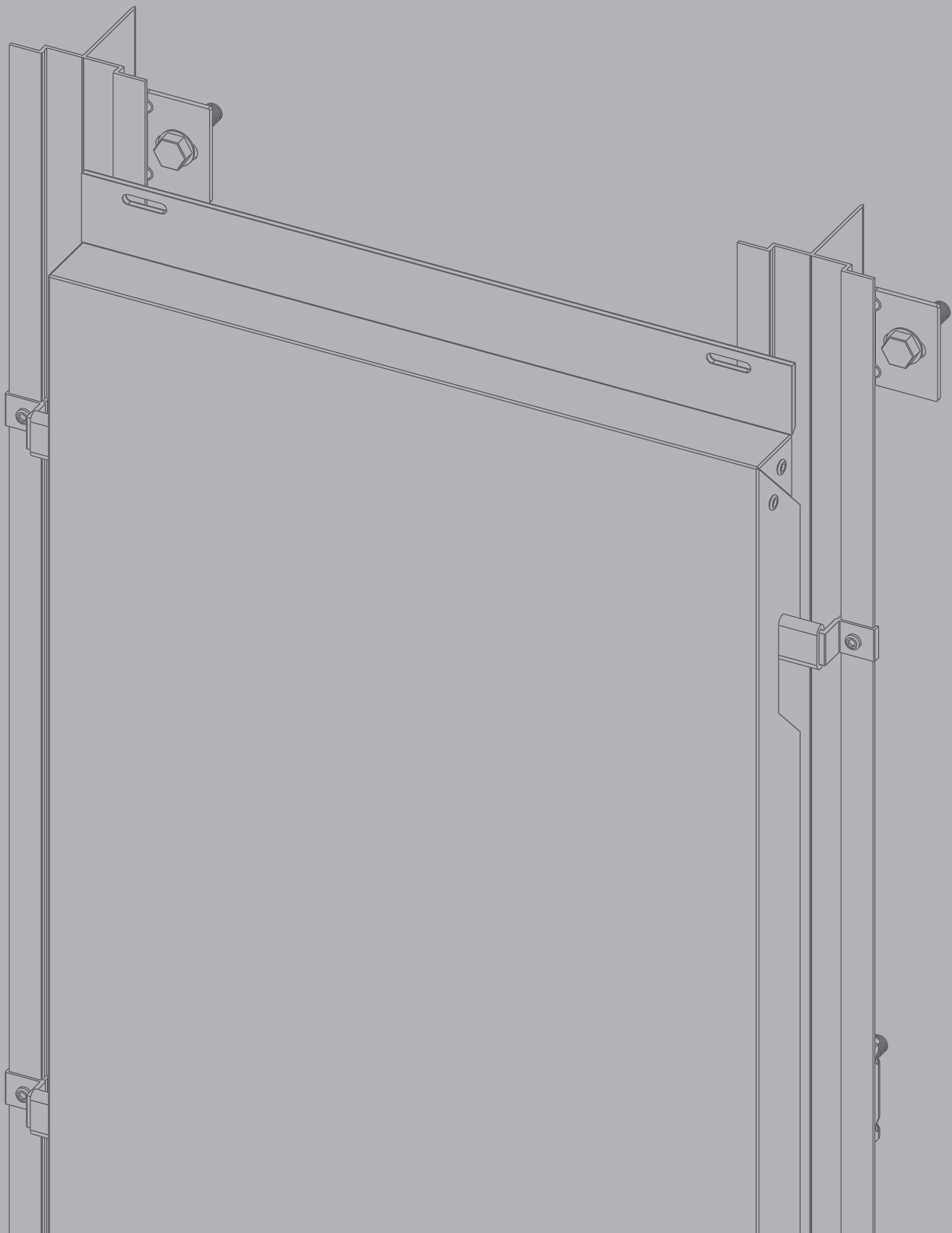


STB-T-CH

HANGING SYSTEM



STB-T-CH SYSTEM

DESCRIPTION



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

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

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

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

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

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

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

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



ETA-ETE: 15/0655



ITB - KOT 2017/0043





SPACERS L



PROFILES T OMEGA

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

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



STACBOND COMPOSITE PANEL CASSETTE

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.

