



WAND BESCHERMING

For direct bonding
of wall panels



■ Material Information

FRP / GRP sheets are manufactured from thermosetting resin reinforced with glass fibres. This combination creates a strong, dimensionally stable and durable panel with a closed surface that is easy to clean.

Depending on the selected sheet type, the surface finish may be smooth or lightly textured to suit the intended application.

The sheets are resistant to mechanical impact, moisture and commonly used cleaning agents. They remain thermally stable within the specified temperature range and are suitable for demanding environments.

Standard colours

- RAL 9016 (White)
- RAL 7040 (Grey)

Other colours available on request from approx. 360 m².



Impact and
shock resistant



Hygienic and
antibacterial
surface



Chemically
resistant to acids,
alkalis and salts



Moisture resistant
with low water
absorption
($< 0,5 - 1\%$)



UV and thermally
stable



Low maintenance



Electrically insulating
(non-conductive
material)

■ Normen en certificeringen



Fire classification B-s1,d0 in accordance with EN 13501-1 (fire-retardant sheets)



Food contact compliant according to EN 1186 series or EU Directive 2002/72/EC



Thermal conductivity tested in accordance with ISO 8302



Water vapour resistance in accordance with EN 12086



Manufactured under ISO 9001:2015 quality management system



Suitable for HACCP environments



Member of EHEDG (European Hygienic Engineering & Design Group)

Applications

FRP sheets are used in environments where hygiene, durability and easy maintenance are essential.

Typical applications include:

- Food processing and production areas
- Commercial kitchens and catering facilities
- Pharmaceutical production areas and cleanrooms
- Cold stores and freezer rooms
- Laundries and sanitary rooms
- Healthcare facilities and hospitals

The sheets are suitable for both new-build and refurbishment projects and can be installed onto a variety of substrates.

■ Types of FRP / GRP Sheets

Embossed (Textured Sheet)

A sheet with a structured surface finish.

- Increased impact and scratch resistance
- Improved water drainage and reduced dirt retention
- Better foam adhesion during cleaning procedures
- Suitable for heavily used areas



Smooth

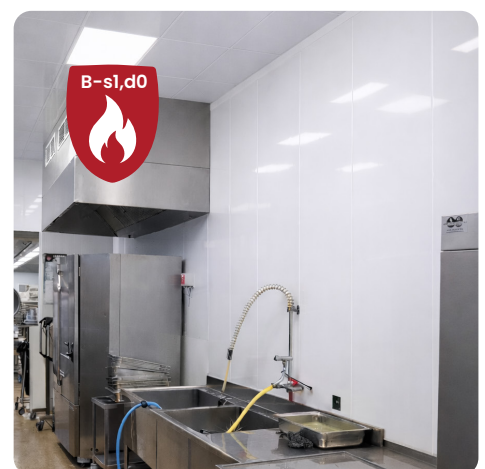
FRP sheet with a smooth matt finish and protective gel coat surface.

- Clean, closed surface finish
- Fast and easy to clean
- High chemical resistance
- Suitable for hygiene-critical areas

Fire (Fire-Retardant Sheet)

FRP sheet with fire-retardant properties and smooth surface finish.

- Complies with fire class B-s1,d0
- Low smoke emission and low toxicity
- Dimensionally stable and thermally resistant
- Suitable for areas with increased fire safety requirements



■ Preparation

Substrate Requirements

The substrate must be suitable for direct bonding and meet the following conditions:

- Flat and structurally stable
- Dry / free from residual moisture (max. 4%)
- Clean, grease-free and dust-free
- Adequate load-bearing strength

Minor irregularities up to approx. 2–3 mm are acceptable. Larger deviations must be levelled before installation.

An unsuitable substrate may result in poor adhesion and visible surface irregularities after installation.

Environmental Conditions

- Minimum installation temperature: +10°C
- Recommended working temperature: up to approx. +30°C
- Substrate and sheets must be dry
- Avoid condensation

Temperature fluctuations and hot cleaning processes may create additional stress between sheet and substrate. These factors should be taken into account during specification and installation.

■ Required Tools

Tools

- Circular saw or jigsaw with fine-toothed blade
- Sealant gun (manual, battery or pneumatic)
- Adhesive trowel (approx. 6–8 mm)
- Angle grinder with grinding disc (for edge preparation)
- Spirit level / laser level / plumb line
- Hand roller
- Additional tools: drill, file, sanding materials

Materials

- FRP / GRP sheets
- Adhesive sausages / cartridges
- Cleaner / degreaser
- 2-component joint system
- Profiles

Substrate Preparation

For correct adhesion, prepare the substrate carefully:

- Remove obstacles and loose items such as pipework, sockets etc.
- Sand back existing coatings, contamination or rust spots
- Thoroughly clean the substrate (remove grease, dirt and adhesive residues)
- Allow substrate to dry completely
- Check moisture content if required

Important: The rear side of each sheet must be degreased before installation.

