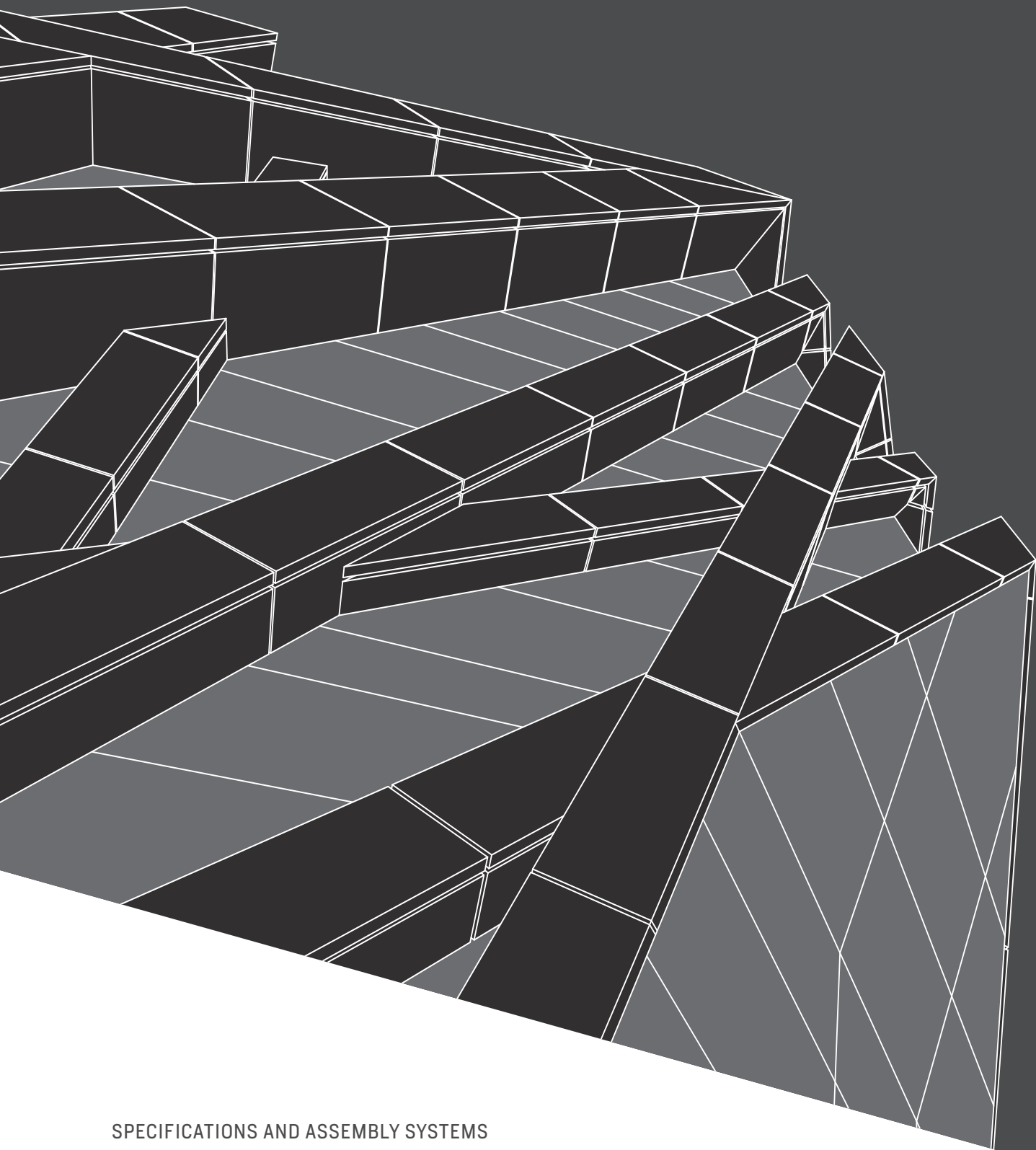


# STAC BOND

ALUMINIUM COMPOSITE PANEL




SPECIFICATIONS AND ASSEMBLY SYSTEMS


## TECHNICAL CATALOGUE

# TECHNICAL CATALOGUE

## SPECIFICATIONS AND ASSEMBLY SYSTEMS

### STACBOND® Technical Department

 Pol. Industrial Picusa s/n 15900 Padrón (A Coruña) Spain

 +34 981 817 036

**EDITION:** 01/2020

**REF:** STB-CT-03-EN



The information in this catalogue is for reference only and is subject to modification.

STAC® is not responsible for the use of the information herein; it is meant for trained technical persons and its use their responsibility.

Any unauthorized reproduction, distribution, public dissemination and/or alteration of this document will be deemed a violation of intellectual property laws.

|               |    |
|---------------|----|
| PRODUCT RANGE | 03 |
|---------------|----|

|                      |    |
|----------------------|----|
| PANEL TRANSFORMATION | 17 |
|----------------------|----|

|                  |    |
|------------------|----|
| ASSEMBLY SYSTEMS | 23 |
|------------------|----|

**STB-T-CH**  
HANGING SYSTEM



25

**STB-T-SZ**  
MALE - FEMALE SYSTEM



39

**STB-T-REM**  
RIVETED SYSTEM



49

**STB-T-PEG**  
GLUED SYSTEM



57

**STB-CH**  
HANGING SYSTEM



65

**STB-SZ**  
MALE - FEMALE SYSTEM



79

**STB-REM**  
RIVETED SYSTEM



89

**STB-PEG**  
GLUED SYSTEM



97

ACCESSORIES  
STACBOND®



105

PROCESSING TOOLS  
STACBOND®



117







*ARCHITECTURE  
WITHOUT LIMITS*

**PRODUCT  
RANGE**

# STACBOND® COMPOSITE PANEL

## CHARACTERISTICS

**STACBOND®** composite panels are composed of two sheets of aluminium and an internal core of thermoplastics with a mineral content. The panels have excellent mechanical properties and provide rigidity. They have a low weight, flat surface, are long-lasting and easy to maintain.

They are especially designed for both new-build ventilated facades and for the renovation and restoration of facades. They are the ideal solution in all fields of architecture: homes, public buildings, offices, business and industry. That's not to mention their use in promoting a corporate image in, for example, supermarkets, car dealerships, banks and petrol stations. They also offer solutions for the design, transport and industrial sectors.

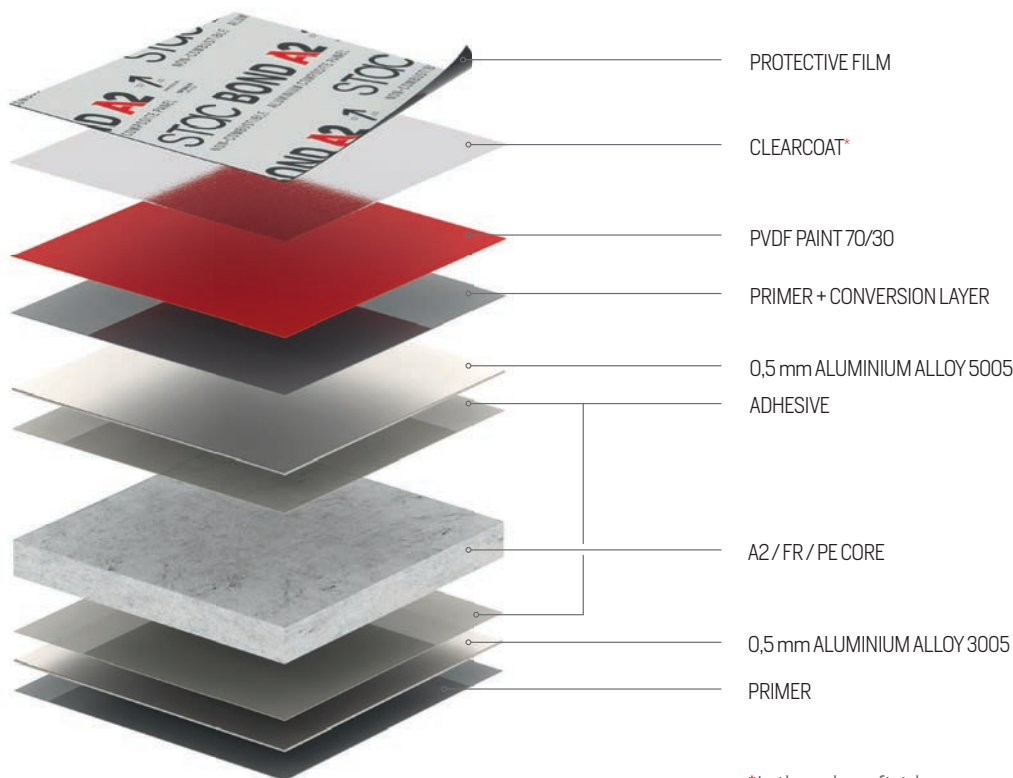
In its manufacturing standard this product consists of an outer sheet of aluminum alloy 5005 and an inner sheet of alloy 3005.

There are three different cores available depending on their mineral content, which can be non-combustible or fire retardant, and are classified (according to UNE 130501-1:2007) as A2-s1 d0 (**STACBOND® A2**), and B-s1, d0 (**STACBOND® FR**).

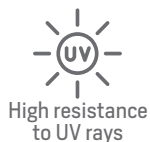
This is lacquered with the highest quality PVDF 70/30 (polyvinylidene fluoride) which provides excellent resistance to ageing and the highest protection against UV rays, as well as having excellent behaviour when machined or formed.

**STACBOND®** offers a full range of colours, shines, textures and natural finishes. Also, they can be supplied in any RAL / PANTONE / NCS colour – please enquire for details.

The **STACBOND®** composite panel is available in various standard dimensions of up to 2000 mm width. Other dimensions can be supplied under request.



\* In three-layer finishes or on request

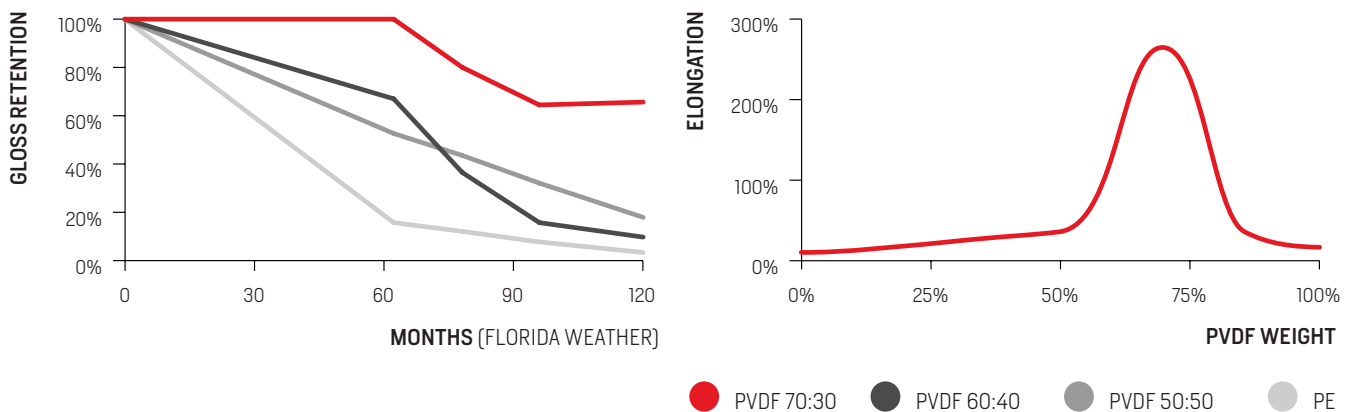


## PVDF 70/30 PAINT

Highest quality paint, used in most **STACBOND®** regular finishes.

The 70/30 code indicates that the paint contains 70% polyvinylidene fluoride and 30% acrylic resin. This ratio is the optimal level to provide a high level of protection against UV rays and high ageing resistance. Mechanically, the paint has sufficient stretch to resist the forming of the panels without deterioration of the coating.

These finishes have a limited range of shine between 25 – 35 %, measured at an angle of 60°.



## FEVE (LUMIFLON)

FEVE is a type of coating with a very similar structure to PVDF but it is harder and less flexible. It allows a wider shine range.

## HDPE (High durability polyester)

HDPE paint is a slightly lower performance finish than PVDF, but allows high gloss range and some special finishes such as textured surfaces.

## INNER FACE PROTECTION PRIMER

The epoxy / epoxy-polyester primer is applied at 5 – 10 microns and protects the interior face of the **STACBOND®** composite panel.



As part of our commitment to the environment, **STACBOND®** does not use chromium in any of the pre-treatment or painting processes.



## CERTIFIED QUALITY

The manufacture of **STACBOND®** composite panels is performed under a controlled process with rigorous internal testing and quality control procedures in our laboratories, and externally via auditing by the most prestigious construction institutes in the various countries where we are certified. This means we offer our clients the peace of mind which comes from having the most demanding national and international certification.

The granting of these certifications follows the European directive in EAD 090062-00-0404 for exterior wall claddings and allows us to conclude that our construction systems are in accordance with the nation regulations of each country.

## ENVIRONMENTAL COMMITMENT

As part of our continuous desire for innovation, the entire **STACBOND®** range and its processes employ optimized materials to always achieve simple, robust, aesthetic and functional products. This philosophy allows us to significantly reduce our environmental impact. We use 100% recyclable materials in the design of our products and we think about their life cycle right from the design phase. We also maintain a commitment with our suppliers to ensure that at least 95% of raw materials are also from recycled sources.

For these reasons, the **STACBOND® PE** and **STACBOND® FR** products have obtained EPD certification.

Furthermore, **STAC®** is **ISO 14001** certified thanks to the fact that our Environmental Management System (EMS), implemented in all our facilities, in line with the requirements of these regulations.



SPAIN



UNITED KINGDOM



ROMANIA



SWITZERLAND



INTERNATIONAL



FRANCE



POLAND



MEXICO



USA



INTERNATIONAL

## SYSTEM CERTIFICATION

| COUNTRY        | RECOGNITION  | BODY               | SYSTEM       |          |              |                  |                     |                  | CORE |    |    |
|----------------|--|--------------------|--------------|----------|--------------|------------------|---------------------|------------------|------|----|----|
|                |  |                    | STB-T-CH     | STB-T-SZ | STB-T-REM    | STB-CH           | STB-SZ              | STB-REM          | A2   | FR | PE |
| EU             | ETA 15-0655 – CE MARK  | IETcc Madrid       | ✓            | ✓        | ✓            | ✓                | ✓                   | ✓                | ✓    | ✓  | ✓  |
| SPAIN          | DIT 553p/19  | IETcc Madrid       | ✓            | ✓        | ✓            | ✓                | ✓                   | ✓                | ✓    | ✓  | ✓  |
| POLAND         | ITB-KOT-2017/0043 wydanie 2  | ITB Warsaw         | ✓            | ✓        | ✓            | ✓                | ✓                   | ✓                | ✓    | ✓  | ✓  |
| FRANCE         | Avis Technique 2.2/13-1548-V1 <sup>(1)</sup><br>Avis Technique 2.2/13-1549-V2 <sup>(2)</sup> | CSTB Paris         |              |          |              | ✓ <sup>(2)</sup> |                     | ✓ <sup>(1)</sup> | ✓    | ✓  | ✓  |
| UNITED KINGDOM | BBA 13/5022  | BBA Watford        |              |          |              | ✓                | ✓                   | ✓                | ✓    | ✓  | ✓  |
| ROMANIA        | TPC  | CTPC Bucharest     | ✓            | ✓        | ✓            | ✓                | ✓                   | ✓                | ✓    | ✓  | ✓  |
| GERMANY        | DIBt   | DIBt Berlin        | ✓            | ✓        | ✓            | ✓                | ✓                   | ✓                | ✓    | ✓  | ✓  |
| SWITZERLAND    | VKF – AEAI   | VKF Bern           | ✓            | ✓        | ✓            | ✓                | ✓                   | ✓                | ✓    | ✓  | ✓  |
| MEXICO         | Valor AMEVEC   | AMEVEC Mexico City | ✓            | ✓        | ✓            | ✓                | ✓                   | ✓                | ✓    | ✓  | ✓  |
|                |  |                    |              |          |              |                  |                     |                  |      |    |    |
|                |  |                    | WET SYSTEM * |          | DRY SYSTEM * |                  | RAINSCREEN SYSTEM * |                  |      |    |    |
| USA            | ICC – ESR  | ICC San Francisco  | ✓            |          | ✓            |                  | ✓                   |                  | ✓    | ✓  | ✓  |
| CANADA         | INTERTEK   | INTERTEK Texas     | ✓            |          | ✓            |                  | ✓                   |                  | ✓    | ✓  |    |

\* Compatible certified systems not supplied by STAC®.

✓ IN PROGRESS    ✓ CERTIFIED

## ENVIRONMENTAL CERTIFICATES

| COUNTRY       | RECOGNITION   | BODY                   | STAC BOND A2 | STAC BOND FR | STAC BOND PE |
|---------------|---------------|------------------------|--------------|--------------|--------------|
| INTERNATIONAL | EPD S-P-01289 | Tecnalia R&I Guipúzcoa | ✓            | ✓            | ✓            |

✓ IN PROGRESS    ✓ CERTIFIED

## FIRE-RESISTANCE RATING

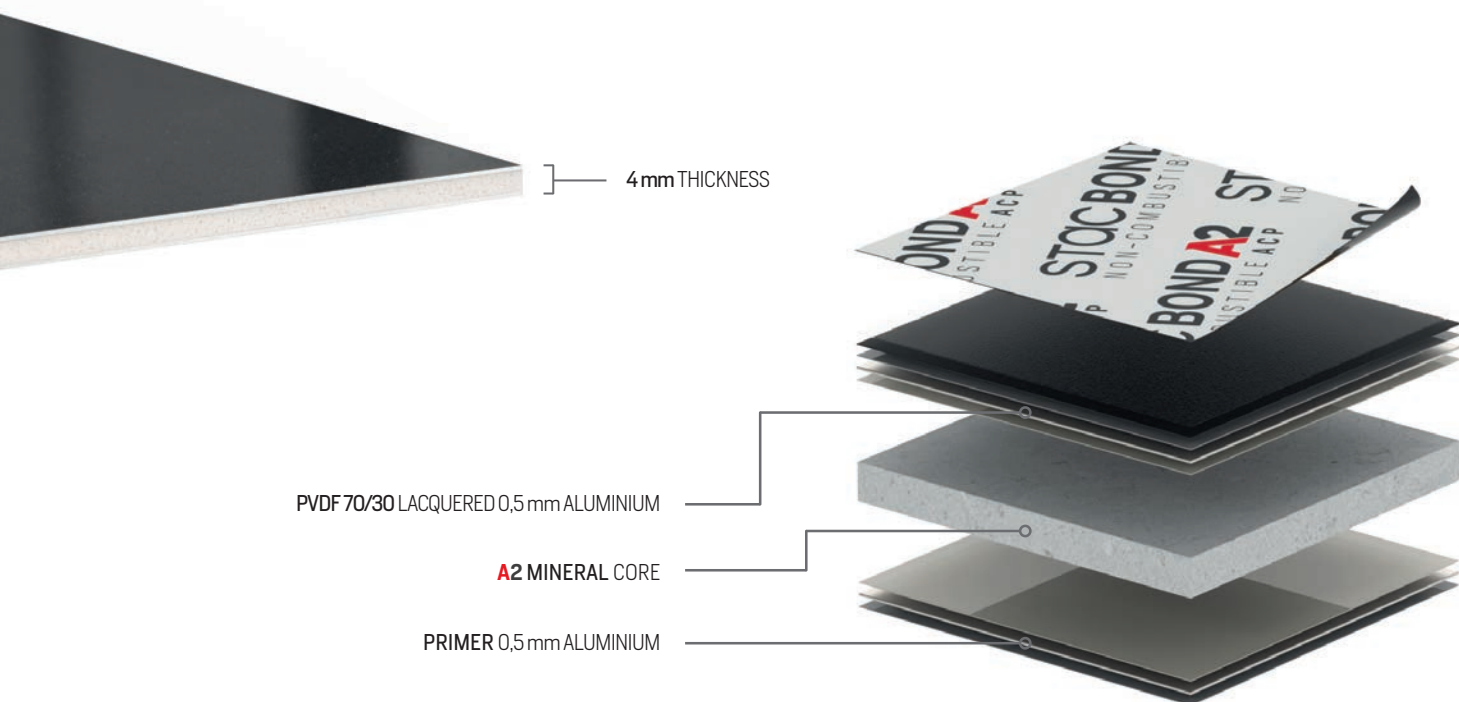
| COUNTRY | REGULATION       | STAC BOND A2   | STAC BOND FR   | STAC BOND PE   |
|---------|------------------|----------------|----------------|----------------|
|         |                  | CLASSIFICATION | CLASSIFICATION | CLASSIFICATION |
| EU      | EN 13501-1       | A2-s1, d0      | B-s1, d0       | .              |
|         | NF P 92-501:1995 | .              | .              | M1             |
| POLAND  | PN-90/8-02867    | .              | NRO            | .              |
| USA     | ASTM E84         | A CLASS        | A CLASS        | A CLASS        |
|         | NFPA 285         | PASS           | PASS           | .              |

**STACBOND® A2** is a non-combustible composite panel composed of two sheets of aluminium and a mineral core developed to comply with the most stringent fire-resistance classification rules.

Thanks to the panels' exceptional mechanical properties (high rigidity, excellent flatness, impact resistance, durability and ease of maintenance) and A2-s1, d0 fire-resistance classification (in accordance with UNE EN 13501-1:2007), they are the ideal cladding solution for tall buildings and high-occupancy buildings.

Compliance with the strictest fire-resistance classification requirements, including:

- ✓ UNE EN 13501-1:2007 - **A2-s1, d0**
- ✓ NFPA 285 - **PASS**
- ✓ ASTM E84 - **A CLASS**



**A2 CORE | 0,5 mm – 4 mm**

| SHEET DIMENSIONS  |                              | WIDTHS (mm)                          | LENGTHS (mm)                     |
|---|------------------------------|--------------------------------------|----------------------------------|
| Made to measure manufacture (CONSULT)                     |                              | 1000 / 1250 / 1500 / 2000            | (min.max.) 2500 / 6000           |
| Thickness tolerance (mm) $\pm 0,2$                        | Width tolerance (mm) $\pm 2$ | Length tolerance (mm) + 15           | Diagonals tolerance (mm) $\pm 3$ |
| Tolerance of the Protective Film on the panel (mm) +0; -5 |                              |                                      |                                  |
| PHYSICAL SPECIFICATION                                    | UNIT                         | VALUE                                | NORM                             |
| Aluminium thickness                                       | mm                           | 0,5                                  |                                  |
| Panel thickness   | mm                           | 4                                    |                                  |
| Panel weight  | kg/m <sup>2</sup>            | 8,3                                  |                                  |
| Aluminium alloy   |                              | 5005 / 3105 / 3005                   | UNE EN 573-3                     |
| A2 CORE SPECIFICATION                                     | UNIT                         | VALUE                                | NORM                             |
| Density   | g/cm <sup>3</sup>            | 1,9 $\pm$ 0,15                       |                                  |
| Fire reaction   |                              | A2 – S1, d0                          | UNE-EN-13501-1:2007              |
| COATING TYPE  | UNIT                         | VALUE                                | NORM                             |
| PvdF 70/30  | $\mu_m$                      | 20 – 25*                             | EN 13523 – 1                     |
| Internal coating thickness<br>Primer                      | $\mu_m$                      | 5 – 10*                              | EN 13523 – 1                     |
| External coating thickness                                | $\mu_m$                      | 25 – 35*                             | EN 13523 – 1                     |
| Gloss (measured at 60° angle)                             | GU                           | 30 $\pm$ 5*                          | EN 13523 – 2 / ISO 2813          |
| Hardness  |                              | Min F                                | EN 13523 – 4                     |
| GENERAL CHARACTERISTICS                                   | UNIT                         | VALUE                                | NORM                             |
| Adherence   |                              | No loss of adherence                 | EN – DIN – 53151                 |
| Elasticity module (E)                                     | N/mm <sup>2</sup>            | 70000                                | EN 485 – 2                       |
| Proof stress (R <sub>p0.2</sub> )                         | N/mm <sup>2</sup>            | $\geq 80$                            | EN 485 – 2                       |
| Tensile strength (R <sub>m</sub> )                        | N/mm <sup>2</sup>            | 125 $\leq$ R <sub>m</sub> $\leq$ 240 | EN 485 – 2                       |
| Elongation (A)  | %                            | $\geq 4$                             | EN 485 – 2                       |
| Impact resistance   |                              | 4 Joules / GT0                       | EN 13523 – 5/6                   |
| Chemical Resistance                                       |                              | 5% HCl unchanged                     | ISO 2812 – METHOD 3              |
| Temperature utilization                                   | °C                           | - 40 / +80                           |                                  |
| Acoustic insulation Rw (C;Ctr)                            | dB                           | 30 [-1; -3]                          | ISO 717 – 1                      |

\* Standard values, other values can be accepted if the finish requires it and does not affect the product quality.



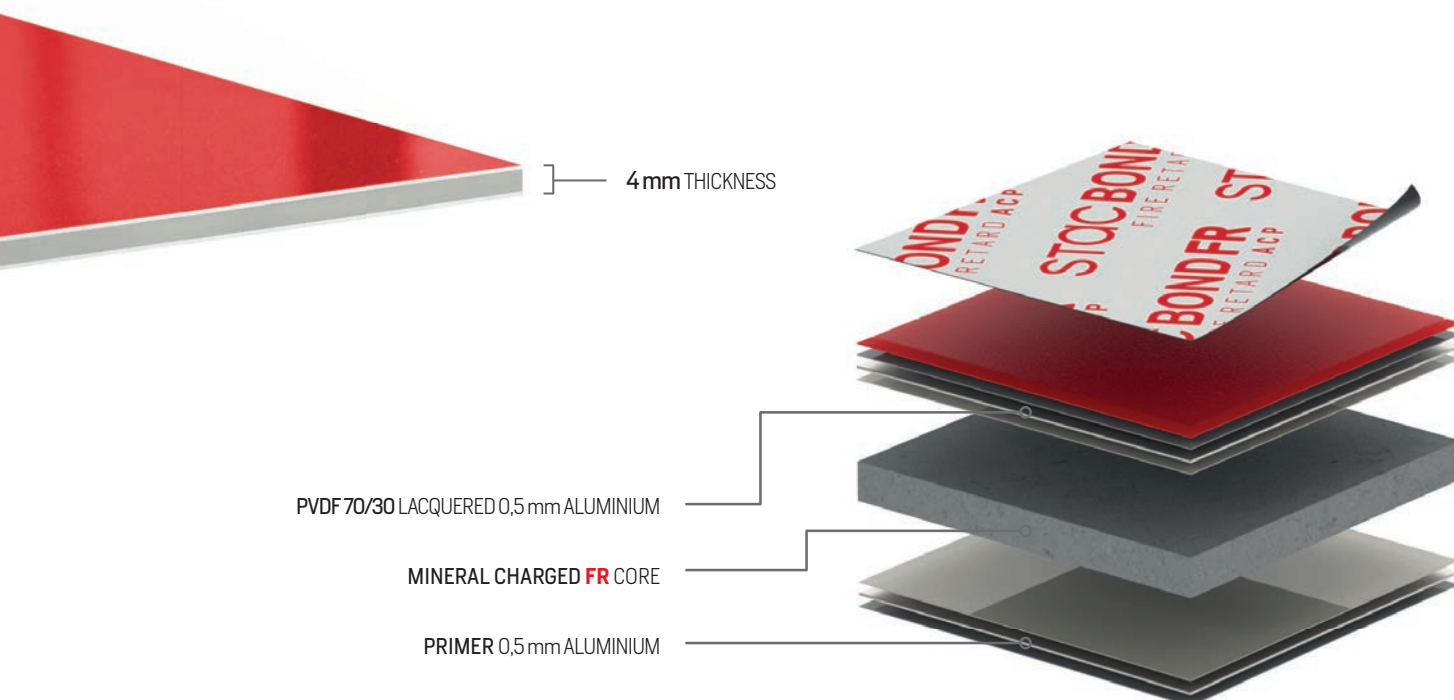
# STACBOND<sup>®</sup> FR

FIRE RETARD ACP

STACBOND<sup>®</sup> FR panels are composed of two aluminium sheets with a fire retardant core made of thermoplastic resins with mineral load.

The panels have excellent mechanical properties including: high rigidity, excellent flatness and impact resistance. They comply with the majority of requirements for fire-resistance classification:

- ✓ UNE EN 13501-1:2007 – **B-s1, d0**
- ✓ PN-90/8-02867 – **NRO**
- ✓ NFPA 285 – **PASS**
- ✓ ASTM E84 – **A CLASS**





| SHEET DIMENSIONS  |                              | WIDTHS (mm)                   | LENGTHS (mm)                     |
|---|------------------------------|-------------------------------|----------------------------------|
| Made to measure manufacture (CONSULT)                       |                              | 1000 / 1250 / 1500 / 2000     | (min.max.) 2500 / 6000           |
| Thickness tolerance (mm) $\pm 0,2$                          | Width tolerance (mm) $\pm 2$ | Length tolerance (mm) $+ 15$  | Diagonals tolerance (mm) $\pm 3$ |
| Tolerance of the Protective Film on the panel (mm) $+0; -5$ |                              |                               |                                  |
| PHYSICAL SPECIFICATION                                      | UNIT                         | VALUE                         | NORM                             |
| Aluminium thickness   | mm                           | 0,5                           |                                  |
| Panel thickness   | mm                           | 4                             |                                  |
| Panel weight  | kg/m <sup>2</sup>            | 8,02                          |                                  |
| Aluminium alloy   |                              | 5005 / 3105 / 3005            | UNE EN 573-3                     |
| FR CORE SPECIFICATION                                       | UNIT                         | VALUE                         | NORM                             |
| Density   | g/cm <sup>3</sup>            | 1,6 – 1,8                     |                                  |
| Fire reaction   |                              | B – S1, d0                    | UNE-EN-13501-1:2007              |
| COATING TYPE  | UNIT                         | VALUE                         | NORM                             |
| PvdF 70/30  | $\mu_m$                      | 20 – 25*                      | EN 13523 – 1                     |
| Internal coating thickness<br>Primer                        | $\mu_m$                      | 5 – 10*                       | EN 13523 – 1                     |
| External coating thickness                                  | $\mu_m$                      | 25 – 35*                      | EN 13523 – 1                     |
| Gloss (measured at 60° angle)                               | GU                           | 30 $\pm$ 5*                   | EN 13523 – 2 / ISO 2813          |
| Hardness  |                              | Min F                         | EN 13523 – 4                     |
| GENERAL CHARACTERISTICS                                     | UNIT                         | VALUE                         | NORM                             |
| Peeling   | N/mm                         | $\geq 7$                      | ASTM D903 – 98 (2004)            |
| Adherence   |                              | There is no loss of adherence | EN – DIN – 53151                 |
| Elasticity module (E)                                       | N/mm <sup>2</sup>            | 70000                         | EN 485 – 2                       |
| Proof stress ( $R_{p0,2}$ )                                 | N/mm <sup>2</sup>            | $\geq 80$                     | EN 485 – 2                       |
| Tensile strength ( $R_m$ )                                  | N/mm <sup>2</sup>            | 125 $\leq R_m \leq$ 240       | EN 485 – 2                       |
| Elongation (A)  | %                            | $\geq 4$                      | EN 485 – 2                       |
| Impact resistance   |                              | 4 Joules / GT0                | EN 13523 – 5/6                   |
| Chemical resistance   |                              | 5% HCl unchanged              | ISO 2812 – METHOD 3              |
| Temperature utilization                                     | °C                           | - 40 / +80                    |                                  |
| Thermal expansion for<br>differences of 100° C              | mm/m (100°)                  | 2,36                          | UNE-EN ISO 10545:1997            |
| Thermal transmission (U)                                    | W/m <sup>2</sup> K           | 5,62                          | UNE-EN ISO 12567-1               |
| Acoustic insulation Rw (C;Ctr)                              | dB                           | 29 [-1; -3]                   | ISO 717 – 1                      |

\* Standard values, other values can be accepted if the finish requires it and does not affect the product quality.

# STACBOND PE

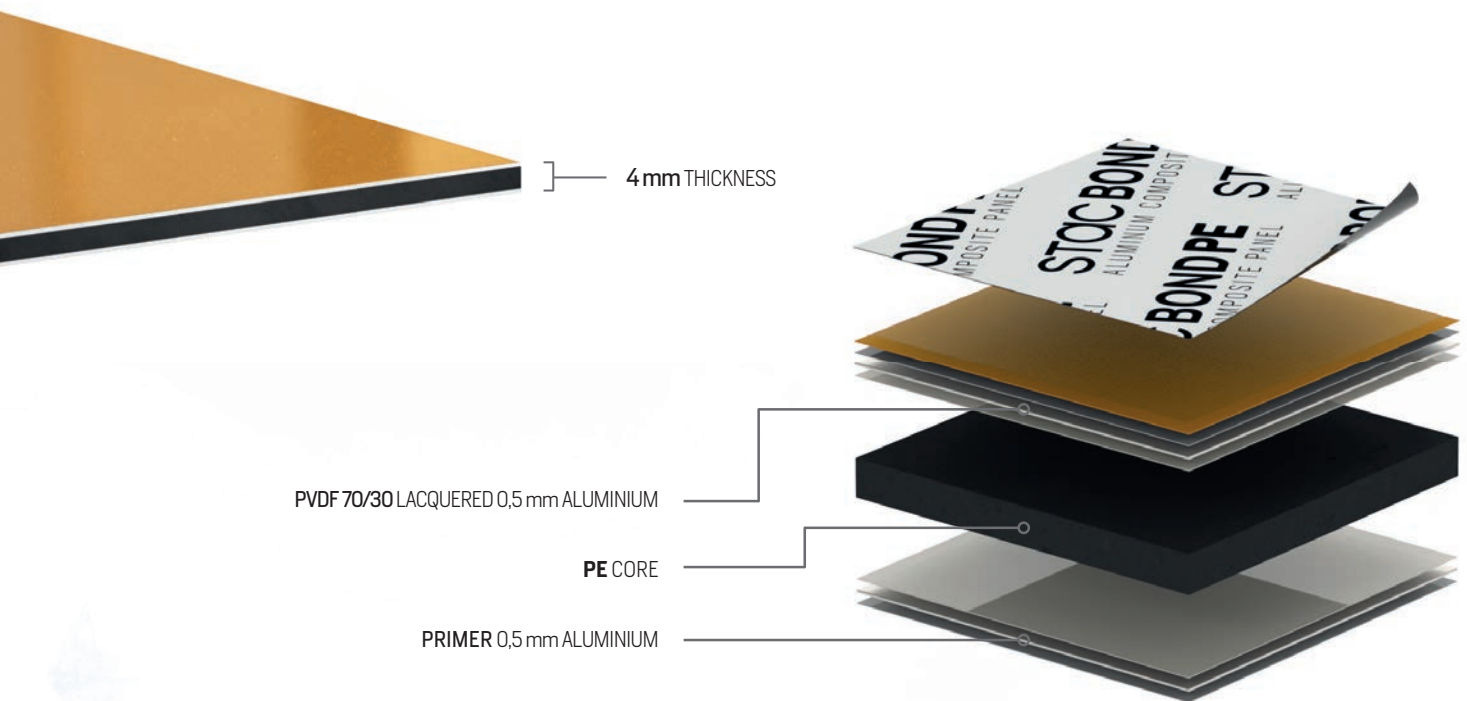
ALUMINUM COMPOSITE PANEL

**STACBOND® PE** panels consist of two aluminium sheets with a thermoplastic resin core (low-density polyethylene). Their outstanding properties include lightness, flatness, inalterability under humidity changes and the ease of forming.

They are especially suitable –among others– for ventilated facades, high durability corporate image, stands and exhibitors, and multiple applications for outdoor spaces.

They comply with the following fire classification requirements:

- ✓ NF P 92-501:1995 – **M1**
- ✓ ASTM E84 – **A CLASS**



**PE CORE | 0,5 mm – 4 mm**

| SHEET DIMENSIONS  |                          | WIDTHS (mm)                   | LENGTHS (mm)                 |
|---|--------------------------|-------------------------------|------------------------------|
| Made to measure manufacture (CONSULT)                     |                          | 1000 / 1250 / 1500 / 2000     | (min. / max.) 2500 / 6000    |
| Thickness tolerance (mm) ± 0,2                            | Width tolerance (mm) ± 2 | Length tolerance (mm) + 15    | Diagonals tolerance (mm) ± 3 |
| Tolerance of the Protective Film on the panel (mm) +0; -5 |                          |                               |                              |
| PHYSICAL SPECIFICATION                                    | UNIT                     | VALUE                         | NORM                         |
| Aluminium thickness                                       | mm                       | 0,5                           |                              |
| Panel thickness   | mm                       | 4                             |                              |
| Panel weight  | kg/m <sup>2</sup>        | 5,5                           |                              |
| Aluminium alloy   |                          | 5005 / 3105 / 3005            | UNE EN 573-3                 |
| PE CORE SPECIFICATION                                     | UNIT                     | VALUE                         | NORM                         |
| Density   | g/cm <sup>3</sup>        | 0,93                          |                              |
| COATING TYPE  | UNIT                     | VALUE                         | NORM                         |
| PvdF 70/30  | μm                       | 20 - 25*                      | EN 13523 - 1                 |
| Internal coating thickness<br>Primer                      | μm                       | 5 - 10*                       | EN 13523 - 1                 |
| External coating thickness                                | μm                       | 25 - 35*                      | EN 13523 - 1                 |
| Gloss (measured at 60° angle)                             | GU                       | 30 ± 5*                       | EN 13523 - 2 / ISO 2813      |
| Hardness  |                          | Min F                         | EN 13523 - 4                 |
| GENERAL CHARACTERISTICS                                   | UNIT                     | VALUE                         | NORM                         |
| Peeling   | N/mm                     | ≥ 9,8                         | ASTM D903 - 98 (2004)        |
| Adherence   |                          | There is no loss of adherence | EN - DIN - 53151             |
| Elasticity module [E]                                     | N/mm <sup>2</sup>        | 70000                         | EN 485 - 2                   |
| Proof stress (R <sub>p 0,2</sub> )                        | N/mm <sup>2</sup>        | ≥ 80                          | EN 485 - 2                   |
| Tensile strength (R <sub>m</sub> )                        | N/mm <sup>2</sup>        | 125 ≤ R <sub>m</sub> ≤ 240    | EN 485 - 2                   |
| Elongation (A)  | %                        | ≥ 4                           | EN 485 - 2                   |
| Impact resistance   |                          | 4 Joules / GT0                | EN 13523 - 5/6               |
| Chemical resistance                                       |                          | 5% HCl unchanged              | ISO 2812 - METHOD 3          |
| Temperature utilization                                   | °C                       | - 40 / +80                    |                              |
| Thermal expansion for<br>differences of 100° C            | mm/m (100°)              | 2,25                          | UNE-EN ISO 10545:1997        |
| Thermal transmission [U]                                  | W/m <sup>2</sup> K       | 3,38                          | UNE-EN ISO 12567-1           |
| Acoustic insulation Rw [C;Ctr]                            | dB                       | 28 [0; -3]                    | ISO 717 - 1                  |

\* Standard values, other values can be accepted if the finish requires it and does not affect the product quality.

### PRODUCT MAINTENANCE

STACBOND® composite panels present an optimal behaviour against possible changes in appearance caused by prolonged exposure to normal climatic conditions.

Facades made of composite panels are exposed to many aggressive agents present in the environment, such as sulphurous compounds, acids and nitrogen compounds caused by acid rain, chemical salts, dirt, soot, etc. These substances mixed with water and combined with UV radiation from the sun can lead to deterioration of the surface finish and shorten life expectancy of the product. These effects are worse in areas where rainwater cannot wash away the impurities.

As long as care is taken to keep the coating in good condition through regular washing and to ensure that incompatible or highly contaminated materials do not come into contact with the surface, the coating will not crack or delaminate, but changes may occur to the uniform appearance, such as slight changes in colour and brightness.

Specifically, for particularly harsh or difficult environments, such as areas with high levels of UV, areas at risk of sandstorms, proximity to chemical factories, swimming pools, saline environments or areas not exposed to natural rain, more rapid deterioration may occur.

For these reasons, the cleaning of roofing and facades is an important part of the care and maintenance of the cladding.

Regular inspection and maintenance is recommended to maintain the optimal appearance and durability of the coated aluminium. Above all, areas not exposed to natural rain, such as overhangs, may need further cleaning to eliminate potentially corrosive deposits. Leaves, grass, mould and other objects should be removed and any obstructions should be cleaned to prevent overflow. Local defects that can cause premature deterioration of the coating or corrosion of the substrate should be examined and repaired.





### CLEANING\*

Dirt and stained areas can be cleaned with water and as oft brush. A moderate strength power washer can also be used. The surface should then be rinsed down.

For more stubborn stains a pH neutral soap should be used. The detergent must be thoroughly removed after a few minutes with water. To remove a stain, a soft cotton cloth (or similar) wetted with a non-aggressive solvent such as mineral alcohol may be used.

Washing the painted surface should be carried out from top to bottom so that any detergent is washed away completely. The use of strong or detergents or those which are inappropriate for coloured surfaces may damage the finish. If necessary, we recommend carrying out a test clean on a small, low-visibility area of the panel.

We recommend carrying out cleaning of the façade when climatic conditions allow (avoiding high temperatures or strong, direct sunlight).



**Moderate pressure washer**



**Use of neutral detergents**



**Washing from top to bottom**

### PROTECTIVE FILM

The protective film used is a temporary surface protector and once the panel is installed in the facade it should be removed as soon as possible as climatic factors (hours of exposure, climate zone, geographic location or sharp changes in temperature) may affect the adhesive used on the protective film and make removal more difficult.

The protective film must be removed within a maximum period of 30 days after the panel has been installed on the facade. When the film is removed, it must be completely removed from the entire visible part of the facade. If it is partially removed, it could cause stains or marks to appear on the front face of the panel.

For the machining and later installation of the **STACBOND®** composite panel on the facade, it must be ensured that the orientation of the arrows indicated on the protective film must be the same on the entire surface, in order to avoid variations in the tone of the finish.



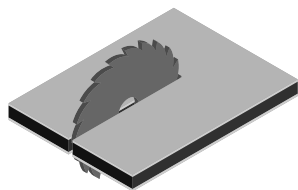
\* Some special finishes require specific cleaning processes. In the vent of doubt, please consult **STACBOND®**.



