

**Perfiles de alas paralelas (WF)**  
**Grado ASTM A 572**  
**Dimensiones / Tolerancias: ASTM A 6**

| Denominación      |           | Denominación  |             | Dimensiones |         |                      |                      |         |  | Dimensiones de construcción |         |     |                        |                        | Superficie                          |                                     |
|-------------------|-----------|---------------|-------------|-------------|---------|----------------------|----------------------|---------|--|-----------------------------|---------|-----|------------------------|------------------------|-------------------------------------|-------------------------------------|
| (metric)          | G<br>kg/m | (Imperial)    | G<br>lbs/ft | h<br>mm     | b<br>mm | t <sub>w</sub><br>mm | t <sub>f</sub><br>mm | r<br>mm | A<br>mm <sup>2</sup><br>x10 <sup>2</sup> | h <sub>i</sub><br>mm        | d<br>mm | Ø   | ρ <sub>min</sub><br>mm | ρ <sub>max</sub><br>mm | A <sub>L</sub><br>m <sup>2</sup> /m | A <sub>G</sub><br>m <sup>2</sup> /t |
| W 410 x 180 x 53+ | 53        | W 16 x 7 x 36 | 36          | 403         | 177     | 7.5                  | 10.9                 | 10      | 68.4                                     | 381.2                       | 361.2   | M22 | 86                     | 90                     | 1.48                                | 27.76                               |

| Propiedades del perfil                                |  |  |                             |  |   |  |  |                             |                      |   |   |
|---|--|--|-----------------------------|--|---|--|--|-----------------------------|----------------------|---|---|
| eje fuerte y-y  |  |  |                             |  | eje débil z-z   |  |  |                             |                      |   |   |
| I <sub>y</sub><br>mm <sup>4</sup><br>x10 <sup>4</sup> | W <sub>el.y</sub><br>mm <sup>3</sup><br>x10 <sup>3</sup> | W <sub>pl.y</sub> ♦<br>mm <sup>3</sup><br>x10 <sup>3</sup> | i <sub>y</sub><br>mm<br>x10 | A <sub>vz</sub><br>mm <sup>2</sup><br>x10 <sup>2</sup> | I <sub>z</sub><br>mm <sup>4</sup><br>x10 <sup>4</sup> | W <sub>el.z</sub><br>mm <sup>3</sup><br>x10 <sup>3</sup> | W <sub>pl.z</sub> ♦<br>mm <sup>3</sup><br>x10 <sup>3</sup> | i <sub>z</sub><br>mm<br>x10 | s <sub>s</sub><br>mm | I <sub>t</sub><br>mm <sup>4</sup><br>x10 <sup>4</sup> | I <sub>w</sub><br>mm <sup>6</sup><br>x10 <sup>9</sup> |
| 18600   | 922.9  | 1045   | 16.54                       | 32.41  | 1009  | 114  | 176.6  | 3.85                        | 41                   | 22.75   | 387.2   |

| Propiedades Mecánicas     |          |           |
|---------------------------|----------|-----------|
| Límite Elástico           | 345 (50) | MPa (ksi) |
| Resistencia a la Tracción | 450 (65) | MPa (ksi) |
| Estiramiento mínimo       | 18%      | ( 200mm ) |

