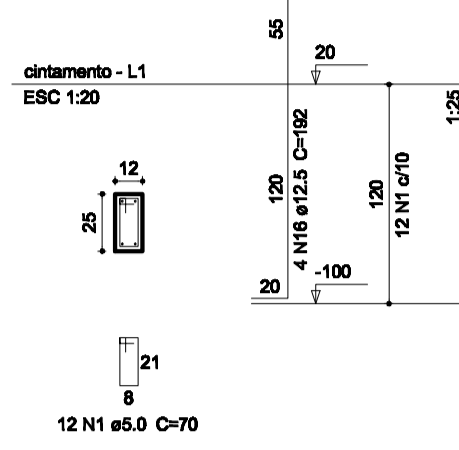
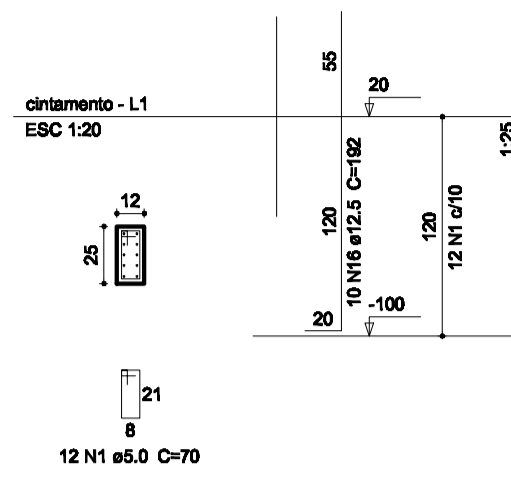


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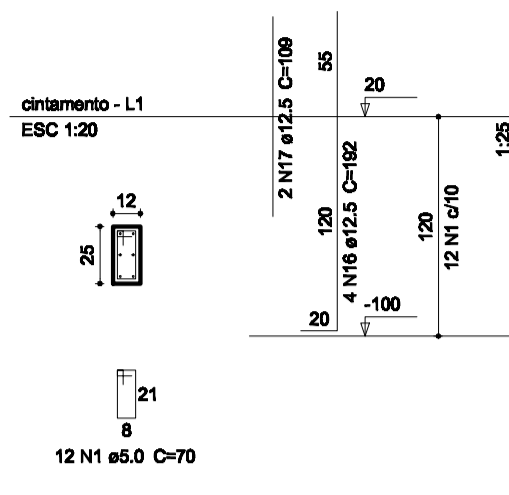


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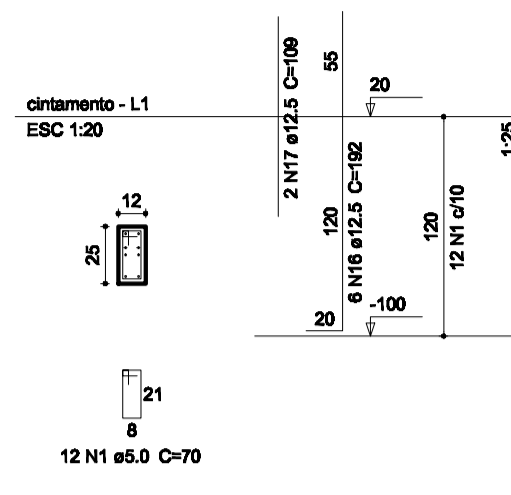


