

STACBOND

Technical catalogue

Specifications and assembly systems



more than you see



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Technical catalogue

Especifications and assembly systems













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	PRODUCT RANGE	05
	ASSEMBLY SYSTEMS	21
STB-T-CH HANGING SYSTEM		23
STB-T-SZ MALE - FEMALE SYSTEM		37
STB-T-REM RIVETED SYSTEM		47
STB-T-PEG GLUED SYSTEM		55
STB-CH HANGING SYSTEM		63
STB-SZ MALE - FEMALE SYSTEM		77
STB-REM RIVETED SYSTEM		87
STB-PEG GLUED SYSTEM		95
ACCESSORIES STACBOND®		103
PROCESSING TOOLS STACBOND®		115

Product
range 



The **STACBOND®** composite panel is a product consisting of two aluminium sheets and an inner core with mineral fillers. It has excellent mechanical properties, providing bending stiffness with a reduced weight, a flat surface, durability and ease of maintenance.

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 aluminium alloy 5005 and an inner sheet of alloy 3005/3105.

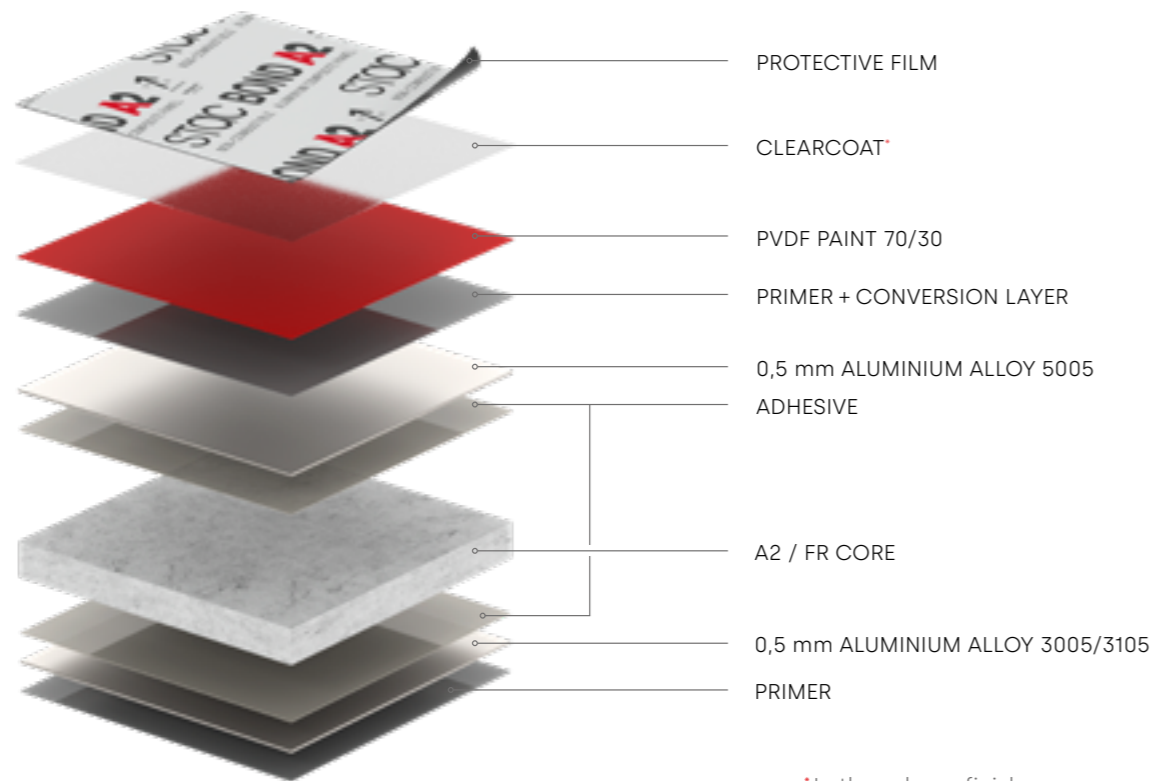
Two different core materials are available in terms

of mineral content (incombustible or fire-retardant), which in accordance with standard UNE 130501-1:2007 are class A2-s1 d0 (**STACBOND®A2**) and class 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 2.000 mm width. Other dimensions can be supplied under request.



*In three-layer finishes or on request.

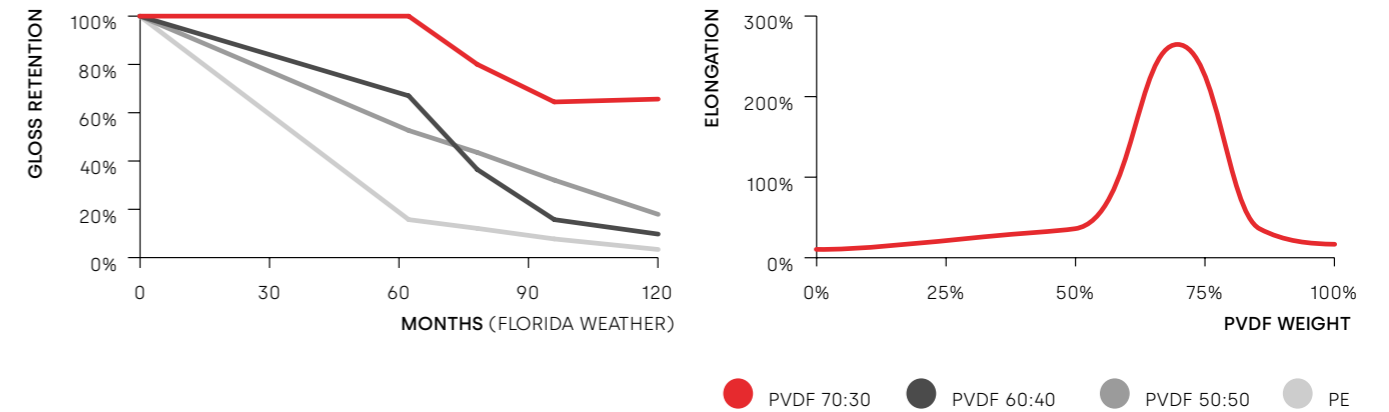
- 
All RAL colours possible
- 
A2, FR y PE cores
- 
High resistance to UV rays
- 
Excellent weight/surface value
- 
Easily conformable
- 
Rapid and simple assembly
- 
Totally recyclable

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.



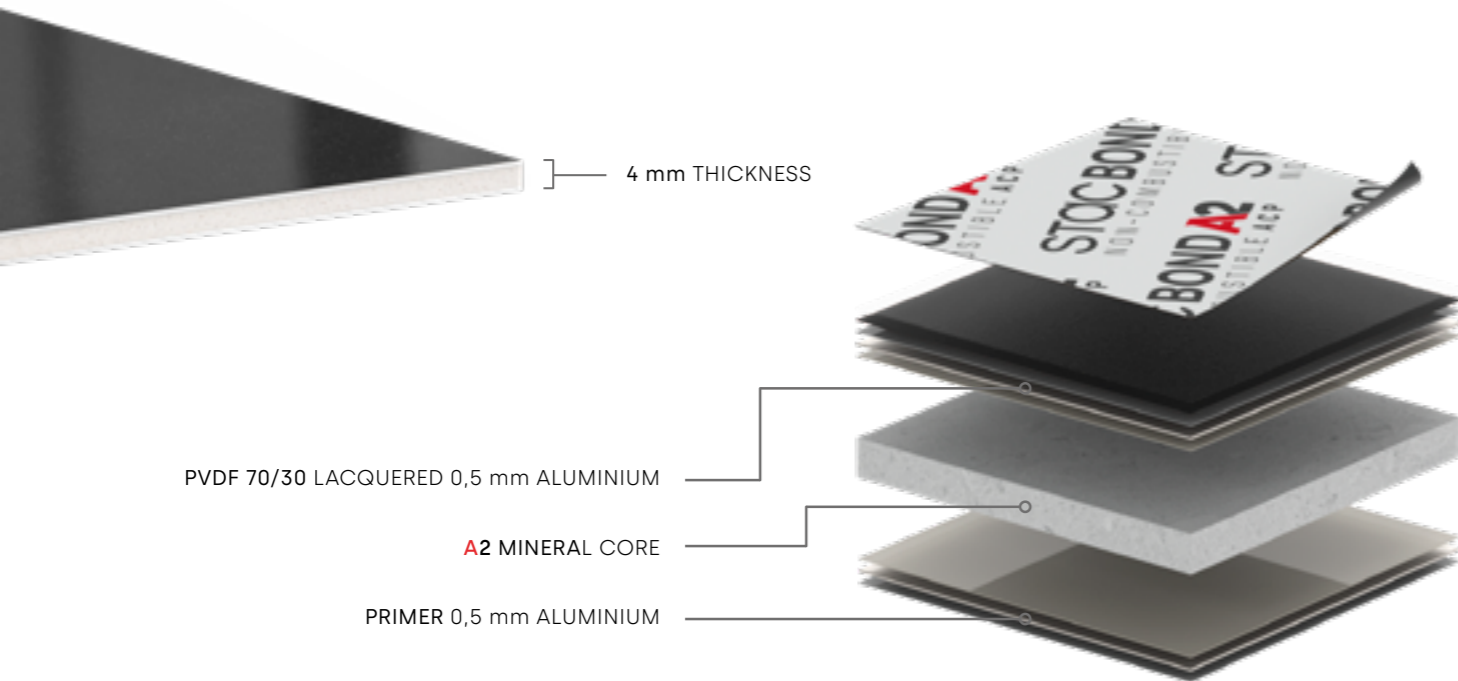
As part of our commitment to the environment, **STACBOND®** does not use chromium in any of the pre-treatment or painting processes.

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**



PANEL PHYSICAL SPECIFICATIONS	UNIT	VALUE	NORM
Panel thickness	mm	4	
Lacquered external sheet thickness	mm	0,50	
Lacquered internal sheet thickness	mm	0,50	
Panel weight	kg/m ²	8,3 ± 0,50	
Front side aluminium alloy		5005	UNE EN 573-3
Reverse side aluminium alloy		3005 / 3105*	UNE EN 573-3

PANEL DIMENSIONAL SPECIFICATIONS	UNIT	VALUE
Width (min. / max.)	mm	1.000 / 2.000**
Length (min. / max.)	mm	2.000 / 6.000**
Thickness tolerance	mm	- 0,15 / + 0,20
Width tolerance	mm	- 0 / + 4
Length tolerance	mm	- 0 / + 15
Diagonals tolerance	mm	± 3
Width tolerance of the protective film	mm	0; -5

TECNICAL SPECIFICATIONS	UNIT	VALUE	NORM
Peeling	N/mm	≥ 3	ASTM D903-98 (2004)
Acoustic insulation Rw (C;Ctr)	dB	30 (-1; -3)	ISO 717-1
Temperature utilization	°C	- 50 / + 80	

A2 CORE SPECIFICATION	UNIT	VALUE	NORM
Densidad	g/cm ³	1,90 ± 0,15	
Fire reaction		A2 - S1, d0	UNE-EN-13501-1:2007

LACQUERED ALUMINIUM TECN. SPECIF.	UNIT	VALUE	NORM
Alloy		5005	UNE EN 573-3
Elasticity module (E)	N/mm ²	70.000	
Proof stress (R _{p0,2})	N/mm ²	≥ 80	
Tensile strength (R _m)	N/mm ²	125 ≤ R _m ≤ 240	EN 485-2
Elongation (A ₅₀)	%	≥ 4	
Density (ρ)	kg/m ³	2.700	
Thermal expansion (α)	mm/m (100°)	2,36	

Use specifications:

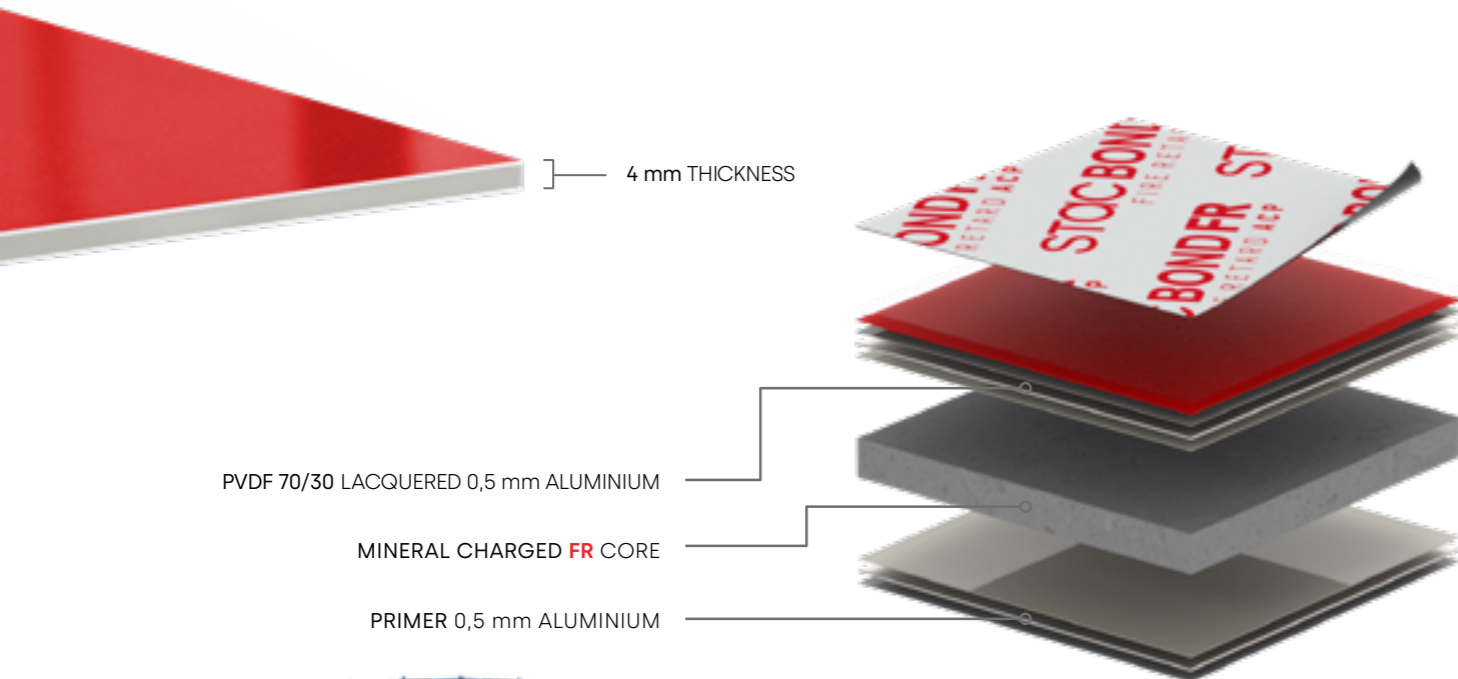
There may be limitations in the realization of STACBOND® A2 panels with high gloss finishes. Consult STAC® for available finishes.

* Possibility of alloy 5005 on customer's request.
** Consult for other dimensions.

STACBOND® 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**
- ✓ CAN/ULC-S102 - **SD: 0 FS: 0**
- ✓ ULC-S134 - **PASS**



PANEL PHYSICAL SPECIFICATIONS

TOTAL THICKNESS PANEL (mm)	TOTAL WEIGHT PANEL (kg/m ²)	
	Thickness of lacquered sheet 0,5 (mm)	Thickness of lacquered sheet 0,3 (mm)
3	6,10	5,70
4	7,80	7,40
5	9,50	-
6	11,20	-

ALUMINIUM ALLOY	VALUE	NORM
Front side	5005	UNE EN 573-3
Reverse side	3005 / 3105*	UNE EN 573-3

PANEL DIMENSIONAL SPECIFICATIONS	UNIT	VALUE
Width (min. / max.)	mm	800 / 2.000**
Length (min. / max.)	mm	2.000 / 6.000**
Thickness tolerance	mm	- 0,15 / + 0,20
Width tolerance	mm	± 2
Length tolerance	mm	- 0 / + 15
Diagonals tolerance	mm	± 3
Width tolerance of the protective film	mm	0; -5

TECNICAL SPECIFICATIONS	UNIT	VALUE	NORM
Peeling	N/mm	≥ 9,80	ASTM D903-98 (2004)
Accoustic insulation Rw (C;Ctr)	dB	29 (-1; -3)	ISO 717-1
Thermal transmission (U)	W/m ² K	5,62	UNE-EN ISO 12567-1
Temperature utilization	°C	-50 / +80	

FR CORE SPECIFICATION	UNIT	VALUE	NORM
Densidad	g/cm ³	1,70 ± 0,10	
Fire reaction		B - S1, d0	UNE-EN-13501-1:2007

ALUMINIUM TECNICAL SPECIFICATIONS	UNIT	VALUE	NORM
Alloy		5005	UNE EN 573-3
Elasticity module (E)	N/mm ²	70.000	
Proof stress (R _{p 0,2})	N/mm ²	≥ 80	
Tensile strength (R _m)	N/mm ²	125 ≤ R _m ≤ 240	EN 485-2
Elongation (A ₅₀)	%	≥ 4	
Density (ρ)	kg/m ³	2.700	
Thermal expansion (α)	mm/m (100°)	2,36	

* Possibility of alloy 5005 on customer's request.
** Consult for other dimensions.

MANTENIMIENTO DEL PRODUCTO

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



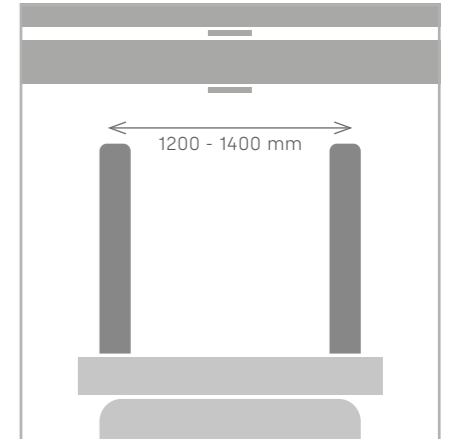
Washing from top to bottom

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

HANDLING

Pour un stockage et une manipulation corrects des panneaux composites aluminium STACBOND® aluminium composite panels, the following information must be considered:

- Pallets must be handled carefully during transport and unloading, always use suitable equipment such as fork-lift trucks. Never move open pallets.
- Whenever possible, store the material in a dry, dust-free interior space and under temperature conditions between 10° - 40° C.
- If stored outdoors, avoid exposing the material to sunlight by protecting it with an opaque protective cover.
- Always store the pallets in a horizontal position up to a maximum of 6 pallets of the same format stacked on top of each other (4 in case of STACBOND® A2) or 12.500 Kg total weight.
- The plastic film must be removed from the pallets no later than 6 months after receipt.
- The individual panels should be lifted from the pallet supported by its four corners, avoiding dragging one over the other. Whenever possible, move the individual panels in an vertical position.



Optimal distance between forklift blades for transporting STACBOND® composite panel pallets.

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.

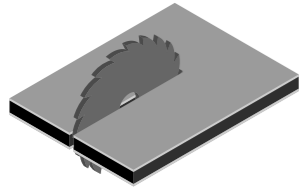
For the machining and later installation of the STACBOND® composite panel on the facade, it must be ensured that the orientation of the arrows indicated on the protective film must be the same on the entire surface, in order to avoid variations in the tone of the finish.



To ensure the integrity and proper functioning of the STACBOND® aluminum composite panel protective film, the following information should be considered:

- Prolonged storage of the material with high temperature variations can affect the adhesion of the protective film, making it difficult to remove.
- Do not mark with inks that can pass through the protective film and affect the surface of the panel.
- Remove the protective film at the latest one month after the installation of the composite panel in the project. Whenever possible, remove it under temperature conditions higher than 10° C.

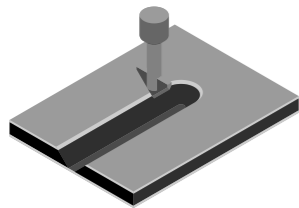
CUTTING



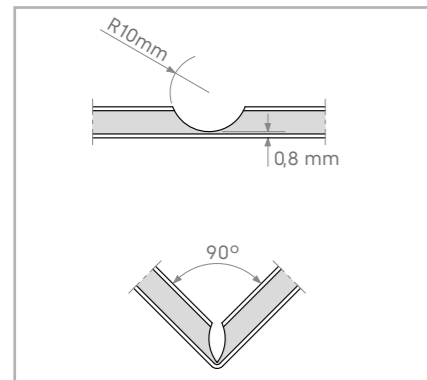
STACBOND® composite panel can be cut using CNC machinery or manually using a wall saw or portable milling machine. Straight, curved and angled cuts are possible, depending on the tools used.

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

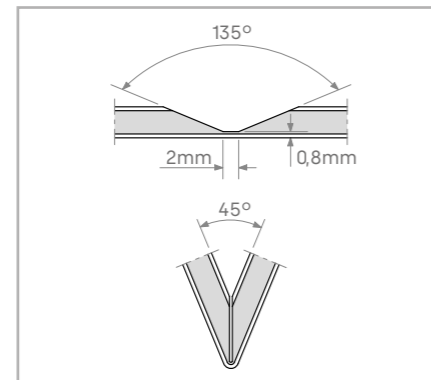
MILLING



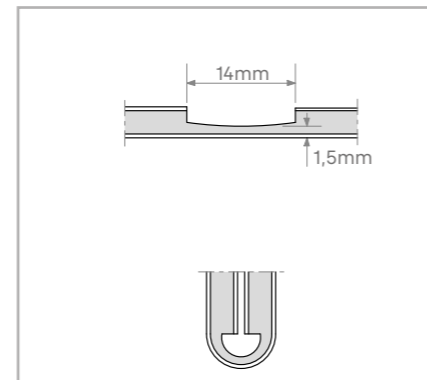
Performed using CNC, wall saw with milling disk or portable milling machine. The partial milling of the panels allows them to be bent into shape. The scoring is done using 90° or 135° milling bits depending on the bend required. To achieve the desired measurements, the fold must be made on the axis of 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.

RECOMMENDED MILLING PARAMETERS:

CORE	PROCESS	ROTATIONAL SPEED (r.p.m.)	DISPLACEMENT SPEED (mm/min)
STACBOND A2	CUTTING	20.000 - 22.000	8.000 - 10.000
	MILLING	22.000 - 24.000	10.000 - 12.000
STACBOND FR	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.

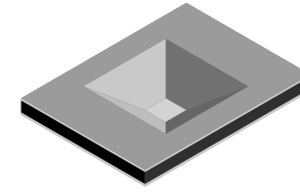
RECOMMENDED TOOLS **A2** CORE:

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

RECOMMENDED TOOLS **FR** CORE:

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

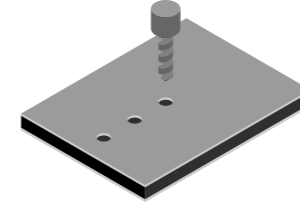
EMBOSSING AND ENGRAVING



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.

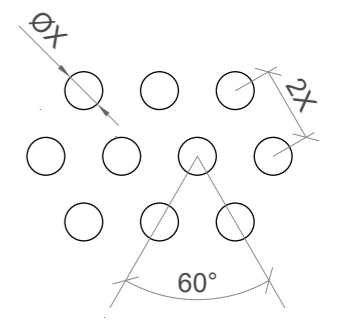
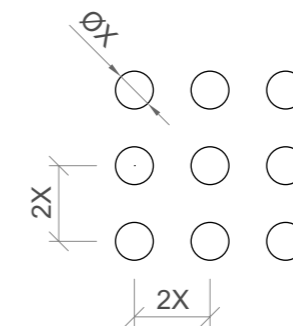
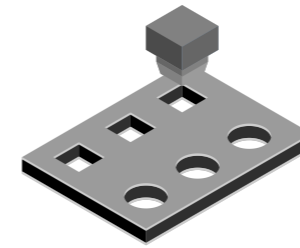
Consult STACBOND® for further information.

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:

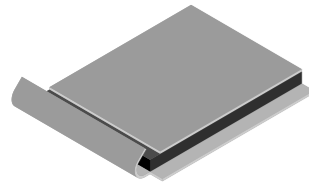
- The smallest punch diameter should be 4 mm.
- The distance between centres must be at least double the diameter.
- The perforated surface area must be less than 35% of the total surface area of the panel.

Consult STACBOND® about possible formats.



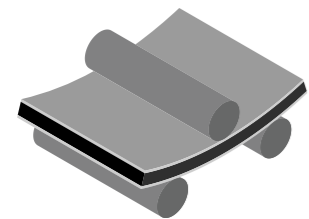
* For perforation parameters with STACBOND® A2 panels, please check with the STACBOND® technical department.

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.

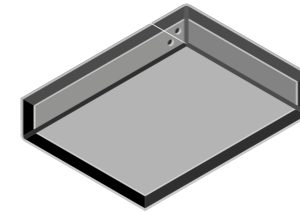
The minimum bending radius without flaps is determined by the following formula:

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

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.

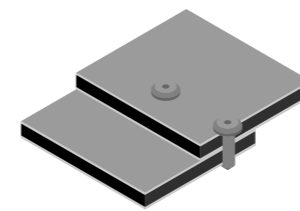
Bending without flaps of lower radius can be achieved by using press brakes with specific tools. Consult STACBOND® for more information.

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.

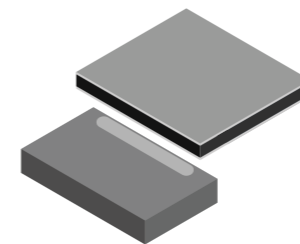
RIVETING AND SCREWING



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.

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



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 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.

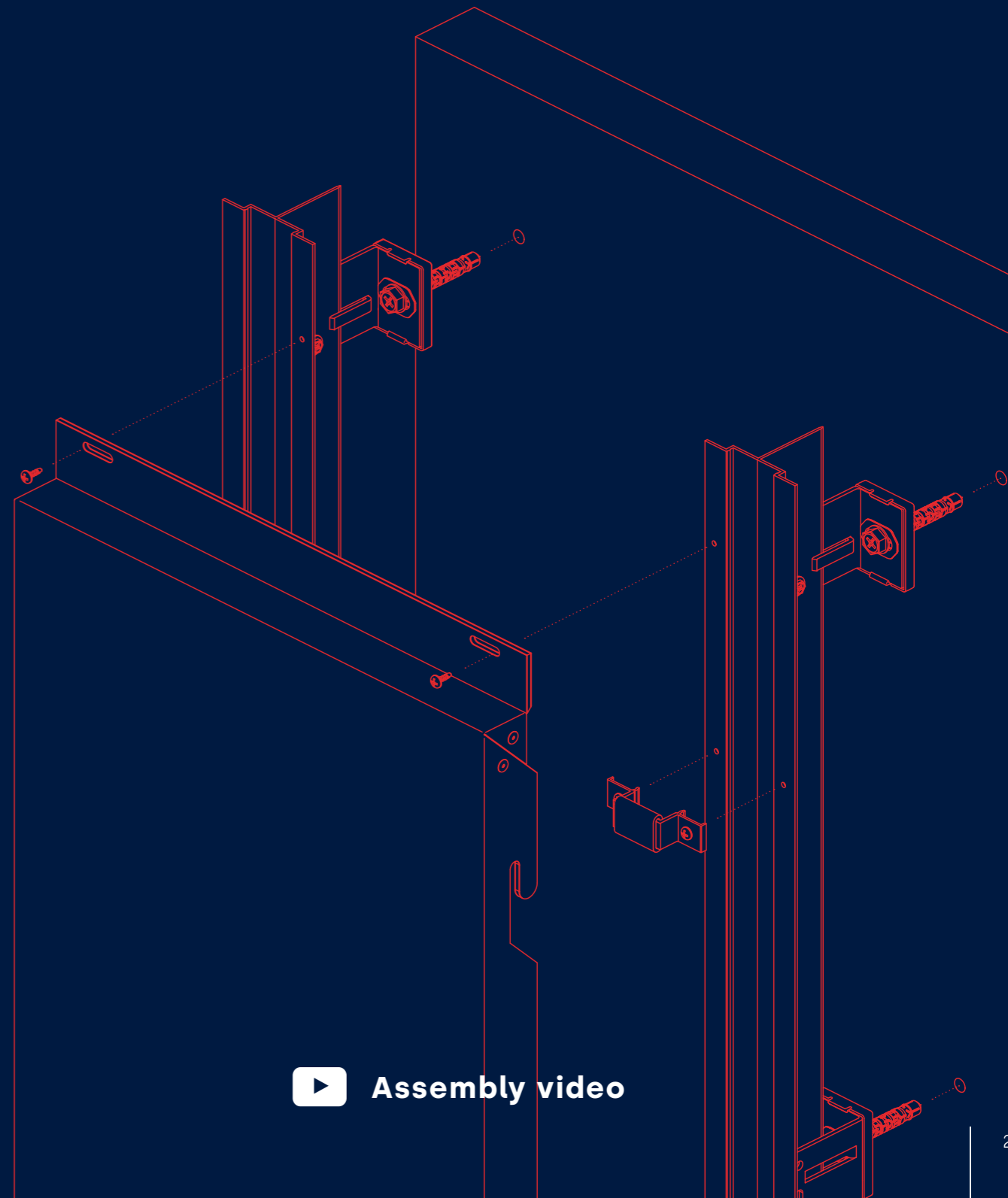
The **STB-T-CH**, **STB-T-SZ**, **STB-T-REM** and **STB-T-PEG** systems employ special L spacers and T profile.

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

The **STACBOND® 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



 [Assembly video](#)



The **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-T-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/T6 aluminium alloy or INOX AISI 430.

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-OMEGA as uprights.

The **bracket sets STB-T-CH hanging** are placed on the profiles T. They are cut from extruded 6063 T5 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/19) 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 complies with all major international certifications.



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 q** 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.



ETA-ETE: 15/0655



Nº 553P/19



ITB - KOT 2017/0043

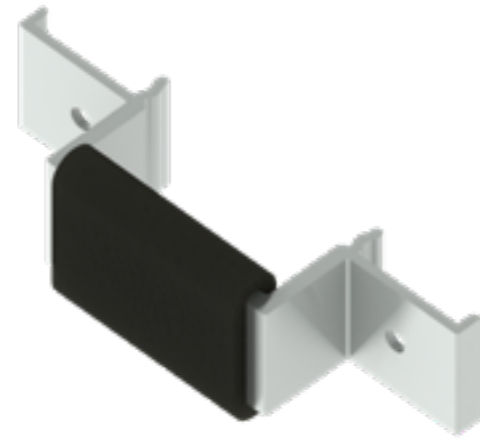


BRACKET SET STB-T-CH HANGING

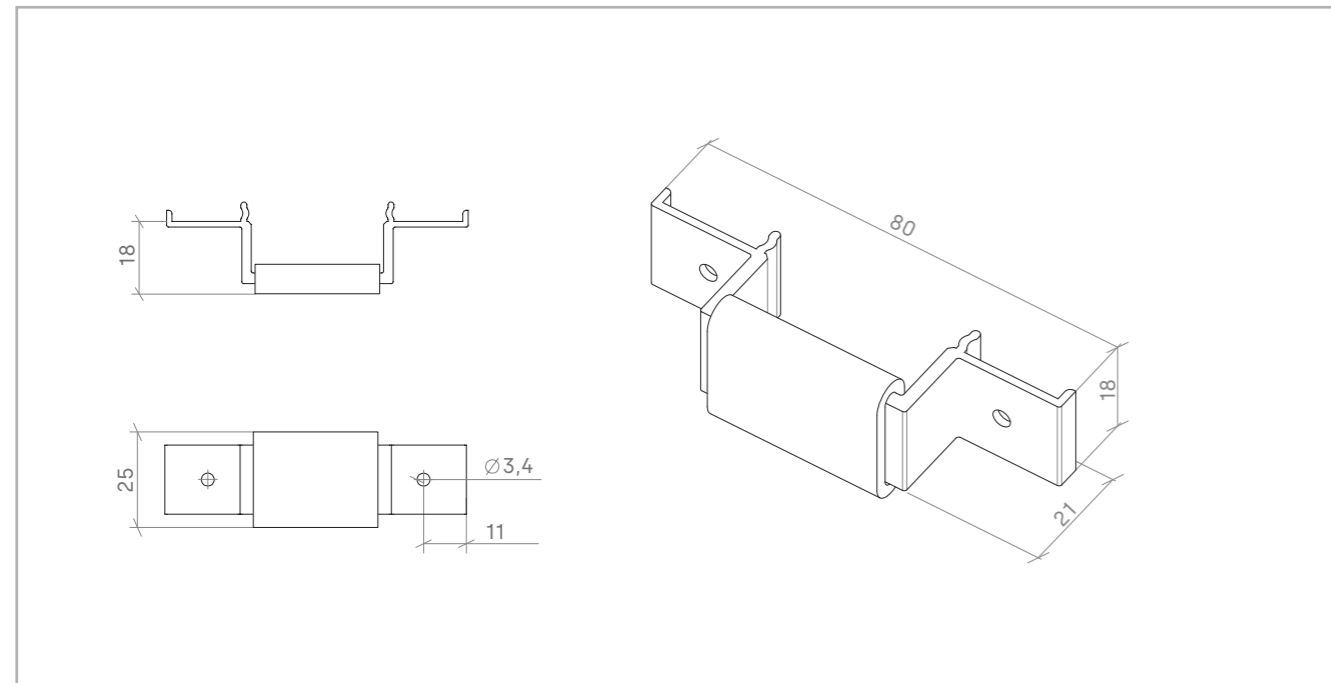
The bracket set STB-T-CH hanging is used on T-OMEGA profiles.

