.49	11.23	117.49	Kiriş	-14.45	42.11	-11.62	26.50	13.97	7.51	-11.62	26.50	-184.47	1.00	15.86	117.49	
Üst	-EX	117.49	117.49	14.50	117.49	Kiriş	13.37	-46.63	10.75	-29.35	15.44	6.88	10.75	-29.35	-184.39	1.00	16.90	117.49	
As22=3.93 cm ²	+EY	117.49	117.49	8.63	117.49	Kiriş	13.37	-46.63	10.63	-33.68	21.21	4.45	10.63	-33.68	-184.44	1.00	21.67	117.49	
As33=3.93 cm ²	-EY	117.49	117.49	9.47	117.49	Kiriş	-14.45	42.11	-11.49	30.41	19.20	4.82	-11.49	30.41	-184.43	1.00	19.80	117.49	
S215	+EX	106.29	106.29	9.33	106.29	Kiriş	5.79	26.46	2.28	9.91	8.81	6.22	2.28	9.91	-152.28	1.00	10.78	106.29	
Alt	-EX	106.29	106.29	11.96	106.29	Kiriş	-1.93	-30.11	-0.76	-11.28	9.99	4.79	-0.76	-11.28	-152.14	1.00	11.08	106.29	
In22=3 m	+EY	106.29	106.29	5.19	106.29	Kiriş	23.29	26.46	1.06	8.96	8.65	7.37	1.06	8.96	-150.08	1.00	11.36	106.29	
In33=3 m	-EY	106.29	106.29	4.00	106.29	Kiriş	-19.43	-30.11	-0.88	-10.20	9.81	6.12	-0.88	-10.20	-154.34	1.00	11.56	106.29	
S215	+EX	106.29	106.29	9.33	106.29	Kiriş	23.25	26.54	16.38	16.51	8.81	6.22	16.38	16.51	-147.87	1.00	10.78	106.29	
Üst	-EX	106.29	106.29	11.96	106.29	Kiriş	-19.31	-30.05	-13.60	-18.69	9.99	4.79	-13.60	-18.69	-147.73	1.00	11.08	106.29	
As22=3.93 cm ²	+EY	106.29	106.29	5.19	106.29	Kiriş	23.25	26.54	21.06	16.98	8.65	7.37	21.06	16.98	-145.67	1.00	11.36	106.29	
As33=3.93 cm ²	-EY	106.29	106.29	4.00	106.29	Kiriş	-19.31	-30.05	-17.49	-19.22	9.81	6.12	-17.49	-19.22	-149.93	1.00	11.56	106.29	
S204	+EX	106.29	106.29	9.72	106.29	Kiriş	2.82	22.27	0.03	8.20	7.31	0.75	0.03	8.20	-157.82	1.00	7.35	106.29	
Alt	-EX	106.29	106.29	11.95	106.29	Kiriş	-8.46	-26.83	-0.09	-9.88	8.86	2.26	-0.09	-9.88	-158.05	1.00	9.14	106.29	
In22=3 m	+EY	106.29	106.29	4.34	106.29	Kiriş	-8.46	-26.83	-0.43	-9.18	8.75	2.59	-0.43	-9.18	-160.27	1.00	9.13	106.29	
In33=3 m	-EY	106.29	106.29	5.06	106.29	Kiriş	2.82	22.27	0.14	7.62	7.22	0.86	0.14	7.62	-155.60	1.00	7.27	106.29	
S204	+EX	106.29	106.29	9.72	106.29	Kiriş	2.72	22.04	2.23	13.74	7.31	0.75	2.23	13.74	-153.41	1.00	7.35	106.29	
Üst	-EX	106.29	106.29	11.95	106.29	Kiriş	-8.15	-26.80	-6.70	-16.70	8.86	2.26	-6.70	-16.70	-153.64	1.00	9.14	106.29	
As22=3.93 cm ²	+EY	106.29	106.29	4.34	106.29	Kiriş	-8.15	-26.80	-7.36	-17.07	8.75	2.59	-7.36	-17.07	-155.86	1.00	9.13	106.29	
As33=3.93 cm ²	-EY	106.29	106.29	5.06	106.29	Kiriş	2.72	22.04	2.45	14.04	7.22	0.86	2.45	14.04	-151.19	1.00	7.27	106.29	
S210	+EX	117.49	117.49	11.11	117.49	Kiriş	-14.94	37.94	-9.44	13.91	12.56	4.59	-9.44	13.91	-194.69	1.00	13.37	117.49	
Alt	-EX	117.49	117.49	14.73	117.49	Kiriş	13.12	-44.40	8.29	-16.28	14.82	4.05	8.29	-16.28	-194.90	1.00	15.36	117.49	
In22=3 m	+EY	117.49	117.49	8.17	117.49	Kiriş	13.12	3.23	2.58	1.22	0.90	4.36	2.58	1.22	-194.74	1.00	4.45	117.49	
In33=3 m	-EY	117.49	117.49	10.36	117.49	Kiriş	-14.94	-9.69	-2.94	-3.67	2.71	4.89	-2.94	-3.67	-194.85	1.00	5.60	117.49	
S210	+EX	117.49	117.49	11.11	117.49	Kiriş	-14.69	37.83	-4.32	23.78	12.56	4.59	-4.32	23.78	-189.63	1.00	13.37	117.49	
Üst	-EX	117.49	117.49	14.73	117.49	Kiriş	13.14	-44.82	3.86	-28.17	14.82	4.05	3.86	-28.17	-189.84	1.00	15.36	117.49	
As22=3.93 cm ²	+EY	117.49	117.49	8.17	117.49	Kiriş	13.14	3.49	10.50	1.49	0.90	4.36	10.50	1.49	-189.68	1.00	4.45	117.49	
As33=3.93 cm ²	-EY	117.49	117.49	10.36	117.49	Kiriş	-14.69	-10.48	-11.75	-4.48	2.71	4.89	-11.75	-4.48	-189.79	1.00	5.60	117.49	
S216	+EX	106.29	106.29	9.36	106.29	Kiriş	-19.75	26.36	-3.15	9.87	8.80	6.65	-3.15	9.87	-149.40	1.00	11.03	106.29	
Alt	-EX	106.29	106.29	11.92	106.29	Kiriş	23.21	-29.57	3.70	-11.07	9.87	7.84	3.70	-11.07	-149.53	1.00	12.61	106.29	
In22=3 m	+EY	106.29	106.29	5.24	106.29	Kiriş	23.21	26.36	0.79	8.87	8.63	7.31	0.79	8.87	-147.19	1.00	11.31	106.29	
In33=3 m	-EY	106.29	106.29	4.01	106.29	Kiriş	-19.75	-29.57	-0.67	-9.95	9.68	6.20	-0.67	-9.95	-151.74	1.00	11.50	106.29	
S216	+EX	106.29	106.29	9.36	106.29	Kiriş	-19.69	26.56	-16.82	16.52	8.80	6.65	-16.82	16.52	-144.99	1.00	11.03	106.29	
Üst	-EX	106.29	106.29	11.92	106.29	Kiriş	23.21	-29.82	19.83	-18.55	9.87	7.84	19.83	-18.55	-145.12	1.00	12.61	106.29	
