



# COMFER s.r.l.

## COMMERCIO FERRO

Mandataria  Centro Servizi Lamiera

Rivenditore Autorizzato:



**FERALPI**  
SIDERURGICA S.P.A.

*Tondo C.A.*



*Recinzioni*



**MARCEGAGLIA**  
BUILDTECH

*Pannelli  
Coibentati*

**EURO-FER**

*Ferro Battuto*

**ind.i.a.**

*Ferro Battuto*



# **PRODOTTI SIDERURGICI**

**dimensioni, pesi, qualità, norme**



# TABELLA COMPARATIVA

| DESIGNAZIONE ATTUALE |        | DESIGNAZIONI PRECEDENTI |        |               |                    |                    |                        |
|----------------------|--------|-------------------------|--------|---------------|--------------------|--------------------|------------------------|
| EN 10025-2:2004      |        | EN 10025:1990 + A:1993  |        | EN 10025:1990 | GERMANY DIN 17 100 | FRANCE NF A 35-501 | UNITED KINGDOM BS 4360 |
| S185                 | 1.0035 | S185                    | 1.0035 | Fe 310-0      | St 33              | A 33               |                        |
|                      |        | S235JR                  | 1.0037 | Fe 360 B      | St 37-2            | E 24-2             |                        |
|                      |        | S235JRG1                | 1.0036 | Fe 360 BFU    | USt 37-2           |                    |                        |
| S235JR               | 1.0038 | S235JRG2                | 1.0038 | Fe 360 BFN    | RSt 37-2           |                    | 40 B                   |
| S235J0               | 1.0114 | S235J0                  | 1.0114 | Fe 360 C      | St 37-3 U          | E 24-3             | 40 C                   |
|                      |        |                         |        |               |                    |                    |                        |
| S235J2               | 1.0117 | S235J2G4                | 1.0117 | Fe 360 D2     | --                 |                    |                        |
| S275JR               | 1.0044 | S275JR                  | 1.0044 | Fe 430 B      | St 44-2            | E 28-2             | 43 B                   |
| S275J0               | 1.0143 | S275J2G3                | 1.0143 | Fe 430 C      | St 44-3 U          | E 28-3             | 43 C                   |
|                      |        |                         |        |               |                    |                    |                        |
| S275J2               | 1.0145 | S275J2G4                | 1.0145 | Fe 430 D2     | --                 |                    |                        |
| S355JR               | 1.0045 | S355JR                  | 1.0045 | Fe 510 B      | --                 | E 36-2             | 50 B                   |
| S355J0               | 1.0553 | S355J0                  | 1.0553 | Fe 510 C      | St 52-3 U          | E 36-3             | 50 C                   |
| S355J2               | 1.0577 | S355J2G4                | 1.0577 | Fe 510 D2     | --                 |                    |                        |
| S355K2               | 1.0596 | S355K2G4                | 1.0596 | Fe 510 DD2    | --                 |                    |                        |
| S450J0               | 1.0590 |                         |        |               |                    |                    | 55 C                   |
| E295                 | 1.0050 | E295                    | 1.0050 | Fe 490-2      | St 50-2            | A 50-2             |                        |
| E355                 | 1.0060 | E355                    | 1.0060 | Fe 590-2      | St 50-2            | A 60-2             |                        |
| E360                 | 1.0070 | E360                    | 1.0070 | Fe 690-2      | St 70-2            | A 70-2             |                        |

| EN 10025-5:2004 |        | EN 10155:1993 |        | EU 155-80    | GERMANY   | FRANCE     | UNITED KINGDOM |
|-----------------|--------|---------------|--------|--------------|-----------|------------|----------------|
| S355J0W         | 1.8959 | S355J0W       | 1.8959 | Fe 510 C2 K1 | --        | E 36 W B 3 | WR50B          |
| S355J2W         | 1.8965 | S355J2G2W     | 1.8965 | --           | WTSt 52-3 | --         | --             |

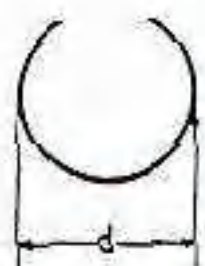


| SPAIN<br>UNE 36-080 | ITALY<br>UNI 7070 | BELGIUM<br>NBN<br>A 21-101 | SWEDEN<br>SS 14 <i>plus</i><br><i>N° of steel grade</i> | PORTUGAL<br>NP 1729 | AUSTRIA<br>M 3116 | NORWAY<br><i>plus</i><br><i>N° of steel grade</i> |
|---------------------|-------------------|----------------------------|---------------------------------------------------------|---------------------|-------------------|---------------------------------------------------|
| A 310-0             | Fe 320            | A 320                      | 13 00-00                                                | Fe 310-0            | St 320            |                                                   |
|                     | Fe 360 B          | AE 235-B                   | 13 11-00                                                | Fe 360-B            |                   | NS 12 120                                         |
| AE 235 B-FU         |                   |                            |                                                         |                     | USt 360 B         | NS 12 122                                         |
| AE 235 B-FN         |                   |                            | 13 12-00                                                |                     | RSt 360 B         | NS 12 123                                         |
| AE 235 C            | Fe 360 C          | AE 235-C                   |                                                         | Fe 360-C            | St 360 C          | NS 12 124                                         |
|                     |                   |                            |                                                         |                     | St 360 CE         |                                                   |
|                     |                   |                            |                                                         |                     |                   |                                                   |
| AE 275 B            | Fe 430 B          | AE 255-B                   | 14 12-00                                                | Fe 430-B            | St 430 B          | NS 12 142                                         |
| AE 275 C            | Fe 430 C          | AE 255-C                   |                                                         | Fe 430-C            | St 430 C          | NS 12 143                                         |
|                     |                   |                            |                                                         |                     | St 430 CE         |                                                   |
|                     |                   |                            | 14 14-01                                                |                     |                   |                                                   |
| AE 355 B            | Fe 510 B          | AE 355-B                   |                                                         | Fe 510-B            |                   |                                                   |
| AE 355 C            | Fe 510 C          | AE 355-C                   |                                                         | Fe 510-C            | St 510 C          | NS 12 153                                         |
|                     |                   |                            |                                                         |                     |                   |                                                   |
|                     |                   |                            |                                                         |                     |                   |                                                   |
|                     |                   |                            |                                                         |                     |                   |                                                   |
| A 490               | Fe 490            | A 490-2                    | 15 50-00<br>15 50-01                                    | Fe 490-2            | St 490            |                                                   |
| A 590               | Fe 590            | A 590-2                    | 16 50-00<br>16 50-01                                    | Fe 590-2            | St 590            |                                                   |
| A 690               | Fe 690            | A 690-2                    | 16 55-00<br>16 55-01                                    | Fe 690-2            | St 690            |                                                   |



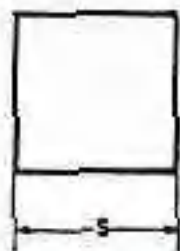
# **LAMINATI MERCANTILI**





# TONDI

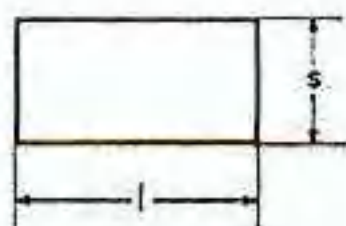
| dimensioni<br>diametro<br>mm | peso<br>kg/m | dimensioni<br>diametro<br>mm | peso<br>kg/m | dimensioni<br>diametro<br>mm | peso<br>kg/m | dimensioni<br>diametro<br>mm | peso<br>kg/m |
|------------------------------|--------------|------------------------------|--------------|------------------------------|--------------|------------------------------|--------------|
| 5                            | 0,154        | 26                           | 4,17         | 63                           | 24,50        | 140                          | 121          |
| 6                            | 0,222        | 27                           | 4,49         | 65                           | 26,00        | 145                          | 130          |
| 7                            | 0,302        | 28                           | 4,83         | 68                           | 28,50        | 150                          | 139          |
| 8                            | 0,395        | 30                           | 5,55         | 70                           | 30,20        | 155                          | 148          |
| 9                            | 0,499        | 32                           | 6,31         | 73                           | 32,90        | 160                          | 158          |
| 10                           | 0,617        | 33                           | 6,71         | 75                           | 34,70        | 170                          | 178          |
| 11                           | 0,746        | 34                           | 7,13         | 78                           | 37,50        | 180                          | 200          |
| 12                           | 0,888        | 35                           | 7,55         | 80                           | 39,50        | 190                          | 223          |
| 13                           | 1,04         | 36                           | 7,99         | 83                           | 42,50        | 200                          | 247          |
| 14                           | 1,21         | 37                           | 8,44         | 85                           | 44,50        | 220                          | 289          |
| 15                           | 1,39         | 38                           | 8,90         | 88                           | 47,70        | 230                          | 326,19       |
| 16                           | 1,58         | 40                           | 9,86         | 90                           | 49,90        | 240                          | 355,16       |
| 17                           | 1,78         | 42                           | 10,90        | 95                           | 55,60        | 250                          | 385,38       |
| 18                           | 2,00         | 45                           | 12,50        | 100                          | 61,60        |                              |              |
| 19                           | 2,23         | 48                           | 14,20        | 105                          | 68,00        |                              |              |
| 20                           | 2,47         | 50                           | 15,40        | 110                          | 74,60        |                              |              |
| 21                           | 2,72         | 52                           | 16,70        | 115                          | 81,50        |                              |              |
| 22                           | 2,96         | 53                           | 17,30        | 120                          | 88,80        |                              |              |
| 23                           | 3,26         | 55                           | 18,70        | 125                          | 96,30        |                              |              |
| 24                           | 3,55         | 58                           | 20,70        | 130                          | 104          |                              |              |
| 25                           | 3,85         | 60                           | 22,20        | 135                          | 112          |                              |              |



# QUADRI

| dimensioni<br>lato<br>mm | peso<br>kg/m | dimensioni<br>lato<br>mm | peso<br>kg/m | dimensioni<br>lato<br>mm | peso<br>kg/m | dimensioni<br>lato<br>mm | peso<br>kg/m |
|--------------------------|--------------|--------------------------|--------------|--------------------------|--------------|--------------------------|--------------|
| 5                        | 0.196        | 18                       | 2.54         | 45                       | 15.9         | 140                      | 154          |
| 6                        | 0.283        | 19                       | 2.83         | 50                       | 19.6         | 150                      | 177          |
| 7                        | 0.385        | 20                       | 3.14         | 55                       | 23.7         |                          |              |
| 8                        | 0.502        | 22                       | 3.80         | 60                       | 28.3         |                          |              |
| 9                        | 0.636        | 25                       | 4.91         | 65                       | 33.2         |                          |              |
| 10                       | 0.785        | 26                       | 5.31         | 70                       | 38.5         |                          |              |
| 11                       | 0.950        | 28                       | 6.15         | 80                       | 50.2         |                          |              |
| 12                       | 1.13         | 30                       | 7.07         | 90                       | 63.6         |                          |              |
| 13                       | 1.33         | 32                       | 8.04         | 100                      | 76.5         |                          |              |
| 14                       | 1.54         | 35                       | 9.62         | 110                      | 95.0         |                          |              |
| 15                       | 1.77         | 38                       | 11.3         | 120                      | 113          |                          |              |
| 16                       | 2.01         | 40                       | 12.6         | 130                      | 133          |                          |              |





# PIATTI

| dimensioni<br>larghezza spessore<br>mm mm | peso<br>kg/m | dimensioni<br>larghezza spessore<br>mm mm | peso<br>kg/m | dimensioni<br>larghezza spessore<br>mm mm | peso<br>kg/m | dimensioni<br>larghezza spessore<br>mm mm | peso<br>kg/m |
|-------------------------------------------|--------------|-------------------------------------------|--------------|-------------------------------------------|--------------|-------------------------------------------|--------------|
| 10 x 3                                    | 0,235        | 20 x 5                                    | 0,785        | 35 x 5                                    | 1,37         | 50 x 6                                    | 2,36         |
| 10 x 4                                    | 0,314        | 20 x 6                                    | 0,942        | 35 x 6                                    | 1,65         | 50 x 8                                    | 3,14         |
| 10 x 5                                    | 0,392        | 20 x 8                                    | 1,260        | 35 x 8                                    | 2,20         | 50 x 10                                   | 3,92         |
| 10 x 6                                    | 0,471        | 20 x 10                                   | 1,570        | 35 x 10                                   | 2,75         | 50 x 12                                   | 4,71         |
| 12 x 3                                    | 0,283        | 20 x 12                                   | 1,880        | 35 x 12                                   | 3,30         | 50 x 15                                   | 5,89         |
| 12 x 4                                    | 0,377        | 20 x 15                                   | 2,360        | 35 x 15                                   | 4,12         | 50 x 20                                   | 7,85         |
| 12 x 5                                    | 0,471        | 22 x 3                                    | 0,518        | 35 x 20                                   | 5,50         | 50 x 25                                   | 9,81         |
| 12 x 6                                    | 0,565        | 22 x 4                                    | 0,691        | 35 x 25                                   | 6,87         | 50 x 30                                   | 11,8         |
| 14 x 3                                    | 0,330        | 22 x 5                                    | 0,864        | 40 x 3                                    | 0,942        | 50 x 40                                   | 15,7         |
| 14 x 4                                    | 0,440        | 22 x 6                                    | 1,040        | 40 x 4                                    | 1,26         | 60 x 3                                    | 1,413        |
| 14 x 5                                    | 0,550        | 22 x 8                                    | 1,38         | 40 x 5                                    | 1,57         | 60 x 4                                    | 1,88         |
| 14 x 6                                    | 0,659        | 22 x 10                                   | 1,73         | 40 x 6                                    | 1,88         | 60 x 5                                    | 2,36         |
| 14 x 8                                    | 0,879        | 22 x 12                                   | 2,07         | 40 x 8                                    | 2,51         | 60 x 6                                    | 2,83         |
| 15 x 3                                    | 0,353        | 22 x 15                                   | 2,59         | 40 x 10                                   | 3,14         | 60 x 8                                    | 3,77         |
| 15 x 4                                    | 0,471        | 25 x 3                                    | 0,589        | 40 x 12                                   | 3,77         | 60 x 10                                   | 4,71         |
| 15 x 5                                    | 0,589        | 25 x 4                                    | 0,785        | 40 x 15                                   | 4,71         | 60 x 12                                   | 5,65         |
| 15 x 6                                    | 0,706        | 25 x 5                                    | 0,981        | 40 x 20                                   | 6,28         | 60 x 15                                   | 7,06         |
| 15 x 8                                    | 0,942        | 25 x 6                                    | 1,18         | 40 x 25                                   | 7,85         | 60 x 20                                   | 9,42         |
| 15 x 10                                   | 1,17         | 25 x 8                                    | 1,57         | 40 x 30                                   | 9,42         | 60 x 25                                   | 11,8         |
| 16 x 3                                    | 0,377        | 25 x 10                                   | 1,95         | 45 x 3                                    | 1,059        | 60 x 30                                   | 14,1         |
| 16 x 4                                    | 0,502        | 25 x 12                                   | 2,36         | 45 x 4                                    | 1,41         | 60 x 35                                   | 16,485       |
| 16 x 5                                    | 0,628        | 25 x 15                                   | 2,94         | 45 x 5                                    | 1,77         | 60 x 40                                   | 18,8         |
| 16 x 6                                    | 0,754        | 30 x 3                                    | 0,706        | 45 x 6                                    | 2,12         | 60 x 50                                   | 23,6         |
| 16 x 8                                    | 1,00         | 30 x 4                                    | 0,942        | 45 x 8                                    | 2,83         | 70 x 3                                    | 1,648        |
| 16 x 10                                   | 1,26         | 30 x 5                                    | 1,18         | 45 x 10                                   | 3,53         | 70 x 4                                    | 2,20         |
| 18 x 3                                    | 0,424        | 30 x 6                                    | 1,41         | 45 x 12                                   | 4,24         | 70 x 5                                    | 2,75         |
| 18 x 4                                    | 0,565        | 30 x 8                                    | 1,88         | 45 x 15                                   | 5,30         | 70 x 6                                    | 3,30         |
| 18 x 5                                    | 0,706        | 30 x 10                                   | 2,36         | 45 x 20                                   | 7,09         | 70 x 8                                    | 4,40         |
| 18 x 6                                    | 0,848        | 30 x 12                                   | 2,83         | 45 x 25                                   | 8,83         | 70 x 10                                   | 5,50         |
| 18 x 8                                    | 1,130        | 30 x 15                                   | 3,53         | 45 x 30                                   | 10,6         | 70 x 12                                   | 6,59         |
| 18 x 10                                   | 1,410        | 30 x 20                                   | 4,71         | 50 x 3                                    | 1,177        | 70 x 15                                   | 8,24         |
| 20 x 3                                    | 0,471        | 35 x 3                                    | 0,824        | 50 x 4                                    | 1,57         | 70 x 20                                   | 11,0         |
| 20 x 4                                    | 0,628        | 35 x 4                                    | 1,10         | 50 x 5                                    | 1,96         | 70 x 25                                   | 13,7         |





# PIATTI

| dimensioni<br>larghezza spessore<br>mm mm | peso<br>kg/m | dimensioni<br>larghezza spessore<br>mm mm | peso<br>kg/m | dimensioni<br>larghezza spessore<br>mm mm | peso<br>kg/m | dimensioni<br>larghezza spessore<br>mm mm | peso<br>kg/m |
|-------------------------------------------|--------------|-------------------------------------------|--------------|-------------------------------------------|--------------|-------------------------------------------|--------------|
| 70 x 30                                   | 16,5         | 90 x 50                                   | 35,3         | 120 x 6                                   | 5,65         | 140 x 15                                  | 16,5         |
| 70 x 35                                   | 19,233       | 90 x 60                                   | 42,4         | 120 x 8                                   | 7,54         | 140 x 20                                  | 22,0         |
| 70 x 40                                   | 22,0         | 100 x 3                                   | 2,355        | 120 x 10                                  | 9,42         | 140 x 25                                  | 27,5         |
| 70 x 50                                   | 27,5         | 100 x 4                                   | 3,14         | 120 x 12                                  | 11,3         | 140 x 30                                  | 33,0         |
| 70 x 60                                   | 33,0         | 100 x 5                                   | 3,92         | 120 x 15                                  | 14,1         | 140 x 35                                  | 38,466       |
| 80 x 3                                    | 1,884        | 100 x 6                                   | 4,71         | 120 x 20                                  | 18,8         | 140 x 40                                  | 44,0         |
| 80 x 4                                    | 2,51         | 100 x 8                                   | 6,28         | 120 x 25                                  | 23,6         | 140 x 50                                  | 55,0         |
| 80 x 5                                    | 3,14         | 100 x 10                                  | 7,85         | 120 x 30                                  | 28,3         | 140 x 60                                  | 65,9         |
| 80 x 6                                    | 3,77         | 100 x 12                                  | 9,42         | 120 x 35                                  | 32,970       | 150 x 3                                   | 3,532        |
| 80 x 8                                    | 5,02         | 100 x 15                                  | 11,8         | 120 x 40                                  | 37,7         | 150 x 4                                   | 4,71         |
| 80 x 10                                   | 6,28         | 100 x 20                                  | 15,7         | 120 x 50                                  | 47,1         | 150 x 5                                   | 5,89         |
| 80 x 12                                   | 7,54         | 100 x 25                                  | 19,6         | 120 x 60                                  | 56,5         | 150 x 6                                   | 7,06         |
| 80 x 15                                   | 9,42         | 100 x 30                                  | 23,6         | 130 x 4                                   | 4,08         | 150 x 8                                   | 9,42         |
| 80 x 20                                   | 12,6         | 100 x 35                                  | 27,475       | 130 x 5                                   | 5,10         | 150 x 10                                  | 11,8         |
| 80 x 25                                   | 15,7         | 100 x 40                                  | 31,4         | 130 x 6                                   | 6,12         | 150 x 12                                  | 14,1         |
| 80 x 30                                   | 18,8         | 100 x 50                                  | 39,2         | 130 x 8                                   | 8,16         | 150 x 15                                  | 17,7         |
| 80 x 35                                   | 21,980       | 100 x 60                                  | 47,1         | 130 x 10                                  | 10,2         | 150 x 20                                  | 23,6         |
| 80 x 40                                   | 25,1         | 110 x 4                                   | 3,45         | 130 x 12                                  | 12,2         | 150 x 25                                  | 29,4         |
| 80 x 50                                   | 31,4         | 110 x 5                                   | 4,32         | 130 x 15                                  | 15,3         | 150 x 30                                  | 35,3         |
| 80 x 60                                   | 37,7         | 110 x 6                                   | 5,18         | 130 x 20                                  | 20,4         | 150 x 35                                  | 41,213       |
| 90 x 3                                    | 2,119        | 110 x 8                                   | 6,91         | 130 x 25                                  | 25,5         | 150 x 40                                  | 47,1         |
| 90 x 4                                    | 2,83         | 110 x 10                                  | 8,64         | 130 x 30                                  | 30,6         | 150 x 50                                  | 58,9         |
| 90 x 5                                    | 3,53         | 110 x 12                                  | 10,4         | 130 x 35                                  | 35,718       | 150 x 60                                  | 70,6         |
| 90 x 6                                    | 4,24         | 110 x 15                                  | 13,0         | 130 x 40                                  | 40,8         |                                           |              |
| 90 x 8                                    | 5,65         | 110 x 20                                  | 17,3         | 130 x 50                                  | 51,0         |                                           |              |
| 90 x 10                                   | 7,06         | 110 x 25                                  | 21,6         | 130 x 60                                  | 61,2         |                                           |              |
| 90 x 12                                   | 8,48         | 110 x 30                                  | 25,9         | 140 x 3                                   | 3,297        |                                           |              |
| 90 x 15                                   | 10,6         | 110 x 35                                  | 30,222       | 140 x 4                                   | 4,40         |                                           |              |
| 90 x 20                                   | 14,1         | 110 x 40                                  | 34,5         | 140 x 5                                   | 5,50         |                                           |              |
| 90 x 25                                   | 17,7         | 110 x 50                                  | 43,2         | 140 x 6                                   | 6,59         |                                           |              |
| 90 x 30                                   | 21,2         | 110 x 60                                  | 51,8         | 140 x 8                                   | 8,79         |                                           |              |
| 90 x 35                                   | 24,728       | 120 x 4                                   | 3,77         | 140 x 10                                  | 11,0         |                                           |              |
| 90 x 40                                   | 28,3         | 120 x 5                                   | 4,71         | 140 x 12                                  | 13,2         |                                           |              |

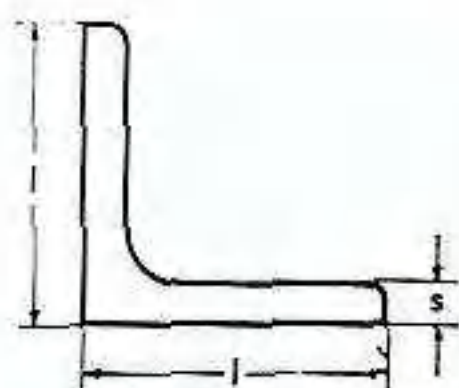




# LARGHI PIATTI

| dimensioni<br>larghezza spessore<br>mm mm | peso<br>kg/m | dimensioni<br>larghezza spessore<br>mm mm | peso<br>kg/m | dimensioni<br>larghezza spessore<br>mm mm | peso<br>kg/m | dimensioni<br>larghezza spessore<br>mm mm | peso<br>kg/m |
|-------------------------------------------|--------------|-------------------------------------------|--------------|-------------------------------------------|--------------|-------------------------------------------|--------------|
| 160 x 5                                   | 6,28         | 190 x 30                                  | 44,7         | 260 x 15                                  | 30,61        | 400 x 12                                  | 37,44        |
| 160 x 6                                   | 7,54         | 200 x 5                                   | 7,85         | 260 x 20                                  | 40,82        | 400 x 15                                  | 46,80        |
| 160 x 8                                   | 10,0         | 200 x 6                                   | 9,42         | 280 x 8                                   | 17,6         | 400 x 20                                  | 62,40        |
| 160 x 10                                  | 12,6         | 200 x 8                                   | 12,6         | 280 x 10                                  | 22,0         | 400 x 25                                  | 78,00        |
| 160 x 12                                  | 15,1         | 200 x 10                                  | 15,7         | 280 x 12                                  | 26,4         | 400 x 30                                  | 93,60        |
| 160 x 15                                  | 18,8         | 200 x 12                                  | 18,8         | 280 x 15                                  | 33,0         | 400 x 35                                  | 106,08       |
| 160 x 20                                  | 25,1         | 200 x 15                                  | 23,6         | 280 x 20                                  | 44,0         | 400 x 40                                  | 124,80       |
| 160 x 25                                  | 31,4         | 200 x 20                                  | 31,4         | 280 x 25                                  | 55,0         | 400 x 50                                  | 156,00       |
| 160 x 30                                  | 37,7         | 200 x 25                                  | 39,2         | 280 x 30                                  | 65,9         | 400 x 60                                  | 187,20       |
| 160 x 40                                  | 50,20        | 200 x 30                                  | 47,1         | 280 x 35                                  | 76,9         | 450 x 5                                   | 17,55        |
| 160 x 50                                  | 62,80        | 200 x 40                                  | 62,80        | 280 x 40                                  | 87,9         | 450 x 6                                   | 21,06        |
| 160 x 60                                  | 75,40        | 200 x 50                                  | 78,50        | 300 x 6                                   | 14,13        | 450 x 8                                   | 28,08        |
| 170 x 5                                   | 6,67         | 200 x 60                                  | 94,20        | 300 x 8                                   | 18,8         | 450 x 10                                  | 35,10        |
| 170 x 6                                   | 8,01         | 220 x 6                                   | 10,36        | 300 x 10                                  | 23,6         | 450 x 12                                  | 42,12        |
| 170 x 8                                   | 10,7         | 220 x 8                                   | 13,8         | 300 x 12                                  | 28,3         | 450 x 15                                  | 52,65        |
| 170 x 10                                  | 13,3         | 220 x 10                                  | 17,3         | 300 x 15                                  | 35,3         | 450 x 20                                  | 70,20        |
| 170 x 12                                  | 16,0         | 220 x 12                                  | 20,7         | 300 x 20                                  | 47,1         | 450 x 25                                  | 87,75        |
| 170 x 15                                  | 20,0         | 220 x 15                                  | 25,9         | 300 x 25                                  | 58,9         | 450 x 30                                  | 105,30       |
| 170 x 20                                  | 26,7         | 220 x 20                                  | 34,5         | 300 x 30                                  | 70,6         | 450 x 35                                  | 122,85       |
| 170 x 25                                  | 33,4         | 220 x 25                                  | 43,2         | 300 x 35                                  | 82,4         | 450 x 40                                  | 140,00       |
| 170 x 30                                  | 40,3         | 220 x 30                                  | 51,8         | 300 x 40                                  | 94,2         | 450 x 50                                  | 175,50       |
| 180 x 5                                   | 7,07         | 220 x 35                                  | 60,4         | 300 x 50                                  | 117,75       | 450 x 60                                  | 210,60       |
| 180 x 6                                   | 8,48         | 220 x 40                                  | 69,1         | 350 x 5                                   | 13,65        | 500 x 5                                   | 19,5         |
| 180 x 8                                   | 11,3         | 220 x 50                                  | 86,40        | 350 x 6                                   | 16,38        | 500 x 6                                   | 23,40        |
| 180 x 10                                  | 14,1         | 240 x 10                                  | 18,84        | 350 x 8                                   | 21,84        | 500 x 8                                   | 31,20        |
| 180 x 12                                  | 17,0         | 240 x 15                                  | 28,26        | 350 x 10                                  | 27,30        | 500 x 10                                  | 39,00        |
| 180 x 15                                  | 21,2         | 240 x 20                                  | 37,68        | 350 x 12                                  | 32,76        | 500 x 12                                  | 46,80        |
| 180 x 20                                  | 28,3         | 240 x 50                                  | 94,20        | 350 x 15                                  | 40,95        | 500 x 15                                  | 58,50        |
| 180 x 25                                  | 35,3         | 250 x 6                                   | 11,775       | 350 x 20                                  | 54,60        | 500 x 20                                  | 78,00        |
| 180 x 30                                  | 42,4         | 250 x 8                                   | 15,8         | 350 x 25                                  | 68,25        | 500 x 25                                  | 97,50        |
| 180 x 40                                  | 56,50        | 250 x 10                                  | 19,6         | 350 x 30                                  | 81,90        | 500 x 30                                  | 117,00       |
| 180 x 50                                  | 70,70        | 250 x 12                                  | 23,6         | 350 x 35                                  | 95,55        | 500 x 35                                  | 136,50       |
| 180 x 60                                  | 84,80        | 250 x 15                                  | 29,4         | 350 x 40                                  | 109,20       | 500 x 40                                  | 156,00       |
| 190 x 8                                   | 11,9         | 250 x 20                                  | 39,2         | 350 x 50                                  | 134,50       | 500 x 50                                  | 195,00       |
| 190 x 10                                  | 14,9         | 250 x 25                                  | 49,1         | 350 x 60                                  | 163,80       | 500 x 60                                  | 234,00       |
| 190 x 12                                  | 17,9         | 250 x 30                                  | 58,9         | 400 x 5                                   | 15,60        |                                           |              |
| 190 x 15                                  | 22,4         | 250 x 35                                  | 68,7         | 400 x 6                                   | 18,72        |                                           |              |
| 190 x 20                                  | 29,8         | 250 x 40                                  | 78,5         | 400 x 8                                   | 24,96        |                                           |              |
| 190 x 25                                  | 37,3         | 250 x 50                                  | 98,125       | 400 x 10                                  | 31,20        |                                           |              |



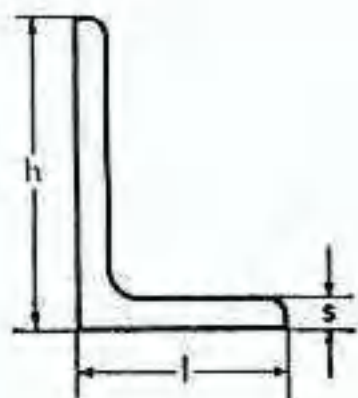


# ANGOLARI

ad ali uguali

| dimensioni<br>larghezza spessore<br>mm mm | peso<br>kg/m | dimensioni<br>larghezza spessore<br>mm mm | peso<br>kg/m | dimensioni<br>larghezza spessore<br>mm mm | peso<br>kg/m | dimensioni<br>larghezza spessore<br>mm mm | peso<br>kg/m |
|-------------------------------------------|--------------|-------------------------------------------|--------------|-------------------------------------------|--------------|-------------------------------------------|--------------|
| 15 x 3                                    | 0,64         | 55 x 4                                    | 3,70         | 80 x 10                                   | 11,90        | 120 x 15                                  | 26,60        |
| 20 x 3                                    | 0,88         | 55 x 5                                    | 4,18         | 80 x 12                                   | 14,10        | 120 x 18                                  | 31,50        |
| 20 x 4                                    | 1,14         | 55 x 6                                    | 4,95         | 90 x 6                                    | 8,30         | 130 x 8                                   | 15,30        |
| 25 x 3                                    | 1,11         | 55 x 8                                    | 6,46         | 90 x 7                                    | 9,60         | 130 x 10                                  | 19,80        |
| 25 x 4                                    | 1,45         | 60 x 4                                    | 4,18         | 90 x 8                                    | 10,90        | 130 x 12                                  | 23,60        |
| 25 x 5                                    | 1,77         | 60 x 5                                    | 4,56         | 90 x 9                                    | 12,20        | 130 x 14                                  | 27,20        |
| 30 x 3                                    | 1,36         | 60 x 6                                    | 5,42         | 90 x 11                                   | 14,70        | 130 x 16                                  | 30,90        |
| 30 x 4                                    | 1,78         | 60 x 8                                    | 7,09         | 90 x 13                                   | 17,10        | 140 x 10                                  | 21,70        |
| 30 x 5                                    | 2,18         | 60 x 10                                   | 8,69         | 90 x 15                                   | 19,50        | 140 x 12                                  | 25,60        |
| 30 x 6                                    | 2,56         | 65 x 4                                    | 4,00         | 100 x 6                                   | 9,29         | 140 x 13                                  | 27,50        |
| 35 x 3                                    | 1,60         | 65 x 5                                    | 5,00         | 100 x 7                                   | 10,70        | 140 x 15                                  | 31,40        |
| 35 x 4                                    | 2,09         | 65 x 6                                    | 5,93         | 100 x 8                                   | 12,20        | 140 x 17                                  | 35,30        |
| 35 x 5                                    | 2,57         | 65 x 7                                    | 6,83         | 100 x 9                                   | 13,50        | 150 x 10                                  | 23,00        |
| 35 x 6                                    | 3,04         | 65 x 9                                    | 8,62         | 100 x 10                                  | 15,10        | 150 x 12                                  | 27,30        |
| 40 x 3                                    | 1,84         | 70 x 5                                    | 5,37         | 100 x 12                                  | 17,80        | 150 x 14                                  | 31,60        |
| 40 x 4                                    | 2,42         | 70 x 6                                    | 6,38         | 100 x 14                                  | 20,60        | 150 x 15                                  | 33,80        |
| 40 x 5                                    | 2,97         | 70 x 7                                    | 7,38         | 100 x 16                                  | 23,20        | 150 x 16                                  | 35,90        |
| 40 x 6                                    | 3,52         | 70 x 8                                    | 8,36         | 110 x 6                                   | 10,24        | 150 x 18                                  | 40,10        |
| 45 x 3                                    | 2,09         | 70 x 9                                    | 9,34         | 110 x 7                                   | 11,80        | 150 x 20                                  | 44,20        |
| 45 x 4                                    | 2,74         | 70 x 11                                   | 11,20        | 110 x 8                                   | 13,40        | 160 x 15                                  | 36,20        |
| 45 x 5                                    | 3,38         | 75 x 5                                    | 5,87         | 110 x 9                                   | 15,00        | 160 x 17                                  | 40,70        |
| 45 x 6                                    | 4,00         | 75 x 6                                    | 7,00         | 110 x 10                                  | 16,60        | 160 x 19                                  | 45,10        |
| 45 x 7                                    | 4,60         | 75 x 7                                    | 8,00         | 110 x 12                                  | 19,70        | 180 x 15                                  | 41,00        |
| 50 x 3                                    | 2,33         | 75 x 8                                    | 9,03         | 110 x 14                                  | 22,80        | 180 x 16                                  | 43,50        |
| 50 x 4                                    | 3,06         | 75 x 10                                   | 11,10        | 120 x 8                                   | 14,70        | 180 x 18                                  | 48,60        |
| 50 x 5                                    | 3,77         | 75 x 12                                   | 13,10        | 120 x 9                                   | 16,40        | 180 x 20                                  | 53,70        |
| 50 x 6                                    | 4,47         | 80 x 5                                    | 6,17         | 120 x 10                                  | 18,20        | 200 x 16                                  | 48,50        |
| 50 x 7                                    | 5,15         | 80 x 6                                    | 7,34         | 120 x 11                                  | 19,90        | 200 x 18                                  | 54,30        |
| 50 x 8                                    | 5,82         | 80 x 7                                    | 8,48         | 120 x 12                                  | 21,60        | 200 x 20                                  | 59,90        |
| 50 x 9                                    | 6,47         | 80 x 8                                    | 9,66         | 120 x 13                                  | 23,30        | 200 x 24                                  | 71,10        |