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	50

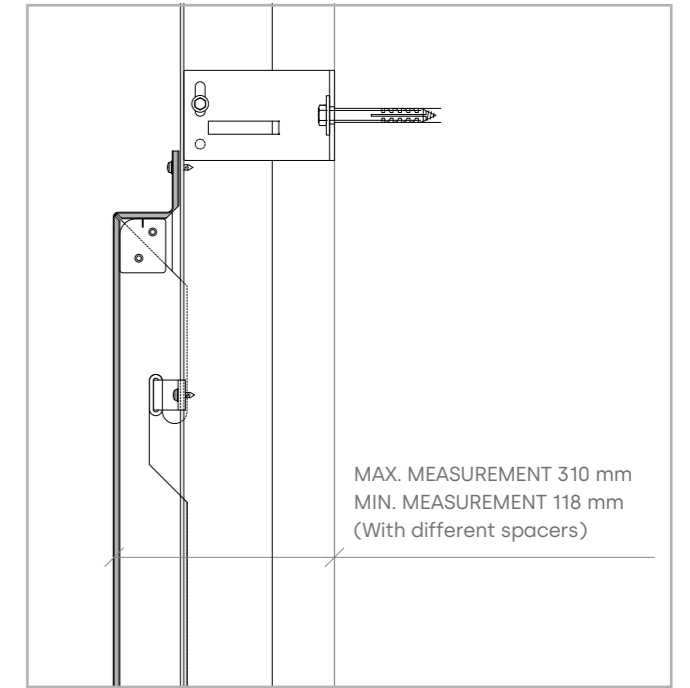


Measurements in mm

45 mm FLAP (DETAIL)



VERTICAL CROSS-SECTION

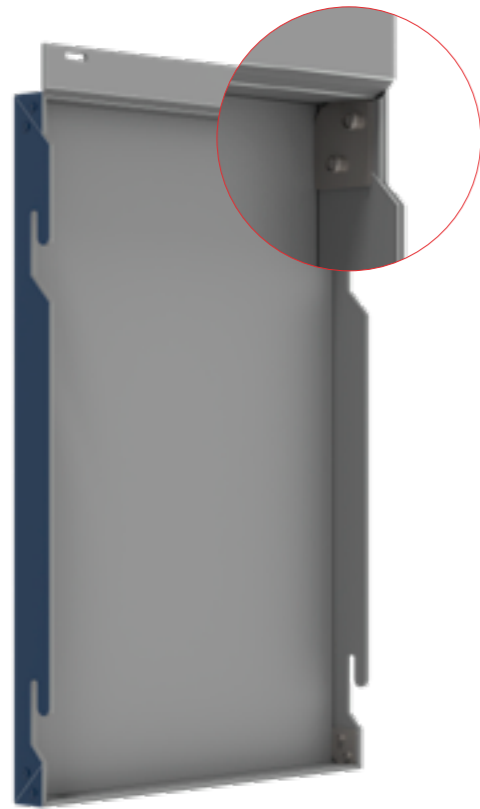


Note: the machined STACBOND® panels are supplied flat. The client is responsible for forming them into cassettes. No specialist machinery is required.

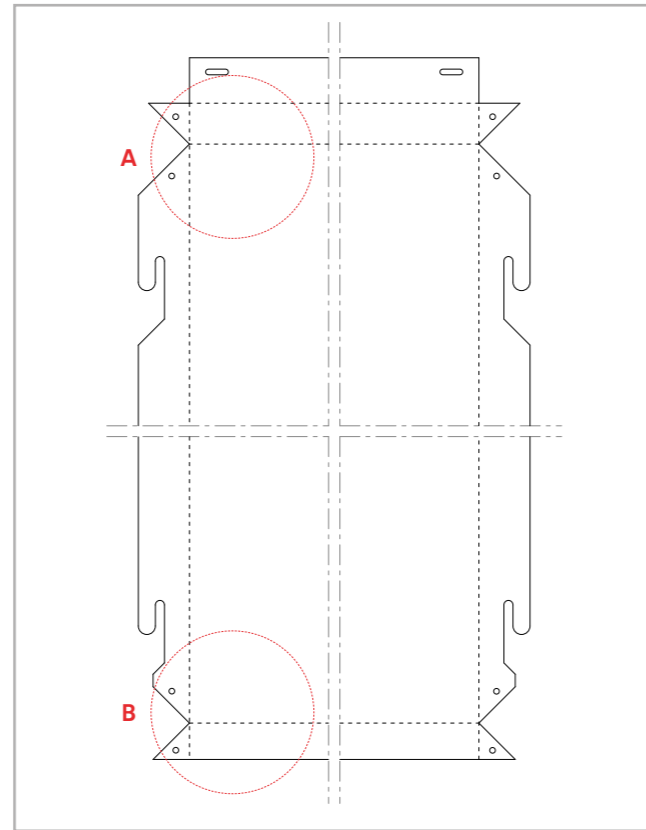
For the CH cassettes with 45 mm flaps, they can be formed using rectangular strips of 1050 alloy (28 x 33 x 2 mm) or rectangular offcuts of the composite panels themselves.

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.

FORMED CASSETTE



FLAT CASSETTE



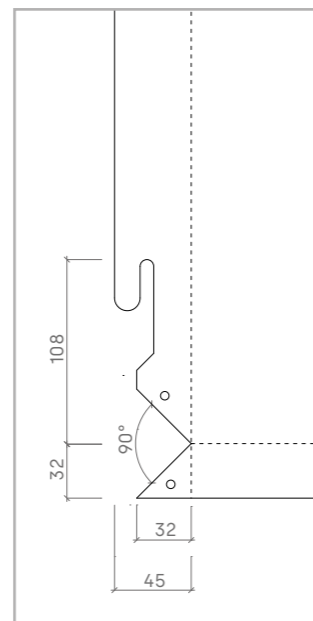
CASSETTES FORMING PLATE

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.

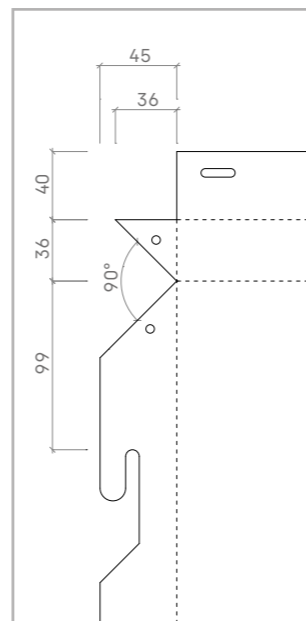
This plate is specified for CH cassettes with 45 mm flap and stiffeners.



DETAIL A



DETAIL B



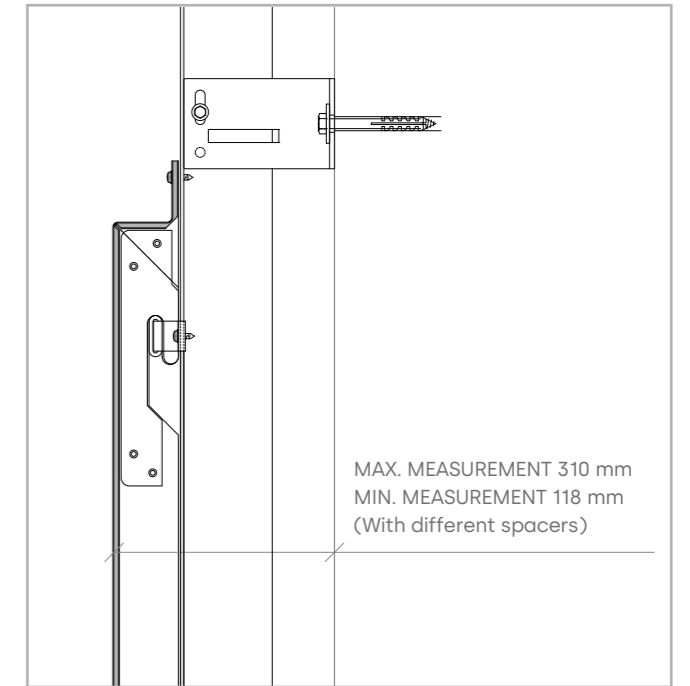
Measurements in mm

REFERENCE	DESCRIPTION	UNITS/BOX
19.019	CASSETTES FORMING PLATE	1000

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.

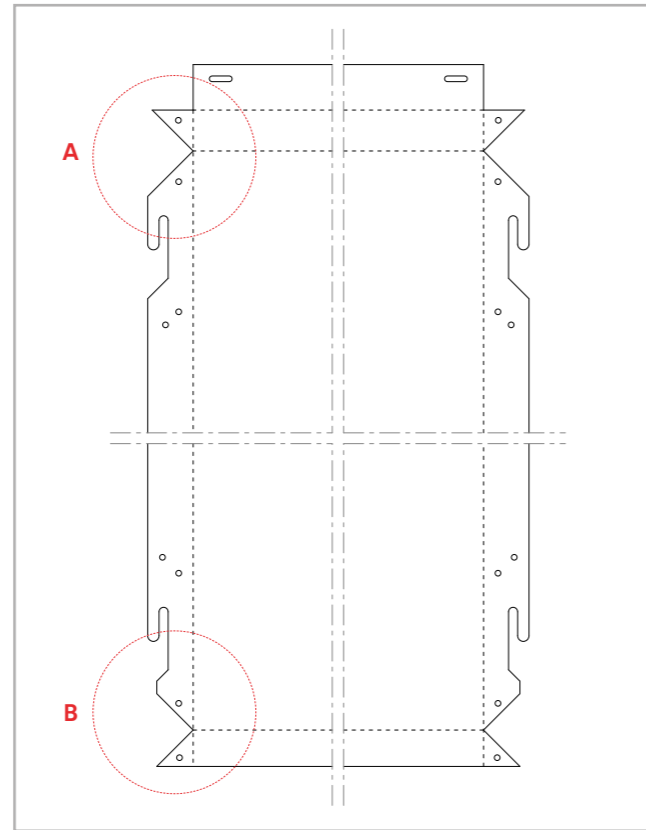
For the forming of CH cassettes with 40 mm flaps, hanging reinforcements are always used for every tab. These are specific 1050 aluminium alloy pieces of 2 mm and are riveted or screwed to the corresponding tabs and/or stiffeners.

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.

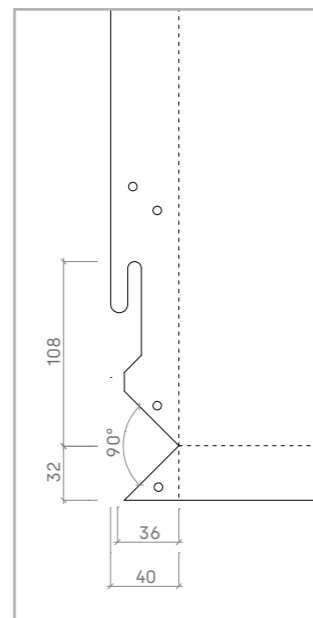
FORMED CASSETTE



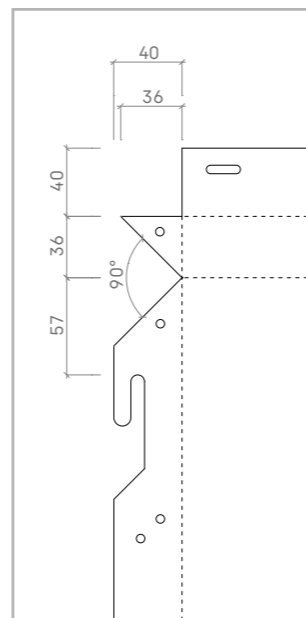
FLAT CASSETTE



DETAIL A



DETAIL B



Measurements in mm

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.

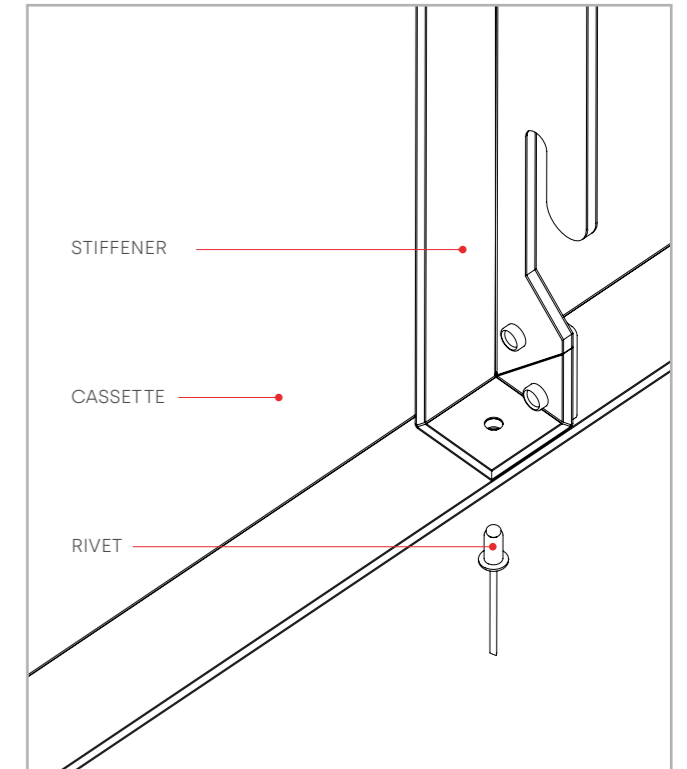


REFERENCE	DESCRIPTION	UNITS/BOX
05.19.019	HANGING REINFORCEMENT	500

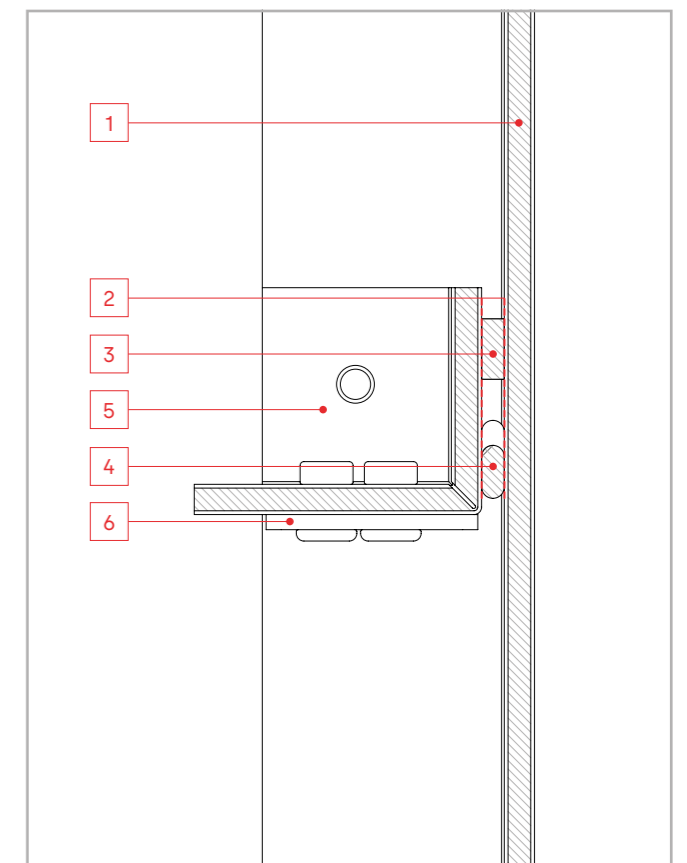
The stiffener is an angular piece formed from machined **STACBOND®** composite panel. It is used to internally reinforce CH cassettes when they exceed certain dimensions. The stiffener is fixed with double-sided tape and adhesive to the inner side of the tray and is riveted to the horizontal upper and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



DETAIL OF MECHANICAL FIXING



DETAIL OF MECHANICAL FIXING

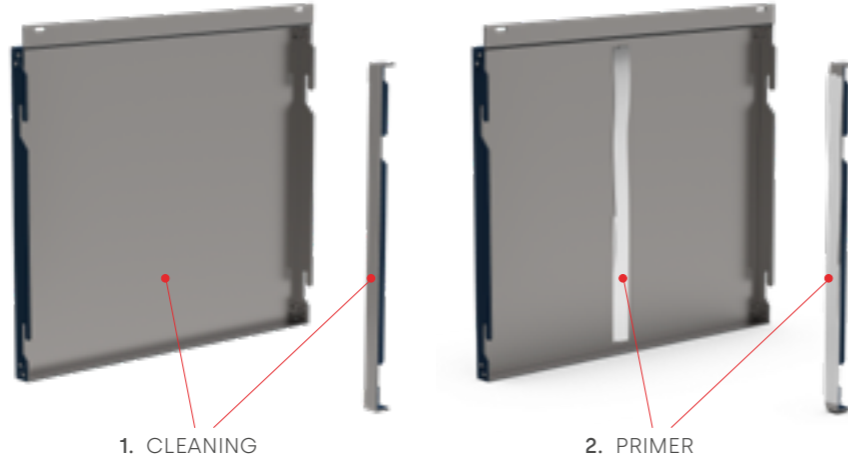


REFERENCE	DESCRIPTION
05.19.025	STIFFENER SCH-1 (< 750 mm)
05.19.026	STIFFENER SCH-2 (750 - 1.500 mm)
05.19.027	STIFFENER SCH-3 (1.500 - 2.400 mm)
05.19.027.1	STIFFENER SCH-4 (2.400 - 4.000 mm)
05.19.027.2	STIFFENER SCH-5 (4.000 - 5.000 mm)
05.19.027.3	STIFFENER SCH-6 (> 5.000 mm)

N°	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

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.

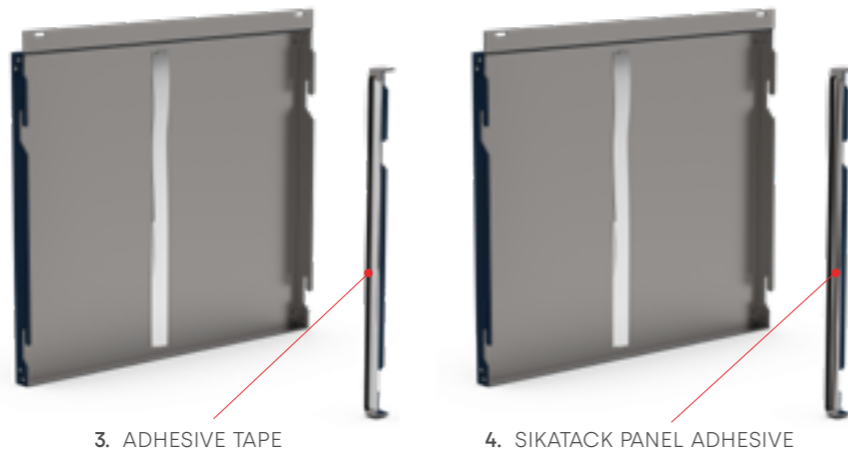


2. PRIMING THE AREA

Once the area is clean it is primed using a specific product which strengthens the adherence of the elastic adhesive (SIKATAACK 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 - SIKATAACK 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.

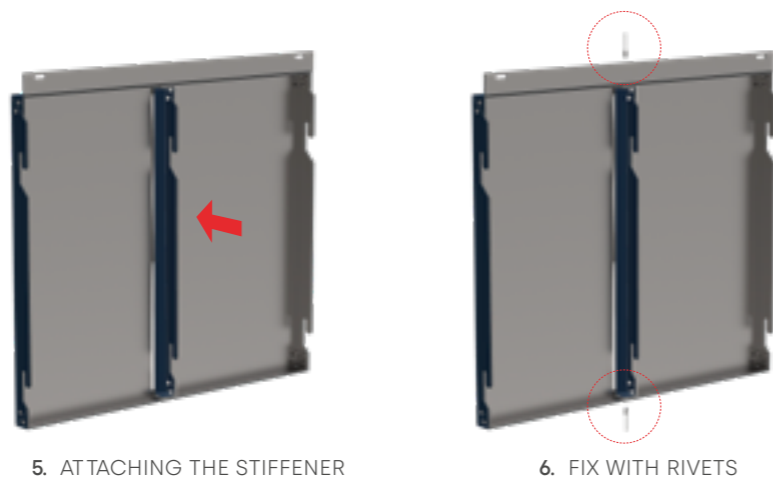


4. APPLYING THE ADHESIVE

The elastic adhesive - SIKATAACK PANEL 50 or similar - is then applied to the panel, applying a continuous bead contiguous to the adhesive tape.

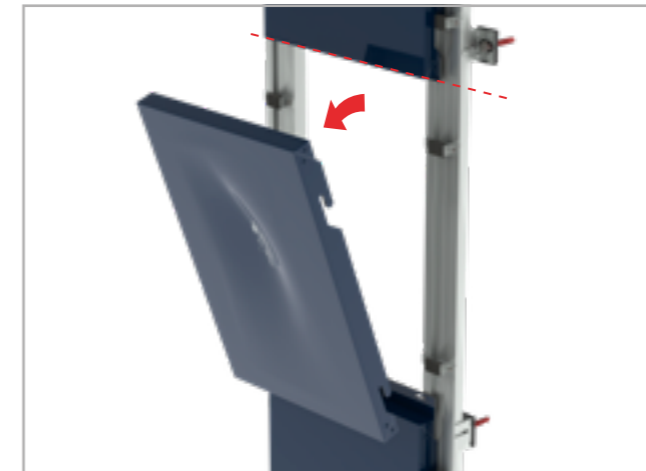
5. ATTACHING STIFFENER

The stiffener shall then be placed on the primed area of the cassette.

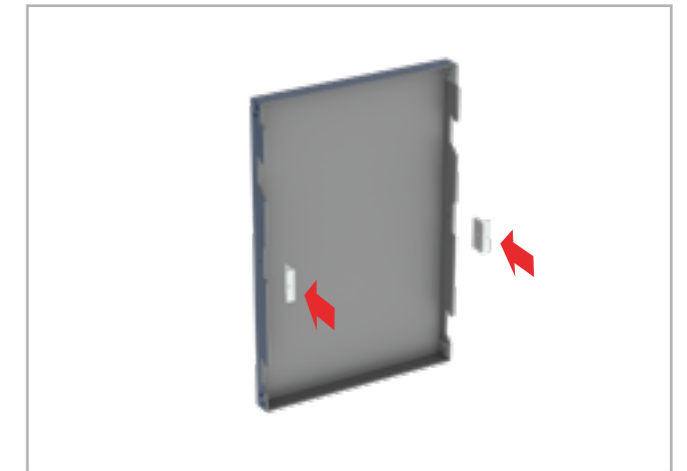


6. FIXING WITH RIVETS

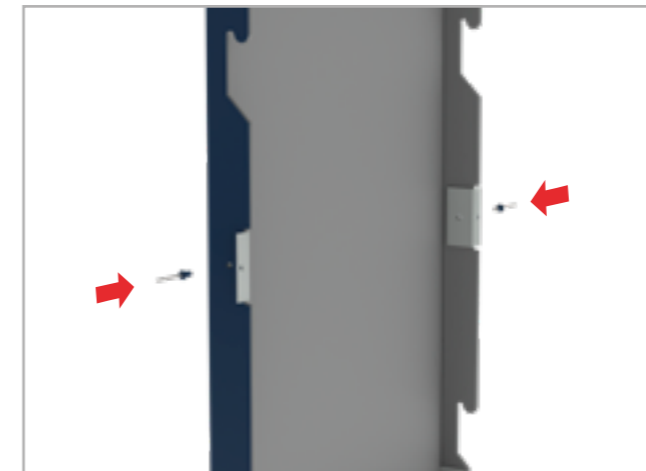
Lastly, the stiffener is drilled and riveted through the upper and lower ends to the horizontal tabs of the cassette.



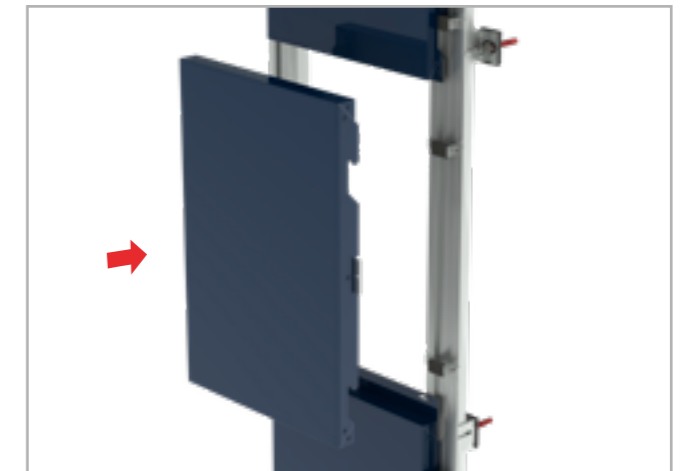
1. Remove the damage cassette by cutting the upper flap.



2. Fitting blocking plates on the side flaps of the new tray.



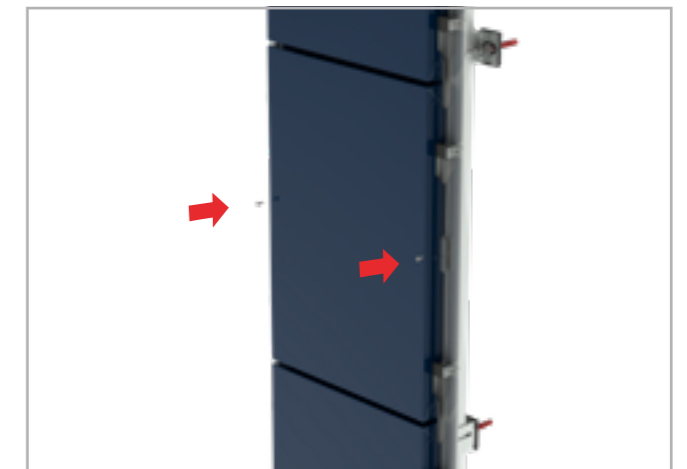
3. Fixing the plates with rivets.



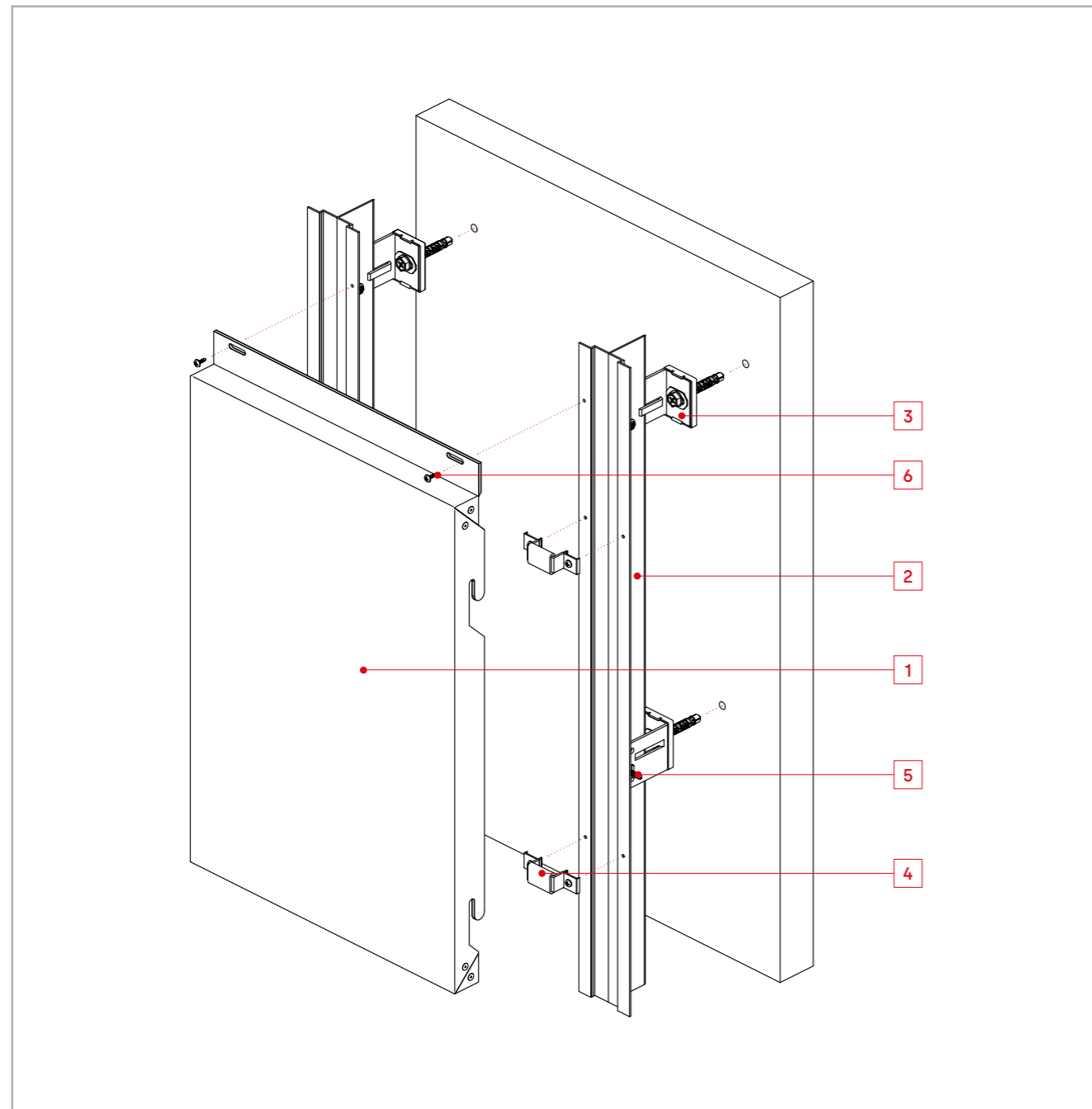
4. Fitting the new tray.



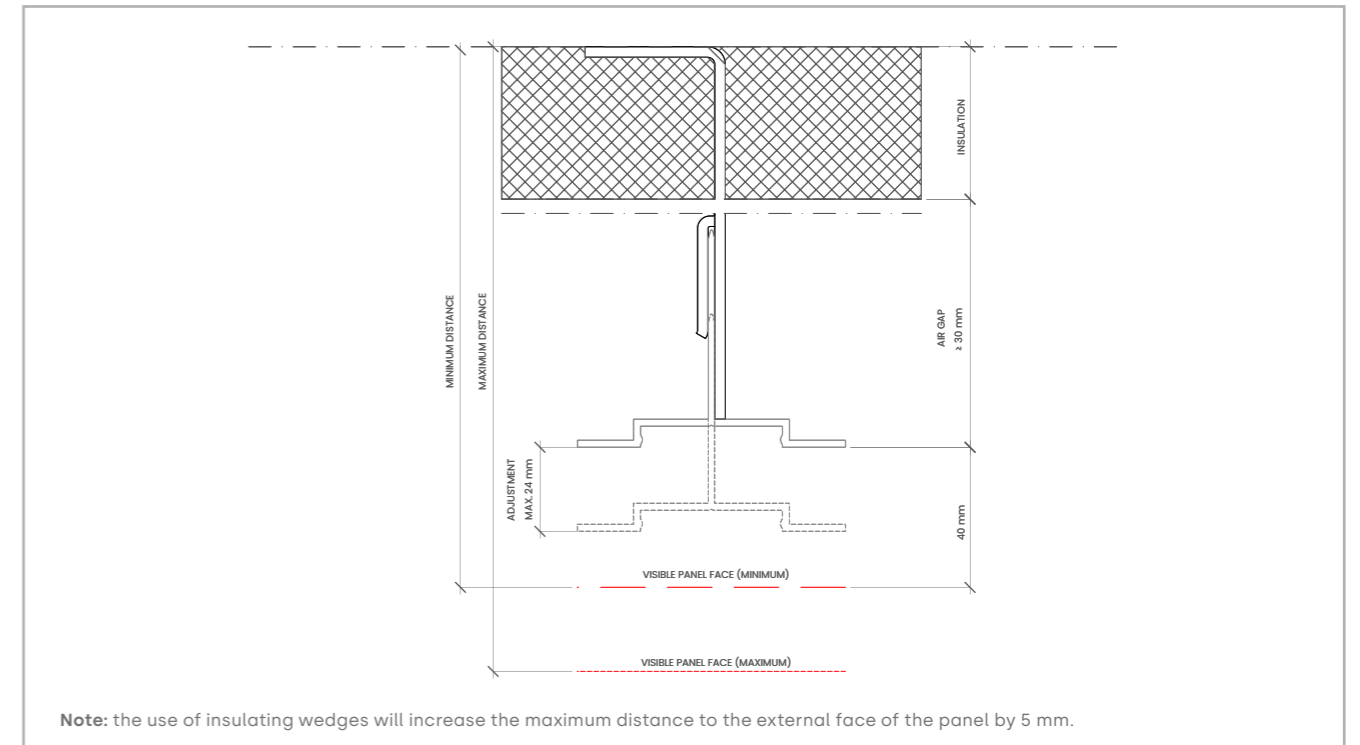
5. Adjustment of the tray to achieve the desired position.



6. Fixing the blocking plates to the sub-structure transom profiles using self-drilling screws.



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
6	Self-tapping screw



SPACER L	DISTANCE (mm) FROM BASE OF FIXING TO VISIBLE FACE OF PANEL		INSULATION THICKNESS (mm) FOR 24 mm* ADJUSTMENT
	MINIMUM	MAXIMUM	MAXIMUM
05.19.041 SPACER L 68	118	142	-
05.19.044 SPACER L 92	142	166	40
05.19.051 SPACER L 116	166	190	60
05.19.052 SPACER L 140	190	214	80
05.19.053 SPACER L 164	214	238	110
05.19.054 SPACER L 188	238	262	130
05.19.055 SPACER L 212	262	286	160
05.19.056 SPACER L 236	286	310	180

INOX SPACER L	DISTANCE (mm) FROM BASE OF FIXING TO VISIBLE FACE OF PANEL		INSULATION THICKNESS (mm) FOR 24 mm* ADJUSTMENT
	MINIMUM	MAXIMUM	MAXIMUM
05.19.078 INOX SPACER L 61	112	136	-
05.19.079 INOX SPACER L 85	136	160	30
05.19.080 INOX SPACER L 109	160	184	60
05.19.081 INOX SPACER L 133	184	208	80
05.19.082 INOX SPACER L 157	208	232	100
05.19.083 INOX SPACER L 181	232	256	130
05.19.084 INOX SPACER L 205	256	280	150
05.19.085 INOX SPACER L 229	280	304	180

SPACER DOUBLE L	DISTANCE (mm) FROM BASE OF FIXING TO VISIBLE FACE OF PANEL		INSULATION THICKNESS (mm) FOR 24 mm* ADJUSTMENT
	MINIMUM	MAXIMUM	MAXIMUM
05.19.042 SPACER DOUBLE L 68	118	142	-
05.19.045 SPACER DOUBLE L 92	142	166	40

* The maximum allowable thickness has been calculated for a stiff insulation layer, guaranteeing maximum adjustment of each system and keeping an air gap ≥ 30 mm.