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

STB-T-CH SYSTEM

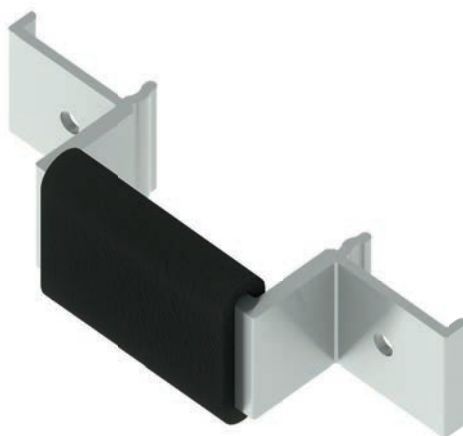
AUXILIARY ELEMENTS

BRACKET SET STB-T-CH HANGING

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

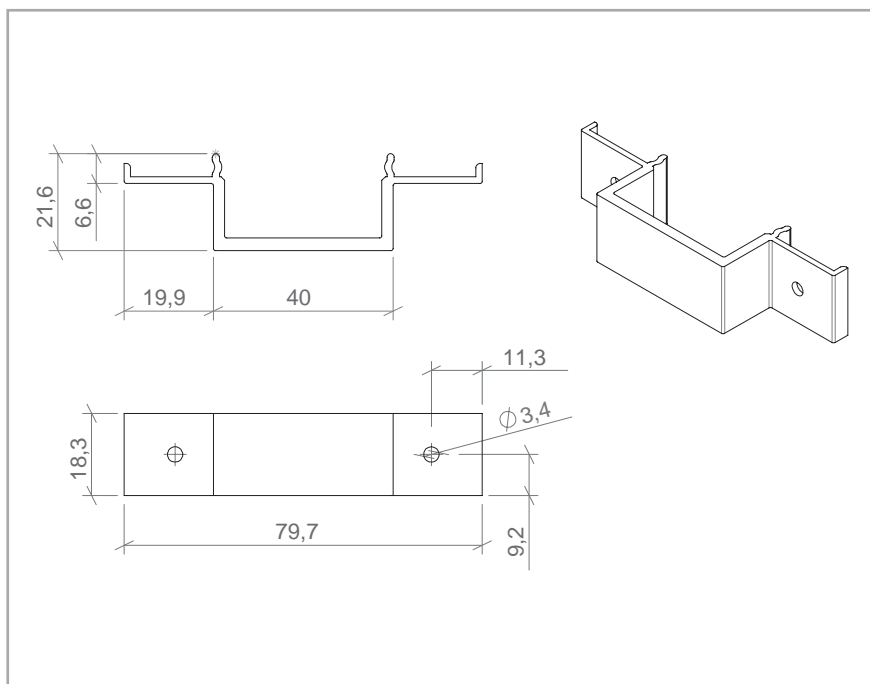
The gasket for the hanger is used to avoid vibration noise caused by wind load, road traffic, etc.