As22=3.93 cm ²	+EY	106.29	106.29	5.24	106.29	Kiriş	23.21	26.56	21.13	17.01	8.63	7.31	21.13	17.01	-142.78	1.00	11.31	106.29	
As33=3.93 cm ²	-EY	106.29	106.29	4.01	106.29	Kiriş	-19.69	-29.82	-17.92	-19.10	9.68	6.20	-17.92	-19.10	-147.33	1.00	11.50	106.29	
S205	+EX	106.29	106.29	13.11	106.29	Kiriş	-22.12	16.28	-8.53	6.00	5.31	7.21	-8.53	6.00	-144.41	1.00	8.95	106.29	
Alt	-EX	106.29	106.29	9.16	106.29	Kiriş	36.98	-11.06	14.26	-4.08	3.51	12.08	14.26	-4.08	-143.29	1.00	12.58	106.29	
In22=3 m	+EY	106.29	106.29	9.02	106.29	Kiriş	36.98	-11.06	4.14	-3.80	3.46	11.93	4.14	-3.80	-146.52	1.00	12.42	106.29	
In33=3 m	-EY	106.29	106.29	4.33	106.29	Kiriş	-22.12	16.28	-2.48	5.59	5.25	7.11	-2.48	5.59	-141.17	1.00	8.84	106.29	
S205	+EX	106.29	106.29	13.11	106.29	Kiriş	-22.24	15.76	-13.09	9.94	5.31	7.21	-13.09	9.94	-140.00	1.00	8.95	106.29	
Üst	-EX	106.29	106.29	9.16	106.29	Kiriş	37.31	-10.23	21.97	-6.45	3.51	12.08	21.97	-6.45	-138.88	1.00	12.58	106.29	
As22=3.93 cm ²	+EY	106.29	106.29	9.02	106.29	Kiriş	37.31	-10.23	31.65	-6.58	3.46	11.93	31.65	-6.58	-142.11	1.00	12.42	106.29	
As33=3.93 cm ²	-EY	106.29	106.29	4.33	106.29	Kiriş	-22.24	15.76	-18.86	10.14	5.25	7.11	-18.86	10.14	-136.76	1.00	8.84	106.29	
S211	+EX	117.49	117.49	13.86	117.49	Kiriş	27.48	-8.99	10.09	-4.34	2.61	8.95	10.09	-4.34	-204.82	1.00	9.32	117.49	
Alt	-EX	117.49	117.49	13.91	117.49	Kiriş	-26.55	26.97	-9.75	13.01	7.82	8.59	-9.75	13.01	-204.66	1.00	11.62	117.49	
In22=3 m	+EY	117.49	117.49	5.77	117.49	Kiriş	1.40	-21.83	0.65	-4.55	7.23	0.53	0.65	-4.55	-204.30	1.00	7.25	117.49	
In33=3 m	-EY	117.49	117.49	14.40	117.49	Kiriş	-0.47	39.81	-0.22	8.29	13.06	0.18	-0.22	8.29	-205.18	1.00	13.06	117.49	
S211	+EX	117.49	117.49	13.86	117.49	Kiriş	26.49	-8.75	16.75	-3.48	2.61	8.95	16.75	-3.48	-199.76	1.00	9.32	117.49	
Üst	-EX	117.49	117.49	13.91	117.49	Kiriş	-25.35	26.26	-16.04	10.44	7.82	8.59	-16.04	10.44	-199.60	1.00	11.62	117.49	
As22=3.93 cm ²	+EY	117.49	117.49	5.77	117.49	Kiriş	1.70	-21.84	0.95	-17.14	7.23	0.53	0.95	-17.14	-199.24	1.00	7.25	117.49	
As33=3.93 cm ²	-EY	117.49	117.49	14.40	117.49	Kiriş	-0.57	39.35	-0.32	30.88	13.06	0.18	-0.32	30.88	-200.12	1.00	13.06	117.49	
S217	+EX	106.29	106.29	9.32	106.29	Kiriş	6.52	20.15	3.68	7.51	6.62	1.70	3.68	7.51	-162.29	1.00	6.83	106.29	
Alt	-EX	106.29	106.29	1															

Kesme Kuvveti Değerlendirmesi - 2. KAT

Eleman Uç	Yön	Vr		D.1		D.2												
		V22u [tf]	V33u [tf]	Ve [tf]	Vr [tf]	Mafsals	Mpk22 [tfm]	Mpk33 [tfm]	M22k [tfm]	M33k [tfm]	V22e [tf]	V33e [tf]	M22kr [tfm]	M33kr [tfm]	Nk [tf]	ζ	Ve [tf]	Vr [tf]
Üst	-EX	106.29	106.29	11.71	106.29	Kiriş	-2.18	-24.10	-0.47	-15.12	8.13	0.57	-0.47	-15.12	-157.06	1.00	8.15	106.29
As22=3.93 cm ²	+EY	106.29	106.29	5.39	106.29	Kiriş	24.31	19.69	22.06	12.71	6.48	7.59	22.06	12.71	-155.18	1.00	9.98	106.29
As33=3.93 cm ²	-EY	106.29	106.29	4.03	106.29	Kiriş	-19.94	-24.10	-18.10	-15.56	7.96	6.23	-18.10	-15.56	-159.76	1.00	10.10	106.29
S206	+EX	106.29	106.29	9.51	106.29	Kiriş	8.61	-29.05	2.19	-15.36	8.89	2.93	2.19	-15.36	-75.06	1.00	9.36	106.29
Alt	-EX	106.29	106.29	6.00	106.29	Kiriş	-2.87	9.68	-0.73	5.12	2.96	0.98	-0.73	5.12	-67.32	1.00	3.12	106.29
In22=3 m	+EY	106.29	106.29	10.20	106.29	Kiriş	-2.87	-29.05	-0.41	-0.52	9.11	0.94	-0.41	-0.52	-72.99	1.00	9.16	106.29
In33=3 m	-EY	106.29	106.29	3.60	106.29	Kiriş	8.61	9.68	1.24	0.17	3.04	2.83	1.24	0.17	-69.40	1.00	4.15	106.29
S206	+EX	106.29	106.29	9.51	106.29	Kiriş	9.55	-29.38	6.61	-11.30	8.89	2.93	6.61	-11.30	-70.65	1.00	9.36	106.29
Üst	-EX	106.29	106.29	6.00	106.29	Kiriş	-3.18	9.79	-2.20	3.77	2.96	0.98	-2.20	3.77	-62.91	1.00	3.12	106.29
As22=3.93 cm ²	+EY	106.29	106.29	10.20	106.29	Kiriş	-3.18	-29.38	-2.42	-26.80	9.11	0.94	-2.42	-26.80	-68.58	1.00	9.16	106.29
As33=3.93 cm ²	-EY	106.29	106.29	3.60	106.29	Kiriş	9.55	9.79	7.26	8.93	3.04	2.83	7.26	8.93	-64.99	1.00	4.15	106.29
S212	+EX	114.35	109.21	12.70	109.83	Kiriş	16.54	35.84	4.96	12.18	11.91	5.56	4.96	12.18	-130.23	1.00	13.14	113.37
