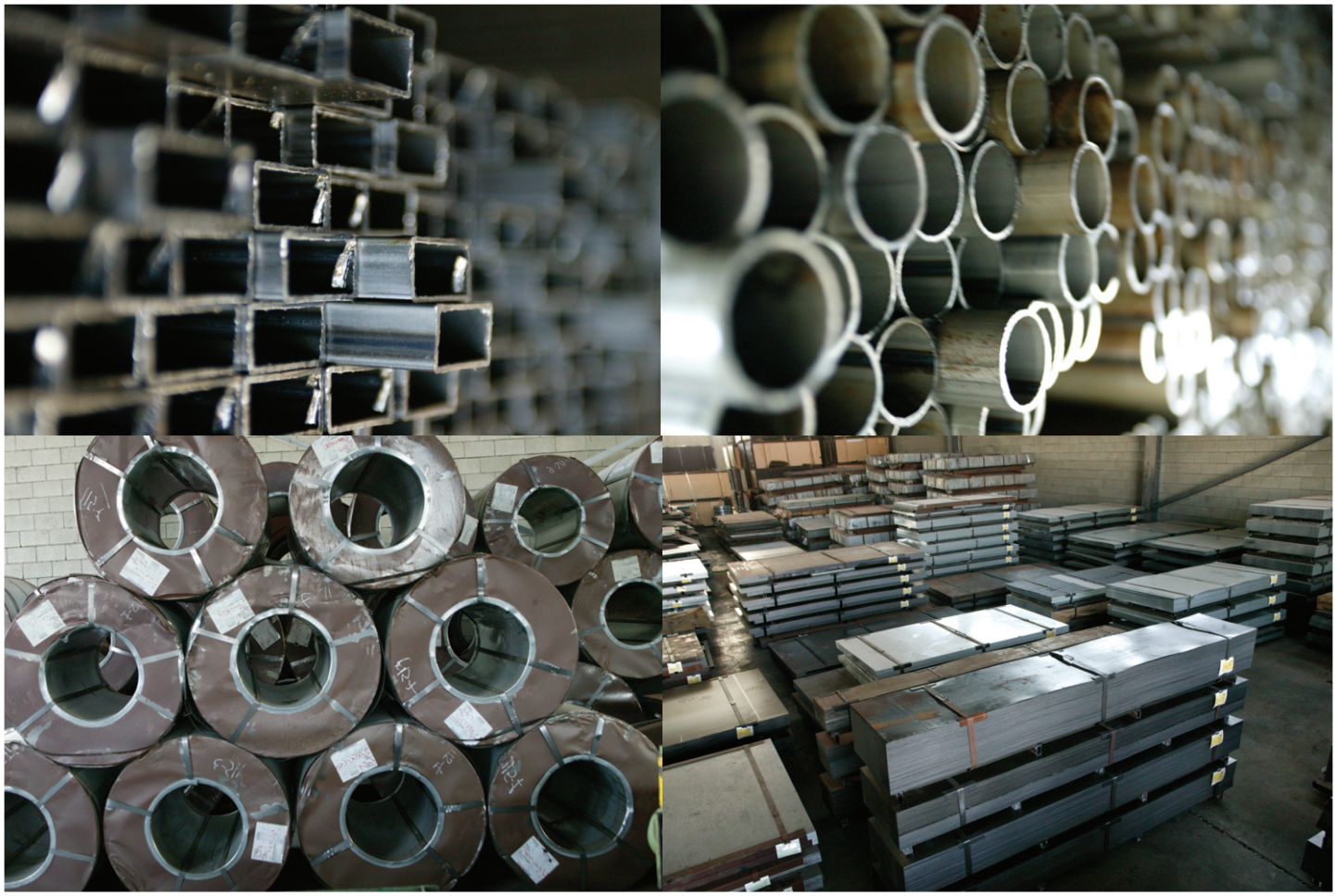
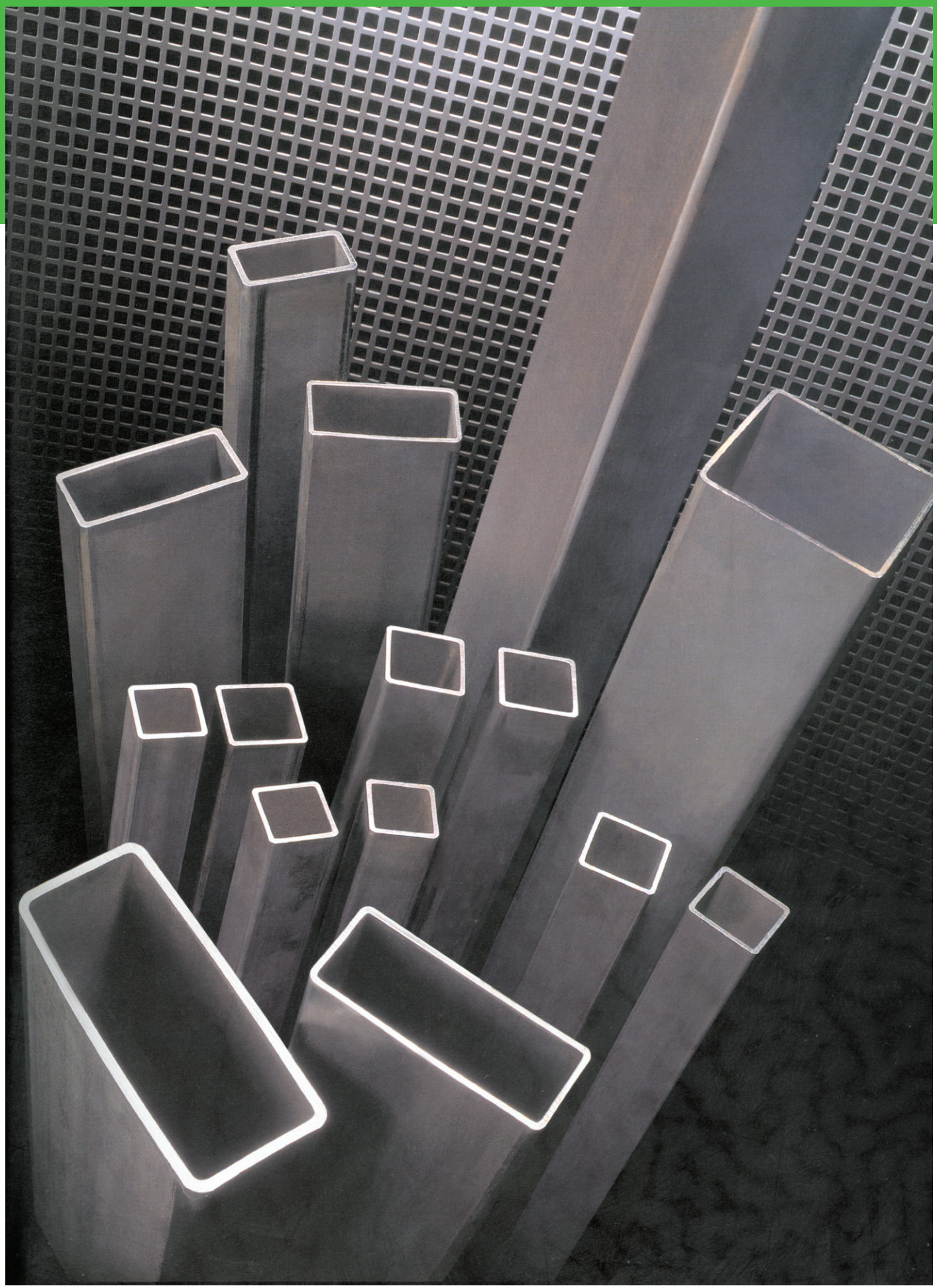


# GIRCOTIS & ACHILLEOS

WHOLESALERS IMPORTERS AGENTS



# GIRCOTIS & ACHILLEOS

WHOLESALERS IMPORTERS AGENTS

## GIRCOTIS & ACHILLEOS LTD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Aradippou Ind. Est.,
P.O.Box 40015,
6300 Larnaca
Tel.: 24533349,
Fax: 24532274

# 100 Χρόνια Παράδοση στα Μέταλλα

Η εταιρεία μας ασχολείται με την εισαγωγή και εμπορία σιδήρου και άλλων μετάλλων από το 1920. Σήμερα στα γραφεία και στις ευρύχωρες αποθήκες μας στα Λατσιά καθώς και στα υποκαταστήματα εις Λάρνακα ( 7,000τ.μ. καλυμμένου χώρου) απασχολούμε 30 άτομα που μαζί με την διεύθυνση προσφέρουν γρήγορη και επαγγελματική εξυπηρέτηση την οποία μπορείτε να εμπιστευτείτε. .

Με τα αυτοκίνητα μας καλύπτουμε ολόκληρη την Κύπρο και με ένα τηλεφώνημα είμαστε κοντά σας. Προσφέρουμε οτιδήποτε έχει σχέση με μέταλλο σε οποιανδήποτε ποσότητα με τα πιο βασικά είδη τα πιο κάτω:

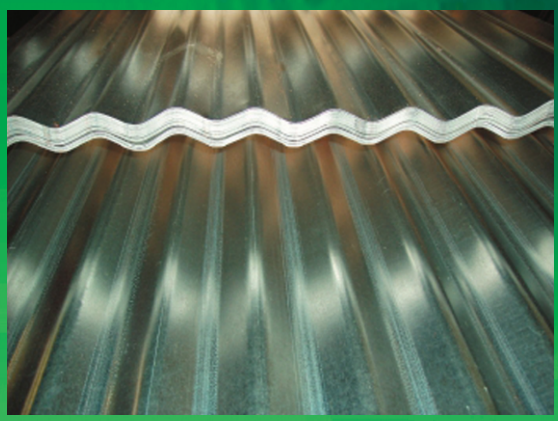
- Λαμαρίνες Γαλβανιζέ
- Λαμαρίνες Μαύρες (Θερμές & Ψυχρές)
- Λαμαρίνες Stainless Steel
- Λαμαρίνες Πλαστικές, Μπογιατισμένες
- Λαμαρίνες Τρυπητές
- Λαμαρίνες Διακοσμητικές
- Λαμαρίνες Χολετρωτές, Γαλβανιζέ & Μπογιατισμένες
- Λαμαρίνες Τραπεζοειδείς, Γαλβανιζέ & Μπογιατισμένες
- Λαμαρίνες Πακλαβωτές και Δάκρυ
- Λάμες
- Γωνιές
- Τετράγωνα
- Ταφ
- Στρογγυλά & Σέξιον
- Νευκές, IPN, IPE, HEB, HEA, UB, UC Δοκοί, UPN
- Σωλήνες Γαλβανιζέ Class A, Class B & Class C
- Σωλήνες Μαύρες Class A, Class B & Class C
- Σωλήνες Stainless Steel
- Σωλήνες Seamless
- Σωλήνες Επίπλων & Εξώστ
- Σωλήνες Χαλκού
- Πασαμάνα
- Πασαμάνα Γαλβανιζέ
- Πασαμάνα RHS
- Πασαμάνα Stainless Steel
- Άξονες Ρολάτους
- Άξονες Πλαστικούς
- Βιομηχανικό Κάρβουνο, Ήλεκτρα
- Εξαρτήματα Μπρούντζινα & Χάλκινα

**Πρέσες, ψαλίδια & ρόλοι για γυρίσματα & κοψίματα όλων των ειδών**

Our Company since 1920 has been dealing with the import and distributions of steel and other types of metals. You can find at our Offices and Warehouses, of a total of 7000m2 of covered space at Latsia ( Head office), Nicosia, Limassol and Larnaca, fast and professional service. With our vehicles we cover the whole of Cyprus. We offer anything that has to do with steel and other metals, available in any quality. Our most representative products are the following:

- Galvanized Steel Sheets
- Cold Rolled & Hot Rolled Steel Sheets
- Hot Rolled Steel Plates
- Teared & Chequered Steel
- Stainless Steel Sheets
- Aluminium Sheets
- Plastics & Painted Sheets
- Perforated Sheets
- Decorative Sheets
- Galvanized & Colored Steel corrugated & Trapezoid sheet
- Steel Flats, Angles, Square, Tees, Round & Window section
- Channels UPN
- Beams IPN, IPE, HEB, HEA, UB & UC
- Galvanized Steel Pipes Class A, B & C
- Black Steel Pipes Class A, B & C
- Seamless Steel Pipes
- Stainless Steel Tubes
- Furniture & Exhaust Pipes
- Copper Tubes
- Square & Rectangular Steel Tubes
- Square & Rectangular Hollow Sections
- Square & Rectangular S/Steel Tubes
- Steel Shafting
- Plastic Shafting
- Industrial Coke
- Electrodes
- Galvanized & Black Pipe Fiftings
- Copper & Bronze Pipe Fiftings

**We also offer bending & cutting of all kinds of sheets**



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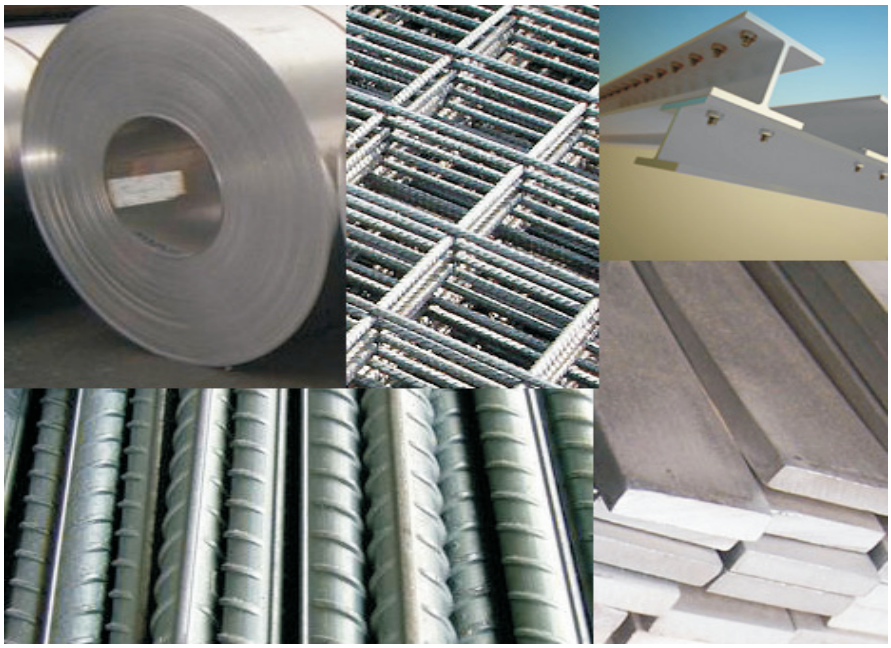


## ΟΙΚΟΔΟΜΙΚΟ ΣΙΔΗΡΟ

**Η Εταιρεία μας έχει δραστηριοποιηθεί δυναμικά και στο εμπόριο του Οικοδομικού Σιδήρου.**

**Γνωρίζοντας την σοβαρότητα και υπευθυνότητα που μας χαρακτηρίζει, να είστε βέβαιοι ότι θα εξυπηρετηθείτε με την ίδια αξιοπιστία, άριστη ποιότητα των προιόντων μας καθώς, και τις καλύτερες τιμές στην αγορά. Τοποθετούμε τα σωστά θεμέλια για σας!**

