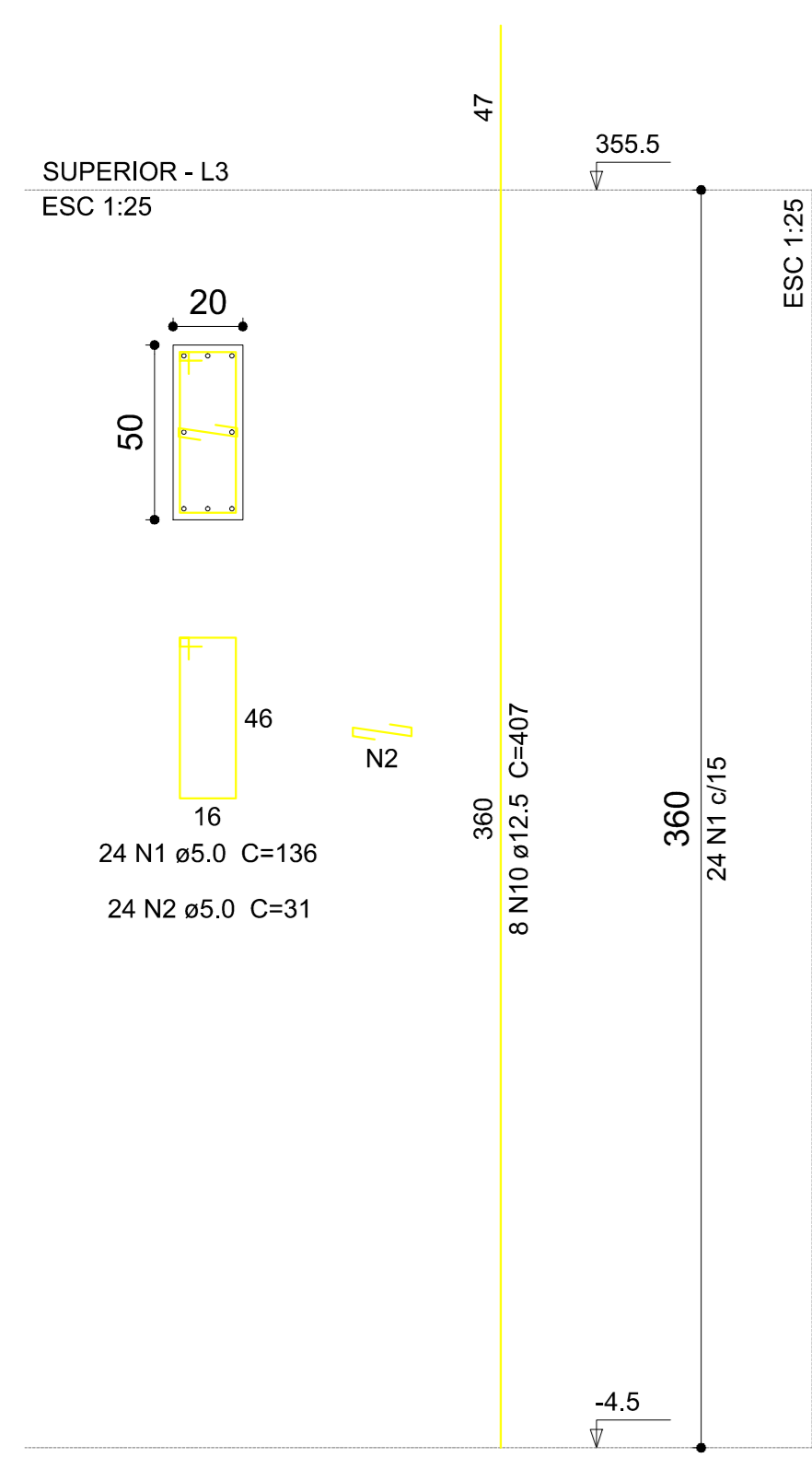
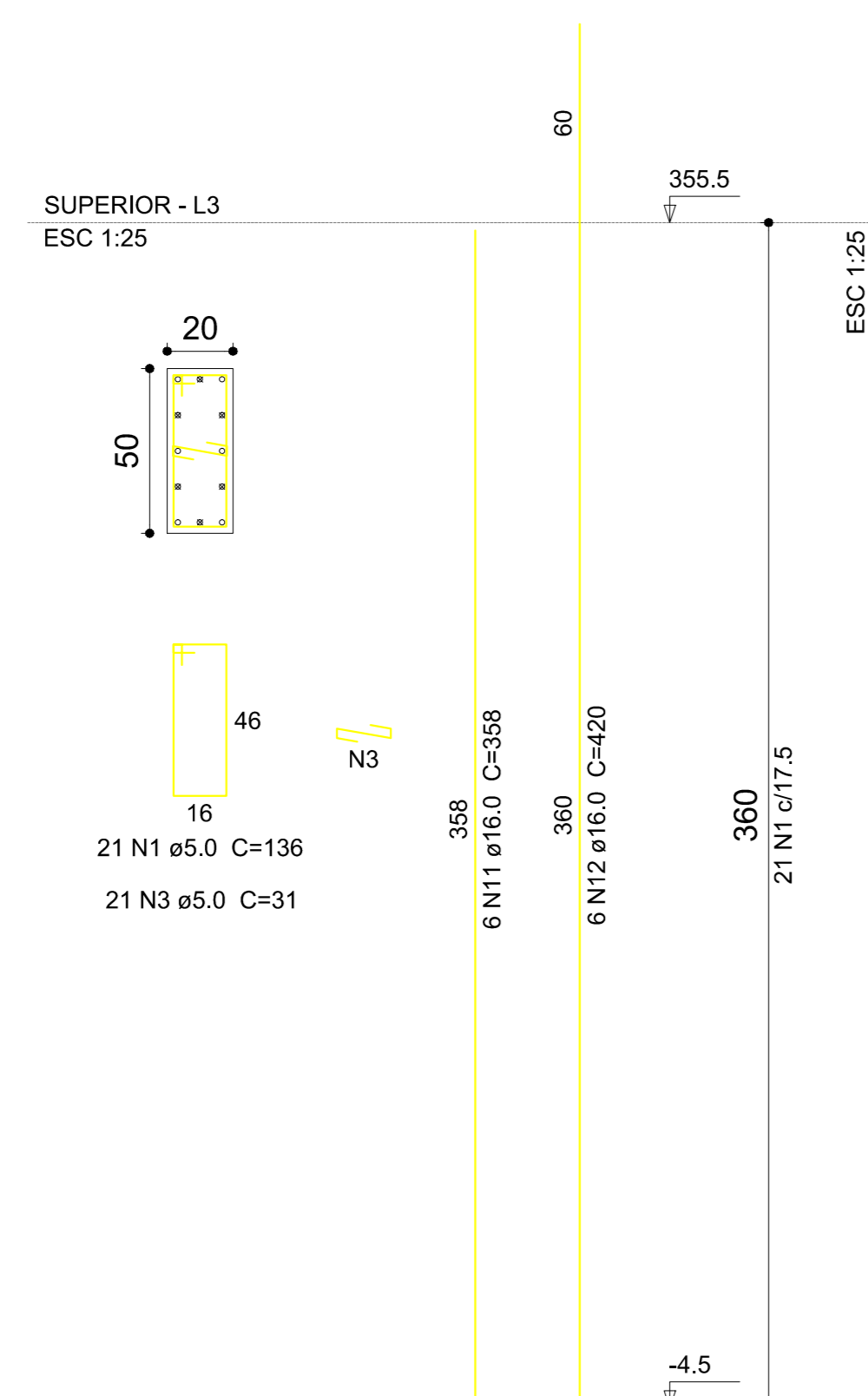


