



**DOBLE**



**ACEROS &  
SOLUCIONES**

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A welder wearing an orange long-sleeved shirt, blue jeans, a white hard hat, and a safety harness is working on a steel structure. The welder is holding a welding torch and a cable, and a bright light is visible at the point of contact. The background is a cloudy sky with a warm, orange glow from the setting or rising sun.

# NOSOTROS SOMOS

Especialistas con más de 20 años de experiencia en el ramo del acero y logística en México y el extranjero, creando soluciones de la mano de los principales fabricantes y distribuidores.





## NUESTRA MISIÓN

Abastecer productos de acero que se necesitan para tu proyecto.

## NUESTRA VISIÓN

Proveer soluciones innovadoras que permitan tener proyectos exitosos.

*TODAS TUS NECESIDADES AL MEJOR COSTO EN UN MISMO LUGAR.*

# PRODUCTOS

## PLANOS

*Placa de Rollo*  
*Lamina Rolada en Frío*  
*Lamina Rolada en Caliente*  
*Lamina Antiderrapante*  
*Placa de Hoja*

## PERFILES ESTRUCTURALES

*Canales*  
*Vigas IPR*  
*Ángulos*  
*Soleras*  
*Redondo y Cuadrado*  
*HSS*  
*PTR*  
*Polín Tipo C*  
*Varilla*



PLANOS

# PLACA DE ROLLO

*Producto plano laminado en caliente el cual procede de rollo.*

✓ *Disponibilidad en diferentes grados de acero.*

| Espesor |       |      | Peso por kilogramo |         |        |         |         |         |         |         |
|---------|-------|------|--------------------|---------|--------|---------|---------|---------|---------|---------|
| Pulgada |       | mm   | 3'x 8'             | 3'x 10' | 4'x 8' | 4'x 10' | 5'x 10' | 5'x 20' | 6'x 20' | 8'x 20' |
| 3/16    | 0.187 | 4.8  | 84                 | 105     | 112    | 140     | 176     | 351     | 421     | 562     |
| 1/4     | 0.250 | 6.3  | 112                | 140     | 150    | 187     | 234     | 468     | 562     | 749     |
| 5/16    | 0.312 | 7.9  | 140                | 176     | 187    | 234     | 293     | 585     | 702     | 935     |
| 3/8     | 0.375 | 9.5  | 168                | 211     | 225    | 281     | 351     | 702     | 842     | 1,123   |
| 7/16    | 0.437 | 11.1 | -                  | -       | -      | -       | -       | -       | 982     | -       |
| 1/2     | 0.500 | 12.7 | 225                | 281     | 300    | 374     | 468     | 936     | 1,123   | 1,498   |
| 5/8     | 0.625 | 15.9 | 281                | 351     | 374    | 468     | 585     | 1,170   | 1,404   | 1,872   |
| 3/4     | 0.750 | 19.0 | 337                | 421     | 449    | 562     | 702     | 1,404   | 1,685   | 2,246   |



PLANOS

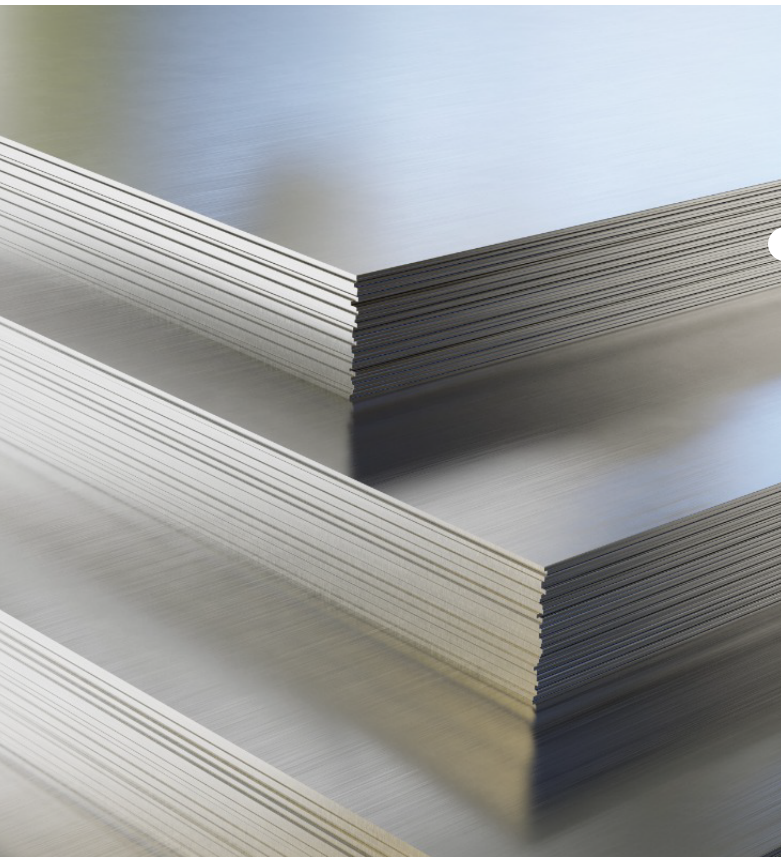
# LAMINA ROLADA EN FRÍO

- ⦿ *Incrementa la resistencia del acero*
- ⦿ *Reduce su capacidad de deformarse sin romperse.*



| Calibre | Espesor |      | Peso                |                   | Peso teórico por hoja(Kg/Hoja) |         |        |         |
|---------|---------|------|---------------------|-------------------|--------------------------------|---------|--------|---------|
|         | Pulg.   | mm   | kg/pie <sup>2</sup> | kg/m <sup>2</sup> | 3'x 8'                         | 3'x 10' | 4'x 8' | 4'x 10' |
| 16      | 0.0598  | 1.52 | 1.11                | 11.93             | 26.60                          | 33.26   | 35.47  | 44.34   |
| 18      | 0.0478  | 1.21 | 0.88                | 9.50              | 21.18                          | 26.47   | 28.24  | 35.30   |
| 20      | 0.0359  | 0.91 | 0.66                | 7.14              | 15.93                          | 19.91   | 21.24  | 26.55   |
| 22      | 0.0299  | 0.76 | 0.55                | 5.97              | 13.30                          | 16.63   | 17.74  | 22.17   |
| 24      | 0.0239  | 0.61 | 0.44                | 4.79              | 10.68                          | 13.35   | 14.24  | 17.80   |
| 26      | 0.0179  | 0.45 | 0.33                | 3.53              | 7.88                           | 9.85    | 10.50  | 13.13   |
| 28      | 0.0149  | 0.38 | 0.28                | 2.98              | 6.65                           | 8.31    | -      | -       |
| 30      | 0.0120  | 0.30 | 0.22                | 2.36              | 5.25                           | 6.56    | -      | -       |

**NOTA:** El peso es calculado considerando una densidad del acero de 7,850 kg/m<sup>3</sup>



PLANOS

# LAMINA ROLADA EN CALIENTE

*Lámina proveniente del rollo.*



*Puede ser decapada  
o sin decapar*

| Calibre | Espesor |      | Peso    |       | Peso teórico por hoja(Kg/Hoja) |        |         |        |         |         |
|---------|---------|------|---------|-------|--------------------------------|--------|---------|--------|---------|---------|
|         | Pulg.   | mm   | kg/pie² | kg/m² | 3'x 6'                         | 3'x 8' | 3'x 10' | 4'x 8' | 4'x 10' | 5'x 10' |
| 4       | 0.224   | 5.69 | 4.15    | 44.67 | 74.69                          | 99.59  | 124.49  | 132.79 | 165.99  | -       |
| 6       | 0.194   | 4.94 | 3.60    | 38.78 | 64.85                          | 86.46  | 108.08  | 115.29 | 144.11  | -       |
| 7       | 0.179   | 4.55 | 3.32    | 35.72 | 59.73                          | 79.64  | 99.55   | 106.19 | 132.73  | -       |
| 8       | 0.164   | 4.18 | 3.05    | 32.81 | 54.87                          | 73.16  | 91.45   | 97.55  | 121.94  | -       |
| 9       | 0.150   | 3.80 | 2.77    | 29.83 | 49.88                          | 66.51  | 83.14   | 88.68  | 110.85  | -       |
| 10      | 0.135   | 3.42 | 2.49    | 26.85 | 44.90                          | 59.86  | 74.83   | 79.81  | 99.77   | 124.71  |
| 11      | 0.120   | 3.04 | 2.22    | 23.86 | 39.91                          | 53.21  | 66.51   | 70.95  | 88.68   | 110.85  |
| 12      | 0.105   | 2.66 | 1.94    | 20.88 | 34.92                          | 46.56  | 58.20   | 62.08  | 77.60   | 97.00   |
| 13      | 0.090   | 2.28 | 1.66    | 17.90 | 29.93                          | 39.91  | 49.88   | 53.21  | 66.51   | -       |
| 14      | 0.075   | 1.90 | 1.39    | 14.92 | 24.94                          | 33.26  | 41.57   | 44.34  | 55.43   | -       |
| 16      | 0.060   | 1.52 | 1.11    | 11.93 | 19.95                          | 26.60  | 33.26   | 35.47  | 44.34   | -       |

**NOTA:** El peso es calculado considerando una densidad del acero de 7,850 kg/m³

**OFRECEMOS DIFERENTES TIPOS DE ACEROS:**



SAE1010



ALTA RESISTENCIA

PLANOS

# LAMINA ANTIDERRA- PANTE

*Hoja lámina negra, laminada en caliente con un grabado en relieve.*



| Calibre | Espesor |       | Peso                |                   | Peso teórico por hoja(Kg/Hoja) |         |        |         |
|---------|---------|-------|---------------------|-------------------|--------------------------------|---------|--------|---------|
|         | Pulg.   | mm    | kg/pie <sup>2</sup> | kg/m <sup>2</sup> | 3'x 8'                         | 3'x 10' | 4'x 8' | 4'x 10' |
| 1/2     | 0.500   | 12.70 | 9.74                | 104.83            | 233.73                         | 292.16  | 311.64 | 389.55  |
| 3/8     | 0.375   | 9.53  | 7.42                | 79.74             | 177.99                         | 222.49  | 237.32 | 296.65  |
| 5/16    | 0.313   | 7.94  | 6.26                | 67.31             | 150.23                         | 187.79  | 200.31 | 250.38  |
| 1/4     | 0.250   | 6.35  | 5.10                | 54.87             | 122.47                         | 153.09  | 163.29 | 204.12  |
| 3/16    | 0.188   | 4.76  | 3.95                | 42.43             | 94.71                          | 118.39  | 126.28 | 157.85  |
| 1/8     | 0.125   | 3.18  | 2.79                | 30.00             | 66.95                          | 83.69   | 89.27  | 111.58  |
| 12      | 0.105   | 2.66  | 2.38                | 25.61             | 57.15                          | 71.44   | 76.20  | 95.25   |
| 14      | 0.075   | 1.90  | 1.70                | 18.29             | 40.82                          | 51.03   | 54.43  | 68.04   |

**NOTA:** Peso teórico sujeto a variaciones.

*En caso de requerir alguna medida adicional, no incluida en esta tabla, favor de solicitar cotización a su ejecutivo de ventas.*



# PLACA DE HOJA

*Placa de metal plano hecha de acero que puede traer algunos tipos de aleaciones*