**Για άμεση εξυπηρέτηση τηλεφωνήστε στα γραφεία μας σε Λατσιά (Κεντρικό), Λευκωσία, Λεμεσό και Λάρνακα.**

# ΘΕΩΡΗΤΙΚΑ ΒΑΡΗ ΛΑΜΑΡΙΝΩΝ
# THEORETICAL WEIGHT OF SHEETS

| Πάχος σε μμ Thickness in mm | ΔΙΑΣΤΑΣΕΙΣ DIMENSIONS | | | | |
|---|---|---|---|---|---|
| | 1000 x 2000 | 1000 x 3000 | 1250 x 2500 | 1250 x 3000 | 1500 x 3000 |
| 0.30 | 4.8 | 7.2 | 7.5 | 9.0 | 10.8 |
| 0.40 | 6.4 | 9.6 | 10.0 | 12.0 | 14.4 |
| 0.50 | 8.0 | 12.0 | 12.5 | 15.0 | 18.0 |
| 0.60 | 9.6 | 14.4 | 15.0 | 18.0 | 21.6 |
| 0.70 | 11.2 | 16.8 | 17.5 | 21.0 | 25.2 |
| 0.80 | 12.8 | 19.2 | 20.0 | 24.0 | 28.8 |
| 0.90 | 14.4 | 21.6 | 22.5 | 27.0 | 32.4 |
| 1.00 | 16.0 | 24.0 | 25.0 | 30.0 | 36.0 |
| 1.25 | 20.0 | 30.0 | 31.2 | 37.5 | 45.0 |
| 1.50 | 24.0 | 36.0 | 37.5 | 45.0 | 54.0 |
| 2.00 | 32.0 | 48.0 | 50.0 | 60.0 | 72.0 |
| 2.50 | 40.0 | 60.0 | 62.5 | 75.0 | 90.0 |
| 3.00 | 48.0 | 72.0 | 75.0 | 90.0 | 108.0 |

| Πάχος σε μμ Thickness in mm | ΔΙΑΣΤΑΣΕΙΣ DIMENSIONS | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | 1000 x 2000 | 1250 x 2500 | 1500 x 6000 | 1800 x 6000 | 2000 x 6000 | 2000 x 8000 | 2300 x 8000 | 2500 x 8000 |
| 4 | 64 | 100 | 288 | 346 | 384 | 512 | 589 | 640 |
| 5 | 80 | 125 | 360 | 482 | 480 | 640 | 736 | 800 |
| 6 | 96 | 150 | 432 | 518 | 576 | 768 | 884 | 960 |
| 7 | 112 | 175 | 504 | 605 | 672 | 896 | 1031 | 1120 |
| 8 | 128 | 200 | 576 | 691 | 768 | 1024 | 1178 | 1280 |
| 9 | 144 | 225 | 648 | 778 | 864 | 1152 | 1325 | 1440 |
| 10 | 160 | 250 | 720 | 864 | 960 | 1280 | 1472 | 1600 |
| 11 | 176 | 275 | 792 | 951 | 1056 | 1408 | 1620 | 1760 |
| 12 | 192 | 300 | 864 | 1037 | 1152 | 1536 | 1767 | 1920 |
| 14 | 224 | 350 | 1008 | 1210 | 1344 | 1792 | 2060 | 2240 |
| 15 | 240 | 375 | 1080 | 1296 | 1440 | 1920 | 2208 | 2400 |
| 16 | 256 | 400 | 1152 | 1383 | 1536 | 2048 | 2355 | 2560 |
| 18 | 288 | 450 | 1296 | 1556 | 1728 | 2304 | 2649 | 2880 |
| 20 | 320 | 500 | 1440 | 1728 | 1920 | 2560 | 2944 | 3200 |
| 22 | 352 | 550 | 1584 | 1901 | 2112 | 2816 | 3238 | 3520 |
| 25 | 400 | 625 | 1800 | 2160 | 2400 | 3200 | 3680 | 4000 |
| 30 | 480 | 750 | 2160 | 2592 | 2880 | 3840 | 4416 | 4800 |
| 35 | 560 | 875 | 2520 | 3024 | 3360 | 4480 | 5152 | 5600 |
| 40 | 640 | 1000 | 2880 | 3456 | 3840 | 5120 | 5888 | 6400 |
| 45 | 720 | 1125 | 3240 | 3888 | 4320 | 5760 | 6624 | 7200 |
| 50 | 800 | 1250 | 3600 | 4320 | 4800 | 6400 | 7360 | 8000 |

## ΛΑΜΑΡΙΝΕΣ & COILS ΨΥΧΡΗΣ ΕΛΑΣΗΣ / COLD ROLLED SHEETS & COILS

QUALITY: St 12.03 - St 13.03 - St 14.03

| Πάχος σε μμ / Thickness in mm | 0.5 - 3.0 |
|---|---|
| Διαστάσεις σε μμ<br>Dimensions in mm | 1000 x 2000<br>1250 x 2500<br>1500 x 3000 |

## ΛΑΜΑΡΙΝΕΣ & COILS ΓΑΛΒΑΝΙΖΕ / GALVANIZED SHEETS & COILS

QUALITY: S235 JR GALVANIZED: 275gr/m²

| Πάχος σε μμ / Thickness in mm | 0.3 - 6.0 |
|---|---|
| Διαστάσεις σε μμ<br>Dimensions in mm | 1000 x 2000<br>1250 x 2500<br>1500 x 3000 |

## ΛΑΜΑΡΙΝΕΣ & COILS ΘΕΡΜΗΣ ΕΛΑΣΗΣ / HOT ROLLED SHEETS PLATES & COILS

QUALITY: S235 JR - S275 JR - S355 JO

| Πάχος σε μμ / Thickness in mm | 1.5 - 50 |
|---|---|
| Διαστάσεις σε μμ<br>Dimensions in mm | 1000 x 2000<br>1250 x 2500<br>1500 x 3000<br>1500 x 6000<br>2000 x 6000 |

## ΛΑΜΑΡΙΝΕΣ & COILS ΜΠΑΚΛΑΒΩΤΕΣ & ΔΑΚΡΥ / CHEQUERED & TEAR PLATES & COILS

QUALITY: S235 JR

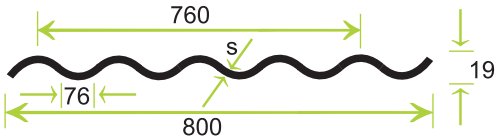
| Πάχος σε μμ / Thickness in mm | 2 - 25 |
|---|---|
| Διαστάσεις σε μμ<br>Dimensions in mm | 1000 x 2000<br>1250 x 2500<br>1500 x 3000 |

## ΛΑΜΑΡΙΝΕΣ QUARTO / QUARTO PLATES

QUALITY: S235 JR - S275 JR - S355 JO

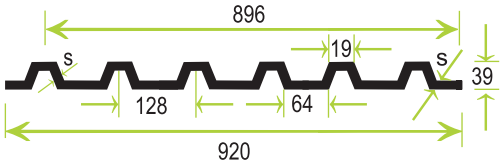
| Πάχος σε μμ / Thickness in mm | 14 - 100 |
|---|---|
| Διαστάσεις σε μμ<br>Dimensions in mm | 1500 x 6000<br>2000 x 6000 |

# ΧΟΛΕΤΡΩΤΕΣ ΛΑΜΑΡΙΝΕΣ
# CORRUGATED SHEETS



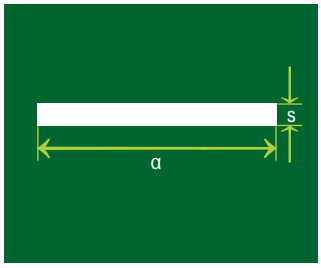

| | | | ΕΠΙΤΡΕΠΟΜΕΝΟ ΦΟΡΤΙΟ ΣΕ kg/m² | | | | |
|---|---|---|---|---|---|---|---|
| | | | Άνοιγμα τεγίδων (m) | | | | |
| Πάχος s (mm) | Βάρος ανά μέτρο kg/m 800 | Ροπή Wx (cm³) | 1.0m | 1.25m | 1.5m | 1.75m | 2.0m |
| 0.30 | 2.17 | 1.43 | 137 | 88 | 61 | 45 | 34 |
| 0.35 | 2.53 | 1.67 | 160 | 108 | 71 | 52 | 40 |
| 0.40 | 2.89 | 1.91 | 183 | 124 | 81 | 60 | 46 |
| 0.45 | 3.25 | 2.15 | 206 | 140 | 92 | 67 | 52 |
| 0.50 | 3.61 | 2.39 | 229 | 155 | 102 | 75 | 57 |

# ΤΡΑΠΕΖΟΕΙΔΗ ΛΑΜΑΡΙΝΕΣ
# TRAPEZOID SHEETS




| | | | ΕΠΙΤΡΕΠΟΜΕΝΟ ΦΟΡΤΙΟ ΣΕ kg/m² | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Άνοιγμα τεγίδων (m) | | | | | | | |
| Πάχος s (mm) | Βάρος ανά μέτρο kg/m | Ροπή Wx (cm³) | 1.0m | 1.25m | 1.5m | 1.75m | 2.0m | 2.25m | 2.5m | 3.0m |
| 0.40 | 3.83 | 4.89 | 470 | 318 | 209 | 153 | 117 | 93 | 75 | 52 |
| 0.45 | 4.30 | 5.50 | 528 | 358 | 236 | 173 | 132 | 104 | 84 | 59 |
| 0.50 | 4.80 | 6.11 | 587 | 435 | 261 | 192 | 147 | 116 | 94 | 65 |
| 0.60 | 5.74 | 7.33 | 704 | 477 | 313 | 230 | 176 | 139 | 113 | 78 |
| 0.70 | 6.70 | 8.58 | 824 | 558 | 366 | 269 | 206 | 163 | 132 | 92 |
| 0.80 | 7.66 | 9.80 | 941 | 638 | 418 | 307 | 235 | 186 | 151 | 105 |
| 0.90 | 8.62 | 11.02 | 1058 | 717 | 470 | 345 | 265 | 209 | 169 | 118 |
| 1.00 | 9.42 | 12.23 | 1174 | 795 | 522 | 383 | 294 | 232 | 188 | 130 |

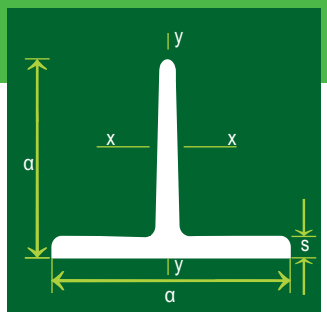
| | | | ΕΠΙΤΡΕΠΟΜΕΝΟ ΦΟΡΤΙΟ ΣΕ kg/m² | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | Άνοιγμα τεγίδων (m) | | | | | | |
| Πάχος s (mm) | Βάρος ανά μέτρο kg/m | Ροπή Wx (cm⁴) | 1.5 | 1.75m | 2.0m | 2.25m | 2.5m | 2.75m | 3.0m |
| 0.50 | 5.0 | 21.54 | 255 | 187 | 143 | 113 | 92 | 76 | 64 |
| 0.60 | 6.0 | 27.60 | 416 | 306 | 234 | 185 | 150 | 124 | 104 |
| 0.75 | 7.5 | 33.19 | 543 | 399 | 306 | 241 | 196 | 162 | 136 |
| 1.00 | 10.0 | 44.82 | 825 | 606 | 464 | 367 | 297 | 246 | 206 |
| 1.25 | 12.5 | 56.41 | 1134 | 833 | 638 | 504 | 408 | 337 | 283 |




# ΛΑΜΕΣ / FLATS

S235 JR - S275 JR

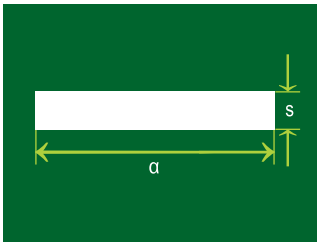
| Πλάτος Width a (mm) | Πάχος- Thickness s (mm) | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 3 | 4 | 5 | 6 | 8 | 10 | 12 | 14 | 16 | 20 | 25 | 30 | 40 | 50 |
| 10 | 0.24 | 0.31 | 0.39 | | | | | | | | | | | |
| 12 | 0.28 | 0.38 | 0.47 | 0.57 | 0.75 | | | | | | | | | |
| 14 | 0.33 | 0.44 | 0.55 | 0.66 | 0.88 | | | | | | | | | |
| 16 | 0.38 | 0.50 | 0.63 | 0.75 | 1.00 | 1.26 | | | | | | | | |
| 20 | 0.47 | 0.63 | 0.79 | 0.94 | 1.26 | 1.57 | 1.88 | | | | | | | |
| 25 | 0.59 | 0.79 | 0.98 | 1.18 | 1.57 | 1.96 | 2.36 | 2.75 | 3.14 | | | | | |
| 30 | 0.71 | 0.94 | 1.18 | 1.41 | 1.88 | 2.36 | 2.83 | 3.30 | 3.77 | 4.71 | | | | |
| 35 | 0.82 | 1.10 | 1.37 | 1.65 | 2.20 | 2.75 | 3.30 | 3.85 | 4.40 | 5.50 | | | | |
| 40 | 0.94 | 1.26 | 1.57 | 1.88 | 2.51 | 3.14 | 3.77 | 4.40 | 5.02 | 6.28 | 7.85 | 9.42 | | |
| 45 | 1.06 | 1.41 | 1.77 | 2.12 | 2.82 | 3.53 | 4.24 | 4.95 | 5.65 | 7.07 | 8.83 | 10.60 | | |
| 50 | 1.18 | 1.58 | 1.96 | 2.36 | 3.14 | 3.93 | 4.71 | 5.50 | 6.28 | 7.85 | 9.81 | 11.80 | | |
| 60 | 1.41 | 1.88 | 2.36 | 2.83 | 3.77 | 4.71 | 5.65 | 6.59 | 7.54 | 9.42 | 11.80 | 14.13 | 18.84 | |
| 70 | 1.65 | 2.20 | 2.75 | 3.30 | 4.40 | 5.50 | 6.59 | 7.69 | 8.79 | 11.00 | 13.73 | 16.50 | 22.00 | |
| 80 | 1.89 | 2.51 | 3.14 | 3.77 | 5.02 | 6.28 | 7.54 | 8.79 | 10.04 | 12.60 | 15.70 | 18.84 | 25.02 | |
| 90 | 2.12 | 2.82 | 3.53 | 4.24 | 5.65 | 7.07 | 8.48 | 9.89 | 11.30 | 14.13 | 17.70 | 21.19 | 28.26 | |
| 100 | 2.36 | 3.14 | 3.93 | 4.71 | 6.28 | 7.85 | 9.42 | 10.99 | 12.60 | 15.70 | 19.62 | 23.60 | 31.14 | 39.30 |
| 120 | 2.83 | 3.77 | 4.72 | 5.65 | 7.54 | 9.42 | 11.30 | 13.12 | 15.10 | 18.84 | 23.60 | 28.30 | 37.68 | 47.14 |
| 130 | 3.06 | 4.08 | 5.10 | 6.12 | 8.79 | 10.20 | 12.24 | 14.22 | 16.32 | 20.41 | 25.51 | 30.61 | 40.82 | 51.02 |
| 140 | 3.30 | 4.40 | 5.50 | 6.59 | 8.79 | 11.00 | 13.18 | 15.38 | 17.60 | 22.00 | 27.50 | 33.00 | 44.00 | 55.00 |
| 150 | 3.53 | 4.71 | 5.88 | 7.06 | 9.42 | 11.80 | 14.13 | 16.48 | 18.84 | 23.60 | 29.43 | 35.32 | 47.20 | 58.92 |




## ΔΔΔΔΔ / T-SECTIONS

S235 JR

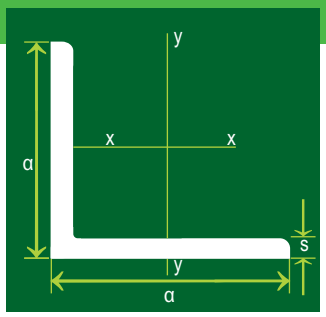
| ΔΙΑΣΤΑΣΕΙΣ DIMENSIONS axs mm | ΒΑΡΟΣ WEIGHT kg/m | ΔΙΑΣΤΑΣΕΙΣ DIMENSIONS axs mm | ΒΑΡΟΣ WEIGHT kg/m |
|---|---|---|---|
| 20 x 3 | 0.88 | 45 x 5.5 | 3.67 |
| 25 x 3 | 1.11 | 50 x 5 | 3.77 |
| 3.5 | 1.29 | 6 | 4.44 |
| 30 x 3 | 1.69 | 60 x 7 | 6.23 |
| 4 | 1.77 | 70 x 8 | 8.32 |
| 35 x 4 | 2.08 | 80 x 9 | 10.70 |
| 4.5 | 2.33 | 90 x 10 | 13.40 |
| 40 x 4 | 2.35 | 100 x 11 | 16.40 |
| 5 | 2.96 | 120 x 13 | 23.20 |