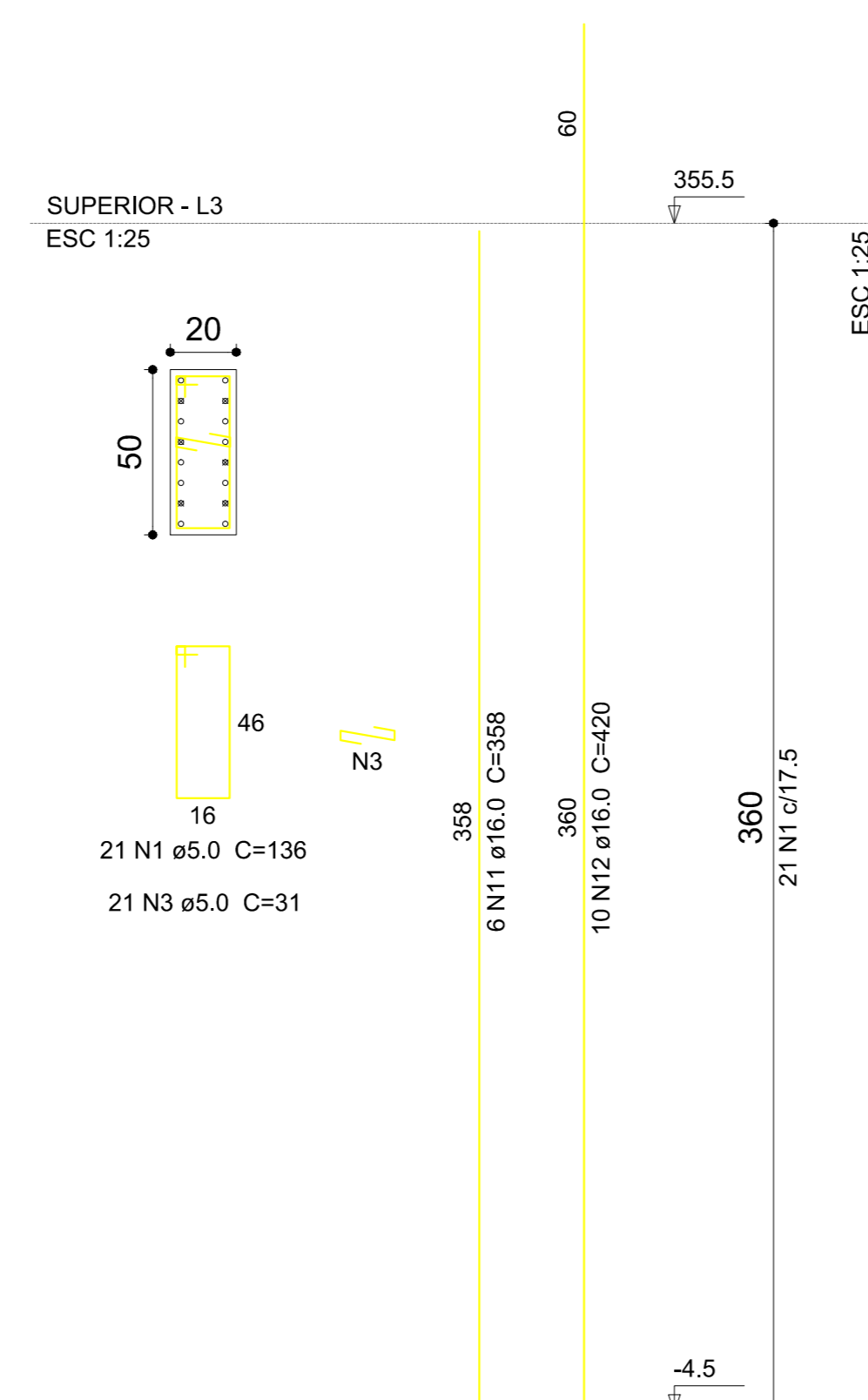
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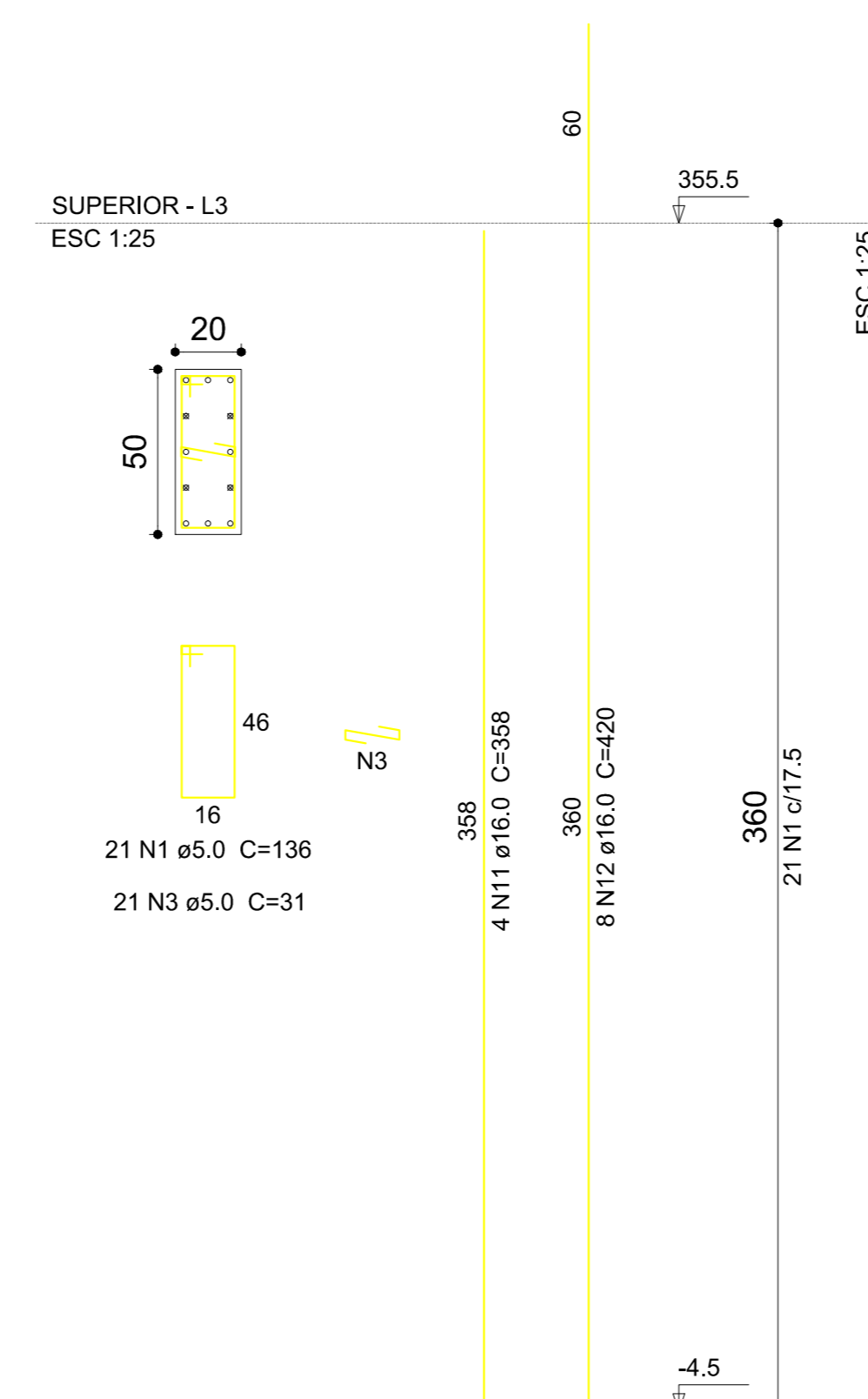
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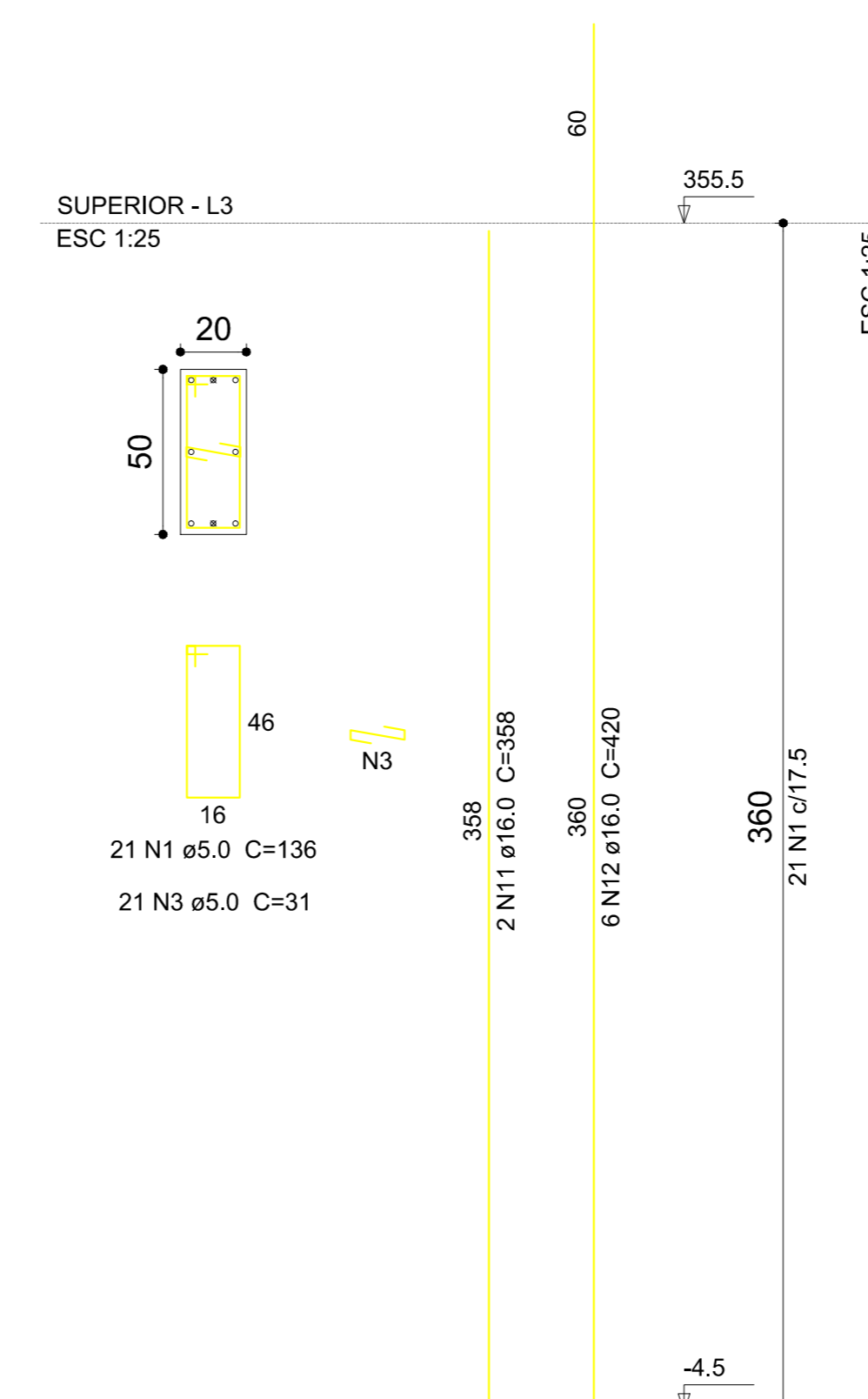
