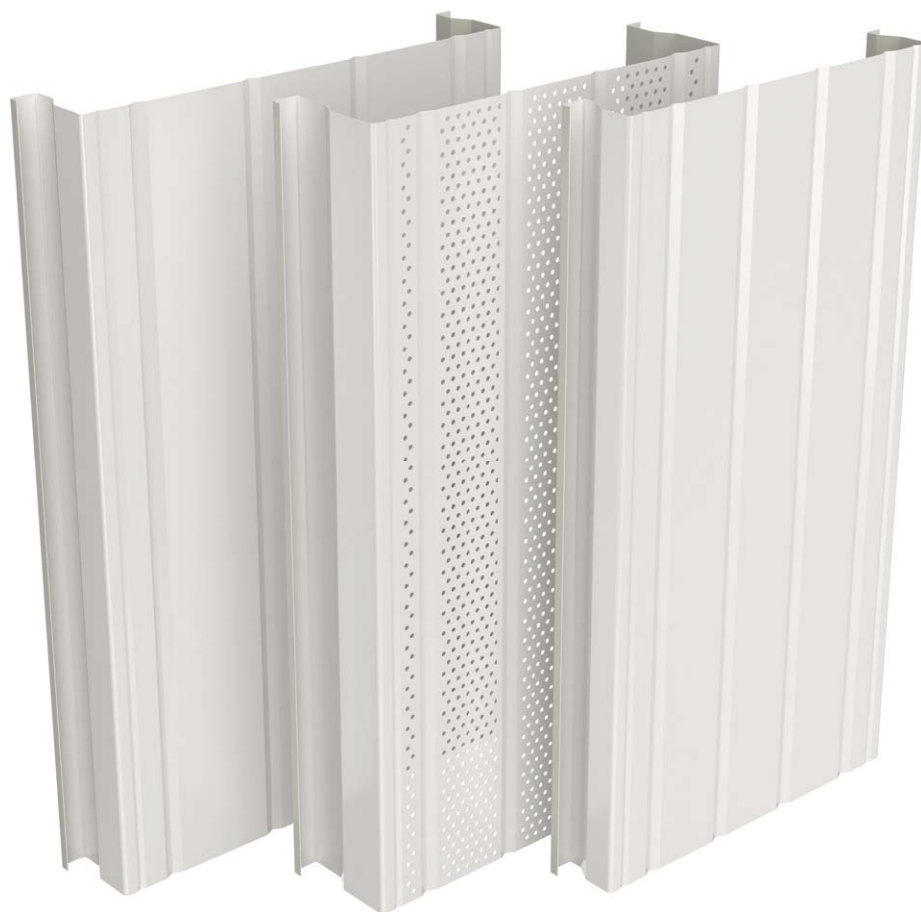


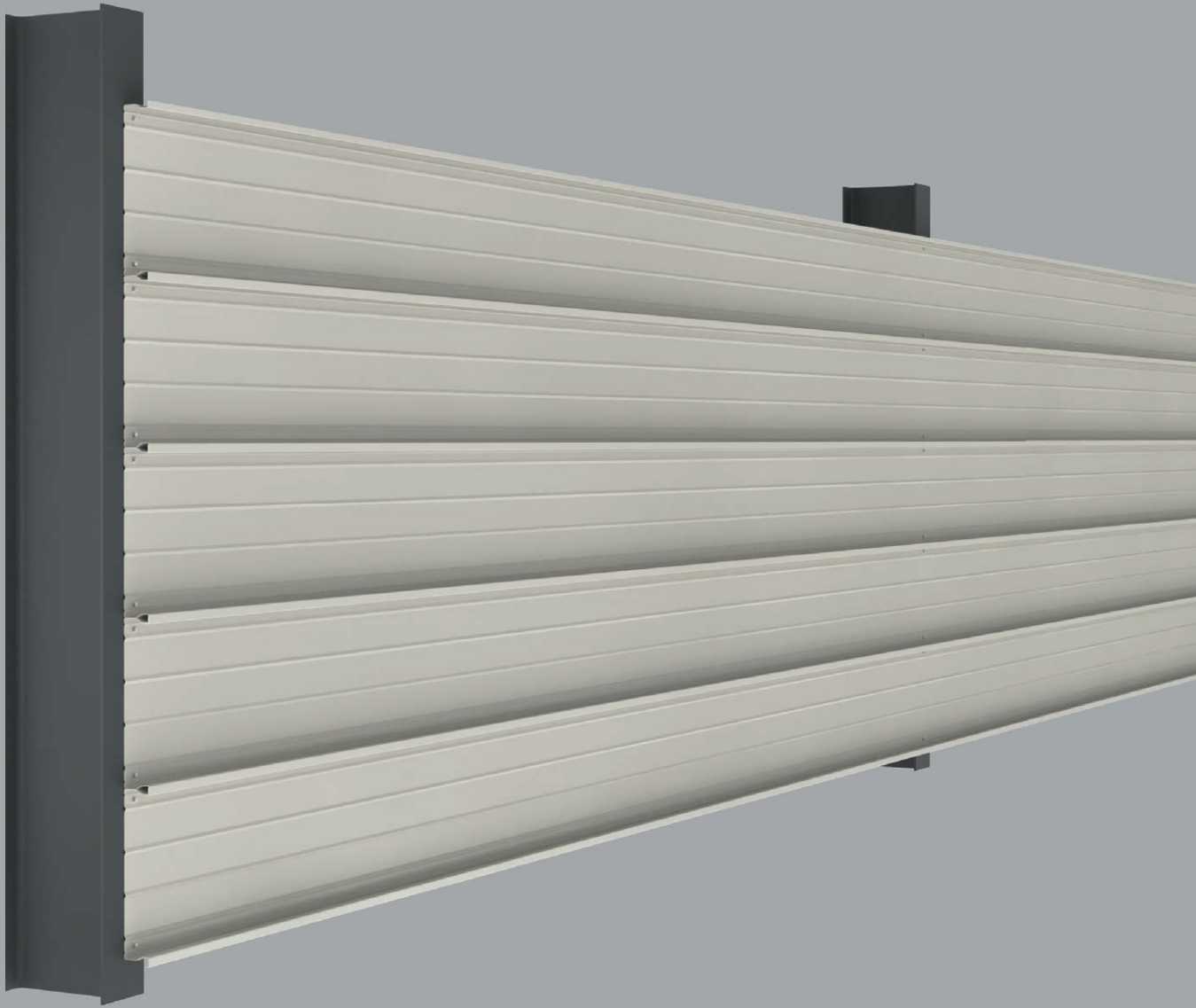
# PLATEAU®

COLD-FORMED STEEL  
TRAY PROFILES



FOR SELF-SUPPORTING  
FAÇADES

361metal



# INDEX

|    |                                                                                                                                           |
|----|-------------------------------------------------------------------------------------------------------------------------------------------|
| 04 | 361 METAL<br>Presentation<br>CE Marking                                                                                                   |
| 06 | PLATEAU® PROFILE                                                                                                                          |
| 08 | CHARACTERIZATION AND TESTING<br>Analytical characterization<br>Numerical analysis using the finite element method<br>Experimental testing |
| 12 | 361 SELEKTOR PLATFORM                                                                                                                     |
| 14 | THE PROFILES<br>Complete range<br>Material<br>Acoustic Plateau®                                                                           |
| 20 | GEOMETRIC PROPERTIES<br>Plateau® 415<br>Plateau® 440<br>Plateau® 500                                                                      |

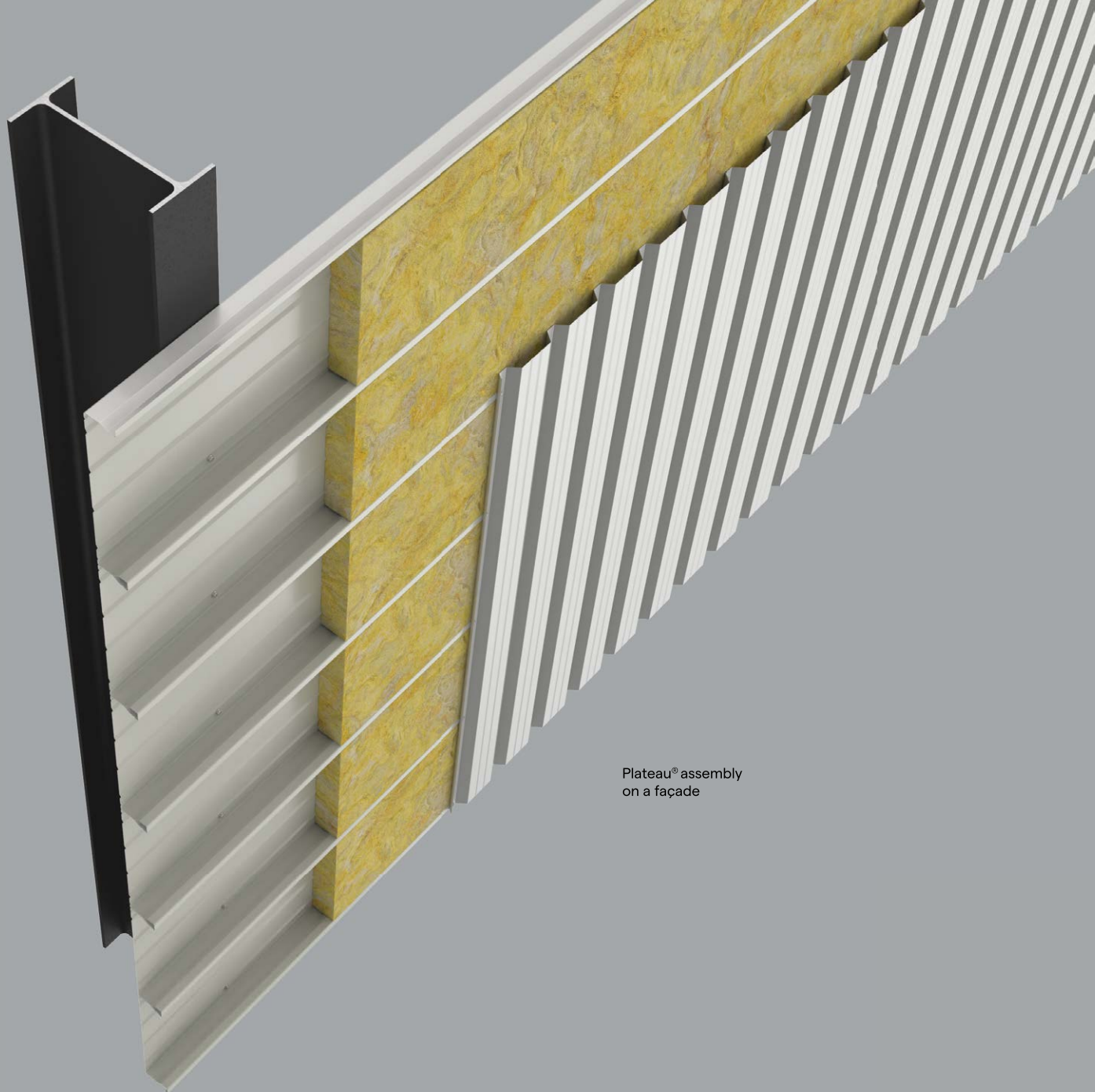
## 361 METAL

Founded in 2021 and integrated into a market-leading group in metal solutions for construction, 361 Metal combines an experienced and dynamic team with modern production facilities and top-quality raw materials to produce and supply the most efficient solutions in structural metal profiles.

361 Metal has its headquarters and manufacturing facilities in Braga, where it develops its industrial activity in metal forming and steelmaking services. Its network of commercial warehouses ensures direct sales and logistical distribution throughout the Iberian Peninsula.

361 Metal headquarters  
Braga, Portugal





Plateau® assembly  
on a façade

## Certification CE Marking

CE Marking is the form of harmonization and unification of procedures, standards, and legislation aimed at realizing the European internal market.

Since its creation in 1992, CE Marking ensures compliance with product standardization and essential safety, health, and environmental requirements.

CE Marking certifies that 361 Metal manufactures products in accordance with the technical requirements for cold-formed steel elements and structures, for roofs, ceilings, floors, and walls as prescribed in NP EN 14782.

Thus, CE Marking guarantees that 361 Metal supplies products in complete conformity with their declared performance.



# PLATEAU® PROFILE

The Plateau® system consists of a range of tray-type profiles for making self-supporting façade and roof systems that can be applied directly to the main structure, while providing the interior finish of the building.

This solution can be applied directly to steel, wood or concrete structures, eliminating the need for a secondary structure. It can overcome spans of up to 8 metres and thus makes it possible to achieve solutions with a good cost-performance ratio.

## THERMAL INSULATION

With different box dimensions, the system can accommodate 70 mm, 90 mm and 120 mm thick mineral wool or PIR panels, thus providing different levels of thermal insulation.

## ACOUSTIC INSULATION

In its perforated version and using suitable mineral wool, the Plateau® System offers the best performance in terms of acoustic insulation for walls and ceilings.

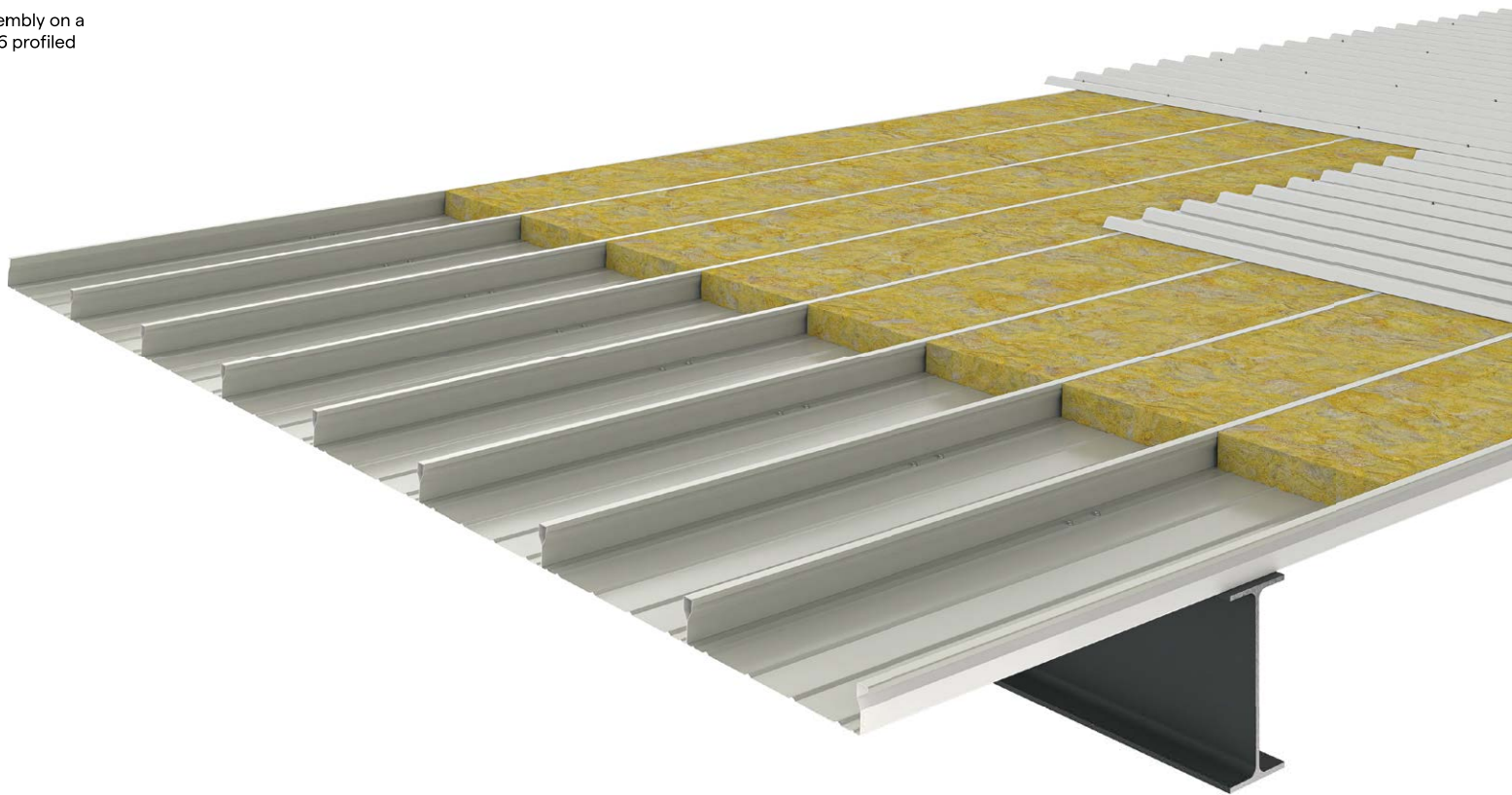
## FIRE BEHAVIOUR

A non-combustible product, this system is considered Class A in terms of reaction to fire.

