



AM-CLAD  
INSTALLATION  
AND MAINTENANCE  
GUIDE

# AM-CLAD INSTALLATION GUIDE

Our fitting guide is based on decades of experience in fitting cladding in a variety of challenging healthcare, foodsafe, industrial and commercial environments.

The advice given is for guidance only and AM-Clad Ltd cannot be held responsible for any faults arising from incorrect interpretation or application of the guidance set out in this document.

## LIMITATIONS OF HYGIENIC CLADDING

When fitted correctly, AM-Clad 2.5mm Antimicrobial premium grade, solid PVCu cladding sheets can be used to create and maintain hygienic environments in the most challenging conditions.

It is suitable for hygiene-critical areas of hospitals and surgeries, including operating theatres. It can be used in high traffic areas where it can be subjected to impact and scuff damage.

Our panels and trims combine to create a robust system with excellent adhesion to all sound substrates when the correct quality and quantity of adhesives are applied. One 6.5kg tub of Two Part Cladding Adhesive (after mixing correctly) should be applied to the rear side of each AM-Clad sheet.

AM-Clad sheets have a maximum service temperature of 60°C which should not be exceeded. It should not be installed in behind or in close proximity to heating appliances, cookers, oven ranges or wall mounted griddles where extreme levels of heat could cause distortion or damage to the surface.

The minimum recommended service temperature is -10°C.

# AM-CLAD INSTALLATION AND MAINTENANCE GUIDE



## INSTALLATION TEMPERATURES

- All installation areas should be a minimum of 14°C. Where possible AM-Clad should be installed at the same temperature to which the area will be once in use.
- AM-Clad should be stored laid flat on a level surface off the ground to prevent condensation and distortion.
- AM-Clad PVC cladding should not be installed on any substrate where the temperature is likely to reach or exceed 60°C, such as kitchen cooklines, where this is likely we recommend the installation of stainless steel.

## PREPARING THE SURFACE

AM-Clad sheets should be fitted to a plumb surface and can be fitted over existing tiles, fair-faced brickwork, blockwork, plaster walls and boarded-out stud partitions. The sheets fix directly to the dry substrate using high quality trade adhesives.

Ensure the plumb substrate is clean, dry, smooth and free of from dust, grease, flaking paint or any substance that may inhibit the bonding strength of the adhesive. Cladding failure can result if the surface is not adequately prepared.

Uneven surfaces must be made good with professional infill materials and allowed to dry out and settle. If fixing over ceramic tiles these must be thoroughly deep cleaned and allowed to dry out before affixing any cladding.

New plaster surfaces should be brushed and sealed with diluted PVA primer (1:10).

The substrate must be straight to within + or minus 3mm over 2 metres and brick / blocks. Remedial rendering works should use a 1:3 sand to cement mix with a trowelled finish.

## **SERVICES AND FITTINGS**

Plumbing and Electrical work should always be carried out by qualified professionals and the following recommendations should be carried out.

Where feasible, pipework should be removed to create a 'first fix state' and 'tails' should be left which can penetrate the holes drilled in the cladding sheet when it is fitted to the wall.

Holes in the cladding sheet should be drilled 3mm oversize to allow for expansion around pipes, fixings and bolts. These should be sealed using a high quality sealant which will accommodate normal levels of expansion.

Steam and hot water pipes should be insulated and a 3-5mm expansion gap id required.

Electrical equipment must be moved or altered by a qualified electrician and electrical switches, cables and power points should be in a 'first fix state' when possible.

# SUBSTRATES

- Plasterboards (grey, pink, green, blue etc.) greater than 12.5mm thick. These tend to be dusty so may need to be primed with a PVA solution.
- Minimum 9mm thick Ply, OSB or MDF. Minimum 12mm is recommended where shelves or cupboards are going to be fixed. Joints should all be level.
- 12.5mm Aqua Panel.
- Tiles that are securely bonded to the substrate and are level, free from grease and well cleaned.
- Trowel finished sand and cement render.
- Painted walls that are free from grease and flaking.
- Brick and Blockwork that is level and free from snots. We do not recommend welding on this substrate.