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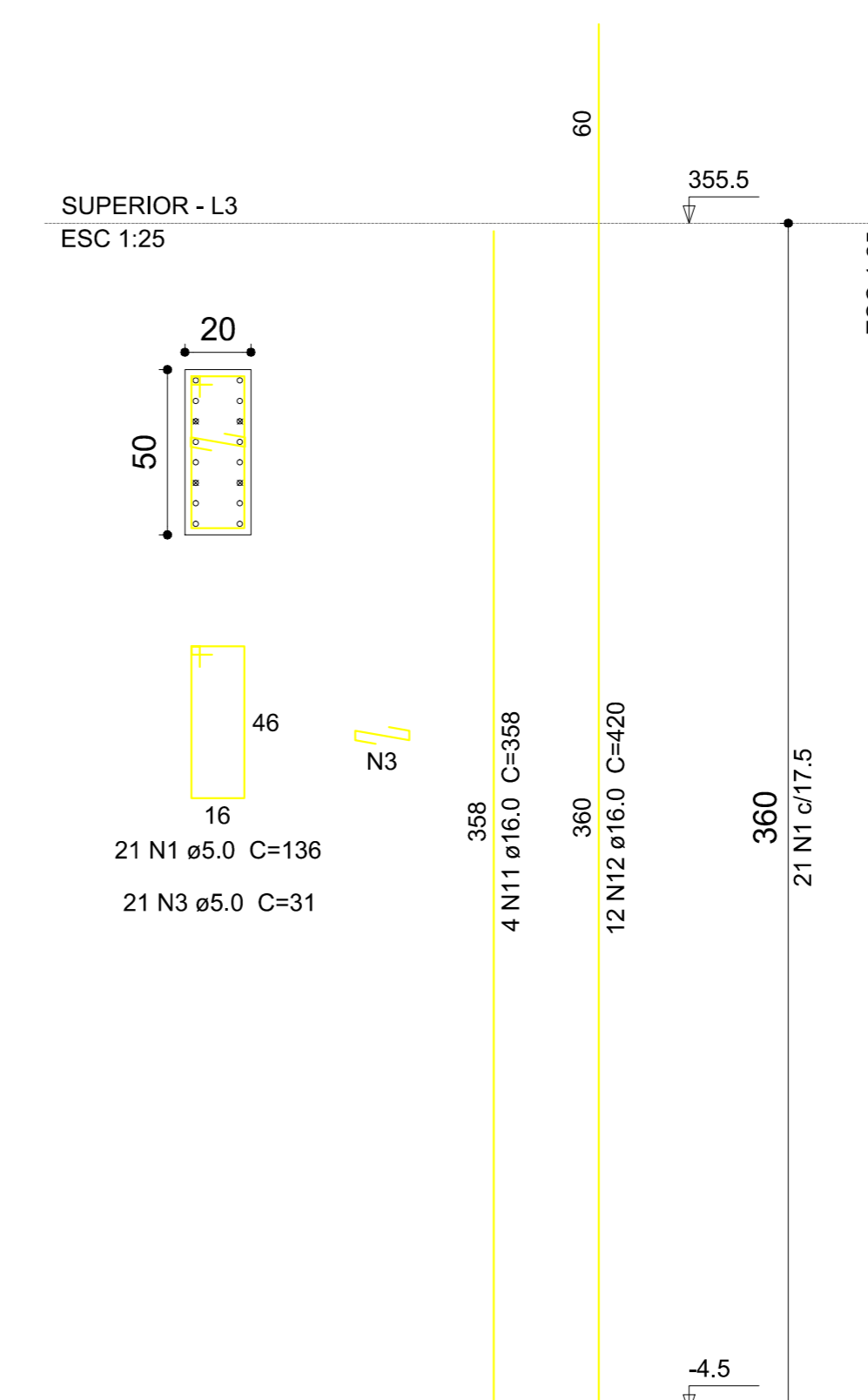
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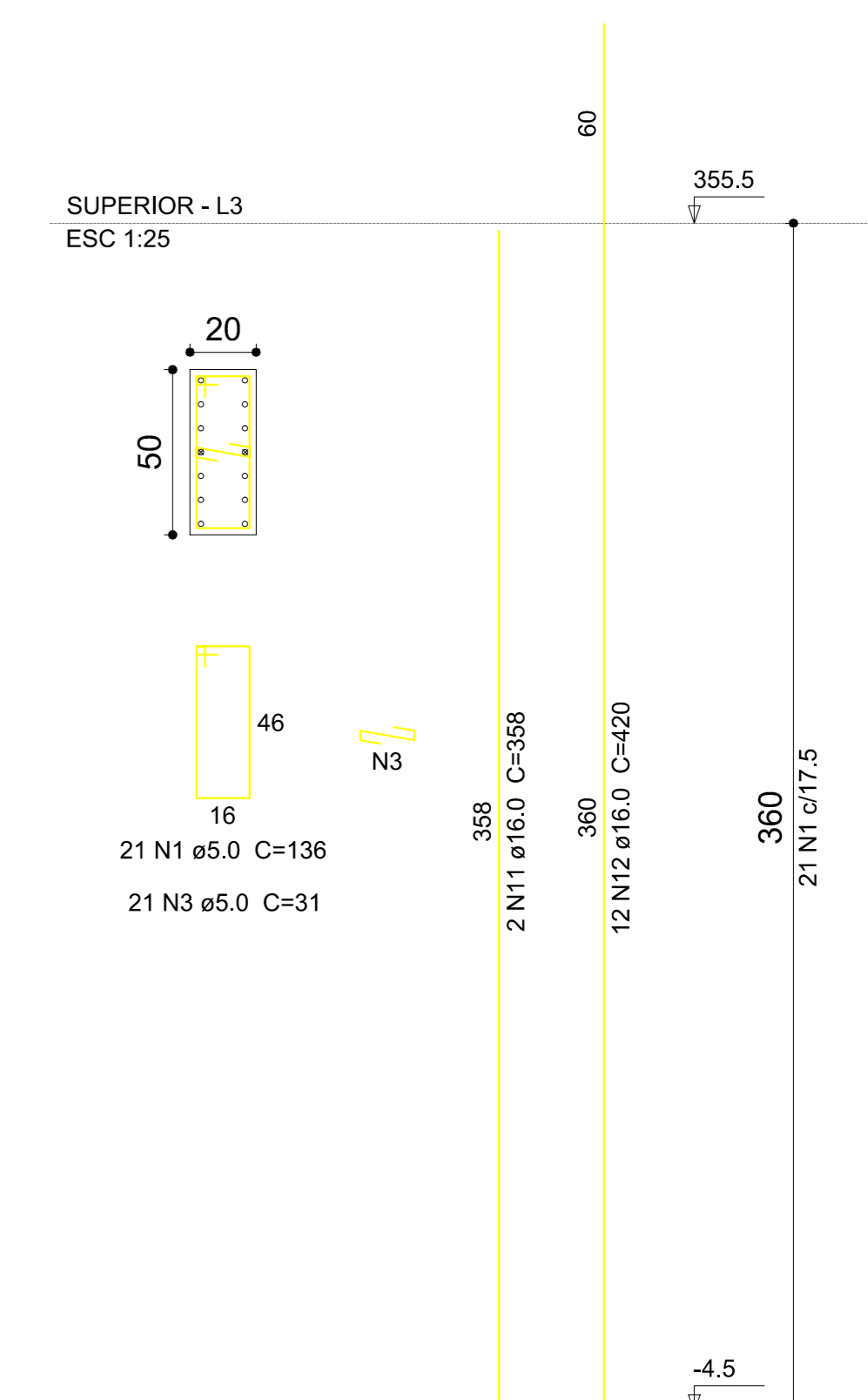
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