Alt	-EX	114.34	109.21	4.04	113.71	Kiriş	-5.51	-21.04	-1.65	-7.15	7.05	1.85	-1.65	-7.15	-119.87	1.00	7.29	113.99
In22=3 m	+EY	114.34	109.21	7.07	111.73	Kiriş	16.54	-21.04	8.36	-4.02	6.95	6.15	8.36	-4.02	-124.75	1.00	9.28	112.00
In33=3 m	-EY	114.34	109.21	14.48	113.55	Kiriş	-5.51	35.84	-2.79	6.85	11.71	2.05	-2.79	6.85	-125.36	1.00	11.89	114.18
S212	+EX	114.34	109.21	12.70	109.83	Kiriş	17.55	35.58	11.72	23.54	11.91	5.56	11.72	23.54	-125.51	1.00	13.14	113.37
Üst	-EX	114.34	109.21	4.04	113.70	Kiriş	-5.85	-21.17	-3.91	-14.01	7.05	1.85	-3.91	-14.01	-115.15	1.00	7.29	113.99
As22=3.93 cm ²	+EY	114.34	109.21	7.07	111.73	Kiriş	17.55	-21.17	10.08	-16.83	6.95	6.15	10.08	-16.83	-120.03	1.00	9.28	112.00
As33=3.93 cm ²	-EY	114.34	109.21	14.48	113.55	Kiriş	-5.85	35.58	-3.36	28.28	11.71	2.05	-3.36	28.28	-120.63	1.00	11.89	114.18
S218	+EX	87.37	90.19	9.11	90.19	Kiriş	12.83	1.31	4.40	0.73	0.40	4.35	4.40	0.73	-104.93	1.00	4.36	90.16
Alt	-EX	87.37	90.19	1.20	89.97	Kiriş	-4.28	-0.44	-1.47	-0.24	0.13	1.45	-1.47	-0.24	-97.05	1.00	1.45	90.16
In22=3 m	+EY	87.37	90.19	6.15	89.10	Kiriş	12.83	-15.45	4.07	-0.73	4.82	4.29	4.07	-0.73	-99.55	1.00	6.45	88.58
In33=3 m	-EY	87.37	90.19	5.10	88.37	Kiriş	-4.28	16.32	-1.36	0.77	5.05	1.43	-1.36	0.77	-102.44	1.00	5.24	87.57
S218	+EX	87.37	90.19	9.11	90.19	Kiriş	13.38	1.09	8.64	0.46	0.40	4.35	8.64	0.46	-101.15	1.00	4.36	90.16
Üst	-EX	87.37	90.19	1.20	89.97	Kiriş	-4.46	-0.36	-2.88	-0.15	0.13	1.45	-2.88	-0.15	-93.27	1.00	1.45	90.16
As22=3.14 cm ²	+EY	87.37	90.19	6.15	89.10	Kiriş	13.38	-15.43	8.79	-13.72	4.82	4.29	8.79	-13.72	-95.77	1.00	6.45	88.58
As33=3.93 cm ²	-EY	87.37	90.19	5.10	88.37	Kiriş	-4.46	16.16	-2.93	14.37	5.05	1.43	-2.93	14.37	-98.66	1.00	5.24	87.57

Yapı Risk Değerlendirmesi - 2. KAT

Eleman	Eleman Durumları				Kesme Kuvvetleri			
	Elastisite Modülü [tf/m ²]	Eksenel Kuvvet [tf]	Eksenel Basınç Gerilmesi [tf/m ²]	Sınır Dahilinde	+EX [tf]	-EX [tf]	+EY [tf]	-EY [tf]
S201	2527734.37	132.89	316.41	✓	10.26	10.26	13.18	13.18
S207	2527734.37	188.78	449.47	✓	11.19	11.19	25.90	25.90
S213	2527734.37	134.33	319.83	✓	10.02	10.02	13.17	13.17
S202	2527734.37	153.18	312.61	✓	20.99	20.99	8.50	8.50
S214	2527734.37	153.49	313.24	✓	20.57	20.57	8.46	8.46
S208	2527734.37	195.67	347.86	✓	24.44	24.44	20.15	20.15
S203	2527734.37	150.44	307.02	✓	21.56	21.56	7.95	7.95
S209	2527734.37	189.49	336.88	✓	25.72	25.72	17.80	17.80
S215	2527734.37	152.21	310.63	✓	21.14	21.14	7.87	7.87
S204	2527734.37	157.93	322.31	✓	21.61	21.61	8.35	8.35
S210	2527734.37	194.79	346.30	✓	25.75	25.75	18.16	18.16
S216	2527734.37	149.47	305.03	✓	21.14	21.14	7.99	7.99
S205	2527734.37	143.85	293.57	✓	20.90	20.90	10.73	10.73
S211	2527734.37	204.74	363.98	✓	26.39	26.39	20.16	20.16
S217	2527734.37	161.88	330.37	✓	20.88	20.88	8.26	8.26
S206	2527734.37	71.19	145.29	✓	9.46	9.46	8.35	8.35
S212	2527734.37	125.05	238.20	✓	13.24	13.24	18.42	18.42
S218	2527734.37	100.99	240.46	✓	10.27	10.27	7.82	7.82

Risk Değerlendirmesi - 2. KAT

Eksenel basınç gerilmeleri ortalaması :	311.08 tf/m ²
0.65* <i>f_{cm}</i> :	1629.13 tf/m ²
0.1* <i>f_{cm}</i> :	250.64 tf/m ²
Kat kesme kuvvetleri oranı sınır değeri:	0.33
Risk sınırını aşan eleman sayısı :	0
Toplam eleman sayısı :	18
En büyük <i>m</i> değeri	0.75 (S212)
[+EX] - Risk sınırını aşan kolon ve perdelerin kesme kuvvetleri toplamı / Toplam kat kesme kuvveti :	0 / 335.52 tf
[+EX] - Kat kesme kuvveti oranı :	0 <= 0.335
[-EX] - Risk sınırını aşan kolon ve perdelerin kesme kuvvetleri toplamı / Toplam kat kesme kuvveti :	0 / 335.52 tf
[-EX] - Kat kesme kuvveti oranı :	0 <= 0.335
[+EY] - Risk sınırını aşan kolon ve perdelerin kesme kuvvetleri toplamı / Toplam kat kesme kuvveti :	0 / 231.24 tf
[+EY] - Kat kesme kuvveti oranı :	0 <= 0.335
[-EY] - Risk sınırını aşan kolon ve perdelerin kesme kuvvetleri toplamı / Toplam kat kesme kuvveti :	0 / 231.24 tf
[-EY] - Kat kesme kuvveti oranı :	0 <= 0.335

Kat Kolonlarının Sınır Değerleri - 1. KAT Birimler : [tf-m]

