Knauf Shaftwall

Installation Procedures

Knauf Shaftwall partitions are designed to be simple and fast to install. Knauf Technical Services are on hand should you have any questions or unusual situations to deal with.

General

Knauf Shaftwall and Firefighting Shaftwall must be installed in accordance with Knauf's recommendations and the recommendations of BS 8212: 1995 and BS 8000: Part 8: 1994.

Perimeter Framing 1,2

Knauf 'J' Channels should be used for the head, base and any abutments. Bed each section onto two continuous beads of Knauf Intumescent and Acoustic Mastic and secure with suitable fixings at maximum 600mm centres and 50mm from ends of channels or studs. Separate channels forming the perimeter do not need to be joined, but should be tightly butted together.

Replace Knauf 'J' Channel with a Knauf Deep Flange 'U' Channel when forming a deflection head.

Vertical Studs

Knauf 'C-T' Studs should be positioned within the channels in sequence with Knauf Core Board, maintaining stud centres at maximum 600mm. In general, there is no requirement to secure the studs at this point as this will be achieved once the boards are screw fixed.

Knauf 'C-T' Studs should be trimmed to within 5mm of the slab to soffit height. For deflection heads only: studs should be cut short to a maximum of half the flange length of the Knauf Deep Flange 'U' Channel. Whenever possible, full height Knauf 'C-T' Studs should be used. If splicing is necessary, then use Knauf 'C' Studs to extend 600mm above and below the Knauf 'C-T' joint, fixed through with a minimum of 6 Knauf Wafer Head Jackpoint Screws. See detail 11 on page 85.

Insulation (if required)

Once the 'C-T' studs have been located in the Knauf 'J' Channels and Knauf Core Board has been inserted, Knauf Earthwool Acoustic Roll can be inserted between the studs vertically. Care should be taken to ensure that the insulation is fitted neatly without gaps at abutments or vertically between different rolls.

Support for Horizontal Joints in Facings

For the Knauf Fire Panel decorative facing, Knauf Fixing Channel or Knauf Flat Fixing Plate should be fitted across the face of all studs secured with 2 Knauf Wafer Head Jackpoint Screws per stud to back the horizontal joints.

Doorways

The head is formed with Knauf 'J' Channel bent and screw-fixed with Knauf Wafer Head Jackpoint Screws to Knauf Deep Flange 'U' Channels. For doors weighing up to 50kg, Knauf Deep Flange 'U' Channels are used for the frame openings inserted with treated timber of 50mm thickness, cut to the size of the stud.

Boarding 3,4,5,6,7

Installation of the Knauf Core Board should commence at one end and work across the shaftwall. Cut the first Knauf Core Board to fit into the Knauf 'J' Channel frame. Pull out tabs in the flange of the 'J' Channel at right angles to retain the Knauf Core Board. You may require a length of timber to gently tap the stud into place, as it is designed to be a tight fit. The next Knauf Core Board is fitted into the 'C-T' Stud and the process is repeated until one side of the shaftwall is complete. For airtight shafts, apply Knauf Sealant to the Knauf Core Board edges prior to installation.

For joints in the Knauf Core Board, install Knauf Core Board Channel to the top edge of the Knauf Core Board and screw-fix 150mm wide Core Board strip across the joints into the Core Board Channel. See detail 12 on page 85.

All other boards should be offered up to the frame with the face of the board outwards and secured with Knauf Screws at 300mm centres. Fixing centres should be reduced to 200mm at corners.

Boarding should commence at one end and work across the partition. At head, base and abutments, board edges should be bedded onto continuous beads of Knauf Sealant. Board joints in multiple layers should be staggered both vertically and horizontally by a minimum of 600mm.

Tape and joint for a seamless finish.

Firefighting Shafts

When constructing a firefighting lift shaft, Knauf Performance Plus is used, as it is highly durable and able to withstand the effects of impact and water, to which it would be subjected during a fire, without losing its fire resistance or integrity when tested to BS 9999: 2008. This means that fire crews maintain protected access to all floors within the building.

1.
Fixing Knauf 'J' Channel to the soffit.

2.
Fixing Knauf 'J' Channel to the abutting wall.
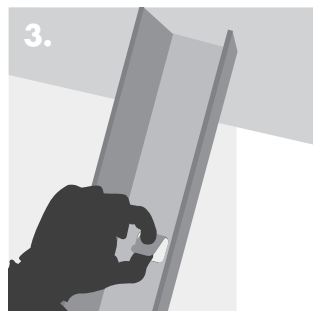
3.
The retention clips are easy to release with the Knauf Core Board in place.

4.
Positioning Knauf 'C-T' Stud to lock Knauf Core Board into place.

5.
Knauf 'J' Channels are used vertically at corners and abutments.

6.
Fixing Knauf Fire Panel.

7.