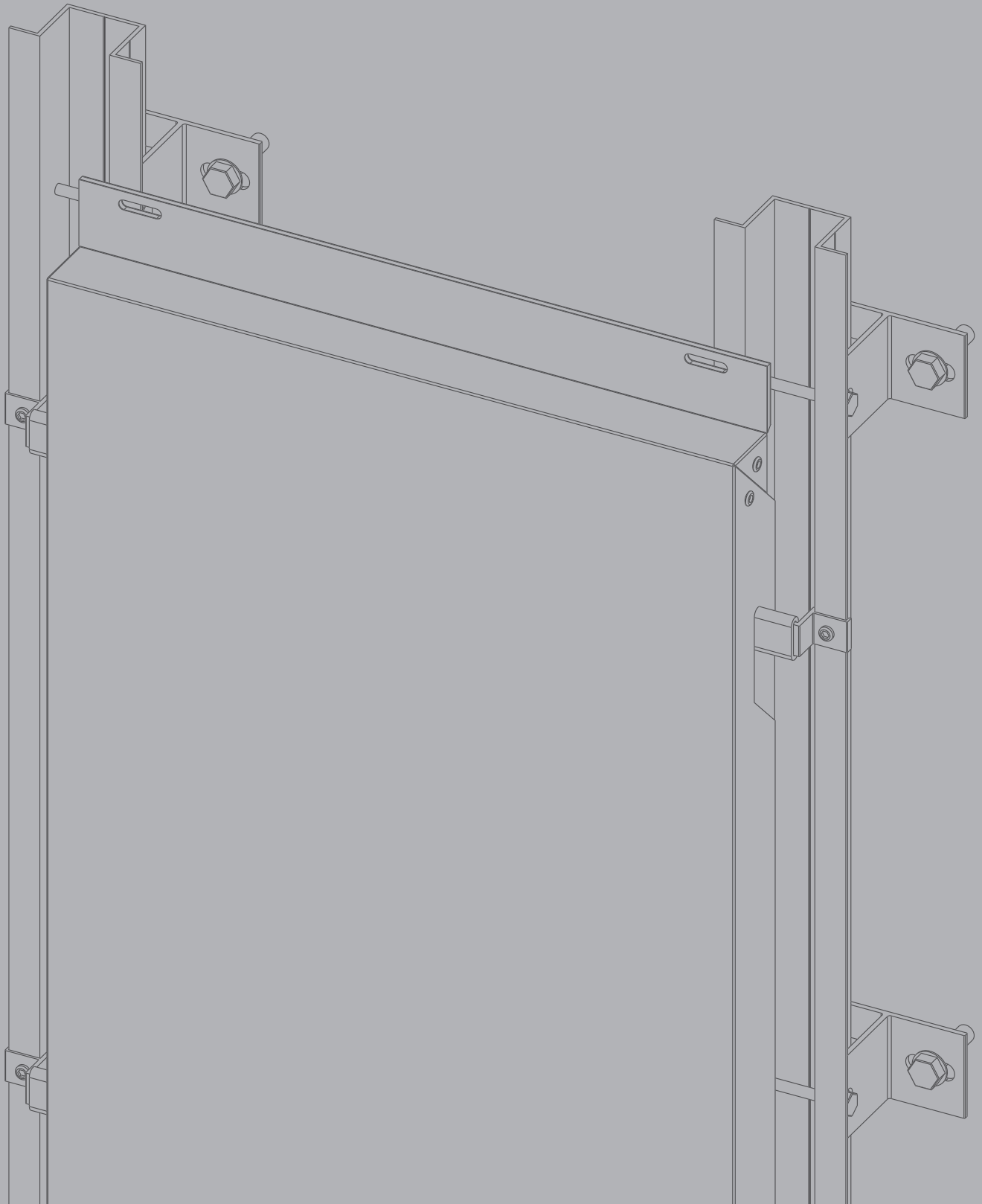


STB-CH

HANGING SYSTEM



STB-CH SYSTEM

DESCRIPTION



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

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

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

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

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

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

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

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



ETA-ETE: 15/0655



Nº 553P/16



ITB – KOT 2017/0043



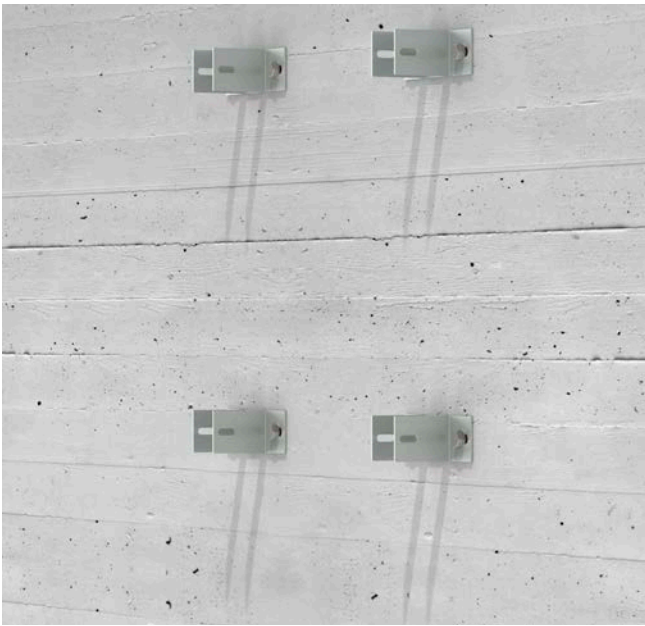
13/5022



2.2/13-1548_V2



