

# PERFILES LAMINADOS

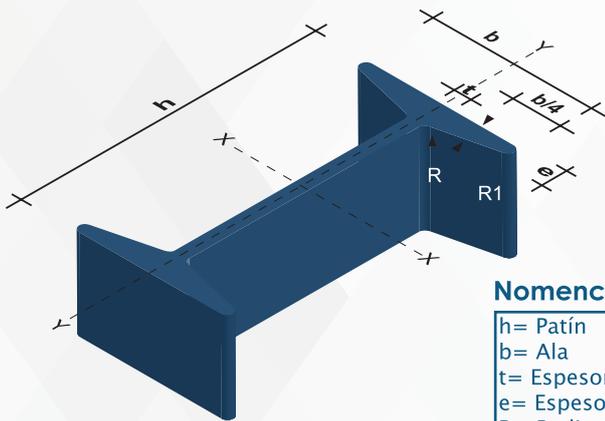
## IPN



### Especificaciones Generales:

|                      |   |
|----------------------|---|
| <b>Norma:</b>        | RTE INEN 018  |
| <b>Calidad:</b>      | ASTM A36 / ENS 235 JR / EN10025 / 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 Alma |
| 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<br>mm     | b<br>mm | t<br>mm | e<br>mm | R<br>mm | R1<br>mm | ÁREA<br>SECCIÓN<br>cm <sup>2</sup> | PESOS<br>kg/mt | INERCIA (cm <sup>4</sup> ) |         | MÓDULO<br>RESISTENCIA (cm <sup>3</sup> )<br>SECCIÓN |         |
|              |             |         |         |         |         |          |                                    |                | Eje x-x                    | Eje y-y | Eje x-x   | Eje y-y |
| IPN 80       | 80          | 42      | 3.90    | 5.90    | 30.90   | 2.30     | 7.58                               | 5.95           | 77                         | 6.29    | 19.50   | 3.00    |
| IPN 100      | 100         | 50      | 4.50    | 6.80    | 4.50    | 2.70     | 10.60                              | 8.32           | 171                        | 12.20   | 34.20   | 4.88    |
| IPN 120      | 120         | 64      | 4.40    | 6.30    | 4.50    | 3.00     | 13.20                              | 10.40          | 318                        | 27.70   | 53.00   | 8.65    |
| IPN 140      | 140         | 66      | 5.70    | 8.60    | 5.70    | 3.40     | 18.30                              | 14.40          | 573                        | 35.20   | 81.90   | 10.70   |
| IPN 160      | 160         | 74      | 6.30    | 9.50    | 6.30    | 3.80     | 22.80                              | 17.90          | 935                        | 54.70   | 117.00  | 14.80   |
| IPN 200      | 200         | 90      | 7.50    | 11.30   | 7.50    | 4.50     | 33.50                              | 26.30          | 2140                       | 117.00  | 214.00  | 26.00   |
| IPN 240      | 240         | 106     | 8.70    | 13.10   | 8.70    | 5.20     | 46.10                              | 36.20          | 4250                       | 221.00  | 354.00  | 41.70   |
| IPN 300      | 300         | 125     | 10.80   | 16.20   | 10.80   | 6.50     | 69.10                              | 54.20          | 9800                       | 451.00  | 653.00  | 72.20   |
| IPN 400      | 400         | 155     | 14.40   | 21.60   | 14.40   | 8.60     | 118.00                             | 92.60          | 29210                      | 1160.00 | 1460.00   | 149.00  |
| IPN 450      | 450         | 170     | 16.20   | 24.30   | 16.20   | 9.70     | 147.00                             | 115.00         | 45850                      | 1730.00 | 2040.00   | 203.00  |