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

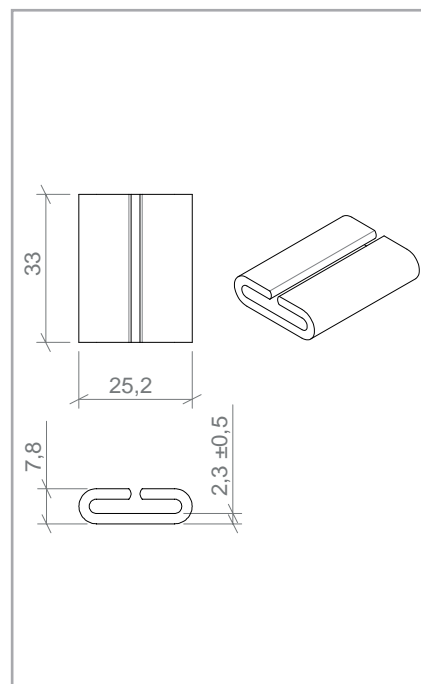


REFERENCE	DESCRIPTION	UNITS/BOX
05.19.062	BRACKET SET STB-T-CH HANGING	200

BRACKET STB-T-CH



BRACKET GASKET



Measurements in mm

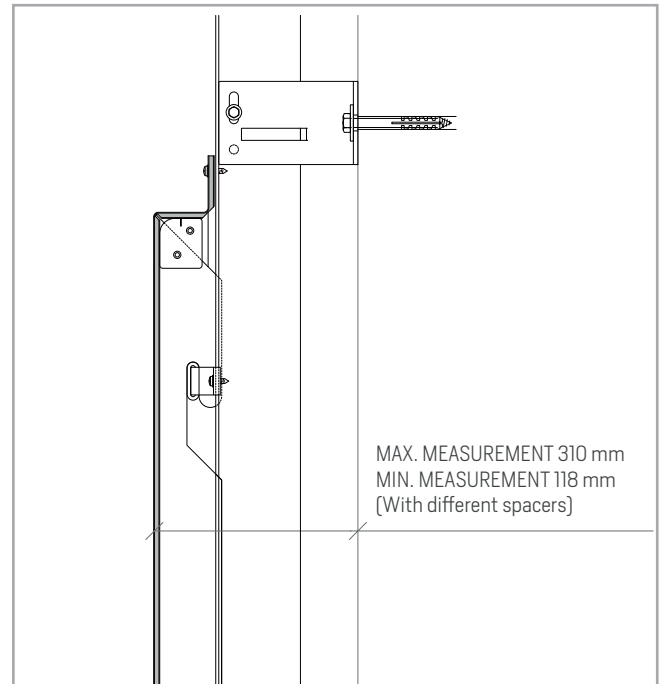
STB-T-CH SYSTEM

STANDARD CH CASSETTE WITH 45 mm FLAP

45 mm FLAP (DETAIL)



VERTICAL CROSS-SECTION



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

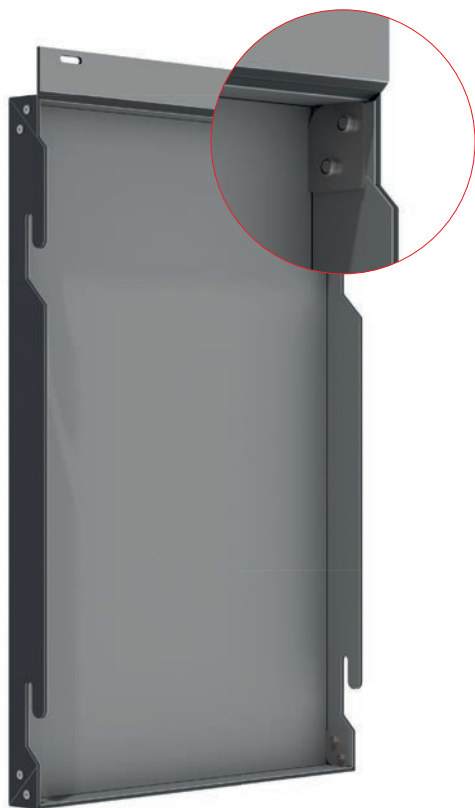
For the CH cassettes with 45 mm flaps, they can be formed using rectangular strips of 1050 ally (28 x 33 x 2 mm) or rectangular offcuts of the composite panels themselves.