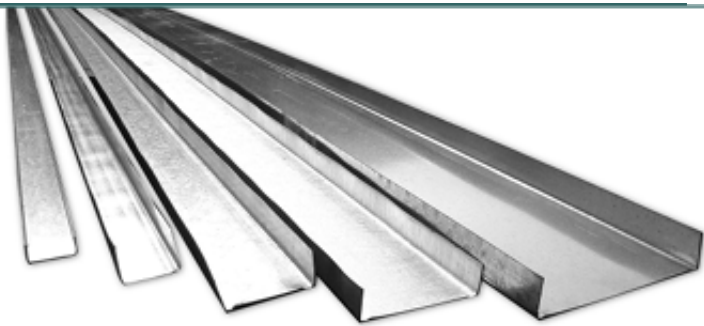
| Espesor |       |       | Peso              |                     | Peso por Placa en Kilos |        |         |        |         |         |
|---------|-------|-------|-------------------|---------------------|-------------------------|--------|---------|--------|---------|---------|
| Pulg.   |       | mm    | kg/m <sup>2</sup> | kg/pie <sup>2</sup> | 3'x 6'                  | 3'x 8' | 3'x 10' | 4'x 8' | 4'x 10' | 5'x 10' |
| 3/16    | 0.187 | 4.8   | 37.78             | 4                   | -                       | *84    | 105     | *112   | 140     | 176     |
| 1/4     | 0.250 | 6.3   | 50.38             | 5                   | -                       | *112   | 140     | *150   | 187     | 234     |
| 5/16    | 0.312 | 7.9   | 62.97             | 6                   | -                       | *140   | 176     | *187   | 234     | 293     |
| 3/8     | 0.375 | 9.5   | 75.56             | 7                   | -                       | *168   | 211     | *225   | 281     | 351     |
| 7/16    | 0.437 | 11.1  | 88.05             | 8                   | -                       | -      | *246    | -      | -       | -       |
| 1/2     | 0.500 | 12.7  | 100.75            | 9                   | -                       | *225   | 281     | *300   | 374     | 468     |
| 9/16    | 0.562 | 14.3  | 113.24            | 11                  | -                       | -      | *316    | -      | -       | -       |
| 5/8     | 0.625 | 15.9  | 125.94            | 12                  | 211                     | 281    | 351     | 374    | 468     | 585     |
| 3/4     | 0.750 | 19.0  | 151.12            | 14                  | 253                     | 337    | 421     | 449    | 562     | 702     |
| 7/8     | 0.875 | 22.3  | 176.31            | 16                  | -                       | -      | *491    | -      | -       | -       |
| 1       | 1     | 25.4  | 201.50            | 19                  | 337                     | 449    | 562     | 599    | 749     | 936     |
| 1 1/8   | 1.125 | 28.6  | 226.69            | 21                  | -                       | -      | 632     | -      | -       | -       |
| 1 1/4   | 1.250 | 31.7  | 251.88            | 23                  | -                       | 562    | 702     | 749    | 936     | 1,170   |
| 1 3/8   | 1.375 | 34.9  | 277.06            | 26                  | -                       | -      | -       | -      | -       | -       |
| 1 1/2   | 1.500 | 38.1  | 302.25            | 28                  | -                       | 674    | 840     | 899    | 1,123   | 1,404   |
| 1 5/8   | 1.625 | 41.3  | 327.44            | 30                  | -                       | -      | -       | -      | -       | -       |
| 1 3/4   | 1.750 | 44.4  | 352.62            | 33                  | -                       | -      | 983     | -      | -       | 1,872   |
| 2       | 2     | 50.8  | 403.00            | 37                  | -                       | 899    | 1,123   | 1,198  | 1,498   | -       |
| 2 1/4   | 2.250 | 57.1  | 453.38            | 42                  | -                       | -      | 1,264   | -      | 1,685   | -       |
| 2 1/2   | 2.500 | 63.5  | 503.75            | 47                  | -                       | -      | 1,404   | -      | 1,872   | -       |
| 2 3/4   | 2.750 | 69.8  | 554.12            | 51                  | -                       | -      | -       | -      | -       | -       |
| 3       | 3     | 76.2  | 604.50            | 56                  | -                       | -      | 1,684   | -      | 2,246   | -       |
| 3 1/2   | 3.500 | 88.9  | 705.25            | 66                  | -                       | -      | -       | -      | -       | -       |
| 4       | 4     | 101.6 | 806.00            | 75                  | -                       | -      | -       | -      | -       | -       |
| 4 1/2   | 4.500 | 114.3 | 906.75            | 84                  | -                       | -      | -       | -      | -       | -       |

| Espesor |       |       | Peso   |         | Peso por Placa en Kilos |         |         |         |         |          |
|---------|-------|-------|--------|---------|-------------------------|---------|---------|---------|---------|----------|
| Pulg.   |       | mm    | kg/m²  | kg/pie² | 5'x 20'                 | 6'x 20' | 6'x 40' | 8'x 20' | 8'x 40' | 10'x 40' |
| 3/16    | 0.187 | 4.8   | 37.78  | 4       | 351                     | 421     | -       | 562     | 1,123   | -        |
| 1/4     | 0.250 | 6.3   | 50.38  | 5       | 468                     | 562     | -       | 749     | -       | -        |
| 5/16    | 0.312 | 7.9   | 62.97  | 6       | 585                     | 702     | -       | 936     | -       | -        |
| 3/8     | 0.375 | 9.5   | 75.56  | 7       | 702                     | 842     | 1,685   | 1,123   | 2,246   | 2,808    |
| 7/16    | 0.437 | 11.1  | 88.05  | 8       | -                       | *983    | -       | -       | -       | -        |
| 1/2     | 0.500 | 12.7  | 100.75 | 9       | 936                     | 1,123   | 2,246   | 1,498   | 2,995   | 3,744    |
| 9/16    | 0.562 | 14.3  | 113.24 | 11      | -                       | 1,264   | -       | -       | -       | -        |
| 5/8     | 0.625 | 15.9  | 125.94 | 12      | 1,170                   | 1,404   | 2,808   | 1,872   | 3,744   | 4,680    |
| 3/4     | 0.750 | 19.0  | 151.12 | 14      | 1,404                   | 1,685   | 3,370   | 2,246   | 4,493   | 5,616    |
| 7/8     | 0.875 | 22.3  | 176.31 | 16      | -                       | 1,966   | -       | 2,621   | -       | -        |
| 1       | 1     | 25.4  | 201.50 | 19      | 1,872                   | 2,246   | 4,493   | 2,995   | 5,990   | 7,488    |
| 1 1/8   | 1.125 | 28.6  | 226.69 | 21      | -                       | 2,527   | -       | 3,370   | 6,739   | -        |
| 1 1/4   | 1.250 | 31.7  | 251.88 | 23      | 2,340                   | 2,808   | 5,616   | 3,744   | 7,488   | -        |
| 1 3/8   | 1.375 | 34.9  | 277.06 | 26      | -                       | -       | -       | 4,118   | -       | -        |
| 1 1/2   | 1.500 | 38.1  | 302.25 | 28      | 2,808                   | 3,370   | -       | 4,493   | 8,986   | -        |
| 1 5/8   | 1.625 | 41.3  | 327.44 | 30      | -                       | -       | -       | 4,867   | -       | -        |
| 1 3/4   | 1.750 | 44.4  | 352.62 | 33      | -                       | 3,931   | -       | 5,242   | -       | -        |
| 2       | 2     | 50.8  | 403.00 | 37      | 3,744                   | 4,493   | -       | 5,990   | 11,981  | -        |
| 2 1/4   | 2.250 | 57.1  | 453.38 | 42      | -                       | 5,054   | -       | 6,739   | -       | -        |
| 2 1/2   | 2.500 | 63.5  | 503.75 | 47      | -                       | 5,616   | -       | 7,488   | -       | -        |
| 2 3/4   | 2.750 | 69.8  | 554.12 | 51      | -                       | -       | -       | 8,237   | -       | -        |
| 3       | 3     | 76.2  | 604.50 | 56      | -                       | 6,739   | -       | 8,986   | -       | -        |
| 3 1/2   | 3.500 | 88.9  | 705.25 | 66      | 6,552                   | 7,935   | -       | 10,483  | -       | -        |
| 4       | 4     | 101.6 | 806.00 | 75      | 7,448                   | 9,069   | -       | 11,981  | -       | -        |
| 4 1/2   | 4.500 | 114.3 | 906.75 | 84      | -                       | -       | -       | 13,478  | -       | -        |

\* Estos materiales se cotizan sobre pedido

OFRECEMOS DIFERENTES TIPOS DE ACEROS

- ☒ A-36
- ☒ A-283°C
- ☒ A-285°C
- ☒ A-516°70
- ☒ A-572°50
- ☒ A-709°50
- ☒ A-572°65
- ☒ SAE 1045



# CANALES

*Perfil estructural con forma de C para uso en construcción.*

| Peralte |       | Peso  |        | Patin      |       |              |       | Alma         |       |
|---------|-------|-------|--------|------------|-------|--------------|-------|--------------|-------|
| d       |       |       |        | Ancho (bf) |       | Espesor (tf) |       | Espesor (tw) |       |
| Pulg.   | mm    | kg/m  | lb/pie | Pulg.      | mm    | Pulg.        | mm    | Pulg.        | mm    |
| 3       | 76.2  | 5.21  | 3.5    | 1.372      | 34.85 | 0.273        | 6.93  | 0.132        | 3.35  |
|         |       | 6.10  | 4.1    | 1.410      | 35.81 | 0.273        | 6.93  | 0.170        | 4.32  |
| 4       | 101.6 | 6.70  | 4.5    | 1.584      | 40.23 | 0.296        | 7.52  | 0.125        | 3.18  |
|         |       | 8.04  | 5.4    | 1.584      | 40.23 | 0.296        | 7.52  | 0.184        | 4.67  |
| 5       | 127.0 | 9.97  | 6.7    | 1.750      | 44.45 | 0.320        | 8.13  | 0.190        | 4.83  |
|         |       | 13.5  | 9      | 1.88       | 47.9  | 0.32         | 8.13  | 0.326        | 8.3   |
| 6       | 152.4 | 12.20 | 8.2    | 1.920      | 48.77 | 0.343        | 8.71  | 0.200        | 5.08  |
|         |       | 15.63 | 10.5   | 2.034      | 51.66 | 0.343        | 8.71  | 0.314        | 7.98  |
|         |       | 19.35 | 13.0   | 2.157      | 54.79 | 0.343        | 8.71  | 0.437        | 11.10 |
| 8       | 203.2 | 17.11 | 11.5   | 2.260      | 57.40 | 0.390        | 9.91  | 0.220        | 5.59  |
|         |       | 20.46 | 13.75  | 2.343      | 59.51 | 0.390        | 9.91  | 0.303        | 7.70  |
|         |       | 27.90 | 18.75  | 2.527      | 64.19 | 0.390        | 9.91  | 0.487        | 12.37 |
| 10      | 254.0 | 22.77 | 15.3   | 2.600      | 66.04 | 0.436        | 11.07 | 0.240        | 6.10  |
|         |       | 29.76 | 20     | 2.739      | 69.57 | 0.436        | 11.07 | 0.379        | 9.63  |
|         |       | 37.20 | 25     | 2.886      | 73.30 | 0.436        | 11.07 | 0.526        | 13.36 |
|         |       | 44.64 | 30     | 3.033      | 77.04 | 0.436        | 11.07 | 0.673        | 17.09 |
| 12      | 304.8 | 30.80 | 20.7   | 2.942      | 74.73 | 0.501        | 12.73 | 0.282        | 7.16  |
|         |       | 37.20 | 25     | 3.047      | 77.39 | 0.501        | 12.73 | 0.387        | 9.83  |
|         |       | 44.64 | 30     | 3.170      | 80.52 | 0.501        | 12.73 | 0.510        | 12.95 |
| 15      | 381.0 | 50.45 | 33.9   | 3.400      | 86.36 | 0.650        | 16.51 | 0.400        | 10.16 |
|         |       | 59.53 | 40     | 3.520      | 89.41 | 0.650        | 16.51 | 0.520        | 13.21 |

# VIGAS IPR

Perfil estructural en forma de "I" puede ser utilizado como columna, trabe o estructuras.