ASOCIACIÓN HISPANA DE MONTAJES Y CERRAMIENTOS



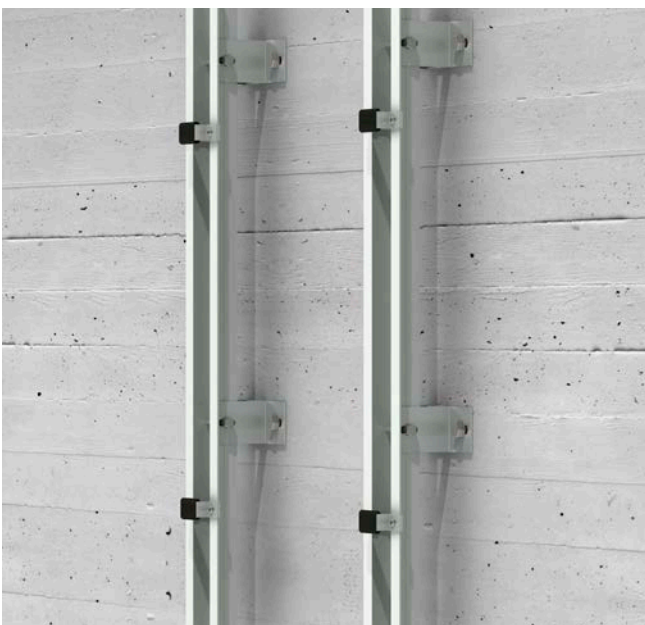
SPACERS DOUBLE T

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



PROFILES OMEGA

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



BRACKET SETS

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



STACBOND COMPOSITE PANEL CASSETTE

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

STB-CH SYSTEM

AUXILIARY ELEMENTS

BRACKET SET STB-CH HANGING

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

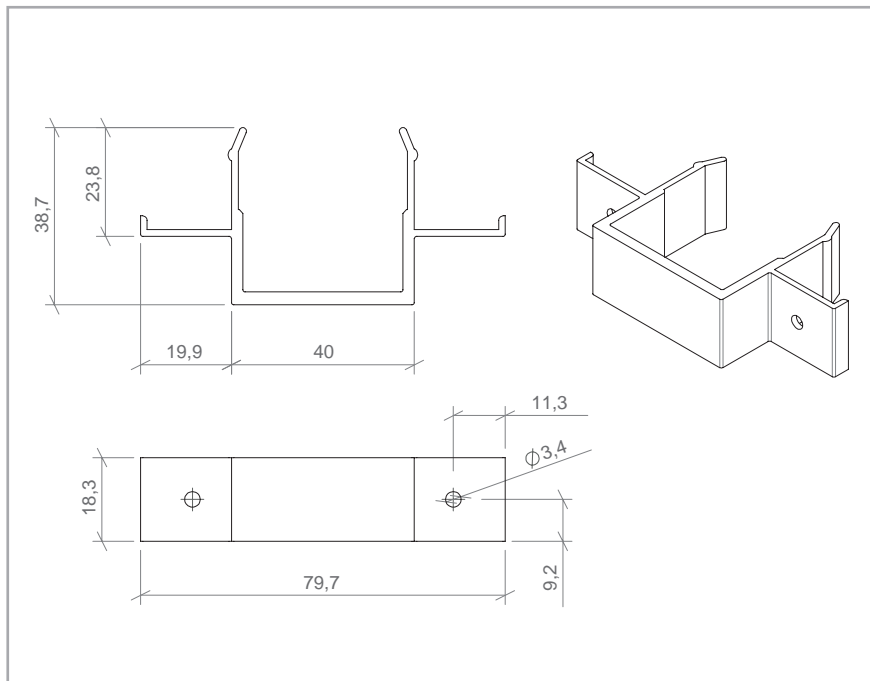
The gasket for the hanger is used to avoid vibration noise caused by wind load, road traffic, etc.

