The height of the panels are 2420mm to protect the corners in transit, they must be cut down to ensure compatibility with the profiles as they are 2400mm.
These fixing guidelines are designed to give you all the information you need to install Mermaid Panels correctly, if there is any aspect on which you need clarification, please contact your retailer before starting to install the panels.

Following these Fixing guidelines will ensure compliance with the warranty.
Before You Start

Please read all instructions thoroughly before starting.
A little time spent in advance may prevent problems arising during installation.

Check contents
Check the items in the kit system(s) you have received against the list of contents detailed on page 5 and check that all items are of acceptable quality to use. In the unlikely event that any items are not present, please contact your Mermaid retailer immediately. Mermaid Panels Ltd will not be responsible for any claims for labour or downtime costs in such circumstances.

Check appearance
Panels are supplied boxed. Always check for visual defects prior to installation. Any claim for faults present in the panels after fitting will limit any claim to the purchase price of the panels. The protective film should always be removed prior to installation so that the surface can be adequately checked. Due to the printing process involved, slight colour variations may be found between panels.

Fitting of panels will be deemed to be acceptance of any surface defects, including colour variation.

Storage and conditioning
Panels should always be stored flat to prevent bowing. The decorative faces should face each other when stored. Due to the natural (plywood) core, the panels may be affected by radical changes in the environment. Areas experiencing high humidity and/or temperature should be avoided.

Under no circumstances should the panels be stored outside.

For best results, the panels should be conditioned by storing them in the room in which they are to be fitted for 2-3 days prior to fitting. The adhesive and sealant must also be stored with the panels at normal room temperature for a couple of days prior to use. Exposing the adhesive to very low temperatures (below 5 deg. C) will severely inhibit its grabbing properties.

Failure to adequately condition boards may result in the panels being bent or bowed when trying to fit, however in most cases panels showing a slight bow can be fitted as the mechanical fixing method will hold them flat against the wall. All plasterwork and concrete should be thoroughly dried out before the panels are sited in the room.

Kit Checklist

Please read all instructions thoroughly before starting.
A little time spent in advance may prevent problems arising during installation.

**Shower Kits**

<table>
<thead>
<tr>
<th>Size</th>
<th>900 x 900mm</th>
<th>1200 x 1200mm</th>
<th>900 x 1200mm</th>
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<td>2 x 1200mm panels</td>
<td>1 x 1200mm panel</td>
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<tr>
<td></td>
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<td>1 internal corner profile</td>
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<tr>
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<td>2 edging profiles</td>
<td>2 edging profiles</td>
<td>2 edging profiles</td>
</tr>
<tr>
<td></td>
<td>2 white transal profile</td>
<td>2 white transal profile</td>
<td>2 white transal profile</td>
</tr>
<tr>
<td></td>
<td>2 end caps</td>
<td>2 end caps</td>
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<td>2 tubes adhesive</td>
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<td>2 tubes Sealux N</td>
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<td>1 homeowner care kit</td>
<td>1 homeowner care kit</td>
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<tr>
<td></td>
<td>2 corner brace tool</td>
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**Wall Kit**

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<td></td>
<td>2 corner brace tool</td>
<td>2 corner brace tool</td>
<td>2 tubes Sealux-N</td>
</tr>
</tbody>
</table>

**Kit Profiles**

[Diagram of internal corner top, bottom seal profile, internal corner base, and edging profile]
Tools needed
Panels can be cut using a variety of normal DIY or joinery tools.

Recommended equipment
- Drill and jig-saw or circular saw with fine blade
- (a handsaw may also be used)
- Screwdriver
- Steel tape, rule and pencil
- Plumb line and spirit level
- Skeleton gun (long size), for sealant and adhesive

Optional equipment
- Electric bench saw
- Plane or file
- Spindle router
- Down-cut jigsaw blades
- Power screwdriver

Optional equipment
- Tin snips or secateurs
- Screws, typically 32mm x 4.8mm stainless steel A2 self-tap
- Sharp pointed blade or craft knife

Adhesives, sealants and fixings
All adhesives and sealants required are supplied in the Accessories Pack.

Additional screws and appropriate Fixings are required for fixing the bottom seal profile (see below), T&G board edges and the internal corners.

