

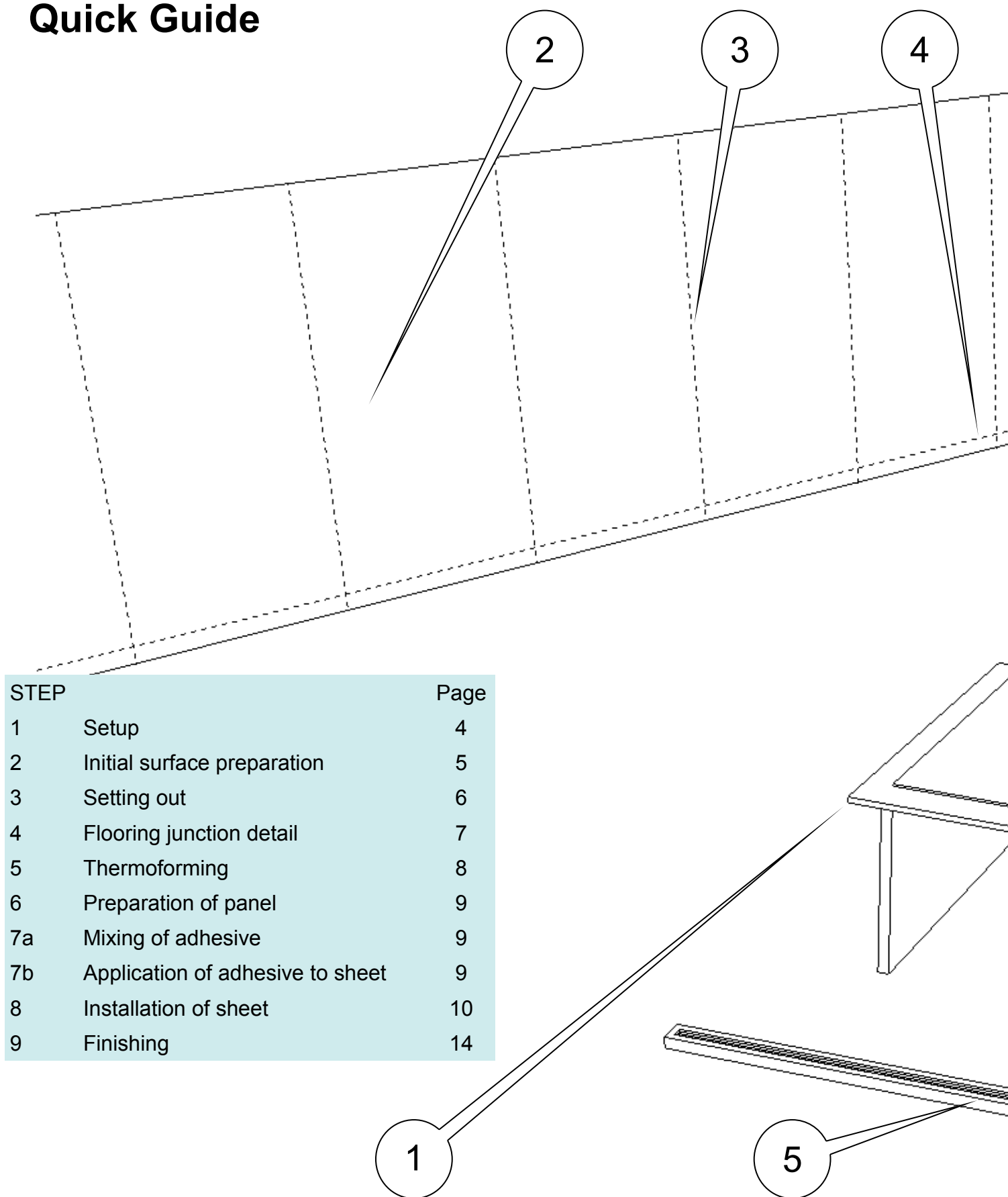
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TROVEX[®]
Installation Guide