Eleman	Yön	Sınıflandırma		Sınır Değerleri				Kontrol
		Ve/Vr	Grup	Nk/fcmAc	Ash/sbk	$m=(MG+nQ+E)/M_k$ <>sınır	δ/h <>sınır	
S118 60/70	+X	4.16/90.17 = 0.05	B	0.134	3.93/432 = 0.009	37.49/58.18 = 0.64 <= 4.83	0.0038 <= 0.0285	✓
	-X	1.39/90.17 = 0.02	B	0.121	3.93/432 = 0.009	24.02/55.61 = 0.43 <= 4.9	0.0038 <= 0.0291	✓
	+Y	7.24/88.81 = 0.08	B	0.125	3.14/512 = 0.006	42.08/64.13 = 0.66 <= 4.87	0.0089 <= 0.0289	✓
	-Y	5.64/87.78 = 0.06	B	0.13	3.14/512 = 0.006	41.56/66.23 = 0.63 <= 4.85	0.0089 <= 0.0287	✓
ø10/16/8/10				fcmAc = 1052.67			h = 3.6	
S112 70/75	+X	10.82/113.02 = 0.1	B	0.133	3.93/512 = 0.008	53.77/83.88 = 0.64 <= 4.83	0.0039 <= 0.0285	✓
	-X	5.79/113.83 = 0.05	B	0.119	3.93/512 = 0.008	36.14/80.05 = 0.45 <= 4.9	0.0039 <= 0.0291	✓
	+Y	7.56/112.73 = 0.07	B	0.126	3.93/552 = 0.007	64.69/86.94 = 0.74 <= 4.87	0.0089 <= 0.0288	✓
	-Y	10.52/114.2 = 0.09	B	0.127	3.93/552 = 0.007	81.59/87.16 = 0.94 <= 4.87	0.0089 <= 0.0288	✓
ø10/16/8/10				fcmAc = 1315.84			h = 3.6	
S106 70/70	+X	10.27/106.29 = 0.1	B	0.082	3.93/512 = 0.008	40.11/62.98 = 0.64 <= 5	0.0039 <= 0.03	✓
	-X	3.81/106.29 = 0.04	B	0.071	3.93/512 = 0.008	32.08/59.77 = 0.54 <= 5	0.0039 <= 0.03	✓
	+Y	10.72/106.29 = 0.1	B	0.079	3.93/512 = 0.008	55.67/62.05 = 0.9 <= 5	0.0089 <= 0.03	✓
	-Y	3.24/106.29 = 0.03	B	0.075	3.93/512 = 0.008	37.3/60.54 = 0.62 <= 5	0.0089 <= 0.03	✓
ø10/16/8/10				fcmAc = 1228.12			h = 3.6	
S117 70/70	+X	6.69/106.3 = 0.06	B	0.175	3.93/512 = 0.008	55.5/91.04 = 0.61 <= 4.62	0.0038 <= 0.0266	✓
	-X	7.78/106.3 = 0.07	B	0.175	3.93/512 = 0.008	59.77/90.9 = 0.66 <= 4.63	0.0038 <= 0.0266	✓
	+Y	6.64/106.3 = 0.06	B	0.172	3.93/512 = 0.008	46.56/88.69 = 0.52 <= 4.64	0.0086 <= 0.0268	✓
	-Y	5.18/106.3 = 0.05	B	0.178	3.93/512 = 0.008	43.84/89.2 = 0.49 <= 4.61	0.0086 <= 0.0265	✓
ø10/16/8/10				fcmAc = 1228.12			h = 3.6	
S111 75/75	+X	9.5/117.49 = 0.08	B	0.193	3.93/552 = 0.007	74.64/113.96 = 0.65 <= 4.53	0.0039 <= 0.0258	✓
	-X	14.07/117.49 = 0.12	B	0.194	3.93/552 = 0.007	74.19/113.97 = 0.65 <= 4.53	0.0039 <= 0.0258	✓
	+Y	6.15/117.49 = 0.05	B	0.193	3.93/552 = 0.007	67.7/114.12 = 0.59 <= 4.54	0.0086 <= 0.0258	✓
	-Y	11.16/117.49 = 0.09	B	0.194	3.93/552 = 0.007	84.72/114.41 = 0.74 <= 4.53	0.0086 <= 0.0258	✓
ø10/16/8/10				fcmAc = 1409.83			h = 3.6	
S105 70/70	+X	8.94/106.3 = 0.08	B	0.156	3.93/512 = 0.008	62.72/83.14 = 0.75 <= 4.72	0.0039 <= 0.0275	✓
	-X	10.96/106.3 = 0.1	B	0.155	3.93/512 = 0.008	54.73/82.48 = 0.66 <= 4.72	0.0039 <= 0.0275	✓
	+Y	9.94/106.3 = 0.09	B	0.159	3.93/512 = 0.008	55.31/83.79 = 0.66 <= 4.7	0.0086 <= 0.0273	✓
	-Y	5.87/106.3 = 0.06	B	0.152	3.93/512 = 0.008	45.48/81.15 = 0.56 <= 4.74	0.0086 <= 0.0277	✓
ø10/16/8/10				fcmAc = 1228.12			h = 3.6	
S116 70/70	+X	10.25/106.3 = 0.1	B	0.162	3.93/512 = 0.008	55.48/87.74 = 0.63 <= 4.69	0.0038 <= 0.0272	✓
	-X	11.24/106.3 = 0.11	B	0.162	3.93/512 = 0.008	60.02/87.76 = 0.68 <= 4.69	0.0038 <= 0.0272	✓
	+Y	6.11/106.3 = 0.06	B	0.158	3.93/512 = 0.008	44.27/85.56 = 0.52 <= 4.71	0.0082 <= 0.0274	✓
	-Y	4.85/106.3 = 0.05	B	0.165	3.93/512 = 0.008	41.66/86.21 = 0.48 <= 4.68	0.0082 <= 0.0271	✓
ø10/16/8/10				fcmAc = 1228.12			h = 3.6	
S110 75/75	+X	12.5/117.49 = 0.11	B	0.184	3.93/552 = 0.007	68.65/111.74 = 0.61 <= 4.58	0.0039 <= 0.0262	✓
	-X	13.98/117.49 = 0.12	B	0.184	3.93/552 = 0.007	74.48/111.79 = 0.67 <= 4.58	0.0039 <= 0.0262	✓
	+Y	3.75/117.49 = 0.03	B	0.184	3.93/552 = 0.007	67.46/111.74 = 0.6 <= 4.58	0.0082 <= 0.0262	✓
	-Y	5.44/117.49 = 0.05	B	0.184	3.93/552 = 0.007	71.98/111.76 = 0.64 <= 4.58	0.0082 <= 0.0262	✓
ø10/16/8/10				fcmAc = 1409.83			h = 3.6	
S104 70/70	+X	7.15/106.3 = 0.07	B	0.171	3.93/512 = 0.008	58.59/86.55 = 0.68 <= 4.65	0.0039 <= 0.0268	✓
	-X	8.87/106.3 = 0.08	B	0.171	3.93/512 = 0.008	62.29/86.62 = 0.72 <= 4.65	0.0039 <= 0.0268	✓
	+Y	4.92/106.3 = 0.05	B	0.174	3.93/512 = 0.008	41.58/86.14 = 0.48 <= 4.63	0.0082 <= 0.0267	✓
	-Y	6.04/106.3 = 0.06	B	0.168	3.93/512 = 0.008	45.32/85.23 = 0.53 <= 4.66	0.0082 <= 0.027	✓
ø10/16/8/10				fcmAc = 1228.12			h = 3.6	
