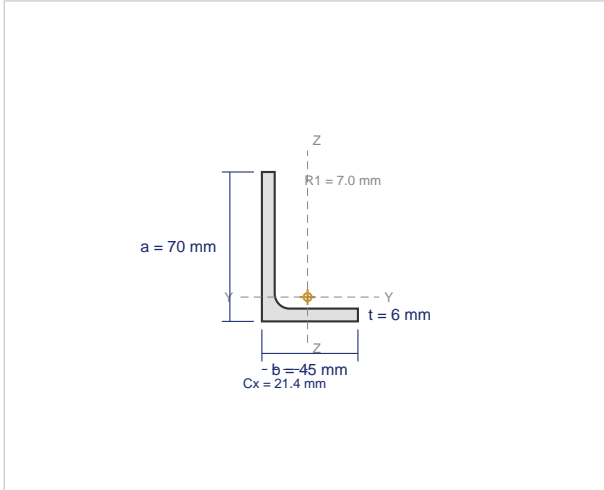


ISA 70x45x6

Indian Standard Unequal Leg Angle -- IS 808 : 1989

CROSS SECTION



DIMENSIONS

| | |
|----------------------|---------------------|
| Leg A | 70 mm |
| Leg B | 45 mm |
| Thickness (t) | 6 mm |
| Root Radius (R1) | 7.0 mm |
| Toe Radius (R2) | 3.5 mm |
| Centroid Cx | 21.4 mm |
| Centroid Cy | 11.4 mm |
| Weight per Meter | 5.3 kg/m |
| Cross-sectional Area | 668 mm ² |

SECTIONAL PROPERTIES

| Property | About X-X Axis | About Y-Y Axis |
|-------------------------|--|---|
| Moment of Inertia | I_x = 195000 mm⁴ | I_y = 59200 mm⁴ |
| Elastic Section Modulus | Z_x = 3980 mm³ | Z_y = 1880 mm³ |
| Radius of Gyration | r_x = 17.1 mm | r_y = 9.4 mm |
| Centroid from Heel | C_x = 21.4 mm | C_y = 11.4 mm |

AVAILABLE GRADES (IS 2062 : 2011)

| Grade | Yield (MPa) | UTS (MPa) | Elongation | Application |
|----------------|-------------|-----------|------------|----------------------------|
| E250 (Fe 410W) | 250 | 410 | 23% | General construction |
| E275 (Fe 440) | 275 | 440 | 22% | Commercial buildings |
| E350 (Fe 490) | 350 | 490 | 22% | Heavy industrial, bridges |
| E410 (Fe 540) | 410 | 540 | 20% | Heavy structural, offshore |

APPLICABLE STANDARDS

| | |
|-----------------------|--|
| IS 808 : 1989 | Dimensions for hot rolled steel beam, column, channel and angle sections |
| IS 2062 : 2011 | Hot rolled medium and high tensile structural steel |
| IS 1852 | Tolerances for hot rolled structural steel sections |