

TECHNICAL DATA SHEET SUB-STRUCTURE



1. Sub-construction For Horizontal Applications / Interior

HIMACS Natural Acrylic Stone™ mainly needs to be supported to avoid any kind of dip. Depending on the application, the following support materials are recommended:

- Steel/stainless steel profiles
- Aluminum/aluminum profiles
- Moisture-resistant MDF, Moisture-resistant plywood or Moisture-resistant Particle Board
- Particle board
- Plasterboard or other alternative constructional boards

Ensure the sub-construction is resistant according to its requirements and specifications needs. When used as a kitchen work surface, a frame substructure is strongly recommended. A full sub-structure can, but need not, be used (Fig.1).

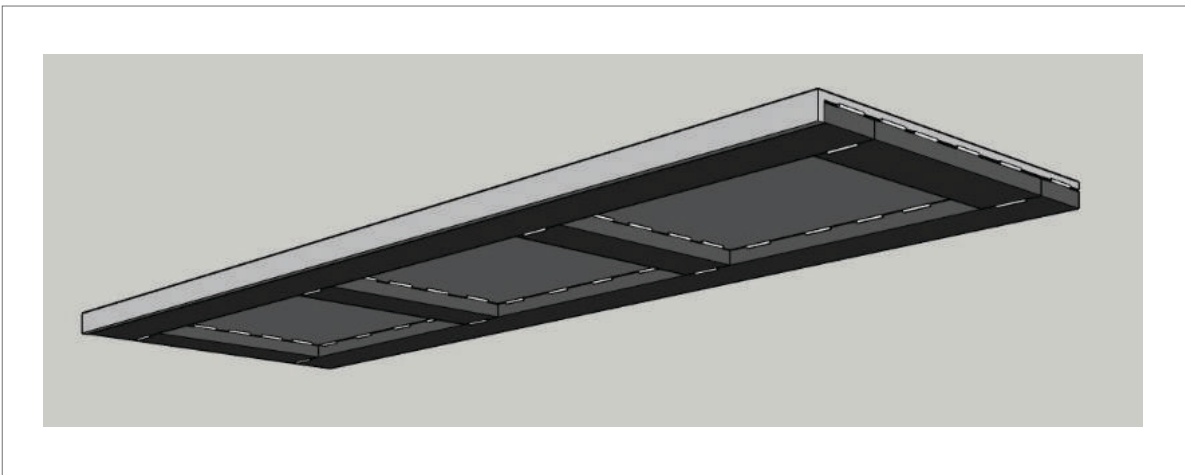


Fig.1

Adjust all substructures with **permanent elastic adhesive** or with permanent elastic PU adhesive to the back of the HIMACS sheet; preferably in dots at a maximum spacing of approximately 100 mm or accordingly to the construction needs.

Use a mirror tape in between the dots to avoid long waiting time of the silicone or PU curing time.

The use of a mirror tape with a foam base is also practical as it ensures an even placing of the sub-construction without any uneven moves.

When to expect some weight to be placed on the surface at a later time some plastic or wooden strips may be placed between HIMACS sheet and sub-construction to avoid any unexpected move or warping of the top due to heavy weight placed for a long time on one position. Fig.2

