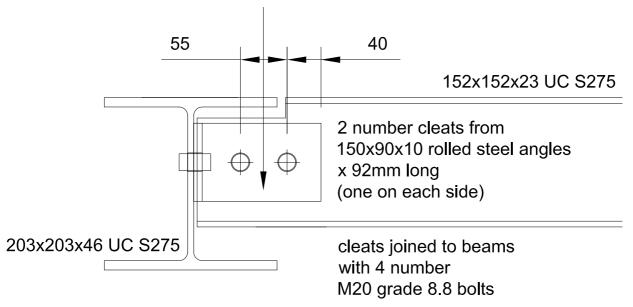
Connection Detail between 152x152x23 UC and 203x203x46 UC

maximum factored load = 25 kN



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

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

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.