*SHAPING YOUR  
CREATIVITY*

# PANEL TRANSFORMATION

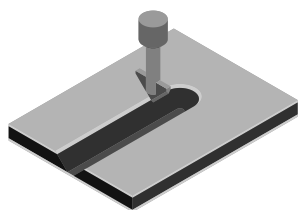
### CUTTING



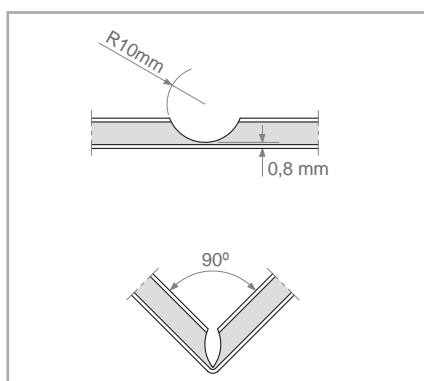
STACBOND® composite panel can be cut using CNC machinery or manually using a wall saw or portable milling machine. Straight, curved and angled cuts are possible, depending on the tools used.

Consult **STACBOND®** for the recommended parameters for the different types of cutting and the machinery used.

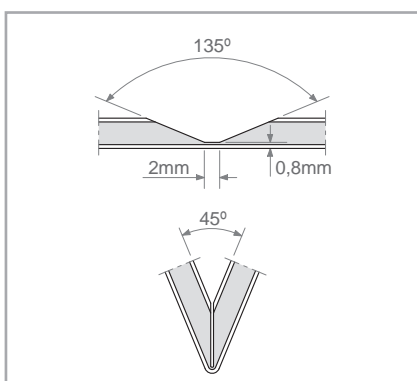
### MILLING



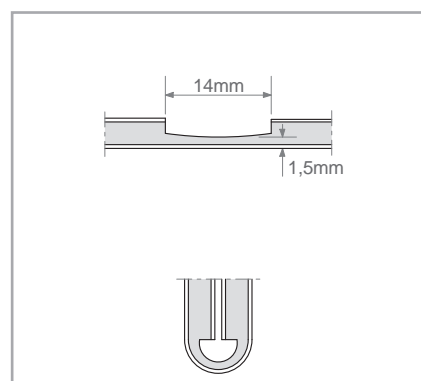
Performed using CNC, wall saw with milling disk or portable milling machine. The partial milling of the panels allows them to be bent into shape. The scoring is done using 90° or 135° milling bits depending on the bend required. To achieve the desired measurements, the fold must be made on the axis of the milling score line. The remaining thickness of the panel allows it to be bent into shape by hand using specific tools or using a composite panel specific press brake.



Spherical milling groove for 90° bends.



V-shaped milling groove for 135° bends.



Arc milling groove for complete 180° folds (not possible on **STACBOND® A2** panel).

#### RECOMMENDED MILLING PARAMETERS:

| CORE               | PROCESS | ROTATIONAL SPEED (r.p.m.) | DISPLACEMENT SPEED (mm/min) |
|--------------------|---------|---------------------------|-----------------------------|
| <b>STACBOND A2</b> | CUTTING | 22.000 – 24.000           | 8.000 – 10.000              |
|                    | MILLING | 24.000                    | 10.000 – 12.000             |
| <b>STACBOND FR</b> | CUTTING | 24.000                    | 12.000 – 14.000             |
|                    | MILLING | 24.000                    | 15.000 – 18.000             |
| <b>STACBOND PE</b> | CUTTING | 24.000                    | 12.000 – 14.000             |
|                    | MILLING | 24.000                    | 15.000 – 18.000             |

**Note:** These values are for guidance only and are intended for use with **STACBOND®** recommended milling tools. For use with other tools or depending on the type of machine it is necessary to adjust them.

#### RECOMMENDED TOOLS **A2** CORE:

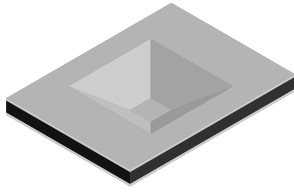
- **Cutting tool:** ø 6 mm milling cutter with diamond insertions (STB-FRESA6PCD)
- **Milling tool:** ø 10 mm spherical milling cutter with diamond insertions (STB-FRESA10PCD)

#### RECOMMENDED TOOLS **FR / PE** CORE:

- **Cutting tool:** ø 6 mm milling cutter with diamond insertions (STB-FD6X80X3.8)
- **Milling tool:** ø 10 mm spherical milling cutter with diamond coating (STB-FEMD-10x72)



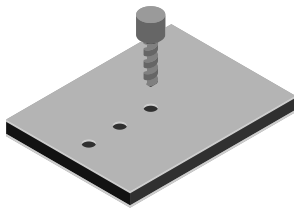
### EMBOSSING AND ENGRAVING



STACBOND® composite panels can be embossed and engraved using CNC machines. There are limits on the depth achievable depending on the shape and size of the tool used.

Please consult STACBOND® about different possible methodologies.

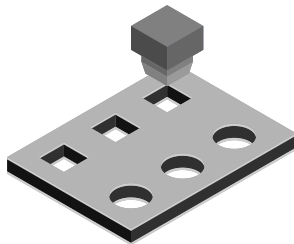
### DRILLING



The composite panel supports multiple types of perforations. Drilling can be frequent during installation of the product on site, especially in riveted and screwed assembly systems. For this purpose, the use of a bidiametric drill bit is recommended for fasteners with an expansion margin.

Consult STACBOND® for further information.

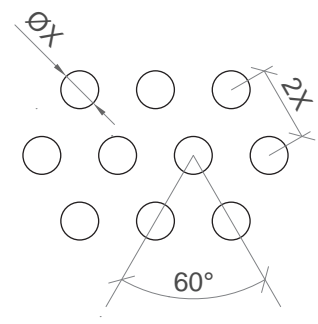
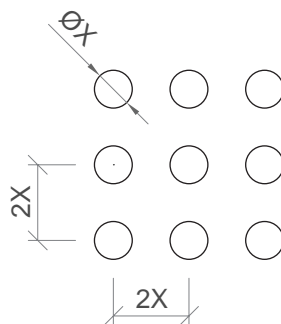
### PUNCHING AND DIE-CUTTING\*



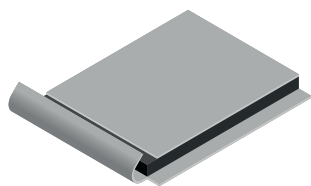
STACBOND® composite panels can be punched or die-cut using CNC machines. The recommended parameters to maintain the panels' properties and thus their guarantee are as follows:

- The smallest punch diameter should be 4 mm
- The distance between centres must be at least double the diameter
- The perforated surface area must be less than 35% of the total surface area of the panel

Consult STACBOND® about possible formats.



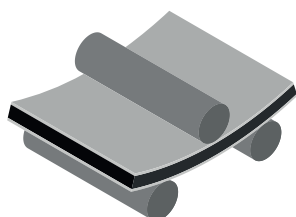
\*STACBOND® A2 panel perforation is not recommended.



### EDGE FOLDING OF BORDERS\*

STACBOND® composite panels can be edge folded on their profile. We offer three types of border: Simple (hides border), double interior (hides the border and part of the reverse) and double exterior (hides border and has a tab sticking out which hides the joint with other sheets of the panel). The dimensions of the panel must be oversized to account for the requirements of each type of border.

|                    | SIMPLE FOLDING | DOUBLE INTERIOR FOLDING | DOUBLE EXTERIOR FOLDING |
|--------------------|----------------|-------------------------|-------------------------|
| UNFOLDED DIAGRAM   |                |                         |                         |
| FOLDED DIAGRAM     |                |                         |                         |
| FLAP INCREASE (mm) | 3,5            | 7,5                     | 14,0                    |



### BENDING WITH ROLLERS

To make curved panels the best system is using a bending machine with 3/4 rollers. To avoid risk of damage, attention must be paid to the minimum radius of the curve of the internal side.

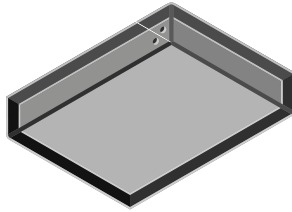
In the case of STACBOND® composite panels with flaps, the minimum recommended radius is 500 mm for a maximum flap length of 20 mm.

The minimum bending radius without flaps is determined by the following formula:

$$\emptyset \text{ UPPER ROLLER} \times 1,5 / 2 = \text{BENDING RADIUS}$$

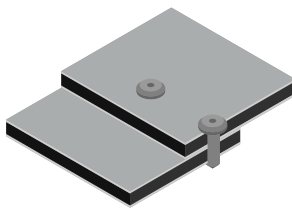
For example, in a machine where the diameter of the upper roller is 200 mm, we could bend a 4 mm thick composite panel sheet with a minimum radius of 150 mm.

Bending without flaps of lower radius can be achieved by using press brakes with specific tools. Consult STACBOND® for more information.



### FORMING CASSETTES\*\*

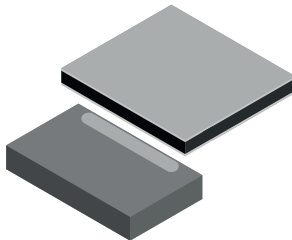
The cassettes in the **STACBOND®** systems are formed by bending the perimeter tabs. These tabs are made by partial milling of the panel with the correct dimensions for the system used. For fastening / anchoring the panels, various specific parts are used, such as strips made of aluminium or from the same material as the panel itself, which are attached using rivets. During the forming process we recommend that the panel be duly protected to avoid superficial damage. This process also can be used to form surfaces with three-dimensional relief.



### RIVETING AND SCREWING

**STACBOND®** composite panels can be installed using rivets or screws, either to each other or to other materials. The thermal expansion of the panels must be taken into account. We recommend the use of aluminium / INOX rivets and INOX A2 screws.

We recommend the use of centring bits for correct drilling and fitting of rivets, as well as spacing nosepieces to limit the pressure exerted on the expansion points.



### GLUEING

The panels can be glued using special adhesives and double-sided adhesive tape specified for composite panels, following the manufacturer's technical specifications.

Consult **STACBOND®** for further information.

\*We recommend the edge folding of the **STACBOND® A2** panel in our own mounting systems (STB-REM, STB-T-REM, STB-PEG, STB-T-PEG) or other systems where the border is visible.

\*\*It is not recommended to fold the tabs of the **STACBOND® A2** panel more than twice.





*MORE SYSTEMS  
MORE SOLUTIONS*

**ASSEMBLY  
SYSTEMS**

# ASSEMBLY SYSTEMS

---

**STACBOND®** offers 8 assembly systems to provide new possibilities and solutions for modern architecture. These systems have been meticulously designed to adapt to the specific requirements of each project.

These 8 systems for the installation of **STACBOND®** composite panels are split into two main groups depending on the substructure:

## T SUBSTRUCTURE

- **STB-T-CH** (hanging system)
- **STB-T-SZ** (male-female coupling system)
- **STB-T-REM** (riveted system)
- **STB-T-PEG** (glued system)

## OMEGA SUBSTRUCTURE

- **STB-CH** (hanging system)
- **STB-SZ** (male-female coupling system)
- **STB-REM** (riveted system)

The **STB-PEG** (glued system) employs a substructure consisting of independent angled spacers and ribbed tubes specifically prescribed for internal applications.

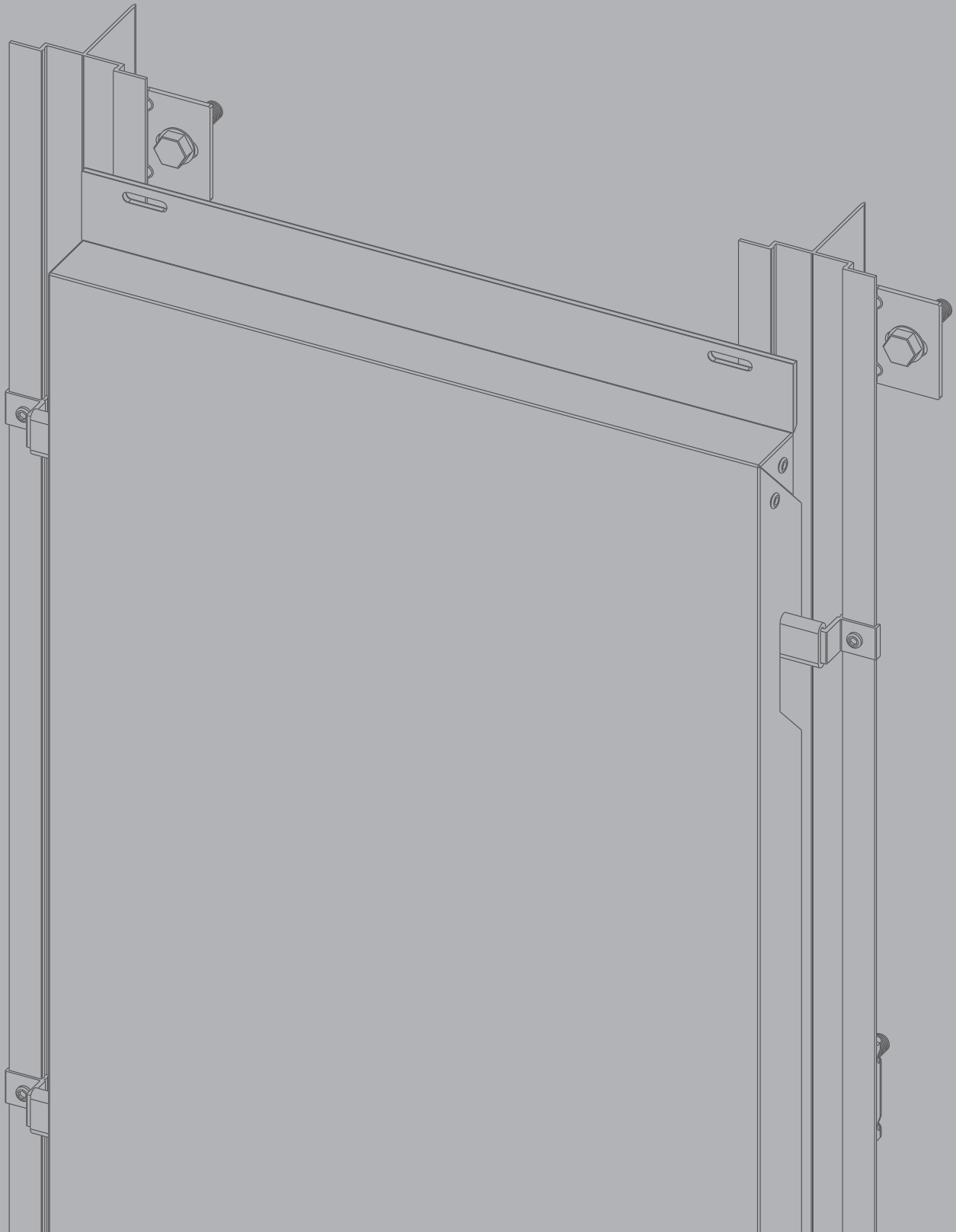
The **STB-CH**, **STB-SZ** and **STB-REM** systems employ the same substructure elements, DOUBLE T spacers and OMEGA profile.

The **STB-T-CH**, **STB-T-SZ**, **STB-T-REM** and **STB-T-PEG** systems employ special L spacers and T profile.

The **STB-T-CH**, **STB-T-SZ**, **STB-T-REM**, **STB-CH**, **STB-SZ** and **STB-REM** installation systems for **STACBOND®** composite panels have the European technical evaluation document ETE/ETA 15-0655 and CE marking according to EAD guide 090062-00-0404.

# STB-T-CH

## HANGING SYSTEM



## STB-T-CH SYSTEM DESCRIPTION



**STB-T-CH** is a kit system based on hung cassettes made from **STACBOND® composite panels for installing ventilated facades**. The system has hidden fixings and is versatile and quick to install. The cassettes can be installed either vertically or horizontally. The **STB-CH** system complies with all the requirements to be employed in the most cutting edge architectural claddings.

The substructure employs **profiles T OMEGA** and **spacers L** in 6063 T5 aluminium alloy.

The spacers come in various lengths to house the required thickness of thermal insulation and compensate any irregularities in the facade. For the thermal break, **STAC®** has developed specific **INSULATING WEDGES** to place between the spacers L and the vertical face.

The spacers are anchored to the wall using special mechanical fixings, recommended in each case by the fixings suppliers, and receive the profiles T as uprights.

The **bracket sets STB-T-CH hanging** are placed on the profiles T. They are cut from extruded 6063 T% aluminium alloy profiles. A special EPDM piece is fitted in the hanging area to avoid vibrations.

The cassettes made of **STACBOND®** composite panel are attached to the substructure thanks to slots which are machined in the vertical edges of the cassettes and in their hidden stiffeners attached to the inner face, in a manner so that they rest on the bracket sets and are screwed or riveted through the upper tabs to the profiles T OMEGA.

**STAC®** has developed a program for the specific calculations of the substructure with the criteria from the Technical approval Document (DIT plus 553p/16) established by the Instituto de Ciencias de la Construcción Eduardo Torroja for each project executed, defining the maximum distances between uprights and the number of fixings.

The **STB-T-CH** system is included in the European technical evaluation document ETE/ETA 15-0655 and has the CE marking.



ETA-ETE: 15/0655



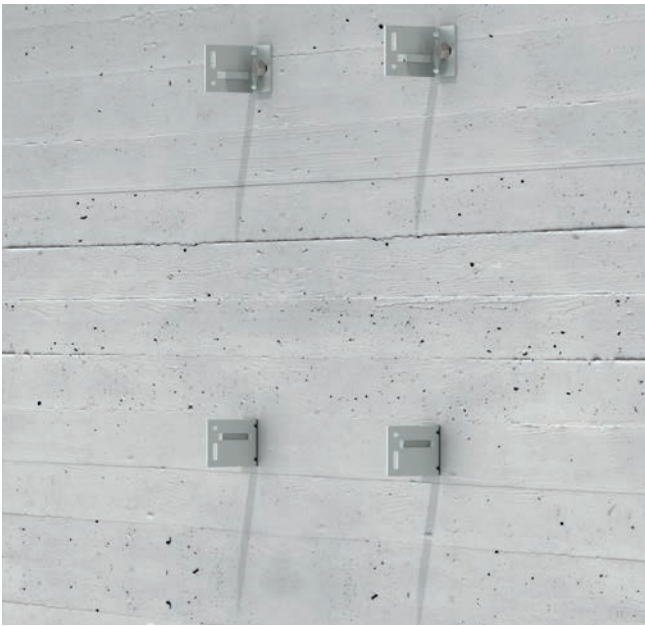
Nº 553P/19



ITB – KOT 2017/0043







SPACERS L

**1. Spacers L to fix the profile to the facade.** The spacers L join the profile T OMEGA to the vertical face or support wall and are used to overcome irregularities in the plumbness of the facade. They are either retaining or supporting. **Insulating wedges** can optionally be installed to act as thermal bridge breaks.



PROFILES T OMEGA

**2. The profiles T OMEGA are screwed to the spacers L.** They must be perfectly plumb with the adjustment that the system allows. The first and last fixings to the face must be placed at a maximum of 250 mm from the ends of the profile.



BRACKET SETS

**3. The bracket sets are placed on the profiles.** These are adjusted in height according to the location of the hanging slots of each cassette.



STACBOND COMPOSITE PANEL CASSETTE

**4. STACBOND® composite panel cassette.** The last step is placing the cassettes on the hangers and screwing or riveting them to the wings of the profiles T OMEGA in the slotted holes located on the upper horizontal tabs of the cassettes. The cladding is applied working from the bottom row up.

# STB-T-CH SYSTEM

## AUXILIARY ELEMENTS

### BRACKET SET STB-T-CH HANGING

The bracket set STB-T-CH hanging is used on T OMEGA profiles.

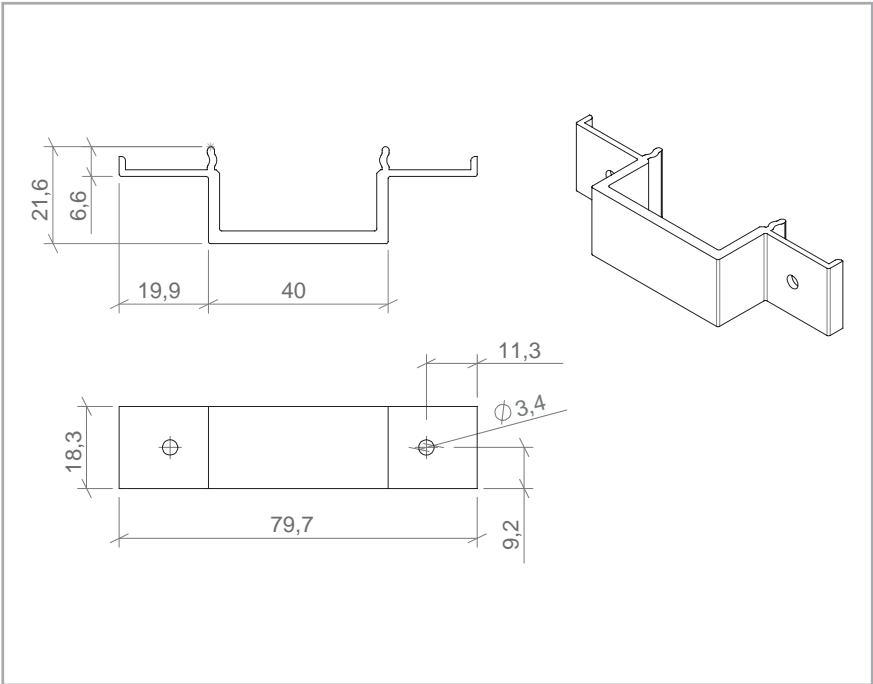
The gasket for the hanger is used to avoid vibration noise caused by wind load, road traffic, etc.

The support is initially attached to the profile via tabs which allow vertical movement to aid placement in the final location and is then fixed using self-tapping screws.

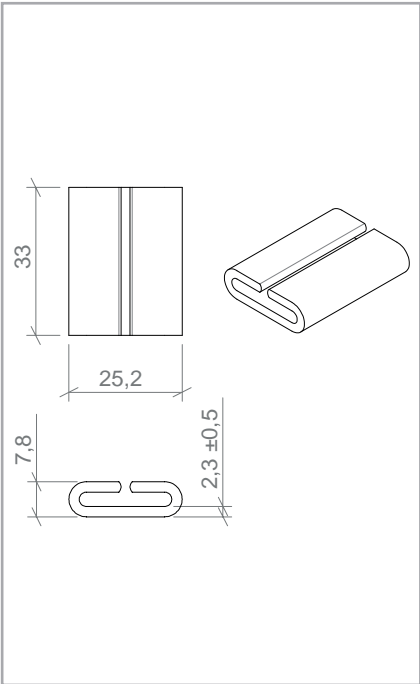


| REFERENCE | DESCRIPTION                  | UNITS/BOX |
|-----------|------------------------------|-----------|
| 05.19.062 | BRACKET SET STB-T-CH HANGING | 200       |

BRACKET STB-T-CH



BRACKET GASKET



Measurements in mm

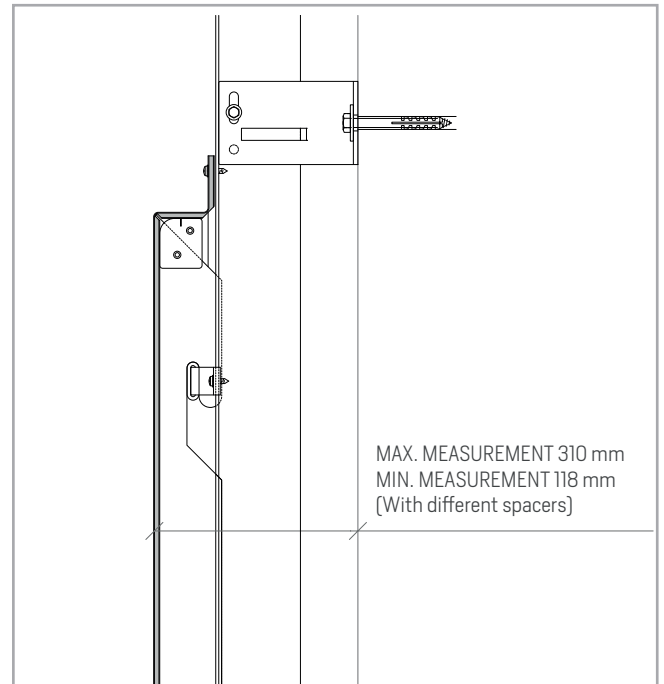
# STB-T-CH SYSTEM

## STANDARD CH CASSETTE WITH 45 mm FLAP

45 mm FLAP (DETAIL)



VERTICAL CROSS-SECTION



**Note:** The machined **STACBOND®** panels are supplied flat. The client is responsible for forming them into cassettes. No specialist machinery is required.

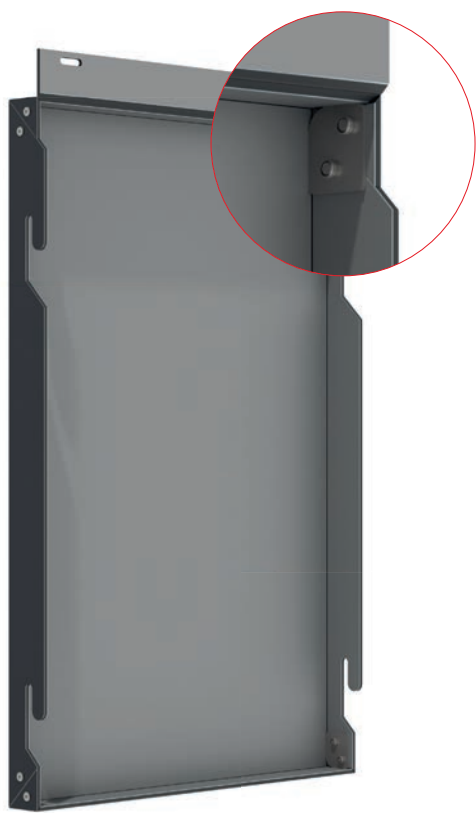
For the CH cassettes with 45 mm flaps, they can be formed using rectangular strips of 1050 ally (28 x 33 x 2 mm) or rectangular offcuts of the composite panels themselves.

Due to their greater length, the 45 mm flaps enter further into the T OMEGA profiles and more efficiently channel away water that hits the facade.

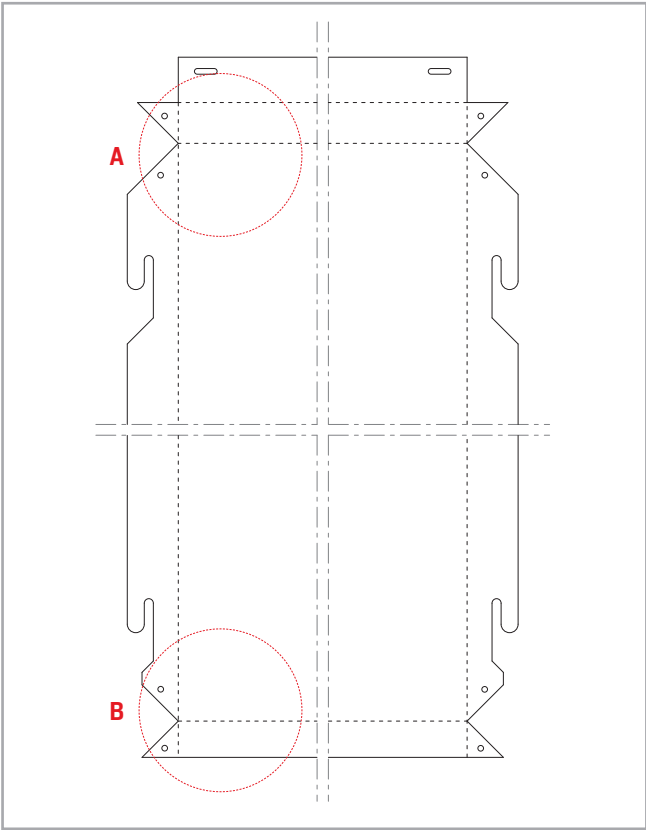
# STB-T-CH SYSTEM

## STANDARD CH CASSETTE WITH 45 mm FLAP

FORMED CASSETTE



FLAT CASSETTE



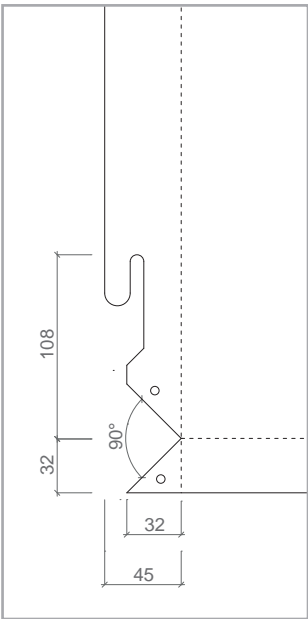
### CASSETTES FORMING PLATE

The shaping plate is a small piece of 1050 H24 aluminium alloy which permits mechanical fixing via rivets to give the STB-CH and STB-T-CH system cassettes their shape.

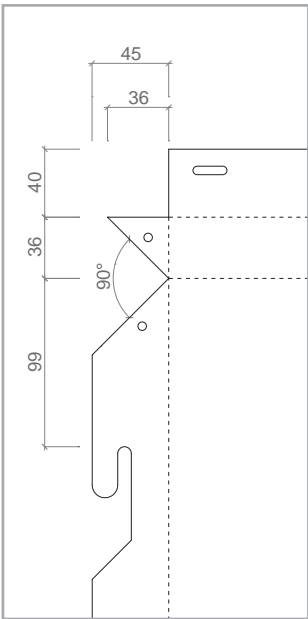
This plate is specified for CH cassettes with 45 mm flap and stiffeners.



DETAIL A



DETAIL B



| REFERENCE | DESCRIPTION             | UNITS/BOX |
|-----------|-------------------------|-----------|
| 05.19.050 | CASSETTES FORMING PLATE | 3000      |

Measurements in mm

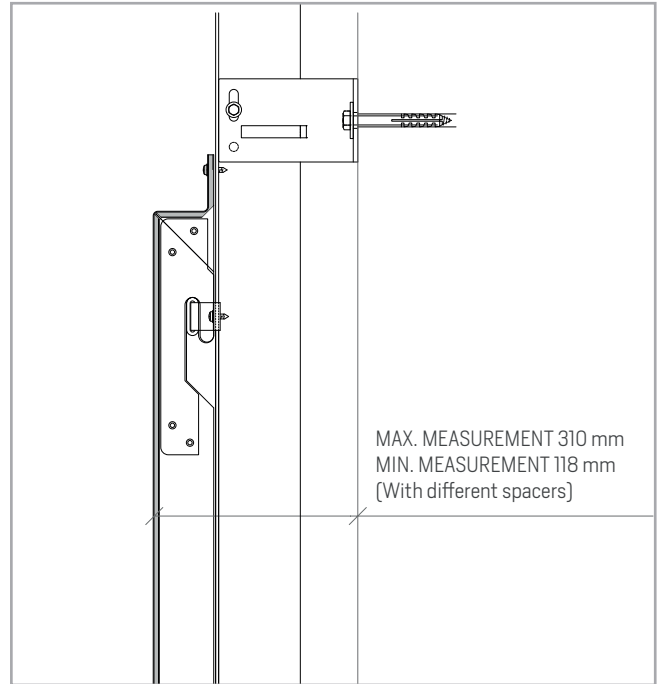
# STB-T-CH SYSTEM

## STANDARD CH CASSETTE WITH 40 mm FLAP

40 mm FLAP (DETAIL)



VERTICAL CROSS-SECTION



**Note:** The machined **STACBOND®** panels are supplied flat. The client is responsible for forming them into cassettes. No specialist machinery is required.

For the forming of CH cassettes with 40 mm flaps, hanging reinforcements are always used for every tab. These are specific 1050 aluminium alloy pieces of 2 mm and are riveted or screwed to the corresponding tabs and / or stiffeners.

The cassettes with 40 mm flap can allow greater optimization as they require less panel in the flaps than the cassettes with 45 mm flap.

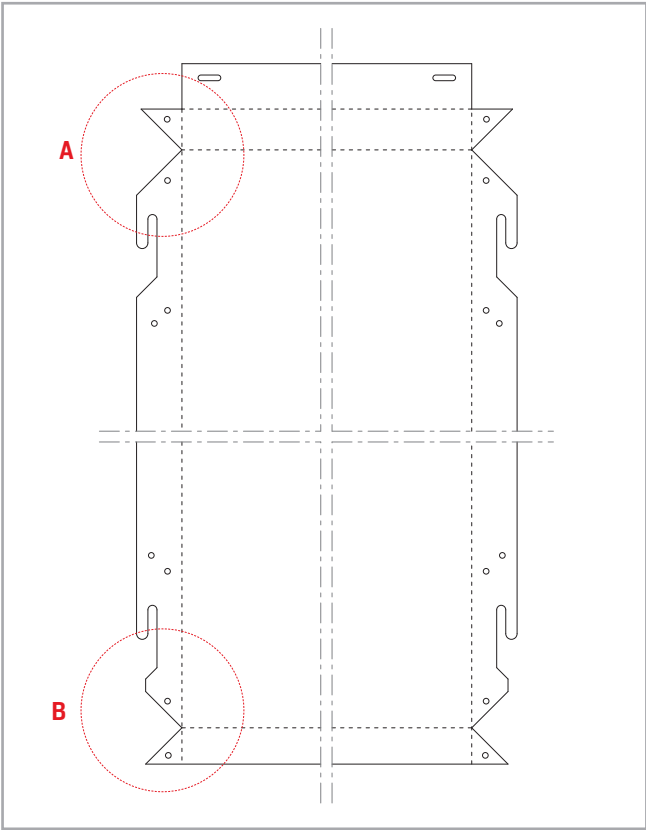
STB-T-CH SYSTEM

STANDARD CH CASSETTE WITH 40 mm FLAP

FORMED CASSETTE



FLAT CASSETTE

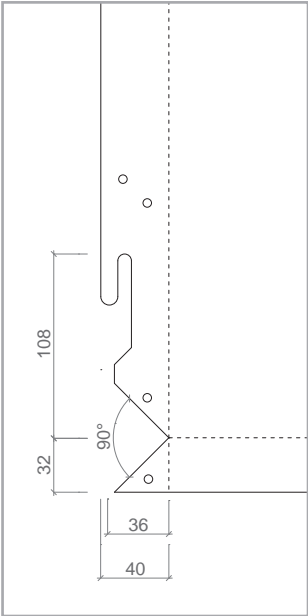


HANGING REINFORCEMENT

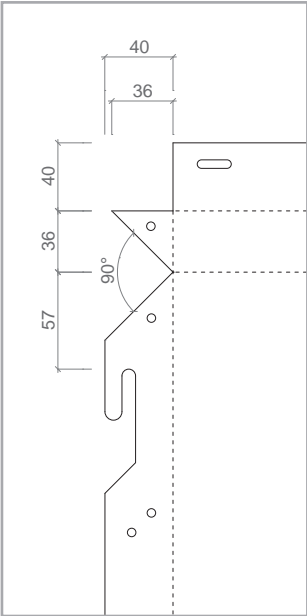
The hanging reinforcement is a piece made of 1050 H24 aluminium alloy which allows mechanical fixing via rivets to form the shape of the cassettes for the STB-CH and STB-T-CH systems, as well as strengthening each of the hanging slots of the CH cassettes with 40 mm flap.



DETAIL A



DETAIL B



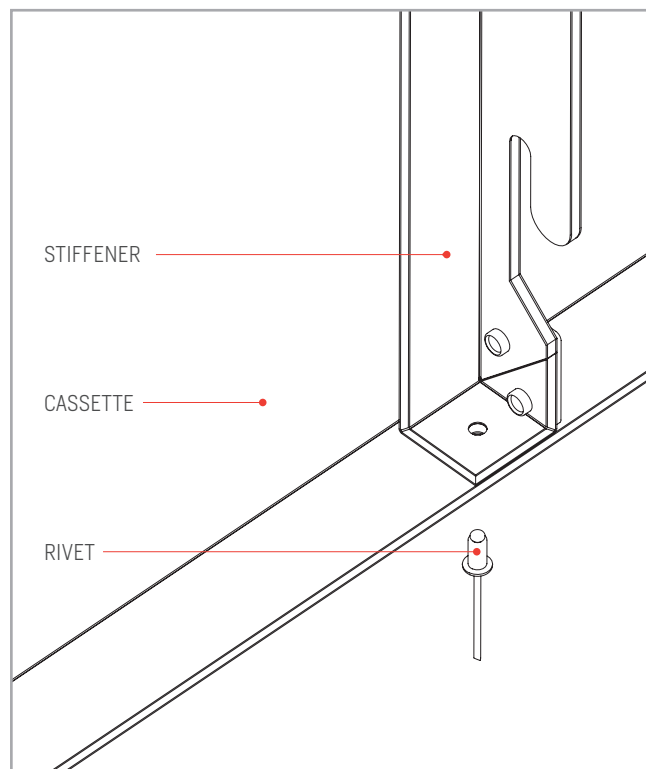
Measurements in mm

| REFERENCE | DESCRIPTION           | UNITS/BOX |
|-----------|-----------------------|-----------|
| 05.19.019 | HANGING REINFORCEMENT | 500       |

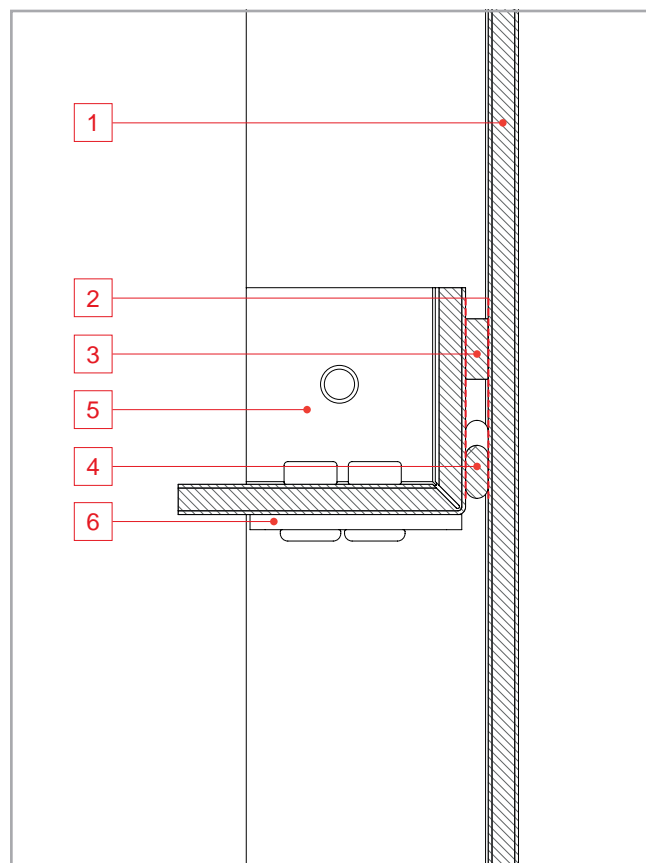
The stiffener is a angular piece formed from machined **STACBOND®** composite panel. It is used to internally reinforce CH cassettes when they exceed certain dimensions. The stiffener is fixed with double-sided tape and adhesive to the inner side of the tray and is riveted to the horizontal upper and lower flanges.



DETAIL OF MECHANICAL FIXING



DETAIL OF MECHANICAL FIXING



| REFERENCE   | DESCRIPTION                      |
|-------------|----------------------------------|
| 05.19.025   | STIFFENER SCH-1 (< 750 mm)       |
| 05.19.026   | STIFFENER SCH-2 (750 - 1500 mm)  |
| 05.19.027   | STIFFENER SCH-3 (1500 - 2400 mm) |
| 05.19.027.1 | STIFFENER SCH-4 (2400 - 4000 mm) |
| 05.19.027.2 | STIFFENER SCH-5 (4000 - 5000 mm) |
| 05.19.027.3 | STIFFENER SCH-6 (> 5000 mm)      |

| Nº | NAME  |
|----|---|
| 1  | STACBOND® composite panel cassette          |
| 2  | Primer                                      |
| 3  | Double-sided adhesive tape                  |
| 4  | Adhesive applied to the cassette            |
| 5  | Stiffener made of STACBOND® composite panel |
| 6  | Cassettes forming plate                     |

# STB-T-CH SYSTEM

## ATTACHING STIFFENER

### 1. PREPARING THE AREA

Firstly dust and dirt is removed mechanically. Solvents must never be used. This cleaning consists of light or heavy sanding, depending on the extent of dirt present. The dust is then vacuumed or blown away. For cleaning and subsequent degreasing, SIKA-AVIATOR-205 or similar is used. It should be left to evaporate for 10 minutes minimum.

### 2. PRIMING THE AREA

Once the area is clean it is primed using a specific product which strengthens the adherence of the elastic adhesive (SIKATACK PANEL PRIMER or similar).

### 3. DOUBLE-SIDED ADHESIVE TAPE

After the required drying time of the primer (30 to 60 mins) the double-sided adhesive tape – SIKATACK PANEL-3 TAPE or similar – is applied. This holds the part whilst the adhesive polymerizes, as well as ensuring the required minimum depth of adhesive for any possible dilation of the STACBOND® composite panel.

### 4. APPLYING THE ADHESIVE

The elastic adhesive – SIKATACK PANEL or similar – is then applied to the panel, applying a continuous bead contiguous to the adhesive tape.

### 5. ATTACHING THE STIFFENER

The stiffener is then put in place ensuring that its full face surface is in contact with the adhesive.

### 6. FIXING WITH RIVETS

Lastly, the stiffener is drilled and riveted through the upper and lower ends to the horizontal tabs of the cassette.



