HI·MACS

The shape of your ideas

17. INTERIOR WALL CLADDING INSTALLATION

FABRICATION GUIDELINES

Solid Surface Material

LX Hausys

HIMACS sheet material, regardless of thickness, is suitable for use in interior settings for both full-height and partial-height wall cladding (such as wainscoting) in dry environments. It may also be applied to wet areas, including shower walls and bath surrounds.
However, HIMACS should not be installed on any wall substrate that has been compromised by moisture—whether through damage or discolouration.
This section outlines the standard procedure for fabricating interior wall installations to ensure consistent and reliable quality.

1. Wall Cladding Installation – Dry Rooms

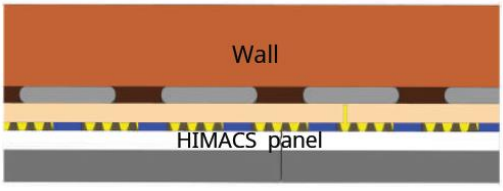
Definition: ***Dry room*** *refers to an interior space within a building—such as a house, flat, or commercial property—where the* ***relative humidity is maintained at low levels****, typically below 20% RH (relative humidity), to prevent moisture-related issues. These rooms are designed to remain free from dampness, condensation, and water ingress, making them suitable for applications where* ***moisture-sensitive materials*** *or finishes are used*.

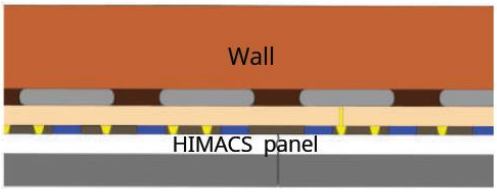
Walls intended to support HIMACS must be in excellent condition, with a maximum unevenness of 1 mm per metre and free from any imperfections.
Any source of moisture within or behind the existing wall structure must be completely removed. Please note that HIMACS is a decorative surfacing material and does not serve as a structural or waterproofing solution.

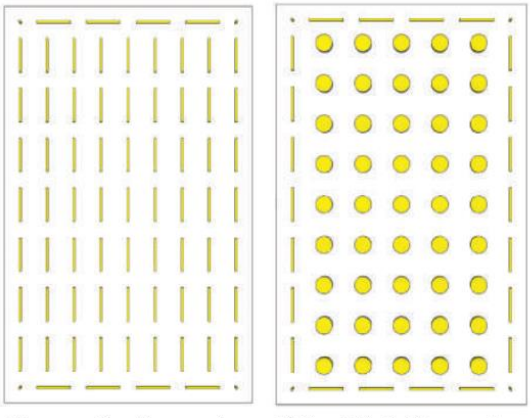
Recommendations:

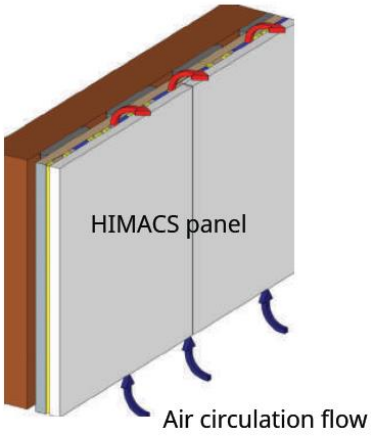
- Create openings for wall penetrations (e.g., electrical outlets and switches) using a router.
- These openings should be at least 12 mm larger in both height and width than the actual device. All corners must be rounded with a minimum radius of 3 mm, and the cut edges should be smoothed using 150-grit sanding material.
- For larger openings, corners should have a radius of 6 mm.
- Affix the HIMACS material to the existing wall using only 100% silicone sealant.
- Apply the silicone sealant in 25 mm diameter spots, spaced 100 mm to 150 mm apart.
- A continuous bead of silicone sealant should be applied around the entire perimeter of the HIMACS panel, including any cut-outs.
- Avoid using dark-coloured silicone sealant, as it may be visible through the HIMACS material.

- For applications exceeding standard sheet dimensions, HIMACS panels may be joined using either joint adhesive or colour-matched silicone sealant:
- Adhesive joints must be completed prior to placing the material.
- Silicone sealant joints can be applied with the material already in place.
- In dry environments, seams may be positioned vertically or horizontally. In wet areas, vertical seams are recommended to facilitate water runoff.
- For all thicknesses, allow for expansion joints of no less than 6 mm every 300 mm both vertically and horizontally. The same spacing should be maintained at internal corners and at floor or ceiling junctions. If expansion/control joints exist in the backing material, the HIMACS joints must align accordingly. These joints and gaps should be sealed with colour-matched 100% silicone sealant.









Glue application systems*) for HIMACS panel

*) = not recommended for thin sheet material of HIMACS

For HIMACS sheets with a thickness of 4.5 mm or 6 mm, the use of a **sub-construction board** is essential to prevent potential moisture-related issues. This board acts as a stabilising layer and must be dry, flat, and suitable for interior use.