**Trovex Hygienic
Wall Cladding System**

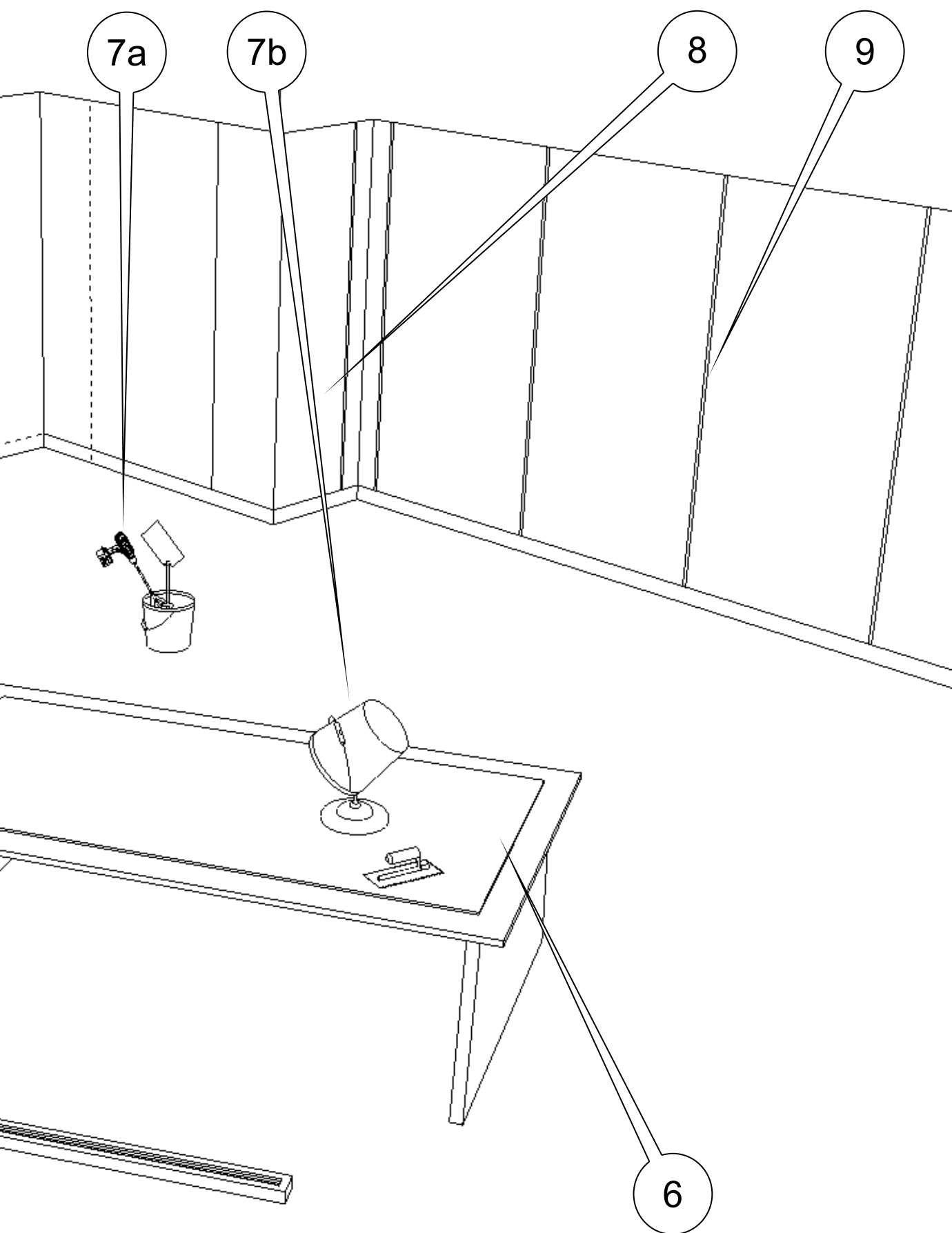
>hygienic walls, ceilings and doorsets

Quick Guide



STEP		Page
1	Setup	4
2	Initial surface preparation	5
3	Setting out	6
4	Flooring junction detail	7
5	Thermoforming	8
6	Preparation of panel	9
7a	Mixing of adhesive	9
7b	Application of adhesive to sheet	9
8	Installation of sheet	10
9	Finishing	14

