# TECHNICAL UPDATE

## Using cavity trays at DPC level for timber frame

**Cavity trays at DPC level for timber frame construction**
We often see cavity trays being used at DPC level between the external masonry cladding and the timber frame. Although this may seem like a sensible approach for protecting against water ingress, it can impede on the drainage and ventilation requirements for the timber frame.

Cavity drainage and ventilation in masonry cladding must:

- Achieve at least 500mm2 per metre run, which equates to a whole brick open perpend every 6th brick length.
- Be fitted in the brick or block course:
  - Below the lowest timber sole plate and,
  - Above external finished ground level and,
  - Below DPC.
- Maintain a clear cavity with care taken to reduce mortar droppings at the base of the wall.

Weep-holes alone are unsuitable for timber frame construction, and proprietary open perpends must be used.

Note: Proprietary open perpend inserts are available with insect screening incorporated. Their equivalent open area must be considered and installation centres reduced accordingly.

Where a cavity tray is proposed at DPC level, proprietary open perpends must be used above and below the cavity tray to provide:

a) Drainage and ventilation to the timber frame above the cavity tray and
b) Ventilation to the sole plate below the cavity tray.

Where flexible DPC materials are to be used as a cavity tray, they should have supporting evidence in the form of a Declaration of Performance to BS EN 14909:2012. They should also have third-party certification (BBA or similar UKAS accredited body) confirming their suitability for use as a cavity tray.

**Warranty stance**
Care should be taken when specifying the use of a cavity tray at DPC level for timber framed properties to ensure adequate drainage and ventilation is given to the frame and sole plates. Proprietary open perpends should be provided above and below the cavity tray and where flexible DPC materials are used as a cavity tray, they should have supporting evidence for their proposed use as highlighted in this article.

*Every care was taken to ensure information in this article was correct at the time of writing (January 2024). Guidance provided does not replace the reader's professional judgement and any construction project should comply with the relevant building regulations or applicable technical standards. For the most up to date LABC Warranty technical guidance please refer to your risk management surveyor and the latest version of the LABC Warranty Technical Manual.*