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

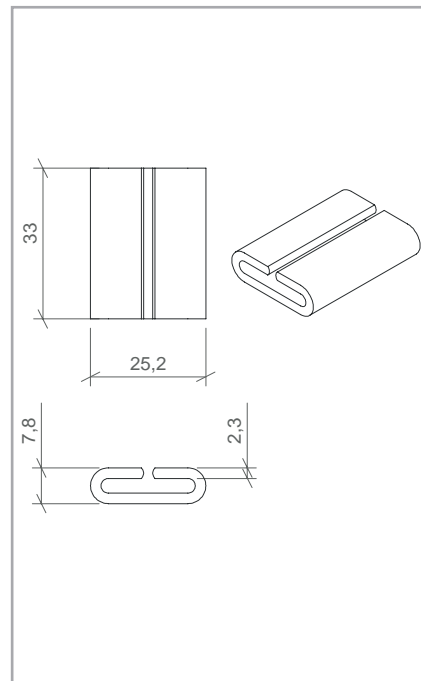


REFERENCE	DESCRIPTION	UNITS/BOX
05.19.013	BRACKET SET STB-CH HANGING	200

BRACKET STB-CH



BRACKET GASKET



Measurements in mm

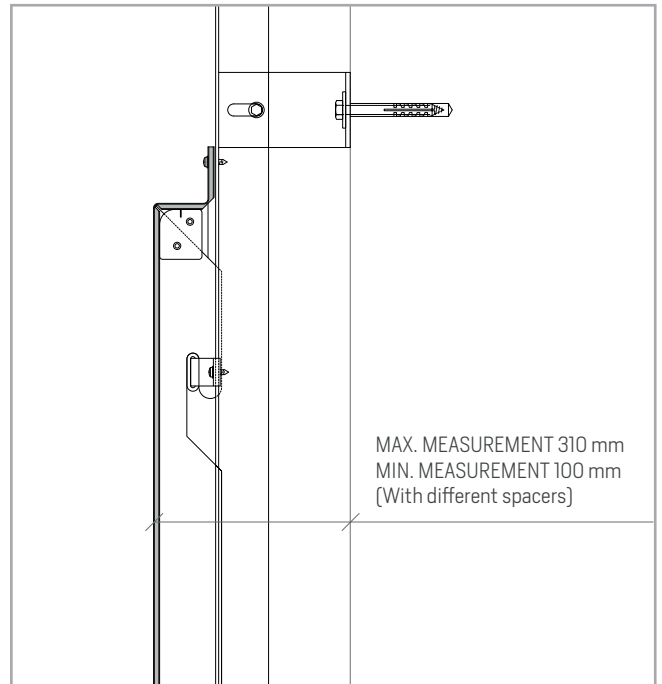
STB-CH SYSTEM

STANDARD CH CASSETTE WITH 45 mm FLAP

45 mm FLAP (DETAIL)



VERTICAL CROSS-SECTION



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

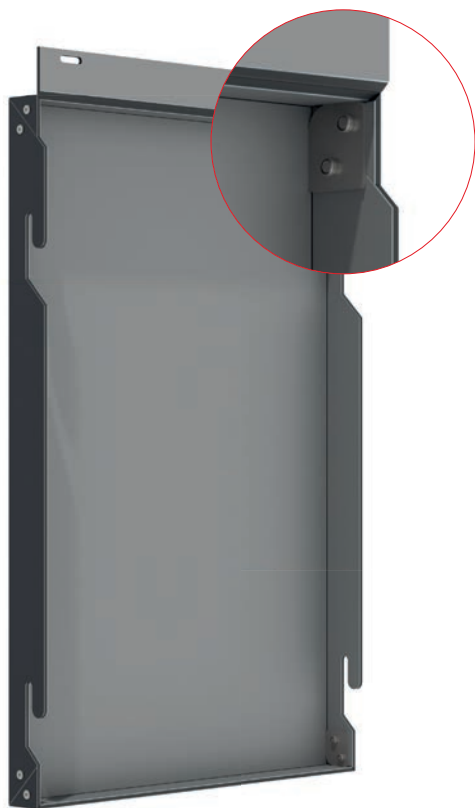
For the CH cassettes with 45 mm flaps, they can be formed using rectangular strips of 1050 ally (28 x 33 x 2 mm) or rectangular offcuts of the composite panels themselves.