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

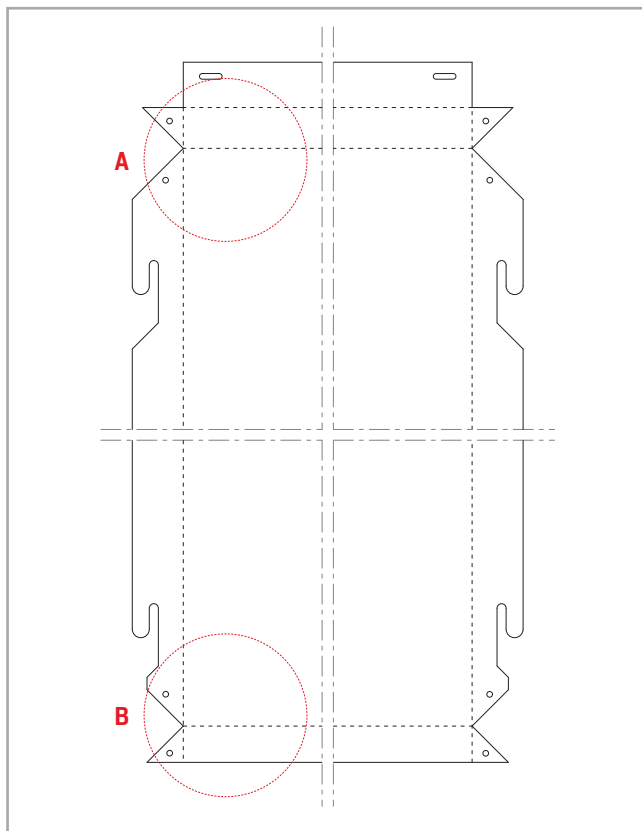
STB-T-CH SYSTEM

STANDARD CH CASSETTE WITH 45 mm FLAP

FORMED CASSETTE



FLAT CASSETTE



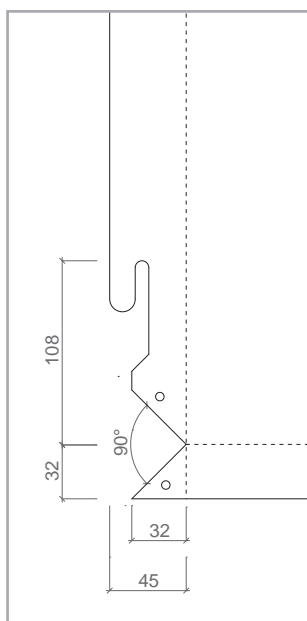
CASSETTES FORMING PLATE

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

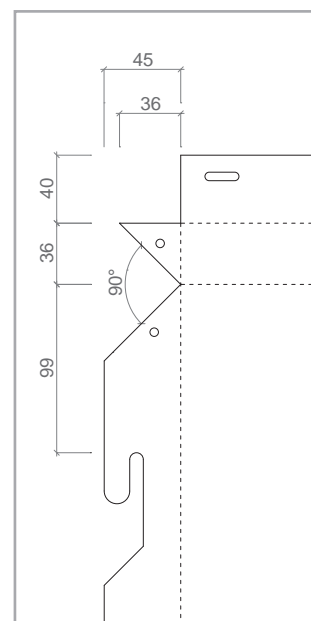
This plate is specified for CH cassettes with 45 mm flap and stiffeners.



DETAIL A



DETAIL B



REFERENCE	DESCRIPTION	UNITS/BOX
05.19.050	CASSETTES FORMING PLATE	3000

Measurements in mm

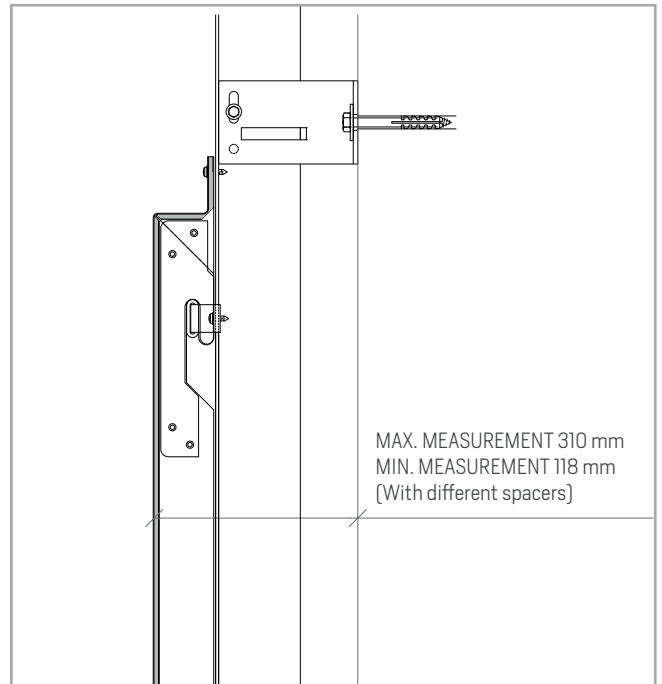
STB-T-CH SYSTEM

STANDARD CH CASSETTE WITH 40 mm FLAP

40 mm FLAP (DETAIL)



