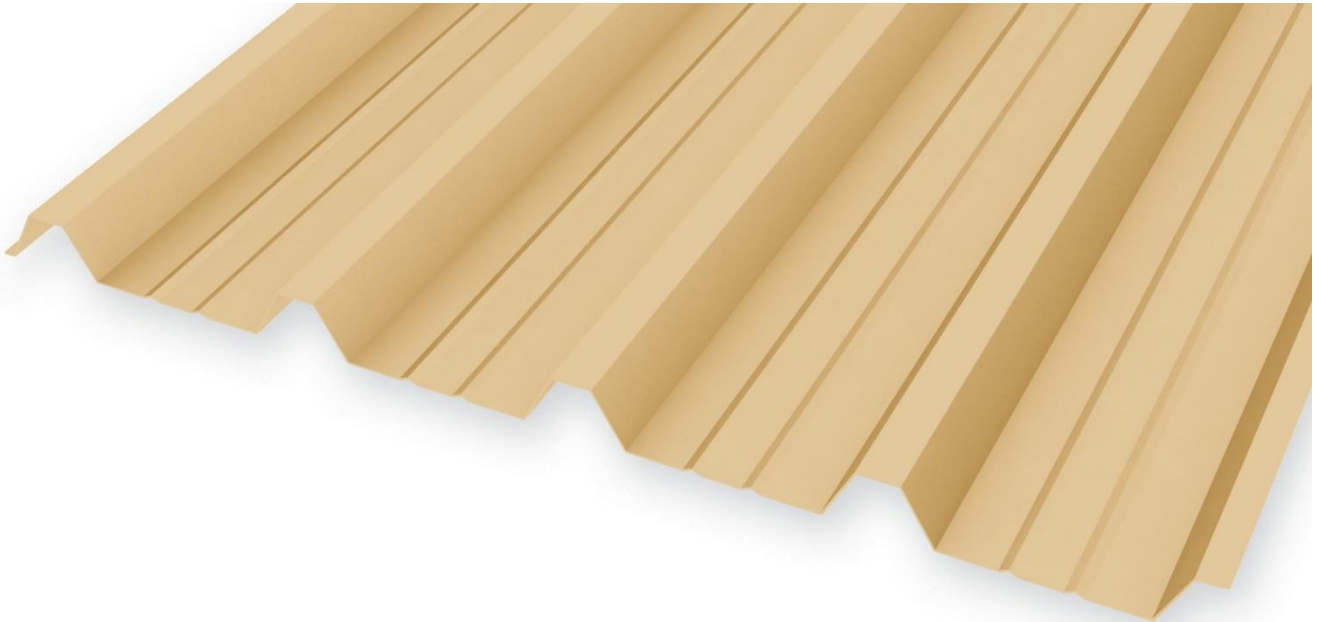


**PROFILE TRAPEZOIDAL DF-40/250****CHARACTERISTIC:**

Trapezoidal profile of cold-formed, high-quality structural steel sheet, the type of profile that makes up the sheet give it excellent resistance to loads and a perfect water tightness.

Manufactured in different sheet metal thicknesses allows an effective enclosure outdoors and indoors.

It can be delivered in different finishes according to the needs of our customers, galvanized or pre-lacquered with various exterior coatings, the standard being the polyester of 25 microns, which confers a good resistance to the environment.

It is possible to choose a view A face and a view B face that make the coating the possibility of having two different finishes.

This profile provides a high finish both structural and aesthetic.



**PROFILE TRAPEZOIDAL DF-40/250****USES AND APPLICATIONS:**

Manufacture of roofs and facades for industrial, residential, sports facilities, commercial, prefabricated houses, pergolas, parking, rehabilitation of roofs and facades.

Deck covers, Missing formwork.

Acoustic systems with perforated sheets.

Facades that need lighting and ventilation, with perforated sheets.

The profile anchoring system together with the seal water tightness allows for quick and easy placement, reducing assembly times.

Our roof or facade profiles provide a high finish both structural and aesthetic.



# PROFILE TRAPEZOIDAL DF-40/250

## PHYSICAL FEATURES:

|                                       |                               |
|---------------------------------------|-------------------------------|
| <b>Quality of pre-lacquered steel</b> | Standard S220GD pre-lacquered |
| <b>Galvanized steel quality</b>       | Galvanized DX51D              |

| Steel sheet values   | TYPE OF STEEL |        |
|----------------------|---------------|--------|
|                      | Dx51d         | S220GD |
| Re N/mm <sup>2</sup> | N.E.          | 220    |
| Rm N/mm <sup>2</sup> | 250 to 500    | 300    |
| A% (Lo-80mm)         | 22%           | 20%    |

## CHEMICAL FEATURES:

| CHEMICAL ANALYSIS (average) sheet metal steel |        |       |       |        |        |
|---|--------|-------|-------|--------|--------|
| C (%)   | Mn (%) | S (%) | P (%) | Si (%) | Al (%) |
| 0.18  | 1.2    | 0.45  | 0.12  | 0.5    | N.E..  |

### OUTER FACES

Cold-profiled sheet from S220GD Z140 pre-lacquered structural steel coil, galvanized DX51D, certified quality.