S115 70/70	+X	9.38/106.3 = 0.09	B	0.165	3.93/512 = 0.008	55.27/88.5 = 0.62 <= 4.68	0.0038 <= 0.0271	✓
	-X	9.78/106.3 = 0.09	B	0.165	3.93/512 = 0.008	60.3/88.47 = 0.68 <= 4.68	0.0038 <= 0.0271	✓
	+Y	5.71/106.3 = 0.05	B	0.162	3.93/512 = 0.008	42.39/86.27 = 0.49 <= 4.69	0.0079 <= 0.0272	✓
	-Y	4.74/106.3 = 0.04	B	0.168	3.93/512 = 0.008	39.96/86.81 = 0.46 <= 4.66	0.0079 <= 0.027	✓
ø10/16/8/10				fcmAc = 1228.12			h = 3.6	
S109 75/75	+X	13.24/117.49 = 0.11	B	0.179	3.93/552 = 0.007	68.78/110.47 = 0.62 <= 4.61	0.0039 <= 0.0265	✓
	-X	14.35/117.49 = 0.12	B	0.179	3.93/552 = 0.007	74.38/110.45 = 0.67 <= 4.61	0.0039 <= 0.0265	✓
	+Y	9.15/117.49 = 0.08	B	0.179	3.93/552 = 0.007	66.04/110.45 = 0.6 <= 4.61	0.0079 <= 0.0265	✓
	-Y	9.28/117.49 = 0.08	B	0.179	3.93/552 = 0.007	68.23/110.45 = 0.62 <= 4.61	0.0079 <= 0.0265	✓
ø10/16/8/10				fcmAc = 1409.83			h = 3.6	
S103 70/70	+X	10.83/106.3 = 0.1	B	0.163	3.93/512 = 0.008	58.7/88.01 = 0.67 <= 4.69	0.0039 <= 0.0272	✓
	-X	10.09/106.3 = 0.09	B	0.163	3.93/512 = 0.008	61.81/87.99 = 0.7 <= 4.69	0.0039 <= 0.0272	✓
	+Y	4.1/106.3 = 0.04	B	0.166	3.93/512 = 0.008	38.35/86.38 = 0.44 <= 4.67	0.0079 <= 0.0271	✓
	-Y	6.07/106.3 = 0.06	B	0.16	3.93/512 = 0.008	43.85/85.74 = 0.51 <= 4.7	0.0079 <= 0.0273	✓
ø10/16/8/10				fcmAc = 1228.12			h = 3.6	
S108 75/75	+X	13.26/117.49 = 0.11	B	0.184	3.93/552 = 0.007	67.36/111.79 = 0.6 <= 4.58	0.0039 <= 0.0262	✓
	-X	15.54/117.49 = 0.13	B	0.186	3.93/552 = 0.007	71.45/112.24 = 0.64 <= 4.57	0.0039 <= 0.0262	✓
	+Y	11.28/117.49 = 0.1	B	0.185	3.93/552 = 0.007	71.4/112.02 = 0.64 <= 4.58	0.0076 <= 0.0262	✓
	-Y	11.19/117.49 = 0.1	B	0.185	3.93/552 = 0.007	73.18/112.02 = 0.65 <= 4.58	0.0076 <= 0.0262	✓
ø10/16/8/10				fcmAc = 1409.83			h = 3.6	
S114 70/70	+X	8.27/106.3 = 0.08	B	0.166	3.93/512 = 0.008	54.3/88.72 = 0.61 <= 4.67	0.0038 <= 0.027	✓
	-X	9.44/106.3 = 0.09	B	0.167	3.93/512 = 0.008	59.3/88.94 = 0.67 <= 4.67	0.0038 <= 0.027	✓

Kat Kolonlarının Sınır Değerleri - 1. KAT Birimler : [tf-m]

Eleman	Yön	Sınıflandırma		Sınır Değerleri				Kontrol
		Ve/Vr	Grup	Nk/fcmAc	Ash/sbk	$m=(MG+nQ+E)/Mk$ <>sınır	δ/h <>sınır	
ø10/16/8/10	+Y	5.64/106.3 = 0.05	B	0.163	3.93/512 = 0.008	42.09/86.62 = 0.49 <= 4.68	0.0076 <= 0.0272	✓
	-Y	5.54/106.3 = 0.05	B	0.169	3.93/512 = 0.008	41.4/87.02 = 0.48 <= 4.66	0.0076 <= 0.0269	✓
				fcmAc = 1228.12			h = 3.6	
S102	+X	9.12/106.3 = 0.09	B	0.165	3.93/512 = 0.008	57.58/88.63 = 0.65 <= 4.67	0.0039 <= 0.0271	✓
70/70	-X	9.69/106.3 = 0.09	B	0.166	3.93/512 = 0.008	61.06/88.86 = 0.69 <= 4.67	0.0039 <= 0.027	✓
ø10/16/8/10	+Y	5.02/106.3 = 0.05	B	0.169	3.93/512 = 0.008	39.83/87.05 = 0.46 <= 4.66	0.0076 <= 0.0269	✓
	-Y	5.95/106.3 = 0.06	B	0.163	3.93/512 = 0.008	43.43/86.46 = 0.5 <= 4.69	0.0076 <= 0.0272	✓
				fcmAc = 1228.12			h = 3.6	
S113	+X	0.87/87.86 = 0.01	B	0.163	3.93/432 = 0.009	28.71/66 = 0.44 <= 4.69	0.0038 <= 0.0272	✓
60/70	-X	2.61/87.86 = 0.03	B	0.176	3.93/432 = 0.009	32.5/68.26 = 0.48 <= 4.62	0.0038 <= 0.0266	✓
ø10/16/8/10	+Y	0.91/87.87 = 0.01	B	0.162	3.14/512 = 0.006	44.9/75.26 = 0.6 <= 4.69	0.0073 <= 0.0272	✓
	-Y	2.74/87.87 = 0.03	B	0.177	3.14/512 = 0.006	57.99/78.21 = 0.74 <= 4.62	0.0073 <= 0.0266	✓
				fcmAc = 1052.67			h = 3.6	
S107	+X	8.11/90.19 = 0.09	B	0.231	3.93/432 = 0.009	34.14/73.69 = 0.46 <= 4.35	0.0039 <= 0.0241	✓
60/70	-X	5.53/90.18 = 0.06	B	0.245	3.93/432 = 0.009	30.84/75.51 = 0.41 <= 4.27	0.0039 <= 0.0235	✓
ø10/16/8/10	+Y	9.82/88.59 = 0.11	B	0.238	3.14/512 = 0.006	80.63/86.07 = 0.94 <= 4.31	0.0073 <= 0.0238	✓
	-Y	9.75/88.44 = 0.11	B	0.238	3.14/512 = 0.006	82.41/86.06 = 0.96 <= 4.31	0.0073 <= 0.0238	✓
				fcmAc = 1052.67			h = 3.6	
S101	+X	6.74/89.36 = 0.08	B	0.161	3.93/432 = 0.009	30.35/62.97 = 0.48 <= 4.7	0.0039 <= 0.0273	✓
60/70	-X	8.02/89.82 = 0.09	B	0.174	3.93/432 = 0.009	33.62/65.22 = 0.52 <= 4.63	0.0039 <= 0.0267	✓
ø10/16/8/10	+Y	2.39/88.01 = 0.03	B	0.174	3.14/512 = 0.006	56.63/75.61 = 0.75 <= 4.63	0.0073 <= 0.0266	✓
	-Y	0.8/88.01 = 0.01	B	0.16	3.14/512 = 0.006	46.03/72.62 = 0.63 <= 4.7	0.0073 <= 0.0273	✓
				fcmAc = 1052.67			h = 3.6	