PROFILES

REF.	PART	PAGE
05.19.061	PROFILE T-OMEGA	106

SPACERS

REF.	PART	PAGE
05.19.041	SPACER L 68	
05.19.044	SPACER L 92	
05.19.051	SPACER L 116	
05.19.052	SPACER L 140	
05.19.053	SPACER L 164	109
05.19.054	SPACER L 188	
05.19.055	SPACER L 212	
05.19.056	SPACER L 236	
05.19.042	SPACER DOUBLE L 68	
05.19.045	SPACER DOUBLE L 92	

FASTENING ACCESSORIES

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

AUXILIARY ELEMENTS

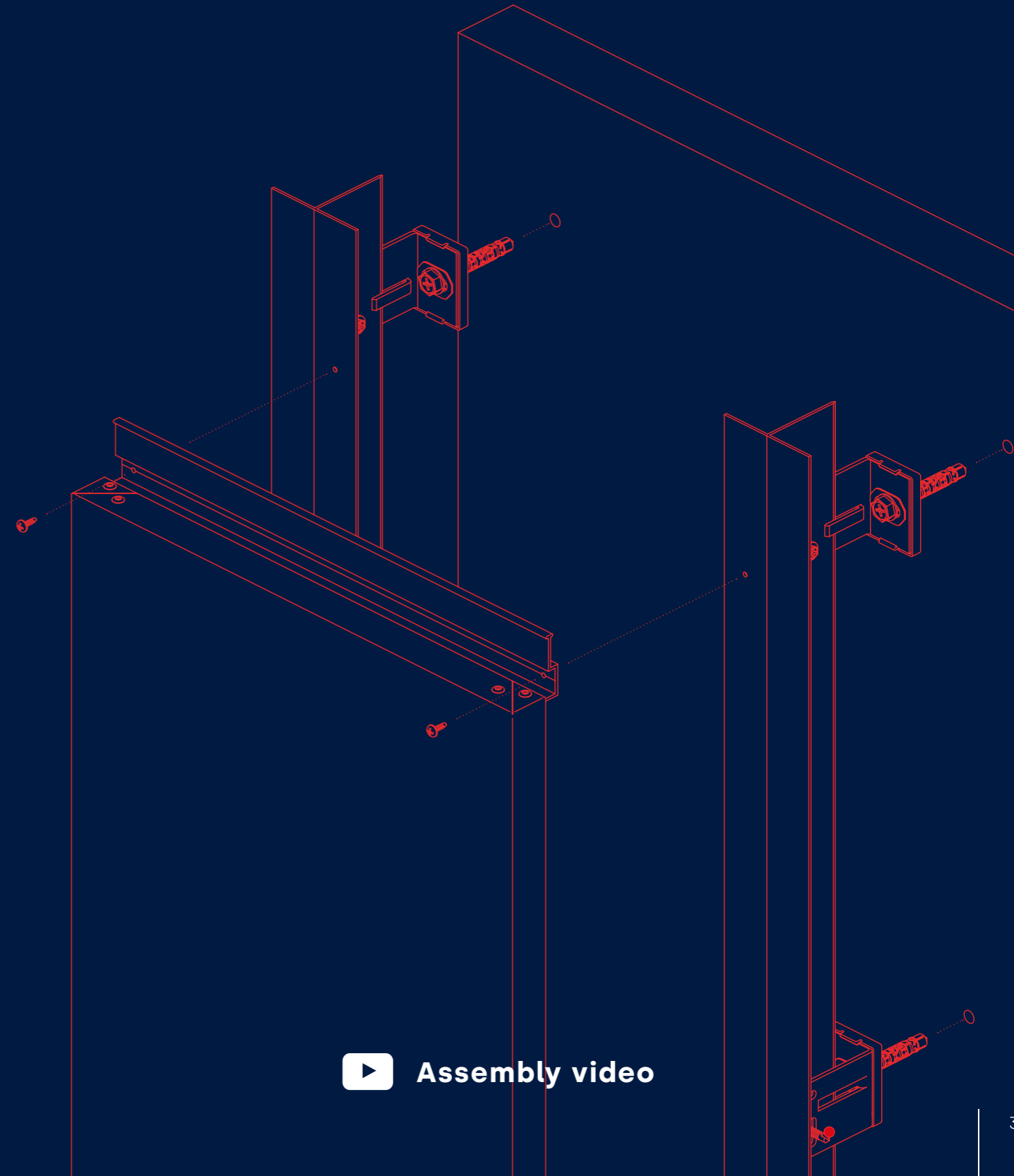
REF.	PART	PAGE
05.19.062	BRACKET SET STB-T-CH HANGING	
19.019	HANGING REINFORCEMENT	
05.19.050	CASSETTES FORMING PLATE	
05.19.025	STIFFENER SCH-1 (< 750 mm)	
05.19.026	STIFFENER SCH-2 (750 - 1500 mm)	111
05.19.027	STIFFENER SCH-3 (1.500 - 2.400 mm)	
05.19.027.1	STIFFENER SCH-4 (2.400 - 4.000 mm)	
05.19.027.2	STIFFENER SCH-5 (4.000 - 5.000 mm)	
05.19.027.3	STIFFENER SCH-6 (> 5.000 mm)	

INSULATING WEDGES

REF.	PART	PAGE
05.19.070	3 x GROOVE WASHER FOR INSULATING WEDGES WITH REF.: 05.19.066 / 05.19.068 / 05.19.072	
05.19.066	INSULATING WEDGE FOR SPACERS DOUBLE L WITH REF.: 05.19.042 / 05.19.045	115
05.19.068	INSULATING WEDGE FOR SPACERS L WITH REF.: 05.19.053 / 05.19.054 / 05.19.055 / 05.19.056	
05.19.072	INSULATING WEDGE FOR SPACERS L WITH REF.: 05.19.041 / 05.19.044 / 05.19.051 / 05.19.052	

STB-T-SZ

MALE - FEMALE SYSTEM



 **Assembly video**



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/T6 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/T6 aluminium alloy or INOX AISI 430.

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.

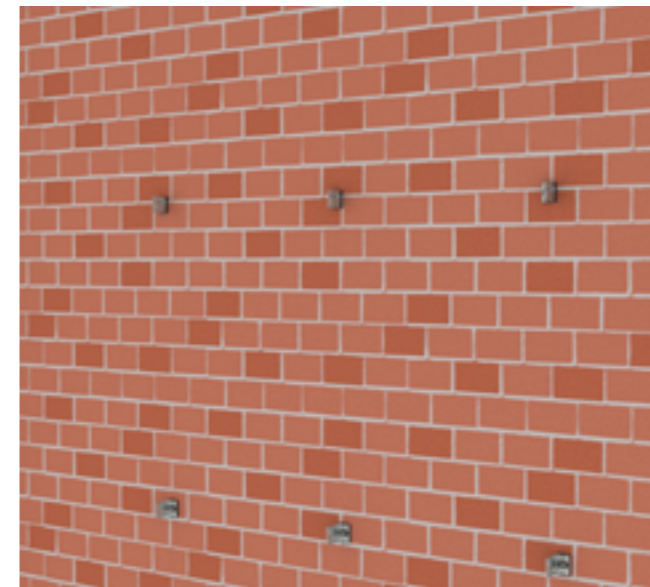
The spacers are anchored to the wall using special mechanical fixings, recommended in each case by the fixings suppliers, and receive the T profiles as uprights.

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/19) 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.



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. Fitting the profiles T. The profiles T (and the profile T-L intermediate) are screwed onto the L spacers, which should be perfectly aligned with the regulations allowed by the system. The first and last fastenings should be fitted at a maximum of 250 mm from the ends of the profiles.



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.



ETA-ETE: 15/0655



Nº 553P/19



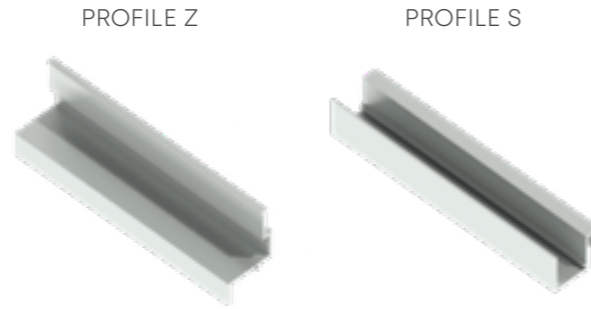
ITB - KOT 2017/0043



PERFIL S Y PERFIL Z

The system comprises two 6063 T5/T6 aluminium alloy profiles onto which the pre-formed cassettes are attached:

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



PROFILE T-L INTERMEDIATE

The profile T-L INTERMEDIATE is used in combination with the profile T, to reduce the weight of the substructure.

Used as upright for fixing intermediate points of SZ cassettes and **STACBOND®** composite panels.



EPDM GASKET PROFILE SZ

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



REINFORCEMENT STB-T-SZ

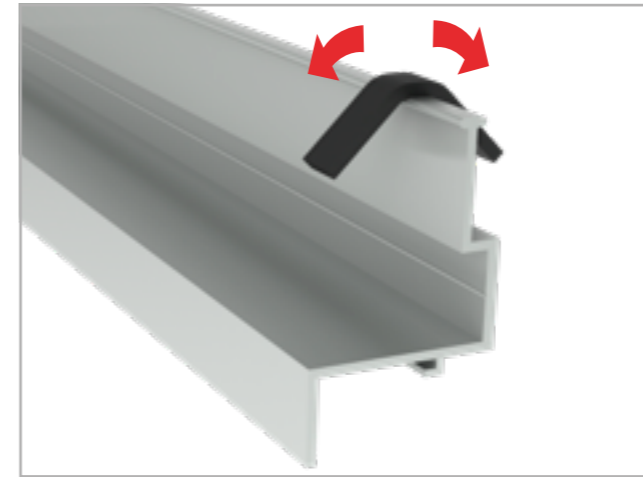
The reinforcement STB-T-SZ is a segment of profile of 200 mm specific length, covers the internal distance between the SZ cassette and the substructure.

This part is attached to the substructure profile with screws.

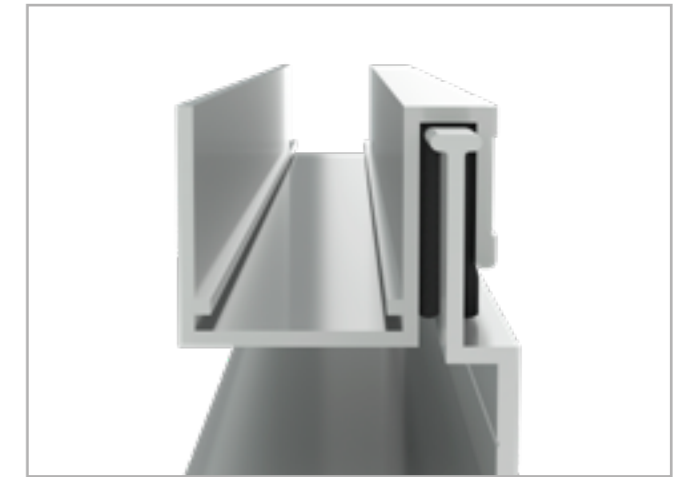


REFERENCE	DESCRIPTION	UNITS/BOX
05.19.001	PROFILE S	-
05.19.002	PROFILE Z	-
05.19.059	PROFILE T-L INTERMEDIATE	-
05.19.049	REINFORCEMENT STB-T-SZ	180
STB-JEPDM	EPDM GASKET PROFILE SZ (m.l.)	-

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.

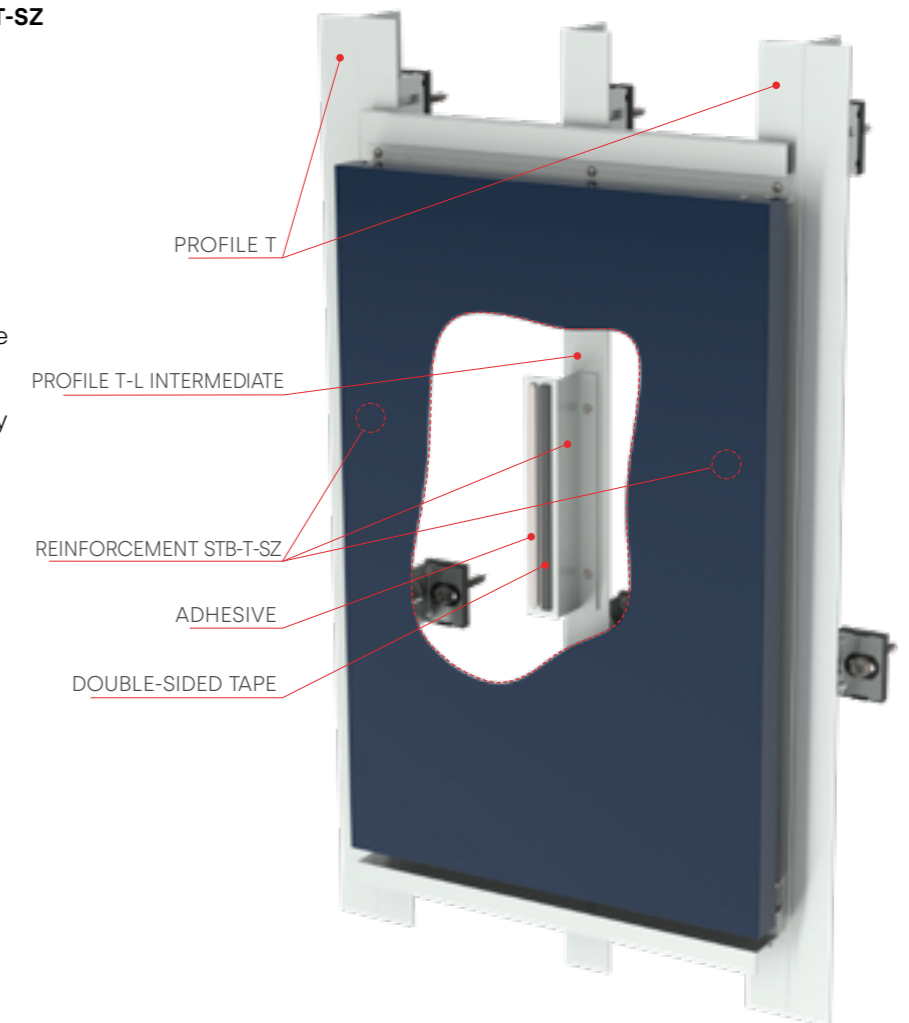
USING THE REINFORCEMENT STB-T-SZ

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 **STACBOND®**.

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.

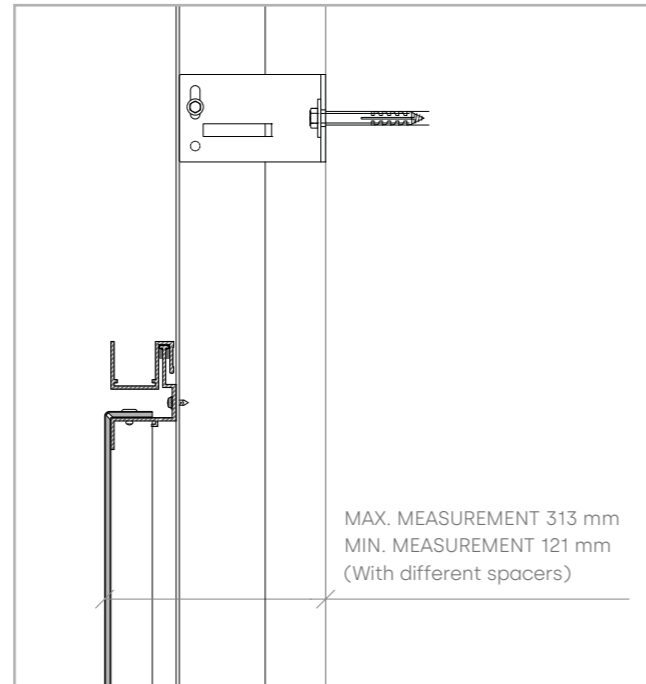
The cassette is then fitted and fixed using rivets in the upper profile Z.



UPPER FIXING



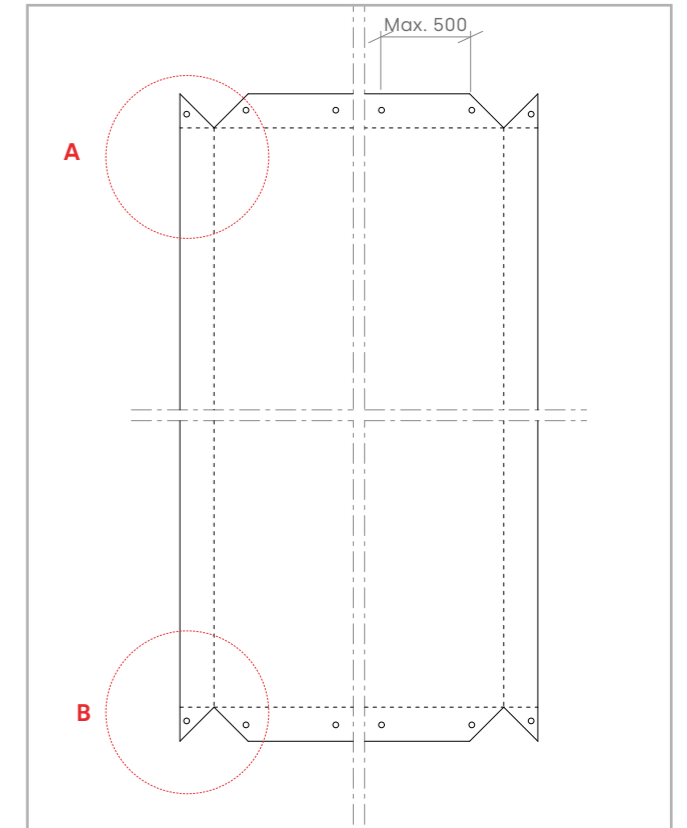
VERTICAL CROSS-SECTION



FORMED CASSETTE



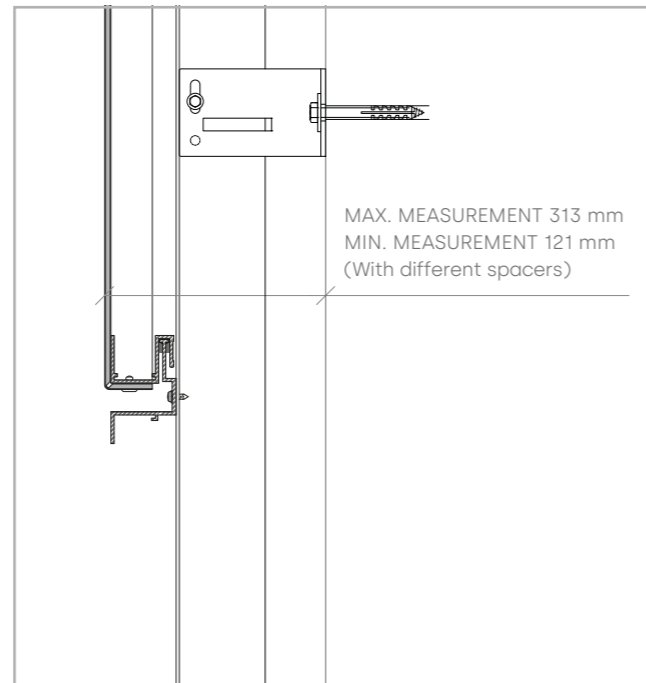
FLAT CASSETTE



LOWER FIXING



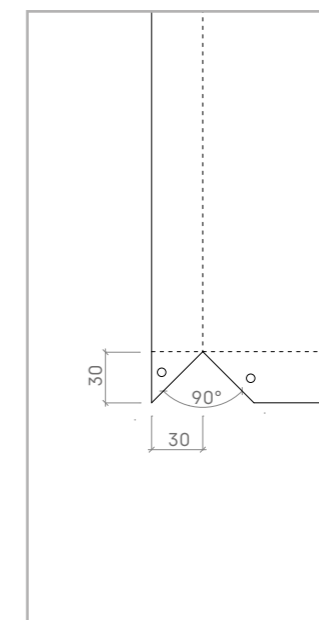
VERTICAL CROSS-SECTION



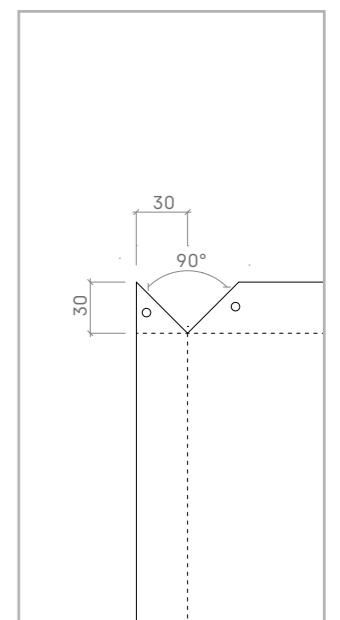
The standard cassettes in the STB-T-SZ system have 30 mm flaps. To form the cassettes, they are mechanically fastened via rivets directly to the longitudinal profiles S and Z.

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.

DETAIL A

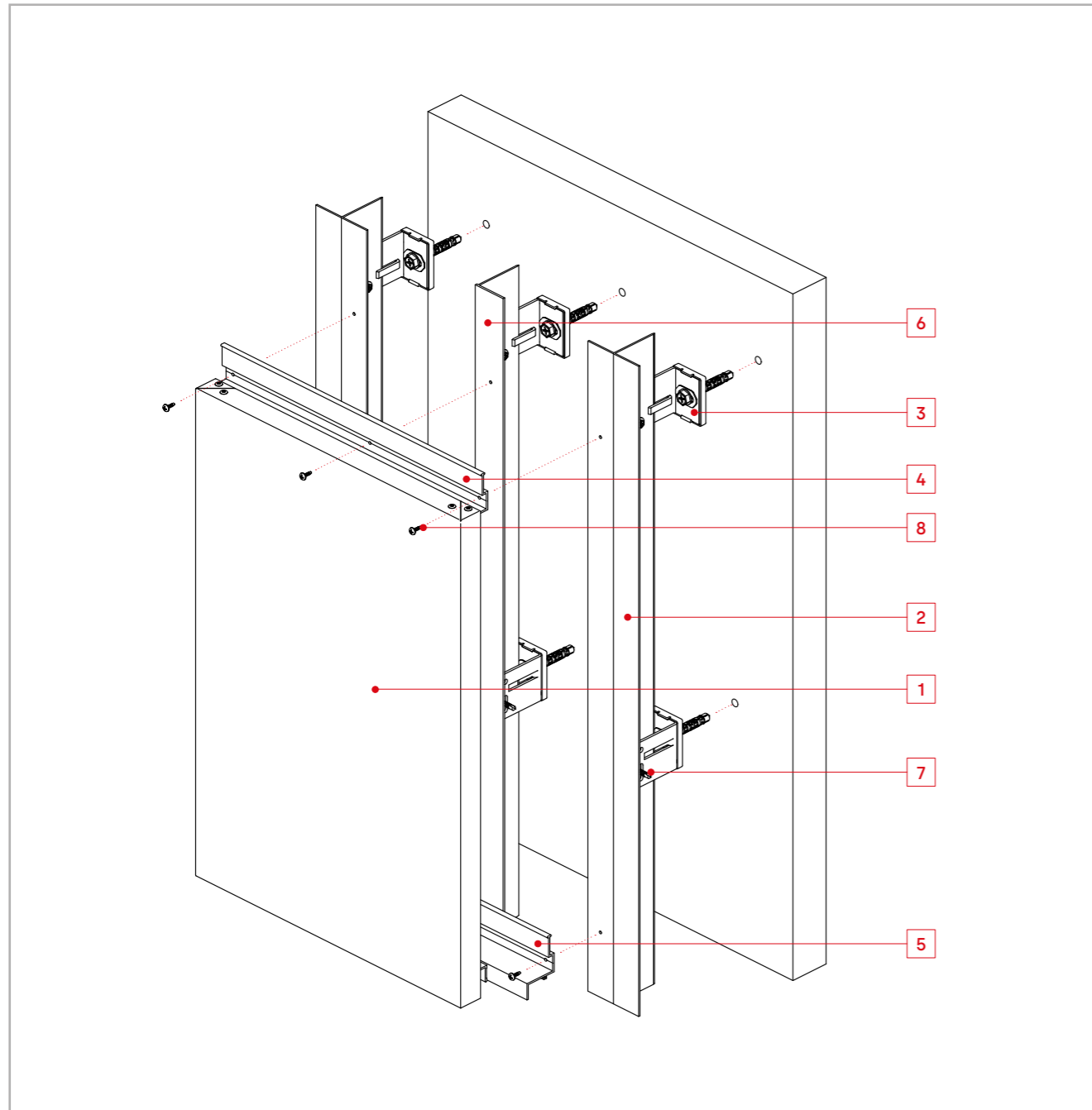


DETAIL B

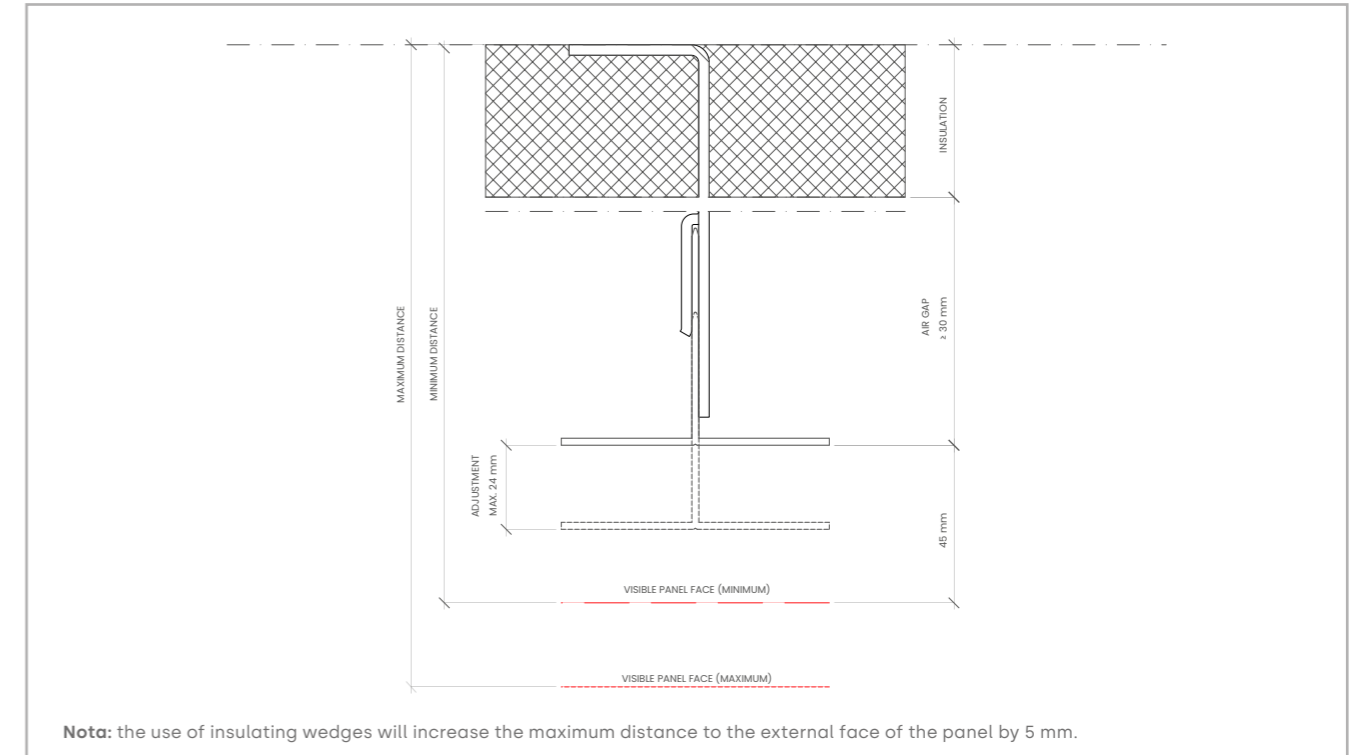


Measurements in mm

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



N°	NAME
1	Cassette made from STACBOND® composite panel
2	Profile T
3	Spacer L
4	Profile Z
5	Profile S
6	Profile T-L intermediate
7	Self-tapping screw
8	Self-tapping screw



SPACER L	DISTANCE (mm) FROM BASE OF FIXING TO VISIBLE FACE OF PANEL		INSULATION THICKNESS (mm) FOR 24 mm* ADJUSTMENT
	MINIMUM	MAXIMUM	MAXIMUM
05.19.041 SPACER L 68	121	145	-
05.19.044 SPACER L 92	145	169	40
05.19.051 SPACER L 116	169	193	60
05.19.052 SPACER L 140	193	217	80
05.19.053 SPACER L 164	217	241	110
05.19.054 SPACER L 188	241	265	130
05.19.055 SPACER L 212	265	289	160
05.19.056 SPACER L 236	289	313	180

INOX SPACER L	DISTANCE (mm) FROM BASE OF FIXING TO VISIBLE FACE OF PANEL		INSULATION THICKNESS (mm) FOR 24 mm* ADJUSTMENT
	MINIMUM	MAXIMUM	MAXIMUM
05.19.078 INOX SPACER L 61	116	145	-
05.19.079 INOX SPACER L 85	140	169	30
05.19.080 INOX SPACER L 109	164	193	60
05.19.081 INOX SPACER L 133	188	217	80
05.19.082 INOX SPACER L 157	212	241	100
05.19.083 INOX SPACER L 181	236	265	130
05.19.084 INOX SPACER L 205	260	289	150
05.19.085 INOX SPACER L 229	284	313	180

SPACER DOUBLE L	DISTANCE (mm) FROM BASE OF FIXING TO VISIBLE FACE OF PANEL		INSULATION THICKNESS (mm) FOR 24 mm* ADJUSTMENT
	MINIMUM	MAXIMUM	MAXIMUM
05.19.042 SPACER DOUBLE L 68	118	142	-
05.19.045 SPACER DOUBLE L 92	142	166	40

* The maximum allowable thickness has been calculated for a stiff insulation layer, guaranteeing maximum adjustment of each system and keeping an air gap ≥ 30 mm.

PROFILES

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

SPACERS

REF.	PART	PAGE
05.19.041	SPACER L 68	
05.19.044	SPACER L 92	
05.19.051	SPACER L 116	
05.19.052	SPACER L 140	
05.19.053	SPACER L 164	109
05.19.054	SPACER L 188	
05.19.055	SPACER L 212	
05.19.056	SPACER L 236	
05.19.042	SPACER DOUBLE L 68	
05.19.045	SPACER DOUBLE L 92	

AUXILIARY ELEMENTS

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

FASTENING ACCESSORIES

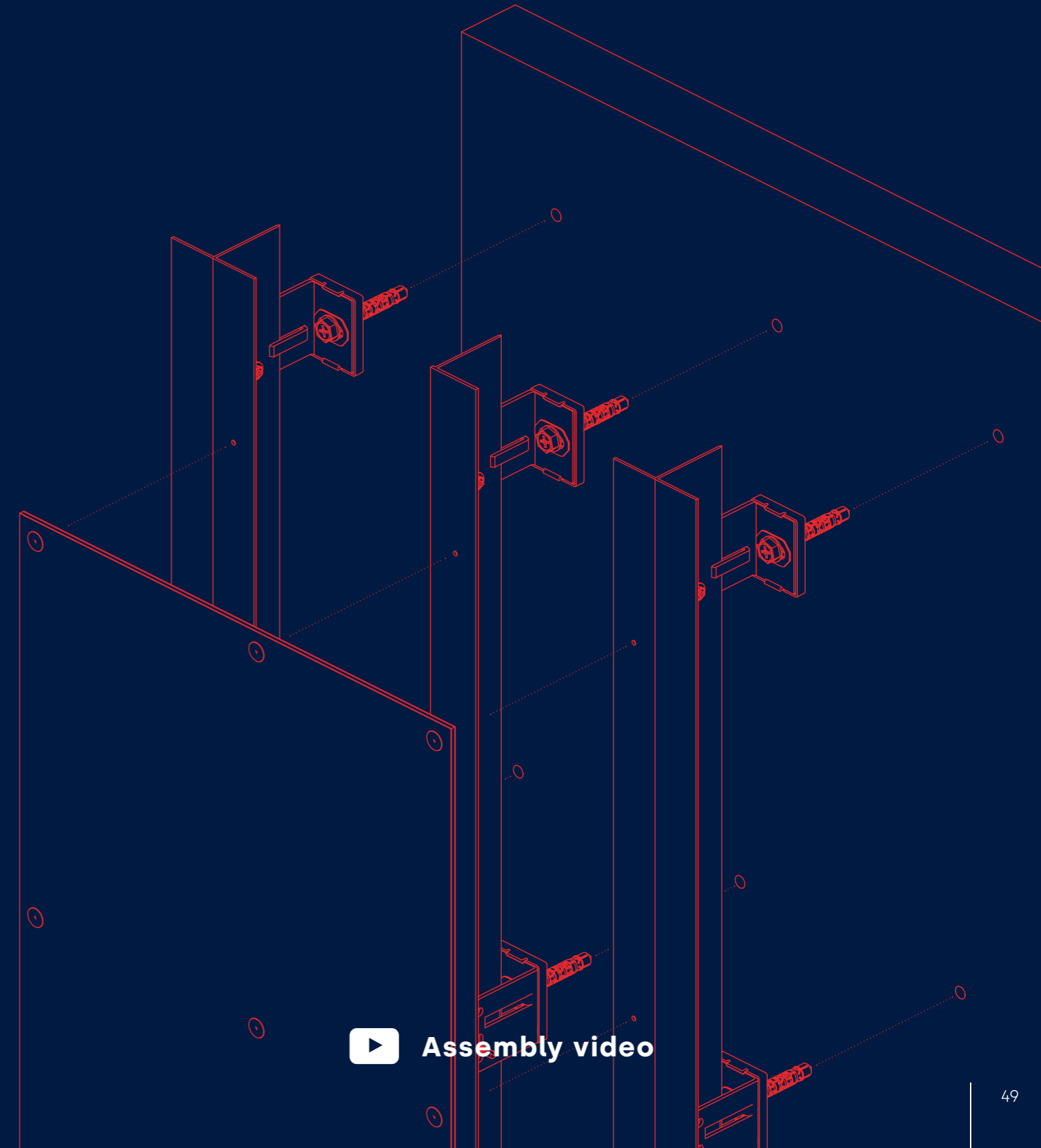
REF.	PART	PAGE
STB-R0300	BLIND RIVET POLYGRIP SFS ASO-D-48150 ALU/INOX 4,8X15	113

INSULATING WEDGES

REF.	PART	PAGE
05.19.070	3 x GROOVE WASHER FOR INSULATING WEDGES WITH REF.: 05.19.066 / 05.19.068 / 05.19.072	
05.19.066	INSULATING WEDGE FOR SPACERS DOUBLE L WITH REF.: 05.19.042 / 05.19.045	115
05.19.068	INSULATING WEDGE FOR SPACERS L WITH REF.: 05.19.053 / 05.19.054 / 05.19.055 / 05.19.056	
05.19.072	INSULATING WEDGE FOR SPACERS L WITH REF.: 05.19.041 / 05.19.044 / 05.19.051 / 05.19.052	

STB-T-REM

RIVETED SYSTEM



 **Assembly video**



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/T6 aluminium alloy or INOX AISI 430.

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 **ANGULAR SPACER** 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/19) 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.



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. Fitting the T profiles. The T profiles (and the intermediate T-L profile) are screwed onto the L spacers, which should be perfectly aligned with the regulations allowed by the system. The first and last fastenings should be fitted at a maximum of 250 mm from the ends of the profiles.