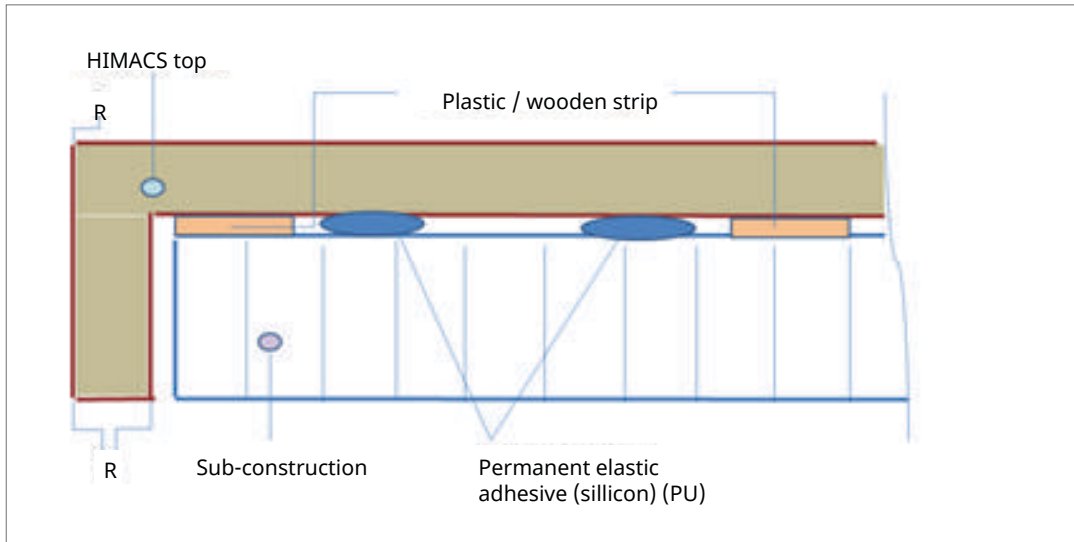


Fig.2

Sub-construction strips made in wood for a standard kitchen counter should have at least a width of approx. 80 mm and a material thickness of approx. 26mm; or accordingly to the calculation of static needs of the used material.

Rebate for reinforcement strips should also be taken into the material preparation work for the sub-construction application and pointed out when special parts may outsourced to metal work.

Be aware that the sub-construction will be different with reference to the material thickness, its use and its application. Ensure to take each single point of necessary job issue into consideration.

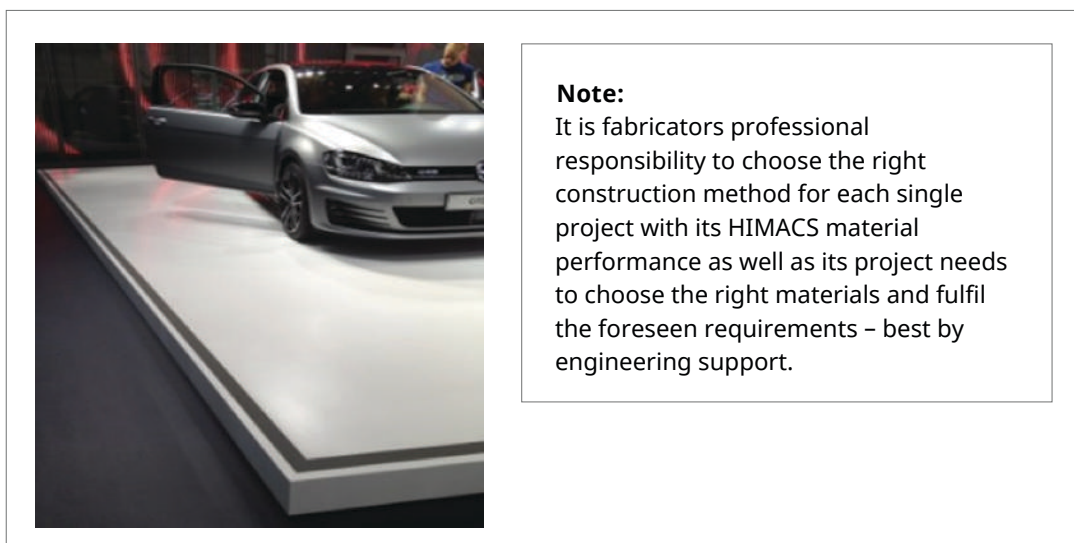


Fig.3 Example: Steel construction for a car platform / show room

Where no heat source is foreseen, like breakfast bar tops or table, counters or furniture's a full underlayment (Fig.4) can be placed, when taking into consideration the dilatation and expected weight foreseen for the top - choose the right thickness of material for the right job.