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

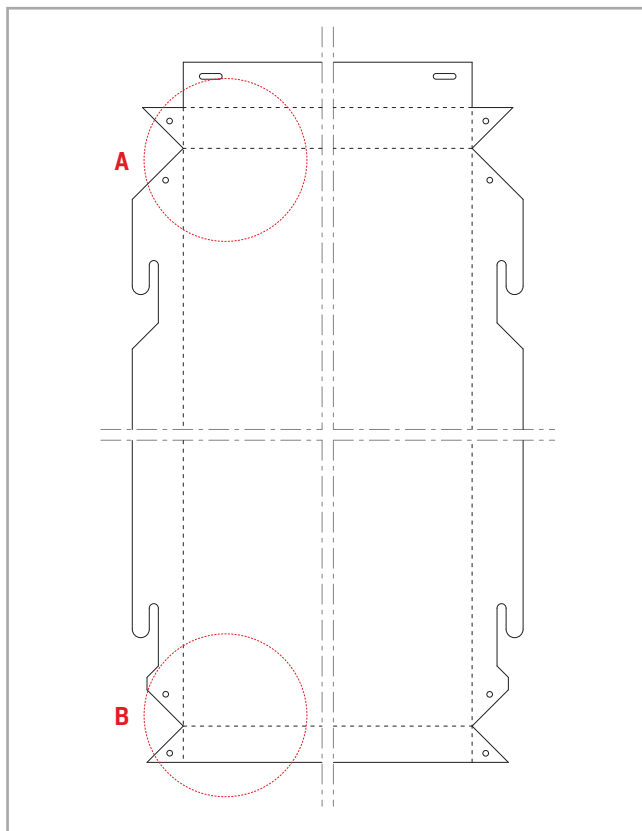
STB-CH SYSTEM

STANDARD CH CASSETTE WITH 45 mm FLAP

FORMED CASSETTE



FLAT CASSETTE



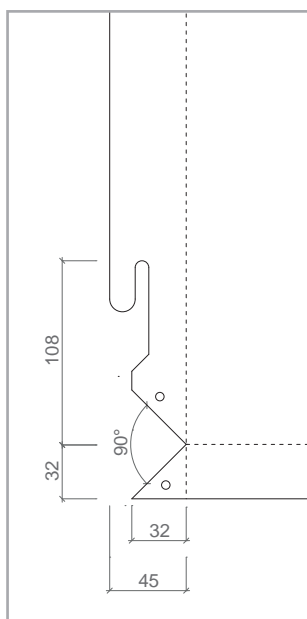
CASSETTES FORMING PLATE

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

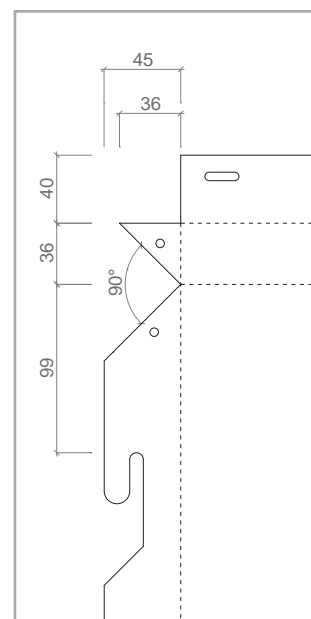
This plate is specified for CH cassettes with 45 mm flap and stiffeners.



DETAIL A



DETAIL B



REFERENCE	DESCRIPTION	UNITS/BOX
05.19.050	CASSETTES FORMING PLATE	3000

Measurements in mm

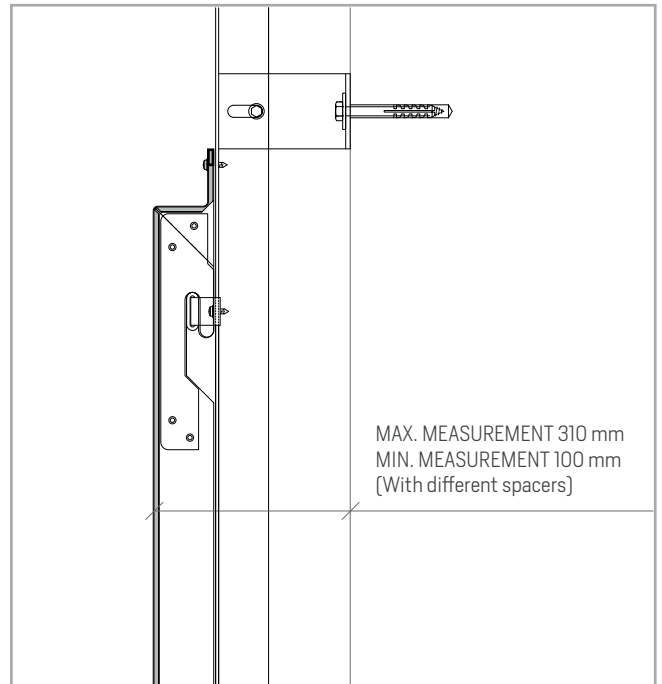
STB-CH SYSTEM

STANDARD CH CASSETTE WITH 40 mm FLAP

40 mm FLAP (DETAIL)