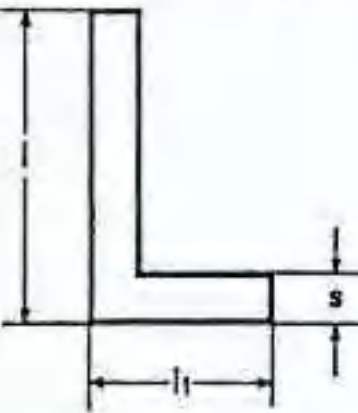
# ANGOLARI

ad ali ineguali ed a spigoli tondi

| dimensioni<br>larghezza spessore<br>mm mm | peso<br>kg/m | dimensioni<br>larghezza spessore<br>mm mm | peso<br>kg/m | dimensioni<br>larghezza spessore<br>mm mm | peso<br>kg/m | dimensioni<br>larghezza spessore<br>mm mm | peso<br>kg/m |
|-------------------------------------------|--------------|-------------------------------------------|--------------|-------------------------------------------|--------------|-------------------------------------------|--------------|
| 20 x 30 x 3                               | 1,11         | 40 x 60 x 5                               | 3,76         | 60 x 120 x 8                              | 10,90        | 80 x 160 x 12                             | 21,60        |
| 20 x 30 x 4                               | 1,45         | 40 x 60 x 6                               | 4,46         | 60 x 120 x 10                             | 13,4         | 90 x 200 x 9                              | 20,2         |
| 20 x 30 x 5                               | 1,77         | 40 x 60 x 7                               | 5,14         | 65 x 100 x 7                              | 8,77         | 90 x 200 x 10                             | 22,2         |
| 20 x 35 x 4                               | 1,61         | 40 x 80 x 6                               | 5,41         | 65 x 100 x 8                              | 10,00        | 90 x 200 x 11                             | 24,6         |
| 20 x 35 x 5                               | 1,97         | 40 x 80 x 8                               | 7,07         | 65 x 100 x 9                              | 11,1         | 90 x 200 x 12                             | 26,3         |
| 20 x 40 x 3                               | 1,34         | 50 x 70 x 6                               | 5,48         | 65 x 100 x 10                             | 12,00        | 90 x 200 x 15                             | 32,5         |
| 20 x 40 x 4                               | 1,77         | 50 x 75 x 5                               | 4,75         | 65 x 100 x 11                             | 13,4         | 100 x 150 x 10                            | 19,3         |
| 20 x 40 x 5                               | 2,17         | 50 x 75 x 6                               | 5,65         | 65 x 130 x 8                              | 11,9         | 100 x 150 x 12                            | 22,6         |
| 25 x 40 x 4                               | 1,92         | 50 x 75 x 7                               | 6,53         | 65 x 130 x 10                             | 14,6         | 100 x 200 x 10                            | 23,0         |
| 25 x 40 x 5                               | 2,36         | 50 x 75 x 8                               | 7,45         | 65 x 130 x 12                             | 17,3         | 100 x 200 x 12                            | 27,3         |
| 30 x 45 x 4                               | 2,25         | 50 x 75 x 9                               | 8,22         | 75 x 100 x 8                              | 11,2         | 100 x 200 x 14                            | 31,6         |
| 30 x 45 x 5                               | 2,77         | 50 x 100 x 6                              | 6,85         | 75 x 100 x 10                             | 13,8         | 100 x 200 x 15                            | 35,9         |
| 30 x 45 x 6                               | 3,27         | 50 x 100 x 8                              | 8,99         | 75 x 150 x 9                              | 15,40        | 100 x 200 x 16                            | 35,90        |
| 30 x 50 x 5                               | 2,96         | 50 x 100 x 10                             | 11,10        | 80 x 120 x 8                              | 12,2         |                                           |              |
| 30 x 50 x 6                               | 3,51         | 60 x 80 x 6                               | 6,37         | 80 x 120 x 10                             | 15,0         |                                           |              |
| 30 x 60 x 5                               | 3,37         | 60 x 80 x 7                               | 7,35         | 80 x 120 x 12                             | 17,8         |                                           |              |
| 30 x 60 x 6                               | 3,99         | 60 x 80 x 8                               | 8,33         | 80 x 120 x 14                             | 20,5         |                                           |              |
| 30 x 60 x 7                               | 4,59         | 60 x 80 x 10                              | 10,20        | 80 x 160 x 10                             | 18,20        |                                           |              |

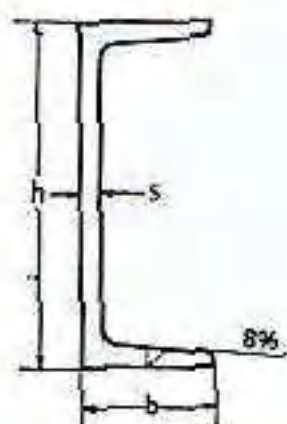
# ANGOLARI

ad ali ineguali ed a spigoli vivi



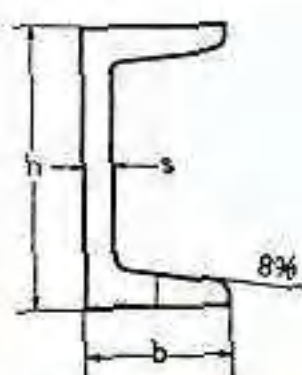
| dimensioni<br>lato<br>mm | altezza<br>mm | spessore<br>mm | peso<br>kg/m |
|--------------------------|---------------|----------------|--------------|
| 20                       | 12            | 4              | 0,879        |
| 25                       | 15            | 4,5            | 1,25         |
| 30                       | 17,5          | 5              | 1,67         |
| 35                       | 20            | 5,5            | 2,14         |
| 40                       | 22            | 6              | 2,64         |





## PROFILATI AD U SERIE NORMALE

| h   | b   | a   | e    | r    | sezione         | peso | momenti di inerzia |                 | moduli di resistenza |                 | raggi di inerzia |                |
|-----|-----|-----|------|------|-----------------|------|--------------------|-----------------|----------------------|-----------------|------------------|----------------|
|     |     |     |      |      |                 |      | I <sub>x</sub>     | I <sub>y</sub>  | W <sub>x</sub>       | W <sub>y</sub>  | I <sub>x</sub>   | I <sub>y</sub> |
| mm  | mm  | mm  | mm   | mm   | cm <sup>2</sup> | kg/m | cm <sup>4</sup>    | cm <sup>4</sup> | cm <sup>3</sup>      | cm <sup>3</sup> | cm               | cm             |
| 30  | 33  | 5   | 7    | 7    | 5,44            | 4,27 | 6,39               | 5,33            | 4,26                 | 2,68            | 1,08             | 0,99           |
| 40  | 35  | 5   | 7    | 7    | 6,21            | 4,87 | 14,10              | 6,68            | 7,05                 | 3,08            | 1,50             | 1,04           |
| 50  | 38  | 5   | 7    | 7    | 7,12            | 5,59 | 26,40              | 9,12            | 10,60                | 3,75            | 1,92             | 1,13           |
| 65  | 42  | 5,5 | 7,5  | 7,5  | 9,03            | 7,09 | 57,50              | 14,10           | 17,70                | 5,07            | 2,52             | 1,25           |
| 80  | 45  | 6   | 8    | 8    | 11,0            | 8,65 | 106                | 19,4            | 26,5                 | 6,35            | 3,10             | 1,33           |
| 100 | 50  | 6   | 8,5  | 8,5  | 13,5            | 10,6 | 205                | 29,1            | 41,1                 | 8,45            | 3,91             | 1,47           |
| 120 | 55  | 7   | 9    | 9    | 17,0            | 13,3 | 364                | 43,1            | 60,7                 | 11,1            | 4,63             | 1,59           |
| 140 | 60  | 7   | 10   | 10   | 20,4            | 16,0 | 605                | 62,5            | 86,4                 | 14,7            | 5,45             | 1,75           |
| 160 | 65  | 7,5 | 10,5 | 10,5 | 24,0            | 18,9 | 925                | 85,1            | 116                  | 18,2            | 6,21             | 1,88           |
| 180 | 70  | 8   | 11   | 11   | 28,0            | 22,0 | 1354               | 114             | 150                  | 22,4            | 6,96             | 2,01           |
| 200 | 75  | 8,5 | 11,5 | 11,5 | 32,2            | 25,3 | 1911               | 148             | 191                  | 26,9            | 7,71             | 2,14           |
| 220 | 80  | 9   | 12,5 | 12,5 | 37,4            | 29,4 | 2691               | 196             | 245                  | 33,5            | 8,48             | 2,29           |
| 240 | 85  | 9,5 | 13   | 13   | 42,3            | 33,2 | 3599               | 247             | 300                  | 39,5            | 9,22             | 2,42           |
| 260 | 90  | 10  | 14   | 14   | 48,3            | 37,9 | 4824               | 317             | 371                  | 47,8            | 10,0             | 2,56           |
| 280 | 95  | 10  | 15   | 15   | 53,4            | 41,9 | 6276               | 398             | 448                  | 57,2            | 10,8             | 2,73           |
| 300 | 100 | 10  | 16   | 16   | 58,8            | 46,1 | 8028               | 493             | 535                  | 67,6            | 11,7             | 2,90           |

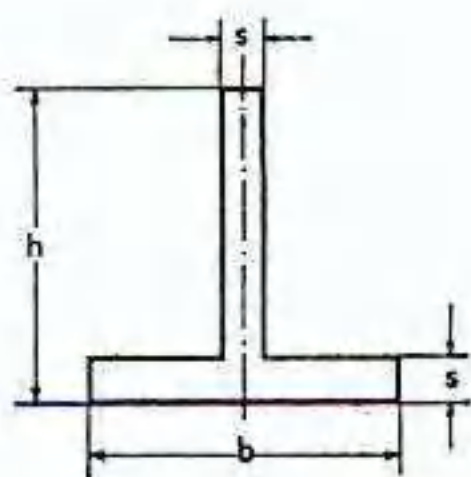


## PROFILATI AD U SERIE SPECIALE

| h    | b  | a  | e   | r   | sezione         | peso | momenti di inerzia |                 | moduli di resistenza |                 | raggi di inerzia |                |
|------|----|----|-----|-----|-----------------|------|--------------------|-----------------|----------------------|-----------------|------------------|----------------|
|      |    |    |     |     |                 |      | I <sub>x</sub>     | I <sub>y</sub>  | W <sub>x</sub>       | W <sub>y</sub>  | I <sub>x</sub>   | I <sub>y</sub> |
| mm   | mm | mm | mm  | mm  | cm <sup>2</sup> | kg/m | cm <sup>4</sup>    | cm <sup>4</sup> | cm <sup>3</sup>      | cm <sup>3</sup> | cm               | cm             |
| * 25 | 12 | 4  | 4   | 4   | 1,68            | 1,30 |                    |                 |                      |                 |                  |                |
| 30   | 15 | 4  | 4,5 | 4,5 | 2,21            | 1,98 | 2,53               | 0,38            | 1,69                 | 0,39            | 1,07             | 0,42           |
|      |    | 5  | 7   | 7   | 5,44            | 4,27 | 6,39               | 5,33            | 4,26                 | 2,68            | 1,08             | 0,99           |
| * 35 | 17 | 5  | 5,5 | 5,5 | 3,27            | 2,52 |                    |                 |                      |                 |                  |                |
| 40   | 20 | 5  | 5,5 | 5   | 3,66            | 3,23 | 7,58               | 1,14            | 3,79                 | 0,86            | 1,44             | 0,56           |
|      |    |    |     |     | 6,21            | 4,87 | 14,10              | 6,68            | 7,05                 | 3,08            | 1,50             | 1,04           |
| 50   | 25 | 5  | 6   | 6   | 4,92            | 4,15 | 16,80              | 2,49            | 6,73                 | 1,48            | 1,85             | 0,71           |
|      |    |    |     |     | 7,12            | 5,59 | 26,40              | 9,12            | 10,60                | 3,75            | 1,92             | 1,13           |
| 60   | 30 | 6  | 6   | 6   | 6,46            | 5,45 | 31,60              | 4,51            | 10,50                | 2,16            | 2,21             | 0,84           |
|      |    |    |     |     | 9,03            | 7,09 | 57,50              | 14,10           | 17,70                | 5,07            | 2,52             | 1,25           |

\* non unificato

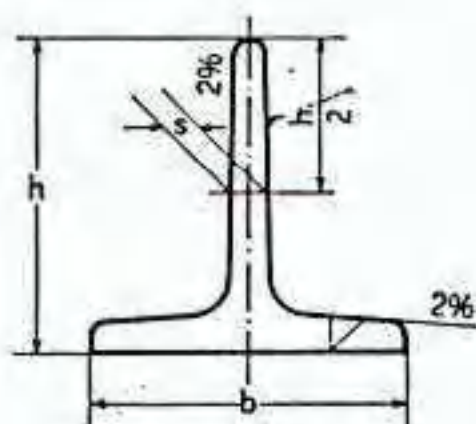




# **PROFILATI a T** a spigoli vivi e tondi

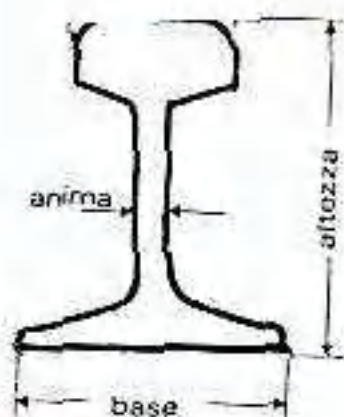
| dimensioni profilo<br>base<br>mm | altezza<br>mm | spessore<br>mm | peso<br>kg/m |
|----------------------------------|---------------|----------------|--------------|
| 20                               | 20            | 4,0            | 1,13         |
| 25                               | 25            | 4,5            | 1,61         |
| 30                               | 30            | 5,0            | 2,16         |
| 35                               | 35            | 5,5            | 2,78         |
| 40                               | 40            | 6,0            | 3,49         |
| 45                               | 45            | 6,5            | 4,26         |
| 50                               | 50            | 7              | 5,11         |
| 60                               | 60            | 8              | 7,03         |
| 70                               | 70            | 9              | 9,26         |
| 80                               | 80            | 10             | 11,80        |
| 100                              | 100           | 11             | 16,4         |
| 120                              | 120           | 13             | 23,2         |
| 140                              | 140           | 15             | 31,30        |

# **PROFILATI a T** serie alleggerite



| dimensioni profilo<br>base<br>mm | altezza<br>mm | spessore<br>mm | peso<br>kg/m |
|----------------------------------|---------------|----------------|--------------|
| 20                               | 20            | 3              | 0,88         |
| 25                               | 25            | 3,5            | 1,29         |
| 30                               | 30            | 4              | 1,75         |
| 35                               | 35            | 4,5            | 2,31         |
| 40                               | 40            | 5              | 2,95         |
| 45                               | 45            | 5,5            | 3,67         |
| 50                               | 50            | 6              | 4,43         |
| 60                               | 60            | 7              | 6,23         |
| 70                               | 70            | 8              | 8,32         |
| 80                               | 80            | 9              | 10,7         |

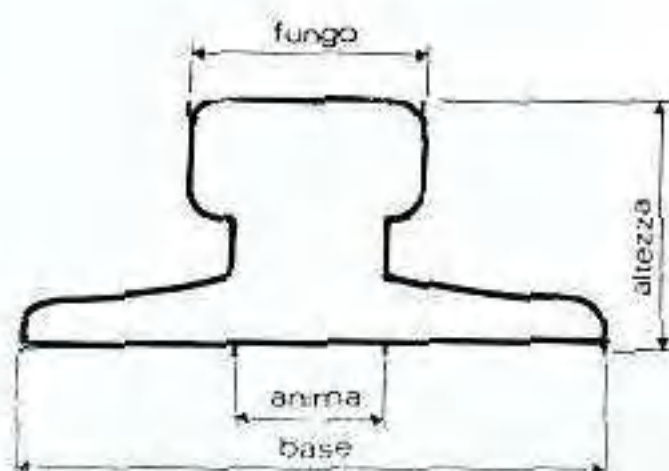




# ROTAIA

## tipo vignola

| designazione | altezza<br>mm | fungo<br>mm | base<br>mm | anima<br>mm | peso<br>kg/m |
|--------------|---------------|-------------|------------|-------------|--------------|
| tipo 21      | 100           | 50          | 80         | 10          | 21,373       |
| tipo 27      | 120           | 50          | 95         | 11          | 27,349       |
| tipo 30      | 125           | 56          | 100        | 12          | 30,152       |
| tipo 36      | 130           | 60          | 100        | 14          | 36,188       |
| tipo 46      | 145           | 63,5        | 135        | 14          | 46,786       |
|              |               | 67,2        |            |             |              |
| tipo 50      | 148           | 65,2        | 135        | 14          | 49,850       |
|              |               | 70          |            |             |              |
| tipo 60      | 172           | 70,6        | 150        | 16,5        | 60,340       |
|              |               | 74,3        |            |             |              |

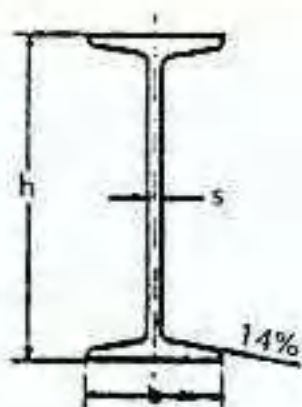


# ROTAIA

## tipo burback

| tipo  | n° | altezza<br>mm | fungo<br>mm | base<br>mm | anima<br>mm | peso<br>kg/m |
|-------|----|---------------|-------------|------------|-------------|--------------|
| A 45  | 1  | 55            | 45          | 125        | 24          | 22,5         |
| A 55  | 2  | 65            | 55          | 150        | 31          | 32,2         |
| A 65  | 3  | 75            | 65          | 175        | 38          | 43,8         |
| A 75  | 4  | 85            | 75          | 200        | 45          | 57,0         |
| A 100 | 5  | 95            | 100         | 200        | 60          | 75,2         |
| A 120 | 6  | 105           | 120         | 220        | 72          | 101,3        |



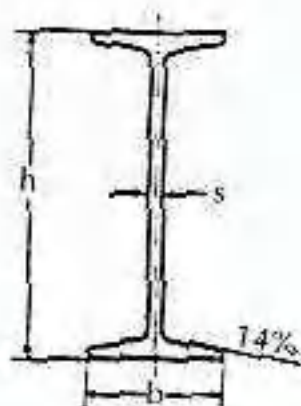


# TRAVI NP

## dati generali

| PROFILO |     |      |      |      | Peso<br>al m.<br>kg | Sez.<br>cm <sup>2</sup> | Wx<br>cm <sup>3</sup> | Jx<br>cm <sup>4</sup> |
|---------|-----|------|------|------|---------------------|-------------------------|-----------------------|-----------------------|
| h       | b   | a    | e    | r    |                     |                         |                       |                       |
| 80      | 42  | 3,9  | 5,9  | 3,9  | 5,9                 | 7,6                     | 19,4                  | 78                    |
| 100     | 50  | 4,5  | 6,8  | 4,5  | 8,3                 | 10,6                    | 34,1                  | 170                   |
| 120     | 58  | 5,1  | 7,7  | 5,1  | 11,1                | 14,2                    | 54,5                  | 327                   |
| 140     | 66  | 5,7  | 8,6  | 5,7  | 14,3                | 18,2                    | 81,8                  | 572                   |
| 160     | 74  | 6,3  | 9,5  | 6,3  | 17,9                | 22,8                    | 117                   | 934                   |
| 180     | 82  | 6,9  | 10,4 | 6,9  | 21,9                | 27,9                    | 161                   | 1444                  |
| 200     | 90  | 7,5  | 11,3 | 7,5  | 26,2                | 33,4                    | 214                   | 2138                  |
| 220     | 98  | 8,1  | 12,2 | 8,1  | 31,0                | 39,5                    | 278                   | 3050                  |
| 240     | 106 | 8,7  | 13,1 | 8,7  | 36,2                | 46,1                    | 353                   | 4239                  |
| 260     | 113 | 9,4  | 14,1 | 9,4  | 41,9                | 53,3                    | 441                   | 5735                  |
| 280     | 119 | 10,1 | 15,2 | 10,1 | 47,9                | 61,0                    | 541                   | 7575                  |
| 300     | 125 | 10,8 | 16,2 | 10,8 | 54,2                | 69,0                    | 652                   | 9785                  |
| 320     | 131 | 11,5 | 17,3 | 11,5 | 61,0                | 77,7                    | 781                   | 12490                 |
| 340     | 137 | 12,2 | 18,3 | 12,2 | 68,0                | 86,7                    | 922                   | 15670                 |
| 360     | 143 | 13,0 | 19,5 | 13,0 | 76,1                | 97                      | 1087                  | 19580                 |
| 380     | 149 | 13,7 | 20,5 | 13,7 | 84,0                | 107                     | 1262                  | 23980                 |
| 400     | 155 | 14,4 | 21,6 | 14,4 | 92,5                | 118                     | 1461                  | 29210                 |
| 425     | 163 | 15,3 | 23,0 | 15,3 | 104                 | 132                     | 1738                  | 36930                 |
| 450     | 170 | 16,2 | 24,3 | 16,2 | 115                 | 147                     | 2035                  | 45790                 |
| 475     | 178 | 17,1 | 25,6 | 17,1 | 128                 | 163                     | 2375                  | 56410                 |
| 500     | 185 | 18,0 | 27,0 | 18,0 | 141                 | 180                     | 2746                  | 68650                 |
| 550     | 200 | 19,0 | 30,0 | 19,0 | 166                 | 212                     | 3598                  | 98950                 |
| 600     | 215 | 21,6 | 32,4 | 21,6 | 199                 | 254                     | 4626                  | 138800                |





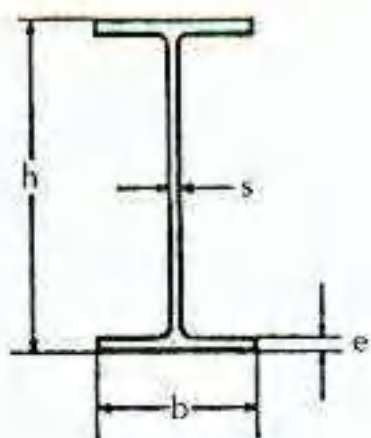
# TRAVI NP

tabella dei carichi netti  
uniformemente

ripartiti per  $\sigma = 1600 \text{ kg/cm}^2$

| h   | DISTANZA TRA GLI APPOGGI IN METRI |        |        |        |        |        |        |       |       |       |       |       |       |       |       |       |
|-----|-----------------------------------|--------|--------|--------|--------|--------|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
|     | 2.50                              | 3.00   | 3.50   | 4.00   | 4.50   | 5.00   | 5.50   | 6.00  | 7.00  | 8.00  | 9.00  | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |
| 80  | 978                               | 810    | 689    | 597    | 525    | 467    | —      | —     | —     | —     | —     | —     | —     | —     | —     | —     |
| 100 | 1725                              | 1430   | 1218   | 1058   | 932    | 831    | 747    | 677   | —     | —     | —     | —     | —     | —     | —     | —     |
| 120 | 2763                              | 2232   | 1954   | 1700   | 1500   | 1340   | 1207   | 1096  | 919   | —     | —     | —     | —     | —     | —     | —     |
| 140 | 4152                              | 3447   | 2941   | 2560   | 2262   | 2022   | 1825   | 1659  | 1395  | 1194  | 1035  | —     | —     | —     | —     | —     |
| 160 | 5946                              | 4938   | 4216   | 3672   | 3247   | 2906   | 2624   | 2389  | 2014  | 1729  | 1503  | 1319  | —     | —     | —     | —     |
| 180 | 8188                              | 6804   | 5811   | 5064   | 4481   | 4012   | 3626   | 3303  | 2791  | 2401  | 2093  | 1842  | 1632  | —     | —     | —     |
| 200 | 10891                             | 9052   | 7734   | 6743   | 5969   | 5347   | 4836   | 4408  | 3730  | 3214  | 2808  | 2477  | 2202  | 1968  | —     | —     |
| 220 | 14156                             | 11768  | 10058  | 8772   | 7763   | 6962   | 6300   | 5745  | 4866  | 4200  | 3675  | 3248  | 2893  | 2593  | 2334  | —     |
| 240 | 17983                             | 14953  | 12783  | 11151  | 9878   | 8856   | 8016   | 7313  | 6201  | 5358  | 4695  | 4156  | 3709  | 3331  | 3004  | 2720  |
| 260 | 22474                             | 18690  | 15981  | 13944  | 12355  | 11080  | 10032  | 9157  | 7770  | 6721  | 5895  | 5226  | 4670  | 4201  | 3797  | 3445  |
| 280 | 27575                             | 22939  | 19617  | 17120  | 15172  | 13610  | 12327  | 11254 | 9557  | 8273  | 7263  | 6446  | 5768  | 5195  | 4703  | 4275  |
| 300 | 33247                             | 27656  | 23654  | 20648  | 18302  | 16421  | 14875  | 13584 | 11544 | 10000 | 8786  | 7803  | 6990  | 6304  | 5714  | 5202  |
| 320 | 39835                             | 33140  | 28343  | 24748  | 21341  | 19689  | 17840  | 16295 | 13854 | 12008 | 10558 | 9387  | 8417  | 7598  | 6896  | 6286  |
| 340 | 47036                             | 39135  | 33481  | 29232  | 25920  | 23263  | 21083  | 19261 | 16383 | 14208 | 12501 | 11122 | 9980  | 9018  | 8194  | 7477  |
| 360 | 55464                             | 46150  | 39487  | 34480  | 30577  | 27447  | 24878  | 22733 | 19344 | 16784 | 14774 | 13152 | 11811 | 10681 | 9713  | 8873  |
| 380 | 64824                             | 53593  | 45859  | 40048  | 35518  | 31887  | 28908  | 26418 | 22488 | 19520 | 17192 | 15313 | 13761 | 12453 | 11133 | 10362 |
| 400 | 74572                             | 62059  | 53107  | 46382  | 41141  | 36940  | 33492  | 30613 | 26068 | 22636 | 19946 | 17775 | 15983 | 14474 | 13183 | 12062 |
| 425 | 88726                             | 73842  | 63197  | 55200  | 48968  | 43972  | 39876  | 36453 | 31052 | 26976 | 23782 | 21206 | 19080 | 17290 | 15760 | 14434 |
| 450 | 103904                            | 86481  | 74020  | 64660  | 57366  | 51521  | 46727  | 42723 | 36406 | 31640 | 27907 | 24898 | 22415 | 20326 | 18541 | 16995 |
| 475 | 121280                            | 100950 | 86409  | 75488  | 66980  | 60160  | 54568  | 49898 | 42532 | 36976 | 32625 | 29120 | 26228 | 23797 | 21720 | 19922 |
| 500 | 140243                            | 116740 | 99932  | 87308  | 77474  | 69592  | 63131  | 57735 | 49225 | 42808 | 37785 | 33738 | 30402 | 27598 | 25204 | 23132 |
| 550 | 183802                            | 153016 | 131003 | 114472 | 101596 | 91278  | 82822  | 75761 | 64630 | 56240 | 49677 | 44394 | 40041 | 36386 | 33268 | 30572 |
| 600 | 236353                            | 196779 | 168483 | 147236 | 130688 | 117430 | 106565 | 97494 | 83196 | 72424 | 64000 | 57222 | 51640 | 46956 | 42961 | 39508 |



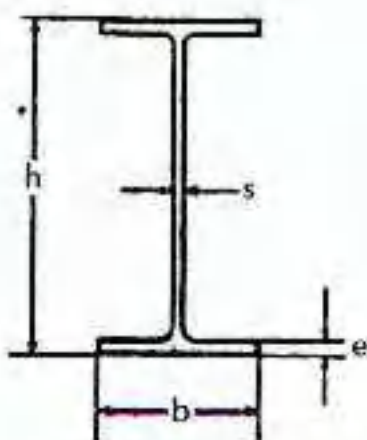


# TRAVI IPE

dati  
generali

| PROFILO |     |      |      |      | Peso<br>al m.<br>kg | Sez.<br>cm <sup>2</sup> | W <sub>x</sub><br>cm <sup>3</sup> | J <sub>x</sub><br>cm <sup>4</sup> |
|---------|-----|------|------|------|---------------------|-------------------------|-----------------------------------|-----------------------------------|
| h       | b   | a    | e    | r    |                     |                         |                                   |                                   |
| 80      | 46  | 3,8  | 5,2  | 5,0  | 6,0                 | 7,6                     | 20,0                              | 80                                |
| 100     | 55  | 4,1  | 5,7  | 7,0  | 8,1                 | 10,3                    | 34,2                              | 171                               |
| 120     | 64  | 4,4  | 6,3  | 7,0  | 10,4                | 13,2                    | 53,0                              | 318                               |
| 140     | 73  | 4,7  | 6,9  | 7,0  | 12,9                | 16,4                    | 77,3                              | 541                               |
| 160     | 82  | 5,0  | 7,4  | 9,0  | 15,8                | 20,1                    | 109                               | 869                               |
| 180     | 91  | 5,3  | 8,0  | 9,0  | 18,8                | 23,9                    | 146                               | 1317                              |
| 200     | 100 | 5,6  | 8,5  | 12,0 | 22,4                | 28,5                    | 194                               | 1943                              |
| 220     | 110 | 5,9  | 9,2  | 12,0 | 26,2                | 33,4                    | 252                               | 2772                              |
| 240     | 120 | 6,2  | 9,8  | 15,0 | 30,7                | 39,1                    | 324                               | 3892                              |
| 270     | 135 | 6,6  | 10,2 | 15,0 | 36,1                | 45,9                    | 429                               | 5790                              |
| 300     | 150 | 7,1  | 10,7 | 15,0 | 42,2                | 53,8                    | 557                               | 8356                              |
| 330     | 160 | 7,5  | 11,5 | 18,0 | 49,1                | 62,6                    | 713                               | 11770                             |
| 360     | 170 | 8,0  | 12,7 | 18,0 | 57,1                | 72,7                    | 904                               | 16270                             |
| 400     | 180 | 8,6  | 13,5 | 21,0 | 66,3                | 84,5                    | 1160                              | 23130                             |
| 450     | 190 | 9,4  | 14,6 | 21,0 | 77,6                | 98,8                    | 1500                              | 33740                             |
| 500     | 200 | 10,2 | 16,0 | 21,0 | 90,7                | 116                     | 1930                              | 48200                             |
| 550     | 210 | 11,1 | 17,2 | 24,0 | 106                 | 134                     | 2440                              | 67120                             |
| 600     | 220 | 12,0 | 19,0 | 24,0 | 122                 | 156                     | 3070                              | 92080                             |





# TRAVI IPE

tabella dei carichi netti  
uniformemente  
ripartiti per  $\sigma = 1600 \text{ kg/cm}^2$

| h   | DISTANZA TRA GLI APPOGGI IN METRI |        |        |       |       |       |       |       |       |       |       |       |       |       |       |       |
|-----|-----------------------------------|--------|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
|     | 2.50                              | 3.00   | 3.50   | 4.00  | 4.50  | 5.00  | 5.50  | 6.00  | 7.00  | 8.00  | 9.00  | 10.00 | 11.00 | 12.00 | 13.00 | 14.00 |
| 80  | 1009                              | 835    | 710    | 616   | 542   | 482   | —     | —     | —     | —     | —     | —     | —     | —     | —     | —     |
| 100 | 1731                              | 1435   | 1222   | 1062  | 936   | 835   | 751   | 681   | —     | —     | —     | —     | —     | —     | —     | —     |
| 120 | 2687                              | 2230   | 1902   | 1654  | 1460  | 1305  | 1176  | 1068  | 896   | —     | —     | —     | —     | —     | —     | —     |
| 140 | 3925                              | 3259   | 2782   | 2422  | 2140  | 1914  | 1728  | 1571  | 1323  | 1133  | —     | —     | —     | —     | —     | —     |
| 160 | 5541                              | 4603   | 3931   | 3425  | 3029  | 2711  | 2450  | 2230  | 1882  | 1617  | 1408  | —     | —     | —     | —     | —     |
| 180 | 7428                              | 6173   | 5273   | 4597  | 4068  | 3643  | 3294  | 3002  | 2538  | 2185  | 1907  | 1681  | 1492  | —     | —     | —     |
| 200 | 9876                              | 8210   | 7016   | 6118  | 5417  | 4854  | 4391  | 4004  | 3390  | 2925  | 2557  | 2259  | 2011  | 1800  | 1619  | —     |
| 220 | 12837                             | 10673  | 9124   | 7959  | 7050  | 6320  | 5720  | 5219  | 4424  | 3822  | 3348  | 2963  | 2644  | 2373  | 2140  | 1937  |
| 240 | 16512                             | 13732  | 11741  | 10246 | 9078  | 8141  | 7371  | 6728  | 5709  | 4939  | 4332  | 3840  | 3432  | 3087  | 2791  | 2532  |
| 270 | 21874                             | 18195  | 15563  | 13583 | 12040 | 10802 | 9785  | 8935  | 7592  | 6575  | 5776  | 5130  | 4595  | 4143  | 3754  | 3417  |
| 300 | 28413                             | 23638  | 20222  | 17655 | 15653 | 14048 | 12731 | 11629 | 9889  | 8574  | 7542  | 6707  | 6017  | 5435  | 4935  | 4101  |
| 330 | 36383                             | 30274  | 25904  | 22620 | 20060 | 18007 | 16323 | 14916 | 12694 | 11016 | 9698  | 8635  | 7756  | 7016  | 6382  | 5831  |
| 360 | 46142                             | 38399  | 32860  | 28700 | 25457 | 22857 | 20724 | 18942 | 16130 | 14007 | 12343 | 11000 | 9891  | 8957  | 8158  | 7465  |
| 400 | 59226                             | 49294  | 42191  | 36855 | 32697 | 29364 | 26631 | 24350 | 20747 | 18029 | 15901 | 14185 | 12769 | 11577 | 10559 | 9677  |
| 450 | 76606                             | 63767  | 54585  | 47689 | 42317 | 38012 | 34482 | 31534 | 26885 | 23379 | 20635 | 18424 | 16601 | 15069 | 13760 | 12628 |
| 500 | 98589                             | 82074  | 70265  | 61397 | 54490 | 48954 | 44417 | 40629 | 34656 | 30154 | 26632 | 23797 | 21460 | 19498 | 17824 | 16376 |
| 550 | 124663                            | 103788 | 88863  | 77656 | 68927 | 61934 | 56202 | 51417 | 43875 | 38192 | 33748 | 30172 | 27226 | 24754 | 22646 | 20824 |
| 600 | 156879                            | 130620 | 111847 | 97752 | 86775 | 77982 | 70776 | 64761 | 55283 | 48144 | 42564 | 38076 | 34381 | 31282 | 28641 | 26360 |

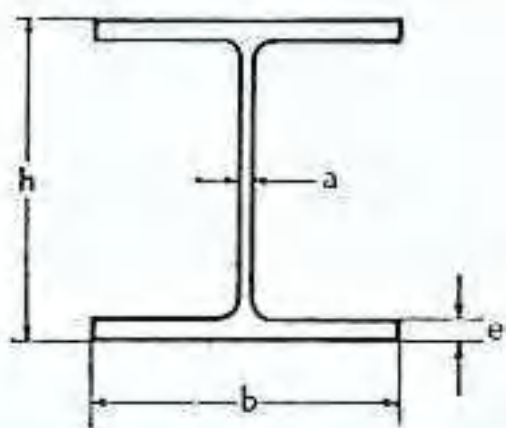


# TRAVE IPE SOLLECITATE A COMPRESSIONE

pilastri acciaio con carico di sicurezza = 16 kg/m<sup>2</sup>

| mm  | carichi massimi in kg riferiti alle lunghezze dei pilastri in m: |       |       |        |        |        |        |        |        |        |        |       |
|-----|------------------------------------------------------------------|-------|-------|--------|--------|--------|--------|--------|--------|--------|--------|-------|
|     | 2                                                                | 2,5   | 3     | 3,5    | 4      | 4,5    | 5      | 5,5    | 6      | 6,5    | 7      | 8     |
| 80  | 3574                                                             | 2272  | 1583  | 1166   |        |        |        |        |        |        |        |       |
| 100 | 6618                                                             | 4291  | 2953  | 2177   | 1671   |        |        |        |        |        |        |       |
| 120 | 10057                                                            | 7489  | 5201  | 3784   | 2937   | 2323   | 1884   |        |        |        |        |       |
| 140 | 14183                                                            | 11359 | 8437  | 6116   | 4702   | 3727   | 3023   | 2503   |        |        |        |       |
| 160 | 18917                                                            | 15611 | 12711 | 9403   | 7210   | 5695   | 4614   | 3810   | 3203   | 2732   |        |       |
| 180 | 24050                                                            | 20670 | 17225 | 13755  | 10563  | 8367   | 6768   | 5607   | 4709   | 4021   | 3466   |       |
| 200 | 30000                                                            | 26205 | 22463 | 19079  | 15099  | 11875  | 9702   | 7985   | 6745   | 5728   | 4924   | 3781  |
| 220 |                                                                  | 32987 | 28886 | 24855  | 21461  | 17183  | 13916  | 11517  | 9698   | 8259   | 7059   | 5419  |
| 240 |                                                                  | 40623 | 35954 | 31595  | 27681  | 23696  | 19190  | 15878  | 13310  | 11353  | 9790   | 7483  |
| 270 |                                                                  | 50301 | 45614 | 41258  | 36537  | 32495  | 28355  | 23167  | 19689  | 16690  | 14513  | 11110 |
| 300 |                                                                  | 61049 | 56631 | 51855  | 46782  | 42403  | 38088  | 33756  | 28503  | 24454  | 20944  | 16000 |
| 330 |                                                                  |       | 68136 | 62600  | 57234  | 51896  | 46586  | 41907  | 36688  | 31596  | 27217  | 20780 |
| 360 |                                                                  |       | 81342 | 75532  | 69652  | 63912  | 58452  | 52396  | 47477  | 41841  | 36236  | 27498 |
| 400 |                                                                  |       | 95886 | 89536  | 83456  | 76384  | 70051  | 63474  | 58528  | 53019  | 45581  | 34666 |
| 450 |                                                                  |       |       | 106093 | 99421  | 92444  | 85448  | 78646  | 71207  | 65593  | 57904  | 44280 |
| 500 |                                                                  |       |       | 128000 | 120519 | 111807 | 104269 | 96165  | 88380  | 80346  | 73359  | 56932 |
| 550 |                                                                  |       |       |        | 141052 | 132345 | 122514 | 112842 | 105615 | 96576  | 88962  | 70065 |
| 600 |                                                                  |       |       |        | 167516 | 156981 | 147692 | 137142 | 128000 | 117183 | 108995 | 89784 |



