Concrete compressive strength: 5200 psi

Reinforcement properties:

|  |  |  |  |
| --- | --- | --- | --- |
| Reinforcement | Yield strength *fy*, ksi | Ultimate strength *fu*, ksi | Ultimate strain |
| Longitudinal | 69 | 94 | 0.21 |
| Transverse | 79 | 98 | 0.15 |

Section properties:

Beam width *b* = 34 in.

Beam height *h* = 26 in.

Concrete cover (from surface to center of longitudinal reinforcement): 3 in.

Distance between layers of reinforcement at same side: 3 in.

Atop = 3.14 in.2 (4#8)

Atop-2 = 1.57 in.2 (2#8)

Abottom = 3.14 in.2

Abottom-2 = 2.36 in.2 (3#8)