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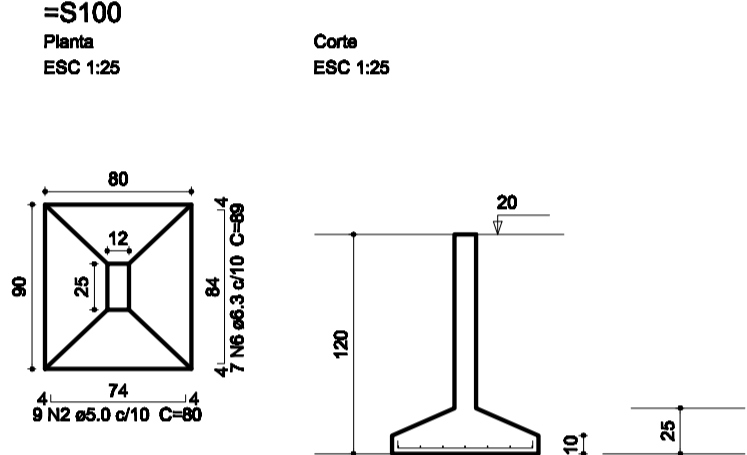
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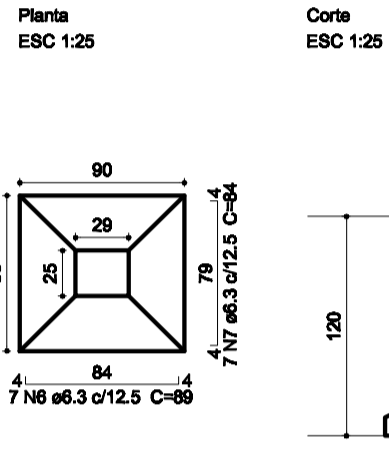
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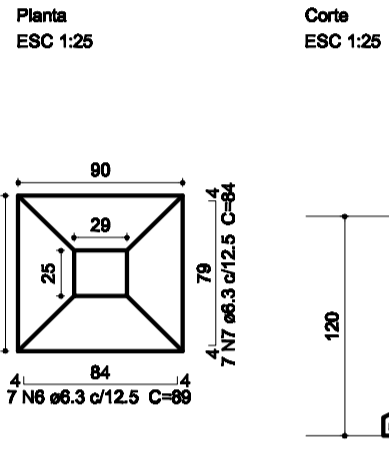
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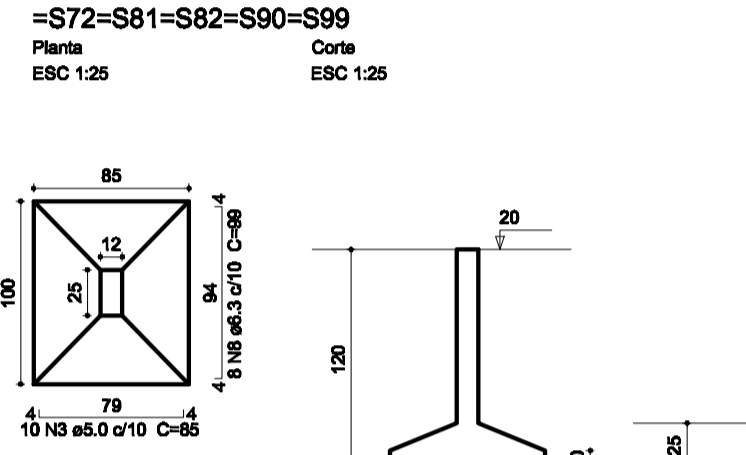
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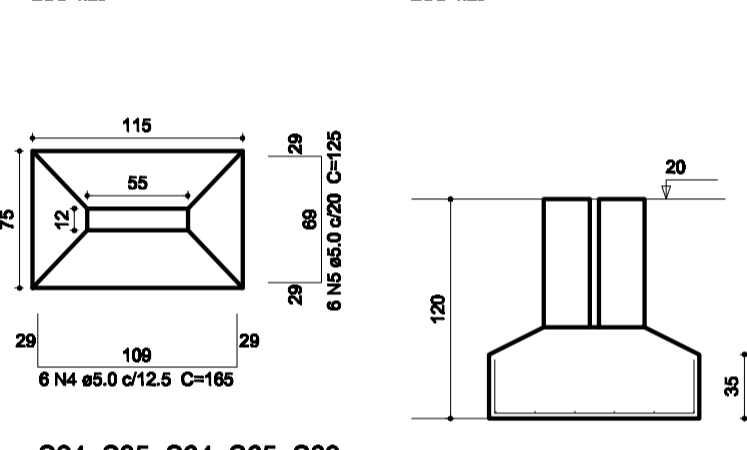