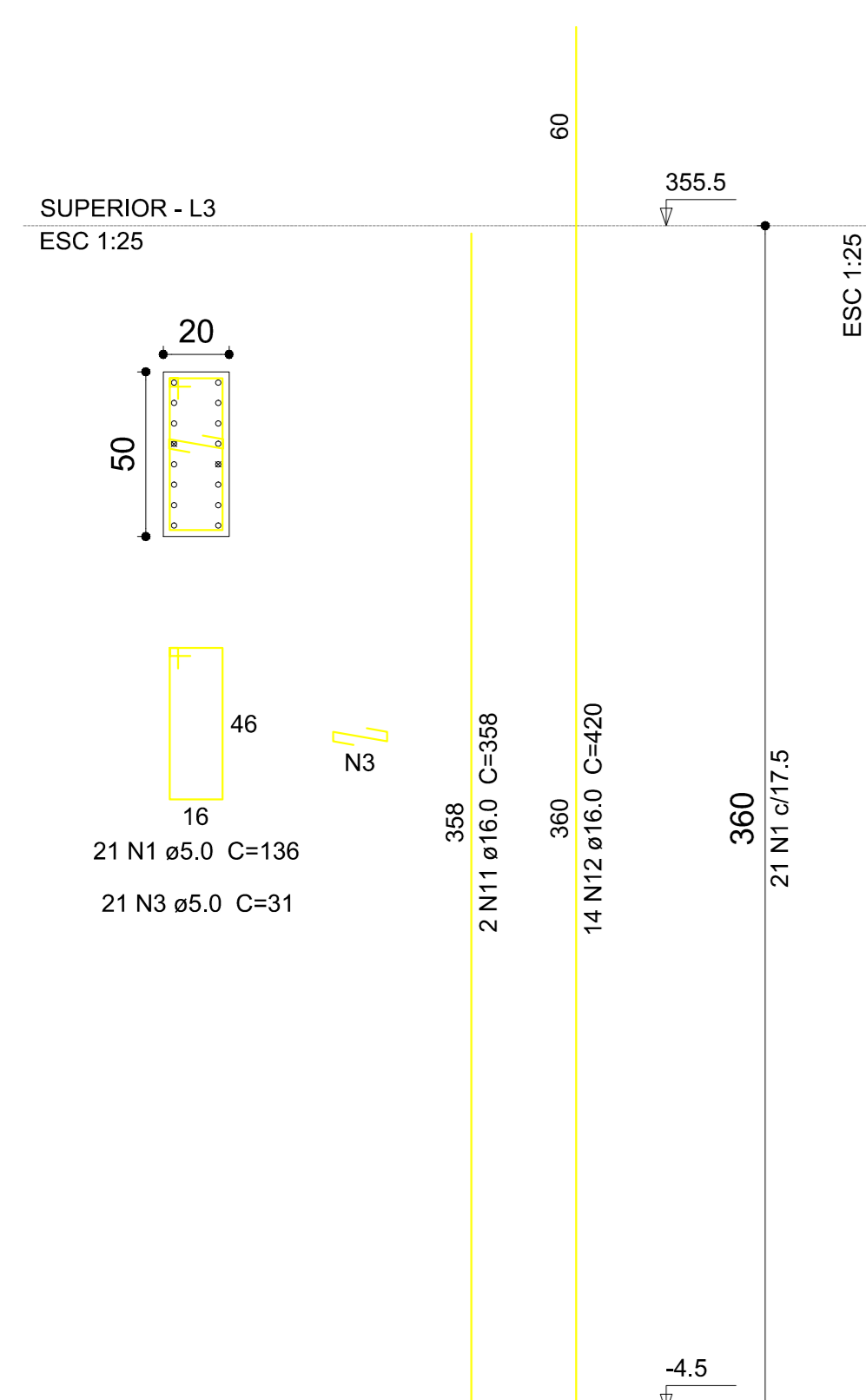
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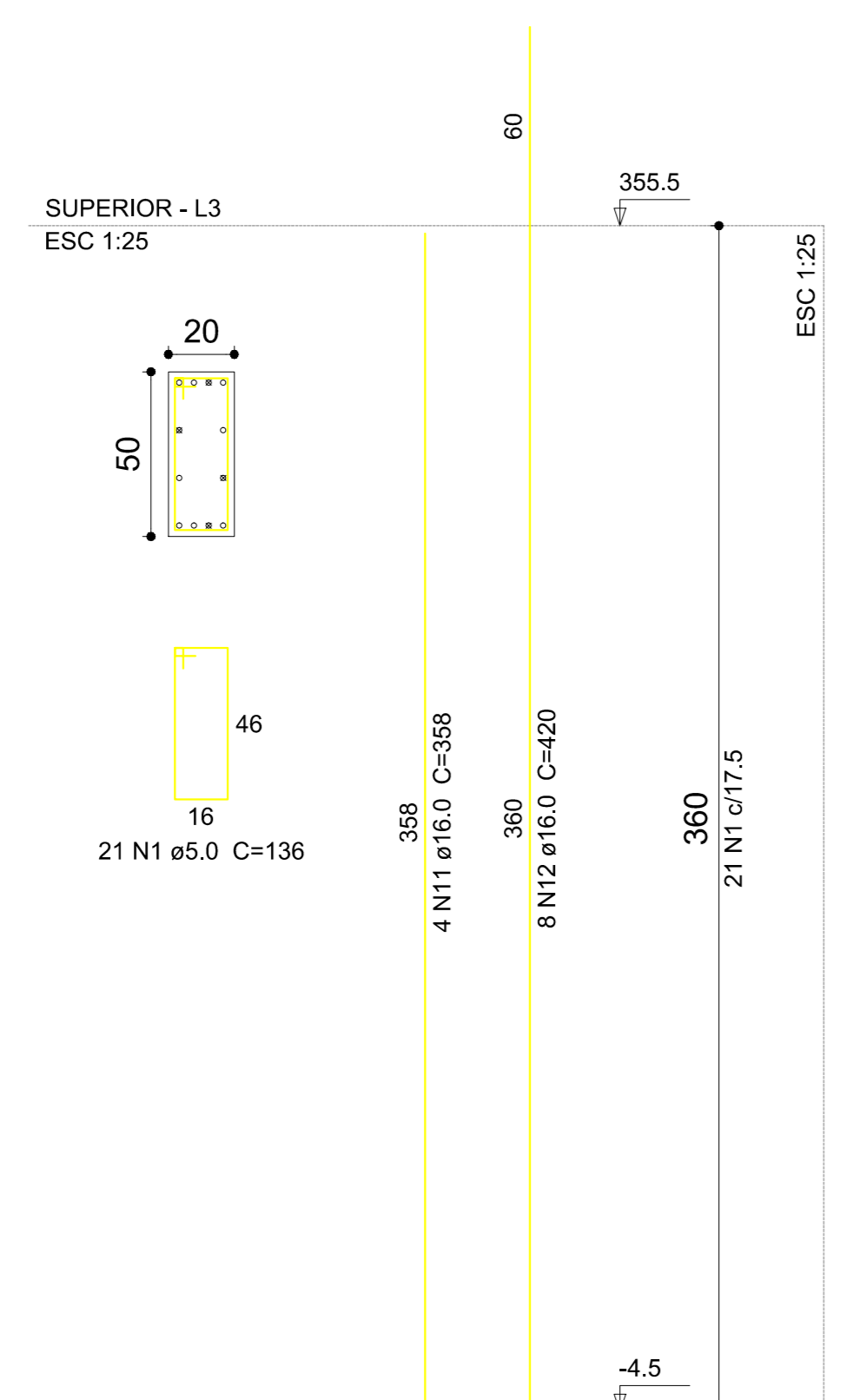
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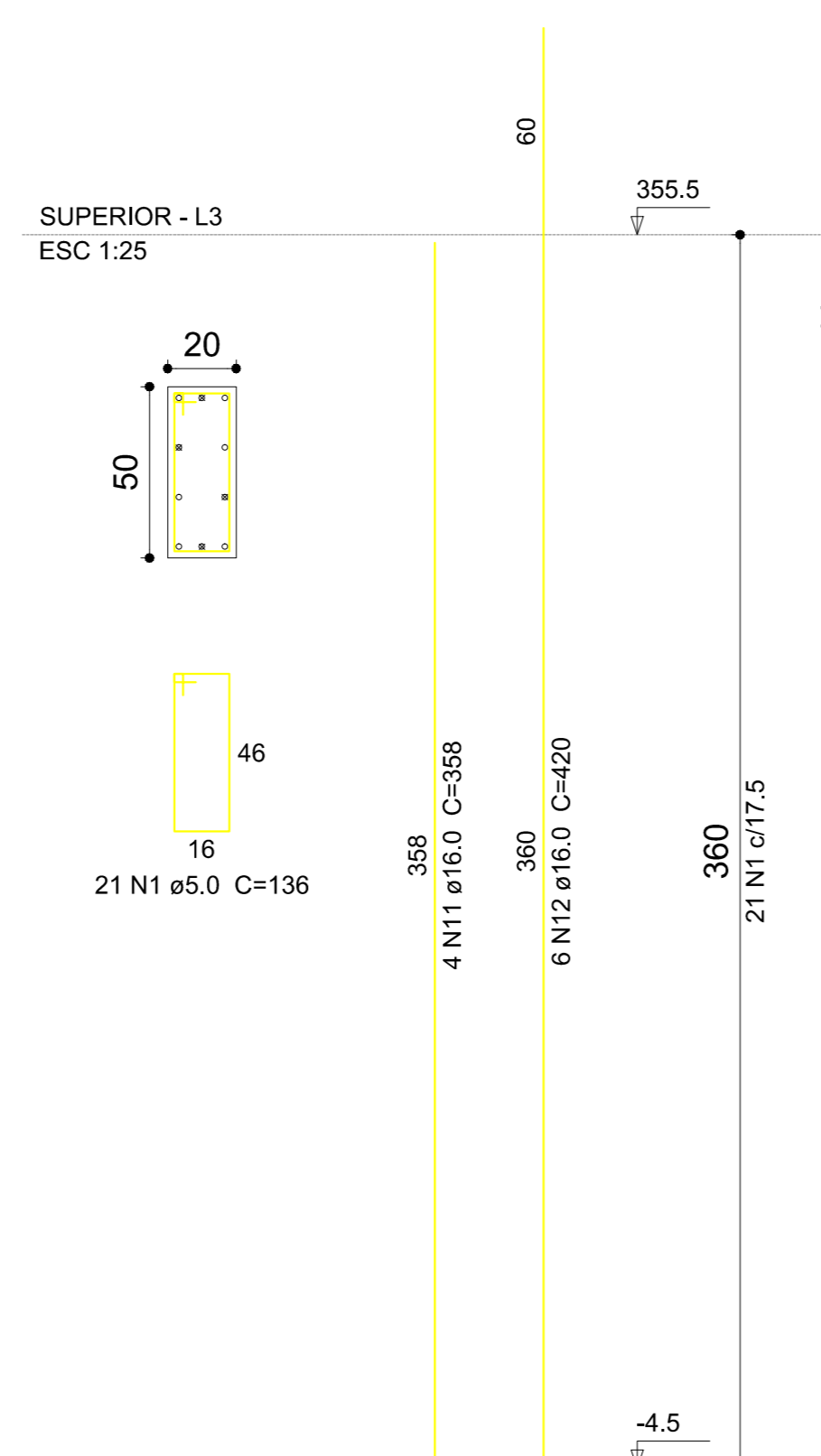