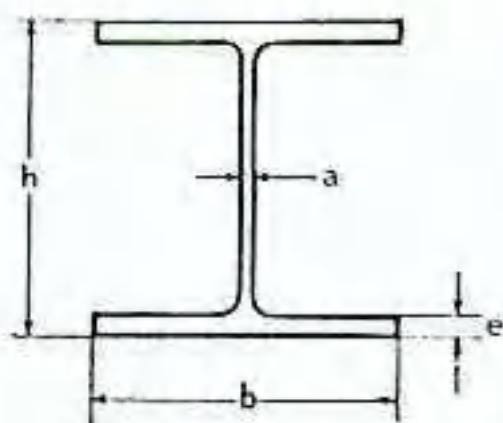


# TRAVI HEA

## dati generali

| PROFILO |     |     |      |      |      | Peso<br>al m.<br>kg | Sez.<br>cm <sup>2</sup> | Wx<br>cm <sup>3</sup> | Ix<br>cm <sup>4</sup> |
|---------|-----|-----|------|------|------|---------------------|-------------------------|-----------------------|-----------------------|
| HE      | h   | b   | a    | e    | r    |                     |                         |                       |                       |
| 100     | 96  | 100 | 5,0  | 8,0  | 12,0 | 16,7                | 21,2                    | 73                    | 349                   |
| 120     | 114 | 120 | 5,0  | 8,0  | 12,0 | 19,9                | 25,3                    | 106                   | 606                   |
| 140     | 133 | 140 | 5,5  | 8,5  | 12,0 | 24,7                | 31,4                    | 155                   | 1033                  |
| 160     | 152 | 160 | 6,0  | 9,0  | 15,0 | 30,4                | 38,8                    | 220                   | 1673                  |
| 180     | 171 | 180 | 6,0  | 9,5  | 15,0 | 35,5                | 45,3                    | 294                   | 2510                  |
| 200     | 190 | 200 | 6,5  | 10,0 | 18,0 | 42,3                | 53,8                    | 389                   | 3692                  |
| 220     | 210 | 220 | 7,0  | 11,0 | 18,0 | 50,5                | 64,3                    | 515                   | 5410                  |
| 240     | 230 | 240 | 7,5  | 12,0 | 21,0 | 60,3                | 76,8                    | 675                   | 7763                  |
| 260     | 250 | 260 | 7,5  | 12,5 | 24,0 | 68,2                | 86,8                    | 836                   | 10455                 |
| 280     | 270 | 280 | 8,0  | 13,0 | 24,0 | 76,4                | 97,3                    | 1010                  | 13673                 |
| 300     | 290 | 300 | 8,5  | 14,0 | 27,0 | 88,3                | 112                     | 1260                  | 18263                 |
| 320     | 310 | 300 | 9,0  | 15,5 | 27,0 | 97,6                | 124                     | 1480                  | 22928                 |
| 340     | 330 | 300 | 9,5  | 16,5 | 27,0 | 105                 | 133                     | 1680                  | 27693                 |
| 360     | 350 | 300 | 10,0 | 17,5 | 27,0 | 112                 | 143                     | 1890                  | 33090                 |
| 400     | 390 | 300 | 11,0 | 19,0 | 27,0 | 125                 | 159                     | 2310                  | 45069                 |
| 450     | 440 | 300 | 11,5 | 21,0 | 27,0 | 140                 | 178                     | 2900                  | 63722                 |
| 500     | 490 | 300 | 12,0 | 23,0 | 27,0 | 155                 | 197                     | 3550                  | 86975                 |
| 550     | 540 | 300 | 12,5 | 24,0 | 27,0 | 166                 | 212                     | 4150                  | 111932                |
| 600     | 590 | 300 | 13,0 | 25,0 | 27,0 | 178                 | 226                     | 4790                  | 141203                |
| 650     | 640 | 300 | 13,5 | 26,0 | 27,0 | 190                 | 241                     | 5470                  | 175178                |
| 700     | 690 | 300 | 14,5 | 27,0 | 27,0 | 204                 | 260                     | 6240                  | 215301                |
| 800     | 790 | 300 | 15,0 | 28,0 | 30,0 | 224                 | 286                     | 7680                  | 303442                |
| 900     | 890 | 300 | 16,0 | 30,0 | 30,0 | 252                 | 320                     | 9480                  | 422075                |
| 1000    | 990 | 300 | 16,5 | 31,0 | 30,0 | 272                 | 347                     | 11190                 | 553846                |



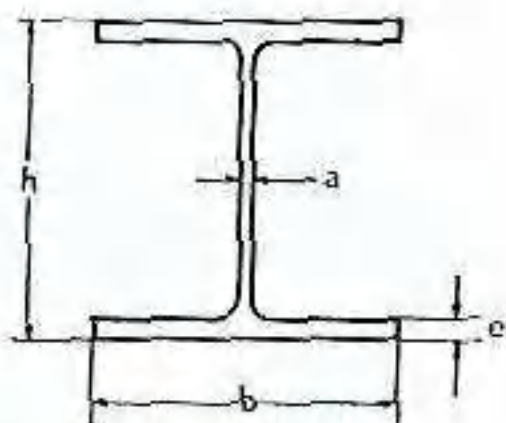


# TRAVI HEA

tabella dei carichi netti  
uniformemente  
ripartiti per  $\sigma = 1600 \text{ kg/cm}^2$

| h    | DISTANZA TRA GLI APPOGGI IN METRI |        |        |        |        |        |        |        |        |        |        |       |
|------|-----------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-------|
|      | 3                                 | 4      | 5      | 6      | 7      | 8      | 9      | 10     | 11     | 12     | 13     | 14    |
| 100  | 3064                              | 2269   | 1785   | 1457   | —      | —      | —      | —      | —      | —      | —      | —     |
| 120  | 4463                              | 3312   | 2614   | 2142   | 1800   | —      | —      | —      | —      | —      | —      | —     |
| 140  | 6539                              | 4861   | 3844   | 3158   | 2661   | 2282   | —      | —      | —      | —      | —      | —     |
| 160  | 9295                              | 6918   | 5480   | 4511   | 3810   | 3276   | 2855   | 2512   | —      | —      | —      | —     |
| 180  | 12437                             | 9265   | 7348   | 6059   | 5127   | 4419   | 3861   | 3408   | 3030   | —      | —      | —     |
| 200  | 16470                             | 12278  | 9746   | 8044   | 6816   | 5885   | 5151   | 4556   | 4061   | 3641   | —      | —     |
| 220  | 21821                             | 16277  | 12931  | 10683  | 9063   | 7835   | 6869   | 6087   | 5437   | 4887   | 4414   | —     |
| 240  | 28618                             | 21358  | 16978  | 14037  | 11920  | 10317  | 9057   | 8036   | 7191   | 6476   | 5862   | 5327  |
| 260  | 35464                             | 26478  | 21060  | 17425  | 14809  | 12830  | 11275  | 10018  | 8977   | 8098   | 7344   | 6688  |
| 280  | 42863                             | 32013  | 25473  | 21087  | 17933  | 15548  | 13676  | 12163  | 10912  | 9856   | 8951   | 8164  |
| 300  | 53493                             | 39965  | 31813  | 26349  | 22421  | 19453  | 17125  | 15244  | 13690  | 12380  | 11258  | 10283 |
| 320  | 62852                             | 46368  | 37400  | 30987  | 26379  | 22898  | 20170  | 17967  | 16147  | 14615  | 13306  | 12164 |
| 340  | 71363                             | 53338  | 42481  | 35209  | 29984  | 26039  | 22947  | 20453  | 18393  | 16659  | 15176  | 13889 |
| 360  | 80301                             | 60034  | 47822  | 39646  | 33775  | 29343  | 25871  | 23071  | 20760  | 18815  | 17152  | 15711 |
| 400  | 98182                             | 73418  | 58509  | 48528  | 41364  | 35959  | 31790  | 28317  | 25567  | 23139  | 21119  | 19369 |
| 450  | 123310                            | 92237  | 73538  | 61025  | 52047  | 45278  | 39983  | 35719  | 32204  | 29252  | 26733  | 24553 |
| 500  | 150997                            | 112977 | 90102  | 74801  | 63827  | 55558  | 49092  | 43888  | 39603  | 36005  | 32937  | 30286 |
| 550  | 176564                            | 132132 | 105407 | 87535  | 74721  | 65070  | 57526  | 51458  | 46463  | 42273  | 38702  | 35618 |
| 600  | 203834                            | 152564 | 121731 | 101116 | 86340  | 75214  | 66520  | 59530  | 53778  | 48956  | 45026  | 41301 |
| 650  | 232816                            | 174280 | 139082 | 115553 | 98692  | 86000  | 76085  | 68116  | 61560  | 56066  | 51388  | 47351 |
| 700  | 265628                            | 198864 | 158724 | 131896 | 112674 | 98200  | 86910  | 77832  | 70366  | 64112  | 58788  | 54195 |
| 800  | 327008                            | 244864 | 195488 | 162496 | 138866 | 121088 | 107210 | 96064  | 86903  | 79232  | 72706  | 67081 |
| 900  | 403724                            | 302352 | 241428 | 200728 | 171584 | 149664 | 132558 | 118824 | 107540 | 98096  | 90065  | 83146 |
| 1000 | 476624                            | 356992 | 285104 | 237088 | 202713 | 176864 | 156698 | 140512 | 127218 | 116096 | 106642 | 98500 |



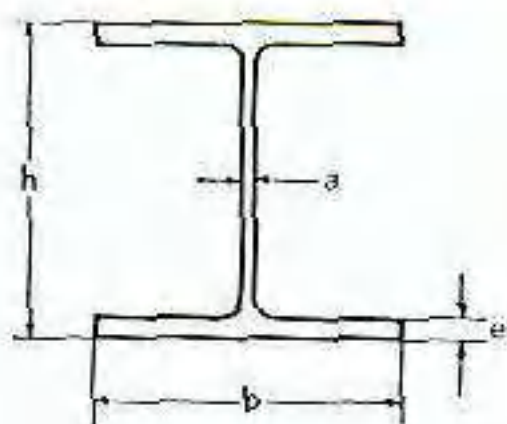


# TRAVI HEB

dati  
generali

| PROFILO |      |     |      |      |      | Peso<br>al m.<br>kg | Sez.<br>cm <sup>2</sup> | Wx<br>cm <sup>3</sup> | Ix<br>cm <sup>4</sup> |
|---------|------|-----|------|------|------|---------------------|-------------------------|-----------------------|-----------------------|
| HE      | h    | b   | a    | e    | r    |                     |                         |                       |                       |
| 100     | 100  | 100 | 6,0  | 10,0 | 12,0 | 20,4                | 26,0                    | 90                    | 450                   |
| 120     | 120  | 120 | 6,5  | 11,0 | 12,0 | 26,7                | 34,0                    | 144                   | 864                   |
| 140     | 140  | 140 | 7,0  | 12,0 | 12,0 | 33,7                | 43,0                    | 216                   | 1509                  |
| 160     | 160  | 160 | 8,0  | 13,0 | 15,0 | 42,6                | 54,3                    | 311                   | 2492                  |
| 180     | 180  | 180 | 8,5  | 14,0 | 15,0 | 51,2                | 65,3                    | 426                   | 3831                  |
| 200     | 200  | 200 | 9,0  | 15,0 | 18,0 | 61,3                | 78,1                    | 570                   | 5696                  |
| 220     | 220  | 220 | 9,5  | 16,0 | 18,0 | 71,5                | 91,0                    | 736                   | 8091                  |
| 240     | 240  | 240 | 10,0 | 17,0 | 21,0 | 83,2                | 106                     | 938                   | 11259                 |
| 260     | 260  | 260 | 10,0 | 17,5 | 24,0 | 93,0                | 118                     | 1150                  | 14919                 |
| 280     | 280  | 280 | 10,5 | 18,0 | 24,0 | 103                 | 131                     | 1380                  | 19270                 |
| 300     | 300  | 300 | 11,0 | 19,0 | 27,0 | 117                 | 149                     | 1680                  | 25166                 |
| 320     | 320  | 300 | 11,5 | 20,5 | 27,0 | 127                 | 161                     | 1930                  | 30823                 |
| 340     | 340  | 300 | 12,0 | 21,5 | 27,0 | 134                 | 171                     | 2160                  | 36656                 |
| 360     | 360  | 300 | 12,5 | 22,5 | 27,0 | 142                 | 181                     | 2400                  | 43193                 |
| 400     | 400  | 300 | 13,5 | 24,0 | 27,0 | 155                 | 198                     | 2880                  | 57680                 |
| 450     | 450  | 300 | 14,0 | 26,0 | 27,0 | 171                 | 218                     | 3550                  | 79887                 |
| 500     | 500  | 300 | 14,5 | 28,0 | 27,0 | 187                 | 239                     | 4290                  | 107176                |
| 550     | 550  | 300 | 15,0 | 29,0 | 27,0 | 199                 | 254                     | 4970                  | 136691                |
| 600     | 600  | 300 | 15,5 | 30,0 | 27,0 | 212                 | 270                     | 5700                  | 171041                |
| 650     | 650  | 300 | 16,0 | 31,0 | 27,0 | 225                 | 286                     | 6480                  | 210616                |
| 700     | 700  | 300 | 17,0 | 32,0 | 27,0 | 241                 | 306                     | 7340                  | 256888                |
| 800     | 800  | 300 | 17,5 | 33,0 | 30,0 | 262                 | 334                     | 8980                  | 359083                |
| 900     | 900  | 300 | 18,5 | 35,0 | 30,0 | 291                 | 371                     | 10980                 | 494065                |
| 1000    | 1000 | 300 | 19,0 | 36,0 | 30,0 | 314                 | 400                     | 12890                 | 644748                |





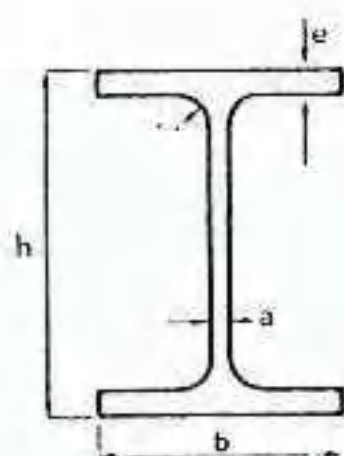
# TRAVI HEB

tabella dei carichi netti  
uniformemente

ripartiti per  $\sigma = 1600 \text{ kg/cm}^2$

| h    | DISTANZA TRA GLI APPOGGI IN METRI |        |        |        |        |        |        |        |        |        |        |        |
|------|-----------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
|      | 3                                 | 4      | 5      | 6      | 7      | 8      | 9      | 10     | 11     | 12     | 13     | 14     |
| 100  | 3778                              | 2798   | 2202   | 1797   | 1502   | —      | —      | —      | —      | —      | —      | —      |
| 120  | 6063                              | 4501   | 3553   | 2911   | 2446   | 2090   | —      | —      | —      | —      | —      | —      |
| 140  | 9114                              | 6777   | 5361   | 4405   | 3713   | 3186   | 2768   | —      | —      | —      | —      | —      |
| 160  | 13141                             | 9781   | 7748   | 6379   | 5388   | 4635   | 4039   | 3554   | —      | —      | —      | —      |
| 180  | 18022                             | 13427  | 10649  | 8780   | 7431   | 6406   | 5597   | 4940   | 4393   | —      | —      | —      |
| 200  | 24135                             | 17994  | 14285  | 11792  | 9993   | 8629   | 7554   | 6683   | 5958   | 5344   | —      | —      |
| 220  | 31187                             | 23265  | 18483  | 15272  | 12957  | 11203  | 9823   | 8705   | 7777   | 6992   | 6317   | —      |
| 240  | 39770                             | 29682  | 23596  | 19511  | 16569  | 14342  | 12591  | 11174  | 10000  | 9006   | 8153   | 7411   |
| 260  | 48786                             | 36427  | 28974  | 23974  | 20377  | 17655  | 15518  | 13789  | 12358  | 11150  | 10113  | 9212   |
| 280  | 58569                             | 43747  | 34812  | 28821  | 24512  | 21255  | 18700  | 16633  | 14924  | 13483  | 12248  | 11174  |
| 300  | 71327                             | 53290  | 42422  | 35137  | 29900  | 25943  | 22839  | 20333  | 18261  | 16515  | 15020  | 13721  |
| 320  | 81963                             | 61250  | 48771  | 40410  | 34401  | 29863  | 26305  | 23433  | 21060  | 19062  | 17351  | 15867  |
| 340  | 91755                             | 68582  | 54624  | 45274  | 38558  | 33487  | 29513  | 26307  | 23659  | 21431  | 19525  | 17872  |
| 360  | 101971                            | 76130  | 60728  | 50346  | 42890  | 37263  | 32854  | 29300  | 26364  | 23895  | 21784  | 19954  |
| 400  | 122412                            | 91568  | 72951  | 60508  | 51576  | 44838  | 39641  | 35313  | 31962  | 28859  | 26341  | 24160  |
| 450  | 150949                            | 112913 | 90022  | 74705  | 63715  | 55430  | 49948  | 43728  | 39427  | 35813  | 32729  | 30062  |
| 500  | 182474                            | 136528 | 108886 | 90395  | 77134  | 67142  | 59328  | 53040  | 47861  | 43514  | 42238  | 38149  |
| 550  | 211451                            | 158240 | 126234 | 104830 | 89484  | 77926  | 68891  | 61624  | 55642  | 50624  | 46347  | 42653  |
| 600  | 242558                            | 181547 | 144856 | 120325 | 102742 | 89501  | 79262  | 70838  | 63993  | 58254  | 53365  | 49145  |
| 650  | 275805                            | 206460 | 164763 | 136890 | 116916 | 101880 | 90135  | 80694  | 72928  | 66420  | 60878  | 56095  |
| 700  | 312450                            | 233916 | 186700 | 155140 | 132530 | 115512 | 102222 | 91542  | 82760  | 75401  | 69137  | 63734  |
| 800  | 382360                            | 286312 | 228578 | 190000 | 162371 | 141584 | 125357 | 112324 | 101612 | 92642  | 85012  | 78434  |
| 900  | 467607                            | 350196 | 279633 | 232494 | 198740 | 173352 | 153541 | 137634 | 124566 | 113628 | 104327 | 96314  |
| 1000 | 549031                            | 411224 | 328414 | 273102 | 233504 | 203728 | 180498 | 161852 | 146538 | 133725 | 122834 | 113077 |



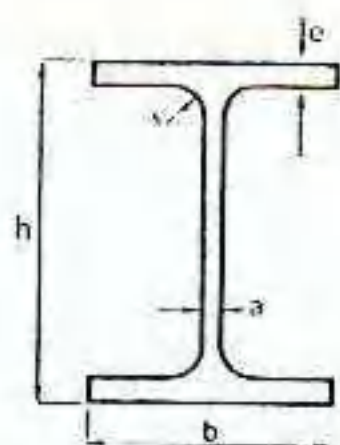


# TRAVI HEM

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| PROFILO |      |     |      |      |      | Peso<br>al m.<br>kg | Sez.<br>cm <sup>2</sup> | Wx<br>cm <sup>3</sup> | Jx<br>cm <sup>4</sup> |
|---------|------|-----|------|------|------|---------------------|-------------------------|-----------------------|-----------------------|
| HE      | h    | b   | a    | e    | r    |                     |                         |                       |                       |
| 100     | 120  | 106 | 12,0 | 20,0 | 12,0 | 41,8                | 53,2                    | 190                   | 1143                  |
| 120     | 140  | 126 | 12,5 | 21,0 | 12,0 | 52,1                | 66,4                    | 288                   | 2018                  |
| 140     | 160  | 146 | 13,0 | 22,0 | 12,0 | 63,2                | 80,6                    | 411                   | 3291                  |
| 160     | 180  | 166 | 14,0 | 23,0 | 15,0 | 76,2                | 97,1                    | 566                   | 5098                  |
| 180     | 200  | 186 | 14,5 | 24,0 | 15,0 | 88,9                | 113                     | 748                   | 7483                  |
| 200     | 220  | 206 | 15,0 | 25,0 | 18,0 | 103                 | 131                     | 967                   | 10642                 |
| 220     | 240  | 226 | 15,5 | 26,0 | 18,0 | 117                 | 149                     | 1220                  | 14605                 |
| 240     | 270  | 248 | 18,0 | 32,0 | 21,0 | 157                 | 200                     | 1800                  | 24289                 |
| 260     | 290  | 268 | 18,0 | 32,5 | 24,0 | 172                 | 220                     | 2160                  | 31307                 |
| 280     | 310  | 288 | 18,5 | 33,0 | 24,0 | 189                 | 240                     | 2550                  | 39547                 |
| 300     | 340  | 310 | 21,0 | 39,0 | 27,0 | 238                 | 303                     | 3480                  | 59201                 |
| 320     | 359  | 309 | 21,0 | 40,0 | 27,0 | 245                 | 312                     | 3800                  | 68135                 |
| 340     | 377  | 309 | 21,0 | 40,0 | 27,0 | 248                 | 316                     | 4050                  | 76372                 |
| 360     | 395  | 308 | 21,0 | 40,0 | 27,0 | 250                 | 319                     | 4300                  | 84867                 |
| 400     | 432  | 307 | 21,0 | 40,0 | 27,0 | 256                 | 326                     | 4820                  | 104119                |
| 450     | 478  | 307 | 21,0 | 40,0 | 27,0 | 263                 | 335                     | 5500                  | 131484                |
| 500     | 524  | 306 | 21,0 | 40,0 | 27,0 | 270                 | 344                     | 6180                  | 161929                |
| 550     | 572  | 306 | 21,0 | 40,0 | 27,0 | 278                 | 354                     | 6920                  | 197984                |
| 600     | 620  | 305 | 21,0 | 40,0 | 27,0 | 285                 | 364                     | 7660                  | 237447                |
| 650     | 668  | 305 | 21,0 | 40,0 | 27,0 | 293                 | 374                     | 8430                  | 281667                |
| 700     | 716  | 304 | 21,0 | 40,0 | 27,0 | 301                 | 383                     | 9200                  | 329278                |
| 800     | 814  | 303 | 21,0 | 40,0 | 30,0 | 317                 | 404                     | 10870                 | 442598                |
| 900     | 910  | 302 | 21,0 | 40,0 | 30,0 | 333                 | 424                     | 12540                 | 570434                |
| 1000    | 1008 | 302 | 21,0 | 40,0 | 30,0 | 349                 | 444                     | 14330                 | 722299                |





# TRAVI HEM

tabella dei carichi netti  
uniformemente  
ripartiti per  $\sigma = 1600 \text{ kg/cm}^2$

| h    | DISTANZA TRA GLI APPOGGI IN METRI |        |        |        |        |        |        |        |        |        |        |        |
|------|-----------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
|      | 3                                 | 4      | 5      | 6      | 7      | 8      | 9      | 10     | 11     | 12     | 13     | 14     |
| 100  | 7981                              | 5912   | 4654   | 3802   | 3181   | 2705   | —      | —      | —      | —      | —      | —      |
| 120  | 12131                             | 9007   | 7112   | 5771   | 4901   | 4191   | 3627   | —      | —      | —      | —      | —      |
| 140  | 17346                             | 12900  | 10205  | 8388   | 7072   | 6070   | 5276   | 4628   | —      | —      | —      | —      |
| 160  | 23920                             | 17806  | 14108  | 11617  | 9816   | 8446   | 7363   | 6482   | 5747   | —      | —      | —      |
| 180  | 31647                             | 23580  | 18704  | 15423  | 13055  | 11256  | 9837   | 8685   | 7726   | 6911   | —      | —      |
| 200  | 40948                             | 30531  | 24239  | 20011  | 16961  | 14647  | 12825  | 11347  | 10119  | 9078   | 8182   | —      |
| 220  | 51701                             | 38571  | 30646  | 25324  | 21489  | 18583  | 16297  | 14445  | 12909  | 11609  | 10491  | 9516   |
| 240  | 76327                             | 56970  | 45294  | 37457  | 31814  | 27543  | 24186  | 21469  | 19217  | 17315  | 15681  | 14258  |
| 260  | 91641                             | 68430  | 54434  | 45047  | 38292  | 33183  | 29171  | 25927  | 23242  | 20975  | 19031  | 17340  |
| 280  | 108230                            | 80842  | 64333  | 53264  | 45304  | 39287  | 34564  | 30749  | 27593  | 24931  | 22650  | 20667  |
| 300  | 147762                            | 110405 | 87895  | 72810  | 61966  | 53774  | 47350  | 42163  | 37875  | 34263  | 31169  | 28484  |
| 320  | 161394                            | 120617 | 96052  | 79594  | 67769  | 58838  | 51838  | 46188  | 41522  | 37592  | 34229  | 31312  |
| 340  | 172451                            | 128604 | 102437 | 84909  | 72319  | 62814  | 55366  | 49358  | 44398  | 40222  | 36651  | 33555  |
| 360  | 182712                            | 136596 | 108827 | 90231  | 76876  | 66798  | 58904  | 52663  | 47285  | 42885  | 39087  | 35813  |
| 400  | 204880                            | 153212 | 124748 | 101288 | 86342  | 75070  | 66245  | 59134  | 53269  | 48840  | 44129  | 40483  |
| 450  | 233871                            | 174943 | 139481 | 115752 | 98727  | 85893  | 75853  | 67768  | 61105  | 55509  | 50733  | 46602  |
| 500  | 262863                            | 196675 | 156854 | 130216 | 111112 | 96717  | 85461  | 76402  | 68940  | 62678  | 57337  | 52721  |
| 550  | 294467                            | 220322 | 175757 | 145955 | 124588 | 108493 | 95913  | 85793  | 77463  | 70475  | 64519  | 59375  |
| 600  | 325963                            | 243974 | 194666 | 161700 | 138070 | 120277 | 106374 | 95195  | 85997  | 78284  | 71714  | 66042  |
| 650  | 358801                            | 268588 | 214343 | 178082 | 152097 | 132536 | 117256 | 104974 | 94871  | 86404  | 79194  | 72972  |
| 700  | 391630                            | 293196 | 234015 | 194460 | 166121 | 144792 | 128135 | 114750 | 103743 | 94521  | 86671  | 79900  |
| 800  | 462835                            | 346572 | 276687 | 229991 | 196546 | 171384 | 151742 | 135966 | 123000 | 112142 | 102906 | 94944  |
| 900  | 534041                            | 399948 | 319359 | 265522 | 226971 | 197976 | 175349 | 157182 | 142257 | 129764 | 119141 | 109989 |
| 1000 | 610366                            | 457164 | 365103 | 303612 | 259591 | 226488 | 200663 | 179934 | 162910 | 148865 | 136558 | 126131 |



# TRAVE HE SOLLECITATA A COMPRESSIONE

| mm  |   | carichi massimi in kg riferiti alle lunghezze dei pilastri in m: |        |        |        |        |        |        |        |        |        |        |        |
|-----|---|------------------------------------------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
|     |   | 2                                                                | 2,5    | 3      | 3,5    | 4      | 4,5    | 5      | 5,5    | 6      | 6,5    | 7      | 8      |
| 100 | A | 23555                                                            | 21068  | 18434  | 15924  | 13732  | 11084  | 9093   | 7521   | 6304   |        |        |        |
|     | B | 29090                                                            | 26000  | 22857  | 19809  | 16979  | 13774  | 11304  | 9327   | 7834   |        |        |        |
|     | M | 61237                                                            | 55633  | 49777  | 44109  | 38342  | 33380  | 26851  | 22166  | 18873  |        |        |        |
| 120 | A | 29985                                                            | 27726  | 25142  | 22741  | 20139  | 17911  | 15629  | 12769  | 10852  | 9200   |        |        |
|     | B | 40296                                                            | 37517  | 34000  | 30734  | 27336  | 24285  | 21501  | 17770  | 15027  | 12680  |        |        |
|     | M | 79879                                                            | 74816  | 68987  | 62863  | 56812  | 50590  | 44827  | 39494  | 33096  | 28105  |        |        |
| 140 | A | 38646                                                            | 36405  | 33718  | 31304  | 28384  | 26031  | 23367  | 21020  | 18402  | 15651  | 13469  |        |
|     | B | 53333                                                            | 50218  | 46802  | 43270  | 39540  | 35833  | 32300  | 29029  | 26060  | 22122  | 19005  |        |
|     | M | 100750                                                           | 95525  | 89555  | 83740  | 77221  | 70086  | 64159  | 58090  | 52636  | 45730  | 39558  |        |
| 160 | A | 49269                                                            | 46676  | 44028  | 41112  | 38559  | 35474  | 32333  | 29561  | 266874 | 24537  | 21333  |        |
|     | B | 68952                                                            | 65323  | 61617  | 57920  | 54300  | 49931  | 46459  | 42174  | 38442  | 35170  | 30808  |        |
|     | M | 124288                                                           | 119507 | 113401 | 106410 | 100232 | 93029  | 85834  | 79671  | 72260  | 66393  | 60925  |        |
| 180 | A | 58926                                                            | 56186  | 53688  | 51042  | 48000  | 45019  | 42385  | 39178  | 36059  | 33095  | 30582  | 24404  |
|     | B | 84943                                                            | 81625  | 77392  | 73577  | 69653  | 65300  | 61099  | 56782  | 52502  | 48147  | 44649  | 35903  |
|     | M | 148590                                                           | 141625 | 136300 | 130417 | 123319 | 116954 | 109204 | 101842 | 94416  | 88000  | 80928  | 68666  |
| 200 | A | 71140                                                            | 68317  | 65709  | 62832  | 59777  | 56631  | 53465  | 50339  | 46782  | 43474  | 40413  | 34850  |
|     | B | 103272                                                           | 99174  | 96123  | 91882  | 87384  | 82754  | 78100  | 73505  | 68659  | 64082  | 59504  | 51850  |
|     | M | 175066                                                           | 168064 | 161600 | 154470 | 148990 | 140990 | 135585 | 126554 | 118689 | 112342 | 104517 | 90943  |
| 220 | A | 86453                                                            | 82967  | 80375  | 76776  | 74014  | 70851  | 67241  | 63900  | 60517  | 56522  | 53305  | 46342  |
|     | B | 122352                                                           | 118378 | 113750 | 109473 | 105507 | 101111 | 95789  | 91000  | 86153  | 81796  | 75883  | 67096  |
|     | M | 202576                                                           | 195934 | 180220 | 182473 | 175764 | 168338 | 160429 | 152254 | 144000 | 136599 | 129210 | 113828 |
| 240 | A | 105025                                                           | 100721 | 97523  | 94523  | 90352  | 87148  | 84164  | 80313  | 76322  | 72282  | 67889  | 61134  |
|     | B | 144957                                                           | 139016 | 134603 | 130461 | 124629 | 120283 | 116164 | 111578 | 106000 | 100353 | 95280  | 85226  |
|     | M | 275310                                                           | 266133 | 255488 | 249500 | 240120 | 233109 | 223328 | 214335 | 206038 | 197135 | 186760 | 166333 |
| 260 | A | 119724                                                           | 115733 | 112000 | 108500 | 104421 | 102117 | 97802  | 94476  | 90181  | 86260  | 82177  | 74267  |
|     | B | 163310                                                           | 157866 | 152774 | 148000 | 142436 | 139294 | 134354 | 128870 | 123816 | 118400 | 112094 | 102400 |
|     | M | 305530                                                           | 295260 | 288000 | 276661 | 270276 | 260266 | 252776 | 244000 | 234240 | 226683 | 216888 | 197393 |
| 280 | A | 135373                                                           | 130823 | 127606 | 123555 | 119753 | 116179 | 112811 | 108867 | 104483 | 101090 | 96695  | 87954  |
|     | B | 182817                                                           | 176670 | 172327 | 166857 | 161723 | 158075 | 152459 | 148056 | 143020 | 137411 | 131400 | 120137 |
|     | M | 384320                                                           | 325694 | 317619 | 307456 | 300250 | 288962 | 282589 | 272567 | 265048 | 254516 | 247948 | 226070 |
| 300 | A |                                                                  | 153846 | 148760 | 144000 | 140625 | 137404 | 132352 | 129496 | 125000 | 120000 | 116883 | 106508 |
|     | B |                                                                  | 203897 | 197157 | 192387 | 186375 | 182106 | 176711 | 171625 | 166825 | 160107 | 154909 | 142850 |
|     | M |                                                                  | 418068 | 407529 | 394276 | 384888 | 375937 | 364631 | 356588 | 343943 | 334455 | 323306 | 301217 |
| 320 | A |                                                                  |        | 164495 | 159232 | 155500 | 151938 | 146352 | 143194 | 138222 | 132683 | 129246 | 117775 |
|     | B |                                                                  |        | 213289 | 208129 | 201625 | 197007 | 191170 | 185669 | 179272 | 173208 | 167584 | 154538 |
|     | M |                                                                  |        | 419495 | 405835 | 396190 | 384000 | 375438 | 367058 | 354042 | 344275 | 330596 | 310062 |
| 340 | A |                                                                  |        | 176528 | 170880 | 166875 | 163053 | 157058 | 151489 | 148333 | 142400 | 137806 | 126390 |
|     | B |                                                                  |        | 225983 | 218752 | 213625 | 208732 | 201058 | 196719 | 187287 | 183516 | 177558 | 163736 |
|     | M |                                                                  |        | 421066 | 410796 | 401015 | 388676 | 379909 | 368817 | 358354 | 346082 | 334622 | 311901 |
| 360 | A |                                                                  |        |        | 182784 | 178500 | 174412 | 168000 | 162042 | 157572 | 152320 | 147406 | 135195 |
|     | B |                                                                  |        |        | 231168 | 225750 | 220580 | 212470 | 207884 | 200666 | 192640 | 187636 | 170982 |
|     | M |                                                                  |        |        | 414699 | 401637 | 392369 | 380656 | 372321 | 359211 | 349369 | 335578 | 303139 |
| 400 | A |                                                                  |        |        | 203520 | 198750 | 191278 | 187058 | 180425 | 175448 | 168476 | 162038 | 149647 |
|     | B |                                                                  |        |        | 253184 | 247250 | 237954 | 232705 | 224453 | 218262 | 209589 | 204180 | 186164 |
|     | M |                                                                  |        |        | 420387 | 410456 | 400984 | 389014 | 377739 | 364531 | 354612 | 340705 | 314024 |
| 450 | A |                                                                  |        |        |        | 222500 | 214135 | 209411 | 201985 | 195068 | 188609 | 181401 | 166549 |
|     | B |                                                                  |        |        |        | 272500 | 262255 | 256470 | 247375 | 240551 | 230993 | 222165 | 205116 |
|     | M |                                                                  |        |        |        | 419250 | 409648 | 397511 | 386071 | 375272 | 360161 | 348467 | 321341 |
| 500 | A |                                                                  |        |        |        | 244961 | 237593 | 232352 | 224113 | 216438 | 207894 | 198742 | 184795 |
|     | B |                                                                  |        |        |        | 295937 | 287037 | 280705 | 270751 | 261479 | 251157 | 243159 | 223251 |
|     | M |                                                                  |        |        |        | 430575 | 420519 | 405058 | 390695 | 382255 | 367253 | 355406 | 325964 |
| 600 | A |                                                                  |        |        |        | 278769 | 270447 | 262608 | 253426 | 243221 | 235324 | 225093 | 207085 |
|     | B |                                                                  |        |        |        | 392384 | 322388 | 315328 | 304225 | 243877 | 282352 | 270000 | 246857 |
|     | M |                                                                  |        |        |        | 451100 | 437533 | 424759 | 412709 | 398575 | 382842 | 365987 | 334436 |

