

MFT-S2S-1L-HIDDEN CLAMPS

Hilti facade system





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MFT-S2S-1L-hidden clamps













APPLICATION AND DESCRIPTION

MFT-S2S-1L-hidden clamps

The system consists of aluminum wall brackets and profiles, and is specifically designed for vertical substructures in ventilated facades by using stainless steel clamps to fix the cladding material to the substructure. The cladding material is slotted on the bottom and top side providing a non-visible fixing method. Wall brackets are supplied with pre-assembled isolators and with different hole geometries in the base plate (for installing anchors or screws).

Support brackets are designed for bearing the loads coming from the ventilated facade (self and wind load). When needed, the flexible point brackets are used in order to fix the vertical profiles, holding up the wind loads and allowing the thermal expansion of the profile.

Vertical profiles are connected to the support brackets with specially designed screws for ventilated facade which avoids creating compressing forces from the profile against the wall brackets and keeps the profile connected by the support bracket in place.

Additionally, each profile will be connected to each other through the connector which will be fixed to one of the box profiles in order to allow the second profile to expand.

Each bracket in combination with the profile will allow an adjustment in order to align the profile with the wall distance needed along the ventilated facade. With this system and depending on the profile we can have different tolerances in order to minimize the wall irregularities and install the cladding material as designed.

Wall brackets are available from 80 mm to 300 mm or without isolators from 75 mm to 295 mm, having available this items in steps of 20 mm. The isolator separates the substructure from the base material to reduce the thermal bridge and avoiding future corrosion problems.

The stainless steel clamps are fixed to the profiles by using screws or rivets. The clamps are available in different shapes.

Advantages

- Only one support bracket per profile needed
- Profiles up to 4 m length fixed in only one support bracket
- Support bracket will be fixed only in the slab or the steel beam
- Different adjustment capability depending on the profile used
- Pre-assembled isolator
- The isolator separates the substructure from the base material reducing the thermal bridge.
- Substructures can be designed with PROFIS facade generating technical and economically optimized solutions
- Can be used with all common cladding material
- · Low installation time needed, saving labor costs
- Invisible fixing

VIEW OF CLADDING



This is an interactive page! By clicking on a system part you get directed to the respective detail page. Click on the move-back button to jump back to the CONTENT AND OVERVIEW.





- 1 Base material
- 2 Anchor acc. to static
- 3 Bracket and isolator
- ④ Insulation
- (5) Fixing insulation
- 6 Profile
- ⑦ Self drilling screw
- 8 Ventilation gap
- (9) Fixing cladding
- 10 Cladding



- A Make sure you have installed brackets in the right position and the reference profile.
- B Insert the connector in the reference TT profile.
- C Screw the TT PC with TT where the vertical mark is. See page 11.
- D Insert the 2nd profile into the TT PC.
- E Adjust it to the right position making sure you have free space to allow movement due to aluminium expansion.







This is an interactive page! Click on the move-back button to jump back to the VIEW OF CLADDING.





Legend:

- 1 Base material
- 2 Anchor acc. to static
- 3 Bracket and isolator
- ④ Insulation
- (5) Fixing insulation
- 6 Profile
- ⑦ Self drilling screw
- (a) Ventilation gap
- 9 Fixing cladding
- ① Adhesive① Cladding



This is an interactive page! Click on the move-back button to jump back to the VIEW OF CLADDING.

- 1 Base material
- 2 Anchor acc. to static
- ③ Bracket and isolator
- (4) Insulation
- (5) Fixing insulation
- 6 Profile
- ⑦ Self drilling screw
- 8 Ventilation gap
- (9) Fixing cladding
- 10 Adhesive
- 1 Cladding









- 1 Base material
- 2 Anchor acc. to static
- 3 Bracket and isolator
- ④ Insulation
- ⑤ Fixing insulation
- 6 Profile
- ⑦ Self drilling screw
- (8) Ventilation gap
- (9) Fixing cladding
- 1 Adhesive
- (1) Cladding



- 1 Base material
- 2 Anchor acc. to static
- ③ Bracket and isolator
- ④ Insulation
- (5) Fixing insulation
- 6 Profile
- ⑦ Self drilling screw
- (a) Ventilation gap
- (9) Fixing cladding
- 10 Cladding









- 1 Base material
- 2 Anchor acc. to static
- ③ Bracket and isolator
- ④ Insulation
- 5 Fixing insulation
- 6 Profile
- (7) Self drilling screw
- 8 Ventilation gap
- 9 Fixing cladding
- 10 Cladding



- 1 Base material
- ② Anchor acc. to static
- 3 Bracket and isolator
- ④ Insulation
- ⑤ Fixing insulation
- 6 Profile
- ⑦ Self drilling screw
- (8) Ventilation gap
- 9 Fixing cladding
- 10 Cladding
- (1) Window connection













- A Make sure that the TT profile below and on top of the window are installed and alligned.
- B Insert RHS PC connector in the TT profiles and install the screws on the sides where the mark is.
- C Insert RHS PC in the RHS profile.

