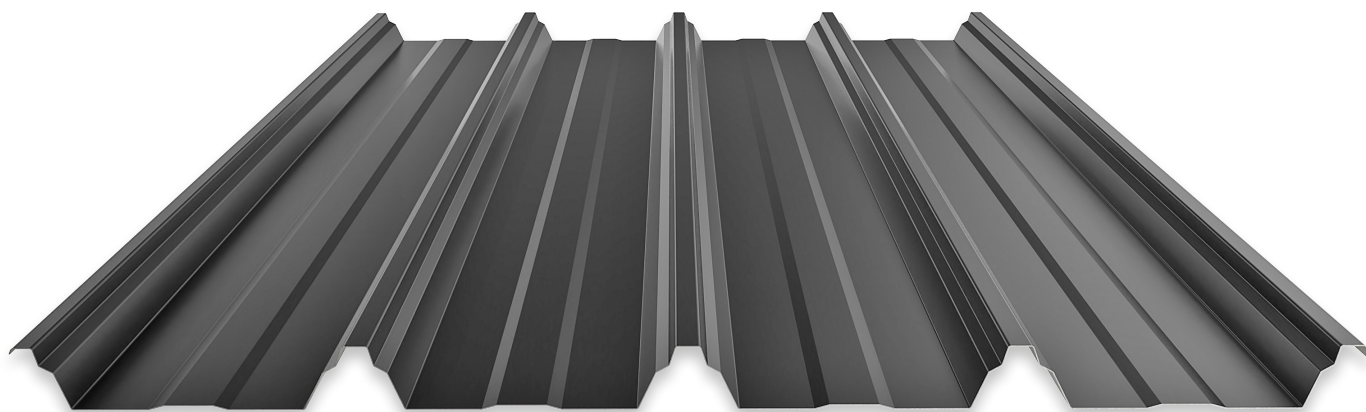
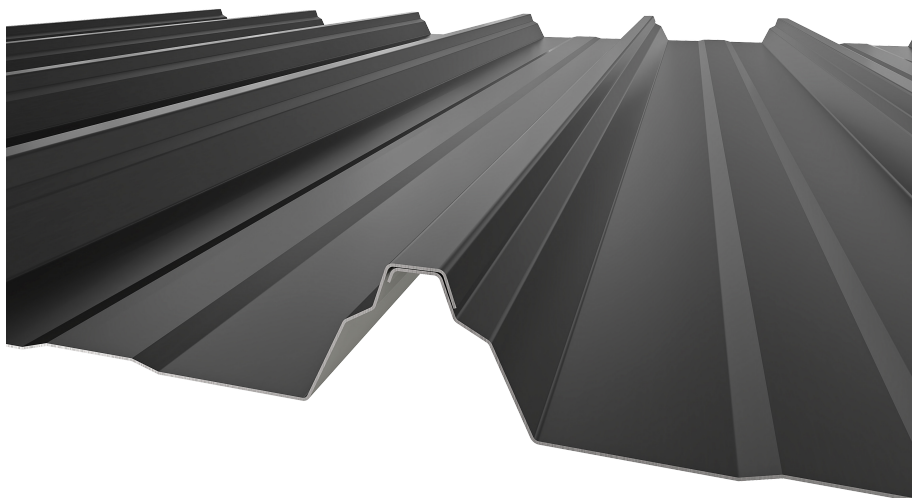


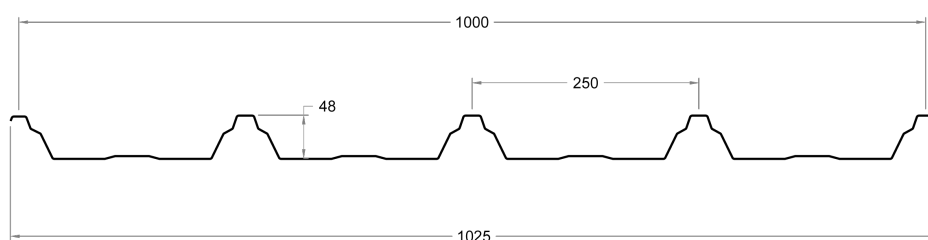
# A48C.1000

TRAPEZOIDAL PROFILE  
FOR ROOFING





### Geometric Characteristics



### Designation

**A48C.1000 Trapezoidal Sheet**

### Description

Cold-formed galvanised and pre-painted steel sheet.