CROSS-STRUTS T

3. Cross-struts (optional). These profiles are mechanically fixed to the vertical substructure using the **el 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

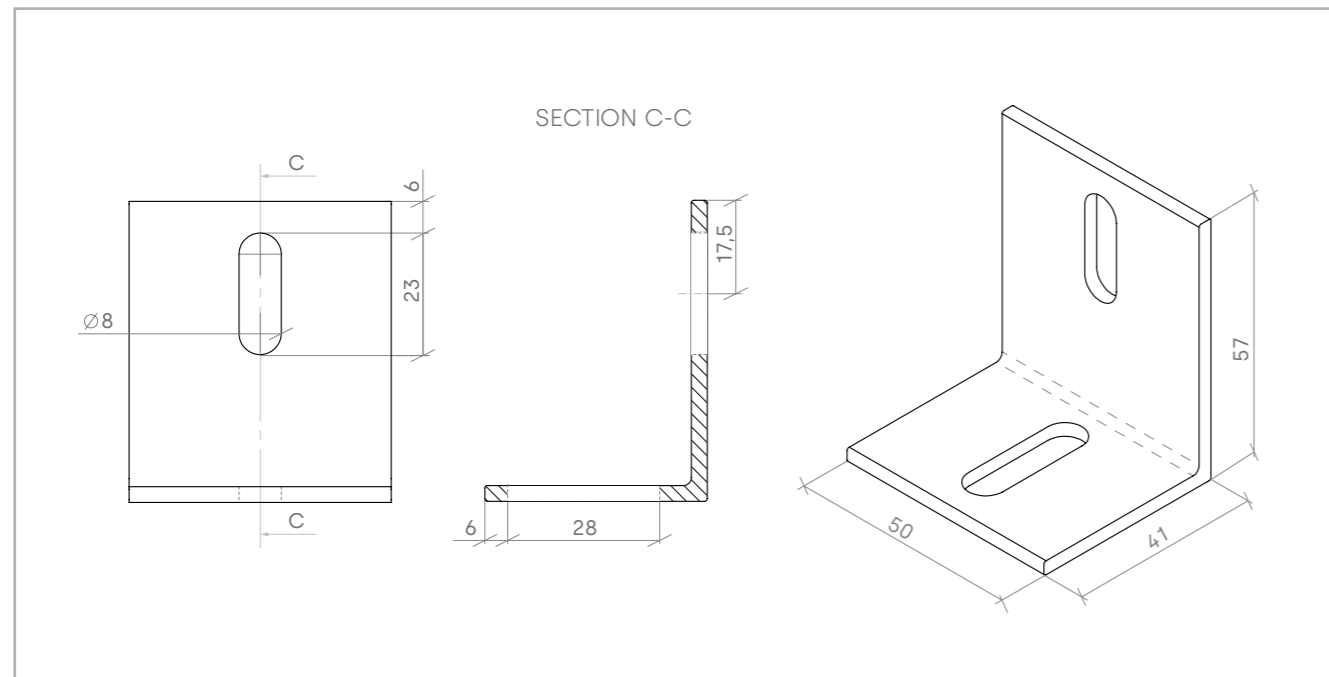
4. Attaching STACBOND® composite panel. Once the substructure is in place, the **STACBOND®** panels are attached to it using rivets. Attention should be paid to the condition and type of rivet to ensure correct dilation of the panels.

ANGULAR SPACER

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.



Measurements in mm

PROFILE T-L INTERMEDIATE

The profile T-L INTERMEDIATE is used in combination with the profile T, to reduce the weight of the substructure.

Used as upright for fixing intermediate points of SZ cassettes and STACBOND® composite panels.



REFERENCE	DESCRIPTION	UNITS/BOX
19.021	ANGULAR SPACER	100
05.19.059	PROFILE T-L INTERMEDIATE	-

DILATION OF THE PANEL

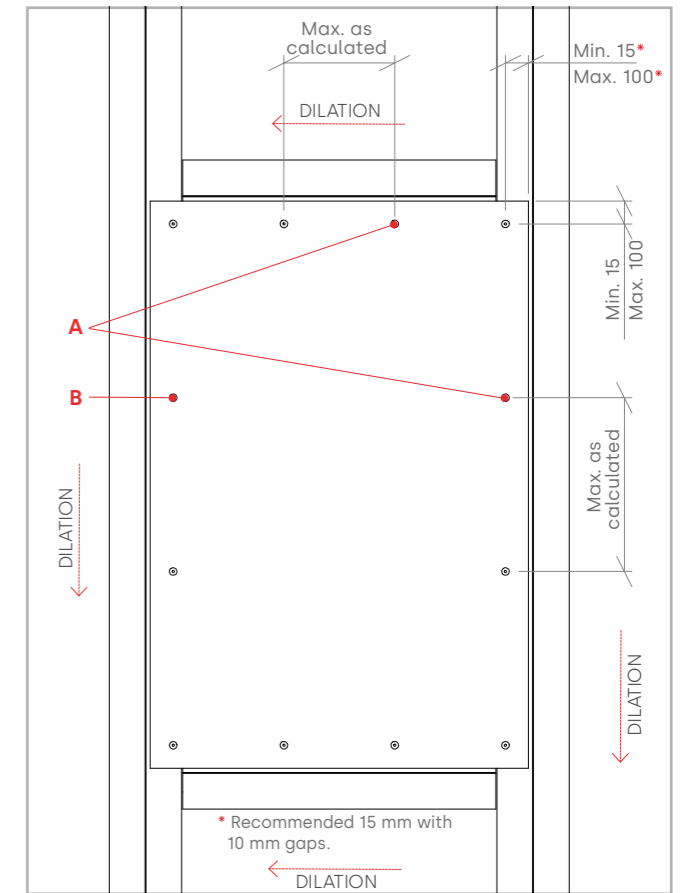
The diagram shows the layout and max. distance of the holes in the STACBOND® composite panel.

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.

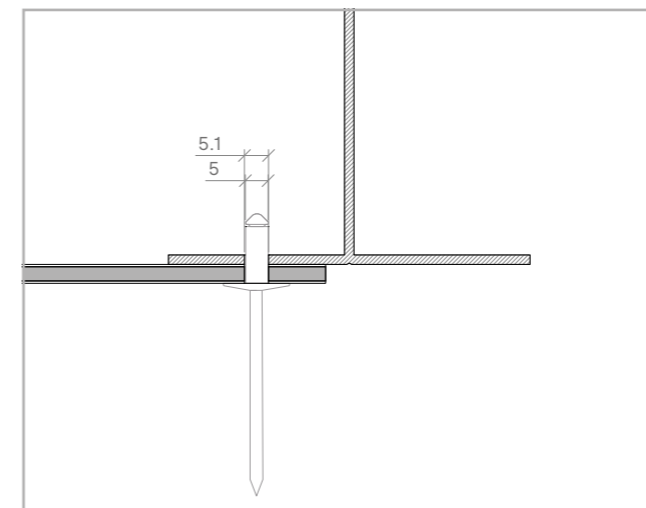
Rivets and screws specified by STAC® should be used.



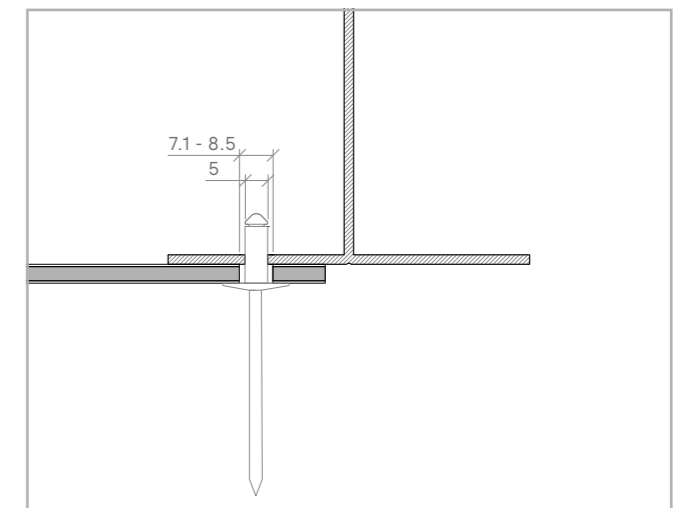
Measurements in mm

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



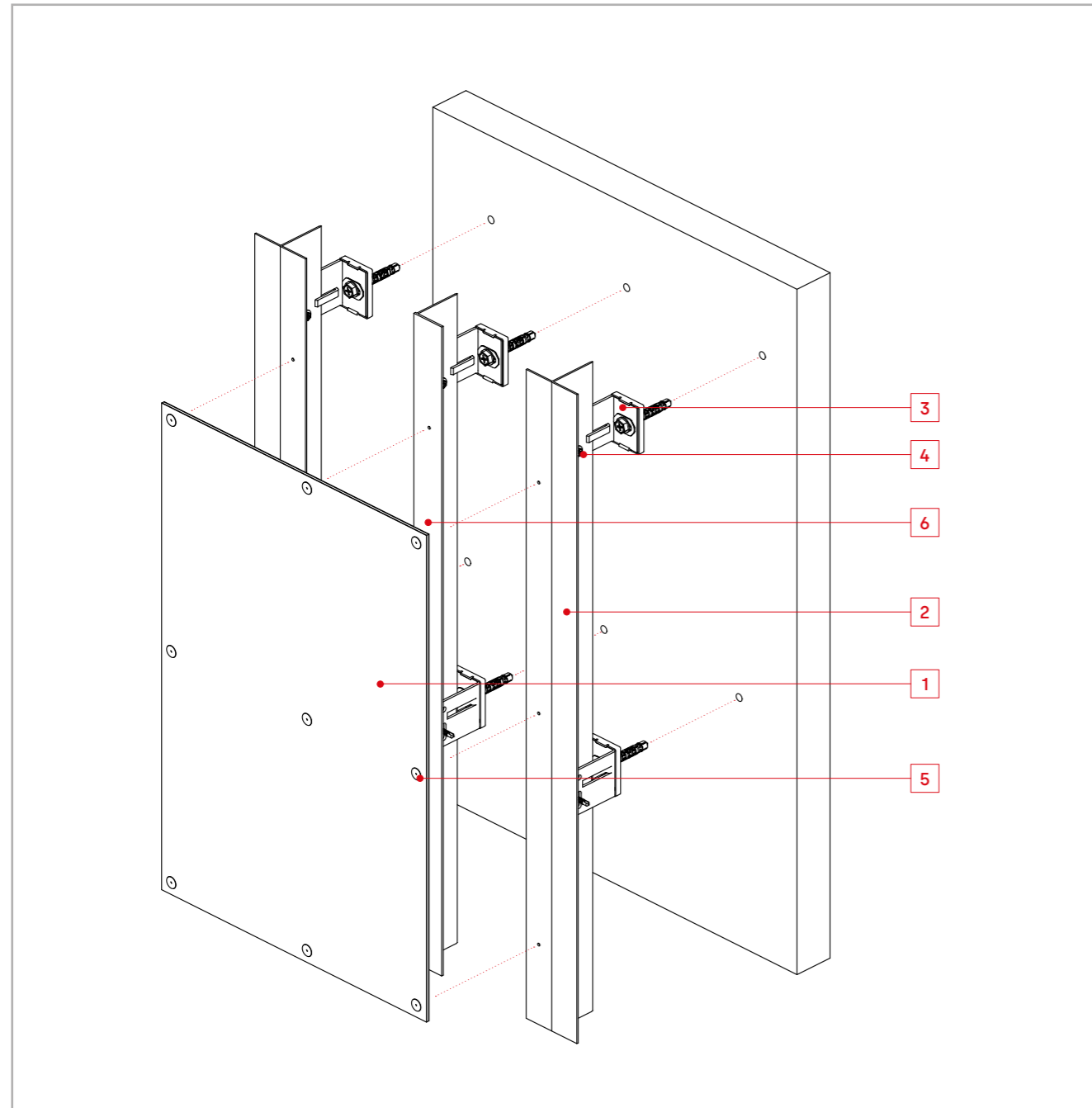
B. MOBILE ANCHORING POINTS



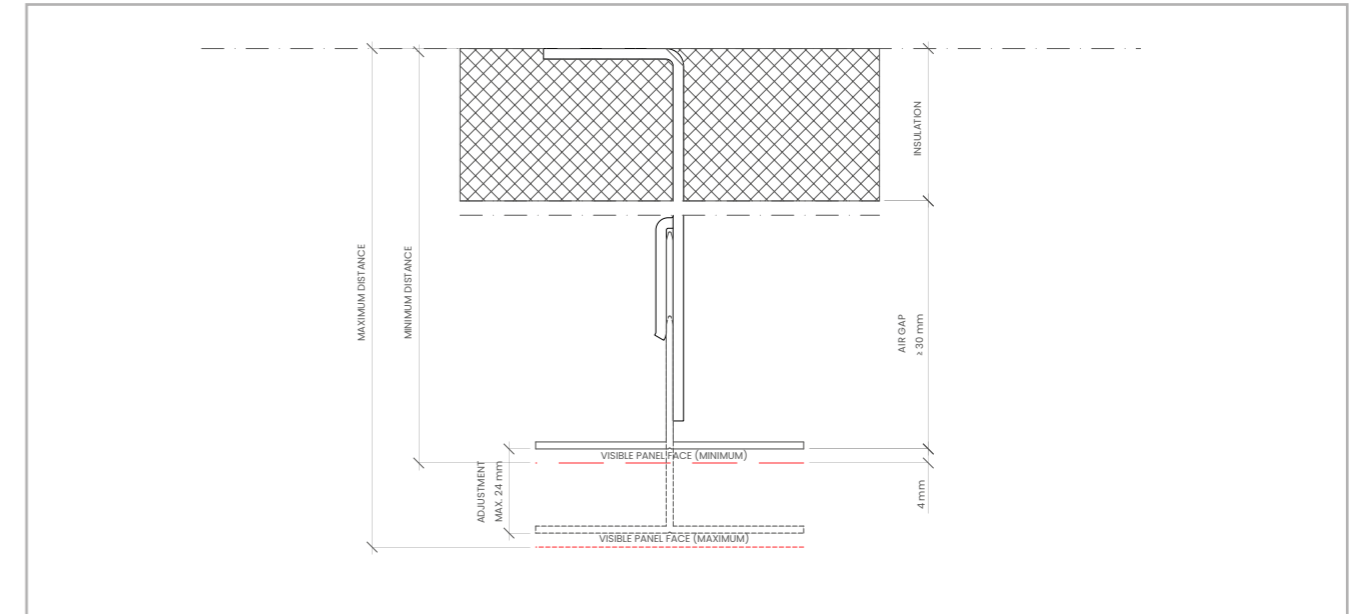
Measurements in mm

The 5,1 mm hole drilled in the STACBOND® composite panel defines the origin of the panel's dilation.

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



N°	NAME
1	STACBOND® panel composite
2	Profile T
3	Spacer L
4	Self-tapping screw
5	Self-tapping screw
6	Perfil T-L intermediate



Note: the use of insulating wedges will increase the maximum distance to the external face of the panel by 5 mm.

SPACER L	DISTANCE (mm) FROM BASE OF FIXING TO VISIBLE FACE OF PANEL		INSULATION THICKNESS (mm) FOR 24 mm* ADJUSTMENT
	MINIMUM	MAXIMUM	MAXIMUM
05.19.041 SPACER L 68	80	104	-
05.19.044 SPACER L 92	104	128	40
05.19.051 SPACER L 116	128	152	60
05.19.052 SPACER L 140	152	176	80
05.19.053 SPACER L 164	176	200	110
05.19.054 SPACER L 188	200	224	130
05.19.055 SPACER L 212	224	248	150
05.19.056 SPACER L 236	248	272	180

INOX SPACER L	DISTANCE (mm) FROM BASE OF FIXING TO VISIBLE FACE OF PANEL		INSULATION THICKNESS (mm) FOR 24 mm* ADJUSTMENT
	MINIMUM	MAXIMUM	MAXIMUM
05.19.078 INOX SPACER L 61	75	104	-
05.19.079 INOX SPACER L 85	99	128	40
05.19.080 INOX SPACER L 109	123	152	60
05.19.081 INOX SPACER L 133	147	176	80
05.19.082 INOX SPACER L 157	171	200	100
05.19.083 INOX SPACER L 181	195	224	130
05.19.084 INOX SPACER L 205	219	248	150
05.19.085 INOX SPACER L 229	243	272	180

SPACER DOUBLE L	DISTANCE (mm) FROM BASE OF FIXING TO VISIBLE FACE OF PANEL		INSULATION THICKNESS (mm) FOR 24 mm* ADJUSTMENT
	MINIMUM	MAXIMUM	MAXIMUM
05.19.042 SPACER DOUBLE L 68	80	104	-
05.19.045 SPACER DOUBLE L 92	104	128	40

* The maximum allowable thickness has been calculated for a stiff insulation layer, guaranteeing maximum adjustment of each system and keeping an air gap ≥ 30 mm.

PROFILES

REF.	PART	PAGE
05.19.043	PROFILE T	106
05.19.043	PROFILE T-L INTERMEDIATE	

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 LIMIT (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	
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	113
STB-T0100	SECURITY SCREW 4,8x19 INOX HEAD TORX SLA3/6-S-D12-4,8x19	
STB-R0100	BLIND RIVET ISO 15977 D5x12 HEAD 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
05.19.041	SPACER L 68	109
05.19.044	SPACER L 92	
05.19.051	SPACER L 116	
05.19.052	SPACER L 140	
05.19.053	SPACER L 164	
05.19.054	SPACER L 188	
05.19.055	SPACER L 212	
05.19.056	SPACER L 236	
05.19.042	SPACER DOUBLE L 68	
05.19.045	SPACER DOUBLE L 92	

AUXILIARY ELEMENTS

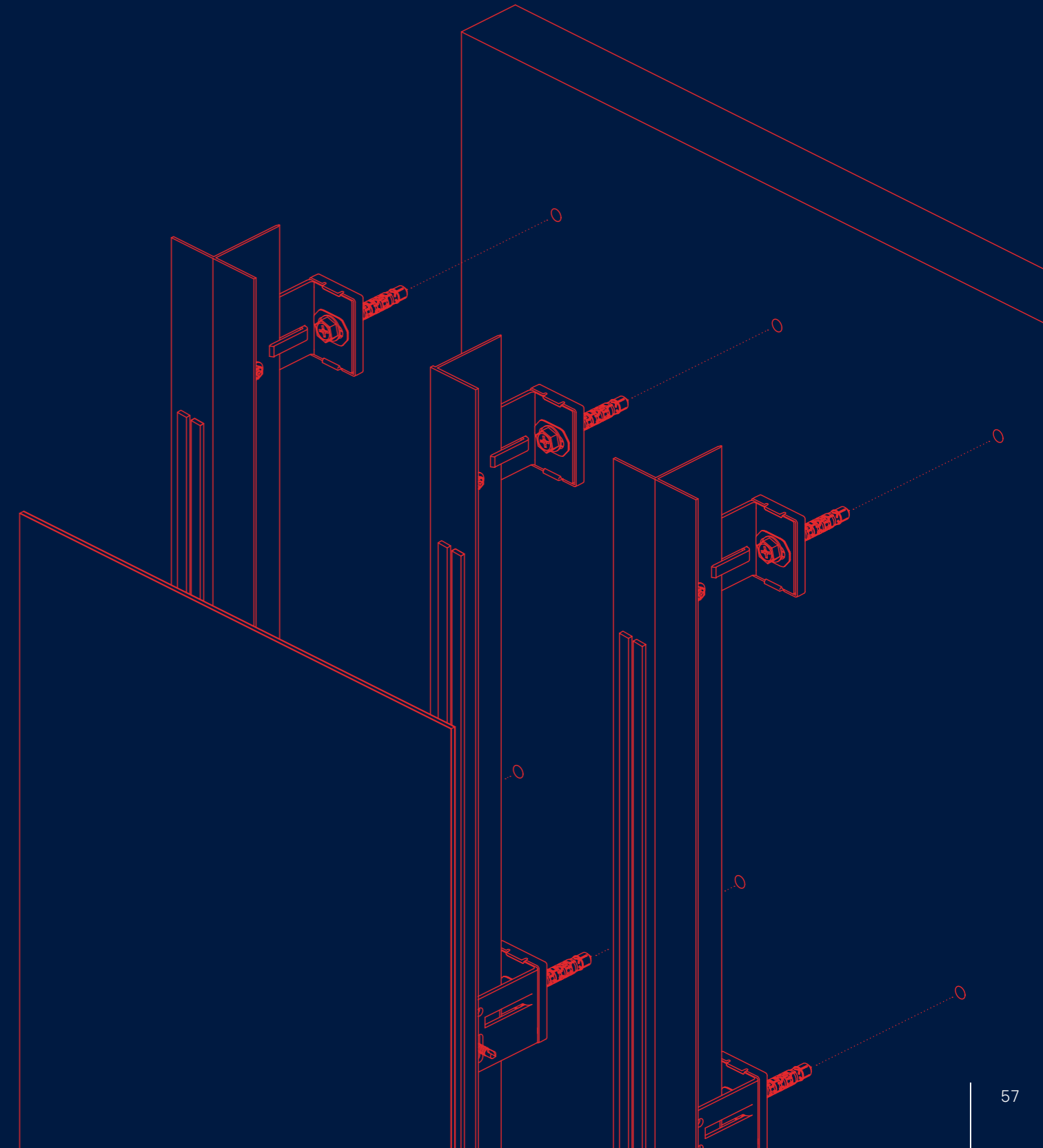
REF.	PART	PAGE
19.021	ANGULAR SPACER	110

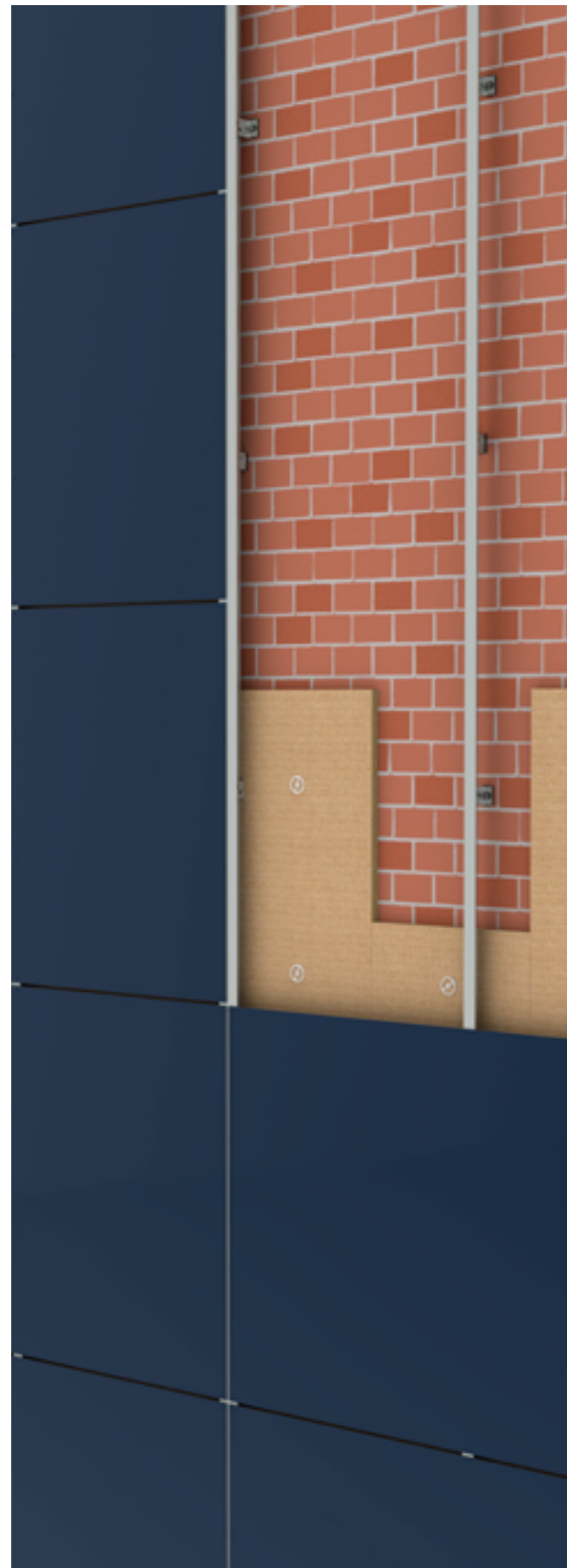
INSULATING WEDGES

REF.	PART	PAGE
05.19.070	3 x GROOVE WASHER FOR INSULATING WEDGES WITH REF.: 05.19.066 / 05.19.068 / 05.19.072	115
05.19.066	INSULATING WEDGE FOR SPACERS DOUBLE L WITH REF.: 05.19.042 / 05.19.045	
05.19.068	INSULATING WEDGE FOR SPACERS L WITH REF.: 05.19.053 / 05.19.054 / 05.19.055 / 05.19.056	
05.19.072	INSULATING WEDGE FOR SPACERS L WITH REF.: 05.19.041 / 05.19.044 / 05.19.051 / 05.19.052	

STB-T-PEG

GLUED SYSTEM





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/T6 aluminium alloy or INOX AISI 430.

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.

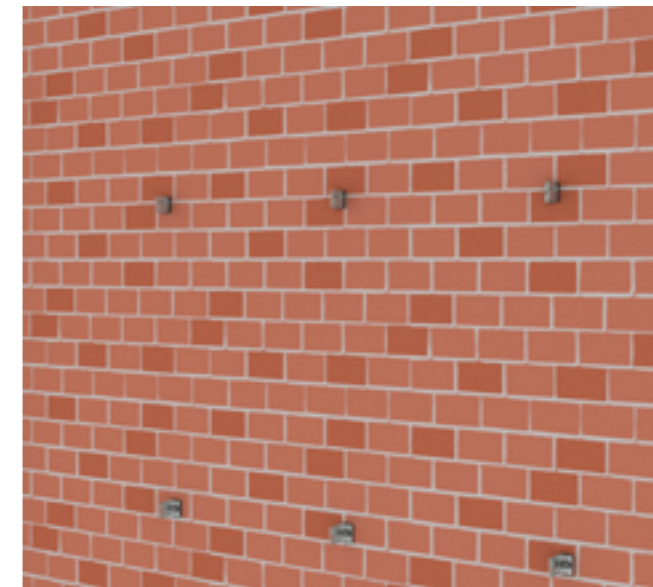
The **STB-T-PEG** system can be mounted on a unidirectional or bidirectional substructure. With a unidirectional substructure, the horizontal joint remains open. In the case of the bidirectional substructure, horizontal struts are attached to the uprights using **ANGULAR SPACER** made of 6063 T5, or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

It is the responsibility of the installer to comply with the recommendations and demands of the manufacturer of the adhesive used, following the specifications for the applied product.

Wherever possible, **STACBOND®** recommends the use of at least one mechanical fastening on every part.



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. Placement of uprights. 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

3. Horizontal cross-struts (optional). These profiles are mechanically fixed to the vertical substructure using the **ANGULAR SPACER**, 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

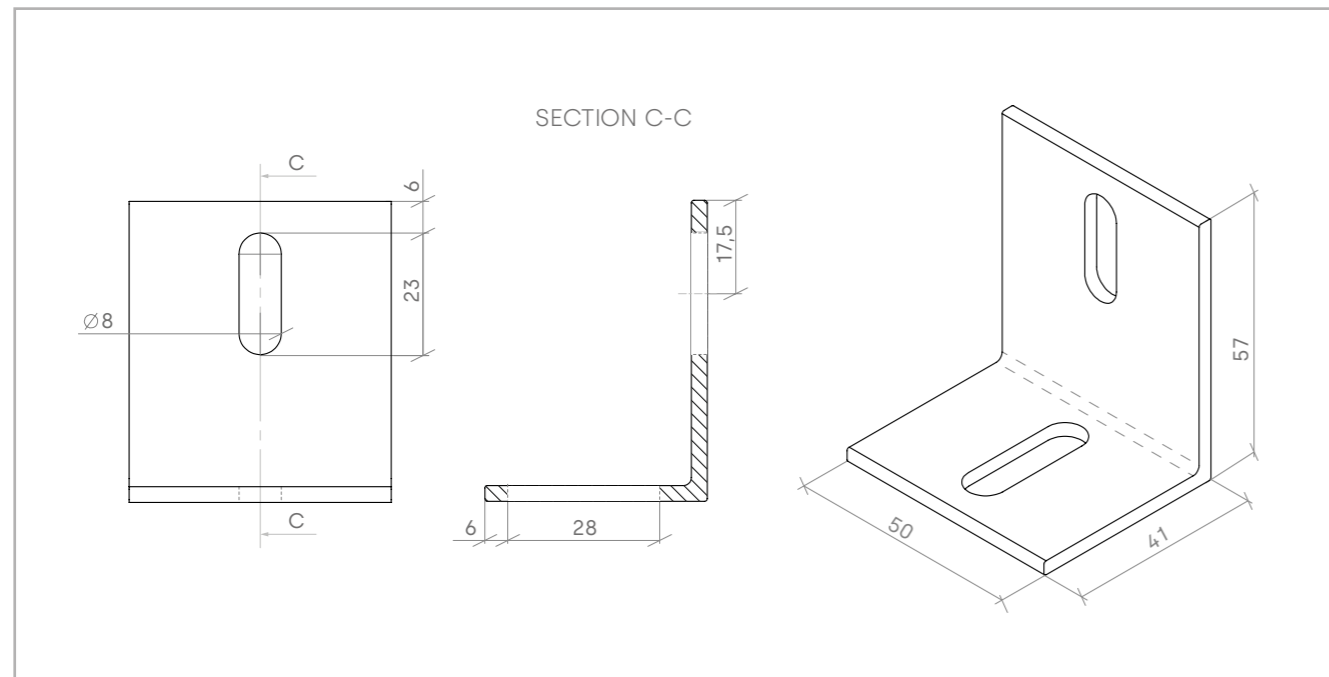
4. Attaching composite panel STACBOND® composite panel. Once the substructure is in place, the **STACBOND®** panels are attached to it using double-sided adhesive tape and adhesive, following the manufacturer's instructions.

ANGULAR SPACER

Part made of extruded 6063 T5 aluminium alloy profile and 3 mm width 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.



Measurements in mm

PROFILE T-L INTERMEDIATE

The profile T-L INTERMEDIATE is used in combination with the profile T, to reduce the weight of the substructure.

Used as upright for fixing intermediate points of SZ cassettes and **STACBOND** composite panels.



REFERENCE	DESCRIPTION	UNITS/BOX
19.021	ANGULAR SPACER	100
05.19.059	PROFILE T-L INTERMEDIATE	-



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, SIKA-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.

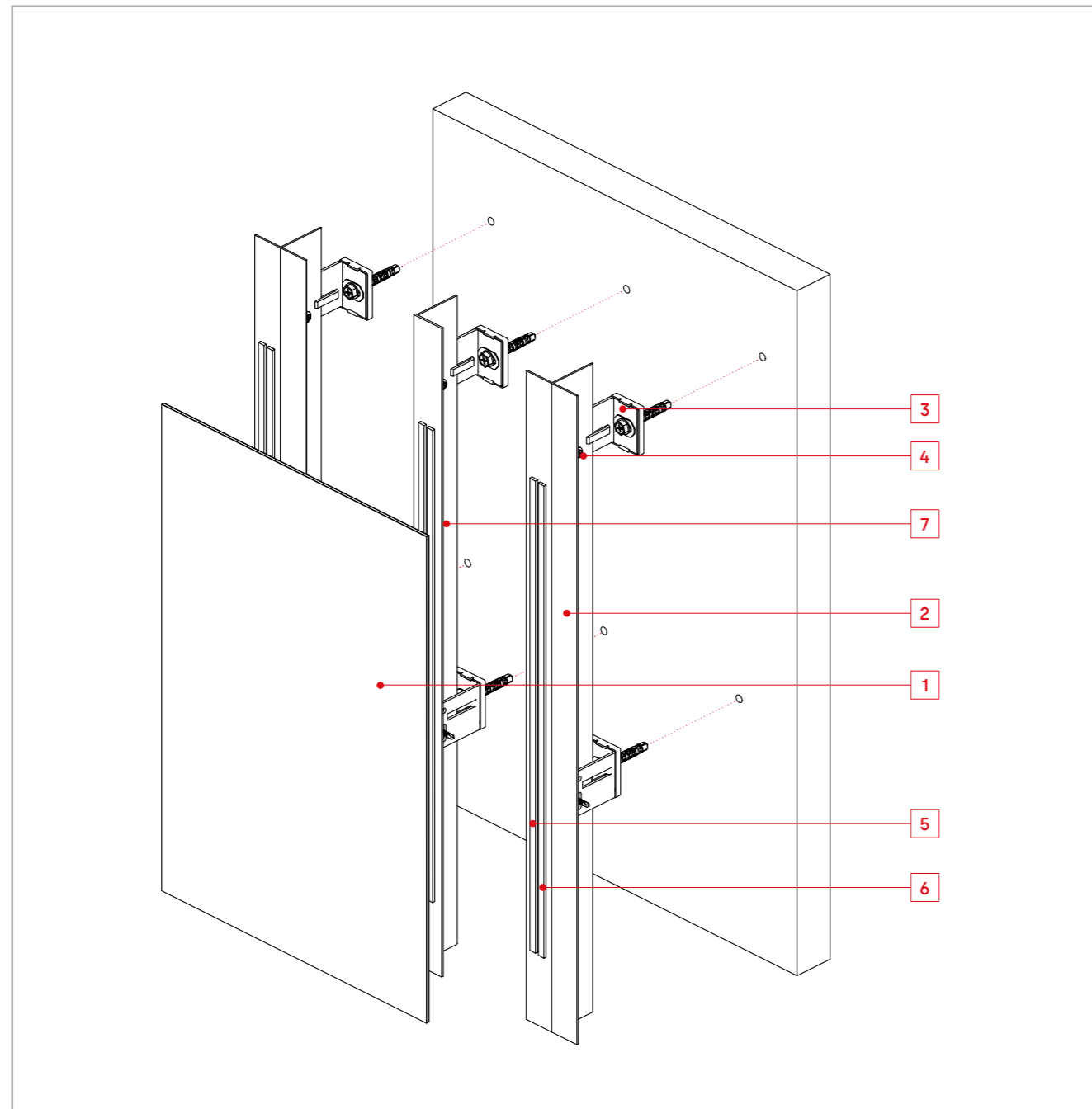
Precautions:

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

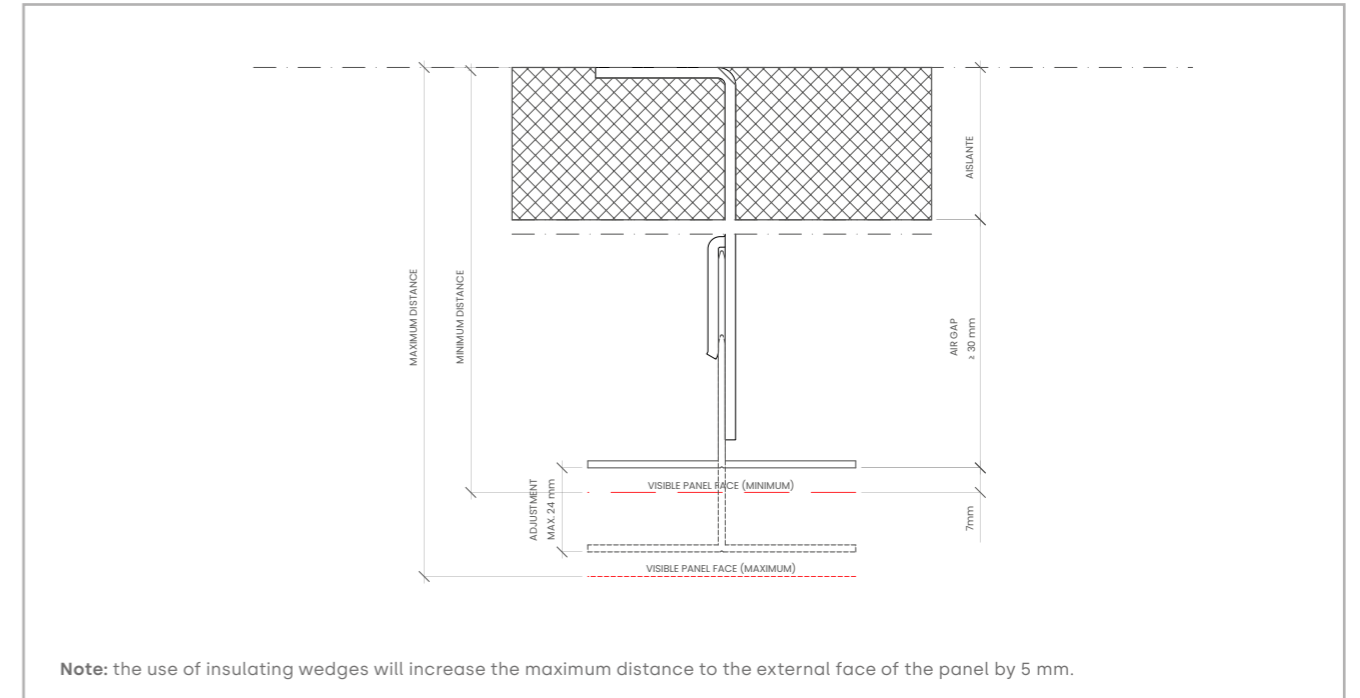
4. Elastic adhesive. Apply a continuous vertical bead of elastic adhesive - SIKATAACK PANEL or similar - using a triangular nozzle (8 mm wide x 10 mm long), at least 5 mm away from the adhesive tape. To ensure correct application, the gun should be positioned perpendicular to the support.