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Tools

You will need:

- Power drill (preferably mixing drill)
- Mixing Paddle
- Protective sheeting (for floor)
- 6mm square notched trowel
- Paper towel or tissue
- Trovex Solvent cleaner (or Trovex IPA cleaner)
- Thermoformer
- Workbench approx. 2.4m x 1.2m
- Jigsaw with fine tooth blade
- Spirit level or laser level
- Rubber Mallet
- Cordless drill
- Holesaws (as required for apertures)
- Block plane
- Panel Roller
- Stanley knife
- For welded joins
 - Weld gun
 - Mozart knife
 -

Minimum PPE required

- Gloves
- Eye protection

1. Setup

Prepare your work area by setting up your workbench, tools and materials where they won't be in the way of installation.

2. Initial Surface Preparation Guidelines

All substrates must be sound, dry (maximum 14% moisture content), and dust free. Porous or dusty surfaces should be primed with a PVA solution diluted 1:10 with water.

EXISTING TILED SURFACES: Tiled surfaces must be thoroughly degreased, rinsed and allowed to dry. Ensure that all tiles are securely bonded and any voids are filled to give an overall smooth and flush surface. This surface is generally not suitable for welded joint application.

PLASTERBOARD: Joints should be flush filled. All fixings must be countersunk. Dusty surfaces should be primed with PVA solution.

PLYWOOD: Joints should be flush. All fixings must be countersunk. Dusty surfaces should be primed with PVA solution.

PLASTER: Must be primed with PVA solution. Suitable skim and hardwall types must conform to BS5492, 1990 Code of practice for internal plastering. Pink lightweight plasters are not recommended. Scratch coat finish is not acceptable.

RENDER: Sand and cement render to a steel trowel finish. Must be primed with PVA solution. Scratch coat finish is not acceptable.

BRICK/BLOCK WORK: Must be fairfaced, even and free of protrusions or voids, straight (within 3mm over a 2m straightedge). Must be primed with PVA solution. This surface is not suitable for welded joint application.

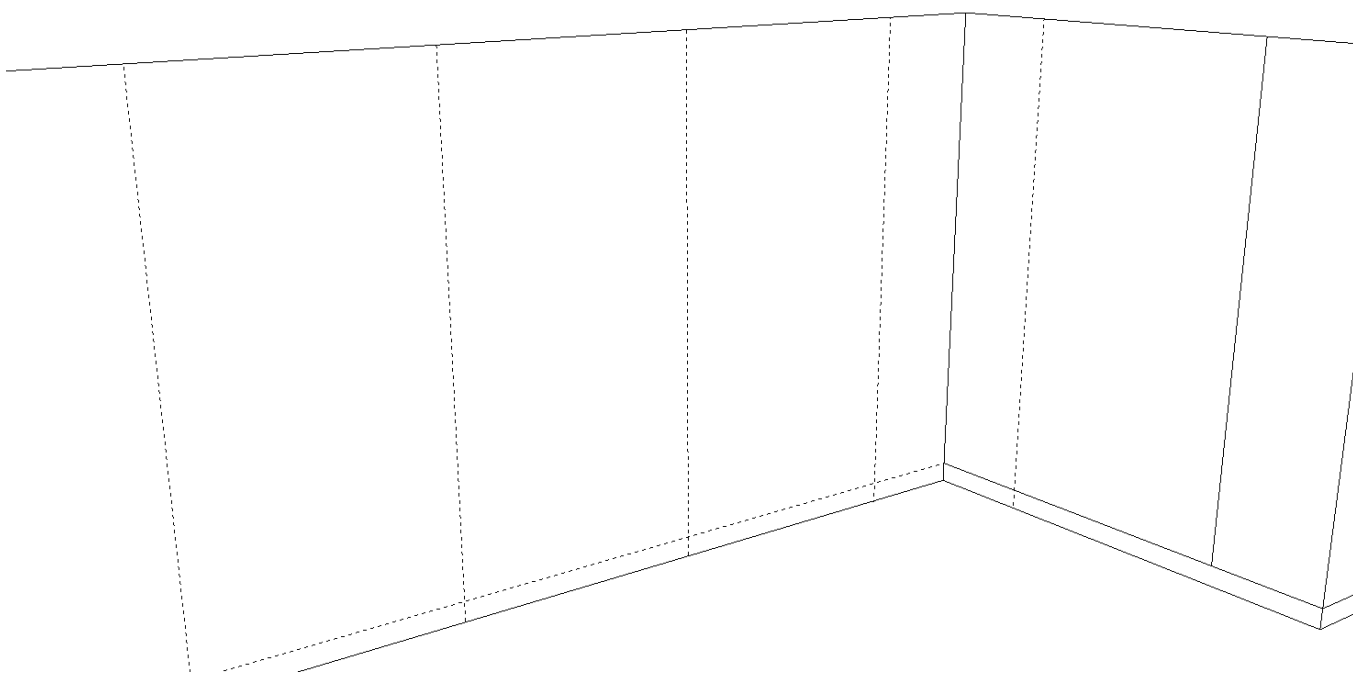
PAINTED SURFACES: Must be thoroughly degreased, rinsed and allowed to dry. Loose or flaking paint must be removed and exposed surfaces primed with PVA solution if required.