## GRADOS DE ACEROS



A36



A572°50



A 992

## VIGAS IPR / VIGAS W

| Dimensiones  |               | Peso |       | Peralte |     | Ancho del Patín |     | Espesor del Patín |      | Espesor del Alma |      |
|--------------|---------------|------|-------|---------|-----|-----------------|-----|-------------------|------|------------------|------|
| Pulg.        | mm            | kg/m | Lb/ft | Pulg.   | mm  | Pulg.           | mm  | Pulg.             | mm   | Pulg.            | mm   |
| 4" x 4"      | 101.6 x 101.6 | 19.3 | 13    | 4.16    | 106 | 4.06            | 103 | 0.35              | 8.9  | 0.28             | 7.1  |
| 5" x 5"      | 127.0 x 127.0 | 23.8 | 16    | 5.01    | 127 | 5.00            | 127 | 0.36              | 9.1  | 0.24             | 6.1  |
|              |               | 28.3 | 19    | 5.15    | 131 | 5.03            | 128 | 0.43              | 10.9 | 0.27             | 6.9  |
| 6" x 4"      | 152.4 x 101.6 | 12.7 | 8.5   | 5.83    | 148 | 3.94            | 100 | 0.19              | 4.8  | 0.17             | 4.3  |
|              |               | 13.4 | 9     | 5.90    | 150 | 3.94            | 100 | 0.22              | 5.6  | 0.17             | 4.3  |
|              |               | 17.9 | 12    | 6.03    | 153 | 4.00            | 102 | 0.28              | 7.1  | 0.23             | 5.8  |
|              |               | 23.8 | 16    | 6.28    | 160 | 4.03            | 102 | 0.41              | 10.4 | 0.26             | 6.6  |
| 6" x 6"      | 152.4 x 152.4 | 22.3 | 15    | 5.99    | 152 | 5.99            | 152 | 0.26              | 6.6  | 0.23             | 5.8  |
|              |               | 29.8 | 20    | 6.20    | 157 | 6.02            | 153 | 0.37              | 9.4  | 0.26             | 6.6  |
|              |               | 37.2 | 25    | 6.38    | 162 | 6.08            | 154 | 0.46              | 11.7 | 0.32             | 8.1  |
| 8" x 4"      | 203.2 x 101.6 | 14.9 | 10    | 7.89    | 200 | 3.94            | 100 | 0.21              | 5.3  | 0.17             | 4.3  |
|              |               | 19.3 | 13    | 7.99    | 203 | 4.00            | 102 | 0.26              | 6.6  | 0.23             | 5.8  |
|              |               | 22.3 | 15    | 8.11    | 206 | 4.02            | 102 | 0.32              | 8.1  | 0.25             | 6.3  |
| 8" x 5 1/4"  | 203.2 x 133.3 | 26.8 | 18    | 8.14    | 207 | 5.25            | 133 | 0.33              | 8.4  | 0.23             | 5.8  |
|              |               | 31.3 | 21    | 8.28    | 210 | 5.27            | 134 | 0.40              | 10.2 | 0.25             | 6.3  |
| 8" x 6 1/2"  | 203.2 x 165.1 | 35.7 | 24    | 7.93    | 201 | 6.50            | 165 | 0.40              | 10.2 | 0.25             | 6.3  |
|              |               | 41.7 | 28    | 8.06    | 205 | 6.54            | 166 | 0.47              | 11.9 | 0.29             | 7.4  |
| 8" x 8"      | 203.2 x 203.2 | 46.1 | 31    | 8.00    | 203 | 8.00            | 203 | 0.44              | 11.2 | 0.29             | 7.4  |
|              |               | 52.1 | 35    | 8.12    | 206 | 8.02            | 204 | 0.50              | 12.7 | 0.31             | 7.9  |
|              |               | 59.5 | 40    | 8.25    | 210 | 8.07            | 205 | 0.56              | 14.2 | 0.36             | 9.1  |
|              |               | 71.4 | 48    | 8.50    | 216 | 8.11            | 206 | 0.69              | 17.4 | 0.40             | 10.2 |
| 10" x 4"     | 254.0 x 101.6 | 17.9 | 12    | 9.87    | 251 | 3.96            | 101 | 0.21              | 5.3  | 0.19             | 4.8  |
|              |               | 22.3 | 15    | 9.99    | 254 | 4.00            | 102 | 0.27              | 6.9  | 0.23             | 5.8  |
|              |               | 25.3 | 17    | 10.11   | 257 | 4.01            | 102 | 0.33              | 8.4  | 0.24             | 6.1  |
|              |               | 28.3 | 19    | 10.24   | 260 | 4.02            | 102 | 0.40              | 10.2 | 0.25             | 6.3  |
| 10" x 5 3/4" | 254.0 x 146.0 | 32.7 | 22    | 10.17   | 258 | 5.75            | 146 | 0.36              | 9.1  | 0.24             | 6.1  |
|              |               | 38.7 | 26    | 10.33   | 262 | 5.77            | 147 | 0.44              | 11.2 | 0.26             | 6.6  |
|              |               | 44.6 | 30    | 10.47   | 266 | 5.81            | 148 | 0.51              | 13.0 | 0.30             | 7.6  |
| 10" x 8"     | 254.0 x 203.2 | 49.1 | 33    | 9.73    | 247 | 7.96            | 202 | 0.44              | 11.2 | 0.29             | 7.4  |
|              |               | 58.0 | 39    | 9.92    | 252 | 7.99            | 203 | 0.53              | 13.5 | 0.32             | 8.1  |
|              |               | 67.0 | 45    | 10.10   | 257 | 8.02            | 204 | 0.62              | 15.7 | 0.35             | 8.9  |



| Dimensiones   |               | Peso  |       | Peralte |     | Ancho del Patín |     | Espesor del Patín |      | Espesor del Alma |      |
|---------------|---------------|-------|-------|---------|-----|-----------------|-----|-------------------|------|------------------|------|
| Pulg.         | mm            | kg/m  | Lb/ft | Pulg.   | mm  | Pulg.           | mm  | Pulg.             | mm   | Pulg.            | mm   |
| 10" x 10"     | 254.0 x 254.0 | 72.9  | 49    | 9.98    | 253 | 10.00           | 254 | 0.56              | 14.2 | 0.34             | 8.6  |
|               |               | 80.4  | 54    | 10.09   | 256 | 10.03           | 255 | 0.62              | 15.7 | 0.37             | 9.4  |
|               |               | 89.4  | 60    | 10.22   | 260 | 10.08           | 256 | 0.68              | 17.3 | 0.42             | 10.7 |
|               |               | 101.2 | 68    | 10.40   | 264 | 10.13           | 257 | 0.77              | 19.6 | 0.47             | 11.9 |
|               |               | 114.6 | 77    | 10.60   | 269 | 10.19           | 259 | 0.87              | 22.1 | 0.53             | 13.5 |
|               |               | 131.1 | 88    | 10.84   | 275 | 10.26           | 261 | 0.99              | 25.1 | 0.61             | 15.4 |
|               |               |       |       |         |     |                 |     |                   |      |                  |      |
| 12" x 4"      | 304.8 x 101.6 | 20.8  | 14    | 11.91   | 303 | 3.97            | 101 | 0.23              | 5.8  | 0.20             | 5.1  |
|               |               | 23.8  | 16    | 11.99   | 305 | 3.99            | 101 | 0.27              | 6.9  | 0.22             | 5.6  |
|               |               | 28.3  | 19    | 12.16   | 309 | 4.01            | 102 | 0.35              | 8.9  | 0.24             | 6.1  |
|               |               | 32.7  | 22    | 12.31   | 313 | 4.03            | 102 | 0.43              | 10.9 | 0.26             | 6.6  |
| 12" x 6 1/2"  | 304.8 x 165.1 | 38.7  | 26    | 12.22   | 310 | 6.49            | 165 | 0.38              | 9.7  | 0.23             | 5.8  |
|               |               | 44.6  | 30    | 12.34   | 313 | 6.52            | 166 | 0.44              | 11.2 | 0.26             | 6.6  |
|               |               | 52.1  | 35    | 12.50   | 317 | 6.56            | 167 | 0.53              | 13.2 | 0.30             | 7.6  |
| 12" x 8"      | 304.8 x 203.2 | 59.5  | 40    | 11.94   | 303 | 8.01            | 203 | 0.52              | 13.2 | 0.30             | 7.6  |
|               |               | 67.0  | 45    | 12.06   | 306 | 8.05            | 204 | 0.58              | 14.7 | 0.34             | 8.6  |
|               |               | 74.4  | 50    | 12.19   | 310 | 8.08            | 205 | 0.64              | 16.3 | 0.37             | 9.4  |
| 12" x 10"     | 304.8 x 254.0 | 78.9  | 53    | 12.06   | 306 | 10.00           | 254 | 0.58              | 14.7 | 0.35             | 8.9  |
|               |               | 86.3  | 58    | 12.19   | 310 | 10.01           | 254 | 0.64              | 16.3 | 0.36             | 9.1  |
| 12" x 12"     | 304.8 x 304.8 | 96.7  | 65    | 12.12   | 380 | 12.00           | 305 | 0.61              | 15.5 | 0.39             | 9.9  |
|               |               | 107.1 | 72    | 12.25   | 311 | 12.04           | 306 | 0.67              | 17.0 | 0.43             | 10.9 |
|               |               | 117.6 | 79    | 12.38   | 314 | 12.08           | 307 | 0.74              | 18.8 | 0.47             | 11.9 |
|               |               | 129.6 | 87    | 12.53   | 318 | 12.13           | 308 | 0.81              | 20.6 | 0.52             | 13.1 |
|               |               | 142.9 | 96    | 12.71   | 323 | 12.16           | 309 | 0.90              | 22.9 | 0.55             | 14.0 |
|               |               | 157.9 | 106   | 12.89   | 327 | 12.22           | 310 | 0.99              | 25.1 | 0.61             | 15.5 |
|               |               | 178.6 | 120   | 13.12   | 333 | 12.32           | 313 | 1.10              | 28.1 | 0.71             | 18.0 |
|               |               | 202.4 | 136   | 13.41   | 341 | 12.40           | 315 | 1.25              | 31.8 | 0.79             | 20.1 |
|               |               | 226.2 | 152   | 13.71   | 348 | 12.48           | 317 | 1.40              | 35.6 | 0.87             | 22.1 |
|               |               | 253.0 | 170   | 14.03   | 356 | 12.57           | 319 | 1.56              | 39.6 | 0.96             | 24.4 |
| 14" x 5"      | 355.6 x 127.0 | 32.7  | 22    | 13.74   | 349 | 5.00            | 127 | 0.34              | 8.6  | 0.23             | 5.8  |
|               |               | 38.7  | 26    | 13.91   | 353 | 5.03            | 128 | 0.42              | 10.7 | 0.26             | 6.6  |
| 14" x 6 3/4"  | 355.6 x 171.4 | 44.6  | 30    | 13.84   | 352 | 6.73            | 171 | 0.39              | 9.9  | 0.27             | 6.9  |
|               |               | 50.6  | 34    | 13.98   | 355 | 6.75            | 171 | 0.46              | 11.7 | 0.29             | 7.4  |
|               |               | 56.5  | 38    | 14.10   | 358 | 6.77            | 172 | 0.52              | 13.2 | 0.31             | 7.9  |
| 14" x 8"      | 355.6 x 203.2 | 64.0  | 43    | 13.66   | 347 | 8.00            | 203 | 0.53              | 13.5 | 0.31             | 7.9  |
|               |               | 71.4  | 48    | 13.79   | 350 | 8.03            | 204 | 0.60              | 15.2 | 0.34             | 8.6  |
|               |               | 78.9  | 53    | 13.92   | 354 | 8.06            | 205 | 0.66              | 16.8 | 0.37             | 9.4  |
| 14" x 10"     | 355.6 x 254.0 | 90.8  | 61    | 13.89   | 353 | 10.00           | 254 | 0.65              | 16.5 | 0.38             | 9.7  |
|               |               | 101.2 | 68    | 14.04   | 357 | 10.04           | 255 | 0.72              | 18.3 | 0.42             | 10.7 |
|               |               | 110.1 | 74    | 14.17   | 360 | 10.07           | 256 | 0.79              | 20.1 | 0.45             | 11.4 |
|               |               | 122.0 | 82    | 14.31   | 363 | 10.13           | 257 | 0.86              | 21.8 | 0.51             | 13.0 |
| 14" x 14 1/2" | 255.6 x 368.3 | 133.9 | 90    | 14.02   | 356 | 14.52           | 369 | 0.71              | 18.0 | 0.44             | 11.2 |
|               |               | 147.3 | 99    | 14.16   | 360 | 14.57           | 370 | 0.78              | 19.8 | 0.49             | 12.4 |
|               |               | 162.2 | 109   | 14.32   | 364 | 14.61           | 371 | 0.86              | 21.8 | 0.53             | 13.5 |
|               |               | 178.6 | 120   | 14.48   | 368 | 14.67           | 373 | 0.94              | 23.9 | 0.59             | 15.0 |
|               |               | 196.4 | 132   | 14.66   | 372 | 14.73           | 374 | 1.03              | 26.2 | 0.65             | 16.5 |