## ΛΑΜΕΣ ΦΑΡΔΙΕΣ / UNIVERSAL PLATES

S235 JR - S275 JR

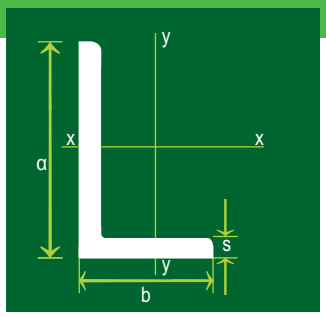
| Πλάτος Width a (mm) | Πάχος- Thickness s (mm) | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 5 | 6 | 8 | 10 | 12 | 14 | 16 | 18 | 20 | 22 | 25 | 30 | 40 | 50 |
| 160 | 6.40 | 7.68 | 10.20 | 12.80 | 15.40 | 17.90 | 20.50 | 23.00 | 25.60 | 28.20 | 33.00 | 38.40 | 51.20 | 64.00 |
| 180 | 7.20 | 8.64 | 11.50 | 14.40 | 17.30 | 20.20 | 23.00 | 25.90 | 28.80 | 31.70 | 36.00 | 43.20 | 57.60 | 72.00 |
| 200 | 8.00 | 9.60 | 12.80 | 16.00 | 19.20 | 22.40 | 25.60 | 28.80 | 32.00 | 35.20 | 40.00 | 48.00 | 64.00 | 80.00 |
| 220 | 8.80 | 10.60 | 14.10 | 17.60 | 21.10 | 24.60 | 28.20 | 31.70 | 35.20 | 38.70 | 44.10 | 52.80 | 70.40 | 88.00 |
| 250 | 10.00 | 12.00 | 16.00 | 20.00 | 24.00 | 28.00 | 32.00 | 36.00 | 40.00 | 44.00 | 50.00 | 60.00 | 80.00 | 100.00 |
| 300 | 12.00 | 14.40 | 19.20 | 24.00 | 28.80 | 33.60 | 38.40 | 43.20 | 48.00 | 52.80 | 60.00 | 72.00 | 96.00 | 120.00 |
| 350 | 14.00 | 16.80 | 22.40 | 28.00 | 33.60 | 39.20 | 44.80 | 50.40 | 56.00 | 61.60 | 70.00 | 84.00 | 112.00 | 140.00 |
| 400 | 16.00 | 19.20 | 25.60 | 32.00 | 38.40 | 44.80 | 51.30 | 57.60 | 64.00 | 70.40 | 80.00 | 96.00 | 128.00 | 160.00 |




# ΙΣΟΣΚΕΛΕΙΣ ΓΩΝΙΕΣ / EQUAL ANGLES

S235 JR - S275 JR

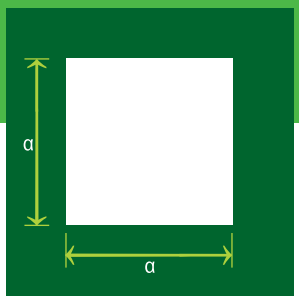
| ΔΙΑΣΤΑΣΕΙΣ DIMENSIONS axs mm | ΒΑΡΟΣ WEIGHT kg/m | ΔΙΑΣΤΑΣΕΙΣ DIMENSIONS axs mm | ΒΑΡΟΣ WEIGHT kg/m | ΔΙΑΣΤΑΣΕΙΣ DIMENSIONS axs mm | ΒΑΡΟΣ WEIGHT kg/m |
|---|---|---|---|---|---|
| 20 x 3 | 0.88 | 60 x 5 | 4.57 | 11 | 14.70 |
| 25 x 3 | 1.12 | 6 | 5.42 | 100 x 8 | 12.20 |
| 30 x 3 | 1.36 | 8 | 7.09 | 10 | 15.10 |
| 4 | 1.78 | 65 x 6 | 5.91 | 110 x 10 | 16.60 |
| 35 x 4 | 1.60 | 7 | 6.83 | 12 | 19.70 |
| 3.5 | 1.85 | 8 | 7.73 | 120 x 10 | 18.20 |
| 4 | 2.10 | 9 | 8.62 | 12 | 21.60 |
| 5 | 2.57 | 70 x 7 | 7.38 | 14 | 25.00 |
| 40 x 3 | 1.84 | 8 | 8.36 | 130 x 12 | 23.60 |
| 4 | 2.42 | 9 | 9.34 | 140 x 14 | 29.50 |
| 5 | 2.97 | 75 x 7 | 7.94 | 150 x 10 | 23.00 |
| 6 | 3.52 | 8 | 9.03 | 12 | 27.30 |
| 45 x 5 | 3.38 | 10 | 11.10 | 16 | 35.90 |
| 6 | 4.00 | 80 x 8 | 9.66 | 180 x 16 | 43.50 |
| 50 x 4 | 3.06 | 10 | 11.90 | 18 | 48.60 |
| 5 | 3.77 | 90 x 8 | 10.90 | 200 x 16 | 48.50 |
| 6 | 4.47 | 9 | 12.20 | 18 | 54.30 |
| 55 x 6 | 4.95 | 10 | 13.40 | 20 | 59.90 |




# ΑΝΙΣΟΣΚΕΛΕΙΣ ΓΩΝΙΕΣ / UNEQUAL ANGLES

S235 JR - S275 JR

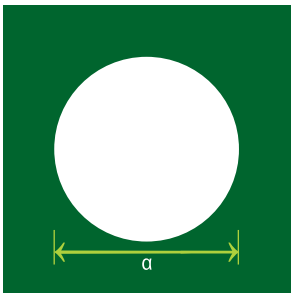
| ΔΙΑΣΤΑΣΕΙΣ DIMENSIONS axbxs mm | ΒΑΡΟΣ WEIGHT kg/m | ΔΙΑΣΤΑΣΕΙΣ DIMENSIONS axbxs mm | ΒΑΡΟΣ WEIGHT kg/m | ΔΙΑΣΤΑΣΕΙΣ DIMENSIONS axbxs mm | ΒΑΡΟΣ WEIGHT kg/m |
|---|---|---|---|---|---|
| 30 x 20 x3 | 1.11 | 90 x 65 x 6 | 7.09 | 130 x 90 x 8 | 13.30 |
| 4 | 1.45 | 8 | 9.30 | 10 | 16.60 |
| 40 x 20 x 3 | 1.35 | 90 x 75 x 6 | 7.50 | 150 x 75 x 10 | 17.00 |
| 4 | 1.77 | 8 | 10.00 | 12 | 20.20 |
| 50 x 30 x 4 | 2.41 | 100 x 50 x 6 | 6.85 | 150 x 90 x 10 | 18.20 |
| 5 | 2.96 | 8 | 8.99 | 12 | 21.60 |
| 60 x 40 x 5 | 3.76 | 100 x 65 x 7 | 8.77 | 150 x 100 x 10 | 19.00 |
| 6 | 4.46 | 8 | 9.94 | 12 | 22.60 |
| 65 x 50 x 6 | 5.16 | 9 | 11.10 | 180 x 90 x 10 | 20.60 |
| 7 | 5.97 | 100 x 75 x 7 | 9.32 | 12 | 24.50 |
| 75 x 50 x 6 | 5.65 | 8 | 10.60 | 200 x 100 x 10 | 23.00 |
| 7 | 6.51 | 9 | 11.80 | 12 | 27.30 |
| 8 | 7.39 | 10 | 13.00 | 14 | 31.60 |
| 75 x 55 x 5 | 4.95 | 120 x 80 x 8 | 12.20 | 200 x 150 x 12 | 32.00 |
| 7 | 6.80 | 10 | 15.00 | 15 | 39.60 |
| 80 x 40 x 6 | 5.41 | 125 x 75 x 8 | 12.20 | 250 x 90 x 12 | 31.10 |
| 8 | 7.07 | 10 | 15.00 | 14 | 36.00 |
| 80 x 65 x 6 | 6.60 | 130 x 65 x 8 | 11.90 | 16 | 40.90 |
| 8 | 8.66 | 10 | 14.60 | | |




# ΤΕΤΡΑΓΩΝΑ ΣΙΔΕΡΑ / SQUARES

S235 JR - S275 JR

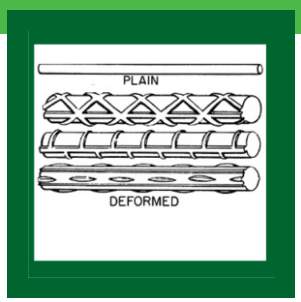
| ΔΙΑΣΤΑΣΕΙΣ DIMENSIONS a mm | ΒΑΡΟΣ WEIGHT kg/m | ΔΙΑΣΤΑΣΕΙΣ DIMENSIONS a mm | ΒΑΡΟΣ WEIGHT kg/m | ΔΙΑΣΤΑΣΕΙΣ DIMENSIONS a mm | ΒΑΡΟΣ WEIGHT kg/m |
|---|---|---|---|---|---|
| 6 | 0.28 | 22 | 3.80 | 60 | 28.30 |
| 8 | 0.50 | 25 | 4.91 | 70 | 38.50 |
| 10 | 0.78 | 30 | 7.07 | 80 | 50.20 |
| 12 | 1.13 | 35 | 9.62 | 90 | 63.60 |
| 14 | 1.54 | 40 | 12.60 | 100 | 78.50 |
| 16 | 2.01 | 45 | 15.90 | 110 | 95.00 |
| 18 | 2.54 | 50 | 19.60 | 120 | 113.00 |
| 20 | 3.14 | 55 | 23.70 | 150 | 177.00 |




# ΣΤΡΟΓΓΥΛΑ ΣΙΔΕΡΑ / ROUNDS

S235 JR - S275 JR

| ΔΙΑΣΤΑΣΕΙΣ DIMENSIONS a mm | ΒΑΡΟΣ WEIGHT kg/m | ΔΙΑΣΤΑΣΕΙΣ DIMENSIONS a mm | ΒΑΡΟΣ WEIGHT kg/m | ΔΙΑΣΤΑΣΕΙΣ DIMENSIONS a mm | ΒΑΡΟΣ WEIGHT kg/m |
|---|---|---|---|---|---|
| 6 | 0.22 | 28 | 4.83 | 85 | 44.50 |
| 8 | 0.39 | 30 | 5.55 | 90 | 49.90 |
| 10 | 0.62 | 32 | 6.31 | 95 | 55.60 |
| 12 | 0.89 | 35 | 7.55 | 100 | 61.70 |
| 14 | 1.21 | 40 | 9.86 | 110 | 74.60 |
| 16 | 1.58 | 45 | 12.50 | 120 | 88.80 |
| 18 | 2.00 | 50 | 15.40 | 130 | 104.00 |
| 19 | 2.23 | 55 | 18.70 | 140 | 121.00 |
| 20 | 2.47 | 60 | 22.20 | 150 | 139.00 |
| 22 | 2.98 | 65 | 26.00 | 160 | 158.00 |
| 24 | 3.55 | 70 | 30.20 | 170 | 178.00 |
| 25 | 3.85 | 75 | 34.70 | 180 | 200.00 |
| 26 | 4.17 | 80 | 39.50 | 200 | 247.00 |




# ΣΙΔΗΡΟΣ - ΜΠΕΤΟΝ / RE-INFORCING BARS

B500C ELOT 1421 - 3
BST 500S DIN 488

| | ΔΙΑΣΤΑΣΕΙΣ<br>DIMENSIONS<br>d<br>(mm) | ΒΑΡΟΣ<br>WEIGHT<br><br>kg/m |
|---|---|---|
| ST I | 8 | 0.390 |
| | 10 | 0.619 |
| | | |
| ST III | 8 | 0.395 |
| | 10 | 0.617 |
| | 12 | 0.888 |
| | 14 | 1.208 |
| | 16 | 1.578 |
| | 18 | 1.998 |
| | 20 | 2.466 |
| | 22 | 2.984 |
| | 25 | 3.850 |
| | 28 | 4.830 |
| | 32 | 6.310 |
| | 40 | 9.860 |

# ΑΞΩΝΕΣ
# BRIGHT DRAWN STEEL SHAFTING ROUND BARS

S235 JR

| ΔΙΑΜΕΤΡΟΙ / DIAMETER mm | kg/m |
|---|---|
| 6 | 0.222 |
| 7 | 0.302 |
| 8 | 0.395 |
| 9 | 0.499 |
| 10 | 0.617 |
| 11 | 0.746 |
| 12 | 0.888 |
| 13 | 1.042 |
| 14 | 1.208 |
| 15 | 1.387 |
| 16 | 1.578 |
| 17 | 1.782 |
| 18 | 1.998 |
| 19 | 2.226 |
| 20 | 2.446 |
| 21 | 2.719 |
| 22 | 2.984 |
| 23 | 3.262 |
| 24 | 3.551 |
| 25 | 3.853 |
| 26 | 4.168 |

| ΔΙΑΜΕΤΡΟΙ / DIAMETER mm | kg/m |
|---|---|
| 27 | 4.495 |
| 28 | 4.834 |
| 29 | 5.185 |
| 30 | 5.549 |
| 31 | 5.925 |
| 32 | 6.313 |
| 33 | 6.614 |
| 34 | 7.127 |
| 35 | 7.553 |
| 36 | 7.990 |
| 37 | 8.440 |
| 38 | 8.903 |
| 39 | 9.378 |
| 40 | 9.875 |
| 41 | 10.370 |
| 42 | 10.876 |
| 43 | 11.400 |
| 44 | 11.936 |
| 45 | 12.485 |
| 46 | 13.046 |
| 47 | 14.203 |

| ΔΙΑΜΕΤΡΟΙ / DIAMETER mm | kg/m |
|---|---|
| 50 | 15.410 |
| 52 | 16.670 |
| 43 | 17.319 |
| 55 | 18.659 |
| 56 | 19.335 |
| 58 | 20.740 |
| 60 | 22.195 |
| 65 | 26.049 |
| 70 | 30.210 |
| 75 | 34.680 |
| 80 | 39.458 |
| 85 | 44.545 |
| 90 | 49.940 |
| 95 | 55.640 |
| 100 | 61.700 |
| 105 | 67.970 |
| 110 | 74.600 |
| 115 | 81.540 |
| 120 | 88.780 |
| 125 | 96.330 |
| 130 | 104.200 |

| ΔΙΑΜΕΤΡΟΙ / DIAMETER Inch. | kg/m |
|---|---|
| 5/16 | 0.388 |
| 3/8 | 0.559 |
| 1/2 | 0.994 |
| 5/8 | 1.554 |
| 3/4 | 2.237 |
| 7/8 | 3.046 |
| 1 | 3.978 |

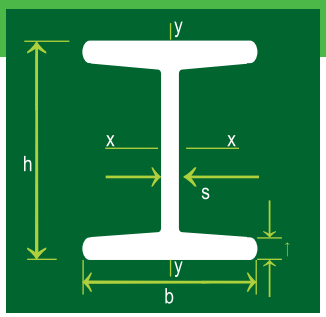
| ΔΙΑΜΕΤΡΟΙ / DIAMETER Inch. | kg/m |
|---|---|
| 1 1/8 | 5.035 |
| 1 1/4 | 6.216 |
| 1 3/8 | 7.521 |
| 1 1/2 | 8.951 |
| 1 3/4 | 12.184 |
| 2 | 15.913 |
| 2 1/4 | 20.141 |

| ΔΙΑΜΕΤΡΟΙ / DIAMETER Inch. | kg/m |
|---|---|
| 2 1/2 | 24.865 |
| 3 | 35.806 |
| 3 1/2 | 48.736 |
| 4 | 63.655 |
| 4 1/2 | 80.564 |
| 5 | 99.461 |
| 6 | 143.225 |