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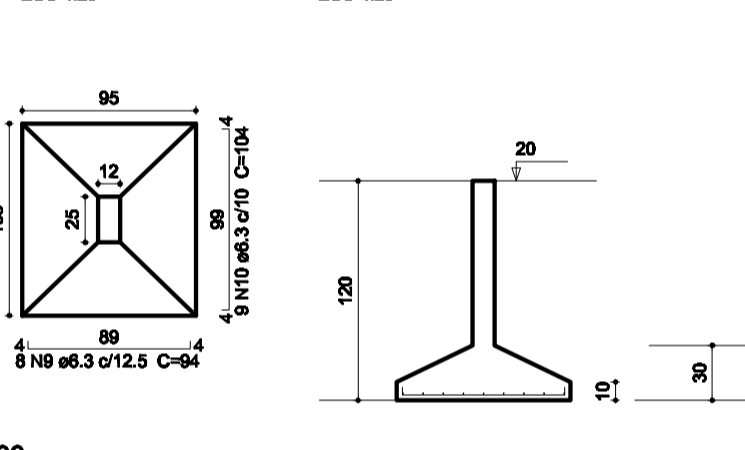
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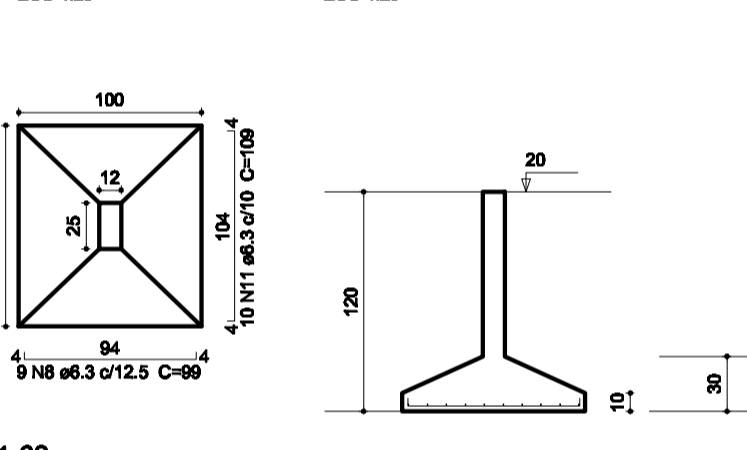
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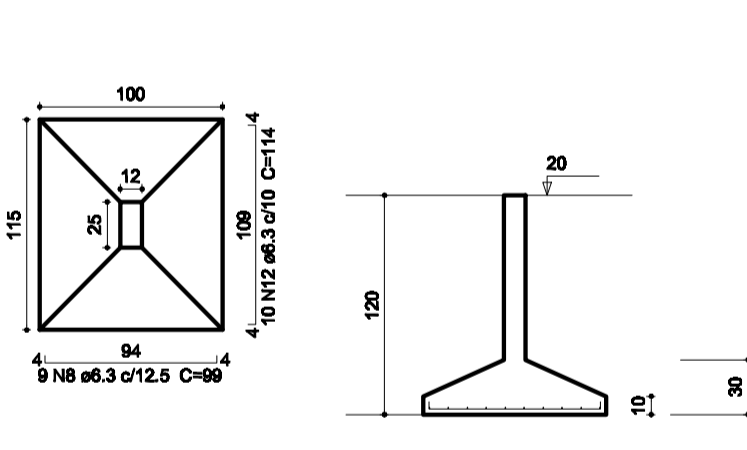
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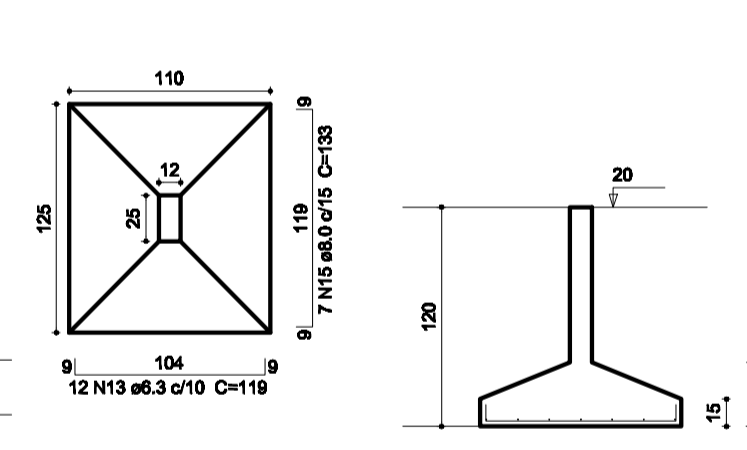