VERTICAL CROSS-SECTION



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

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

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

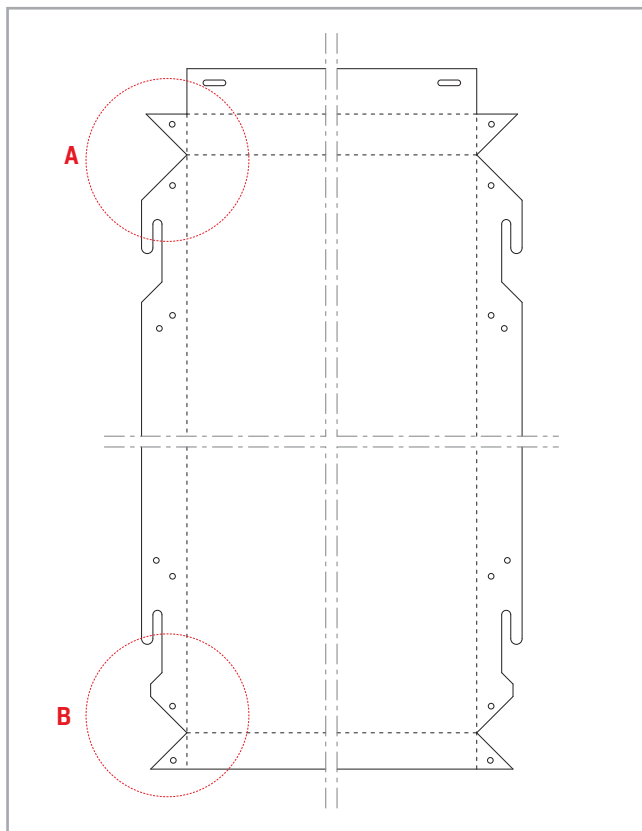
STB-CH SYSTEM

STANDARD CH CASSETTE WITH 40 mm FLAP

FORMED CASSETTE



FLAT CASSETTE

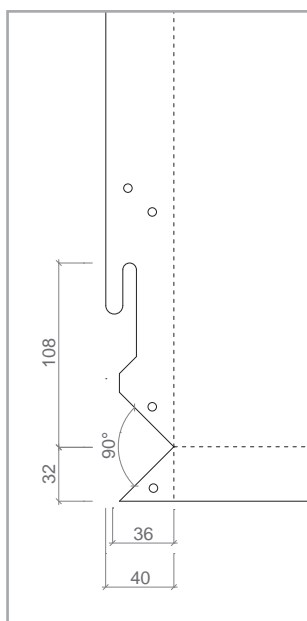


HANGING REINFORCEMENT

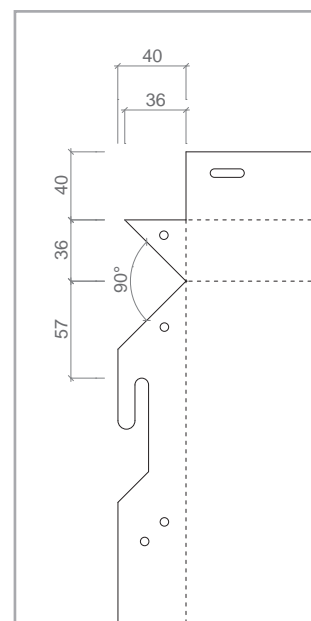
The hanging reinforcement is a piece made of 1050 H24 aluminium alloy which allows mechanical fixing via rivets to form the shape of the cassettes for the STB-CH and STB-T-CH systems, as well as strengthening each of the hanging slots of the CH cassettes with 40 mm flap.