Note. Where possible all substrates should be level over 2 meters to within 3mm. Otherwise there is potential for the undulations to show through the sheet.

# AM-CLAD SHEET INSTALLATION

1. Prior to setting up check all substrates suitable for AM-Clad.
2. In a safe manner setup your working area, work bench, tools, and AM-Clad Thermoformer to preheat ready for forming.
3. Draw the datum line on the walls receiving AM-Clad using a laser or water level at a convenient and memorable height.
4. Lay your first panel of AM-Clad on the work bench and ensure it is free from damage from transportation. If damage is found check to see if it on an area of the sheet that can be cut out and the sheet salvaged.
5. On the wall from the datum line down to the finished level, then mark this same measurement on the protective film of the panel, measured from the bottom of the sheet up. This will be the datum line. All your measurements for cuts will be taken from this point.
6. Measure from the wall datum line to the ceiling and any other cuts / cut outs and mark these on your sheet whether marking front or back.
7. Cut the panel using a plunge saw for long cuts, a jigsaw for socket cut outs and hole saws for pipe work pass throughs. Ensure you leave 2mm between the AM-Clad and any abutments with ceilings, door frames and

pipework to allow for expansion.

8. Measure for the required thermoforming and mark up the face of the sheet.
9. Set the AM-Clad on the thermoformer and from the required bends.
10. Hold the AM-Clad up of against the wall to test fit.
11. Return the AM-Clad back to the work bench, trim and alter if required.
12. If vertical joints are welded, see Welded Joints section below.

### **13. PREPARING ADHESIVE:**

- 13.1 Gently remove the lid of your adhesive (if you're using a Waterbased Single Part Adhesive move on to point 13.3), If using Two Part Adhesive remove Part B and add to Part A.
- 13.2 Two Part Adhesive: Grip the tub firmly between your feet and mix the Adhesive adhesive using a drill and paddle for 2-5 minutes (depending on working temperatures) or until the colour is the same throughout ensuring you move the paddle around the entire tub.
- 13.3 Waterbased One Part: Grip the tub firmly between your feet and mix the adhesive using a drill and paddle until it reaches an even consistency throughout similar to a thick toothpaste.
14. Clean the back of the AM-Clad using Cleaner to the Rear to ensure no contamination.
15. Apply adhesive to the rear of the AM-Clad using a Square Notched Trowel 1/3mm for the Two Part Adhesive and Square Notched Trowel 2/5mm for the Waterbased One Part.
16. Lift the sheet back onto the wall and line up the sheet and wall datum lines. Use wall roller across the sheet to give even transfer of the adhesive to the substrate.
17. If welding vertical joints remove the protective film from the weld tape. See the welded joint method.
18. If vertical joint trims are being used fit the back section of the joint trim behind the sheet. See the trimmed joint method below.
19. Install floor transition trims and any other finishing trims as required.
20. Repeat the process throughout the required areas.
21. Where window sills, heads and door heads are formed the material and joints should be to the width of the structural opening.

