
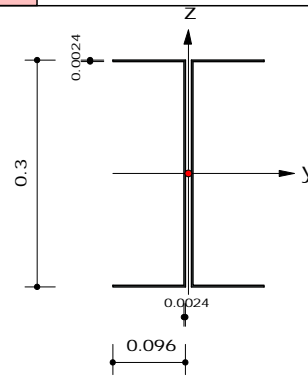


|   |                |                |                      |                                    |
|---|----------------|----------------|----------------------|------------------------------------|
|  | <b>Company</b> |                | <b>Project Title</b> | 2F-3Bx11B Site Office at Jalan Buk |
|   | <b>Author</b>  | Cheng Tee Teck | <b>File Name</b>     | \\1...3F-3Bx12B worker quarter.mgb |

1. Design Information

Design Code : BS5950-90  
 Unit System : kN, m  
 Member No : 11667  
 Material : S355 (No:2)  
 (Fy = 355000, Es = 210000000)  
 Section Name : C30024 (No:2)  
 (Built-up Section).  
 Member Length : 1.82033



2. Member Forces

Axial Force Fxx = 0.53524 (LCB: 1, POS:1/2)  
 Bending Moments My = 15.0634, Mz = 0.00000  
 End Moments Myi = 12.2941, Myj = 13.4881 (for Le)  
 Myi = 12.2941, Myj = 13.4881 (for Ly)  
 Mzi = 0.00000, Mzj = 0.00000 (for Lz)  
 Shear Forces Fyy = 0.00000 (LCB: 3, POS:1/2)  
 Fzz = -5.7153 (LCB: 5, POS:I)

|             |         |           |         |
|-------------|---------|-----------|---------|
| Depth       | 0.30000 | Web Thick | 0.00240 |
| Flg Width   | 0.09600 | Flg Thick | 0.00240 |
| BTB Spacing | 0.00800 |           |         |
| Area        | 0.00234 | Asz       | 0.00144 |
| Qyb         | 0.02518 | Qzb       | 0.00461 |
| Iyy         | 0.00003 | Izz       | 0.00000 |
| Ybar        | 0.10000 | Zbar      | 0.15000 |
| Zyy         | 0.00020 | Zzz       | 0.00003 |
| ry          | 0.11457 | rz        | 0.03721 |

3. Design Parameters

Effective Length for LTB Le = 1.82033  
 Effective Length Factors Ky = 3.00, Kz = 3.00  
 Equivalent Uniform Moment Factors / Slenderness Correction Factor  
 m\_y = 1.00, m\_z = 1.00, n = 1.00

4. Checking Results

Slenderness Ratio  
 KL/r = 146.7 < 200.0 (Memb:11668, LCB: 7)..... O.K  
 Axial Resistance  
 Ft/Pt = 0.535/195.581 = 0.003 < 1.000 ..... O.K  
 Bending Resistance  
 My/Mcy = 15.0634/17.1146 = 0.880 < 1.000 ..... O.K  
 Mz/Mcz = 0.00000/2.70870 = 0.000 < 1.000 ..... O.K  
 Combined Capacity (Tension+Bending)  
 Rmax = Fa/Pa + My/Mcy + Mz/Mcz = 0.883 < 1.000 ..... O.K  
 Shear Resistance  
 Fvy/Pvy = 0.000 < 1.000 ..... O.K  
 Fvz/Pvz = 0.080 < 1.000 ..... O.K