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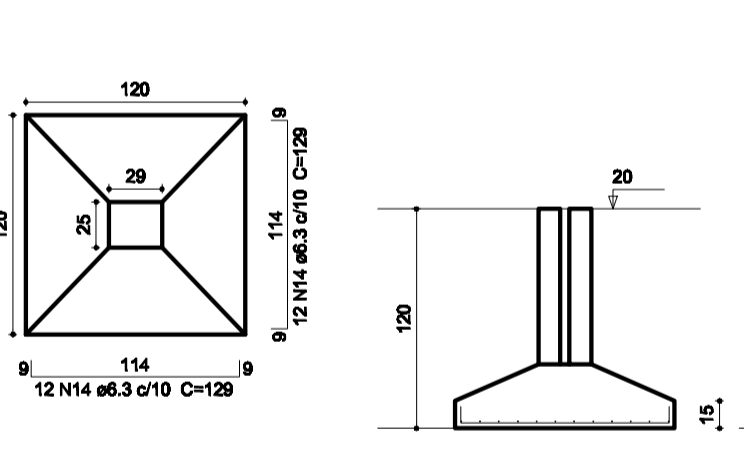
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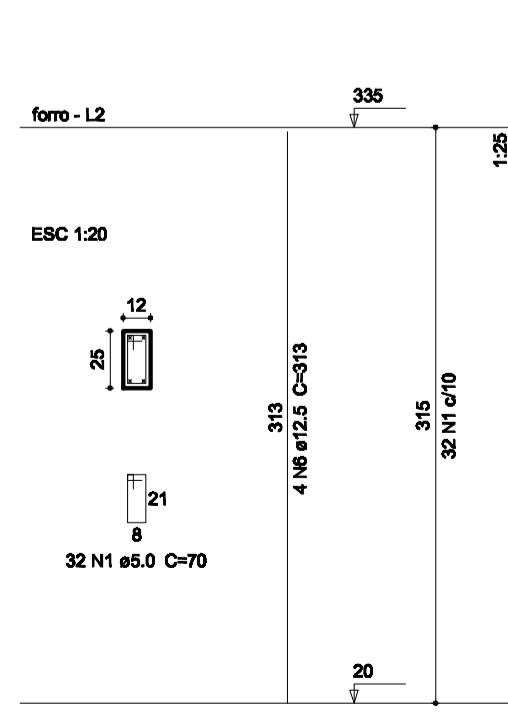
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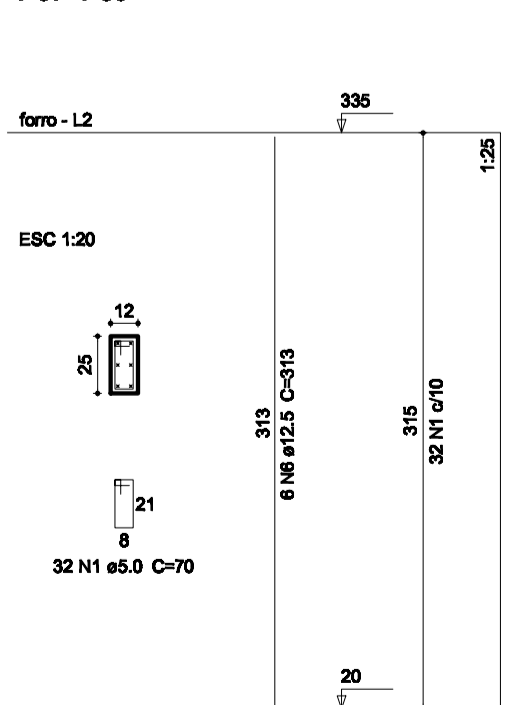
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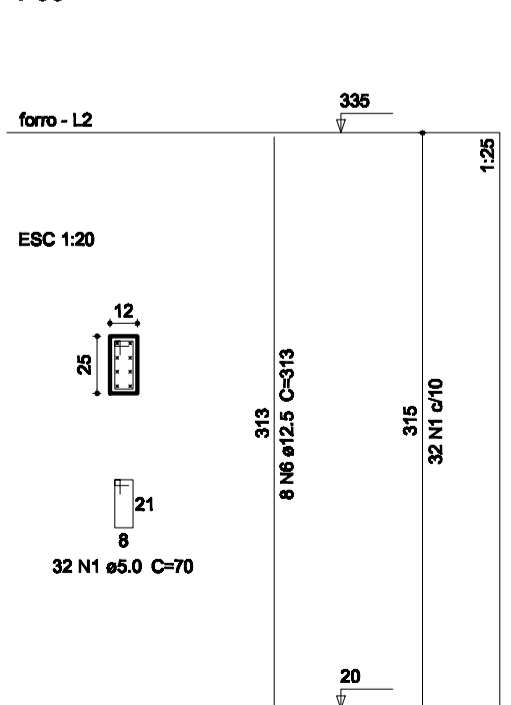
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P67-P89