- D Bring the RHS with RHS PC to the right position for installing it on the side of the window.
- E Mount on top of the TT profile (below window profile), adjust the RHS PC in the right position and fix the screws in the flange.
- F Screw the spiders on the top RHS PC's flange making sure you have enough free space to allow the movement of the window profile (1,2mm per linear meter)









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BRACKETS RANGE

MFT-S2S UI Medium

| Order Description | Item No. | Length |
|-------------------|----------|--------|
| MFT-S2S UI 080 M | 2158286 | 80 mm |
| MFT-S2S UI 100 M | 2158287 | 100 mm |
| MFT-S2S UI 120 M | 2158288 | 120 mm |
| MFT-S2S UI 140 M | 2158289 | 140 mm |
| MFT-S2S UI 160 M | 2158410 | 160 mm |
| MFT-S2S UI 180 M | 2158411 | 180 mm |
| MFT-S2S UI 200 M | 2158412 | 200 mm |
| MFT-S2S UI 220 M | 2158413 | 220 mm |
| MFT-S2S UI 240 M | 2158414 | 240 mm |
| MFT-S2S UI 260 M | 2158415 | 260 mm |
| MFT-S2S UI 280 M | 2158416 | 280 mm |
| MFT-S2S UI 300 M | 2158417 | 300 mm |





MFT-S2S UI Large

| Order Description | Item No. | Length |
|-------------------|----------|--------|
| MFT-S2S UI 080 L | 2157966 | 80 mm |
| MFT-S2S UI 100 L | 2157967 | 100 mm |
| MFT-S2S UI 120 L | 2157968 | 120 mm |
| MFT-S2S UI 140 L | 2157969 | 140 mm |
| MFT-S2S UI 160 L | 2158380 | 160 mm |
| MFT-S2S UI 180 L | 2158381 | 180 mm |
| MFT-S2S UI 200 L | 2158382 | 200 mm |
| MFT-S2S UI 220 L | 2158383 | 220 mm |
| MFT-S2S UI 240 L | 2158384 | 240 mm |
| MFT-S2S UI 260 L | 2158385 | 260 mm |
| MFT-S2S UI 280 L | 2158386 | 280 mm |
| MFT-S2S UI 300 L | 2158387 | 300 mm |





The length shown includes the isolator thickness.



BRACKET PROFILE ADJUSTMENT



| Profiles | MFT-S2S TT MFT-S2S TT MFT-S2S TT 80x120x2,0 6m 100x120x2,0 6m 110x120x2,0 6m 80x120x2,5 6m 100x120x2,5 6m 110x120x2,5 6m 80x100x2,0 6m 100x100x2,0 6m 110x100x2,0 6m 80x100x2,5 6m 100x100x2,5 6m 110x100x2,0 6m | | 100x120x2,0 6m 100x120x2,5 6m 100x100x2,0 6m | | 2,0 6m 2,5 6m 2,0 6m | MFT-S2S TT 135x120x2,0 6m 135x120x2,5 6m 135x100x2,0 6m 135x100x2,5 6m | | MFT-S2S TT 150x120x2,0 6m 150x120x2,5 6m 150x100x2,0 6m 150x100x2,5 6m | | |
|--------------------|--|--------|--|--------|----------------------------|--|--------|--|--------|--------|
| Brackets | A min* | A max* | A min* | A max* | A min* | A max* | A min* | A max* | A min* | A max* |
| MFT-S2S UI 080 M/L | 89.5 | 125 | 109.5 | 145 | 119.5 | 150 | 144.5 | 170 | 159.5 | 180 |
| MFT-S2S UI 100 M/L | 102 | 145 | 109.5 | 165 | 119.5 | 170 | 144.5 | 190 | 159.5 | 200 |
| MFT-S2S UI 120 M/L | 122 | 165 | 122 | 185 | 122 | 190 | 144.5 | 210 | 159.5 | 220 |
| MFT-S2S UI 140 M/L | 142 | 185 | 142 | 205 | 142 | 210 | 144.5 | 230 | 159.5 | 240 |
| MFT-S2S UI 160 M/L | 162 | 205 | 162 | 225 | 162 | 230 | 162 | 250 | 162 | 260 |
| MFT-S2S UI 180 M/L | 182 | 225 | 182 | 245 | 182 | 250 | 182 | 270 | 182 | 280 |
| MFT-S2S UI 200 M/L | 202 | 245 | 202 | 265 | 202 | 270 | 202 | 290 | 202 | 300 |
| MFT-S2S UI 220 M/L | 222 | 265 | 222 | 285 | 222 | 290 | 222 | 310 | 222 | 320 |
| MFT-S2S UI 240 M/L | 242 | 285 | 242 | 305 | 242 | 310 | 242 | 330 | 242 | 340 |
| MFT-S2S UI 260 M/L | 262 | 305 | 262 | 325 | 262 | 330 | 262 | 350 | 262 | 360 |
| MFT-S2S UI 280 M/L | 282 | 325 | 282 | 345 | 282 | 350 | 282 | 370 | 282 | 380 |
| MFT-S2S UI 300 M/L | 302 | 345 | 302 | 365 | 302 | 370 | 302 | 390 | 302 | 400 |

* The distance shown is valid for profile of 2,0 mm.

PRODUCTS RANGE

| Bracket fasteners | |
|--------------------------------|--|
| HUS-HR | |
| HRD-H | |
| HST-R | |
| HSA-R | |
| HIT-HY 270 | |
| HIT-HY 200-A | |
| S-MP 53S | |
| S-MD 51S / S-MD 53S / S-MD 55S | |
| Direct fastening | |
| Brackets | |
| MFT-S2S Medium | |
| MFT-S2S Large | |



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PRODUCTS RANGE

| Profiles | |
|----------------------|--|
| MFT-S2S TT | |
| MFT-S2S RHS | |
| Profile fastener | |
| S-AD | |
| Accessories | |
| MFT-ISO | |
| MFT-S2S UI AP L | |
| MFT-S2S UI TT PC | |
| MFT-S2S UI RHS PC | |
| MFT-CH | |
| Insulation fasteners | |
| Insulation fasteners | |



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