



InstaClad Robust Installation Manual



Introduction

The InstaClad Robust Installation Manual supplements the training received at the Insta Academy and is intended as a quick reference guide to key stage details.

Further Technical information can be found on our website www.instagroup.co.uk or by contacting your nominated Technical Inspector.

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Health & Safety

InstaGroup take Health and Safety very seriously; please follow the Health & Safety code at all times including all relevant H&S requirements for each part of the install and within your own company policy.

Please Refer to COSHH details for each individual component of the system.



Fuel Burning Appliances/Combustion Air Ventilators/Air Bricks and Ventilators

All fuel burning appliances require an adequate air supply and a clear flue to operate correctly. With an appliance in good working order the main product of combustion is carbon dioxide.

Carbon Monoxide is produced though when a flue is blocked or the air supply is impaired.

You cannot see, smell or taste carbon monoxide, but it is an **extremely toxic gas**.

With this in mind it is absolutely imperative that any existing combustion air ventilator is maintained and extended through the InstaClad Solid Wall System. If there is a fuel burning appliance within the property and there is no existing combustion air ventilation, then the advice of a qualified Gas Safe engineer should be sought.

There are potentially many other air bricks and ventilators on external solid walls and where these continue to serve a purpose they must obviously be maintained. These may include under floor air, room ventilators, extractor fan and larder/food storage cupboards. Bathroom and kitchen ventilators should be maintained as should gable end airbricks. Vents serving ducted air systems must not be compromised. Bedroom ventilators were originally intended to provide combustion air to an open fire and/or fresh air. Due to changes in heating arrangements, many have been sealed off internally. The decision to block off any existing vents should be discussed and documented with the homeowner.

Preparation

- 1 Undertake pull out tests prior to starting work, results to be recorded.
- 2 Ensure relevant authorities have been contacted e.g.: Local Authority Building Control, Utility Companies ref power cables & BT/Sky etc ref phone lines.
- 3 Remove any flaky paint, loose render or features to simplify detailing - treat surfaces with stiff bristle brush and fill accordingly.
- 4 Treat wall with anti fungal wash and leave to dry (min 24hrs). Refer to survey and method statement.
- 5 Is site safe and ready to work, i.e. scaffold correct, all obstacles removed?
- 6 All windows and doors need to be fully protected along with garden areas, driveways and walkways to and from vehicles minimising damage to client property.
- 7 Remove all down pipes, satellite dishes, flower baskets etc.

- 8 Refer to survey and method statement ensuring the substrate is within the working parameter of the system i.e. levels & condition.
- 9 Extend any services where required and consider ventilation requirements.
- 10 Ensure you have all materials needed for the install? Verge trim, starter tracks, correct colour render, correct tinted primer, fixings etc.
- 11 Materials are stored securely in a dry environment and at a temperature suitable for each component.
- 12 Refer to survey and method statement as to whether a primer coat is required
- 13 As with all EWI systems some elements of the installation (as detailed) Should Only be considered in temperatures of 5°C and rising. Wet weather should also be avoided as should installing onto saturated back grounds. Installed components should be protected from frost.

Installation

1. **Preperation** - Check substrates to ensure a clear working line within the parameter of the system which allows you to bring out the starter tracks using packing shims accordingly. The use of string line may be required to ensure working within the perimeters of the system.



2. **Starter Tracks** - For standard DPC mark out a straight line using level, laser or string line. Work as close to the DPC without penetrating it (always work above DPC level). For non standard DPC please refer to site specific method statement or contact your technical inspector. Using marked out guide line and starter track as reference, drill pilot holes into substrate.

Place starter track against substrate, using the end slotted holes push fixing plug into pilot hole and screw fixing into this leaving loose (remember to work form right to left or vice versa).

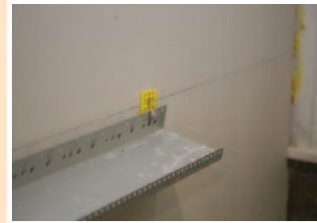


Installation

Starter Tracks cont.



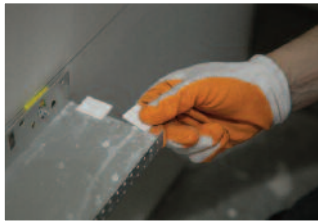
3. Use packing shims to adjust depth of starter track giving you a clear working line up the substrate. Ensure you have enough room for turbo fix considering the maximum working depth is 20mm.