Bonding to a damp or contaminated substrate will reduce adhesion and increase the risk of delamination.

Alignment and Planning

- Mark vertical reference lines (for example every 1200 mm)
- Set a horizontal laser line to measure floor and ceiling irregularities
- Check dimensions and panel layout in advance to avoid narrow finishing strips
- Determine installation direction before starting



Critical Attention Points

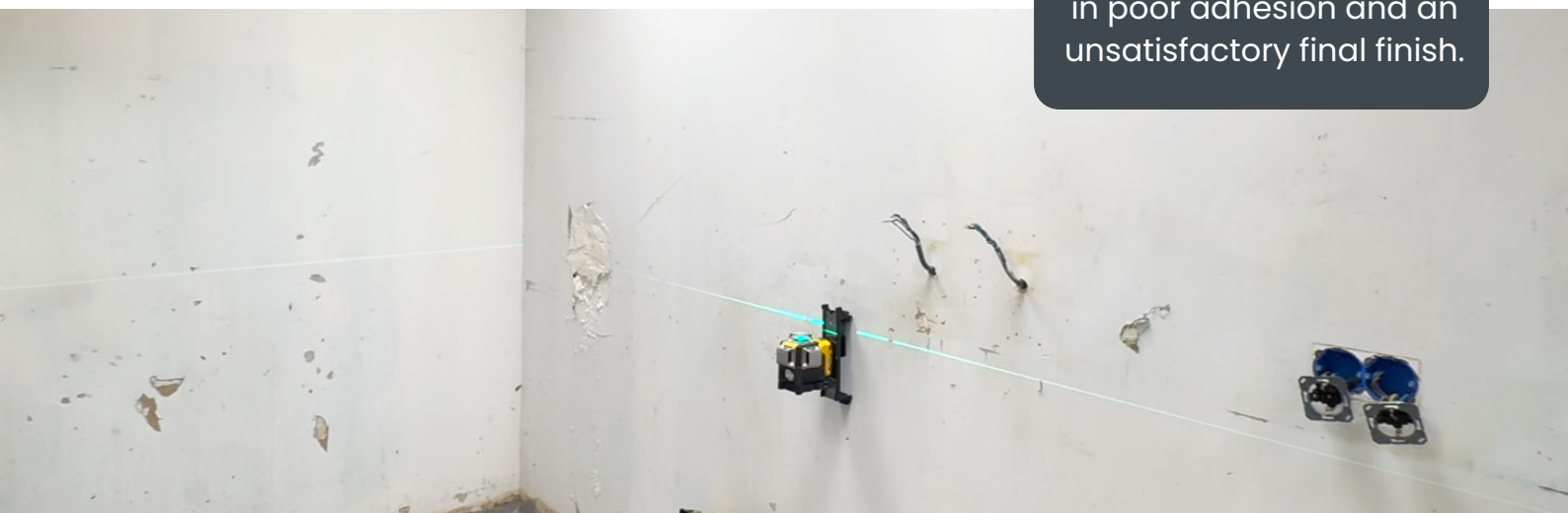
- Do not install onto uneven substrates
- Do not bond onto damp or greasy surfaces
- Ensure sufficient and even adhesive distribution
- Consider temperature influence during service life

Incorrect preparation may lead to loose sheets, hygiene issues and costly remedial work.

Important Notice

Substrate and sheets must always be dry, flat and grease-free.

Failure to meet these requirements may result in poor adhesion and an unsatisfactory final finish.



■ Installation – Direct Bonding

Pre-Installation Check

Before starting installation, verify that:

- Substrate is flat, dry and grease-free
- Substrate and sheets are at temperature (min. +10°C)
- Sheets are acclimatised where required
- Horizontal and vertical reference lines are marked

Only begin installation when all conditions are met.

Preparation for Jointing Systems

Depending on the selected joint method, certain steps must be completed before fixing the sheets.

For 2-Component Joint Finishing:

- Chamfer sheet edges approx. 45°
- Apply masking tape approx. 3 mm from the edge



For Profiles:

- Cut profiles to size
- Pre-fit profiles to wall or sheet where required

Complete these operations before placing the sheets.

