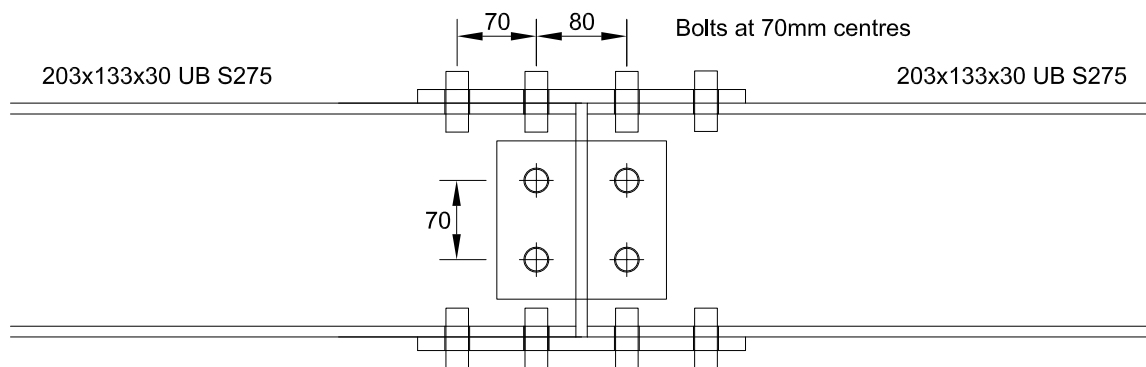


Splice Connection Detail 203x133x30 UB

maximum factored bending moment = 40 kNm
maximum factored shear = 20 kN



M20 HR8.8 Preload bolts (HSFG Type) throughout

140x290x10mm S275 steel flange plates

150x140x8mm S275 steel web plates both sides of web

Flange Bolts Shear Resistance

$$0.7 \times 800 \times 245 \times 0.45/1.25 \times 4/10^3 = 197.6 \text{ kN}$$

$$40 \times 10^3 / (206.8 + 10) = 184.5 \text{ kN} < 197.6 \text{ kN therefore OK}$$

Web Bolts Shear Resistance

$$0.7 \times 800 \times 245 \times 0.45/1.25 \times 2/10^3 = 98.8 \text{ kN}$$

$$20 \text{ kN} < 98.8 \text{ kN therefore OK}$$