Question
Is it acceptable to install fan ducts and boiler flues through core drilled holes in external masonry walls without a cavity tray above?

Considerations
- NHBC Standards clauses 6.1 - S4(e) and 6.8 – D11(i) refer to the provision of cavity trays to air bricks ducts and moisture drip collars to balanced flues to avoid water gathering on the ducts/flues and crossing the cavity to the inner leaf.
- Circular ducts/flues to extract fans and boilers when installed with a slight fall to outside helps to direct moisture back on to the outer leaf of the wall.
- The installation of the duct/flue through core drilled holes is usually after completion of the wall when the risk of mortar droppings gathering on the duct/flue and bridging the cavity has passed.
- Careful setting out is required to correctly positioned cavity trays at the time of constructing the walls to suit the later provision of a core drilled hole for ducts/flues etc.

Answer
Where a duct to an extract fan is built-in as the wall is constructed it should be provided with a cavity tray to protect the duct from mortar droppings, which could bridge the cavity and cause dampness.

Where a duct to an extract fan or boiler flue is installed through a core-drilled hole after completion of the wall it is not essential to provide a cavity tray although the provision of a tray during the construction of the wall is considered good practice.