VERTICAL CROSS-SECTION



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

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

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

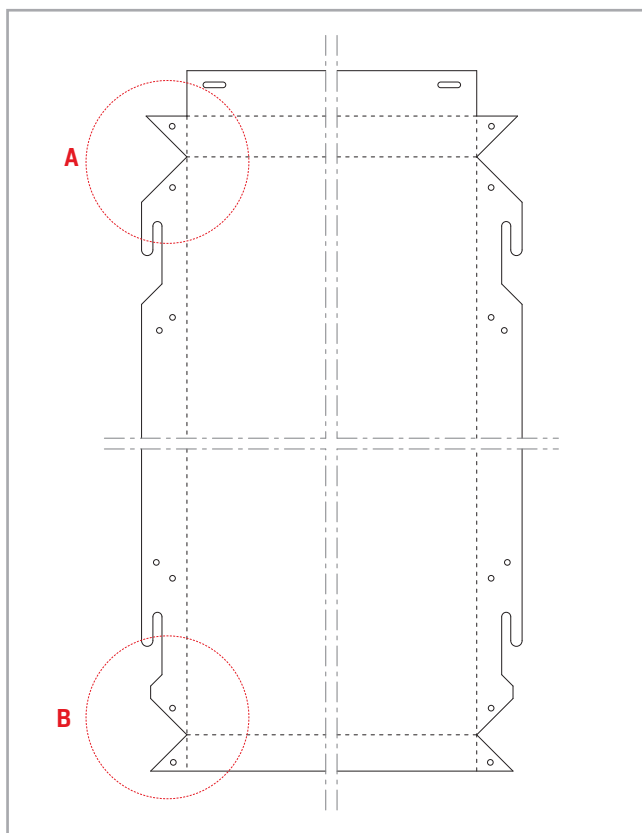
STB-T-CH SYSTEM

STANDARD CH CASSETTE WITH 40 mm FLAP

FORMED CASSETTE



FLAT CASSETTE

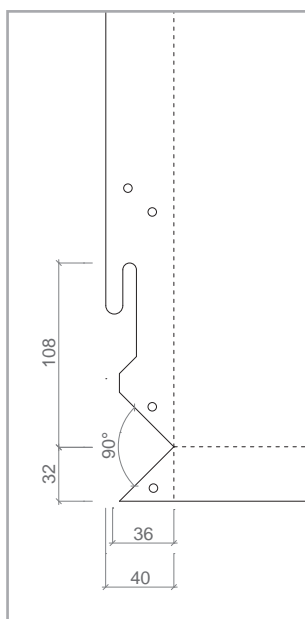


HANGING REINFORCEMENT

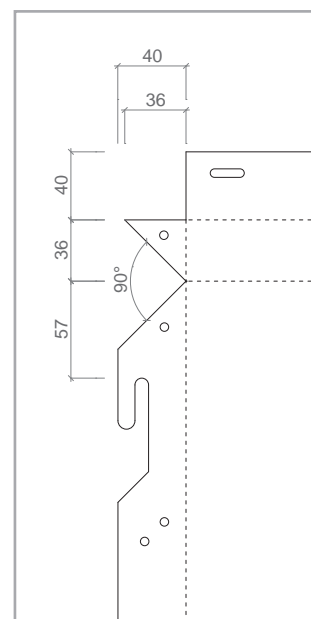
The hanging reinforcement is a piece made of 1050 H24 aluminium alloy which allows mechanical fixing via rivets to form the shape of the cassettes for the STB-CH and STB-T-CH systems, as well as strengthening each of the hanging slots of the CH cassettes with 40 mm flap.