| Dimensiones   |               | Peso  |       | Peralte |     | Ancho del Patín |     | Espesor del Patín |      | Espesor del Alma |      |
|---------------|---------------|-------|-------|---------|-----|-----------------|-----|-------------------|------|------------------|------|
| Pulg.         | mm            | kg/m  | Lb/ft | Pulg.   | mm  | Pulg.           | mm  | Pulg.             | mm   | Pulg.            | mm   |
| 14" x 16"     | 355.6 x 406.4 | 215.8 | 145   | 14.78   | 375 | 15.50           | 394 | 1.09              | 27.7 | 0.68             | 17.3 |
|               |               | 236.6 | 159   | 14.98   | 380 | 15.57           | 395 | 1.19              | 30.2 | 0.75             | 19.0 |
|               |               | 261.9 | 176   | 15.22   | 387 | 15.65           | 398 | 1.31              | 33.3 | 0.83             | 21.1 |
|               |               | 287.2 | 193   | 15.48   | 393 | 15.71           | 399 | 1.44              | 36.6 | 0.89             | 22.6 |
|               |               | 314.0 | 211   | 15.72   | 399 | 15.80           | 401 | 1.56              | 39.6 | 0.98             | 24.9 |
|               |               | 346.7 | 233   | 16.04   | 407 | 15.89           | 404 | 1.72              | 43.7 | 1.07             | 27.2 |
|               |               | 382.4 | 257   | 16.38   | 416 | 15.99           | 406 | 1.89              | 48.0 | 1.17             | 29.7 |
|               |               | 421.1 | 283   | 16.74   | 425 | 16.11           | 409 | 2.07              | 52.6 | 1.29             | 32.8 |
|               |               | 462.8 | 311   | 17.12   | 434 | 16.23           | 412 | 2.26              | 57.4 | 1.41             | 35.8 |
| 16" x 5 1/2"  | 406.4 x 139.7 | 38.7  | 26    | 15.69   | 399 | 5.50            | 140 | 0.35              | 8.9  | 0.25             | 6.3  |
|               |               | 46.1  | 31    | 15.88   | 403 | 5.53            | 140 | 0.44              | 11.2 | 0.28             | 7.1  |
| 16" x 7"      | 406.4 x 177.8 | 53.6  | 36    | 15.86   | 403 | 6.99            | 178 | 0.43              | 10.9 | 0.30             | 7.6  |
|               |               | 59.5  | 40    | 16.01   | 407 | 7.00            | 178 | 0.51              | 13.0 | 0.31             | 7.9  |
|               |               | 67.0  | 45    | 16.13   | 410 | 7.04            | 179 | 0.57              | 14.5 | 0.35             | 8.9  |
|               |               | 74.4  | 50    | 16.26   | 413 | 7.07            | 180 | 0.63              | 16.0 | 0.38             | 9.7  |
|               |               | 84.8  | 57    | 16.43   | 417 | 7.12            | 181 | 0.72              | 18.3 | 0.43             | 10.9 |
| 16" x 10 1/4" | 406.4 x 260.3 | 99.7  | 67    | 16.33   | 415 | 10.24           | 260 | 0.67              | 17.0 | 0.40             | 10.2 |
|               |               | 114.6 | 77    | 16.52   | 420 | 10.30           | 262 | 0.76              | 19.3 | 0.46             | 11.7 |
|               |               | 132.6 | 89    | 16.75   | 425 | 10.37           | 263 | 0.88              | 22.2 | 0.53             | 13.3 |
|               |               | 149.0 | 100   | 16.97   | 431 | 10.43           | 265 | 0.99              | 25.0 | 0.59             | 14.9 |
| 18" x 6"      | 457.2 x 152.4 | 52.1  | 35    | 17.70   | 450 | 6.00            | 152 | 0.43              | 10.9 | 0.30             | 7.6  |
|               |               | 59.5  | 40    | 17.90   | 455 | 6.02            | 153 | 0.53              | 13.5 | 0.32             | 8.1  |
|               |               | 68.4  | 46    | 18.06   | 459 | 6.06            | 154 | 0.61              | 15.5 | 0.36             | 9.1  |
| 18" x 7 1/2"  | 457.2 x 190.5 | 74.4  | 50    | 17.99   | 457 | 7.50            | 190 | 0.57              | 14.5 | 0.36             | 9.1  |
|               |               | 81.8  | 55    | 18.11   | 460 | 7.53            | 191 | 0.63              | 16.0 | 0.39             | 9.9  |
|               |               | 89.3  | 60    | 18.24   | 463 | 7.56            | 192 | 0.70              | 17.8 | 0.42             | 10.7 |
|               |               | 96.7  | 65    | 18.35   | 466 | 7.59            | 193 | 0.75              | 19.0 | 0.45             | 11.4 |
|               |               | 105.6 | 71    | 18.47   | 469 | 7.64            | 194 | 0.81              | 20.6 | 0.50             | 12.7 |
| 18" x 11"     | 457.2 x 279.4 | 112.1 | 76    | 18.21   | 463 | 11.04           | 280 | 0.68              | 17.3 | 0.43             | 10.9 |
|               |               | 128.0 | 86    | 18.39   | 467 | 11.09           | 282 | 0.77              | 19.6 | 0.48             | 12.2 |
|               |               | 144.3 | 97    | 18.59   | 472 | 11.15           | 283 | 0.87              | 22.1 | 0.54             | 13.7 |
|               |               | 157.7 | 106   | 18.73   | 476 | 11.20           | 284 | 0.94              | 3.9  | 0.59             | 15.0 |
|               |               | 177.1 | 119   | 18.97   | 482 | 11.27           | 286 | 1.06              | 26.9 | 0.66             | 16.8 |
|               |               | 193.5 | 130   | 19.25   | 489 | 11.16           | 284 | 1.20              | 30.5 | 0.67             | 17.0 |
|               |               | 212.8 | 143   | 19.49   | 495 | 11.22           | 285 | 1.32              | 33.5 | 0.73             | 18.5 |
|               |               | 235.1 | 158   | 19.72   | 501 | 11.30           | 287 | 1.44              | 36.6 | 0.81             | 20.6 |
| 21" x 6 1/2"  | 533.4 x 165.1 | 65.5  | 44    | 20.66   | 525 | 6.50            | 165 | 0.45              | 11.4 | 0.35             | 8.9  |
|               |               | 74.4  | 50    | 20.83   | 529 | 6.53            | 166 | 0.54              | 13.7 | 0.38             | 9.7  |
|               |               | 84.8  | 57    | 21.06   | 534 | 6.56            | 166 | 1.65              | 16.5 | 0.41             | 10.4 |
| 21" x 8 1/4"  | 533.4 x 209.5 | 92.3  | 62    | 20.99   | 533 | 8.24            | 209 | 0.62              | 15.7 | 0.40             | 10.2 |
|               |               | 101.2 | 68    | 21.13   | 537 | 8.27            | 210 | 0.69              | 17.5 | 0.43             | 10.9 |
|               |               | 108.7 | 73    | 21.24   | 539 | 8.30            | 211 | 0.74              | 18.8 | 0.46             | 11.6 |
|               |               | 123.5 | 83    | 21.43   | 544 | 8.36            | 212 | 0.84              | 21.3 | 0.52             | 13.2 |
|               |               | 138.4 | 93    | 21.62   | 549 | 8.42            | 214 | 0.93              | 23.6 | 0.58             | 14.7 |

