

2) For Detail "B"

a) Design Tension Force

	Tension Force	=	18.44 kN	
Provide 2 x 3 nos. rebar	Force per Rebar	=	$18.44 / (3 \times 2)$	
		=	3.07 kN	
Refer to RE-500 catalog, capacity for Y10		=	34.1 kN	
	F.O.S.	=	$34.1 / 3.07$	
		=	11.10 > 3	OK

b) Weld on Rebar

	weld length	=	$10\pi = 31.42$	mm
	weld stress	=	$(3.07 \times 1000) / 31.42 \times 0.6$	
		=	59 N/mm	
	Allowable stress	=	$0.7 \times 6 \times 220$	
		=	924 N/mm	
		>	59 N/mm	OK

c) Weld on angle

	weld length	=	$150 \times 2$	
		=	300 mm	
	weld stress	=	$18.44 \times 1000 / 300$	
		=	61.46 N/mm	
		<	924 N/mm	OK