PAPERED SURFACES: All wallpaper must be removed, the exposed surface must be cleaned and prepared. (Voids filled, porous surfaces primed with PVA solution).

TEMPERATURE: The ambient temperature of the room, including the substrate, is critical for a successful installation. This must be a minimum of 14°C. This temperature should be maintained for at least 24 hours before and after the installation. Failure to do so may prevent the adhesive curing correctly and cause subsequent delamination.

3. Setting Out

- ♦ Measure round the walls to be covered, to determine where the joints in the panels are likely to be. If a panel joint is to be used, the panel coverage will be the width of the panel plus 7mm. Adjust your start point to ensure joints between panels are not too close to either external or internal corners or leaving small pieces to infill particularly round windows and doors. Try to ensure at all times that the full width of the panel is used.
- ♦ Installation should ideally start in a thermoformed internal or external corner, which allows 2 edges to work from. Cut and thermoform the panel as required (see Step 5). Dry fit the panel to ensure a good fit and that both vertical edges are plumb.
- ♦ Allow an expansion gap of 3mm at the top of the panel.



4. Flooring Junction Detail

Decide what detail is required at the junction with flooring.

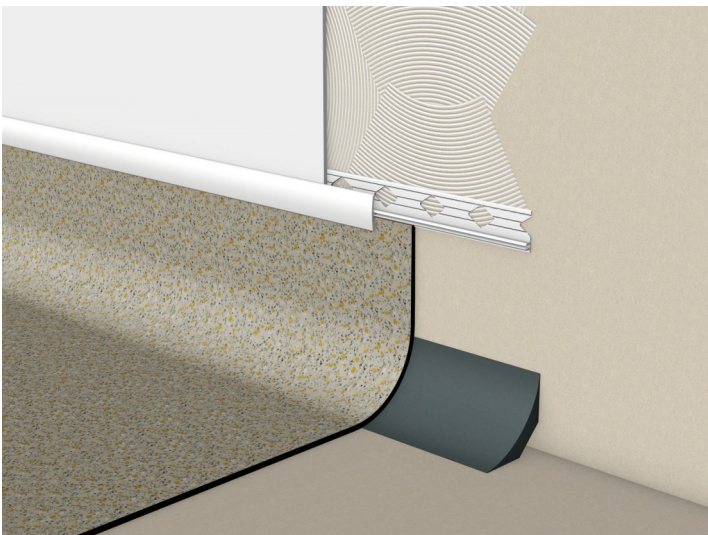
For Vinyl Flooring – you will need to set the bottom of the sheet according to the finished floor details, typically 100mm from the FFL. (See detail TD03)

Kerb Tiled Finish – Apply sealant to top of tile prior to installing wall cladding and apply sheet to wall whilst sealant is still wet, clean off and then apply finishing bead of sealant to front face.

