


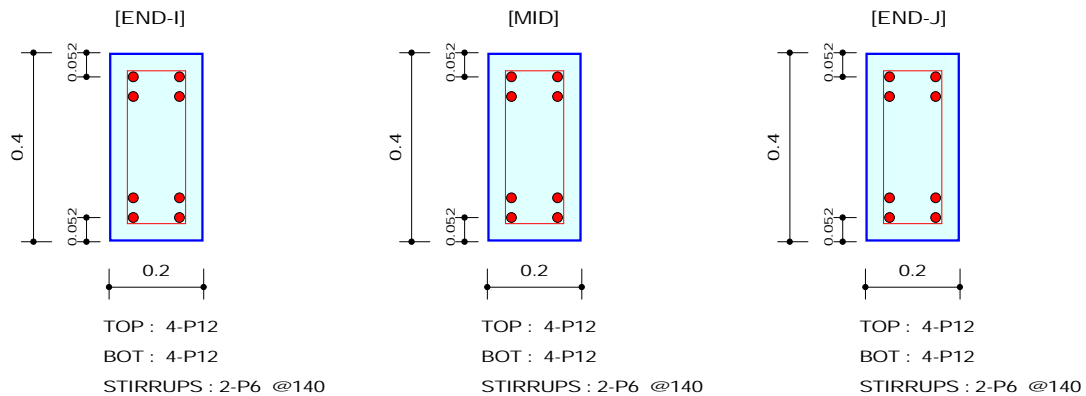
| | | | | |
|---|---------|--|---------------|------------------------------|
|  | Company | | Project Title | |
| | Author | | File Name | D:\...\MidasCal81_100_V8.mgb |

1. Design Information

Design Code : ACI318-11
 Material Data : $f_c = 1.5e+006$, $f_y = 4e+007$, $f_{ys} = 2.4e+007$ kgf/m²
 Section Property: GB1 (No : 2)

Unit System : kgf, m
 Beam Span : 13 m

2. Section Diagram



3. Bending Moment Capacity

| | END-I | MID | END-J |
|----------------------------------|---------|---------|---------|
| (-) Load Combination No. | 10 | 9 | 18 |
| Moment (Mu) | 3847.43 | 1723.37 | 3705.11 |
| Factored Strength (ϕM_n) | 4225.69 | 4225.69 | 4225.69 |
| Check Ratio ($M_u/\phi M_n$) | 0.9105 | 0.4078 | 0.8768 |
| (+) Load Combination No. | 12 | 10 | 2 |
| Moment (Mu) | 1163.18 | 3717.97 | 1432.50 |
| Factored Strength (ϕM_n) | 4225.69 | 4225.69 | 4225.69 |
| Check Ratio ($M_u/\phi M_n$) | 0.2753 | 0.8798 | 0.3390 |
| Using Rebar Top (A_{s_top}) | 0.0005 | 0.0005 | 0.0005 |
| Using Rebar Bot (A_{s_bot}) | 0.0005 | 0.0005 | 0.0005 |

4. Shear Capacity

| | END-I | MID | END-J |
|--|-----------|-----------|-----------|
| Load Combination No. | 10 | 6 | 6 |
| Factored Shear Force (V_u) | 5090.73 | 3701.54 | 5044.07 |
| Shear Strength by Conc. (ϕV_c) | 2994.30 | 2994.30 | 2994.30 |
| Shear Strength by Rebar (ϕV_s) | 2234.23 | 2234.23 | 2234.23 |
| Using Shear Reinf. (A_{sV}) | 0.0004 | 0.0004 | 0.0004 |
| Using Stirrups Spacing | 2-P6 @140 | 2-P6 @140 | 2-P6 @140 |
| Check Ratio | 0.9736 | 0.7080 | 0.9647 |