### Application

Roof cladding for buildings.

### Dimensions

Effective width: 1000 mm

Overall width: 1025 mm

Thicknesses: 0.7 to 1.2 mm

Lengths: 2000 to 14000 mm

## Composition

### Substrate

Structural steel S220GD to S320GD.

### Metallic Coating

Galvanising Z100 to Z275, or equivalent AZ or ZM coating.

### Organic Coating

25 µm polyester coating, or alternatives such as PVDF, HDX or HPS.

## Regulations

### Steel Sheet Certification

CE marking in accordance with EN 10346 for metallic coatings and EN 10169 for organic coatings.

### A48.1000 Profile Certification

CE marking in accordance with EN 14782.



## Reaction to Fire

Reaction to fire classification A1 in accordance with EN 13501 (Euroclasses).

## Profile Technical Data

| Thickness<br>(mm) | Weight<br>(kg/m) | Weight<br>(kg/m <sup>2</sup> ) | Moment of Inertia I<br>(cm <sup>4</sup> /m) | Section Modulus<br>Wmin (cm <sup>3</sup> /m) | Bending Moment Mf<br>(kgf·m) |
|-------------------|------------------|--------------------------------|---------------------------------------------|----------------------------------------------|------------------------------|
| 0.7               | 6.84             | 6.93                           | 22.142                                      | 6.281                                        | 143.63                       |
| 0.8               | 7.91             | 7.86                           | 25.163                                      | 7.15                                         | 161.78                       |
| 1.0               | 9.9              | 9.72                           | 31.51                                       | 8.923                                        | 202.21                       |
| 1.2               | 11.79            | 11.84                          | 37.71                                       | 10.741                                       | 244.17                       |

### Allowable Load Tables

Maximum uniformly distributed load  $P$  (kN/m<sup>2</sup>) for a deflection of  $f \leq L/200$ .

Table values are based on calculations for S220GD and S320GD steel in accordance with EN 10346.

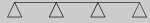
#### S220GD - 2 Supports

| t<br>(mm) | Pressure loads by span (m)  |      |      |     |     |     |     |     |     |     |     |
|-----------|----------------------------------------------------------------------------------------------------------------|------|------|-----|-----|-----|-----|-----|-----|-----|-----|
|           | 1.0                                                                                                            | 1.2  | 1.4  | 1.6 | 1.8 | 2.0 | 2.2 | 2.4 | 2.6 | 2.8 | 3.0 |
| 0.7       | 1775                                                                                                           | 1081 | 678  | 448 | 307 | 218 | 166 | 126 | 97  | 76  | 62  |
| 0.8       | 2028                                                                                                           | 1233 | 777  | 513 | 351 | 249 | 189 | 144 | 110 | 87  | 69  |
| 1.0       | 2526                                                                                                           | 1525 | 958  | 628 | 429 | 307 | 231 | 179 | 137 | 108 | 86  |
| 1.2       | 2982                                                                                                           | 1813 | 1136 | 749 | 511 | 369 | 279 | 213 | 164 | 128 | 100 |

#### S220GD - 3 Supports

| t<br>(mm) | Pressure loads by span (m)  |      |      |      |      |     |     |     |     |     |     |
|-----------|------------------------------------------------------------------------------------------------------------------|------|------|------|------|-----|-----|-----|-----|-----|-----|
|           | 1.0                                                                                                              | 1.2  | 1.4  | 1.6  | 1.8  | 2.0 | 2.2 | 2.4 | 2.6 | 2.8 | 3.0 |
| 0.7       | 4266                                                                                                             | 2609 | 1658 | 1073 | 751  | 539 | 405 | 310 | 241 | 193 | 155 |
| 0.8       | 4840                                                                                                             | 2993 | 1871 | 1242 | 848  | 602 | 460 | 356 | 276 | 217 | 174 |
| 1.0       | 6029                                                                                                             | 3665 | 2325 | 1527 | 1057 | 748 | 572 | 437 | 346 | 271 | 217 |
| 1.2       | 7151                                                                                                             | 4404 | 2749 | 1833 | 1252 | 904 | 678 | 525 | 404 | 322 | 256 |