1. CLEANING



2. PRIMING



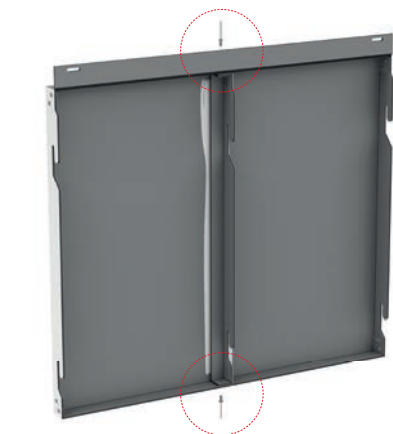
3. ADHESIVE TAPE



4. SIKATACK PANEL ADHESIVE



5. ATTACHING THE STIFFENER



6. FIX WITH RIVETS



## STB-T-CH SYSTEM

### REPLACEMENT OF DAMAGED CASSETTES



1. Remove the damage cassette by cutting the upper flap.



2. Drill hole in tube of 30 x 30 x 1.4 mm with  $\varnothing$  6 mm and place in the new cassette.



3. Place 4.2 x 13 DIN 7504 N stainless screws in "L" profile of 30 x 20 x 1.3 mm and attach this to the profile T OMEGA.



4. Place specified double-side tape and adhesive on the "L" profile 30 x 20 mm.

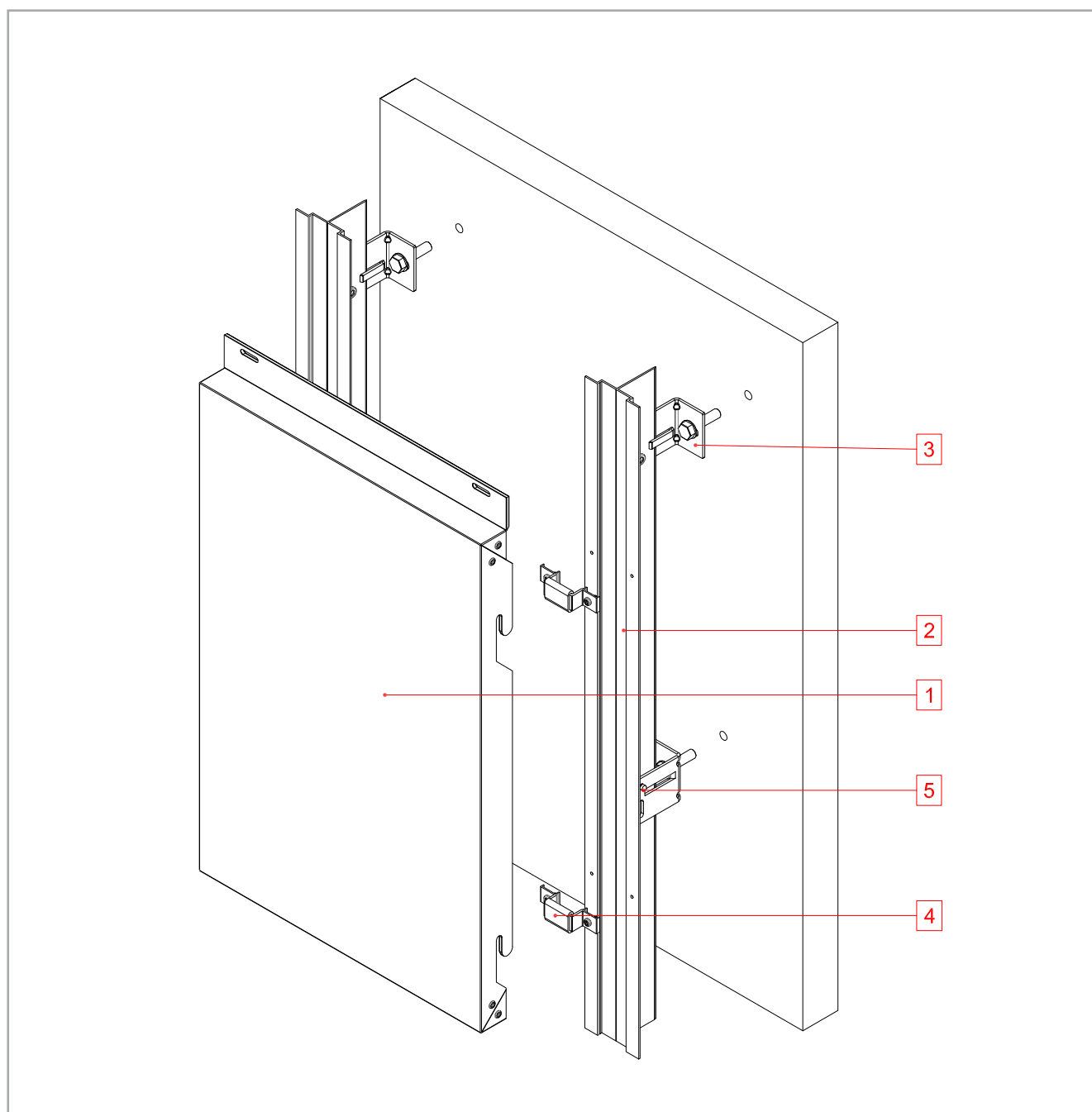


5. Fit the new **STACBOND®** composite panel cassette with special 9 mm hanging slot and hanging reinforcement pieces.



## STB-T-CH SYSTEM

### INSTALLATION DIAGRAM

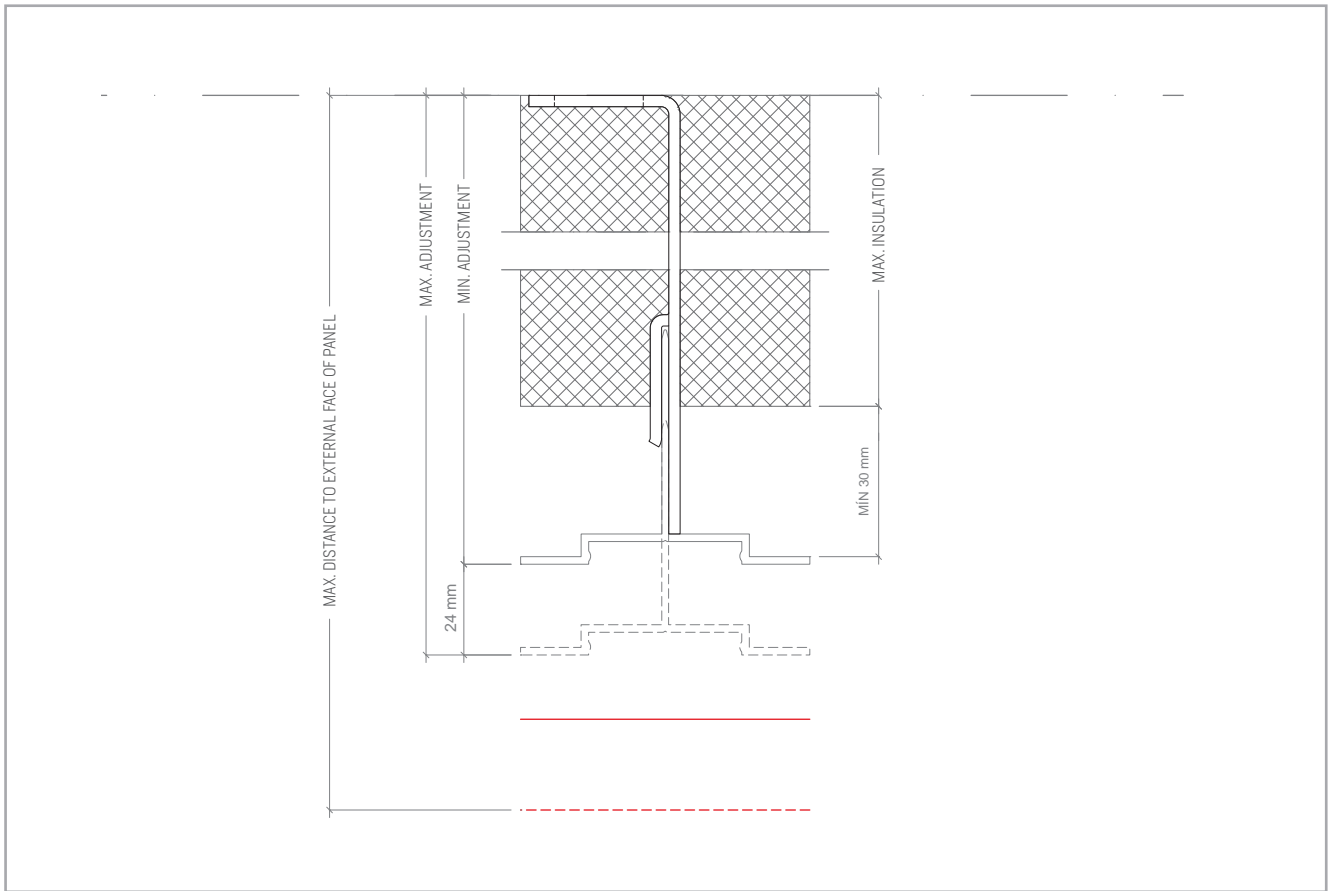


| N° | NAME |
|----|------|
|----|------|

- |   |  |
|---|--|
| 1 | Cassette made from STACBOND® composite panel |
| 2 | Profile T OMEGA                              |
| 3 | Spacer L                                     |
| 4 | Bracket set STB-T-CH hanging                 |
| 5 | Self-tapping screw                           |

# STB-T-CH SYSTEM

## SPACER / THERMAL INSULATION RELATIONSHIP



| SPACER L * ST-1-55 |                      | DISTANCE (mm) FROM BASE OF<br>FIXING TO VISIBLE FACE OF PANEL |     | RECOMMENDED INSULATION (mm)<br>WITH 30 mm AIR CAVITY |
|--------------------|----------------------|---|-----|--|
| REF.               | PART                 | MIN.  | MAX |  |
| 05.19.041          | SPACER L 68 ST-1-55  | 118   | 142 | 40   |
| 05.19.044          | SPACER L 92 ST-1-55  | 142   | 166 | 80   |
| 05.19.051          | SPACER L 116 ST-1-55 | 166   | 190 | 100  |
| 05.19.052          | SPACER L 140 ST-1-55 | 190   | 214 | 120  |
| 05.19.053          | SPACER L 164 ST-1-55 | 214   | 238 | 140  |
| 05.19.054          | SPACER L 188 ST-1-55 | 238   | 262 | 160  |
| 05.19.055          | SPACER L 212 ST-1-55 | 262   | 286 | 200  |
| 05.19.056          | SPACER L 236 ST-1-55 | 286   | 310 | 220  |

| SPACER L * ST-2-120 |                      | DISTANCE (mm) FROM BASE OF<br>FIXING TO VISIBLE FACE OF PANEL |     | RECOMMENDED INSULATION (mm)<br>WITH 30 mm AIR CAVITY |
|---------------------|----------------------|---|-----|--|
| REF.                | PART                 | MIN.  | MAX |  |
| 05.19.042           | SPACER L 68 ST-2-120 | 118   | 142 | 40   |
| 05.19.045           | SPACER L 92 ST-2-120 | 142   | 166 | 80   |

# STB-T-CH SYSTEM

## ACCESSORIES

### PROFILES

| REF.      | PART            | PAGE |
|-----------|-----------------|------|
| 05.19.061 | PROFILE T OMEGA | 106  |

### SPACERS

| REF.      | PART                 | PAGE |
|-----------|----------------------|------|
| 05.19.041 | SPACER L 68 ST-1-55  | 109  |
| 05.19.044 | SPACER L 92 ST-1-55  |      |
| 05.19.051 | SPACER L 116 ST-1-55 |      |
| 05.19.052 | SPACER L 140 ST-1-55 |      |
| 05.19.053 | SPACER L 164 ST-1-55 |      |
| 05.19.054 | SPACER L 188 ST-1-55 |      |
| 05.19.055 | SPACER L 212 ST-1-55 |      |
| 05.19.056 | SPACER L 236 ST-1-55 |      |
| 05.19.042 | SPACER L 68 ST-2-120 |      |
| 05.19.045 | SPACER L 92 ST-2-120 |      |

### FASTENING ACCESSORIES

| REF.      | PART  | PAGE |
|-----------|---|------|
| STB-R0300 | BLIND RIVET POLYGRIP SFS<br>ASO-D-48150 ALU/INOX 4,8X15 | 113  |


### AUXILIARY ELEMENTS

| REF.      | PART                            | PAGE |
|-----------|---------------------------------|------|
| 05.19.062 | BRACKET SET STB-T-CH HANGING    | 111  |
| 19.019    | HANGING REINFORCEMENT           |      |
| 05.19.050 | CASSETTES FORMING PLATE         |      |
| 05.19.025 | STIFFENER SCH-1 (< 750 mm)      |      |
| 05.19.026 | STIFFENER SCH-2 (750 - 1500 mm) |      |
| 05.19.027 | STIFFENER SCH-3 (> 1500 mm)     |      |

### INSULATION PLATES

| REF.      | PART   | PAGE |
|-----------|--|------|
| 05.19.070 | <b>3x</b> GROOVE WASHER FOR INSULATING<br>WEDGES WITH REF.:<br>05.19.066 / 05.19.068 / 05.19.072               | 115  |
| 05.19.066 | INSULATING WEDGE FOR SPACERS<br><b>L * ST-2-120</b> WITH REF.:<br>05.19.042 / 05.19.045                        |      |
| 05.19.068 | INSULATING WEDGE FOR SPACERS<br><b>L * ST-1-55</b> WITH REF.:<br>05.19.053 / 05.19.054 / 05.19.055 / 05.19.056 |      |
| 05.19.072 | INSULATING WEDGE FOR SPACERS<br><b>L * ST-1-55</b> WITH REF.:<br>05.19.041 / 05.19.044 / 05.19.051 / 05.19.052 |      |

## INFORMATION AND SALES

 (+34) 981 817 036

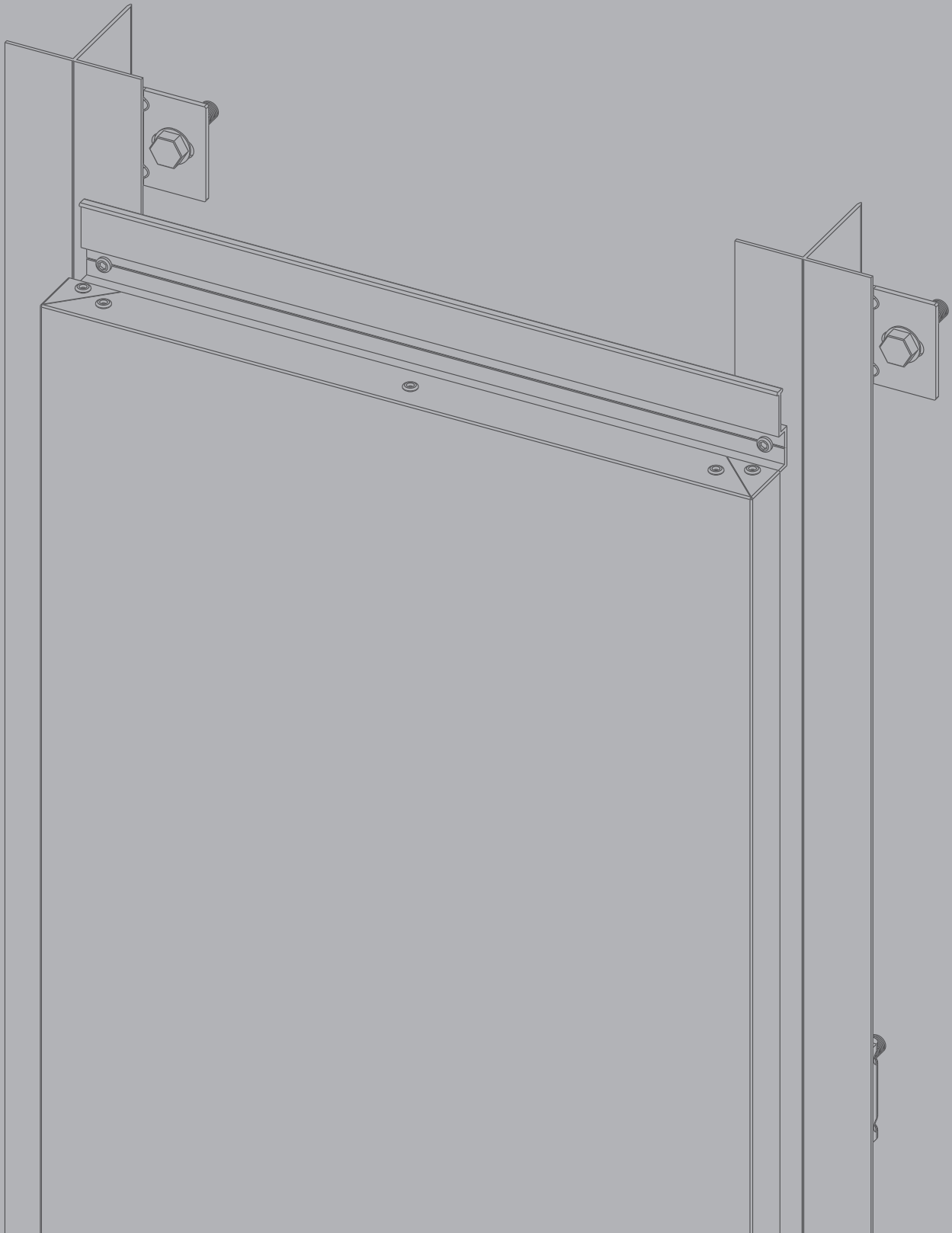
 (+34) 981 817 037

 stacbond@stac.es

 www.stac.es

# STB-T-SZ

MALE-FEMALE SYSTEM



# STB-T-SZ SYSTEM

## DESCRIPTION



**STB-T-SZ** is a kit system based on cassettes made from **STACBOND® composite panels for installing ventilated facades**. It is a hidden male-female coupling system which is quick and easy to install. It was specially designed to develop facades with horizontal aspect of mainly solid wall with little surface area of openings or linear spaces.

The system comprises two 6063 T5 aluminium alloy profiles onto which the pre-formed cassettes are attached:

- Lower female profile, called **profile S**.
- Upper male profile, called **profile Z**.

The substructure employs **profiles T** and **spacers L** in 6063 T5 aluminium alloy.

The spacers come in various lengths to house the required thickness of thermal insulation and compensate any irregularities in the facade. For the thermal break, **STAC®** has developed specific **INSULATING WEDGES** to place between the spacers L and the vertical face.

The spacers are anchored to the wall using special mechanical fixings, recommended in each case by the fixings suppliers, and receive the T profiles as uprights.

The **STACBOND®** composite panel cassettes are mechanically attached to the uprights. The facade is constructed from the base up in a manner that the profile S of each upper cassette sits on the profile Z of the cassette below it. Mechanical anchoring is via screwing the profiles Z to the profile T.

To avoid vibration of the male-female cassettes and the profiles S and Z, protective EPDM gaskets are incorporated.

**STAC®** has developed a program for the specific calculations of the substructure with the criteria from the Technical approval Document (DIT plus 553p/16) established by the Instituto de Ciencias de la Construcción Eduardo Torroja for each project executed, defining the maximum distances between uprights and the number of fixings.

The **STB-T-SZ** system complies with all major international certifications.



ETA-ETE: 15/0655



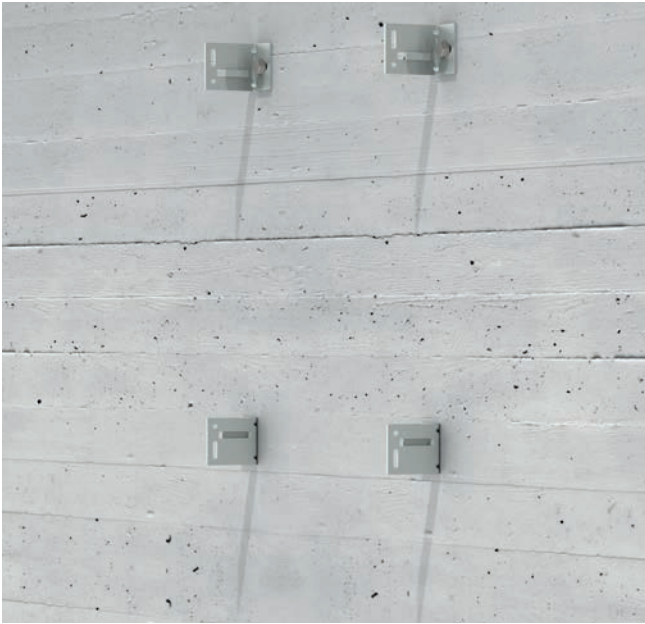
Nº 553P/19



ITB – KOT 2017/0043



ASOCIACIÓN TÉCNICA DE EMPRESAS DE LA INDUSTRIA DE LA CONSTRUCCIÓN



SPACERS L

**1. Spacers L to fix the profile to the facade.** The spacers L join the profile T to the vertical face or support wall and are used to overcome irregularities in the plumbness of the facade. They are either retaining or supporting. **Insulating wedges** can optionally be installed to act as thermal bridge breaks.



PROFILES T

**2. The profiles T are screwed to the spacers L.** They must be perfectly plumb with the adjustment that the system allows. The first and last fixings to the face must be placed at a maximum of 250 mm from the ends of the profile.



BASE PROFILE Z

**3. Profile S and profile Z.** These profiles longitudinally strengthen the cassette in both its upper and lower parts. The profile Z is fitted in the upper part and has a EPDM adhesive strip which surrounds the vertical wing of the profile to absorb possible spaces between the male and female parts to avoid noise caused by vibration. These profiles are attached to the cassettes using rivets.



STACBOND COMPOSITE PANEL CASSETTE

**4. STACBOND® composite panel cassette.** Once the cassette has been formed with the profile Z in the upper part and the profile S in the lower part, it is set up to the facade. Cladding is performed from the bottom row up in a manner so that each cassette rests on the one below and is mechanically fastened in the upper part by screwing the profile Z to the upright profile T.



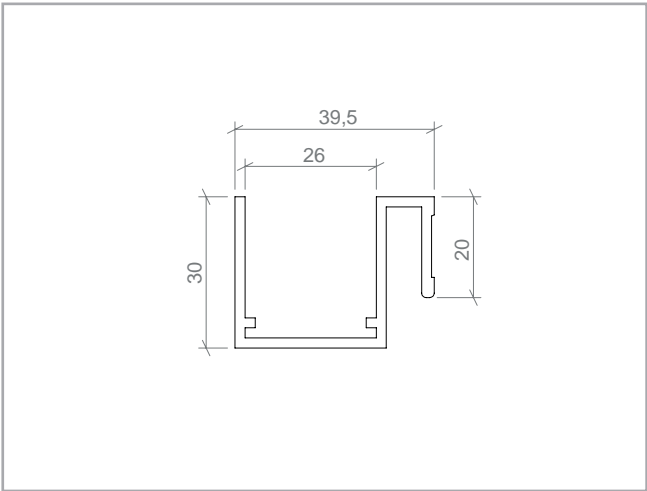
# STB-T-SZ SYSTEM

## AUXILIARY ELEMENTS

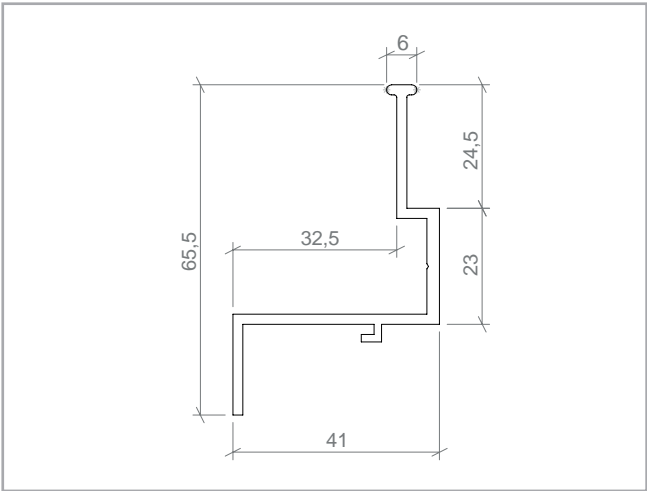
### PROFILE S AND PROFILE Z



PROFILE S

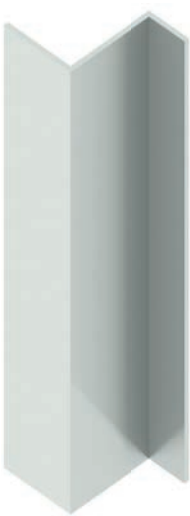


PROFILE Z



Measurements in mm

### REINFORCEMENT STB-T-SZ



The reinforcement STB-T-SZ is a segment of profile of 200 mm specific length, covers the internal distance between the SZ cassette and the substructure.  
This part is attached to the substructure profile with screws.

### EPDM GASKET PROFILE SZ



We provide a EPDM protection gasket to place between the two profiles and absorb any slack.

| REFERENCE | DESCRIPTION                   | UNITS/BOX |
|-----------|-------------------------------|-----------|
| 05.19.001 | PROFILE S                     | 24        |
| 05.19.002 | PROFILE Z                     | 18        |
| 05.19.049 | REINFORCEMENT STB-T-SZ        | 180       |
| STB-JEPDM | EPDM GASKET PROFILE SZ (m.l.) | -         |

### USING THE EPDM GASKET PROFILE SZ



The segments of EPDM gasket must be placed on the head of the profile Z and wrapped around to cover both sides. The recommended size of these strips is 60 mm.



The recommended maximum distance between segments is 500 mm. Using this accessory eliminates possible vibrations between the panels and allows them to be adjusted to ensure flatness of the facade.

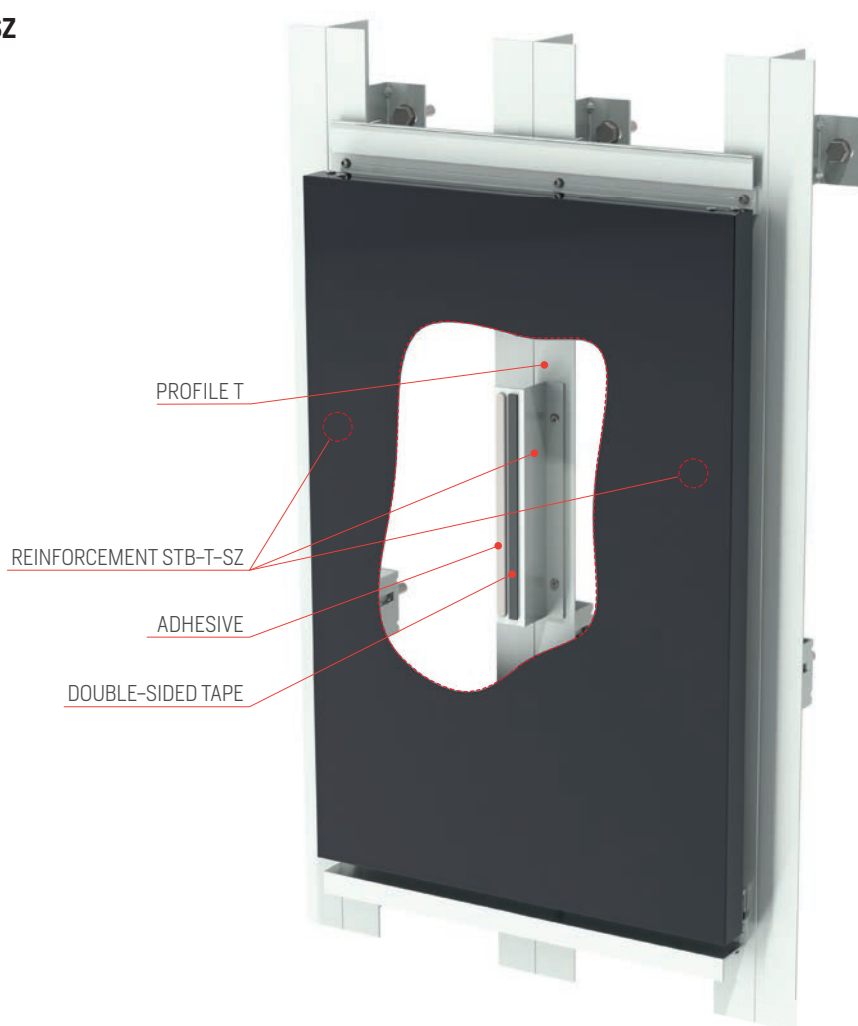
### USING THE REINFORCEMENT STB-T-SZ

The use of the STB-T-SZ reinforcement depends on the height of the tray and the wind load of the project site. For more detailed information please consult **STAC®**.

It must be used on each of the upright profiles T that support the composite panel cassette.

The reinforcement is mechanically attached to the front face of the profile and special adhesive and double-sided adhesive tape is applied.

The cassette is then fitted and fixed using rivets in the upper profile Z.



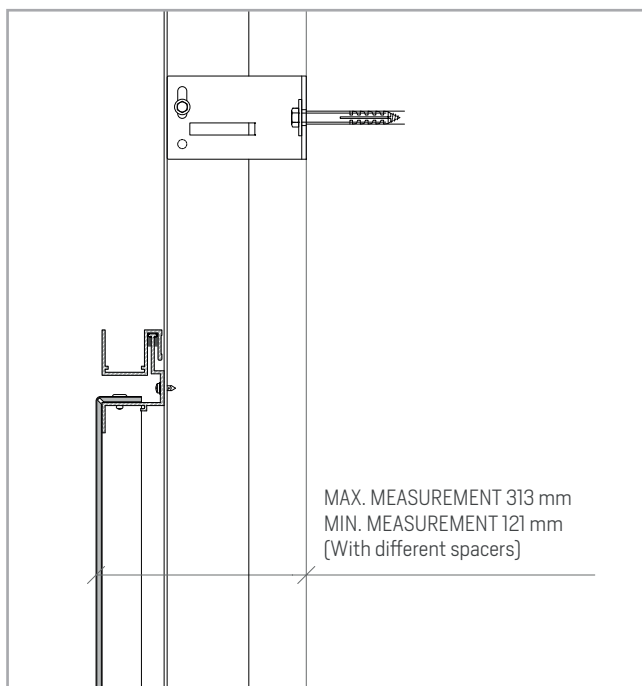
## STB-T-SZ SYSTEM

### INSTALLING SZ CASSETTE

UPPER FIXING



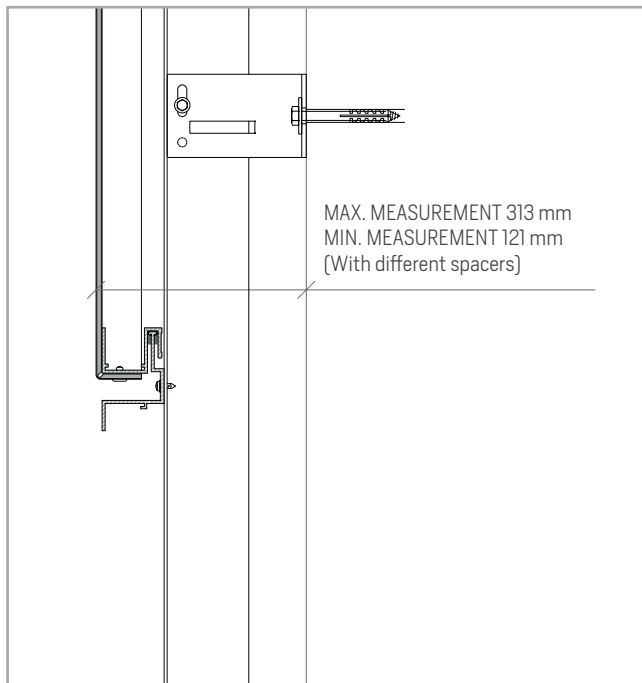
VERTICAL CROSS-SECTION



LOWER FIXING



VERTICAL CROSS-SECTION

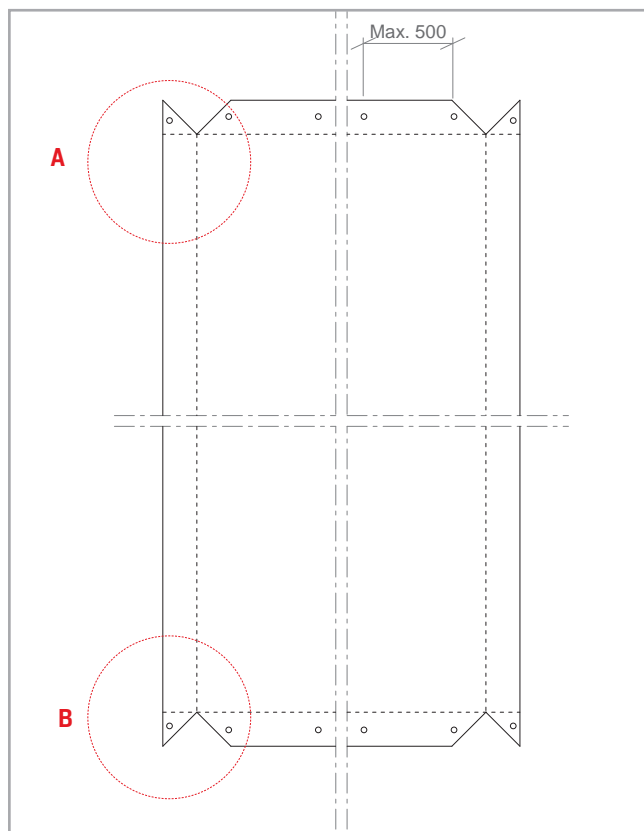


**Note:** The machined **STACBOND®** panels are supplied flat. The client is responsible for forming them into cassettes. No specialist machinery is required.

FORMED CASSETTE

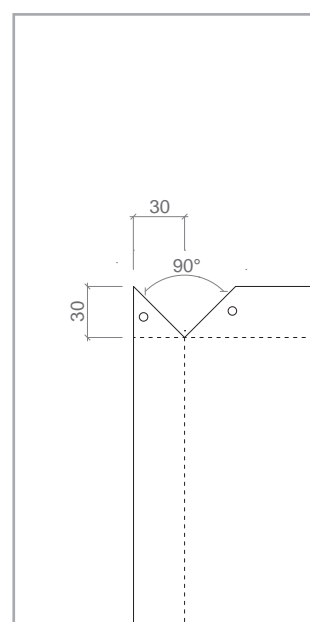
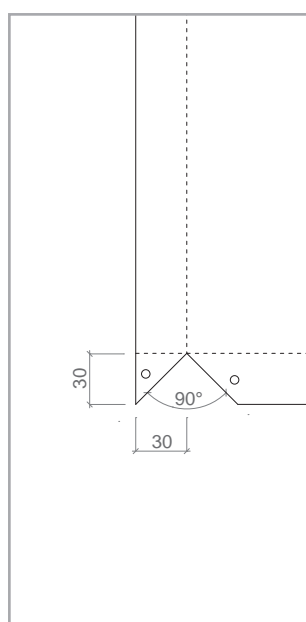


FLAT CASSETTE



DETAIL A

DETAIL B



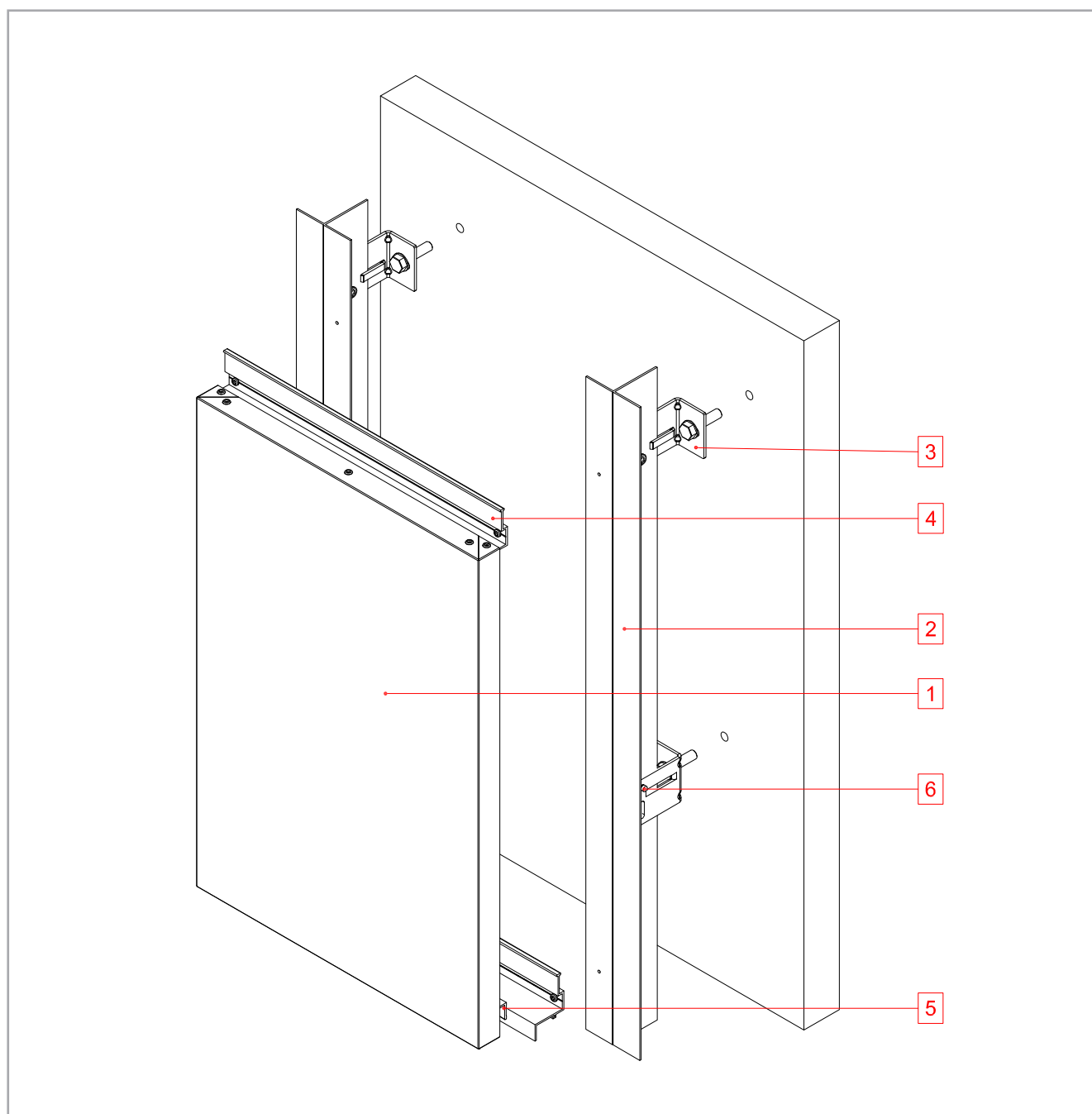
Measurements in mm

The standard cassettes in the STB-T-SZ system have 30 mm flaps. To form the cassettes, they are mechanically fastened via rivets directly to the longitudinal profiles S and Z.

The profile Z is attached in the lower part and the profile S in the upper part of the cassette. These profiles provide the cassettes with great longitudinal rigidity.