## DIMENSIONAL STABILITY

The Plateau® tray system guarantees the flatness of surfaces over time and is not subject to surface changes afterwards.

Plateau® assembly on a roof with CP6 profiled sheet metal



Plateau® profiles are produced by cold-forming galvanised S320GD structural steel sheet with thicknesses ranging from 0,6 mm to 1,2 mm.

Cold roll forming is a continuous forming process with high dimensional accuracy. It allows the production of profiled sheets with lengths adapted to the project, with their size essentially limited to the logistics associated with transport and assembly.

Plateau® 500 without perforation



Production line  
Braga, Portugal



# CHARACTERIZATION AND TESTING

## ANALYTICAL CHARACTERISATION

Cold-formed profiles with reduced thicknesses exhibit significant slenderness levels in their components (flanges, webs, and stiffeners). Therefore, they are sensitive to local and distortional buckling effects, which occur at stress levels below the material's yield stress. As such, they are typically classified as class 4 according to Eurocode 3.

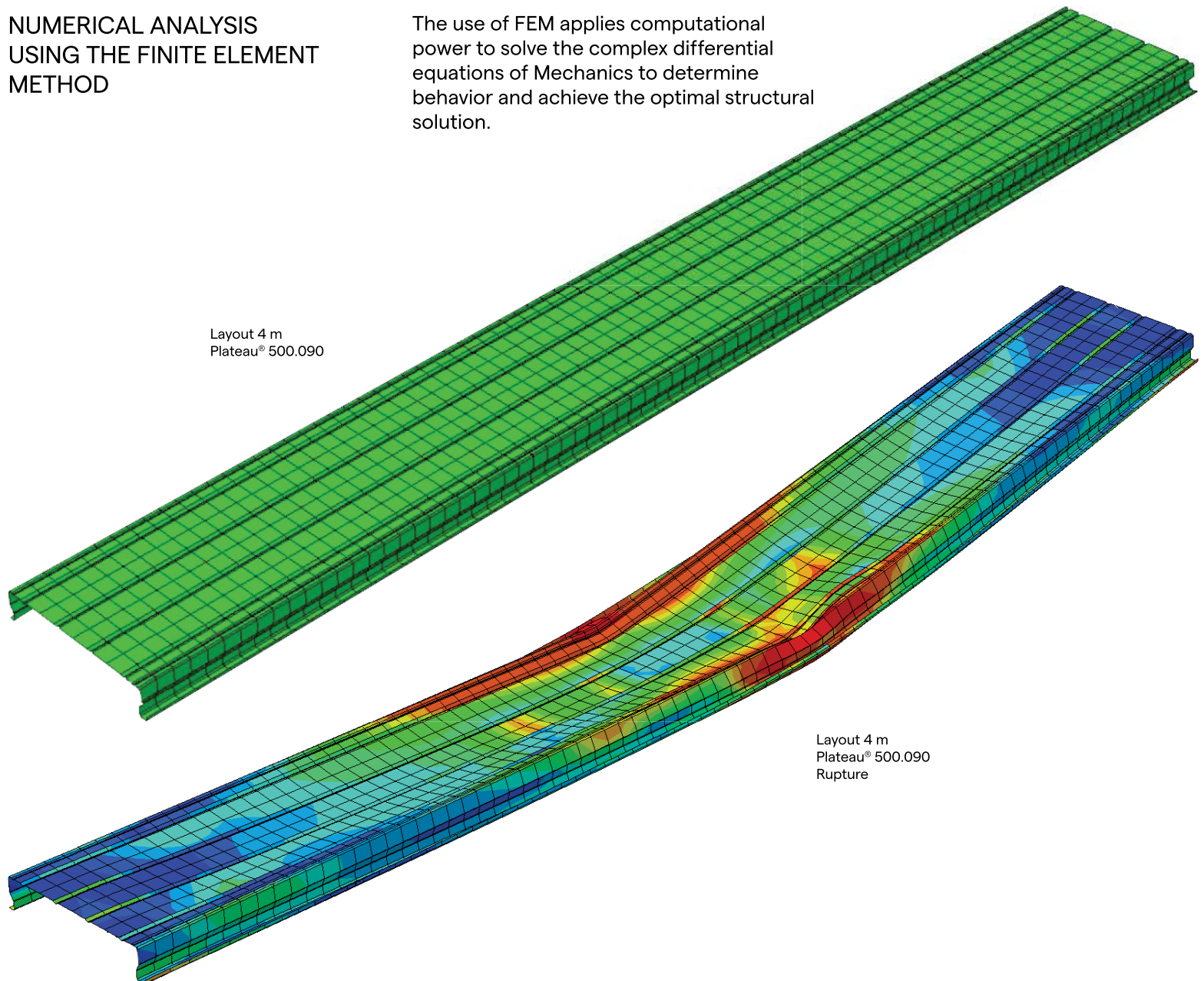
The safety verification procedure provided in Eurocode 3 for this type of metal profiles is defined in Parts 1-3 and 1-5 of the standard, which is based on the concept of effective widths.

The determination of the effective sections of class 4 metal profiles is based on the determination of the reduction factor due to buckling for each component of the cross-section (flanges and webs).

This reduction factor depends on the normalized slenderness coefficient and the distribution of normal stresses in each component. The location and size of the effective areas of the section are defined in clause 5.5.2 of Part 1-3 of Eurocode 3 for internal and external elements.

## NUMERICAL ANALYSIS USING THE FINITE ELEMENT METHOD

The use of FEM applies computational power to solve the complex differential equations of Mechanics to determine behavior and achieve the optimal structural solution.



# CHARACTERIZATION AND TESTING

## EXPERIMENTAL TESTING

Plateau® profiles underwent an exhaustive program aimed at fully characterizing their performance.

The process was developed through a partnership between 361 Metal and the Faculty of Engineering of the University of Porto and was based on the methodology summarized below:

- Definition of geometric properties using the analytical method recommended by Eurocode;
- Experimental campaign to validate the geometric properties measured by the analytical characterisation.

Conducting test  
FEUP, Porto



Plateau® assembly  
on a facade





# 361 SELEKTOR PLATFORM

## STRUCTURAL CALCULATION TOOL FOR DESIGNERS

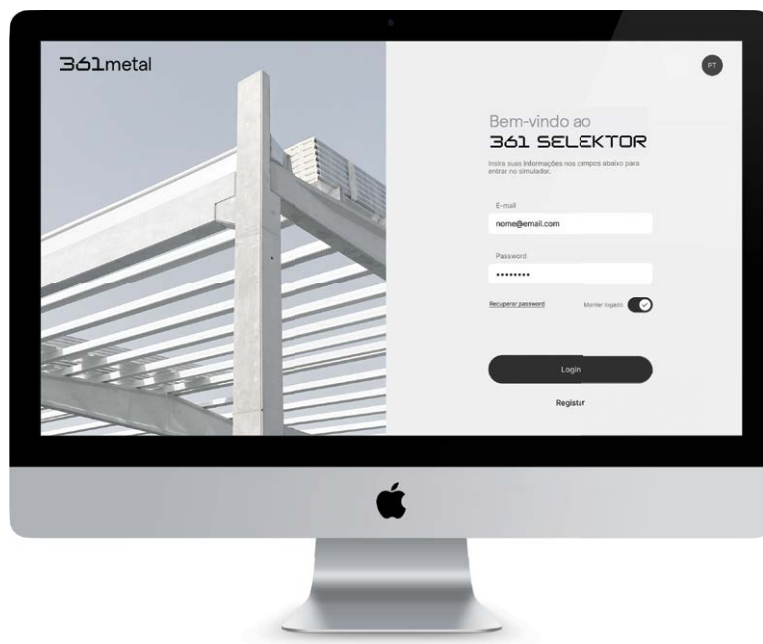
361 Metal offers a tool to support designers in correctly dimensioning their products in accordance with the Structural Eurocodes.

This tool has the following features, among others:

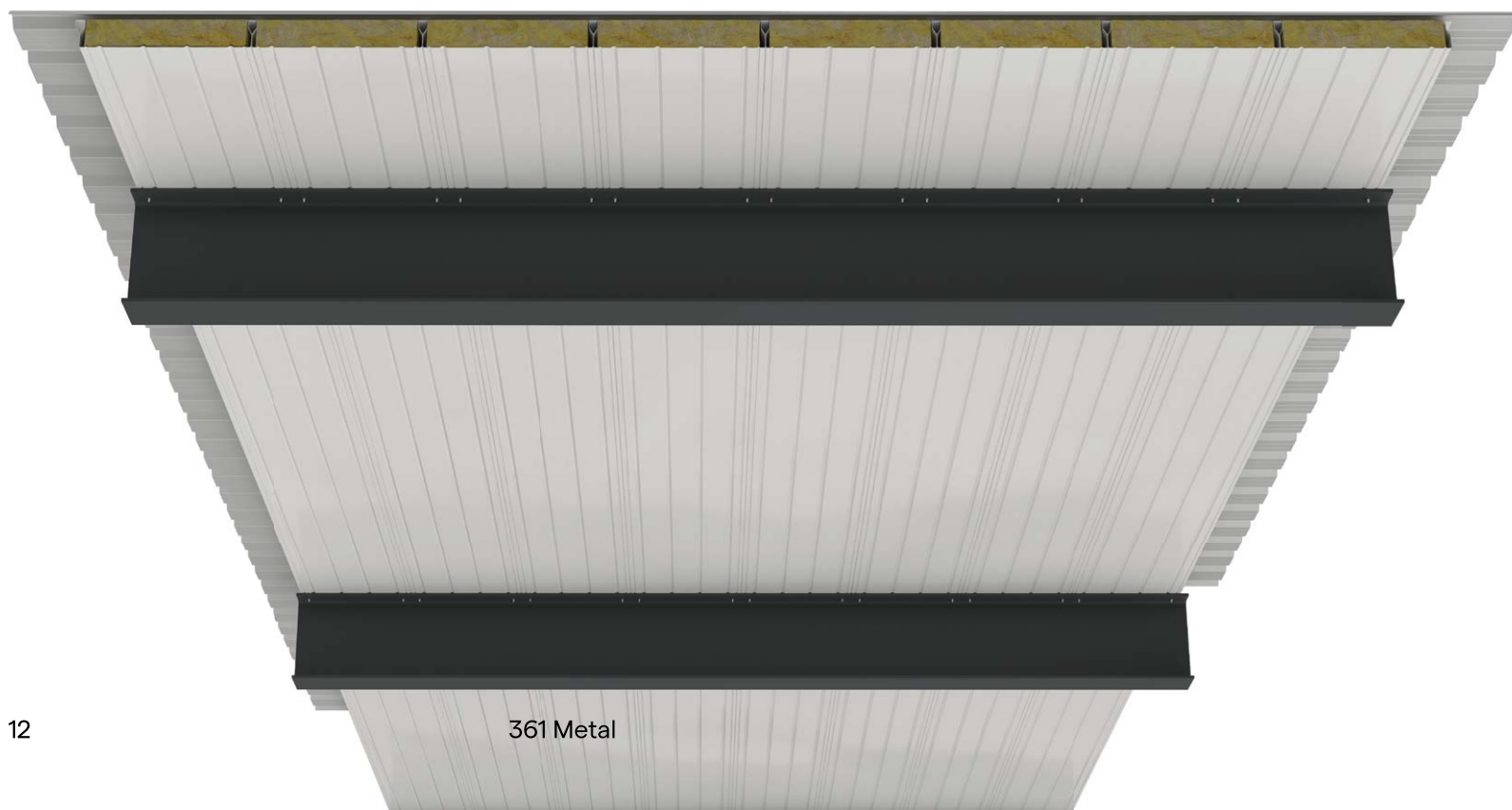
- Selection of the optimised and most suitable solution for a given use;
- Use of an expeditious design methodology even for designers with less experience in using these products;
- Issuing calculation notes in multilingual format.

Application available at [361metal.com](https://361metal.com) and [361selektor.com](https://361selektor.com)

Note: the structural calculation process must always be carried out by a qualified technician. 361 Metal has qualified technicians to support the prescription of the products it sells.



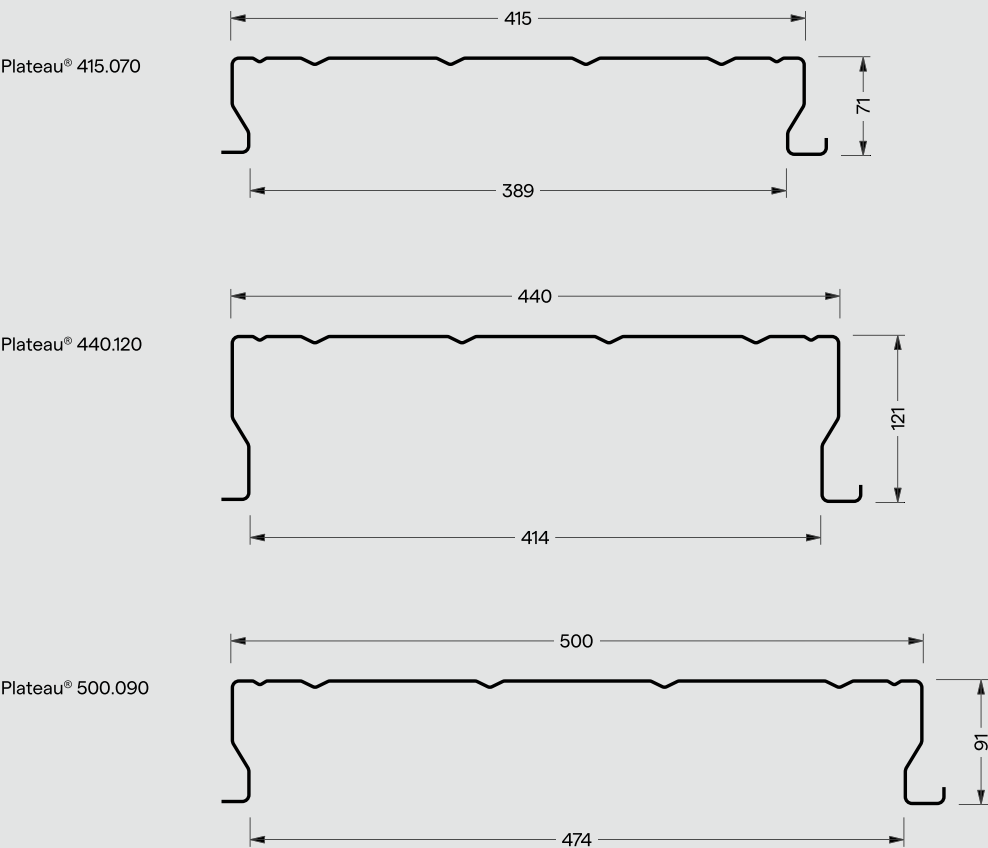
Assembly of Plateau®  
on a roof





# THE PROFILES

Plateau® profiles are available on the market in 3 versions, defined by their usable width, which varies between 415 → 440 → 500, each with variants depending on their thickness. The thickness of the sections varies between 0,6 and 1,2 mm.



| SECTION           | WEIGHT | HEIGHT | WIDTH | THICKNESS        |
|-------------------|--------|--------|-------|------------------|
|                   |        |        |       | Nominal          |
|                   |        | h      | b     | t <sub>nom</sub> |
|                   | Kg/m   | mm     | mm    | mm               |
| Plateau® 415×0,60 | 2,98   | 70     | 440   | 0,60             |
| Plateau® 415×0,70 | 3,48   | 70     | 440   | 0,70             |
| Plateau® 415×0,75 | 3,73   | 70     | 440   | 0,75             |
| Plateau® 415×1,00 | 4,97   | 70     | 440   | 1,00             |
| Plateau® 415×1,20 | 5,97   | 70     | 440   | 1,20             |
| Plateau® 440×0,60 | 3,57   | 120    | 465   | 0,60             |
| Plateau® 440×0,70 | 4,17   | 120    | 465   | 0,70             |
| Plateau® 440×0,75 | 4,47   | 120    | 465   | 0,75             |
| Plateau® 440×1,00 | 5,95   | 120    | 465   | 1,00             |
| Plateau® 440×1,20 | 7,14   | 120    | 465   | 1,20             |
| Plateau® 500×0,60 | 3,57   | 90     | 525   | 0,60             |
| Plateau® 500×0,70 | 4,17   | 90     | 525   | 0,70             |
| Plateau® 500×0,75 | 4,47   | 90     | 525   | 0,75             |
| Plateau® 500×1,00 | 5,96   | 90     | 525   | 1,00             |
| Plateau® 500×1,20 | 7,15   | 90     | 525   | 1,20             |

MATERIAL

The base material used in the manufacture of Plateau® profiles is pre-painted galvanised structural steel S320GD+Z200 according to standard EN 10346.

