Quality Alert

MORGAN SINDALL CONSTRUCTION

Cavity Trays

We have recorded in the past twelve months an increase in defects with a root cause of cavity tray installation and design. Dampness and water ingress in to buildings via the cavity construction has proved to be costly and disruptive to remedy.

The approach of using roll damp course material as a cavity tray is effective providing the tray is installed with **minimum 150mm upstand, secured effectively, shaped to deflect water** away from the building and ideally allows for the removal of mortar from masonry laying at higher levels.

The increased use of SFS framing with sheathing board does not provide a mortar joint in which to bed the upstand of the tray and a detail must be provided on how the tray is secured to the sheathing board. The fixing specification, stainless steel, plastic etc. is important for corrosion, both from the environment and bi-metallic, and what the fixing is puncturing and providing a possible water ingress path. **Breather membranes should be dressed over the tray.**

No matter the type of wall construction it is imperative that trays made from roll material have a stop end formed. In masonry walls this is done by folding the ends of the tray into the perp joint of the outer leaf. The omission of or poorly formed stop end allows water back into the cavity rather than towards the weep holes provided in the facing wall. Forming stop ends in sheathing board is more difficult and is sometimes seen as a mix of damp material, bits of tape and sealant! Not acceptable .Weep holes are provided at each end of a horizontal cavity tray at **maximum** 900mm centres, this is often reduced to 450mm centres in a specification. Check if the specification requires or should allow for non-combustible weep vents. If in doubt ask.

An option to consider and strongly favoured in high risk areas is the use of preformed cavity trays and where possible these are included and specified by the designer. The material and rigidity of preformed cavity tray profiles makes them suitable for timber frame, SFS/sheathing board and masonry construction. **Preformed cavity trays should always be the first option on all stepped or lower roof abutments.** The benefit of preformed cavity trays is a ready-shaped three-dimensional product which provides a consistently formed tray enclosed in the wall to provide long-term protection and integrity of the building envelope. Trays are preformed to match cavity widths and for internal or external corners. The tray should match the design life of the building and any tray specified can demonstrate testing with guarantees provided.

A further consideration is the need to specify **non-combustible cavity tray products**. Several products have been approved by LABC and guidance is available at:

https://www.labcwarranty.co.uk/blog/cavity-trays-major-projects-acceptance/

This advice should be used, where the above is applicable, and the information discussed with your team highlighting the following points:

- Which is the best form of cavity tray to adopt for this project
- Are cavity trays covered in the sub-contractors inspection plan and this should be a HOLD POINT
- Are fixings of trays to sheathing boards specified and correct for the environment
- Do we need non-combustible cavity tray products

Everyone has the right to be 100% Safe