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.



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



SPACER L		DISTANCE (mm) FROM BASE OF FIXING TO VISIBLE FACE OF PANEL		INSULATION THICKNESS (mm) FOR 24 mm* ADJUSTMENT
REF.	PART	MINIMUM	MAXIMUM	MAXIMUM
05.19.041	SPACER L 68	83	107	-
05.19.044	SPACER L 92	107	131	40
05.19.051	SPACER L 116	131	155	60
05.19.052	SPACER L 140	155	179	80
05.19.053	SPACER L 164	179	203	110
05.19.054	SPACER L 188	203	227	130
05.19.055	SPACER L 212	227	251	160
05.19.056	SPACER L 236	251	275	180

INOX SPACER L		DISTANCE (mm) FROM BASE OF FIXING TO VISIBLE FACE OF PANEL		INSULATION THICKNESS (mm) FOR 24 mm* ADJUSTMENT
REF.	PART	MINIMUM	MAXIMUM	MAXIMUM
05.19.078	INOX SPACER L 61	78	107	-
05.19.079	INOX SPACER L 85	102	131	30
05.19.080	INOX SPACER L 109	126	155	60
05.19.081	INOX SPACER L 133	150	179	80
05.19.082	INOX SPACER L 157	174	203	100
05.19.083	INOX SPACER L 181	198	227	130
05.19.084	INOX SPACER L 205	221	251	150
05.19.085	INOX SPACER L 229	243	275	180

SPACER DOUBLE L		DISTANCE (mm) FROM BASE OF FIXING TO VISIBLE FACE OF PANEL		INSULATION THICKNESS (mm) FOR 24 mm* ADJUSTMENT
REF.	PART	MINIMUM	MAXIMUM	MAXIMUM
05.19.042	SPACER DOUBLE L 68	83	107	-
05.19.045	SPACER DOUBLE L 92	107	131	40

* The maximum allowable thickness has been calculated for a stiff insulation layer, guaranteeing maximum adjustment of each system and keeping an air gap ≥ 30 mm.

PROFILES

REF.	PART	PAGE
05.19.043	PROFIL T	106
05.19.059	PROFILE T-L INTERMEDIATE	

SPACERS

REF.	PART	PAGE
05.19.041	SPACER L 68	109
05.19.044	SPACER L 92	
05.19.051	SPACER L 116	
05.19.052	SPACER L 140	
05.19.053	SPACER L 164	
05.19.054	SPACER L 188	
05.19.055	SPACER L 212	
05.19.056	SPACER L 236	
05.19.042	SPACER DOUBLE L 68	
05.19.045	SPACER DOUBLE L 92	

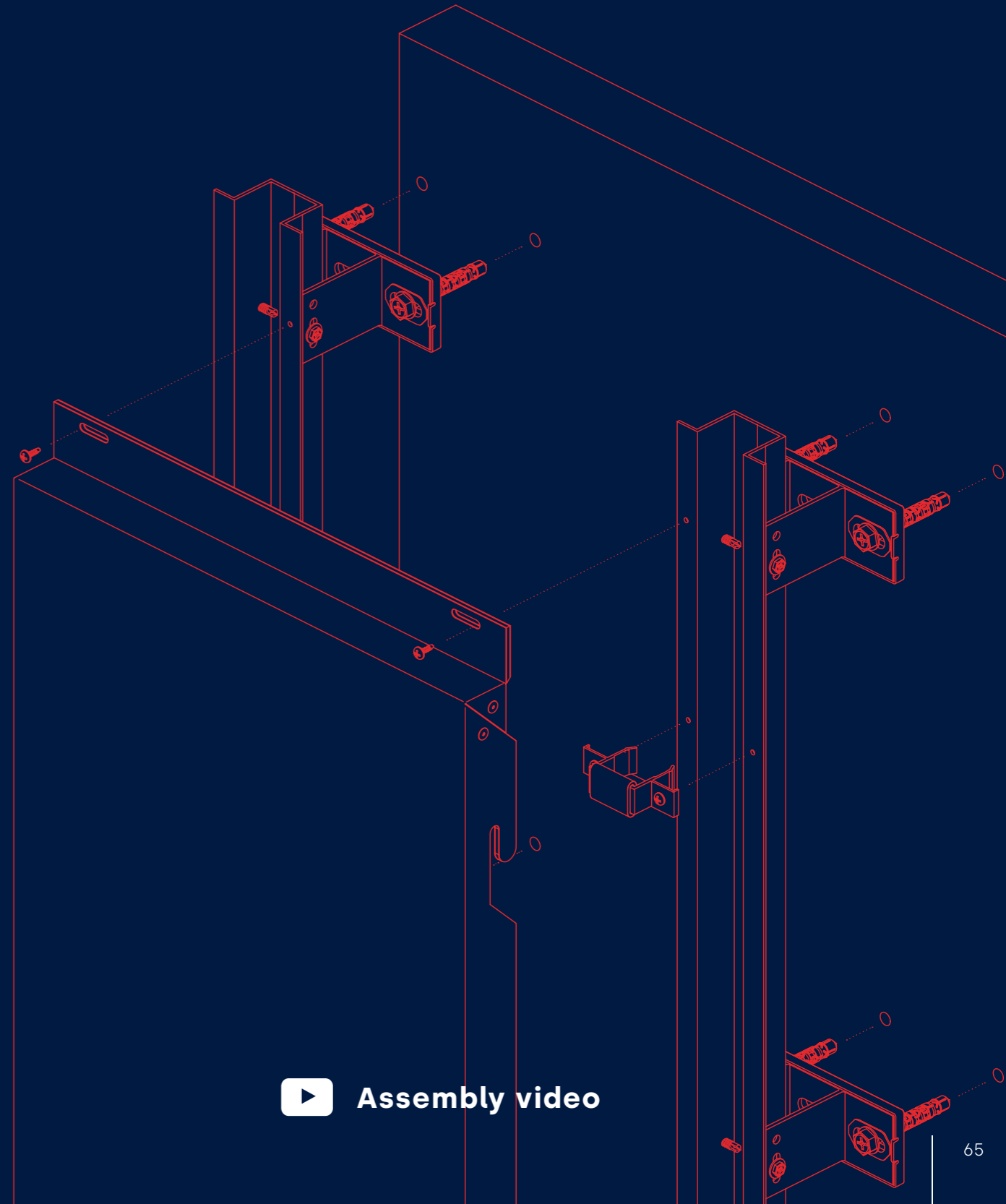
AUXILIARY ELEMENTS

REF.	PART	PAGE
19.021	ANGULAR SPACER	110

INSULATING WEDGES

REF.	PART	PAGE
05.19.070	3 x GROOVE WASHER FOR INSULATING WEDGES WITH REF.: 05.19.066 / 05.19.068 / 05.19.072	115
05.19.066	INSULATING WEDGE FOR SPACERS DOUBLE L WITH REF.: 05.19.042 / 05.19.045	
05.19.068	INSULATING WEDGE FOR SPACERS L WITH REF.: 05.19.053 / 05.19.054 / 05.19.055 / 05.19.056	
05.19.072	INSULATING WEDGE FOR SPACERS L WITH REF.: 05.19.041 / 05.19.044 / 05.19.051 / 05.19.052	

STB-CH HANGING SYSTEM



[Assembly video](#)



STB-CH is a kit system based on hung cassettes made from **STACBOND®** composite panel 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/T6 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 **DOUBLE T** and the vertical face.

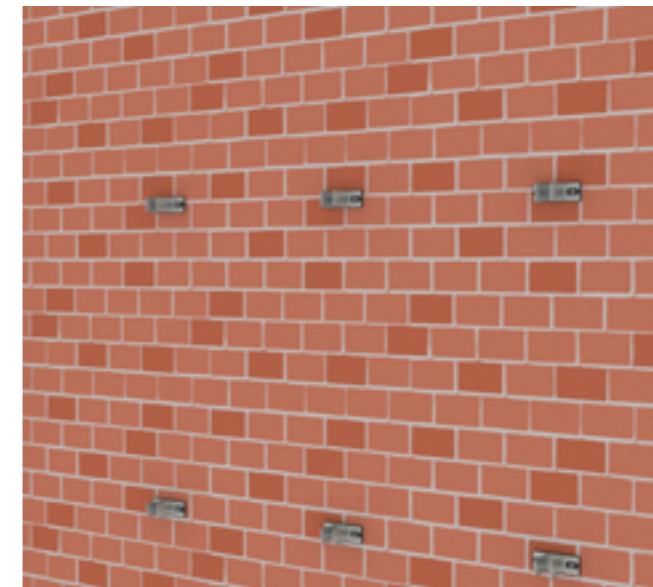
The spacers are anchored to the wall using special mechanical fixings, recommended in each case by the fixings suppliers, and receive the profiles **OMEGA** as uprights.

The **bracket sets STB-CH hanging** are placed on the uprights. They are cut from extruded 6063 T5 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/19) 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.



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 **STB-CH** brackets are fitted onto the **OMEGA PROFILE**. These are adjusted in height according to the location of the hanging slots of each cassette.



STACBOND COMPOSITE PANEL CASSETTE

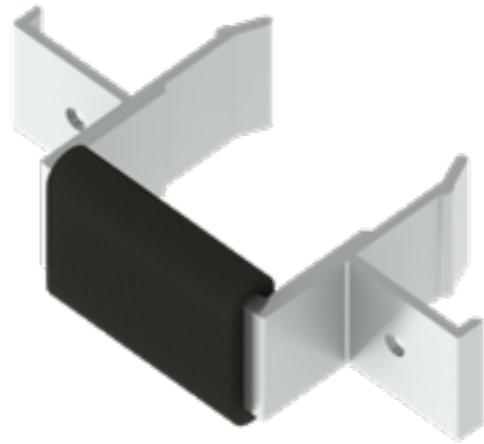
4. The last step is placing the **STACBOND®** composite panel cassettes on the hangers and screwing or riveting them to the wings of the profiles **OMEGA** in the slotted holes located on the upper horizontal tabs of the cassettes. The cladding is applied working from the bottom row up.

BRACKET SET STB-CH HANGING

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

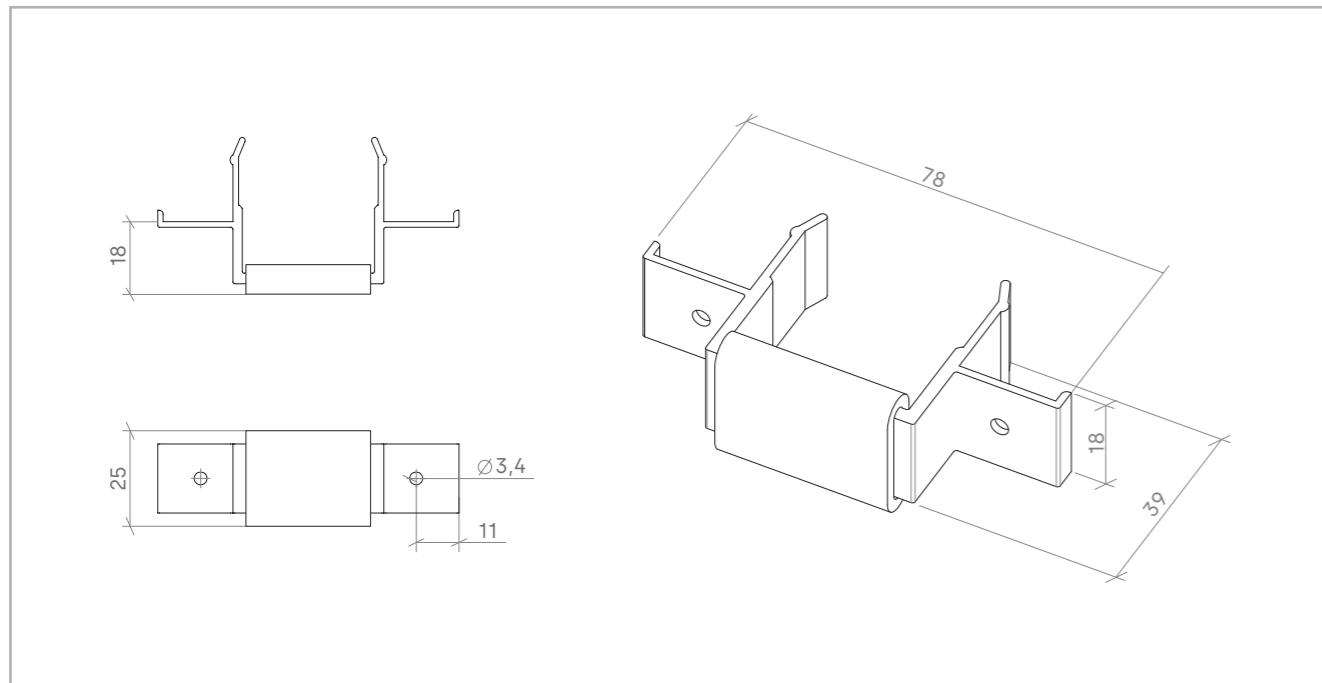
The gasket for the hanger is used to avoid vibration noise caused by wind load, road traffic, etc.

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	50

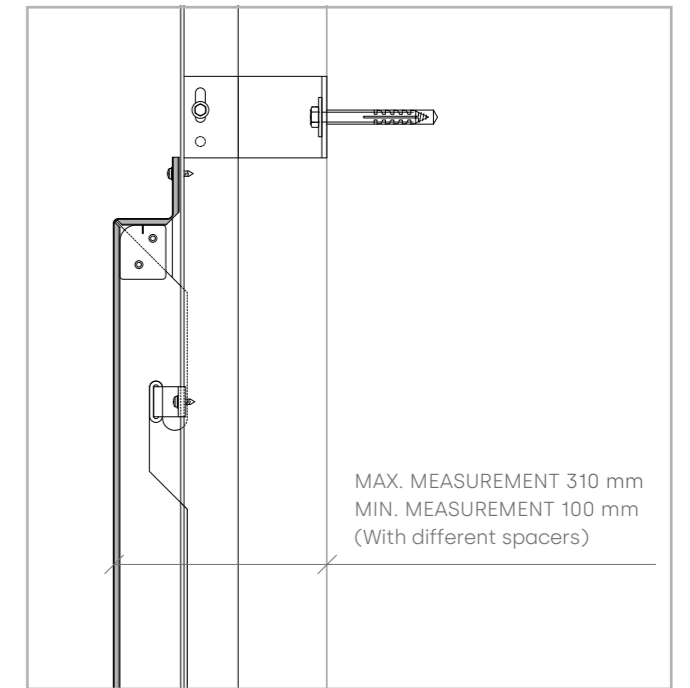
Measurements in mm



45 mm FLAP (DETAIL)



VERTICAL CROSS-SECTION

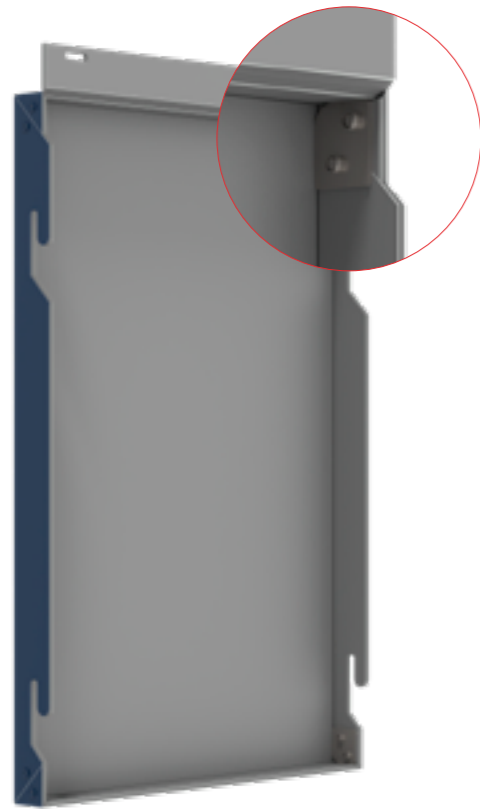


Note: the machined STACBOND® panels are supplied flat. The client is responsible for forming them into cassettes. No specialist machinery is required.

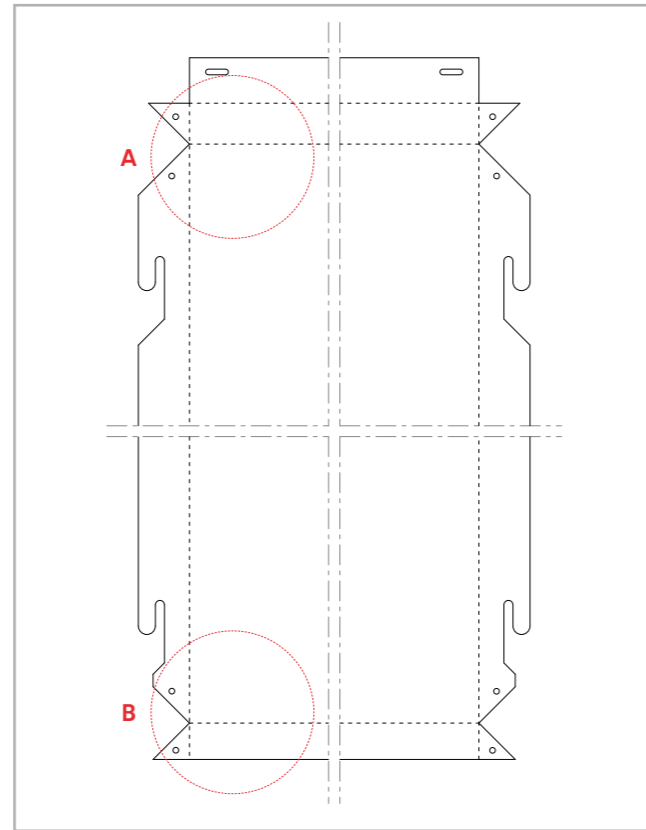
For the CH cassettes with 45 mm flaps, they can be formed using rectangular strips of 1050 alloy (28 x 33 x 2 mm) or rectangular offcuts of the composite panels themselves.

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.

FORMED CASSETTE



FLAT CASSETTE



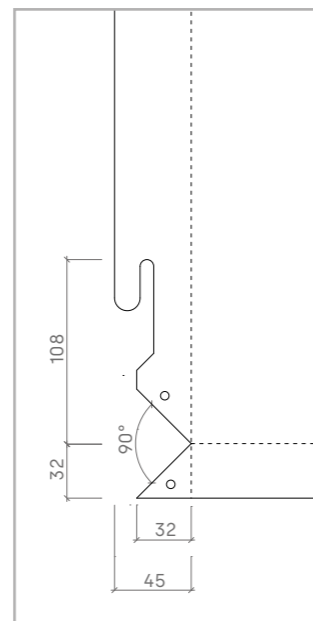
CASSETTES FORMING PLATE

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.

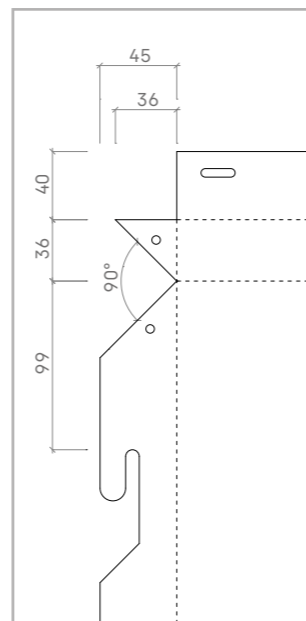
This plate is specified for CH cassettes with 45 mm flap and stiffeners.



DETAIL A



DETAIL B



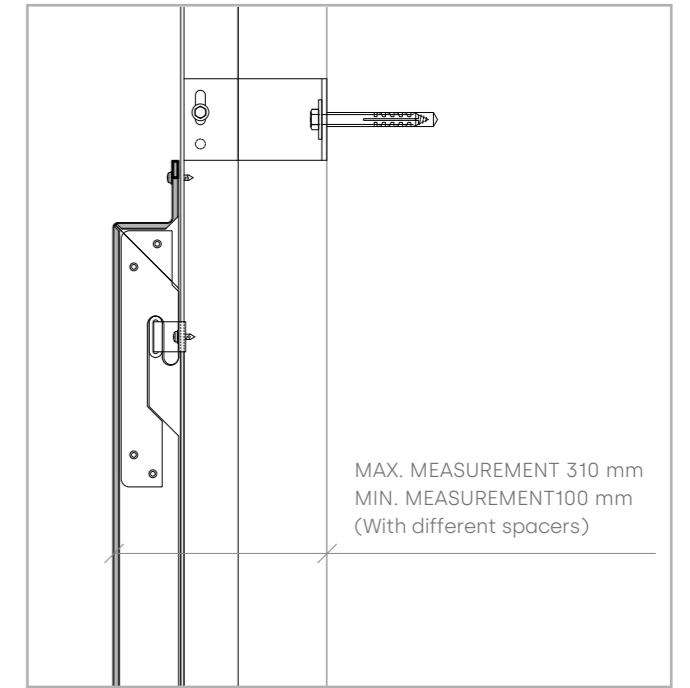
Measurements in mm

REFERENCE	DESCRIPTION	UNITS/BOX
05.19.050	CASSETTES FORMING PLATE	1000

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.

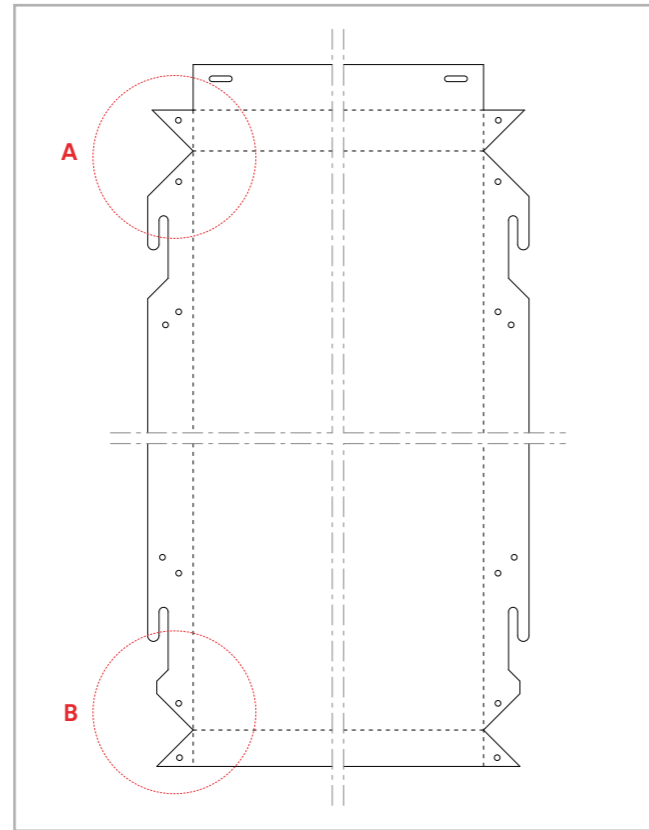
For the forming of CH cassettes with 40 mm flaps, hanging reinforcements are always used for every tab. These are specific 1050 aluminium alloy pieces of 2 mm and are riveted or screwed to the corresponding tabs and/or stiffeners.

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.

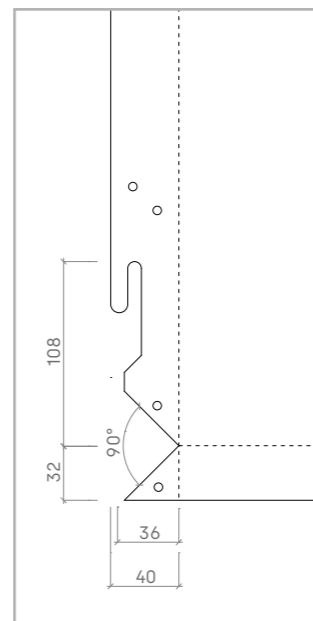
FORMED CASSETTE



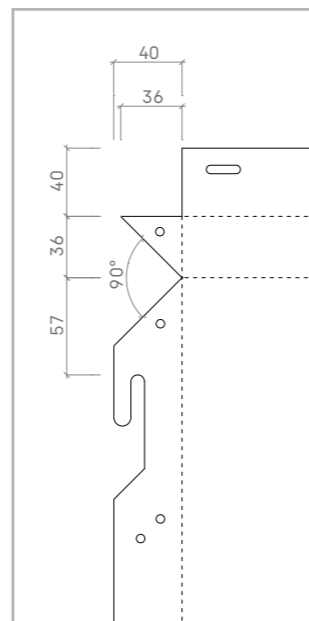
FLAT CASSETTE



DETAIL A



DETAIL B



Measurements in mm

HANGING REINFORCEMENT

The hanging reinforcement is a piece made of 1050 H24 aluminum 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.

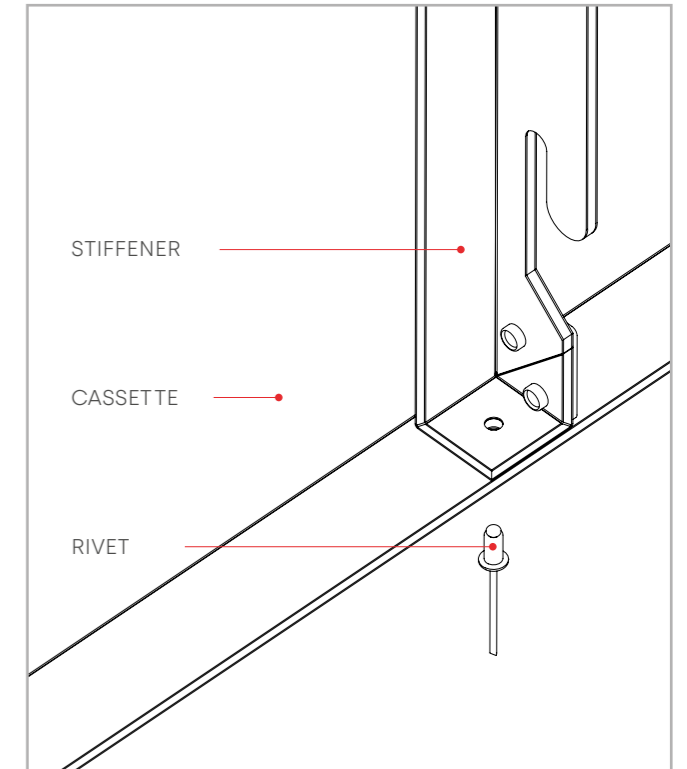


REFERENCE	DESCRIPTION	UNITS/BOX
05.19.013	HANGING REINFORCEMENT	500

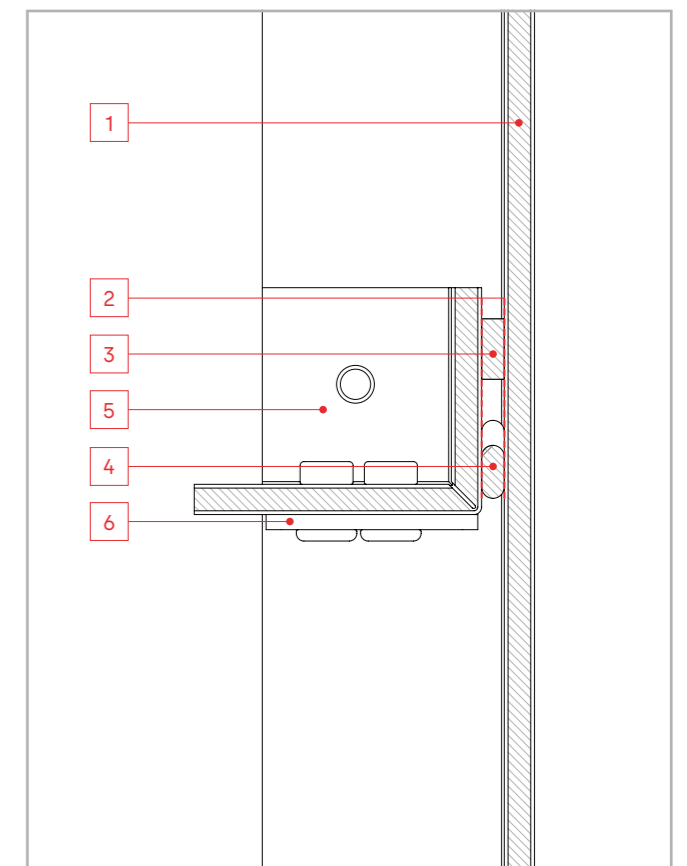
The stiffener is an angular piece formed from machined STACBOND® composite panel. It is used to internally reinforce CH cassettes when they exceed certain dimensions. The stiffener is fixed with double-sided tape and adhesive to the inner side of the tray and is riveted to the horizontal upper and lower 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 - 1.500 mm)
05.19.027	STIFFENER SCH-3 (1.500 - 2.400 mm)
05.19.027.1	STIFFENER SCH-4 (2.400 - 4.000 mm)
05.19.027.2	STIFFENER SCH-5 (4.000 - 5.000 mm)
05.19.027.3	STIFFENER SCH-6 (> 5.000 mm)

N°	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

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

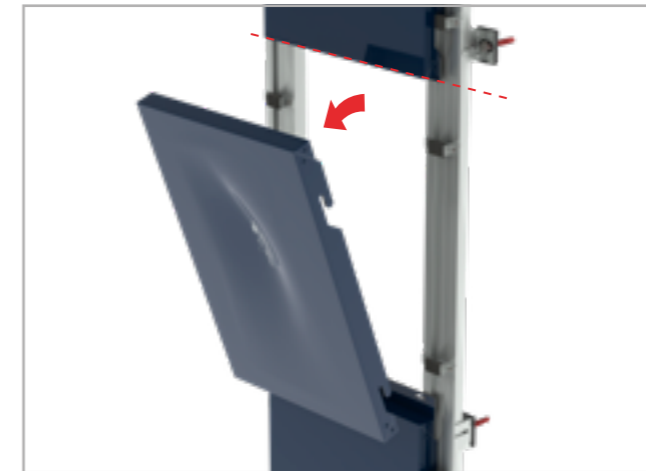
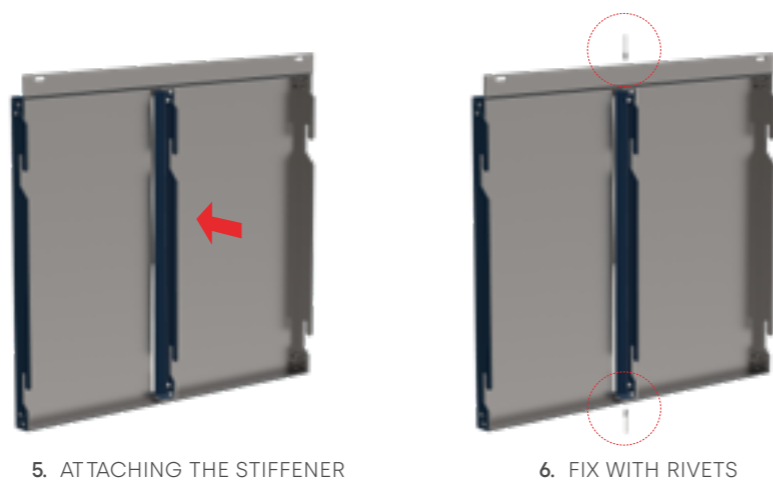
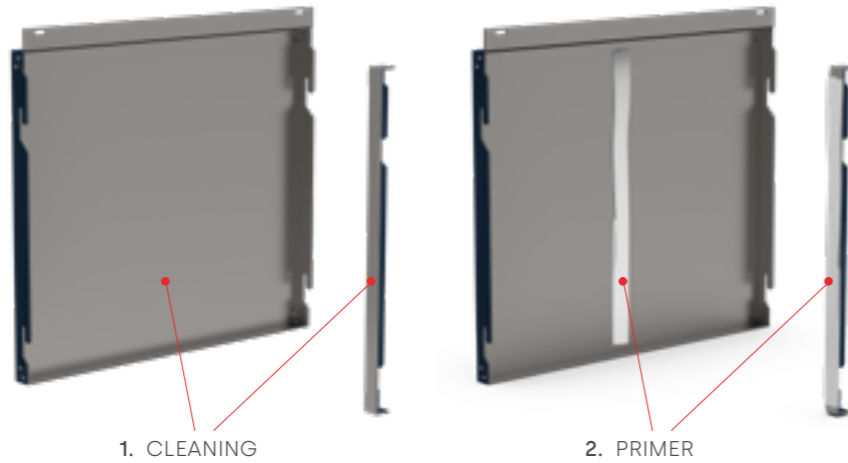
The elastic adhesive - SIKATACK PANEL 50 or similar - is then applied to the panel, applying a continuous bead contiguous to the adhesive tape.

