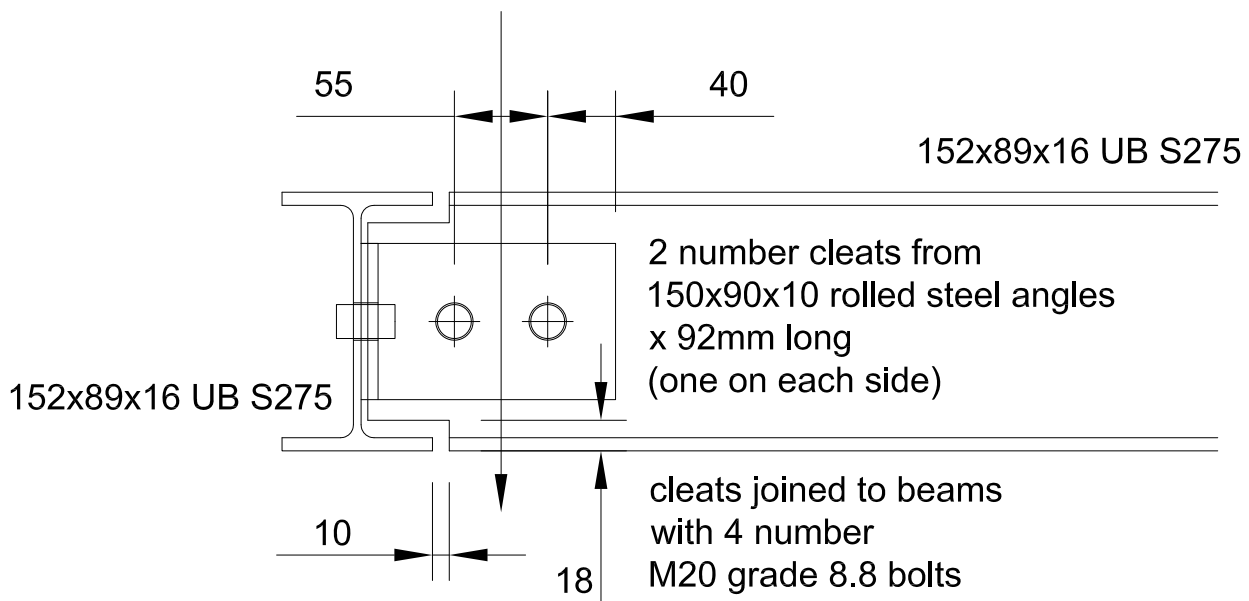


Connection Detail 152x89x16 UB

maximum factored load = 20 kN



Bearing Capacity of M20 bolt passing through 4.5mm thick S275 steel = 37.9 kN

$2 \times 37.9 \text{ kN} = 75.8 \text{ kN} > 20 \text{ kN}$ therefore OK

Shearing Resistance of M20 grade 8.8 bolt = 94.1 kN

$2 \times 94.1 \text{ kN} = 188.2 \text{ kN} > 20 \text{ kN}$ therefore OK

Values from P363 Steel Building Design: Design Data, In accordance with Eurocodes and the UK National Annexes.