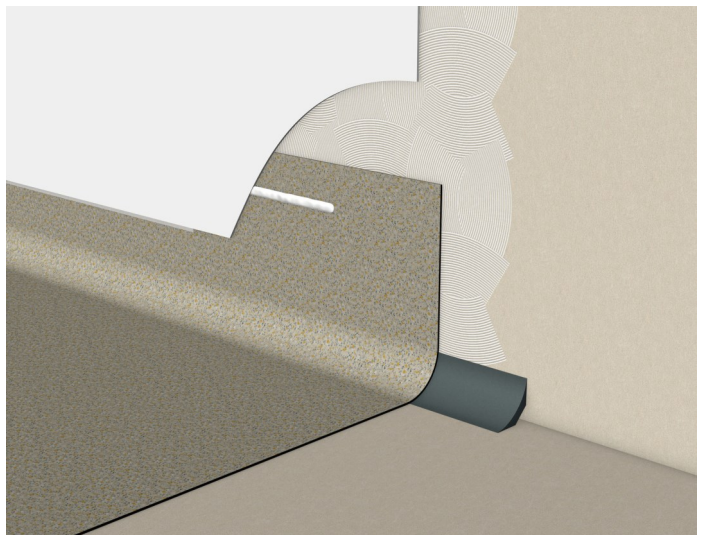
Resin Floor – treat as vinyl floor: cove resin up to transition trim ensuring that resin skirting thickness is a maximum of 3mm. Fit clip on cover when coving is set.

For Wet room detail – The flooring should be installed first. This needs to have a minimum cove height of 150mm. Apply the Trovex sheet to the wall so that it overlaps the coved skirting by 50mm leaving 100mm of the coved skirting visible. The Trovex sheet should be bonded to the coved vinyl for maximum water proofing. (See detail TD04). Apply sealant bead at the bottom of the Trovex sheet to flooring finish.