5. ATTACHING STIFFENER

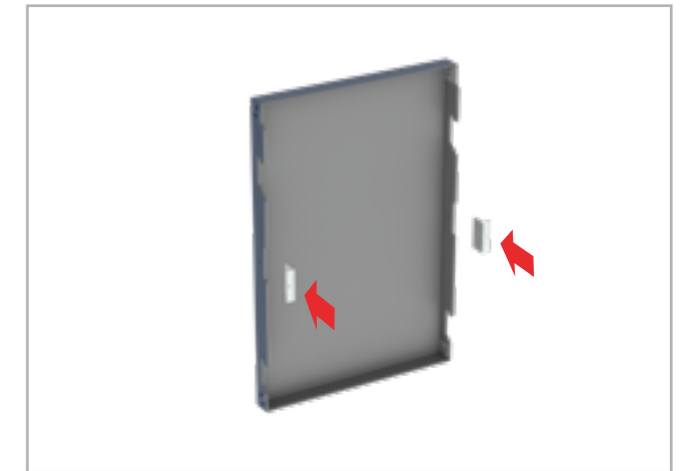
The stiffener shall then be placed on the primed area of the cassette.

6. FIXING WITH RIVETS

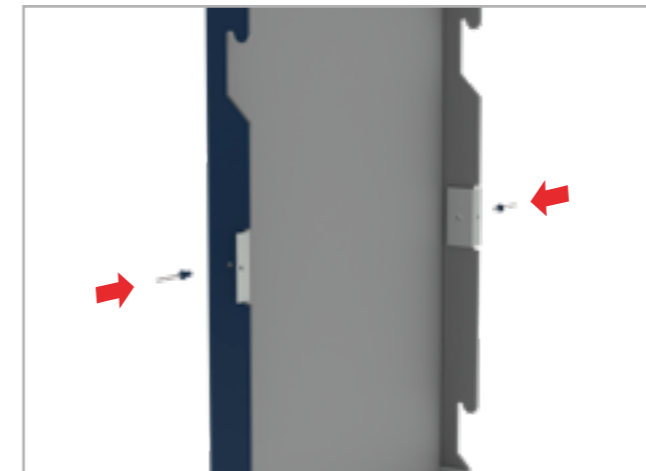
Lastly, the stiffener is drilled and riveted through the upper and lower ends to the horizontal tabs of the cassette.



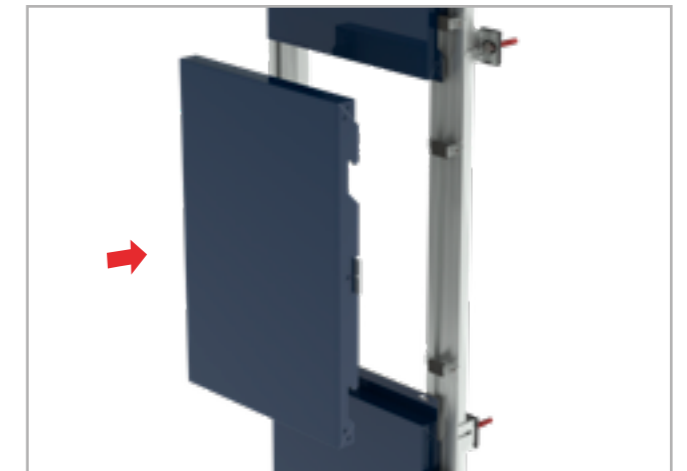
1. Remove the damage cassette by cutting the upper flap.



2. Fitting blocking plates on the side flaps of the new tray.



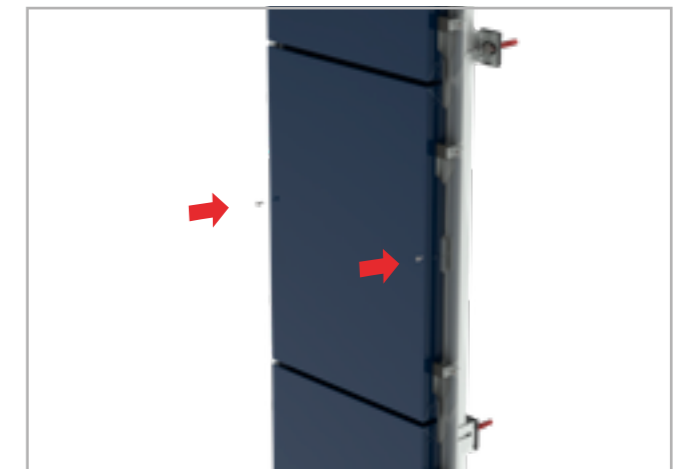
3. Fixing the plates with rivets.



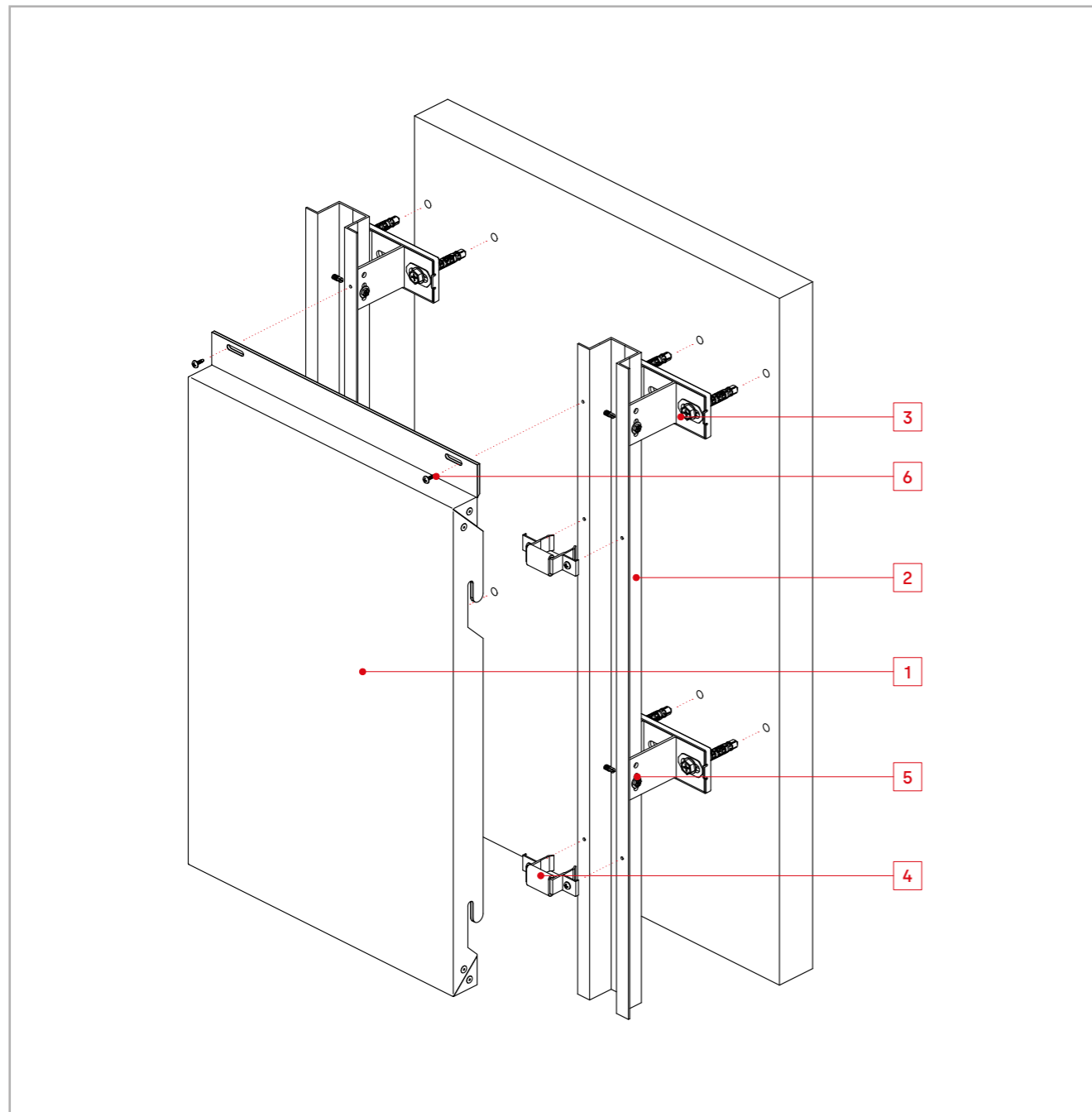
4. Fitting the new tray.



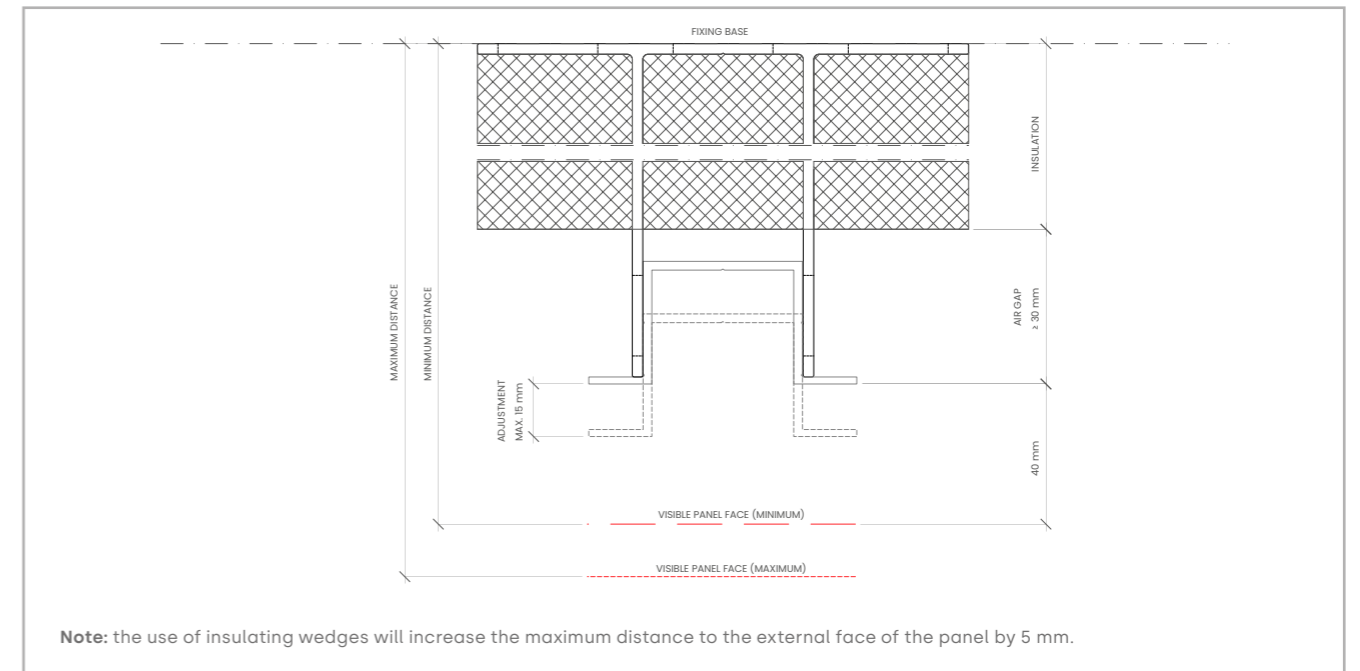
5. Adjustment of the tray to achieve the desired position.



6. Fixing the blocking plates to the sub-structure transom profiles using self-drilling screws.



N°	NAME
1	Cassette made from STACBOND® composite panel
2	Profile OMEGA
3	Spacer DOUBLE T
4	Bracket set STB-CH hanging
5	Self-tapping screw
6	Self-tapping screw



REF.	PART	DISTANCE (mm) FROM BASE OF FIXING TO VISIBLE FACE OF PANEL		INSULATION THICKNESS (mm) FOR 24 mm* ADJUSTMENT
		MINIMUM	MAXIMUM	MAXIMUM
05.19.004	SPACER DOUBLE T 57	100	115	-
05.19.005	SPACER DOUBLE T 72	115	130	40
05.19.006	SPACER DOUBLE T 87	130	145	50
05.19.007	SPACER DOUBLE T 102	145	160	70
05.19.030	SPACER DOUBLE T 117	160	175	80
05.19.031	SPACER DOUBLE T 132	175	190	100
05.19.032	SPACER DOUBLE T 147	190	205	110
05.19.033	SPACER DOUBLE T 162	205	220	130
05.19.034	SPACER DOUBLE T 177	220	235	140
05.19.035	SPACER DOUBLE T 192	235	250	160
05.19.036	SPACER DOUBLE T 207	250	265	170
05.19.037	SPACER DOUBLE T 222	265	280	190
05.19.038	SPACER DOUBLE T 237	280	295	200
05.19.039	SPACER DOUBLE T 252	295	310	220

REF.	PART	DISTANCE (mm) FROM BASE OF FIXING TO VISIBLE FACE OF PANEL		INSULATION THICKNESS (mm) FOR 24 mm* ADJUSTMENT
		MINIMUM	MAXIMUM	MAXIMUM
05.19.046	SPACER U 57	100	115	-
05.19.047	SPACER U 72	115	130	40

* The maximum allowable thickness has been calculated for a stiff insulation layer, guaranteeing maximum adjustment of each system and keeping an air gap ≥ 30 mm.

PROFILES

REF.	PART	PAGE
05.19.003	PROFILE OMEGA	106

AUXILIARY ELEMENTS

REF.	PART	PAGE
05.19.013	BRACKET SET STB-CH HANGING	
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 - 1.500 mm)	111
05.19.027	STIFFENER SCH-3 (1.500 - 2.400 mm)	
05.19.027.1	STIFFENER SCH-4 (2.400 - 4.000 mm)	
05.19.027.2	STIFFENER SCH-5 (4.000 - 5.000 mm)	
05.19.027.3	STIFFENER SCH-6 (> 5.000 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	
05.19.067	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	114
05.19.073	INSULATING WEDGE FOR SPACERS DOUBLE T WITH REF.: 05.19.004 / 05.19.005 / 05.19.006 / 05.19.007	

SPACERS

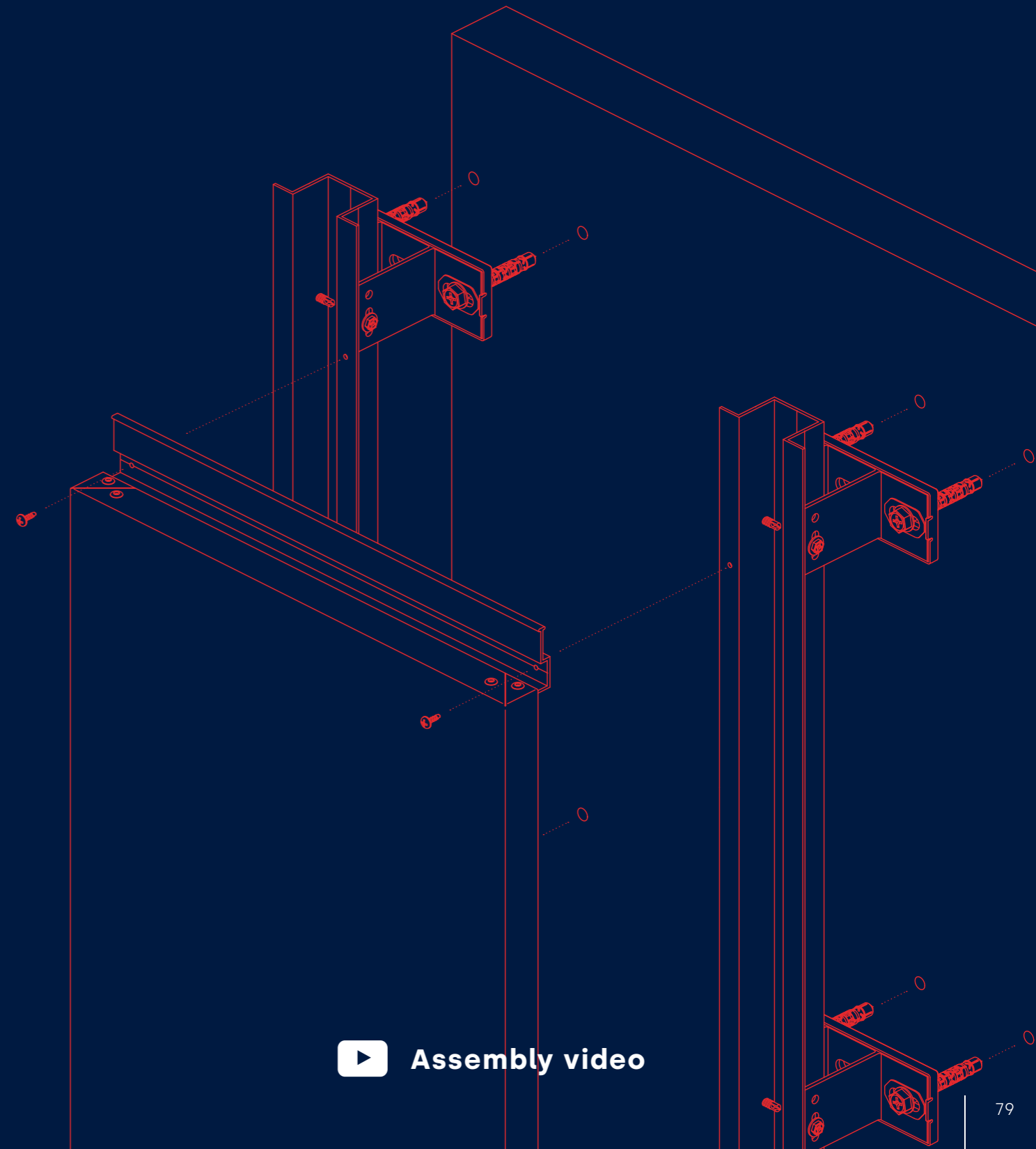
REF.	PART	PAGE
05.19.004	SPACER DOUBLE T 57	
05.19.005	SPACER DOUBLE T 72	
05.19.006	SPACER DOUBLE T 87	
05.19.007	SPACER DOUBLE T 102	
05.19.030	SPACER DOUBLE T 117	
05.19.031	SPACER DOUBLE T 132	
05.19.032	SPACER DOUBLE T 147	
05.19.033	SPACER DOUBLE T 162	108
05.19.034	SPACER DOUBLE T 177	
05.19.035	SPACER DOUBLE T 192	
05.19.036	SPACER DOUBLE T 207	
05.19.037	SPACER DOUBLE T 222	
05.19.038	SPACER DOUBLE T 237	
05.19.039	SPACER DOUBLE T 252	
05.19.046	SPACER U 57	
05.19.047	SPACER U 72	

FASTENING ACCESSORIES

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

STB-SZ

MALE - FEMALE SYSTEM



[▶ Assembly video](#)



STB-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/T6 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** y **spacers DOUBLE T** in 6063 T5/T6 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.

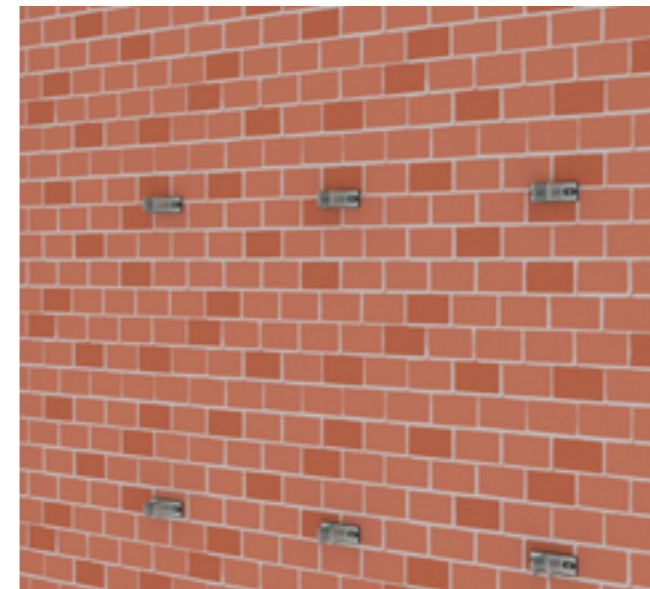
The spacers are anchored to the wall using special mechanical fixings, recommended in each case by the fixings suppliers, and receive the profiles OMEGA as uprights.

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/19) 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.



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.



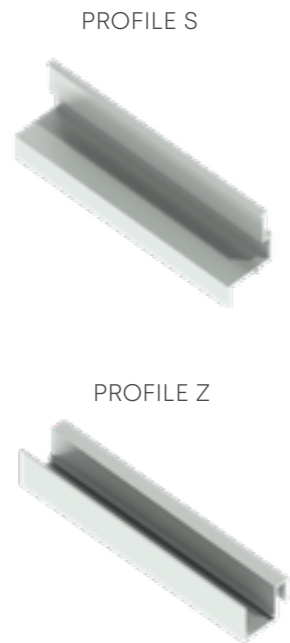
STACBOND COMPOSITE PANEL CASSETTES

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

The STB-SZ system comprises two 6063 T5/T6 aluminium alloy profiles onto which the pre-formed cassettes are attached:

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



REINFORCEMENT STB-SZ

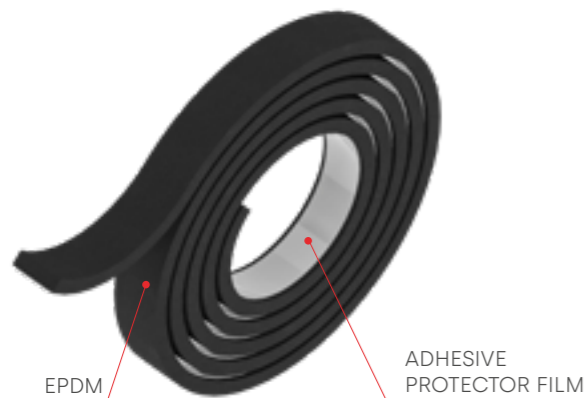
The reinforcement STB-SZ is a segment of profile of 200 mm specific length, covers the internal distance between the SZ cassette and the substructure.

This part is attached to the substructure profile with screws.



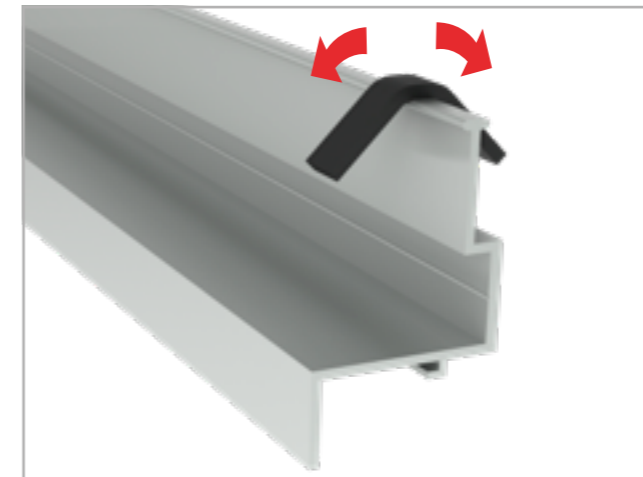
EPDM GASKET PROFILE SZ

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

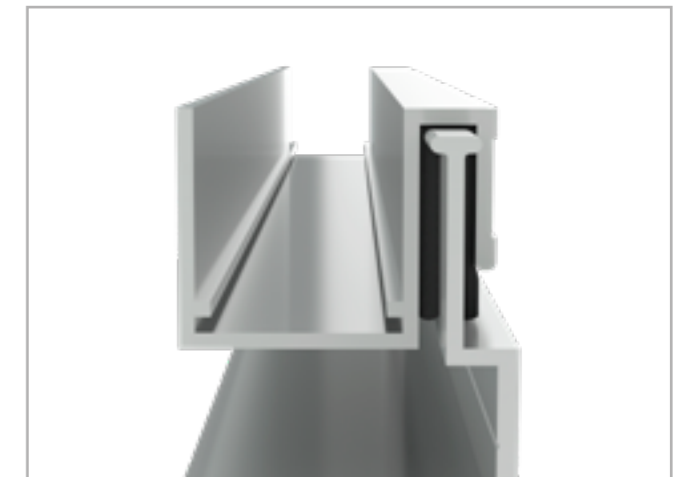


REFERENCE	DESCRIPTION	UNITS/BOX
05.19.001	PROFILE S	-
05.19.002	PROFILE Z	-
05.99.231	REINFORCEMENT STB-SZ	174
STB-JEPDM	EPDM GASKET PROFILE SZ (m.l.)	-

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.

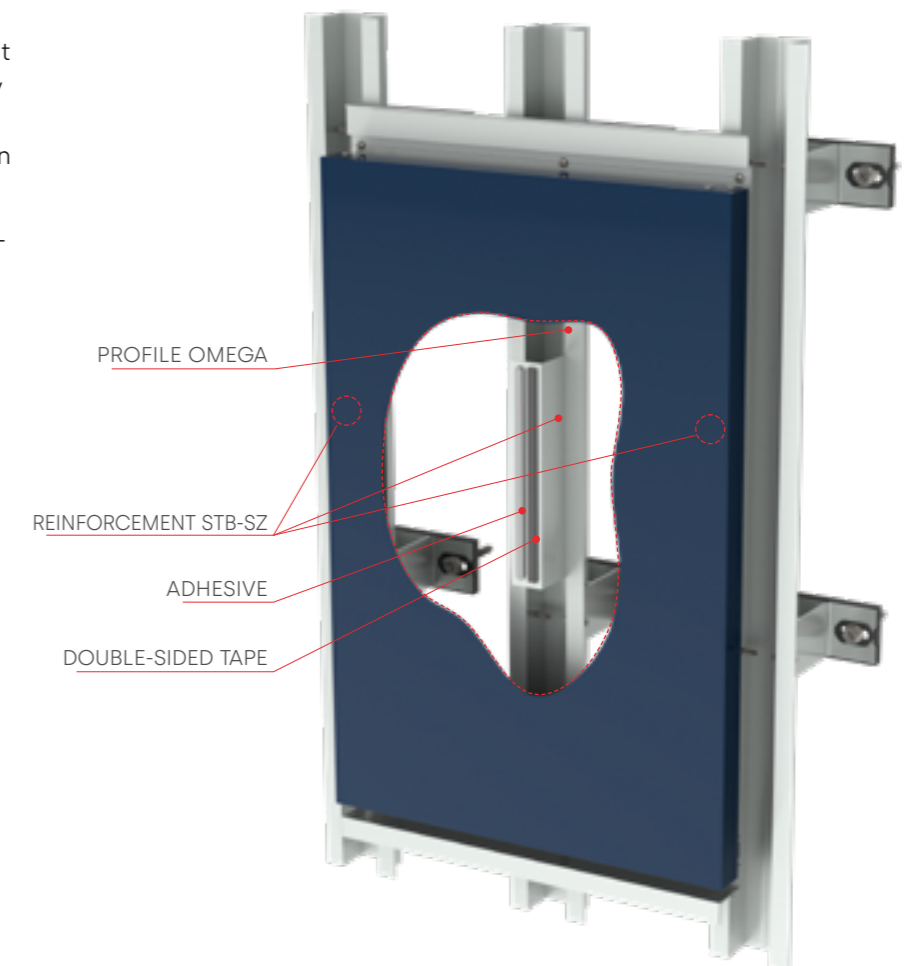
USING THE REINFORCEMENT STB-SZ

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 **STACBOND®**.

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.

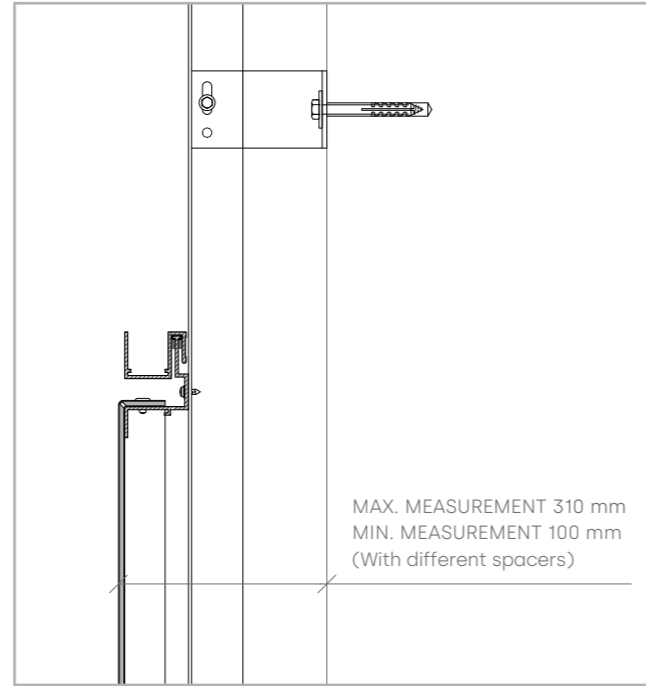
The cassette is then fitted and fixed using rivets in the upper profile Z.



UPPER FIXING



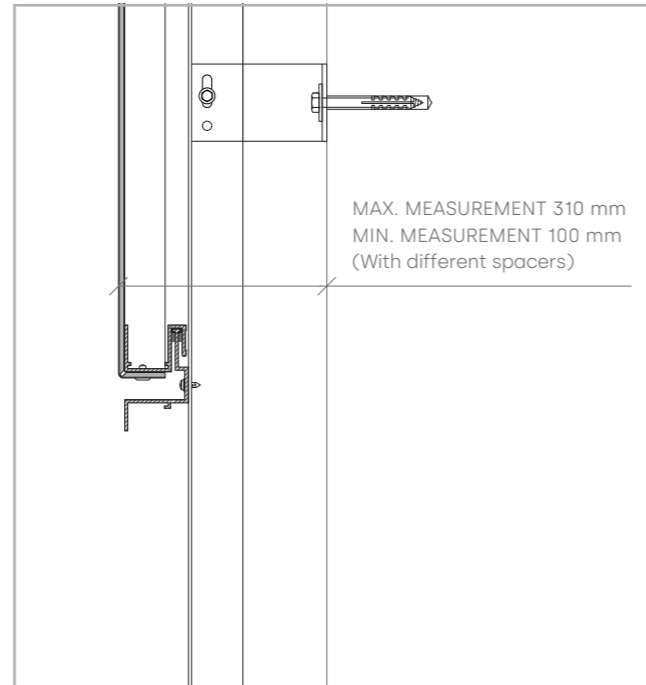
VERTICAL CROSS-SECTION



LOWER FIXING



VERTICAL CROSS-SECTION

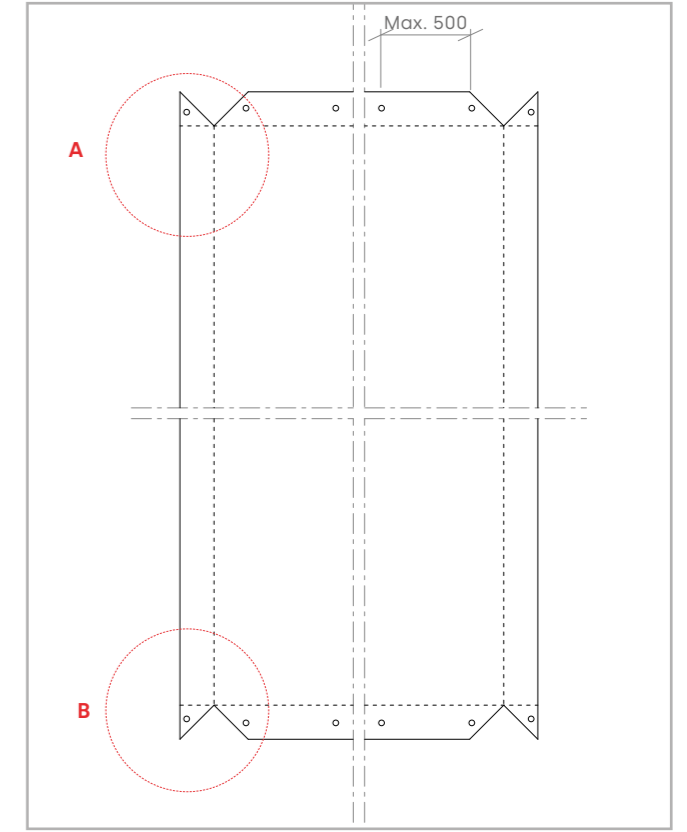


Note: the machined **STACBOND®** panels are supplied flat. The client is responsible for forming them into cassettes. No specialist machinery is required.