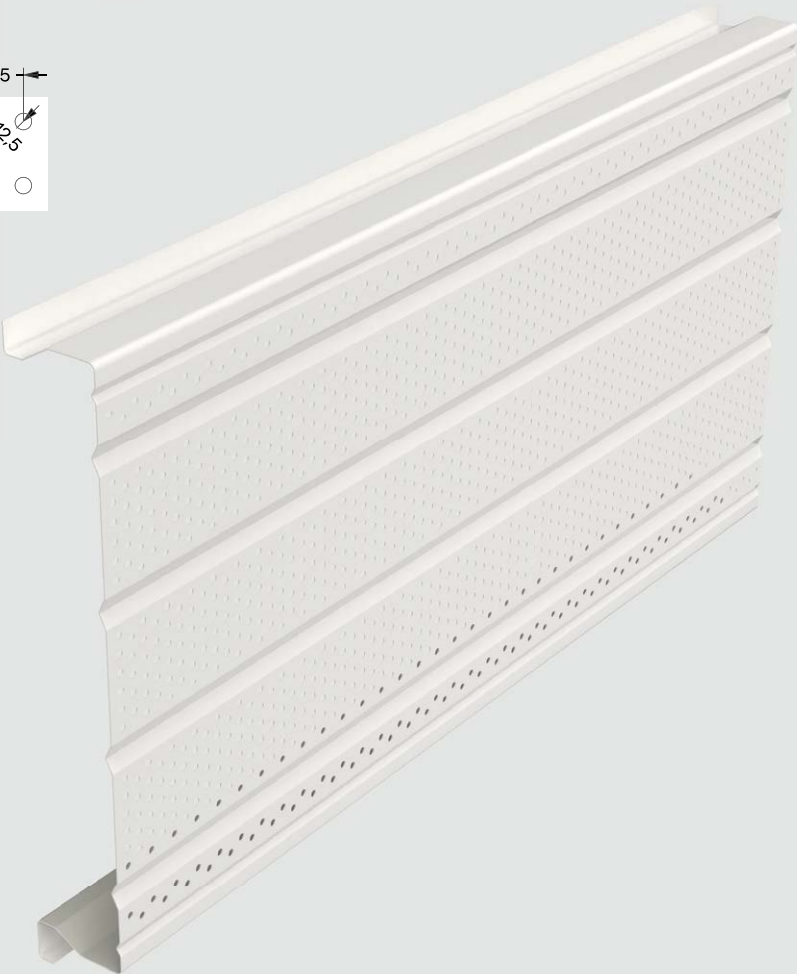
| STEEL CLASS | YIELD STRESS | TENSILE STRESS |
|-------------|--------------|----------------|
|             | Mpa          | Mpa            |
| S320GD+Z200 | 320          | 390            |

On request, different types of steel can also be used or with different types of metallic coating such as Zinc-Magnesium (ZM).

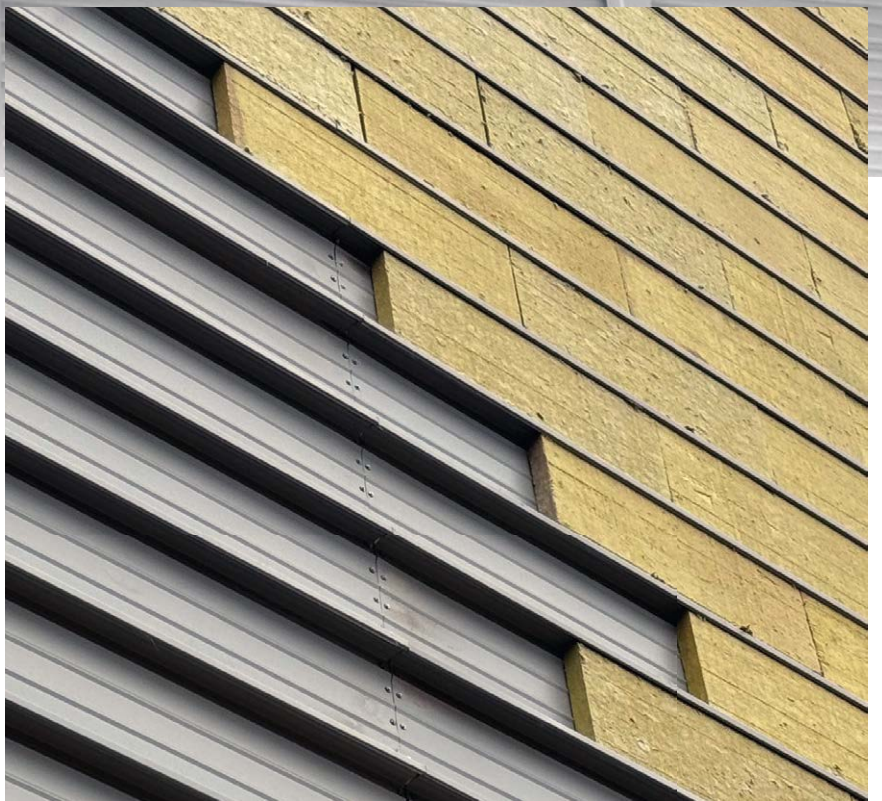
The standard organic coating consists of a 25 µm polyester lacquer. Also under conditions to be defined on request, the profiles can be produced with a 35 µm PVDF or 55 µm HDX coating.

ACOUSTIC PLATEAU®

Plateau® acoustic profiles are manufactured with perforations on the exposed side of the profile. With the indicated mineral wool insulation, this solution makes it possible to create walls and ceilings with high acoustic performance.

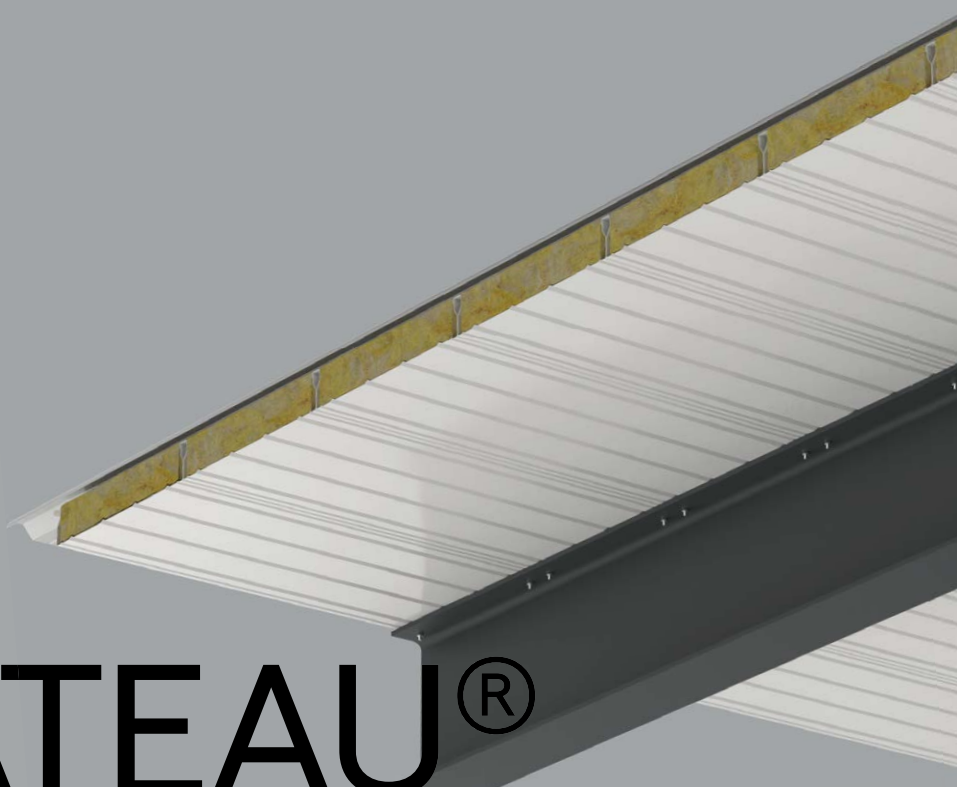








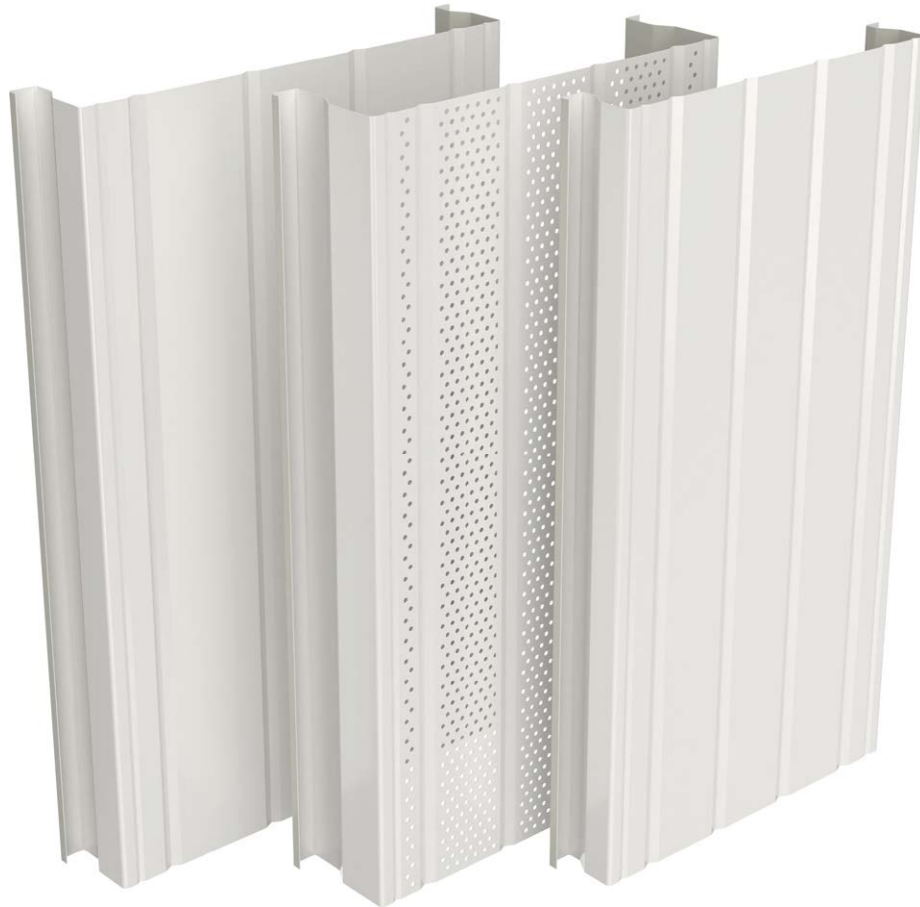




# PLATEAU<sup>®</sup> RANGE

415 → 440 → 500

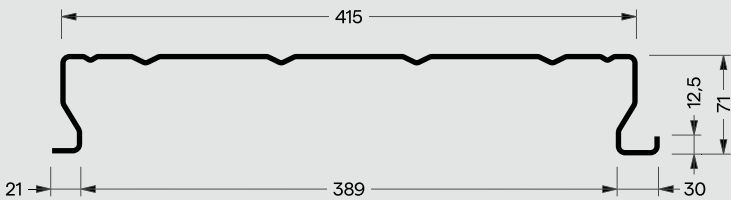
## GEOMETRY



## PROPERTIES



SECTION GEOMETRY



## GROSS SECTION PROPERTIES

| SECTION           | WEIGHT | HEIGHT | WIDTH | THICKNESS        |                  | GROSS SECTION PROPERTIES |                       |                       |                       |                       |                |                |                 |                 |                 |                 |
|-------------------|--------|--------|-------|------------------|------------------|--------------------------|-----------------------|-----------------------|-----------------------|-----------------------|----------------|----------------|-----------------|-----------------|-----------------|-----------------|
|                   |        |        |       | Nomi.            | Effect.          |                          |                       |                       |                       |                       |                |                |                 |                 |                 |                 |
|                   |        | h      | b     | t <sub>nom</sub> | t <sub>eff</sub> |                          |                       |                       |                       |                       |                |                |                 |                 |                 |                 |
|                   | Kg/m   | mm     | mm    | mm               | mm               | A <sub>gross</sub>       | I <sub>y, gross</sub> | I <sub>z, gross</sub> | W <sub>y, gross</sub> | W <sub>z, gross</sub> | I <sub>w</sub> | I <sub>t</sub> | Y <sub>cg</sub> | Y <sub>cc</sub> | Z <sub>cg</sub> | Z <sub>cc</sub> |
| Plateau® 415×0,60 | 2,98   | 70     | 440   | 0,60             | 0,56             | 355                      | 21,2                  | 829,6                 | 3845                  | 37178                 | 6114           | 37             | 223             | 236             | 53              | 93              |
| Plateau® 415×0,70 | 3,48   | 70     | 440   | 0,70             | 0,66             | 418                      | 25,0                  | 977,8                 | 4528                  | 43817                 | 7206           | 61             | 223             | 236             | 53              | 93              |
| Plateau® 415×0,75 | 3,73   | 70     | 440   | 0,75             | 0,71             | 450                      | 26,9                  | 1051,8                | 4869                  | 47137                 | 7752           | 76             | 223             | 236             | 53              | 93              |
| Plateau® 415×1,00 | 4,97   | 70     | 440   | 1,00             | 0,96             | 608                      | 36,4                  | 1422,2                | 6569                  | 63735                 | 10481          | 187            | 223             | 236             | 49              | 93              |
| Plateau® 415×1,20 | 5,97   | 70     | 440   | 1,20             | 1,16             | 735                      | 44,0                  | 1718,5                | 7924                  | 77013                 | 12665          | 330            | 223             | 236             | 53              | 93              |

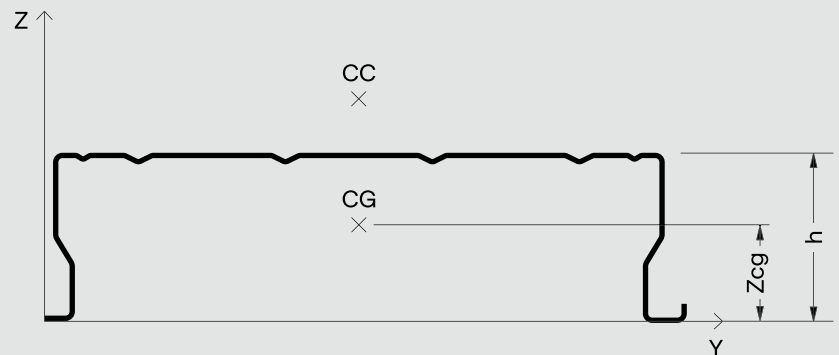
Note: the weights indicated in the tables are theoretical weights estimated based on the nominal dimensions of the cross-section, with variations occurring within the tolerances provided in standard EN 10051.