TD03



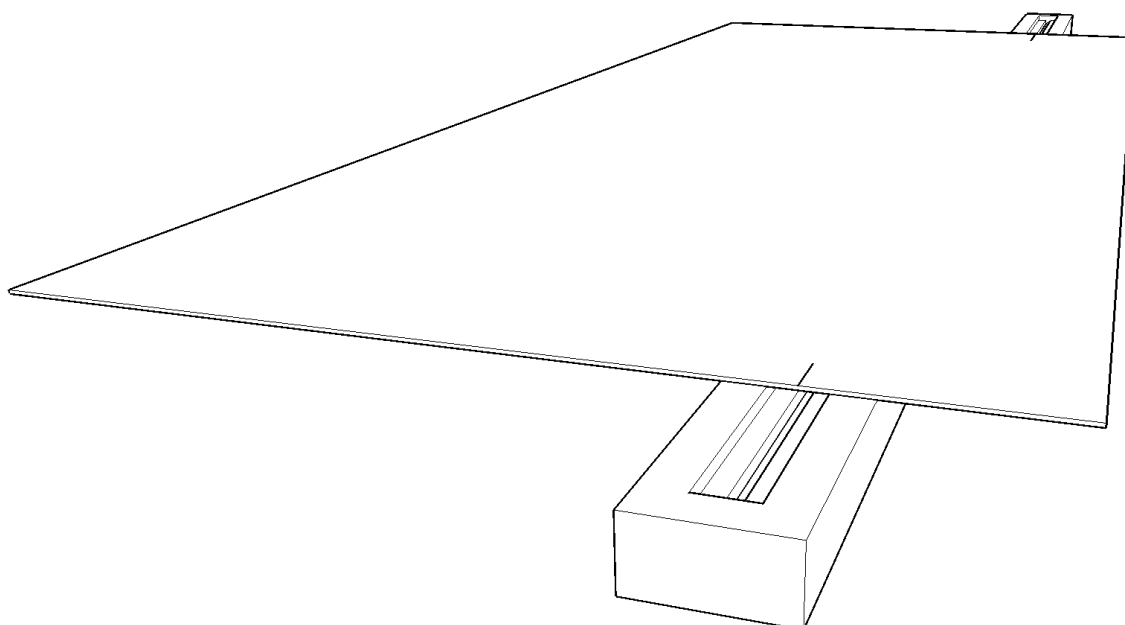
TD04



5. Thermoforming Panels for Corners

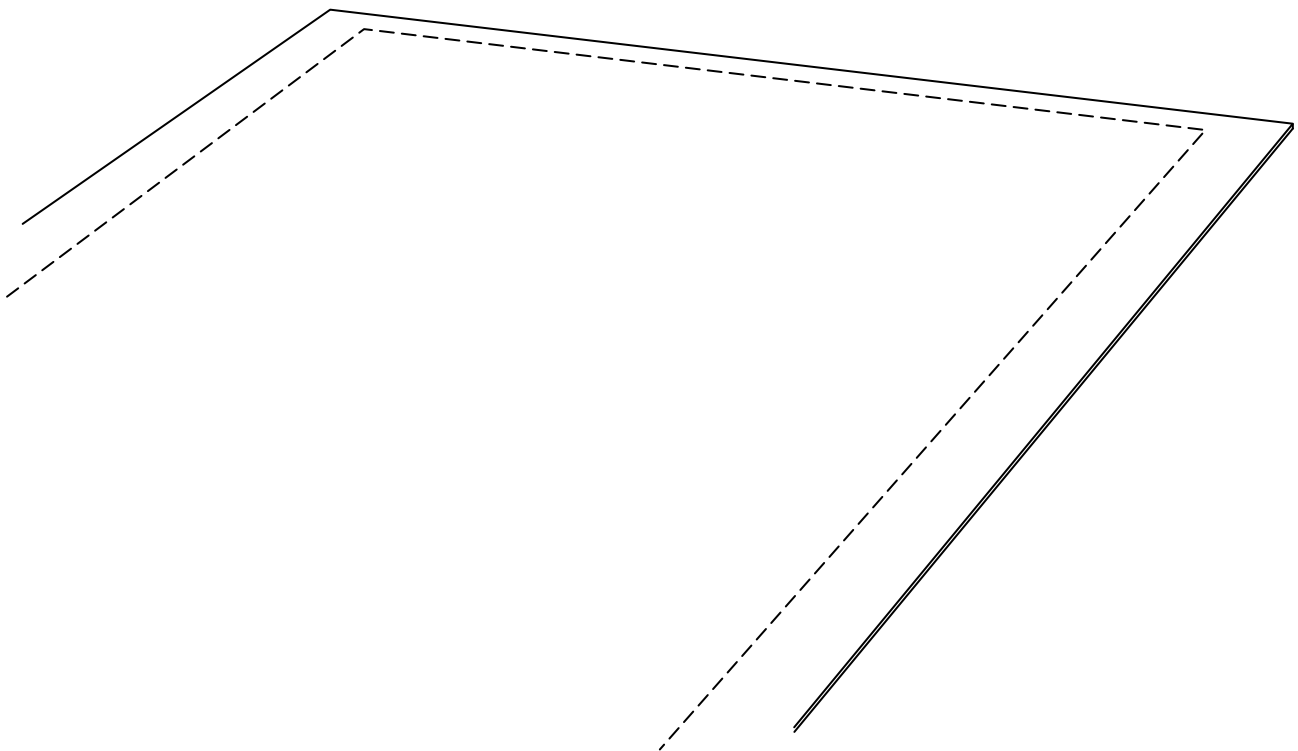
- ♦ The front face of the sheet is protected with a clear film. DO NOT remove the film from the face of the panel.
- ♦ Ensure thermoformer is up to temperature. Allow 15 - 30 minutes for preheat, then test a sample piece for effective forming.
- ♦ Cut panel to size.
- ♦ Mark point on sheet at which sheet needs to be formed and hold over thermoformer for 30-60 seconds. If forming Trovex Brilliance sheet hold the sheet over the heat for at least 50 seconds to avoid stress marks appearing. Bend sheet to desired angle and hold in position until set (approximately 1 minute).
- ♦ Allow to cool before application.