Screws should be no.6 flathead, countersunk, screws and a suitable length for fixing into solid walls (typically approximately 30mm).

Fixings (rawplugs) should be selected appropriate to the construction of the wall.

The profile system combined with adhesive should provide a secure fixing, however additional fixing can be achieved by using countersunk screws in locations that will be hidden on completion, eg behind the shower screen frame.

Additional tools for fitting the Transeal bottom seal profile system
- Wall preparation
- Pipework
- Trays and baths
- Transeal bottom seal system
- Internal corner profile base
- Measuring and cutting panels
- Fixing panels to walls (Shower Kit)
- Fixing panels to walls (Wall Kit)
- Finishing Transeal
- Finishing internal corners
- Fitting valves and controls
- Fitting shower screen or curtain
1. Wall preparation

Panels can be fixed to most surfaces including tiles, concrete, plaster and chipboard walls.

Whatever the surface, it is important that the walls are even and sound, and provide a suitable fixing for the screws or screws and plugs and adhesive.

If walls are uneven, battens or other means of packing should be used.

The surfaces where the adhesive is to be used should be clean and dry to ensure an effective bond.

Mermaid panels can also be attached directly to studwork.

The studwork should be constructed from the following:
- a sole plate
- a head plate
- vertical studs at 600mm or 585mm centres (depending on panel supplied). Where a 900mm panel is being used, then an additional vertical stud should also be used, positioned such that it is located behind the shower screen profile.
- at least 2 horizontal noggins (max centres 800mm).

Additional noggins should be positioned to carry heavy items such as hand basins, wall mounted toilets or furniture. Vertical battens should also be present in the corners to support the corner profiles.

In all cases the studwork should be levelled using packing pieces or taper wedges to create a flat framework for fixing.

2. Pipework

All pipework should be pre-installed, leaving stub pipes at the positions where the equipment will be fitted.

3. Trays and baths

It is IMPORTANT that the bath or shower tray is already securely in place and sealed appropriately before the panels are installed. Under no circumstances should the bath or shower tray be installed on top of the panels. Where the shower tray is supplied with an integral upstand detail this should, where possible, be recessed into the wall (Fig. #1).

NOTE
The coloured film applied to the bottom seal profile is part of its design and should not be removed at any point.

4. Fitting Transeal bottom seal system

Screw the mitre box to a working surface to hold steady while cutting the Transeal bottom seal profile (Fig #2).

Measure and cut the profiles to length. Mitre cut the meeting corners. Cut ends square. After cutting, remove all the frays left by the saw blade, using a craft knife.

Each mitre cut must have a small portion (Fig #3) removed to allow extra sealant to be added later. Tin snips or garden secateurs are ideal.

Lay the Transeal profiles in position, ensuring the mitre cuts meet. The hole formed by the two notched mitre cuts is the desired result.

If the shower tray has an upstand, the removable leg should be torn off.

If the shower tray has an integral upstand there are two options for using transeal profile. An alternative option for when it is not practical to use the Transeal profile is detailed in Appendix F.

The Transeal Profile should be screw fixed to the wall at 200mm centres (Fig #4). Appropriate pilot holes and/or fixings should be made where the installation is direct to studwork, an additional horizontal noggin may be required. If the screw heads protrude more than 3mm from the Transeal profile then the holes should be countersunk using an appropriate tool. Screws to be used should be resistant to corrosion, typically 32 x 4.8mm stainless steel A2 self tap.
Clean the surface of the profiles and tray using the supplied alcohol wipes prior to fitting to ensure proper adhesion of the Sealux-N sealant.

Insert the profile upside down into the mitre box and support the remainder of the profile to keep steady. (For 3 sided showers, always commence installation with the middle (back) Transeal profile first).

Cut Sealux-N tube nozzle at slight angle such that it will allow a 8mm diameter bead of sealant to be extruded. Resting the nozzle on the profile lay a 400mm line of Sealux-N sealant into the profile. Level the Sealux-N using the spatula provided. If necessary (Fig #5), redistribute (or add to) Sealux-N as required. Continue in 400mm steps until the entire profile length is full of sealant. Ensure the sealant is butted flush with the ends of the profile.

Using your finger under the nozzle as support and a fingertip against the wall as a guide, lay an 8mm line of Sealux-N on the shower tray so that the outer edge is no more than 20mm from the wall (Fig #6).