Hot galvanized sheet according to EN 10346.

### COATINGS

The sheet can be manufactured with various exterior coatings to ensure maximum durability, depending on the environment and the intended conditions of use:

Polyester lacquer (25 microns)

Granite HDX (55 microns)

PVDF / Polyvinylidene Fluoride (35 mm)

PET (50 microns) (for panel inner face only)

Granite FARM (35 microns) for agricultural or livestock sector.

### Z140 TYPE

Total minimum coating mass, three-point test: 140 gr/cm<sup>2</sup>

Theoretical indicative values for the thickness of the surface coating, test at a point 10 (range 7 to 15), (Z zinc coating masses).

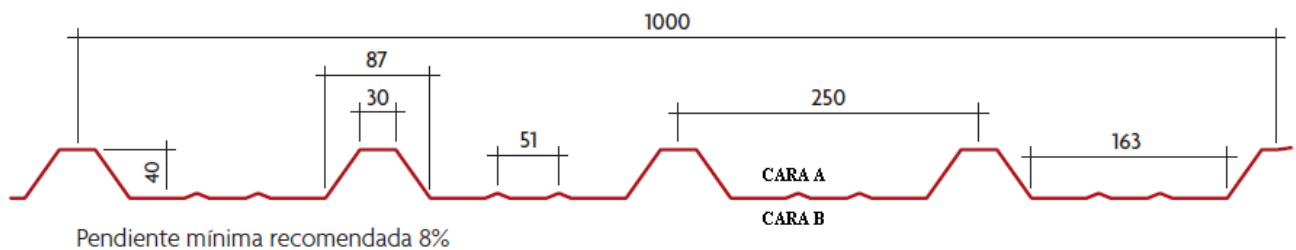
Density 7.1 g/cm<sup>3</sup>



## PROFILE TRAPEZOIDAL DF-40/250

### STRUCTURAL FEATURES:

|                             |                   |     |
|-----------------------------|-------------------|-----|
| <b>Useful width:</b>        | 1000              | mm  |
| <b>Manufacturing length</b> | On request        | mm  |
| <b>Number of grecas</b>     | 5                 | N ° |
| <b>Height greca</b>         | 40                | mm  |
| <b>Passage of greca</b>     | 250               | mm  |
| <b>Thicknesses</b>          | 0,5/0,6/0,7/0,8/1 | mm  |



Detalle del solape:



| Thickness | Weight |                   | Position A Covered  |                      |                  | Position B facade    |                  |
|-----------|--------|-------------------|---------------------|----------------------|------------------|----------------------|------------------|
|           |        |                   | Moment of inertia I | Resilient moment W   | Moment flector M | Resilient moment W   | Moment flector M |
| Mm        | kg/m   | kg/m <sup>2</sup> | cm <sup>4</sup> /m  | cm <sup>3</sup> /m/m | kg-m             | cm <sup>3</sup> /m/m | kg-m             |
| 0,5       | 5      | 5                 | 13,01               | 4,23                 | 59,27            | 3,86                 | 54,04            |
| 0,6       | 6      | 6                 | 15,48               | 5,04                 | 70,56            | 4,69                 | 65,66            |
| 0,7       | 7      | 7                 | 17,97               | 5,78                 | 80,92            | 5,74                 | 80,36            |
| 0,8       | 8      | 8                 | 20,43               | 6,62                 | 92,68            | 6,46                 | 90,44            |
| 1         | 10     | 10                | 23,10               | 7,32                 | 110,55           | 7,34                 | 100,20           |

#### Calculation criteria:

Maximum permissible voltage of the plate T-1400 kg/m<sup>2</sup>

Maximum permissible arrow  $f-L/200$  (L being belt spacing)


#### Regulations:


UNE 14782 Self-supporting metal sheets for coating and coating of roofs and facades.



# PROFILE TRAPEZOIDAL DF-40/250

## MAXIMUM LIGHTS TABLE BETWEEN SUPPORTS (TWO SUPPORTS)


|  L (m) |      | Position A Covered<br>Distance between supports L(m) |     |      |     |      |     |  |
|---|------|--|-----|------|-----|------|-----|--|
| Thickness mm  | 1    | 1,25   | 1,5 | 1,75 | 2   | 2,25 | 2,5 |  |
| 0,5   | 455  | 291  | 213 | 160  | 120 | 89   | 68  |  |
| 0,6   | 596  | 349  | 251 | 177  | 141 | 106  | 90  |  |
| 0,7   | 721  | 430  | 288 | 208  | 162 | 127  | 104 |  |
| 0,8   | 987  | 504  | 330 | 240  | 185 | 146  | 119 |  |
| 1   | 1312 | 646  | 406 | 293  | 228 | 184  | 154 |  |
| Allowable load between supports kg/m <sup>2</sup>                                       |      |  |     |      |     |      |     |  |


|  L (m) |      | Position B facade<br>Distance between supports L(m) |     |      |     |      |     |  |
|--|------|---|-----|------|-----|------|-----|--|
| Thickness mm   | 1    | 1,25  | 1,5 | 1,75 | 2   | 2,25 | 2,5 |  |
| 0,5  | 447  | 288   | 209 | 157  | 117 | 88   | 64  |  |
| 0,6  | 579  | 340   | 237 | 171  | 131 | 104  | 84  |  |
| 0,7  | 718  | 420   | 286 | 207  | 161 | 125  | 103 |  |
| 0,8  | 976  | 493   | 322 | 237  | 181 | 140  | 116 |  |
| 1  | 1303 | 630   | 401 | 292  | 227 | 176  | 154 |  |
| Allowable load between supports kg/m <sup>2</sup>  |      |   |     |      |     |      |     |  |



