Connection Detail 203x133x30 UB

maximum factored load = 60 kN

20

203x133x30 UB S275

2 number cleats from
90x90x8 rolled steel angles
x 130mm long
(one on each side)

70

203x133x30 UB S275

10

cleats joined to beams
with 6 number
M16 grade 8.8 bolts
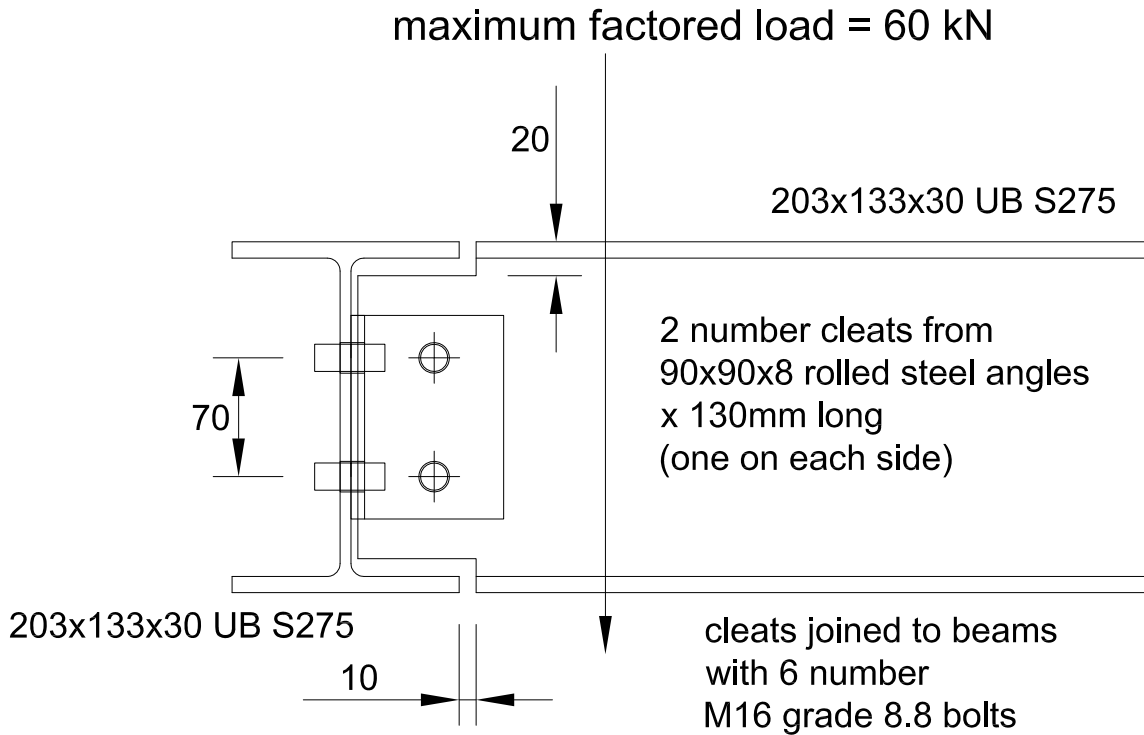
Bearing Capacity of M16 bolt passing through 5.4mm thick
S275 steel = 43.6 kN

2 x 43.6 kN = 87.2 kN > 60 kN therefore OK

Shearing Resistance of M16 grade 8.8 bolt = 60.3 kN

4 x 60.3 kN = 241.2 kN > 60 kN therefore OK

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