To ensure the long-term stability of the HIMACS surface, a **full-surface permanent adhesive application** is recommended when bonding the sheet to the sub-construction board. This method provides uniform adhesion and minimises the risk of warping or detachment over time.

Important Installation Guidance for HIMACS Surfaces in Wet rooms

Prohibited Environments: HIMACS must not be used on any surface within steam rooms, steam showers, saunas, or any comparable high-humidity environments.

Substrate Requirements: The wall substrate intended for HIMACS application must be a moisture-resistant material, such as a cement-based backer board. The surface must be structurally sound, level to within 1 mm over a 1 m span both vertically and horizontally, and free from any irregularities or defects.

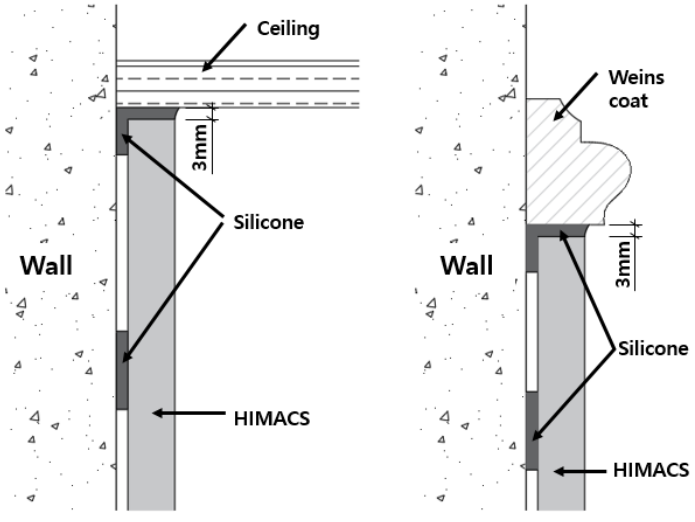
2. Wall Cladding Installation – Wet Rooms

*Definition**: Wet room** is space designed to accommodate direct water exposure from bathing or showering activities. It could integrate drainage, ventilation, and surface finishes to ensure hygiene, safety, and durability in high-use environments*.

- **Moisture Control**: Any source of moisture present within or behind the existing wall substrate must be completely eliminated prior to installation. HIMACS is not designed to function as a structural or waterproofing solution for external moisture ingress; it is strictly a decorative surfacing product.
- **Substrate Termination**: The backer board must terminate a minimum of **12 mm above the floor or shower tray** to prevent moisture—including condensation—from wicking upwards into the substrate.
- **Adhesive Application Recommendations:**
- Use **100% silicone sealant** exclusively to bond HIMACS to the wall substrate.
- Avoid using **dark-coloured silicone sealants**, as these may be visible through the HIMACS material.
- Apply the silicone sealant in **25 mm diameter spots**, spaced **100 mm to 150 mm apart** across the surface.
- A **continuous bead of silicone sealant** must be applied around the entire perimeter of the HIMACS panel and any cut-outs to ensure a secure and sealed installation.
- **Seaming and Panel Installation:** For applications exceeding standard sheet dimensions, HIMACS panels may be joined using either a **colour-matched silicone sealant** or a **dedicated joint adhesive**.
    - **Adhesive joints** must be completed prior to positioning the panels.
    - **Silicone sealant joints** may be applied with the panels already in place.
- In **wet wall environments**, seams should be oriented **vertically** to promote effective drainage and minimise water retention.
- **Expansion and Movement Control:** Allow for **expansion joints** of no less than **6 mm every 300 mm**, both vertically and horizontally, regardless of panel thickness.

- Where expansion or control joints exist in the substrate (e.g., cementitious backer board), HIMACS joints must be aligned precisely with those locations.
- **Fixture Penetrations:** Use a **router** to create openings for shower controls, heads, and taps.
- Each opening must be at least **12 mm larger in diameter** than the fixture penetration.
- Smooth all cut edges using **150-grit abrasive material**.
- Seal all penetrations with **100% silicone sealant** to prevent water ingress behind trim or escutcheon plates.
- **Perimeter and Corner Spacing:** Maintain a **3 mm gap** where wall panels meet the shower base or tray.
- Apply the same spacing at internal corners, floor junctions, and ceiling interfaces.
- All gaps and expansion joints must be sealed using **colour-matched 100% silicone sealant**.
- **Trim and Accessory Attachment:** Affix batten strips, crown mouldings, skirting trims, and corner profiles using **100% silicone sealant**, ensuring a secure and watertight finish.
- **Hygiene Compliance**: HIMACS is suitable for hygienic environments such as spas, wellness centres, and healthcare facilities. Ensure installation meets **Health and Safety Executive (HSE)** guidelines for wet areas and infection control.
- **Ventilation Requirements**: Wet rooms must be equipped with adequate mechanical ventilation systems to comply with **local Regulations**, ensuring proper moisture management and air quality.

Wall cladding with ceiling contact or Wains coats



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