DETAIL A



DETAIL B



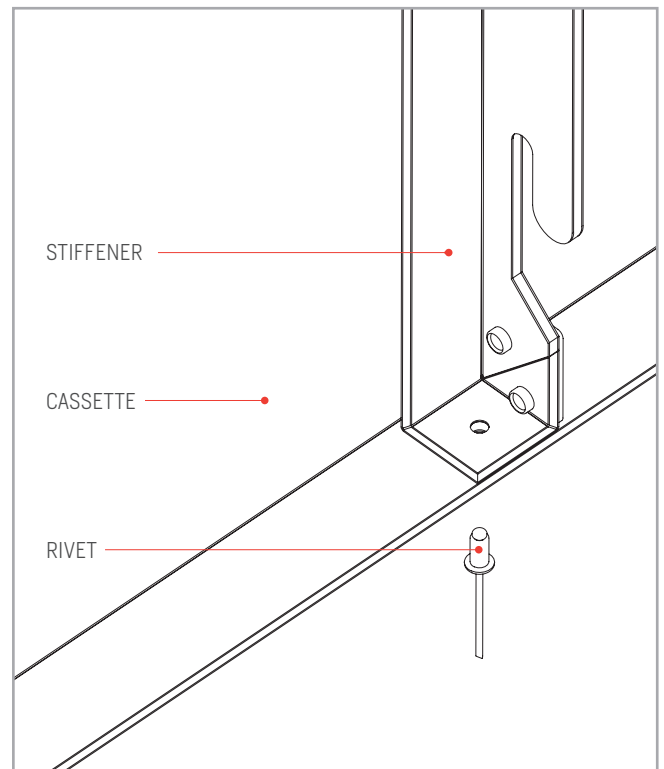
REFERENCE	DESCRIPTION	UNITS/BOX
05.19.019	HANGING REINFORCEMENT	500

Measurements in mm

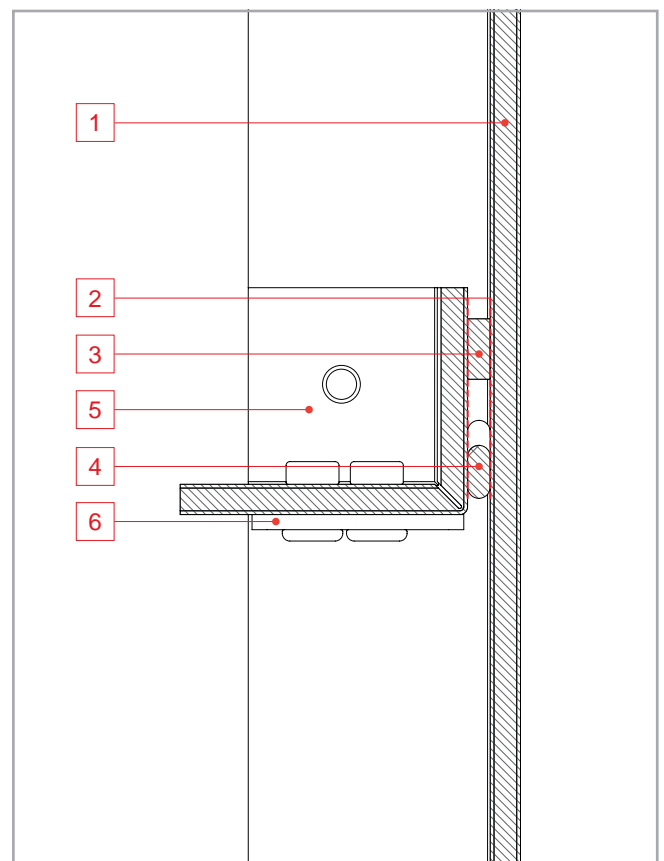
The stiffener is a angular piece formed from machined **STACBOND®** composite panel. It is used to internally reinforce CH cassettes when they exceed certain dimensions. The stiffener is fixed with double-sided tape and adhesive to the inner side of the tray and is riveted to the horizontal upper and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



DETAIL OF MECHANICAL FIXING



DETAIL OF MECHANICAL FIXING



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

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

STB-T-CH SYSTEM

ATTACHING STIFFENER

1. PREPARING THE AREA

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

2. PRIMING THE AREA

Once the area is clean it is primed using a specific product which strengthens the adherence of the elastic adhesive (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 or similar – is then applied to the panel, applying a continuous bead contiguous to the adhesive tape.