# PROFILE TRAPEZOIDAL DF-40/250

## TABLE OF MAXIMUM LIGHTS BETWEEN SUPPORTS (FOUR SUPPORTS)

|  Position A Covered Distance between supports L(m) |      |      |     |      |     |      |     |
|---|------|------|-----|------|-----|------|-----|
| Thickness mm  | 1    | 1,25 | 1,5 | 1,75 | 2   | 2,25 | 2,5 |
| 0,5   | 538  | 330  | 240 | 177  | 136 | 108  | 86  |
| 0,6   | 705  | 436  | 314 | 231  | 177 | 139  | 113 |
| 0,7   | 853  | 525  | 360 | 262  | 202 | 166  | 130 |
| 0,8   | 1154 | 623  | 412 | 299  | 232 | 180  | 148 |
| 1   | 1532 | 818  | 530 | 383  | 297 | 235  | 191 |
| Allowable load between kg/m2 supports   |      |      |     |      |     |      |     |

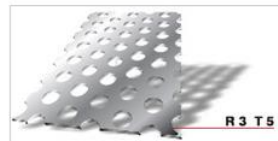
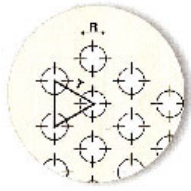
|  Position B facade<br>Distance between supports L(m) |      |      |     |      |     |      |     |
|---|------|------|-----|------|-----|------|-----|
| Thickness mm  | 1    | 1,25 | 1,5 | 1,75 | 2   | 2,25 | 2,5 |
| 0,5   | 525  | 324  | 231 | 172  | 132 | 101  | 80  |
| 0,6   | 689  | 422  | 297 | 216  | 164 | 128  | 105 |
| 0,7   | 849  | 521  | 357 | 260  | 201 | 159  | 128 |
| 0,8   | 1146 | 614  | 402 | 291  | 226 | 177  | 145 |
| 1   | 1529 | 809  | 548 | 376  | 293 | 233  | 191 |
| Allowable load between kg/m2 supports   |      |      |     |      |     |      |     |



**PROFILE TRAPEZOIDAL DF-40/250****PERFORATIONS FOR ACOUSTIC SOLUTIONS:**

You can supply this profile with uniform perforation. type R3T5

|                                      |  |
|--------------------------------------|--|
| <b>DRILLING TYPE:</b>                | R3T5                                       |
| <b>HOLE TYPE:</b>                    | Round                                      |
| <b>PROVISION:</b>                    | Angular                                    |
| <b>DIAMETER (R):</b>                 | 3 mm                                       |
| <b>DISTANCE BETWEEN CENTRES (T):</b> | 5 mm                                       |
| <b>PERFORATED SUPERFICIE:</b>        | 32.62 % (S.L. s $0.906 \times (R / T)^2$ ) |

**QUALITY AND CERTIFICATIONS:**

Our profiles are manufactured with the best materials available on the market, both in the pre-lacquered or galvanized steel sheet used.

**UNE 14782** For different profiles, marked according to standard.



**UNE-EN 10346** Steel flat products coated continuously by hot immersion. Technical conditions of supply.

**UNE-EN 10169** Flat steel products, continuously coated with organic (prelacqued) materials.

**UNE-EN 10143** Steel sheets and bands with continuous metal coating by hot immersion. Dimensional and shape tolerances.

**OTHER CHARACTERISTICS:****WATERTIGHTNESS AND STABILITY:**

Our design, of the overlap make our profiles perfiles watertight and atmospheric agents.

Our products comply with the European REACH regulation containing substances classified as extremely worrying (SVHC) according to Annex XIV to that regulation.





## PROFILE TRAPEZOIDAL DF-40/250



### **ENVIRONMENTAL CONSERVATION MEASURES:**

#### **TREATMENT OF RESIDUE:**

The residue from the cuts produced during assembly consists of sheet metal which is not considered as hazardous waste.

They must be classified with the corresponding LER codes and be restored or by an authorized waste manager in accordance with local legislation in force at the time the waste occurs.

When the profiles or panels of a roof or facade are changed for any reason, the same treatment should be given to the residue produced.

At all times the environment of waste products produced by the handling of our profiles must be protected in order to contribute to the maintenance and improvement of the environment.

**The owner of the facility where our profiles are mounted is the final holder.**

#### **ENVIRONMENTAL SUSTAINABILITY:**

Our products comply with the European REACH regulation containing substances classified as extremely worrying (SVHC) according to Annex XIV to that regulation.

