

2 LASCELLES AVENUE

Feb 15

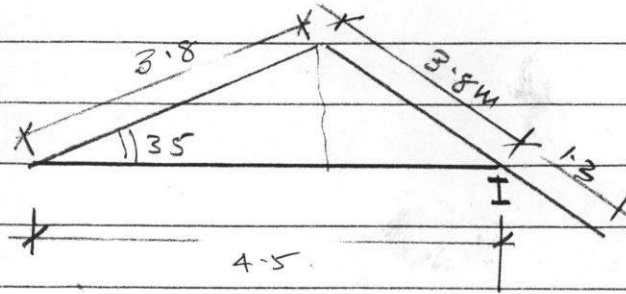
Design Steel Beam to support Roof. span 6.7m over
See section.

Loading

Roof DL = 0.75 kNm²

LL = 0.75 kNm²

Ceiling = 0.25 kNm²



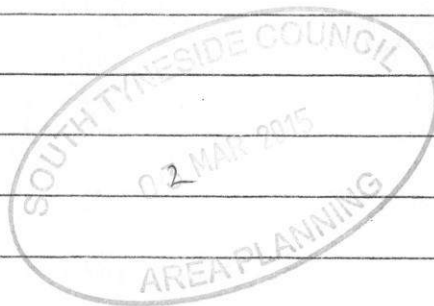
Design load

$$\frac{2.6 \times 1.5}{2} + \frac{1.3 \times 1.5}{2} + \frac{5.5 \times 0.25}{2} = 5.7 + 0.8 + 0.98 =$$

$$I_{\text{required}} = \frac{7.48 \times 4.5 \times 2.045 \times 4.5^2}{13921} \text{ cm}^4$$

use either

$$\text{use } 203 \times 102 \times 22 \text{ UB } \Rightarrow 2090 \text{ cm}^4$$



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