pilastri acciaio con carico di sicurezza = 16 kg/m<sup>2</sup>



**TUBI SALDATI**

**TUBOLARI PER SERRAMENTI**

**TUBOLARI PER PORTONI**

**TUBOLARI MANCORRENTI**





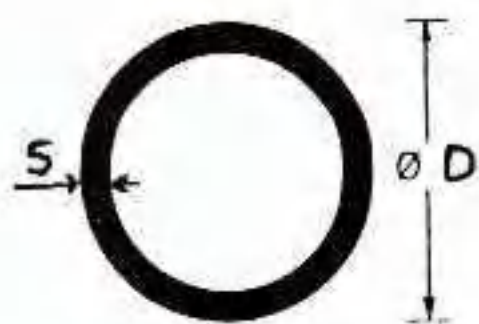
# TUBI SALDATI TONDI

## da nastro laminato a caldo

### UNI 7811

| Ø D   | S    | 1,5  | 2     | 2,5   | 3     | 4     | 5     | 6     | 7     | 8      | 9      | 10 |
|-------|------|------|-------|-------|-------|-------|-------|-------|-------|--------|--------|----|
| 12    | 0,39 |      |       |       |       |       |       |       |       |        |        |    |
| 14    | 0,46 |      |       |       |       |       |       |       |       |        |        |    |
| 16    | 0,54 | 0,69 |       |       |       |       |       |       |       |        |        |    |
| 18    | 0,61 | 0,79 |       |       |       |       |       |       |       |        |        |    |
| 19    | 0,65 | 0,84 |       |       |       |       |       |       |       |        |        |    |
| 20    | 0,68 | 0,89 |       |       |       |       |       |       |       |        |        |    |
| 22    | 0,76 | 0,99 |       |       |       |       |       |       |       |        |        |    |
| 25    | 0,87 | 1,13 | 1,39  | 1,63  |       |       |       |       |       |        |        |    |
| 28    | 0,98 | 1,28 | 1,57  | 1,85  |       |       |       |       |       |        |        |    |
| 30    | 1,05 | 1,38 | 1,70  | 2,00  |       |       |       |       |       |        |        |    |
| 32    | 1,13 | 1,48 | 1,82  | 2,15  |       |       |       |       |       |        |        |    |
| 35    | 1,24 | 1,63 | 2,00  | 2,37  |       |       |       |       |       |        |        |    |
| 38    | 1,35 | 1,78 | 2,19  | 2,59  | 3,35  |       |       |       |       |        |        |    |
| 40    | 1,42 | 1,87 | 2,31  | 2,74  | 3,55  |       |       |       |       |        |        |    |
| 42    | 1,49 | 1,97 | 2,43  | 2,88  | 3,75  |       |       |       |       |        |        |    |
| 45    | 1,61 | 2,12 | 2,62  | 3,11  | 4,04  |       |       |       |       |        |        |    |
| 48    | 1,72 | 2,27 | 2,80  | 3,33  | 4,34  | 5,34  |       |       |       |        |        |    |
| 50    | 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 | 2,71 | 3,36  | 4,00  | 5,23  |       |       |       |       |        |        |    |
| 60    | 2,16 | 2,86 | 3,56  | 4,21  | 5,52  | 6,78  |       |       |       |        |        |    |
| 62    | 2,24 | 2,96 | 3,67  | 4,37  | 5,72  | 7,03  |       |       |       |        |        |    |
| 63    | 2,27 | 3,01 | 3,73  | 4,44  | 5,82  | 7,17  |       |       |       |        |        |    |
| 65    | 2,35 | 3,11 | 3,85  | 4,59  | 6,02  | 7,40  |       |       |       |        |        |    |
| 70    | 2,53 | 3,35 | 4,16  | 4,96  | 6,51  | 8,01  |       |       |       |        |        |    |
| 76    | 2,76 | 3,65 | 4,54  | 5,41  | 7,11  | 8,77  | 10,37 |       |       |        |        |    |
| 80    | 2,90 | 3,85 | 4,78  | 5,70  | 7,50  | 9,25  | 10,95 |       |       |        |        |    |
| 83    | 3,01 | 4,00 | 4,96  | 5,92  | 7,80  | 9,62  | 11,40 |       |       |        |        |    |
| 89    | 3,23 | 4,29 | 5,33  | 6,36  | 8,38  | 10,35 | 12,27 | 14,14 | 15,96 |        |        |    |
| 96    |      | 4,64 | 5,76  | 6,88  | 9,08  | 11,22 | 13,32 | 15,36 |       |        |        |    |
| 102   |      | 4,93 | 6,13  | 7,32  | 9,67  | 11,96 | 14,21 | 16,40 | 18,47 |        |        |    |
| 108   |      | 5,23 | 6,50  | 7,77  | 10,26 | 12,70 | 15,09 | 17,44 |       |        |        |    |
| 114   |      | 5,52 | 6,87  | 8,21  | 10,90 | 13,44 | 15,99 | 18,48 | 20,97 | 23,37  | 25,72  |    |
| 121   |      | 5,87 | 7,31  | 8,73  | 11,45 | 14,31 | 17,02 | 19,69 |       |        |        |    |
| 127   |      | 6,17 | 7,68  | 9,17  | 12,13 | 15,04 | 17,90 | 20,72 | 23,48 | 26,19  | 28,85  |    |
| 133   |      |      | 8,05  | 9,62  | 12,73 | 15,78 | 18,83 | 21,76 |       |        |        |    |
| 139   |      |      | 8,42  | 10,06 | 13,32 | 16,53 | 19,69 | 22,80 | 25,98 | 29,01  | 31,99  |    |
| 152   |      |      | 9,22  | 11,05 | 14,64 | 18,18 | 21,66 | 25,10 | 28,49 | 31,83  | 35,12  |    |
| 159   |      |      |       | 11,54 | 15,69 | 18,99 | 22,64 | 26,24 | 29,79 | 33,29  | 36,75  |    |
| 168,3 |      |      | 10,23 | 12,23 | 16,21 | 20,14 | 24,02 | 27,85 | 31,63 | 35,36  | 39,04  |    |
| 177,8 |      |      |       | 12,93 | 17,14 | 21,31 | 25,42 | 29,49 | 35,50 | 37,47  | 41,38  |    |
| 193,7 |      |      |       | 14,11 | 18,71 | 23,27 | 27,77 | 32,23 | 36,64 | 40,99  | 45,30  |    |
| 219,1 |      |      |       | 15,99 | 21,22 | 26,40 | 31,53 | 36,61 | 41,65 | 46,63  | 51,57  |    |
| 244,5 |      |      |       |       | 23,72 | 29,53 | 35,29 | 41,00 | 46,66 | 52,27  | 57,83  |    |
| 273,0 |      |      |       |       | 26,54 | 33,05 | 39,51 | 45,92 | 52,28 | 58,60  | 64,86  |    |
| 323,9 |      |      |       |       | 31,56 | 39,32 | 47,04 | 54,71 | 62,32 | 69,89  | 77,41  |    |
| 339,7 |      |      |       |       |       | 41,27 | 49,38 | 57,43 | 65,44 | 73,40  | 81,31  |    |
| 355,6 |      |      |       |       |       | 43,23 | 51,73 | 60,18 | 68,58 | 76,93  | 85,23  |    |
| 406,4 |      |      |       |       |       | 49,50 | 59,25 | 68,95 | 78,60 | 88,20  | 97,76  |    |
| 457,2 |      |      |       |       |       |       | 66,76 | 77,72 | 88,62 | 99,48  | 110,29 |    |
| 508,0 |      |      |       |       |       |       | 74,28 | 86,49 | 98,65 | 110,75 | 122,81 |    |



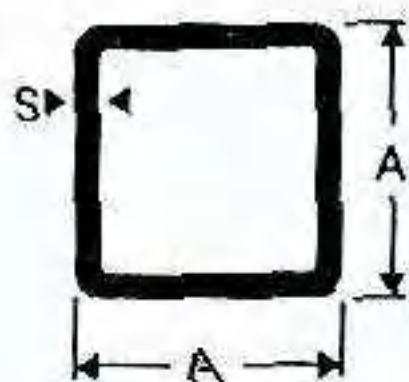


## TUBI SALDATI PER CARPENTERIA

| DN     | Ø D   | S *  | kg/m  |
|--------|-------|------|-------|
| 3/8"   | 16,75 | 1,8  | 0,66  |
| 1/2"   | 21,25 | 2,2  | 1,03  |
| 3/4"   | 26,75 | 2,5  | 1,50  |
| 1"     | 33,5  | 2,65 | 2,02  |
| 1 1/4" | 42,4  | 3    | 2,91  |
| 1 1/2" | 48,3  | 3    | 3,35  |
| 2"     | 60,3  | 3    | 4,24  |
| 2 1/2" | 76,1  | 3    | 5,41  |
| 3"     | 88,9  | 3    | 6,36  |
| 3 1/2" | 101,6 | 3    | 7,29  |
| 4"     | 114,3 | 3    | 8,23  |
| 4 1/2" | 127   | 3,7  | 11,26 |
| 5"     | 139,7 | 3,7  | 12,41 |
| 5 1/2" | 152   | 4    | 14,61 |
| 6"     | 168   | 4    | 16,18 |
| 7 1/2" | 193,7 | 4    | 18,65 |
| 8"     | 219   | 5    | 26,40 |

\* spessore per impieghi più correnti.  
I tubi possono tuttavia essere forniti anche  
con spessore diverso.



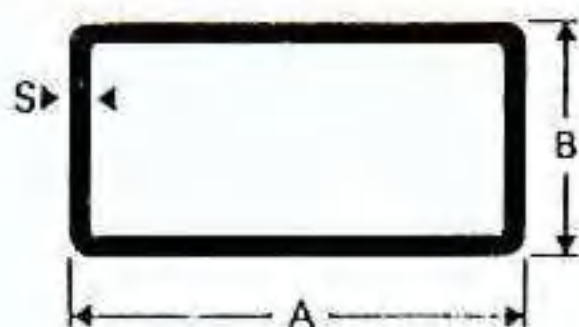


# TUBI SALDATI QUADRI

## da nastro laminato a caldo

| dimensione<br>A x A<br>mm | spessore mm |      |       |       |       |       |       |       |       |       |
|---------------------------|-------------|------|-------|-------|-------|-------|-------|-------|-------|-------|
|                           | 1,5         | 2    | 3     | 4     | 5     | 6     | 7     | 8     | 9     | 10    |
|                           | peso kg/m   |      |       |       |       |       |       |       |       |       |
| 10 x 10                   | 0,40        |      |       |       |       |       |       |       |       |       |
| 12 x 12                   | 0,50        |      |       |       |       |       |       |       |       |       |
| 15 x 15                   | 0,64        | 0,88 |       |       |       |       |       |       |       |       |
| 20 x 20                   | 0,87        | 1,13 | 1,60  |       |       |       |       |       |       |       |
| 22 x 22                   | 0,98        | 1,28 | 1,85  |       |       |       |       |       |       |       |
| 25 x 25                   | 1,11        | 1,44 | 2,07  |       |       |       |       |       |       |       |
| 30 x 30                   | 1,34        | 1,76 | 2,54  | 3,27  |       |       |       |       |       |       |
| 35 x 35                   | 1,58        | 2,07 | 3,01  | 4,04  |       |       |       |       |       |       |
| 40 x 40                   | 1,81        | 2,39 | 3,48  | 4,09  | 4,83  |       |       |       |       |       |
| 45 x 45                   | 2,05        | 2,70 | 3,96  | 4,72  | 5,61  |       |       |       |       |       |
| 50 x 50                   | 2,28        | 3,01 | 4,43  | 5,83  | 6,40  | 8,48  |       |       |       |       |
| 60 x 60                   | 2,75        | 3,64 | 5,37  | 7,03  | 7,97  | 10,34 |       |       |       |       |
| 70 x 70                   | 3,23        | 4,27 | 6,31  | 8,33  | 9,54  | 11,10 | 12,53 | 15,57 |       |       |
| 80 x 80                   | 3,78        | 4,90 | 7,25  | 9,55  | 11,11 | 12,99 | 14,72 | 16,36 |       | 22    |
| 90 x 90                   |             | 5,50 | 8,20  | 10,80 | 12,68 | 14,87 | 16,92 |       |       |       |
| 100 x 100                 |             | 6,15 | 9,14  | 12,06 | 14,26 | 16,76 | 19,12 | 21,39 | 22,99 | 24,89 |
| 110 x 110                 |             |      | 9,84  | 12,89 | 15,83 | 18,64 | 21,32 | 23,90 | 25,81 | 28,03 |
| 120 x 120                 |             |      | 11,00 | 14,54 | 17,40 | 20,53 | 23,52 | 26,41 | 28,64 | 31,17 |
| 140 x 140                 |             |      | 12,72 | 16,76 | 20,52 | 24,98 | 27,91 | 31,43 | 34,29 | 37,45 |
| 150 x 150                 |             |      | 13,86 | 18,35 | 22,11 | 26,19 | 30,11 | 33,95 | 37,12 | 40,59 |
| 160 x 160                 |             |      | 14,61 | 19,27 | 23,66 | 28,04 | 32,31 | 36,46 | 39,94 | 43,73 |
| 175 x 175                 |             |      | 16,00 | 21,22 | 26,04 | 30,90 | 35,61 | 40,23 | 44,18 | 48,44 |
| 180 x 180                 |             |      |       | 21,78 | 26,80 | 31,81 | 36,70 | 41,48 | 45,60 | 50,01 |
| 200 x 200                 |             |      | 18,92 | 24,29 | 29,94 | 35,58 | 41,10 | 46,51 | 51,25 | 56,29 |
| 220 x 220                 |             |      | 20,06 | 26,81 | 33,12 | 39,39 | 45,50 | 51,53 | 56,90 | 62,57 |
| 250 x 250                 |             |      |       | 30,57 | 37,79 | 45,00 | 52,09 | 59,07 | 65,38 | 71,99 |
| 260 x 260                 |             |      |       | 31,76 | 39,41 | 46,94 | 54,29 | 61,58 | 68,20 | 75,13 |
| 300 x 300                 |             |      |       |       | 45,64 | 54,42 | 63,08 | 71,63 | 79,51 | 87,69 |
| 325 x 325                 |             |      |       |       | 49,57 | 59,13 | 68,58 | 77,91 | 86,57 | 95,54 |





# TUBI SALDATI RETTANGOLARI

da nastro laminato a caldo

| dimensione<br>A x B<br>mm | spessore "S" mm |      |      |      |      |      |   |
|---------------------------|-----------------|------|------|------|------|------|---|
|                           | 1,5             | 2    | 3    | 4    | 5    | 6    | 7 |
|                           | peso kg/m       |      |      |      |      |      |   |
| 15 x 10                   | 0,52            |      |      |      |      |      |   |
| 20 x 10                   | 0,64            | 0,81 |      |      |      |      |   |
| 20 x 15                   | 0,75            | 0,97 |      |      |      |      |   |
| 25 x 10                   | 0,75            | 0,97 |      |      |      |      |   |
| 25 x 15                   | 0,87            | 1,13 |      |      |      |      |   |
| 25 x 20                   | 0,99            | 1,29 |      |      |      |      |   |
| 30 x 10                   | 0,87            | 1,13 |      |      |      |      |   |
| 30 x 15                   | 0,99            | 1,29 | 1,85 |      |      |      |   |
| 30 x 20                   | 1,11            | 1,44 | 2,07 |      |      |      |   |
| 30 x 25                   | 1,22            | 1,60 | 2,31 |      |      |      |   |
| 35 x 10                   | 0,99            | 1,29 |      |      |      |      |   |
| 35 x 15                   | 1,11            | 1,44 | 2,07 |      |      |      |   |
| 35 x 20                   | 1,22            | 1,60 | 2,31 |      |      |      |   |
| 35 x 25                   | 1,34            | 1,76 | 2,54 |      |      |      |   |
| 40 x 10                   | 1,11            | 1,44 |      |      |      |      |   |
| 40 x 15                   | 1,22            | 1,60 | 2,31 |      |      |      |   |
| 40 x 20                   | 1,34            | 1,76 | 2,54 | 3,35 |      |      |   |
| 40 x 25                   | 1,46            | 1,91 | 2,78 | 3,75 |      |      |   |
| 40 x 30                   | 1,58            | 2,07 | 3,01 | 4,04 |      |      |   |
| 45 x 10                   | 1,22            | 1,60 | 2,31 |      |      |      |   |
| 45 x 15                   | 1,34            | 1,76 | 2,54 |      |      |      |   |
| 45 x 20                   | 1,46            | 1,91 | 2,78 | 3,75 |      |      |   |
| 45 x 25                   | 1,58            | 2,07 | 3,01 | 4,04 |      |      |   |
| 45 x 30                   | 1,69            | 2,23 | 3,25 | 4,34 |      |      |   |
| 50 x 10                   | 1,34            | 1,76 | 2,54 |      |      |      |   |
| 50 x 15                   | 1,46            | 1,92 | 2,78 |      |      |      |   |
| 50 x 20                   | 1,58            | 2,07 | 3,01 |      |      |      |   |
| 50 x 25                   | 1,69            | 2,23 | 3,25 | 4,34 |      |      |   |
| 50 x 30                   | 1,81            | 2,39 | 3,48 | 4,52 |      |      |   |
| 50 x 40                   | 2,05            | 2,70 | 3,95 | 5,15 | 6,28 |      |   |
| 60 x 10                   | 1,58            | 2,07 | 3,01 |      |      |      |   |
| 60 x 15                   | 1,69            | 2,23 | 3,25 |      |      |      |   |
| 60 x 20                   | 1,81            | 2,39 | 3,48 | 4,63 |      |      |   |
| 60 x 25                   | 1,93            | 2,54 | 3,74 | 4,93 |      |      |   |
| 60 x 30                   | 2,05            | 2,70 | 3,95 | 5,07 |      |      |   |
| 60 x 40                   | 2,28            | 3,01 | 4,43 | 5,35 | 6,39 | 8,29 |   |
| 60 x 50                   | 2,52            | 3,33 | 4,90 | 5,98 | 8,02 |      |   |
| 70 x 20                   | 2,05            | 2,70 | 3,95 | 5,23 |      |      |   |
| 70 x 25                   | 2,17            | 2,86 | 4,19 |      |      |      |   |
| 70 x 30                   | 2,28            | 3,01 | 4,43 | 5,35 |      |      |   |
| 70 x 40                   | 2,52            | 3,33 | 4,90 | 5,98 | 8,02 |      |   |



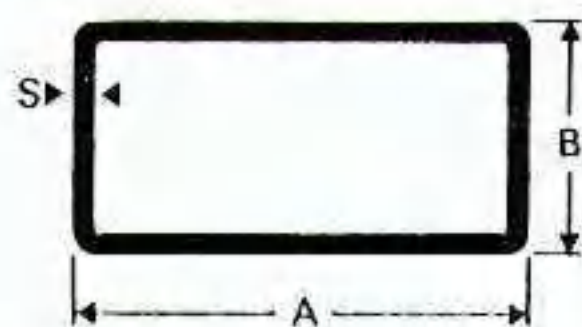


# TUBI SALDATI RETTANGOLARI

da nastro laminato a caldo

| dimensione<br>A x B<br>mm | spessore mm |      |       |       |       |       |       |       |   |       |
|---------------------------|-------------|------|-------|-------|-------|-------|-------|-------|---|-------|
|                           | 1,5         | 2    | 3     | 4     | 5     | 6     | 7     | 8     | 9 | 10    |
|                           | peso kg/m   |      |       |       |       |       |       |       |   |       |
| 70 x 50                   | 2,76        | 3,64 | 5,37  | 7,05  | 7,97  | 9,21  | 10,34 |       |   |       |
| 80 x 15                   | 2,16        | 2,86 |       |       |       |       |       |       |   |       |
| 80 x 20                   | 2,28        | 3,01 | 4,43  |       |       |       |       |       |   |       |
| 80 x 30                   | 2,52        | 3,33 | 4,90  | 5,98  |       |       |       |       |   |       |
| 80 x 40                   | 2,76        | 3,64 | 5,37  | 7,05  | 7,97  | 9,21  | 10,34 |       |   |       |
| 80 x 50                   | 2,99        | 3,96 | 5,84  | 7,66  | 9,62  | 11,54 |       |       |   |       |
| 80 x 60                   | 3,23        | 4,27 | 6,31  | 7,86  | 9,54  | 11,10 | 12,54 |       |   |       |
| 90 x 30                   | 2,76        | 3,64 | 5,37  | 7,10  |       |       |       |       |   |       |
| 90 x 40                   | 2,99        | 3,96 | 5,84  | 7,66  | 9,62  | 11,40 |       |       |   |       |
| 90 x 50                   | 3,23        | 4,27 | 6,31  | 7,86  | 10,36 | 12,28 |       |       |   |       |
| 90 x 60                   |             | 4,58 | 6,78  | 8,92  | 11,10 | 13,17 |       |       |   |       |
| 100 x 20                  | 2,76        | 3,64 | 5,37  | 7,10  |       |       |       |       |   |       |
| 100 x 30                  | 3,00        | 3,95 | 5,84  | 7,66  |       |       |       |       |   |       |
| 100 x 40                  | 3,22        | 4,27 | 6,31  | 7,86  | 9,54  | 11,10 | 12,54 |       |   |       |
| 100 x 50                  | 3,46        | 4,58 | 6,78  | 8,92  | 11,40 | 12,04 | 13,64 | 16,83 |   |       |
| 100 x 60                  |             | 4,90 | 7,25  | 9,55  | 11,77 | 12,98 | 14,74 |       |   |       |
| 100 x 70                  |             | 5,21 | 7,72  | 10,17 | 12,56 | 13,93 |       |       |   |       |
| 100 x 80                  |             | 5,53 | 8,19  | 10,80 | 13,35 | 14,87 | 16,94 |       |   |       |
| 110 x 50                  |             | 4,90 | 7,25  | 9,55  | 11,77 | 12,98 | 14,74 |       |   |       |
| 120 x 30                  |             | 4,59 | 6,81  | 9,55  | 11,77 | 12,98 | 14,74 |       |   |       |
| 120 x 40                  |             | 4,90 | 7,25  | 9,55  | 11,77 | 12,98 | 14,74 |       |   |       |
| 120 x 60                  |             | 5,53 | 8,19  | 10,80 | 13,35 | 14,87 | 16,94 | 20,40 |   |       |
| 120 x 80                  |             | 6,15 | 9,14  | 12,06 | 14,91 | 16,76 | 19,14 | 21,39 |   | 28,30 |
| 120 x 100                 |             |      | 9,90  | 12,99 | 15,81 | 18,62 | 21,32 |       |   |       |
| 130 x 50                  |             | 5,50 | 8,20  | 10,80 | 13,35 | 14,87 |       |       |   |       |
| 130 x 60                  |             | 5,84 | 8,67  | 11,43 | 14,31 | 17,02 | 19,60 |       |   |       |
| 140 x 40                  |             | 5,53 | 8,19  | 10,80 | 13,35 | 14,87 |       |       |   |       |
| 140 x 50                  |             | 5,84 | 8,67  | 11,43 | 14,31 | 17,02 | 19,60 |       |   |       |
| 140 x 60                  |             | 6,15 | 9,14  | 12,06 | 14,91 | 16,76 | 19,14 |       |   |       |
| 140 x 70                  |             | 6,47 | 9,61  | 12,27 | 15,04 | 17,70 | 21,76 | 23,6  |   |       |
| 140 x 80                  |             |      | 9,90  | 12,99 | 15,81 | 18,62 | 21,32 |       |   |       |
| 150 x 30                  |             | 5,50 | 8,20  | 10,80 | 13,35 |       |       |       |   |       |
| 150 x 40                  |             | 5,87 | 8,73  | 12,27 | 15,04 | 17,70 |       |       |   |       |
| 150 x 50                  |             | 6,16 | 9,14  | 12,06 | 14,91 | 16,76 | 19,14 |       |   |       |
| 150 x 100                 |             |      | 11,49 | 15,20 | 18,84 | 21,47 | 24,90 | 27,67 |   | 36,10 |
| 160 x 40                  |             | 6,07 | 8,96  | 11,73 | 14,24 | 16,74 |       |       |   |       |
| 160 x 50                  |             |      | 9,43  | 12,36 | 15,03 | 17,68 |       |       |   |       |
| 160 x 60                  |             |      | 9,90  | 12,99 | 15,81 | 18,62 | 21,32 |       |   |       |





# TUBI SALDATI RETTANGOLARI

da nastro laminato a caldo

| dimensione<br>A x B<br>mm | spessore mm |   |       |       |       |       |       |       |       |       |
|---------------------------|-------------|---|-------|-------|-------|-------|-------|-------|-------|-------|
|                           | 1,5         | 2 | 3     | 4     | 5     | 6     | 7     | 8     | 9     | 10    |
|                           | peso kg/m   |   |       |       |       |       |       |       |       |       |
| 160 x 80                  |             |   | 11,02 | 14,57 | 18,05 | 20,53 | 23,80 | 26,41 |       | 34,50 |
| 180 x 60                  |             |   | 11,02 | 14,57 | 18,05 | 20,53 | 23,80 |       |       |       |
| 180 x 80                  |             |   | 11,78 | 15,50 | 18,95 | 22,39 | 25,71 | 28,92 |       | 37,70 |
| 200 x 100                 |             |   | 13,85 | 18,34 | 22,09 | 26,19 | 30,48 | 33,95 | 37,12 | 41,59 |
| 250 x 100                 |             |   | 16,02 | 21,16 | 26,01 | 30,90 | 35,65 | 40,23 | 44,18 | 48,44 |
| 250 x 150                 |             |   |       | 24,29 | 29,94 | 35,58 | 41,10 | 46,51 | 51,25 | 56,29 |
| 300 x 100                 |             |   |       | 24,29 | 29,94 | 35,58 | 41,10 | 46,51 |       |       |
| 300 x 150                 |             |   | 20,58 | 27,44 | 33,90 | 40,34 | 46,65 | 52,79 |       |       |
| 300 x 200                 |             |   |       | 30,57 | 37,79 | 45,00 | 52,09 | 59,07 |       |       |
| 400 x 200                 |             |   |       |       | 45,64 | 54,42 | 63,08 | 71,63 |       |       |
| 400 x 250                 |             |   |       |       | 49,57 | 59,13 | 68,58 | 77,91 |       |       |



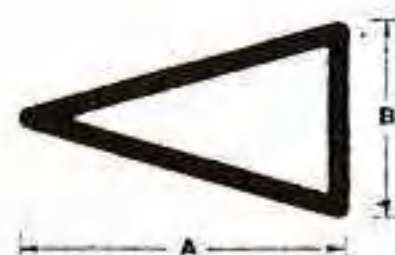
# TUBOLARI A SEZIONI VARIE

ovale

| A<br>B | 30<br>15 | 36<br>18 | 40<br>20 | 50<br>25 | 60<br>30 | 31<br>16 | 45<br>20 | 50<br>10 | 60<br>20 | 80<br>45 |
|--------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| 1,5    | 0,86     | 1,05     | 1,12     | 1,50     | 1,87     | 0,90     | 1,32     | 1,29     | 1,63     |          |
| 2      | 1,13     | 1,38     | 1,47     | 1,95     | 2,47     | 1,90     |          |          | 2,16     |          |
| 3      |          |          |          | 2,86     | 3,63     |          |          |          |          |          |
| 4      |          |          |          |          |          |          |          |          |          | 6,68     |

triangolo

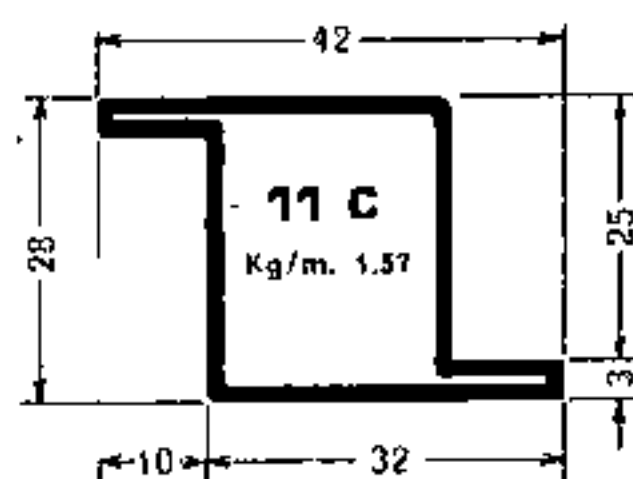
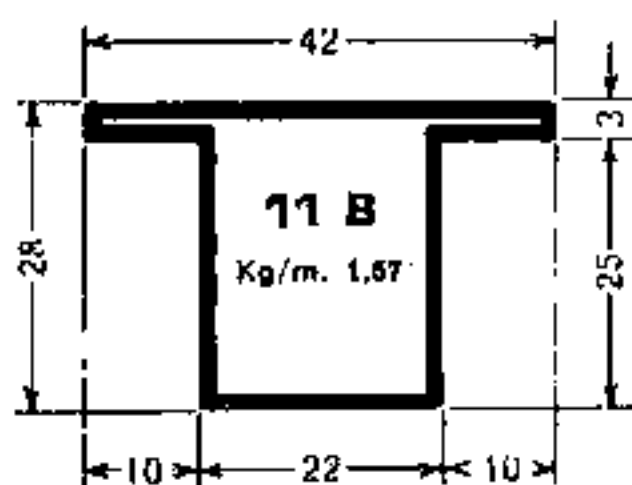
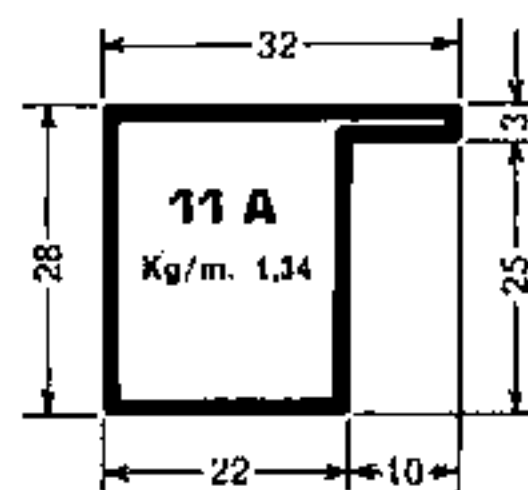
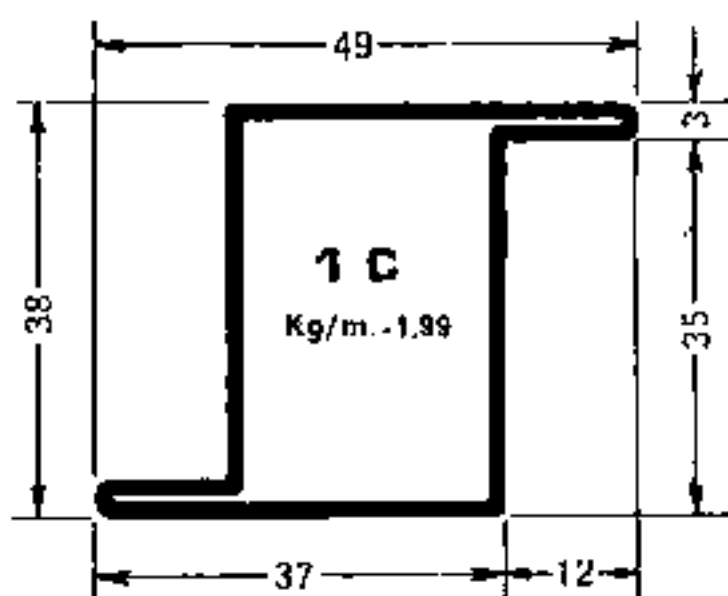
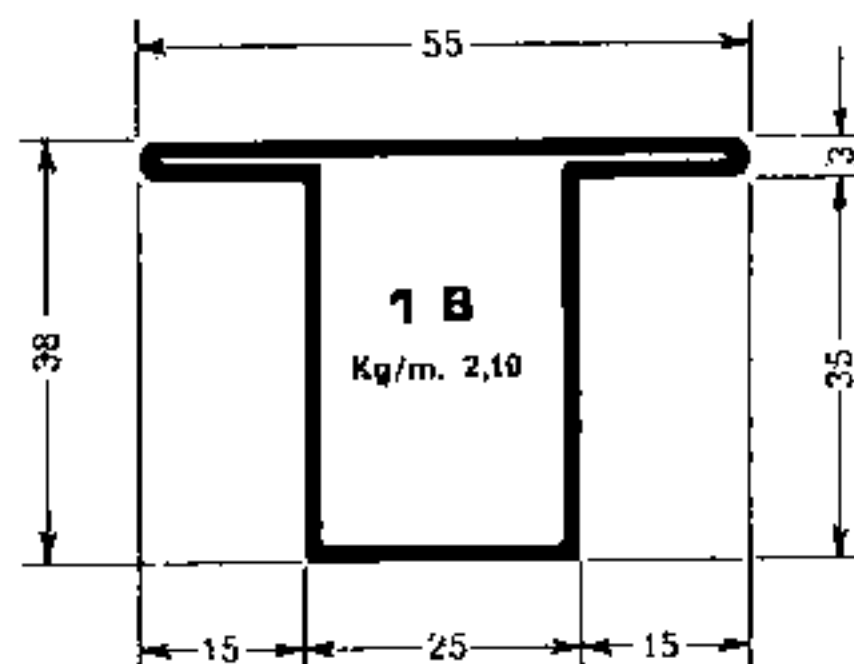
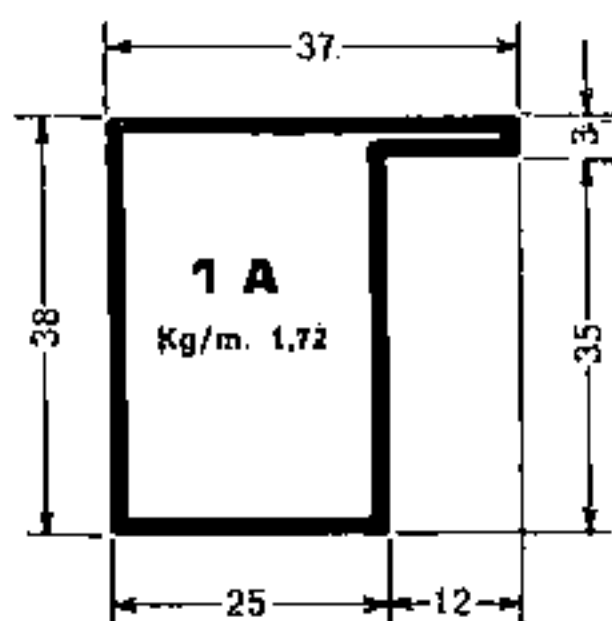
| A<br>B | 30<br>15 | 40<br>22 | 60<br>38 | 60<br>55 |
|--------|----------|----------|----------|----------|
| 1,5    | 0,86     | 1,24     |          |          |
| 2      | 1,13     | 1,63     |          |          |
| 3      |          |          | 3,73     | 4,29     |