DETAIL A



DETAIL B



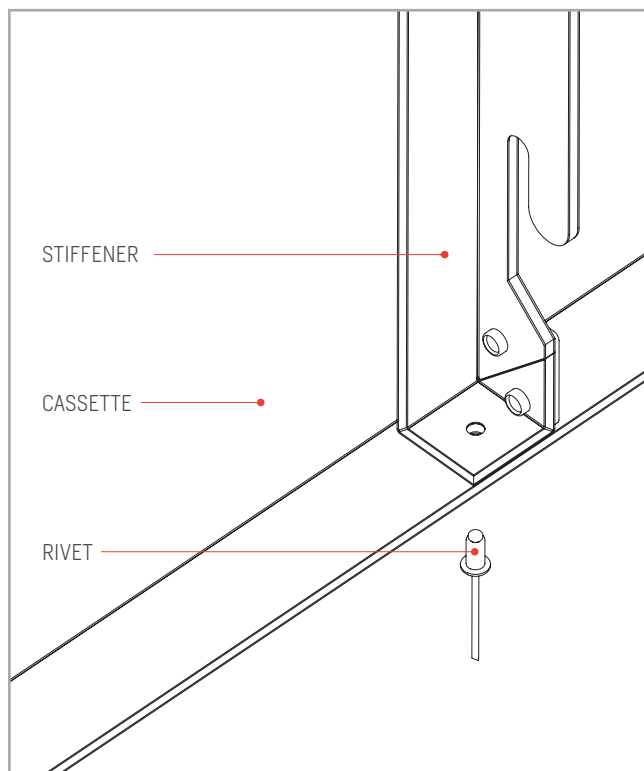
REFERENCE	DESCRIPTION	UNITS/BOX
05.19.013	HANGING REINFORCEMENT	500

Measurements in mm

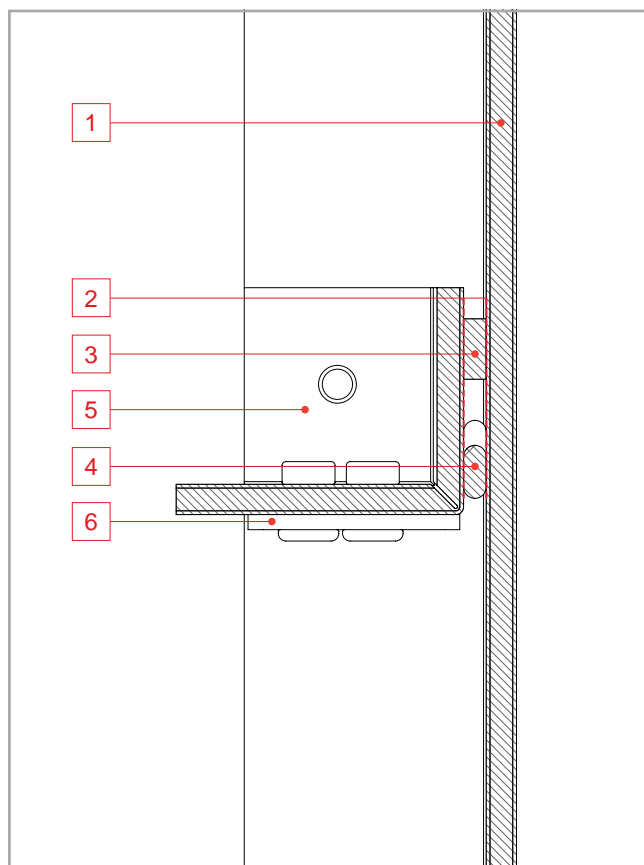
The stiffener is a angular piece formed from machined **STACBOND®** composite panel. It is used to internally reinforce CH cassettes when they exceed certain dimensions. The stiffener is fixed with double-sided tape and adhesive to the inner side of the tray and is riveted to the horizontal upper and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



DETAIL OF MECHANICAL FIXING



DETAIL OF MECHANICAL FIXING



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

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

STB-CH SYSTEM

ATTACHING STIFFENER

1. PREPARING THE AREA

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

2. PRIMING THE AREA

Once the area is clean it is primed using a specific product which strengthens the adherence of the elastic adhesive (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-CH SYSTEM REPLACEMENT OF DAMAGED CASSETTES



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



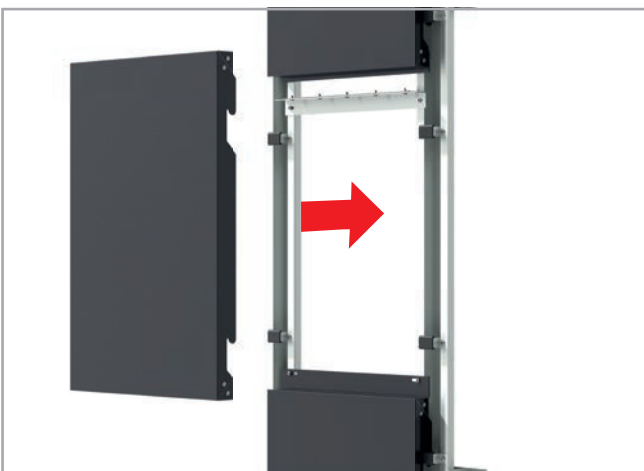
2. Drill hole in tube of 30 x 30 x 1.4 mm with \varnothing 6 mm and place in the new cassette.