P93



Relação do aço

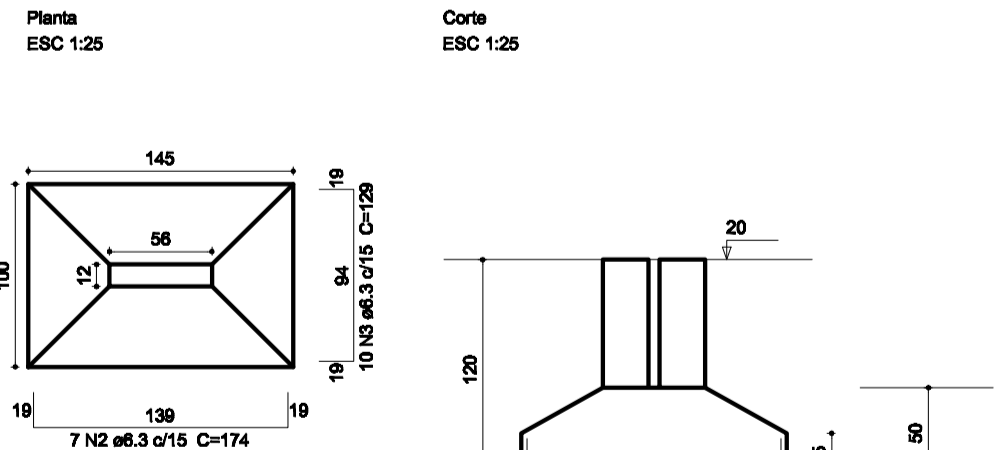
diâmetro	80	89-P1	879-80		
forma	80	P93	2xP87		
AÇO	N	DIAM	Q	UNIT (cm)	C.TOTAL (cm)
CA80	1	5.0	2844	70	200000
CA50	2	6.3	7	174	1218
	3	6.3	10	129	1290
	4	6.3	13	134	1742
	5	8.0	10	143	1430
	6	12.5	378	313	117888

