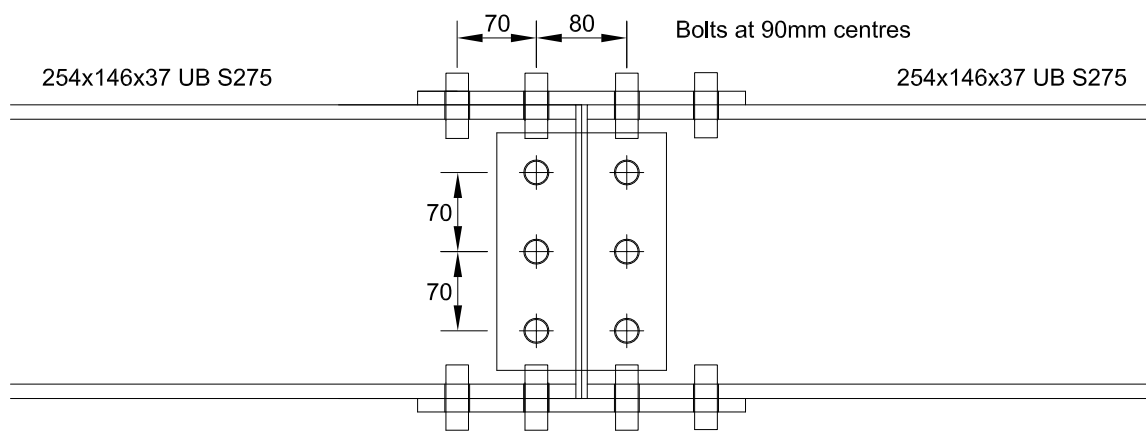


Splice Connection Detail 254x146x37 UB

maximum factored bending moment = 50 kNm
maximum factored shear = 30 kN



M20 HR8.8 Preload bolts (HSFG Type) throughout

130x290x10mm S275 steel flange plates

150x210x8mm S275 steel web plates both sides of web

Flange Bolts Shear Resistance

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

$$50 \times 10^3 / (259.6 + 10) = 185.5 \text{ kN} < 197.6 \text{ kN therefore OK}$$

Web Bolts Shear Resistance

$$0.7 \times 800 \times 245 \times 0.45/1.25 \times 3/10^3 = 148.2 \text{ kN}$$

$$30 \text{ kN} < 148.2 \text{ kN therefore OK}$$