| Dimensiones   |               | Peso  |       | Peralte |     | Ancho del Patín |     | Espesor del Patín |      | Espesor del Alma |      |
|---------------|---------------|-------|-------|---------|-----|-----------------|-----|-------------------|------|------------------|------|
| Pulg.         | mm            | kg/m  | Lb/ft | Pulg.   | mm  | Pulg.           | mm  | Pulg.             | mm   | Pulg.            | mm   |
| 21" x 12 1/4" | 533.4 x 311.1 | 150.3 | 101   | 21.36   | 543 | 12.29           | 312 | 0.80              | 20.3 | 0.50             | 12.7 |
|               |               | 165.2 | 111   | 21.51   | 546 | 12.34           | 313 | 0.88              | 22.4 | 0.55             | 14.0 |
|               |               | 181.5 | 132   | 21.68   | 551 | 12.39           | 315 | 0.96              | 24.4 | 0.60             | 15.2 |
|               |               | 196.7 | 132   | 21.83   | 554 | 12.44           | 316 | 1.04              | 26.3 | 0.65             | 16.5 |
|               |               | 218.7 | 147   | 22.06   | 560 | 12.51           | 318 | 1.15              | 29.2 | 0.72             | 18.3 |
| 24" x 7"      | 609.6 x 177.8 | 81.8  | 55    | 23.57   | 599 | 7.01            | 178 | 0.51              | 13.0 | 0.40             | 10.2 |
|               |               | 92.3  | 62    | 23.74   | 603 | 70.4            | 179 | 0.59              | 15.0 | 0.43             | 10.9 |
| 24" x 9"      | 609.6 x 228.6 | 101.2 | 68    | 23.73   | 603 | 8.97            | 228 | 0.59              | 15.0 | 0.42             | 10.7 |
|               |               | 113.1 | 76    | 23.92   | 608 | 8.99            | 228 | 0.68              | 17.3 | 0.44             | 11.2 |
|               |               | 125.0 | 84    | 24.10   | 612 | 9.02            | 229 | 0.77              | 19.6 | 0.47             | 11.9 |
|               |               | 139.9 | 94    | 24.31   | 617 | 9.07            | 230 | 0.88              | 22.4 | 0.52             | 13.2 |
|               |               | 153.3 | 103   | 24.53   | 623 | 9.00            | 229 | 0.98              | 24.9 | 0.55             | 14.0 |
| 24" 12 3/4"   | 609.6 x 323.8 | 154.8 | 104   | 24.06   | 611 | 12.75           | 324 | 0.75              | 19.0 | 0.50             | 12.7 |
|               |               | 174.1 | 117   | 24.26   | 616 | 12.80           | 325 | 0.85              | 21.6 | 0.55             | 14.0 |
|               |               | 194.9 | 131   | 24.48   | 622 | 12.86           | 327 | 0.96              | 24.4 | 0.61             | 15.5 |
|               |               | 217.3 | 146   | 21.74   | 628 | 12.90           | 328 | 1.09              | 27.7 | 0.65             | 16.5 |
|               |               | 241.0 | 162   | 25.00   | 635 | 12.95           | 328 | 1.22              | 31.0 | 0.70             | 17.8 |
|               |               | 261.9 | 176   | 25.24   | 641 | 12.89           | 327 | 1.34              | 34.0 | 0.75             | 19.1 |
|               |               | 285.0 | 192   | 25.47   | 647 | 12.95           | 329 | 1.46              | 37.1 | 0.81             | 20.6 |
|               |               | 306.0 | 207   | 25.70   | 653 | 13.00           | 330 | 1.57              | 59.9 | 0.87             | 22.1 |
| 27" x 10"     | 685.8 x 254.0 | 125.0 | 84    | 26.71   | 678 | 9.96            | 253 | 0.64              | 16.3 | 0.46             | 11.7 |
|               |               | 139.9 | 94    | 26.92   | 684 | 9.99            | 254 | 0.75              | 19.0 | 0.49             | 12.4 |
|               |               | 151.8 | 102   | 27.09   | 688 | 10.02           | 255 | 0.83              | 21.1 | 0.52             | 13.2 |
|               |               | 169.6 | 114   | 27.29   | 693 | 10.07           | 256 | 0.93              | 23.6 | 0.57             | 14.5 |
|               |               | 192.0 | 129   | 27.63   | 702 | 10.01           | 254 | 1.10              | 27.9 | 0.61             | 15.5 |
| 27" x 14"     | 685.8 x 355.6 | 217.3 | 146   | 27.38   | 695 | 13.97           | 355 | 0.98              | 24.9 | 0.61             | 15.5 |
|               |               | 239.6 | 161   | 27.59   | 701 | 14.02           | 356 | 1.08              | 27.4 | 0.66             | 16.8 |
| 30" 10 1/2"   | 762.0 x 266.7 | 133.9 | 90    | 29.53   | 750 | 10.40           | 264 | 0.61              | 15.5 | 0.47             | 11.9 |
|               |               | 147.3 | 99    | 29.65   | 753 | 10.45           | 265 | 0.67              | 17.0 | 0.52             | 13.2 |
|               |               | 160.7 | 108   | 29.86   | 758 | 10.48           | 266 | 0.76              | 19.3 | 0.55             | 14.0 |
|               |               | 172.6 | 116   | 30.01   | 762 | 10.50           | 267 | 0.85              | 21.6 | 0.57             | 14.5 |
|               |               | 184.7 | 124   | 30.17   | 766 | 10.52           | 264 | 0.93              | 23.6 | 0.59             | 14.9 |
|               |               | 196.4 | 132   | 30.31   | 769 | 10.54           | 267 | 1.00              | 25.4 | 0.61             | 15.5 |
|               |               | 220.2 | 148   | 30.67   | 779 | 10.48           | 266 | 1.18              | 30.0 | 0.65             | 16.5 |
| 33" x 11 1/2" | 838.2 x 292.1 | 175.6 | 118   | 32.86   | 835 | 11.48           | 292 | 0.74              | 18.8 | 0.55             | 14.0 |
|               |               | 193.4 | 130   | 33.09   | 840 | 11.51           | 292 | 0.86              | 21.8 | 0.58             | 14.7 |
|               |               | 209.8 | 141   | 33.30   | 846 | 11.54           | 293 | 0.96              | 24.4 | 0.61             | 15.5 |
|               |               | 226.2 | 152   | 33.49   | 850 | 11.56           | 293 | 1.05              | 26.7 | 0.63             | 16.0 |
| 36" x 12"     | 914.4 x 304.8 | 200.9 | 135   | 35.55   | 903 | 11.95           | 304 | 0.79              | 20.1 | 0.60             | 15.2 |
|               |               | 223.2 | 150   | 35.85   | 911 | 11.98           | 304 | 0.94              | 23.9 | 0.63             | 16.0 |
|               |               | 238.1 | 160   | 36.01   | 915 | 12.00           | 305 | 1.02              | 25.9 | 0.65             | 16.5 |
|               |               | 253.3 | 170   | 36.17   | 918 | 12.03           | 306 | 1.10              | 27.9 | 0.68             | 17.2 |
|               |               | 312.5 | 210   | 36.69   | 932 | 12.18           | 309 | 1.36              | 34.5 | 0.83             | 21.1 |
| 40" x 12"     | 1016 x 304.8  | 221.7 | 149   | 38.20   | 970 | 11.81           | 300 | 0.83              | 21.1 | 0.63             | 16.0 |



# ÁNGULOS

Perfiles estructurales que forman un ángulo recto de 90° de lados iguales y/o desiguales.

ÁNGULOS (LADOS DESIGUALES)

| ESPESOR Y DIMENSIONES |                  |            |                  | PESO   |          |
|-----------------------|------------------|------------|------------------|--------|----------|
| Pulg.                 | ANCHO            | mm.        |                  | PESO   |          |
| Espesor(k)            | Dimensión (dxbf) | Espesor(k) | Dimensión (dxbf) | kg./m. | lb./pie. |
| 3/16                  | 3x2              | 4.76       | 76.2x50.8        | 4.57   | 3.07     |
| 1/4                   | 3.2              | 6.35       | 76.2x50.8        | 6.70   | 4.50     |
|                       | 4.3              |            | 101.6x76.2       | 8.63   | 5.8      |
| 5/16                  | 4.3              | 7.90       | 101.6x76.2       | 10.70  | 7.20     |
| 3/8                   | 6.4              | 9.53       | 152.4x101.6      | 18.30  | 12.30    |
| 1/2                   | 6.4              | 12.70      | 152.4x101.6      | 24.11  | 16.20    |



| Pulgada |        | mm.     |         | PESO   |
|---------|--------|---------|---------|--------|
| Espesor | Ancho  | Espesor | Ancho   | kg./m. |
| 109     | x1     | 2.8     | x 25.4  | 1.05   |
|         | x1 1/4 |         | x 31.7  | 1.33   |
|         | x1 1/2 |         | x 38.1  | 1.61   |
| 1/8     | x1 1/2 | 3.2     | x 38.1  | 1.83   |
|         | x1 3/4 |         | x 44.4  | 2.14   |
|         | x2     |         | x 50.8  | 2.46   |
| 3/16    | x1 3/4 | 4.8     | x 44.4  | 3.15   |
|         | x2     |         | x 50.8  | 3.63   |
|         | x2 1/2 |         | x 63.5  | 4.57   |
|         | x3     |         | x 76.2  | 5.52   |
| 1/4     | x1 3/4 | 6.3     | x 44.4  | 4.12   |
|         | x2     |         | x 50.8  | 4.75   |
|         | x2 1/2 |         | x 63.5  | 6.10   |
|         | x3     |         | x 76.2  | 7.29   |
|         | x3 1/2 |         | x 88.9  | 8.63   |
|         | x4     |         | x 101.6 | 9.82   |
| 5/16    | x3     | 7.9     | x 76.2  | 9.08   |
|         | x3 1/2 |         | x 88.9  | 10.71  |
|         | x4     |         | x 101.6 | 12.20  |
|         | x5     |         | x 127.0 | 15.32  |
|         | x6     |         | x 152.4 | 18.45  |
| 3/8     | x3     | 9.5     | x 76.2  | 10.71  |
|         | x3 1/2 |         | x 88.9  | 12.64  |
|         | x4     |         | x 101.6 | 14.58  |
|         | x5     |         | x 127.0 | 18.30  |
|         | x6     |         | x 152.4 | 22.17  |
| 7/16    | x4     | 11.1    | x 101.6 | 16.81  |
|         | x6     |         | x 152.4 | 25.59  |

| Pulgada |       | mm.     |         | PESO   |
|---------|-------|---------|---------|--------|
| Espesor | Ancho | Espesor | Ancho   | kg./m. |
| 1/2     | x3    | 12.7    | x 76.2  | 13.99  |
|         | x4    |         | x 101.6 | 19.05  |
|         | x5    |         | x 127.0 | 24.11  |
|         | x6    |         | x 152.4 | 29.16  |
|         | x8    |         | x 203.2 | 39.28  |
| 9/16    | x8    | 14.3    | x 203.2 | 44.05  |
| 5/8     | x4    | 15.9    | x 101.6 | 23.46  |
|         | x6    |         | x 152.4 | 36.01  |
|         | x8    |         | x 203.2 | 48.66  |
| 3/4     | x6    | 19.0    | x 152.4 | 42.71  |
|         | x8    |         | x 203.2 | 57.88  |
| 7/8     | x8    | 22.2    | x 203.2 | 66.96  |
| 1       | x6    | 25.4    | x 152.4 | 55.85  |
|         | x8    |         | x 203.2 | 75.89  |
| 1 1/8   | x8    | 28.6    | x 203.2 | 84.67  |

# SOLERAS

*Placa de metal plano que se utiliza para fabricar herramientas o como perfil estructural.*