# STB-T-SZ SYSTEM

## INSTALLATION DIAGRAM

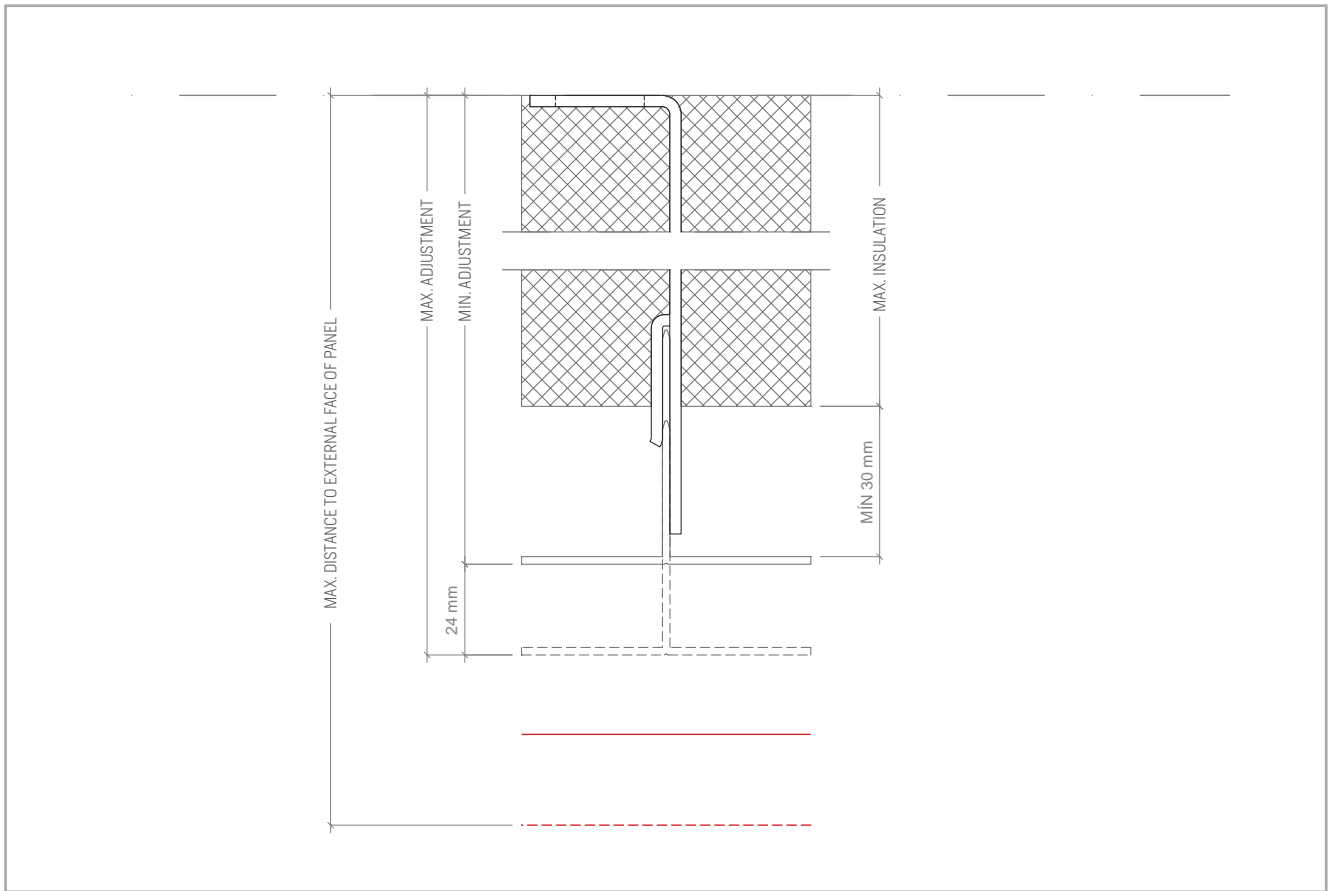


### N° NAME

- |   |  |
|---|--|
| 1 | Cassette made from STACBOND® composite panel |
| 2 | Profile T                                    |
| 3 | Spacer L                                     |
| 4 | Profile Z                                    |
| 5 | Profile S                                    |
| 6 | Self-tapping screw                           |

# STB-T-SZ SYSTEM

## SPACER / THERMAL INSULATION RELATIONSHIP



| SPACER L * ST-1-55 |                      | DISTANCE (mm) FROM BASE OF<br>FIXING TO VISIBLE FACE OF PANEL |     | RECOMMENDED INSULATION (mm)<br>WITH 30 mm AIR CAVITY |
|--------------------|----------------------|---|-----|--|
| REF.               | PART                 | MIN.  | MAX |  |
| 05.19.041          | SPACER L 68 ST-1-55  | 121   | 145 | 40   |
| 05.19.044          | SPACER L 92 ST-1-55  | 145   | 169 | 80   |
| 05.19.051          | SPACER L 116 ST-1-55 | 169   | 193 | 100  |
| 05.19.052          | SPACER L 140 ST-1-55 | 193   | 217 | 120  |
| 05.19.053          | SPACER L 164 ST-1-55 | 217   | 241 | 140  |
| 05.19.054          | SPACER L 188 ST-1-55 | 241   | 265 | 160  |
| 05.19.055          | SPACER L 212 ST-1-55 | 265   | 289 | 200  |
| 05.19.056          | SPACER L 236 ST-1-55 | 289   | 313 | 220  |

| SPACER L * ST-2-120 |                      | DISTANCE (mm) FROM BASE OF<br>FIXING TO VISIBLE FACE OF PANEL |     | RECOMMENDED INSULATION (mm)<br>WITH 30 mm AIR CAVITY |
|---------------------|----------------------|---|-----|--|
| REF.                | PART                 | MIN.  | MAX |  |
| 05.19.042           | SPACER L 68 ST-2-120 | 121   | 145 | 40   |
| 05.19.045           | SPACER L 92 ST-2-120 | 145   | 169 | 80   |

# STB-T-SZ SYSTEM

## ACCESSORIES

### PROFILES

| REF.      | PART         | PAGE |
|-----------|--------------|------|
| 05.19.043 | PROFILE T    | 106  |
| 05.19.001 | PROFILE S    | 107  |
| 05.19.002 | PROFILE Z    |      |
| 05.19.074 | PROFILE Z 20 |      |
| 05.19.063 | PROFILE Z 24 |      |

### SPACERS

| REF.      | PART                 | PAGE |
|-----------|----------------------|------|
| 05.19.041 | SPACER L 68 ST-1-55  | 109  |
| 05.19.044 | SPACER L 92 ST-1-55  |      |
| 05.19.051 | SPACER L 116 ST-1-55 |      |
| 05.19.052 | SPACER L 140 ST-1-55 |      |
| 05.19.053 | SPACER L 164 ST-1-55 |      |
| 05.19.054 | SPACER L 188 ST-1-55 |      |
| 05.19.055 | SPACER L 212 ST-1-55 |      |
| 05.19.056 | SPACER L 236 ST-1-55 |      |
| 05.19.042 | SPACER L 68 ST-2-120 |      |
| 05.19.045 | SPACER L 92 ST-2-120 |      |

### AUXILIARY ELEMENTS

| REF.      | PART                          | PAGE |
|-----------|-------------------------------|------|
| 05.19.049 | REINFORCEMENT STB-T-SZ        | 110  |
| STB-JEPDM | EPDM GASKET PROFILE SZ (m.l.) |      |


### FASTENING ACCESSORIES


| REF.      | PART  | PAGE |
|-----------|---|------|
| STB-R0300 | BLIND RIVET POLYGRIP SFS<br>ASO-D-48150 ALU/INOX 4,8X15 | 113  |

### INSULATING WEDGES

| REF.      | PART   | PAGE |
|-----------|--|------|
| 05.19.070 | <b>3 x</b> GROOVE WASHER FOR INSULATING<br>WEDGES WITH REF.:<br>05.19.066 / 05.19.068 / 05.19.072              | 115  |
| 05.19.066 | INSULATING WEDGE FOR SPACERS<br><b>L * ST-2-120</b> WITH REF.:<br>05.19.042 / 05.19.045                        |      |
| 05.19.068 | INSULATING WEDGE FOR SPACERS<br><b>L * ST-1-55</b> WITH REF.:<br>05.19.053 / 05.19.054 / 05.19.055 / 05.19.056 |      |
| 05.19.072 | INSULATING WEDGE FOR SPACERS<br><b>L * ST-1-55</b> WITH REF.:<br>05.19.041 / 05.19.044 / 05.19.051 / 05.19.052 |      |

## INFORMATION AND SALES

 (+34) 981 817 036

 (+34) 981 817 037

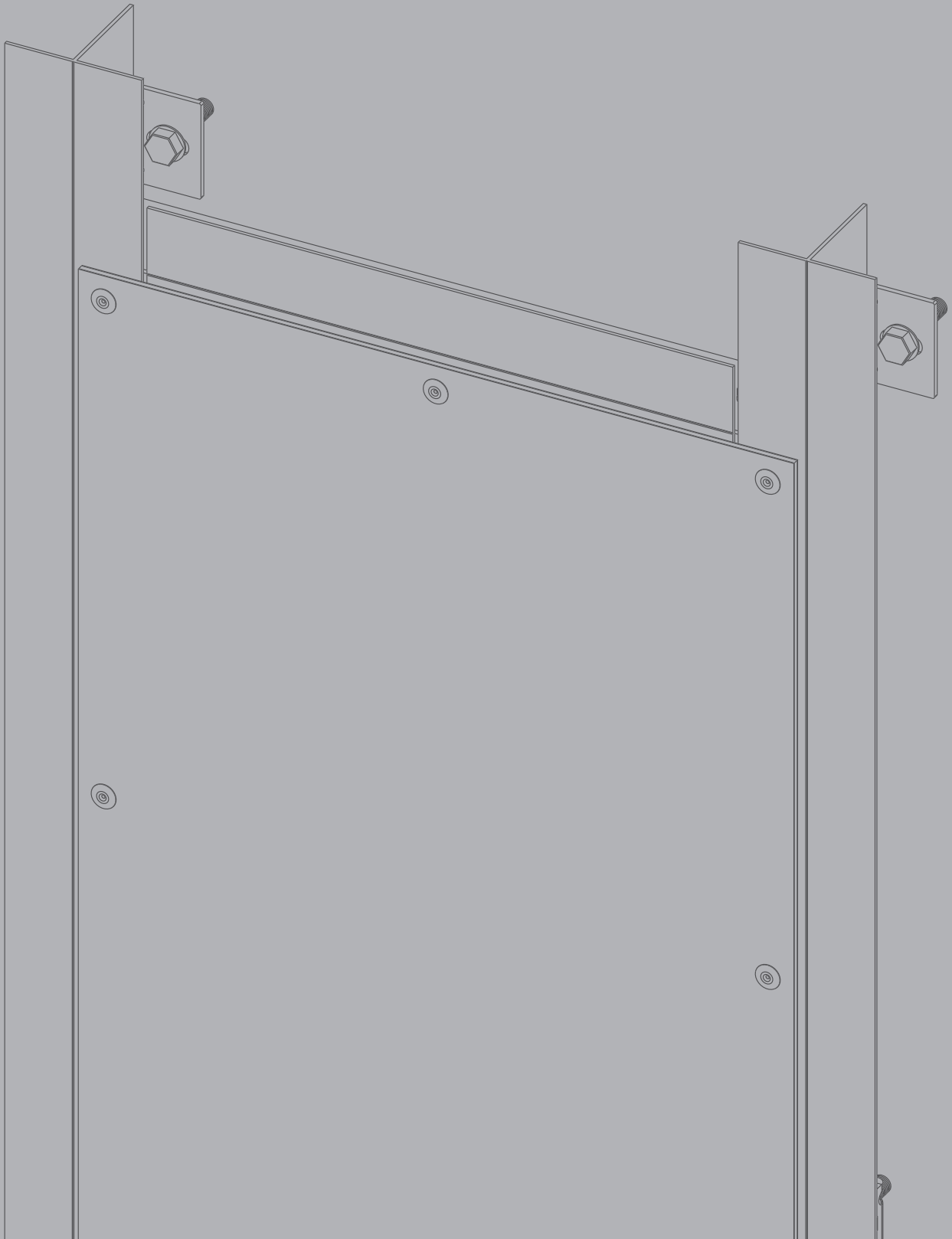
 stacbond@stac.es

 www.stac.es



# STB-T-REM

## RIVETED SYSTEM



# STB-T-REM SYSTEM

## DESCRIPTION



**STB-T-REM** is a kit system based on flat panels made from **STACBOND® composite panels for installing ventilated facades**. It is a system with visible fixings which is quick to install and which allows both horizontal and vertical assembly. It is a very versatile system which perfectly suits any architectural layout and offers the possibility to easily cover curving sections. The **STB-T-REM** system therefore complies with all the requirements to be employed in the most demanding architectural claddings.

The substructure employs **profiles T** and **spacers L** in 6063 T5 aluminium alloy.

The spacers come in various lengths to house the required thickness of thermal insulation and compensate any irregularities in the facade. For the thermal break, **STAC®** has developed specific **INSULATING WEDGES** to place between the spacers L and the vertical face.

The spacers are anchored to the wall using special mechanical fixings, recommended in each case by the fixings suppliers, and receive the profiles T as uprights.

The **STB-T-REM** system can be mounted on a unidirectional or bidirectional substructure. With a unidirectional substructure, the horizontal joint remains open. In the case of the bidirectional substructure, horizontal struts are attached to the uprights using **spacers angular** made of 6063 T5, or to the vertical face using spacers L.

This substructure with vertical and / or horizontal T profiles support the **STACBOND®** composite panel sheets which are riveted at their edges.

**STAC®** has developed a program for the specific calculations of the substructure with the criteria from the Technical approval Document (DIT plus 553p/16) established by the Instituto de Ciencias de la Construcción Eduardo Torroja for each project executed, defining the maximum distances between uprights and the number of fixings.

The **STB-T-REM** system complies with all major international certifications.



ETA-ETE: 15/0655



Nº 553P/189



ITB - KOT 2017/0043



ASOCIACIÓN TÉCNICA DE EMPRESAS DE VENTILACIÓN Y CLIMATIZACIÓN



SPACERS L

**1. Spacers L to fix the profile to the facade.** The spacers L join the profile T to the vertical face or support wall and are used to overcome irregularities in the plumbness of the facade. They are either retaining or supporting. **Insulating wedges** can optionally be installed to act as thermal bridge breaks.



PROFILES T

**2. The profiles T are screwed to the spacers L.** They must be perfectly plumb with the adjustment that the system allows. The first and last fixings to the face must be placed at a maximum of 250 mm from the ends of the profile.



HORIZONTAL PROFILES T

**3. Horizontal cross-struts (optional).** These profiles are mechanically fixed to the vertical substructure using the **spacers angular**, or to the base wall using spacers L. The possibility of creating a bidirectional substructure allows the system to adapt to the requirements of the facade.



ATTACHING STACBOND COMPOSITE PANEL

**4. Attaching STACBOND® composite panel.** Once the substructure is in place, the **STACBOND®** panels are attached to it using rivets. Attention should be paid to the condition and type of rivet to ensure correct dilation of the panels.

# STB-T-REM SYSTEM

## AUXILIARY ELEMENTS

### SPACER ANGULAR

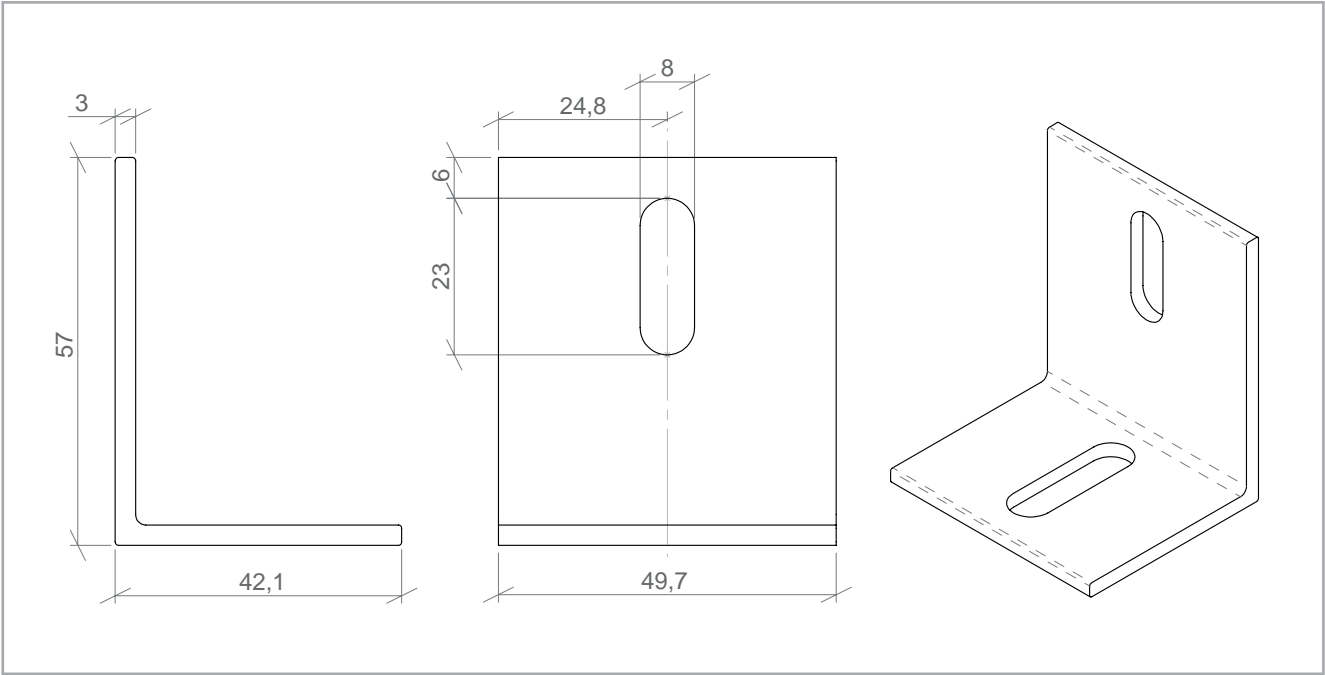
Part made of extruded 6063 T5 aluminium alloy profile (3 mm) with holes for fixing to the upright and cross-strut profiles T.

This accessory allows profiles T to be attached horizontally to the vertical substructure, reducing the number of fixings to the base wall.

Fixing of these spacers is done using  $\varnothing$  4.8 mm blind rivets or  $\varnothing$  4.8 mm self-tapping screws. These coupling parts are compatible with possible dilation of the substructure.



| REFERENCE | DESCRIPTION    | UNITS/BOX |
|-----------|----------------|-----------|
| 19.021    | SPACER ANGULAR | 100       |



Measurements in mm

# STB-T-REM SYSTEM

## TYPE AND DISTRIBUTION OF PERFORATIONS

### DILATION OF THE PANEL

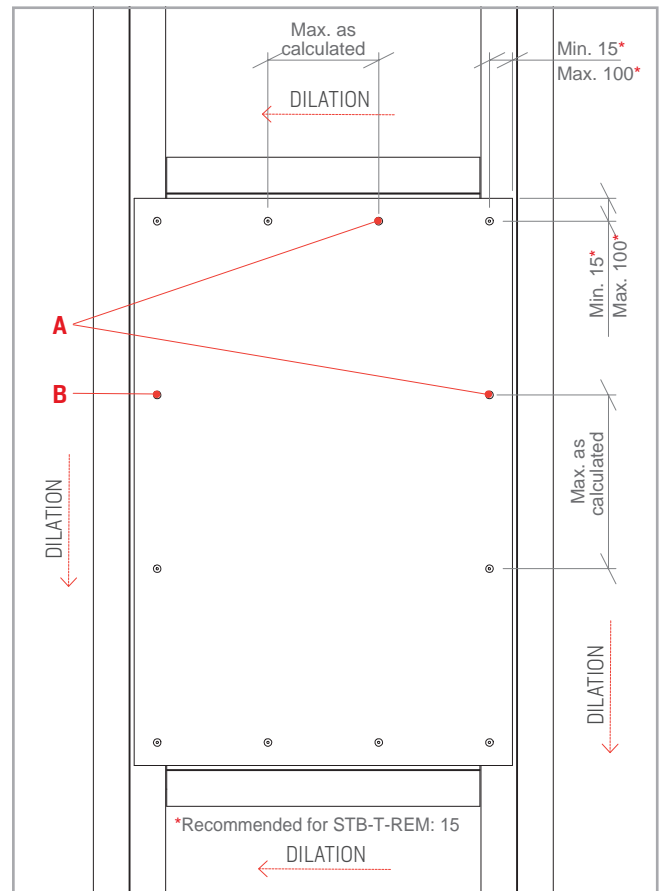
The diagram shows the layout and max. distance of the holes in the **STACBOND®** composite panel.

The panels are set in place by drilling and inserting the corresponding rivet, respecting the difference between the diameter of the drill and the shank of the rivet and also the distances between rivets and the edge of the panel.

To allow movement of the panel and to avoid problems from dilation, it is important to centre the drill holes on the substructure. This allows equal dilation in all directions and does not limit movement. We recommend the use of **centring gauges** to ensure correct hole placement and fixing of rivets.

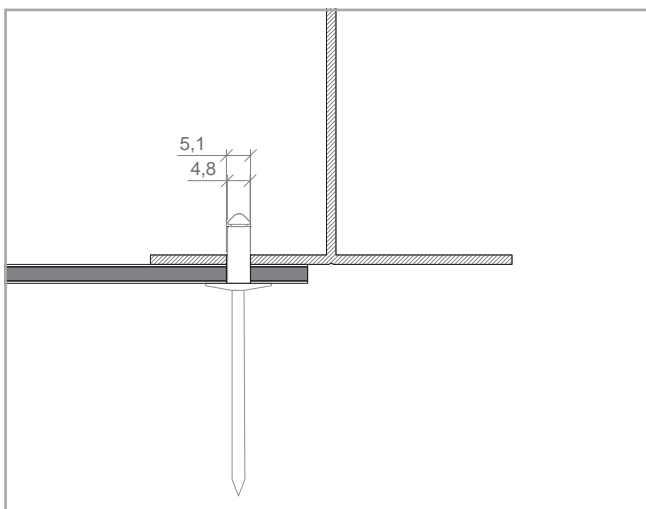
Furthermore, to allow movement in the floating fixing points, it is important to control the rivet clinch strength. We recommend the use of a **spacing nosepiece** which leaves a 0.2 mm gap between the sheet and the fixing, avoiding immobilising fixing points which should be floating.

Rivets and screws specified by **STAC®** should be used.



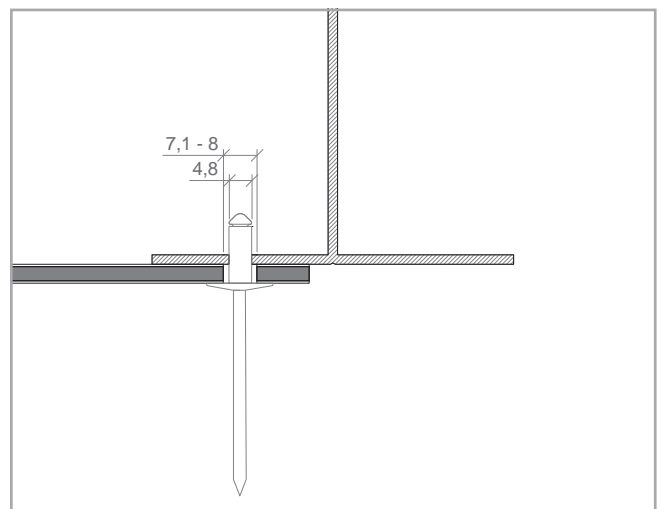
**Note:** other rivets and screws may be used providing that their mechanical characteristics are equal or greater than those specified by **STAC®**.

### A. FIXED ANCHORING POINTS



The 5.1 mm hole drilled in the **STACBOND®** composite panel defines the origin of the panel's dilation.

### B. MOBILE ANCHORING POINTS

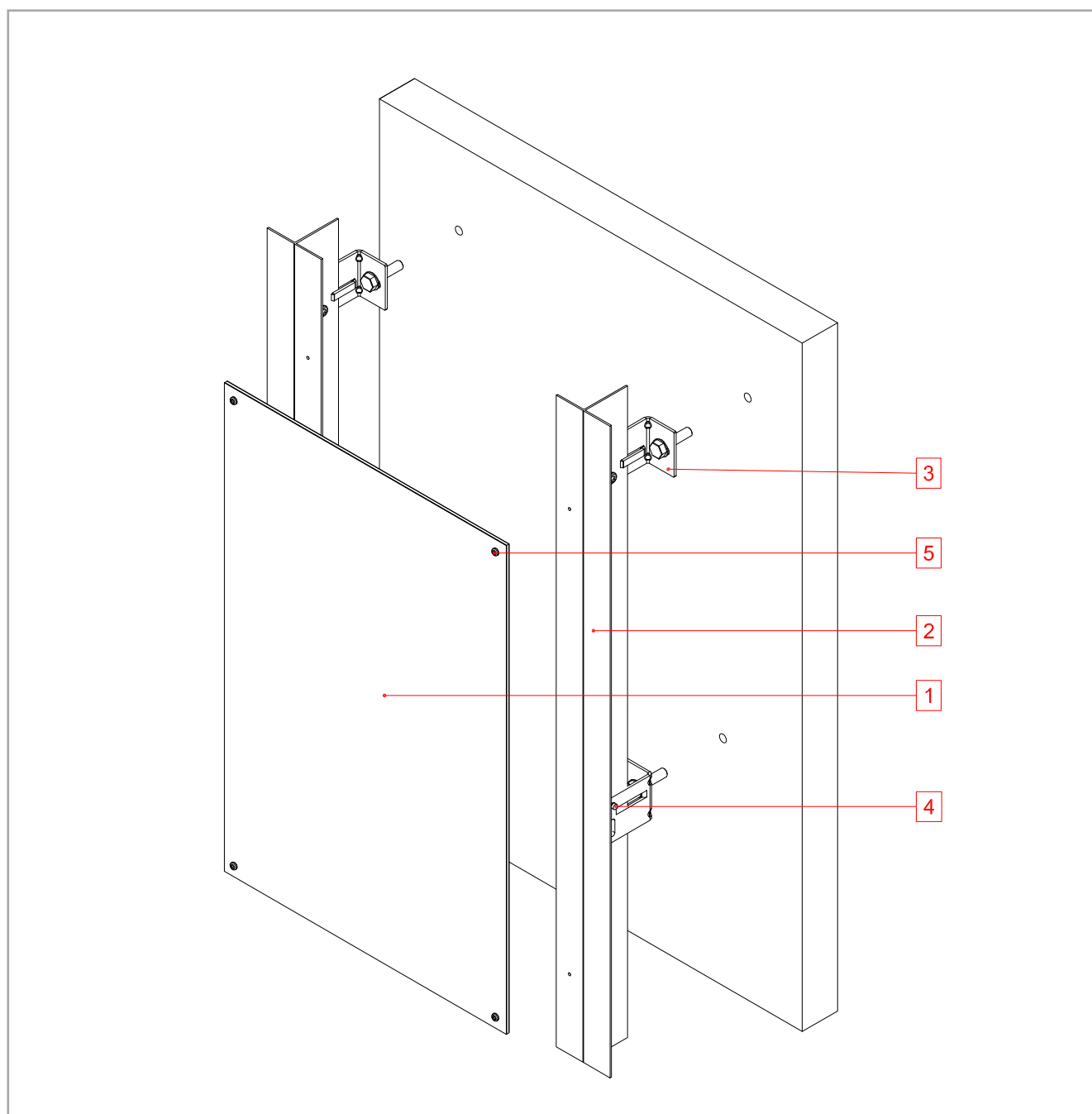


The larger diameter hole drilled in the **STACBOND®** composite panel allows dilation to be absorbed.

Measurements in mm

## STB-T-REM SYSTEM

### INSTALLATION DIAGRAM

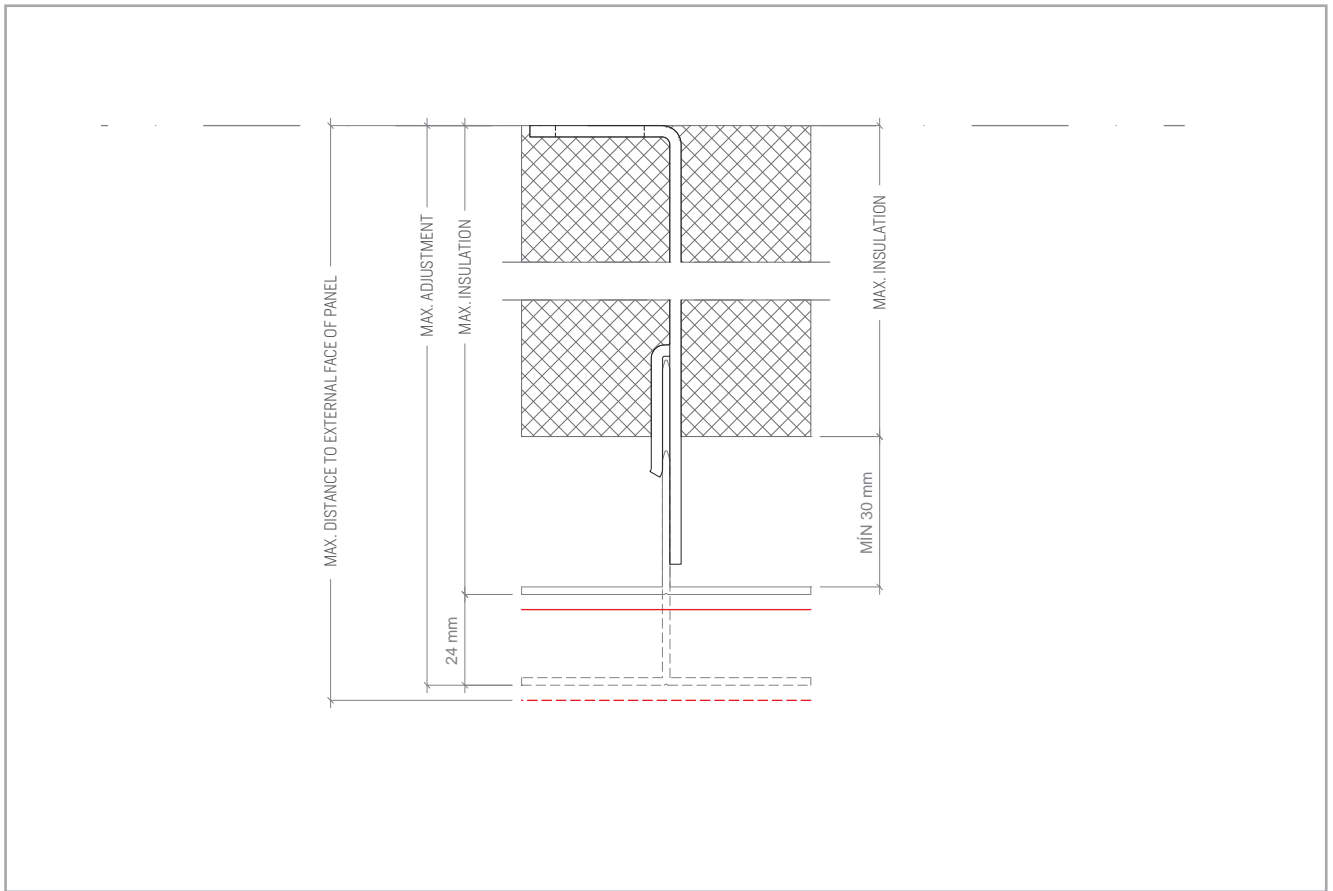


| N° | NAME |
|----|------|
|----|------|

- |   |                           |
|---|---------------------------|
| 1 | STACBOND® composite panel |
| 2 | Profile T                 |
| 3 | Spacer L                  |
| 4 | Self-tapping screw        |
| 5 | Blind rivet               |

# STB-T-REM SYSTEM

## SPACER / THERMAL INSULATION RELATIONSHIP



| SPACER L * ST-1-55 |                      | DISTANCE (mm) FROM BASE OF<br>FIXING TO VISIBLE FACE OF PANEL |     | RECOMMENDED INSULATION (mm)<br>WITH 30 mm AIR CAVITY |
|--------------------|----------------------|---|-----|--|
| REF.               | PART                 | MIN.  | MAX |  |
| 05.19.041          | SPACER L 68 ST-1-55  | 80  | 104 | 40   |
| 05.19.044          | SPACER L 92 ST-1-55  | 104   | 128 | 80   |
| 05.19.051          | SPACER L 116 ST-1-55 | 128   | 152 | 100  |
| 05.19.052          | SPACER L 140 ST-1-55 | 152   | 176 | 120  |
| 05.19.053          | SPACER L 164 ST-1-55 | 176   | 200 | 140  |
| 05.19.054          | SPACER L 188 ST-1-55 | 200   | 224 | 160  |
| 05.19.055          | SPACER L 212 ST-1-55 | 224   | 248 | 200  |
| 05.19.056          | SPACER L 236 ST-1-55 | 248   | 272 | 220  |

| SPACER L * ST-2-120 |                      | DISTANCE (mm) FROM BASE OF<br>FIXING TO VISIBLE FACE OF PANEL |     | RECOMMENDED INSULATION (mm)<br>WITH 30 mm AIR CAVITY |
|---------------------|----------------------|---|-----|--|
| REF.                | PART                 | MIN.  | MAX |  |
| 05.19.042           | SPACER L 68 ST-2-120 | 80  | 104 | 40   |
| 05.19.045           | SPACER L 92 ST-2-120 | 104   | 128 | 80   |



# STB-T-REM SYSTEM

## ACCESSORIES

### PROFILES

| REF.      | PART      | PAGE |
|-----------|-----------|------|
| 05.19.043 | PROFILE T | 106  |

### FASTENING ACCESSORIES

| REF.         | PART   | PAGE |
|--------------|--|------|
| STB-FIJA-201 | RIVETER NOSEPIECE (RIVETS SSO-D15)                             | 112  |
| STB-FIJA-202 | RIVETER NOSEPIECE (RIVETS AP)                                  |      |
| STB-FIJA-203 | DUAL DIA. DRILL BIT (HSS-7,0/5,1x74)                           |      |
| STB-FIJA-204 | DEPTH LOCATOR 16x18  |      |
| STB-FIJA-205 | CENTRING GAUGE (DG-146x20-7.0)                                 |      |
| STB-FIJA-206 | REPLACEMENT NOSE PIECE FOR CENTRING GAUGE ø 6.9 mm             | 113  |
| STB-FIJA-207 | SPECIAL BIT FOR THE CENTRING GAUGE (HS-5.1x62/26)              |      |
| STB-FIJA-208 | DRIVER BIT T20WW-25-HEX1/4"                                    |      |
| STB-FIJA-209 | MANUAL CENTRING GAUGE FOR SCREWS SLA3                          |      |
| STB-FIJA-210 | SOCKET IRIUS G-00106.07  |      |
| STB-T0100    | SECURITY SCREW 4.8x19 INOX HEAD TORX SLA3/6-S-D12-4.8x19       | 113  |
| STB-R0100    | BLIND RIVET ISO 15977 D5x12 CAB. 14 mm ALU/INOX AP14-S-5,.0x12 |      |
| STB-R0200    | FACADE RIVET HEAD 15 mm INOX/INOX A4 5x14 SSO-D15-50140        |      |

### SPACERS

| REF.      | PART                 | PAGE |
|-----------|----------------------|------|
| 19.041    | SPACER L 68 ST-1-55  | 109  |
| 05.19.044 | SPACER L 92 ST-1-55  |      |
| 05.19.051 | SPACER L 116 ST-1-55 |      |
| 05.19.052 | SPACER L 140 ST-1-55 |      |
| 05.19.053 | SPACER L 164 ST-1-55 |      |
| 05.19.054 | SPACER L 188 ST-1-55 |      |
| 05.19.055 | SPACER L 212 ST-1-55 |      |
| 05.19.056 | SPACER L 236 ST-1-55 |      |
| 05.19.042 | SPACER L 68 ST-2-120 |      |
| 05.19.045 | SPACER L 92 ST-2-120 |      |

### AUXILIARY ELEMENTS

| REF.   | PART           | PAGE |
|--------|----------------|------|
| 19.021 | SPACER ANGULAR | 110  |

### INSULATING WEDGES

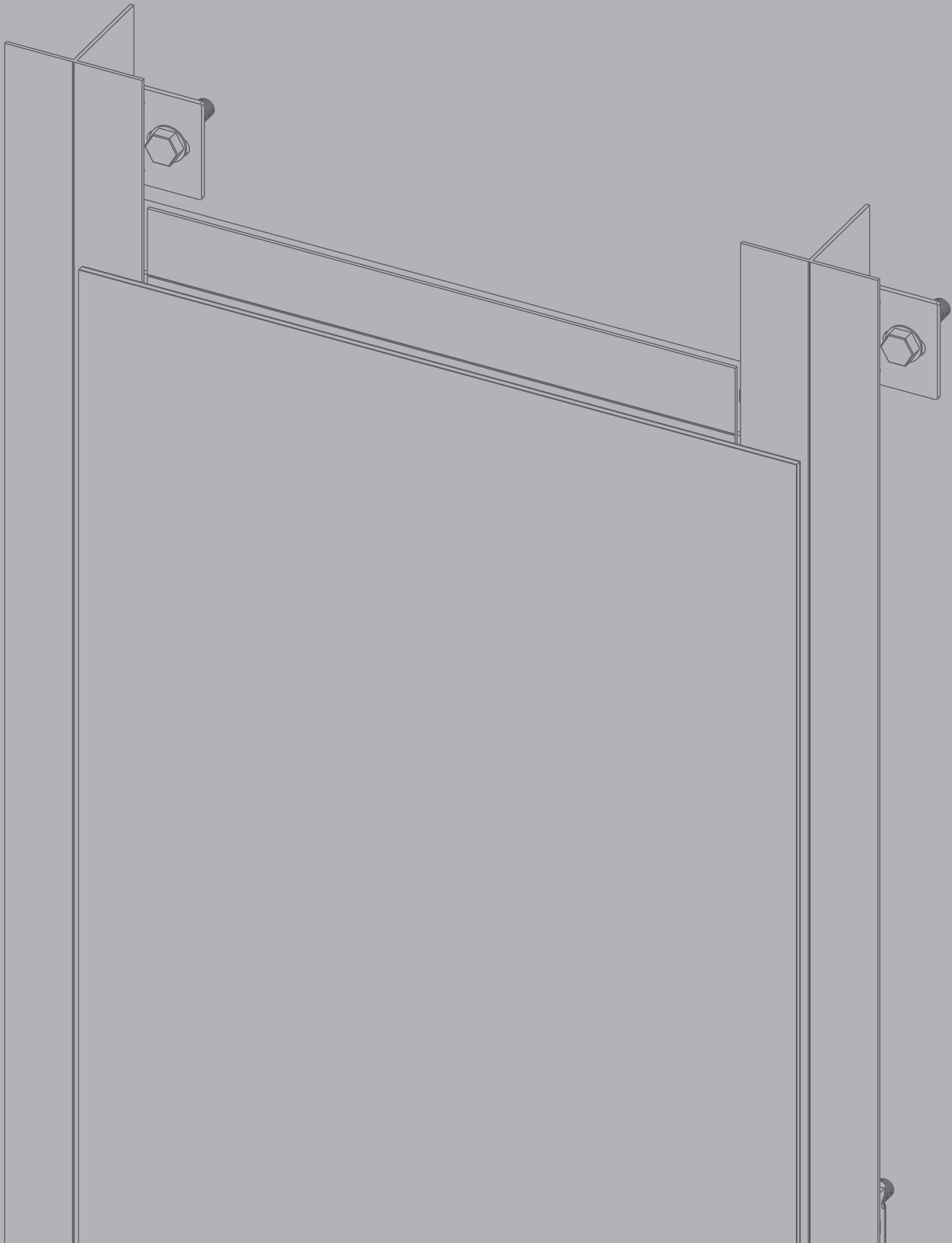
| REF.      | PART   | PAGE |
|-----------|--|------|
| 05.19.070 | <b>3 x</b> GROOVE WASHER FOR INSULATING WEDGES WITH REF.:<br>05.19.066 / 05.19.068 / 05.19.072                 | 115  |
| 05.19.066 | INSULATING WEDGE FOR SPACERS<br><b>L * ST-2-120</b> WITH REF.:<br>05.19.042 / 05.19.045                        |      |
| 05.19.068 | INSULATING WEDGE FOR SPACERS<br><b>L * ST-1-55</b> WITH REF.:<br>05.19.053 / 05.19.054 / 05.19.055 / 05.19.056 |      |
| 05.19.072 | INSULATING WEDGE FOR SPACERS<br><b>L * ST-1-55</b> WITH REF.:<br>05.19.041 / 05.19.044 / 05.19.051 / 05.19.052 |      |

## INFORMATION AND SALES

☎ (+34) 981 817 036  
 📄 (+34) 981 817 037  
 ✉ stacbond@stac.es  
 🌐 www.stac.es

# STB-T-PEG

GLUED SYSTEM



## STB-T-PEG SYSTEM

### DESCRIPTION



**STB-T-PEG** is a kit system based on flat panels made from **STACBOND® composite panel for installing ventilated facades**. It is a system with hidden fixings which is quick and economic to install and which allows both horizontal and vertical assembly.

As this is a glued system with chemical anchoring, it is resistant to aging and weathering; it absorbs vibration and allows numerous possibilities in facade design.

The substructure employs **profiles T** and **spacers L** in 6063 T5 aluminium alloy.

For the thermal break, **STAC®** has developed specific **INSULATING WEDGES** to place between the spacers L and the vertical face.

The spacers are anchored to the wall using special mechanical fixings, recommended in each case by the fixings suppliers, and receive the T profiles as uprights.

The **STB-T-PEG** system can be mounted on a unidirectional or bidirectional substructure. With a unidirectional substructure, the horizontal joint remains open. In the case of the bidirectional substructure, horizontal struts are attached to the uprights using **spacers angular** made of 6063 T5, or to the vertical face using spacers L.

**STACBOND®** composite panels are attached to the substructure consisting of vertical and (where used) horizontal profiles using a specific adhesive and double-sided adhesive tape, in accordance with the manufacturer's instructions.

**STAC®** has developed a program for the specific calculations of the substructure for each project executed, defining the maximum distances between uprights.



SPACERS L

**1. Spacers L to fix the profile to the facade.** The spacers L join the profile T to the vertical face or support wall and are used to overcome irregularities in the plumbness of the facade. They are either retaining or supporting. **Insulating wedges** can optionally be installed to act as thermal bridge breaks.



PROFILES T

**2. The profiles T are screwed to the spacers L.** They must be perfectly plumb with the adjustment that the system allows. The first and last fixings to the face must be placed at a maximum of 250 mm from the ends of the profile.



HORIZONTAL PROFILES T

**3. Horizontal cross-struts (optional).** These profiles are mechanically fixed to the vertical substructure using the **spacers angular**, or to the base wall using spacers L. The possibility of creating a bidirectional substructure allows the system to adapt to the requirements of the facade.



GLUING THE STACBOND COMPOSITE PANEL

**4. Attaching STACBOND® composite panel.** Once the substructure is in place, the **STACBOND®** panels are attached to it using double-sided adhesive tape and adhesive, following the manufacturer's instructions.

# STB-T-PEG SYSTEM

## AUXILIARY ELEMENTS

### SPACER ANGULAR

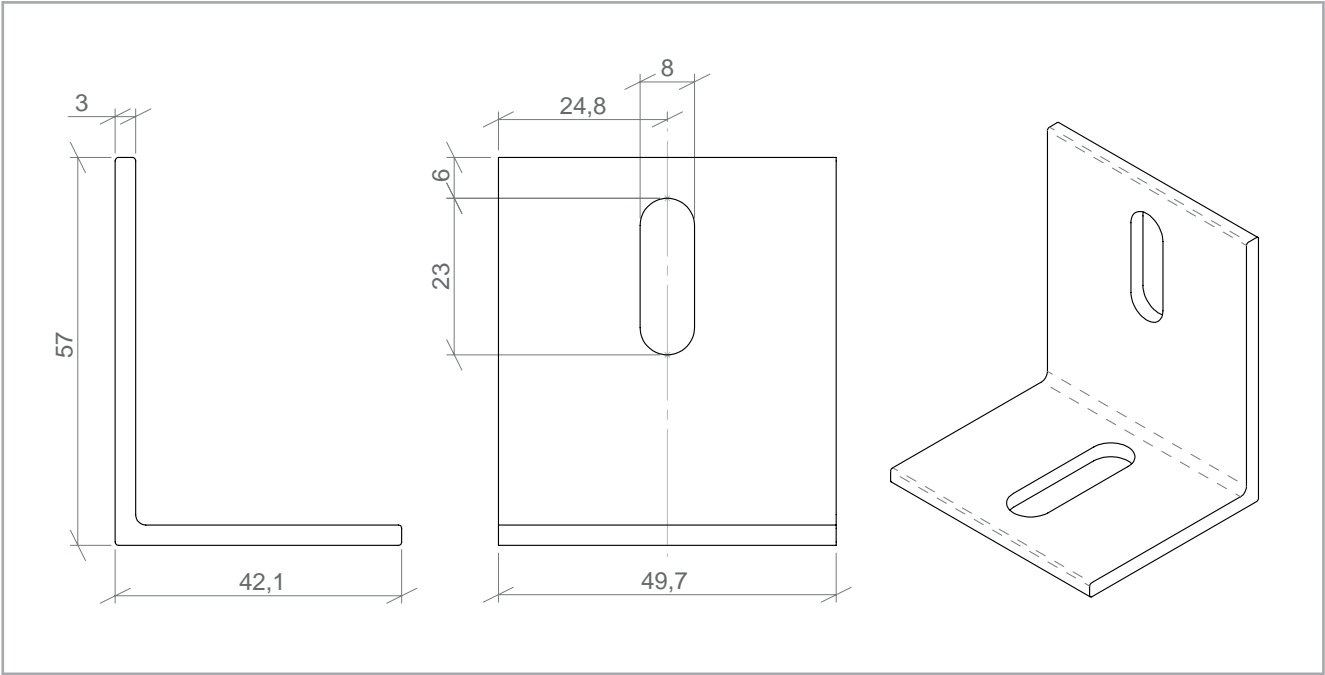
Part made of extruded 6063 T5 aluminium alloy profile (3 mm) with holes for fixing to the upright and cross-strut profiles T.

This accessory allows profiles T to be attached horizontally to the vertical substructure, reducing the number of fixings to the base wall.

Fixing of these spacers is done using  $\varnothing$  4.8 mm blind rivets or  $\varnothing$  4.8 mm self-tapping screws. These coupling parts are compatible with possible dilation of the substructure.



| REFERENCE | DESCRIPTION    | UNITS/BOX |
|-----------|----------------|-----------|
| 19.021    | SPACER ANGULAR | 100       |



Measurements in mm



**1. Cleaning the substructure.** The substructure must be clean, dry, homogenous, and free of oil, grease, dust and loose particles. Any paint, grout or other substances must be removed.

**Precautions:**

- Clean the surface with a damp paper towel, moving in one single direction, as if sanding. Solvents must never be used.
- For cleaning and degreasing, SIK-AVIATOR-205 or similar is used. It should be left to evaporate for 10 minutes minimum.

**2. Priming the area.** Priming should be done with a product which strengthens the adherence of the adhesive to the substructure – SIKATAACK PANEL PRIMER or similar.

**Precautions:**

- Once hardened, the primers can only be removed via mechanical means.
- The primer leaves a heterogeneous film. Only those surfaces which are to be glued should be treated.
- The evaporation times of the cleaning products must be adhered to (30 – 60 mins).

**3. Applying the double-sided adhesive tape.** The double-sided adhesive tape – SIKATAACK PANEL-3 or similar – is used to initially attach the panels until the main adhesive polymerizes and also ensures the minimum adhesive thickness of 3 mm. This absorbs and possible vibration or dilation produced in the **STACBOND®** composite panel facade. The long-term strength is only achieved with the adhesive.

**4. Elastic adhesive.** Apply a continuous vertical bead of elastic adhesive – SIKATAACK PANEL or similar – using a triangular nozzle (8 mm wide x 10 mm long), at least 5 mm away from the adhesive tape. To ensure correct application, the gun should be positioned perpendicular to the support.

