HolzCore Care and Maintenance Guide

HolzCore internal wall insulation is designed to insulate the walls of your masonry building, dramatically improving internal comfort and air quality as well as reducing your heating requirements.

To maintain the functioning of your HolzCore internal wall insulation, it is important to look after your building and to make sure that it's normal maintenance is continued. This will not require any additional maintenance than would have been required before installation but it is important to maintain a regular maintenance schedule.

External surfaces

The exterior of the building is particularly important as significant rain penetration can have a negative effect on the walls and the functioning of the system. The following areas should be checked to ensure rain does not penetrate to the interior of the building.

- The roof should be checked annually to ensure there are no broken tiles/slates that could be allowing moisture ingress to the tops of the walls.
- Gutters and downpipes should be checked and cleared 6 monthly to prevent overflows down the surface of the walls which can allow ingress into the walls.
- Penetrations, such as vent or waste pipes, window/door frames and sills should be checked annually and re-sealed if necessary.
- Wall surfaces should not be receiving splash-back from adjacent surfaces. Ensure objects are not leant against or near the walls for long periods and prevent plants from growing against the walls, causing a rise in moisture levels in the walls.
- The condition of the masonry surfaces should be checked for frost and impact damage and salt contamination. Physical damage should be repaired as soon as possible.
- On bare brick or stone walls the condition of the pointing is critical. Pointing should be in good condition and as flush as possible with the masonry surface to reduce water penetration into the surface. Do not deeply rake pointing, keeping it no more than 5mm from the surface of the masonry.
- Rendered surfaces should be checked for any signs of cracking, which must be filled and sealed or re-painted as soon as possible. Junctions with sills/openings are an area that often cracks and allows rain ingress so should be sealed with a polyurethane sealant, such as Sika EBT+, to maintain weather tightness.
- The plinth or base of the wall receives the highest levels of moisture from rain and splashing as well as being areas that receive lots of impacts. Regularly check for cracks or holes and fill or seal as required to prevent an increase in moisture within the masonry in this area.

The HolzCore system has been modelled using the wall conditions and finishes at the time of installation. The surface finishes should not be changed to ones which allow more rain ingress without first discussing it with us as it could affect the functioning of the system.

Internal surfaces

The HolzCore system is designed to require very little maintenance other than than visual inspection and the prompt repair of any damage that occurs. As with the exterior, the system does not require occupants to use the building differently but does assume that the building is correctly heated and ventilated.

Should any areas of black mould or dampness occur, it should be noted and reported. In the case of dampness or mould related issues, it is most likely that the humidity is too high within the room or building as a whole but the below issues should be checked and addressed.

- If the ventilation is inadequate within the building or particularly kitchens, bedrooms and bathrooms, the amount of moisture in the air will cause cool surfaces to become damp and over time this will grow mould. Although the detailing HolzCore uses eliminates most thermal bridges, there is a limit to how much moisture a surface can tolerate before growing mould. Ventilation rates should be increased by installing bathroom extraction and single room ventilation or a whole house ventilation system.
- Clothes should not be dried indoors unless a dehumidifier is also used as this causes huge amounts of moisture to be released into the air.
- If there are mould issues around windows after addressing the above points, it is possible that the reveal insulation has not been fitted correctly. The installer should check the reveals to confirm.
- If there are pipes running through the service zone within the walls, moisture could be coming either from a leak or from moisture condensing on very cold pipes that have not been insulated. The wall surface should be opened up to investigate if necessary.

As with the exterior, the HolzCore system has been designed to function correctly with the finishes detailed in the NSC document. Please do not change the surface finishes without discussion with us first as it can alter the functioning of the system.

Fixtures and fittings

Any fixings used must not penetrate the membrane within the wall build-up and so care should be taken to ensure the fixings are not too long. The plasterboard or Fermacell surface can be fixed into with standard screw or plasterboard fixings but if heavier items are to be hung, they must be fixed into the battens within the wall build-up.

Decoration

The skimmed plasterboard or Fermacell should be decorated with breathable or acrylic paints, suitable for gypsum plaster. Vinyl or oil based paints should not be used as they restrict moisture flow in and out of the

wall too much and are more likely to allow mould growth in humid conditions. Lime based paints are not suitable for application to gypsum surfaces.

Damage

Damage to the plasterboard or Fermacell board finishes can be repaired by simply cutting out section of the board, between battens, replacing it and skimming over again with a gypsum skim. It is essential not to damage the membrane within the wall or the tapes sealing it but if damage does occur, just tape over the cut/tear with more airtightness tape before re-installing the flexible insulation and plasterboard.

If water leaks occur due to leaks from pipes within the wall or from any other source, the wall surface must be opened up to assess the extent of water saturation.

1) Remove the plasterboard/ Fermacell from the affected area.
2) Remove the flexible insulation from between the battens and put somewhere to dry.
3) Cut small slits in the membrane to assess whether the wood fibre board is wet or dry. If dry, use Ampacoll INT airtightness tape to re-seal the slits. If the wall is wet, larger sections of the membrane should be removed to assess the extent of the moisture ingress.
4) Wood fibre, if left exposed, will dry quickly, particularly with a dehumidifier present. However, the relative humidity would need to drop below 80% where the board meets the wall before being covered by the membrane again. If there is no time to allow this to dry then the system should be de-constructed and the wet sections of wood fibre board removed before being replaced with dry board.
5) Re-instatement should be carried out as per the installation instructions.

If you have any questions, please contact us.

Back to Earth (SW) Ltd 7 Tuns Lane, Silverton, Exeter, Devon. EX5 4HY
T:- 01392 861763 E:- chris@backtoearth.co.uk W:- backtoearth.co.uk
Back to Earth is the trading name of Back to Earth (SW) Ltd, registered in England and Wales.
Co. No. 06916254. Directors HN Brookman, CJ Brookman.
Registered Office:- 2 Barnfield Crescent, Exeter, EX1 1QT