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



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

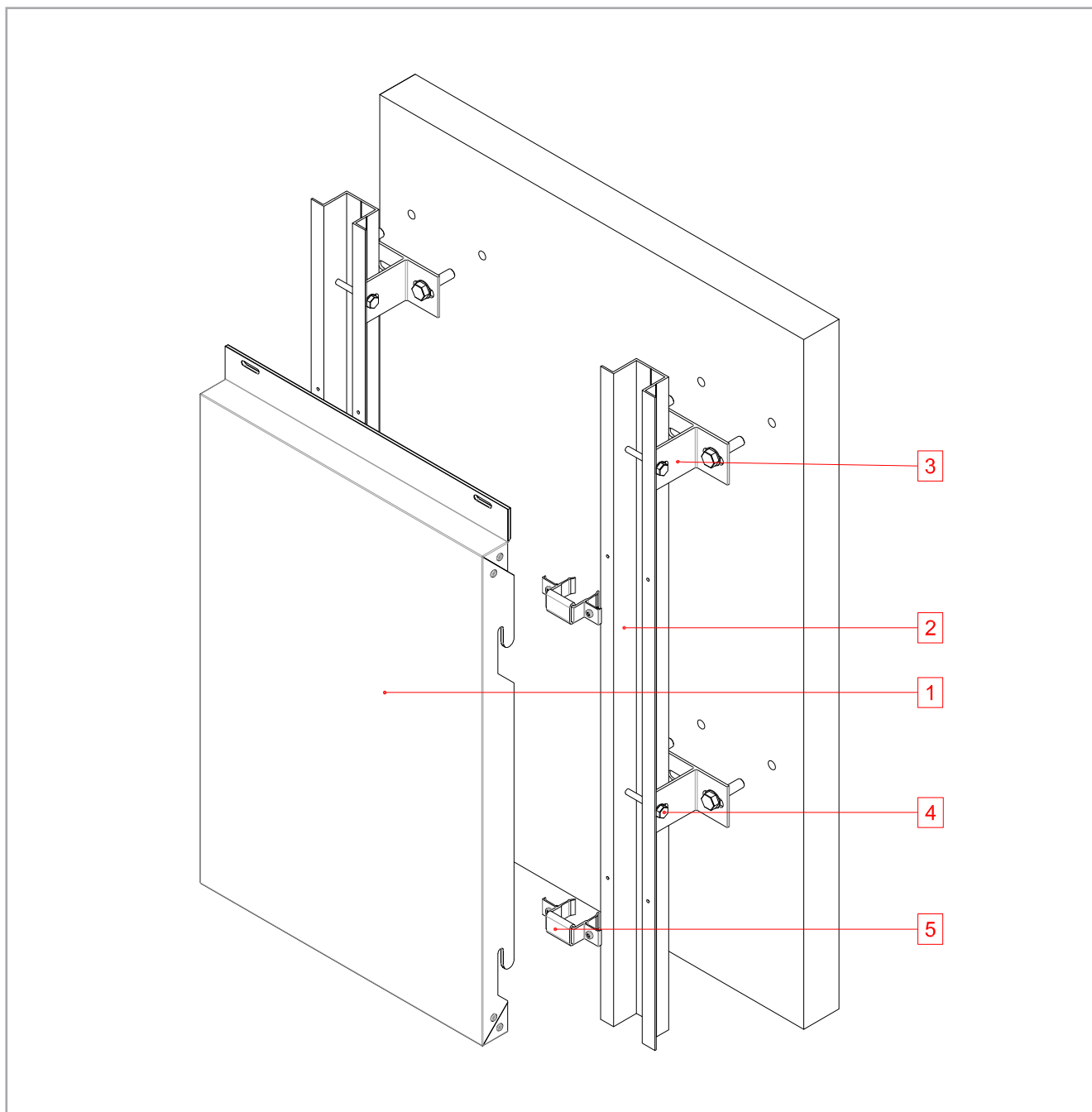


5. Fit the new **STACBOND®** composite panel cassette with special 9 mm hanging slot and hanging reinforcement pieces.



STB-CH SYSTEM

INSTALLATION DIAGRAM

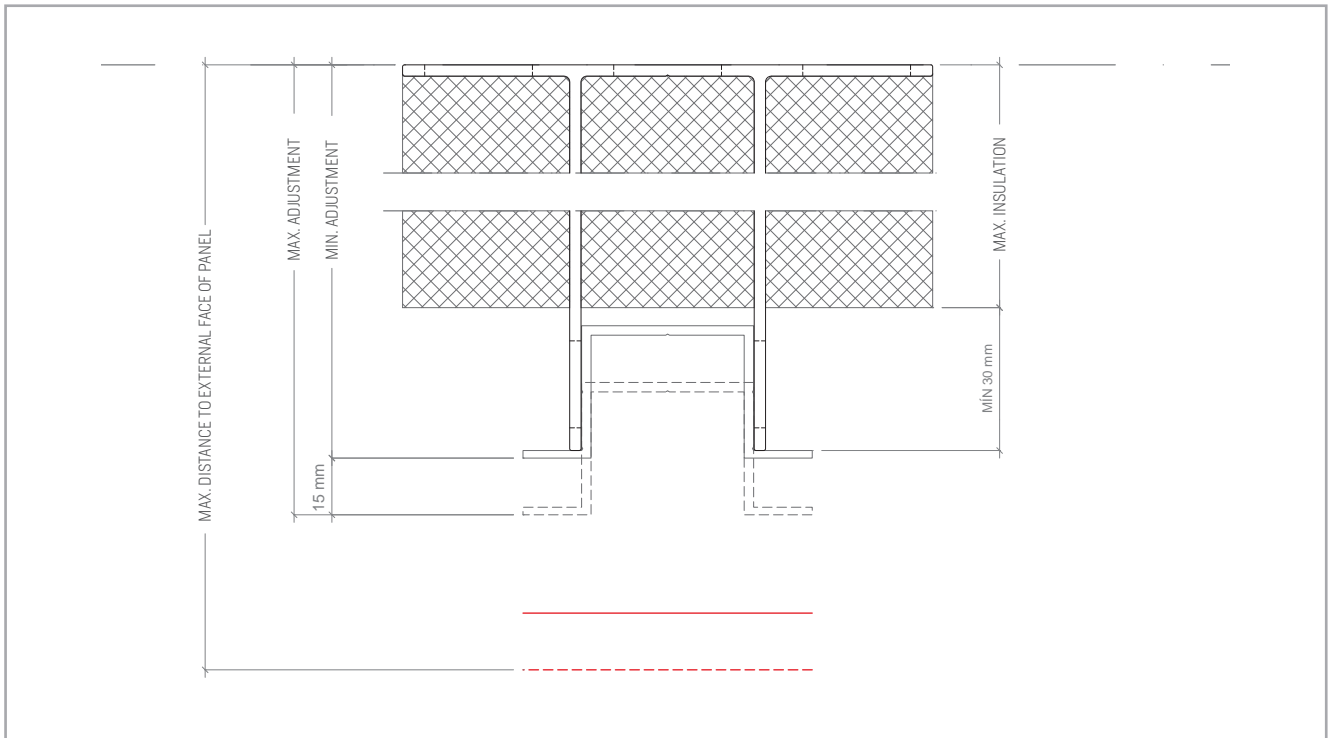


N° NAME

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

STB-CH SYSTEM

SPACER / THERMAL INSULATION RELATIONSHIP



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

SPACER U *		DISTANCE (mm) FROM BASE OF FIXING TO VISIBLE FACE OF PANEL		RECOMMENDED INSULATION (mm) WITH 30 mm AIR CAVITY
		MIN.	MAX	
05.19.046	SPACER U 59	100	115	30
05.19.047	SPACER U 74	115	130	50

STB-CH SYSTEM

ACCESORIES

PROFILES

REF.	PART	PAGE
05.19.003	PROFILE OMEGA	106

AUXILIARY ELEMENTS

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

INSULATING WEDGES

REF.	PART	PAGE