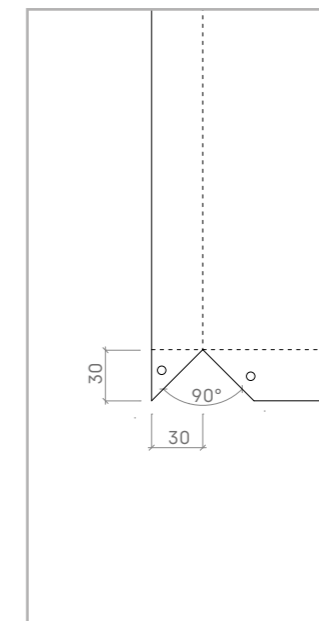
FORMED CASSETTE



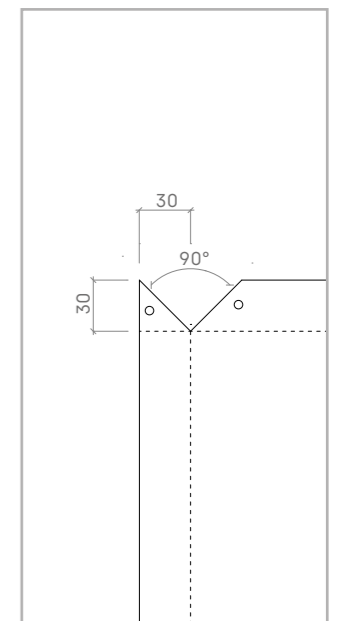
FLAT CASSETTE



DETAIL A



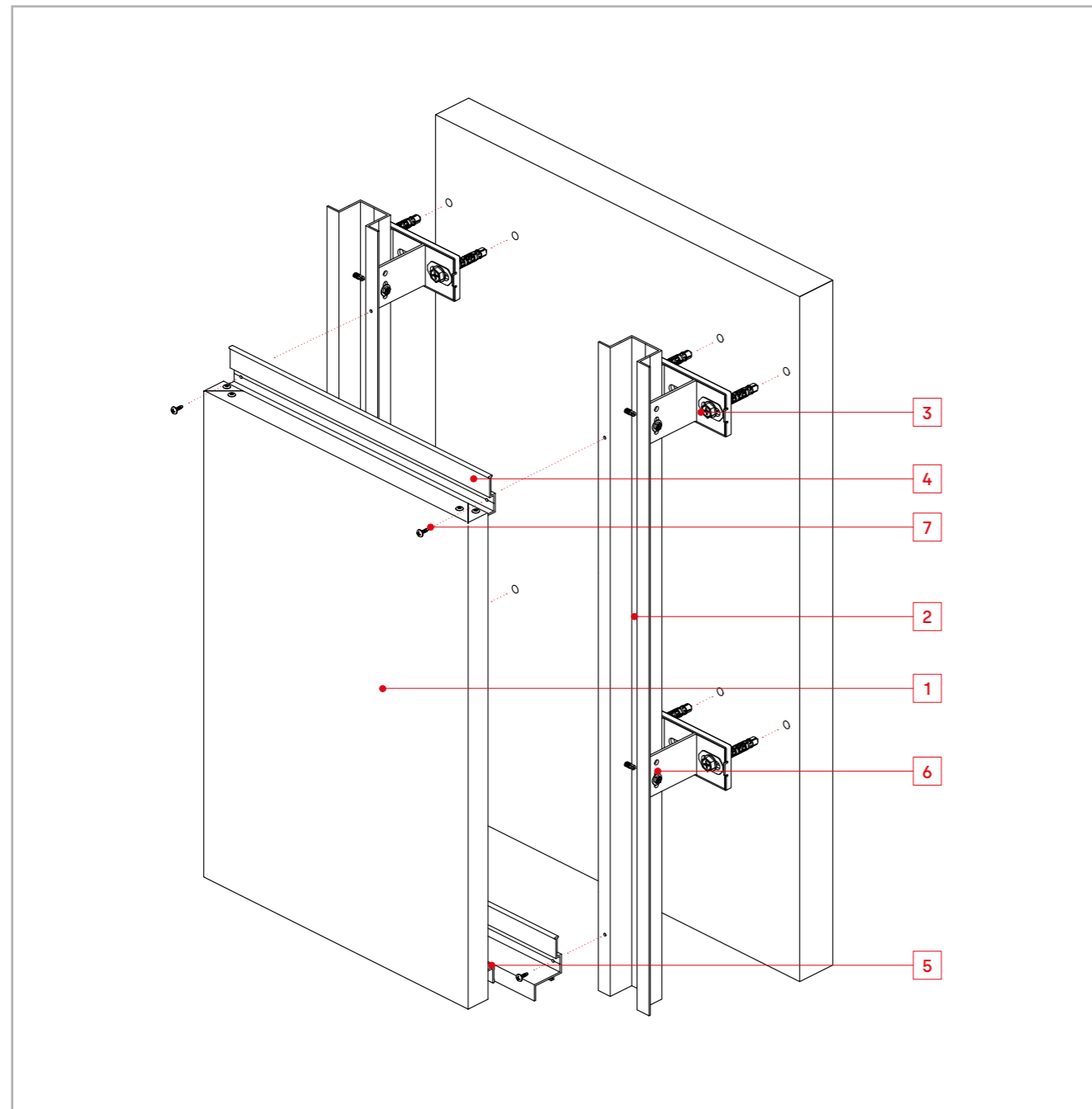
DETAIL B



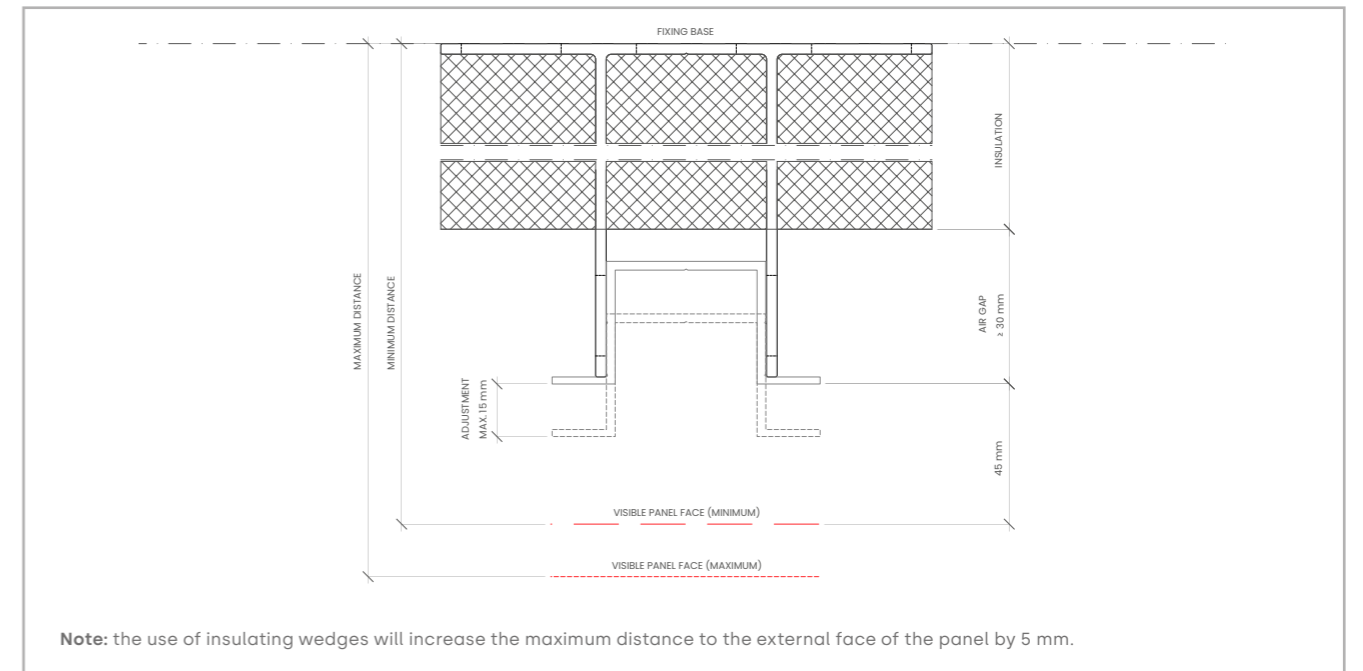
Measurements in mm

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.



N°	NAME
1	Cassette made from STACBOND® composite panel
2	Profile OMEGA
3	Spacer DOUBLE T
4	Profile Z
5	Profile S
6	Self-tapping screw
7	Self-tapping screw



SPACER DOUBLE T	DISTANCE (mm) FROM BASE OF FIXING TO VISIBLE FACE OF PANEL		INSULATION THICKNESS (mm) FOR 24 mm* ADJUSTMENT
	MINIMUM	MAXIMUM	MAXIMUM
05.19.004 SPACER DOUBLE T 57	104	119	-
05.19.005 SPACER DOUBLE T 72	119	134	40
05.19.006 SPACER DOUBLE T 87	134	149	50
05.19.007 SPACER DOUBLE T 102	149	164	70
05.19.030 SPACER DOUBLE T 117	164	179	80
05.19.031 SPACER DOUBLE T 132	179	194	100
05.19.032 SPACER DOUBLE T 148	194	209	110
05.19.033 SPACER DOUBLE T 162	209	224	130
05.19.034 SPACER DOUBLE T 177	224	239	140
05.19.035 SPACER DOUBLE T 192	239	254	160
05.19.036 SPACER DOUBLE T 207	254	269	170
05.19.037 SPACER DOUBLE T 222	269	284	190
05.19.038 SPACER DOUBLE T 237	284	299	200
05.19.039 SPACER DOUBLE T 252	299	314	220

SPACER U	DISTANCE (mm) FROM BASE OF FIXING TO VISIBLE FACE OF PANEL		INSULATION THICKNESS (mm) FOR 24 mm* ADJUSTMENT
	MINIMUM	MAXIMUM	MAXIMUM
05.19.046 SPACER U 57	104	119	-
05.19.047 SPACER U 72	119	134	40

* The maximum allowable thickness has been calculated for a stiff insulation layer, guaranteeing maximum adjustment of each system and keeping an air gap ≥ 30 mm.

PROFILES

REF.	PART	PAGE
05.19.003	PROFILE OMEGA	106
05.19.001	PROFILE S	
05.19.002	PROFILE Z	107
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	
05.19.067	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	114
05.19.073	INSULATING WEDGE FOR SPACERS DOUBLE T WITH REF.: 05.19.004 / 05.19.005 / 05.19.006 / 05.19.007	

SPACERS

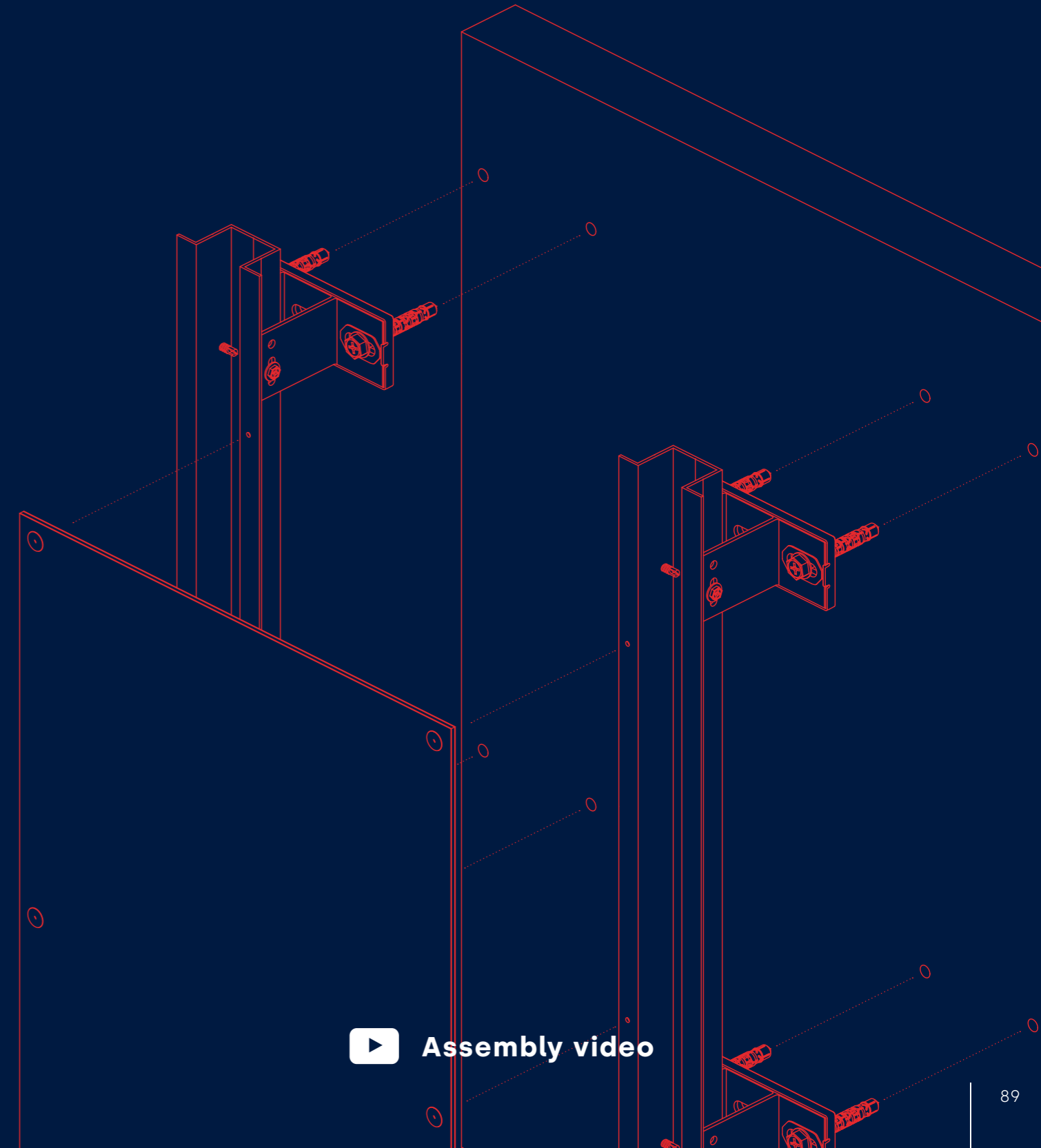
REF.	PART	PAGE
05.19.004	SPACER DOUBLE T 57	
05.19.005	SPACER DOUBLE T 72	
05.19.006	SPACER DOUBLE T 87	
05.19.007	SPACER DOUBLE T 102	
05.19.030	SPACER DOUBLE T 117	
05.19.031	SPACER DOUBLE T 132	
05.19.032	SPACER DOUBLE T 147	
05.19.033	SPACER DOUBLE T 162	108
05.19.034	SPACER DOUBLE T 177	
05.19.035	SPACER DOUBLE T 192	
05.19.036	SPACER DOUBLE T 207	
05.19.037	SPACER DOUBLE T 222	
05.19.038	SPACER DOUBLE T 237	
05.19.039	SPACER DOUBLE T 252	
05.19.046	SPACER U 57	
05.19.047	SPACER U 72	

AUXILIARY ELEMENTS

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

STB-REM

RIVETED SYSTEM



 **Assembly video**



El **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.

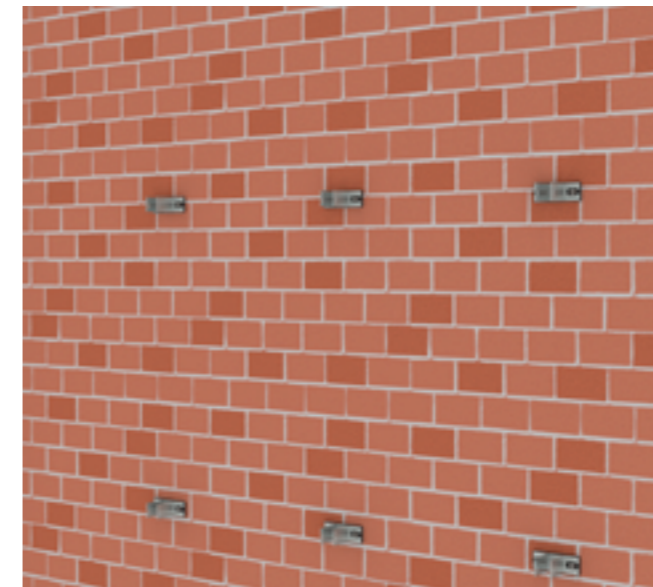
The spacers are anchored to the wall using special mechanical fixings, recommended in each case by the fixings suppliers, and receive the profiles OMEGA as uprights.

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 **studs joining** made of 5005 H24 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/19) 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.



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.



CROSS-STRUTS OMEGA

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



ATTACHING STACBOND COMPOSITE PANEL

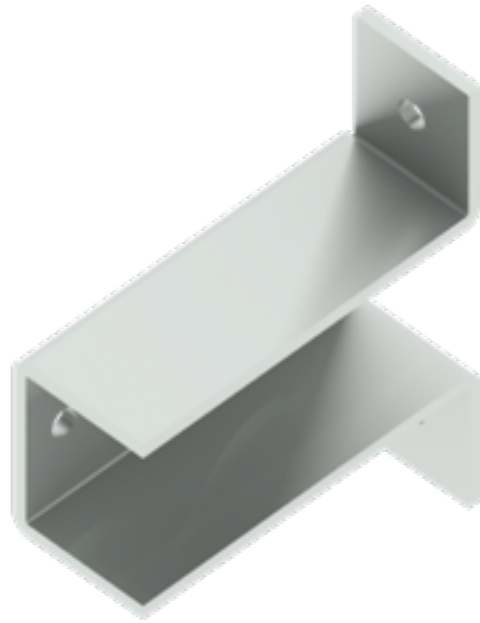
4. Attaching **STACBOND®** composite panel. Once the substructure is in place, the **STACBOND®** panels are attached to it using rivets. Attention should be paid to the condition and type of rivet to ensure correct dilation of the panels.

STUDS JOINING STB-REM

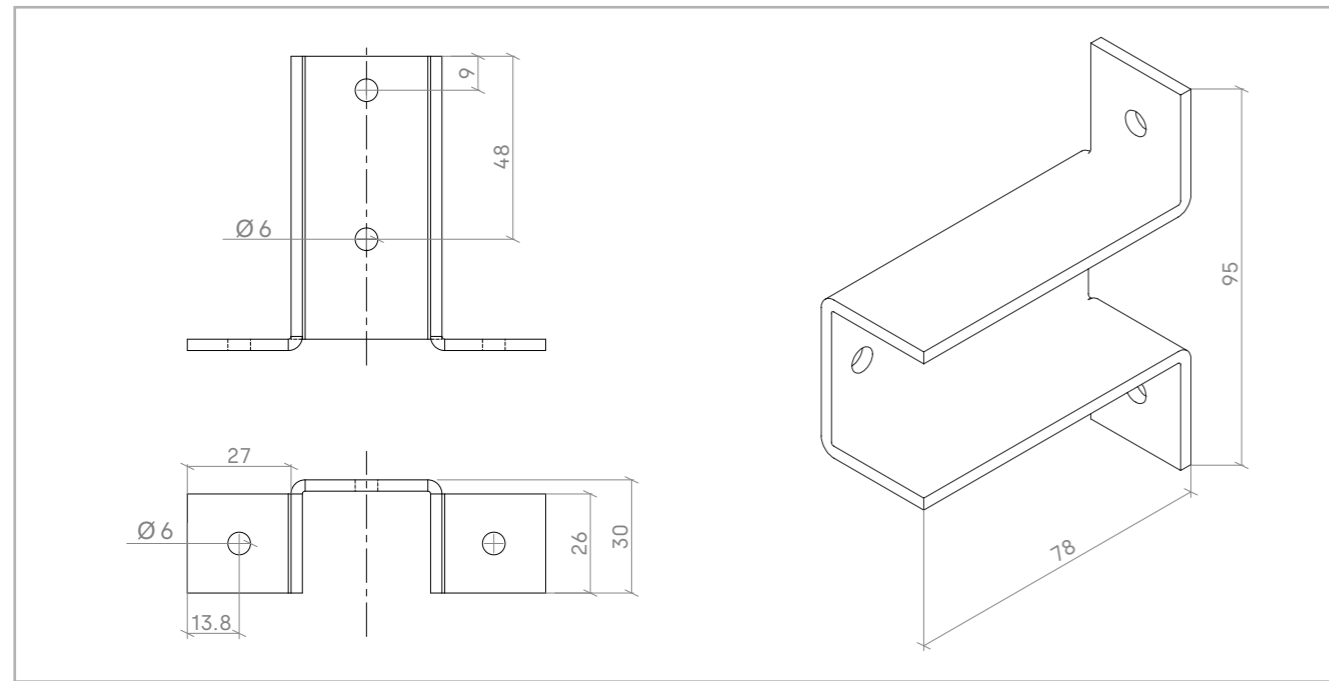
Part made of folded 1050-H aluminium alloy sheet (3 mm) with holes for fixing to the upright and cross-strut profiles OMEGA.

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	STUDS JOINING STB-REM	150



Measurements in mm

DILATION OF THE PANEL

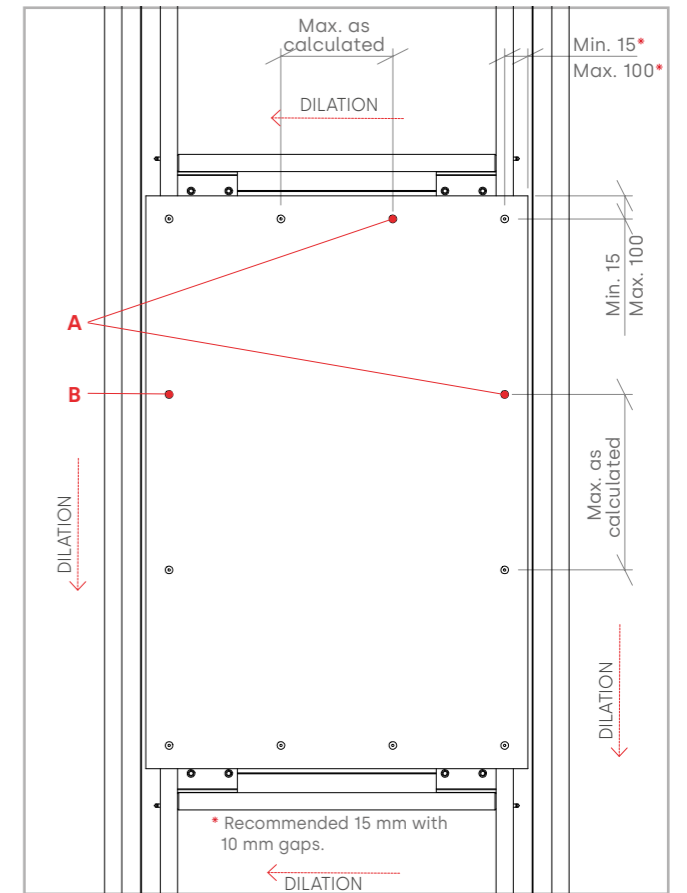
The diagram shows the layout and max. distance of the holes in the **STACBOND**® composite panel.

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.

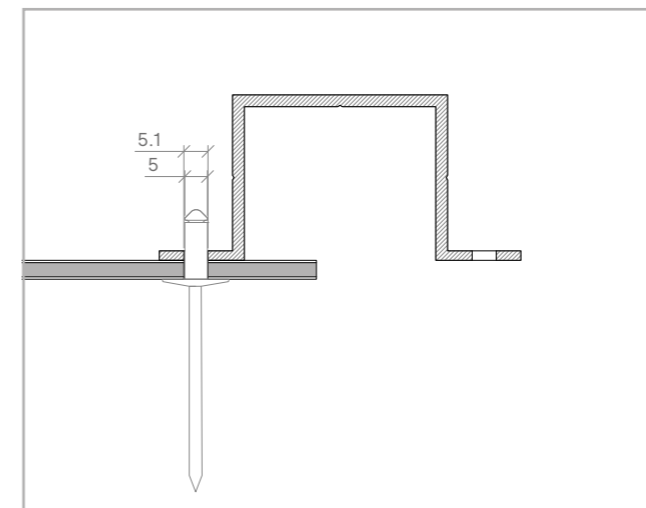
Rivets and screws specified by **STAC**® should be used.



Measurements in mm

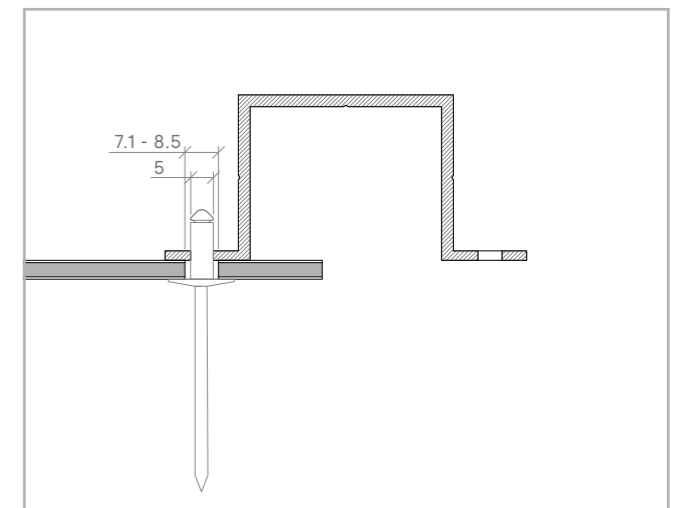
Note: other rivets and screws may be used providing that their mechanical characteristics are equal or greater than those specified by **STAC**®.

A. FIXED ANCHORING POINTS



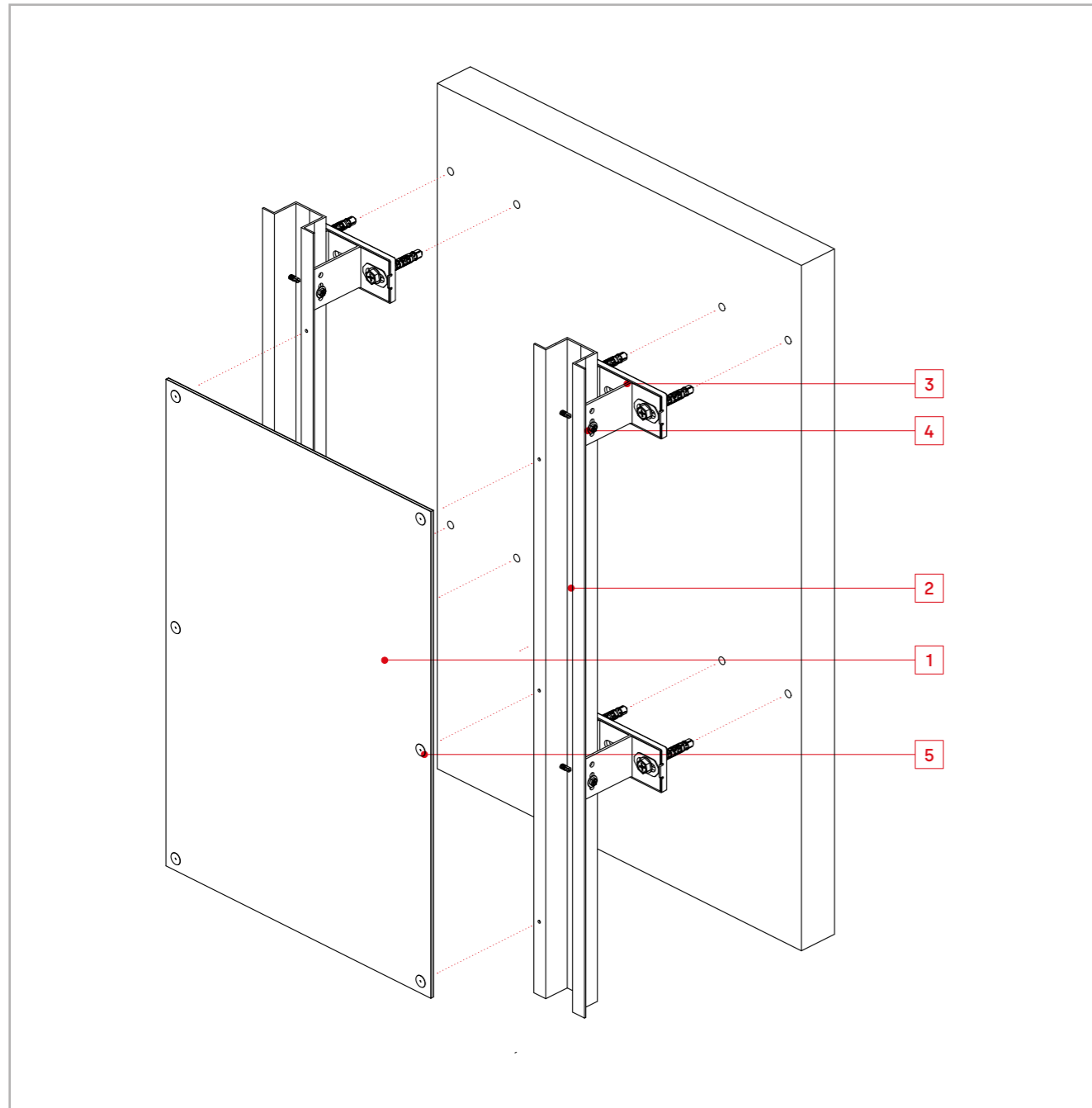
The 5,1 mm diameter drill hole in the **STACBOND**® composite panel defines the origin of the extension of the part.

B. MOBILE ANCHORING POINTS



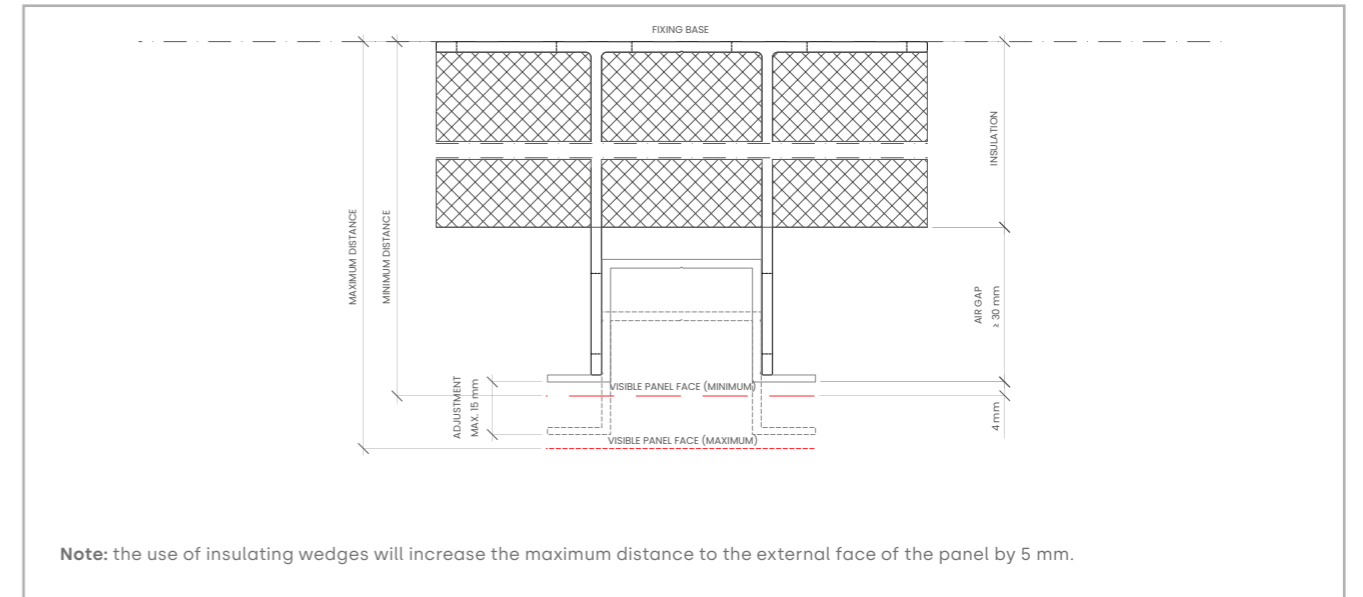
The larger diameter hole drilled in the **STACBOND**® composite panel allows dilation to be absorbed.

Measurements in mm



N° NAME

- | | |
|---|---------------------------|
| 1 | STACBOND® composite panel |
| 2 | Profile OMEGA |
| 3 | Spacer DOUBLE T |
| 4 | Self-tapping screw |
| 5 | Self-tapping screw |



SPACER DOUBLE T

REF.	PART
05.19.004	SPACER DOUBLE T 57
05.19.005	SPACER DOUBLE T 72
05.19.006	SPACER DOUBLE T 87
05.19.007	SPACER DOUBLE T 102
05.19.030	SPACER DOUBLE T 117
05.19.031	SPACER DOUBLE T 132
05.19.032	SPACER DOUBLE T 147
05.19.033	SPACER DOUBLE T 162
05.19.034	SPACER DOUBLE T 177
05.19.035	SPACER DOUBLE T 192
05.19.036	SPACER DOUBLE T 207
05.19.037	SPACER DOUBLE T 222
05.19.038	SPACER DOUBLE T 238
05.19.039	SPACER DOUBLE T 252

DISTANCE (mm) FROM BASE OF FIXING TO VISIBLE FACE OF PANEL

MINIMUM	MAXIMUM
63	78
78	93
93	108
108	123
123	138
138	153
153	168
168	183
183	198
198	213
213	228
228	243
243	258
258	273

INSULATION THICKNESS (mm) FOR 24 mm* ADJUSTMENT

MAXIMUM
-
40
50
70
80
100
110
130
140
160
170
190
200
220

SPACER U

REF.	PART
05.19.046	SPACER U 57
05.19.047	SPACER U 72

DISTANCE (mm) FROM BASE OF FIXING TO VISIBLE FACE OF PANEL

MINIMUM	MAXIMUM
63	78
78	93

INSULATION THICKNESS (mm) FOR 24 mm* ADJUSTMENT

MAXIMUM
-
40

* The maximum allowable thickness has been calculated for a stiff insulation layer, guaranteeing maximum adjustment of each system and keeping an air gap ≥ 30 mm.

PROFILES

REF.	PART	PAGE
05.19.003	PROFILE OMEGA	106

FASTENING ACCESSORIES

REF.	PART	PAGE
STB-FIJA-201	RIVETER NOSEPIECE (RIVETS SSO-D15)	
STB-FIJA-202	RIVETER NOSEPIECE (RIVETS AP)	
STB-FIJA-203	DUAL DIA. DRILL BIT (HSS-7,0/5,1x74)	
STB-FIJA-204	DEPTH LIMIT (DEPTH LOCATOR 16x18)	112
STB-FIJA-205	CENTRING GAUGE (DG-146x20-7.0)	
STB-FIJA-206	REPLACEMENT NOSE PIECE FOR CENTRING GAUGE ø 6,9 mm	
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 HEAD 14 mm ALU/INOX AP14-S-5,0x12	
STB-R0200	FACADE RIVETHEAD 15 mm INOX/INOX A4 5x14 SSO-D15-50140	

AUXILIARY ELEMENTS

REF.	PART	PAGE
05.19.020	STUDS JOINING STB-REM	110

SPACERS

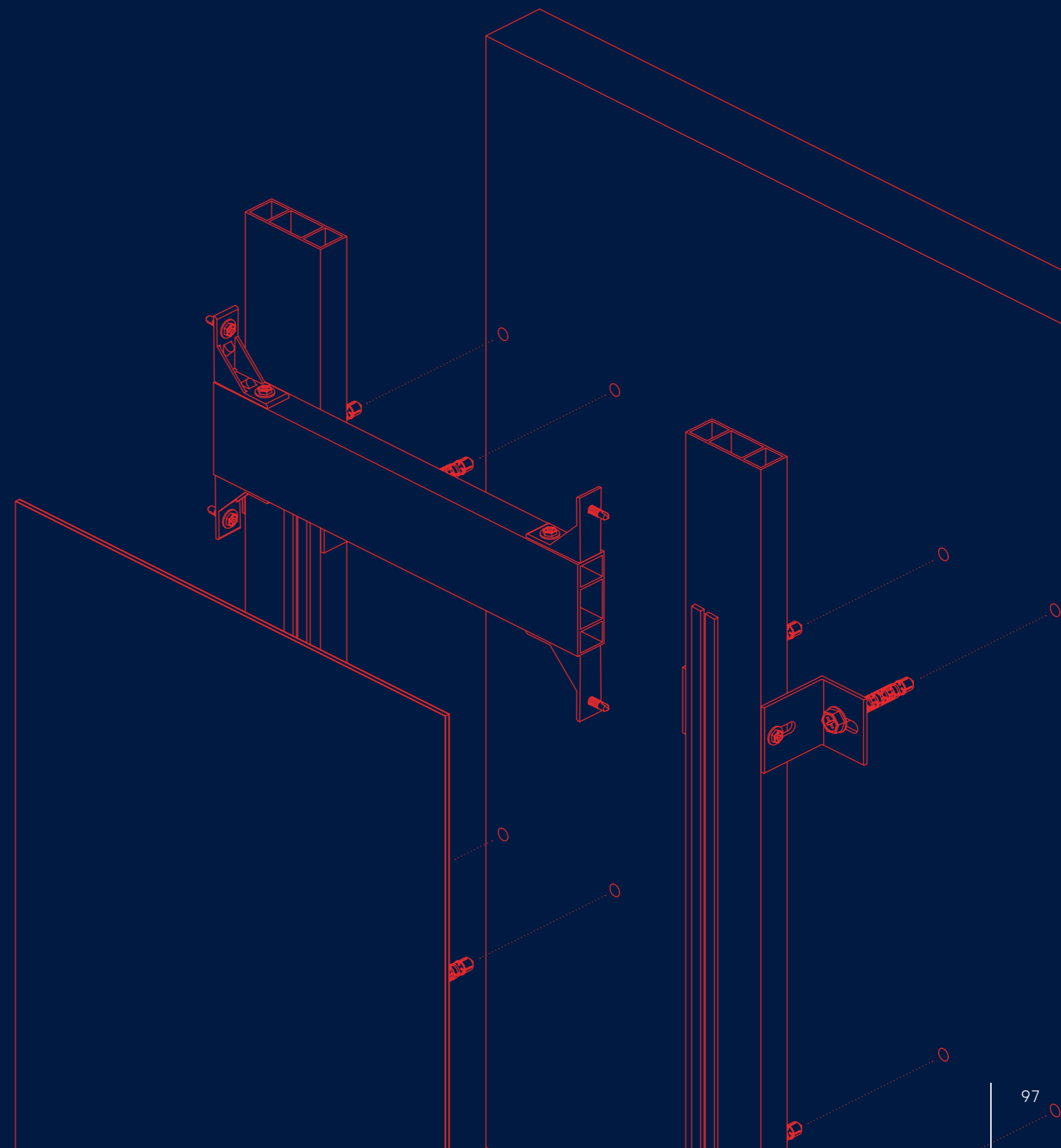
REF.	PART	PAGE
05.19.004	SPACER DOUBLE T 57	
05.19.005	SPACER DOUBLE T 72	
05.19.006	SPACER DOUBLE T 87	
05.19.007	SPACER DOUBLE T 102	
05.19.030	SPACER DOUBLE T 117	
05.19.031	SPACER DOUBLE T 132	
05.19.032	SPACER DOUBLE T 147	
05.19.033	SPACER DOUBLE T 162	108
05.19.034	SPACER DOUBLE T 177	
05.19.035	SPACER DOUBLE T 192	
05.19.036	SPACER DOUBLE T 207	
05.19.037	SPACER DOUBLE T 222	
05.19.038	SPACER DOUBLE T 237	
05.19.039	SPACER DOUBLE T 252	
05.19.046	SPACER U 57	
05.19.047	SPACER U 72	

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	
05.19.067	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	114
05.19.073	INSULATING WEDGE FOR SPACERS DOUBLE T WITH REF.: 05.19.004 / 05.19.005 / 05.19.006 / 05.19.007	

STB-PEG

GLUED SYSTEM





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 **STUDS STB-PEG** (70 x 24,5mm) AND **spacers ANGULAR** in 6063 T5/T6 aluminium alloy.