**Precautions:**

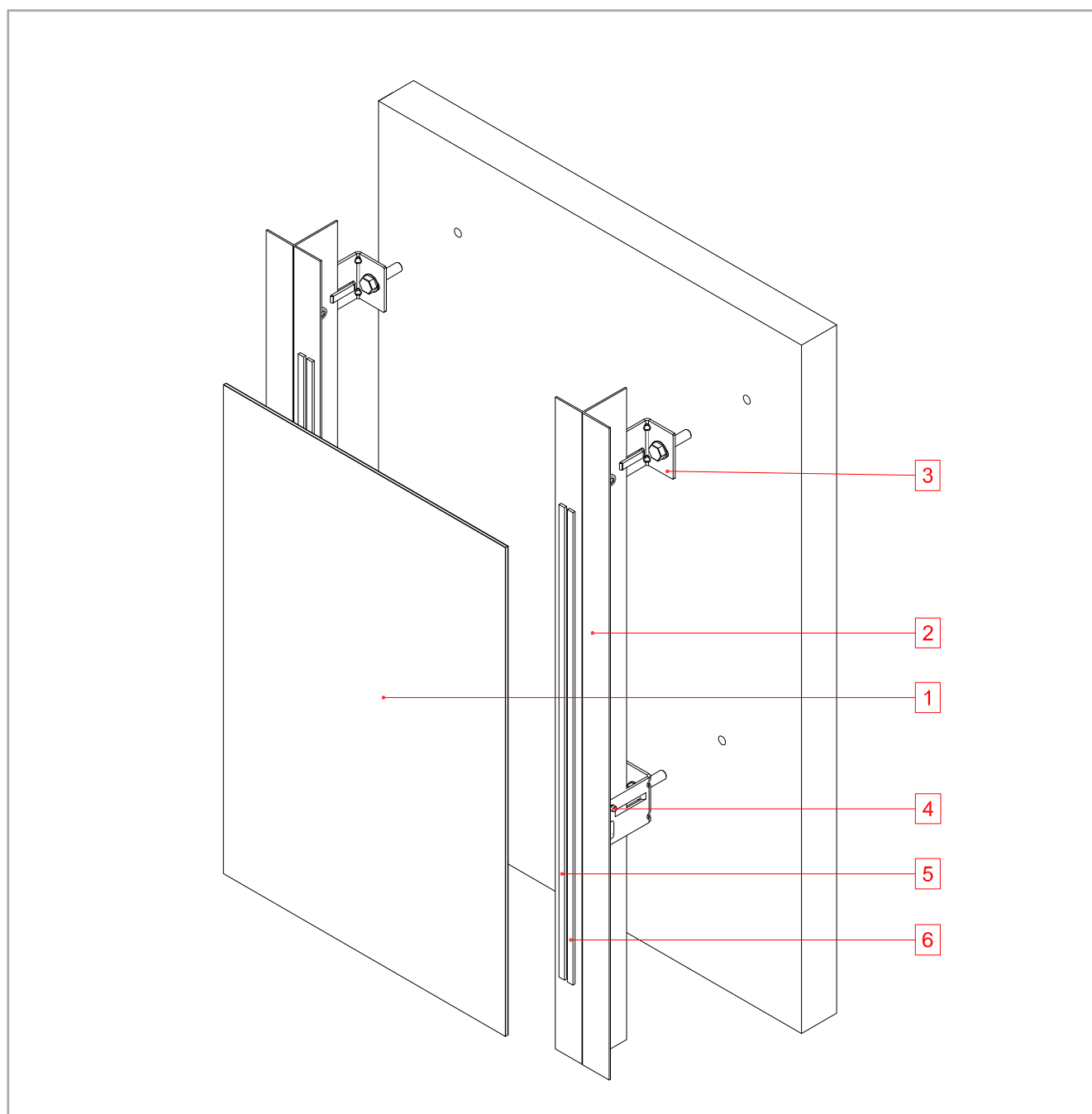
- The application of adhesive bead on the cross-struts of the substructure does not offer any structural function.

**5. Placing the panel.** Remove the protective film from the double-sided adhesive tape. Carefully place the panel in position precisely and press firmly until the panel contacts the double-sided adhesive tape.

Always follow the panel manufacturer's instructions for their storage. Avoid exposure to heat and direct sunlight prior to gluing the panels.

# STB-T-PEG SYSTEM

## INSTALLATION DIAGRAM

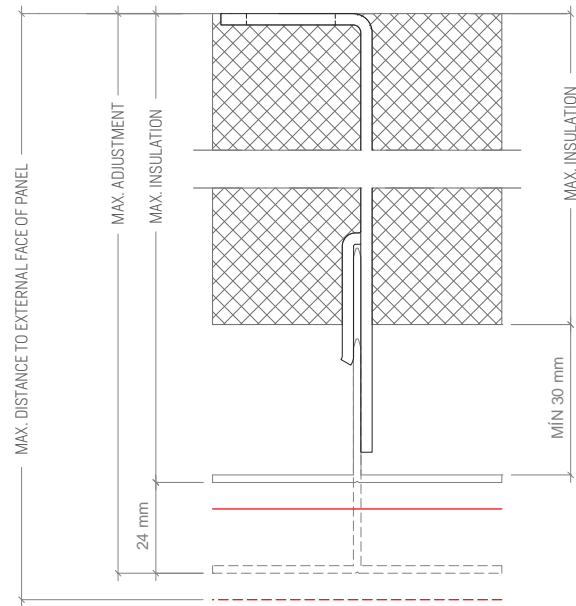


| N° | NAME                       |
|----|----------------------------|
| 1  | STACBOND® composite panel  |
| 2  | Profile T                  |
| 3  | Spacer L                   |
| 4  | Self-tapping screw         |
| 5  | Specific adhesive          |
| 5  | Double-sided adhesive tape |



# STB-T-PEG SYSTEM

## SPACER / THERMAL INSULATION RELATIONSHIP



### SPACER L \* ST-1-55

| REF.      | PART                 | DISTANCE (mm) FROM BASE OF<br>FIXING TO VISIBLE FACE OF PANEL |     | RECOMMENDED INSULATION (mm)<br>WITH 30 mm AIR CAVITY |
|-----------|----------------------|---|-----|--|
|           |                      | MIN.  | MAX |  |
| 05.19.041 | SPACER L 68 ST-1-55  | 83  | 107 | 40   |
| 05.19.044 | SPACER L 92 ST-1-55  | 107   | 131 | 80   |
| 05.19.051 | SPACER L 116 ST-1-55 | 131   | 155 | 100  |
| 05.19.052 | SPACER L 140 ST-1-55 | 155   | 179 | 120  |
| 05.19.053 | SPACER L 164 ST-1-55 | 179   | 203 | 140  |
| 05.19.054 | SPACER L 188 ST-1-55 | 203   | 227 | 160  |
| 05.19.055 | SPACER L 212 ST-1-55 | 227   | 251 | 200  |
| 05.19.056 | SPACER L 236 ST-1-55 | 251   | 275 | 220  |

### SPACER L \* ST-2-120

| REF.      | PART                 | DISTANCE (mm) FROM BASE OF<br>FIXING TO VISIBLE FACE OF PANEL |     | RECOMMENDED INSULATION (mm)<br>WITH 30 mm AIR CAVITY |
|-----------|----------------------|---|-----|--|
|           |                      | MIN.  | MAX |  |
| 05.19.042 | SPACER L 68 ST-2-120 | 83  | 107 | 40   |
| 05.19.045 | SPACER L 92 ST-2-120 | 107   | 131 | 80   |

# STB-T-PEG SYSTEM

## ACCESSORIES

### PROFILES

| REF.      | PART      | PAGE |
|-----------|-----------|------|
| 05.19.043 | PROFILE T | 106  |

### SPACERS

| REF.      | PART                  | PAGE |
|-----------|-----------------------|------|
| 05.19.041 | SPACER L 68 ST-1-55   | 109  |
| 05.19.044 | SPACER L 92 ST-1-55   |      |
| 05.19.051 | SPACER L 116 ST-1-55  |      |
| 05.19.052 | SPACER L 140 ST-1-55  |      |
| 05.19.053 | SPACER L 164 ST-1-55  |      |
| 05.19.054 | SPACER L 188 ST-1-55  |      |
| 05.19.055 | SPACER L 212 ST-1-55  |      |
| 05.19.056 | SPACER L 236 ST-1-55  |      |
| 05.19.042 | SSPACER L 68 ST-2-120 |      |
| 05.19.045 | SPACER L 92 ST-2-120  |      |


### AUXILIARY ELEMENTS

| REF.   | PART           | PAGE |
|--------|----------------|------|
| 19.021 | SPACER ANGULAR | 110  |

### INSULATING WEDGES

| REF.      | PART   | PAGE |
|-----------|--|------|
| 05.19.070 | <b>3 x</b> GROOVE WASHER FOR INSULATING WEDGES WITH REF.:<br>05.19.066 / 05.19.068 / 05.19.072                 | 115  |
| 05.19.066 | INSULATING WEDGE FOR SPACERS<br><b>L * ST-2-120</b> WITH REF.:<br>05.19.042 / 05.19.045                        |      |
| 05.19.068 | INSULATING WEDGE FOR SPACERS<br><b>L * ST-1-55</b> WITH REF.:<br>05.19.053 / 05.19.054 / 05.19.055 / 05.19.056 |      |
| 05.19.072 | INSULATING WEDGE FOR SPACERS<br><b>L * ST-1-55</b> WITH REF.:<br>05.19.041 / 05.19.044 / 05.19.051 / 05.19.052 |      |

## INFORMATION AND SALES

 (+34) 981 817 036

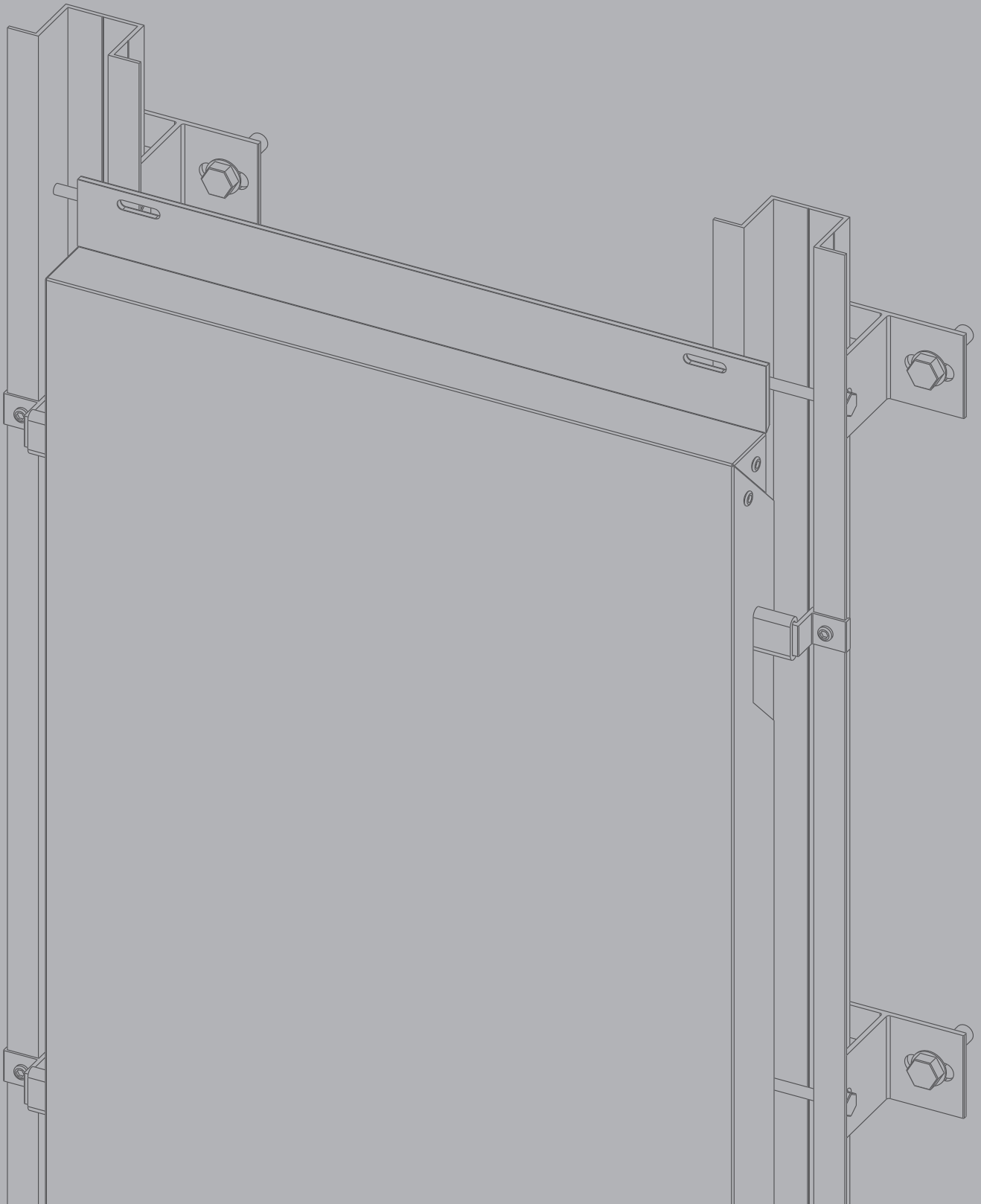
 (+34) 981 817 037

 stacbond@stac.es

 www.stac.es

# STB-CH

## HANGING SYSTEM



# STB-CH SYSTEM

## DESCRIPTION



**STB-CH** is a kit system based on hung cassettes made from **STACBOND®** composite panels for installing ventilated facades. The system has hidden fixings and is versatile and quick to install. The cassettes can be installed either vertically or horizontally. The **STB-CH** system complies with all the requirements to be employed in the most cutting edge architectural claddings.

The substructure employs **profiles OMEGA** and **spacers DOUBLE T** in 6063 T5 aluminium alloy.

The spacers come in various lengths to house the required thickness of thermal insulation and compensate any irregularities in the facade. For the thermal break, **STAC®** has developed specific **INSULATING WEDGES** to place between the **spacers DOUBLE T** and the vertical face.

The spacers are anchored to the wall using special mechanical fixings, recommended in each case by the fixings suppliers, and receive the **profiles OMEGA** as uprights.

The **bracket sets STB-CH hanging** are placed on the uprights. They are cut from extruded 6063 T% aluminium alloy profiles. A special EPDM piece is fitted in the hanging area to avoid vibrations.

The cassettes made of **STACBOND®** composite panel are attached to the substructure thanks to slots which are machined in the vertical edges of the cassettes and in their hidden stiffeners attached to the inner face, in a manner so that they rest on the support hangers and are screwed or riveted through the upper tabs to the **profiles OMEGA**.

**STAC®** has developed a program for the specific calculations of the substructure with the criteria from the Technical approval Document (DIT plus 553p/16) established by the Instituto de Ciencias de la Construcción Eduardo Torroja for each project executed. This program defines the maximum distances between uprights and the number of fixings.

The **STB-CH** system complies with all major international certifications.



ETA-ETE: 15/0655



Nº 553P/19



ITB - KOT 2017/0043



13/5022



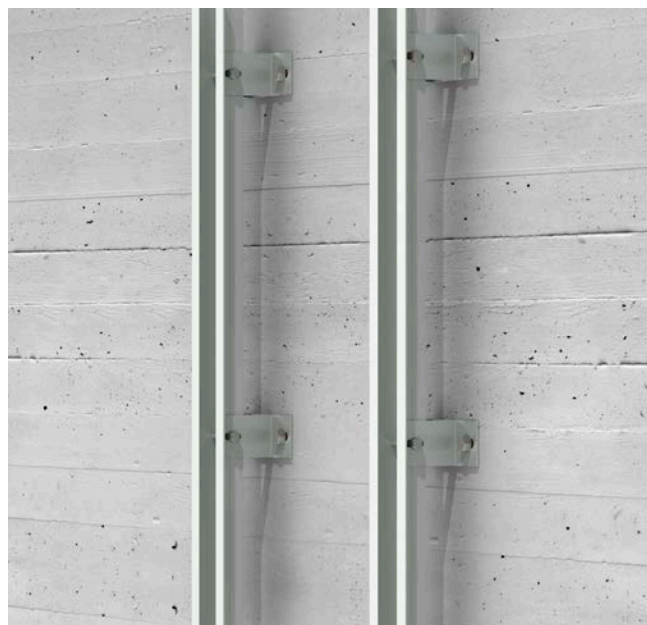
2.2/13-1548\_V2





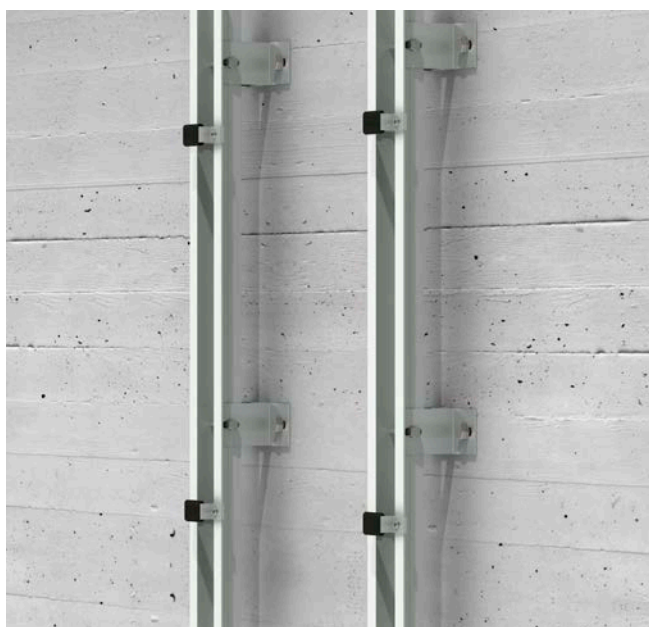
SPACERS DOUBLE T

**1.** The first step is **attaching the spacers DOUBLE T** to the facade. These must be in perfect vertical alignment. The spacers to be used depends on the thermal insulation and the layout / irregularities of the facade. **Insulating wedges** can optionally be installed to act as thermal bridge breaks.



PROFILES OMEGA

**2.** The **profiles OMEGA** are **screwed to the spacers DOUBLE T**. They must be perfectly plumb with the adjustment that the system allows. The first and last fixings must be placed at a maximum of 250 mm from the ends of the profile OMEGA.



BRACKET SETS

**3.** The **bracket sets** are **placed on the profiles**. These are adjusted in height according to the location of the hanging slots of each cassette.



STACBOND COMPOSITE PANEL CASSETTE

**4. STACBOND® composite panel cassette.** The last step is placing the cassettes on the hangers and screwing or riveting them to the wings of the profiles OMEGA in the slotted holes located on the upper horizontal tabs of the cassettes. The cladding is applied working from the bottom row up.

# STB-CH SYSTEM

## AUXILIARY ELEMENTS

### BRACKET SET STB-CH HANGING

The bracket set STB-CH hanging is used on OMEGA profiles.

The gasket for the hanger is used to avoid vibration noise caused by wind load, road traffic, etc.

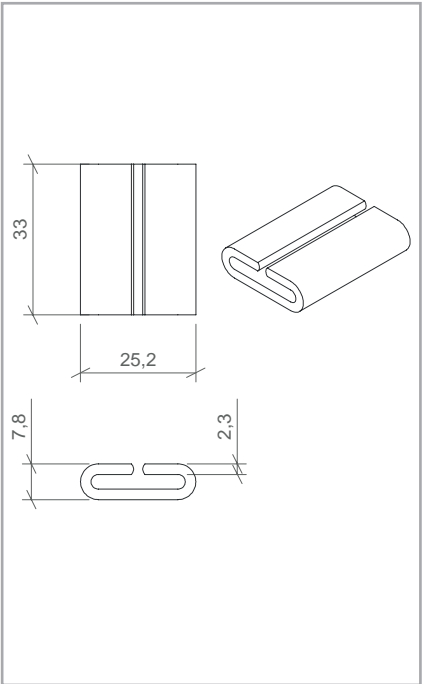
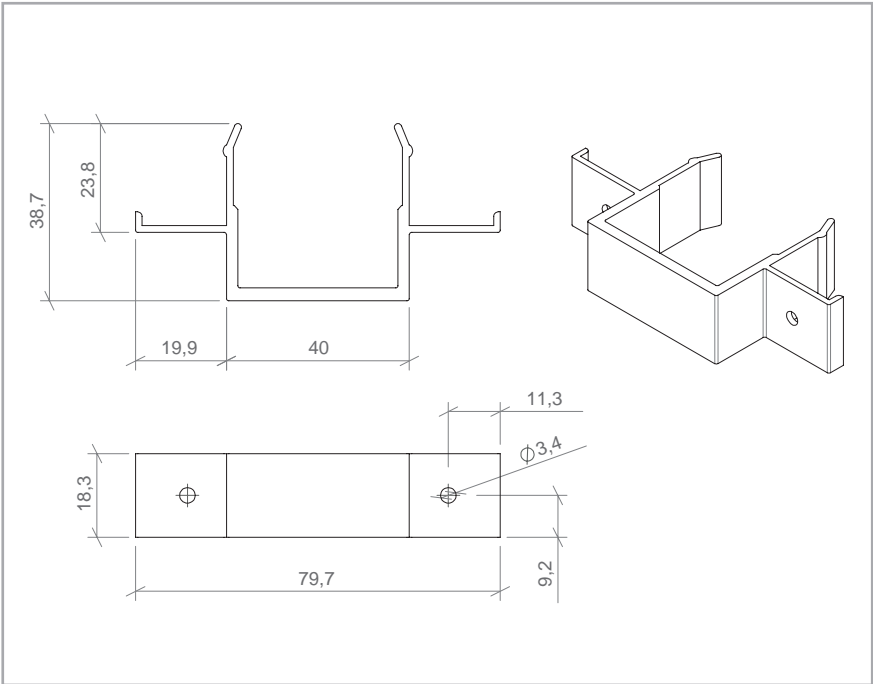
The support is initially attached to the profile via tabs which allow vertical movement to aid placement in the final location and is then fixed using self-tapping screws



| REFERENCE | DESCRIPTION                | UNITS/BOX |
|-----------|----------------------------|-----------|
| 05.19.013 | BRACKET SET STB-CH HANGING | 200       |

BRACKET STB-CH

BRACKET GASKET



Measurements in mm

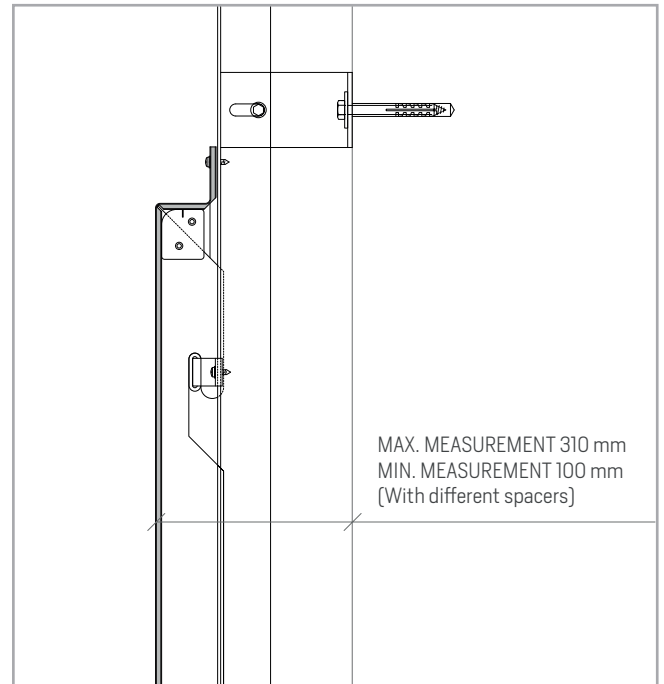
# STB-CH SYSTEM

## STANDARD CH CASSETTE WITH 45 mm FLAP

45 mm FLAP (DETAIL)



VERTICAL CROSS-SECTION



**Note:** The machined **STACBOND®** panels are supplied flat. The client is responsible for forming them into cassettes. No specialist machinery is required.

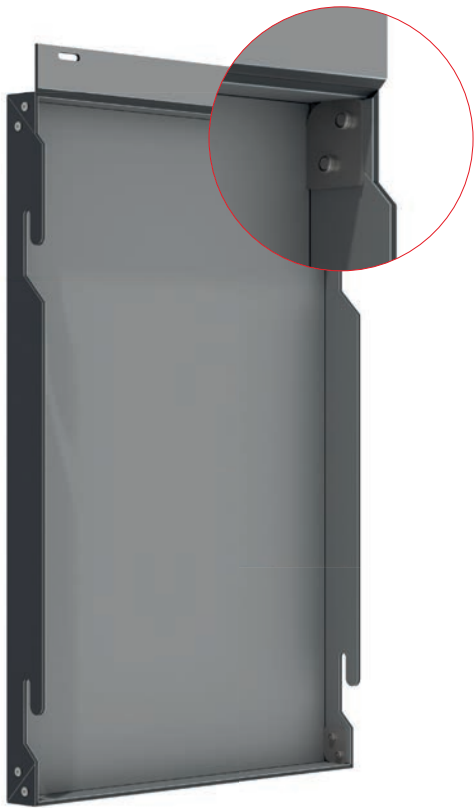
For the CH cassettes with 45 mm flaps, they can be formed using rectangular strips of 1050 ally (28 x 33 x 2 mm) or rectangular offcuts of the composite panels themselves.

Due to their greater length, the 45 mm flaps enter further into the OMEGA profiles and more efficiently channel away water that hits the facade.

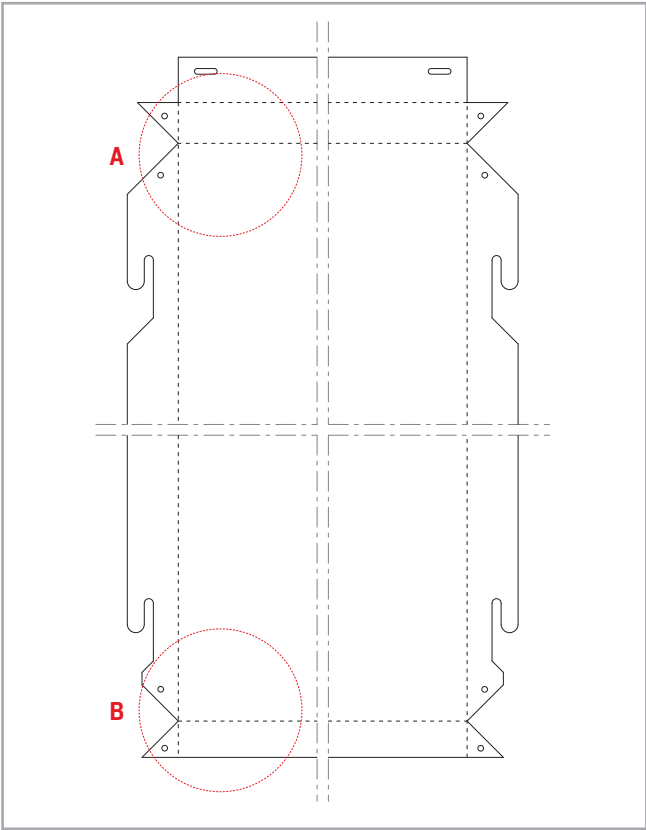
# STB-CH SYSTEM

## STANDARD CH CASSETTE WITH 45 mm FLAP

FORMED CASSETTE



FLAT CASSETTE



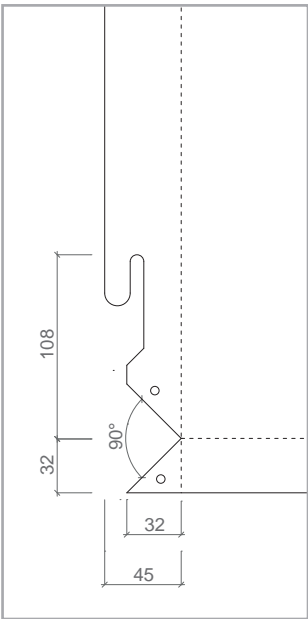
### CASSETTES FORMING PLATE

The shaping plate is a small piece of 1050 H24 aluminium alloy which permits mechanical fixing via rivets to give the STB-CH and STB-T-CH system cassettes their shape.

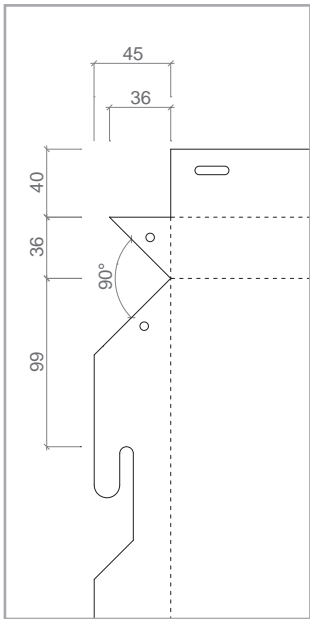
This plate is specified for CH cassettes with 45 mm flap and stiffeners.



DETAIL A



DETAIL B



| REFERENCE | DESCRIPTION             | UNITS/BOX |
|-----------|-------------------------|-----------|
| 05.19.050 | CASSETTES FORMING PLATE | 3000      |

Measurements in mm



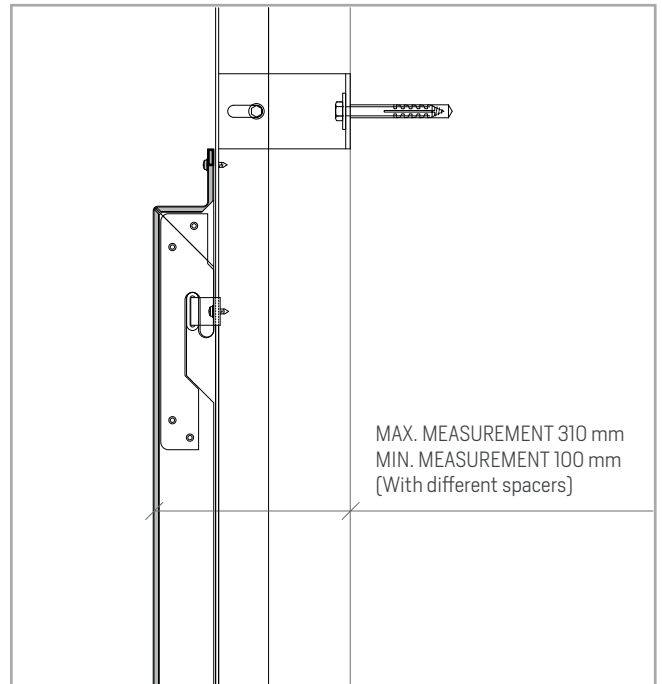
# STB-CH SYSTEM

## STANDARD CH CASSETTE WITH 40 mm FLAP

### 40 mm FLAP (DETAIL)



### VERTICAL CROSS-SECTION



**Note:** The machined **STACBOND®** panels are supplied flat. The client is responsible for forming them into cassettes. No specialist machinery is required.

For the forming of CH cassettes with 40 mm flaps, hanging reinforcements are always used for every tab. These are specific 1050 aluminium alloy pieces of 2 mm and are riveted or screwed to the corresponding tabs and / or stiffeners.

The cassettes with 40 mm flap can allow greater optimization as they require less panel in the flaps than the cassettes with 45 mm flap.

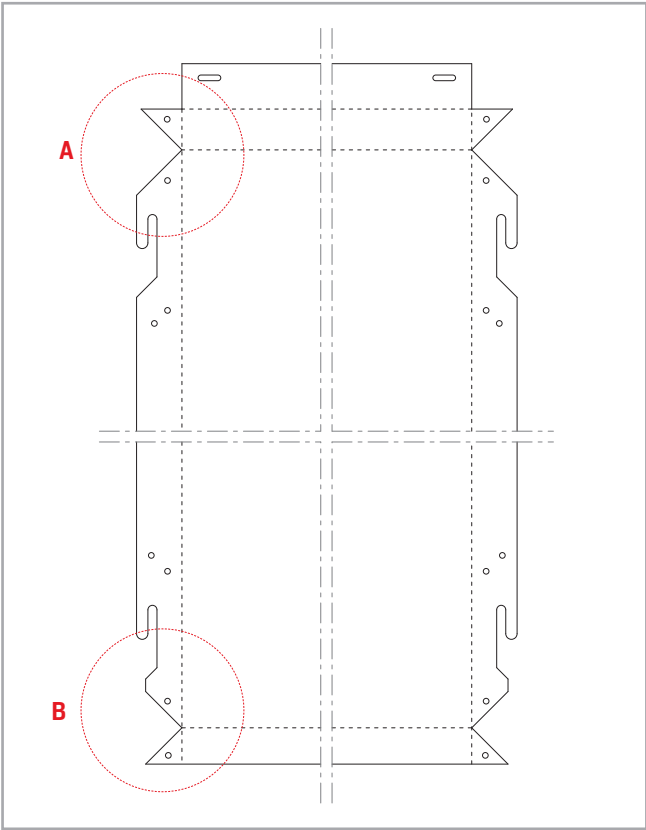
STB-CH SYSTEM

STANDARD CH CASSETTE WITH 40 mm FLAP

FORMED CASSETTE



FLAT CASSETTE

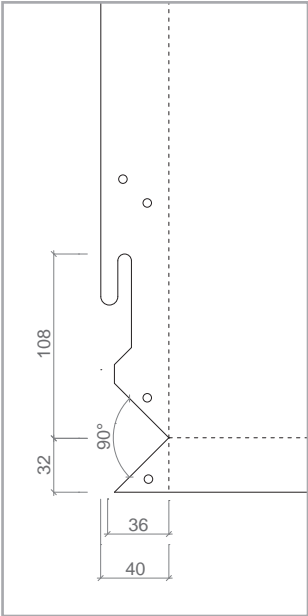


HANGING REINFORCEMENT

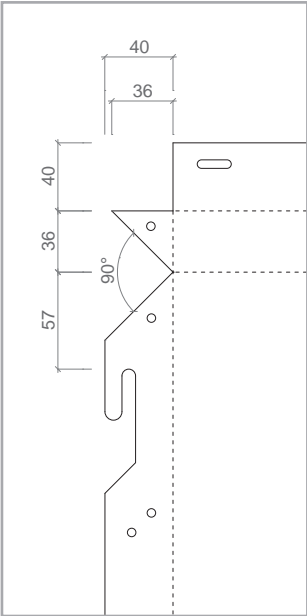
The hanging reinforcement is a piece made of 1050 H24 aluminium alloy which allows mechanical fixing via rivets to form the shape of the cassettes for the STB-CH and STB-T-CH systems, as well as strengthening each of the hanging slots of the CH cassettes with 40 mm flap.



DETAIL A



DETAIL B



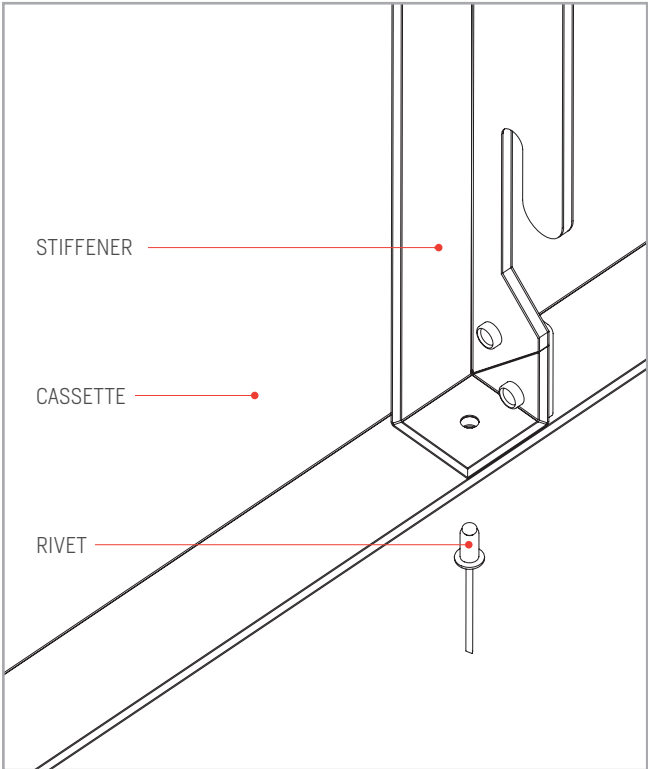
| REFERENCE | DESCRIPTION           | UNITS/BOX |
|-----------|-----------------------|-----------|
| 05.19.013 | HANGING REINFORCEMENT | 500       |

Measurements in mm

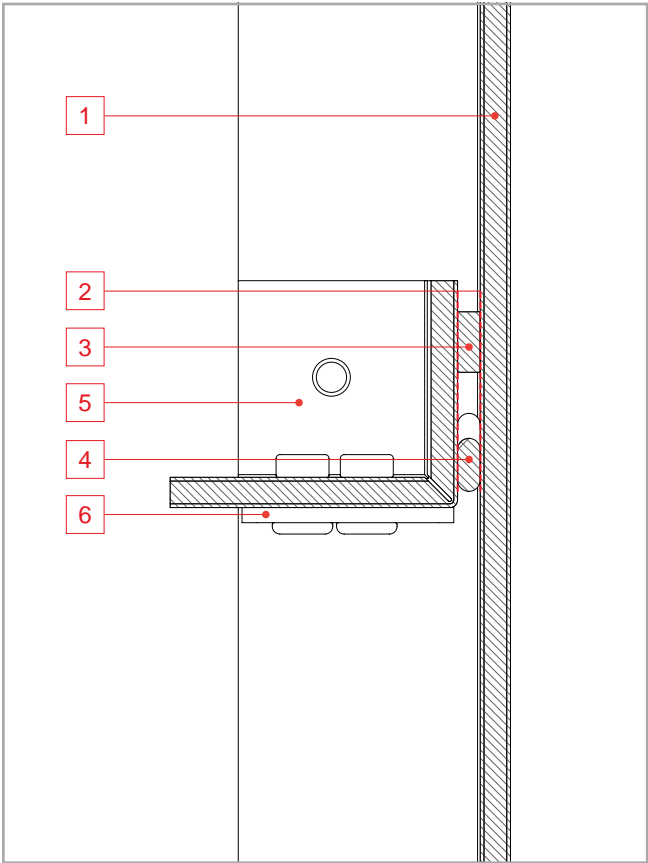
The stiffener is a angular piece formed from machined **STACBOND®** composite panel. It is used to internally reinforce CH cassettes when they exceed certain dimensions. The stiffener is fixed with double-sided tape and adhesive to the inner side of the tray and is riveted to the horizontal upper and lower flanges.



DETAIL OF MECHANICAL FIXING



DETAIL OF MECHANICAL FIXING



| REFERENCE   | DESCRIPTION                      |
|-------------|----------------------------------|
| 05.19.025   | STIFFENER SCH-1 (< 750 mm)       |
| 05.19.026   | STIFFENER SCH-2 (750 - 1500 mm)  |
| 05.19.027   | STIFFENER SCH-3 (1500 - 2400 mm) |
| 05.19.027.1 | STIFFENER SCH-4 (2400 - 4000 mm) |
| 05.19.027.2 | STIFFENER SCH-5 (4000 - 5000 mm) |
| 05.19.027.3 | STIFFENER SCH-6 (> 5000 mm)      |

| Nº | NAME  |
|----|---|
| 1  | STACBOND® composite panel cassette          |
| 2  | Primer                                      |
| 3  | Double-sided adhesive tape                  |
| 4  | Adhesive applied to the cassette            |
| 5  | Stiffener made of STACBOND® composite panel |
| 6  | Cassettes forming plate                     |

# STB-CH SYSTEM

## ATTACHING STIFFENER

### 1. PREPARING THE AREA

Firstly dust and dirt is removed mechanically. Solvents must never be used. This cleaning consists of light or heavy sanding, depending on the extent of dirt present. The dust is then vacuumed or blown away. For cleaning and subsequent degreasing, SIKA-AVIATOR-205 or similar is used. It should be left to evaporate for 10 minutes minimum.

### 2. PRIMING THE AREA

Once the area is clean it is primed using a specific product which strengthens the adherence of the elastic adhesive (SIKATACK PANEL PRIMER or similar).

### 3. DOUBLE-SIDED ADHESIVE TAPE

After the required drying time of the primer (30 to 60 mins) the double-sided adhesive tape – SIKATACK PANEL-3 TAPE or similar – is applied. This holds the part whilst the adhesive polymerizes, as well as ensuring the required minimum depth of adhesive for any possible dilation of the STACBOND® composite panel.

### 4. APPLYING THE ADHESIVE

The elastic adhesive – SIKATACK PANEL or similar – is then applied to the panel, applying a continuous bead contiguous to the adhesive tape.

### 5. ATTACHING THE STIFFENER

The stiffener is then put in place ensuring that its full face surface is in contact with the adhesive.

### 6. FIXING WITH RIVETS

Lastly, the stiffener is drilled and riveted through the upper and lower ends to the horizontal tabs of the cassette.



