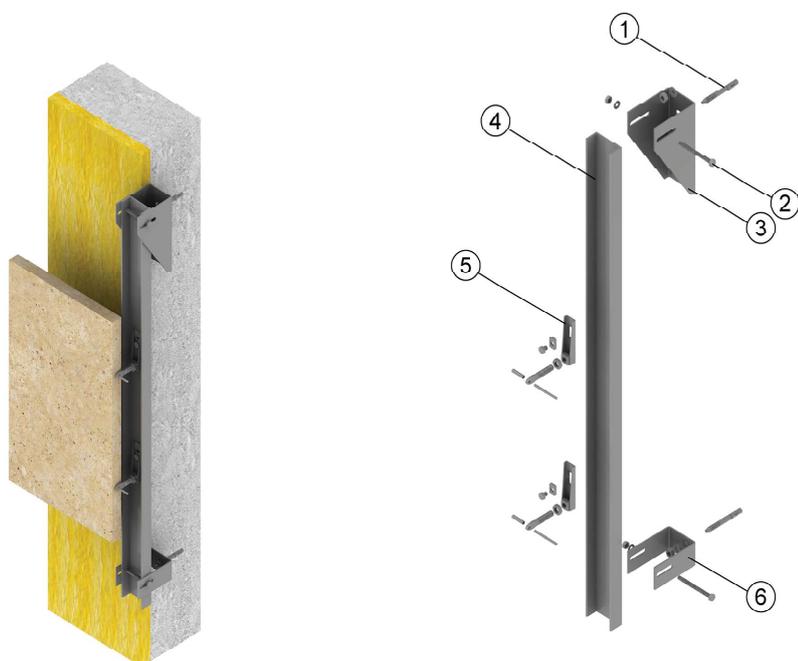


HMP-ALU Sub channel system- Installation method

HMP-ALU-U Sub channel fixing system

Sub channel system with HMP-ALU-U aluminium channel assembled on HCSP4-ALU channel supports and HCRS4-ALU channel restraints. Stone installation can be made with either Z Anchors or Body anchors. Brackets are fixed on the channel with self tabbing screws, allowing quick and easy installation.

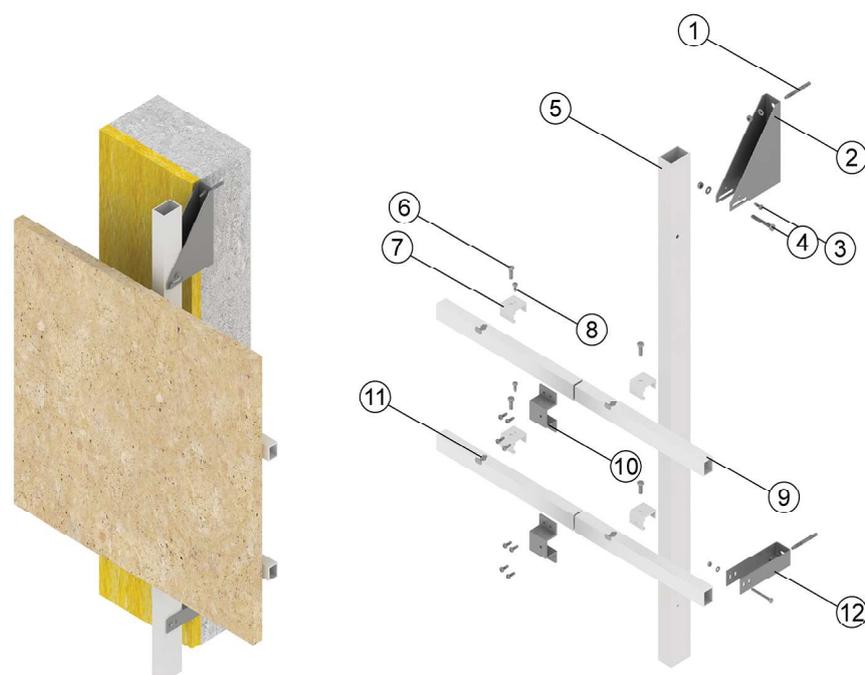


Set Elements

- 1-Through bolt
- 2-Hex bolt
- 3-Channel support
- 4-Channel
- 5-Body anchor
- 6-Channel Restraint

HMP-ALU-AG Sub channel system

Sub channel system with Aluminium box channels forming a vertical and horizontal grid. Vertical channels are fixed on HCSP4-ALU Channel supports and the horizontal channels are set on the vertical channels with channel connection elements. Stone fixing is made on to horizontal channels using the hang on method through the agraffe brackets that are fixed on the stone with undercut bolts.