# TUBOLARI PER SERRAMENTI

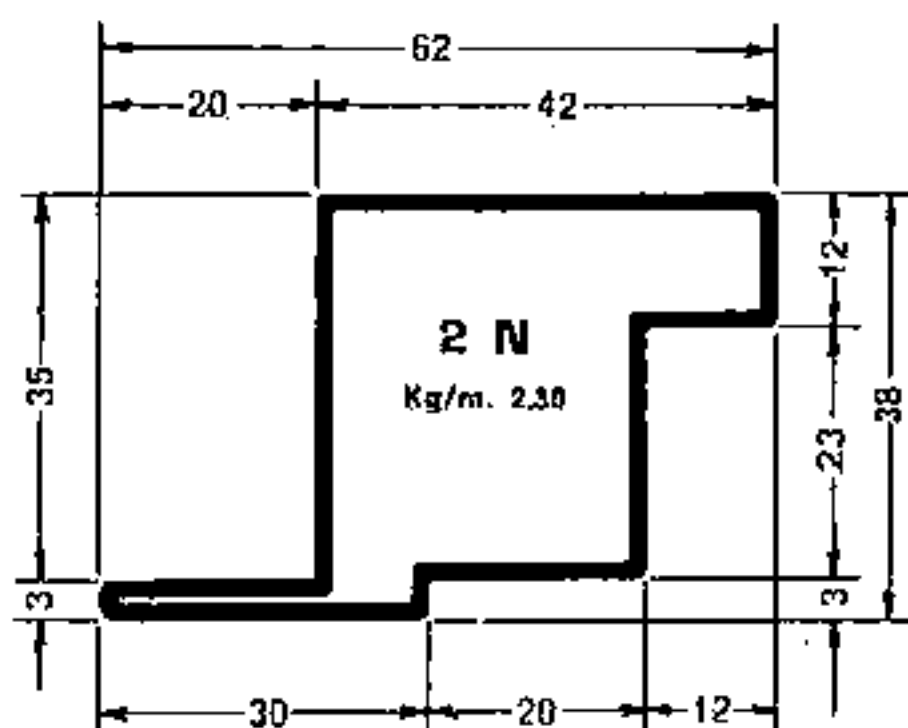
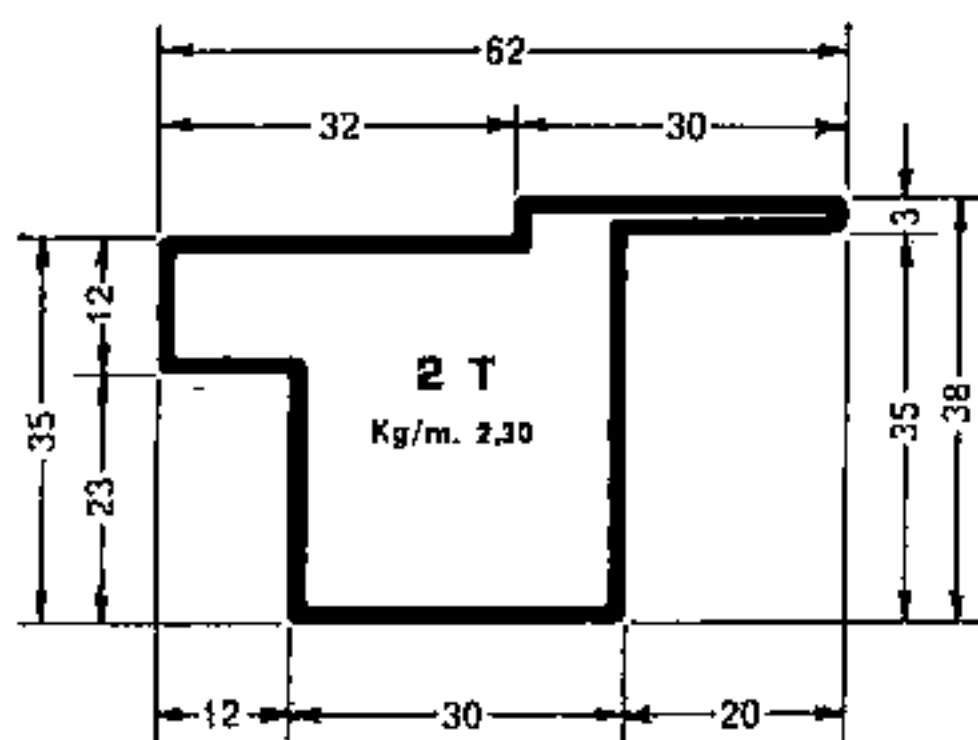
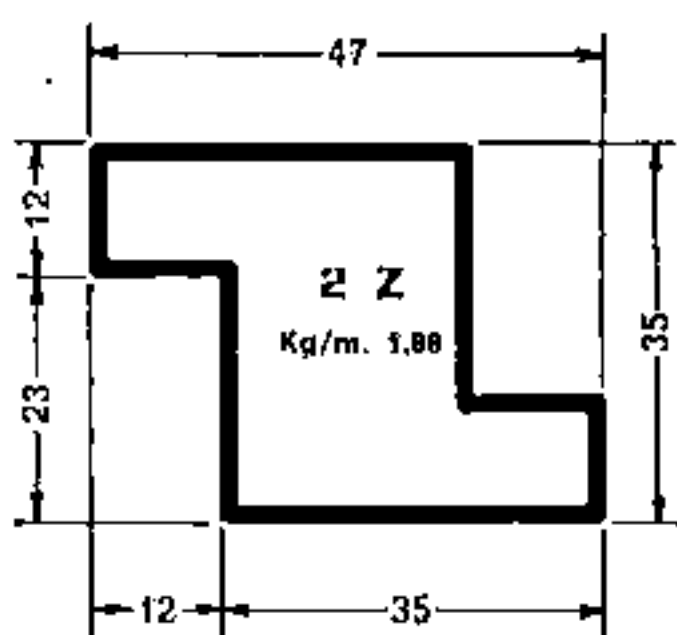
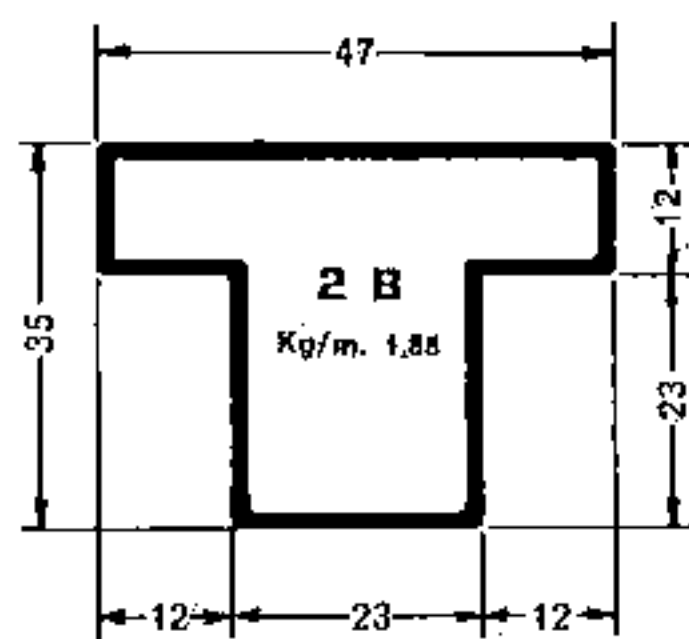
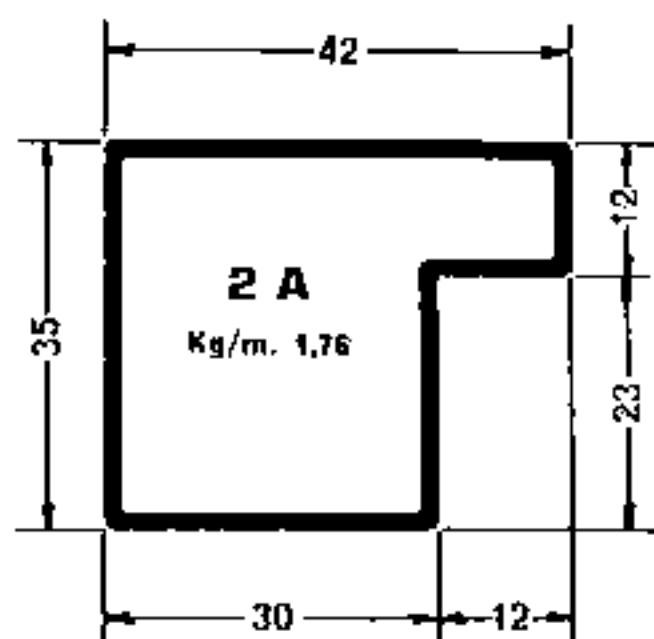
spessore mm 1,5





# TUBOLARI PER SERRAMENTI

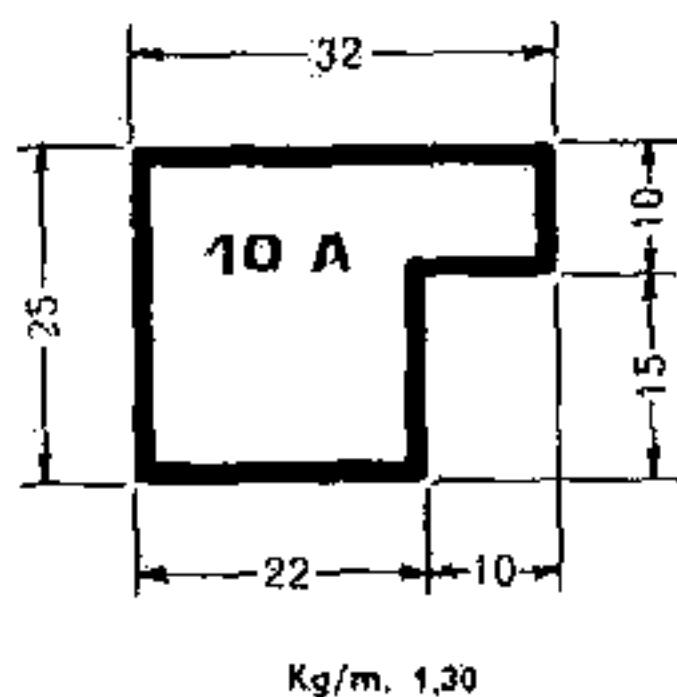
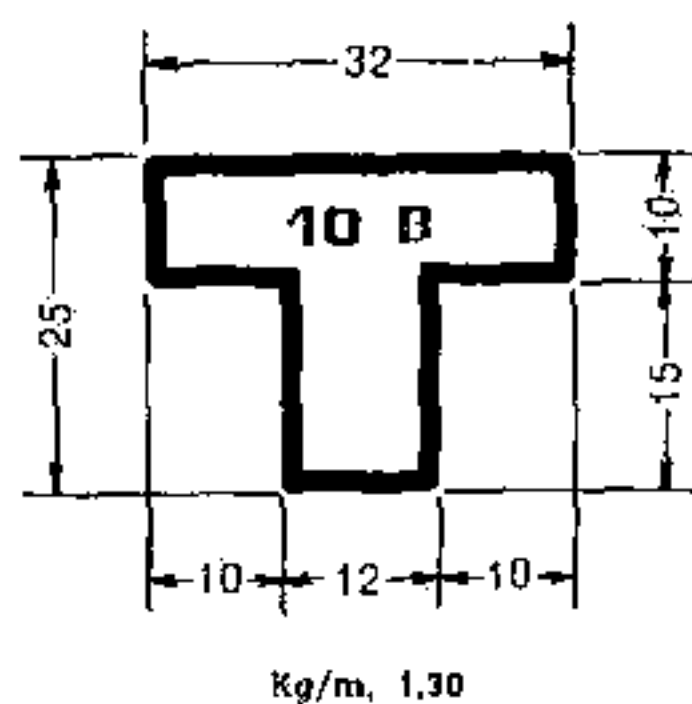
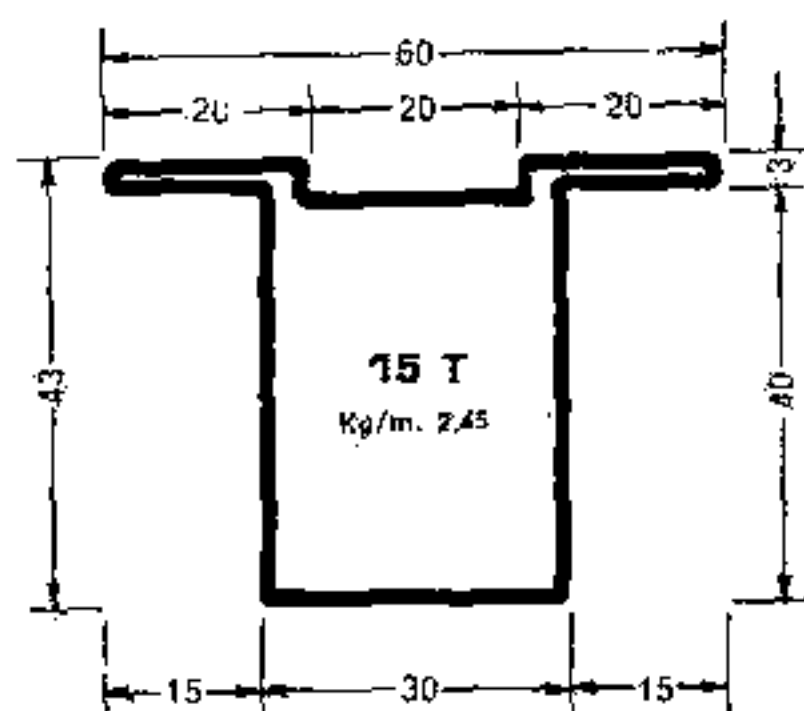
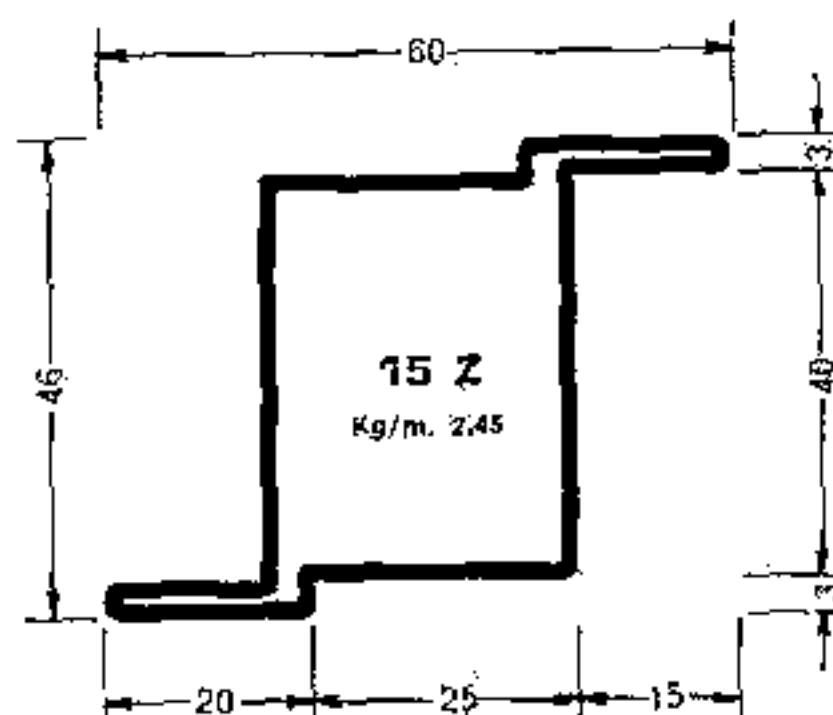
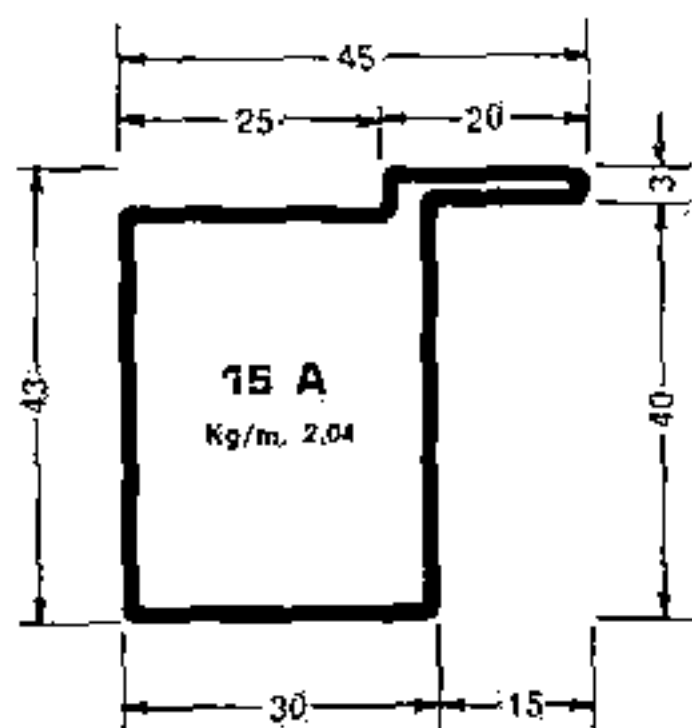
spessore mm 1,5





# TUBOLARI PER SERRAMENTI

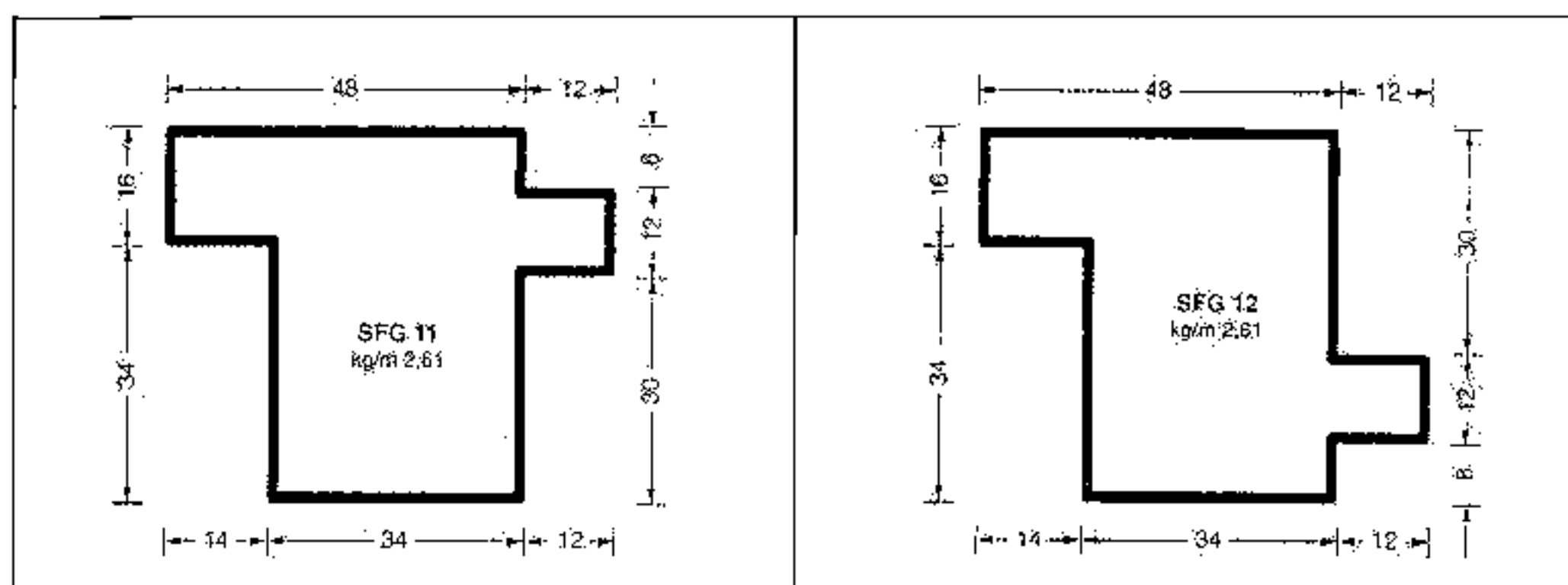
spessore mm 1,5





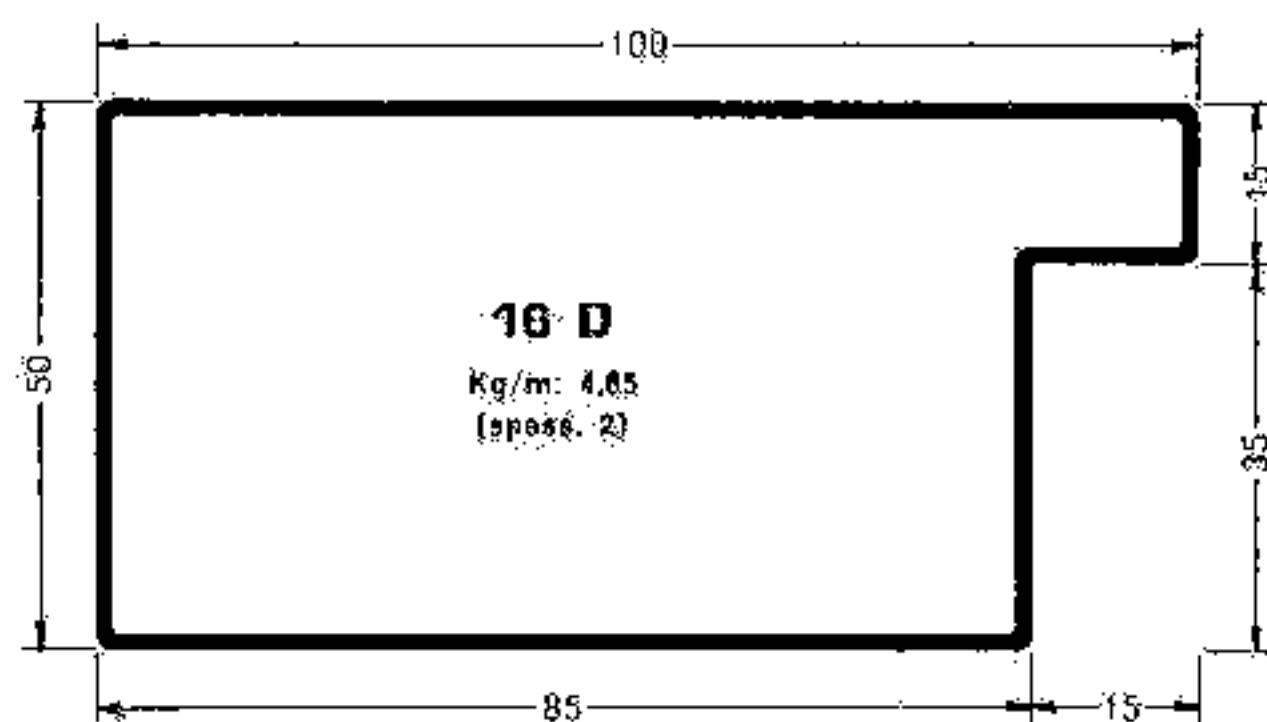
# TUBOLARI PER PORTE A LIBRO

spessore mm 1,5

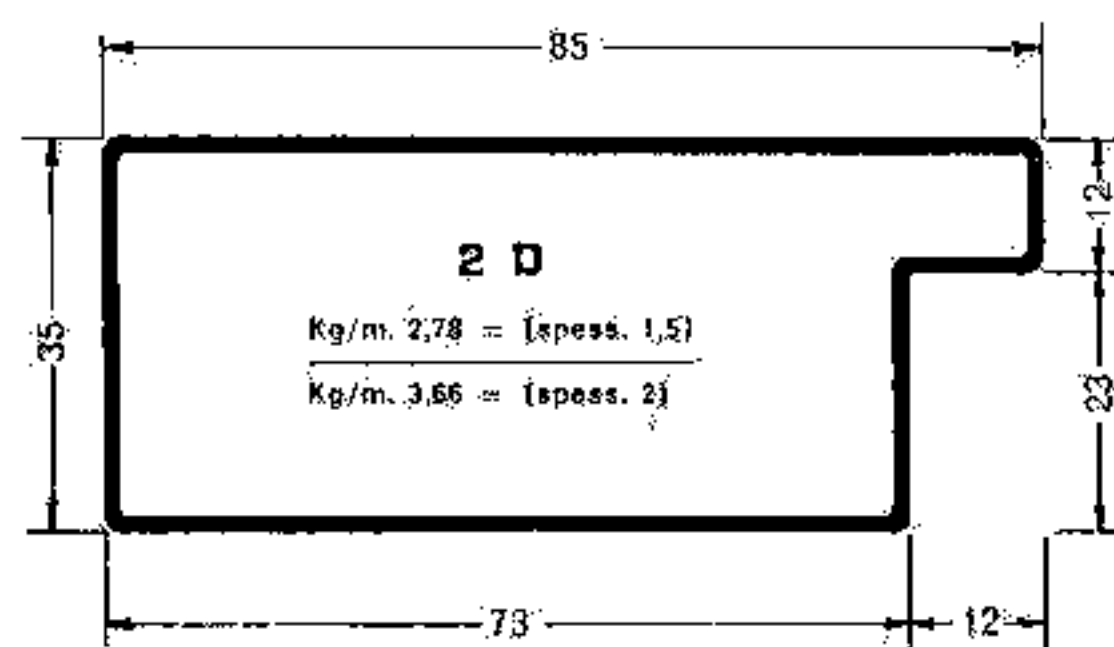


# TUBOLARI PER PORTONI

spessore mm 2



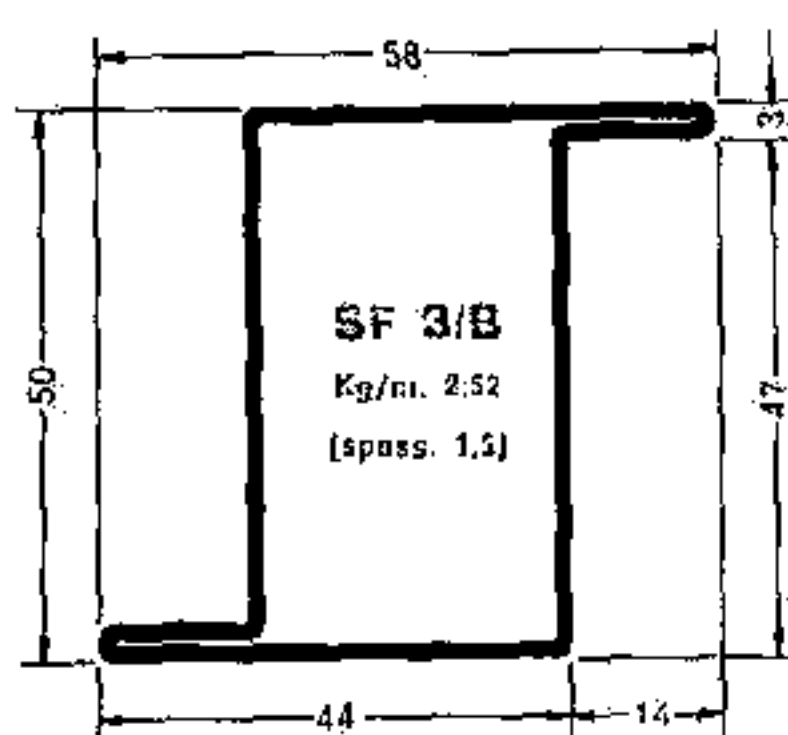
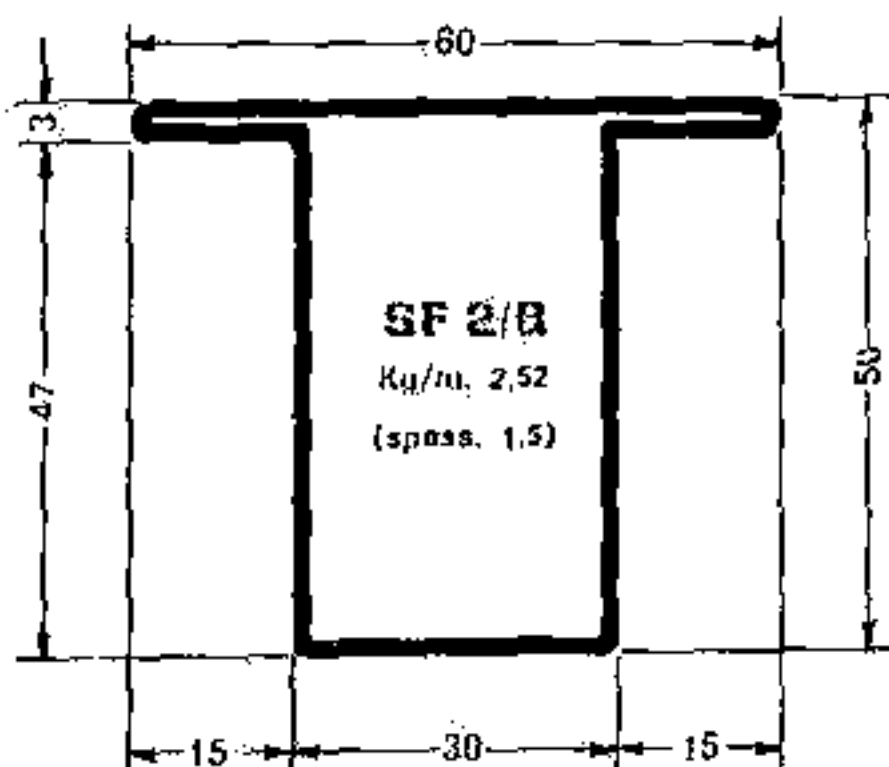
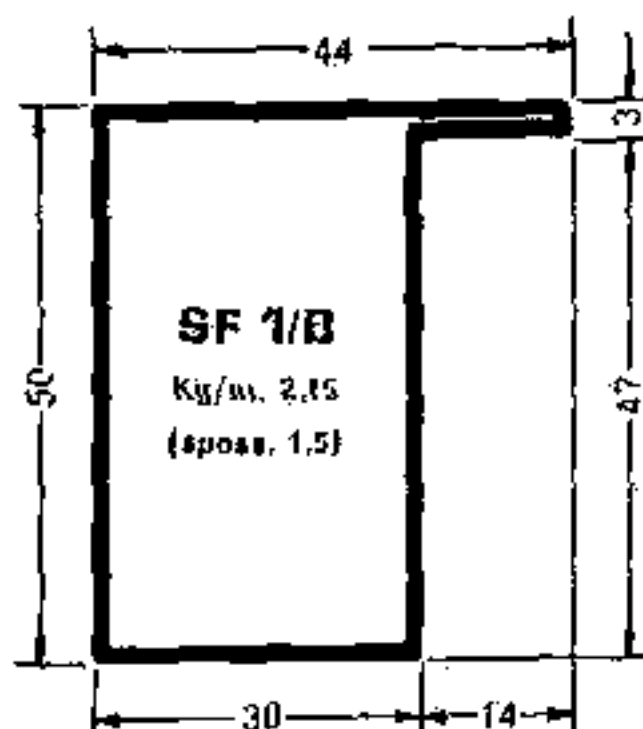
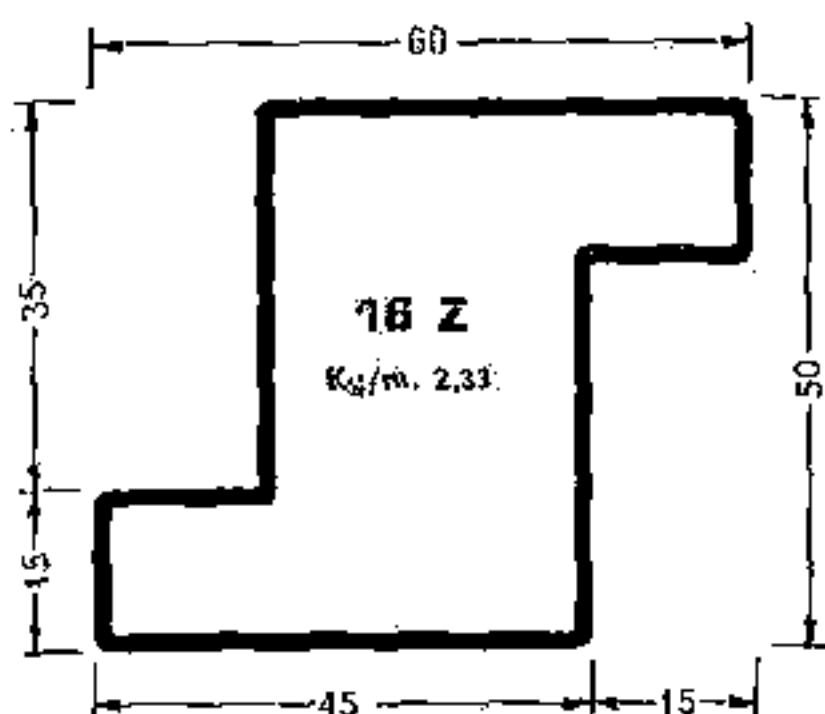
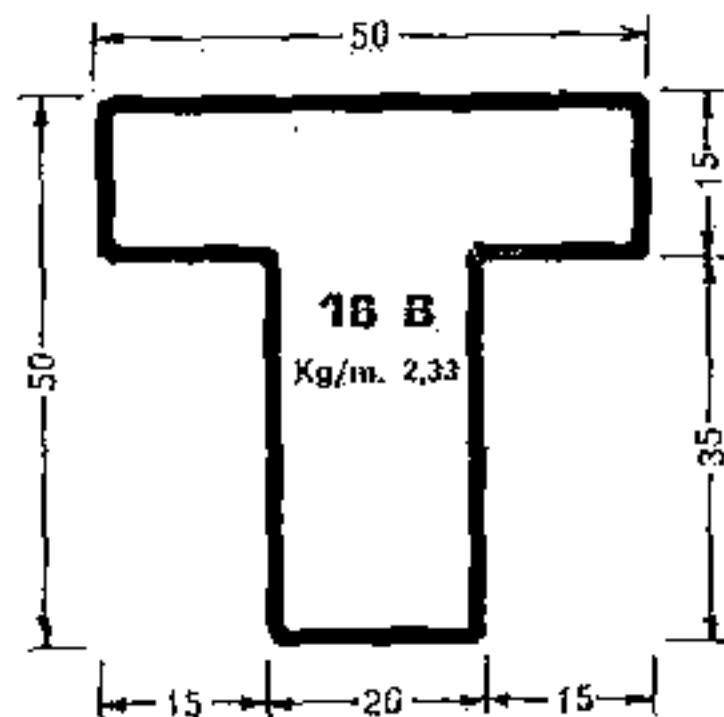
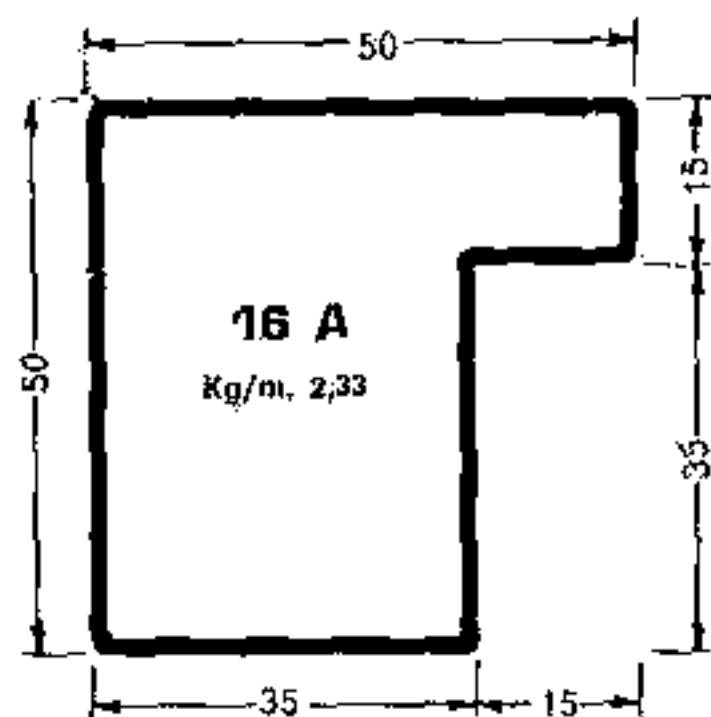
spessore mm 1,5





# TUBOLARI PER PORTONI

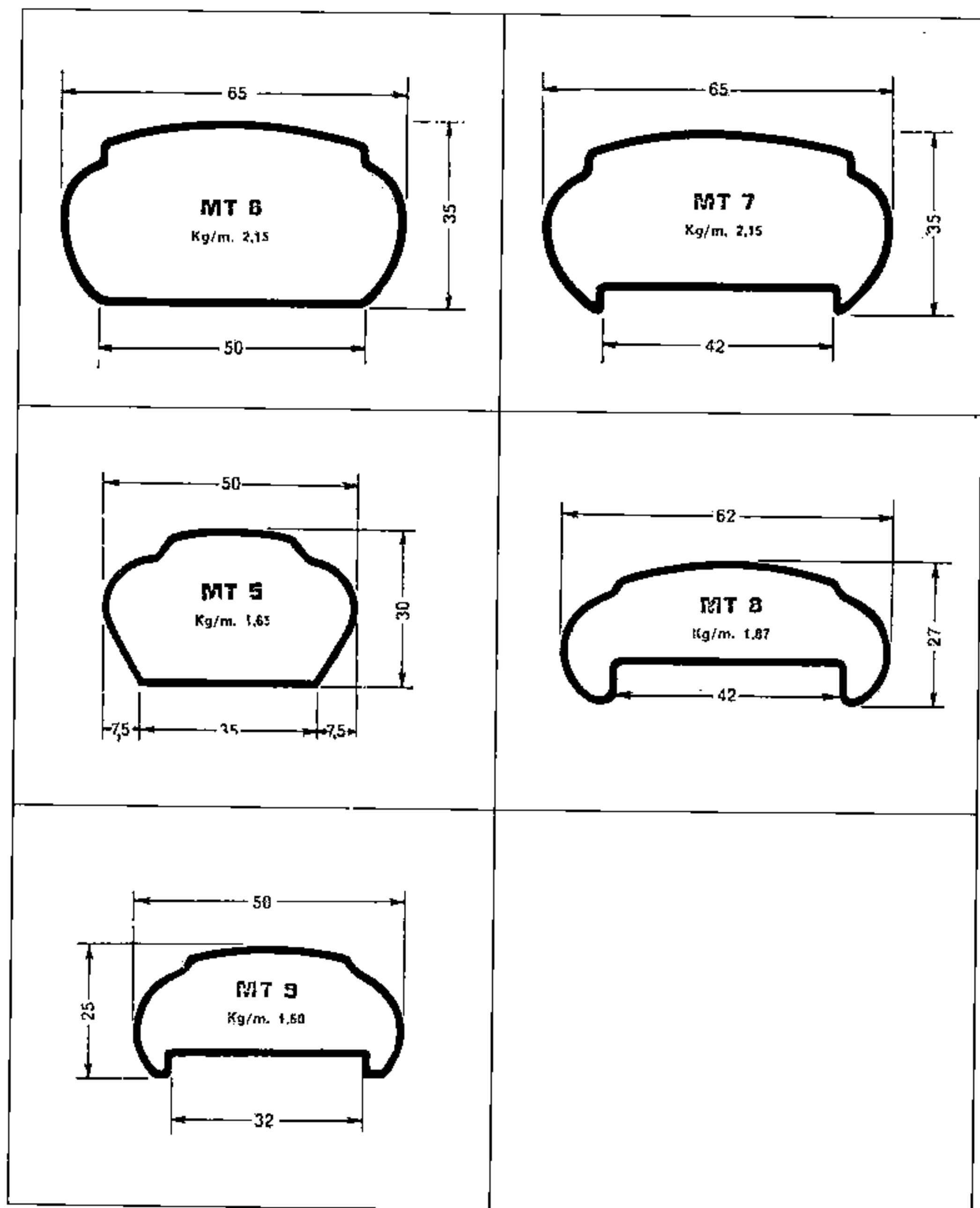
spessore mm 1,5





# TUBOLARI MANCORRENTI

(corrimano) spessore mm 1,5



Spessori e dimensioni in mm

Pesi riferiti in kg per metro







# PROFILI APERTI

I **profili aperti** rappresentati nelle tabelle che seguono sono i tipi più correnti. Tuttavia, su richiesta, si possono fornire gli stessi con misure diverse da quelle riportate e con spessori fino a 12 mm.