## EFFECTIVE SECTION PROPERTIES

| S320 GD           |                  |                     |                     |                         |                    |                    |                     |                     |                         |                    |                    |                     |                     |                         |                    |                    |                     |                     |                         |                    |                    |                     |                     |
|-------------------|------------------|---------------------|---------------------|-------------------------|--------------------|--------------------|---------------------|---------------------|-------------------------|--------------------|--------------------|---------------------|---------------------|-------------------------|--------------------|--------------------|---------------------|---------------------|-------------------------|--------------------|--------------------|---------------------|---------------------|
| SECTION           | COMPRESSION      |                     |                     | Y-AXIS POSITIVE FLEXION |                    |                    |                     |                     | Y-AXIS NEGATIVE FLEXION |                    |                    |                     |                     | Z-AXIS POSITIVE FLEXION |                    |                    |                     |                     | Z-AXIS NEGATIVE FLEXION |                    |                    |                     |                     |
|                   | A <sub>eff</sub> | Y <sub>cg,eff</sub> | Z <sub>cg,eff</sub> | A <sub>eff</sub>        | I <sub>y,eff</sub> | W <sub>y,eff</sub> | Y <sub>cg,eff</sub> | Z <sub>cg,eff</sub> | A <sub>eff</sub>        | I <sub>y,eff</sub> | W <sub>y,eff</sub> | Y <sub>cg,eff</sub> | Z <sub>cg,eff</sub> | A <sub>eff</sub>        | I <sub>z,eff</sub> | W <sub>z,eff</sub> | Y <sub>cg,eff</sub> | Z <sub>cg,eff</sub> | A <sub>eff</sub>        | I <sub>z,eff</sub> | W <sub>z,eff</sub> | Y <sub>cg,eff</sub> | Z <sub>cg,eff</sub> |
|                   | mm²              | mm                  | mm                  | mm²                     | ×10⁴ mm⁴           | mm³                | mm                  | mm                  | mm²                     | ×10⁴ mm⁴           | mm³                | mm                  | mm                  | mm²                     | ×10⁴ mm⁴           | mm³                | mm                  | mm                  | mm²                     | ×10⁴ mm⁴           | mm³                | mm                  | mm                  |
| Plateau® 415×0,60 | 151              | 227                 | 44                  | 184                     | 14,3               | 3187               | 229                 | 40                  | 337                     | 15,9               | 2650               | 221                 | 56                  | 266                     | 628,1              | 24390              | 183                 | 52                  | 261                     | 607,4              | 22861              | 267                 | 51                  |
| Plateau® 415×0,70 | 196              | 227                 | 44                  | 227                     | 17,6               | 3816               | 230                 | 41                  | 400                     | 19,7               | 3277               | 221                 | 56                  | 323                     | 781,5              | 31062              | 189                 | 52                  | 318                     | 757,8              | 29183              | 260                 | 51                  |
| Plateau® 415×0,75 | 219              | 228                 | 45                  | 248                     | 19,2               | 4126               | 229                 | 42                  | 432                     | 21,6               | 3602               | 222                 | 56                  | 352                     | 859,6              | 34509              | 192                 | 56                  | 347                     | 833,7              | 32420              | 258                 | 51                  |
| Plateau® 415×1,00 | 342              | 228                 | 45                  | 360                     | 27,6               | 5684               | 229                 | 43                  | 593                     | 31,9               | 5317               | 223                 | 55                  | 498                     | 1249,4             | 51942              | 201                 | 51                  | 495                     | 1214,1             | 48915              | 249                 | 51                  |
| Plateau® 415×1,20 | 442              | 227                 | 46                  | 456                     | 34,5               | 6969               | 228                 | 45                  | 721                     | 39,9               | 6709               | 222                 | 54                  | 615                     | 1548,6             | 65316              | 205                 | 52                  | 611                     | 1515,5             | 62049              | 245                 | 52                  |

### Legend

|                       |                                                  |
|-----------------------|--------------------------------------------------|
| A <sub>gross</sub>    | Gross section area                               |
| I <sub>y, gross</sub> | Gross section inertia yy-axis                    |
| I <sub>z, gross</sub> | Gross section inertia zz-axis                    |
| I <sub>w</sub>        | Warping constant                                 |
| I <sub>t</sub>        | Torsion inertia                                  |
| CG                    | Coordinates of the center of gravity             |
| CC                    | Coordinates of the shear center                  |
| A <sub>eff</sub>      | Effective section area                           |
| I <sub>y, eff</sub>   | Effective section inertia yy-axis                |
| W <sub>y, eff</sub>   | Bending modulus of the effective section yy-axis |
| I <sub>z, eff</sub>   | Effective section inertia zz-axis                |
| W <sub>z, eff</sub>   | Bending modulus of the effective section zz-axis |

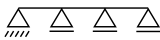


PLATEAU® 415 — S320GD — FAÇADE

Allowable load values (factored) in kN/m²

|  |     | SPAN |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
|-----------------------------------------------------------------------------------|-----|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| THICKNESS                                                                         |     | 2,00 | 2,25 | 2,50 | 2,75 | 3,00 | 3,25 | 3,50 | 3,75 | 4,00 | 4,25 | 4,50 | 4,75 | 5,00 | 5,25 | 5,50 | 5,75 | 6,00 | 6,25 | 6,50 | 6,75 | 7,00 |
| 0,60                                                                              | (P) | 1,32 | 1,17 | 1,05 | 0,96 | 0,88 | 0,81 | 0,72 | 0,59 | 0,48 | 0,40 | 0,34 | 0,29 | 0,25 | 0,21 | 0,19 | 0,16 | 0,14 | 0,13 | 0,11 | 0,10 | 0,09 |
| 0,70                                                                              | (P) | 1,80 | 1,60 | 1,44 | 1,31 | 1,20 | 1,11 | 0,89 | 0,73 | 0,60 | 0,50 | 0,42 | 0,36 | 0,31 | 0,26 | 0,23 | 0,20 | 0,18 | 0,16 | 0,14 | 0,12 | 0,11 |
| 0,75                                                                              | (P) | 2,06 | 1,83 | 1,65 | 1,50 | 1,38 | 1,22 | 0,98 | 0,80 | 0,66 | 0,55 | 0,46 | 0,39 | 0,34 | 0,29 | 0,25 | 0,22 | 0,19 | 0,17 | 0,15 | 0,14 | 0,12 |
| 1,00                                                                              | (P) | 3,64 | 3,24 | 2,91 | 2,65 | 2,29 | 1,80 | 1,45 | 1,17 | 0,97 | 0,81 | 0,68 | 0,58 | 0,50 | 0,43 | 0,37 | 0,33 | 0,29 | 0,25 | 0,23 | 0,20 | 0,18 |
| 1,20                                                                              | (P) | 5,19 | 4,62 | 4,16 | 3,62 | 2,87 | 2,26 | 1,81 | 1,47 | 1,21 | 1,01 | 0,85 | 0,72 | 0,62 | 0,54 | 0,47 | 0,41 | 0,36 | 0,32 | 0,28 | 0,25 | 0,23 |

|  |     | SPAN |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
|-----------------------------------------------------------------------------------|-----|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| THICKNESS                                                                         |     | 2,00 | 2,25 | 2,50 | 2,75 | 3,00 | 3,25 | 3,50 | 3,75 | 4,00 | 4,25 | 4,50 | 4,75 | 5,00 | 5,25 | 5,50 | 5,75 | 6,00 | 6,25 | 6,50 | 6,75 | 7,00 |
| 0,60                                                                              | (P) | 1,00 | 0,87 | 0,76 | 0,67 | 0,60 | 0,54 | 0,48 | 0,44 | 0,40 | 0,37 | 0,34 | 0,32 | 0,29 | 0,27 | 0,26 | 0,24 | -    | -    | -    | -    | -    |
| 0,70                                                                              | (P) | 1,32 | 1,14 | 0,99 | 0,87 | 0,78 | 0,70 | 0,63 | 0,57 | 0,52 | 0,48 | 0,44 | 0,41 | 0,38 | 0,35 | 0,33 | 0,31 | 0,29 | 0,27 | 0,25 | 0,24 | 0,23 |
| 0,75                                                                              | (P) | 1,49 | 1,28 | 1,12 | 0,98 | 0,87 | 0,78 | 0,71 | 0,64 | 0,58 | 0,53 | 0,49 | 0,45 | 0,42 | 0,39 | 0,36 | 0,34 | 0,32 | 0,30 | 0,28 | 0,27 | 0,25 |
| 1,00                                                                              | (P) | 2,44 | 2,08 | 1,80 | 1,58 | 1,40 | 1,24 | 1,12 | 1,01 | 0,92 | 0,84 | 0,77 | 0,70 | 0,65 | 0,60 | 0,56 | 0,52 | 0,49 | 0,46 | 0,43 | 0,40 | 0,38 |
| 1,20                                                                              | (P) | 3,31 | 2,81 | 2,42 | 2,11 | 1,86 | 1,65 | 1,48 | 1,33 | 1,21 | 1,10 | 1,01 | 0,92 | 0,85 | 0,79 | 0,73 | 0,68 | 0,63 | 0,59 | 0,56 | 0,52 | 0,49 |

|  |     | SPAN |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
|------------------------------------------------------------------------------------|-----|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| THICKNESS                                                                          |     | 2,00 | 2,25 | 2,50 | 2,75 | 3,00 | 3,25 | 3,50 | 3,75 | 4,00 | 4,25 | 4,50 | 4,75 | 5,00 | 5,25 | 5,50 | 5,75 | 6,00 | 6,25 | 6,50 | 6,75 | 7,00 |
| 0,60                                                                               | (P) | 1,17 | 1,01 | 0,88 | 0,78 | 0,70 | 0,63 | 0,57 | 0,52 | 0,47 | 0,44 | 0,40 | 0,37 | 0,35 | 0,32 | 0,30 | 0,28 | 0,25 | -    | -    | -    | -    |
| 0,70                                                                               | (P) | 1,54 | 1,33 | 1,16 | 1,03 | 0,91 | 0,82 | 0,74 | 0,67 | 0,62 | 0,57 | 0,52 | 0,48 | 0,45 | 0,42 | 0,39 | 0,35 | 0,30 | 0,27 | 0,24 | 0,21 | 0,19 |
| 0,75                                                                               | (P) | 1,74 | 1,50 | 1,31 | 1,15 | 1,03 | 0,92 | 0,83 | 0,76 | 0,69 | 0,63 | 0,58 | 0,54 | 0,50 | 0,47 | 0,43 | 0,38 | 0,33 | 0,29 | 0,26 | 0,23 | 0,21 |
| 1,00                                                                               | (P) | 2,86 | 2,45 | 2,12 | 1,86 | 1,65 | 1,47 | 1,32 | 1,20 | 1,09 | 1,00 | 0,91 | 0,84 | 0,78 | 0,71 | 0,62 | 0,54 | 0,48 | 0,42 | 0,38 | 0,34 | 0,30 |
| 1,20                                                                               | (P) | 3,89 | 3,31 | 2,86 | 2,50 | 2,21 | 1,97 | 1,76 | 1,59 | 1,44 | 1,32 | 1,20 | 1,11 | 1,02 | 0,89 | 0,78 | 0,68 | 0,60 | 0,53 | 0,47 | 0,42 | 0,38 |

- Legend
- ULS-governed loads
- SLS-governed loads
- (D)

 Downward loads
- (U)

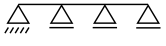
 Upward loads
- (P)

 Pressure loads
- SLS

 Deflection limit: L/200

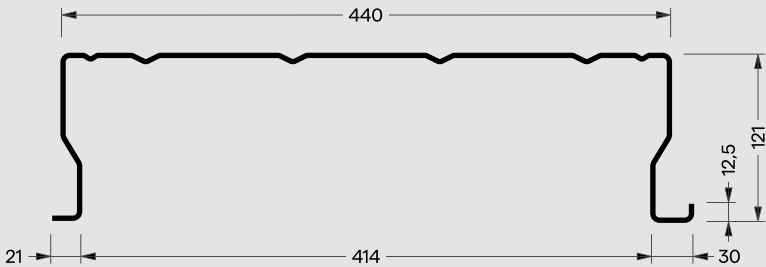
Dimensions in millimeters (mm)

PLATEAU® 415 — S320GD — ROOF  
Allowable load values (factored) in kN/m<sup>2</sup>