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 **STUDS STB-PEG** as vertical studs.

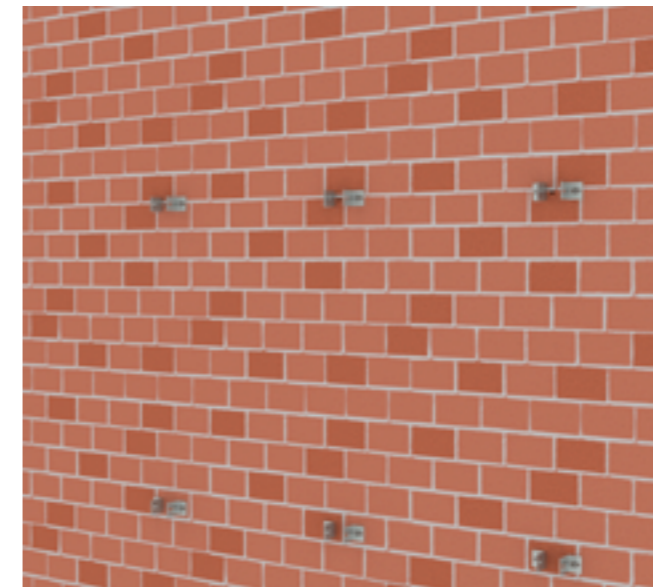
The **STB-PEG** system can be mounted on a unidirectional or bidirectional substructure. With a unidirectional substructure, the horizontal joint remains open. In the case of the bidirectional substructure, horizontal struts are attached to the uprights using **studs STB-PEG** made of ZAMAK 5, or to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

It is the responsibility of the installer to comply with the recommendations and demands of the manufacturer of the adhesive used, following the specifications for the applied product.

Wherever possible, **STACBOND®** recommends the use of at least one mechanical fastening on every part.



SPACERS ANGULAR

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.



CROSS-STRUTS STB-PEG

2. Placement of studs. The studs **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.



CROSS-STRUT

3. Cross-struts (optional). These profiles are mechanically fixed to the vertical substructure using studs joining **STB-PEG**. 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. cante.

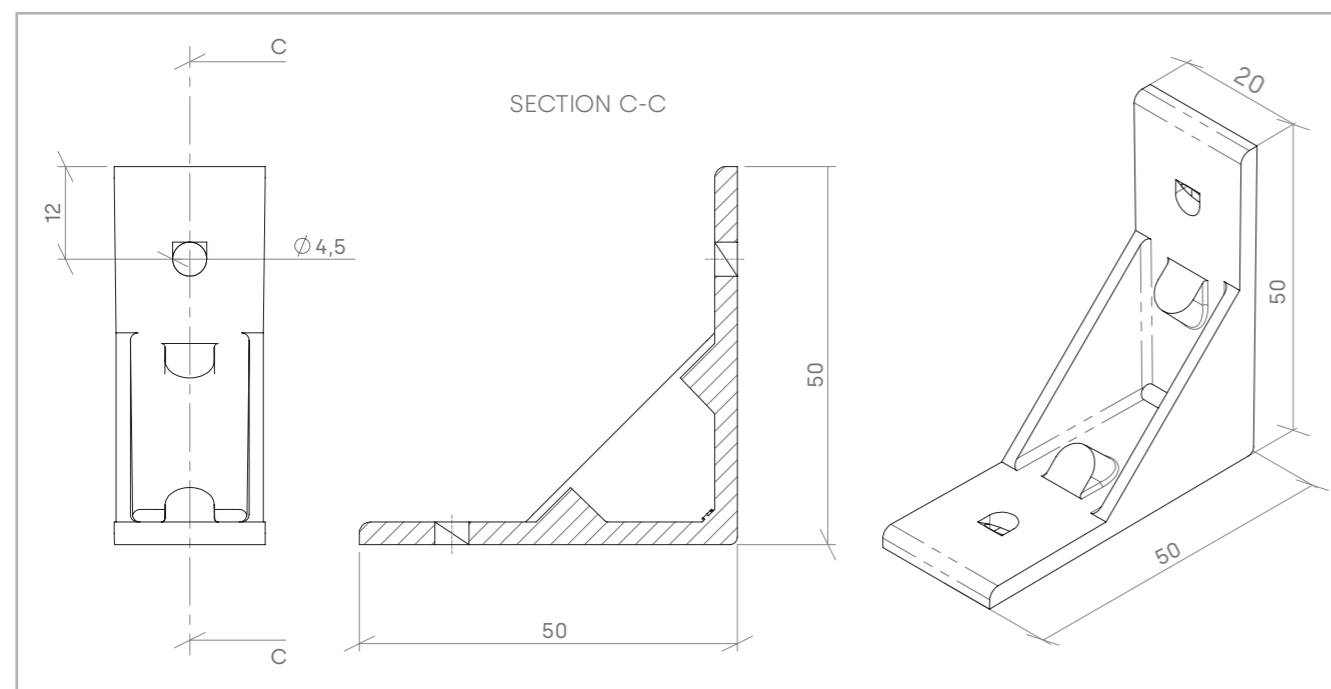
STUDS JOINING STB-PEG

The studs joining STB-PEG are made of moulded ZAMAK 5 and allow the construction of bidirectional substructures

Fixing of these studs joining 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	STUDS 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, SIKA-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.

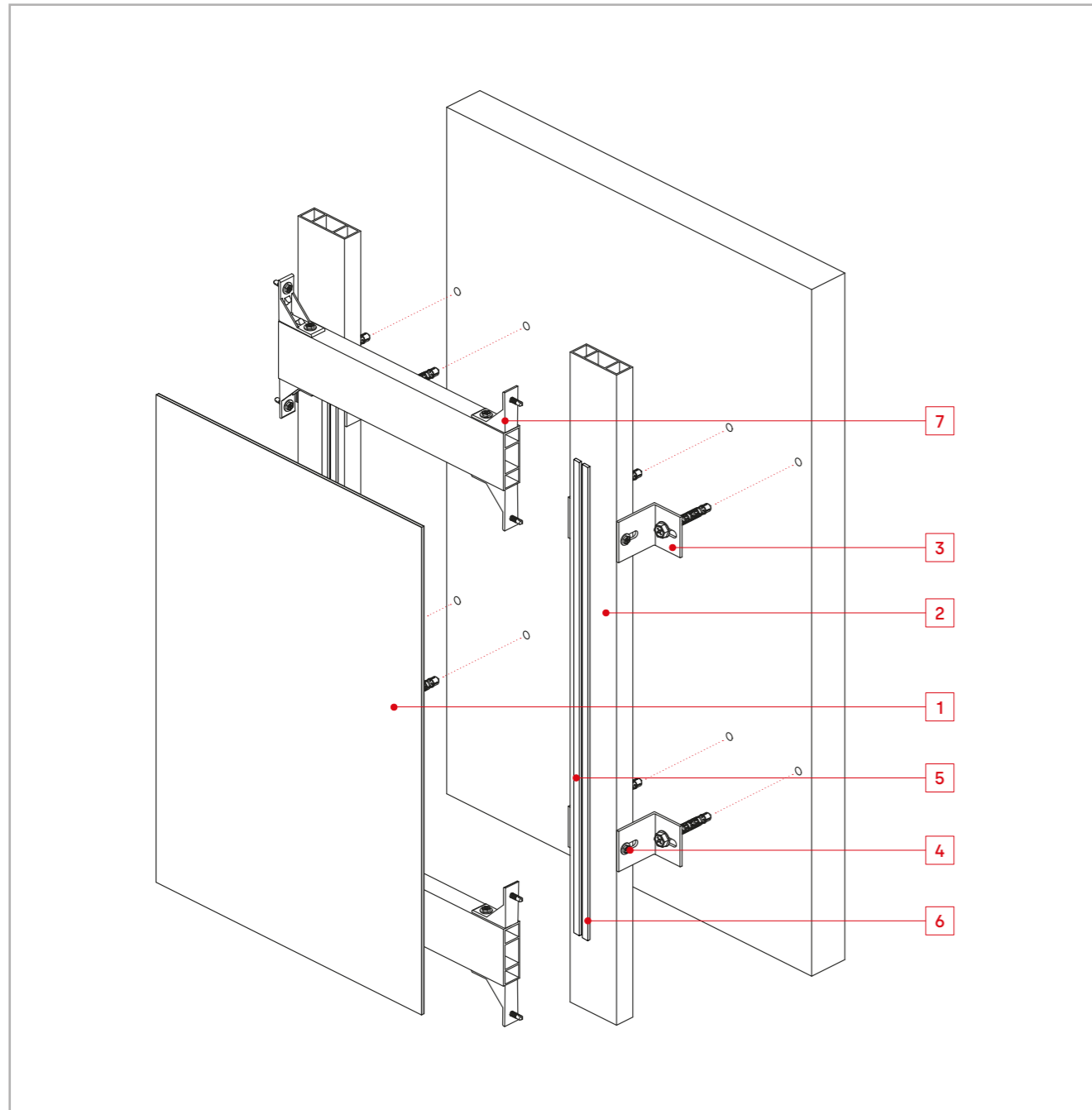
Precautions:

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

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.

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.



N°	NAME
1	STACBOND® composite panel
2	Cross-strut STB-PEG
3	ANGULAR SPACER
4	Self-tapping screw
5	Specific adhesive
6	Double-sided adhesive tape
7	Studs joining STB-PEG

PROFILES

REF.	PART	PAGE
19.022	CROSS-STRUT STB-PEG	106

AUXILIARY ELEMENTS

REF.	PART	PAGE
05.19.024	STUDS JOINING STB-PEG	110

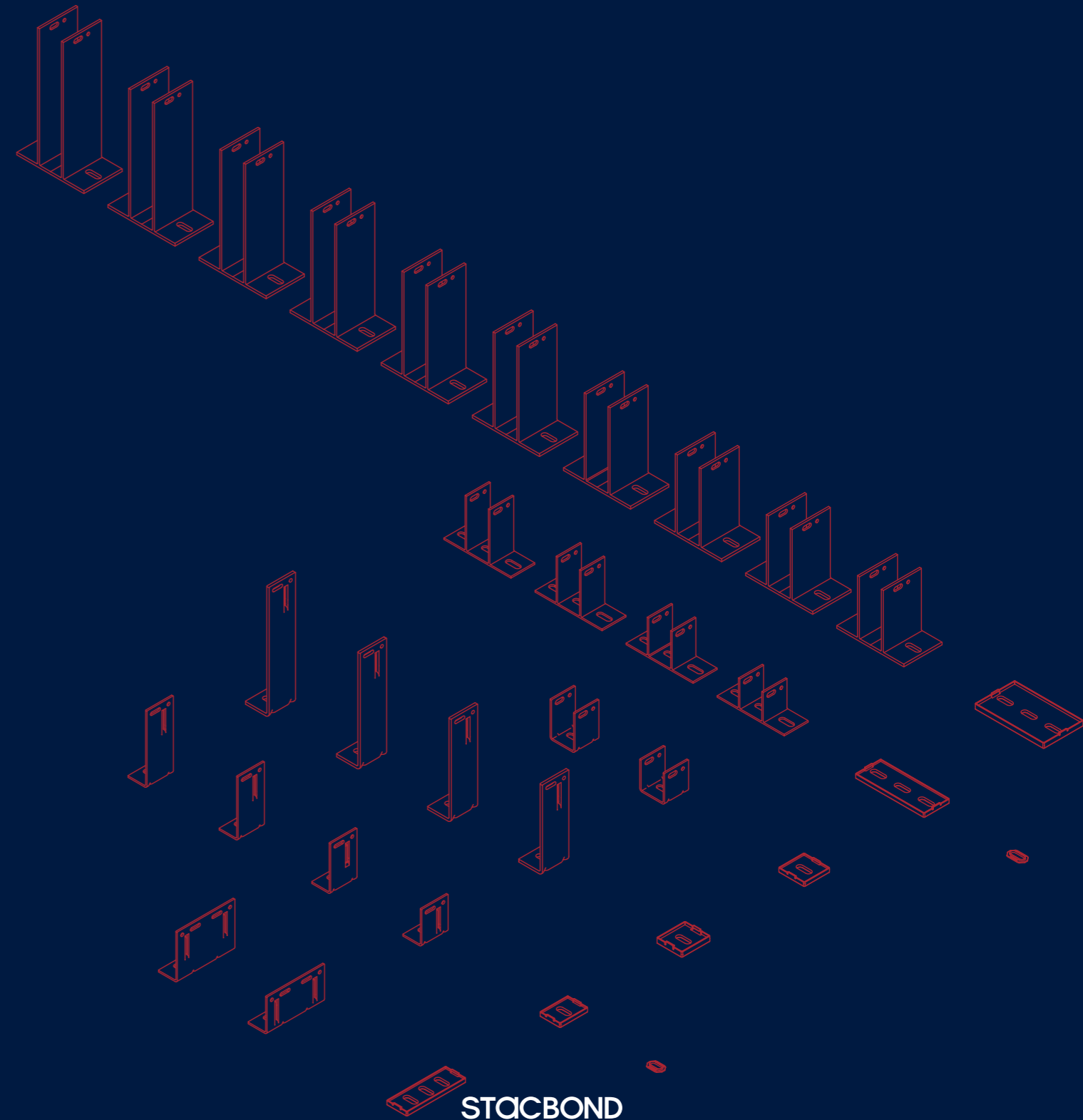
SPACERS

REF.	PART	PAGE
19.021	ANGULAR SPACER	110

STACBOND
more than you see

ACCESSORIES

FOR ASSEMBLY SYSTEMS



STACBOND



REFERENCE	PART	LENGTH (mm)	ALLOY	UNITS/BOX
05.19.003	PROFILE OMEGA	6.500	6063 T5/T6	12



REFERENCE	PART	LENGTH (mm)	ALLOY	UNITS/BOX
05.19.040	PROFILE OMEGA F (2.5 mm)	6.500	6063 T5/T6	12 *



REFERENCE	PART	LENGTH (mm)	ALLOY	UNITS/BOX
05.19.043	PROFILE T	6.500	6063 T5/T6	11 *



REFERENCE	PART	LENGTH (mm)	ALLOY	UNITS/BOX
05.19.059	PROFILE T-L INTERMEDIATE	6.500	6063 T5/T6	21



REFERENCE	PART	LENGTH (mm)	ALLOY	UNITS/BOX
05.19.061	PROFILE T-OMEGA	6.500	6063 T5/T6	8



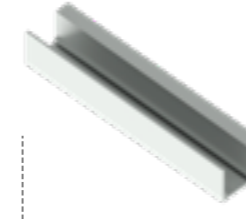
REFERENCE	PART	LENGTH (mm)	ALLOY	UNITS/BOX
19.022	CROSS-STRUT STB-PEG	6.500	6063 T5/T6	10 *



REFERENCE	PART	LENGTH (mm)	ALLOY	UNITS/BOX
05.19.075	PROFILE REINFORCEMENT STB-SZ	6.500	6063 T5/T6	- *



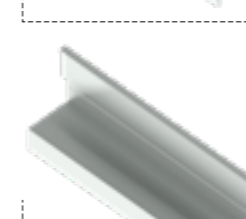
REFERENCE	PART	LENGTH (mm)	ALLOY	UNITS/BOX
05.19.076	PROFILE REINFORCEMENT STB-T-SZ	6.500	6063 T5/T6	50 *



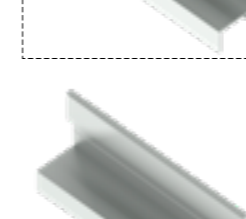
REFERENCE	PART	LENGTH (mm)	ALLOY	UNITS/BOX
05.19.001	PROFILE S	6.500	6063 T5/T6	18



REFERENCE	PART	LENGTH (mm)	ALLOY	UNITS/BOX
05.19.002	PROFILE Z	6.500	6063 T5/T6	18



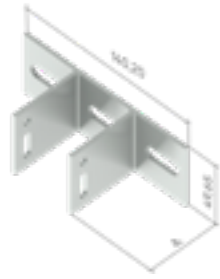
REFERENCE	PART	LENGTH (mm)	ALLOY	UNITS/BOX
05.19.074	PROFILE Z 20	6.500	6063 T5/T6	18 *



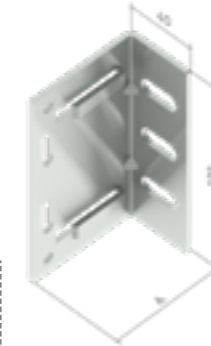
REFERENCE	PART	LENGTH (mm)	ALLOY	UNITS/BOX
05.19.063	PROFILE Z 24	6.500	6063 T5/T6	18 *

Note: the profiles are supplied with a length of 6.500 mm. For other formats, please contact STAC®.

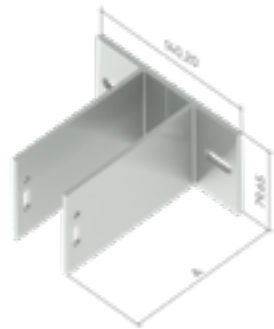
* References on request. Consult manufacturing and distribution deadlines.



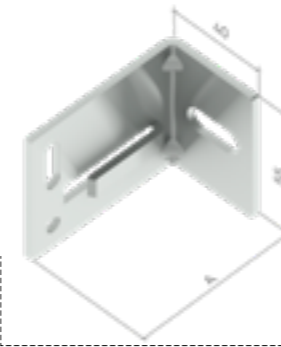
REFERENCE	PART	A	ALLOY	UNITS/BOX
05.19.004	SPACER DOUBLE T	57	6063 T5	96
05.19.005		72	6063 T5	80
05.19.006		87	6063 T5	80
05.19.007		102	6063 T5	72



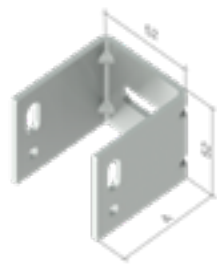
REFERENCE	PART	A	ALLOY	UNITS/BOX
05.19.042	SPACER DOUBLE L	68	5005 H24	250
05.19.045		92	5005 H24	180



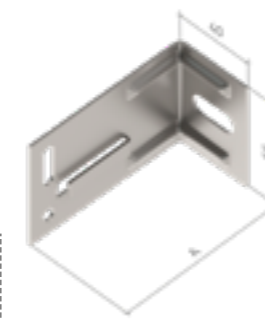
REFERENCE	PART	A	ALLOY	UNITS/BOX
05.19.030	SPACER DOUBLE T	117	6005 T6	50
05.19.031		132	6005 T6	24
05.19.032		147	6005 T6	40
05.19.033		162	6005 T6	40
05.19.034		177	6005 T6	36
05.19.035		192	6005 T6	24
05.19.036		207	6005 T6	24
05.19.037		222	6005 T6	24
05.19.038		237	6005 T6	24
05.19.039		252	6005 T6	24



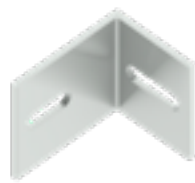
REFERENCE	PART	A	ALLOY	UNITS/BOX
05.19.041	SPACER L	68	5005 H24	528
05.19.044		92	5005 H24	200
05.19.051		116	5005 H24	180
05.19.052		140	5005 H24	276
05.19.053		164	5005 H24	176
05.19.054		188	5005 H24	135
05.19.055		212	5005 H24	120
05.19.056		236	5005 H24	56



REFERENCE	PART	A	ALLOY	UNITS/BOX
05.19.046	SPACER U	57	5005 H24	125
05.19.047		72	5005 H24	100



REFERENCE	PART	A	ALLOY	UNITS/BOX
05.19.078	INOX SPACER L	68	AISI 430	-
05.19.079		85	AISI 430	-
05.19.080		109	AISI 430	-
05.19.081		133	AISI 430	-
05.19.082		157	AISI 430	-
05.19.083		181	AISI 430	-
05.19.084		205	AISI 430	-
05.19.085		229	AISI 430	-



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



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



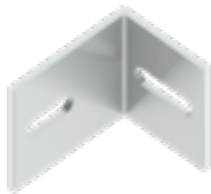
REFERENCE	PART	ALLOY	UNITS/BOX
05.19.049	REINFORCEMENT STB-T-SZ	6063 T5	180



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



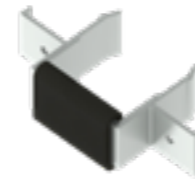
REFERENCE	PART	ALLOY	UNITS/BOX
05.19.024	STUDS JOINING STB-PEG	ZAMAK 5	100



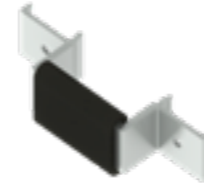
REFERENCE	PART	ALLOY	UNITS/BOX
19.021	ANGULAR SPACER	6063 T5	100



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	50



REFERENCE	PART	ALLOY	UNITS/BOX
05.19.062	BRACKET SET STB-T-CH HANGING	6063 T5	50



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	1.000



REFERENCE	PART	ALLOY	UNITS/BOX
05.19.025	STIFFENER SCH-1 (< 750 mm)	-	-
05.19.026	STIFFENER SCH-2 (750 - 1.500 mm)	-	-
05.19.027	STIFFENER SCH-3 (1.500 - 2.400 mm)	-	-
05.19.027.1	STIFFENER SCH-4 (2.400 - 4.000 mm)	-	-
05.19.027.2	STIFFENER SCH-5 (4.000 - 5.000 mm)	-	-
05.19.027.3	STIFFENER SCH-6 (> 5.000 mm)	-	-



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



REFERENCE	PART	OBSERVATIONS	MIN. UNITS
STB-FIJA-203	DUAL DIA. DRILL BIT (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 (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 CENTRING GAUGE ø 6,9 mm	Replacement nose piece in the event of damage.	1
STB-FIJA-207	SPECIAL BIT FOR THE 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	FINISH	MIN. UNITS	UNITS/BOX
STB-T0100	SECURITY SCREW 4,8x19 INOX HEAD TORX	UNPAINTED	100	100
	SLA3/6-S-D12-4,8x19	PAINTED - RAL	250	100



REFERENCE	PART	FINISH	MIN. UNITS	UNITS/BOX
STB-R0100	BLIND RIVET ISO 15977 D5x12 HEAD 14 mm	UNPAINTED	100	100
	ALU/ edificio tga AP14-S-5,0x12	PAINTED - RAL	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 INOX/INOX	UNPAINTED	100	100
	A4 5x14 SSO-D15-50140	PAINTED - RAL	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 SFS ASO-D-48150	UNPAINTED	100	100
	ALU/INOX 4,8X15	PAINTED - RAL	250	100

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



REFERENCE	PART	UNITS/BOX
05.19.071	3 x GROOVE WASHER FOR INSULATING WEDGES WITH REF.: 05.19.067 / 05.19.069 / 05.19.073	1.000



REFERENCE	PART	UNITS/BOX
05.19.067	INSULATING WEDGE FOR SPACERS U WITH REF.: 05.19.046 / 05.19.047	350



REFERENCE	PART	UNITS/BOX
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	100



REFERENCE	PART	UNITS/BOX
05.19.073	INSULATING WEDGE FOR SPACERS DOUBLE T WITH REF.: 05.19.004 / 05.19.005 / 05.19.006 / 05.19.007	140



REFERENCE	PART	UNITS/BOX
05.19.070	3 x GROOVE WASHER FOR INSULATING WEDGES WITH REF.: 05.19.066 / 05.19.068 / 05.19.072	1.000



REFERENCE	PART	UNITS/BOX
05.19.066	INSULATING WEDGE FOR SPACERS DOUBLE L WITH REF.: 05.19.042 / 05.19.045	250



REFERENCE	PART	UNITS/BOX
05.19.068	INSULATING WEDGE FOR SPACERS L WITH REF.: 05.19.053 / 05.19.054 / 05.19.055 / 05.19.056	300

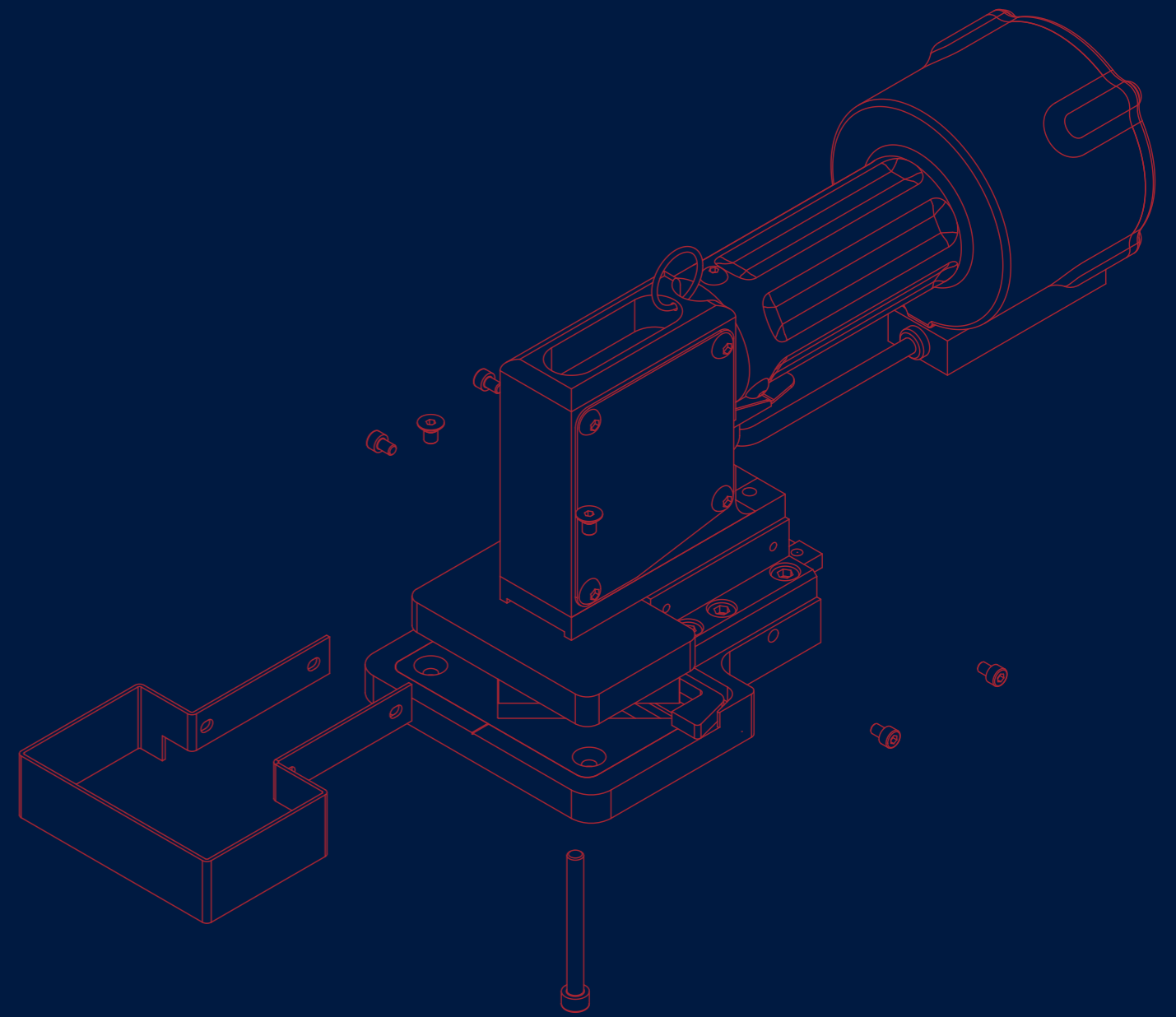


REFERENCE	PART	UNITS/BOX
05.19.072	INSULATING WEDGE FOR SPACERS L WITH REF.: 05.19.041 / 05.19.044 / 05.19.051 / 05.19.052	500



STACBOND
more than you see

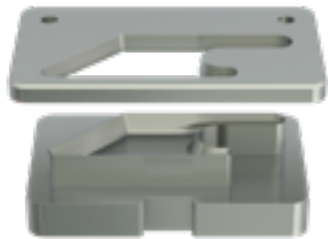
PROCESSING TOOLS



STACBOND



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	PART	OBSERVATIONS	MIN. UNITS
STB-MC-0010	STACBOND® ANUAL 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 HANGING BOOT DIE-CUTTING AND 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-FMD4,80X3,8	HM HSS MILLING CUTTER ø4,80,5x3,8 Z=2 ø12 BODY 4 mm PANEL CUTTING	ø 4 mm hard metal milling cutter for panel cutting with 4 mm thickness (marking)	1
STB-FMD5X80X2,8	HM HSS MILLING CUTTER ø5x80x2,8 Z=2 ø12 BODY 3 mm PANEL CUTTING	ø 5 mm hard metal milling cutter for panel cutting with 3 mm thickness (dilation)	1
STB-FMD5X80X3,8	HM HSS MILLING CUTTER ø5x80x3,8 Z=2 ø12 BODY 4 mm PANEL CUTTING	ø 5 mm hard metal milling cutter for panel cutting with 4mm thickness (dilation)	1
STB-FMD6X80X2,8	HM HSS MILLING CUTTER ø6x80x2,8 Z=2 ø12 BODY 3 mm PANEL CUTTING	ø 6 mm hard metal milling cutter for panel cutting with 3 mm thickness (dilation)	1
STB-FMD6X80X3,8	HM HSS MILLING CUTTER ø6x80x3,8 Z=2 ø12 BODY 4 mm PANEL CUTTING	ø 6 mm hard metal milling cutter for panel cutting with 4 mm thickness (dilation)	1
STB-FMD6X80X5,8	HM HSS MILLING CUTTER ø6x80x3,8 Z=2 ø12 BODY 4 mm PANEL CUTTING	ø 6 mm hard metal milling cutter for panel cutting with 6 mm thickness (dilation)	1



REFERENCE	PART	OBSERVATIONS	MIN. UNITS
STB-FD5X80X2,8	DIAMOND HSS MILLING CUTTER SPECIAL H4 PCD ø5x80x2,8 Z=2 ø12 HM BODY	ø 6 mm diamond milling cutter for panel cutting with 3 mm thickness	1
STB-FD5X80X3,8	DIAMOND HSS MILLING CUTTER SPECIAL H4 PCD ø5x80x3,8 Z=2 ø12 HM BODY	ø 6 mm diamond milling cutter for panel cutting with 4 mm thickness	1
STB-FD5X80X5,8	DIAMOND HSS MILLING CUTTER SPECIAL H4 PCD ø6x80x5,8 Z=2 ø12 HM BODY	ø 6 mm diamond milling cutter for panel cutting with 6 mm thickness	1
STB-FD6X80X2,8	DIAMOND HSS MILLING CUTTER SPECIAL H4 PCD ø6x80x2,8 Z=2 ø12 HM BODY	ø 6 mm diamond milling cutter for panel cutting with 3 mm thickness	1
STB-FD6X80X3,8	DIAMOND HSS MILLING CUTTER SPECIAL H4 PCD ø6x80x3,8 Z=2 ø12 HM BODY	ø 6 mm diamond milling cutter for panel cutting with 4 mm thickness	1
STB-FD6X80X5,8	DIAMOND HSS MILLING CUTTER SPECIAL H4 PCD ø6x80x5,8 Z=2 ø12 HM BODY	ø 6 mm diamond milling cutter for panel cutting with 6 mm thickness	1



REFERENCE	PART	OBSERVATIONS	MIN. UNITS
STB-FRESAD6PCD	DIAMOND HSS MILLING CUTTER SECO PCD ø6x75x3,8 ø12 HM BODY	ø 6 mm diamond milling cutter for panel cutting with 4 mm thickness with A2 core	1



REFERENCE	PART	OBSERVATIONS	MIN. UNITS
STB-FMD-C45	HM HSS MILLING CUTTER ø3x81 90° SPECIAL REF. 1 Z=2 ø12 BODY	Hard metal milling cutter for 45° cutting	1





REFERENCE	PART	OBSERVATIONS	MIN. UNITS
STB-FRESA90	HSS MD MILLING CUTTER ø3x81 SPECIAL REF. 1 Z=2 BODY ø16	Hard metal milling cutter for 90° cutting	1



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-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	Diamond milling cutter for 135° of panel with A2 core	1

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.

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