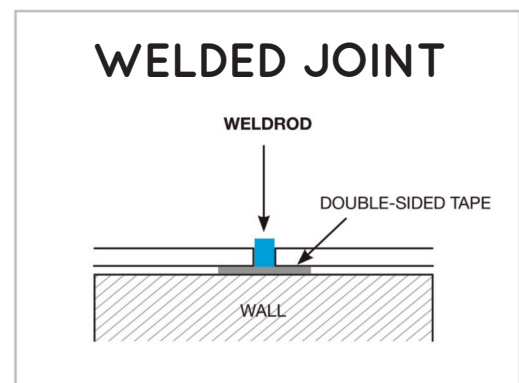
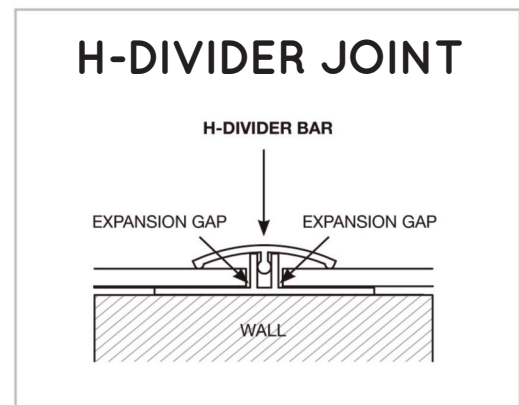
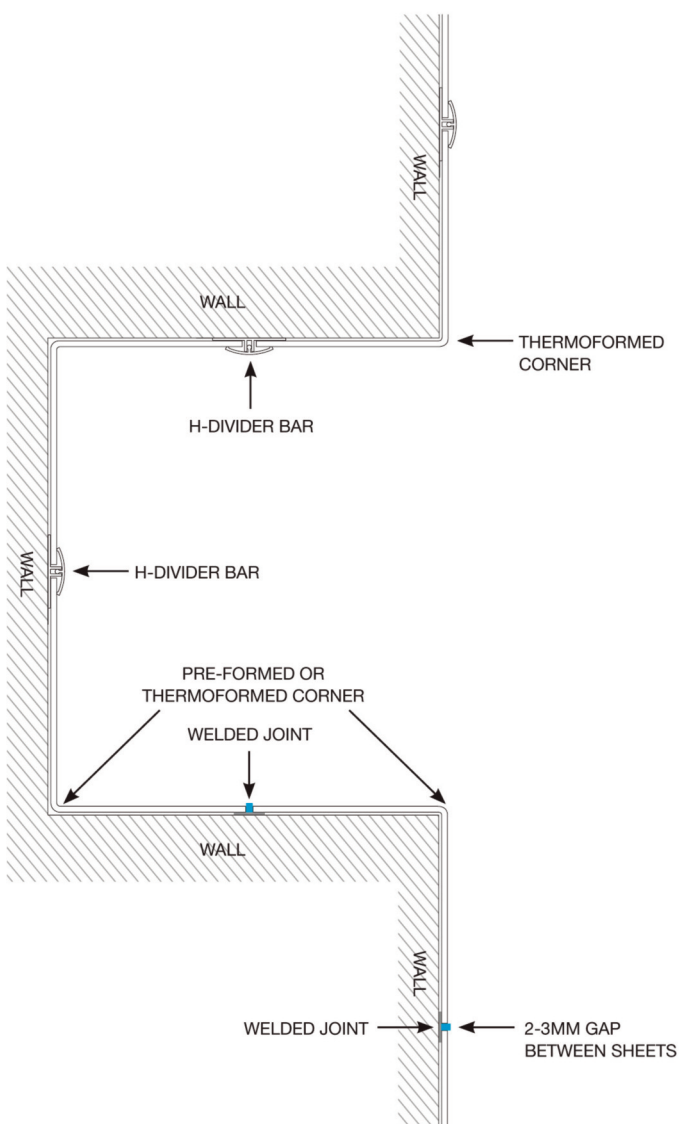
Note: Joints should be 300mm from any bends where ever possible.

# WELDED JOINTS

1. Ensure edges of the AM-Clad are clean and free from burrs. Where welded edges have been saw cut we recommend using a small block plane to give a true edge.
2. Apply spray adhesive to the substrate centred at the joints of the AM-Clad allow to dry and apply the tape.
3. Install sheets as above leaving the adhesive 25mm clear of the edge of the sheet.
4. Carefully cut through and remove half of the tape 1 protective film and press the AM-Clad firmly onto the tape.

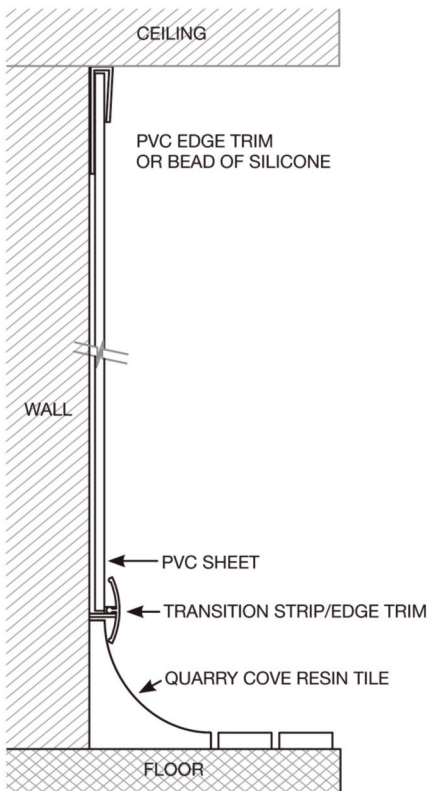
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## THERMOFORMED INTERNAL AND EXTERNAL CORNERS WITH H-DIVIDER AND WELDED JOINTS