## U A LATI UGUALI

| dimensioni<br>A x B x A<br>mm | spessore  |      |      |      |       |       |       |
|-------------------------------|-----------|------|------|------|-------|-------|-------|
|                               | 1,5       | 2    | 2,5  | 3    | 4     | 5     | 6     |
|                               | peso kg/m |      |      |      |       |       |       |
| 8 x 8 x 8                     | 0,21      |      |      |      |       |       |       |
| 10 x 10 x 10                  | 0,29      |      |      |      |       |       |       |
| 12 x 12 x 12                  | 0,36      |      |      |      |       |       |       |
| 14 x 14 x 14                  | 0,43      |      |      |      |       |       |       |
| 15 x 15 x 15                  | 0,47      | 0,59 |      |      |       |       |       |
| 20 x 20 x 20                  | 0,65      | 0,83 |      |      |       |       |       |
| 22 x 22 x 22                  | 0,72      | 0,93 |      |      |       |       |       |
| 25 x 25 x 25                  | 0,83      | 1,07 | 1,30 | 1,49 |       |       |       |
| 30 x 30 x 30                  | 1,00      | 1,31 | 1,60 | 1,87 |       |       |       |
| 35 x 35 x 35                  | 1,19      | 1,55 | 1,90 | 2,23 |       |       |       |
| 40 x 40 x 40                  | 1,37      | 1,79 | 2,20 | 2,59 | 3,33  |       |       |
| 45 x 45 x 45                  |           | 2,07 | 2,50 | 2,95 | 3,81  |       |       |
| 50 x 50 x 50                  |           | 2,28 | 2,80 | 3,31 | 4,29  | 5,40  |       |
| 60 x 60 x 60                  |           | 2,76 | 3,40 | 4,04 | 5,25  | 6,56  |       |
| 70 x 70 x 70                  |           |      | 4,00 | 4,76 | 6,21  | 7,76  |       |
| 80 x 80 x 80                  |           |      |      | 5,48 | 7,11  | 8,89  |       |
| 90 x 90 x 90                  |           |      |      | 6,20 | 8,13  | 10,16 |       |
| 100 x 100 x 100               |           |      |      | 6,92 | 9,01  | 11,26 | 13,30 |
| 120 x 120 x 120               |           |      |      | 8,25 | 11,00 | 13,60 | 16,12 |





# U AD ALI UGUALI

| dimensioni<br>A x B x A<br>mm | spessore in mm |      |      |
|-------------------------------|----------------|------|------|
|                               | 1,5            | 2    | 3    |
|                               | kg/ml          |      |      |
| 10 x 15 x 10                  | 0,35           |      |      |
| 20 x 15 x 20                  | 0,59           | 0,77 |      |
| 10 x 20 x 10                  | 0,41           | 0,54 |      |
| 20 x 22 x 20                  | 0,68           | 0,90 |      |
| 30 x 22 x 30                  | 0,91           | 1,19 |      |
| 12 x 25 x 12                  | 0,52           | 0,68 |      |
| 30 x 25 x 30                  | 0,95           | 1,24 | 1,76 |
| 40 x 25 x 40                  | 1,18           | 1,55 | 2,24 |
| 15 x 30 x 15                  | 0,64           | 0,85 |      |
| 20 x 30 x 20                  | 0,77           | 1,00 | 1,43 |
| 25 x 30 x 25                  | 0,89           | 1,16 | 1,67 |

| dimensioni<br>A x B x A<br>mm | spessore in mm |       |       |       |       |
|-------------------------------|----------------|-------|-------|-------|-------|
|                               | 2              | 3     | 4     | 5     | 6     |
|                               | kg/ml          |       |       |       |       |
| 35 x 30 x 35                  | 1,40           | 2,00  |       |       |       |
| 40 x 30 x 40                  | 1,64           | 2,43  | 3,18  |       |       |
| 17 x 35 x 17                  | 0,99           |       |       |       |       |
| 20 x 35 x 20                  | 1,08           | 1,53  |       |       |       |
| 30 x 35 x 30                  | 1,40           | 2,00  |       |       |       |
| 40 x 35 x 40                  | 1,71           | 2,50  |       |       |       |
| 20 x 40 x 20                  | 1,16           | 1,67  |       |       |       |
| 30 x 40 x 30                  | 1,47           | 2,14  |       |       |       |
| 35 x 40 x 35                  | 1,64           | 2,43  | 3,18  |       |       |
| 20 x 50 x 20                  | 1,33           | 1,96  |       |       |       |
| 25 x 50 x 25                  | 1,47           | 2,14  |       |       |       |
| 30 x 50 x 30                  | 1,64           | 2,43  | 3,18  |       |       |
| 40 x 50 x 40                  | 1,94           | 2,85  | 3,70  |       |       |
| 20 x 60 x 20                  | 1,47           | 2,14  |       |       |       |
| 30 x 60 x 30                  | 1,87           | 2,61  | 3,39  | 4,12  |       |
| 40 x 60 x 40                  | 2,10           | 3,08  | 4,01  | 4,90  |       |
| 50 x 65 x 50                  | 2,41           | 3,58  | 4,73  | 5,84  |       |
| 30 x 70 x 30                  | 1,94           | 2,85  | 3,70  |       |       |
| 35 x 70 x 35                  | 2,10           | 3,08  | 4,01  | 4,90  |       |
| 45 x 70 x 45                  | 2,41           | 3,58  | 4,73  | 5,84  |       |
| 40 x 80 x 40                  | 2,41           | 3,58  | 4,73  | 5,84  |       |
| 50 x 80 x 50                  | 2,73           | 4,02  | 5,27  | 6,47  |       |
| 60 x 80 x 60                  | 3,04           | 4,50  | 5,90  | 7,26  |       |
| 40 x 90 x 40                  | 2,57           | 3,80  | 4,96  | 6,08  |       |
| 45 x 90 x 45                  | 2,73           | 4,02  | 5,27  | 6,47  |       |
| 30 x 100 x 30                 | 2,41           | 3,58  | 4,73  | 5,84  |       |
| 40 x 100 x 40                 | 2,73           | 4,02  | 5,27  | 6,47  |       |
| 50 x 100 x 50                 | 3,04           | 4,50  | 5,90  | 7,26  |       |
| 60 x 100 x 60                 | 3,36           | 4,96  | 6,53  | 8,04  |       |
| 50 x 120 x 50                 | 3,36           | 4,96  | 6,53  | 8,04  | 9,41  |
| 55 x 120 x 55                 |                | 5,20  | 6,84  | 8,43  | 9,84  |
| 60 x 120 x 60                 |                | 5,44  | 7,15  | 8,83  | 10,37 |
| 60 x 140 x 60                 |                | 5,91  | 7,78  | 9,61  | 11,32 |
| 50 x 150 x 50                 |                | 5,71  | 7,49  | 9,20  | 10,85 |
| 60 x 160 x 60                 |                | 6,43  | 8,45  | 10,40 | 12,29 |
| 80 x 180 x 80                 |                | 7,87  | 10,37 | 12,80 | 15,17 |
| 100 x 200 x 100               |                | 9,31  | 12,29 | 15,20 | 18,05 |
| 100 x 220 x 100               |                | 9,79  | 12,93 | 16,00 | 19,00 |
| 100 x 250 x 100               |                | 10,51 | 13,89 | 17,20 | 20,45 |
| 100 x 300 x 100               |                | 11,71 | 15,49 | 19,20 | 22,85 |

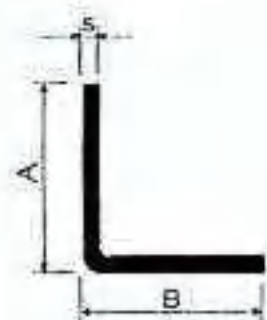




# ANGOLARI A LATI INEGUALI

| dimensioni<br>B x A<br>mm | spessore in mm |      |      |      |      |   |   |   |
|---------------------------|----------------|------|------|------|------|---|---|---|
|                           | 1,5            | 2    | 2,5  | 3    | 4    | 5 | 6 | 7 |
|                           | peso kg/m      |      |      |      |      |   |   |   |
| 10 x 20                   | 0,33           |      |      |      |      |   |   |   |
| 12 x 25                   | 0,42           | 0,55 |      |      |      |   |   |   |
| 15 x 25                   | 0,45           | 0,59 |      |      |      |   |   |   |
| 15 x 30                   | 0,51           | 0,66 | 0,83 | 0,99 |      |   |   |   |
| 15 x 40                   |                | 0,83 | 1,03 | 1,22 |      |   |   |   |
| 20 x 25                   |                | 0,66 | 0,83 | 0,99 |      |   |   |   |
| 20 x 30                   |                | 0,75 | 0,93 | 1,10 |      |   |   |   |
| 20 x 35                   |                | 0,83 | 1,03 | 1,22 |      |   |   |   |
| 20 x 40                   |                | 0,94 | 1,14 | 1,34 |      |   |   |   |
| 20 x 45                   |                | 0,99 | 1,22 | 1,46 |      |   |   |   |
| 20 x 50                   |                | 1,06 | 1,32 | 1,56 |      |   |   |   |
| 20 x 60                   |                | 1,22 | 1,52 | 1,81 |      |   |   |   |
| 25 x 30                   |                | 0,83 | 1,03 | 1,22 |      |   |   |   |
| 25 x 40                   |                | 0,99 | 1,22 | 1,46 |      |   |   |   |
| 25 x 50                   |                | 1,14 | 1,42 | 1,70 |      |   |   |   |
| 30 x 40                   |                | 1,06 | 1,32 | 1,56 |      |   |   |   |
| 30 x 50                   |                | 1,22 | 1,52 | 1,81 |      |   |   |   |
| 30 x 60                   |                |      | 1,72 | 2,04 |      |   |   |   |
| 30 x 80                   |                |      |      | 2,52 | 3,33 |   |   |   |
| 40 x 60                   |                |      |      | 2,28 | 3,01 |   |   |   |
| 40 x 80                   |                |      |      | 2,75 | 3,64 |   |   |   |
| 40 x 100                  |                |      |      | 3,22 | 4,27 |   |   |   |

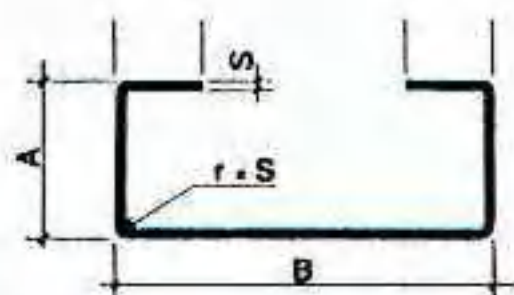




# ANGOLARI A LATI UGUALI

| dimensioni<br>B x A<br>mm | spessore in mm |      |      |      |      |       |       |       |
|---------------------------|----------------|------|------|------|------|-------|-------|-------|
|                           | 1,5            | 2    | 2,5  | 3    | 4    | 5     | 6     | 7     |
|                           | peso kg/m      |      |      |      |      |       |       |       |
| 10 x 10                   | 0,20           |      |      |      |      |       |       |       |
| 15 x 15                   | 0,31           | 0,40 |      |      |      |       |       |       |
| 20 x 20                   | 0,43           | 0,56 | 0,69 |      |      |       |       |       |
| 25 x 25                   | 0,55           | 0,72 | 0,90 | 1,03 |      |       |       |       |
| 30 x 30                   | 0,67           | 0,88 | 1,10 | 1,25 |      |       |       |       |
| 35 x 35                   |                | 1,03 | 1,30 | 1,53 |      |       |       |       |
| 40 x 40                   |                | 1,20 | 1,45 | 1,75 |      |       |       |       |
| 45 x 45                   |                | 1,35 | 1,69 | 2,00 | 2,63 |       |       |       |
| 50 x 50                   |                | 1,51 | 1,87 | 2,20 | 2,95 | 3,65  |       |       |
| 60 x 60                   |                |      | 2,27 | 2,70 | 3,50 | 4,40  | 5,22  |       |
| 70 x 70                   |                |      |      | 3,15 | 4,15 | 5,22  | 6,68  |       |
| 80 x 80                   |                |      |      | 3,65 | 4,76 | 6,75  | 7,16  |       |
| 90 x 90                   |                |      |      | 4,12 | 5,46 | 6,80  | 8,10  |       |
| 100 x 100                 |                |      |      | 4,60 | 6,00 | 7,45  | 8,85  | 10,22 |
| 120 x 120                 |                |      |      |      | 7,34 | 9,00  | 10,70 | 12,40 |
| 150 x 150                 |                |      |      |      |      | 11,40 | 13,55 | 15,70 |

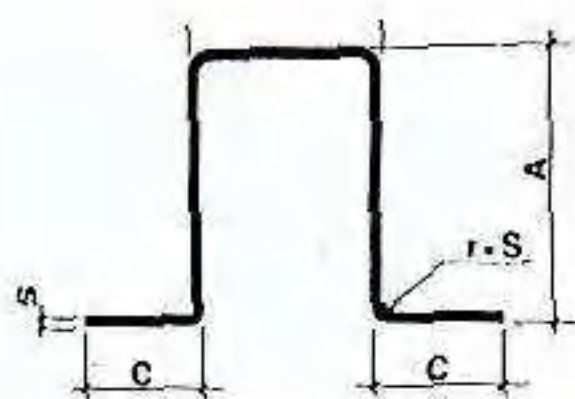




# PROFILATI APERTI A “C”

| dimensioni<br>C x A x B<br>mm | spessore  |      |       |       |       |   |
|-------------------------------|-----------|------|-------|-------|-------|---|
|                               | 1,5       | 2    | 2,5   | 3     | 4     | 5 |
|                               | peso kg/m |      |       |       |       |   |
| 10 x 15 x 40                  | 0,945     |      |       |       |       |   |
| 7,5 x 20 x 30                 | 0,883     |      |       |       |       |   |
| 10 x 20 x 40                  | 1,090     | 1,35 |       |       |       |   |
| 5 x 25 x 25                   | 0,883     |      |       |       |       |   |
| 10 x 25 x 50                  | 1,290     | 1,66 |       |       |       |   |
| 10 x 30 x 40                  | 1,290     | 1,66 |       |       |       |   |
| 10 x 30 x 50                  | 1,410     | 1,82 |       |       |       |   |
| 5 x 35 x 15                   | 1,000     |      |       |       |       |   |
| 5 x 35 x 35                   | 1,230     |      |       |       |       |   |
| 10 x 35 x 50                  | 1,530     | 1,97 |       |       |       |   |
| 15 x 35 x 80                  | 2,000     | 2,60 |       |       |       |   |
| 10 x 40 x 40                  | 1,530     | 1,98 | 2,394 | 2,826 |       |   |
| 15 x 40 x 50                  | 1,760     | 2,29 | 2,78  | 3,29  |       |   |
| 15 x 40 x 80                  | 2,120     | 2,76 | 3,375 | 4,00  |       |   |
| 15 x 40 x 100                 | 2,350     | 3,07 | 3,76  | 4,47  |       |   |
| 15 x 40 x 120                 | 2,590     | 3,39 | 4,16  | 4,94  |       |   |
| 20 x 40 x 80                  | 2,280     | 2,97 | 3,64  | 4,30  |       |   |
| 20 x 40 x 120                 | 2,76      | 3,61 | 4,44  | 5,28  |       |   |
| 15 x 45 x 45                  | 1,86      | 2,41 | 2,94  | 3,48  |       |   |
| 15 x 45 x 50                  | 1,92      | 2,49 | 3,04  | 3,60  |       |   |
| 15 x 45 x 60                  | 2,08      | 2,65 | 3,24  | 3,84  |       |   |
| 20 x 45 x 100                 | 2,69      | 3,45 | 4,24  | 5,04  |       |   |
| 15 x 50 x 50                  | 2,08      | 2,65 | 3,24  | 3,84  |       |   |
| 15 x 50 x 80                  | 2,44      | 3,13 | 3,84  | 4,56  |       |   |
| 15 x 50 x 100                 | 2,69      | 3,45 | 4,24  | 5,04  |       |   |
| 30 x 50 x 150                 |           | 4,73 | 5,84  | 6,96  |       |   |
| 30 x 50 x 200                 |           | 5,53 | 6,84  | 8,16  |       |   |
| 15 x 60 x 40                  | 2,16      | 2,81 | 3,44  | 4,08  |       |   |
| 30 x 60 x 120                 | 3,50      | 4,57 | 5,65  | 6,72  | 8,73  |   |
| 30 x 60 x 150                 | 3,85      | 5,05 | 6,25  | 7,45  | 9,69  |   |
| 30 x 60 x 200                 | 4,44      | 5,85 | 7,24  | 8,60  | 11,29 |   |
| 20 x 70 x 50                  | 2,65      | 3,47 | 4,24  | 5,04  | 6,49  |   |
| 30 x 70 x 100                 | 3,48      | 4,57 | 5,64  | 6,72  | 8,73  |   |
| 30 x 70 x 150                 | 4,08      | 5,37 | 6,64  | 7,92  | 10,33 |   |
| 30 x 70 x 200                 | 4,68      | 6,17 | 7,64  | 9,12  | 11,93 |   |
| 20 x 80 x 40                  | 2,76      | 3,61 | 4,44  | 5,28  | 6,84  |   |
| 20 x 80 x 80                  | 3,21      | 4,25 | 5,24  | 6,24  | 8,09  |   |
| 30 x 80 x 100                 | 3,72      | 4,89 | 6,04  | 7,20  | 9,37  |   |
| 30 x 80 x 150                 | 4,32      | 5,69 | 7,04  | 8,40  | 10,97 |   |
| 30 x 80 x 200                 | 4,98      | 6,49 | 8,04  | 9,60  | 12,57 |   |
| 30 x 100 x 60                 | 3,77      | 4,89 | 6,04  | 7,20  | 9,37  |   |
| 30 x 100 x 100                | 4,28      | 5,53 | 6,84  | 8,16  | 10,65 |   |
| 30 x 100 x 150                | 4,85      | 6,33 | 7,84  | 9,36  | 12,25 |   |
| 30 x 100 x 200                | 5,40      | 7,13 | 8,84  | 10,56 | 13,85 |   |
| 30 x 100 x 300                | 6,60      | 8,80 | 10,64 | 12,90 | 17,05 |   |

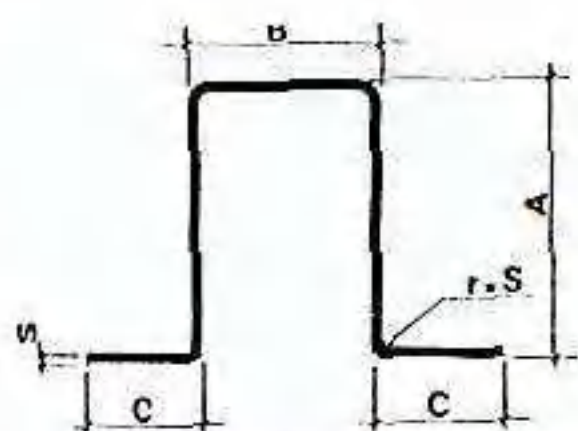




# PROFILI APERTI OMEGA SIMMETRICI

| dimensioni<br>C x A x B<br>mm | spessore  |      |      |      |   |   |   |
|-------------------------------|-----------|------|------|------|---|---|---|
|                               | 1,5       | 2    | 2,5  | 3    | 4 | 5 | 6 |
|                               | peso kg/m |      |      |      |   |   |   |
| 10 x 15 x 15                  | 0,636     |      |      |      |   |   |   |
| 10 x 15 x 30                  | 0,816     | 1,02 |      |      |   |   |   |
| 10 x 20 x 20                  | 8,16      |      |      |      |   |   |   |
| 10 x 25 x 15                  | 0,876     | 1,10 |      |      |   |   |   |
| 10 x 25 x 50                  | 1,300     | 1,66 |      |      |   |   |   |
| 15 x 30 x 15                  | 1,110     | 1,42 |      |      |   |   |   |
| 15 x 30 x 30                  | 1,300     | 1,66 |      |      |   |   |   |
| 15 x 30 x 50                  | 1,540     | 1,98 |      |      |   |   |   |
| 15 x 35 x 15                  | 1,240     | 1,58 |      |      |   |   |   |
| 15 x 35 x 35                  | 1,480     | 1,90 |      |      |   |   |   |
| 20 x 35 x 20                  | 1,410     | 1,82 | 2,20 |      |   |   |   |
| 20 x 35 x 35                  | 1,600     | 2,06 | 2,50 | 3,20 |   |   |   |
| 20 x 35 x 50                  | 1,780     | 2,30 | 2,80 | 3,26 |   |   |   |
| 20 x 40 x 30                  | 1,660     | 2,14 | 2,60 | 3,02 |   |   |   |
| 25 x 40 x 25                  | 1,720     | 2,22 | 2,70 | 3,14 |   |   |   |
| 25 x 40 x 30                  | 1,780     | 2,30 | 2,80 | 3,26 |   |   |   |
| 25 x 40 x 40                  | 1,900     | 2,46 | 3,00 | 3,50 |   |   |   |
| 20 x 45 x 20                  | 1,660     | 2,14 | 2,60 |      |   |   |   |
| 20 x 45 x 30                  | 1,780     | 2,30 | 2,80 | 3,26 |   |   |   |
| 25 x 45 x 45                  | 2,080     | 2,70 | 3,30 | 3,86 |   |   |   |
| 20 x 50 x 25                  | 1,840     | 2,38 | 2,90 |      |   |   |   |
| 20 x 50 x 30                  | 1,900     | 2,46 | 3,00 | 3,50 |   |   |   |
| 20 x 50 x 50                  | 2,130     | 2,78 | 3,40 | 3,98 |   |   |   |
| 25 x 50 x 30                  | 2,010     | 2,62 | 3,20 | 3,75 |   |   |   |
| 25 x 50 x 40                  | 2,140     | 2,78 | 3,40 | 3,98 |   |   |   |
| 30 x 50 x 25                  | 2,07      | 2,70 | 3,30 |      |   |   |   |
| 30 x 50 x 30                  | 2,13      | 2,78 | 3,40 | 3,98 |   |   |   |





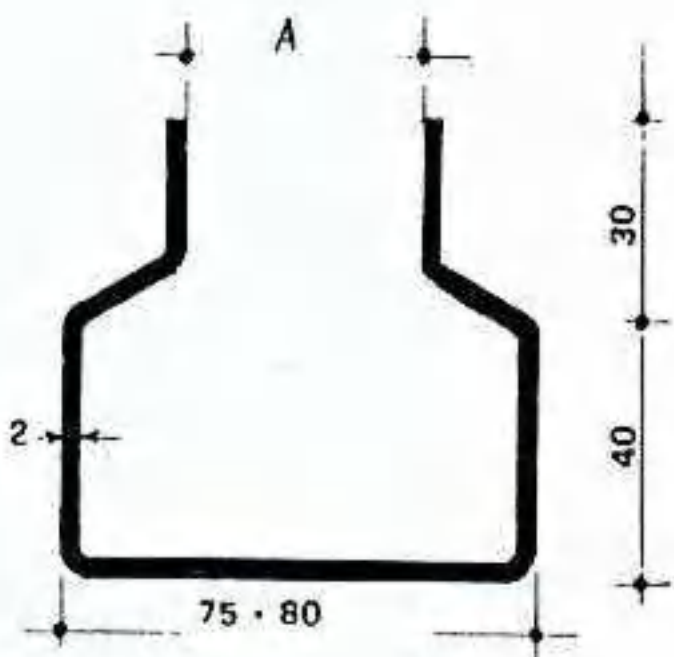
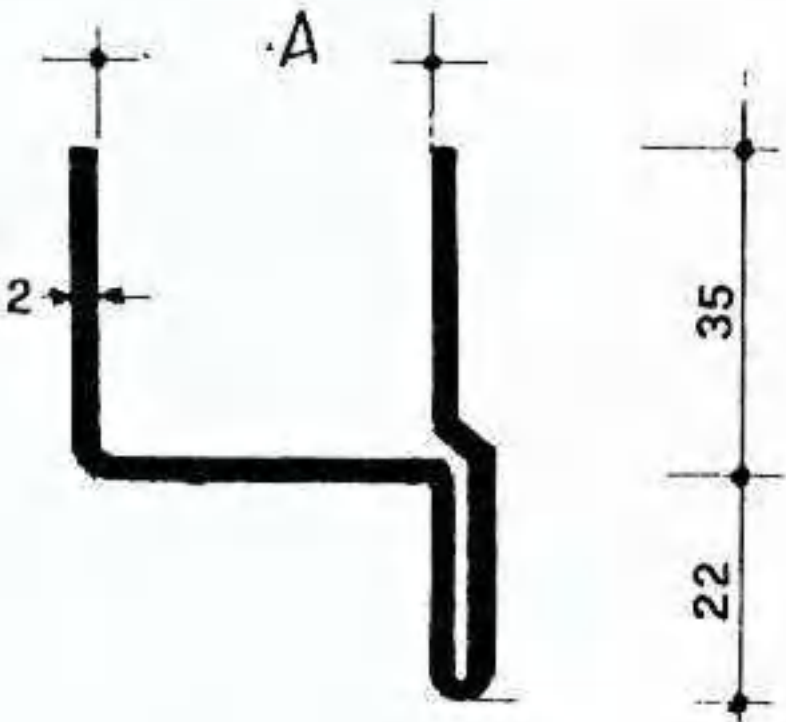
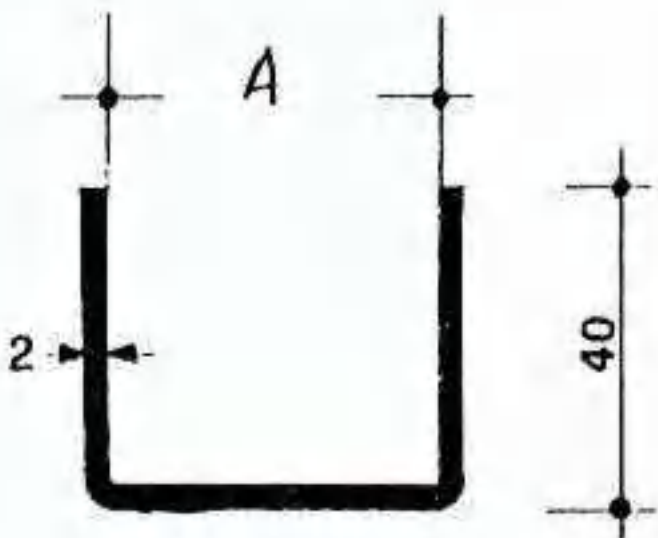
# PROFILI APERTI

## OMEGA SIMMETRICI

| dimensioni<br>C x A x B<br>mm | spessore  |      |      |       |       |       |   |
|-------------------------------|-----------|------|------|-------|-------|-------|---|
|                               | 1,5       | 2    | 2,5  | 3     | 4     | 5     | 6 |
|                               | peso kg/m |      |      |       |       |       |   |
| 20 x 60 x 30                  | 2,13      | 2,78 | 3,40 | 3,98  |       |       |   |
| 20 x 60 x 40                  | 2,26      | 2,95 | 3,60 | 4,22  |       |       |   |
| 25 x 60 x 30                  | 2,26      | 2,95 | 3,60 | 4,22  |       |       |   |
| 25 x 60 x 40                  | 2,38      | 3,10 | 3,80 | 4,46  |       |       |   |
| 30 x 60 x 30                  | 2,38      | 3,10 | 3,80 | 4,46  |       |       |   |
| 30 x 60 x 40                  | 2,50      | 3,26 | 4,00 | 4,70  |       |       |   |
| 20 x 70 x 25                  | 2,31      | 3,02 | 3,70 | 4,34  |       |       |   |
| 20 x 70 x 40                  | 2,50      | 3,26 | 4,00 | 4,70  |       |       |   |
| 20 x 70 x 50                  | 2,61      | 3,42 | 4,20 | 4,95  |       |       |   |
| 25 x 70 x 40                  | 2,61      | 3,42 | 4,20 | 4,95  |       |       |   |
| 25 x 70 x 50                  | 2,73      | 3,58 | 4,40 | 5,18  |       |       |   |
| 30 x 70 x 30                  |           | 3,42 | 4,20 | 4,95  |       |       |   |
| 30 x 70 x 50                  |           | 3,74 | 4,60 | 5,42  |       |       |   |
| 20 x 75 x 50                  |           | 3,58 | 4,40 | 5,18  |       |       |   |
| 25 x 75 x 50                  |           | 3,74 | 4,60 | 5,42  |       |       |   |
| 30 x 75 x 50                  |           | 3,90 | 4,80 | 5,66  |       |       |   |
| 20 x 80 x 40                  |           | 3,58 | 4,40 | 5,18  |       |       |   |
| 20 x 80 x 50                  |           | 3,74 | 4,60 | 5,42  |       |       |   |
| 25 x 80 x 40                  |           | 3,74 | 4,60 | 5,42  |       |       |   |
| 25 x 80 x 50                  |           | 3,90 | 4,80 | 5,66  |       |       |   |
| 30 x 80 x 40                  |           | 3,90 | 4,80 | 5,66  |       |       |   |
| 30 x 80 x 50                  |           | 4,06 | 5,00 | 5,90  |       |       |   |
| 15 x 100 x 30                 |           | 3,90 | 4,80 | 5,66  |       |       |   |
| 25 x 100 x 40                 |           | 4,38 | 5,40 | 6,38  |       |       |   |
| 25 x 100 x 50                 |           | 4,54 | 5,60 | 6,62  |       |       |   |
| 25 x 100 x 60                 |           | 4,70 | 5,80 | 6,84  |       |       |   |
| 30 x 100 x 40                 |           | 4,54 | 5,60 | 6,62  |       |       |   |
| 30 x 100 x 50                 |           | 4,70 | 5,80 | 6,84  |       |       |   |
| 30 x 100 x 60                 |           | 4,86 | 6,00 | 7,10  |       |       |   |
| 40 x 100 x 40                 |           | 4,86 | 6,00 | 7,10  |       |       |   |
| 30 x 110 x 50                 |           | 5,02 | 6,20 | 7,34  |       |       |   |
| 30 x 120 x 50                 |           | 5,34 | 6,60 | 7,82  | 10,18 |       |   |
| 30 x 120 x 60                 |           | 5,50 | 6,80 | 8,06  | 10,50 |       |   |
| 40 x 120 x 80                 |           | 6,14 | 7,60 | 9,03  | 11,77 |       |   |
| 30 x 150 x 80                 |           | 6,78 | 8,40 | 9,98  | 13,06 | 16,00 |   |
| 40 x 150 x 80                 |           | 7,10 | 8,80 | 10,46 | 13,70 | 16,80 |   |
| 40 x 150 x 110                |           | 7,58 | 9,40 | 11,18 | 14,66 | 18,00 |   |

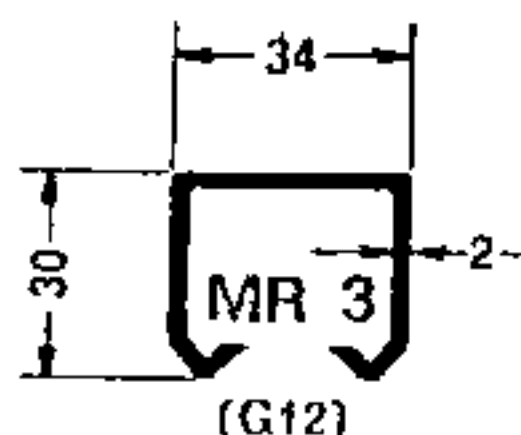
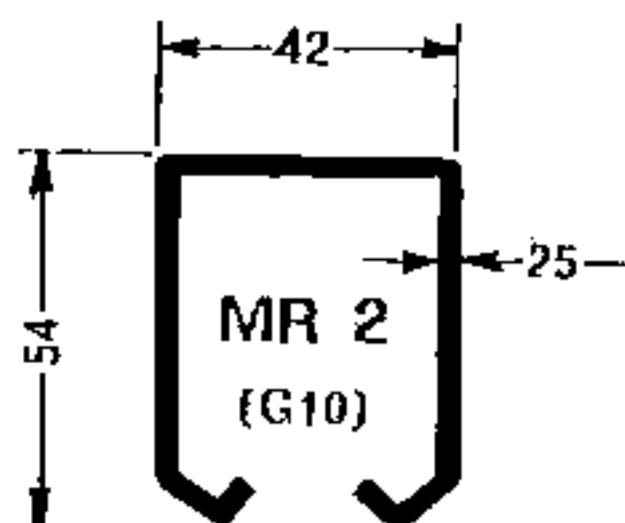
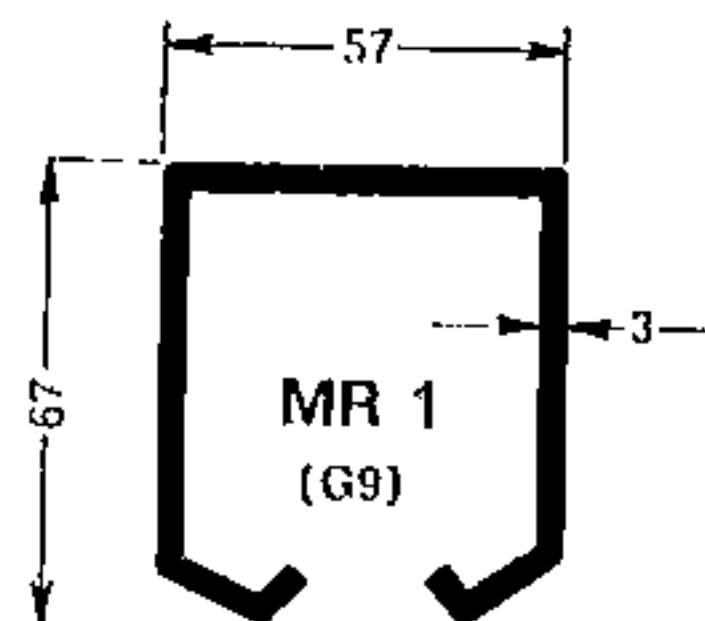