1. CLEANING



2. PRIMING



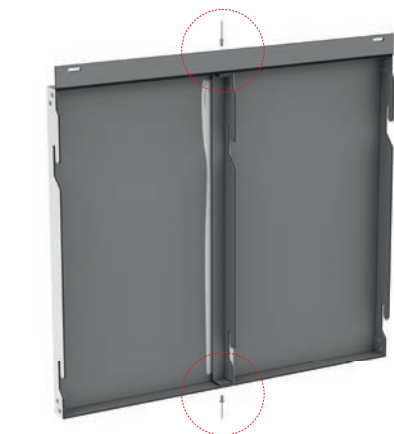
3. ADHESIVE TAPE



4. SIKATACK PANEL ADHESIVE



5. ATTACHING THE STIFFENER



6. FIX WITH RIVETS

## STB-CH SYSTEM

### REPLACEMENT OF DAMAGED CASSETTES



1. Remove the damage cassette by cutting the upper flap.



2. Drill hole in tube of 30 x 30 x 1.4 mm with  $\varnothing$  6 mm and place in the new cassette.



3. Place 4.2 x 13 DIN 7504 N stainless screws in "L" profile of 30 x 20 x 1.3 mm and attach this to the profile OMEGA.



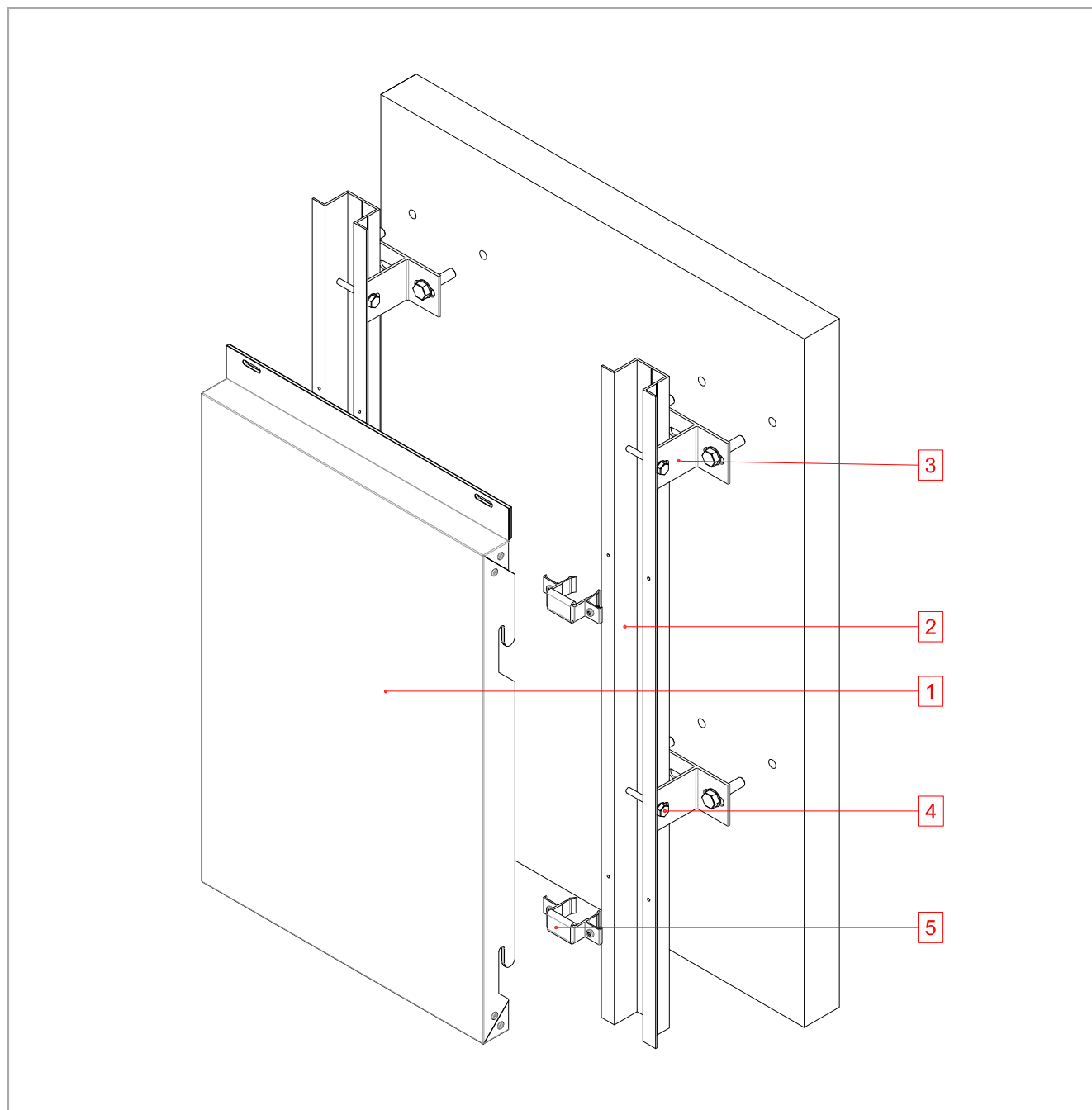
4. Place specified double-side tape and adhesive on the "L" profile 30 x 20 mm.



5. Fit the new **STACBOND®** composite panel cassette with special 9 mm hanging slot and hanging reinforcement pieces.



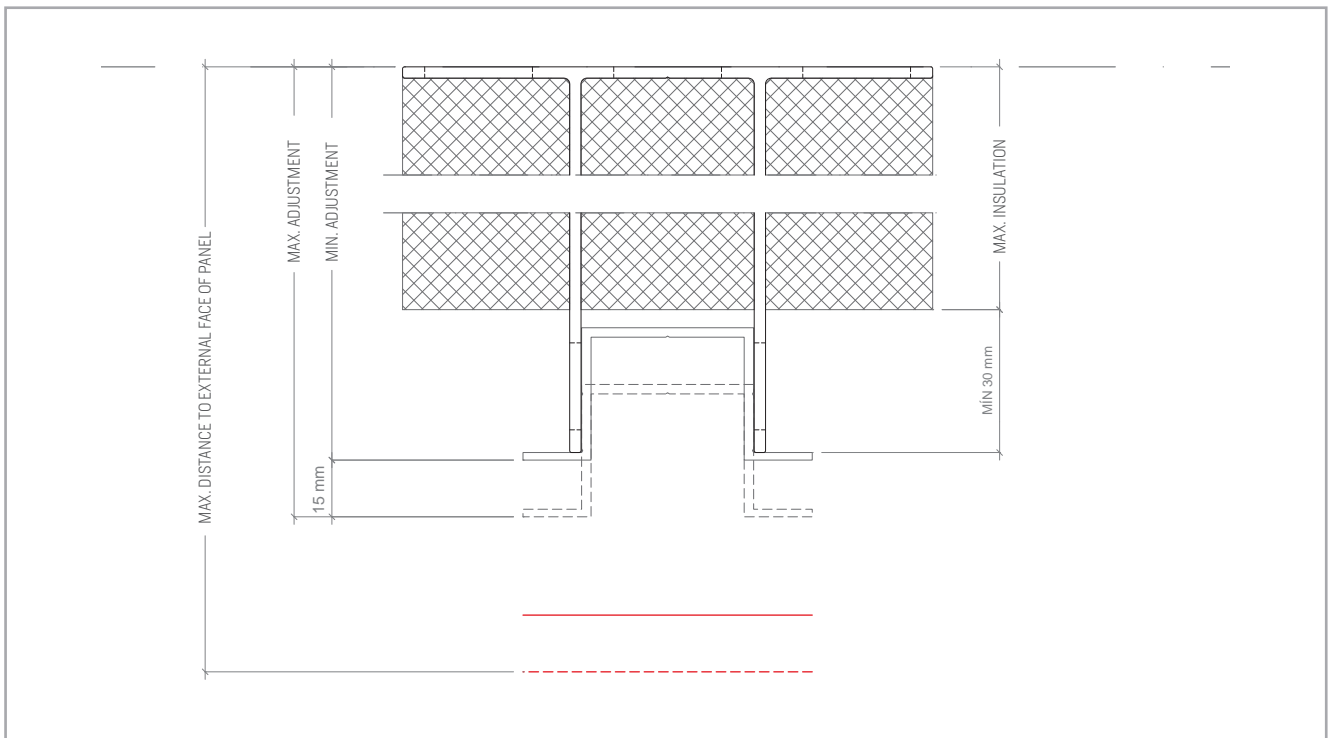
## STB-CH SYSTEM INSTALLATION DIAGRAM



| N° | NAME   |
|----|--|
| 1  | Cassette made from STACBOND® composite panel |
| 2  | Profile OMEGA                                |
| 3  | Spacer DOUBLE T                              |
| 4  | Through screw M 6 x 60/70                    |
| 5  | Bracket set STB-T-CH hanging                 |

# STB-CH SYSTEM

## SPACER / THERMAL INSULATION RELATIONSHIP



### SPACER DOUBLE T \*

| REF.      | PART                | DISTANCE (mm) FROM BASE OF<br>FIXING TO VISIBLE FACE OF PANEL |     | RECOMMENDED INSULATION (mm)<br>WITH 30 mm AIR CAVITY |
|-----------|---------------------|---|-----|--|
|           |                     | MIN.  | MAX |  |
| 05.19.004 | SPACER DOUBLE T 59  | 100   | 115 | 30   |
| 05.19.005 | SPACER DOUBLE T 74  | 115   | 130 | 50   |
| 05.19.006 | SPACER DOUBLE T 89  | 130   | 145 | 60   |
| 05.19.007 | SPACER DOUBLE T 104 | 145   | 160 | 80   |
| 05.19.030 | SPACER DOUBLE T 119 | 160   | 175 | 100  |
| 05.19.031 | SPACER DOUBLE T 134 | 175   | 190 | 110  |
| 05.19.032 | SPACER DOUBLE T 149 | 190   | 205 | 120  |
| 05.19.033 | SPACER DOUBLE T 164 | 205   | 220 | 140  |
| 05.19.034 | SPACER DOUBLE T 179 | 220   | 235 | 160  |
| 05.19.035 | SPACER DOUBLE T 194 | 235   | 250 | 170  |
| 05.19.036 | SPACER DOUBLE T 209 | 250   | 265 | 180  |
| 05.19.037 | SPACER DOUBLE T 224 | 265   | 280 | 200  |
| 05.19.038 | SPACER DOUBLE T 239 | 280   | 295 | 220  |
| 05.19.039 | SPACER DOUBLE T 254 | 295   | 310 | 230  |

### SPACER U \*

| REF.      | PART        | DISTANCE (mm) FROM BASE OF<br>FIXING TO VISIBLE FACE OF PANEL |     | RECOMMENDED INSULATION (mm)<br>WITH 30 mm AIR CAVITY |
|-----------|-------------|---|-----|--|
|           |             | MIN.  | MAX |  |
| 05.19.046 | SPACER U 59 | 100   | 115 | 30   |
| 05.19.047 | SPACER U 74 | 115   | 130 | 50   |

# STB-CH SYSTEM

## ACCESORIES

### PROFILES

| REF.      | PART          | PAGE |
|-----------|---------------|------|
| 05.19.003 | PROFILE OMEGA | 106  |

### AUXILIARY ELEMENTS

| REF.      | PART                            | PAGE |
|-----------|---------------------------------|------|
| 05.19.062 | BRACKET SET STB-T-CH HANGING    | 111  |
| 19.019    | HANGING REINFORCEMENT           |      |
| 05.19.050 | CASSETTES FORMING PLATE         |      |
| 05.19.025 | STIFFENER SCH-1 (< 750 mm)      |      |
| 05.19.026 | STIFFENER SCH-2 (750 - 1500 mm) |      |
| 05.19.027 | STIFFENER SCH-3 (> 1500 mm)     |      |

### INSULATING WEDGES

| REF.      | PART  | PAGE |
|-----------|---|------|
| 05.19.071 | 3 x GROOVE WASHER FOR INSULATING WEDGES WITH REF.: 05.19.067 / 05.19.069 / 05.19.073  | 114  |
| 05.19.005 | INSULATING WEDGE FOR SPACERS U* WITH REF.: 05.19.046 / 05.19.047  |      |
| 05.19.069 | INSULATING WEDGE FOR SPACERS DOUBLE T* WITH REF.: 05.19.030 / 05.19.031 / 05.19.032 / 05.19.033 / 05.19.034 / 05.19.035 / 05.19.036 / 05.19.037 / 05.19.038 / 05.19.039 |      |
| 05.19.073 | INSULATING WEDGE FOR SPACERS DOUBLE T* WITH REF.: 05.19.004 / 05.19.005 / 05.19.006 / 05.19.007   |      |

### SPACERS

| REF.      | PART                | PAGE |
|-----------|---------------------|------|
| 05.19.004 | SPACER DOUBLE T 59  | 108  |
| 05.19.005 | SPACER DOUBLE T 74  |      |
| 05.19.006 | SPACER DOUBLE T 89  |      |
| 05.19.007 | SPACER DOUBLE T 104 |      |
| 05.19.030 | SPACER DOUBLE T 119 |      |
| 05.19.031 | SPACER DOUBLE T 134 |      |
| 05.19.032 | SPACER DOUBLE T 149 |      |
| 05.19.033 | SPACER DOUBLE T 164 |      |
| 05.19.034 | SPACER DOUBLE T 179 |      |
| 05.19.035 | SPACER DOUBLE T 194 |      |
| 05.19.036 | SPACER DOUBLE T 209 | 109  |
| 05.19.037 | SPACER DOUBLE T 224 |      |
| 05.19.038 | SPACER DOUBLE T 239 |      |
| 05.19.039 | SPACER DOUBLE T 254 |      |
| 05.19.046 | SPACER U 59         |      |
| 05.19.047 | SPACER U 74         |      |

### FASTENING ACCESSORIES

| REF.      | PART   | PAGE |
|-----------|--|------|
| STB-R0300 | BLIND RIVET POLYGRIP SFS ASO-D-48150 ALU/INOX 4,8X15 | 113  |

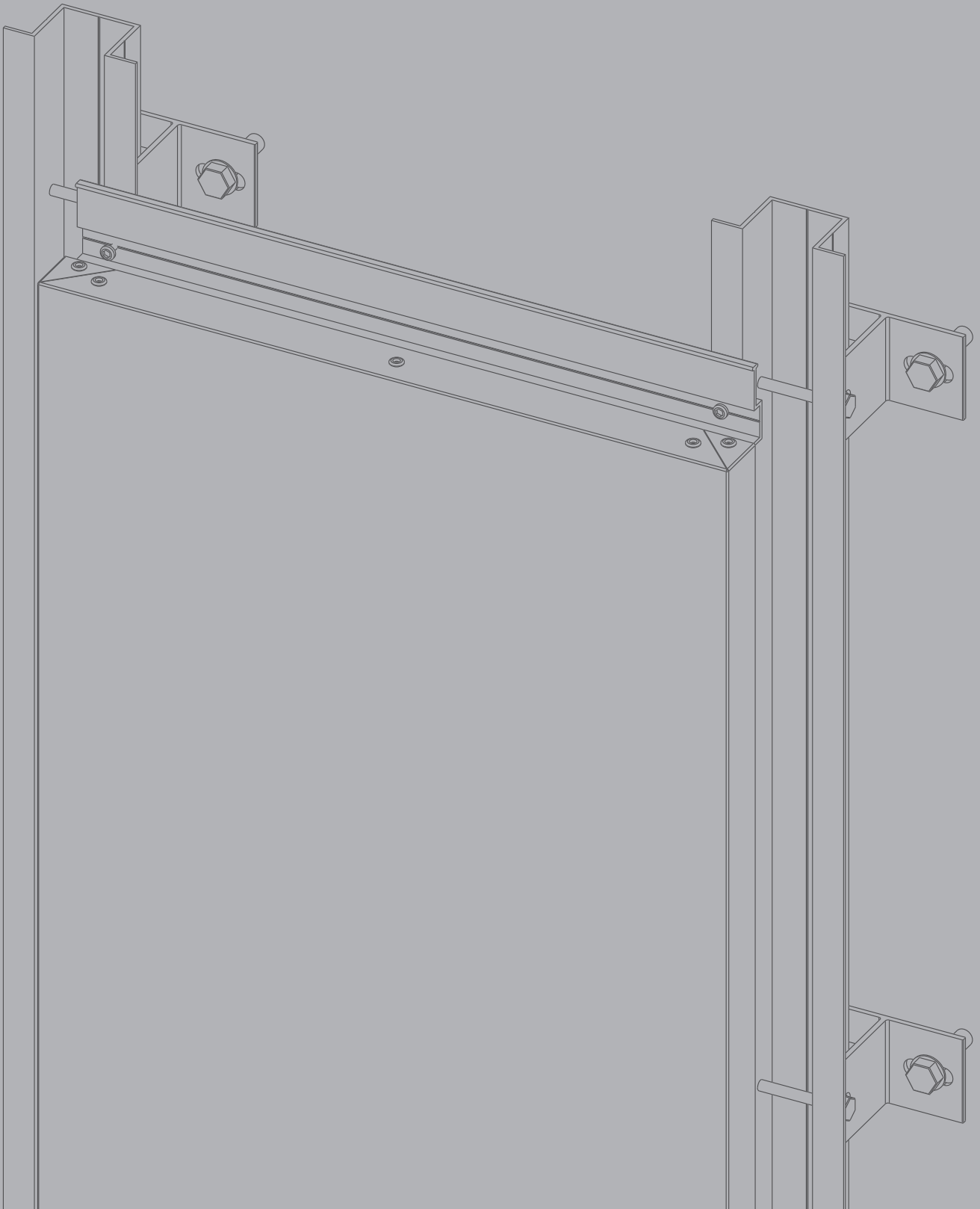
## INFORMATION AND SALES

☎ (+34) 981 817 036  
 📠 (+34) 981 817 037  
 ✉ stacbond@stac.es  
 🌐 www.stac.es



# STB-SZ

## MALE-FEMALE SYSTEM



## STB-SZ SYSTEM DESCRIPTION



**STB-T-SZ** is a kit system based on cassettes made from **STACBOND® composite panels for installing ventilated facades**. It is a hidden male-female coupling system which is quick and easy to install. It was specially designed to develop facades with horizontal aspect of mainly solid wall with little surface area of openings or linear spaces.

The system comprises two 6063 T5 aluminium alloy profiles onto which the pre-formed cassettes are attached:

- Lower female profile, called **profile S**.
- Upper male profile, called **profile Z**.

The substructure employs **profiles OMEGA** and **spacers DOUBLE T** in 6063 T5 aluminium alloy.

The spacers come in various lengths to house the required thickness of thermal insulation and compensate any irregularities in the facade. For the thermal break, **STAC®** has developed specific **INSULATING WEDGES** to place between the spacers double T and the vertical face.

The spacers are anchored to the wall using special mechanical fixings, recommended in each case by the fixings suppliers, and receive the profiles OMEGA as uprights.

The **STACBOND®** composite panel cassettes are mechanically attached to the uprights. The facade is constructed from the base up in a manner that the profile S of each upper cassette sits on the profile Z of the cassette below it. Mechanical anchoring is via screwing the profiles Z to the profile OMEGA.

To avoid vibration of the male-female cassettes and the profiles S and Z, protective EPDM gaskets are incorporated.

**STAC®** has developed a program for the specific calculations of the substructure with the criteria from the Technical approval Document (DIT plus 553p/16) established by the Instituto de Ciencias de la Construcción Eduardo Torroja for each project executed, defining the maximum distances between uprights and the number of fixings.

The **STB-SZ** system complies with all major international certifications.



ETA-ETE: 15/0655



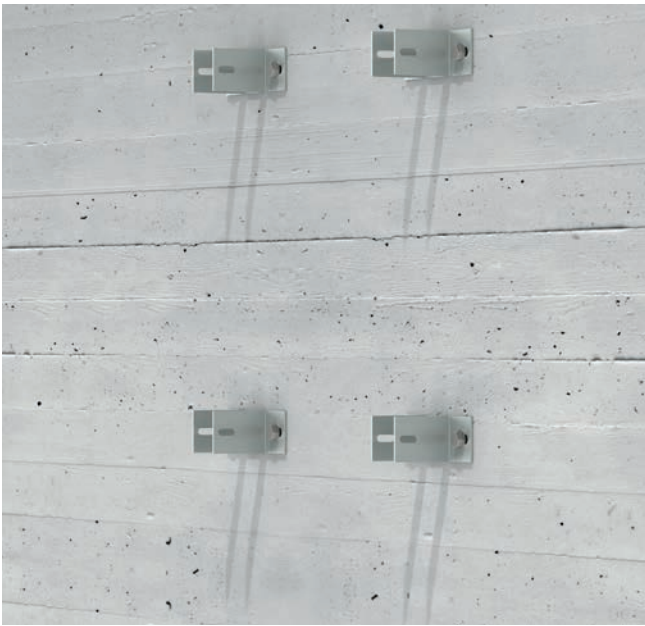
Nº 553P/19



ITB – KOT 2017/0043



ASOCIACIÓN INTERNACIONAL DE VENTANAS Y CERRAMIENTOS



SPACERS DOUBLE T

**1.** The first step is **attaching the spacers DOUBLE T** to the facade. These must be in perfect vertical alignment. The spacers to be used depends on the thermal insulation and the layout / irregularities of the facade. **Insulating wedges** can optionally be installed to act as thermal bridge breaks.



PROFILES OMEGA

**2.** The profiles **OMEGA** are **screwed to the spacers DOUBLE T**. They must be perfectly plumb with the adjustment that the system allows. The first and last fixings must be placed at a maximum of 250 mm from the ends of the profile **OMEGA**.



BASE PROFILE Z

**3. Profile S and profile Z.** These profiles longitudinally strengthen the cassette in both its upper and lower parts. The profile Z is fitted in the upper part and has a EPDM adhesive strip which surrounds the vertical wing of the profile to absorb possible spaces between the male and female parts to avoid noise caused by vibration. These profiles are attached to the cassettes using rivets.



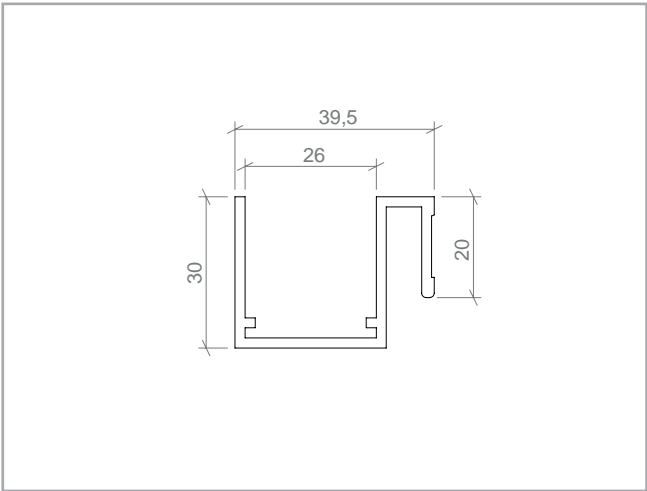
STACBOND COMPOSITE PANEL CASSETTES

**4. STACBOND® composite panel cassette.** Once the cassette has been formed with the profile Z in the upper part and the profile S in the lower part, it is set up to the facade. Cladding is performed from the bottom row up in a manner so that each cassette rests on the one below and is mechanically fastened in the upper part by screwing the profile Z to the upright profile **OMEGA**.

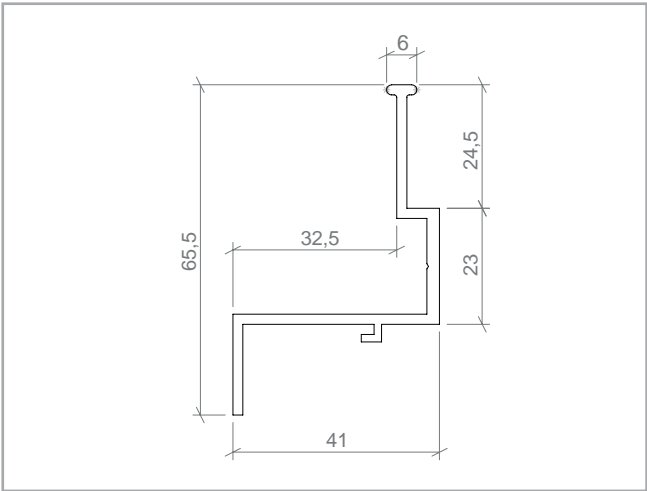
**PROFILE S AND PROFILE Z**



PROFILE S



PROFILE Z



Measurements in mm

**EPDM GASKET PROFILE SZ**



We provide a EPDM protection gasket to place between the two profiles and absorb any slack.

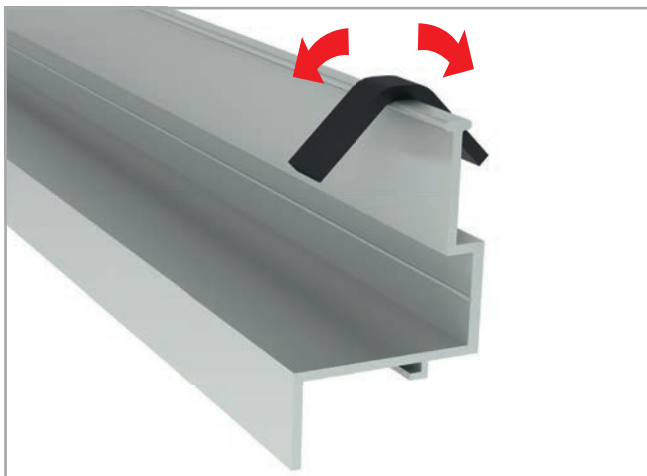
**REINFORCEMENT STB-SZ**

The reinforcement STB-SZ is a segment of profile of 200 mm specific length, covers the internal distance between the SZ cassette and the substructure.  
This part is attached to the substructure profile with screws.



| REFERENCE | DESCRIPTION                   | UNITS/BOX |
|-----------|-------------------------------|-----------|
| 05.19.001 | PROFILE S                     | 24        |
| 05.19.002 | PROFILE Z                     | 18        |
| 05.99.231 | REINFORCEMENT STB-SZ          | 174       |
| STB-JEPDM | EPDM GASKET PROFILE SZ (m.l.) | -         |

### USING THE EPDM GASKET PROFILE SZ



The segments of EPDM gasket must be placed on the head of the profile Z and wrapped around to cover both sides. The recommended size of these strips is 60 mm.



The recommended maximum distance between segments is 500 mm. Using this accessory eliminates possible vibrations between the panels and allows them to be adjusted to ensure flatness of the facade.

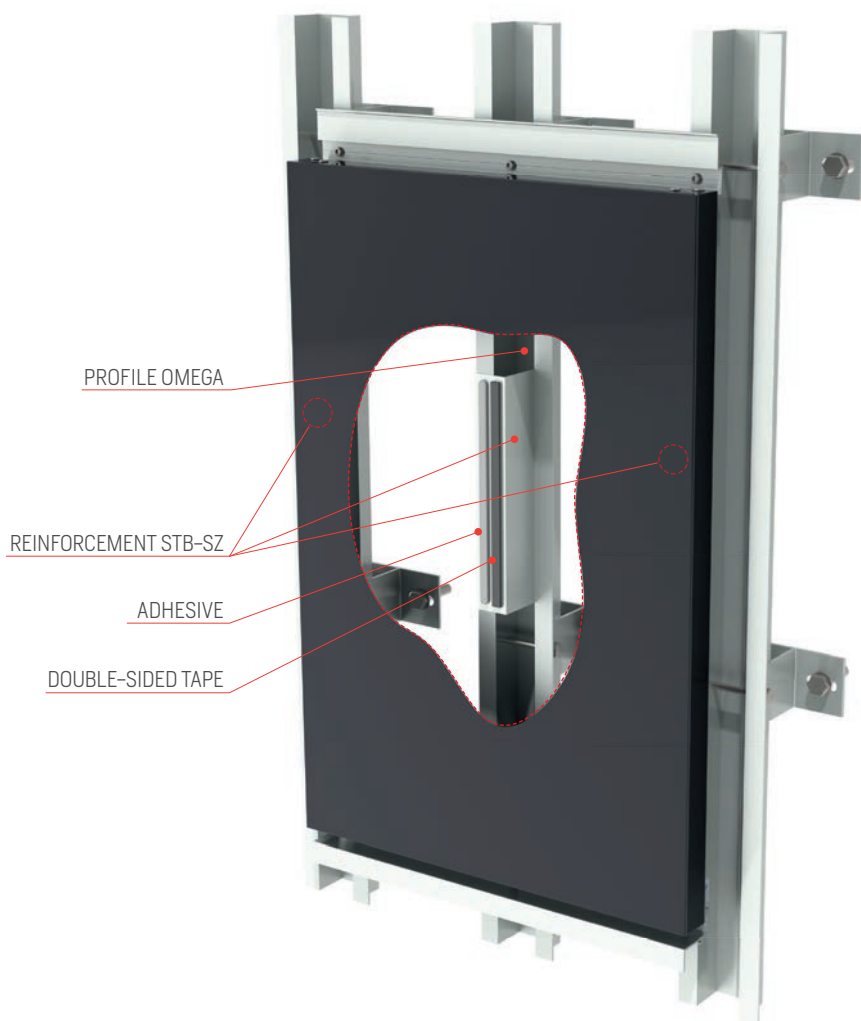
### USING THE REINFORCEMENT STB-SZ

The use of the STB-SZ reinforcement depends on the height of the tray and the wind load of the project site. For more detailed information please consult **STAC®**.

It must be used on each of the upright profiles OMEGA that support the composite panel cassette.

The reinforcement is mechanically attached to the front face of the profile and special adhesive and double-sided adhesive tape is applied.

The cassette is then fitted and fixed using rivets in the upper profile Z.





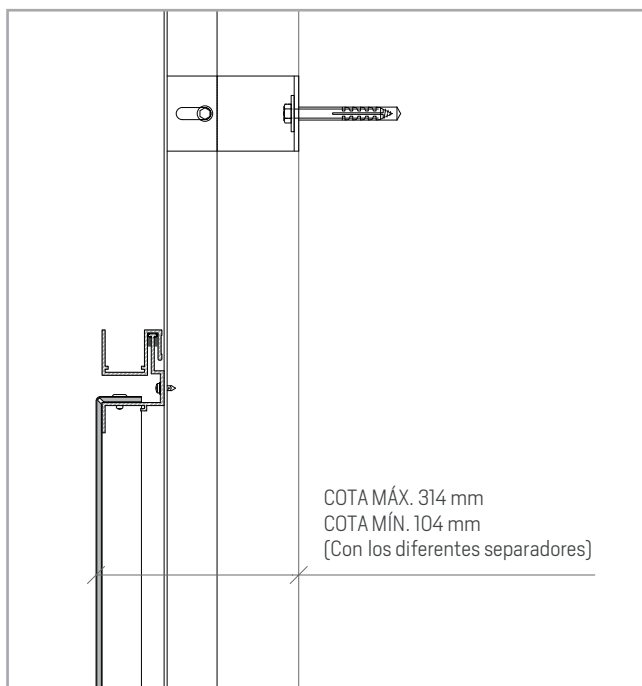
## STB-SZ SYSTEM

### INSTALLING SZ CASSETTE

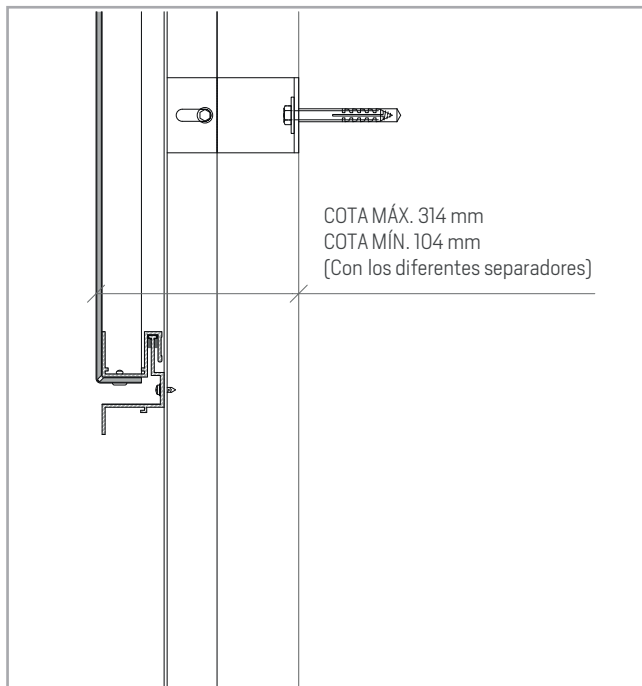
UPPER FIXING



VERTICAL CROSS-SECTION



VERTICAL CROSS-SECTION

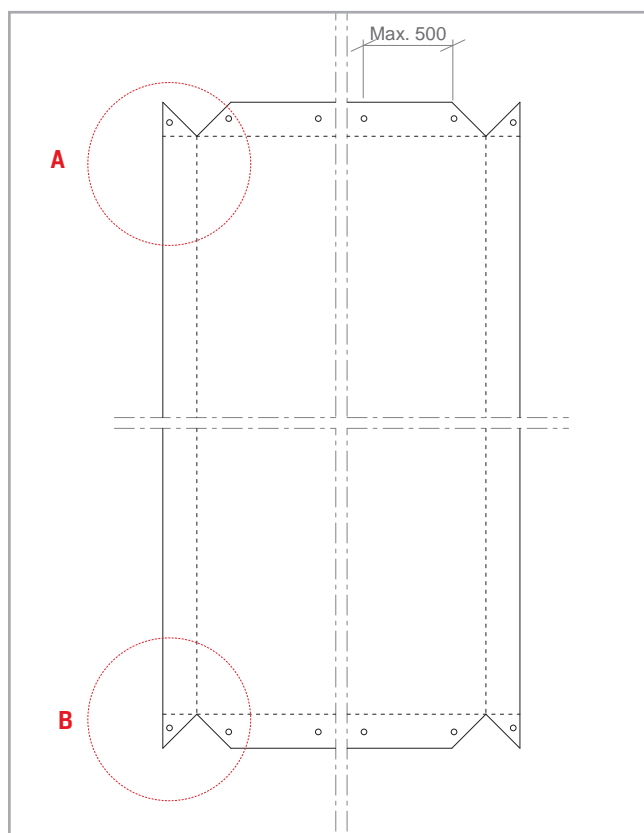


**Note:** The machined **STACBOND®** panels are supplied flat. The client is responsible for forming them into cassettes. No specialist machinery is required.

FORMED CASSETTE

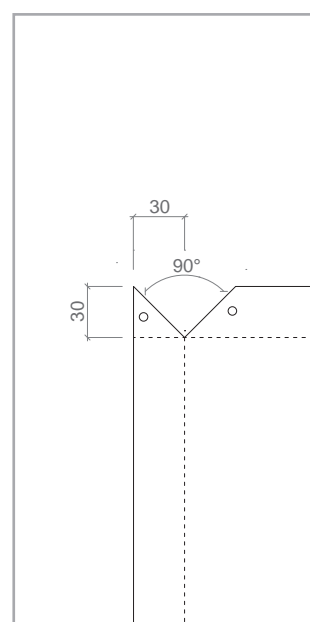
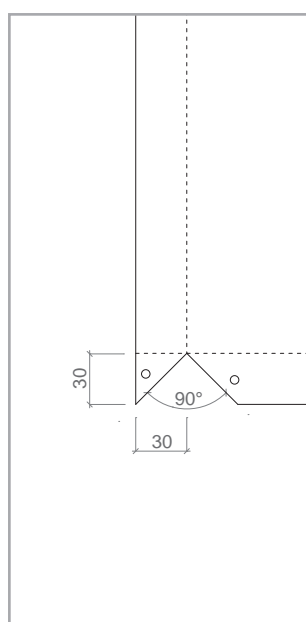


FLAT CASSETTE



DETAIL A

DETAIL B



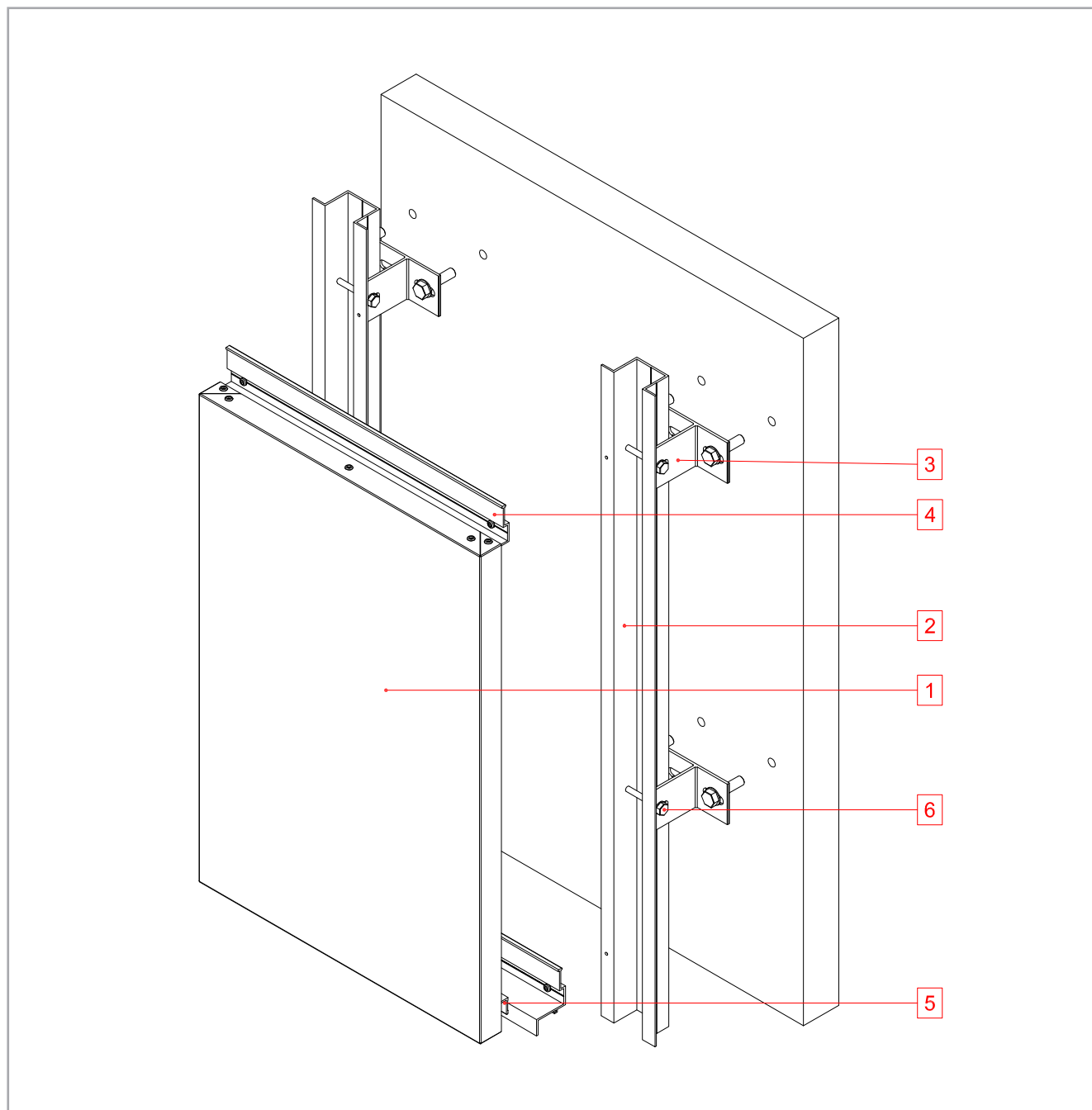
Measurements in mm

The standard cassettes in the STB-T-SZ system have 30 mm flaps. To form the cassettes, they are mechanically fastened via rivets directly to the longitudinal profiles S and Z.

The profile Z is attached in the lower part and the profile S in the upper part of the cassette. These profiles provide the cassettes with great longitudinal rigidity.