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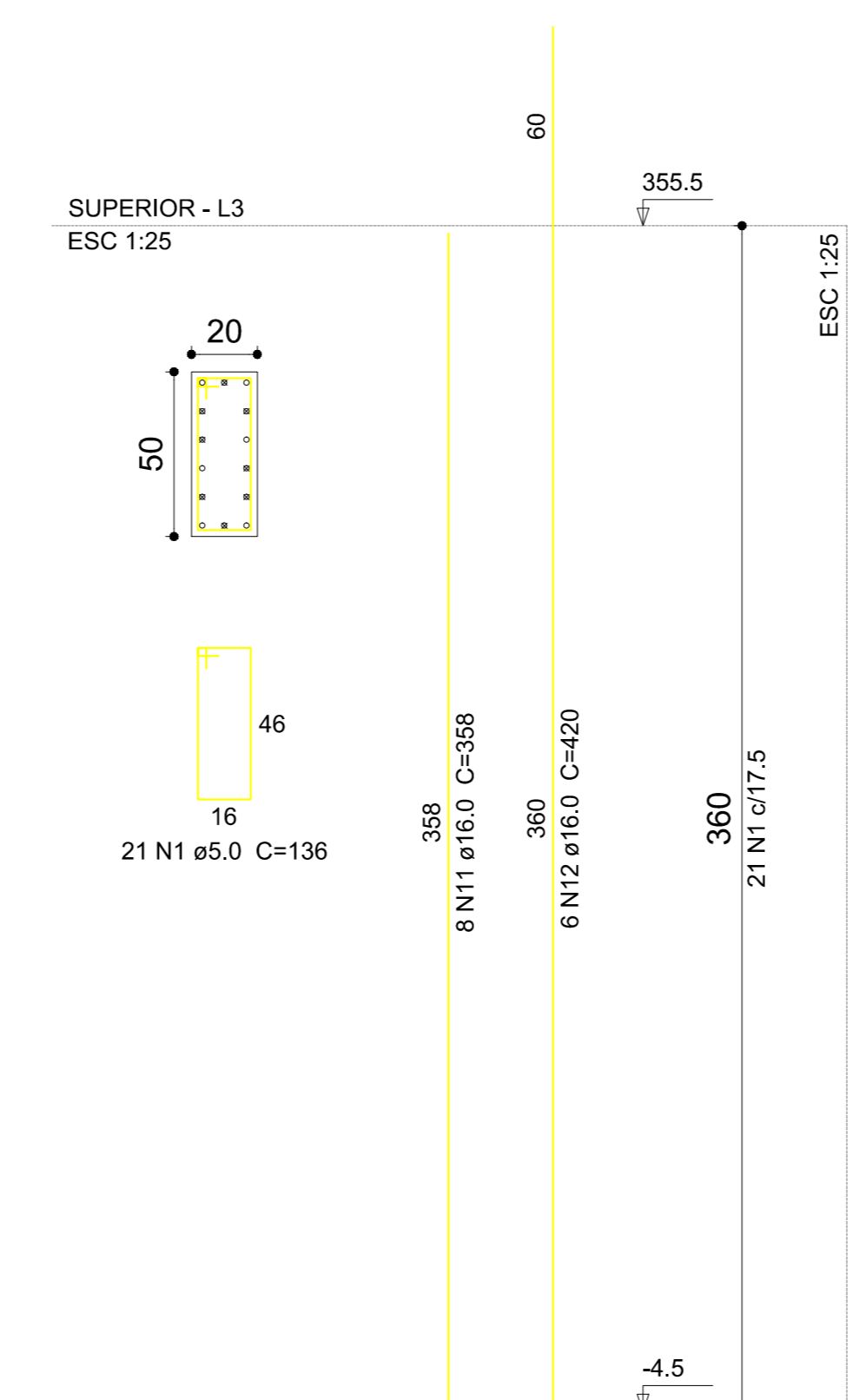
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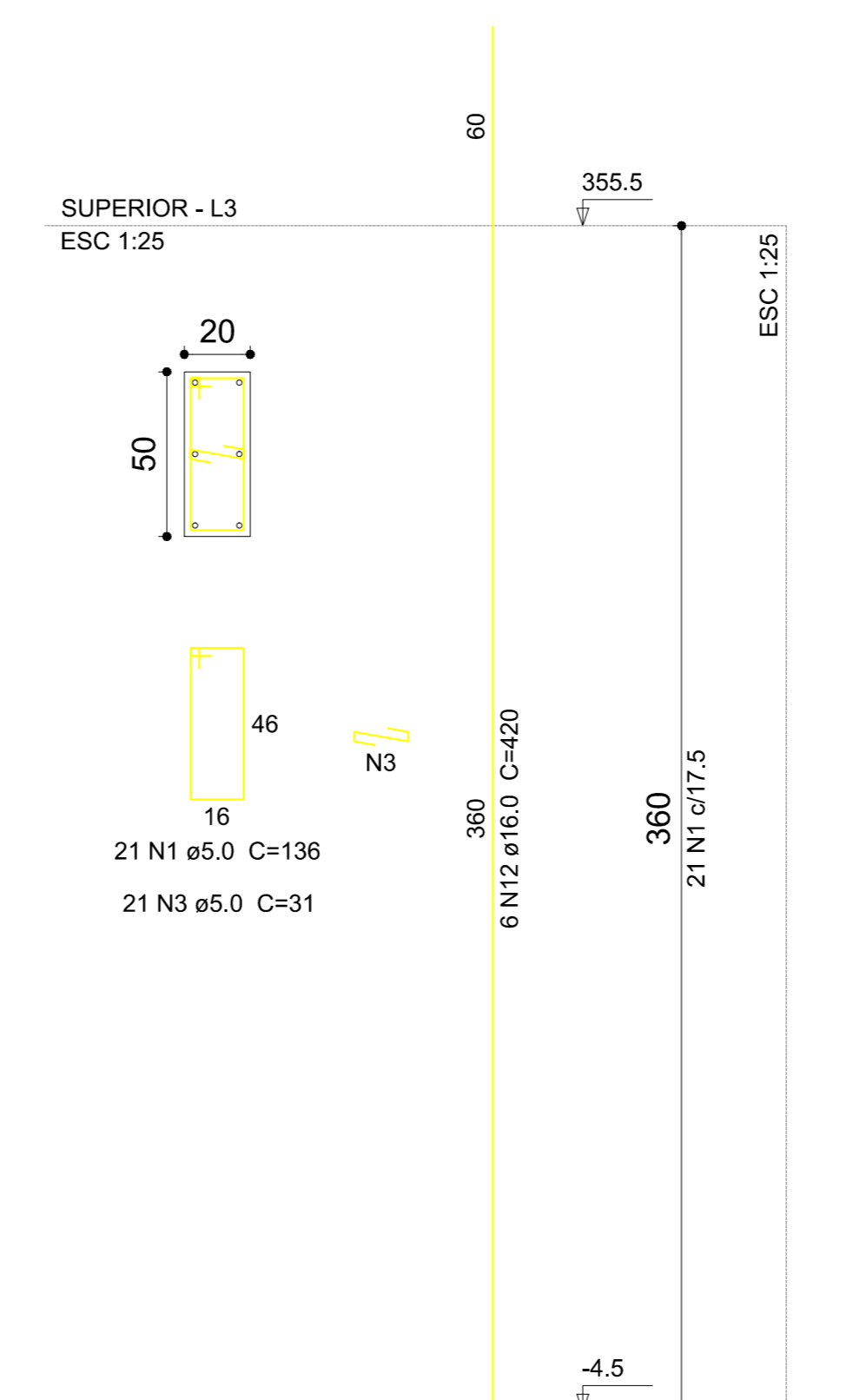
P3=P8=P11=P16=P21=P26=P34=P39