#### S220GD - 4 Supports

| t<br>(mm) | Pressure loads by span (m)  |      |      |      |     |     |     |     |     |     |     |
|-----------|------------------------------------------------------------------------------------------------------------------|------|------|------|-----|-----|-----|-----|-----|-----|-----|
|           | 1.0                                                                                                              | 1.2  | 1.4  | 1.6  | 1.8 | 2.0 | 2.2 | 2.4 | 2.6 | 2.8 | 3.0 |
| 0.7       | 3358                                                                                                             | 2047 | 1287 | 856  | 584 | 421 | 317 | 246 | 189 | 150 | 120 |
| 0.8       | 3828                                                                                                             | 2322 | 1484 | 964  | 673 | 474 | 365 | 280 | 214 | 172 | 137 |
| 1.0       | 4763                                                                                                             | 2935 | 1825 | 1205 | 832 | 592 | 447 | 343 | 267 | 212 | 168 |
| 1.2       | 5671                                                                                                             | 3456 | 2178 | 1429 | 975 | 699 | 538 | 409 | 317 | 252 | 200 |

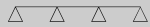
### S320GD - 2 Supports

| t<br>(mm) | Pressure loads by span (m)  |      |      |      |     |     |     |     |     |     |     |
|-----------|----------------------------------------------------------------------------------------------------------------|------|------|------|-----|-----|-----|-----|-----|-----|-----|
|           | 1.0                                                                                                            | 1.2  | 1.4  | 1.6  | 1.8 | 2.0 | 2.2 | 2.4 | 2.6 | 2.8 | 3.0 |
| 0.7       | 2605                                                                                                           | 1573 | 993  | 652  | 445 | 315 | 242 | 183 | 142 | 111 | 88  |
| 0.8       | 2925                                                                                                           | 1779 | 1114 | 739  | 508 | 364 | 276 | 209 | 160 | 125 | 100 |
| 1.0       | 3664                                                                                                           | 2208 | 1392 | 918  | 633 | 444 | 341 | 259 | 202 | 157 | 124 |
| 1.2       | 4342                                                                                                           | 2673 | 1659 | 1086 | 756 | 533 | 404 | 310 | 237 | 188 | 147 |

### S320GD - 3 Supports

| t<br>(mm) | Pressure loads by span (m)  |      |      |      |      |      |     |     |     |     |     |
|-----------|----------------------------------------------------------------------------------------------------------------|------|------|------|------|------|-----|-----|-----|-----|-----|
|           | 1.0                                                                                                            | 1.2  | 1.4  | 1.6  | 1.8  | 2.0  | 2.2 | 2.4 | 2.6 | 2.8 | 3.0 |
| 0.7       | 6256                                                                                                           | 3823 | 2393 | 1567 | 1094 | 769  | 584 | 449 | 352 | 280 | 226 |
| 0.8       | 7078                                                                                                           | 4330 | 2713 | 1777 | 1246 | 883  | 675 | 515 | 405 | 317 | 257 |
| 1.0       | 8818                                                                                                           | 5339 | 3377 | 2243 | 1542 | 1090 | 827 | 645 | 495 | 394 | 319 |
| 1.2       | 10485                                                                                                          | 6365 | 3990 | 2660 | 1834 | 1312 | 998 | 767 | 595 | 469 | 375 |

### S320GD - 4 Supports

| t<br>(mm) | Pressure loads by span (m)  |      |      |      |      |      |     |     |     |     |     |
|-----------|------------------------------------------------------------------------------------------------------------------|------|------|------|------|------|-----|-----|-----|-----|-----|
|           | 1.0                                                                                                              | 1.2  | 1.4  | 1.6  | 1.8  | 2.0  | 2.2 | 2.4 | 2.6 | 2.8 | 3.0 |
| 0.7       | 4867                                                                                                             | 3016 | 1883 | 1231 | 850  | 611  | 460 | 355 | 273 | 218 | 174 |
| 0.8       | 5577                                                                                                             | 3375 | 2126 | 1417 | 968  | 688  | 529 | 401 | 315 | 249 | 199 |
| 1.0       | 6910                                                                                                             | 4195 | 2661 | 1736 | 1199 | 867  | 651 | 498 | 390 | 306 | 246 |
| 1.2       | 8314                                                                                                             | 5006 | 3140 | 2076 | 1441 | 1031 | 776 | 597 | 468 | 365 | 294 |

