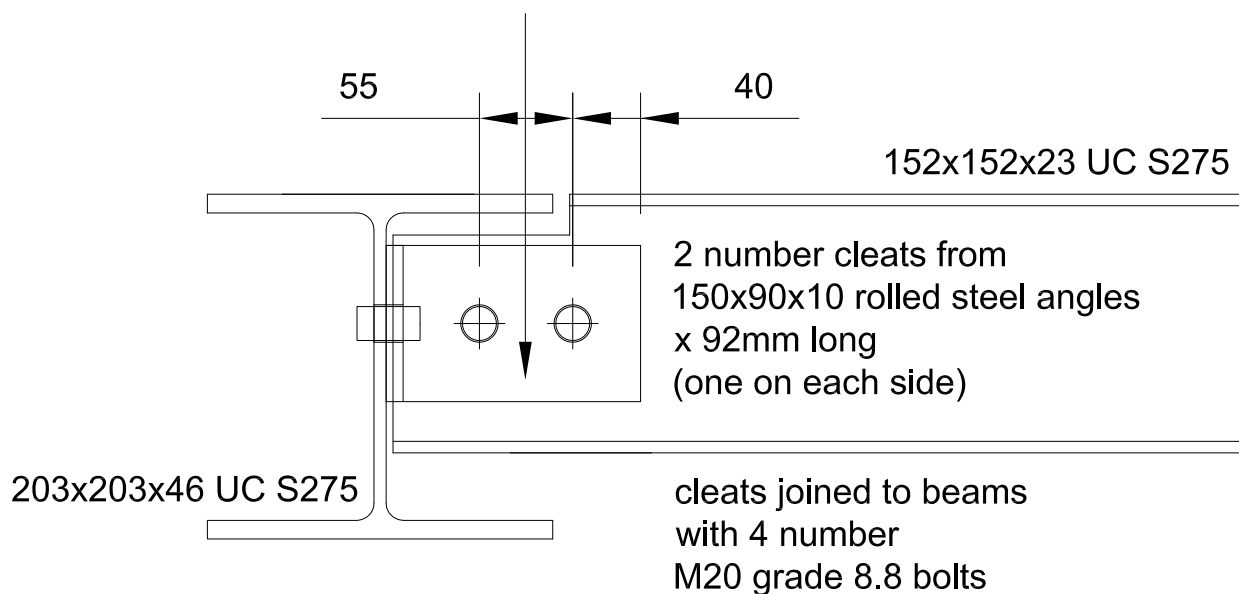


Connection Detail between 152x152x23 UC and 203x203x46 UC

maximum factored load = 25 kN



Bearing Capacity of M20 bolt passing through 5.8mm thick
S275 steel = 48.8 kN

$2 \times 48.8 \text{ kN} = 97.6 \text{ kN} > 25 \text{ kN}$ therefore OK

Shearing Resistance of M20 grade 8.8 bolt = 94.1 kN

$2 \times 94.1 \text{ kN} = 188.2 \text{ kN} > 25 \text{ kN}$ therefore OK

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