Notes: The heating/softening period may vary due to differences between individual thermoformers. If in doubt, test samples of the wall cladding. If a white stress mark does appear where you have formed a deep-coloured sheet, hold the corner over the heat again, until stress marks fade.



6. Preparation of Panel

- ♦ Clean the back of the panel with Trovex Solvent Cleaner applied with paper tissue.
- ♦ Mark a border 30mm in from any edge which is to receive a panel joint, transition profile or end profile. Edges *not* receiving a profile (eg. the top of the sheet) should have a 4mm border.



7. Application of Adhesive

Trovex Bond 2 Adhesive

Part B of the Trovex Bond 2 system (supplied in the sachet within the adhesive tub) should be poured into part A and mixed carefully using a paddle and electric drill. Allow at least 3 minutes for a proper mix to be achieved.

Spread the mixture over the back of the panel, keeping within the marked borders) using a 6mm square notched trowel.

Trovex Bond W Adhesive

Trovex Bond W Adhesive is a one part system and can be applied directly from the container. It can only be used when applying Trovex sheet to porous substrates e.g. plasterboard, some plywood and some plastered substrates. Spread over the back of the panel (keeping within the borders) using a 3mm V-notched trowel.

8. Installation of Panel

For Trovex 2-Part Joint Trim

- ♦ As soon as the panel is fully covered, place immediately onto the wall pressing firmly all over. Do not allow time for the adhesive to 'settle' as this can weaken the bond.
- ♦ Using a panel roller, start from the centre and apply even pressure over the whole sheet to achieve a good all over bond with the substrate.
- ♦ Ensure that the base of the sheet is supported to prevent movement whilst the adhesive cures.
- ♦ Immediately clean off any adhesive that is on the face of the sheet.
- ♦ Peel away the protective layer along all the edges of the panel to reveal 50mm of the panel. **Do not remove the whole protective layer.**

If a transition trim is required (eg. for sheet vinyl flooring) the back plate of this needs to be installed to the bottom edge of the Trovex sheet before you install the 2-part joint trim.

- ♦ Install backing plate of the 2-part trims by inserting the edge of the back section behind the cladding sheet, ensuring that there is a 1mm gap between the sheet and the groove in the trim. Dry fit the next panel then follow previous steps to prepare the next sheet.
- ♦ When the panel is ready and coated in adhesive, place the edge of the panel 1mm away from the centre section of the joint fitted to the last sheet, ensuring the remainder of the panel is held away from the wall while the sheet is positioned, then follow previous steps to finish installing the sheet.
- ♦ Install covers of the horizontal transition profile first, using a non-marking rubber mallet to firmly fix in place once all the sheets are installed, then fit the vertical joint profile covers in the same way.
- ♦

For Trovex Welded Joins

- ♦ Mark a vertical line on the wall to show position of the joint. Apply a band of primer centrally on this line, at least 50mm wide.
- ♦ When the primer is dry, apply double sided welding underlay onto the primer and ensure that the paper liner is left in place
- ♦ Remove sheet. Bevel front edge of the joint to create a shallow 'V' to help the weld rod to seat properly.
- ♦ As soon as the panel is fully covered with adhesive, place immediately onto the wall ensuring edge of sheet is central on the welding underlay pressing firmly all over with panel roller to ensure adequate adhesive transfer.
- ♦ Do not allow time for the adhesive to 'settle' as this can weaken the bond.
- ♦ Using a panel roller, start from the centre and apply even pressure over the whole sheet to achieve a good all over bond with the substrate.
- ♦ Immediately clean off any adhesive that is on the face of the sheet.
- ♦ Ensure that the sheet is correctly positioned, and cut through the paper release film of the weld underlay with a sharp craft knife, using the edge of the cladding sheet as a guide. Carefully lift the edge of the sheet and remove the release film to expose half of the weld underlay for the installed sheet only. Press the sheet firmly onto the underlay.
- ♦ Hammer in 4 or 5 panel pins of 1.5-2.0mm diameter next to the sheet edge and ensure these are equally spaced. These pins help to provide the correct spacing between sheets for accurate welding.