4. Once happy with starter track depth and it's level, secure fixings through track into substrate.

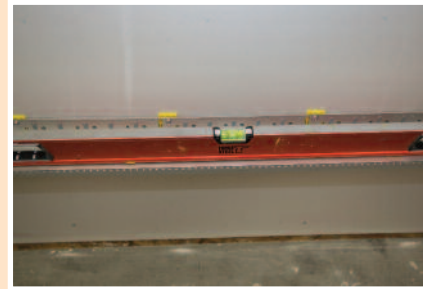


5. Use two connectors to join tracks (never butt joint).

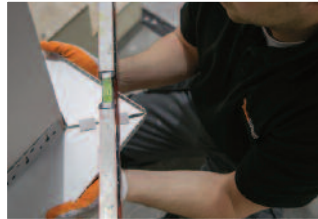


Installation

6. Continue this around the property always checking lines and levels as you go.



7. Mitre all angles with a clean cut and use connectors to join.



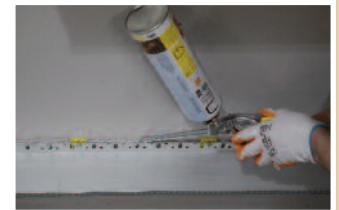
8. Secure fixings into starter tracks not exceeding maximum 300mm centres.



Installation



9. Fill the gap between the starter track and substrate with PU Filler foam.



At this point of the install stop ends should be fitted (where required) to the substrate ensuring the line is perfectly straight.



Above bay windows, porches, and garages – for example the starter track typically fitted as above but always refer to your site specific method statement. Remember to add or adjust lead flashing (where applicable) to ensure rain water runs away from rendered walls.

10. Verge Trims - If required, verge trims need to be installed prior to installing the final row of insulation boards.

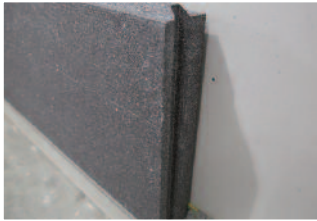
Use packing shims to bring out verge trim to meet insulation board ensuring a minimum 35mm overhang and that the rear of the trim is sealed to prevent water ingress.

This is particularly relevant at all critical junctions.

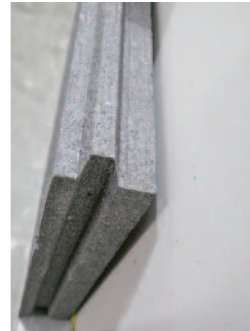


Installation

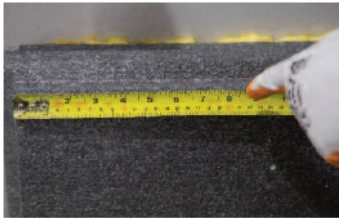
11. Installation Boards - Place the first EPS Insulation board onto the starter track, **THICKER EDGE AGAINST THE WALL**, working from left to right or vice versa (you can put a minimum cut 150mm high from starter track for height adjustments working up the substrate). Remember to use seal tape where the EPS meets a dissimilar face.



12. Turbo Fix is applied to the rear of the EPS board using the M or W pattern. Gently place the board into the starter track and offer it to the substrate, ensuring that the turbo fix is kept within the maximum 20mm tolerance.



Continue to fit boards as above along the first level. When installing the next course's stagger all EPS boarding using the T&G as much as possible remembering the required 200mm overlap working through the courses. Remember to consider Turbo Fix curing times (checking levels every 2 to 3 minutes until fully cured) this will ensure your margin and straight edges are correct.



13. When installing around doors & windows an “L” shaped EPS board must be installed to avoid joints at stress points.



14. When working to an external corner overlap EPS boards and extend past corner (cut off flush when cured).



15. Door/Window heads and reveals should now be fitted using one of the systems demonstrated during training using 20mm EPS Reveal Boards.



Always remember to use seal tape at all dissimilar surfaces

16. Using high density boards cut out and install ready for sky dishes/flower baskets etc.
17. PU filler foam all joints and allow to dry. Once dry cut off (Do not rasp out).



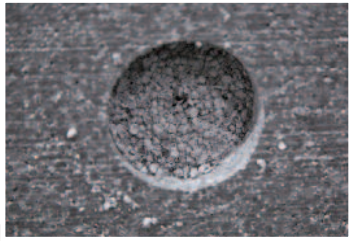
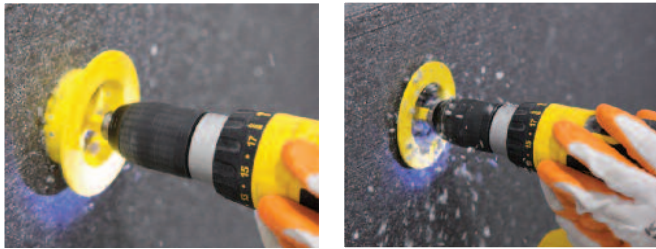
Installation

18. Dowells

(You must wait a minimum of two hours for Turbo Fix to cure)

Requirement to install 2 x countersunk dowels per full board

Using Dowl Cutter form countersunk holes into EPS boards.