|    |     | SPAN |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------------------------------------------------------------------------------|-----|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| THICKNESS                                                                           |     | 2,00 | 2,25 | 2,50 | 2,75 | 3,00 | 3,25 | 3,50 | 3,75 | 4,00 | 4,25 | 4,50 | 4,75 | 5,00 | 5,25 | 5,50 | 5,75 | 6,00 |
| 0,60                                                                                | (D) | 1,10 | 0,95 | 0,83 | 0,74 | 0,66 | 0,59 | 0,48 | 0,34 | 0,24 | 0,16 | 0,09 | 0,04 | 0,00 | -    | -    | -    | -    |
|                                                                                     | (U) | 3,50 | 2,81 | 2,23 | 1,74 | 1,39 | 1,15 | 0,97 | 0,83 | 0,73 | 0,65 | 0,59 | 0,54 | 0,49 | 0,46 | 0,43 | 0,41 | 0,39 |
| 0,70                                                                                | (D) | 1,57 | 1,37 | 1,21 | 1,07 | 0,97 | 0,86 | 0,63 | 0,47 | 0,34 | 0,24 | 0,16 | 0,10 | 0,05 | 0,01 | -    | -    | -    |
|                                                                                     | (U) | 4,16 | 3,33 | 2,71 | 2,10 | 1,67 | 1,37 | 1,15 | 0,98 | 0,86 | 0,76 | 0,68 | 0,62 | 0,56 | 0,52 | 0,49 | 0,46 | 0,44 |
| 0,75                                                                                | (D) | 1,83 | 1,60 | 1,41 | 1,26 | 1,14 | 0,96 | 0,72 | 0,53 | 0,39 | 0,28 | 0,20 | 0,13 | 0,07 | 0,03 | -    | -    | -    |
|                                                                                     | (U) | 4,48 | 3,59 | 2,95 | 2,29 | 1,82 | 1,49 | 1,24 | 1,06 | 0,92 | 0,81 | 0,73 | 0,66 | 0,60 | 0,56 | 0,52 | 0,49 | 0,46 |
| 1,00                                                                                | (D) | 3,38 | 2,97 | 2,65 | 2,38 | 2,00 | 1,51 | 1,15 | 0,88 | 0,67 | 0,51 | 0,39 | 0,28 | 0,20 | 0,13 | 0,08 | 0,03 | -    |
|                                                                                     | (U) | 6,11 | 4,88 | 4,01 | 3,27 | 2,59 | 2,10 | 1,74 | 1,47 | 1,26 | 1,10 | 0,97 | 0,87 | 0,79 | 0,72 | 0,67 | 0,62 | 0,58 |
| 1,20                                                                                | (D) | 4,91 | 4,33 | 3,87 | 3,36 | 2,56 | 1,94 | 1,49 | 1,15 | 0,90 | 0,69 | 0,53 | 0,41 | 0,30 | 0,22 | 0,15 | 0,09 | 0,04 |
|                                                                                     | (U) | 7,45 | 5,95 | 4,87 | 4,05 | 3,19 | 2,58 | 2,13 | 1,79 | 1,53 | 1,33 | 1,17 | 1,04 | 0,94 | 0,85 | 0,78 | 0,73 | 0,68 |
|    |     | SPAN |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| THICKNESS                                                                           |     | 2,00 | 2,25 | 2,50 | 2,75 | 3,00 | 3,25 | 3,50 | 3,75 | 4,00 | 4,25 | 4,50 | 4,75 | 5,00 | 5,25 | 5,50 | 5,75 | 6,00 |
| 0,60                                                                                | (D) | 0,78 | 0,64 | 0,53 | 0,45 | 0,37 | 0,31 | 0,26 | 0,22 | 0,18 | 0,15 | 0,12 | 0,09 | 0,07 | 0,05 | 0,03 | 0,02 | -    |
|                                                                                     | (U) | 2,95 | 2,37 | 1,97 | 1,66 | 1,43 | 1,25 | 1,11 | 1,00 | 0,90 | 0,83 | 0,76 | 0,71 | 0,66 | 0,62 | 0,58 | 0,55 | 0,52 |
| 0,70                                                                                | (D) | 1,09 | 0,91 | 0,76 | 0,64 | 0,54 | 0,46 | 0,40 | 0,34 | 0,29 | 0,25 | 0,21 | 0,17 | 0,14 | 0,12 | 0,09 | 0,07 | 0,05 |
|                                                                                     | (U) | 3,60 | 2,89 | 2,39 | 2,01 | 1,73 | 1,51 | 1,33 | 1,19 | 1,07 | 0,98 | 0,90 | 0,83 | 0,77 | 0,72 | 0,68 | 0,64 | 0,61 |
| 0,75                                                                                | (D) | 1,26 | 1,05 | 0,88 | 0,74 | 0,64 | 0,54 | 0,47 | 0,40 | 0,34 | 0,30 | 0,25 | 0,22 | 0,18 | 0,15 | 0,13 | 0,10 | 0,08 |
|                                                                                     | (U) | 3,94 | 3,16 | 2,61 | 2,20 | 1,88 | 1,64 | 1,45 | 1,29 | 1,16 | 1,06 | 0,97 | 0,89 | 0,83 | 0,78 | 0,73 | 0,69 | 0,65 |
| 1,00                                                                                | (D) | 2,18 | 1,82 | 1,54 | 1,31 | 1,13 | 0,98 | 0,85 | 0,74 | 0,65 | 0,57 | 0,50 | 0,44 | 0,39 | 0,34 | 0,30 | 0,26 | 0,22 |
|                                                                                     | (U) | 5,73 | 4,58 | 3,76 | 3,16 | 2,69 | 2,34 | 2,05 | 1,82 | 1,63 | 1,48 | 1,34 | 1,23 | 1,14 | 1,06 | 0,99 | 0,93 | 0,87 |
| 1,20                                                                                | (D) | 3,02 | 2,52 | 2,14 | 1,83 | 1,57 | 1,37 | 1,19 | 1,05 | 0,92 | 0,81 | 0,72 | 0,64 | 0,57 | 0,50 | 0,44 | 0,39 | 0,35 |
|                                                                                     | (U) | 7,19 | 5,74 | 4,70 | 3,94 | 3,35 | 2,90 | 2,54 | 2,25 | 2,01 | 1,81 | 1,65 | 1,51 | 1,39 | 1,29 | 1,20 | 1,12 | 1,05 |
|  |     | SPAN |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| THICKNESS                                                                           |     | 2,00 | 2,25 | 2,50 | 2,75 | 3,00 | 3,25 | 3,50 | 3,75 | 4,00 | 4,25 | 4,50 | 4,75 | 5,00 | 5,25 | 5,50 | 5,75 | 6,00 |
| 0,60                                                                                | (D) | 0,94 | 0,79 | 0,66 | 0,56 | 0,48 | 0,41 | 0,35 | 0,30 | 0,25 | 0,21 | 0,18 | 0,15 | 0,13 | 0,10 | 0,08 | 0,04 | -    |
|                                                                                     | (U) | 3,63 | 2,91 | 2,40 | 2,02 | 1,74 | 1,51 | 1,33 | 1,19 | 1,07 | 0,95 | 0,84 | 0,75 | 0,68 | 0,62 | 0,57 | 0,53 | 0,50 |
| 0,70                                                                                | (D) | 1,31 | 1,10 | 0,93 | 0,79 | 0,68 | 0,59 | 0,51 | 0,44 | 0,38 | 0,33 | 0,29 | 0,25 | 0,22 | 0,18 | 0,16 | 0,13 | 0,11 |
|                                                                                     | (U) | 4,44 | 3,56 | 2,93 | 2,46 | 2,10 | 1,83 | 1,61 | 1,43 | 1,29 | 1,12 | 0,98 | 0,87 | 0,78 | 0,71 | 0,65 | 0,60 | 0,56 |
| 0,75                                                                                | (D) | 1,51 | 1,26 | 1,07 | 0,92 | 0,79 | 0,68 | 0,59 | 0,52 | 0,45 | 0,39 | 0,34 | 0,30 | 0,26 | 0,23 | 0,20 | 0,17 | 0,14 |
|                                                                                     | (U) | 4,87 | 3,90 | 3,20 | 2,69 | 2,30 | 1,99 | 1,75 | 1,55 | 1,40 | 1,26 | 1,15 | 1,06 | 0,98 | 0,91 | 0,82 | 0,75 | 0,70 |
| 1,00                                                                                | (D) | 2,60 | 2,19 | 1,86 | 1,60 | 1,39 | 1,21 | 1,06 | 0,93 | 0,83 | 0,73 | 0,65 | 0,58 | 0,51 | 0,46 | 0,41 | 0,36 | 0,32 |
|                                                                                     | (U) | 7,10 | 5,67 | 4,64 | 3,88 | 3,30 | 2,85 | 2,50 | 2,21 | 1,97 | 1,78 | 1,62 | 1,48 | 1,36 | 1,22 | 1,10 | 1,00 | 0,91 |
| 1,20                                                                                | (D) | 3,60 | 3,03 | 2,58 | 2,22 | 1,92 | 1,68 | 1,48 | 1,30 | 1,16 | 1,03 | 0,92 | 0,82 | 0,74 | 0,66 | 0,59 | 0,53 | 0,46 |
|                                                                                     | (U) | 8,91 | 7,10 | 5,81 | 4,85 | 4,12 | 3,55 | 3,10 | 2,74 | 2,44 | 2,19 | 1,99 | 1,81 | 1,66 | 1,48 | 1,33 | 1,20 | 1,09 |



SECTION GEOMETRY



## GROSS SECTION PROPERTIES

| SECTION           | WEIGHT | HEIGHT | WIDTH | THICKNESS        |                  | GROSS SECTION PROPERTIES |                       |                       |                       |                       |                |                |                 |                 |                 |                 |
|-------------------|--------|--------|-------|------------------|------------------|--------------------------|-----------------------|-----------------------|-----------------------|-----------------------|----------------|----------------|-----------------|-----------------|-----------------|-----------------|
|                   |        |        |       | Nomi.            | Effect.          |                          |                       |                       |                       |                       |                |                |                 |                 |                 |                 |
|                   |        | h      | b     | t <sub>nom</sub> | t <sub>eff</sub> |                          |                       |                       |                       |                       |                |                |                 |                 |                 |                 |
|                   | Kg/m   | mm     | mm    | mm               | mm               | A <sub>gross</sub>       | I <sub>y, gross</sub> | I <sub>z, gross</sub> | W <sub>y, gross</sub> | W <sub>z, gross</sub> | I <sub>w</sub> | I <sub>t</sub> | Y <sub>cg</sub> | Y <sub>cc</sub> | Z <sub>cg</sub> | Z <sub>cc</sub> |
| Plateau® 440×0,60 | 3,57   | 120    | 465   | 0,60             | 0,56             | 425                      | 76,9                  | 1212,0                | 8457                  | 51627                 | 25207          | 44             | 235             | 244             | 89              | 165             |
| Plateau® 440×0,70 | 4,17   | 120    | 465   | 0,70             | 0,66             | 501                      | 90,7                  | 1428,4                | 9962                  | 60846                 | 97080          | 73             | 235             | 244             | 89              | 165             |
| Plateau® 440×0,75 | 4,47   | 120    | 465   | 0,75             | 0,71             | 538                      | 97,6                  | 1536,6                | 10714                 | 65456                 | 31959          | 91             | 235             | 244             | 89              | 165             |
| Plateau® 440×1,00 | 5,95   | 120    | 465   | 1,00             | 0,96             | 728                      | 131,9                 | 2077,7                | 14467                 | 88504                 | 43212          | 224            | 235             | 244             | 89              | 165             |
| Plateau® 440×1,20 | 7,14   | 120    | 465   | 1,20             | 1,16             | 880                      | 159,4                 | 2510,6                | 17462                 | 106940                | 52210          | 395            | 235             | 244             | 89              | 165             |

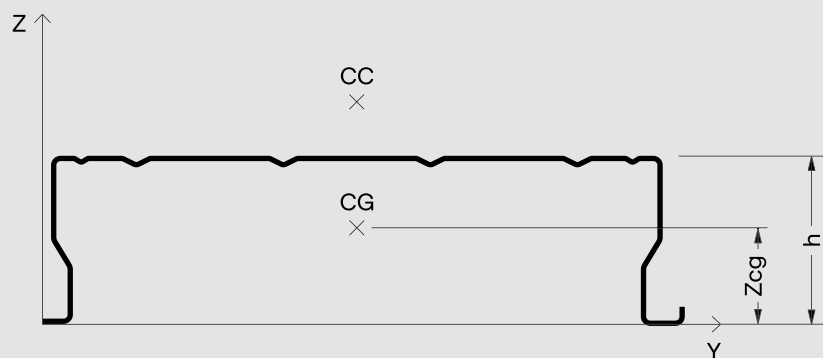
Note: the weights indicated in the tables are theoretical weights estimated based on the nominal dimensions of the cross-section, with variations occurring within the tolerances provided in standard EN 10051.

## EFFECTIVE SECTION PROPERTIES

| S320 GD           |                  |                     |                     |                         |                                  |                    |                     |                     |                         |                                  |                    |                     |                     |                         |                                  |                    |                     |                     |                         |                                  |                    |                     |                     |
|-------------------|------------------|---------------------|---------------------|-------------------------|----------------------------------|--------------------|---------------------|---------------------|-------------------------|----------------------------------|--------------------|---------------------|---------------------|-------------------------|----------------------------------|--------------------|---------------------|---------------------|-------------------------|----------------------------------|--------------------|---------------------|---------------------|
| SECTION           | COMPRESSION      |                     |                     | Y-AXIS POSITIVE FLEXION |                                  |                    |                     |                     | Y-AXIS NEGATIVE FLEXION |                                  |                    |                     |                     | Z-AXIS POSITIVE FLEXION |                                  |                    |                     |                     | Z-AXIS NEGATIVE FLEXION |                                  |                    |                     |                     |
|                   | A <sub>eff</sub> | Y <sub>cg,eff</sub> | Z <sub>cg,eff</sub> | A <sub>eff</sub>        | I <sub>y,eff</sub>               | W <sub>y,eff</sub> | Y <sub>cg,eff</sub> | Z <sub>cg,eff</sub> | A <sub>eff</sub>        | I <sub>y,eff</sub>               | W <sub>y,eff</sub> | Y <sub>cg,eff</sub> | Z <sub>cg,eff</sub> | A <sub>eff</sub>        | I <sub>z,eff</sub>               | W <sub>z,eff</sub> | Y <sub>cg,eff</sub> | Z <sub>cg,eff</sub> | A <sub>eff</sub>        | I <sub>z,eff</sub>               | W <sub>z,eff</sub> | Y <sub>cg,eff</sub> | Z <sub>cg,eff</sub> |
|                   | mm <sup>2</sup>  | mm                  | mm                  | mm <sup>2</sup>         | ×10 <sup>4</sup> mm <sup>4</sup> | mm <sup>3</sup>    | mm                  | mm                  | mm <sup>2</sup>         | ×10 <sup>4</sup> mm <sup>4</sup> | mm <sup>3</sup>    | mm                  | mm                  | mm <sup>2</sup>         | ×10 <sup>4</sup> mm <sup>4</sup> | mm <sup>3</sup>    | mm                  | mm                  | mm <sup>2</sup>         | ×10 <sup>4</sup> mm <sup>4</sup> | mm <sup>3</sup>    | mm                  | mm                  |
| Plateau® 440×0,60 | 161              | 238                 | 75                  | 218                     | 47,8                             | 6751               | 237                 | 64                  | 385                     | 52,5                             | 5139               | 235                 | 97                  | 305                     | 828,6                            | 28876              | 179                 | 87                  | 302                     | 800,2                            | 27586              | 293                 | 85                  |
| Plateau® 440×0,70 | 213              | 238                 | 75                  | 270                     | 59,3                             | 8094               | 237                 | 67                  | 466                     | 67,6                             | 6745               | 234                 | 95                  | 373                     | 1046,6                           | 37470              | 187                 | 87                  | 369                     | 1014,0                           | 35850              | 285                 | 85                  |
| Plateau® 440×0,75 | 240              | 238                 | 75                  | 308                     | 65,2                             | 8768               | 237                 | 68                  | 507                     | 75,5                             | 7582               | 234                 | 94                  | 407                     | 1157,7                           | 41922              | 191                 | 87                  | 403                     | 1123,3                           | 40157              | 282                 | 85                  |
| Plateau® 440×1,00 | 387              | 238                 | 74                  | 452                     | 95,3                             | 12230              | 238                 | 72                  | 710                     | 117,6                            | 12077              | 234                 | 91                  | 582                     | 1724,8                           | 65211              | 203                 | 86                  | 580                     | 1683,3                           | 62867              | 269                 | 85                  |
| Plateau® 440×1,20 | 516              | 238                 | 75                  | 568                     | 119,5                            | 15005              | 238                 | 73                  | 847                     | 147,2                            | 15223              | 234                 | 91                  | 727                     | 2189,6                           | 84868              | 210                 | 86                  | 726                     | 2154,1                           | 82558              | 262                 | 85                  |

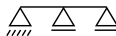
### Legend

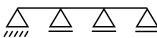
|                       |                                                  |
|-----------------------|--------------------------------------------------|
| A <sub>gross</sub>    | Gross section area                               |
| I <sub>y, gross</sub> | Gross section inertia yy-axis                    |
| I <sub>z, gross</sub> | Gross section inertia zz-axis                    |
| I <sub>w</sub>        | Warping constant                                 |
| I <sub>t</sub>        | Torsion inertia                                  |
| CG                    | Coordinates of the center of gravity             |
| CC                    | Coordinates of the shear center                  |
| A <sub>eff</sub>      | Effective section area                           |
| I <sub>y, eff</sub>   | Effective section inertia yy-axis                |
| W <sub>y, eff</sub>   | Bending modulus of the effective section yy-axis |
| I <sub>z, eff</sub>   | Effective section inertia zz-axis                |
| W <sub>z, eff</sub>   | Bending modulus of the effective section zz-axis |



