

Cavity

Tools required

- Insulation saw
- Tape measure

Fixing and application

Designing the cavity wall

The use of ROCKWOOL Cavity does not affect the choice of wall ties to BS EN 845-1:2013+A1:2016. Ties should be selected according to structural requirements, cavity size, building height and location.

The outer leaf is the first line of defence against rain and the following will help to improve its effectiveness:

1. Consider the dimensional tolerances of the wall before designing the width of the cavity. An extra 5mm above the nominal batt thickness will normally be sufficient.
2. Select bricks conforming to EN771-1 that are appropriate to the exposure class. Refer to annex B of BS EN 1996-2 (Eurocode 6 - Design of masonry structures - Part 2: Design considerations, selection of materials and execution of masonry)
3. Select a lime mortar mix that does not contain detergent-type plasticisers, which reduce the water resistance of the joints.
4. Specify weather-struck, flush or bucket-handle joints. Recessed joints increase the risk of water penetration. Ensure all bed and perpend joints in the external wall are fully filled with mortar.
5. Cavity trays should incorporate stop ends, have weep holes at approximately 450mm centres (or a maximum of 900mm centres) and be continuous across closely spaced openings (Figure 2).
6. Vertical damp proof courses at wall openings should project at least 25mm into the cavity (see ROCKWOOL ROCKCLOSE® data sheet for details).

Figure 1



Figure 2



Figure 3



Installing ROCKWOOL Cavity

1. The installation of the batts should commence below the damp proof course (preferably by at least 150mm) with no risk of capillary action to minimise cold bridging. The bottom row of ties should be at 450mm centres horizontally. If necessary, the width of the first course of batts can be cut to suit the height of the next row of wall ties. The width of cut batts should always be 5mm greater than the width to be insulated, e.g. wall tie centres.
2. It is recommended that the external leaf be constructed ahead of the internal one so that any mortar protruding into the cavity space from the back of the external leaf can be cleaned off before installing the batts.
3. Build up a complete section of the leading leaf to one course above the next row of wall ties spaced at a maximum of 900mm horizontally (Figure 1). Ensure that all mortar joints are properly filled, particularly the perpend.
4. Before installing each course of batts, excess mortar must be removed from the inside face of the leading leaf, and mortar droppings cleaned from the exposed edges of the batts. This is made easier using a cavity board (Figure 2). This sequence should be maintained progressively until it reaches the wall plate or cavity tray. It is important for the insulation to be carried to the highest level possible (Figure 5).
5. It is essential that all the joints between ROCKWOOL Cavity batts are clean and tightly butted.
6. Raise the second leaf to the same level as the batts.
7. The as-built cavity width must not exceed the dimensions in the table opposite:
8. Repeat this sequence to the top of the wall (see Figure 5). Alternatively, the top of the batts can be protected by using a cavity tray.
9. To minimise water penetration to the inner leaf during driving rain, it is essential that no gaps are left between the batts.
10. Cut the batts cleanly, using a sharp, long bladed knife and a straight edge.
11. Fit the batts closely around wall openings. Slit them neatly where additional wall ties occur and be careful not to impale or tear them. At corner joints, edges must be cut accurately to ensure close butting (see Figure 4).

Figure 4



Figure 5



Nominal Batt thickness	Permitted deviation maximum as built cavity widths (mm)
80-120	0-10
125-150	0-15
160-300	0-20

Note: Where two layers of ROCKWOOL Cavity batts are used, ensure that the vertical joints between the outer batts are staggered to those of the inner batts.

Health & safety

The mechanical effect of fibres in contact with skin may cause temporary itching.



Cover exposed skin
When working in unventilated area wear disposable face mask.



Clean area using vacuum equipment.



Waste should be disposed of according to local regulations.



Rinse in cold water before washing.



Ventilate working area if possible.



Wear goggles when working overhead.