5. ATTACHING THE STIFFENER

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

6. FIXING WITH RIVETS

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



1. CLEANING



2. PRIMING



3. ADHESIVE TAPE



4. SIKATAACK PANEL ADHESIVE



5. ATTACHING THE STIFFENER



6. FIX WITH RIVETS

STB-T-CH SYSTEM REPLACEMENT OF DAMAGED CASSETTES



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



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



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



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

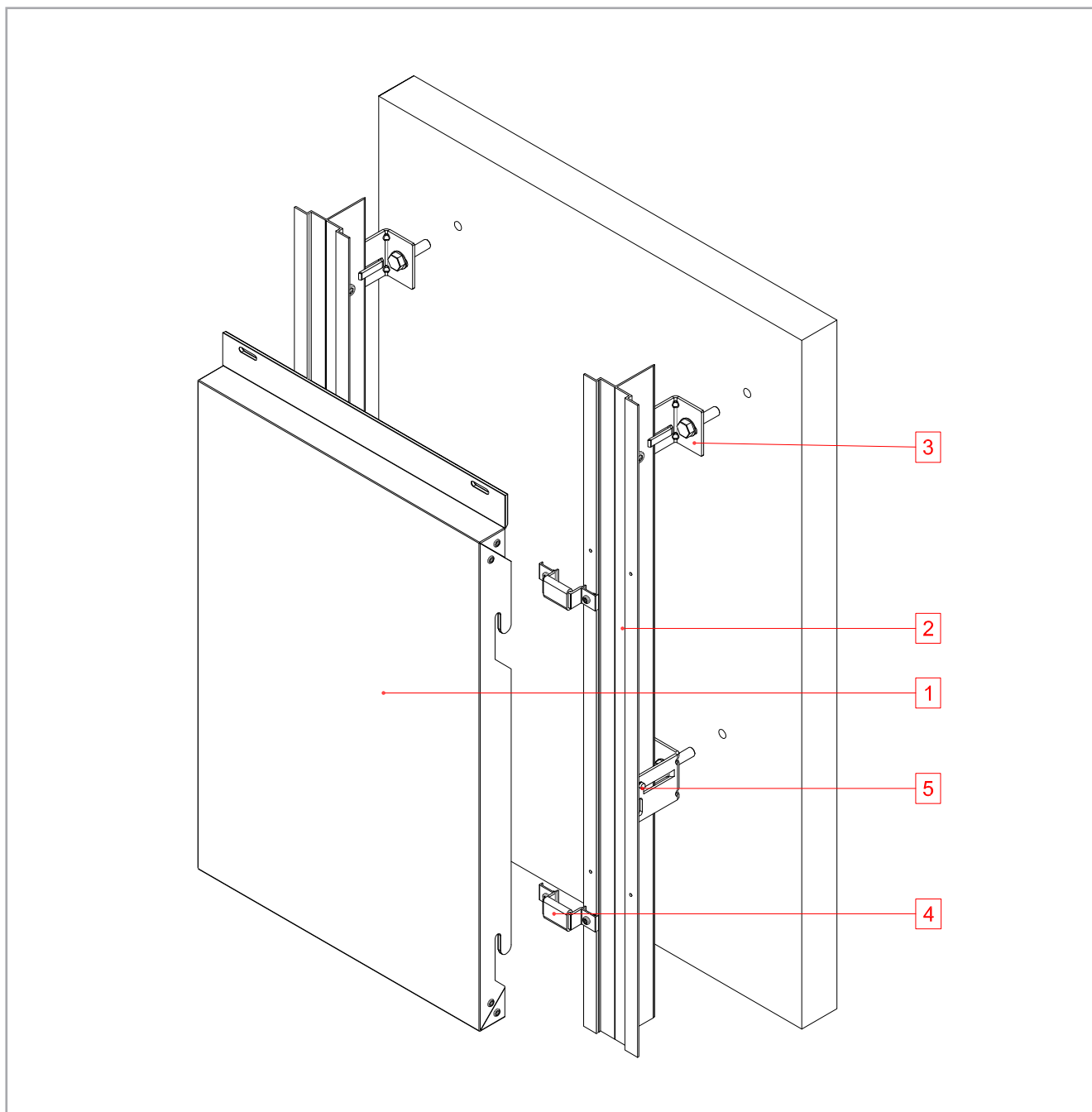


5. Fit the new **STACBOND**[®] composite panel cassette with special 9 mm hanging slot and hanging reinforcement pieces.



STB-T-CH SYSTEM

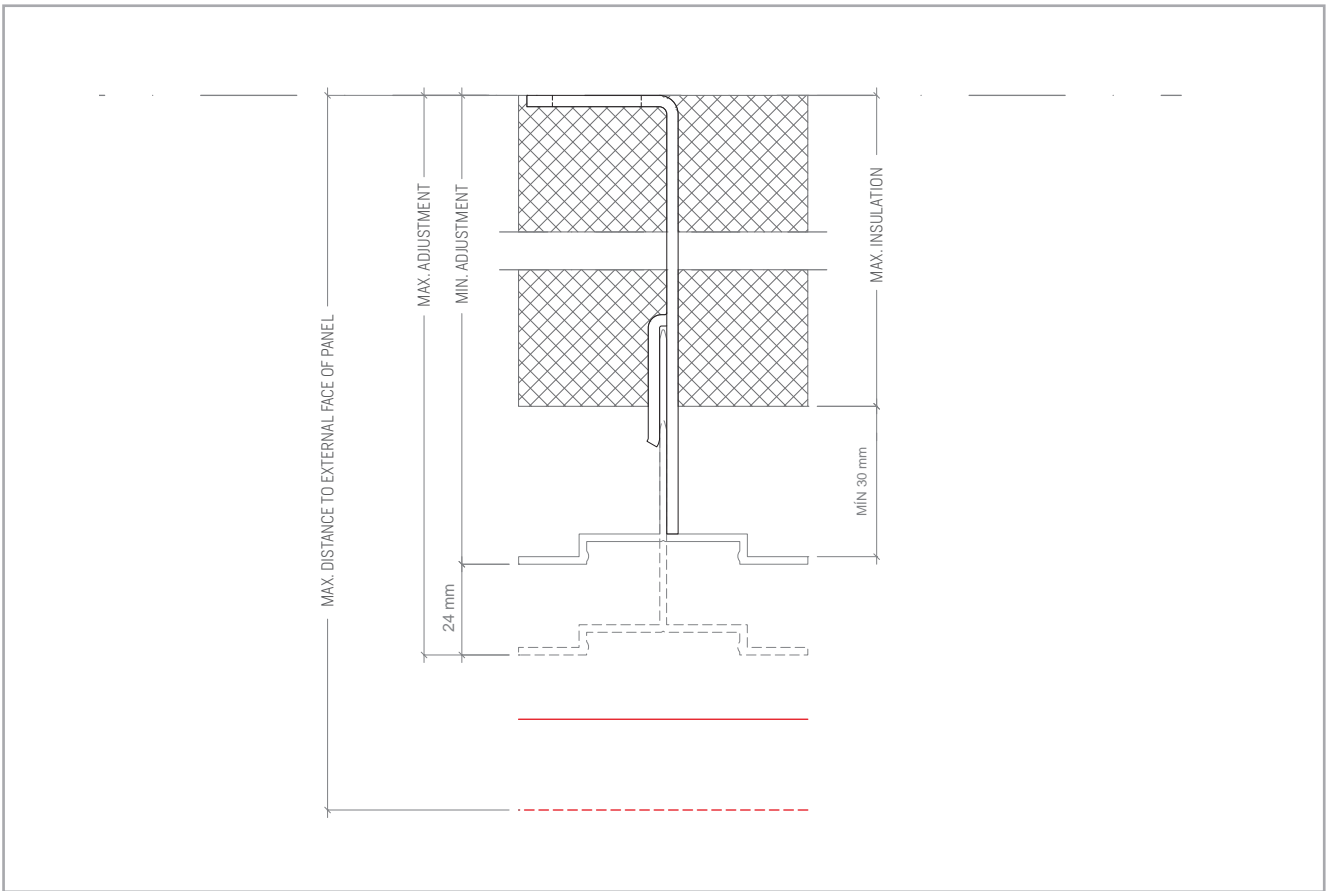
INSTALLATION DIAGRAM



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

STB-T-CH SYSTEM

SPACER / THERMAL INSULATION RELATIONSHIP



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

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

STB-T-CH SYSTEM

ACCESSORIES

PROFILES

REF.	PART	PAGE
05.19.061	PROFILE T OMEGA	106

SPACERS

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

FASTENING ACCESSORIES

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





AUXILIARY ELEMENTS

REF.	PART	PAGE
05.19.062	BRACKET SET STB-T-CH HANGING	111
19.019	HANGING REINFORCEMENT	
05.19.050	CASSETTES FORMING PLATE	
05.19.025	STIFFENER SCH-1 (< 750 mm)	115
05.19.026	STIFFENER SCH-2 (750 - 1500 mm)	
05.19.027	STIFFENER SCH-3 (> 1500 mm)	

INSULATION PLATES

REF.	PART	PAGE
05.19.070	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 L * ST-2-120 WITH REF.: 05.19.042 / 05.19.045	
05.19.068	INSULATING WEDGE FOR SPACERS L * ST-1-55 WITH REF.: 05.19.053 / 05.19.054 / 05.19.055 / 05.19.056	
05.19.072	INSULATING WEDGE FOR SPACERS L * ST-1-55 WITH REF.: 05.19.041 / 05.19.044 / 05.19.051 / 05.19.052	

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