Kesme Kuvveti Değerlendirmesi - 1. KAT

Eleman	Yön	Vr		D.1		D.2												Nk	ζ	Ve	Vr
		V22u	V33u	Ve	Vr	Mafsals	Mpk22	Mpk33	M22k	M33k	V22e	V33e	M22kr	M33kr							
Uç		[tf]	[tf]	[tf]	[tf]		[tfm]	[tfm]	[tfm]	[tfm]	[tf]	[tf]	[tfm]	[tfm]	[tf]		[tf]	[tf]			
S118	+EX	87.37	90.19	10.22	90.19	Kiriş	13.74	0.52	4.01	0.40	0.33	4.15	4.01	0.40	-141.13	1.00	4.16	90.17			
Alt	-EX	87.37	90.19	2.84	90.10	Kiriş	-4.58	-0.17	-1.34	-0.13	0.11	1.38	-1.34	-0.13	-127.16	1.00	1.39	90.17			
ln22=3 m	+EY	87.37	90.19	7.24	88.81	Kiriş	13.74	-14.85	9.40	-1.25	5.32	6.05	9.40	-1.25	-131.77	1.00	8.06	88.93			
ln33=3 m	-EY	87.37	90.19	5.64	87.78	Kiriş	-4.58	15.19	-3.13	1.28	5.61	2.02	-3.13	1.28	-136.52	1.00	5.96	87.68			
S118	+EX	87.37	90.19	10.22	90.19	Kiriş	12.83	1.31	8.43	0.58	0.33	4.15	8.43	0.58	-137.35	1.00	4.16	90.17			
Üst	-EX	87.37	90.19	2.84	90.10	Kiriş	-4.28	-0.44	-2.81	-0.19	0.11	1.38	-2.81	-0.19	-123.38	1.00	1.39	90.17			
As22=3.14 cm ²	+EY	87.37	90.19	7.24	88.81	Kiriş	12.83	-15.45	8.76	-14.72	5.32	6.05	8.76	-14.72	-127.99	1.00	8.06	88.93			
As33=3.93 cm ²	-EY	87.37	90.19	5.64	87.78	Kiriş	-4.28	16.32	-2.92	15.56	5.61	2.02	-2.92	15.56	-132.74	1.00	5.96	87.68			
S112	+EX	114.35	109.21	14.13	109.81	Kiriş	16.88	34.51	4.50	4.53	9.40	5.36	4.50	4.53	-175.41	1.00	10.82	113.02			
Alt	-EX	114.35	109.21	5.99	111.49	Kiriş	-5.63	-19.99	-1.50	-2.62	5.50	1.79	-1.50	-2.62	-156.86	1.00	5.79	113.83			
ln22=3 m	+EY	114.35	109.21	7.56	112.73	Kiriş	16.88	-19.99	7.11	-1.26	6.09	5.10	7.11	-1.26	-165.64	1.00	7.94	112.15			
ln33=3 m	-EY	114.35	109.21	16.05	113.88	Kiriş	-5.63	34.51	-2.37	2.17	10.39	1.70	-2.37	2.17	-166.63	1.00	10.52	114.20			
S112	+EX	114.35	109.21	14.13	109.81	Kiriş	16.54	35.84	11.57	23.67	9.40	5.36	11.57	23.67	-170.69	1.00	10.82	113.02			
Üst	-EX	114.35	109.21	5.99	111.49	Kiriş	-5.51	-21.04	-3.86	-13.89	5.50	1.79	-3.86	-13.89	-152.13	1.00	5.79	113.83			
As22=3.93 cm ²	+EY	114.35	109.21	7.56	112.73	Kiriş	16.54	-21.04	8.17	-17.02	6.09	5.10	8.17	-17.02	-160.92	1.00	7.94	112.15			
As33=3.93 cm ²	-EY	114.35	109.21	16.05	113.88	Kiriş	-5.51	35.84	-2.72	28.99	10.39	1.70	-2.72	28.99	-161.91	1.00	10.52	114.20			
S106	+EX	106.29	106.29	10.27	106.29	Kiriş	7.69	-28.32	1.53	-19.70	11.13	2.65	1.53	-19.70	-101.32	1.00	11.44	106.29			
Alt	-EX	106.29	106.29	6.93	106.29	Kiriş	-2.56	9.44	-0.51	6.57	3.71	0.88	-0.51	6.57	-87.71	1.00	3.81	106.29			
ln22=3 m	+EY	106.29	106.29	11.29	106.29	Kiriş	-2.56	-28.32	-2.27	-3.29	10.61	1.58	-2.27	-3.29	-97.47	1.00	10.72	106.29			
ln33=3 m	-EY	106.29	106.29	3.24	106.29	Kiriş	7.69	9.44	6.81	1.10	3.54	4.73	6.81	1.10	-91.56	1.00	5.90	106.29			
S106	+EX	106.29	106.29	10.27	106.29	Kiriş	8.61	-29.05	6.41	-13.70	11.13	2.65	6.41	-13.70	-96.91	1.00	11.44	106.29			
Üst	-EX	106.29	106.29	6.93	106.29	Kiriş	-2.87	9.68	-2.14	4.57	3.71	0.88	-2.14	4.57	-83.30	1.00	3.81	106.29			
As22=3.93 cm ²	+EY	106.29	106.29	11.29	106.29	Kiriş	-2.87	-29.05	-2.46	-28.53	10.61	1.58	-2.46	-28.53	-93.06	1.00	10.72	106.29			
As33=3.93 cm ²	-EY	106.29	106.29	3.24	106.29	Kiriş	8.61	9.68	7.37	9.51	3.54	4.73	7.37	9.51	-87.15	1.00	5.90	106.29			
S117	+EX	106.30	106.30	11.64	106.30	Kiriş	7.21	21.28	3.19	6.49	6.38	2.01	3.19	6.49	-215.52	1.00	6.69	106.30			
Alt	-EX	106.30	106.30	13.81	106.30	Kiriş	-2.40	-25.07	-1.06	-7.65	7.75	0.67	-1.06	-7.65	-214.75	1.00	7.78	106.30			
ln22=3 m	+EY	106.30	106.30	6.64	106.30	Kiriş	23.35	21.28	3.10	14.61	9.34	8.93	3.10	14.61	-211.22	1.00	12.93	106.30			
ln33=3 m	-EY	106.30	106.30	5.18	106.30	Kiriş	-18.55	-25.07	-2.46	-17.22	11.26	7.32	-2.46	-17.22	-219.05	1.00	13.43	106.30			
S117	+EX	106.30	106.30	11.64	106.30	Kiriş	6.52	20.15	2.84	12.64	6.38	2.01	2.84	12.64	-211.11	1.00	6.69	106.30			
Üst	-EX	106.30	106.30	13.81	106.30	Kiriş	-2.17	-24.87	-0.95	-15.60	7.75	0.67	-0.95	-15.60	-210.34	1.00	7.78	106.30			
As22=3.93 cm ²	+EY	106.30	106.30	6.64	106.30	Kiriş	24.42	20.15	23.71	13.42	9.34	8.93	23.71	13.42	-206.81	1.00	12.93	106.30			