PLATEAU® 440 — S320GD — FAÇADE  
 Allowable load values (factored) in kN/m²

|  |     | SPAN |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |  |
|-----------------------------------------------------------------------------------|-----|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|--|
| THICKNESS                                                                         |     | 2,00 | 2,25 | 2,50 | 2,75 | 3,00 | 3,25 | 3,50 | 3,75 | 4,00 | 4,25 | 4,50 | 4,75 | 5,00 | 5,25 | 5,50 | 5,75 | 6,00 | 6,25 | 6,50 | 6,75 | 7,00 | 7,25 | 7,50 | 7,75 | 8,00 |  |
| 0,60                                                                              | (P) | 1,27 | 1,13 | 1,02 | 0,93 | 0,85 | 0,78 | 0,73 | 0,68 | 0,64 | 0,60 | 0,57 | 0,54 | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    |  |
| 0,70                                                                              | (P) | 1,73 | 1,54 | 1,39 | 1,26 | 1,16 | 1,07 | 0,99 | 0,92 | 0,87 | 0,82 | 0,77 | 0,73 | 0,69 | 0,66 | 0,63 | 0,60 | 0,57 | 0,51 | 0,45 | 0,40 | 0,36 | 0,33 | -    | -    | -    |  |
| 0,75                                                                              | (P) | 1,99 | 1,77 | 1,59 | 1,45 | 1,32 | 1,22 | 1,14 | 1,06 | 0,99 | 0,94 | 0,88 | 0,84 | 0,79 | 0,76 | 0,72 | 0,69 | 0,64 | 0,57 | 0,50 | 0,45 | 0,40 | 0,36 | 0,33 | 0,30 | 0,27 |  |
| 1,00                                                                              | (P) | 3,49 | 3,11 | 2,79 | 2,54 | 2,33 | 2,15 | 2,00 | 1,86 | 1,75 | 1,64 | 1,55 | 1,47 | 1,40 | 1,33 | 1,27 | 1,13 | 1,00 | 0,88 | 0,78 | 0,70 | 0,63 | 0,57 | 0,51 | 0,46 | 0,42 |  |
| 1,20                                                                              | (P) | 4,98 | 4,42 | 3,98 | 3,62 | 3,32 | 3,06 | 2,84 | 2,65 | 2,49 | 2,34 | 2,21 | 2,09 | 1,99 | 1,87 | 1,62 | 1,42 | 1,25 | 1,11 | 0,98 | 0,88 | 0,79 | 0,71 | 0,64 | 0,58 | 0,53 |  |

|  |     | SPAN |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |  |
|-----------------------------------------------------------------------------------|-----|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|--|
| THICKNESS                                                                         |     | 2,00 | 2,25 | 2,50 | 2,75 | 3,00 | 3,25 | 3,50 | 3,75 | 4,00 | 4,25 | 4,50 | 4,75 | 5,00 | 5,25 | 5,50 | 5,75 | 6,00 | 6,25 | 6,50 | 6,75 | 7,00 | 7,25 | 7,50 | 7,75 | 8,00 |  |
| 0,60                                                                              | (P) | 1,03 | 0,91 | 0,82 | 0,75 | 0,69 | 0,63 | 0,58 | 0,53 | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    |  |
| 0,70                                                                              | (P) | 1,40 | 1,24 | 1,12 | 1,02 | 0,92 | 0,83 | 0,76 | 0,70 | 0,64 | 0,60 | 0,55 | 0,52 | 0,48 | 0,45 | 0,43 | 0,40 | 0,38 | -    | -    | -    | -    | -    | -    | -    | -    |  |
| 0,75                                                                              | (P) | 1,60 | 1,43 | 1,28 | 1,16 | 1,04 | 0,94 | 0,86 | 0,79 | 0,73 | 0,67 | 0,63 | 0,58 | 0,54 | 0,51 | 0,48 | 0,45 | 0,43 | 0,40 | 0,38 | 0,36 | 0,34 | 0,33 | 0,31 | -    | -    |  |
| 1,00                                                                              | (P) | 2,82 | 2,47 | 2,17 | 1,93 | 1,73 | 1,56 | 1,42 | 1,30 | 1,19 | 1,10 | 1,02 | 0,95 | 0,88 | 0,83 | 0,77 | 0,73 | 0,69 | 0,65 | 0,61 | 0,58 | 0,55 | 0,52 | 0,50 | 0,47 | 0,45 |  |
| 1,20                                                                              | (P) | 3,93 | 3,40 | 2,99 | 2,65 | 2,37 | 2,13 | 1,93 | 1,76 | 1,62 | 1,49 | 1,38 | 1,28 | 1,19 | 1,11 | 1,04 | 0,97 | 0,92 | 0,86 | 0,81 | 0,77 | 0,73 | 0,69 | 0,66 | 0,63 | 0,60 |  |

|  |     | SPAN |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |  |
|------------------------------------------------------------------------------------|-----|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|--|
| THICKNESS                                                                          |     | 2,00 | 2,25 | 2,50 | 2,75 | 3,00 | 3,25 | 3,50 | 3,75 | 4,00 | 4,25 | 4,50 | 4,75 | 5,00 | 5,25 | 5,50 | 5,75 | 6,00 | 6,25 | 6,50 | 6,75 | 7,00 | 7,25 | 7,50 | 7,75 | 8,00 |  |
| 0,60                                                                               | (P) | 1,17 | 1,04 | 0,93 | 0,85 | 0,78 | 0,72 | 0,67 | 0,61 | 0,57 | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    |  |
| 0,70                                                                               | (P) | 1,59 | 1,41 | 1,27 | 1,16 | 1,06 | 0,97 | 0,88 | 0,81 | 0,75 | 0,70 | 0,65 | 0,60 | 0,57 | 0,53 | 0,50 | 0,47 | 0,45 | 0,42 | -    | -    | -    | -    | -    | -    | -    |  |
| 0,75                                                                               | (P) | 1,82 | 1,62 | 1,46 | 1,33 | 1,21 | 1,10 | 1,00 | 0,92 | 0,85 | 0,79 | 0,73 | 0,68 | 0,64 | 0,60 | 0,56 | 0,53 | 0,50 | 0,47 | 0,45 | 0,43 | 0,41 | 0,39 | 0,37 | 0,35 | -    |  |
| 1,00                                                                               | (P) | 3,29 | 2,86 | 2,52 | 2,25 | 2,02 | 1,82 | 1,66 | 1,52 | 1,40 | 1,29 | 1,20 | 1,11 | 1,04 | 0,97 | 0,91 | 0,86 | 0,81 | 0,76 | 0,72 | 0,69 | 0,65 | 0,62 | 0,59 | 0,56 | 0,54 |  |
| 1,20                                                                               | (P) | 4,56 | 3,95 | 3,47 | 3,08 | 2,76 | 2,49 | 2,26 | 2,07 | 1,90 | 1,75 | 1,62 | 1,50 | 1,40 | 1,31 | 1,23 | 1,15 | 1,08 | 1,02 | 0,97 | 0,92 | 0,87 | 0,82 | 0,78 | 0,75 | 0,71 |  |

Legend

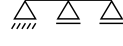
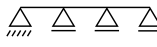
- ULS-governed loads
- SLS-governed loads

- (D) Downward loads
- (U) Upward loads

- (P) Pressure loads
- SLS Deflection limit: L/200

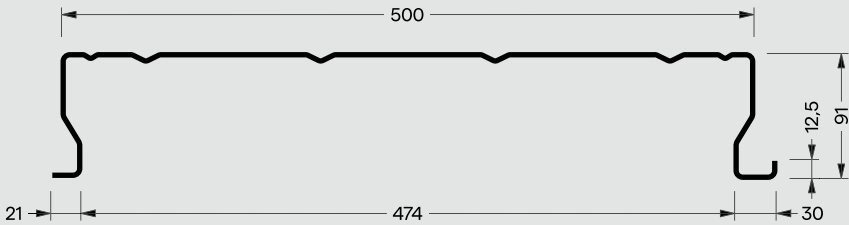
Dimensions in millimeters (mm)

PLATEAU® 440 — S320GD — ROOF  
Allowable load values (factored) in kN/m²

|    |     | SPAN  |       |       |       |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |  |
|-------------------------------------------------------------------------------------|-----|-------|-------|-------|-------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|--|
| THICKNESS                                                                           |     | 2,00  | 2,25  | 2,50  | 2,75  | 3,00 | 3,25 | 3,50 | 3,75 | 4,00 | 4,25 | 4,50 | 4,75 | 5,00 | 5,25 | 5,50 | 5,75 | 6,00 | 6,25 | 6,50 | 6,75 | 7,00 | 7,25 | 7,50 |  |
| 0,60                                                                                | (D) | 0,98  | 0,84  | 0,72  | 0,63  | 0,55 | 0,49 | 0,43 | 0,38 | 0,34 | 0,30 | 0,27 | 0,24 | 0,21 | 0,19 | 0,17 | 0,15 | 0,12 | 0,06 | 0,02 | -    | -    | -    | -    |  |
|                                                                                     | (U) | 2,88  | 2,59  | 2,36  | 2,17  | 2,02 | 1,88 | 1,77 | 1,67 | 1,59 | 1,51 | 1,38 | 1,23 | 1,10 | 0,99 | 0,91 | 0,83 | 0,77 | 0,72 | 0,68 | 0,64 | 0,61 | 0,58 | 0,56 |  |
| 0,70                                                                                | (D) | 1,42  | 1,23  | 1,08  | 0,95  | 0,85 | 0,76 | 0,68 | 0,62 | 0,56 | 0,51 | 0,46 | 0,42 | 0,38 | 0,35 | 0,32 | 0,29 | 0,23 | 0,16 | 0,11 | 0,06 | 0,02 | -    | -    |  |
|                                                                                     | (U) | 4,53  | 4,06  | 3,69  | 3,38  | 3,12 | 2,91 | 2,72 | 2,54 | 2,27 | 1,96 | 1,70 | 1,50 | 1,33 | 1,20 | 1,09 | 0,99 | 0,92 | 0,85 | 0,79 | 0,75 | 0,70 | 0,67 | 0,64 |  |
| 0,75                                                                                | (D) | 1,67  | 1,45  | 1,28  | 1,13  | 1,01 | 0,91 | 0,82 | 0,75 | 0,68 | 0,62 | 0,57 | 0,52 | 0,48 | 0,44 | 0,41 | 0,38 | 0,29 | 0,22 | 0,15 | 0,10 | 0,05 | 0,01 | -    |  |
|                                                                                     | (U) | 5,57  | 4,99  | 4,52  | 4,14  | 3,82 | 3,53 | 3,09 | 2,73 | 2,44 | 2,15 | 1,87 | 1,64 | 1,46 | 1,31 | 1,18 | 1,08 | 0,99 | 0,92 | 0,85 | 0,80 | 0,75 | 0,71 | 0,68 |  |
| 1,00                                                                                | (D) | 3,15  | 2,76  | 2,45  | 2,20  | 1,98 | 1,81 | 1,65 | 1,52 | 1,40 | 1,30 | 1,21 | 1,13 | 1,05 | 0,99 | 0,91 | 0,75 | 0,61 | 0,50 | 0,40 | 0,32 | 0,25 | 0,18 | 0,13 |  |
|                                                                                     | (U) | 12,21 | 9,72  | 7,94  | 6,62  | 5,62 | 4,84 | 4,22 | 3,72 | 3,31 | 2,97 | 2,69 | 2,39 | 2,11 | 1,87 | 1,68 | 1,52 | 1,38 | 1,27 | 1,17 | 1,08 | 1,01 | 0,95 | 0,89 |  |
| 1,20                                                                                | (D) | 4,61  | 4,05  | 3,61  | 3,25  | 2,95 | 2,69 | 2,48 | 2,29 | 2,12 | 1,97 | 1,84 | 1,73 | 1,62 | 1,46 | 1,21 | 1,01 | 0,84 | 0,70 | 0,57 | 0,47 | 0,38 | 0,30 | 0,23 |  |
|                                                                                     | (U) | 14,92 | 11,87 | 9,68  | 8,07  | 6,84 | 5,88 | 5,12 | 4,51 | 4,01 | 3,59 | 3,24 | 2,93 | 2,57 | 2,27 | 2,03 | 1,83 | 1,66 | 1,51 | 1,39 | 1,29 | 1,20 | 1,12 | 1,05 |  |
|    |     | SPAN  |       |       |       |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |  |
| THICKNESS                                                                           |     | 2,00  | 2,25  | 2,50  | 2,75  | 3,00 | 3,25 | 3,50 | 3,75 | 4,00 | 4,25 | 4,50 | 4,75 | 5,00 | 5,25 | 5,50 | 5,75 | 6,00 | 6,25 | 6,50 | 6,75 | 7,00 | 7,25 | 7,50 |  |
| 0,60                                                                                | (D) | 0,73  | 0,62  | 0,53  | 0,45  | 0,39 | 0,33 | 0,28 | 0,23 | 0,19 | 0,16 | 0,13 | 0,10 | 0,07 | 0,05 | 0,03 | 0,01 | -    | -    | -    | -    | -    | -    | -    |  |
|                                                                                     | (U) | 2,36  | 2,13  | 1,95  | 1,80  | 1,67 | 1,57 | 1,48 | 1,40 | 1,33 | 1,27 | 1,21 | 1,17 | 1,09 | 1,02 | 0,96 | 0,90 | 0,85 | 0,81 | 0,77 | 0,73 | 0,70 | 0,68 | 0,65 |  |
| 0,70                                                                                | (D) | 1,09  | 0,93  | 0,81  | 0,71  | 0,61 | 0,53 | 0,45 | 0,39 | 0,34 | 0,29 | 0,25 | 0,21 | 0,18 | 0,15 | 0,12 | 0,09 | 0,07 | 0,05 | 0,03 | 0,01 | -    | -    | -    |  |
|                                                                                     | (U) | 3,69  | 3,31  | 3,01  | 2,77  | 2,56 | 2,39 | 2,24 | 2,11 | 1,94 | 1,76 | 1,60 | 1,47 | 1,36 | 1,26 | 1,17 | 1,10 | 1,04 | 0,98 | 0,93 | 0,88 | 0,84 | 0,81 | 0,77 |  |
| 0,75                                                                                | (D) | 1,29  | 1,11  | 0,97  | 0,84  | 0,73 | 0,63 | 0,55 | 0,48 | 0,41 | 0,36 | 0,31 | 0,27 | 0,23 | 0,20 | 0,17 | 0,14 | 0,11 | 0,09 | 0,07 | 0,05 | 0,03 | 0,01 | -    |  |
|                                                                                     | (U) | 4,52  | 4,05  | 3,68  | 3,37  | 3,12 | 2,90 | 2,72 | 2,41 | 2,15 | 1,94 | 1,77 | 1,62 | 1,49 | 1,38 | 1,29 | 1,20 | 1,13 | 1,07 | 1,01 | 0,96 | 0,91 | 0,87 | 0,84 |  |
| 1,00                                                                                | (D) | 2,48  | 2,13  | 1,83  | 1,59  | 1,39 | 1,22 | 1,08 | 0,96 | 0,85 | 0,76 | 0,68 | 0,60 | 0,54 | 0,48 | 0,43 | 0,38 | 0,34 | 0,30 | 0,27 | 0,24 | 0,21 | 0,18 | 0,15 |  |
|                                                                                     | (U) | 10,74 | 9,59  | 7,84  | 6,54  | 5,55 | 4,78 | 4,17 | 3,68 | 3,27 | 2,94 | 2,66 | 2,42 | 2,22 | 2,04 | 1,89 | 1,76 | 1,65 | 1,54 | 1,45 | 1,37 | 1,30 | 1,24 | 1,18 |  |
| 1,20                                                                                | (D) | 3,57  | 3,04  | 2,62  | 2,28  | 2,00 | 1,76 | 1,57 | 1,40 | 1,25 | 1,12 | 1,01 | 0,91 | 0,82 | 0,74 | 0,67 | 0,61 | 0,55 | 0,49 | 0,45 | 0,40 | 0,36 | 0,32 | 0,29 |  |
|                                                                                     | (U) | 15,13 | 12,03 | 9,82  | 8,18  | 6,93 | 5,96 | 5,19 | 4,57 | 4,06 | 3,64 | 3,28 | 2,99 | 2,73 | 2,51 | 2,32 | 2,15 | 2,01 | 1,88 | 1,77 | 1,67 | 1,57 | 1,49 | 1,42 |  |
|  |     | SPAN  |       |       |       |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |  |
| THICKNESS                                                                           |     | 2,00  | 2,25  | 2,50  | 2,75  | 3,00 | 3,25 | 3,50 | 3,75 | 4,00 | 4,25 | 4,50 | 4,75 | 5,00 | 5,25 | 5,50 | 5,75 | 6,00 | 6,25 | 6,50 | 6,75 | 7,00 | 7,25 | 7,50 |  |
| 0,60                                                                                | (D) | 0,87  | 0,74  | 0,64  | 0,55  | 0,48 | 0,42 | 0,37 | 0,32 | 0,27 | 0,23 | 0,19 | 0,16 | 0,13 | 0,11 | 0,08 | 0,06 | 0,04 | 0,03 | 0,01 | -    | -    | -    | -    |  |
|                                                                                     | (U) | 2,45  | 2,21  | 2,02  | 1,86  | 1,73 | 1,62 | 1,53 | 1,44 | 1,37 | 1,31 | 1,25 | 1,20 | 1,16 | 1,12 | 1,08 | 1,04 | 0,99 | 0,93 | 0,89 | 0,84 | 0,80 | 0,75 | 0,71 |  |
| 0,70                                                                                | (D) | 1,28  | 1,10  | 0,96  | 0,85  | 0,75 | 0,66 | 0,58 | 0,50 | 0,44 | 0,39 | 0,34 | 0,30 | 0,26 | 0,22 | 0,19 | 0,16 | 0,14 | 0,11 | 0,09 | 0,07 | 0,05 | 0,04 | 0,02 |  |
|                                                                                     | (U) | 3,83  | 3,44  | 3,12  | 2,87  | 2,66 | 2,47 | 2,32 | 2,19 | 2,07 | 1,96 | 1,87 | 1,76 | 1,62 | 1,50 | 1,39 | 1,30 | 1,22 | 1,15 | 1,07 | 0,99 | 0,92 | 0,87 | 0,82 |  |
| 0,75                                                                                | (D) | 1,51  | 1,31  | 1,14  | 1,01  | 0,89 | 0,78 | 0,69 | 0,60 | 0,53 | 0,47 | 0,42 | 0,37 | 0,32 | 0,28 | 0,25 | 0,22 | 0,19 | 0,16 | 0,14 | 0,11 | 0,09 | 0,07 | 0,06 |  |
|                                                                                     | (U) | 4,70  | 4,21  | 3,82  | 3,50  | 3,24 | 3,01 | 2,82 | 2,65 | 2,51 | 2,35 | 2,13 | 1,94 | 1,79 | 1,65 | 1,53 | 1,43 | 1,34 | 1,26 | 1,18 | 1,12 | 1,06 | 1,01 | 0,97 |  |
| 1,00                                                                                | (D) | 2,86  | 2,50  | 2,18  | 1,90  | 1,67 | 1,48 | 1,32 | 1,18 | 1,05 | 0,95 | 0,85 | 0,77 | 0,70 | 0,63 | 0,57 | 0,51 | 0,47 | 0,42 | 0,38 | 0,34 | 0,31 | 0,28 | 0,25 |  |
|                                                                                     | (U) | 11,18 | 9,97  | 9,01  | 8,09  | 6,85 | 5,89 | 5,12 | 4,51 | 4,00 | 3,59 | 3,24 | 2,94 | 2,69 | 2,47 | 2,28 | 2,12 | 1,97 | 1,84 | 1,73 | 1,63 | 1,54 | 1,46 | 1,37 |  |
| 1,20                                                                                | (D) | 4,19  | 3,59  | 3,11  | 2,72  | 2,39 | 2,13 | 1,90 | 1,70 | 1,53 | 1,38 | 1,25 | 1,14 | 1,03 | 0,94 | 0,86 | 0,78 | 0,72 | 0,65 | 0,60 | 0,55 | 0,50 | 0,46 | 0,42 |  |
|                                                                                     | (U) | 18,80 | 14,95 | 12,18 | 10,13 | 8,57 | 7,36 | 6,39 | 5,62 | 4,98 | 4,45 | 4,01 | 3,64 | 3,32 | 3,05 | 2,81 | 2,60 | 2,42 | 2,26 | 2,12 | 1,99 | 1,87 | 1,77 | 1,64 |  |



