

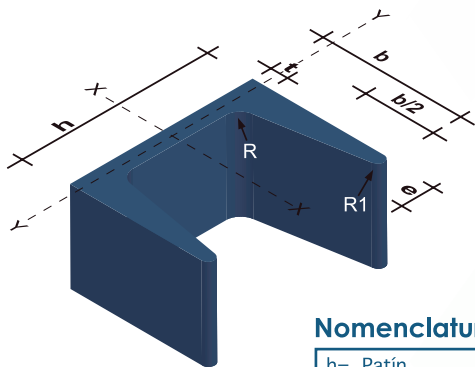
# PERFILES LAMINADOS

## UPN

### Especificaciones Generales:

|                      |   |
|----------------------|---|
| <b>Norma:</b>        | RTE INEN 018  |
| <b>Calidad:</b>      | ASTM A36 / ENS 235 JR / EN10025<br>/ASTM A 572 GR 50 / ENS 355 J2 |
| <b>Largo Normal:</b> | 6.00mts y 12mts   |
| <b>Acabado:</b>      | Acero negro   |

\*Otras calidades, otros largos y otros acabados  
previa consulta



### Nomenclatura

h= Patín  
b= Ala  
t= Espesor Ala  
e= Espesor Ala  
R= Radio Giro Ala  
R1= Radio Giro Ala



### PROPIEDADES MECÁNICAS

| RESISTENCIA MECÁNICA |           | PUNTO FLUENCIA     |     |
|----------------------|-----------|--------------------|-----|
| Kg/mm <sup>2</sup>   | Mpa       | Kg/mm <sup>2</sup> | Mpa |
| 37 - 52              | 370 - 520 | 24                 | 235 |

| DENOMINACIÓN | DIMENSIONES |     |       |       |       |                 | PROPIEDADES                     |                 |                            |         |                                |         |
|--------------|-------------|-----|-------|-------|-------|-----------------|---------------------------------|-----------------|----------------------------|---------|--------------------------------|---------|
|              | h           | b   | t     | e     | R     | R1              | ÁREA SECCIÓN<br>cm <sup>2</sup> | PESOS<br>kg/mts | INERCIA (cm <sup>4</sup> ) |         | RESISTENCIA (cm <sup>3</sup> ) |         |
|              | mm          | mm  | mm    | mm    | mm    | cm <sup>4</sup> |                                 |                 | Eje x-x                    | Eje y-y | Eje x-x                        | Eje y-y |
| UPN 80       | 80          | 45  | 6.00  | 8.00  | 8.00  | 4.00            | 1.10                            | 8.64            | 106.00                     | 19.40   | 26.50                          | 6.36    |
| UPN 100      | 100         | 50  | 6.00  | 8.50  | 8.50  | 4.50            | 13.50                           | 10.60           | 206.00                     | 29.30   | 41.20                          | 8.49    |
| UPN 120      | 120         | 55  | 7.00  | 9.00  | 9.00  | 4.50            | 17.00                           | 13.40           | 364.00                     | 43.20   | 60.70                          | 11.10   |
| UPN 140      | 140         | 60  | 7.00  | 10.00 | 10.00 | 5.00            | 20.40                           | 16.00           | 605.00                     | 62.70   | 86.40                          | 14.80   |
| UPN 160      | 160         | 65  | 7.50  | 10.50 | 10.50 | 5.50            | 24.00                           | 18.80           | 905.00                     | 85.30   | 116.00                         | 18.30   |
| UPN 180      | 180         | 70  | 8.00  | 11.00 | 11.00 | 5.50            | 28.00                           | 22.00           | 1350.00                    | 114.00  | 150.00                         | 22.40   |
| UPN 200      | 200         | 75  | 8.50  | 11.50 | 11.50 | 6.00            | 32.20                           | 25.30           | 1910.00                    | 148.00  | 191.00                         | 27.00   |
| UPN 220      | 220         | 80  | 9.00  | 12.50 | 12.50 | 6.50            | 37.40                           | 29.40           | 2690.00                    | 197.00  | 245.00                         | 33.60   |
| UPN 240      | 240         | 85  | 9.50  | 13.00 | 13.00 | 6.50            | 42.30                           | 33.20           | 3600.00                    | 248.00  | 300.00                         | 39.60   |
| UPN 300      | 300         | 100 | 10.00 | 16.00 | 16.00 | 8.00            | 58.80                           | 46.20           | 8030.00                    | 495.00  | 535.00                         | 67.80   |