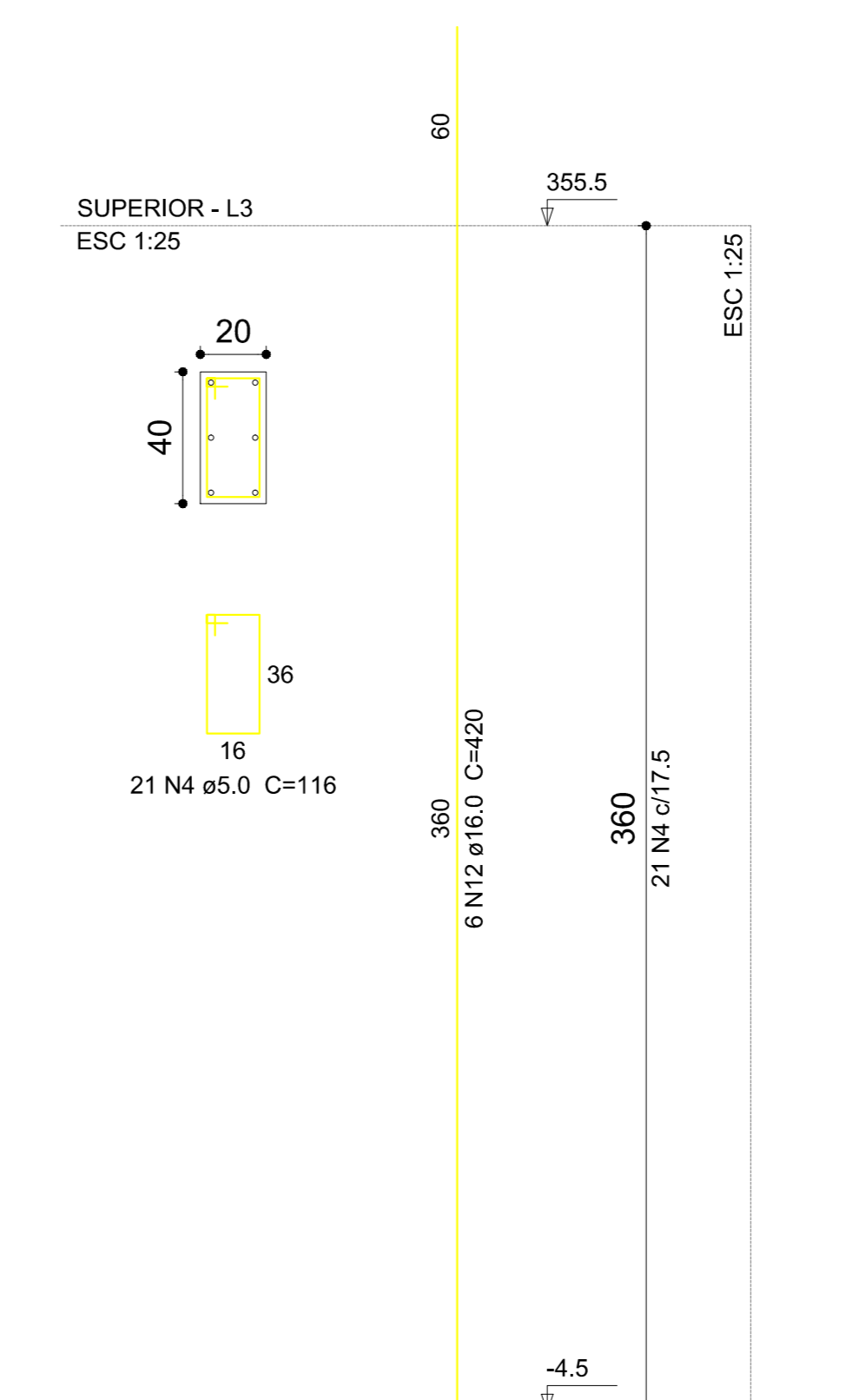
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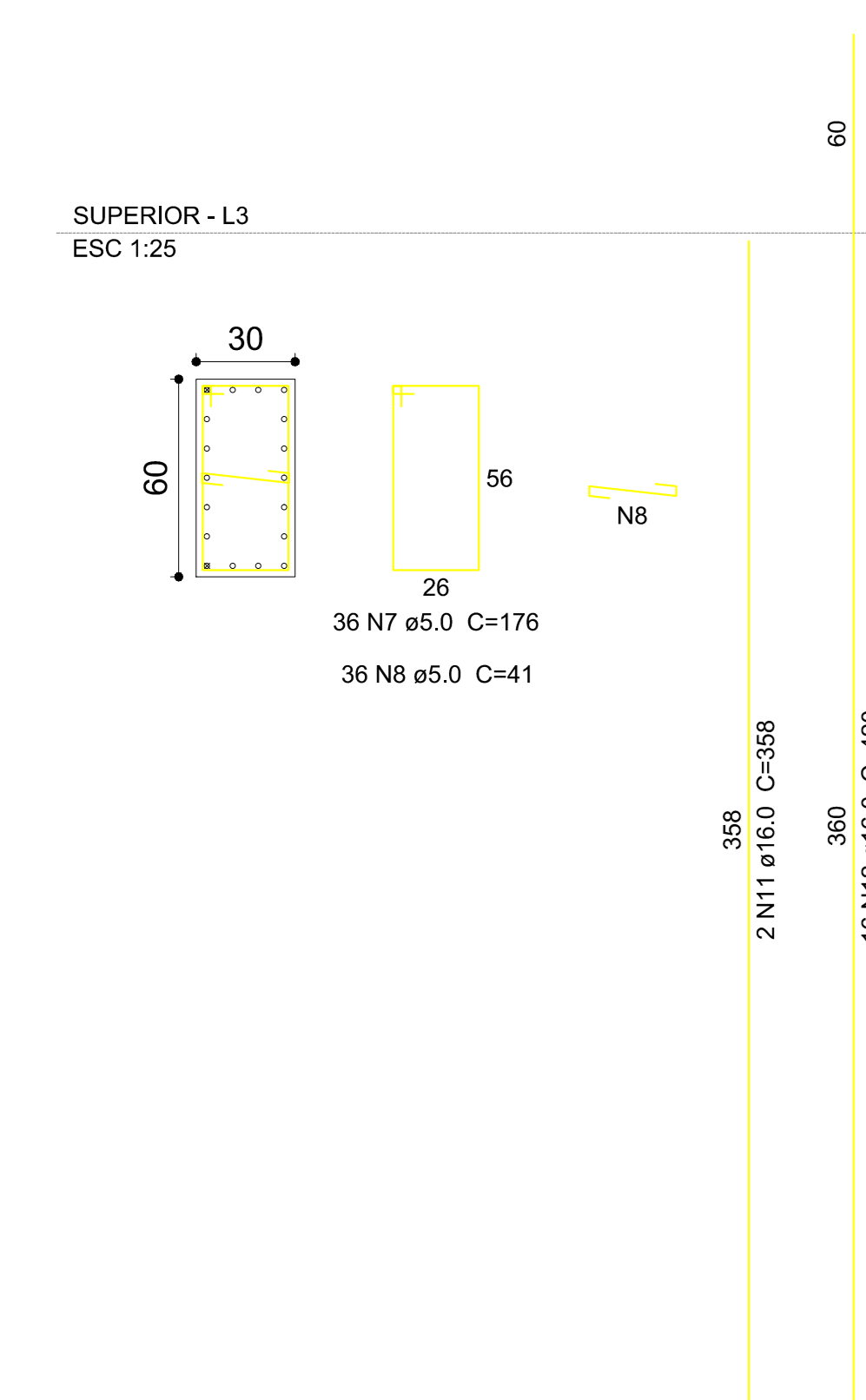
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