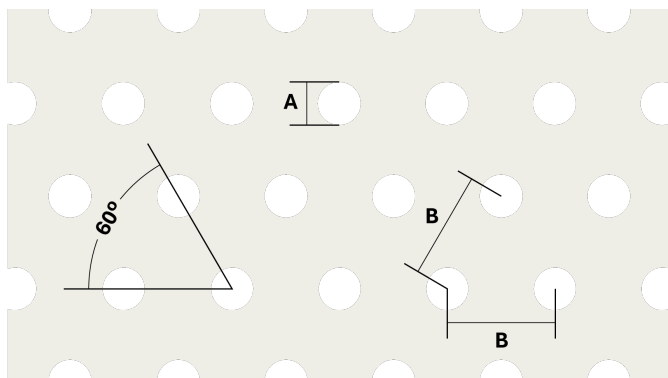
### Perforated Sheet Option

361 Metal can supply this profile with uniform perforation in two patterns:

**Type R3/T5** — 3 mm diameter holes at 5 mm centres, in a 60° triangular pattern, giving an open area of approximately 33%.

**Type R5/T8** — 5 mm diameter holes at 8 mm centres, in a 60° triangular pattern, giving an open area of approximately 35%.

Other perforation patterns available on request.



### Key

| Pattern | Hole diameter (A) | Centre distance (B) |
|---------|-------------------|---------------------|
| R3/T5   | 3 mm              | 5 mm                |
| R5/T8   | 5 mm              | 8 mm                |

### Coating Selection

To support selection and ensure maximum product durability, we offer a range of coatings to suit the installation environment.

### Available Coatings

| Coatings              | Exterior Environment |                  |           |          |          |            |      | Interior Environment |                 |               |                    |
|-----------------------|----------------------|------------------|-----------|----------|----------|------------|------|----------------------|-----------------|---------------|--------------------|
|                       | Rural Non-Polluted   | Urban/Industrial | Marine    |          |          | Resistance |      | Low Humidity         | Medium Humidity | High Humidity | Interior Corrosion |
|                       |                      |                  | 3 - 20 km | 1 - 3 km | 0 - 1 km | Corrosion  | UV   |                      |                 |               |                    |
| PE 25µm               | ✓                    | *                | *         | ×        | ×        | *          | *    | ✓                    | ✓               | Ai3           | CPI3               |
| PE 35µm<br>HDS 35µm   | ✓                    | ✓                | ✓         | *        | ×        | RC4        | RUV4 | ✓                    | ✓               | Ai3           | CPI4               |
| PVDF 35µm             | ✓                    | ✓                | ✓         | *        | ×        | RC4        | RUV4 | ✓                    | ✓               | Ai3           | CPI4               |
| PUPA 55µm<br>HDX 55µm | ✓                    | ✓                | ✓         | ✓        | *        | RC5        | RUV4 | ✓                    | ✓               | Ai3           | CPI4               |
| HPS 200µm             | ✓                    | ✓                | ✓         | ✓        | ✓        | RC5+       | RUV4 | ✓                    | ✓               | Ai5           | CPI5               |

✓ Suitable Coating

× Unsuitable Coating

\* On Request

*Indicative table only. Each project has its own specific requirements, so we recommend contacting our team directly for a tailored assessment.*

### Condensation Control

The A48 is available with an optional factory-applied anti-condensation coating on the underside. The material retains condensed moisture instead of letting it drip. As the air warms up, the accumulated water gradually returns to the atmosphere through evaporation. It is a durable material that withstands fresh-water jet washing and maintains its performance in aggressive environments.

Non-combustible.

Rain noise reduction of up to 6 dB.

Water absorption capacity of up to 1.5 kg/m<sup>2</sup>.



### Quality and Safety

Steel and coatings free of SVHC, in compliance with the European REACH Regulation.

*Information subject to change without notice. Please refer to the latest version at [www.361metal.com](http://www.361metal.com).  
For information only; does not replace technical validation for each application.*