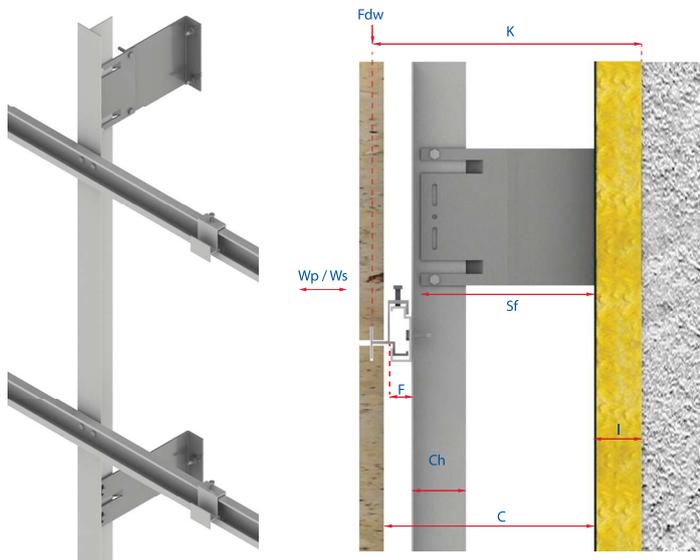


Set Elements

- 1-Through bolt
- 2-Channel support
- 3-Self drilling screw
- 4-Hex bolt
- 5-Vertical channel
- 6-Leveling bolt
- 7-Bracket
- 8-Self drilling screw
- 9-Horizontal channel
- 10-Channel connection
- 11-Undercut bolt
- 12-Channel Restraint

HMP-ALU-P Sub channel system

- Indirect fixing on to non-load bearing walls
- Projection sizes of up to 300 mm with load capacity of 5 kN
- Lower drilling points enable fast installation
- Installation at vertical and horizontal joints
- Easy to use & adjustability in three directions
- Ability to absorb building movements.

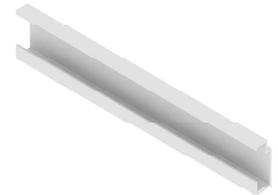


K: projection size
Fdw: dead Load
Ws: wind pressure
C: wall cavity
I: insulation thickness
CH: channel height
F: anchor forming size
Sf: support forming size
Lc: channel length
Sc: vertical channel spacing
Lk: end channel spacing
Ls: connection spacing

HMP-ALU-T T Channel



HMP-ALU-P Agraffe channel



HCSP3-ALU Channel restraint



HCRS4-ALU Channel restraint



HM-AG-K Agraffe bracket



Channel support

Channel supports are load bearing brackets that bear the full weight of the cladding fixed on the sub channel systems. The load is transferred to the concrete beam and the attachment is made with anchor bolts.

Channel restraint

Channel restraints are brackets that restrain the sub channel system against wind pressure and suction. The brackets are tied to the wall with suitable anchor bolts, strengthening the channels against buckling.

Channel

Channels are spanned from floor slab to slab can be supplied in the same length as the floor height.

Agraffe Kerf Brackets

Agraffe kerf brackets that are used to install stone slabs on to the channels. The brackets are fixed to the channels with hex self drilling screws. Each bracket is designed to carry the load of the individual stone panel.

Stone panel

Stone panels are fixed on to sub channel system. Proper study and calculation is made to check the suitability of stone and dimensions for facade installation purposes.

Load bearing beams

Load bearing beams are usually constructed out of high strength concrete. Sometimes steel is used. The Sub Channel system is loaded on this part of the substrate.

Building wall

The walls can be constructed out of concrete, brick, block work. Different attachment types are used for different type of walls, therefore careful analysis must be made to use the most secure type of connections to the wall for restraining the sub channel system.

Insulation

A layer of thermal insulation is covered on the wall, with suitable dowels. Sound insulation, fire proof barriers and EPDM may also be laid behind and or in front of the thermal insulation, providing full protection to the building.

Wall cavity

This is the empty space between the cladding and the insulation. Adequate space is required to accommodate the sub channel fixing system, allowing room for the channel and brackets to fit into.