# ΠΛΕΓΜΑ ΔΟΜΙΚΟ & ΠΕΡΙΦΡΑΞΗΣ
# WELDED WIRE MESH

DIN 488, BS 4483, ASTM - A 185

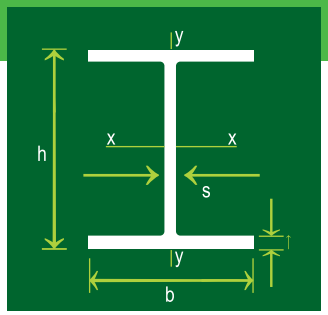
| REF. NO | ΔΙΑΣΤΑΣΕΙΣ - DIMENSIONS | | | | WEIGHT PER SHEET | WIDTH LENGTH | STEEL WIRES |
|---|---|---|---|---|---|---|---|
| | ΑΠΟΣΤΑΣΕΙΣ / SPACING | ΔΙΑΜΕΤΡΟΙ / DIAMETERS | | | | | |
| | | MAIN WIRES | | CROSS WIRES | | | |
| | mm | mm | | | Kg | m | |
| **Manufactured according to DIN488** | | | | | | | DEFORMED |
| Q92 | 150 X 150 X | 4.2 | X | 4.2 | 15.9 | 2.15 X 5.0 | |
| Q131 | 150 X 150 X | 5.0 | X | 5.0 | 22.5 | 2.15 X 5.0 | |
| Q188 | 150 X 150 X | 6.0 | X | 6.0 | 32.4 | 2.15 X 5.0 | |
| Q257 | 150 X 150 X | 7.0 / 5.0 | X | 7.0 | 39.7 | 2.15 X 5.0 | |
| R92 | 150 X 150 X | 4.2 | X | 4.2 | 12.8 | 2.15 X 5.0 | |
| **Manufactured according to BS4483** | | | | | | | DEFORMED |
| A98 | 200 X 200 X | 5.0 | X | 5.0 | 16.7 | 2.15 X 5.0 | |
| A98* | 200 X 200 X | 5.0 | X | 5.0 | 8.3 | 1.80 X 3.0 | |
| A142 | 200 X 200 X | 6.0 | X | 6.0 | 24.1 | 2.15 X 5.0 | |
| A142* | 200 X 200 X | 6.0 | X | 6.0 | 12.0 | 1.80 X 3.0 | |
| A193 | 200 X 200 X | 7.0 | X | 7.0 | 32.8 | 2.15 X 5.0 | |
| A252 | 200 X 200 X | 8.0 | X | 8.0 | 43.0 | 2.15 X 5.0 | |
| A252* | 200 X 200 X | 8.0 | X | 8.0 | 21.0 | 1.75 X 3.0 | |
| A393 | 200 X 200 X | 10.0 | X | 10.0 | 67.1 | 2.15 X 5.0 | |
| B503 | 100 X 200 X | 8.0 | X | 8.0 | 64.7 | 2.15 X 5.0 | |
| B785 | 100 X 200 X | 10.0 | X | 10.0 | 89.1 | 2.15 X 5.0 | |
| **ΔΙΑ ΠΕΡΙΦΡΑΞΗ - For Fencing** | | | | | | | PLAIN, BLACK HARD DRAWN |
| F3 | 50 X 50 X | 4 | X | 4 | 13.3 | 1.20 X 2.8 | |
| F4 | 100 X 50 X | 4 | X | 4 | 31.9 | 2.15 X 5.0 | |
| F5 | 50 X 25 X | 4 | X | 4 | 19.8 | 1.20 X 2.8 | |
| PF1 | 200 X 50 X | 8 | X | 8 | 106.7 | 2.15 X 5.0 | |
| F3G | 50 X 50 X | 4 | X | 4 | 12.1 | 1.20 X 3.0 | PLAIN GALVANIZED |
| F4G | 100 X 50 X | 4 | X | 4 | 20.3 | 1.90 X 4.0 | |




# ΔΟΚΟΙ IPN / JOISTS IPN

S235 JR - S275 JR - S355 JO - 263

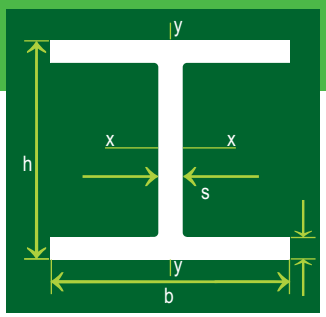
| IPN | ΒΑΡΟΣ WEIGHT G kg/m | ΔΙΑΣΤΑΣΕΙΣ - DIMENSIONS mm | | | | ΔΙΑΤΟΜΗ SECTION F $cm^2$ | ΡΟΠΗ ΑΝΤΙΣΤΑΣΕΩΣ SECTION MODULUS $cm^3$ | |
|---|---|---|---|---|---|---|---|---|
| | | h | b | s | t | | Wx | Wy |
| 80 | 5.94 | 80 | 42 | 3.9 | 5.9 | 7.57 | 19.5 | 3.00 |
| 100 | 8.34 | 100 | 50 | 4.5 | 6.8 | 10.60 | 34.2 | 4.88 |
| 120 | 11.10 | 120 | 58 | 5.1 | 7.7 | 14.20 | 54.7 | 7.41 |
| 140 | 14.30 | 140 | 66 | 5.7 | 8.6 | 18.20 | 81.9 | 10.70 |
| 160 | 17.90 | 160 | 74 | 6.3 | 9.5 | 22.80 | 117.0 | 14.80 |
| 180 | 21.90 | 180 | 82 | 6.9 | 10.4 | 27.90 | 161.0 | 19.80 |
| 200 | 26.20 | 200 | 90 | 7.5 | 11.3 | 33.40 | 214.0 | 26.00 |
| 220 | 31.20 | 220 | 98 | 8.1 | 12.2 | 39.50 | 278.0 | 33.10 |
| 240 | 36.20 | 240 | 106 | 8.7 | 13.1 | 46.10 | 354.0 | 41.70 |
| 260 | 41.90 | 260 | 113 | 9.4 | 14.1 | 53.30 | 442.0 | 51.00 |
| 280 | 47.90 | 280 | 119 | 10.1 | 15.2 | 61.00 | 542.0 | 61.20 |
| 300 | 54.20 | 300 | 125 | 10.8 | 16.2 | 69.00 | 653.0 | 72.20 |
| 320 | 61.00 | 320 | 131 | 11.5 | 17.3 | 77.70 | 782.0 | 84.70 |
| 340 | 68.00 | 340 | 137 | 12.2 | 18.3 | 86.70 | 923.0 | 98.40 |
| 360 | 76.10 | 360 | 143 | 13.0 | 19.5 | 97.00 | 1090.0 | 114.00 |
| 400 | 92.40 | 400 | 155 | 14.4 | 21.6 | 118.00 | 1460.0 | 149.00 |
| 450 | 115.00 | 450 | 170 | 16.2 | 24.3 | 147.00 | 2040.0 | 203.00 |
| 500 | 141.00 | 500 | 185 | 18.0 | 27.0 | 179.00 | 2750.0 | 268.00 |
| 550 | 166.00 | 550 | 200 | 19.0 | 30.0 | 212.00 | 3610.0 | 349.00 |




# ΔΟΚΟΙ IPE / JOISTS IPE

S235 JR - S275 JR - S355 JO - 263

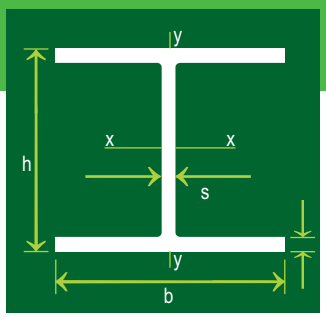
| IPE | ΒΑΡΟΣ WEIGHT G kg/m | ΔΙΑΣΤΑΣΕΙΣ - DIMENSIONS mm | | | | ΔΙΑΤΟΜΗ SECTION F $cm^2$ | ΡΟΠΗ ΑΝΤΙΣΤΑΣΕΩΣ SECTION MODULUS $cm^3$ | |
|---|---|---|---|---|---|---|---|---|
| | | h | b | s | t | | Wx | Wy |
| 80 | 6.00 | 80 | 46 | 3.8 | 5.2 | 7.64 | 20.0 | 3.69 |
| 100 | 8.10 | 100 | 55 | 4.1 | 5.7 | 10.30 | 34.2 | 5.79 |
| 120 | 10.40 | 120 | 64 | 4.4 | 6.3 | 13.20 | 53.0 | 8.65 |
| 140 | 12.90 | 140 | 73 | 4.7 | 6.9 | 16.40 | 77.3 | 12.30 |
| 160 | 15.80 | 160 | 82 | 5.0 | 7.4 | 20.10 | 109.0 | 16.70 |
| 180 | 18.80 | 180 | 91 | 5.3 | 8.0 | 23.90 | 146.0 | 22.20 |
| 200 | 22.40 | 200 | 100 | 5.6 | 8.5 | 28.50 | 194.0 | 28.50 |
| 220 | 26.20 | 220 | 110 | 5.9 | 9.2 | 33.40 | 252.0 | 37.30 |
| 240 | 30.70 | 240 | 120 | 6.2 | 9.8 | 39.10 | 324.0 | 47.30 |
| 270 | 36.10 | 270 | 135 | 6.6 | 10.2 | 45.90 | 429.0 | 62.20 |
| 300 | 42.20 | 300 | 150 | 7.1 | 10.7 | 53.80 | 557.0 | 80.50 |
| 330 | 49.10 | 330 | 160 | 7.5 | 11.5 | 62.60 | 713.0 | 98.50 |
| 360 | 57.10 | 360 | 170 | 8.0 | 12.7 | 72.70 | 904.0 | 123.00 |
| 400 | 66.33 | 400 | 180 | 8.6 | 13.5 | 84.50 | 1160.0 | 146.00 |
| 450 | 77.60 | 450 | 190 | 9.4 | 14.6 | 98.90 | 1500.0 | 176.00 |
| 500 | 90.70 | 500 | 200 | 10.2 | 16.2 | 116.00 | 1930.0 | 214.00 |
| 550 | 106.00 | 550 | 210 | 11.1 | 17.2 | 134.00 | 2440.0 | 254.00 |
| 600 | 122.00 | 600 | 220 | 12.0 | 19.0 | 156.00 | 3070.0 | 308.00 |




# ΔΟΚΟΙ ΠΛΑΤΥΠΕΛΜΟΙ HEB-IPB / BEAMS HEB-IPB

S235 JR - S275 JR - S355 JO - 263

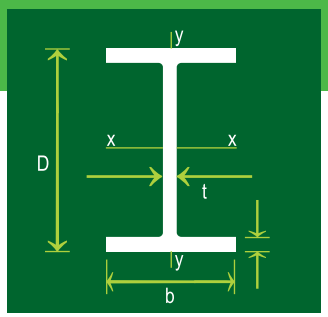
| HEB-IPB | ΒΑΡΟΣ WEIGHT G kg/m | ΔΙΑΣΤΑΣΕΙΣ - DIMENSIONS mm | | | | ΔΙΑΤΟΜΗ SECTION F $cm^2$ | ΡΟΠΗ ΑΝΤΙΣΤΑΣΕΩΣ SECTION MODULUS $cm^3$ | |
|---|---|---|---|---|---|---|---|---|
| | | h | b | s | t | | Wx | Wy |
| 100 | 20.4 | 100 | 100 | 6.0 | 10.0 | 26.0 | 89.9 | 33.5 |
| 120 | 26.7 | 120 | 120 | 6.5 | 11.0 | 34.0 | 144.0 | 52.9 |
| 140 | 33.7 | 140 | 140 | 7.0 | 12.0 | 43.0 | 216.0 | 78.5 |
| 160 | 42.6 | 160 | 160 | 8.0 | 13.0 | 54.3 | 311.0 | 111.0 |
| 180 | 51.2 | 180 | 180 | 8.5 | 14.0 | 65.3 | 426.0 | 151.0 |
| 200 | 61.3 | 200 | 200 | 9.0 | 15.0 | 78.1 | 570.0 | 200.0 |
| 220 | 71.5 | 220 | 220 | 9.5 | 16.0 | 91.0 | 736.0 | 258.0 |
| 240 | 83.2 | 240 | 240 | 10.0 | 17.0 | 106.0 | 938.0 | 327.0 |
| 260 | 93.0 | 260 | 260 | 10.0 | 17.5 | 118.0 | 1150.0 | 395.0 |
| 280 | 103.0 | 280 | 280 | 10.5 | 18.0 | 131.0 | 1380.0 | 471.0 |
| 300 | 117.0 | 300 | 300 | 11.0 | 19.0 | 149.0 | 1680.0 | 616.0 |
| 320 | 127.0 | 320 | 300 | 11.5 | 20.5 | 161.0 | 1930.0 | 616.0 |
| 340 | 134.0 | 340 | 300 | 12.0 | 21.5 | 171.0 | 2160.0 | 646.0 |
| 360 | 142.0 | 360 | 300 | 12.5 | 22.5 | 181.0 | 2400.0 | 676.0 |
| 400 | 155.0 | 400 | 300 | 13.5 | 24.0 | 198.0 | 2880.0 | 721.0 |
| 450 | 171.0 | 450 | 300 | 14.0 | 26.0 | 218.0 | 3550.0 | 781.0 |
| 500 | 187.0 | 500 | 300 | 14.5 | 28.0 | 239.0 | 4290.0 | 842.0 |
| 550 | 199.0 | 550 | 300 | 15.0 | 29.0 | 254.0 | 4970.0 | 872.0 |
| 600 | 212.0 | 600 | 300 | 15.5 | 30.0 | 270.0 | 5700.0 | 902.0 |
| 650 | 225.1 | 650 | 300 | 16.0 | 31.0 | 286.0 | 6480.0 | 932.0 |
| 700 | 241.0 | 700 | 300 | 17.0 | 32.0 | 306.0 | 7340.0 | 963.0 |
| 800 | 262.0 | 800 | 300 | 17.5 | 33.0 | 334.0 | 8980.0 | 994.0 |
| 900 | 291.0 | 900 | 300 | 18.5 | 35.0 | 371.0 | 10980.0 | 1050.0 |
| 1000 | 314.0 | 1000 | 300 | 19.0 | 36.0 | 400.0 | 12890.0 | 1090.0 |




# ΔΟΚΟΙ ΠΛΑΤΥΠΕΛΜΟΙ ΕΛΑΦΡΥΣ ΤΥΠΟΣ HEA-IPBL
# BEAMS HEA-IPBL

S235 JR - S275 JR - S355 JO - 263

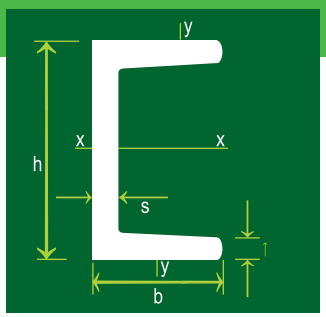
| HEA-IPBL | ΒΑΡΟΣ WEIGHT G kg/m | ΔΙΑΣΤΑΣΕΙΣ - DIMENSIONS mm | | | | ΔΙΑΤΟΜΗ SECTION F $cm^2$ | ΡΟΠΗ ΑΝΤΙΣΤΑΣΕΩΣ SECTION MODULUS $cm^3$ | |
|---|---|---|---|---|---|---|---|---|
| | | h | b | s | t | | Wx | Wy |
| 100 | 16.7 | 96 | 100 | 5.0 | 8.0 | 21.2 | 72.8 | 26.8 |
| 120 | 19.9 | 114 | 120 | 5.0 | 8.0 | 25.3 | 106.0 | 38.5 |
| 140 | 24.7 | 133 | 140 | 5.5 | 8.5 | 31.4 | 155.0 | 55.6 |
| 160 | 30.4 | 152 | 160 | 6.0 | 9.0 | 38.8 | 220.0 | 76.9 |
| 180 | 35.5 | 171 | 180 | 6.0 | 9.5 | 45.3 | 294.0 | 103.9 |
| 200 | 42.3 | 190 | 200 | 6.5 | 10.0 | 53.8 | 389.0 | 134.0 |
| 220 | 50.5 | 210 | 220 | 7.0 | 11.0 | 64.3 | 515.0 | 178.0 |
| 240 | 60.3 | 230 | 240 | 7.5 | 12.0 | 76.8 | 675.0 | 231.0 |
| 260 | 68.2 | 250 | 260 | 7.5 | 12.5 | 86.8 | 836.0 | 282.0 |
| 280 | 76.4 | 270 | 280 | 8.0 | 13.0 | 97.3 | 1010.0 | 340.0 |
| 300 | 88.3 | 290 | 300 | 8.5 | 14.0 | 112.0 | 1260.0 | 421.0 |
| 320 | 97.6 | 310 | 300 | 9.0 | 15.5 | 124.0 | 1480.0 | 466.0 |
| 340 | 105.0 | 330 | 300 | 9.5 | 16.5 | 133.0 | 1680.0 | 496.0 |
| 360 | 112.0 | 350 | 300 | 10.0 | 17.5 | 143.0 | 1890.0 | 526.0 |
| 400 | 125.0 | 390 | 300 | 11.0 | 19.0 | 159.0 | 2310.0 | 571.0 |
| 450 | 140.0 | 440 | 300 | 11.5 | 21.0 | 178.0 | 2900.0 | 631.0 |
| 500 | 155.0 | 490 | 300 | 12.0 | 23.0 | 198.0 | 3550.0 | 691.0 |
| 550 | 166.0 | 540 | 300 | 12.5 | 24.0 | 212.0 | 4150.0 | 721.0 |
| 600 | 178.0 | 590 | 300 | 13.0 | 25.0 | 226.0 | 4790.0 | 751.0 |
| 650 | 190.0 | 640 | 300 | 13.5 | 26.0 | 242.0 | 5470.0 | 782.0 |
| 700 | 204.0 | 690 | 300 | 14.5 | 27.0 | 260.0 | 6240.0 | 812.0 |
| 800 | 224.0 | 790 | 300 | 15.0 | 28.0 | 286.0 | 7680.0 | 843.0 |
| 900 | 252.0 | 890 | 300 | 16.0 | 30.0 | 320.0 | 9480.0 | 903.0 |
| 1000 | 272.0 | 990 | 300 | 16.5 | 31.0 | 347.0 | 11190.0 | 934.0 |