## SOLERAS DE SLITTER

| Dimensiones |       |         |       | Peso |        |
|-------------|-------|---------|-------|------|--------|
| Pulg.       |       | mm.     |       |      |        |
| Espesor     | Ancho | Espesor | Ancho | kg/m | lb/pie |
| 1/8         | 1/2   | 3.2     | 12.7  | 0.31 | 0.21   |
|             | 3/4   |         | 19.1  | 0.47 | 0.32   |
|             | 1     |         | 25.4  | 0.63 | 0.43   |
|             | 1 1/4 |         | 31.7  | 0.79 | 0.53   |
|             | 1 1/2 |         | 38.1  | 0.95 | 0.64   |
| 3/16        | 2     | 4.8     | 50.8  | 1.26 | 0.85   |
|             | 1/2   |         | 12.7  | 0.47 | 0.32   |
|             | 3/4   |         | 19.1  | 0.71 | 0.48   |
|             | 1     |         | 25.4  | 0.94 | 0.64   |
|             | 1 1/4 |         | 31.7  | 1.18 | .080   |
|             | 1 1/2 |         | 38.1  | 1.42 | 0.96   |
|             | 2     |         | 50.8  | 1.90 | 1.28   |
|             | 3     |         | 76.2  | 2.85 | 1.91   |

SOLERAS

PERFILES ESTRUCTURALES

Soleras a 6.10 mts (20pies)

| Pulgada |         | mm         | Kg/m  |
|---------|---------|------------|-------|
| 1/8     | x 1/2   | 3.2 x 12.7 | 0.32  |
|         | x 3/4   | x 19.0     | 0.47  |
|         | x 1     | x 25.4     | 0.63  |
|         | x 1 1/4 | x 31.7     | 0.79  |
|         | x 1 1/2 | x 38.1     | 0.95  |
|         | x 2     | x 50.8     | 1.27  |
| 3/16    | x 1/2   | 4.8 x 12.7 | 0.47  |
|         | x 3/4   | x 19.0     | 0.71  |
|         | x 1     | x 25.4     | 0.95  |
|         | x 1 1/4 | x 31.7     | 1.19  |
|         | x 1 1/2 | x 38.1     | 1.42  |
|         | x 2     | x 50.8     | 1.90  |
| 1/4     | x 1     | 6.3 x 25.4 | 1.27  |
|         | x 1 1/4 | x 31.7     | 1.58  |
|         | x 1 1/2 | x 38.1     | 1.90  |
|         | x 2     | x 50.8     | 2.53  |
|         | x 2 1/2 | x 63.5     | 3.17  |
|         | x 3     | x 76.2     | 3.79  |
|         | x 4     | x 101.6    | 5.06  |
|         | x 5     | x 127.0    | 6.32  |
|         | x 6     | x 152.4    | 7.59  |
|         | x 8     | x 203.2    | 10.13 |
|         | x 10    | x 254.0    | 12.66 |
|         | x 12    | x 304.8    | 15.18 |
|         | 3/8     | 9.5 x 25.4 | 1.90  |
|         |         | x 31.7     | 2.38  |
|         |         | x 38.1     | 2.54  |
|         |         | x 50.8     | 3.79  |
|         |         | x 63.5     | 4.75  |
|         |         | x 76.2     | 5.70  |
|         | x 4     | x 101.6    | 7.59  |
|         | x 5     | x 127.0    | 9.49  |
|         | x 6     | x 152.4    | 11.40 |
|         | x 8     | x 203.2    | 15.18 |
|         | x 10    | x 254.0    | 18.99 |
|         | x 12    | x 304.8    | 22.80 |

Soleras a 6.10 mts (20pies)

| Pulgada |         | mm          | Kg/m  |
|---------|---------|-------------|-------|
| 1/2     | x 1     | 12.7 x 25.4 | 1.90  |
|         | x 1 1/2 | x 38.1      | 2.38  |
|         | x 2     | x 50.8      | 2.54  |
|         | x 2 1/2 | x 63.5      | 3.79  |
|         | x 3     | x 76.2      | 4.75  |
|         | x 4     | x 101.6     | 5.70  |
| 5/8     | x 5     | x 127.0     | 7.59  |
|         | x 6     | x 152.4     | 9.49  |
|         | x 8     | x 203.2     | 11.40 |
|         | x 10    | x 254.0     | 15.18 |
|         | x 12    | x 304.8     | 18.99 |
|         | 3/4     | 15.9 x 76.2 | 9.49  |
|         |         | x 101.6     | 12.66 |
|         |         | x 127.0     | 15.83 |
|         |         | x 152.4     | 18.99 |
|         |         | x 203.2     | 25.33 |
|         |         | x 254.0     | 31.66 |
| 3/4     | x 12    | x 304.8     | 37.97 |
|         | 1       | 19.0 x 38.1 | 5.70  |
|         |         | x 50.8      | 7.59  |
|         |         | x 63.5      | 9.49  |
|         |         | x 76.2      | 11.40 |
|         |         | x 101.6     | 15.18 |
|         |         | x 127.0     | 18.99 |
|         | 1       | x 152.4     | 22.80 |
|         |         | x 203.2     | 30.36 |
|         |         | x 254.0     | 37.97 |
|         |         | x 304.8     | 45.59 |
|         |         | 25.4 x 50.8 | 10.13 |
|         |         | x 76.2      | 15.18 |
|         |         | x 101.6     | 20.27 |
|         |         | x 152.4     | 30.36 |
|         |         | x 203.2     | 40.53 |
|         | x 10    | x 254.0     | 50.65 |
|         | x 12    | x 304.8     | 60.71 |

Soleras a 12.20 mts (40pies) en Acero A-529°55

| Pulgada |   |    | mm   |         | Kg/m  |
|---------|---|----|------|---------|-------|
| 5/16    | x | 6  | 17.9 | x 152.4 | 9.49  |
|         | x | 8  |      | x 203.2 | 12.65 |
|         | x | 10 |      | x 254.0 | 15.77 |
| 3/8     | x | 6  | 9.5  | x 152.4 | 11.40 |
|         | x | 8  |      | x 203.2 | 15.18 |
|         | x | 9  |      | x 228.6 | 17.27 |
|         | x | 10 |      | x 254.0 | 18.99 |
| 1/2     | x | 12 |      | x 304.8 | 22.80 |
|         | x | 6* | 12.7 | x 152.4 | 15.18 |
|         | x | 8  |      | x 203.2 | 20.24 |
|         | x | 9  |      | x 228.6 | 23.03 |
| 5/8     | x | 10 |      | x 254.0 | 25.33 |
|         | x | 12 |      | x 304.8 | 30.36 |
|         | x | 6  | 15.9 | x 152.4 | 18.99 |
|         | x | 8  |      | x 203.3 | 25.33 |
|         | x | 10 |      | x 254.0 | 31.66 |
| 3/4     | x | 12 |      | x 304.8 | 37.97 |
|         | x | 8  | 19.0 | x 203.2 | 30.35 |
|         | x | 10 |      | x 254.0 | 37.97 |
|         | x | 12 |      | x 304.8 | 45.59 |
| 1       | x | 8  | 25.4 | x 203.2 | 40.47 |
|         | x | 10 |      | x 254.0 | 50.65 |
|         | x | 12 |      | x 304.8 | 60.71 |

\*También se maneja en grado A-572°65

Soleras a 12.20 mts (40pies) en Acero A-529°55



# REDONDO Y CUADRADO

Productos fabricados en acero comercial ya sea en forma cuadrado o redonda.



| Medidas |           |       | Peso     |        |           |        |                     |        |
|---------|-----------|-------|----------|--------|-----------|--------|---------------------|--------|
|         |           |       | Redondos |        | Cuadrados |        | Cuadrados retorcido |        |
| Pulg.   | milésimas | mm    | kg/m     | lb/pie | kg/m      | lb/pie | kg/m                | lb/pie |
| 12 mm   | 0.472     | 12.00 | -        | -      | 1.14      | 0.77   | 1.14                | 0.77   |
| 3/8     | 0.375     | 9.53  | 0.56     | 0.38   | 0.71      | 0.48   | 0.71                | 0.48   |
| 1/2     | 0.500     | 12.70 | 0.99     | 0.67   | 1.26      | 0.85   | 1.26                | 0.85   |
| 5/8     | 0.625     | 15.88 | 1.55     | 1.04   | 1.98      | 1.33   | 1.58                | 1.33   |
| 3/4     | 0.750     | 19.05 | 2.24     | 1.50   | 2.85      | 1.91   | -                   | -      |
| 7/8     | 0.875     | 22.23 | 3.04     | 2.04   | -         | -      | -                   | -      |
| 1       | 1.000     | 25.40 | 3.97     | 2.67   | 5.06      | 3.40   | -                   | -      |
| 1 1/8   | 1.125     | 28.58 | 5.03     | 3.38   | -         | -      | -                   | -      |
| 1 1/4   | 1.250     | 31.75 | 6.21     | 4.17   | 7.91      | 5.31   | -                   | -      |
| 1 3/8   | 1.375     | 34.93 | 7.51     | 5.05   | -         | -      | -                   | -      |
| 1 1/2   | 1.500     | 38.10 | 8.94     | 6.01   | 11.38     | 7.65   | -                   | -      |
| 1 3/4   | 1.750     | 44.45 | 12.17    | 8.18   | -         | -      | -                   | -      |
| 2       | 2.000     | 50.80 | 15.90    | 10.68  | 20.24     | 13.60  | -                   | -      |
| 2 1/2   | 2.500     | 63.50 | 24.84    | 16.69  | 31.62     | 21.50  | -                   | -      |
| 3       | 3.000     | 76.20 | 35.76    | 24.04  | -         | -      | -                   | -      |

**PRESENTACIÓN:** Se manejan a 6.10m de largo en grado ASTM A-36

## REDONDO BRILLANTE (SEMIFLECHA)

| Pulgada | mm   | Kg/m |
|---------|------|------|
| 3/16    | 4.8  | 0.14 |
| 1/4     | 6.3  | 0.25 |
| 5/16    | 7.9  | 0.39 |
| 3/8     | 9.53 | 0.56 |



# HSS

Perfil estructural cuadrado o rectangular.