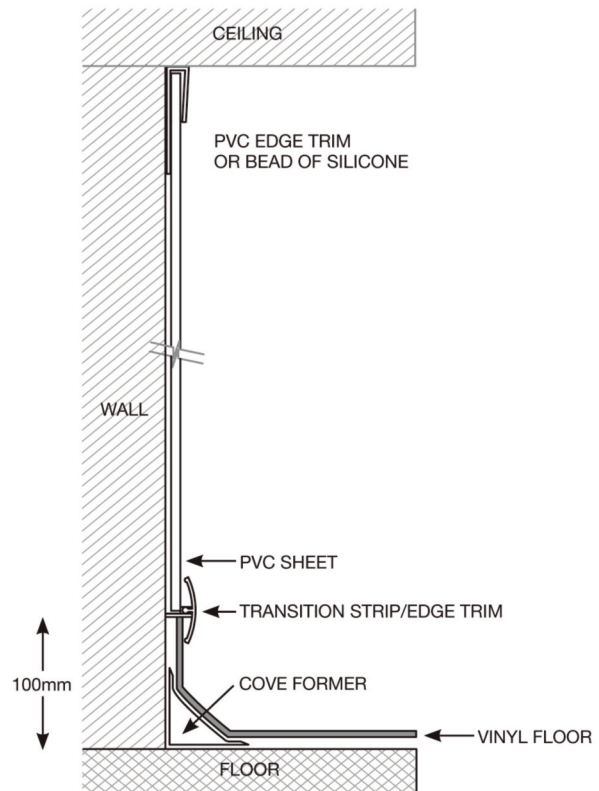


5. Install the remaining sheets leaving a 1.5mm gap between each sheet.
6. Clean all joints using anti-static wipes. This will prevent dust burning into the joints when welding.
7. Carry out a test weld on some off cuts or scrap material, to ensure the weld gun is at the correct temperature.
8. Weld the AM-Clad joints being extremely careful not to burn the sheets.
9. Allow the weld to cool and trim using a blade in a single pass where possible.

## WALL TO FLOOR DETAIL FOR TILE/RESIN COVE



## WALL TO FLOOR DETAIL FOR VINYL FLOOR



## TRIMMED JOINTS

1. Once the first panel of AM-Clad is installed cut down and tuck the back of the joint trim behind the sheet leaving a 1mm gap between the edge of the sheet and the clip channel of the back trim. Note, if a skirting transition trim is being installed the joint back needs to be cut short by 20mm to allow for this.



2. Following the installation of all the sheets and back trims, loosely install the front part of the joint trim by hand.
3. Cut down the front trim and final fit using a rubber mallet.

## **TRIMMED FLOOR TRANSITION**

1. Once all the AM-Clad panels are installed install the cut tile trim by tucking it up behind the underside of the cladding.
2. Loose fit the cover trim bending along the way to form the internal and external angles.

## **COMPLETION**

Once all sheets and joints are installed and sealed with silicone, leave on the protective film until all trades have completed their work. This will protect the panels from dust and prevent static build up.

Peel off the protective film to reveal pristine hygienic cladding.

## **CLEANING AND MAINTENANCE**

Under normal conditions only light cleaning is required using a soft cloth, and a mild detergent diluted in warm water – no hotter than 60°C. Do not use boiling water and do not use abrasive pads or wire wool.

Please note that we do NOT recommend the use of hot water lances for cleaning PVC cladded walls. Extremely hot water that exceeds 60°C and steam can damage the seals. Careful pressure washer cleaning at lower temperatures in conjunction with good quality detergents will ensure perfect results. In all cases the lance should not be pointed too close to the cladding (within 600mm).



FOR MORE INFORMATION

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