# ΔΟΚΟΙ ΠΛΑΤΥΠΕΛΜΟΙ
# UNIVERSAL BEAMS

S235 JR - S275 JR - S355 JO - 263

| DESIGNATION | | Depth of Section D | Depth of Section B | Thickness | | Area of Section | Moment of inertia | | Radius of gyration | | Elastic modulus | | Plastic modulus | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Serial size | Mass per meter | | | Wed t | Flange T | | Axis x-x | Axis y-y | Axis x-x | Axis y-y | Axis x-x | Axis y-y | Axis x-x | Axis y-y |
| mm | kg | mm | mm | mm | $cm^2$ | mm | $cm^4$ | $cm^4$ | cm | $cm^3$ | $cm^3$ | $cm^3$ | $cm^3$ | $cm^3$ |
| 203x133 | 25 | 203.2 | 133.4 | 5.8 | 7.8 | 32.3 | 2356 | 310 | 8.5 | 3.10 | 231.9 | 46.4 | 259.8 | 71.4 |
| | 30 | 206.8 | 133.8 | 6.3 | 9.6 | 38.0 | 2887 | 384 | 8.7 | 3.18 | 279.3 | 57.4 | 313.3 | 88.1 |
| 254x146 | 31 | 251.5 | 146.1 | 6.1 | 8.6 | 40.0 | 4439 | 449 | 10.5 | 3.35 | 353.1 | 61.5 | 395.6 | 94.5 |
| | 37 | 356.0 | 146.4 | 6.4 | 10.6 | 47.5 | 5556 | 571 | 10.8 | 3.47 | 434.0 | 78.1 | 485.3 | 119.6 |
| 305x165 | 40 | 303.8 | 165.1 | 6.1 | 10.2 | 51.5 | 8523 | 763 | 12.9 | 3.85 | 561.2 | 92.4 | 624.5 | 141.5 |
| | 46 | 307.1 | 165.7 | 6.7 | 11.8 | 58.9 | 9948 | 897 | 13.0 | 3.90 | 647.9 | 108.3 | 722.7 | 165.8 |
| 356x171 | 45 | 352.0 | 171.0 | 6.9 | 9.7 | 57.0 | 12091 | 812 | 14.6 | 3.78 | 686.9 | 95.0 | 773.7 | 146.7 |
| | 51 | 355.6 | 171.5 | 7.3 | 11.8 | 64.6 | 14156 | 968 | 14.8 | 3.87 | 796.2 | 112.9 | 894.9 | 174.1 |
| | 57 | 358.6 | 172.1 | 8.0 | 13.0 | 72.2 | 16077 | 1109 | 14.9 | 3.92 | 896.5 | 128.9 | 1009.0 | 198.8 |
| 406x178 | 60 | 406.4 | 177.8 | 7.8 | 12.8 | 76.0 | 21508 | 1199 | 16.8 | 3.97 | 1058.0 | 134.8 | 1194.0 | 208.3 |
| | 67 | 409.4 | 178.8 | 8.8 | 14.3 | 85.5 | 24329 | 1365 | 16.9 | 4.00 | 1188.0 | 152.7 | 1346.0 | 236.5 |
| 457x152 | 74 | 461.3 | 125.7 | 9.9 | 17.0 | 95.0 | 32435 | 1012 | 18.5 | 3.26 | 1406.0 | 132.5 | 1622.0 | 209.1 |
| | 82 | 465.1 | 153.5 | 10.7 | 18.9 | 104.5 | 36215 | 1143 | 18.6 | 3.31 | 1557.0 | 149.0 | 1800.0 | 235.4 |




# ΔΟΚΟΙ UPN / CHANNELS UPN

S235 JR

| UNP | ΒΑΡΟΣ WEIGHT G kg/m | ΔΙΑΣΤΑΣΕΙΣ - DIMENSIONS mm | | | | ΔΙΑΤΟΜΗ SECTION F $cm^2$ | ΡΟΠΗ ΑΝΤΙΣΤΑΣΕΩΣ SECTION MODULUS $cm^3$ | |
|---|---|---|---|---|---|---|---|---|
| | | h | b | s | t | | Wx | Wy |
| 30 x 15 | 1.74 | 30 | 15 | 4.2 | 4.5 | 2.21 | 1.69 | 0.39 |
| 40 x 20 | 2.87 | 40 | 20 | 5.0 | 5.5 | 3.66 | 3.79 | 0.86 |
| 35 | 4.87 | 40 | 35 | 5.0 | 7.0 | 6.21 | 7.05 | 3.08 |
| 50 x 25 | 3.86 | 50 | 25 | 5.0 | 6.0 | 4.92 | 6.73 | 1.48 |
| 38 | 5.59 | 50 | 38 | 5.0 | 7.0 | 7.12 | 10.60 | 3.75 |
| 60 x 30 | 5.07 | 60 | 30 | 6.0 | 6.0 | 6.46 | 10.50 | 2.16 |
| 65 x 42 | 7.09 | 60 | 42 | 5.5 | 7.5 | 9.03 | 17.70 | 5.07 |
| 80 | 8.64 | 80 | 45 | 6.0 | 8.0 | 11.00 | 26.50 | 6.36 |
| 100 | 10.60 | 100 | 50 | 6.0 | 8.5 | 13.50 | 41.20 | 8.49 |
| 120 | 13.40 | 120 | 55 | 7.0 | 9.0 | 17.00 | 60.70 | 11.10 |
| 140 | 16.00 | 140 | 60 | 7.0 | 10.0 | 20.40 | 86.40 | 14.80 |
| 160 | 18.80 | 160 | 65 | 7.5 | 10.5 | 24.00 | 116.00 | 18.30 |
| 180 | 22.00 | 180 | 70 | 8.0 | 11.0 | 28.00 | 150.00 | 22.40 |
| 200 | 25.30 | 200 | 75 | 8.5 | 11.5 | 32.30 | 191.00 | 27.00 |
| 220 | 29.40 | 220 | 80 | 9.0 | 12.5 | 37.40 | 245.00 | 33.60 |
| 240 | 33.20 | 240 | 85 | 9.5 | 13.0 | 42.30 | 300.00 | 39.60 |
| 260 | 37.90 | 260 | 90 | 10.0 | 14.0 | 48.30 | 371.00 | 47.70 |
| 280 | 41.80 | 280 | 95 | 10.0 | 15.0 | 53.30 | 448.00 | 52.20 |
| 300 | 46.20 | 300 | 100 | 10.0 | 16.0 | 58.80 | 535.00 | 67.80 |
| 350 | 60.60 | 350 | 100 | 14.0 | 16.0 | 77.30 | 734.00 | 75.00 |
| 400 | 71.80 | 400 | 110 | 14.0 | 18.0 | 91.50 | 1020.00 | 102.00 |

# ΣΩΛΗΝΕΣ ΜΑΥΡΕΣ & ΓΑΛΒΑΝΙΖΕ
# BLACK & GALVANIZED STEEL TUBES

## BS 1387: 1985 PRESSURE TESTED GENERAL PURPOSE STEEL TUBES

BS 1387

| DIMENSIONS AND WEIGHTS FOR SELF COLOUR & BLACK VARNISHED | | | | | | | WEIGHTS FOR GALVANIZED TUBES | |
|---|---|---|---|---|---|---|---|---|
| N.B. | | O.D. | | WALL | Kgs per meter | | Kgs per meter | |
| mm | In | Max | Min | mm | Plain end | Screwed Socketed | Plain end | Screwed Socketed |
| **LIGHT (REDUCED WALL THICKNESS)** | | | | | | | | |
| 15 | 1/2 | 21.3 | 21 | 2 | 0.96 | 1 | 1 | 1.05 |
| 20 | 3/4 | 26.9 | 26.4 | 2.3 | 1.38 | 1.39 | 1.45 | 1.46 |
| 25 | 1 | 33.8 | 33.2 | 2.6 | 1.98 | 2.00 | 2.06 | 2.08 |
| 32 | 1 1/4 | 42.5 | 41.9 | 2.6 | 2.54 | 2.57 | 2.65 | 2.70 |
| 40 | 1 1/2 | 48.4 | 47.8 | 2.9 | 3.23 | 3.27 | 3.35 | 3.39 |
| 50 | 2 | 60.2 | 59.6 | 2.9 | 4.08 | 4.15 | 4.24 | 4.31 |
| 65 | 2 1/2 | 76.0 | 75.2 | 3.2 | 5.71 | 5.83 | 5.91 | 6.03 |
| 80 | 3 | 88.7 | 87.9 | 3.2 | 6.72 | 6.89 | 6.95 | 7.13 |
| 100 | 4 | 113.9 | 113.0 | 3.6 | 9.75 | 10.00 | 10.00 | 10.30 |
| **MEDIUM (CLASS B)** | | | | | | | | |
| 15 | 1/2 | 21.7 | 21.1 | 2.6 | 1.21 | 1.22 | 1.26 | 1.27 |
| 20 | 3/4 | 27.2 | 26.6 | 2.6 | 1.56 | 1.57 | 1.63 | 1.64 |
| 25 | 1 | 34.2 | 33.4 | 3.2 | 2.41 | 2.43 | 2.49 | 2.51 |
| 32 | 1 1/4 | 42.9 | 42.1 | 3.2 | 3.10 | 3.13 | 3.21 | 3.24 |
| 40 | 1 1/2 | 48.8 | 48.0 | 3.2 | 3.57 | 3.61 | 3.69 | 3.73 |
| 50 | 2 | 60.8 | 59.8 | 3.6 | 5.03 | 5.10 | 5.18 | 5.26 |
| 65 | 2 1/2 | 76.6 | 75.4 | 3.6 | 6.43 | 6.55 | 6.63 | 6.75 |
| 80 | 3 | 89.5 | 88.1 | 4.0 | 8.37 | 8.54 | 8.6 | 8.87 |
| 100 | 5 | 114.9 | 113.3 | 4.5 | 12.20 | 12.50 | 12.50 | 12.80 |
| 125 | 5 | 140.6 | 138.7 | 5.0 | 16.60 | 17.10 | 17.00 | 17.50 |
| 150 | 6 | 116.1 | 164.1 | 5.0 | 19.70 | 20.30 | 20.20 | 20.80 |
| **HEAVY (CLASS C)** | | | | | | | | |
| 15 | ½ | 21.7 | 21.1 | 3.2 | 1.44 | 1.45 | 1.49 | 1.50 |
| 20 | 3/4 | 27.2 | 26.6 | 3.2 | 1.87 | 1.88 | 1.93 | 1.94 |
| 25 | 1 | 34.2 | 33.4 | 4.0 | 2.94 | 2.96 | 3.02 | 3.04 |
| 32 | 1 1/4 | 42.9 | 42.1 | 4.0 | 3.80 | 3.83 | 3.90 | 3.94 |
| 40 | 1 1/2 | 48.8 | 48.0 | 4.0 | 4.38 | 4.42 | 4.50 | 4.54 |
| 50 | 2 | 60.8 | 59.8 | 4.5 | 6.19 | 6.26 | 6.34 | 6.41 |
| 65 | 2 1/2 | 76.6 | 75.4 | 4.5 | 7.93 | 8.05 | 8.12 | 8.25 |
| 80 | 3 | 89.5 | 88.1 | 5.0 | 10.30 | 10.50 | 10.50 | 10.70 |
| 100 | 5 | 114.9 | 113.3 | 5.4 | 14.50 | 14.80 | 14.80 | 15.10 |
| 125 | 5 | 140.6 | 138.7 | 5.4 | 17.90 | 18.40 | 18.30 | 18.80 |
| 150 | 6 | 116.1 | 164.1 | 5.4 | 21.30 | 21.90 | 21.70 | 22.30 |

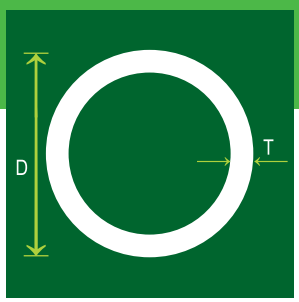
B.S 1387 "Light" dimensions are in accordance with ISO " Light" Series II" / B.S. 1387 "Medium and Heavy" Maximum and Minimum outside diameters meet The requirements of ISO 65. Thickness are in accordance with ISO 65.

# ΣΩΛΗΝΕΣ ΑΝΕΥ ΡΑΦΗΣ / SEAMLESS TUBES

DIN 2440 S235 JR - S275 JR

| OUTSIDE DIAMETRES mm | WALL THICKNESS mm | ΒΑΡΟΣ WEIGHT kg/m |
|---|---|---|
| 21.3 (1/2") | 2.60 | 1.21 |
| | 2.90 | 1.33 |
| | 3.20 | 1.44 |
| | 3.60 | 1.59 |
| | 4.00 | 1.72 |
| | 4.50 | 1.87 |
| | 5.50 | 2.01 |
| 26.9 (3/4") | 2.60 | 1.57 |
| | 2.90 | 1.73 |
| | 3.20 | 1.89 |
| | 3.60 | 2.09 |
| | 4.00 | 2.28 |
| | 4.50 | 2.48 |
| | 5.00 | 2.70 |
| | 5.60 | 2.94 |
| | 6.30 | 3.21 |
| 33.7 (1") | 2.60 | 2.01 |
| | 2.90 | 2.08 |
| | 3.20 | 2.52 |
| | 4.00 | 2.76 |
| | 4.50 | 3.02 |
| | 5.00 | 3.30 |
| | 5.60 | 3.60 |
| | 6.30 | 3.97 |
| 42.4 (1 1/4") | 2.60 | 2.57 |
| | 2.90 | 2.84 |
| | 3.20 | 3.11 |
| | 3.60 | 3.47 |
| | 4.00 | 3.81 |
| | 4.50 | 4.19 |
| | 5.00 | 4.61 |
| | 5.60 | 5.07 |
| | 6.30 | 5.62 |
| 48.3 (1 1/2") | 2.60 | 2.95 |
| | 2.90 | 3.27 |
| | 3.20 | 3.59 |
| | 3.60 | 4.00 |
| | 4.00 | 4.41 |
| | 4.50 | 4.85 |
| | 5.00 | 5.34 |
| | 5.60 | 5.89 |
| | 6.30 | 6.55 |
| | 7.10 | 7.24 |
| | 8.00 | 7.98 |
| 60.3 (2") | 3.60 | 5.07 |
| | 4.00 | 5.59 |
| | 4.50 | 6.17 |
| | 5.00 | 6.82 |
| | 5.60 | 7.53 |
| | 6.30 | 8.42 |
| | 7.10 | 9.34 |
| | 8.00 | 10.30 |

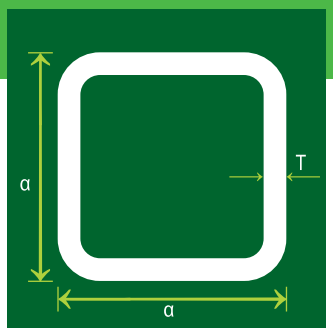
| OUTSIDE DIAMETRES mm | WALL THICKNESS mm | ΒΑΡΟΣ WEIGHT kg/m |
|---|---|---|
| 76.1 (2 1/2") | 3.60 | 6.49 |
| | 4.00 | 7.17 |
| | 4.50 | 7.92 |
| | 5.00 | 8.77 |
| | 5.60 | 9.71 |
| | 6.30 | 10.90 |
| | 7.10 | 12.10 |
| | 8.00 | 13.40 |
| 108 (3") | 4.50 | 11.40 |
| | 5.00 | 12.70 |
| | 5.60 | 14.10 |
| | 6.30 | 15.80 |
| | 7.10 | 17.70 |
| | 8.00 | 19.60 |
| | 8.80 | 21.40 |
| | 10.00 | 24.20 |
| | 11.00 | 25.40 |
| | 12.50 | 29.60 |
| 114.3 (4") | 4.50 | 12.10 |
| | 5.00 | 13.50 |
| | 5.60 | 15.00 |
| | 6.30 | 16.80 |
| | 7.10 | 18.80 |
| | 8.00 | 20.90 |
| | 8.80 | 22.80 |
| | 10.00 | 25.70 |
| | 11.00 | 28.10 |
| | 12.50 | 31.60 |
| | 14.20 | 35.10 |
| 139.7 (5") | 5.00 | 16.60 |
| | 5.60 | 18.50 |
| | 6.30 | 20.80 |
| | 7.10 | 23.30 |
| | 8.00 | 25.90 |
| | 8.80 | 28.30 |
| | 10.00 | 32.00 |
| | 11.00 | 35.10 |
| | 12.50 | 39.50 |
| | 14.20 | 44.00 |
| 168.3 (6") | 6.30 | 25.30 |
| | 7.10 | 28.30 |
| | 8.00 | 31.50 |
| | 8.80 | 34.50 |
| | 10.00 | 39.00 |
| | 11.00 | 42.90 |
| | 12.50 | 48.40 |
| | 14.20 | 54.10 |
| | 16.00 | 59.90 |