Resistencia máxima a la tensión

| Dimensiones Exteriores |           | Espesor |      | Peso   |       |
|------------------------|-----------|---------|------|--------|-------|
| Pulg.                  | mm        | Pulg.   | mm   | Kg/pza | Kg/m  |
| 4" x 4"                | 102x102   | 0.312   | 7.9  | 270    | 22.13 |
|                        |           | 0.375   | 9.5  | 314    | 25.73 |
| 5" x 5"                | 127 x 127 | 0.312   | 7.9  | 348    | 28.52 |
|                        |           | 0.375   | 9.5  | 408    | 33.44 |
| 6" x 4"                | 152 x 102 | 0.312   | 7.9  | 348    | 28.52 |
|                        |           | 0.375   | 9.5  | 406    | 33.27 |
| 6" x 6"                | 152 x 152 | 0.187   | 4.7  | 264    | 21.63 |
|                        |           | 0.250   | 6.3  | 346    | 28.36 |
|                        |           | 0.312   | 7.9  | 424    | 34.75 |
|                        |           | 0.500   | 9.5  | 500    | 40.98 |
|                        |           |         | 12.7 | 640    | 52.45 |
| 8" x 6"                | 203 x 152 | 0.250   | 6.3  | 408    | 33.44 |
|                        |           | 0.375   | 9.5  | 592    | 48.52 |
| 8" x 8"                | 203 x 203 | 0.187   | 4.7  | 356    | 29.18 |
|                        |           | 0.250   | 6.3  | 470    | 38.52 |
|                        |           | 0.312   | 7.9  | 578    | 47.37 |
|                        |           | 0.375   | 9.5  | 684    | 56.06 |
|                        |           | 0.500   | 12.7 | 888    | 72.78 |

| Dimensiones Exteriores |           | Espesor |      | Peso   |        |
|------------------------|-----------|---------|------|--------|--------|
| Pulg.                  | mm        | Pulg.   | mm   | Kg/pza | Kg/m   |
| 10" x 6"               | 254 x 152 | 0.187   | 4.7  | 358    | 29.34  |
|                        |           | 0.250   | 6.3  |        |        |
|                        |           | 0.375   | 7.9  |        |        |
|                        |           |         | 9.5  |        |        |
|                        |           |         | 12.7 |        |        |
| 10" x 10"              | 254 x 254 | 0.187   | 4.7  | 450    | 36.88  |
|                        |           | 0.250   | 6.3  | 592    | 48.52  |
|                        |           | 0.312   | 7.9  | 734    | 60.16  |
|                        |           | 0.375   | 9.5  | 870    | 71.31  |
|                        |           | 0.500   | 12.7 | 1,134  | 92.96  |
| 12" x 6"               | 305 x 152 | 0.375   | 9.5  | 778    | 63.77  |
| 12" x 8"               | 305 x 203 | 0.375   | 9.5  | 870    | 71.31  |
|                        |           | 0.500   | 12.7 | 1,134  | 92.96  |
| 12" x 12"              | 305 x 305 | 0.250   | 6.3  | 716    | 58.68  |
|                        |           | 0.312   | 7.9  | 888    | 72.79  |
|                        |           | 0.375   | 9.5  | 1,056  | 86.55  |
|                        |           | 0.500   | 12.7 | 1,382  | 113.27 |
|                        |           | 0.525   | 15.9 | 1,694  | 138.85 |
| 14" x 14"              | 356 x 356 | 0.312   | 7.9  | 1,042  | 85.40  |
|                        |           | 0.375   | 9.5  | 1,240  | 72.79  |
|                        |           | 0.500   | 12.7 | 1,628  | 86.55  |
|                        |           | 0.625   | 15.9 | 1,998  | 113.85 |
| 16" x 16"              | 406 x 406 | 0.312   | 7.9  | 1,196  | 98.03  |
|                        |           | 0.375   | 9.5  | 1,426  | 116.89 |
|                        |           | 0.500   | 12.7 | 1,876  | 153.77 |
|                        |           | 0.625   | 15.9 | 2,312  | 189.51 |

# PTR

*Tubo de acero estructural hueco con forma rectangular o cuadrada.*



| Dimensiones Exteriores |         | Espesor |     | Calibre | Kg/m | Largo (m) | Pza. x Paquete | Peso Paquete |
|------------------------|---------|---------|-----|---------|------|-----------|----------------|--------------|
| Pulg.                  | mm      | Pulg.   | mm  |         |      |           |                |              |
| 1/2" x 1/2"            | 13 x 13 | 0.036   | 0.9 | 20      | 0.34 | 6.00      | 231            | 471          |
|                        |         | 0.048   | 1.2 | 18      | 0.44 | 6.00      | 231            | 610          |
| 5/8" x 5/8"            | 16 x 16 | 0.036   | 0.9 | 20      | 0.43 | 6.00      | 252            | 650          |
|                        |         | 0.048   | 1.2 | 18      | 0.56 | 6.00      | 252            | 847          |
| 3/4" x 3/4"            | 19 x 19 | 0.036   | 0.9 | 20      | 0.52 | 6.00      | 121            | 378          |
|                        |         | 0.048   | 1.2 | 18      | 0.68 | 6.00      | 121            | 494          |
|                        |         | 0.060   | 1.5 | 16      | 0.84 | 6.00      | 121            | 610          |
|                        |         | 0.075   | 1.9 | 14      | 1.02 | 6.00      | 121            | 741          |
|                        |         |         |     |         |      |           |                |              |
| 1" x 1/2"              | 25 x 13 | 0.048   | 1.2 | 18      | 0.68 | 6.00      | 120            | 490          |
| 1" x 1"                | 25 x 25 | 0.036   | 0.9 | 20      | 0.70 | 6.00      | 100            | 420          |
| 1 1/4" x 3/4"          | 32 x 19 | 0.048   | 1.2 | 18      | 0.92 | 6.00      | 100            | 552          |
|                        |         | 0.060   | 1.5 | 16      | 1.14 | 6.00      | 100            | 684          |
|                        |         | 0.075   | 1.9 | 14**    | 1.40 | 6.00      | 100            | 840          |
|                        |         | 0.090   | 2.3 | 13      | 1.65 | 6.00      | 100            | 990          |
|                        |         | 0.105   | 2.7 | 12      | 1.90 | 6.00      | 100            | 1140         |
|                        |         | 0.120   | 3   | 11      | 1.94 | 6.00      | 100            | 1164         |
|                        |         | 0.135   | 3.4 | 10      | 2.12 | 6.00      | 100            | 1272         |
|                        |         |         |     |         |      |           |                |              |
| 1 1/4" x 1 1/4"        | 32 x 32 | 0.036   | 0.9 | 20      | 0.70 | 6.00      | 99             | 416          |
|                        |         | 0.048   | 1.2 | 18      | 0.92 | 6.00      | 99             | 546          |
| 1 1/2" x 1/2"          | 38 x 13 | 0.036   | 0.9 | 20      | 0.88 | 6.00      | 81             | 428          |
|                        |         | 0.048   | 1.2 | 18      | 1.16 | 6.00      | 81             | 564          |
|                        |         | 0.060   | 1.5 | 16      | 1.44 | 6.00      | 100            | 864          |
|                        |         | 0.075   | 1.9 | 14**    | 1.78 | 6.00      | 100            | 1068         |
|                        |         | 0.105   | 2.7 | 12      | 2.42 | 6.00      | 100            | 1452         |
| 1 1/2" x 1"            | 38 x 25 | 0.036   | 0.9 | 20      | 0.70 | 6.00      | 98             | 412          |
|                        |         | 0.048   | 1.2 | 18      | 0.92 | 6.00      | 98             | 541          |
|                        |         | 0.036   | 0.9 | 20      | 0.88 | 6.00      | 84             | 444          |

| Dimensiones Exteriores |         | Espesor |     | Calibre | Kg/m  | Largo (m) | Pza. x Paquete | Peso Paquete |
|------------------------|---------|---------|-----|---------|-------|-----------|----------------|--------------|
| Pulg.                  | mm      | Pulg.   | mm  |         |       |           |                |              |
| 1 1/2" x 1 1/2"        | 38 x 38 | 0.036   | 0.9 | 20      | 1.06  | 6.00      | 49             | 312          |
|                        |         | 0.048   | 1.2 | 18      | 1.40  | 6.00      | 49             | 412          |
|                        |         | 0.060   | 1.5 | 16      | 1.74  | 6.00      | 100            | 1044         |
|                        |         | 0.075   | 1.9 | 14**    | 2.15  | 6.00      | 64             | 826          |
|                        |         | 0.105   | 2.7 | 12      | 2.95  | 6.00      | 64             | 1133         |
|                        |         | 0.120   | 3   | 11      | 3.15  | 6.00      | 64             | 1210         |
|                        |         | 0.150   | 3.8 | 9       | 3.79  | 6.00      | 64             | 1455         |
| 1 3/4" x 1 3/4"        | 44 x 19 | 0.036   | 0.9 | 20      | 0.88  | 6.00      | 84             | 444          |
|                        |         | 0.048   | 1.2 | 18      | 1.16  | 6.00      | 84             | 585          |
| 2" x 1"                | 51 x 25 | 0.036   | 0.9 | 20      | 1.06  | 6.00      | 50             | 318          |
|                        |         | 0.048   | 1.2 | 18      | 1.40  | 6.00      | 50             | 420          |
|                        |         | 0.075   | 1.9 | 14      | 2.15  | 6.00      | 80             | 1032         |
|                        |         | 0.120   | 3   | 11      | 3.15  | 6.00      | 80             | 1512         |
| 2" x 2"                | 51 x 51 | 0.048   | 1.2 | 18      | 1.89  | 6.00      | 64             | 726          |
|                        |         | 0.060   | 1.5 | 16      | 2.35  | 6.00      | 64             | 902          |
|                        |         | 0.075   | 1.9 | 14**    | 2.91  | 6.00      | 64             | 1117         |
|                        |         | 0.105   | 2.7 | 12      | 4.01  | 6.00      | 64             | 1540         |
|                        |         | 0.120   | 3   | 11      | 4.36  | 6.00      | 64             | 1674         |
|                        |         | 0.135   | 3.4 | 10      | 4.84  | 6.00      | 64             | 1859         |
|                        |         | 0.150   | 3.8 | 9       | 5.31  | 6.00      | 64             | 2039         |
|                        |         | 0.180   | 4.6 | 7       | 6.43  | 6.10      | 36             | 1412         |
|                        |         | 0.250   | 6.3 | 1/4"    | 8.04  | 6.10      | 36             | 1766         |
|                        |         |         |     |         |       |           |                |              |
| 2 1/4" x 3/4"          | 57 x 19 | 0.036   | 0.9 | 20      | 1.06  | 6.00      | 55             | 350          |
|                        |         | 0.048   | 1.2 | 18      | 1.40  | 6.00      | 55             | 462          |
| 2 1/2" x 1 1/4"        | 64 x 32 | 0.036   | 0.9 | 20      | 1.34  | 6.00      | 54             | 434          |
|                        |         | 0.048   | 1.2 | 18      | 1.77  | 6.00      | 54             | 573          |
| 2 1/2" x 1 1/2"        | 64 x 38 | 0.075   | 1.9 | 14      | 2.91  | 6.00      | 48             | 838          |
| 2 1/2" x 2 1/2"        | 64 x 64 | 0.075   | 1.9 | 14      | 3.67  | 6.00      | 42             | 925          |
|                        |         | 0.105   | 2.7 | 12      | 5.07  | 6.00      | 36             | 1095         |
|                        |         | 0.120   | 3   | 11      | 5.57  | 6.00      | 36             | 1203         |
|                        |         | 0.135   | 3.4 | 10      | 6.20  | 6.00      | 36             | 1339         |
|                        |         | 0.180   | 4.6 | 7       | 8.34  | 6.10      | 36             | 1831         |
|                        |         | 0.250   | 6.3 | 1/4"    | 10.57 | 6.10      | 36             | 2321         |
| 3" x 1"                | 76 x 25 | 0.048   | 1.2 | 18      | 1.89  | 6.00      | 48             | 544          |
|                        |         | 0.060   | 1.5 | 16      | 2.35  | 6.00      | 48             | 676          |
|                        |         | 0.075   | 1.9 | 14      | 2.91  | 6.00      | 48             | 838          |
|                        |         | 0.120   | 3   | 11      | 4.36  | 6.00      | 48             | 1256         |
| 3" x 1 1/2"            | 76 x 38 |         |     | 10      | 4.84  | 6.00      | 48             | 1394         |
|                        |         | 0.135   | 3.4 |         |       |           |                |              |
|                        |         | 0.036   | 0.9 | 20      | 1.61  | 6.00      | 48             | 464          |
|                        |         | 0.048   | 1.2 | 18      | 2.13  | 6.00      | 70             | 895          |
|                        |         | 0.075   | 1.9 | 14      | 3.29  | 6.00      | 70             | 1382         |
|                        |         | 0.120   | 3   | 11      | 4.90  | 6.00      | 70             | 2058         |