As33=3.93 cm ²	-EY	106.30	106.30	5.18	106.30	Kiriş	-20.07	-24.87	-19.49	-16.56	11.26	7.32	-19.49	-16.56	-214.64	1.00	13.43	106.30			
S111	+EX	117.49	117.49	16.68	117.49	Kiriş	29.67	-8.96	8.75	-6.69	3.78	8.71	8.75	-6.69	-272.12	1.00	9.50	117.49			
Alt	-EX	117.49	117.49	16.40	117.49	Kiriş	-27.72	26.88	-8.18	20.07	11.34	8.33	-8.18	20.07	-272.90	1.00	14.07	117.49			
ln22=3 m	+EY	117.49	117.49	6.76	117.49	Kiriş	2.91	-21.13	1.38	-1.05	6.11	0.71	1.38	-1.05	-271.71	1.00	6.15	117.49			
ln33=3 m	-EY	117.49	117.49	15.73	117.49	Kiriş	-0.97	39.05	-0.46	1.94	11.15	0.24	-0.46	1.94	-273.31	1.00	11.16	117.49			
S111	+EX	117.49	117.49	16.68	117.49	Kiriş	27.48	-8.99	17.39	-4.65	3.78	8.71	17.39	-4.65	-267.06	1.00	9.50	117.49			
Üst	-EX	117.49	117.49	16.40	117.49	Kiriş	-26.55	26.97	-16.80	13.96	11.34	8.33	-16.80	13.96	-267.83	1.00	14.07	117.49			
As22=3.93 cm ²	+EY	117.49	117.49	6.76	117.49	Kiriş	1.40	-21.83	0.74	-17.29	6.11	0.71	0.74	-17.29	-266.65	1.00	6.15	117.49			

Kesme Kuvveti Değerlendirmesi - 1. KAT

Eleman Uç	Yön	Vr		D.1		D.2													
		V22u [tf]	V33u [tf]	Ve [tf]	Vr [tf]	Mafsals	Mpk22 [tfm]	Mpk33 [tfm]	M22k [tfm]	M33k [tfm]	V22e [tf]	V33e [tf]	M22kr [tfm]	M33kr [tfm]	Nk [tf]	ζ	Ve [tf]	Vr [tf]	
As33=3.93 cm ²	-EY	117.49	117.49	15.73	117.49	Kiriş	-0.47	39.81	-0.25	31.52	11.15	0.24	-0.25	31.52	-268.24	1.00	11.16	117.49	
S105	+EX	106.30	106.30	15.37	106.30	Kiriş	-21.59	17.11	-8.42	5.05	5.11	7.33	-8.42	5.05	-192.02	1.00	8.94	106.30	
Alt	-EX	106.30	106.30	10.96	106.30	Kiriş	36.19	-12.12	14.11	-3.58	3.52	12.27	14.11	-3.58	-190.52	1.00	12.77	106.30	
ln22=3 m	+EY	106.30	106.30	9.94	106.30	Kiriş	36.19	-12.12	2.03	-8.13	5.13	11.62	2.03	-8.13	-195.87	1.00	12.70	106.30	
ln33=3 m	-EY	106.30	106.30	5.87	106.30	Kiriş	-21.59	17.11	-1.21	11.47	7.39	6.95	-1.21	11.47	-186.66	1.00	10.14	106.30	
S105	+EX	106.30	106.30	15.37	106.30	Kiriş	-22.12	16.28	-13.59	10.28	5.11	7.33	-13.59	10.28	-187.61	1.00	8.94	106.30	
Üst	-EX	106.30	106.30	10.96	106.30	Kiriş	36.98	-11.06	22.71	-6.98	3.52	12.27	22.71	-6.98	-186.11	1.00	12.77	106.30	
As22=3.93 cm ²	+EY	106.30	106.30	9.94	106.30	Kiriş	36.98	-11.06	32.83	-7.26	5.13	11.62	32.83	-7.26	-191.46	1.00	12.70	106.30	
As33=3.93 cm ²	-EY	106.30	106.30	5.87	106.30	Kiriş	-22.12	16.28	-19.64	10.69	7.39	6.95	-19.64	10.69	-182.25	1.00	10.14	106.30	
S116	+EX	106.30	106.30	11.59	106.30	Kiriş	5.70	25.75	2.03	7.97	8.15	6.21	2.03	7.97	-198.36	1.00	10.25	106.30	
Alt	-EX	106.30	106.30	13.94	106.30	Kiriş	-1.90	-27.47	-0.68	-8.50	9.00	6.73	-0.68	-8.50	-198.48	1.00	11.24	106.30	
ln22=3 m	+EY	106.30	106.30	6.11	106.30	Kiriş	22.08	25.75	3.44	17.67	11.72	8.62	3.44	17.67	-194.59	1.00	14.55	106.30	
ln33=3 m	-EY	106.30	106.30	4.85	106.30	Kiriş	-18.28	-27.47	-2.84	-18.85	12.82	7.31	-2.84	-18.85	-202.25	1.00	14.76	106.30	
S116	+EX	106.30	106.30	11.59	106.30	Kiriş	-19.75	26.36	-16.61	16.49	8.15	6.21	-16.61	16.49	-193.95	1.00	10.25	106.30	
Üst	-EX	106.30	106.30	13.94	106.30	Kiriş	23.21	-29.57	19.51	-18.49	9.00	6.73	19.51	-18.49	-194.07	1.00	11.24	106.30	
As22=3.93 cm ²	+EY	106.30	106.30	6.11	106.30	Kiriş	23.21	26.36	22.41	17.49	11.72	8.62	22.41	17.49	-190.18	1.00	14.55	106.30	
As33=3.93 cm ²	-EY	106.30	106.30	4.85	106.30	Kiriş	-19.75	-29.57	-19.08	-19.61	12.82	7.31	-19.08	-19.61	-197.84	1.00	14.76	106.30	
S110	+EX	117.49	117.49	13.66	117.49	Kiriş	-14.08	37.89	-7.89	11.01	11.68	4.46	-7.89	11.01	-258.90	1.00	12.50	117.49	
Alt	-EX	117.49	117.49	16.78	117.49	Kiriş	12.37	-41.77	6.93	-12.14	13.42	3.92	6.93	-12.14	-259.09	1.00	13.98	117.49	
ln22=3 m	+EY	117.49	117.49	8.91	117.49	Kiriş	12.37	1.94	0.11	1.62	1.21	3.55	0.11	1.62	-258.93	1.00	3.75	117.49	
ln33=3 m	-EY	117.49	117.49	10.48	117.49	Kiriş	-14.08	-5.82	-0.12	-4.87	3.63	4.04	-0.12	-4.87	-259.06	1.00	5.44	117.49	
S110	+EX	117.49	117.49	13.66	117.49	Kiriş	-14.94	37.94	-5.51	24.03	11.68	4.46	-5.51	24.03	-253.83	1.00	12.50	117.49	
Üst	-EX	117.49	117.49	16.78	117.49	Kiriş	13.12	-44.40	4.83	-28.12	13.42	3.92	4.83	-28.12	-254.02	1.00	13.98	117.49	