# PROFILI PER PANNELLI POLIURETANICI

|                                                                                     |                                                                                                                                                          |
|-------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------|
|   | <p><b>SERIE DI PROFILATI ZINCATI<br/>PER PANNELLI POLIURETANICI</b></p> <p>A = 31 - 36 - 41</p> <p>- PROFILO PER PORTONI<br/>Peso Kg. 3,6 ca. al mt.</p> |
|  | <p>A = 31 - 36 - 41</p> <p>- PROFILO BATTENTE<br/>Peso Kg. 2,5 ca. al mt.</p>                                                                            |
|  | <p>A = 31 - 36 - 41</p> <p>- PROFILO PORTAPANNELLO<br/>Peso Kg. 1,8 ca. al mt.</p>                                                                       |



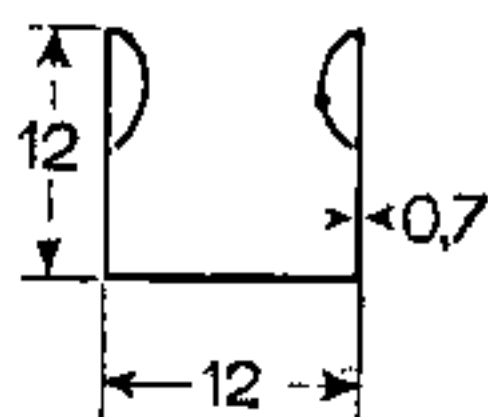
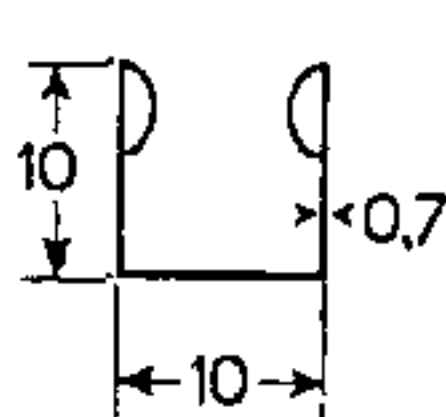
# MONOROTAIE E CARRELLI



Tipo per carrelli grandi  
peso al m kg 5,000

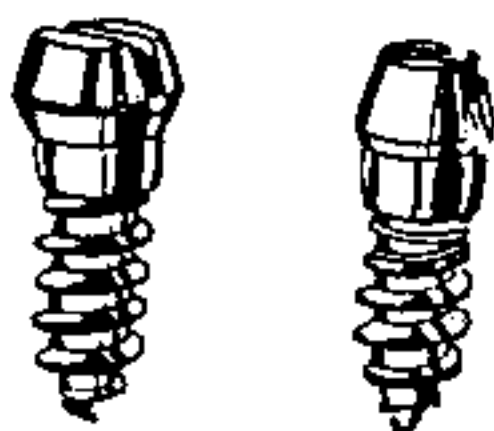
Tipo per carrelli piccoli  
peso al m kg 3,180

Tipo per carrelli mignon  
peso al m kg 1,774



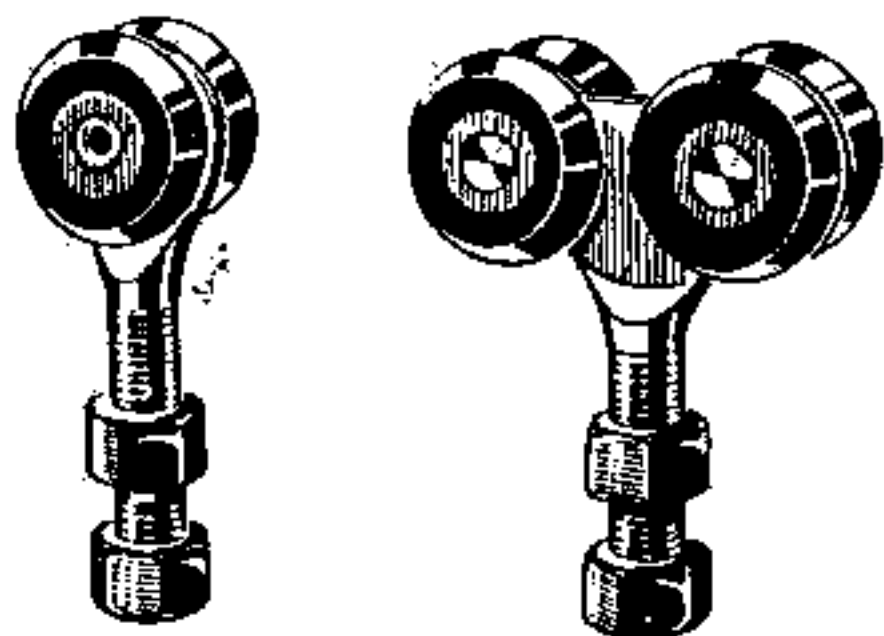
FERMAVETRO A SCATTO  
ZINCATO

peso m kg 0,203    peso m kg 0,240  
spessore m/m 0,7



Viti zincate autofilettanti  
per fermavetri a scatto  
per tipi 10 - 12

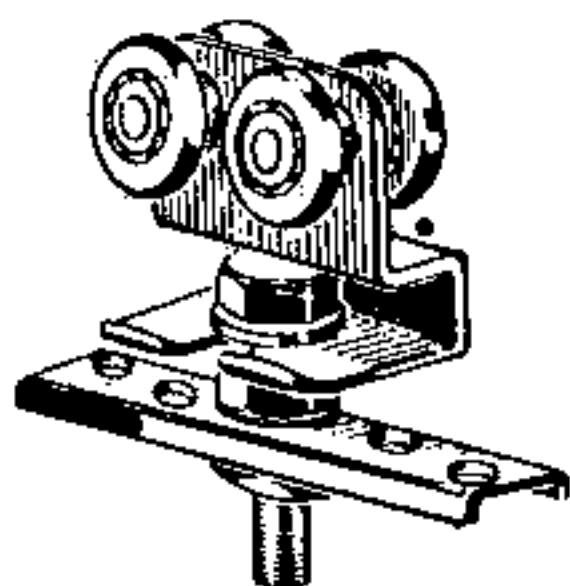




# **PORTATA MONOROTAIE** (con supporto ogni metro)

Carrelli grandi e piccoli a 2  
e 4 ruote  
2 RA 4 RA 2 RB 4 RB

Carrello  
tipo 2 r A = kg/m 400  
tipo 4 r B = kg/m 450  
tipo 2 r B = kg/m 200  
tipo 4 r A = kg/m 750



Carrelli Mignon a 4 ruote per MR 3  
4 RC



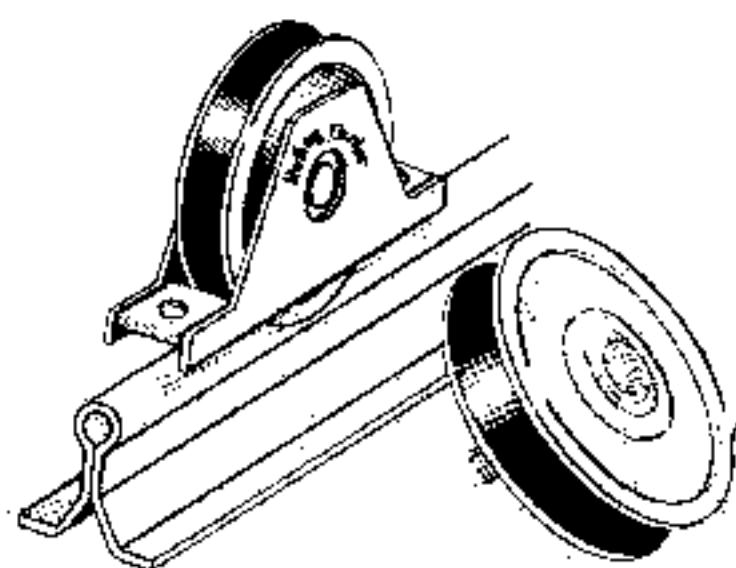
**STAFFA SNODATA**  
per carrelli ns / tipi  
MR 1  
MR 2



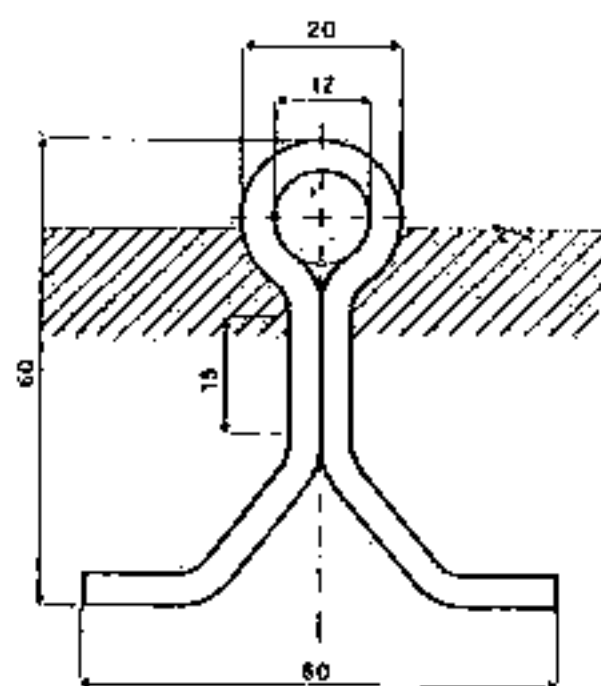
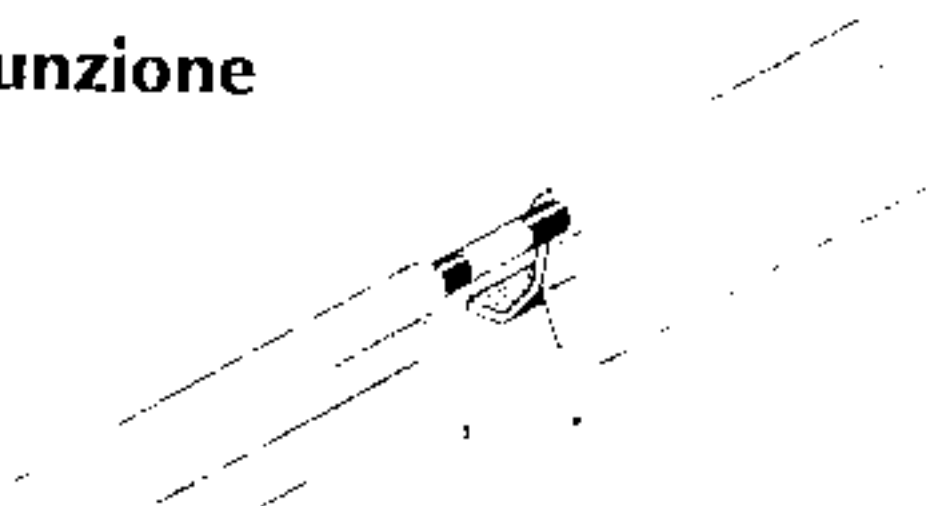
**GUIDA INFERIORE**  
ad oliva con rullo ottone  
Ø 10  
Ø 15  
Ø 25



# GUIDA ROLLING A PAVIMENTO



**tondo giunzione**





**LAMIERE**  
**RETI ONDULATE**



# LAMIERE A CALDO DA TRENO E DA COILS

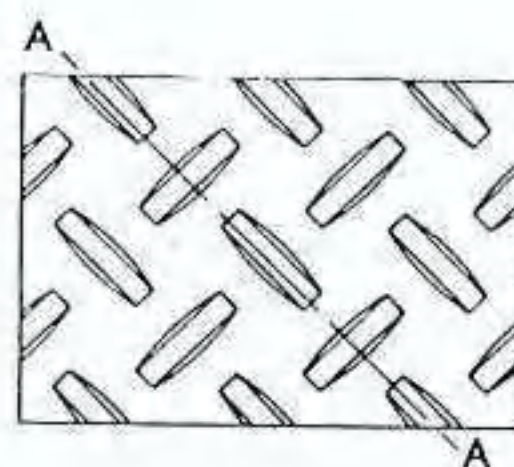
| spessore<br>mm | peso<br>kg/m <sup>2</sup> | spessore<br>mm | peso<br>kg/m <sup>2</sup> | spessore<br>mm | peso<br>kg/m <sup>2</sup> | spessore<br>mm | peso<br>kg/m <sup>2</sup> |
|----------------|---------------------------|----------------|---------------------------|----------------|---------------------------|----------------|---------------------------|
| 1,5            | 11,8                      | 17             | 133                       | 35             | 275                       | 75             | 589                       |
| 2              | 15,7                      | 18             | 141                       | 36             | 283                       | 80             | 628                       |
| 2,5            | 19,6                      | 19             | 149                       | 37             | 290                       | 85             | 667                       |
| 3              | 23,5                      | 20             | 157                       | 38             | 298                       | 90             | 707                       |
| 3,5            | 27,4                      | 21             | 165                       | 39             | 306                       | 95             | 746                       |
| 4              | 31,4                      | 22             | 173                       | 40             | 314                       | 100            | 785                       |
| 5              | 39                        | 23             | 181                       | 42             | 330                       | 105            | 824                       |
| 6              | 47                        | 24             | 188                       | 44             | 345                       | 110            | 864                       |
| 7              | 55                        | 25             | 196                       | 46             | 361                       | 115            | 903                       |
| 8              | 63                        | 26             | 204                       | 48             | 377                       | 120            | 942                       |
| 9              | 71                        | 27             | 212                       | 50             | 393                       | 130            | 1021                      |
| 10             | 79                        | 28             | 220                       | 52             | 408                       | 140            | 1099                      |
| 11             | 86                        | 29             | 228                       | 54             | 424                       | 150            | 1178                      |
| 12             | 94                        | 30             | 236                       | 56             | 440                       | 160            | 1256                      |
| 13             | 102                       | 31             | 243                       | 58             | 455                       | 170            | 1335                      |
| 14             | 110                       | 32             | 251                       | 60             | 471                       | 180            | 1413                      |
| 15             | 118                       | 33             | 259                       | 65             | 510                       | 190            | 1492                      |
| 16             | 126                       | 34             | 267                       | 70             | 550                       | 200            | 1670                      |

## LAMIERE DECAPATE

| spessore<br>mm | peso<br>kg/m <sup>2</sup> |
|----------------|---------------------------|
| 1,5            | 11,8                      |
| 1,8            | 14,2                      |
| 2              | 15,7                      |
| 2,5            | 19,6                      |
| 3              | 23,5                      |
| 3,5            | 27,4                      |
| 4              | 31,4                      |
| 5              | 39                        |
| 6              | 47                        |

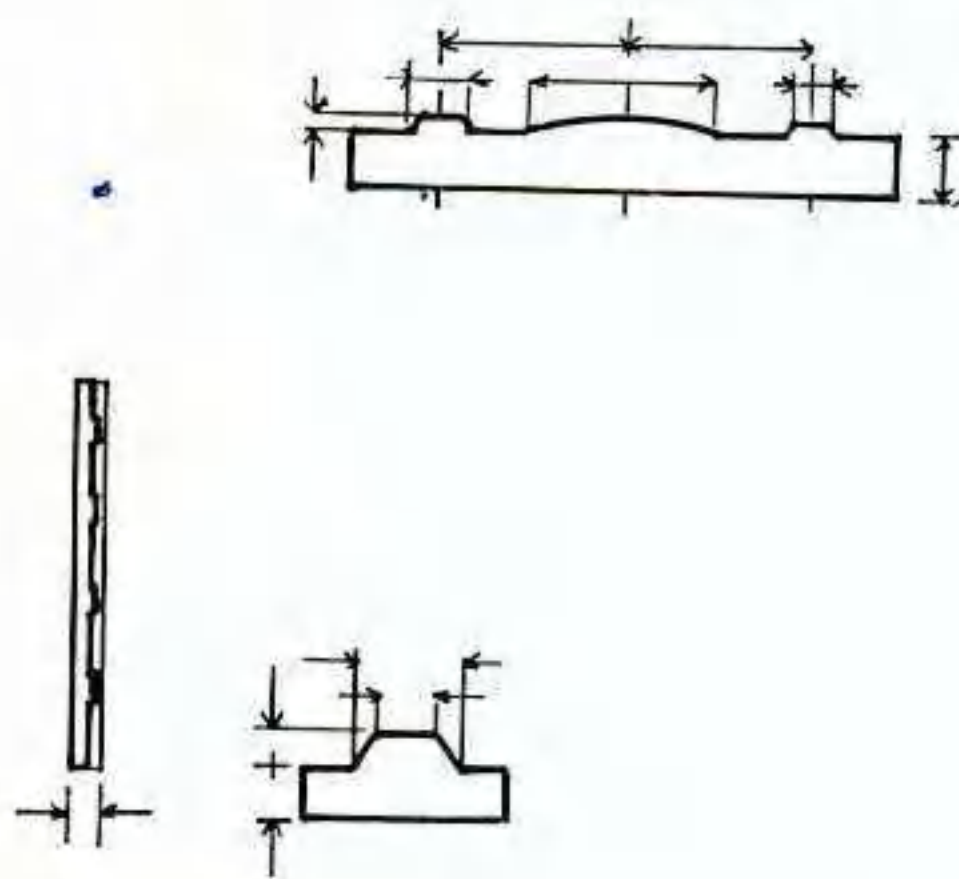
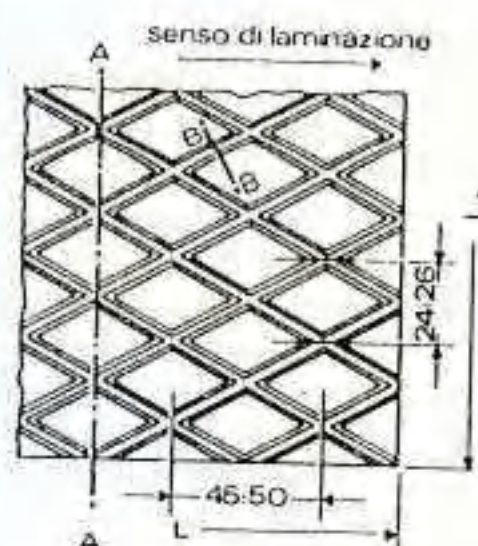
## LAMIERE BUGNATE

| spessore<br>mm | peso<br>kg/m <sup>2</sup> |
|----------------|---------------------------|
| 2              | 16,97                     |
| 2,5            | 20,87                     |
| 3              | 26,05                     |
| 4              | 33,95                     |
| 5              | 41,75                     |
| 6              | 52,10                     |
| 8              | 67,90                     |



## LAMIERE STRIATE

| spessore<br>mm | peso<br>kg/m <sup>2</sup> |
|----------------|---------------------------|
| * 2,5          | 22,2                      |
| 3              | 28,6                      |
| 4              | 36,5                      |
| 5              | 44,3                      |
| 6              | 52,1                      |
| 7              | 60                        |
| 8              | 67,8                      |
| 10             | 83,6                      |
| 12             | 99,1                      |
| * 14           | 115                       |





# LAMIERE A FREDDO

| spessore<br>mm | peso<br>kg/m <sup>2</sup> | spessore<br>mm | peso<br>kg/m <sup>2</sup> | qualità                                           | impieghi                                                                                                                                         |
|----------------|---------------------------|----------------|---------------------------|---------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|
| 0,40           | 3,15                      | 1,50           | 11,75                     | Fe P01<br>Fe P02<br>Fe P03<br>Fe P04              | per azioni di formatura e di piega<br>stampaggi di normale difficoltà<br>medio stampaggio<br>antinvecchiante; stampaggi<br>molto difficili       |
| 0,45           | 3,52                      | 1,80           | 14,15                     |                                                   |                                                                                                                                                  |
| 0,50           | 3,90                      | 2,00           | 15,70                     |                                                   |                                                                                                                                                  |
| 0,60           | 4,70                      | 2,50           | 19,60                     |                                                   |                                                                                                                                                  |
| 0,70           | 5,50                      | 3,00           | 23,55                     | tipo<br>UNISMALT<br>tipo S<br>tipo SMP<br>tipo M1 | per smaltatura diretta<br>adatto alla smaltatura a due mani<br>adatto alla smaltatura a polvere<br>per elementi lamellari di<br>motori elettrici |
| 0,80           | 6,30                      |                |                           |                                                   |                                                                                                                                                  |
| 0,90           | 7,05                      |                |                           |                                                   |                                                                                                                                                  |
| 1,00           | 7,80                      |                |                           |                                                   |                                                                                                                                                  |
| 1,20           | 9,35                      |                |                           |                                                   |                                                                                                                                                  |

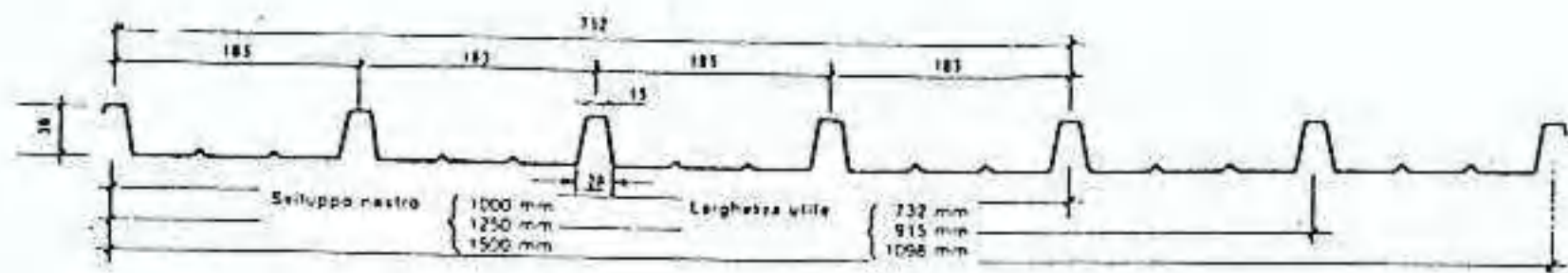
# LAMIERE ZINCATE

| numeri | spessore<br>mm | tipo sendzimir            |         | impieghi                                                                       |
|--------|----------------|---------------------------|---------|--------------------------------------------------------------------------------|
|        |                | peso<br>kg/m <sup>2</sup> | qualità |                                                                                |
| 30     | 0,30           | 2,74                      | Fe P01G | normali operazioni di piegatura<br>e foratura                                  |
| 29     | 0,35           | 3,13                      |         |                                                                                |
| 28     | 0,40           | 3,52                      |         |                                                                                |
| 27     | 0,45           | 3,91                      | Fe P02G | operazioni di profilatura non<br>impegnative e di piegatura<br>più impegnative |
| 26     | 0,50           | 4,30                      |         |                                                                                |
| 25     | 0,55           | 4,70                      |         |                                                                                |
| 24     | 0,60           | 5,10                      |         |                                                                                |
| 23     | 0,70           | 5,90                      | Fe P04G | stampaggi profondi                                                             |
| 22     | 0,80           | 6,65                      |         |                                                                                |
| 20     | 1,00           | 8,25                      |         |                                                                                |
| 18     | 1,25           | 9,90                      |         |                                                                                |
| 16     | 1,50           | 12,15                     |         |                                                                                |
| 14     | 2,00           | 16,10                     |         |                                                                                |
| 12     | 2,50           | 20,05                     |         |                                                                                |
| 10     | 3,00           | 24,00                     |         |                                                                                |



# ELEMENTI GRECATI PER COPERTURE, PARETI E CONTROSOFFITTI

EGB 401



### CARATTERISTICHE STATICHE

Zincata  
Lunghezza 2 - 3 - 4 - 5 - 6 mt

Preverniciata testa nera  
bianco grigio  
Lunghezza 2 - 3 - 4 - 5 - 6 mt

| Spessore               |      | 0,6   | 0,7   | 0,8   | 1,0   |
|------------------------|------|-------|-------|-------|-------|
| Peso kg/m <sup>2</sup> |      | 6,42  | 7,49  | 8,57  | 10,72 |
| Peso kg/m <sup>2</sup> | 1000 | 4,71  | 5,49  | 6,28  | 7,85  |
|                        | 1250 | 5,88  | 6,86  | 7,85  | 9,81  |
|                        | 1500 | 7,06  | 8,24  | 9,42  | 11,77 |
| J cm <sup>4</sup> /m   |      | 13,79 | 16,04 | 18,31 | 22,83 |
| W cm <sup>3</sup> /m   |      | 4,75  | 5,55  | 6,36  | 7,98  |

CARICO MAX UNIFORMEMENTE DISTRIBUITO IN kg/m<sup>2</sup>  
(sovraccarico + peso proprio) /  $\sigma = 1400 \text{ kg/cm}^2$

| spessore   | distanze fra gli appoggi in metri |      |      |      |      |      |      |      |      |      |      |      |      |
|------------|-----------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| mm         | 1,00                              | 1,25 | 1,50 | 1,75 | 2,00 | 2,25 | 2,50 | 2,75 | 3,00 | 3,25 | 3,50 | 3,75 | 4,00 |
| 0,6        | 530                               | 340  | 235  | 175  | 135  | 105  | 85   | 70   | 60   | 50   | 45   | 40   | 35   |
|            |                                   |      |      |      |      | 97   | 71   | 54   | 41   | 31   | 25   | 21   |      |
| 0,7        | 620                               | 400  | 275  | 205  | 155  | 125  | 100  | 80   | 70   | 60   | 50   | 45   | 40   |
|            |                                   |      |      |      |      | 113  | 82   | 62   | 48   | 36   | 30   | 24   |      |
| 0,8        | 715                               | 435  | 315  | 230  | 180  | 140  | 115  | 95   | 80   | 65   | 60   | 50   | 45   |
|            |                                   |      |      |      |      | 130  | 94   | 71   | 54   | 42   | 34   | 27   |      |
| 1,0        | 895                               | 575  | 395  | 290  | 225  | 175  | 145  | 120  | 100  | 85   | 75   | 65   | 55   |
|            |                                   |      |      |      |      | 162  | 117  | 88   | 68   | 52   | 43   | 34   |      |
| Freccia cm | 0,23                              | 0,37 | 0,53 | 0,73 | 0,97 | 1,20 | 1,49 | 1,79 | 2,19 | 2,51 | 3,04 | 3,46 | 3,90 |
| 0,6        | 665                               | 425  | 295  | 220  | 170  | 130  | 105  | 90   | 75   | 65   | 55   | 45   | 40   |
|            |                                   |      |      |      |      |      |      |      | 68   | 52   | 43   | 35   |      |
| 0,7        | 775                               | 500  | 345  | 255  | 195  | 155  | 125  | 100  | 85   | 75   | 65   | 55   | 50   |
|            |                                   |      |      |      |      |      |      |      | 80   | 55   | 50   | 40   |      |
| 0,8        | 895                               | 570  | 395  | 290  | 225  | 175  | 145  | 120  | 100  | 85   | 75   | 65   | 55   |
|            |                                   |      |      |      |      |      |      |      | 91   | 70   | 57   | 46   |      |
| 1,0        | 1120                              | 720  | 495  | 365  | 280  | 220  | 180  | 150  | 125  | 105  | 90   | 80   | 70   |
|            |                                   |      |      |      |      |      |      |      | 114  | 87   | 71   | 58   |      |
| freccia cm | 0,18                              | 0,27 | 0,40 | 0,55 | 0,73 | 0,89 | 1,10 | 1,38 | 1,64 | 1,92 | 2,23 | 2,47 | 2,85 |

IT/80



### CARATTERISTICHE STATICHE

Zincata  
Lunghezza 3 - 4 - 5 - 6 mt

|                        |      |
|------------------------|------|
| Spessore               | 0,8  |
| Peso kg/m              | 6,28 |
| Peso kg/m <sup>2</sup> | 7,47 |



# LAMIERE STIRATE



## ART. S/17

A = Avanzamento mm 2,5

S = Spessore mm 1,5 - Pseo mq/kg 3,9 circa

FORMATI = Rotoli altezza 1000/1250/1500

lunghezza 6.000/10.000 circa

MAGLIA = 10 x 43



## ART. S/20

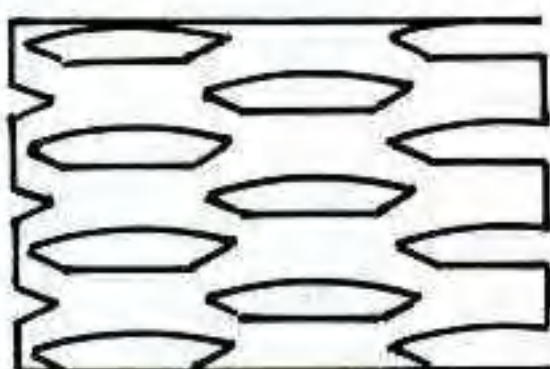
A = Avanzamento mm 3,0

S = Spessore mm 2,0 - Pseo mq/kg 3,9 circa

FORMATI = Rotoli altezza 1000/1250/1500

lunghezza 6.000/10.000 circa

MAGLIA = 20 x 60



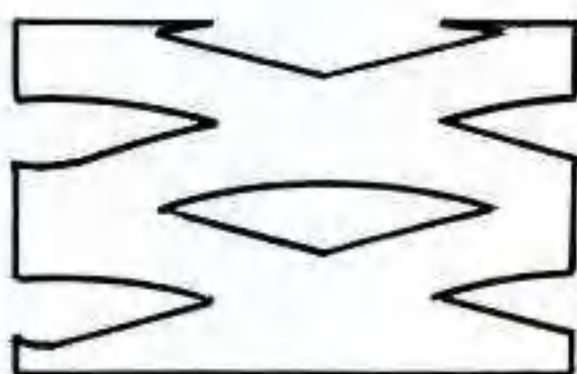
## ART. F/21

A = Avanzamento mm 4,0

S = Spessore mm 3,0 - Pseo mq/kg 17,5 circa

FORMATI = 2000 x 1000

VUOTO = 05 x 25



## ART. F/5

A = Avanzamento mm 7,0

S = Spessore mm 3,0 - Pseo mq/kg 18 circa

FORMATI = 2000 x 1000

VUOTO = 10 x 40

## RETI ONDULATE A MAGLIA QUADRA



| ROTOLI<br>LUNGHEZZA<br>ML. 25   | maglia luce | diametro filo | peso teorico kg al mq     | dimensioni  |
|---------------------------------|-------------|---------------|---------------------------|-------------|
|                                 | 10 x 10     | 2             | 4,5                       | h. 1000     |
|                                 | 15 x 15     | 2,5           | 4,8                       | h. 1000     |
|                                 | 20 x 20     | 3             | 5,5                       | h. 1000     |
|                                 | 27 x 27     | 3             | 4,6                       | h. 1000     |
|                                 | 36 x 36     | 4             | 5,1                       | h. 1000     |
|                                 | 45 x 45     | 5             | 6,5                       | h. 1000     |
| FORMATO<br>FOGLI<br>1000 x 2000 | maglia luce | diametro filo | peso teorico kg al foglio | dimensioni  |
|                                 | 10 x 10     | 2             | 9                         | 1000 x 2000 |
|                                 | 15 x 15     | 2,5           | 9,6                       | 1000 x 2000 |
|                                 | 20 x 20     | 3             | 11                        | 1000 x 2000 |
|                                 | 27 x 27     | 3             | 9,2                       | 1000 x 2000 |
|                                 | 36 x 36     | 4             | 10,2                      | 1000 x 2000 |
|                                 | 45 x 45     | 5             | 13                        | 1000 x 2000 |



# LAMIERE FORATE

formato 2.000 x 1.000



FORI TONDI 60 GRADI

| foro<br>Ø mm | passo<br>mm | spessore<br>mm                   |   |    |
|--------------|-------------|----------------------------------|---|----|
| 2            | 4           | 1 - 1,5 - 2                      |   |    |
| 3            | 5           | 1 - 1,5 - 2 - 3                  |   |    |
| 4            | 6           | 1 - 1,5 - 2 - 3                  |   |    |
| 5            | 8           | 1 - 1,5 - 2 - 3                  |   |    |
| 6            | 9           | 1 - 1,5 - 2 - 3                  |   |    |
| 8            | 12          | 1 - 1,5 - 2 - 3 - 4 - 5          |   |    |
| 10           | 15          | 1 - 1,5 - 2 - 3 - 4 - 5 - 6 - 10 |   |    |
| 12           | 18          | 1 - 1,5 - 2 - 3                  |   |    |
| 15           | 22          | 1 - 1,5 - 2 - 3                  | 5 | 10 |
| 20           | 26          | 1 - 1,5 - 2 - 3                  | 5 | 10 |
| 25           | 32          | 1,5 - 2 - 3                      |   |    |



FORI QUADRI

| foro<br>□ mm | passo<br>mm | spessore<br>mm |  |
|--------------|-------------|----------------|--|
| 5 x 5        | 7           | 1 - 1,5        |  |
| 8 x 8        | 10          | 1 - 1,5        |  |
| 8 x 8        | 12          | 2              |  |
| 10 x 10      | 12          | 1 - 1,5 - 2    |  |
| 10 x 10      | 15          | 1 - 1,5 - 2    |  |



FORI FANTASIA

|       |  | spessore<br>mm |
|-------|--|----------------|
| GF-11 |  | 1              |
| GF-17 |  | 1              |