# STB-SZ SYSTEM

## INSTALLATION DIAGRAM



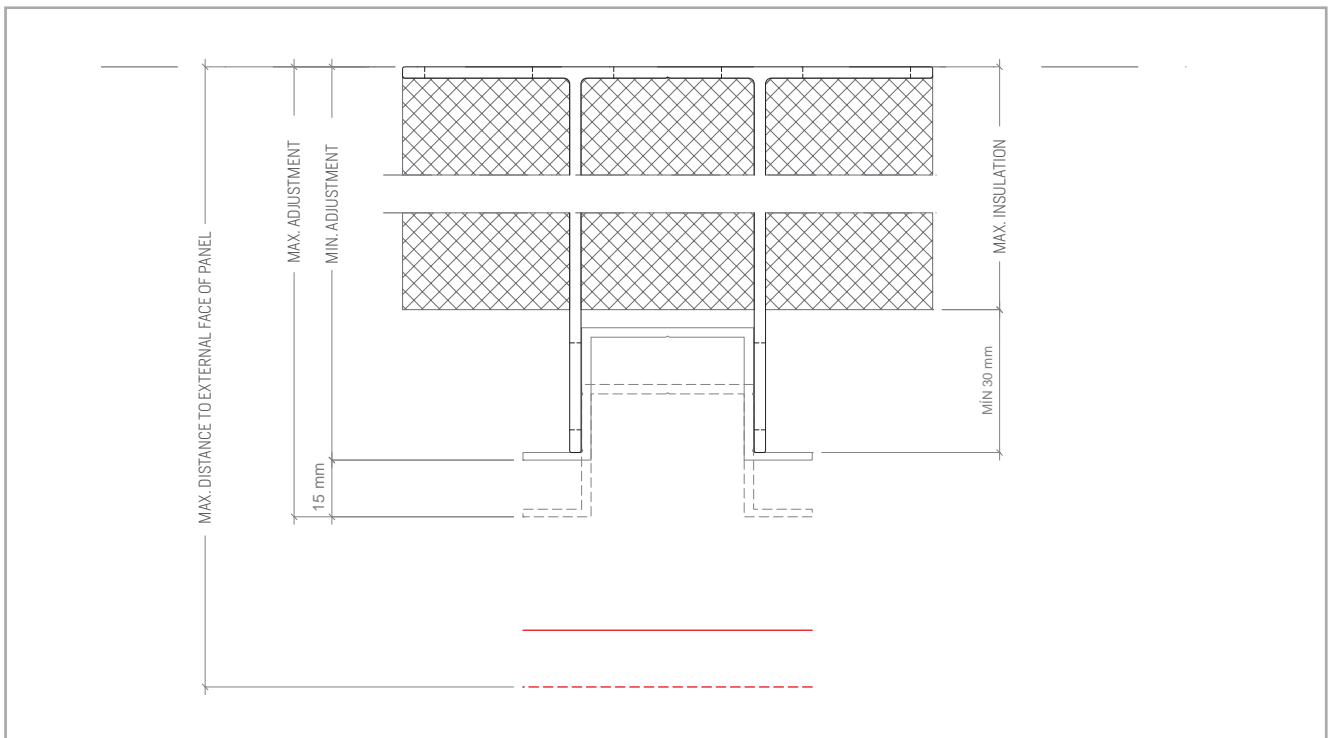
### N° NAME

- |   |  |
|---|--|
| 1 | Cassette made from STACBOND® composite panel |
| 2 | Profile OMEGA                                |
| 3 | Spacer DOUBLE T                              |
| 4 | Profile Z                                    |
| 5 | Profile S                                    |
| 6 | Through screw M 6 x 60/70                    |



# STB-SZ SYSTEM

## SPACER / THERMAL INSULATION RELATIONSHIP



| SPACER DOUBLE T * |                     | DISTANCE (mm) FROM BASE OF<br>FIXING TO VISIBLE FACE OF PANEL |     | RECOMMENDED INSULATION (mm)<br>WITH 30 mm AIR CAVITY |
|-------------------|---------------------|---|-----|--|
| REF.              | PART                | MIN.  | MAX |  |
| 05.19.004         | SPACER DOUBLE T 59  | 104   | 119 | 30   |
| 05.19.005         | SPACER DOUBLE T 74  | 119   | 134 | 50   |
| 05.19.006         | SPACER DOUBLE T 89  | 134   | 149 | 60   |
| 05.19.007         | SPACER DOUBLE T 104 | 149   | 164 | 80   |
| 05.19.030         | SPACER DOUBLE T 119 | 164   | 179 | 100  |
| 05.19.031         | SPACER DOUBLE T 134 | 179   | 194 | 110  |
| 05.19.032         | SPACER DOUBLE T 149 | 194   | 209 | 120  |
| 05.19.033         | SPACER DOUBLE T 164 | 209   | 224 | 140  |
| 05.19.034         | SPACER DOUBLE T 179 | 224   | 239 | 160  |
| 05.19.035         | SPACER DOUBLE T 194 | 239   | 254 | 170  |
| 05.19.036         | SPACER DOUBLE T 209 | 254   | 269 | 180  |
| 05.19.037         | SPACER DOUBLE T 224 | 269   | 284 | 200  |
| 05.19.038         | SPACER DOUBLE T 239 | 284   | 299 | 220  |
| 05.19.039         | SPACER DOUBLE T 254 | 299   | 314 | 230  |

| SPACER U * |             | DISTANCE (mm) FROM BASE OF<br>FIXING TO VISIBLE FACE OF PANEL |     | RECOMMENDED INSULATION (mm)<br>WITH 30 mm AIR CAVITY |
|------------|-------------|---|-----|--|
| REF.       | PART        | MIN.  | MAX |  |
| 05.19.046  | SPACER U 59 | 104   | 119 | 30   |
| 05.19.047  | SPACER U 74 | 119   | 134 | 50   |

### PROFILES

| REF.      | PART          | PAGE |
|-----------|---------------|------|
| 05.19.003 | PROFILE OMEGA | 106  |
| 05.19.001 | PROFILE S     | 107  |
| 05.19.002 | PROFILE Z     |      |
| 05.19.074 | PROFILE Z 20  |      |
| 05.19.063 | PROFILE Z 24  |      |

### AUXILIARY ELEMENTS

| REF.      | PART                          | PAGE |
|-----------|-------------------------------|------|
| 05.99.231 | REINFORCEMENT STB-SZ          | 110  |
| STB-JEPDM | EPDM GASKET PROFILE SZ (m.l.) |      |

### INSULATING WEDGES

| REF.      | PART  | PAGE |
|-----------|---|------|
| 05.19.071 | 3 x GROOVE WASHER FOR INSULATING WEDGES WITH REF.: 05.19.067 / 05.19.069 / 05.19.073  | 114  |
| 05.19.005 | INSULATING WEDGE FOR SPACERS U* WITH REF.: 05.19.046 / 05.19.047  |      |
| 05.19.069 | INSULATING WEDGE FOR SPACERS DOUBLE T* WITH REF.: 05.19.030 / 05.19.031 / 05.19.032 / 05.19.033 / 05.19.034 / 05.19.035 / 05.19.036 / 05.19.037 / 05.19.038 / 05.19.039 |      |
| 05.19.073 | INSULATING WEDGE FOR SPACERS DOUBLE T* WITH REF.: 05.19.004 / 05.19.005 / 05.19.006 / 05.19.007   |      |


### SPACERS


| REF.      | PART                | PAGE |
|-----------|---------------------|------|
| 05.19.004 | SPACER DOUBLE T 59  | 108  |
| 05.19.005 | SPACER DOUBLE T 74  |      |
| 05.19.006 | SPACER DOUBLE T 89  |      |
| 05.19.007 | SPACER DOUBLE T 104 |      |
| 05.19.030 | SPACER DOUBLE T 119 |      |
| 05.19.031 | SPACER DOUBLE T 134 |      |
| 05.19.032 | SPACER DOUBLE T 149 |      |
| 05.19.033 | SPACER DOUBLE T 164 |      |
| 05.19.034 | SPACER DOUBLE T 179 |      |
| 05.19.035 | SPACER DOUBLE T 194 |      |
| 05.19.036 | SPACER DOUBLE T 209 | 109  |
| 05.19.037 | SPACER DOUBLE T 224 |      |
| 05.19.038 | SPACER DOUBLE T 239 |      |
| 05.19.039 | SPACER DOUBLE T 254 |      |
| 05.19.046 | SPACER U 59         | 109  |
| 05.19.047 | SPACER U 74         |      |

### FASTENING ACCESSORIES

| REF.      | PART   | PAGE |
|-----------|--|------|
| STB-R0300 | BLIND RIVET POLYGRIP SFS ASO-D-48150 ALU/INOX 4,8X15 | 113  |

## INFORMATION AND SALES

 (+34) 981 817 036

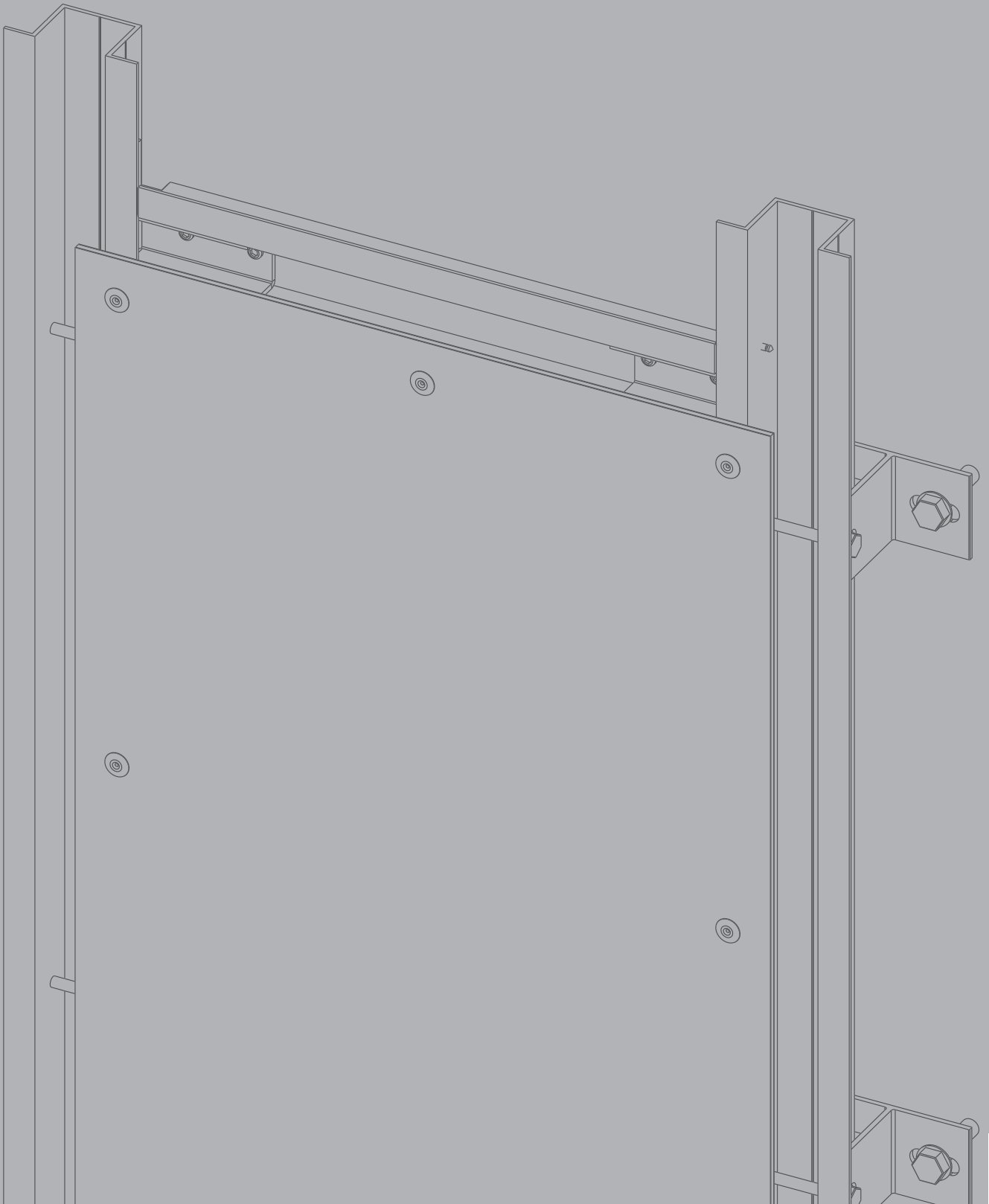
 (+34) 981 817 037

 stacbond@stac.es

 www.stac.es

# STB-REM

## RIVETED SYSTEM



## STB-REM SYSTEM

### DESCRIPTION



**STB-REM** is a kit system based on flat panels made from **STACBOND® composite panels for installing ventilated facades**. It is a system with visible fixings which is quick to install and which allows both horizontal and vertical assembly. It is a very versatile system which perfectly suits any architectural layout and offers the possibility to easily cover curving sections. The **STB-REM** system therefore complies with all the requirements to be employed in the most demanding architectural claddings.

The substructure employs **profiles OMEGA** and **spacers DOUBLE T** in 6063 T5 aluminium alloy.

The spacers come in various lengths to house the required thickness of thermal insulation and compensate any irregularities in the facade. For the thermal break, **STAC®** has developed specific **INSULATING WEDGES** to place between the spacers **DOUBLE T** and the vertical face.

The spacers are anchored to the wall using special mechanical fixings, recommended in each case by the fixings suppliers, and receive the profiles **OMEGA** as uprights.

The **STB-REM** system can be mounted on a unidirectional or bidirectional substructure. With a unidirectional substructure, the horizontal joint remains open. In the case of the bidirectional substructure, horizontal struts are attached to the uprights using mounting joints made of **1050-H** aluminium alloy, or to the vertical face using spacers **DOUBLE T**.

This substructure with vertical and / or horizontal profiles **OMEGA** support the **STACBOND®** composite panel sheets which are riveted at their edges.

**STAC®** has developed a program for the specific calculations of the substructure with the criteria from the Technical approval Document (DIT plus 553p/16) established by the Instituto de Ciencias de la Construcción Eduardo Torroja for each project executed, defining the maximum distances between the profile **OMEGA** uprights and the number of fixings.

The **STB-REM** system complies with all major international certifications.



ETA-ETE: 15/0655



Nº 553P/19



ITB - KOT 2017/0043

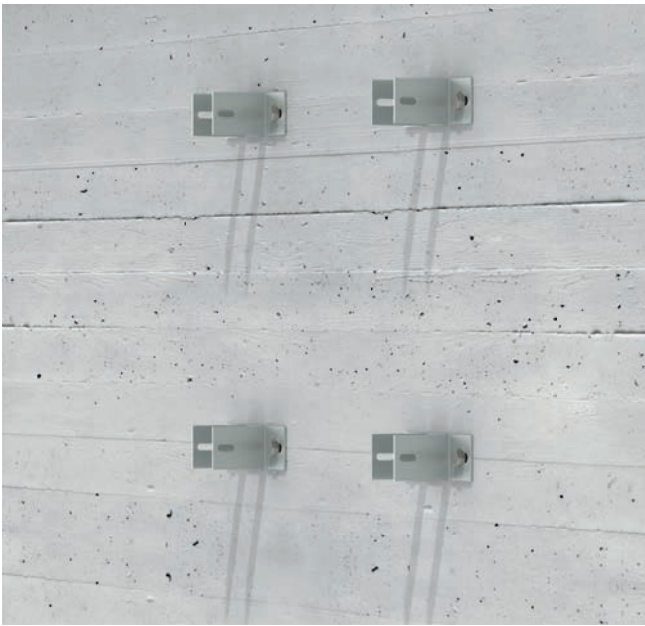


13/5022



2.2/13-1548\_V1





SPACERS DOUBLE T



PROFILES OMEGA

**1.** The first step is **attaching the spacers DOUBLE T** to the facade. These must be in perfect vertical alignment. The spacers to be used depends on the thermal insulation and the layout / irregularities of the facade. **Insulating wedges** can optionally be installed to act as thermal bridge breaks.

**2.** The **profiles OMEGA** are **screwed to the spacers DOUBLE T**. They must be perfectly plumb with the adjustment that the system allows. The first and last fixings must be placed at a maximum of 250 mm from the ends of the profile OMEGA.



HORIZONTAL PROFILES OMEGA



ATTACHING STACBOND COMPOSITE PANEL

**3.** **Horizontal cross-struts (optional)**. These profiles are mechanically fixed to the vertical substructure using **mullion joinings STB-REM**. The possibility of creating a bidirectional substructure allows the system to adapt to the requirements of the facade.

**4.** **Attaching STACBOND® composite panel**. Once the substructure is in place, the **STACBOND®** panels are attached to it using rivets. Attention should be paid to the condition and type of rivet to ensure correct dilation of the panels.

# STB-REM SYSTEM

## AUXILIARY ELEMENTS

### MULLION JOINING STB-REM

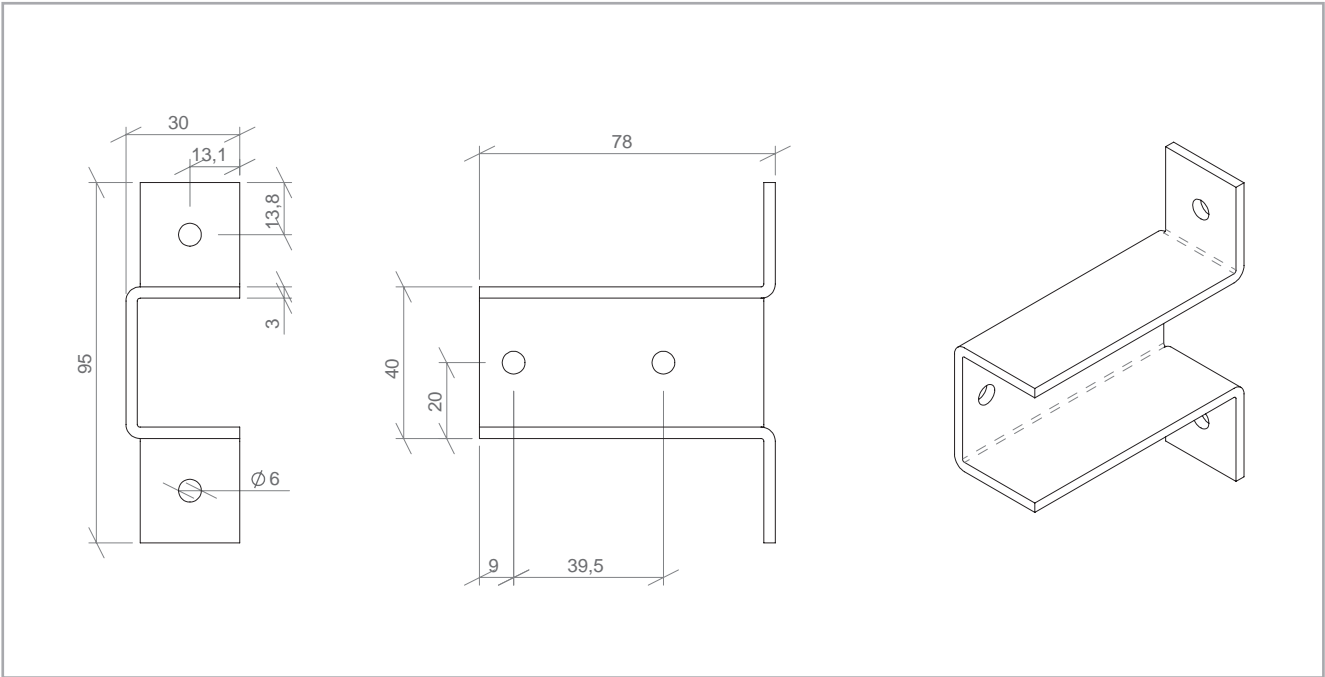
Part made of folded 1050-H aluminium alloy sheet (3 mm) with holes for fixing to the upright and cross-strut profiles OMEGA.

This accessory allows profiles OMEGA to be attached horizontally to the substructure, reducing the number of fixings to the base wall.

Fixing of these spacers is done using  $\varnothing 4.8$  mm blind rivets or  $\varnothing 4.8$  mm self-tapping screws. These coupling parts are compatible with possible dilation of the substructure.



| REFERENCE | DESCRIPTION             | UNITS/BOX |
|-----------|-------------------------|-----------|
| 05.19.020 | MULLION JOINING STB-REM | 150       |



Measurements in mm

# STB-REM SYSTEM

## TYPE AND DISTRIBUTION OF PERFORATIONS

### DILATION OF THE PANEL

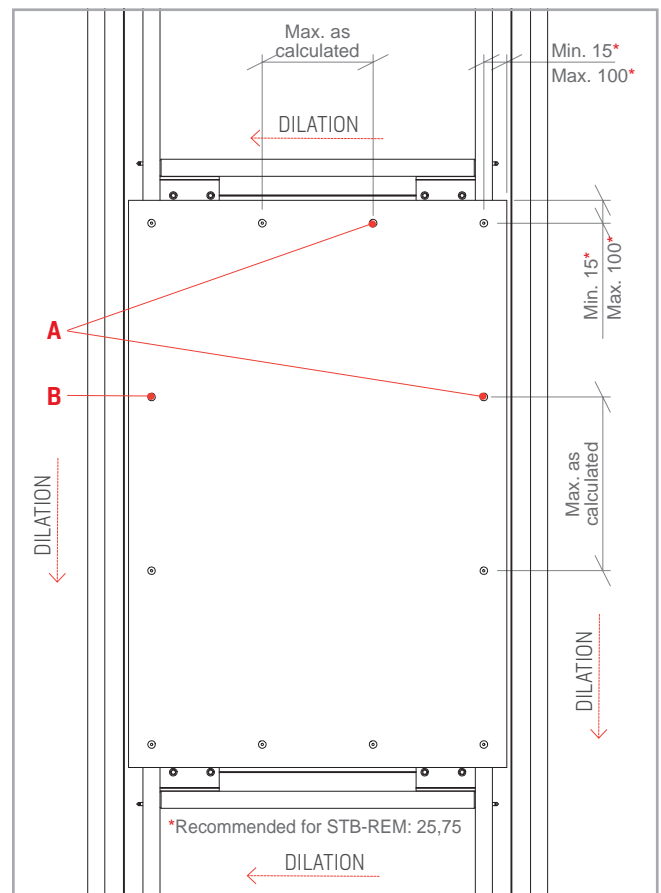
The diagram shows the layout and max. distance of the holes in the **STACBOND®** composite panel.

The panels are set in place by drilling and inserting the corresponding rivet, respecting the difference between the diameter of the drill and the shank of the rivet and also the distances between rivets and the edge of the panel.

To allow movement of the panel and to avoid problems from dilation, it is important to centre the drill holes on the substructure. This allows equal dilation in all directions and does not limit movement. We recommend the use of **centring gauges** to ensure correct hole placement and fixing of rivets.

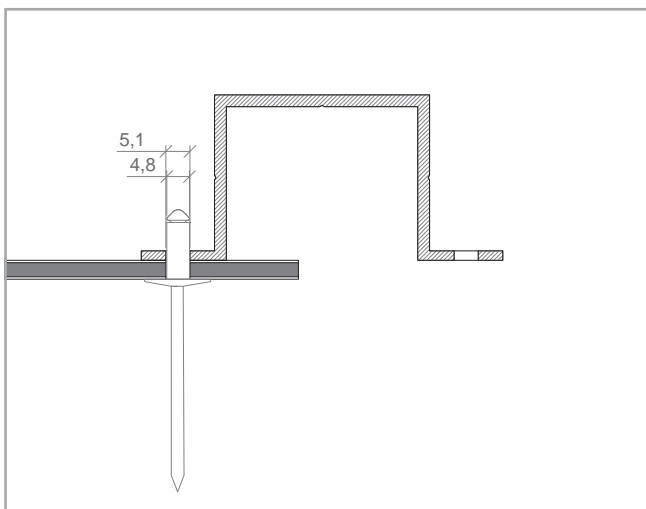
Furthermore, to allow movement in the floating fixing points, it is important to control the rivet clinch strength. We recommend the use of a **spacing nosepiece** which leaves a 0.2 mm gap between the sheet and the fixing, avoiding immobilising fixing points which should be floating.

Rivets and screws specified by **STAC®** should be used.

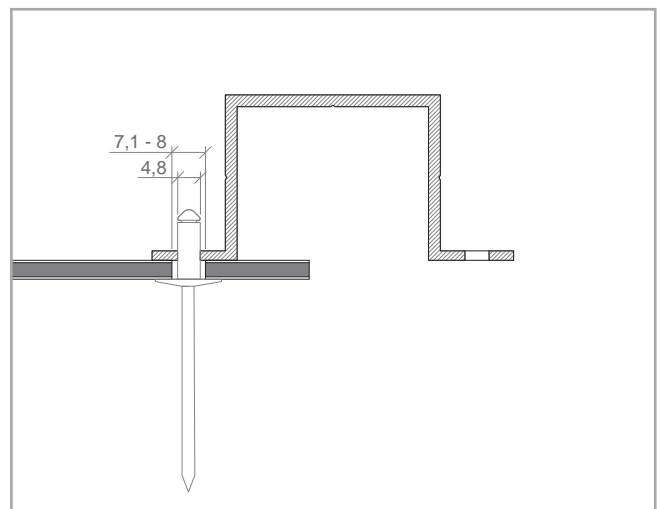


**Note:** other rivets and screws may be used providing that their mechanical characteristics are equal or greater than those specified by **STAC®**.

### A. FIXED ANCHORING POINTS



### B. MOBILE ANCHORING POINTS

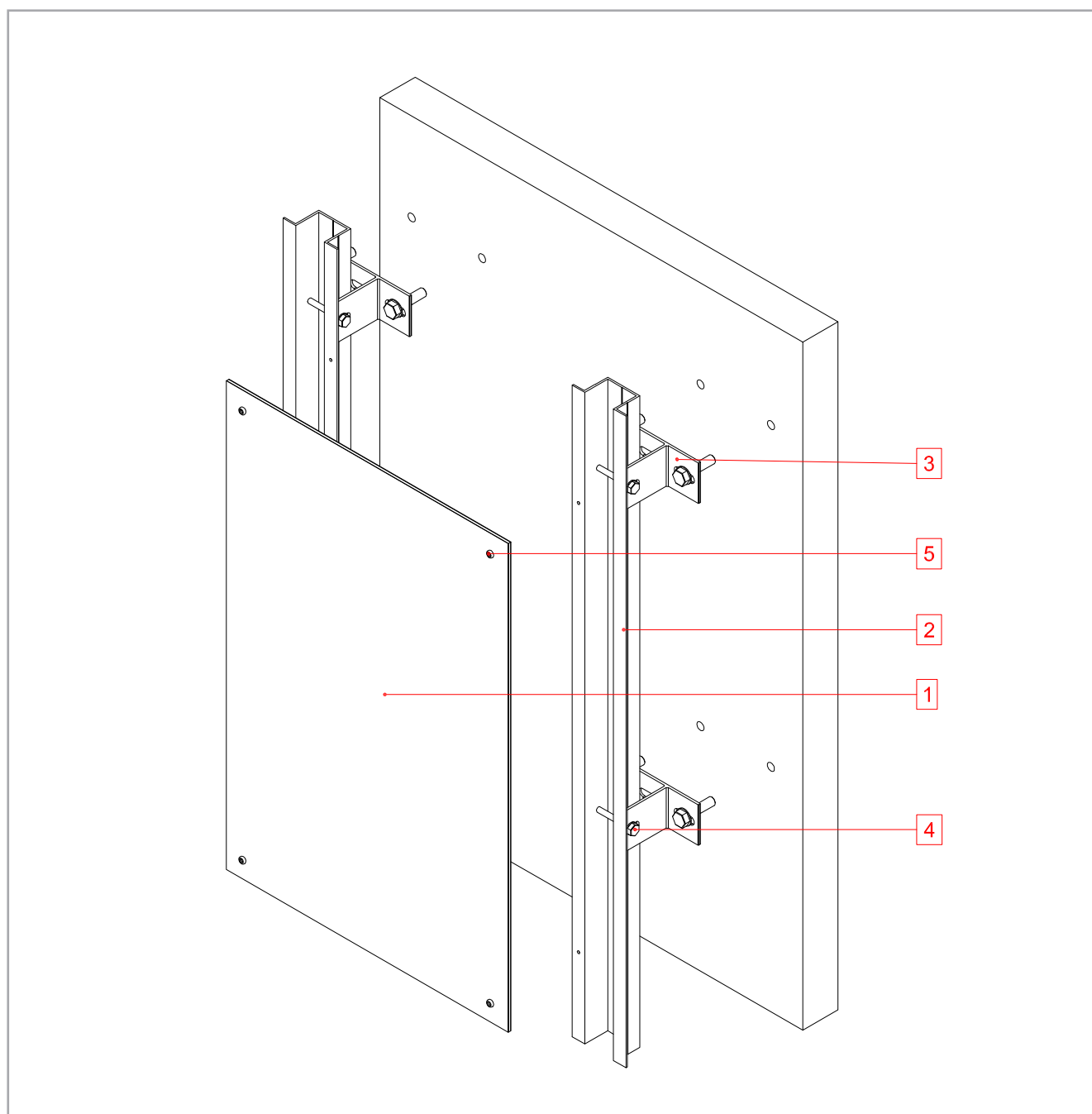


Measurements in mm

The larger diameter hole drilled in the **STACBOND®** composite panel allows dilation to be absorbed.

# STB-REM SYSTEM

## INSTALLATION DIAGRAM



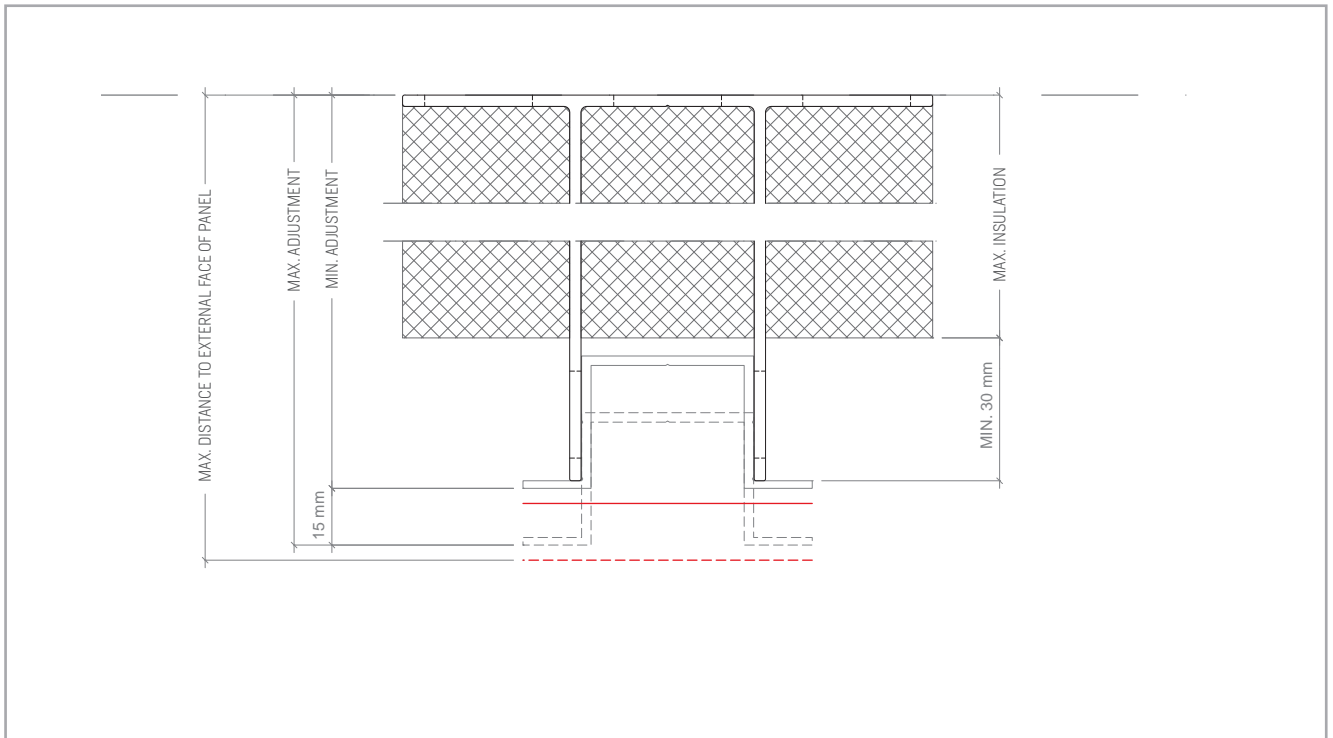
| N° | NAME |
|----|------|
|----|------|

- |   |                           |
|---|---------------------------|
| 1 | STACBOND® composite panel |
| 2 | Profile OMEGA             |
| 3 | Spacer DOUBLE T           |
| 4 | Through screw M 6 x 60/70 |
| 5 | Blind rivet               |



# STB-REM SYSTEM

## SPACER / THERMAL INSULATION RELATIONSHIP



| SPACER DOUBLE T * |                     | DISTANCE (mm) FROM BASE OF<br>FIXING TO VISIBLE FACE OF PANEL |     | RECOMMENDED INSULATION (mm)<br>WITH 30 mm AIR CAVITY |
|-------------------|---------------------|---|-----|--|
| REF.              | PART                | MIN.  | MAX |  |
| 05.19.004         | SPACER DOUBLE T 59  | 63  | 78  | 30   |
| 05.19.005         | SPACER DOUBLE T 74  | 78  | 93  | 50   |
| 05.19.006         | SPACER DOUBLE T 891 | 93  | 108 | 60   |
| 05.19.007         | SPACER DOUBLE T 104 | 108   | 123 | 80   |
| 05.19.030         | SPACER DOUBLE T 119 | 123   | 138 | 100  |
| 05.19.031         | SPACER DOUBLE T 134 | 138   | 153 | 110  |
| 05.19.032         | SPACER DOUBLE T 149 | 153   | 168 | 120  |
| 05.19.033         | SPACER DOUBLE T 164 | 168   | 183 | 140  |
| 05.19.034         | SPACER DOUBLE T 179 | 183   | 198 | 160  |
| 05.19.035         | SPACER DOUBLE T 194 | 198   | 213 | 170  |
| 05.19.036         | SPACER DOUBLE T 209 | 213   | 228 | 180  |
| 05.19.037         | SPACER DOUBLE T 224 | 228   | 243 | 200  |
| 05.19.038         | SPACER DOUBLE T 239 | 243   | 258 | 220  |
| 05.19.039         | SPACER DOUBLE T 254 | 258   | 273 | 230  |

| SPACER U * |             | DISTANCE (mm) FROM BASE OF<br>FIXING TO VISIBLE FACE OF PANEL |     | RECOMMENDED INSULATION (mm)<br>WITH 30 mm AIR CAVITY |
|------------|-------------|---|-----|--|
| REF.       | PART        | MIN.  | MAX |  |
| 05.19.046  | SPACER U 59 | 63  | 78  | 30   |
| 05.19.047  | SPACER U 74 | 78  | 93  | 50   |

# STB-REM SYSTEM

## ACCESORIES

### PROFILES

| REF.      | PART          | PAGE |
|-----------|---------------|------|
| 05.19.003 | PROFILE OMEGA | 106  |

### FASTENING ACCESSORIES

| REF.         | PART   | PAGE |
|--------------|--|------|
| STB-FIJA-201 | RIVETER NOSEPIECE (RIVETS SSO-D15)                             | 112  |
| STB-FIJA-202 | RIVETER NOSEPIECE (RIVETS AP)                                  |      |
| STB-FIJA-203 | DUAL DIA. DRILL BIT (HSS-7,0/5,1x74)                           |      |
| STB-FIJA-204 | DEPTH LOCATOR 16x18  |      |
| STB-FIJA-205 | CENTRING GAUGE (DG-146x20-7.0)                                 |      |
| STB-FIJA-206 | REPLACEMENT NOSE PIECE FOR CENTRING GAUGE ø 6.9 mm             | 113  |
| STB-FIJA-207 | SPECIAL BIT FOR THE CENTRING GAUGE (HS-5.1x62/26)              |      |
| STB-FIJA-208 | DRIVER BIT T20WW-25-HEX1/4"                                    |      |
| STB-FIJA-209 | MANUAL CENTRING GAUGE FOR SCREWS SLA3                          |      |
| STB-FIJA-210 | SOCKET IRIUS G-00106.07  |      |
| STB-T0100    | SECURITY SCREW 4.8x19 INOX HEAD TORX SLA3/6-S-D12-4.8x19       | 113  |
| STB-R0100    | BLIND RIVET ISO 15977 D5x12 CAB. 14 mm ALU/INOX AP14-S-5,.0x12 |      |
| STB-R0200    | FACADE RIVET HEAD 15 mm INOX/INOX A4 5x14 SSO-D15-50140        |      |

### AUXILIARY ELEMENTS

| REF.      | PART                    | PAGE |
|-----------|-------------------------|------|
| 05.19.020 | MULLION JOINING STB-REM | 110  |

### SPACERS

| REF.      | PART                | PAGE |
|-----------|---------------------|------|
| 05.19.004 | SPACER DOUBLE T 59  | 108  |
| 05.19.005 | SPACER DOUBLE T 74  |      |
| 05.19.006 | SPACER DOUBLE T 89  |      |
| 05.19.007 | SPACER DOUBLE T 104 |      |
| 05.19.030 | SPACER DOUBLE T 119 |      |
| 05.19.031 | SPACER DOUBLE T 134 |      |
| 05.19.032 | SPACER DOUBLE T 149 |      |
| 05.19.033 | SPACER DOUBLE T 164 |      |
| 05.19.034 | SPACER DOUBLE T 179 |      |
| 05.19.035 | SPACER DOUBLE T 194 |      |
| 05.19.036 | SPACER DOUBLE T 209 | 109  |
| 05.19.037 | SPACER DOUBLE T 224 |      |
| 05.19.038 | SPACER DOUBLE T 239 |      |
| 05.19.039 | SPACER DOUBLE T 254 |      |
| 05.19.030 | SPACER U 46         |      |
| 05.19.031 | SPACER U 47         |      |

### INSULATING WEDGES

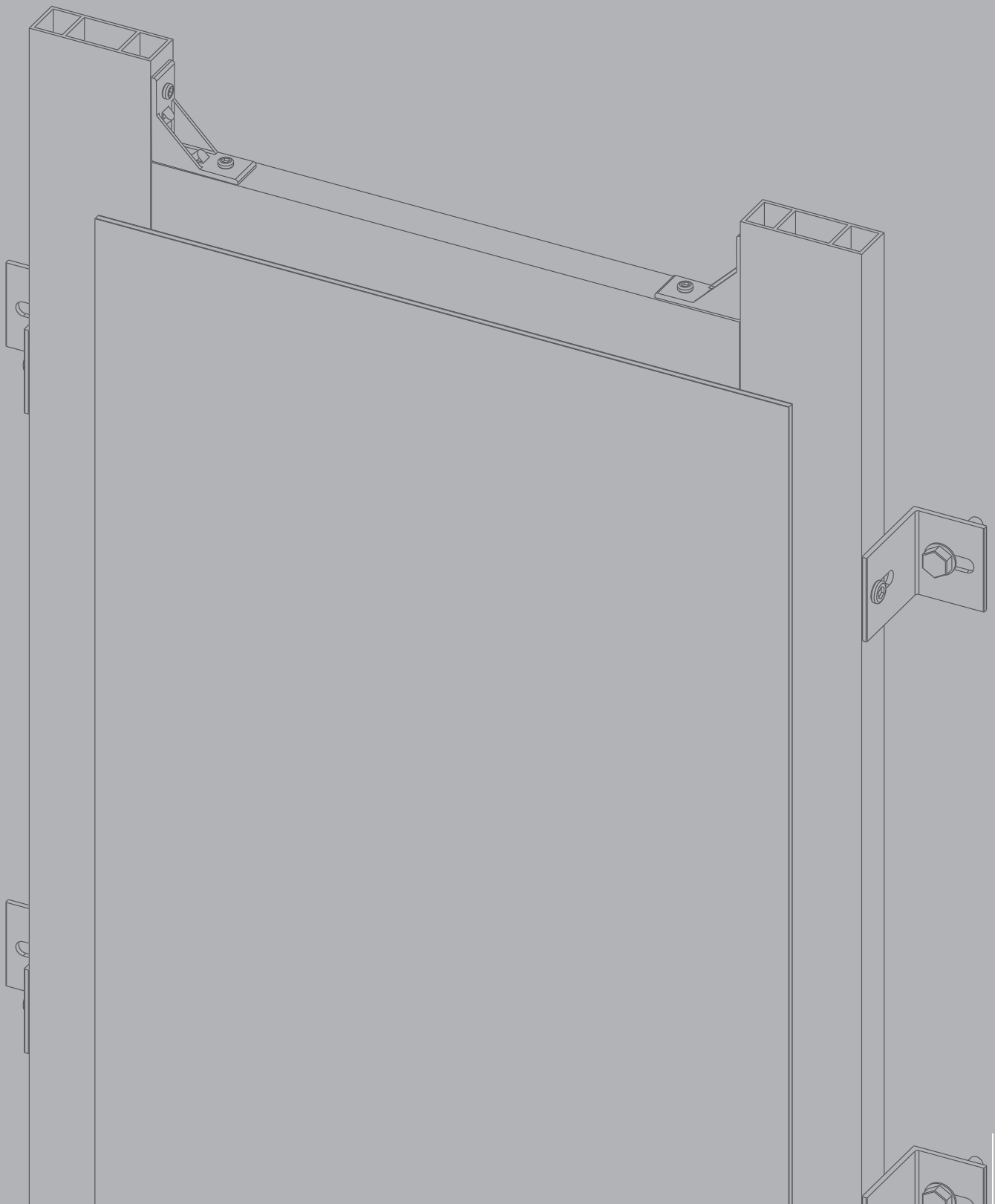
| REF.      | PART  | PAGE |
|-----------|---|------|
| 05.19.071 | <b>3 x</b> GROOVE WASHER FOR INSULATING WEDGES WITH REF.: 05.19.067 / 05.19.069 / 05.19.073   | 114  |
| 05.19.005 | INSULATING WEDGE FOR SPACERS <b>U *</b> WITH REF.: 05.19.046 / 05.19.047  |      |
| 05.19.069 | INSULATING WEDGE FOR SPACERS <b>DOUBLE T *</b> WITH REF.: 05.19.030 / 05.19.031 / 05.19.032 / 05.19.033 / 05.19.034 / 05.19.035 / 05.19.036 / 05.19.037 / 05.19.038 / 05.19.039 |      |
| 05.19.073 | INSULATING WEDGE FOR SPACERS <b>DOUBLE T *</b> WITH REF.: 05.19.004 / 05.19.005 / 05.19.006 / 05.19.007   |      |

## INFORMATION AND SALES

☎ (+34) 981 817 036  
 📄 (+34) 981 817 037  
 ✉ stacbond@stac.es  
 🌐 www.stac.es

# STB-PEG

## GLUED SYSTEM



## STB-PEG SYSTEM

### DESCRIPTION

---



**STB-PEG** is a kit system based on flat panels made from **STACBOND®** composite panels for installing ventilated facades. It is a system with hidden fixings which is quick and economic to install and which allows both horizontal and vertical assembly.

As this is a glued system with chemical anchoring, it is resistant to aging and weathering; it absorbs vibration and allows numerous possibilities in facade design.

The substructure is made from lengths of **MULLIONS STB-PEG** (70 x 24.5 mm) and 6063 T5 aluminium alloy **spacers ANGULAR**.

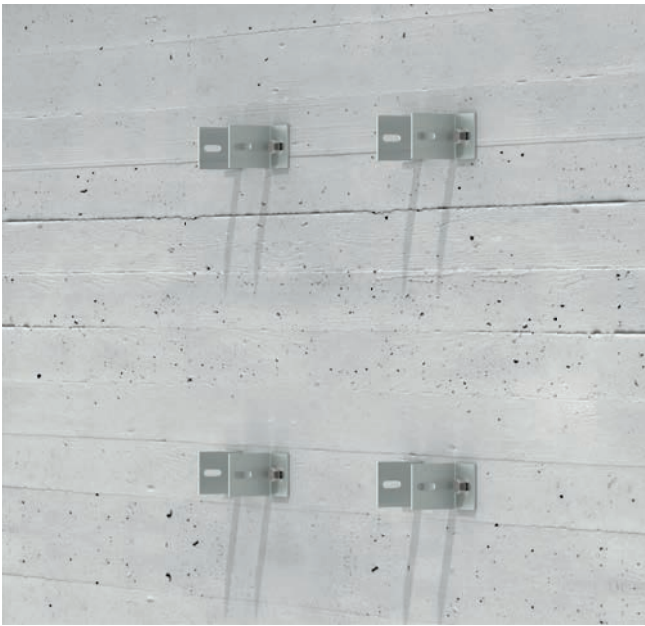
These spacers are placed opposite each other to bidimensionally absorb any irregularities in the facade.

The spacers are anchored to the wall using special mechanical fixings, recommended in each case by the fixings suppliers, and receive the **MULLIONS STB-PEG** as uprights.

The **STB-PEG** system can be mounted on a unidirectional or bidirectional substructure. With a unidirectional substructure, the horizontal joint remains open. In the case of the bidirectional substructure, horizontal struts are attached to the uprights using **MULLION JOININGS STB-PEG** made of ZAMAK 5, or to the vertical face using spacers **ANGULAR**.

The **STACBOND®** composite panels are attached to the substructure using a specific adhesive and double-sided adhesive tape, in accordance with the manufacturer's instructions.

**STAC®** has developed a program for the specific calculations of the substructure for each project executed, defining the maximum distances between uprights.



SPACERS ANGULAR



MULLIONS STB-PEG

**1. Spacers angular.** The spacers angular join the uprights to the vertical face or supporting wall. They are either retaining or supporting. These are placed opposite each other and fixed to the vertical face using special mechanical anchors.

**2. Placement of uprights.** The mullions STB-PEG are screwed between the spacers angular. They must be perfectly plumb with the adjustment that the system allows. The first and last fixings must be placed at a maximum of 250 mm from the ends of the mullion.



HORIZONTAL MULLIONS



GLUING THE STACBOND COMPOSITE PANEL

**3. Horizontal cross-struts (optional).** These profiles are mechanically fixed to the vertical substructure using **mullion joinings STB-PEG**. The possibility of creating a bidirectional substructure allows the system to adapt to the requirements of the facade.

**4. Attaching STACBOND® composite panel.** Once the substructure is in place, the **STACBOND®** panels are attached to it using double-sided adhesive tape and adhesive, following the manufacturer's instructions.