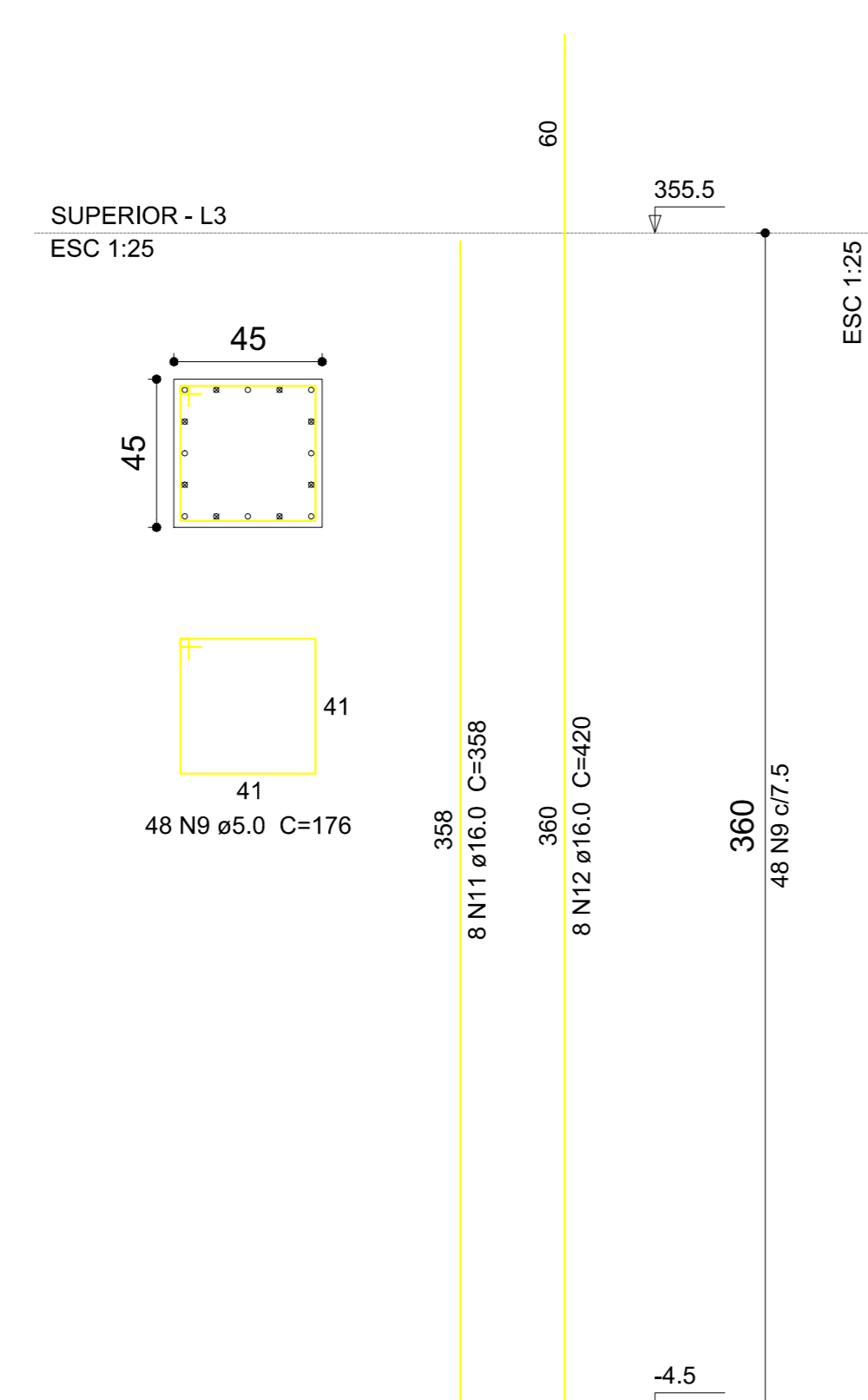
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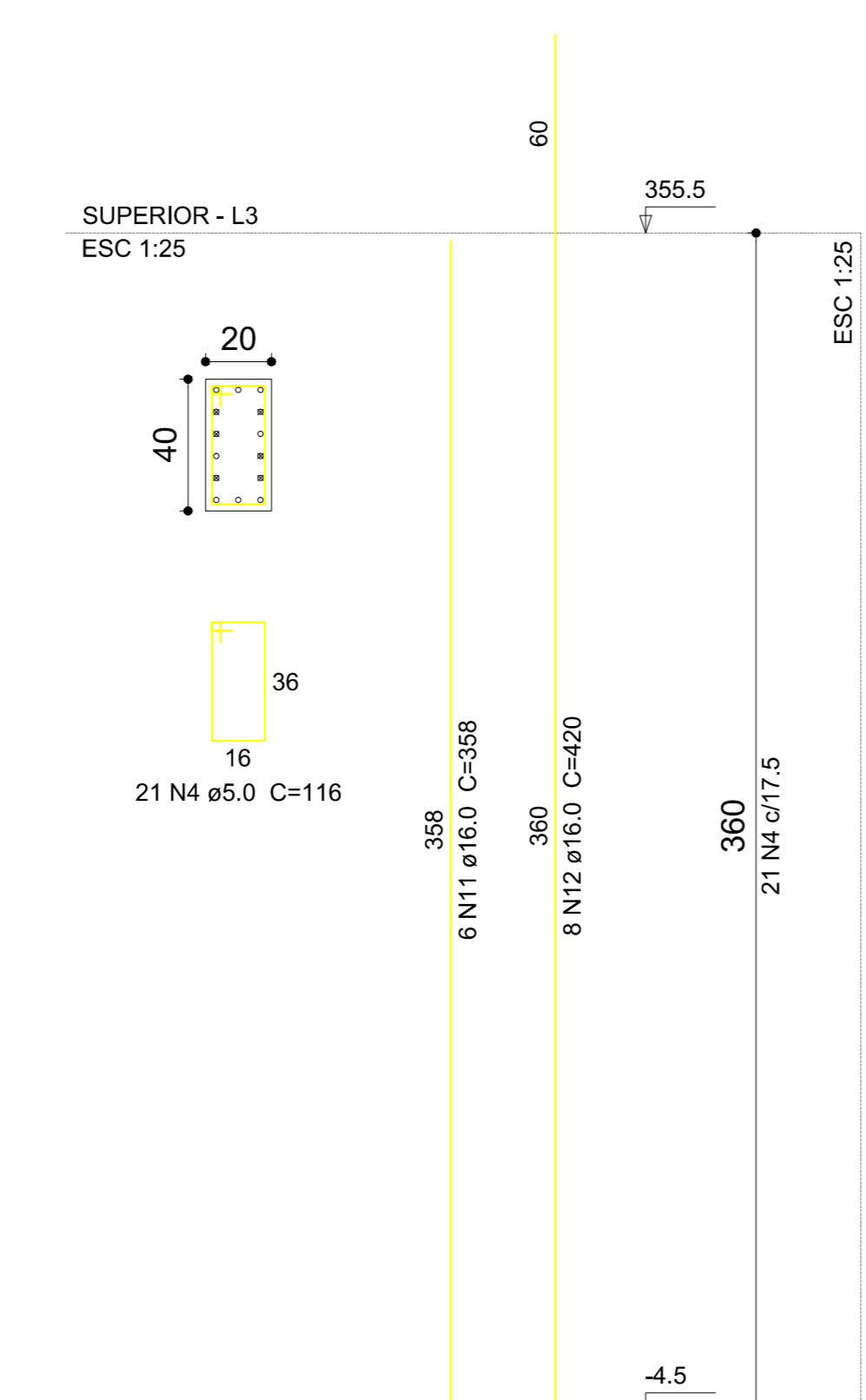
P44