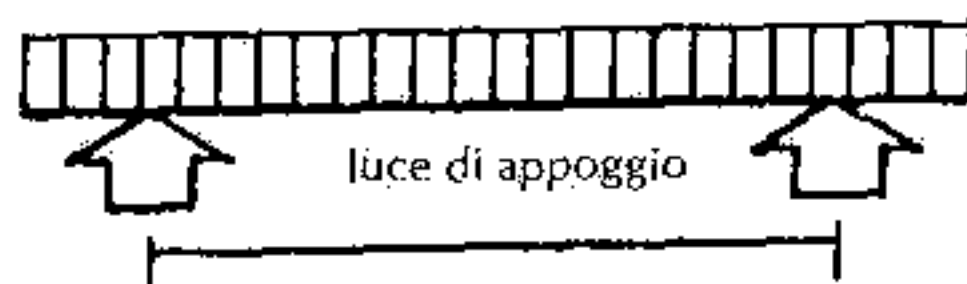


**GRIGLIATO  
ELETTOFORGIATO**



# PORTATA PER CARICHI UNIFORMEMENTE DISTRIBUITI (kg/mq)

carico uniformemente distribuito



| maglia   | piatto | peso<br>kg/mq | distanza netta tra gli appoggi (mm) |       |       |       |       |       |       |       |       |      |      |      |      |
|----------|--------|---------------|-------------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|------|------|------|------|
|          |        |               | 300                                 | 400   | 500   | 600   | 700   | 800   | 900   | 1000  | 1200  | 1400 | 1600 | 1800 | 2000 |
| 15 x 76  | 20 x 2 | 22,6          | 6500                                | 3500  | 2900  | 2500  | 2000  | 1500  | 1000  |       |       |      |      |      |      |
|          | 25 x 2 | 28,1          | 19000                               | 10500 | 6700  | 4700  | 3300  | 2200  | 1550  | 1150  | 650   |      |      |      |      |
|          | 30 x 2 | 33,4          | 27000                               | 15000 | 10000 | 7000  | 5000  | 3800  | 2700  | 2000  | 1200  | 800  | 500  |      |      |
|          | 40 x 2 | 44,0          | 47000                               | 27000 | 17000 | 12000 | 10000 | 7000  | 5500  | 4500  | 2600  | 1700 | 1100 | 800  | 500  |
| 22 x 76  | 25 x 2 | 19,8          | 12700                               | 7200  | 4600  | 3200  | 2300  | 1500  | 1050  | 800   |       |      |      |      |      |
|          | 30 x 2 | 23,5          | 18300                               | 10300 | 6600  | 4600  | 3400  | 2600  | 1850  | 1350  | 750   | 500  |      |      |      |
|          | 25 x 3 | 28,9          | 20000                               | 11000 | 7000  | 4900  | 3400  | 2300  | 1600  | 1200  | 700   |      |      |      |      |
|          | 30 x 3 | 34,4          | 28000                               | 16000 | 10000 | 7000  | 5100  | 4000  | 2900  | 2000  | 1150  | 750  | 500  |      |      |
|          | 40 x 3 | 45,3          | 50000                               | 28000 | 18000 | 12500 | 9000  | 7000  | 5500  | 4500  | 2800  | 1800 | 1200 | 900  | 600  |
| 25 x 76  | 20 x 2 | 14,5          | 6000                                | 3300  | 2200  | 1500  | 1000  | 700   |       |       |       |      |      |      |      |
|          | 25 x 2 | 17,7          | 11300                               | 6450  | 4150  | 2800  | 1900  | 1350  | 900   | 700   |       |      |      |      |      |
|          | 30 x 2 | 21,0          | 16300                               | 9400  | 6000  | 4000  | 2800  | 2150  | 1500  | 1200  | 880   | 450  |      |      |      |
|          | 25 x 3 | 25,8          | 17100                               | 9500  | 6000  | 4000  | 2800  | 1900  | 1400  | 1000  | 620   |      |      |      |      |
|          | 30 x 3 | 30,6          | 24400                               | 14000 | 9000  | 6100  | 4200  | 3200  | 2200  | 1800  | 1000  | 680  |      |      |      |
|          | 40 x 3 | 40,3          | 44000                               | 25000 | 16000 | 11000 | 8000  | 6300  | 4700  | 3700  | 2400  | 1600 | 1000 | 700  | 580  |
|          | 40 x 4 | 53,1          | 58000                               | 33000 | 21000 | 14000 | 10000 | 8400  | 6200  | 4900  | 3200  | 2100 | 1300 | 900  | 770  |
|          | 50 x 4 | 65,9          | 90000                               | 51000 | 33000 | 22000 | 16000 | 13000 | 10000 | 8000  | 5400  | 4000 | 2800 | 2100 | 1400 |
|          | 60 x 4 | 78,8          | 145000                              | 81000 | 52000 | 36000 | 26000 | 20000 | 16000 | 13000 | 9000  | 6000 | 5000 | 3600 | 2600 |
|          | 70 x 4 | 91,7          | 174000                              | 98000 | 62000 | 43000 | 32000 | 24000 | 20000 | 16000 | 11000 | 8000 | 6200 | 4900 | 3700 |
| 30 x 100 | 25 x 2 | 14,7          | 9500                                | 5400  | 3400  | 2400  | 1700  | 1100  | 800   | 600   |       |      |      |      |      |
|          | 25 x 3 | 22,1          | 14500                               | 8000  | 5200  | 3700  | 2500  | 1650  | 1200  | 850   |       |      |      |      |      |
|          | 30 x 3 | 26,2          | 21000                               | 11500 | 7100  | 5100  | 3800  | 2900  | 2100  | 1500  | 850   | 550  |      |      |      |
|          | 40 x 3 | 34,2          | 37000                               | 21000 | 13000 | 9000  | 6600  | 5100  | 4100  | 3300  | 2000  | 1300 | 850  | 650  | 450  |
| 34 x 76  | 25 x 2 | 13,5          | 8300                                | 4700  | 3000  | 2100  | 1500  | 1000  | 700   | 500   |       |      |      |      |      |
|          | 30 x 2 | 15,9          | 12000                               | 6800  | 4300  | 3100  | 2300  | 1700  | 1200  | 900   | 500   |      |      |      |      |
|          | 25 x 3 | 19,4          | 12500                               | 7000  | 4500  | 3200  | 2200  | 1450  | 1050  | 750   |       |      |      |      |      |
|          | 30 x 3 | 23,0          | 18000                               | 10000 | 6500  | 4600  | 3400  | 2500  | 1800  | 1300  | 750   | 480  |      |      |      |
|          | 40 x 3 | 30,1          | 32000                               | 18000 | 11500 | 8200  | 6000  | 4500  | 3600  | 2900  | 1800  | 800  | 550  | 370  |      |

Carico di sicurezza 16 (kg/mm<sup>2</sup>)

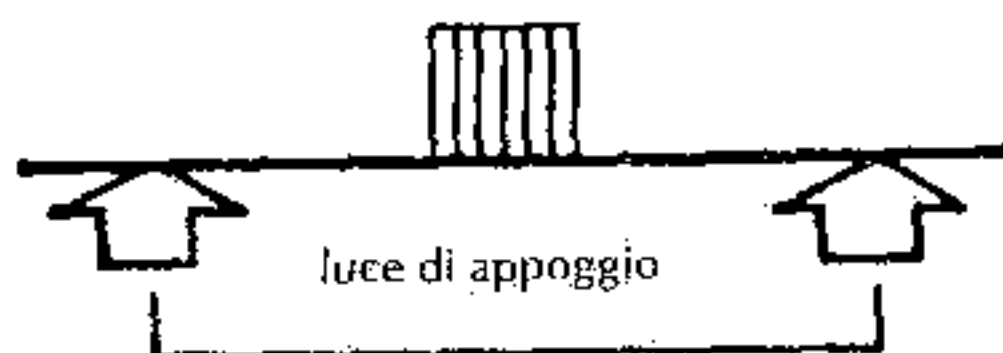
Freccia elastica minore di 1:250 della luce netta di appoggio

Per ulteriori informazioni rivolgersi al nostro ufficio tecnico.



# PORTATA PER CARICHI CONCENTRATI SU IMPRONTA (kg)

carico concentrato su impronta



| maglia   | piatto | peso<br>kg/mm <sup>2</sup> | distanza netta tra gli appoggi (mm) |      |      |      |      |      |      |      |      |      |      |      |      |
|----------|--------|----------------------------|-------------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
|          |        |                            | 300                                 | 400  | 500  | 600  | 700  | 800  | 900  | 1000 | 1200 | 1400 | 1600 | 1800 | 2000 |
| 15 x 76  | 20 x 2 | 22,6                       | 580                                 | 400  | 290  | 220  | 190  | 160  | 120  |      |      |      |      |      |      |
|          | 25 x 2 | 28,1                       | 1350                                | 900  | 700  | 550  | 480  | 400  | 300  | 240  | 170  |      |      |      |      |
|          | 30 x 2 | 33,4                       | 1850                                | 1250 | 950  | 750  | 650  | 550  | 500  | 400  | 300  | 200  | 150  |      |      |
|          | 40 x 2 | 44,0                       | 2900                                | 1950 | 1500 | 1200 | 1000 | 850  | 750  | 680  | 550  | 420  | 320  | 250  | 200  |
| 22 x 76  | 25 x 2 | 19,8                       | 1050                                | 730  | 550  | 440  | 370  | 300  | 240  | 200  |      |      |      |      |      |
|          | 30 x 2 | 23,5                       | 1450                                | 980  | 750  | 600  | 500  | 430  | 380  | 320  | 220  | 160  |      |      |      |
|          | 25 x 3 | 28,9                       | 1400                                | 950  | 720  | 580  | 490  | 400  | 320  | 250  | 180  |      |      |      |      |
|          | 30 x 3 | 34,4                       | 1950                                | 1440 | 1000 | 800  | 680  | 580  | 500  | 410  | 290  | 210  | 160  |      |      |
|          | 40 x 3 | 45,3                       | 3250                                | 2200 | 1670 | 1350 | 1130 | 980  | 840  | 750  | 620  | 470  | 360  | 290  | 230  |
| 25 x 76  | 20 x 2 | 11,5                       | 390                                 | 270  | 200  | 150  | 120  |      |      |      |      |      |      |      |      |
|          | 25 x 2 | 17,7                       | 900                                 | 650  | 480  | 380  | 320  | 260  | 220  | 180  |      |      |      |      |      |
|          | 30 x 2 | 21,0                       | 1300                                | 880  | 670  | 500  | 440  | 380  | 300  | 250  | 170  | 140  |      |      |      |
|          | 25 x 3 | 25,8                       | 1250                                | 850  | 640  | 480  | 430  | 350  | 280  | 220  | 150  |      |      |      |      |
|          | 30 x 3 | 30,6                       | 1750                                | 1400 | 910  | 710  | 580  | 490  | 420  | 360  | 270  | 180  |      |      |      |
|          | 40 x 3 | 40,3                       | 2900                                | 2000 | 1600 | 1300 | 1050 | 860  | 750  | 650  | 550  | 400  | 320  | 270  | 210  |
|          | 40 x 4 | 53,1                       | 3850                                | 2650 | 2100 | 1750 | 1400 | 1150 | 1000 | 850  | 650  | 500  | 400  | 350  | 250  |
|          | 50 x 4 | 65,9                       | 5500                                | 4000 | 3050 | 2250 | 1950 | 1650 | 1450 | 1200 | 1100 | 800  | 650  | 600  | 500  |
|          | 60 x 4 | 78,8                       | 8800                                | 6000 | 4500 | 3600 | 3050 | 2650 | 2250 | 2000 | 1600 | 1450 | 1200 | 1050 | 950  |
|          | 70 x 4 | 91,7                       | 10500                               | 7100 | 5400 | 4300 | 3600 | 3100 | 2700 | 2400 | 2000 | 1700 | 1500 | 1300 | 1100 |
| 30 x 100 | 25 x 2 | 14,7                       | 880                                 | 600  | 450  | 360  | 310  | 250  | 210  | 160  |      |      |      |      |      |
|          | 25 x 3 | 22,1                       | 1120                                | 760  | 580  | 470  | 390  | 320  | 260  | 210  |      |      |      |      |      |
|          | 30 x 3 | 26,2                       | 1550                                | 1060 | 800  | 650  | 550  | 470  | 400  | 350  | 210  | 170  |      |      |      |
|          | 40 x 3 | 34,2                       | 2600                                | 1750 | 1350 | 1100 | 900  | 790  | 680  | 600  | 500  | 390  | 300  | 240  | 200  |
| 34 x 76  | 25 x 2 | 13,5                       | 820                                 | 570  | 430  | 350  | 290  | 240  | 200  | 150  |      |      |      |      |      |
|          | 30 x 2 | 15,9                       | 1100                                | 750  | 570  | 450  | 380  | 330  | 290  | 240  | 150  |      |      |      |      |
|          | 25 x 3 | 19,4                       | 1050                                | 740  | 550  | 440  | 360  | 300  | 230  | 190  |      |      |      |      |      |
|          | 30 x 3 | 23,0                       | 1500                                | 1000 | 750  | 600  | 500  | 430  | 380  | 320  | 220  | 160  |      |      |      |
|          | 40 x 3 | 30,1                       | 2400                                | 1600 | 1220 | 980  | 820  | 700  | 610  | 540  | 450  | 370  | 270  | 210  |      |

Tipo di carico:

- pedonale kg 150 concentrati su impronta
- autovettura kg 400 concentrati su impronta
- autocarro kg 1500 concentrati su impronta
- autotreno kg 3000 concentrati su impronta

Carico di sicurezza 16 (kg/mm<sup>2</sup>)

Freccia elastica minore di 1:250 della luce netta di appoggio

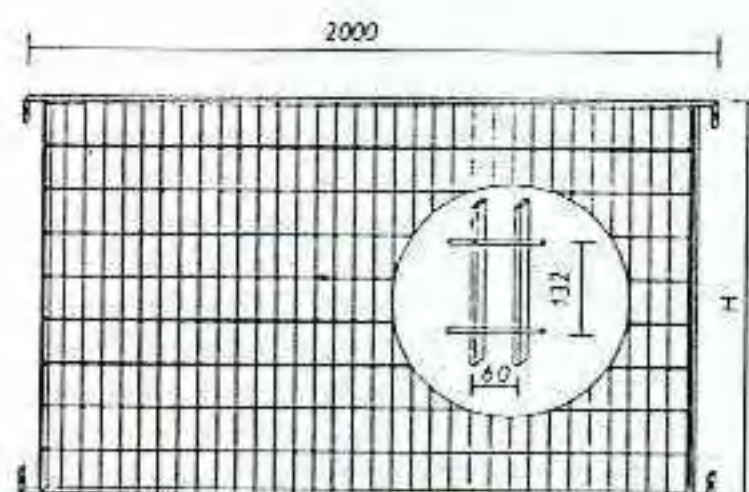
Impronta 250x250 (mm)

Per ulteriori informazioni rivolgersi al nostro ufficio tecnico.



# MODULI RECINZIONE ZINCATI

bordati con piatto 25 x 6



| altezza<br>(mm) | interasse<br>(mm) | peso (kg/cad.)          |                         |                        |
|-----------------|-------------------|-------------------------|-------------------------|------------------------|
|                 |                   | maglia: 60 x 132 25 x 2 | maglia: 60 x 132 25 x 3 | maglia: 60 x 66 25 x 3 |
| 930             | 2.000             | 21,5                    | 28,2                    | 30,6                   |
| 1.200           | 2.000             | 26,0                    | 34,7                    | 37,8                   |
| 1.330           | 2.000             | 28,3                    | 37,9                    | 41,3                   |
| 1.460           | 2.000             | 30,6                    | 41,2                    | 44,9                   |
| 1.720           | 2.000             | 32,5                    | 44,7                    | 48,9                   |

## PIANTANA ZINCATA

in piatto 60 x 8

ALTEZZA mm 1.200 per pannello da H mm 930  
 ALTEZZA mm 1.500 per pannello da H mm 1.200  
 ALTEZZA mm 1.600 per pannello da H mm 1.330  
 ALTEZZA mm 1.800 per pannello da H mm 1.460  
 ALTEZZA mm 2.000 per pannello da H mm 1.720

PESO (kg/cad.) 4,8  
 PESO (kg/cad.) 6,0  
 PESO (kg/cad.) 6,4  
 PESO (kg/cad.) 7,2  
 PESO (kg/cad.) 7,6

## BULLONI CON DADO

TESTA ESAGONALE ZINCATI  
 TESTA ESAGONALE INOX  
 ANTIFURTO INOX

MISURA mm 8 x 30  
 MISURA mm 8 x 30  
 MISURA mm 8 x 30

## ANGOLARI ZINCATI CON ZANCHE

MISURA mm 30 x 30 x 5  
 MISURA mm 35 x 35 x 5

LUNGHEZZA mm 2.000  
 LUNGHEZZA mm 2.000



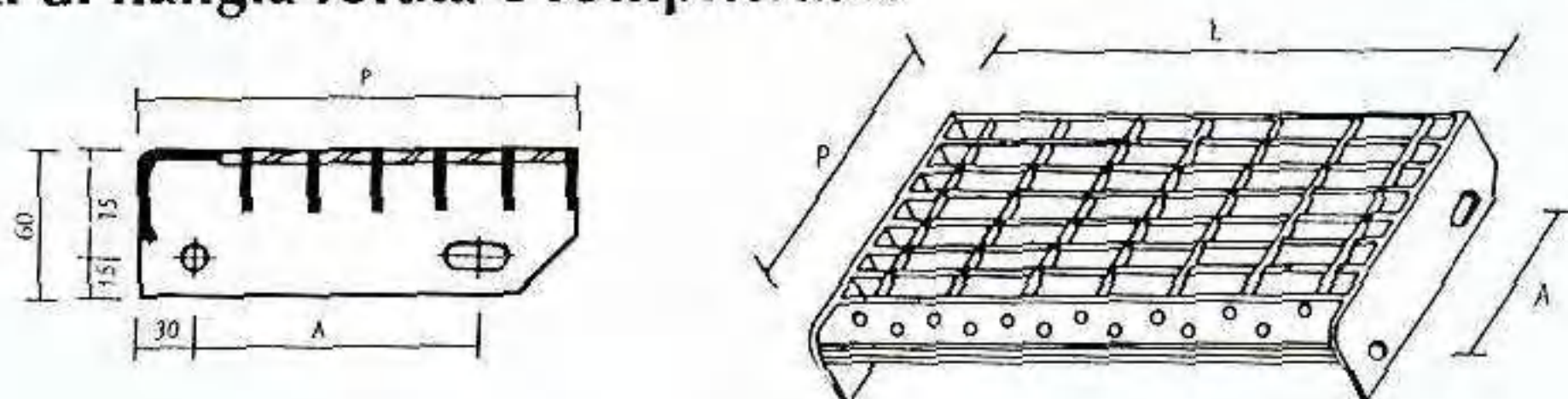
# GRADINI ZINCATI

completi di flangia forata e rompivisuale

asola 12 x 25

foro Ø 12

flange piatto 60 x 3 con foro ovale



| lunghezza<br>L (mm) | pedana<br>P (mm) | foratura<br>A (mm) | grigliato<br>(maglia) | peso zinc.<br>(kg/cod.) |
|---------------------|------------------|--------------------|-----------------------|-------------------------|
| 600                 | 205              | 115                | 25 x 76 25 x 2        | 3,4                     |
| 700                 | 255              | 180                | 25 x 76 25 x 2        |                         |
| 800                 | 255              | 180                | 25 x 76 25 x 2        | 5,2                     |
| 1000                | 305              | 180                | 25 x 76 25 x 2        | 7,4                     |
| 1200                | 330              | 180                | 15 x 76 25 x 2        | 13,1                    |
| 1200                | 330              | 180                | 15 x 76 30 x 2        | 15,4                    |

# PANNELLI ZINCATI BORDATI



| portata<br>(tipo) | dimensioni<br>(mm) | peso<br>(kg/cod.) | grigliato<br>(maglia) |
|-------------------|--------------------|-------------------|-----------------------|
| AUTOVETTURA       | 150 x 1000         | 3,8               | 25 x 76 25 x 2        |
| AUTOVETTURA       | 200 x 1000         | 4,7               | 25 x 76 25 x 2        |
| AUTOVETTURA       | 250 x 1000         | 5,7               | 25 x 76 25 x 2        |
| AUTOVETTURA       | 300 x 1000         | 6,7               | 25 x 76 25 x 2        |
| AUTOVETTURA       | 400 x 1000         | 8,6               | 25 x 76 25 x 2        |
| AUTOVETTURA       | 500 x 1000         | 10,5              | 25 x 76 25 x 2        |
| AUTOVETTURA       | 600 x 1000         | 12,5              | 25 x 76 25 x 2        |
| PEDONALE          | 700 x 1000         | 14,4              | 25 x 76 25 x 2        |
| PEDONALE          | 800 x 1000         | 16,3              | 25 x 76 25 x 2        |
| PEDONALE          | 900 x 1000         | 18,2              | 25 x 76 25 x 2        |
| PEDONALE          | 1000 x 1000        | 20,2              | 25 x 76 25 x 2        |
| AUTOVETTURA       | 225 x 225          | 1,3               | 25 x 76 25 x 2        |
| AUTOVETTURA       | 325 x 325          | 2,6               | 25 x 76 25 x 2        |
| AUTOVETTURA       | 425 x 425          | 4,1               | 25 x 76 25 x 2        |
| AUTOVETTURA       | 525 x 525          | 6,2               | 25 x 76 25 x 2        |
| AUTOTRENO         | 250 x 1000         | 12,5              | 25 x 76 40 x 3        |
| AUTOTRENO         | 350 x 1000         | 27,3              | 25 x 76 50 x 4        |
| AUTOTRENO         | 450 x 1000         | 34,4              | 25 x 76 50 x 4        |
| AUTOTRENO         | 550 x 1000         | 41,5              | 25 x 76 50 x 4        |

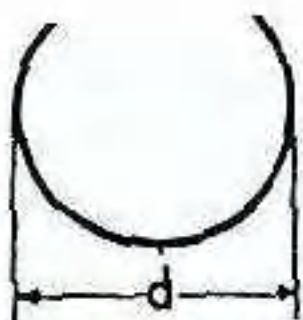






**TUBI IN ACCIAIO  
INOSSIDABILE  
LAMIERE**



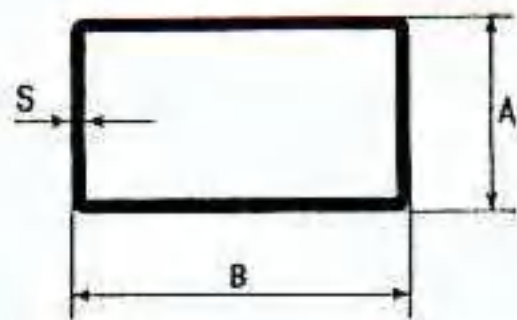


# TUBI TONDI

peso teorico chilogrammi per metro

| diametro<br>mm | spessore |        |        |        |        |        |        |        |        |
|----------------|----------|--------|--------|--------|--------|--------|--------|--------|--------|
|                | 1,0 mm   | 1,2 mm | 1,5 mm | 2,0 mm | 2,5 mm | 3,0 mm | 4,0 mm | 5,0 mm | 6,0 mm |
| 10             | 0,225    | 0,264  | 0,319  |        |        |        |        |        |        |
| 12             | 0,275    | 0,325  | 0,394  | 0,500  |        |        |        |        |        |
| 14             | 0,326    | 0,385  | 0,470  | 0,601  |        |        |        |        |        |
| 15             | 0,351    | 0,415  | 0,507  | 0,651  |        |        |        |        |        |
| 16             | 0,376    | 0,445  | 0,545  | 0,701  |        |        |        |        |        |
| 17,2           | 0,406    | 0,481  | 0,590  | 0,761  | 0,921  |        |        |        |        |
| 18             | 0,426    | 0,505  | 0,620  | 0,801  |        |        |        |        |        |
| 19,05          | 0,452    | 0,536  | 0,659  | 0,854  |        |        |        |        |        |
| 20             | 0,476    | 0,565  | 0,695  | 0,901  |        |        |        |        |        |
| 21,3           | 0,508    | 0,604  | 0,744  | 0,967  | 1,177  |        |        |        |        |
| 22             | 0,526    | 0,625  | 0,770  | 1,002  |        |        |        |        |        |
| 23             | 0,551    | 0,655  | 0,808  | 1,051  |        |        |        |        |        |
| 25             | 0,601    | 0,715  | 0,883  | 1,152  | 1,409  |        |        |        |        |
| 26,9           | 0,649    | 0,772  | 0,954  | 1,247  | 1,527  | 1,795  |        |        |        |
| 28             | 0,676    | 0,805  | 0,995  | 1,302  | 1,596  | 1,878  |        |        |        |
| 30             | 0,726    | 0,865  | 1,070  | 1,402  | 1,722  | 2,028  |        |        |        |
| 32             | 0,776    | 0,925  | 1,146  | 1,502  | 1,847  | 2,178  |        |        |        |
| 33,7           | 0,819    | 0,977  | 1,209  | 1,588  | 1,953  | 2,306  |        |        |        |
| 34             | 0,826    | 0,985  | 1,221  | 1,602  | 1,971  | 2,328  |        |        |        |
| 35             | 0,851    | 1,016  | 1,258  | 1,653  | 2,035  | 2,404  |        |        |        |
| 38,1           | 0,929    | 1,109  | 1,375  | 1,808  | 2,229  | 2,637  |        |        |        |
| 40             | 0,977    | 1,166  | 1,446  | 1,903  | 2,348  | 2,779  |        |        |        |
| 42,4           | 1,037    | 1,238  | 1,536  | 2,023  | 2,498  | 2,960  | 3,847  |        |        |
| 44,5           | 1,089    | 1,301  | 1,615  | 2,128  | 2,629  | 3,117  |        |        |        |
| 45             | 1,102    | 1,316  | 1,634  | 2,153  | 2,661  | 3,155  |        |        |        |
| 48,3           | 1,184    | 1,415  | 1,758  | 2,319  | 2,867  | 3,403  | 4,438  |        |        |
| 50             | 1,227    | 1,466  | 1,822  | 2,404  | 2,974  | 3,531  | 4,607  |        |        |
| 50,8           | 1,247    | 1,490  | 1,852  | 2,444  |        | 3,591  |        |        |        |
| 51             | 1,252    | 1,496  | 1,859  | 2,454  | 3,036  | 3,606  |        |        |        |
| 52             | 1,277    | 1,526  | 1,897  | 2,504  | 3,099  | 3,681  |        |        |        |
| 54             | 1,327    | 1,587  | 1,972  | 2,604  | 3,224  | 3,831  |        |        |        |
| 57             |          |        | 2,085  | 2,754  | 3,412  | 4,057  | 5,309  |        |        |
| 60,3           | 1,485    | 1,776  | 2,209  | 2,920  | 3,618  | 4,304  | 5,640  |        |        |
| 63,5           | 1,565    |        | 2,329  | 3,080  | 3,819  | 4,545  | 5,960  |        |        |
| 70             | 1,728    | 2,067  | 2,573  | 3,405  | 4,226  | 5,033  | 6,611  |        |        |
| 76,1           | 1,881    | 2,251  | 2,802  | 3,711  | 4,607  | 5,491  | 7,222  |        |        |
| 80             | 1,978    | 2,368  | 2,948  | 3,906  | 4,852  | 5,784  | 7,613  |        |        |
| 88,9           |          |        | 3,283  | 4,352  | 5,409  | 6,453  | 8,504  |        |        |
| 101,6          |          |        | 3,760  | 4,988  | 6,204  | 7,407  | 9,776  | 12,094 | 14,363 |
| 104            |          |        | 3,850  | 5,108  | 6,354  | 7,587  | 10,016 | 12,395 | 14,724 |
| 114,3          |          |        | 4,237  | 5,624  | 6,999  | 8,361  | 11,048 | 13,684 | 16,271 |
| 129            |          |        | 4,789  | 6,360  | 7,919  | 9,465  | 12,520 | 15,525 | 18,480 |
| 139,7          |          |        | 5,191  | 6,896  | 8,589  | 10,269 | 13,592 | 16,864 | 20,087 |
| 154            |          |        | 5,728  | 7,612  | 9,484  | 11,343 | 15,024 | 18,655 | 22,236 |
| 168,3          |          |        | 6,245  | 8,328  | 10,379 | 12,417 | 16,456 | 20,445 | 24,384 |
| 193,7          |          |        | 7,219  | 9,600  | 11,969 | 14,325 | 19,000 | 23,625 | 28,200 |
| 203            |          |        | 7,568  | 10,066 | 12,551 | 15,024 | 19,932 | 24,790 | 29,597 |
| 204            |          |        | 7,606  | 10,116 | 12,614 | 15,099 | 20,032 | 24,915 | 29,748 |
| 219,1          |          |        | 8,173  | 10,872 | 13,559 | 16,233 | 21,544 | 26,805 | 32,016 |



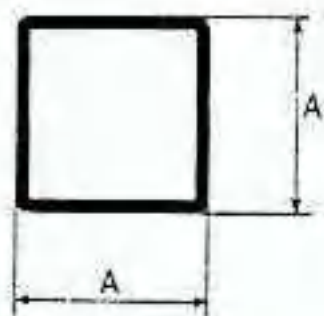


# TUBI RETTANGOLARI

peso teorico chilogrammi per metro

| sezione<br>mm | spessore |        |        |        |        |        |        |        |        |
|---------------|----------|--------|--------|--------|--------|--------|--------|--------|--------|
|               | 1,0 mm   | 1,2 mm | 1,5 mm | 2,0 mm | 2,5 mm | 3,0 mm | 4,0 mm | 5,0 mm | 6,0 mm |
| 20 x 10       | 0,453    | 0,538  | 0,661  |        |        |        |        |        |        |
| 20 x 15       | 0,533    | 0,634  | 0,781  |        |        |        |        |        |        |
| 25 x 15       | 0,613    | 0,729  | 0,900  | 1,175  |        |        |        |        |        |
| 30 x 10       | 0,613    | 0,729  | 0,900  |        |        |        |        |        |        |
| 30 x 15       | 0,693    | 0,825  | 1,020  | 1,335  |        |        |        |        |        |
| 30 x 20       | 0,772    | 0,921  | 1,140  | 1,494  |        |        |        |        |        |
| 35 x 15       | 0,772    | 0,921  | 1,140  |        |        |        |        |        |        |
| 35 x 20       | 0,852    | 1,017  | 1,259  | 1,654  |        |        |        |        |        |
| 40 x 15       | 0,852    | 1,017  | 1,259  | 1,654  |        |        |        |        |        |
| 40 x 20       | 0,926    | 1,112  | 1,379  | 1,813  |        |        |        |        |        |
| 40 x 30       | 1,091    | 1,303  | 1,618  | 2,132  |        |        |        |        |        |
| 50 x 20       | 1,091    | 1,303  | 1,618  | 2,132  |        |        |        |        |        |
| 50 x 25       |          | 1,399  | 1,738  | 2,292  |        |        |        |        |        |
| 50 x 30       | 1,251    | 1,495  | 1,857  | 2,451  |        |        |        |        |        |
| 60 x 20       |          | 1,495  | 1,857  | 2,451  |        |        |        |        |        |
| 60 x 30       |          | 1,686  | 2,097  | 2,770  |        | 4,081  |        |        |        |
| 60 x 40       |          | 1,878  | 2,336  | 3,089  |        | 4,559  | 5,960  |        |        |
| 70 x 20       |          | 1,686  | 2,097  | 2,770  |        |        |        |        |        |
| 80 x 40       |          | 2,261  | 2,814  | 3,727  | 4,600  | 5,516  | 7,222  |        |        |
| 80 x 60       |          |        | 3,293  | 4,365  | 5,408  | 6,473  | 8,504  |        |        |
| 100 x 40      |          |        | 3,293  | 4,365  | 5,408  | 6,473  | 8,504  |        |        |
| 100 x 50      |          |        | 3,532  | 4,684  | 5,790  | 6,952  | 9,115  |        |        |
| 100 x 60      |          |        | 3,771  | 5,003  |        | 7,430  | 9,807  |        |        |
| 100 x 80      |          |        |        | 5,642  |        | 8,387  | 11,083 | 13,728 |        |
| 120 x 60      |          |        |        | 5,642  |        | 8,387  | 11,083 | 13,728 | 16,324 |
| 120 x 80      |          |        |        | 6,279  |        | 9,343  | 12,358 | 15,322 | 18,236 |
| 150 x 50      |          |        |        | 6,279  |        | 9,343  | 12,358 | 15,322 | 18,236 |
| 200 x 100     |          |        |        | 9,469  |        | 14,129 | 18,738 | 23,297 | 27,806 |
| 200 x 150     |          |        |        | 11,064 |        | 16,521 | 21,928 | 27,285 | 32,592 |
| 250 x 100     |          |        |        | 11,064 |        | 16,521 | 21,928 | 27,285 | 32,592 |





# TUBI QUADRI

peso teorico chilogrammi per metro

| sezione<br>mm | spessore |        |        |        |        |        |        |        |        |
|---------------|----------|--------|--------|--------|--------|--------|--------|--------|--------|
|               | 1,0 mm   | 1,2 mm | 1,5 mm | 2,0 mm | 2,5 mm | 3,0 mm | 4,0 mm | 5,0 mm | 6,0 mm |
| 10 x 10       | 0,294    |        |        |        |        |        |        |        |        |
| 12 x 12       | 0,358    |        |        |        |        |        |        |        |        |
| 15 x 15       | 0,453    | 0,538  | 0,661  |        |        |        |        |        |        |
| 16 x 16       | 0,485    | 0,576  | 0,709  | 0,920  |        |        |        |        |        |
| 18 x 18       | 0,549    | 0,653  | 0,805  |        |        |        |        |        |        |
| 20 x 20       | 0,613    | 0,729  | 0,900  | 1,175  |        |        |        |        |        |
| 25 x 25       | 0,772    | 0,921  | 1,140  | 1,494  | 1,846  | 2,179  |        |        |        |
| 30 x 30       | 0,932    | 1,112  | 1,379  | 1,813  | 2,222  | 2,645  |        |        |        |
| 35 x 35       | 1,091    | 1,303  | 1,618  | 2,132  | 2,629  | 3,118  |        |        |        |
| 40 x 40       | 1,251    | 1,495  | 1,857  | 2,451  | 3,036  | 3,602  | 4,708  |        |        |
| 45 x 45       | 1,410    | 1,686  | 2,097  | 2,770  | 3,433  | 4,081  | 5,309  |        |        |
| 50 x 50       | 1,570    | 1,878  | 2,336  | 3,089  | 3,818  | 4,559  | 5,960  |        |        |
| 60 x 60       |          |        | 2,814  | 3,727  | 4,607  | 5,516  | 7,222  |        |        |
| 80 x 80       |          |        | 3,771  | 5,003  | 6,203  | 7,430  | 9,807  | 12,095 |        |
| 100 x 100     |          |        | 4,728  | 6,279  | 7,918  | 9,343  | 12,358 | 15,322 | 18,236 |
| 120 x 120     |          |        |        | 7,555  |        | 11,257 | 14,910 | 18,512 | 22,064 |
| 150 x 150     |          |        |        | 9,469  |        | 14,129 | 18,738 | 23,297 | 27,806 |
| 175 x 175     |          |        |        | 11,064 |        | 16,521 | 21,928 | 27,285 | 32,592 |



# LAMIERE

qualità AISI 304-316

| spessore<br>mm | laminato a freddo      | laminato a caldo       |
|----------------|------------------------|------------------------|
|                | peso kg/m <sup>2</sup> | peso kg/m <sup>2</sup> |
| 0,5            | 4,00                   | —                      |
| 0,6            | 4,80                   | —                      |
| 0,7            | 5,50                   | —                      |
| 0,8            | 6,40                   | —                      |
| 1,0            | 8,00                   | —                      |
| 1,2            | 9,60                   | —                      |
| 1,5            | 12,00                  | —                      |
| 2,0            | 16,00                  | 16,00                  |
| 2,5            | 20,00                  | 20,00                  |
| 3,0            | 24,00                  | 24,00                  |
| 4,0            | 32,00                  | 32,00                  |
| 5,0            | —                      | 40,00                  |
| 6,0            | —                      | 48,00                  |
| 8,0            | —                      | 64,00                  |
| 10,0           | —                      | 80,00                  |
| 12,0           | —                      | 96,00                  |

Sono disponibili a magazzino rotoli in vari spessori e formati. Possibilità di tagli a misura.

## QUALITÀ ACCIAI INOSSIDABILI E CORRISPONDENTE CON NORME ESTERE

| Italia<br>UNI   | USA<br>AISI | Germania<br>WERKSTOFF | Francia<br>AFNOR | Svezia<br>SIS | URSS<br>GOST | Gran Bretagna<br>BSI |
|-----------------|-------------|-----------------------|------------------|---------------|--------------|----------------------|
| X5CrNi18-10     | 304         | 1.4301                | Z6CN18-09        | 2332          | 08Kh18N10    | 304S15               |
| X2CrNi18-11     | 304L        | 1.4306                | Z2CN18-10        | 2352          | 03Kh18N11    | 304S11               |
| X6CrNi18-11     | 321         | 1.4541                | Z6CNT18-10       | 2337          | 08Kh18N10T   | 321S31               |
| X6CrNi25-20     | 310S        | 1.4842                | Z12CN25-20       | 2361          | 10Kh23N18    | 310S24               |
| X5CrNiMo17-12   | 316         | 1.4401                | Z6CND17-11       | 2347          | /            | 316S31               |
| X2CrNiMo17-12   | 316L        | 1.4404                | Z2CND17-12       | 2348          | 03Kh17NT4M2  | 316S11               |
| X6CrNiMoTi17-12 | 316Ti       | 1.4571                | Z6CNDT17-12      | 2350          | 08Kh17N13M2T | 320S31               |
| X2CrNiMo17-13   | 316SL       | 1.4435                | Z2CND17-13       | 2353          | 03Kh16N15M3  | 316S13               |
| X5CrNiMo17-13   | 316S        | 1.4436                | Z6CND17-12       | 2343          | /            | 316S33               |