Resumo do aço

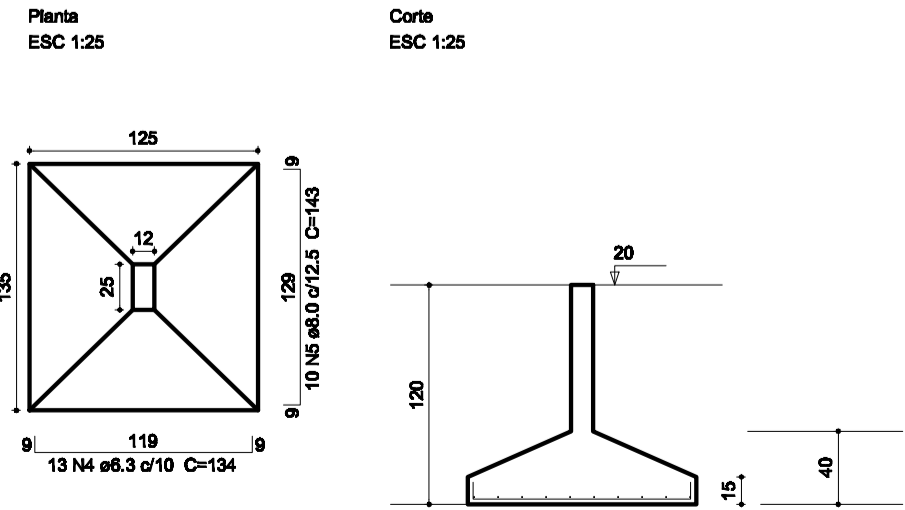
AÇO	DIAM	C.TOTAL (m)	PESO (kg)
CA80	6.3	42.5	10.4
	8.0	14.3	5.8
	12.5	1178.9	1133.7
CA50	5.0	2060.8	317.6
<b>PESO TOTAL</b>			
CA80		1148.6	
CA50		317.6	

Vol. de concreto total (C-20) = 9.62 m³  
 Área de forma total = 216.46 m²

S79-80



S60



Relação do aço

AÇO	N	DIAM	Q	UNIT (cm)	C.TOTAL (cm)
CA80	1	5.0	1184	70	81480
	2	5.0	423	80	33840
	3	5.0	160	85	13600
	4	5.0	6	185	990
	5	5.0	6	125	750
CA50	6	6.3	343	89	30527
	7	6.3	14	84	1176
	8	6.3	200	99	19800
	9	6.3	80	84	7200
	10	6.3	80	104	8380
	11	6.3	30	108	3270
	12	6.3	90	114	8700
	13	6.3	24	119	2856
	14	6.3	24	129	3086
	15	6.0	14	133	1862
	16	12.5	388	182	78416
	17	12.5	4	109	436

Resumo do aço

AÇO	DIAM	C.TOTAL (m)	PESO (kg)
CA50	6.3	853.1	203.9
	8.0	18.7	7.3
	12.5	788.6	740.3
CA80	5.0	1306.6	201.4
<b>PESO TOTAL</b>			
CA50		861.5	
CA80		201.4	

Vol. de concreto total (C-20) = 16.16 m³  
 Área de forma total = 119.61 m²

NOTAS IMPORTANTES:

- A EXECUÇÃO DA ESTRUTURA DEVERÁ OBEDECER AS PRESCRIÇÕES DA NBR-6118
- O RESPECTIVO PROJETO ESTRUTURAL, SE COMPLEMENTAR COM PROJETO ARQUITETÔNICO E OS PROJETOS COMPLEMENTARES DEVENDO SER ANALIZADAS TODAS AS INTERFERÊNCIAS ENTRE OS PROJETOS ANTES DO INÍCIO DA OBRA
- COTAS E DIMENSÕES EM CENTÍMETROS
- Fck= 25 MPa
- RECOBRIMENTO: LAJES: 2,0 cm
- PILARES: 2,0 cm

RAIO (r) DE DOBRAMENTO PARA GANCHOS

BTOLA	CA50	CA60
≤ 20mm	2,5x	3x
21-25mm	4x	5x
26-32mm	5x	6x
33-38mm	6x	7x
39-45mm	7x	8x
46-52mm	8x	9x
53-60mm	9x	10x
61-70mm	10x	11x
71-80mm	11x	12x
81-90mm	12x	13x
91-100mm	13x	14x
101-110mm	14x	15x
111-120mm	15x	16x
121-130mm	16x	17x
131-140mm	17x	18x
141-150mm	18x	19x
151-160mm	19x	20x
161-170mm	20x	21x
171-180mm	21x	22x
181-190mm	22x	23x
191-200mm	23x	24x