# STB-PEG SYSTEM

## AUXILIARY ELEMENTS

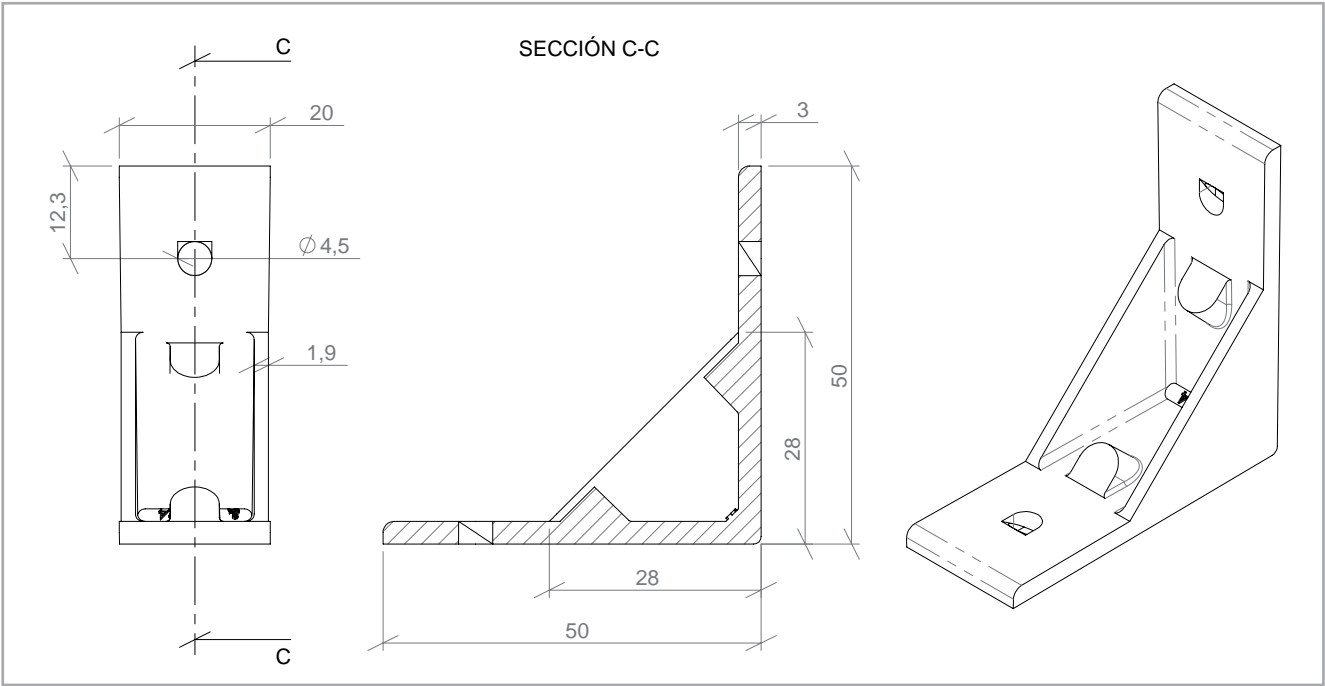
### MULLION JOINING STB-PEG

The mullion joints STB-PEG are made of moulded ZAMAK 5 and allow the construction of bidirectional substructures via mechanical fixing between mullions STB-PEG uprights.

Fixing of these mullion joints is done using  $\varnothing 4.8$  mm blind rivets or  $\varnothing 4.8$  mm self-tapping screws. These coupling parts are compatible with possible dilation of the substructure.



| REFERENCE | DESCRIPTION             | UNITS/BOX |
|-----------|-------------------------|-----------|
| 05.19.024 | MULLION JOINING STB-PEG | 100       |



Measurements in mm





**1. Cleaning the substructure.** The substructure must be clean, dry, homogenous, and free of oil, grease, dust and loose particles. Any paint, grout or other substances must be removed.

**Precautions:**

- Clean the surface with a damp paper towel, moving in one single direction, as if sanding. Solvents must never be used.
- For cleaning and degreasing, SIK-AVIATOR-205 or similar is used. It should be left to evaporate for 10 minutes minimum.

**2. Priming the area.** Priming should be done with a product which strengthens the adherence of the adhesive to the substructure – SIKATACK PANEL PRIMER or similar.

**Precautions:**

- Once hardened, the primers can only be removed via mechanical means.
- The primer leaves a heterogeneous film. Only those surfaces which are to be glued should be treated.
- The evaporation times of the cleaning products must be adhered to (30 – 60 mins).

**3. Applying the double-sided adhesive tape.** The double-sided adhesive tape – SIKATACK PANEL-3 or similar – is used to initially attach the panels until the main adhesive polymerizes and also ensures the minimum adhesive thickness of 3 mm. This absorbs and possible vibration or dilation produced in the **STACBOND®** composite panel facade. The long-term strength is only achieved with the adhesive.

**4. Elastic adhesive.** Apply a continuous vertical bead of elastic adhesive – SIKATACK PANEL or similar – using a triangular nozzle (8 mm wide x 10 mm long), at least 5 mm away from the adhesive tape. To ensure correct application, the gun should be positioned perpendicular to the support.

**Precautions:**

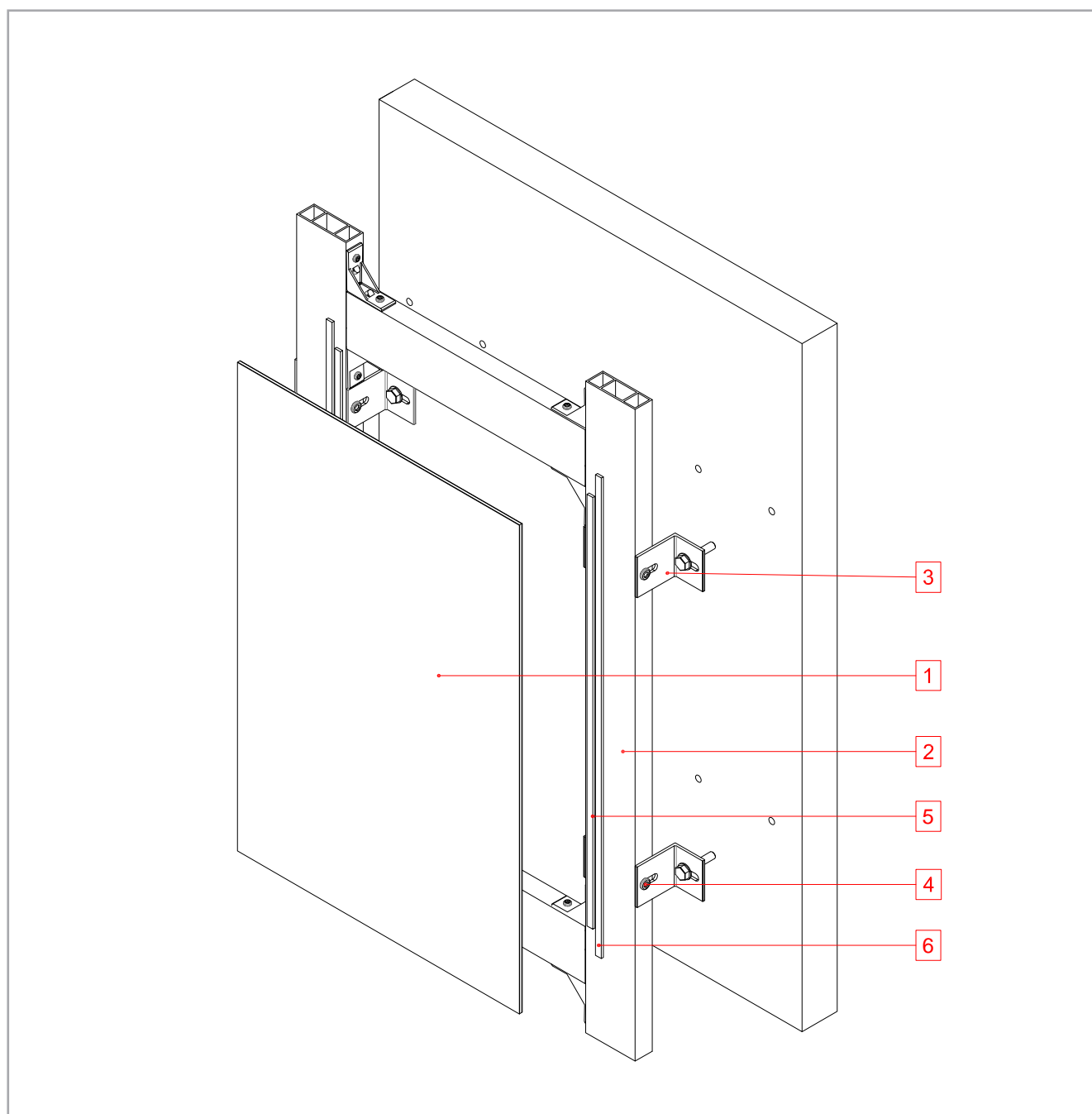
- The application of adhesive bead on the cross-struts of the substructure does not offer any structural function.

**5. Placing the panel.** Remove the protective film from the double-sided adhesive tape. Carefully place the panel in position precisely and press firmly until the panel contacts the double-sided adhesive tape.

Always follow the panel manufacturer's instructions for their storage. Avoid exposure to heat and direct sunlight prior to gluing the panels.

## STB-PEG SYSTEM

### INSTALLATION DIAGRAM



| Nº | NAME |
|----|------|
|----|------|

- |   |                            |
|---|----------------------------|
| 1 | STACBOND® composite panel  |
| 2 | Mullion STB-PEG            |
| 3 | Spacer angular             |
| 4 | Self-tapping screw         |
| 5 | Specific adhesive          |
| 6 | Double-sided adhesive tape |



### PROFILES

| REF.   | PART            | PAGE |
|--------|-----------------|------|
| 19.022 | MULLION STB-PEG | 106  |

### AUXILIARY ELEMENTS


| REF.      | PART                    | PAGE |
|-----------|-------------------------|------|
| 05.19.024 | MULLION JOINING STB-PEG | 110  |


### SPACERS

| REF.   | PART           | PAGE |
|--------|----------------|------|
| 19.021 | SPACER ANGULAR | 109  |

## INFORMATION AND SALES

---

 (+34) 981 817 036

 (+34) 981 817 037

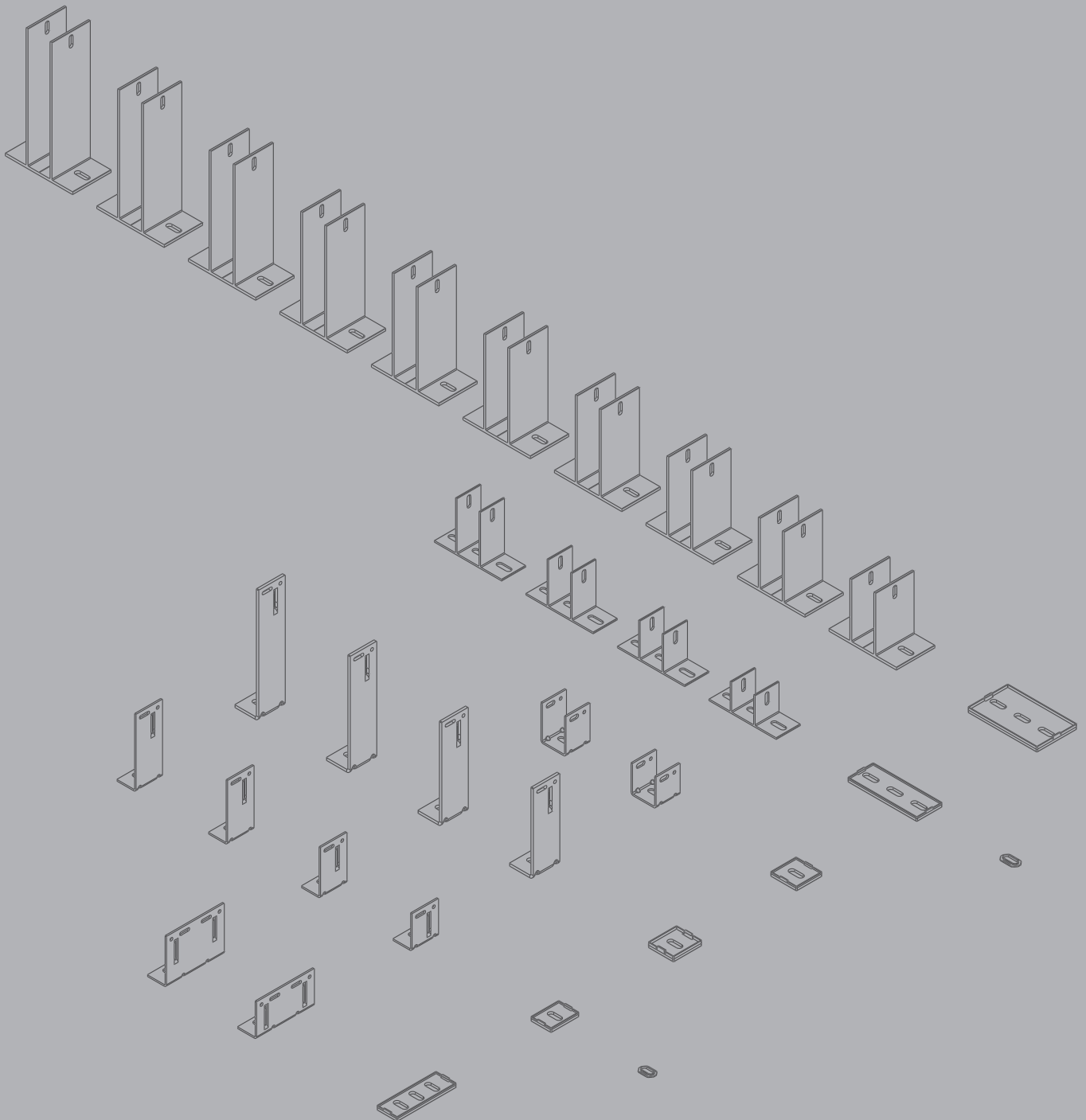
 stacbond@stac.es

 [www.stac.es](http://www.stac.es)

---

# ACCESSORIES

## FOR ASSEMBLY SYSTEMS



# STACBOND® ACCESSORIES

## PROFILES



| REFERENCE | PART          | ALLOY   | UNITS/BOX |
|-----------|---------------|---------|-----------|
| 05.19.003 | PROFILE OMEGA | 6063 T5 | 12        |



| REFERENCE | PART                     | ALLOY   | UNITS/BOX |
|-----------|--------------------------|---------|-----------|
| 05.19.040 | PROFILE OMEGA F (2,5 mm) | 6063 T5 | 12        |



| REFERENCE | PART      | ALLOY   | UNITS/BOX |
|-----------|-----------|---------|-----------|
| 05.19.043 | PROFILE T | 6063 T5 | 12        |



| REFERENCE | PART            | ALLOY   | UNITS/BOX |
|-----------|-----------------|---------|-----------|
| 05.19.061 | PROFILE T OMEGA | 6063 T5 | 12        |



| REFERENCE | PART            | ALLOY   | UNITS/BOX |
|-----------|-----------------|---------|-----------|
| 19.022    | MULLION STB-PEG | 6063 T5 | -         |



| REFERENCE | PART                         | ALLOY   | UNITS/BOX |
|-----------|------------------------------|---------|-----------|
| 04.99.231 | PROFILE REINFORCEMENT STB-SZ | 6063 T5 | -         |



| REFERENCE | PART                           | ALLOY   | UNITS/BOX |
|-----------|--------------------------------|---------|-----------|
| 01.34.550 | PROFILE REINFORCEMENT STB-T-SZ | 6063 T5 | -         |



| REFERENCE | PART      | ALLOY   | UNITS/BOX |
|-----------|-----------|---------|-----------|
| 05.19.001 | PROFILE S | 6063 T5 | 24        |



| REFERENCE | PART      | ALLOY   | UNITS/BOX |
|-----------|-----------|---------|-----------|
| 05.19.002 | PROFILE Z | 6063 T5 | 18        |



| REFERENCE | PART         | ALLOY   | UNITS/BOX |
|-----------|--------------|---------|-----------|
| 05.19.074 | PROFILE Z 20 | 6063 T5 | -         |



| REFERENCE | PART         | ALLOY   | UNITS/BOX |
|-----------|--------------|---------|-----------|
| 05.19.063 | PROFILE Z 24 | 6063 T5 | -         |

**Nota:** the profiles are supplied with a length of 6500 mm. For other formats, please contact STAC®.

# STACBOND® ACCESSORIES

## SPACERS



| REFERENCE | PART                | ALLOY   | UNITS/BOX |
|-----------|---------------------|---------|-----------|
| 05.19.004 | SPACER DOUBLE T 59  | 6063 T5 | 96        |
| 05.19.005 | SPACER DOUBLE T 74  | 6063 T5 | 80        |
| 05.19.006 | SPACER DOUBLE T 89  | 6063 T5 | 80        |
| 05.19.007 | SPACER DOUBLE T 104 | 6063 T5 | 72        |



| REFERENCE | PART                | ALLOY   | UNITS/BOX |
|-----------|---------------------|---------|-----------|
| 05.19.030 | SPACER DOUBLE T 119 | 6005 T6 | 50        |
| 05.19.031 | SPACER DOUBLE T 134 | 6005 T6 | 24        |
| 05.19.032 | SPACER DOUBLE T 149 | 6005 T6 | 40        |
| 05.19.033 | SPACER DOUBLE T 164 | 6005 T6 | 40        |
| 05.19.034 | SPACER DOUBLE T 179 | 6005 T6 | 36        |
| 05.19.035 | SPACER DOUBLE T 194 | 6005 T6 | 24        |
| 05.19.036 | SPACER DOUBLE T 209 | 6005 T6 | 24        |
| 05.19.037 | SPACER DOUBLE T 224 | 6005 T6 | 30        |
| 05.19.038 | SPACER DOUBLE T 239 | 6005 T6 | 25        |
| 05.19.039 | SPACER DOUBLE T 254 | 6005 T6 | 24        |



| REFERENCE  | PART                  | ALLOY   | UNITS/BOX |
|------------|-----------------------|---------|-----------|
| 05.19.004F | SPACER DOUBLE T 59 F  | 6063 T5 | -         |
| 05.19.005F | SPACER DOUBLE T 74 F  | 6063 T5 | -         |
| 05.19.006F | SPACER DOUBLE T 89 F  | 6063 T5 | -         |
| 05.19.007F | SPACER DOUBLE T 104 F | 6063 T5 | -         |



| REFERENCE  | PART                  | ALLOY   | UNITS/BOX |
|------------|-----------------------|---------|-----------|
| 05.19.030F | SPACER DOUBLE T 119 F | 6005 T6 | -         |
| 05.19.031F | SPACER DOUBLE T 134 F | 6005 T6 | -         |
| 05.19.032F | SPACER DOUBLE T 149 F | 6005 T6 | -         |
| 05.19.033F | SPACER DOUBLE T 164 F | 6005 T6 | -         |
| 05.19.034F | SPACER DOUBLE T 179 F | 6005 T6 | -         |
| 05.19.035F | SPACER DOUBLE T 194 F | 6005 T6 | -         |
| 05.19.036F | SPACER DOUBLE T 209 F | 6005 T6 | -         |
| 05.19.037F | SPACER DOUBLE T 224 F | 6005 T6 | -         |
| 05.19.038F | SPACER DOUBLE T 239 F | 6005 T6 | -         |
| 05.19.039F | SPACER DOUBLE T 254 F | 6005 T6 | -         |



| REFERENCE | PART           | ALLOY   | UNITS/BOX |
|-----------|----------------|---------|-----------|
| 19.021    | SPACER ANGULAR | 6063 T5 | 100       |



| REFERENCE | PART        | ALLOY    | UNITS/BOX |
|-----------|-------------|----------|-----------|
| 05.19.046 | SPACER U 59 | 5005 H24 | 125       |
| 05.19.047 | SPACER U 74 | 5005 H24 | 100       |



| REFERENCE | PART                 | ALLOY    | UNITS/BOX |
|-----------|----------------------|----------|-----------|
| 05.19.042 | SPACER L 68 ST-2-120 | 5005 H24 | 250       |
| 05.19.045 | SPACER L 92 ST-2-120 | 5005 H24 | 180       |



| REFERENCE | PART                 | ALLOY    | UNITS/BOX |
|-----------|----------------------|----------|-----------|
| 05.19.041 | SPACER L 68 ST-1-55  | 5005 H24 | 500       |
| 05.19.044 | SPACER L 92 ST-1-55  | 5005 H24 | 200       |
| 05.19.051 | SPACER L 116 ST-1-55 | 5005 H24 | 180       |
| 05.19.052 | SPACER L 140 ST-1-55 | 5005 H24 | 276       |
| 05.19.053 | SPACER L 164 ST-1-55 | 5005 H24 | 130       |
| 05.19.054 | SPACER L 188 ST-1-55 | 5005 H24 | 135       |
| 05.19.055 | SPACER L 212 ST-1-55 | 5005 H24 | 120       |
| 05.19.056 | SPACER L 236 ST-1-55 | 5005 H24 | 100       |

## STACBOND® ACCESSORIES

### AUXILIARY ELEMENTS



| REFERENCE | PART                 | ALLOY   | UNITS/BOX |
|-----------|----------------------|---------|-----------|
| 05.99.231 | REINFORCEMENT STB-SZ | 6063 T5 | 174       |



| REFERENCE | PART                   | ALLOY   | UNITS/BOX |
|-----------|------------------------|---------|-----------|
| 05.19.049 | REINFORCEMENT STB-T-SZ | 6063 T5 | 180       |



| REFERENCE | PART                    | ALLOY    | UNITS/BOX |
|-----------|-------------------------|----------|-----------|
| 05.19.020 | MULLION JOINING STB-REM | 5005 H24 | 150       |



| REFERENCE | PART                    | ALLOY   | UNITS/BOX |
|-----------|-------------------------|---------|-----------|
| 05.19.024 | MULLION JOINING STB-PEG | ZAMAK 5 | 100       |



| REFERENCE | PART           | ALLOY   | UNITS/BOX |
|-----------|----------------|---------|-----------|
| 19.021    | SPACER ANGULAR | 6063 T5 | 100       |



| REFERENCE | PART                          | ALLOY | UNITS/BOX |
|-----------|-------------------------------|-------|-----------|
| STB-JEPDM | EPDM GASKET PROFILE SZ (m.l.) | -     | -         |





| REFERENCE | PART                       | ALLOY   | UNITS/BOX |
|-----------|----------------------------|---------|-----------|
| 05.19.013 | BRACKET SET STB-CH HANGING | 6063 T5 | 200       |



| REFERENCE | PART                         | ALLOY   | UNITS/BOX |
|-----------|------------------------------|---------|-----------|
| 05.19.062 | BRACKET SET STB-T-CH HANGING | 6063 T5 | 200       |



| REFERENCE | PART                  | ALLOY    | UNITS/BOX |
|-----------|-----------------------|----------|-----------|
| 19.019    | HANGING REINFORCEMENT | 1050 H24 | 500       |



| REFERENCE | PART                    | ALLOY    | UNITS/BOX |
|-----------|-------------------------|----------|-----------|
| 05.19.050 | CASSETTES FORMING PLATE | 1050 H24 | 3000      |



| REFERENCE   | PART                             | ALLOY | UNITS/BOX |
|-------------|----------------------------------|-------|-----------|
| 05.19.025   | STIFFENER SCH-1 (< 750 mm)       | -     | -         |
| 05.19.026   | STIFFENER SCH-2 (750 - 1500 mm)  | -     | -         |
| 05.19.027   | STIFFENER SCH-3 (> 1500 mm)      | -     | -         |
| 05.19.027.1 | STIFFENER SCH-4 (2400 - 4000 mm) | -     | -         |
| 05.19.027.2 | STIFFENER SCH-5 (4000 - 5000 mm) | -     | -         |
| 05.19.027.3 | STIFFENER SCH-6 (> 5000 mm)      | -     | -         |

## STACBOND® ACCESSORIES

### FASTENING ACCESSORIES



| REFERENCE    | PART                                | OBSERVATIONS                                      | MIN. UNITS |
|--------------|-------------------------------------|---|------------|
| STB-FIJA-201 | RIVETER NOZZLES<br>(RIVETS SSO-D15) | Limits cinch strength for mobile anchoring points | 1          |
| STB-FIJA-202 | RIVETER NOZZLES<br>(RIVETS AP)      | Limits cinch strength for mobile anchoring points | 1          |



| REFERENCE    | PART                                    | OBSERVATIONS  | MIN./UNITS |
|--------------|---|---|------------|
| STB-FIJA-203 | DUAL DIA. DRILL BIT<br>(HSS-7,0/5,1x74) | Drills panel to 7 mm and the substructure to 5.1 mm | 1          |



| REFERENCE    | PART                                 | OBSERVATIONS   | MIN. UNITS |
|--------------|--------------------------------------|--|------------|
| STB-FIJA-204 | DEPTH LIMIT<br>(DEPTH LOCATOR 16x18) | Works with the dual diameter bit to stop the 7 mm shank drilling into the substructure | 1          |



| REFERENCE    | PART   | OBSERVATIONS   | MIN. UNITS |
|--------------|--|--|------------|
| STB-FIJA-205 | CENTRING GAUGE (DG-146x20-7.0)                             | To make the 5.1 mm hole in the substructure through the 7 mm hole in the panel | 1          |
| STB-FIJA-206 | REPLACEMENT NOSE PIECE FOR<br>CENTRING GAUGE ø 6.9 mm      | Replacement nose piece in the event of damage.                                 | 1          |
| STB-FIJA-207 | SPECIAL DRILL BIT FOR THE<br>CENTRING GAUGE (HS-5.1x62/26) | Special drill bit for the gauge with shorter helical shaft.                    | 1          |



| REFERENCE    | PART                        | MIN. UNITS | UNITS/BOX |
|--------------|-----------------------------|------------|-----------|
| STB-FIJA-208 | DRIVER BIT T20WW-25-HEX1/4" | 1          | 1         |



| REFERENCE    | PART                                  | MIN. UNITS | UNITS/BOX |
|--------------|---------------------------------------|------------|-----------|
| STB-FIJA-209 | MANUAL CENTRING GAUGE FOR SCREWS SLA3 | 1          | 1         |



| REFERENCE    | PART                    | MIN. UNITS. | UNITS/BOX |
|--------------|-------------------------|-------------|-----------|
| STB-FIJA-210 | SOCKET IRIUS G-00106.07 | 1           | 1         |



| REFERENCE | PART                                    | FINISH              | MIN. UNITS | UNITS/BOX |
|-----------|---|---------------------|------------|-----------|
| STB-T0100 | SECURITY SCREW 4.8x19<br>INOX HEAD TORX | UNPAINTED           | 100        | 100       |
|           | SLA3/6-S-D12-4.8x19                     | PAINTED - RAL CHART | 250        | 100       |



| REFERENCE | PART                                      | FINISH              | MIN. UNITS | UNITS/BOX |
|-----------|---|---------------------|------------|-----------|
| STB-R0100 | BLIND RIVET ISO 15977<br>D5x12 CAB. 14 mm | UNPAINTED           | 100        | 100       |
|           | ALU/INOX AP14-S-5,.0x12                   | PAINTED - RAL CHART | 250        | 100       |

APPLICATION: To attach **STACBOND®** panels to STB-REM / STB-T-REM substructures.



| REFERENCE | PART   | FINISH              | MIN. UNITS | UNITS/BOX |
|-----------|--|---------------------|------------|-----------|
| STB-R0200 | FACADE RIVET HEAD 15 mm<br>INOX/INOX A4 5x14 | UNPAINTED           | 100        | 100       |
|           | SSO-D15-50140                                | PAINTED - RAL CHART | 250        | 100       |

APPLICATION: To attach **STACBOND®** panels to STB-REM / STB-T-REM substructures for environments with high chloride exposure.



| REFERENCE | PART                                    | FINISH              | MIN. UNITS | UNITS/BOX |
|-----------|---|---------------------|------------|-----------|
| STB-R0300 | BLIND RIVET POLYGRIP<br>SFS ASO-D-48150 | UNPAINTED           | 100        | 100       |
|           | ALU/INOX 4.8X15                         | PAINTED - RAL CHART | 250        | 100       |

APPLICATION: To form CH and SZ cassettes from **STACBOND®** composite panels

# STACBOND® ACCESSORIES

## INSULATING WEDGES FOR SPACERS OMEGA / U



| REFERENCE | PART   | UNITS/BOX |
|-----------|--|-----------|
| 05.19.071 | <b>3 x GROOVE WASHER</b> FOR INSULATING WEDGES WITH REF.:<br>05.19.067 / 05.19.069 / 05.19.073 | 2500      |



| REFERENCE | PART   | UNITS/BOX |
|-----------|--|-----------|
| 05.19.067 | INSULATING WEDGE FOR SPACERS <b>U*</b> WITH REF.:<br>05.19.046 / 05.19.047 | 700       |



| REFERENCE | PART   | UNITS/BOX |
|-----------|--|-----------|
| 05.19.069 | INSULATING WEDGE FOR SPACERS <b>DOUBLE T*</b> WITH REF.:<br>05.19.030 / 05.19.031 / 05.19.032 / 05.19.033 / 05.19.034 /<br>05.19.035 / 05.19.036 / 05.19.037 / 05.19.038 / 05.19.039 | 400       |



| REFERENCE | PART  | UNITS/BOX |
|-----------|---|-----------|
| 05.19.073 | INSULATING WEDGE FOR SPACERS <b>DOUBLE T*</b> WITH REF.:<br>05.19.004 / 05.19.005 / 05.19.006 / 05.19.007 | 400       |



# STACBOND® ACCESSORIES

## INSULATING WEDGES FOR SPACERS L



| REFERENCE | PART  | UNITS/BOX |
|-----------|---|-----------|
| 05.19.070 | 3 x GROOVE WASHER FOR INSULATING WEDGES WITH REF.:<br>05.19.066 / 05.19.068 / 05.19.072 | 2500      |



| REFERENCE | PART  | UNITS/BOX |
|-----------|---|-----------|
| 05.19.066 | INSULATING WEDGE FOR SPACERS L * ST-2-120 WITH REF.:<br>05.19.042 / 05.19.045 | 400       |



| REFERENCE | PART   | UNITS/BOX |
|-----------|--|-----------|
| 05.19.068 | INSULATING WEDGE FOR SPACERS L * ST-1-55 WITH REF.:<br>05.19.053 / 05.19.054 / 05.19.055 / 05.19.056 | 700       |




| REFERENCE | PART   | UNITS/BOX |
|-----------|--|-----------|
| 05.19.072 | INSULATING WEDGE FOR SPACERS L * ST-1-55 WITH REF.:<br>05.19.041 / 05.19.044 / 05.19.051 / 05.19.052 | 800       |



## INFORMATION AND SALES

---

 (+34) 981 817 036

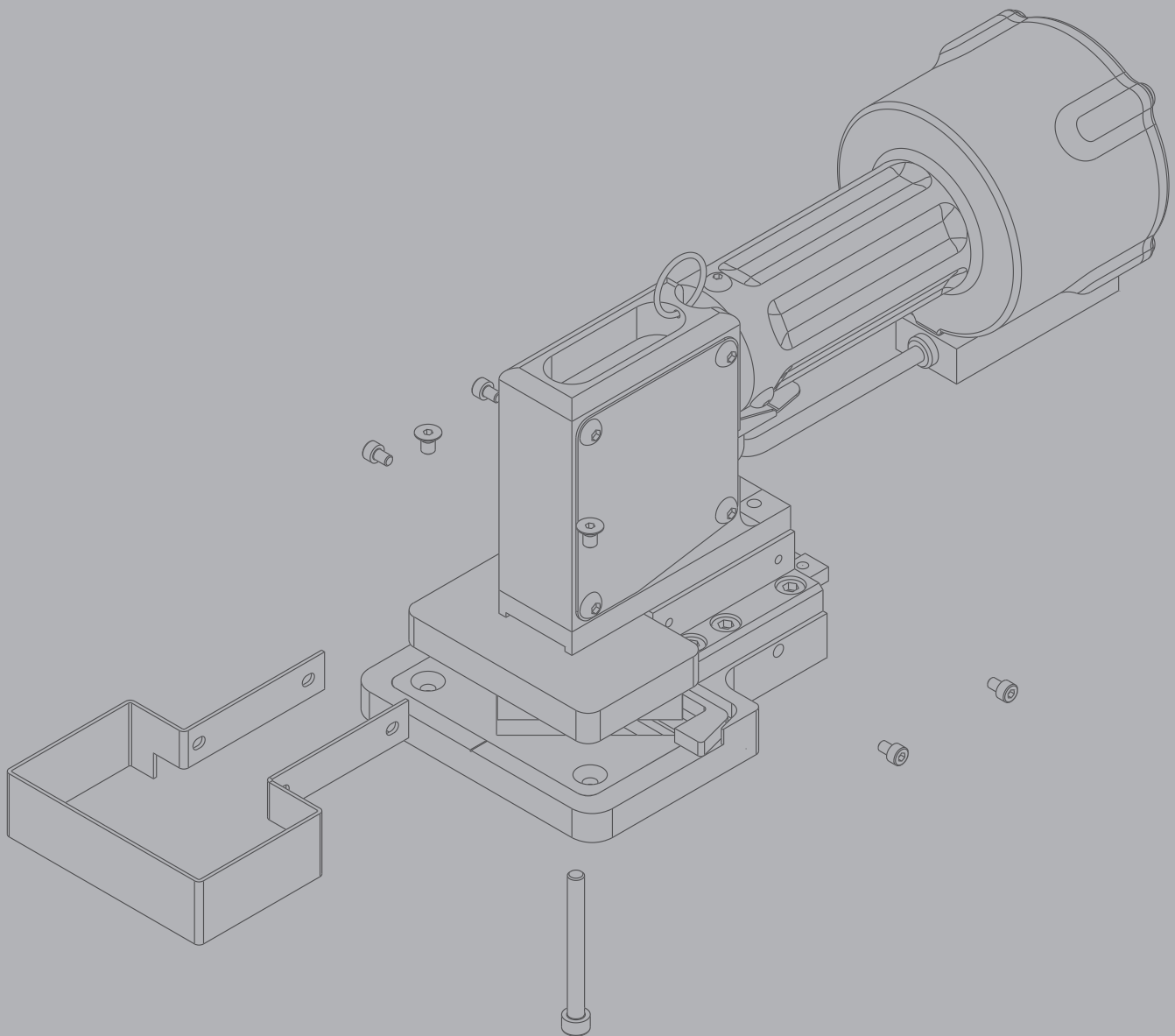
 (+34) 981 817 037

 stacbond@stac.es

 [www.stac.es](http://www.stac.es)

---

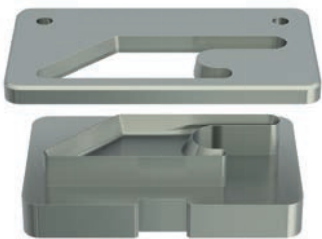
# PROCESSING TOOLS



STACBOND® PROCESSING TOOLS
MANUAL DIE-CUTTING MACHINE



HANGING BOOT TOOLING DETAIL



V TOOLING DETAIL



STACBOND® DIE-CUTTING MACHINE MANUAL

Easy-to-use and very versatile hand tool for use in the workshop as well as for mobile use in the assembly of facades, trade fairs, etc.

This machine is the ideal complement to work together with a manual milling machine or a wall saw.

Its interchangeable tools, specifically developed for the CH and SZ cassette formats of the **STACBOND®** assembly systems, enable the hanging boots and corners to be die-cut for correct shaping.

| REFERENCE   | DESCRIPTION  | OBSERVATIONS   | MIN. UNITS |
|-------------|--|--|------------|
| STB-MC-0010 | STACBOND® MANUAL DIE-CUTTING MACHINE WITH HANGING BOOT DIE-CUTTING TOOLING                   | Pre-assembled hanging boot tool allows adjustment for 40 and 45 mm flaps.        | 1          |
| STB-MC-0011 | STACBOND® MANUAL DIE-CUTTING MACHINE WITH V DIE-CUTTING TOOLING                              | The pre-assembled V-shaped tooling is used to make the cassette forming corners. | 1          |
| STB-MC-0013 | STACBOND® MANUAL DIE-CUTTING MACHINE WITH HANGING BOOT DIE-CUTTING AND V DIE-CUTTING TOOLING | Available interchangeable tools (follow the instructions for use).               | 1          |







| REFERENCE       | PART  | OBSERVATIONS  | MIN. UNITS |
|-----------------|---|---|------------|
| STB-FMD4X80X3.8 | HM HSS MILLING CUTTER<br>Ø4x80,5x3,8 Z=2 Ø12 BODY<br>4 mm PANEL CUTTING | Ø 4 mm hard metal milling<br>cutter for panel cutting with<br>4 mm thickness (marking)  | 1          |
| STB-FMD5X80X2.8 | HM HSS MILLING CUTTER<br>Ø5x80x2,8 Z=2 Ø12 BODY 3 mm<br>PANEL CUTTING   | Ø 5 mm hard metal milling<br>cutter for panel cutting with<br>3 mm thickness (dilation) | 1          |
| STB-FMD5X80X3.8 | HM HSS MILLING CUTTER<br>Ø5x80x3,8 Z=2 Ø12 BODY 4 mm<br>PANEL CUTTING   | Ø 5 mm hard metal milling<br>cutter for panel cutting with<br>4mm thickness (dilation)  | 1          |
| STB-FMD6X80X2.8 | HM HSS MILLING CUTTER<br>Ø6x80x2,8 Z=2 Ø12 BODY 3 mm<br>PANEL CUTTING   | Ø 6 mm hard metal milling<br>cutter for panel cutting with<br>3 mm thickness (dilation) | 1          |
| STB-FMD6X80X3.8 | HM HSS MILLING CUTTER<br>Ø6x80x3,8 Z=2 Ø12 BODY 4 mm<br>PANEL CUTTING   | Ø 6 mm hard metal milling<br>cutter for panel cutting with<br>4 mm thickness (dilation) | 1          |
| STB-FMD6X80X3.8 | HM HSS MILLING CUTTER<br>Ø6x80x3,8 Z=2 Ø12 BODY 4 mm<br>PANEL CUTTING   | Ø 6 mm hard metal milling<br>cutter for panel cutting with<br>6 mm thickness (dilation) | 1          |



| REFERENCE      | PART  | OBSERVATIONS   | MIN. UNITS |
|----------------|---|--|------------|
| STB-FD6X80X2.8 | DIAMOND HSS MILLING CUTTER<br>COHERSA SPECIAL H4 PCD<br>Ø6x80x2,8 Z=2 Ø12 HM BODY | Ø 6 mm diamond milling cutter for<br>panel cutting with 3 mm thickness | 1          |
| STB-FD6X80X3.8 | DIAMOND HSS MILLING CUTTER<br>COHERSA SPECIAL H4 PCD<br>Ø6x80x3,8 Z=2 Ø12 HM BODY | Ø 6 mm diamond milling cutter for<br>panel cutting with 4 mm thickness | 1          |
| STB-FD6X80X5.8 | DIAMOND HSS MILLING CUTTER<br>COHERSA SPECIAL H4 PCD<br>Ø6x80x5,8 Z=2 Ø12 HM BODY | Ø 6 mm diamond milling cutter for<br>panel cutting with 6 mm thickness | 1          |



| REFERENCE      | PART   | OBSERVATIONS   | MIN. UNITS |
|----------------|--|--|------------|
| STB-FRESAD6PCD | DIAMOND HSS MILLING CUTTER<br>SECO PCD Ø6x75x3,8 Ø12 HM BODY | Ø 6 mm diamond milling cutter for<br>panel cutting with 4 mm thickness<br>with A2 core | 1          |



| REFERENCE   | PART   | OBSERVATIONS                                 | MIN. UNITS |
|-------------|--|--|------------|
| STB-FMD-C45 | HM HSS MILLING CUTTER Ø3x81<br>90° SPECIAL REF. 1 Z=2 Ø12 BODY | Hard metal milling cutter for<br>45° cutting | 1          |



| REFERENCE   | PART  | OBSERVATIONS                                     | MIN. UNITS |
|-------------|---|--|------------|
| STB-FRESA90 | HM HSS MILLING CUTTER Ø3x81<br>ESPECIAL REF. 1 Z=2 Ø16 BODY | Hard metal milling cutter for<br>90° v-groovi ng | 1          |

# STACBOND® PROCESSING TOOLS

## MILLING CUTTERS FOR CNC MACHINES



| REFERENCE      | PART   | OBSERVATIONS  | MIN. UNITS |
|----------------|--|---|------------|
| STB-FEMD-10x72 | HM HSS SPHERICAL MILLING CUTTER WITH DIAMOND COATING Ø10x72 Z=2 Ø10 BODY (COD:JS532100D1B.0Z2-NXT) | Ø 10 mm milling cutter with diamond coating for spherical grooving of panel with PE/FR core | 1          |



| REFERENCE       | PART   | OBSERVATIONS  | MIN. UNITS |
|-----------------|--|---|------------|
| STB-FRESAD10PCD | DIAMOND HSS SPHERICAL MILLING CUTTER SECO PCD Ø10x73 Ø10 HM BODY | Ø 10 mm diamond milling cutter for spherical grooving of panel with A2 core | 1          |



| REFERENCE       | PART   | OBSERVATIONS   | MIN. UNITS |
|-----------------|--|--|------------|
| STB-FEMD-20X100 | HM HSS SPHERICAL MILLING CUTTER Ø20x100 UHM 30° Z=2 Ø20 BODY | Ø20mm hard metal milling cutter for spherical grooving | 1          |



| REFERENCE    | PART   | OBSERVATIONS                              | MIN. UNITS |
|--------------|--|---|------------|
| STB-FRESA135 | HM HSS MILLING CUTTER Ø3xØ32x80x38,8 R0,2 Z=2 Ø16 BODY | Hard metal milling cutter for 45° cutting | 1          |



| REFERENCE    | PART  | OBSERVATIONS  | MIN. UNITS |
|--------------|---|---|------------|
| STB-FPCD-135 | DIAMOND HSS MILLING CUTTER Ø35x175 Z=2 Ø16 BODY | Diamondmilling cutter for 135° v-grooving of panel with A2 core | 1          |

## INFORMATION AND SALES

☎ (+34) 981 817 036

📄 (+34) 981 817 037

✉ stacbond@stac.es

🌐 www.stac.es

**STACBOND®** would be pleased to help with any enquiry.

For further information, please visit our website or get in touch and we'll study a solution that meets your requirements.

We provide technical assistance in Spanish, English, French, German and Italian.



The information in this catalogue is for reference only and is subject to modification.

**STAC®** is not responsible for the use of the information herein; it is meant for trained technical persons and its use their responsibility.

Any unauthorized reproduction, distribution, public dissemination and/or alteration of this document will be deemed a violation of intellectual property laws.

### STAC® CENTRAL Spain

☎ (+34) 981 817 036  
📠 (+34) 981 817 037  
✉ stacbond@stac.es

📍 Pol. industrial Picusa s/n  
15900 Padrón (A Coruña)  
Spain

### STACBOND® PRODUCTION CENTER Spain

☎ (+34) 981 817 036  
📠 (+34) 981 817 037  
✉ stacbond@stac.es

📍 C/ Isaac Prado Bodelón P. 2  
Pol. ind. de La Rozada  
24516 Parandones (León)  
Spain

### STAC® Poland

☎ (+48) 322 630 740  
✉ polska@stac.es

📍 Ul. Kluczevska 2A  
32-300 Olkusz  
Poland

### STAC® Morocco

☎ (+212) 053952 11 36  
📠 (+212) 053952 11 54  
✉ maroc@stac.es

📍 Route nationale 1 Km. 92  
Comune Rurale Laouamra  
Larache, Morocco

### STAC® Mexico

☎ (+52) 442 251 7019  
✉ mexico@stac.es

📍 Parque Ind. Pyme, carretera estatal 431. Los Cues, km 5.8  
Huimilpan, 76970  
Querétaro, Mexico



Follow us!

# STAC BOND®




🌐 stac.es

# STAC BOND

ALUMINIUM COMPOSITE PANEL



 [stacbond.es](https://stacbond.es)