Lay a light line (5mm) of Sealux-N on the wall, approximately 15mm up from the shower tray. Position the Transeal profile over the joint and rotate it into position, in the process fusing the Sealux-N in the profile with the Sealux-N on the shower tray to form a watertight seal. Screw the profile to the wall (Fig #7).

Remove any sealant on shower tray with a spatula. Carry out the same procedure for the remaining profiles.

At the mitred joints, apply extra Sealux-N to one edge to ensure the fusion of the sealant inside the corner. Pump extra Sealux-N into the notch at the corners to complete the seal (Fig #8).

5. Fitting internal corner profile base

The internal corner consists of a two-part profile system (Fig #9).

The top profile should be put on one side for now. Under no circumstances should the top profile be cut at this stage or the backing tape removed.

Note: board edge must be cut square.

The base profile should be cut so that it rests on top of the bottom seal profile.

The internal corner base profile(s) should be fitted into the corner. For three sided shower installations, both internal corners should be fitted.

The base profile must be fixed to the corner using appropriate screws. Screws should be placed at 150-200mm centres (Fig #10).

If the walls are not square then appropriate packers can be used behind the base profile to ensure it is straight and true.
6. Measuring and cutting the panels

The height of the panels are 2420mm to protect the corners in transit, they must be cut down to ensure compatibility with the profiles as they are 2400mm.

To determine the width of the panels, measure from the location pips (Fig #11). This should be checked at the top, middle and bottom to check that the walls are true. Panels may need cutting to suit where the walls are not square.

Panels can be cut using normal cutting tools. For best results the cutting action should be into the decorative face, so when using a jig-saw, the decorative laminate should be face down. The exception to this is when using a special "down cut" jig-saw blade, which should only be attempted if you are familiar with this tool (Fig #12).

When using a bench circular saw or hand saw, the decorative laminate should be face up. Use a handsaw with a fine tooth blade for best results.

In shower installations, the side panel(s) should be cut so that they are either level with the front of the shower screen profile or so that they are completely outside of the shower area. Allow an extra 10mm (min) beyond the outer edge of the shower screen profile to accommodate the edging profile, if required.

Under no circumstances should the panels be butted up to the inside of the shower screen profile.

Holes for valves etc. should also be cut at this stage. Holes can be cut using a hole cutter a drill or a jigsaw (Fig #13). A minimum of 2mm clearance should be allowed all the way round (Fig #14).

7a. Fixing panels to walls (Shower Kit)

In order to hold the panels in place it is recommended that "hidden" fixings are used positioned behind the intended location of the shower screen profile. Prior to fixing to the walls in a shower enclosure, the edging profiles should be put on to the outer edges of the panels (Fig #15). These can simply be pushed on to the outer panel edges. Sealux-N sealant can be used where necessary to give a secure join.

Apply masking tape to the curved face of the Transeal profile up to the bottom ridge. Starting with the middle profile (if any), lay a heavy line of Sealux-N in the channel formed between the strip upstand and the wall panel support leg.

The panels can now be fitted on to the walls, positioning them onto the internal corner profile and resting on the Transeal bottom seal profile. The panels should be installed using ‘Mermaid panel adhesive’, which works in conjunction with the profile system to ensure a secure fixing.

Where the panels are being fixed to studwork, the adhesive should be applied liberally to the battens. Otherwise the adhesive should be applied to the wall. The recommended method of applying the adhesive is to put lines (approx. 8mm diameter) evenly spread over the surface of the panel (Fig #17).

The adhesive has quick grab but long curing time. As the adhesive cures in air this may take a long time if ventilation to the glued areas is limited, it is imperative that mechanical fixings are therefore used in conjunction with the adhesive.

However it may be necessary to brace the panels until the adhesive sets, the length of time depends on the current room conditions. The adhesive must be stored at room temperature, otherwise it loses its ‘adhesive’ properties.

In conjunction with the hidden screws described in paragraph one the panels can be held temporarily in the corners using the corner brace tool (Fig #18).
7b. Fixing panels to walls (Wall Kit)

Fixing Tongued and Grooved Panels (600mm nominal / 585mm face)

Fitting panels directly to uneven walls will effect the quality of the finished joints, it is preferable to fix panels to a level frame. Due to the natural variations present in each individual board it is impossible to achieve a perfectly flat join in every case. A small visible step with a dark line is not deemed as a product defect should it be present once the panels have been installed.