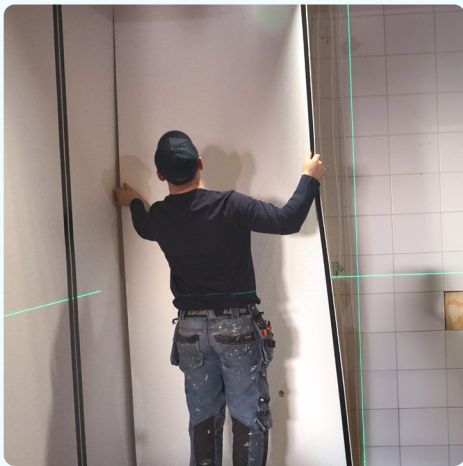


Step 1 – Apply Adhesive

- Apply adhesive in vertical beads, plus one horizontal bead at the bottom
- Bottom bead must not connect with vertical beads
- Consumption: approx. 1 adhesive sausage (600ml) per m²
- Maximum spacing between beads: 5 cm

Important:

Do not use spot bonding and do not create closed adhesive patterns. Use open beads to allow trapped air to escape



Step 2 – Position the Sheet

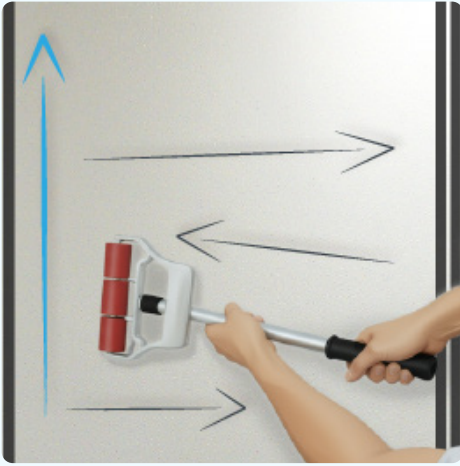
Check that the preparatory work for 1/2K joints/profiles has been carried out

- Place the sheet according to the reference lines
- Position accurately immediately; later correction is limited
- Allow for expansion clearance around all edges



Step 3 – Press into Position

- Press the sheet evenly against the wall
- Work progressively from left to right and bottom to top so air can escape upward
- Ensure full surface contact with the adhesive



Step 4 – Rolling Pressure Finish

- Roll immediately after installation
- Work from centre to edges and from bottom to top
- Follow the direction of the adhesive beads

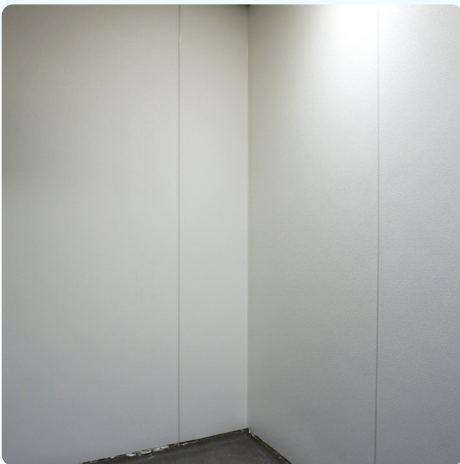
Purpose:

- Distribute adhesive evenly
- Remove trapped air
- Optimise adhesion



Step 5 – Connections and Movement

- Allow for thermal expansion of the material
- Leave adequate clearance in profiles and around sheet edges
- Prevent compression or restraint of the sheet



Step 6 – Final Check and Finishing

- Check flatness and adhesion
- Check joints and transitions
- Remove excess adhesive residues

Allow adhesive to cure fully in accordance with technical data sheets before putting the area into service.

■ Jointing and Finishing

Select one jointing method per application: sealant joint or profile connection.

Sealant Joint Finishing

Joints between sheets can be sealed using either a 1-component (1K) or 2-component (2K) joint sealant.

- Ensure sheet edges are clean, dry and dust-free
- Chamfer edges approx. 45° for improved adhesion and finish
- Blow out and clean joints before sealing

Applying the Joint Sealant

- Apply masking tape approx. 3 mm from the edge
- Apply sealant in one continuous movement
- Fill the joint completely without interruptions
- Smooth off once only
- Remove tape in one continuous motion

Important:

Do not use tooling liquid with 2K sealants

Ensure sealant bonds to the sheet edges, not only between the sheets



Selection: 1K or 2K Joint Sealant

1K Joint Sealant

- Permanently flexible
- Accommodates sheet movement

2K Joint Sealant

- Harder joint finish
- Mould resistant
- Less suitable where movement occurs (risk of cracking)

Profile Jointing

Sheets may also be connected using plastic or aluminium profiles, such as H-profiles.

Installing Profiles

- Ensure sheets are straight and properly aligned
- Slide sheets into the profile without force
- Always leave movement clearance; do not push sheets fully against the centre stop

Important for Profiles

- Leave expansion clearance inside the profile
- Sheets must not be over-clamped
- Follow the internal stop line where applicable

Key Attention Points for All Joints

- Allow for material expansion
- Prevent stress in sheets and joints
- Ensure a fully sealed and hygienic finish
- Prevent open joints where moisture or dirt may penetrate

Final Inspection

- Check all joints for complete sealing
- Check profiles for correct installation
- Confirm stress-free installation of all sheets



Important:

Insufficient clearance may cause distortion or stress within the sheet.