If a transition trim is required (eg. for sheet vinyl flooring) the back plate of this needs to be installed to the base of the cladding sheet before you weld the sheet. See 2-part joint instructions

- ♦ Peel away the protective layer along all the edges of the panel to reveal 50mm of the panel. **Do not remove the whole protective layer.**

- ♦ Dry fit the next panel then follow previous steps to prepare the next sheet, remembering to bevel the edges first, and butt up to the panel pins. There should be no more than 2.0mm gap between the panels.
- ♦ Install each sheet ensuring the main part of the sheet is held away from the wall while it is positioned, then follow previous steps to finish installing the sheet. Take special care to accurately position the sheet when pressing onto the weld underlay.
- ♦ Welding should be carried out after the adhesive has cured.
- ♦ Remove the panel pins and clean the joint using a lint free cloth wrapped around a clean pointed implement and moistened with Trovex cleaner.
- ♦ Switch on the welding gun and allow it to reach temperature. Approx setting 4 on a Leister gun and 400°C on a Steinel gun.
- ♦ Cut a length of colour matched weld rod as long as the weld joint.
- ♦ Starting at the top of the sheet, feed the weld rod into the top of the speed weld nozzle until it comes out of the shoe. Press the weld rod to the joint and continue to move the gun down the joint at an approximate speed of 500mm/minute until the bottom of the sheet is reached. The nozzle should be kept as close to the sheet as possible without actually touching it.
- ♦ Allow the joint to cool then spray down the length of the joint with silicone spray and, using a Mozart trimming knife, trim back the excess weld rod ensuring that the 0.7mm spacer is below the blade. This helps to reduce any tension in the weld rod before the finish cut is carried out.
- ♦ Spray down the length of the joint again with silicone spray.
- ♦ Swing the 0.7mm spacer to one side and using firm pressure cut the remaining ridge of weld rod to leave a flush finish.

Important:

Do not feed the weld rod into the nozzle until you are ready to start as any delay will cause the rod to melt, blocking the nozzle and leaving ash on the joint.

Note:

The welding underlay is an important ingredient for successful welding. It holds the sheets in position to keep them flush and correctly spaced. It also prevents hot air blowing behind the sheet which will cause warping.

Tips:

- ♦ *Spray down the length of the joint with silicone lubricant spray. This helps the blade of the trimming knife to 'glide' over the surface of the sheet avoiding surface scratching.*
- ♦ *Polishing the underside of the spacer and blade also helps to prevent scratching especially when used with a lubricant such as a silicone spray – consult Trovex technical team for suitable products.*
- ♦ *'Glazing' the surface of the weld rod will give a shine to the join. This is done by moving the weld gun nozzle slowly over the weld join which melts and seals the surface. Heat setting as for welding. Do not let the nozzle touch the surface.*
- ♦ *Where the bottom of the cladding finishes close to the floor, it may be beneficial to cut a short length of weld rod approximately 600mm long and start from the bottom of the sheet, welding up to 600mm high. The excess weld rod is then trimmed to 0.7mm, using the Mozart trimming knife. Then, starting at the top of the sheet, weld the join as per above instructions, and overlap the welded joint near the bottom of the sheet. Cut off the excess weld rod down to 0.7mm and then carry out the finish cut starting from the bottom of the sheet.*
- ♦ *Forming a groove in the lower weld rod at the point of overlap will help the joint to fuse together neatly.*
- ♦ *It may be helpful to hold the weld rod against the join at the start of the weld using a clean, flat bladed screwdriver.*

9. Finishing

When the project is complete and adhesive is cured (minimum 24 hours), remove the protective film and wipe down using Trovex Antistatic Cleaner.

Seal all abutments with Trovex Seal colour matched finishing silicone.

Notes

Notes

**For tips and advice call Trovex
on 01707 254170**

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