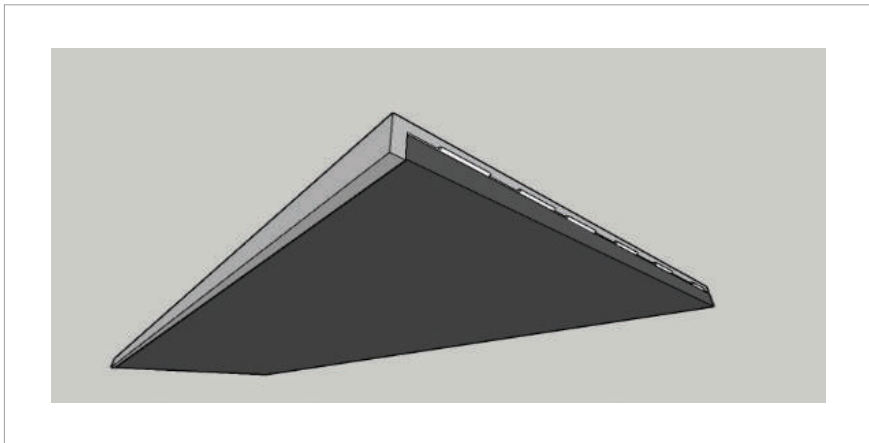


Fig.4

2. Sub-construction For Vertical Applications / Interior

With regards to the product thickness the right sub-construction must be chosen to avoid any shadowing or warping during the time of use.