As22=3.93 cm ²	+EY	117.49	117.49	8.91	117.49	Kiriş	13.12	3.23	10.54	2.01	1.21	3.55	10.54	2.01	-253.86	1.00	3.75	117.49	
As33=3.93 cm ²	-EY	117.49	117.49	10.48	117.49	Kiriş	-14.94	-9.69	-12.01	-6.03	3.63	4.04	-12.01	-6.03	-253.99	1.00	5.44	117.49	
S104	+EX	106.30	106.30	12.38	106.30	Kiriş	2.87	22.72	0.09	7.18	7.08	0.96	0.09	7.18	-209.54	1.00	7.15	106.30	
Alt	-EX	106.30	106.30	14.42	106.30	Kiriş	-8.60	-26.01	-0.28	-8.22	8.39	2.88	-0.28	-8.22	-209.89	1.00	8.87	106.30	
ln22=3 m	+EY	106.30	106.30	4.92	106.30	Kiriş	15.74	-26.01	2.41	-17.86	11.84	3.48	2.41	-17.86	-213.62	1.00	12.34	106.30	
ln33=3 m	-EY	106.30	106.30	6.04	106.30	Kiriş	-21.47	22.72	-3.28	15.60	10.08	1.99	-3.28	15.60	-205.81	1.00	10.28	106.30	
S104	+EX	106.30	106.30	12.38	106.30	Kiriş	2.82	22.27	2.79	14.07	7.08	0.96	2.79	14.07	-205.13	1.00	7.15	106.30	
Üst	-EX	106.30	106.30	14.42	106.30	Kiriş	-8.46	-26.83	-8.36	-16.95	8.39	2.88	-8.36	-16.95	-205.48	1.00	8.87	106.30	
As22=3.93 cm ²	+EY	106.30	106.30	4.92	106.30	Kiriş	-8.46	-26.83	-8.03	-17.65	11.84	3.48	-8.03	-17.65	-209.21	1.00	12.34	106.30	
As33=3.93 cm ²	-EY	106.30	106.30	6.04	106.30	Kiriş	2.82	22.27	2.68	14.65	10.08	1.99	2.68	14.65	-201.40	1.00	10.28	106.30	
S115	+EX	106.30	106.30	11.43	106.30	Kiriş	22.40	26.63	9.77	8.25	8.27	4.43	9.77	8.25	-202.29	1.00	9.38	106.30	
Alt	-EX	106.30	106.30	14.12	106.30	Kiriş	-18.25	-29.25	-7.96	-9.06	9.30	3.04	-7.96	-9.06	-202.14	1.00	9.78	106.30	
ln22=3 m	+EY	106.30	106.30	5.71	106.30	Kiriş	22.40	26.63	3.74	18.29	11.93	8.66	3.74	18.29	-198.60	1.00	14.74	106.30	
ln33=3 m	-EY	106.30	106.30	4.74	106.30	Kiriş	-18.25	-29.25	-3.05	-20.09	13.33	7.20	-3.05	-20.09	-205.83	1.00	15.15	106.30	
S115	+EX	106.30	106.30	11.43	106.30	Kiriş	5.79	26.46	3.51	16.55	8.27	4.43	3.51	16.55	-197.88	1.00	9.38	106.30	
Üst	-EX	106.30	106.30	14.12	106.30	Kiriş	-1.93	-30.11	-1.17	-18.84	9.30	3.04	-1.17	-18.84	-197.73	1.00	9.78	106.30	
As22=3.93 cm ²	+EY	106.30	106.30	5.71	106.30	Kiriş	23.29	26.46	22.24	17.49	11.93	8.66	22.24	17.49	-194.19	1.00	14.74	106.30	
As33=3.93 cm ²	-EY	106.30	106.30	4.74	106.30	Kiriş	-19.43	-30.11	-18.55	-19.91	13.33	7.20	-18.55	-19.91	-201.42	1.00	15.15	106.30	
S109	+EX	117.49	117.49	13.73	117.49	Kiriş	12.42	42.25	4.13	12.28	12.97	2.64	4.13	12.28	-252.05	1.00	13.24	117.49	
Alt	-EX	117.49	117.49	16.69	117.49	Kiriş	-13.97	-44.56	-4.65	-12.95	14.10	2.70	-4.65	-12.95	-251.95	1.00	14.35	117.49	
ln22=3 m	+EY	117.49	117.49	9.15	117.49	Kiriş	12.42	-44.56	0.22	-15.18	10.51	3.62	0.22	-15.18	-252.00	1.00	11.12	117.49	
ln33=3 m	-EY	117.49	117.49	9.28	117.49	Kiriş	-13.97	42.25	-0.25	14.39	9.74	3.99	-0.25	14.39	-251.99	1.00	10.53	117.49	
S109	+EX	117.49	117.49	13.73	117.49	Kiriş	-14.71	42.03	-3.79	26.63	12.97	2.64	-3.79	26.63	-246.98	1.00	13.24	117.49	
Üst	-EX	117.49	117.49	16.69	117.49	Kiriş	13.34	-46.31	3.44	-29.35	14.10	2.70	3.44	-29.35	-246.88	1.00	14.35	117.49	
As22=3.93 cm ²	+EY	117.49	117.49	9.15	117.49	Kiriş	13.34	-46.31	10.63	-16.35	10.51	3.62	10.63	-16.35	-246.94	1.00	11.12	117.49	
As33=3.93 cm ²	-EY	117.49	117.49	9.28	117.49	Kiriş	-14.71	42.03	-11.72	14.84	9.74	3.99	-11.72	14.84	-246.93	1.00	10.53	117.49	
S103	+EX	106.30	106.30	12.57	106.30	Kiriş	26.28	8.44	8.25	3.80	6.90	8.35	8.25	3.80	-199.73	1.00	10.83	106.30	
Alt	-EX	106.30	106.30	14.16	106.30	Kiriş	-27.25	-2.81	-8.56	-1.27	4.72	8.92	-2.81	-8.56	-1.27	-199.60	1.00	10.09	106.30
ln22=3 m	+EY	106.30	106.30	4.10	106.30	Kiriş	-27.25	-16.04	-18.74	-2.74	6.39	12.57	-2.74	-18.74	-203.27	1.00	14.11	106.30	
ln33=3 m	-EY	106.30	106.30	6.07	106.30	Kiriş	26.28	21.67	18.07	3.70	8.42	11.86	18.07	3.70	-196.06	1.00	14.54	106.30	
S103	+EX	106.30	106.30	12.57	106.30	Kiriş	26.60	22.68	16.79	16.90	6.90	8.35	16.79	6.90	-195.32	1.00	10.83	106.30	
Üst	-EX	106.30	106.30	14.16	106.30	Kiriş	-28.84	-17.30	-18.21	-12.90	4.72	8.92	-18.21	-12.90	-195.19	1.00	10.09	106.30	
As22=3.93 cm ²	+EY	106.30	106.30	4.10	106.30	Kiriş	-28.84	-17.30	-18.98	-16.44	6.39	12.57	-18.98	-16.44	-198.86	1.00	14.11	106.30	
As33=3.93 cm ²	-EY	106.30	106.30	6.07	106.30	Kiriş	26.60	22.68											