05.19.071	3 x GROOVE WASHER FOR INSULATING WEDGES WITH REF.: 05.19.067 / 05.19.069 / 05.19.073	
05.19.005	INSULATING WEDGE FOR SPACERS U* WITH REF.: 05.19.046 / 05.19.047	
05.19.069	INSULATING WEDGE FOR SPACERS DOUBLE T* WITH REF.: 05.19.030 / 05.19.031 / 05.19.032 / 05.19.033 / 05.19.034 / 05.19.035 / 05.19.036 / 05.19.037 / 05.19.038 / 05.19.039	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 59	
05.19.005	SPACER DOUBLE T 74	
05.19.006	SPACER DOUBLE T 89	
05.19.007	SPACER DOUBLE T 104	
05.19.030	SPACER DOUBLE T 119	
05.19.031	SPACER DOUBLE T 134	
05.19.032	SPACER DOUBLE T 149	108
05.19.033	SPACER DOUBLE T 164	
05.19.034	SPACER DOUBLE T 179	
05.19.035	SPACER DOUBLE T 194	
05.19.036	SPACER DOUBLE T 209	
05.19.037	SPACER DOUBLE T 224	
05.19.038	SPACER DOUBLE T 239	
05.19.039	SPACER DOUBLE T 254	
05.19.046	SPACER U 59	109
05.19.047	SPACER U 74	

FASTENING ACCESSORIES

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

INFORMATION AND SALES

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