SECTION GEOMETRY



## GROSS SECTION PROPERTIES

| SECTION           | WEIGHT | HEIGHT | WIDTH | THICKNESS        |                  | GROSS SECTION PROPERTIES |                       |                       |                       |                       |                |                |                 |                 |                 |                 |
|-------------------|--------|--------|-------|------------------|------------------|--------------------------|-----------------------|-----------------------|-----------------------|-----------------------|----------------|----------------|-----------------|-----------------|-----------------|-----------------|
|                   |        |        |       | Nomi.            | Effect.          |                          |                       |                       |                       |                       |                |                |                 |                 |                 |                 |
|                   |        | h      | b     | t <sub>nom</sub> | t <sub>eff</sub> | A <sub>gross</sub>       | I <sub>y, gross</sub> | I <sub>z, gross</sub> | W <sub>y, gross</sub> | W <sub>z, gross</sub> | I <sub>w</sub> | I <sub>t</sub> | Y <sub>cg</sub> | Y <sub>cc</sub> | Z <sub>cg</sub> | Z <sub>cc</sub> |
|                   | Kg/m   | mm     | mm    | mm               | mm               | mm²                      | ×10⁴ mm⁴              | ×10⁴ mm⁴              | mm³                   | mm³                   | ×10⁶ mm⁶       | mm⁴            | mm              | mm              | mm              | mm              |
| Plateau® 500×0,60 | 3,57   | 90     | 525   | 0,60             | 0,56             | 425                      | 40,1                  | 1441,1                | 5583                  | 54254                 | 17150          | 44             | 266             | 282             | 70              | 120             |
| Plateau® 500×0,70 | 4,17   | 90     | 525   | 0,70             | 0,66             | 501                      | 47,2                  | 1698,4                | 6575                  | 63943                 | 20212          | 73             | 266             | 282             | 70              | 120             |
| Plateau® 500×0,75 | 4,47   | 90     | 525   | 0,75             | 0,71             | 539                      | 50,8                  | 1827,1                | 7071                  | 68787                 | 21743          | 91             | 266             | 282             | 70              | 120             |
| Plateau® 500×1,00 | 5,96   | 90     | 525   | 1,00             | 0,96             | 728                      | 68,7                  | 2470,5                | 9545                  | 93008                 | 29399          | 224            | 266             | 282             | 70              | 120             |
| Plateau® 500×1,20 | 7,15   | 90     | 525   | 1,20             | 1,16             | 880                      | 83,0                  | 2985,1                | 11518                 | 112380                | 35524          | 395            | 266             | 282             | 70              | 120             |

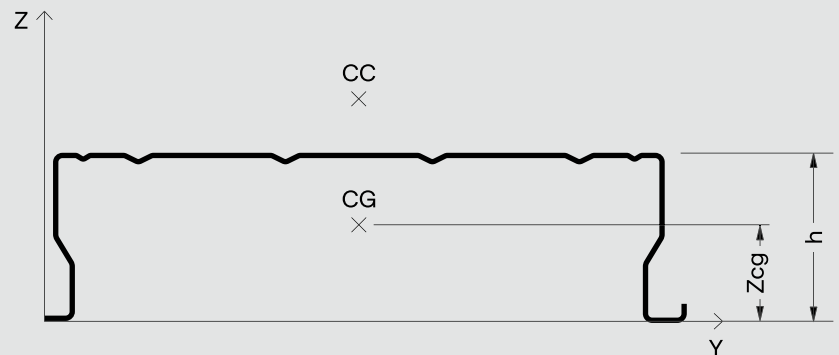
Note: the weights indicated in the tables are theoretical weights estimated based on the nominal dimensions of the cross-section, with variations occurring within the tolerances provided in standard EN 10051.

## EFFECTIVE SECTION PROPERTIES

| S320 GD           |                  |                     |                     |                         |                    |                    |                     |                     |                         |                    |                    |                     |                     |                         |                    |                    |                     |                     |                         |                    |                    |                     |                     |
|-------------------|------------------|---------------------|---------------------|-------------------------|--------------------|--------------------|---------------------|---------------------|-------------------------|--------------------|--------------------|---------------------|---------------------|-------------------------|--------------------|--------------------|---------------------|---------------------|-------------------------|--------------------|--------------------|---------------------|---------------------|
| SECTION           | COMPRESSION      |                     |                     | Y-AXIS POSITIVE FLEXION |                    |                    |                     |                     | Y-AXIS NEGATIVE FLEXION |                    |                    |                     |                     | Z-AXIS POSITIVE FLEXION |                    |                    |                     |                     | Z-AXIS NEGATIVE FLEXION |                    |                    |                     |                     |
|                   | A <sub>eff</sub> | Y <sub>cg,eff</sub> | Z <sub>cg,eff</sub> | A <sub>eff</sub>        | I <sub>y,eff</sub> | W <sub>y,eff</sub> | Y <sub>cg,eff</sub> | Z <sub>cg,eff</sub> | A <sub>eff</sub>        | I <sub>y,eff</sub> | W <sub>y,eff</sub> | Y <sub>cg,eff</sub> | Z <sub>cg,eff</sub> | A <sub>eff</sub>        | I <sub>z,eff</sub> | W <sub>z,eff</sub> | Y <sub>cg,eff</sub> | Z <sub>cg,eff</sub> | A <sub>eff</sub>        | I <sub>z,eff</sub> | W <sub>z,eff</sub> | Y <sub>cg,eff</sub> | Z <sub>cg,eff</sub> |
|                   | mm²              | mm                  | mm                  | mm²                     | ×10⁴ mm⁴           | mm³                | mm                  | mm                  | mm²                     | ×10⁴ mm⁴           | mm³                | mm                  | mm                  | mm²                     | ×10⁴ mm⁴           | mm³                | mm                  | mm                  | mm²                     | ×10⁴ mm⁴           | mm³                | mm                  | mm                  |
| Plateau® 500×0,60 | 154              | 271                 | 56                  | 195                     | 24,7               | 4478               | 271                 | 50                  | 402                     | 29,8               | 3836               | 265                 | 74                  | 302                     | 1061,0             | 31860              | 208                 | 68                  | 299                     | 982,8              | 30071              | 328                 | 67                  |
| Plateau® 500×0,70 | 203              | 271                 | 55                  | 245                     | 30,5               | 5359               | 270                 | 51                  | 482                     | 37,9               | 4931               | 264                 | 73                  | 369                     | 1278,8             | 41157              | 216                 | 67                  | 364                     | 1239,6             | 38870              | 319                 | 66                  |
| Plateau® 500×0,75 | 228              | 271                 | 55                  | 269                     | 33,4               | 5819               | 272                 | 52                  | 520                     | 41,5               | 5399               | 264                 | 73                  | 403                     | 1412,3             | 45966              | 219                 | 67                  | 397                     | 1370,1             | 43417              | 316                 | 66                  |
| Plateau® 500×1,00 | 356              | 271                 | 56                  | 389                     | 48,1               | 8067               | 272                 | 54                  | 712                     | 60,5               | 7882               | 265                 | 72                  | 574                     | 2067,1             | 69789              | 230                 | 67                  | 565                     | 2004,1             | 65763              | 305                 | 66                  |
| Plateau® 500×1,20 | 466              | 270                 | 57                  | 490                     | 60,3               | 9865               | 272                 | 56                  | 865                     | 75,6               | 9904               | 265                 | 71                  | 711                     | 2592,0             | 89157              | 236                 | 67                  | 706                     | 2534,4             | 85034              | 298                 | 66                  |

### Legend

|                       |                                                  |
|-----------------------|--------------------------------------------------|
| A <sub>gross</sub>    | Gross section area                               |
| I <sub>y, gross</sub> | Gross section inertia yy-axis                    |
| I <sub>z, gross</sub> | Gross section inertia zz-axis                    |
| I <sub>w</sub>        | Warping constant                                 |
| I <sub>t</sub>        | Torsion inertia                                  |
| CG                    | Coordinates of the center of gravity             |
| CC                    | Coordinates of the shear center                  |
| A <sub>eff</sub>      | Effective section area                           |
| I <sub>y, eff</sub>   | Effective section inertia yy-axis                |
| W <sub>y, eff</sub>   | Bending modulus of the effective section yy-axis |
| I <sub>z, eff</sub>   | Effective section inertia zz-axis                |
| W <sub>z, eff</sub>   | Bending modulus of the effective section zz-axis |

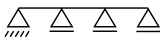


PLATEAU® 500 — S320GD — FAÇADE

Allowable load values (factored) in kN/m²

|  |     | SPAN |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
|-----------------------------------------------------------------------------------|-----|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| THICKNESS                                                                         |     | 2,00 | 2,25 | 2,50 | 2,75 | 3,00 | 3,25 | 3,50 | 3,75 | 4,00 | 4,25 | 4,50 | 4,75 | 5,00 | 5,25 | 5,50 | 5,75 | 6,00 | 6,25 | 6,50 | 6,75 | 7,00 |
| 0,60                                                                              | (P) | 1,12 | 1,00 | 0,90 | 0,82 | 0,75 | 0,69 | 0,64 | 0,60 | 0,56 | 0,53 | 0,50 | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    |
| 0,70                                                                              | (P) | 1,53 | 1,36 | 1,22 | 1,11 | 1,02 | 0,94 | 0,87 | 0,81 | 0,76 | 0,72 | 0,67 | 0,57 | 0,49 | 0,42 | 0,37 | 0,32 | 0,28 | 0,25 | 0,22 | 0,20 | -    |
| 0,75                                                                              | (P) | 1,75 | 1,55 | 1,40 | 1,27 | 1,17 | 1,08 | 1,00 | 0,93 | 0,87 | 0,82 | 0,73 | 0,62 | 0,54 | 0,46 | 0,40 | 0,35 | 0,31 | 0,27 | 0,24 | 0,22 | 0,20 |
| 1,00                                                                              | (P) | 3,07 | 2,73 | 2,46 | 2,24 | 2,05 | 1,89 | 1,76 | 1,64 | 1,52 | 1,27 | 1,07 | 0,91 | 0,78 | 0,67 | 0,59 | 0,51 | 0,45 | 0,40 | 0,36 | 0,32 | 0,28 |
| 1,20                                                                              | (P) | 4,38 | 3,89 | 3,50 | 3,18 | 2,92 | 2,69 | 2,50 | 2,31 | 1,90 | 1,59 | 1,34 | 1,14 | 0,97 | 0,84 | 0,73 | 0,64 | 0,56 | 0,50 | 0,44 | 0,40 | 0,36 |