Ensure - where heating sources - such as lamps or sunshine - the panel always need to move according to its dilatation.

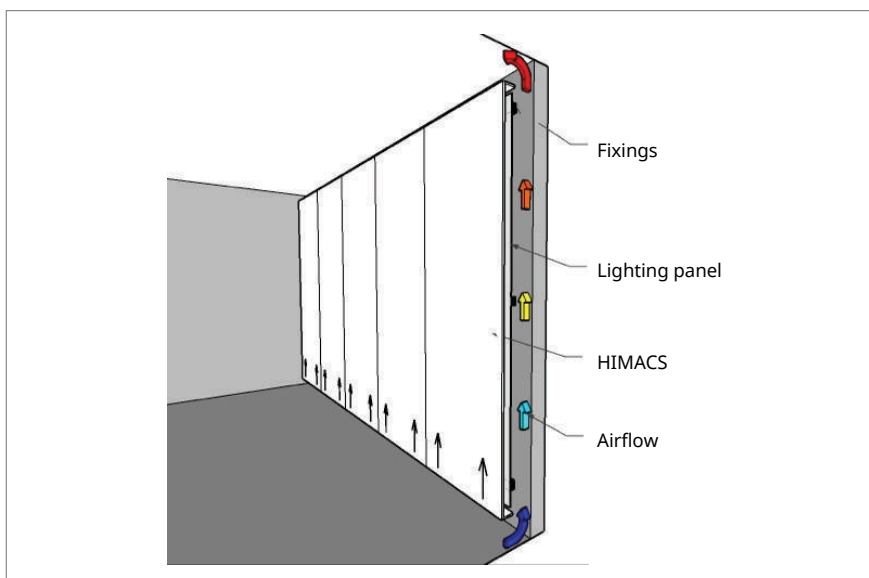
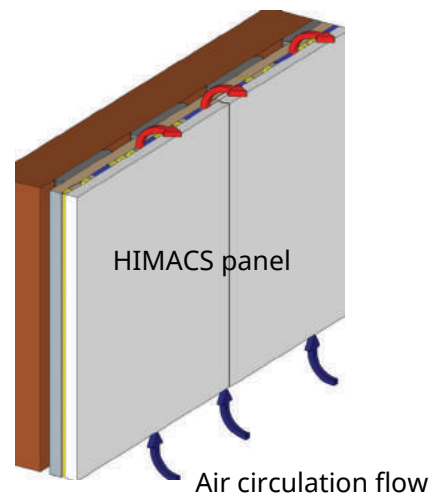
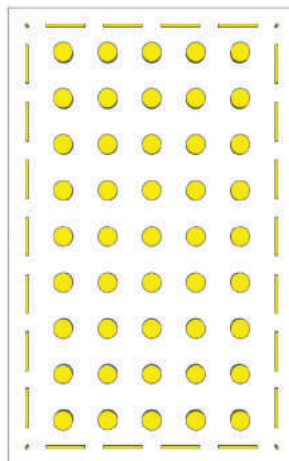
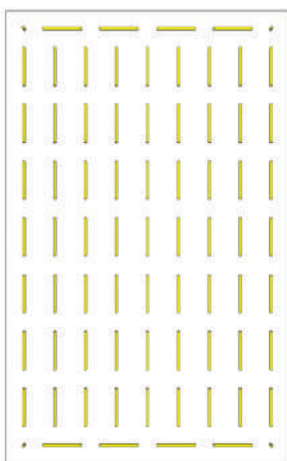
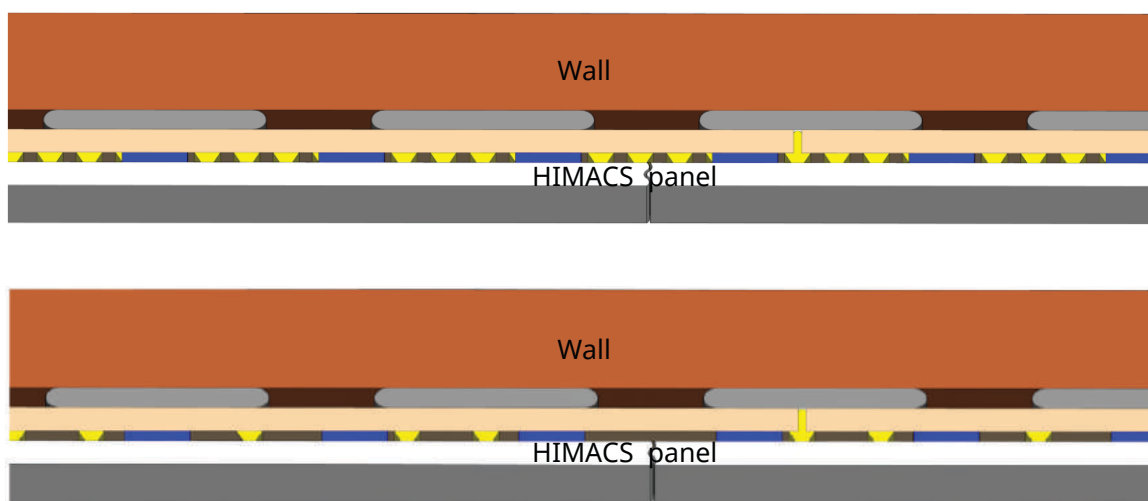