# ΣΩΛΗΝΕΣ ΣΤΡΟΓΓΥΛΕΣ / ROUND TUBES

DIN 2440 S235 JR - S275 JR

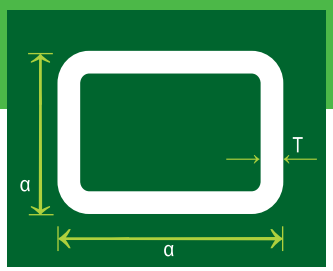
| ΔΙΑΣΤΑΣΕΙΣ / DIMENSION D = 0 (mm) | Πάχος - T = Thickness (mm) | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 1,2 | 1,5 | 2 | 2,5 | 3 | 4 | 5 | 6 | 7 |
| 16 | 0.37 | 0.43 | | | | | | | | |
| 17 | | 0.47 | 0.57 | 0.74 | | | | | | |
| 19 | | 0.53 | 0.65 | 0.84 | | | | | | |
| 22 | | 0.62 | 0.76 | 0.99 | | | | | | |
| 25 | | 0.70 | 0.87 | 1.13 | 1.39 | 1.63 | | | | |
| 28 | | 0.79 | 0.98 | 1.28 | 1.57 | 1.85 | | | | |
| 32 | | 0.91 | 1.13 | 1.48 | 1.82 | 2.15 | | | | |
| 35 | | 1.00 | 1.24 | 1.63 | 2.00 | 2.37 | | | | |
| 38 | | 1.09 | 1.35 | 1.78 | 2.19 | 2.59 | 3.35 | | | |
| 42 | | 1.21 | 1.50 | 1.97 | 2.44 | 2.89 | 3.75 | | | |
| 45 | | 1.30 | 1.61 | 2.12 | 2.62 | 3.11 | 4.4 | | | |
| 48 | | 1.38 | 1.72 | 2.27 | 2.81 | 3.33 | 4.34 | | | |
| 50 | | 1.44 | 1.79 | 2.37 | 2.93 | 3.48 | 4.54 | | | |
| 52 | | | 1.87 | 2.47 | 3.05 | 3.63 | 4.74 | | | |
| 55 | | | 1.98 | 2.61 | 3.24 | 3.85 | 5.03 | | | |
| 57 | | | 2.05 | 2.72 | 3.36 | 4.00 | 5.23 | | | |
| 60 | | | 2.16 | 2.86 | 3.55 | 4.22 | 5.52 | | | |
| 63.5 | | | 2.29 | 3.03 | 3.76 | 4.48 | 5.87 | 7.21 | | |
| 65 | | | 2.35 | 3.11 | 3.85 | 4.59 | 6.02 | 7.40 | | |
| 76 | | | 2.76 | 3.65 | 4.53 | 5.40 | 7.10 | 8.76 | | |
| 83 | | | 3.01 | 4.00 | 4.96 | 5.92 | 7.79 | 9.62 | 11.39 | |
| 89 | | | | 4.29 | 5.33 | 6.36 | 8.39 | 10.36 | 12.28 | |
| 96 | | | | 4.64 | 5.77 | 6.88 | 9.08 | 11.22 | 13.32 | |
| 102 | | | | 4.93 | 6.14 | 7.32 | 9.67 | 11.96 | 14.21 | 16.40 |
| 108 | | | | 5.23 | 6.50 | 7.77 | 10.26 | 12.70 | 15.90 | 17.44 |
| 114 | | | | 5.52 | 6.87 | 8.21 | 10.85 | 13.44 | 15.98 | 18.47 |
| 127 | | | | 6.17 | 7.68 | 9.17 | 12.13 | 15.04 | 17.90 | 20.72 |
| 133 | | | | | 8.04 | 9.62 | 12.72 | 15.78 | 18.79 | 21.75 |
| 139 | | | | | 8.46 | 10.11 | 13.35 | 16.61 | 19.78 | 22.91 |
| 152 | | | | | 9.22 | 11.02 | 14.60 | 18.13 | 21.60 | 25.03 |
| 168 | | | | | | 12.23 | 16.25 | 20.14 | 24.02 | 27.84 |
| 192 | | | | | | 13.98 | 18.55 | 23.06 | 27.52 | 31.94 |
| 219 | | | | | | 15.98 | 21.21 | 26.39 | 31.52 | 36.60 |




# ΣΩΛΗΝΕΣ ΤΕΤΡΑΓΩΝΕΣ / SQUARE TUBES

DIN 2440 S235 JR - S275 JR

| ΔΙΑΣΤΑΣΕΙΣ DIMENSION A x A mm | ΠΑΧΟΣ T = Thickness mm | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | 1.2 | 1.5 | 2 | 2.5 | 3 | 4 | 5 | 6 | 7 |
| | Kg/m | | | | | | | | |
| 15 X 15 | 0.52 | 0.64 | 0.82 | | | | | | |
| 20 X 20 | 0.71 | 0.87 | 1.13 | 1.37 | 1.60 | | | | |
| 25 X 25 | 0.90 | 1.11 | 1.44 | 1.77 | 2.07 | | | | |
| 30 X 30 | 1.08 | 1.34 | 1.76 | 2.16 | 2.54 | 3.27 | | | |
| 35 X 35 | 1.27 | 1.58 | 2.07 | 2.55 | 3.01 | 3.89 | | | |
| 40 X 40 | 1.46 | 1.81 | 2.39 | 2.94 | 3.49 | 4.52 | 5.50 | | |
| 45 X 45 | | 2.05 | 2.70 | 3.34 | 3.96 | 5.15 | | | |
| 50 X 50 | | 2.28 | 3.01 | 3.73 | 4.43 | 5.78 | 7.06 | | |
| 60 X 60 | | 2.76 | 3.64 | 4.51 | 5.37 | 7.03 | 8.63 | 10.17 | |
| 70 X 70 | | | 4.27 | 5.30 | 6.31 | 8.29 | 10.20 | 12.06 | |
| 80 X 80 | | | 4.90 | 6.08 | 7.25 | 9.55 | 11.77 | 13.94 | 16.05 |
| 90 X 90 | | | 5.53 | 6.87 | 8.20 | 10.80 | 13.35 | 15.83 | 18.24 |
| 100 X 100 | | | 6.15 | 7.66 | 9.14 | 12.06 | 14.91 | 17.71 | 20.44 |
| 120 X 120 | | | | | 11.02 | 14.57 | 18.05 | 21.48 | 24.84 |
| 125 X 125 | | | | | | 14.57 | 18.05 | 21.48 | 24.84 |
| 150 X 150 | | | | | 13.85 | 18.34 | 22.76 | 27.13 | 31.43 |
| 160 X 160 | | | | | | | 14.60 | 19.30 | 23.80 |
| 175 X 175 | | | | | 16.00 | 21.22 | 26.40 | 31.54 | 36.61 |
| 180 X 180 | | | | | | | 16.50 | 21.80 | 27.00 |
| 200 X 200 | | | | | | | 18.40 | 24.30 | 30.10 |
| 220 X 220 | | | | | | | 20.30 | 26.80 | 33.20 |

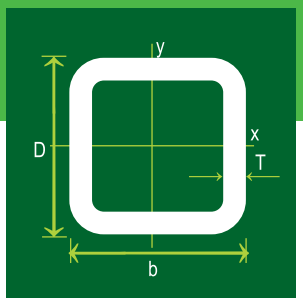



# ΣΩΛΗΝΕΣ ΟΡΘΟΓΩΝΙΕΣ / RECTANGULAR TUBES

DIN 2440 S235 JR - S275 JR

| ΔΙΑΣΤΑΣΕΙΣ DIMENSION BxA mm | ΠΑΧΟΣ T = Thickness mm | | | | | | |
|---|---|---|---|---|---|---|---|
| | 1.2 | 1.5 | 2 | 2.5 | 3 | 4 | 5 |
| | Kg/m | | | | | | |
| 20 x 10 | 0.52 | 0.64 | 0.82 | | | | |
| 20 x 15 | 0.61 | 0.75 | 0.97 | | | | |
| 25 x 10 | 0.61 | 0.75 | 0.97 | | | | |
| 25 x 15 | 0.71 | 0.87 | 1.13 | 1.37 | | | |
| 30 x 10 | 0.71 | 0.87 | 1.13 | | | | |
| 30 x 15 | 0.80 | 0.99 | 1.29 | 1.57 | 1.84 | | |
| 30 x 16 | 0.82 | 1.01 | 1.32 | 1.61 | 1.88 | | |
| 30 x 20 | 0.90 | 1.11 | 1.44 | 1.77 | 2.07 | | |
| 30 x 25 | 0.99 | 1.22 | 1.60 | 1.96 | 2.31 | | |
| 34 x 15 | 0.88 | 1.08 | 1.41 | 1.73 | 2.03 | | |
| 34 x 20 | 0.97 | 1.20 | 1.57 | 1.92 | 2.26 | | |
| 35 x 10 | 0.80 | 0.99 | 1.29 | | | | |
| 35 x 15 | 0.90 | 1.11 | 1.44 | 1.77 | 2.07 | | |
| 35 x 20 | 0.99 | 1.22 | 1.60 | 1.96 | 2.31 | | |
| 35 x 25 | 1.08 | 1.34 | 1.76 | 2.16 | 2.54 | | |
| 40 x 10 | 0.90 | 1.11 | 1.44 | | | | |
| 40 x 15 | 0.99 | 1.22 | 1.60 | 1.96 | 2.31 | | |
| 40 x 20 | 1.08 | 1.34 | 1.76 | 2.16 | 2.54 | | |
| 40 x 25 | 1.18 | 1.46 | 1.91 | 2.35 | 2.78 | | |
| 40 x 27 | 1.21 | 1.51 | 1.98 | 2.43 | 2.87 | | |
| 40 x 30 | 1.27 | 1.58 | 2.07 | 2.55 | 3.01 | 3.89 | |
| 45 x 10 | 0.99 | 1.22 | 1.60 | | | | |
| 45 x 15 | 1.08 | 1.34 | 1.76 | 2.16 | 2.54 | | |
| 45 x 20 | 1.18 | 1.46 | 1.91 | 2.35 | 2.78 | | |
| 45 x 25 | 1.27 | 1.58 | 2.07 | 2.55 | 3.01 | | |
| 50 x 10 | 1.08 | 1.34 | 1.76 | | | | |
| 50 x 15 | 1.18 | 1.46 | 1.91 | 2.35 | 2.78 | | |
| 50 x 20 | 1.27 | 1.58 | 2.07 | 2.55 | 3.01 | | |
| 50 x 25 | 1.37 | 1.77 | 2.23 | 2.75 | 3.25 | | |
| 50 x 30 | 1.46 | 1.81 | 2.39 | 2.94 | 3.49 | 4.52 | |
| 50 x 34 | | 1.91 | 2.51 | 3.10 | 3.67 | 4.77 | |
| 50 x 40 | | 2.05 | 2.70 | 3.34 | 3.96 | 5.15 | |
| 55 x 34 | | 2.02 | 2.67 | 3.30 | 3.91 | 5.09 | |
| 60 x 10 | 1.27 | 1.58 | 2.07 | | | | |
| 60 x 15 | 1.37 | 1.77 | 2.23 | 2.75 | 3.25 | | |
| 60 x 20 | 1.46 | 1.81 | 2.39 | 2.94 | 3.49 | | |
| 60 x 25 | | 1.93 | 2.54 | 3.14 | 3.74 | | |
| 60 x 30 | | 2.05 | 2.70 | 3.34 | 3.96 | 5.15 | |
| 60 x 33 | | 2.12 | 2.79 | 3.45 | 4.10 | 5.34 | |
| 60 x 40 | | 2.28 | 3.01 | 3.73 | 4.43 | 5.78 | 7.06 |

| ΔΙΑΣΤΑΣΕΙΣ DIMENSION BxA mm | ΠΑΧΟΣ T = Thickness mm | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | 1.5 | 2 | 2.5 | 3 | 4 | 5 | 6 | 7 |
| | Kg/m | | | | | | | |
| 60 x 50 | 2.52 | 3.33 | 4.12 | 4.90 | 6.41 | 7.85 | | |
| 70 x 20 | 2.05 | 2.70 | 3.34 | 3.96 | | | | |
| 70 x 25 | 2.17 | 2.86 | 3.53 | 4.19 | | | | |
| 70 x 30 | 2.28 | 3.01 | 3.73 | 4.43 | 5.78 | | | |
| 70 x 40 | 2.52 | 3.33 | 4.12 | 4.90 | 6.41 | 7.85 | | |
| 70 x 50 | 2.76 | 3.64 | 4.51 | 4.37 | 7.03 | 8.63 | | |
| 80 x 20 | 2.28 | 3.01 | 3.73 | 4.43 | | | | |
| 80 x 30 | 2.52 | 3.33 | 4.12 | 4.90 | 6.41 | | | |
| 80 x 40 | 2.76 | 3.64 | 4.51 | 5.37 | 7.03 | 8.63 | | |
| 80 x 50 | 2.99 | 3.96 | 4.91 | 5.84 | 7.66 | 9.42 | | |
| 80 x 60 | | 4.27 | 5.30 | 6.31 | 8.29 | 10.20 | 12.06 | |
| 90 x 30 | 2.76 | 3.64 | 4.51 | 5.37 | 7.03 | | | |
| 90 x 40 | 2.99 | 3.96 | 4.91 | 5.84 | 7.66 | 8.63 | | |
| 90 x 50 | | 4.27 | 5.30 | 6.31 | 8.29 | 10.20 | 12.06 | |
| 90 x 60 | | 4.58 | 5.69 | 6.78 | 8.92 | 10.99 | 13.00 | |
| 100 x 20 | 2.75 | 3.64 | 4.51 | 5.37 | | | | |
| 100 x 30 | 2.99 | 3.96 | 4.91 | 5.84 | 7.66 | | | |
| 100 x 40 | | 4.47 | 5.30 | 6.31 | 8.29 | 10.20 | | |
| 100 x 50 | | 4.58 | 5.69 | 6.78 | 8.92 | 10.99 | 13.00 | |
| 100 x 60 | | 4.90 | 6.08 | 7.25 | 9.55 | 11.77 | 13.94 | |
| 100 x 70 | | 5.21 | 6.48 | 7.72 | 10.17 | 12.56 | 14.88 | |
| 100 x 80 | | 5.53 | 6.87 | 8.20 | 10.80 | 13.35 | 15.83 | 18.24 |
| 110 x 50 | | 4.90 | 6.08 | 7.25 | 9.55 | 11.77 | 13.94 | |
| 110 x 60 | | 5.21 | 6.48 | 7.72 | 10.17 | 12.56 | 14.88 | |
| 110 x 110 | | | 8.05 | 9.61 | 12.69 | 16.33 | 18.65 | 21.54 |
| 120 x 30 | | 4.58 | 5.69 | 6.78 | 8.92 | 10.99 | 13.00 | |
| 120 x 40 | | 4.90 | 6.08 | 7.25 | 9.55 | 11.77 | | |
| 120 x 50 | | 5.21 | 6.48 | 7.72 | 10.17 | 12.56 | 14.88 | |
| 120 x 60 | | 5.53 | 6.87 | 8.20 | 10.80 | 13.35 | 15.83 | |
| 120 x 80 | | 6.15 | 7.66 | 9.14 | 12.06 | 14.91 | 17.71 | 20.44 |
| 130 x 50 | | 5.53 | 6.87 | 8.20 | 10.80 | 13.35 | 15.83 | |
| 140 x 60 | | 6.15 | 7.66 | 9.14 | 12.06 | 14.91 | 17.71 | |
| 140 x 80 | | | | | 12.69 | 16.33 | 18.65 | 21.84 |
| 150 x 50 | | 6.15 | 7.66 | 9.14 | 12.06 | 14.91 | 17.71 | |
| 150 x 100 | | | | 11.30 | 14.98 | 18.34 | 21.69 | |
| 160 x 80 | | | | 10.82 | 14.30 | 17.70 | 21.10 | |
| | | | | | | | | |
| 180 x 60 | | | | 10.80 | 14.30 | 17.70 | 21.10 | |
| 200 x 100 | | | | 13.85 | 18.34 | 22.76 | 27.12 | |
| 250 x 100 | | | | 16.00 | 21.22 | 26.40 | 31.54 | 36.61 |