|  |     | SPAN |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
|-----------------------------------------------------------------------------------|-----|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| THICKNESS                                                                         |     | 2,00 | 2,25 | 2,50 | 2,75 | 3,00 | 3,25 | 3,50 | 3,75 | 4,00 | 4,25 | 4,50 | 4,75 | 5,00 | 5,25 | 5,50 | 5,75 | 6,00 | 6,25 | 6,50 | 6,75 | 7,00 |
| 0,60                                                                              | (P) | 0,89 | 0,77 | 0,67 | 0,60 | 0,53 | 0,48 | 0,44 | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    |
| 0,70                                                                              | (P) | 1,21 | 1,05 | 0,92 | 0,82 | 0,73 | 0,66 | 0,60 | 0,55 | 0,50 | 0,46 | 0,43 | 0,40 | 0,37 | 0,34 | 0,32 | -    | -    | -    | -    | -    | -    |
| 0,75                                                                              | (P) | 1,37 | 1,19 | 1,04 | 0,92 | 0,82 | 0,74 | 0,67 | 0,61 | 0,56 | 0,52 | 0,48 | 0,44 | 0,41 | 0,38 | 0,36 | 0,34 | 0,32 | 0,30 | 0,28 | 0,27 | -    |
| 1,00                                                                              | (P) | 2,28 | 1,96 | 1,71 | 1,51 | 1,34 | 1,20 | 1,09 | 0,99 | 0,90 | 0,83 | 0,76 | 0,70 | 0,65 | 0,61 | 0,57 | 0,53 | 0,50 | 0,47 | 0,44 | 0,41 | 0,39 |
| 1,20                                                                              | (P) | 3,11 | 2,67 | 2,32 | 2,04 | 1,81 | 1,62 | 1,46 | 1,32 | 1,20 | 1,10 | 1,01 | 0,93 | 0,86 | 0,80 | 0,75 | 0,70 | 0,65 | 0,61 | 0,57 | 0,54 | 0,51 |

|  |     | SPAN |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
|------------------------------------------------------------------------------------|-----|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| THICKNESS                                                                          |     | 2,00 | 2,25 | 2,50 | 2,75 | 3,00 | 3,25 | 3,50 | 3,75 | 4,00 | 4,25 | 4,50 | 4,75 | 5,00 | 5,25 | 5,50 | 5,75 | 6,00 | 6,25 | 6,50 | 6,75 | 7,00 |
| 0,60                                                                               | (P) | 1,03 | 0,91 | 0,81 | 0,72 | 0,65 | 0,59 | 0,53 | 0,49 | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    | -    |
| 0,70                                                                               | (P) | 1,40 | 1,22 | 1,07 | 0,95 | 0,85 | 0,77 | 0,70 | 0,64 | 0,59 | 0,54 | 0,50 | 0,47 | 0,43 | 0,41 | 0,38 | 0,36 | -    | -    | -    | -    | -    |
| 0,75                                                                               | (P) | 1,59 | 1,38 | 1,21 | 1,08 | 0,96 | 0,87 | 0,79 | 0,72 | 0,66 | 0,61 | 0,56 | 0,52 | 0,49 | 0,46 | 0,43 | 0,40 | 0,38 | 0,35 | 0,34 | 0,32 | 0,30 |
| 1,00                                                                               | (P) | 2,65 | 2,29 | 2,00 | 1,77 | 1,58 | 1,42 | 1,28 | 1,16 | 1,06 | 0,98 | 0,90 | 0,83 | 0,77 | 0,72 | 0,67 | 0,63 | 0,59 | 0,56 | 0,53 | 0,49 | 0,44 |
| 1,20                                                                               | (P) | 3,63 | 3,12 | 2,72 | 2,39 | 2,13 | 1,91 | 1,72 | 1,56 | 1,42 | 1,30 | 1,20 | 1,11 | 1,03 | 0,96 | 0,89 | 0,83 | 0,78 | 0,73 | 0,68 | 0,61 | 0,55 |

Legend

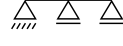
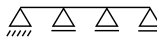
- ULS-governed loads
- SLS-governed loads

- (D) Downward loads
- (U) Upward loads

- (P) Pressure loads
- SLS Deflection limit: L/200

Dimensions in millimeters (mm)

PLATEAU® 500 — S320GD — ROOF  
Allowable load values (factored) in kN/m<sup>2</sup>

|    |     | SPAN  |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
|-------------------------------------------------------------------------------------|-----|-------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| THICKNESS                                                                           |     | 2,00  | 2,25 | 2,50 | 2,75 | 3,00 | 3,25 | 3,50 | 3,75 | 4,00 | 4,25 | 4,50 | 4,75 | 5,00 | 5,25 | 5,50 | 5,75 | 6,00 | 6,25 | 6,50 | 6,75 | 7,00 |
| 0,60                                                                                | (D) | 0,87  | 0,75 | 0,65 | 0,57 | 0,50 | 0,44 | 0,39 | 0,35 | 0,31 | 0,28 | 0,25 | 0,17 | 0,11 | 0,06 | 0,01 | -    | -    | -    | -    | -    | -    |
|                                                                                     | (U) | 3,25  | 2,92 | 2,65 | 2,27 | 1,94 | 1,68 | 1,40 | 1,19 | 1,03 | 0,90 | 0,80 | 0,72 | 0,66 | 0,61 | 0,56 | 0,53 | 0,50 | 0,47 | 0,45 | 0,43 | 0,42 |
| 0,70                                                                                | (D) | 1,27  | 1,10 | 0,96 | 0,85 | 0,76 | 0,68 | 0,61 | 0,55 | 0,50 | 0,46 | 0,38 | 0,28 | 0,20 | 0,13 | 0,08 | 0,03 | -    | -    | -    | -    | -    |
|                                                                                     | (U) | 4,83  | 3,87 | 3,19 | 2,68 | 2,29 | 1,99 | 1,71 | 1,45 | 1,24 | 1,08 | 0,96 | 0,86 | 0,78 | 0,71 | 0,65 | 0,61 | 0,57 | 0,54 | 0,51 | 0,49 | 0,47 |
| 0,75                                                                                | (D) | 1,48  | 1,29 | 1,13 | 1,01 | 0,90 | 0,81 | 0,74 | 0,67 | 0,61 | 0,56 | 0,44 | 0,33 | 0,24 | 0,17 | 0,11 | 0,06 | 0,02 | -    | -    | -    | -    |
|                                                                                     | (U) | 5,23  | 4,19 | 3,44 | 2,89 | 2,47 | 2,14 | 1,85 | 1,56 | 1,34 | 1,17 | 1,03 | 0,92 | 0,83 | 0,76 | 0,70 | 0,65 | 0,60 | 0,57 | 0,54 | 0,51 | 0,49 |
| 1,00                                                                                | (D) | 2,78  | 2,44 | 2,17 | 1,95 | 1,76 | 1,60 | 1,47 | 1,35 | 1,20 | 0,95 | 0,75 | 0,59 | 0,46 | 0,35 | 0,26 | 0,19 | 0,13 | 0,08 | 0,03 | -    | -    |
|                                                                                     | (U) | 7,18  | 5,73 | 4,70 | 3,93 | 3,35 | 2,90 | 2,54 | 2,17 | 1,85 | 1,59 | 1,39 | 1,23 | 1,10 | 1,00 | 0,91 | 0,84 | 0,77 | 0,72 | 0,68 | 0,64 | 0,61 |
| 1,20                                                                                | (D) | 4,07  | 3,58 | 3,19 | 2,87 | 2,61 | 2,38 | 2,19 | 1,96 | 1,56 | 1,24 | 0,99 | 0,79 | 0,63 | 0,50 | 0,39 | 0,29 | 0,22 | 0,15 | 0,10 | 0,05 | 0,01 |
|                                                                                     | (U) | 8,74  | 6,97 | 5,70 | 4,77 | 4,05 | 3,50 | 3,06 | 2,66 | 2,25 | 1,93 | 1,68 | 1,48 | 1,32 | 1,19 | 1,08 | 0,99 | 0,91 | 0,85 | 0,79 | 0,74 | 0,70 |
|    |     | SPAN  |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| THICKNESS                                                                           |     | 2,00  | 2,25 | 2,50 | 2,75 | 3,00 | 3,25 | 3,50 | 3,75 | 4,00 | 4,25 | 4,50 | 4,75 | 5,00 | 5,25 | 5,50 | 5,75 | 6,00 | 6,25 | 6,50 | 6,75 | 7,00 |
| 0,60                                                                                | (D) | 0,66  | 0,55 | 0,45 | 0,37 | 0,31 | 0,25 | 0,21 | 0,17 | 0,14 | 0,11 | 0,08 | 0,06 | 0,04 | 0,02 | 0,00 | -    | -    | -    | -    | -    | -    |
|                                                                                     | (U) | 2,65  | 2,38 | 2,17 | 1,98 | 1,70 | 1,49 | 1,32 | 1,18 | 1,07 | 0,97 | 0,89 | 0,83 | 0,77 | 0,72 | 0,68 | 0,64 | 0,61 | 0,58 | 0,56 | 0,54 | 0,52 |
| 0,70                                                                                | (D) | 0,95  | 0,79 | 0,66 | 0,56 | 0,47 | 0,40 | 0,34 | 0,29 | 0,24 | 0,20 | 0,17 | 0,14 | 0,11 | 0,08 | 0,06 | 0,04 | 0,02 | -    | -    | -    | -    |
|                                                                                     | (U) | 4,19  | 3,58 | 2,95 | 2,49 | 2,13 | 1,85 | 1,63 | 1,46 | 1,31 | 1,19 | 1,09 | 1,00 | 0,93 | 0,87 | 0,82 | 0,77 | 0,73 | 0,69 | 0,66 | 0,63 | 0,60 |
| 0,75                                                                                | (D) | 1,11  | 0,92 | 0,78 | 0,66 | 0,56 | 0,48 | 0,41 | 0,35 | 0,30 | 0,25 | 0,21 | 0,18 | 0,15 | 0,12 | 0,10 | 0,07 | 0,05 | 0,03 | 0,02 | -    | -    |
|                                                                                     | (U) | 4,87  | 3,90 | 3,21 | 2,70 | 2,31 | 2,01 | 1,77 | 1,57 | 1,42 | 1,28 | 1,17 | 1,08 | 1,00 | 0,93 | 0,87 | 0,82 | 0,78 | 0,74 | 0,70 | 0,67 | 0,64 |
| 1,00                                                                                | (D) | 1,99  | 1,67 | 1,42 | 1,22 | 1,05 | 0,91 | 0,80 | 0,70 | 0,61 | 0,54 | 0,47 | 0,41 | 0,36 | 0,32 | 0,28 | 0,24 | 0,21 | 0,18 | 0,15 | 0,12 | 0,10 |
|                                                                                     | (U) | 7,02  | 5,61 | 4,60 | 3,85 | 3,28 | 2,84 | 2,49 | 2,20 | 1,97 | 1,78 | 1,62 | 1,48 | 1,37 | 1,27 | 1,18 | 1,10 | 1,04 | 0,98 | 0,93 | 0,88 | 0,84 |
| 1,20                                                                                | (D) | 2,80  | 2,36 | 2,01 | 1,73 | 1,50 | 1,30 | 1,14 | 1,01 | 0,89 | 0,79 | 0,70 | 0,62 | 0,55 | 0,49 | 0,43 | 0,38 | 0,34 | 0,30 | 0,26 | 0,23 | 0,20 |
|                                                                                     | (U) | 8,76  | 6,99 | 5,72 | 4,78 | 4,07 | 3,51 | 3,07 | 2,72 | 2,42 | 2,18 | 1,98 | 1,81 | 1,66 | 1,54 | 1,43 | 1,33 | 1,25 | 1,18 | 1,11 | 1,05 | 1,00 |
|  |     | SPAN  |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| THICKNESS                                                                           |     | 2,00  | 2,25 | 2,50 | 2,75 | 3,00 | 3,25 | 3,50 | 3,75 | 4,00 | 4,25 | 4,50 | 4,75 | 5,00 | 5,25 | 5,50 | 5,75 | 6,00 | 6,25 | 6,50 | 6,75 | 7,00 |
| 0,60                                                                                | (D) | 0,78  | 0,67 | 0,56 | 0,47 | 0,40 | 0,34 | 0,29 | 0,24 | 0,20 | 0,17 | 0,14 | 0,11 | 0,09 | 0,06 | 0,05 | 0,03 | 0,01 | 0,00 | -    | -    | -    |
|                                                                                     | (U) | 2,75  | 2,47 | 2,25 | 2,07 | 1,92 | 1,79 | 1,58 | 1,41 | 1,27 | 1,16 | 1,06 | 0,97 | 0,89 | 0,81 | 0,74 | 0,68 | 0,63 | 0,59 | 0,55 | 0,52 | 0,50 |
| 0,70                                                                                | (D) | 1,14  | 0,96 | 0,81 | 0,69 | 0,59 | 0,51 | 0,44 | 0,38 | 0,33 | 0,28 | 0,24 | 0,21 | 0,18 | 0,15 | 0,12 | 0,10 | 0,08 | 0,06 | 0,04 | 0,02 | 0,01 |
|                                                                                     | (U) | 4,36  | 3,90 | 3,54 | 3,04 | 2,60 | 2,25 | 1,98 | 1,75 | 1,57 | 1,42 | 1,28 | 1,13 | 1,01 | 0,91 | 0,83 | 0,76 | 0,71 | 0,66 | 0,62 | 0,58 | 0,55 |
| 0,75                                                                                | (D) | 1,33  | 1,12 | 0,95 | 0,81 | 0,70 | 0,60 | 0,52 | 0,46 | 0,40 | 0,34 | 0,30 | 0,26 | 0,22 | 0,19 | 0,16 | 0,14 | 0,11 | 0,09 | 0,07 | 0,05 | 0,04 |
|                                                                                     | (U) | 5,37  | 4,80 | 3,95 | 3,31 | 2,82 | 2,45 | 2,15 | 1,90 | 1,71 | 1,54 | 1,40 | 1,29 | 1,19 | 1,10 | 1,03 | 0,96 | 0,89 | 0,82 | 0,76 | 0,71 | 0,67 |
| 1,00                                                                                | (D) | 2,36  | 2,00 | 1,71 | 1,48 | 1,28 | 1,12 | 0,99 | 0,87 | 0,77 | 0,69 | 0,61 | 0,54 | 0,48 | 0,43 | 0,38 | 0,34 | 0,30 | 0,27 | 0,23 | 0,21 | 0,18 |
|                                                                                     | (U) | 8,70  | 6,93 | 5,67 | 4,74 | 4,03 | 3,47 | 3,04 | 2,68 | 2,39 | 2,15 | 1,95 | 1,78 | 1,64 | 1,51 | 1,40 | 1,29 | 1,18 | 1,08 | 1,00 | 0,92 | 0,86 |
| 1,20                                                                                | (D) | 3,32  | 2,81 | 2,41 | 2,08 | 1,82 | 1,60 | 1,41 | 1,25 | 1,11 | 0,99 | 0,89 | 0,80 | 0,72 | 0,64 | 0,58 | 0,52 | 0,47 | 0,42 | 0,38 | 0,34 | 0,30 |
|                                                                                     | (U) | 10,88 | 8,66 | 7,07 | 5,90 | 5,01 | 4,31 | 3,76 | 3,32 | 2,95 | 2,65 | 2,40 | 2,18 | 2,00 | 1,84 | 1,71 | 1,56 | 1,42 | 1,29 | 1,19 | 1,10 | 1,02 |





**BRAGA (HEADQUARTERS)**

Rua da Quinta, N° 1  
4705-475 Esporões Braga, Portugal  
+351 253 086 750

**VILA REAL**

Estrada Nacional 15, N° 2029  
5000-121 Justes, Vila Real, Portugal  
+351 259 331 778

**VILA NOVA DE GAIA**

Rua da Junqueira de Baixo, N° 131  
4405-870 Vila Nova de Gaia, Portugal  
+351 227 629 539

**COIMBRA**

Zona Industrial de Viadores, Lt. 21  
3050-481 Pampilhosa, Portugal  
+351 969 800 356

[info@361metal.com](mailto:info@361metal.com)  
[361metal.com](http://361metal.com)