Installation

As laminate panels have sharp edges we advise you to wear suitable gloves for protection when handling them.

1. Commence the installation of your panels in a corner or at an end by fixing the appropriate profile in position.
2. Remove the protruding part of the tongue from the edge of the first panel.
3. Pilot bore the back lip of the panel with a No.3 high speed drill where screws are to be located to fix the panel to the framing (Fig #19). Failure to pilot bore may result in the panels splitting. If studwork is not used then screws, plugs or fixings appropriate to the sub surface should be used.
4. Apply a generous amount of Mermaid adhesive to the face of the framing where the panel is to be fitted.
5. Insert the cut edge of the panel into the profile then press back onto the framing, you will feel a positive click when the join is completed (Fig #20). Fix the panel in place using M2.5x16mm non-corrosive countersunk screws. Ensuring that the screws are turned until they are just under the flush to prevent any obstruction to the tongue of the next panel to be fitted.
6. Pilot bore the back lip of the next panel then apply a small bead of sealant to the front edge of the tongue. (too large a bead of sealant will prevent the joint going together properly) (Fig #21).

8. Finishing Transeal bottom seal system

Sealux-N sealant may be squeezed out between the Transeal and the bottom of the wall panel. This should be rubbed off immediately, ensuring that the Sealux-N is pressed firmly into the joint and finishes flush with the front face of the panel (there must not be a step between the Sealux-N and the front of the panel as this will cause issues (Fig #22)).

Remove the masking tape from the bottom of the board and the Transeal profile after the Sealux-N has skinned (approx. 5 minutes). This will ensure a neat finish (Fig #23).

9. Finishing internal corners

The profile system gives a mechanical fixing in conjunction with the adhesive bond and therefore should be installed as soon as possible to ensure a secure fixing.

The internal Corner top profiles should be cut to length so that they finish at the bottom of the panels (Fig #24). If the coving profile system is being used this should be installed first. Please see Appendix E

Sometimes the back profile may open out causing the front profile to gape open and the fit of the top profile will be lose. If this occurs it can be tightened up by “pinching” the jaws of the base profile closed. This should be done using long nose pliers and squeezing the gap shut at approximately 30mm intervals along the whole length of the profile (Fig #25).
10. Fitting valves and controls

The gaps surrounding the pipes should be filled with Sealux-N sealant supplied in the kit (Fig #29). This should be done even if the gaps will be covered by a faceplate with an integral gasket.

11. Fitting shower screen or curtain

The shower screen/curtain can now be fitted in accordance with the supplier’s fitting instructions.

Additional panel fixings can be achieved using counter-sunk screws which will be hidden behind the shower screen frame.

It may be necessary to remove a portion of the Transeal bottom seal profile to allow the shower screen profile to fit flush against the panel (Fig #30). The panel can be cut using a sharp blade (heating the blade first using a flame will make this much easier).

Ensure the shower screen profile is fully bedded in the Sealux-N sealant where it crosses the line of the Transeal profile (Fig #31).

Where a shower curtain is used (or the panels are used around a bath) and therefore it is not possible to get a mechanical fixing on the outer edges of the panels, another fixing method such as mirror screws may be required to ensure that the boards stay flat against the wall. The use of adhesive alone will not be sufficient in this instance.
**Appendices**

The following additional notes are only applicable for specialist installations of Mermaid panels.

**APPENDIX A**

**Installation procedure – full room/continuous wall**

Bathroom panels should be used when lining out full rooms. Care should be taken prior to fitting the panels to ensure that the joints are positioned in such a way as to avoid very thin strips of panels at the ends of the walls. The panels should be fixed to the walls as described in section 7b.

When lining a full room, the Transeal bottom profile should be used at the top of the bath or shower tray.

It is not normally necessary to use a skirting board with Mermaid panels. For fitting vinyl or tiled flooring see Appendices C and D.

If using coving, this should be fitted prior to fitting the top profile (see APPENDIX F).