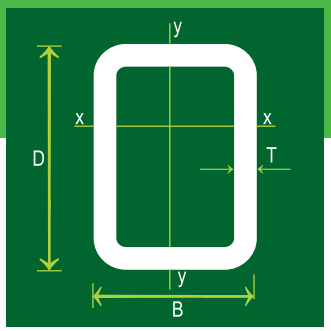



# ΚΟΙΛΟΙ ΔΟΚΟΙ ΤΕΤΡΑΓΩΝΟΙ ΘΕΡΜΗΣ ΔΙΑΜΟΡΦΩΣΗΣ
# SQUARE HOLLOW SECTION HOT FINISHED

DIN 17100 S275 JR - S355 JO

| MEGEUD SIZE DxB mm | THICKNESS T mm | MASS M kg/m | AREA A kg/m | MOMENT OF INERTIA I cm | RADIUS OF GIRATION R cm | ELASTIC MODULUS Z cm | PLASTIC MODULUS S cm | TORSIONAL J cm | CONSTANTS C cm |
|---|---|---|---|---|---|---|---|---|---|
| 20 x 20 | 2.0 | 1.12 | 1.42 | 0.76 | 0.73 | 0.76 | 0.95 | 1.22 | 1.07 |
| | 2.5 | 1.35 | 1.72 | 0.87 | 0.71 | 0.88 | 1.12 | 1.41 | 1.21 |
| 25 x 25 | 2.0 | 1.43 | 1.82 | 1.59 | 0.94 | 1.27 | 1.56 | 2.52 | 1.81 |
| | 2.5 | 1.74 | 2.22 | 1.85 | 0.91 | 1.48 | 1.86 | 2.97 | 2.09 |
| | 3.0 | 2.04 | 2.60 | 2.06 | 0.89 | 1.65 | 2.12 | 3.36 | 2.31 |
| | 3.2 | 2.15 | 2.74 | 2.14 | 0.88 | 1.71 | 2.21 | 3.49 | 2.38 |
| 30 x 30 | 2.5 | 2.14 | 2.72 | 3.40 | 1.12 | 2.27 | 2.79 | 5.50 | 3.22 |
| | 3.0 | 2.51 | 3.20 | 3.84 | 1.10 | 2.56 | 3.21 | 6.17 | 3.61 |
| | 3.2 | 2.65 | 3.38 | 4.00 | 1.09 | 2.67 | 3.37 | 6.45 | 3.75 |
| 40 x 40 | 2.5 | 2.92 | 3.72 | 8.67 | 1.53 | 4.33 | 5.21 | 13.60 | 6.23 |
| | 3.0 | 3.45 | 4.40 | 9.96 | 1.51 | 4.98 | 6.07 | 15.70 | 7.11 |
| | 3.2 | 3.66 | 4.66 | 10.40 | 1.50 | 5.22 | 6.40 | 16.50 | 7.43 |
| | 4.0 | 4.46 | 5.68 | 12.10 | 1.46 | 6.07 | 6.71 | 19.50 | 8.56 |
| | 5.0 | 5.40 | 6.88 | 13.80 | 1.42 | 6.92 | 8.92 | 22.60 | 9.65 |
| 50 x 50 | 2.5 | 3.71 | 4.72 | 17.70 | 1.94 | 7.07 | 8.38 | 27.40 | 10.20 |
| | 3.0 | 4.39 | 5.60 | 20.50 | 1.91 | 8.20 | 9.83 | 32.00 | 11.80 |
| | 3.2 | 4.66 | 5.94 | 21.60 | 1.91 | 8.62 | 10.40 | 33.80 | 12.40 |
| | 4.0 | 5.72 | 7.28 | 25.50 | 1.87 | 10.20 | 12.50 | 40.40 | 14.50 |
| | 5.0 | 6.97 | 8.88 | 29.60 | 1.83 | 11.90 | 14.90 | 47.60 | 16.70 |
| | 6.3 | 8.49 | 10.80 | 33.90 | 1.77 | 13.60 | 17.50 | 55.30 | 18.90 |
| 60 x 60 | 3.0 | 5.34 | 6.80 | 36.60 | 2.32 | 12.20 | 14.50 | 56.90 | 17.70 |
| | 3.2 | 5.67 | 7.22 | 38.70 | 2.31 | 12.90 | 15.30 | 60.10 | 18.60 |
| | 4.0 | 6.97 | 8.88 | 46.10 | 2.28 | 15.40 | 18.60 | 72.40 | 22.10 |
| | 5.0 | 8.54 | 10.90 | 54.40 | 2.24 | 18.10 | 22.30 | 86.30 | 25.80 |
| | 6.3 | 10.80 | 13.30 | 63.40 | 2.18 | 21.10 | 26.60 | 102.00 | 29.70 |
| | 8.0 | 12.80 | 16.30 | 72.40 | 2.11 | 24.10 | 31.40 | 119.00 | 33.50 |
| 70 x 70 | 3.0 | 6.25 | 8.00 | 59.60 | 2.73 | 17.00 | 20.00 | 92.10 | 24.80 |
| | 3.6 | 7.46 | 9.50 | 69.50 | 2.70 | 19.90 | 23.60 | 108.00 | 28.70 |
| | 5.0 | 10.10 | 12.90 | 90.10 | 2.64 | 25.70 | 31.20 | 142.00 | 36.80 |
| | 6.3 | 12.50 | 15.90 | 106.00 | 2.59 | 30.40 | 37.60 | 169.00 | 43.00 |
| | 8.0 | 15.30 | 19.50 | 123.00 | 2.51 | 35.30 | 45.00 | 200.00 | 49.40 |
| 80 x 80 | 3.0 | 7.22 | 9.20 | 90.60 | 3.14 | 22.70 | 26.50 | 139.00 | 33.10 |
| | 3.6 | 8.59 | 10.90 | 106.00 | 3.11 | 26.50 | 31.30 | 164.00 | 38.50 |
| | 5.0 | 11.70 | 14.90 | 139.00 | 3.05 | 34.70 | 41.70 | 217.00 | 49.80 |
| | 6.3 | 14.40 | 18.40 | 165.00 | 3.00 | 41.30 | 50.50 | 261.00 | 58.80 |
| | 8.0 | 17.80 | 22.70 | 194.00 | 2.92 | 48.60 | 60.90 | 312.00 | 68350 |
| 90 x 90 | 3.6 | 9.72 | 12.40 | 154.00 | 3.52 | 34.10 | 40.00 | 237.00 | 49.70 |
| | 5.0 | 13.30 | 16.90 | 202.00 | 3.46 | 45.00 | 53.60 | 315.00 | 64.90 |
| | 6.3 | 16.40 | 20.90 | 242.00 | 3.41 | 53.90 | 65.30 | 381.00 | 77.10 |
| | 8.0 | 20.40 | 25.90 | 288.00 | 3.33 | 64.00 | 79.20 | 459.00 | 90.70 |

| ΜΕΓΕΘΟΣ / SIZE<br>DxB<br>mm | THICKNESS<br>T<br>m/m | MASS<br>M<br>kg/m | AREA<br>A<br>kg/m | MOMENT OF INERTIA<br>I<br>cm | RADIUS OF GIRATION<br>R<br>cm | ELASTIC MODULUS<br>Z<br>cm | PLASTIC MODULUS<br>S<br>cm | TORSIONAL<br>J<br>cm | CONSTANTS<br>C<br>cm |
|---|---|---|---|---|---|---|---|---|---|
| 100 x 100 | 4.0 | 12.00 | 15.30 | 234.00 | 3.91 | 46.80 | 54.90 | 361.00 | 68.20 |
| | 5.0 | 14.80 | 18.90 | 283.00 | 3.87 | 56.60 | 67.10 | 439.00 | 81.90 |
| | 6.3 | 18.40 | 23.40 | 341.00 | 3.81 | 68.20 | 82.00 | 533.00 | 97.90 |
| | 8.0 | 22.90 | 29.10 | 408.00 | 3.74 | 81.50 | 99.90 | 646.00 | 116.00 |
| | 10.0 | 27.90 | 35.50 | 474.00 | 3.65 | 94.90 | 119.00 | 761.00 | 134.00 |
| 120 x 120 | 5.0 | 18.00 | 22.90 | 503.00 | 4.69 | 83.80 | 98.40 | 775.00 | 122.00 |
| | 6.3 | 22.30 | 28.50 | 610.00 | 4.63 | 102.00 | 121.00 | 949.00 | 147.00 |
| | 8.0 | 27.30 | 35.50 | 738.00 | 4.56 | 123.00 | 149.00 | 1159.00 | 176.00 |
| | 10.0 | 34.20 | 43.50 | 870.00 | 4.47 | 145.00 | 178.00 | 1381.00 | 206.00 |
| | 12.5 | 41.60 | 53.00 | 1009.00 | 4.36 | 168.00 | 212.00 | 1624.00 | 237.00 |
| 140 x 140 | 5.0 | 21.10 | 26.90 | 814.00 | 5.50 | 814.00 | 116.00 | 1251.00 | 170.00 |
| | 5.6 | 23.50 | 30.00 | 899.00 | 5.48 | 128.00 | 151.00 | 1385.00 | 187.00 |
| | 6.3 | 26.30 | 33.50 | 994.00 | 5.45 | 142.00 | 168.00 | 1538.00 | 206.00 |
| | 7.1 | 29.40 | 37.50 | 1099.00 | 5.41 | 157.00 | 186.00 | 1706.00 | 227.00 |
| | 8.0 | 32.90 | 41.90 | 1212.00 | 5.38 | 173.00 | 207.00 | 1889.00 | 249.00 |
| | 10.00 | 40.40 | 51.50 | 1441.00 | 5.29 | 206.00 | 250.00 | 2269.00 | 294.00 |
| | 12.5 | 49.50 | 63.00 | 1691.00 | 5.18 | 242.00 | 299.00 | 2695.00 | 342.00 |
| 150 x 150 | 5.0 | 22.70 | 28.90 | 1009.00 | 5.91 | 135.00 | 157.00 | 1548.00 | 197.00 |
| | 6.3 | 28.30 | 36.00 | 1236.00 | 5.86 | 165.00 | 194.00 | 1907.00 | 240.00 |
| | 8.0 | 35.40 | 45.10 | 1510.00 | 5.78 | 201.00 | 240.00 | 2348.00 | 291.00 |
| | 10.0 | 43.60 | 55.50 | 1803.00 | 5.70 | 240.00 | 290.00 | 2829.00 | 345.00 |
| | 12.5 | 53.40 | 68.00 | 2125.00 | 5.59 | 283.00 | 348.00 | 3372.00 | 403.00 |
| | 16.0 | 66.40 | 84.50 | 2500.00 | 5.44 | 233.00 | 421.00 | 4029.00 | 498.00 |
| 180 x 180 | 6.3 | 34.20 | 43.60 | 2186.00 | 7.08 | 243.00 | 283.00 | 3357.00 | 355.00 |
| | 8.0 | 43.00 | 54.70 | 2689.00 | 7.01 | 299.00 | 352.00 | 4156.00 | 434.00 |
| | 10.0 | 53.00 | 67.50 | 3237.00 | 6.92 | 360.00 | 429.00 | 5041.00 | 519.00 |
| | 12.5 | 65.20 | 83.00 | 3856.00 | 6.82 | 428.00 | 519.00 | 6062.00 | 613.00 |
| | 16.0 | 81.40 | 104.00 | 4607.00 | 6.66 | 512.00 | 634.00 | 7339.00 | 725.00 |
| 200 x 200 | 5.0 | 30.50 | 38.90 | 2460.00 | 7.95 | 246.00 | 284.00 | 3752.00 | 362.00 |
| | 6.3 | 38.20 | 48.60 | 3033.00 | 7.90 | 303.00 | 353.00 | 4647.00 | 444.00 |
| | 8.0 | 48.00 | 61.10 | 3744.00 | 7.83 | 374.00 | 439.00 | 5770.00 | 545.00 |
| | 10.0 | 59.30 | 75.50 | 4545.00 | 7.74 | 452.00 | 536.00 | 7020.00 | 655.00 |
| | 12.0 | 73.00 | 93.00 | 5419.00 | 7.63 | 542.00 | 651.00 | 8479.00 | 779.00 |
| | 16.0 | 91.50 | 117.00 | 6524.00 | 7.48 | 652.00 | 799.00 | 10330.00 | 929.00 |
| 250 x 250 | 6.3 | 48.10 | 61.20 | 6049.00 | 9.94 | 484.00 | 559.00 | 9288.00 | 712.00 |
| | 8.0 | 60.50 | 77.10 | 7510.00 | 9.87 | 601.00 | 699.00 | 11510.0 | 880.00 |
| | 10.0 | 75.00 | 95.50 | 9141.00 | 9.78 | 731.00 | 858.00 | 14090.00 | 1065.00 |
| | 12.5 | 92.60 | 118.00 | 11050.00 | 9.68 | 884.00 | 1048.00 | 17140.00 | 1279.00 |
| | 16.0 | 117.00 | 149.00 | 13480.00 | 9.53 | 1078.00 | 1298.00 | 21110.00 | 1548.00 |
| 300 x 300 | 8.0 | 73.10 | 93.10 | 13210.00 | 11.90 | 881.00 | 1018.00 | 20170.00 | 1294.00 |
| | 10.0 | 90.70 | 116.00 | 16150.00 | 11.80 | 1077.00 | 1254.00 | 24780.00 | 1575.00 |
| | 12.5 | 112.00 | 143.00 | 19630.00 | 11.70 | 1309.00 | 1538.00 | 30290.00 | 1905.00 |
| | 16.0 | 142.00 | 181.00 | 24160.00 | 11.60 | 1610.00 | 1916.00 | 37570.00 | 2327.00 |
| 350 x 350 | 8.0 | 85.70 | 109.00 | 21240.00 | 14.00 | 1214.00 | 1398.00 | 32350.00 | 1789.00 |
| | 10.0 | 106.00 | 136.00 | 26050.00 | 13.90 | 1489.00 | 1725.00 | 39840.00 | 2186.00 |
| | 12.5 | 132.00 | 168.00 | 21810.00 | 13.80 | 1817.00 | 2122.00 | 48870.00 | 2655.00 |
| | 16.0 | 167.00 | 213.00 | 39370.00 | 13.60 | 2250.00 | 2655.00 | 60900.00 | 3265.00 |
| 400 x 400 | 10.0 | 122.00 | 156.00 | 39350.00 | 15.90 | 1968.00 | 2272.00 | 60030.00 | 2896.00 |
| | 12.5 | 152.00 | 193.00 | 48190.00 | 15.80 | 2409.00 | 2800.00 | 73810.00 | 3530.00 |
| | 16.0 | 192.00 | 245.00 | 59910.00 | 15.70 | 2995.00 | 3514.00 | 92310.00 | 4363.00 |
| | 20.0 | 237.00 | 302.00 | 72400.00 | 15.50 | 3620.00 | 4292.00 | 112320.00 | 5240.00 |