19. Drill pilot hole into substrate (min 35mm embedment).



20. Push hammer dowel into substrate and boarding.

21. Hammer dowel in fully.

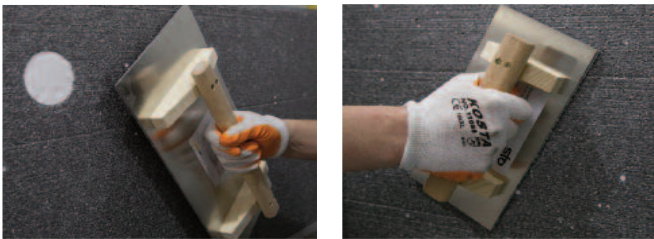


Installation

22. Gently push in end cap leaving flush.



23. Rasp all EPS boards using straight edge to ensure that any high points are levelled and to negate the risk of 'quilting' i.e. The undulating appearance of the boards once rendered.



At this point any indents can be brought out using Insta DP Morter backing coat to level work.

24. **Window Sills** - Fix new over or under sills allowing for a minimum 35mm over hang from final stage of installation.

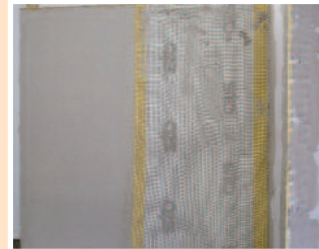


25. **Backing Coat** - Confirm working temp 5°C and rising.

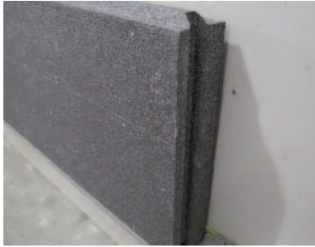
26. Cut and fit all internal and external angle beads.



27. On flat walls and also internal and external corners, ensure that the mesh is overlapped by 100mm (as indicated by the yellow marking).



28. Cut and fit stress patches around doors/
windows/stop ends etc (450mm x 250mm).

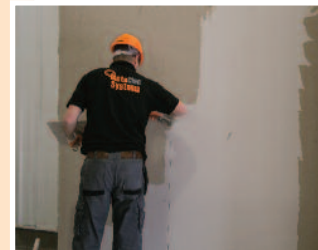


29. Mix Insta DP Morter as per instructions on
packaging (standing 5 mins).

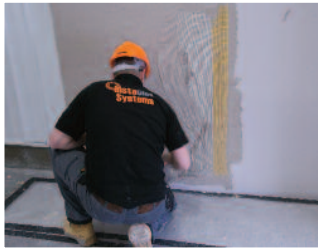


30. Then re-mix.

31. Apply Insta DP Morter to EPS boards (5mm).

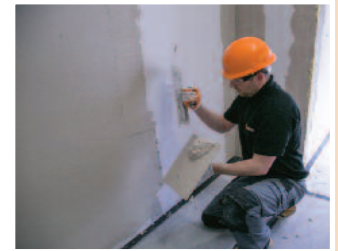


32. Push pre cut mesh into Insta DP Plaster Morter leaving no mesh exposed and trowel as flat as possible.



33. Remove excess Insta DP Morter ready for overlaps (min 100mm) and continue as normal ensuring wall is as flat as possible.

To flatten the wall you can use a butterfly trowel/trowel/dry sponge. Once dry, use trowel or rasp to remove any high sections and to clean off angles.



Primer - Ensure InstaLevel DP Plaster is fully dry (minimum 24hours dependant on weather conditions).

Add 1 cup of water and mix (do not add any more water).

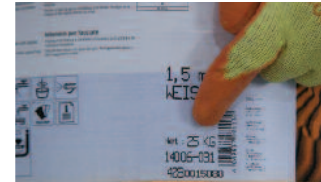
Apply evenly with a brush or roller.



1. Finish Coat - First check that all batch numbers correspond.

Understanding the use by date:

- 3 largest digits at the beginning of the batch number indicate the expiry date.
- 1st large digits indicate the year of expiry (e.g. 20 = 2020)
- 2nd and 3rd digits indicate the week of expiry within that year (e.g. W/E 27th June 2020)



2. Add water (cup at a time) to get correct consistency.



3. Apply to trowel or hawk and apply to wall.



4. Remove render back to 1.5mm thickness.



5. Texture trowel wall using figure of 8 patterns
If the wall is not texturing properly this could be due to incorrect thickness of the render.

Finish site clean and tidy.

Alternative site specific top coat finishes are also available.

- Pebble Dash and Brick Slips.