**APPENDIX B**

**Fixing external corners**

External corners are fitted in the same sequence as the internal corners, ie the base profile is fitted first, then the panel, then the top profile. Refer to sections 5 and 9 for details on the cutting and tape removal operations.

The external profile cannot be used for mitre joints. The 90 degree angle should be used when going around the perimeter of a window reveal or boxing in. The profile is simply fixed using a bead of sealant.

**APPENDIX C**

**Fitting Mermaid panels in conjunction with a Vinyl floor**

When fitting panels with a vinyl floor the (optional) vinyl floor profile should be used.

The profile should be screw fitted to the wall between 60-100mm from the floor and used as a datum with the panels fitted on top of this.

The gap formed between the profile and the bottom of the boards should be filled with sealant as shown. The vinyl floor can then be installed and pushed up inside the profile to achieve a neat finish.

**APPENDIX D**

**Fitting Mermaid panels in conjunction with Tile skirting**

The normal clearance between the floor and the bottom edge of the panel should be between 60-80mm.

The Mermaid aluminium bottom profile should be used on top of the skirting tile, The gap formed between the profile and the bottom of the boards should be filled with sealant as show.

Please Note: it is not recommended that the panels go down to the floor level in shower areas, this will invalidate the product guarantee.
Cut the backing profile to length and mitre into the internal and external corners. A slight gap at the mitre is acceptable.

Push the backing profile up to the ceiling and fix with screws or nails (Fig #37).

To calculate the length of the top profile, measure the wall length and deduct an appropriate amount for each corner moulding. This gives the correct allowance for the overlap of the moulding. For an internal corner moulding, reduce the length top profile by 35mm, and for an external corner moulding reduce the length by 12mm (Fig #36).

The top should be positioned using the mouldings as a guide (Fig #38). Push the top profile and mouldings into place, taking care not to push the top profile too far as this could create a gap between the top and corner mouldings (Fig #39 and 40).

Please Note If the mouldings appear loose they can be secured in place using a suitable PVC adhesive.

Mermaid Panels Ltd recommend that the Transeal profile should always be used to ensure a watertight joint. However if the design of the bath or shower tray fitted prohibits this then the recommended alternative is as follows.

Prior to fitting the panels masking tape should be applied along the bottom of the panels and the tray to prevent excessive sealant spreading.

The panels are installed leaving a gap at the bottom of 3-4mm (this will need to be formed using wedges to prevent the panel slipping down during the adhesive curing cycle). The resultant gap should then be filled with sealant to complete the seal.
Applications & Installations

Mermaid panels are ideal for wall lining in most wet area applications including domestic and commercial showers, power showers, domestic steam-rooms and even in domestic kitchens subject to the exclusions outlined below.

Exclusions
Mermaid panels should never be used down to the floor in a shower area or in any other area subject to puddling of water. We suggest the use of a kerb tile or Transeal bottom seal profile and a shower tray. The use of panels inside saunas and commercial steam rooms is also not recommended. The laminate surface is resistant to steam and boiling water and can withstand temperatures of up to 180ºC for short periods but continuous localised heat and excessive exposure to spot heat must be avoided. Mermaid panels should not be used around gas or electric cooking hobs.

Cleaning
The recommended method of cleaning the panels is with regular use of a microfibre cloth which gives a superior finish when used only with water. A single microfibre cloth is supplied as part of your Mermaid kit. Additional microfibre cloths can be ordered from Mermaid Panels Ltd.

Panels can also be cleaned using normal soap and water together with a final wipe using a soft cloth. Alternatively a non scratch liquid cleaner may be used if using a household chemical cleaner this must always be washed off with water after a few minutes and must NOT be left on the panel. Abrasive cleaners are not necessary and should NEVER be used.

Warranty
The Mermaid panel system is guaranteed to remain watertight and waterproof for 10 years from the date of purchase. We also guarantee that the panels will not crack or delaminate during that time. Please note that the guarantee does not cover failure due to faulty installation and incorrect maintenance movement of associated structures. Fair wear and tear to the product through chemical and/or physical action accidental damage or misuse of the product. Use of the bottom seal profile is not mandatory but if ingress of water occurs and the bottom seal profile system has not been used the guarantee may not be valid. Please note also that the guarantee only applies if the product has been used in a normal domestic situation.