| Dimensiones Exteriores |           | Espesor |     | Calibre | Kg/m  | Largo (m)  | Pza. x Paquete | Peso Paquete |
|------------------------|-----------|---------|-----|---------|-------|------------|----------------|--------------|
| Pulg.                  | mm        | Pulg.   | mm  |         |       |            |                |              |
| 3" x 2"                | 76 x 51   | 0.075   | 1.9 | 14      | 3.67  | 6.00       | 49             | 1079         |
|                        |           | 0.120   | 3   | 11      | 5.57  | 6.00       | 42             | 1404         |
|                        |           | 0.135   | 3.4 | 10      | 6.20  | 6.00       | 42             | 1562         |
|                        |           | 0.180   | 4.6 | 7       | 8.34  | 6.00       | 36             | 1831         |
|                        |           | 0.250   | 6.3 | 1/4"    | 10.57 | 6.00       | 36             | 2321         |
| 3" x 3"                | 76 x 76   | 0.075   | 1.9 | 14      | 4.42  | 6.00       | 42             | 1131         |
|                        |           | 0.120   | 3   | 11      | 6.78  | 6.00       | 36             | 1489/ 2978   |
|                        |           | 0.150   | 3.8 | 9       | 8.33  | 6.00       | 25             | 1270         |
|                        |           | 0.180   | 4.6 | 7       | 10.24 | 6.00       | 25             | 1562         |
|                        |           | 0.250   | 6.3 | 1/4"    | 13.10 | 6.00       | 25/20          | 1998 / 3196  |
| 3 1/2"x3 1/2"          | 89 x 89   | 0.120   | 3   | 11      | 7.99  | 6.00       | 36             | 1755         |
|                        |           | 0.150   | 3.8 | 9       | 9.85  | 6.00       | 25             | 1502         |
|                        |           | 0.180   | 4.6 | 7       | 12.14 | 6.00       | 25             | 1851         |
|                        |           | 0.250   | 6.3 | 1/4"    | 15.63 | 6.00       | 16             | 1525/ 3051   |
|                        |           | 0.075   | 1.9 | 14      | 4.04  | 6.00       | 35             | 848          |
| 4" x 1 1/2"            | 102 x 38  | 0.075   | 1.9 | 14      | 4.42  | 6.00       | 40             | 1061         |
| 4" x 2"                | 102 x 51  | 0.120   | 3   | 11      | 6.78  | 6.00       | 32             | 1302         |
|                        |           | 0.150   | 3.8 | 9       | 8.33  | 6.00       | 32             | 1599         |
|                        |           | 0.180   | 4.6 | 7       | 10.24 | 6.00       | 28             | 1749         |
|                        |           | 0.250   | 6.3 | 1/4"    | 13.13 | 6.10       | 20             | 1602 /3204   |
|                        |           | 0.075   | 1.9 | 14      | 5.18  | 6.10/12.20 | 42             | 1328         |
| 4" x 3"                | 102 x 76  | 0.120   | 3   | 11      | 7.99  | 6.00       | 30             | 1462         |
|                        |           | 0.150   | 3.8 | 9       | 9.85  | 6.10       | 25             | 1502 /3004   |
|                        |           | 0.180   | 4.6 | 7       | 12.14 | 6.10/12.20 | 20             | 1481         |
|                        |           | 0.250   | 6.3 | 1/4"    | 15.63 | 6.10       | 16             | 1525 / 3051  |
|                        |           | 0.075   | 1.9 | 14      | 5.93  | 6.10/12.20 | 30             | 1085         |
| 4" x 4"                | 102 x 102 | 0.125   | 3.2 | 1/8"    | 9.21  | 6.00       | 30 / 20        | 1685/ 2247   |
|                        |           | 0.150   | 3.8 | 9       | 11.36 | 6.10/12.20 | 25             | 1732         |
|                        |           | 0.187   | 4.7 | 3/16"   | 14.04 | 6.10       | 25 / 20        | 2141 / 3426  |
|                        |           | 0.250   | 63  | 1/4"    | 18.16 | 6.10/12.20 | 16             | 1772 / 3545  |
|                        |           | 0.120   | 3   | 11      | 7.99  | 6.10/12.20 | 20             | 975          |
| 5" x 2"                | 127 x 51  | 0.180   | 4.6 | 7       | 12.14 | 6.10       | 20             | 1481         |
|                        |           | 0.075   | 1.9 | 14      | 5.93  | 6.10       | 35             | 1266         |
| 5" x 3"                | 127 x 76  | 0.125   | 3.2 | 1/8"    | 9.21  | 6.00       | 35             | 1966 / 3933  |
|                        |           | 0.187   | 4.7 | 3/16"   | 14.03 | 6.10/12.20 | 24             | 2054 / 4108  |
|                        |           | 0.250   | 6.3 | 1/4"    | 18.16 | 6.10/12.20 | 18             | 1994 / 3988  |
|                        |           | 0.125   | 3.2 | 1/8"    | 11.63 | 6.10/12.20 | 20/16          | 1419 / 2270  |
|                        |           | 0.187   | 4.7 | 3/16"   | 17.85 | 6.10/12.20 | 16             | 1742 / 3484  |
| 5" x 5"                | 127 x 127 | 0.250   | 6.3 | 1/4"    | 23.22 | 6.10/12.20 | 12             | 1700 / 3400  |
|                        |           | 0.075   | 1.9 | 14      | 5.93  | 6.10/12.20 | 16             | 579          |
|                        |           | 0.125   | 3.2 | 1/8"    | 9.21  | 6.00       | 16             | 899 /1798    |
|                        |           | 0.187   | 4.7 | 3/16"   | 14.03 | 6.10/12.20 | 16             | 1369/ 2739   |
|                        |           | 0.250   | 6.3 | 1/4"    | 18.16 | 6.10/12.20 | 16             | 1772 / 3545  |
| 6" x 2"                | 152 x 51  | 0.125   | 3.2 | 1/8"    | 11.63 | 6.10/12.20 | 20/12          | 1419 / 1703  |
|                        |           | 0.187   | 4.7 | 3/16"   | 17.85 | 6.10/12.20 | 20/16          | 2178 / 3484  |
|                        |           | 0.250   | 6.3 | 1/4"    | 23.22 | 6.10/12.20 | 12             | 1700 / 3399  |



# POLÍN TIPO C

*Producto derivado de lámina caliente,  
puede fabricarse en calidad comercial  
o alta resistencia.*

| Medida        | Dimensiones  | Kg/m  | Largo (m) | Pzas. x Paquete | Peso. x Paquete |
|---------------|--------------|-------|-----------|-----------------|-----------------|
| 3" Cal 14     | 3" x 1 1/2"  | 2.61  | 6         | 60              | 940             |
| 3" Cal 16     | 3" x 1 1/2"  | 2.08  | 6         | 60              | 749             |
| 4" Cal 14     | 4" x 2"      | 3.4   | 6         | 48              | 979             |
| 4" Cal 16     | 4" x 2"      | 2.71  | 6         | 498             | 780             |
| 5" Cal 14     | 5" x 2"      | 3.8   | 6         | 48              | 1094            |
| 6" Cal 12     | 6" x 2"      | 5.86  | 6         | 48              | 1688            |
| 6" Cal 14     | 6" x 2"      | 4.19  | 6         | 48              | 1207            |
| 8" Cal 10     | 8" x 2 3/4"  | 9.9   | 8         | 24              | 1901            |
| 8" Cal 12     | 8" x 2 3/4"  | 7.96  | 8         | 24              | 1528            |
| 8" Cal 14*    | 8" x 2 3/4"  | 5.7   | 6         | 24              | 821             |
| 8" Cal 14     | 8" x 2 3/4"  | 5.7   | 8         | 24              | 1094            |
| 10" Cal 10    | 10" x 2 3/4" | 11.2  | 10        | 16              | 1792            |
| 10" Cal 12    | 10" x 2 3/4" | 9.06  | 10        | 16              | 1450            |
| 10" Cal 14*** | 10" x 2 3/4" | 6.49  | 10        | 16              | 1038            |
| 10" Cal 14 ** | 10" x 3 1/2" | 6.85  | 10        | 16              | 1096            |
| 12" Cal 10    | 12" x 3 1/2" | 13.6  | 12        | 12              | 1958            |
| 12" Cal 12    | 12" x 3 1/2" | 10.99 | 12        | 12              | 1583            |
| 12" Cal 14    | 12" x 3 1/2" | 7.87  | 12        | 12              | 1133            |
| 14" Cal 12    | 14" x 3 1/2" | 12.1  | 14        | 12              | 2033            |
| 14" Cal 14    | 14" x 3 1/2" | 8.7   | 14        | 12              | 1462            |

■ Solo bajo pedido

# VARILLA

*Tipo de acero diseñado para la construcción especialmente como refuerzo de concreto.*

## PRESENTACIÓN



12 m de longitud



9.15 m de longitud

(Solo Varilla de 3/8 y 1/2)



## VARILLA CORRUGADA

| No.<br>Designación | Calibre |      | Peso |        | Área de la Sección<br>Transversal | Perímetro |
|--------------------|---------|------|------|--------|-----------------------------------|-----------|
|                    | Pulg.   | mm   | kg/m | lb/pie |                                   |           |
| 3                  | 3/8     | 9.5  | 0.56 | 0.38   | 71                                | 29.8      |
| 4                  | 1/2     | 12.7 | 0.99 | 0.67   | 127                               | 39.9      |
| 5                  | 5/8     | 15.9 | 1.55 | 1.04   | 198                               | 50        |
| 6                  | 3/4     | 19.1 | 2.24 | 1.50   | 285                               | 60        |
| 8                  | 1       | 25.4 | 3.97 | 2.67   | 507                               | 79.8      |
| 10                 | 1 1/4   | 31.8 | 6.23 | 4.30   | 794                               | 99.9      |
| 12                 | 1 1/2   | 38.1 | 8.94 | 5.99   | 1140                              | 119.7     |

**NOTA:** Número de designación corresponde al número de octavos en pulgadas equivalentes al diámetro nominal de la varilla

# SERVICIOS

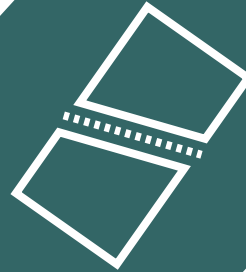
## **NIVELADO A MEDIDA**

*Ofrecemos el proceso de nivelado, lo que permite cortar a la medida deseada.*



## **CORTES DE PLACA**

*Se ofrece el servicio de corte de lámina y placa.*



## **LÓGISTICA**

*Ofrecemos la entrega en tiempo y forma de sus pedidos.*



## **ALMACÉN**

*Ofrecemos el almacenamiento de tus materiales con la programación de entrega en tiempos requeridos.*



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*Calle Licenciado Jose Benítez # 2755  
Colonia Obispado CP.64030*