Fig.5

Avoid any creation of moisture of the backside of HIMACS panel. Best to reach with:

- All-over adhesion with toothed spatula and with permanent elastic adhesive (especially when using thin sheets of HIMACS(like 4.5mm thickness)
- Stripes of permanent elastic adhesive and air circulation*)
- Mechanical fixing and air circulation *)



Glue application systems*) for HIMACS panel

*) = not recommended for thin sheet material of HIMACS

Here some samples of different kind of fixing techniques which can be used.

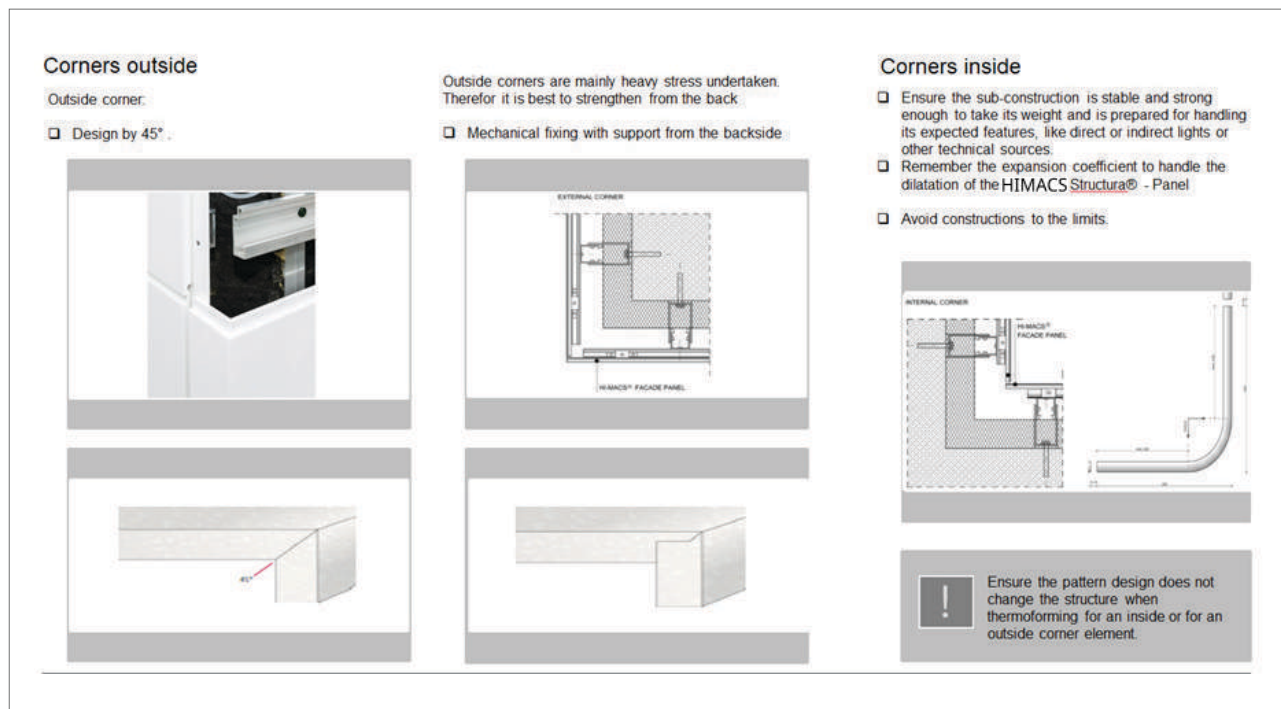


Fig.6

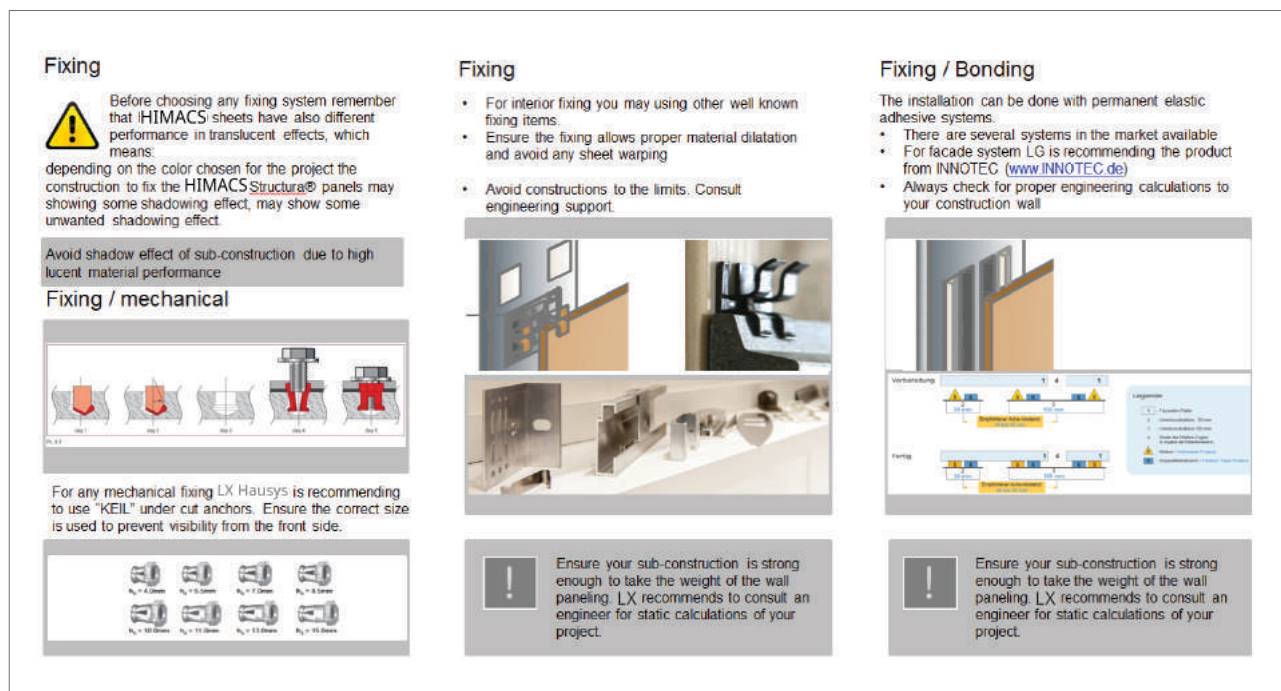


Fig.7

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