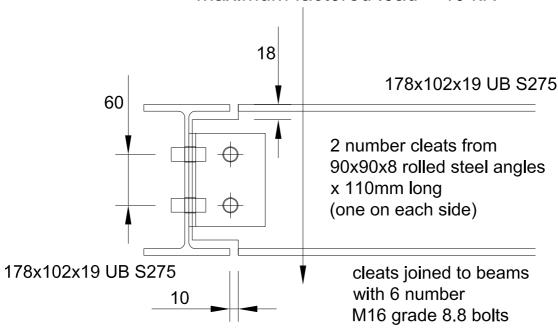
Connection Detail 178x102x19 UB

maximum factored load = 40 kN



Bearing Capacity of M16 bolt passing through 4.8mm thick S275 steel = 32.7 kN

 $2 \times 32.7 \text{ kN} = 65.4 \text{ kN} > 40 \text{ kN}$ therefore OK

Shearing Resistance of M16 grade 8.8 bolt = 188 kN

 $2 \times 188 \text{ kN} = 376 \text{ kN} > 40 \text{ kN} \text{ therefore OK}$

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