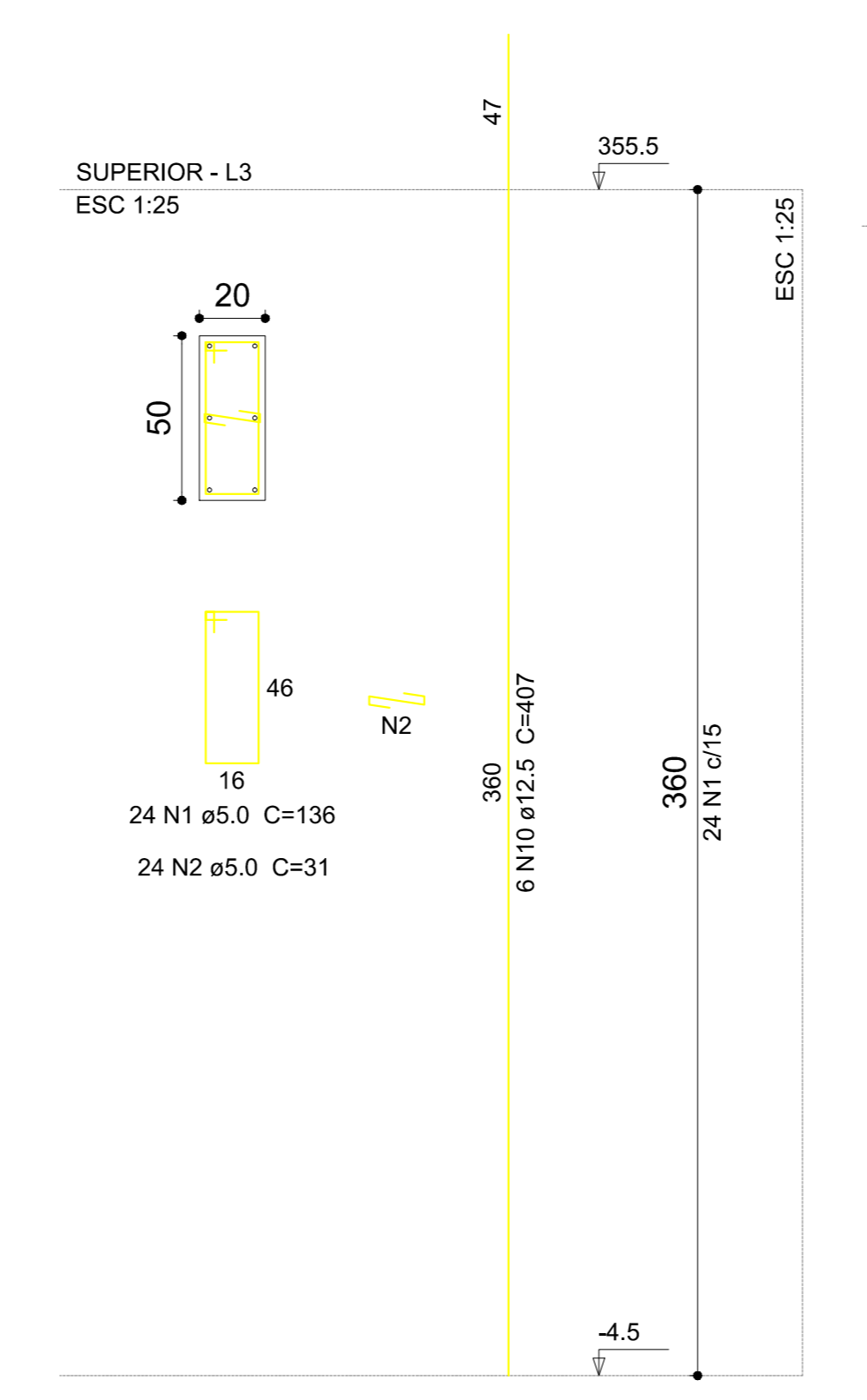
P45



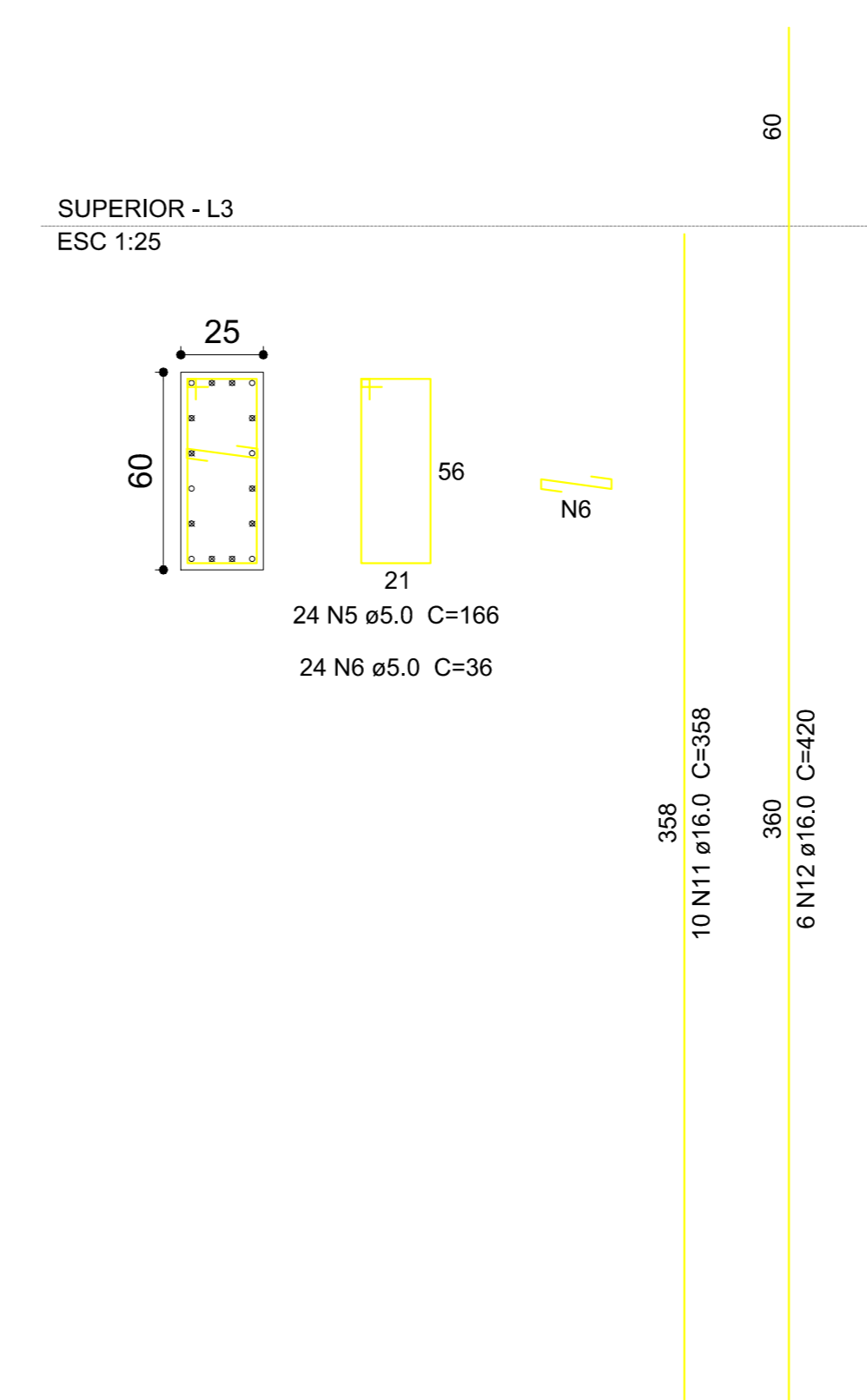
P46



P5=P6=P36=P37



P43



Relação do aço

AÇO	N	DIAM	Q	UNIT (cm)	C.TOTAL (cm)
2xP1	8xP2	8xP3			
4xP5	P10	4xP12			
4xP13	2xP15	2xP17			
2xP19	P23	P30			
P41	P42	P43			
P44	P45	P46			

Resumo do aço

AÇO	DIAM	C.TOTAL (m)	PESO + 10% (kg)
CA50	12.5	162.8	172.5
CA60	16.0	2050.3	3559.6
CA60	5.0	1627.6	275.9
<b>PESO TOTAL</b>			
CA50	3732.1		
CA60	275.9		

Vol. de concreto total (C-25) = 16.89 m³  
Área de forma total = 229.32 m²



# FB ENGENHARIA LTDA

Felisberto & Biava Associados

**FB ENGENHARIA LTDA**  
 CNPJ: 08.582.028/0001-96  
 CREA-SC - 82.125-1 - VIDEIRA-SC

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 www.fbengenharia.com  
 Fone: (49) 3566.5862

Cliente <b>INSTITUTO FEDERAL CATARINENSE</b>	Projeto <b>425</b>
Obra <b>EDIFICAÇÃO PARA SALAS DE AULA E OFICINAS</b>	Prancha <b>18/32</b>
Local <b>RODOVIA SC 303 - VIDEIRA - SC</b>	
Resp. técnico <b>Eng. Civil FABIANO BIAVA</b> CREA SC - 67691-9	Assinatura Proprietário
Descrição <b>PILARES DO SUPERIOR</b>	
Desenho <b>FB ENGENHARIA</b>	Unidade <b>CENTIMETROS</b>
Data <b>FEVEREIRO/2013</b>	Escala <b>INDICADA</b>
Área <b>2,546,16m²</b>	