# ΚΟΙΛΟΙ ΔΟΚΟΙ ΠΑΡΑΛΛΗΛΟΓΡΑΜΜΟΙ ΘΕΡΜΗΣ ΔΙΑΜΟΡΦΩΣΗΣ
# RECTANGULAR HOLLOW SECTIONS HOT FINISHED

**DIN 17100 S235 JR - S275 JR**

| SIZE DxB mm | THICKNESS T mm | MASS M kg/m | SECTION L AREA A kg/m | MOMENT OF INERTIA I x-y cm | MOMENT OF INERTIA I y-y cm | RADIUS OF GIRATION R x-y cm | RADIUS OF GIRATION R y-y cm | ELASTIC MODULUS Z x-y cm | ELASTIC MODULUS Z y-y cm | PLASTIC MODULUS S x-y cm | PLASTIC MODULUS S y-y cm | TORSIONAL CONSTANTS J cm | TORSIONAL CONSTANTS C cm |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 50 x 25 | 2.5 | 2.72 | 3.47 | 10.50 | 3.44 | 1.75 | 1.00 | 4.25 | 2.75 | 5.410 | 3.25 | 8.41 | 4.62 |
| | 3.0 | 3.22 | 4.10 | 12.20 | 3.89 | 1.73 | 1.73 | 4.88 | 3.11 | 6.300 | 3.77 | 9.64 | 5.21 |
| | 3.2 | 3.41 | 4.34 | 12.80 | 4.05 | 1.72 | 0.97 | 5.11 | 3.24 | 6.640 | 3.96 | 10.1 | 5.42 |
| 50 x 30 | 2.5 | 2.92 | 3.72 | 12.00 | 5.30 | 1.80 | 1.19 | 4.81 | 3.53 | 6.010 | 4.16 | 11.7 | 5.74 |
| | 3.0 | 3.45 | 4.40 | 13.90 | 6.04 | 1.78 | 1.17 | 5.54 | 4.03 | 7.010 | 4.83 | 13.5 | 6.52 |
| | 3.2 | 3.66 | 4.66 | 14.50 | 6.31 | 1.77 | 1.16 | 5.82 | 4.21 | 7.390 | 5.08 | 14.2 | 6.81 |
| | 4.0 | 4.46 | 5.68 | 17.00 | 7.25 | 1.73 | 1.13 | 6.80 | 4.83 | 8.810 | 6.01 | 16.6 | 7.79 |
| | 5.0 | 5.40 | 6.88 | 18.50 | 8.13 | 1.68 | 1.09 | 7.79 | 5.42 | 10.400 | 6.98 | 19.0 | 8.71 |
| 60 x 40 | 2.5 | 3.71 | 4.72 | 23.10 | 12.20 | 2.21 | 1.61 | 7.71 | 6.10 | 9.430 | 7.09 | 25.0 | 9.74 |
| | 3.0 | 4.39 | 5.60 | 26.90 | 14.10 | 2.19 | 1.59 | 8.98 | 7.04 | 11.100 | 8.29 | 29.2 | 11.2 |
| | 3.2 | 4.66 | 5.94 | 28.30 | 14.80 | 2.18 | 1.58 | 9.44 | 7.39 | 11.700 | 8.75 | 30.8 | 11.8 |
| | 4.0 | 5.72 | 7.28 | 33.60 | 17.30 | 2.15 | 1.54 | 11.20 | 8.67 | 14.100 | 10.50 | 36.60 | 13.7 |
| | 5.0 | 6.97 | 8.88 | 39.20 | 20.00 | 2.10 | 1.50 | 13.10 | 10.00 | 16.800 | 12.40 | 43.0 | 15.8 |
| | 6.3 | 8.49 | 10.80 | 45.10 | 22.60 | 2.04 | 1.45 | 15.00 | 11.30 | 19.900 | 14.60 | 49.7 | 17.7 |
| 80 x 40 | 3.0 | 5.34 | 6.80 | 55.00 | 18.20 | 2.85 | 1.64 | 13.80 | 9.10 | 17.300 | 10.50 | 43.7 | 15.3 |
| | 3.2 | 5.67 | 7.22 | 58.10 | 19.10 | 2.84 | 1.63 | 14.50 | 9.56 | 18.300 | 11.10 | 46.1 | 16.1 |
| | 4.0 | 6.97 | 8.88 | 69.60 | 22.60 | 2.80 | 1.59 | 17.40 | 11.30 | 22.200 | 13.40 | 55.1 | 18.9 |
| | 5.0 | 8.54 | 10.90 | 82.40 | 26.20 | 2.75 | 1.55 | 20.60 | 13.10 | 26.700 | 15.90 | 65.0 | 21.9 |
| | 6.3 | 10.50 | 13.30 | 96.50 | 29.80 | 2.69 | 1.50 | 24.10 | 14.90 | 31.900 | 18.80 | 75.8 | 24.9 |
| | 8.0 | 12.80 | 16.30 | 111.00 | 33.10 | 2.61 | 1.42 | 27.70 | 16.60 | 37.800 | 21.80 | 86.3 | 27.6 |
| 90 x 50 | 3.0 | 6.28 | 8.0 | 85.40 | 33.80 | 3.27 | 2.05 | 19.00 | 13.50 | 23.400 | 15.50 | 76.4 | 22.4 |
| | 3.6 | 7.46 | 9.50 | 99.80 | 39.10 | 3.24 | 2.03 | 22.20 | 15.60 | 27.600 | 18.10 | 89.6 | 25.9 |
| | 5.0 | 10.10 | 12.90 | 130.00 | 50.00 | 3.18 | 1.97 | 28.90 | 20.00 | 36.600 | 23.90 | 116.0 | 32.9 |
| | 6.3 | 12.50 | 15.90 | 154.00 | 58.10 | 3.12 | 1.91 | 34.20 | 23.30 | 44.200 | 28.50 | 138.0 | 38.2 |
| | 8.0 | 15.30 | 19.50 | 180.00 | 66.30 | 3.04 | 1.84 | 40.00 | 26.50 | 53.000 | 33.70 | 116.0 | 43.4 |
| 100 x 50 | 3.0 | 6.75 | 8.60 | 111.00 | 37.10 | 3.59 | 2.08 | 22.20 | 14.80 | 27.600 | 16.90 | 88.3 | 25.0 |
| | 3.2 | 7.18 | 9.14 | 117.00 | 39.10 | 3.58 | 2.07 | 23.50 | 15.60 | 29.200 | 17.90 | 93.3 | 26.4 |
| | 4.0 | 8.86 | 11.30 | 142.00 | 46.70 | 3.55 | 2.03 | 28.40 | 18.70 | 35.700 | 21.70 | 113.0 | 31.4 |
| | 5.0 | 10.90 | 13.90 | 170.00 | 55.10 | 3.50 | 1.99 | 34.00 | 22.00 | 43.300 | 26.10 | 135.0 | 37.0 |
| | 6.3 | 13.40 | 17.10 | 202.00 | 64.20 | 3.44 | 1.94 | 40.50 | 25.70 | 52.500 | 31.30 | 160.0 | 43.0 |
| | 8.0 | 16.60 | 21.10 | 238.00 | 73.50 | 3.36 | 1.86 | 47.60 | 29.40 | 63.100 | 37.10 | 187.0 | 49.1 |
| 100 x 60 | 3.0 | 7.22 | 9.20 | 125.00 | 56.20 | 3.69 | 2.47 | 25.00 | 18.70 | 30.500 | 21.30 | 121.0 | 30.7 |
| | 3.6 | 8.59 | 10.90 | 147.00 | 65.40 | 3.66 | 2.45 | 29.30 | 21.80 | 36.000 | 25.10 | 142.0 | 35.6 |
| | 5.0 | 11.70 | 14.90 | 192.00 | 84.70 | 3.60 | 2.39 | 38.50 | 28.20 | 48.100 | 33.30 | 187.0 | 46.0 |
| | 6.3 | 14.40 | 18.40 | 230.00 | 99.90 | 3.54 | 2.33 | 46.00 | 33.30 | 58.400 | 40.20 | 224.0 | 54.0 |
| | 8.0 | 17.80 | 22.70 | 272.00 | 116.00 | 3.46 | 2.26 | 54.40 | 38.70 | 70.500 | 48.10 | 266.4 | 62.4 |

| ΔΙΑΣΤΑΣΕΙΣ SIZE DxB mm | THICKNESS T mm | MASS M kg/m | SECTION L AREA A kg/m | MOMENT OF INERTIA I x-y cm | MOMENT OF INERTIA I y-y cm | RADIUS OF GIRATION R x-y cm | RADIUS OF GIRATION R y-y cm | ELASTIC MODULUS Z x-y cm | ELASTIC MODULUS Z y-y cm | PLASTIC MODULUS S x-y cm | PLASTIC MODULUS S y-y cm | TORSIONAL J cm | CONSTANTS C cm |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 120 x 60 | 3.6 | 9.72 | 12.40 | 230.0 | 76.9 | 4.31 | 2.49 | 38.30 | 25.60 | 47.60 | 29.20 | 183.0 | 43.3 |
| | 5.0 | 13.30 | 16.90 | 304.0 | 99.9 | 4.24 | 2.43 | 50.70 | 33.30 | 63.90 | 38.80 | 242.0 | 56.0 |
| | 6.3 | 16.40 | 20.90 | 366.0 | 118.0 | 4.18 | 2.38 | 61.00 | 39.40 | 78.00 | 46.90 | 290.0 | 66.0 |
| | 8.0 | 20.40 | 25.90 | 437.0 | 138.0 | 4.10 | 2.31 | 72.80 | 45.90 | 94.80 | 56.40 | 344.0 | 76.8 |
| 120 x 80 | 5.0 | 14.80 | 18.90 | 370.0 | 195.0 | 4.43 | 3.21 | 61.70 | 48.80 | 75.40 | 56.70 | 401.0 | 77.9 |
| | 6.3 | 18.40 | 23.40 | 447.0 | 234.0 | 4.37 | 3.16 | 74.60 | 58.40 | 92.30 | 69.10 | 486.0 | 93.0 |
| | 8.0 | 22.90 | 29.10 | 537.0 | 278.0 | 4.29 | 3.09 | 89.50 | 69.40 | 113.0 | 83.90 | 586.0 | 110.0 |
| | 10.0 | 27.90 | 35.50 | 628.0 | 320.0 | 4.20 | 3.00 | 105.00 | 80.00 | 134.0 | 99.40 | 688.0 | 126.0 |
| 150 x 100 | 5.0 | 18.70 | 23.90 | 747.0 | 396.0 | 5.59 | 4.07 | 99.50 | 79.10 | 121.0 | 90.80 | 806.0 | 127.0 |
| | 6.3 | 23.30 | 29.70 | 910.0 | 479.0 | 5.53 | 4.02 | 121.00 | 95.90 | 148.0 | 111.00 | 958.0 | 153.0 |
| | 8.0 | 29.10 | 37.10 | 1106.0 | 577.0 | 5.46 | 3.94 | 147.0 | 115.00 | 183.0 | 137.0 | 1202.0 | 184.0 |
| | 10.0 | 35.70 | 45.50 | 1312.0 | 678.0 | 5.37 | 3.86 | 175.0 | 136.00 | 220.0 | 164.0 | 1431.0 | 215.0 |
| | 12.0 | 43.60 | 55.50 | 1532.0 | 781.0 | 5.25 | 3.75 | 204.0 | 156.00 | 263.0 | 194.0 | 1680.0 | 246.0 |
| 160 x 80 | 5.0 | 18.00 | 22.90 | 753.0 | 251.0 | 5.74 | 3.31 | 94.10 | 62.80 | 117.0 | 71.7 | 599.0 | 106.0 |
| | 6.3 | 22.30 | 28.50 | 917.0 | 302.0 | 5.68 | 3.26 | 115.0 | 75.60 | 144.0 | 87.7 | 729.0 | 127.0 |
| | 8.0 | 27.90 | 35.50 | 1113.0 | 361.0 | 5.60 | 3.19 | 139.0 | 90.20 | 177.0 | 107.0 | 882.0 | 151.0 |
| | 10.0 | 34.20 | 43.50 | 1318.0 | 419.0 | 5.50 | 3.10 | 165.0 | 105.0 | 213.0 | 127.0 | 1041.0 | 175.0 |
| | 12.5 | 41.60 | 53.00 | 1536.0 | 476.0 | 5.38 | 3.00 | 192.0 | 119.0 | 254.0 | 150.0 | 1206.0 | 199.0 |
| 200 x 100 | 5.0 | 22.70 | 28.90 | 1509.0 | 509.0 | 7.23 | 4.20 | 151.0 | 102.0 | 186.0 | 115.0 | 1202.0 | 172.0 |
| | 6.3 | 28.30 | 36.00 | 1851.0 | 618.0 | 7.17 | 4.14 | 185.0 | 124.0 | 131.0 | 141.0 | 1473.0 | 208.0 |
| | 8.0 | 35.40 | 45.10 | 2269.0 | 747.0 | 7.09 | 4.07 | 227.0 | 149.0 | 286.0 | 174.0 | 1802.0 | 251.0 |
| | 10.0 | 43.60 | 55.50 | 2718.0 | 881.0 | 7.00 | 3.98 | 272.0 | 176.0 | 346.0 | 209.0 | 2154.0 | 296.0 |
| | 12.5 | 53.40 | 68.00 | 3218.0 | 1022.0 | 6.88 | 3.88 | 322.0 | 204.0 | 417.0 | 249.0 | 2541.0 | 342.0 |
| | 16.0 | 66.40 | 84.50 | 3808.0 | 1175.0 | 6.71 | 3.73 | 381.0 | 235.0 | 505.0 | 297.0 | 2988.0 | 393.0 |
| 250 x 150 | 5.0 | 30.50 | 38.90 | 3382.0 | 1534.0 | 9.33 | 6.28 | 271.0 | 205.0 | 326.0 | 229.0 | 3275.0 | 337.0 |
| | 6.3 | 38.20 | 48.60 | 4178.0 | 1886.0 | 9.27 | 6.23 | 334.0 | 252.0 | 405.0 | 284.0 | 4049.0 | 413.0 |
| | 8.0 | 48.00 | 61.10 | 5167.0 | 2317.0 | 9.19 | 6.16 | 413.0 | 309.0 | 505.0 | 353.0 | 5014.0 | 506.0 |
| | 10.0 | 59.30 | 75.50 | 6259.0 | 2784.0 | 9.10 | 6.07 | 501.0 | 371.0 | 618.0 | 430.0 | 6082.0 | 606.0 |
| | 12.0 | 73.00 | 93.00 | 7518.0 | 3310.0 | 8.99 | 5.97 | 601.0 | 441.0 | 751.0 | 520.0 | 7317.0 | 717.0 |
| | 16.0 | 91.50 | 117.0 | 9089.0 | 3943.0 | 8.83 | 5.82 | 727.0 | 526.0 | 924.0 | 635.0 | 8863.0 | 851.0 |
| 300 x 200 | 5.0 | 48.10 | 61.20 | 7880.0 | 4216.0 | 11.30 | 8.30 | 525.0 | 422.0 | 627.0 | 475.0 | 8468.0 | 681.0 |
| | 6.3 | 60.50 | 77.10 | 9798.0 | 5219.0 | 11.30 | 8.23 | 653.0 | 522.0 | 785.0 | 593.0 | 10550.0 | 840.0 |
| | 8.0 | 75.00 | 95.50 | 11940.0 | 6331.0 | 11.20 | 8.14 | 796.0 | 633.0 | 964.0 | 726.0 | 12890.0 | 1016.0 |
| | 10.0 | 92.60 | 118.0 | 14460.0 | 7619.0 | 11.10 | 8.04 | 964.0 | 762.0 | 1179.0 | 866.0 | 15650.0 | 1217.0 |
| | 16.0 | 117.0 | 95.50 | 17700.0 | 9239.0 | 10.90 | 7.89 | 1180.0 | 924.0 | 1462.0 | 1094.0 | 19230.0 | 1649.0 |
| 400 x 200 | 8.0 | 73.10 | 93.10 | 19708.0 | 6695.0 | 14.50 | 8.48 | 985.0 | 669.8 | 1210.0 | 746.0 | 15720.0 | 1135.0 |
| | 10.0 | 90.70 | 116.0 | 24140.0 | 8138.0 | 14.50 | 8.39 | 1207.0 | 814.0 | 1492.0 | 916.0 | 19240.0 | 1377.0 |
| | 12.5 | 112.0 | 143.0 | 29410.0 | 9820.0 | 14.30 | 8.29 | 1471.0 | 982.0 | 1831.0 | 1120.0 | 23410.0 | 1657.0 |
| | 16.0 | 142.0 | 181.0 | 36300.0 | 11950.0 | 14.20 | 8.14 | 1815.0 | 1195.0 | 2285.0 | 1388.0 | 28830.0 | 2011.0 |
| 450x250 | 10.0 | 106.0 | 136.0 | 37180.0 | 14900.0 | 16.60 | 10.50 | 1653.0 | 1192.0 | 2013.0 | 1338.0 | 33250.0 | 1986.0 |
| | 12.0 | 132.0 | 168.0 | 45470.0 | 18100.0 | 16.50 | 10.40 | 2021.0 | 1448.0 | 2478.0 | 1642.0 | 40670.0 | 2407.0 |
| | 16.0 | 167.0 | 213.0 | 56420.0 | 22250.0 | 16.30 | 10.20 | 2508.0 | 1780.0 | 3103.0 | 2047.0 | 50480.0 | 2948.0 |
| 500 x 300 | 10.0 | 122.0 | 156.0 | 54120.0 | 24560.0 | 18.70 | 12.60 | 2165.0 | 1638.0 | 2609.0 | 1834.0 | 52400.0 | 2696.0 |
| | 12.5 | 152.0 | 193.0 | 66360.0 | 29970.0 | 18.50 | 12.50 | 2655.0 | 1998.0 | 3218.0 | 2257.0 | 64310.0 | 3282.0 |
| | 16.0 | 192.0 | 245.0 | 82670.0 | 37080.0 | 18.40 | 12.30 | 3307.0 | 2472.0 | 4042.0 | 2825.0 | 80220.0 | 4046.0 |
| | 20.0 | 237.0 | 302.0 | 100150.0 | 44550.0 | 18.20 | 12.10 | 4006.0 | 2970.0 | 4942.0 | 3442.0 | 97310.0 | 4845.0 |

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