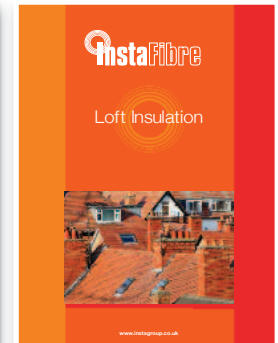
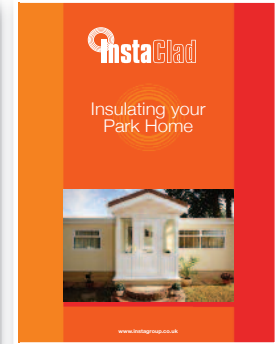
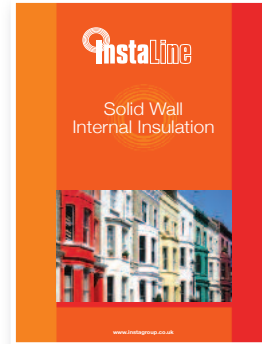
We also have solutions for areas below the DPC level.

We are also able to supply other ancillary products such as flexi starter tracks for bay windows, spiral fixings for down pipes etc and high density support blocks. We also have a range of innovative cold bridging solutions for window reveals (Insta ThermoBead), areas behind soil pipes/gutters and downpipes which negates the need for removal (Insta Thermopro) and for key areas behind soffits/Finlock gutters etc, (Insta ThermoFlash). Product sheets are available on request.

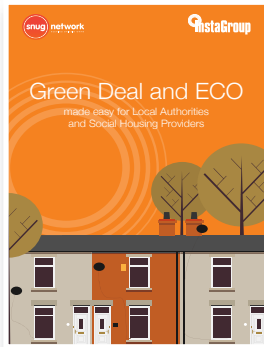
We hope that this quick reference guide helps you to achieve a top class finish that you can be proud of.

If you require any further information then please visit our website or contact any of our Technical Team.

Other Activities



Other Activities



Certificate No. GB07/72624



Certificate No. GB05/64742

Products & Tools (With associated ordering codes)

Code	Product	Tools	item
SWSPF	ICR PRIM FUNGAL 10ltr	SWSRBL	ICR RASPING BOARD LARGE
SWSTFA	ICR TURBOFIX 10.4KG CAN 10.4kg can	SWSRBS	ICR RASPING BOARD SMALL
SWSEPS100	ICR EPS 100MM GREY T&G 0.5m ² per board	SWSSTL	ICR SMOOTHING TROWEL LARGE
SWSHD155	ICR HAMMER DOWEL 8/60 155mm box of 100	SWSSTS	ICR SMOOTHING TROWEL SMALL
SWSTHC	ICR THERMODOVEL CAP box of 100	SWSTT	ICR TEXTURING TROWEL
SWSEPS20	ICR EPS 20MM REVEAL 12.5m ² per board	SWSTFCA	ICR TURBOFIX CLEANING ADAPTOR
SWSFF	ICR FOAM FILLER CAN	SWSTFH	ICR TURBOFIX FLEXIBLE HOSE
SWSLDP	ICR DP MORTAR 25kg sack	SWSTFP	ICR TURBOFIX PISTOL
SWSGFM	ICR GLASS FIBRE MESH 110CMX50M 50m roll	SWSPSPA	ICR TURBOFIX PISTOL SPARE PART
SWSPRIM	ICR PRIMER WHITE 23kg pail	SWSWLT	ICR WIDE LEVELLING TROWEL
SWSSILK	ICR SILCAREND K1.5 - WHITE 25kg pail	SWSGTL	ICR GAUGING TROWEL LARGE
SWSSILKT	ICR SILCAREND K1.5 - TINTED 25kg pail	SWSGTS	ICR GAUGING TROWEL SMALL
SWSST	ICR STARTER TRACK 102mm x 2m 13 lengths 26m	SWSPUP	ICR PU FOAM PISTOL
SWSHF80	ICR HAM FIX VZ8 SS 80mm LONG box of 100	SWSCSM	ICR THERMO COUNTERSINK MILL
SWSPS3	ICR PACKING SHIMS 3mm box of 1000		
SWSSTC	ICR STARTER TRACK CONNECTORS box of 100		
SWSJST	ICR SEAL JOINTING TAPE 5X18M 18m roll		
SWSPVCM	ICR PVC MESH ANGLE BEAD 2.5m lengths		
SWSAA	SWSAA ICR ARMOUR ANGLE 70X90mm X 50M 50m roll		

Ancillary Items

SW150MMVT	150mm VERGE TRIMS 2m lengths 2m lengths
SWTRJP150	150mm JOINTING PIECES
SWSSPF	ICR SPIRAL FIXINGS 25 in a box
SWVTEC	FULL END CAPS FOR WEC741/150 pair

Please contact the Sales Office Team on 0118 9739541 if you have any questions



UP AGAINST THE WALL

Insta House, Ivanhoe Road, Hogwood Business Park, Finchampstead, Wokingham, Berkshire. RG40 4PZ.

Tel: 0118 932 8811 Fax: 0118 932 8314 Email: sales@instagroup.co.uk

www.instagroup.co.uk