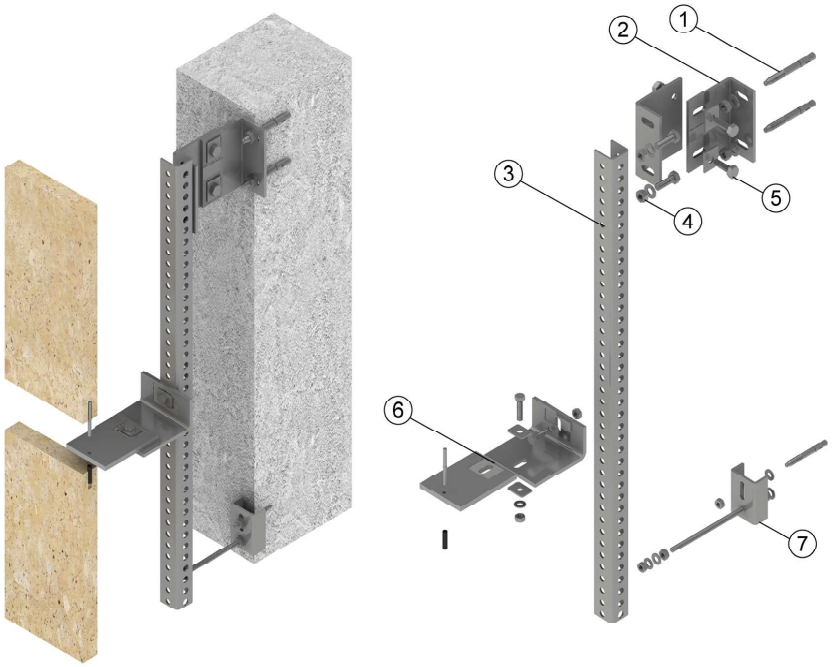
HMP Sub channel system - Installation method

HMPA-HC5 Sub channel system

Sub channel system with HMPA U channel assembled on HCSP05 channel supports and HCRS5 channel restraints. Stone installation can be made with either Z Anchors or HA L anchors. Fully adjustable with high load capacity.

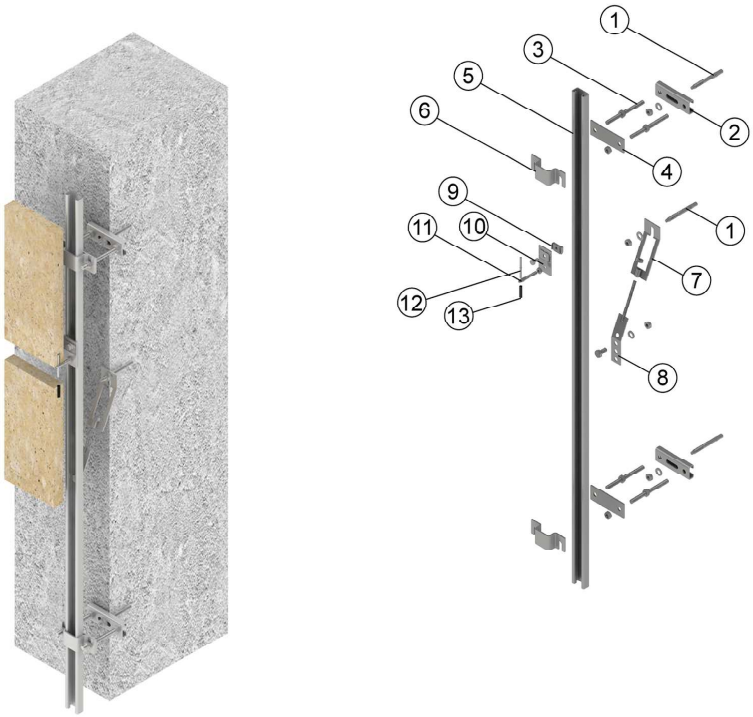


Set Elements

1- Through bolt
2- Channel support
3- Channel
4- Nut
5- Hex bolt
6- L Anchor
7- Channel Restraint

ATS Sub channel fixing system

Sub channel system with HMPS toothed channel assembled on ATS-S channel supports and ATS-R channel restraints. Stone installation can be made with either Z Anchors or HA L anchors. Easy adjustability on the vertical axis allows quick installation of the brackets on to channels using lock nuts.

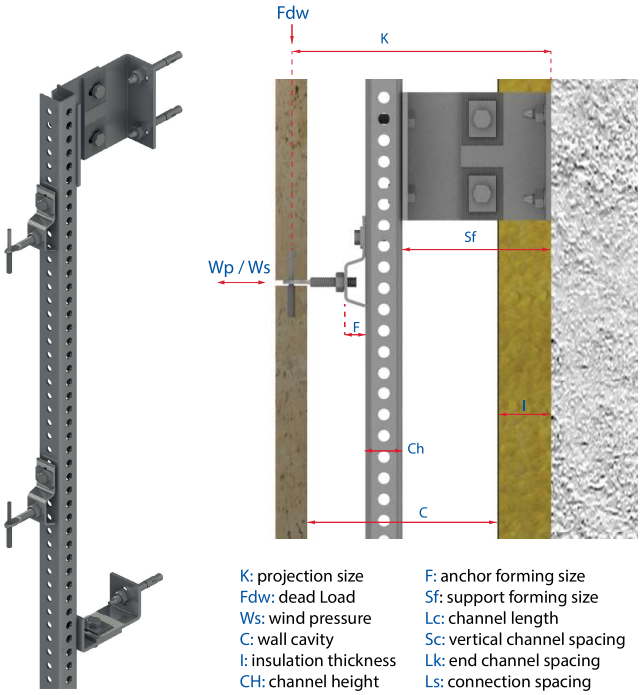


Set Elements

1-Through bolt
2-Channel bar
3-Threaded rod
4-Plate
5-C Channel
6-Omega anchor
7-HASP 1 Anchor
8-HASP 2 Anchor
9-Lock nut
10- Z Anchor
11-Adjustable arm
12-Flanged pin
13-Plastic tube

HMPA-HC5 Sub channel system

- Indirect fixing on to non-load bearing walls
- Projection sizes of up to 300 mm with load capacity of 5 kN
- Fewer 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

HMPA U Channel

HCSP2 Channel support

HCRS5 Channel restraint

HZ02 Z Anchor

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.

Z Anchors
Z Anchors are brackets that are used to install stone slabs on to the channels. The brackets are fixed to the channels with hex bolts. 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 infront of the thermal insulation, provinding full protection to the building.

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