

# DuctRock® Slab

Fire protection for ventilation, smoke extract, and kitchen extract ducts.

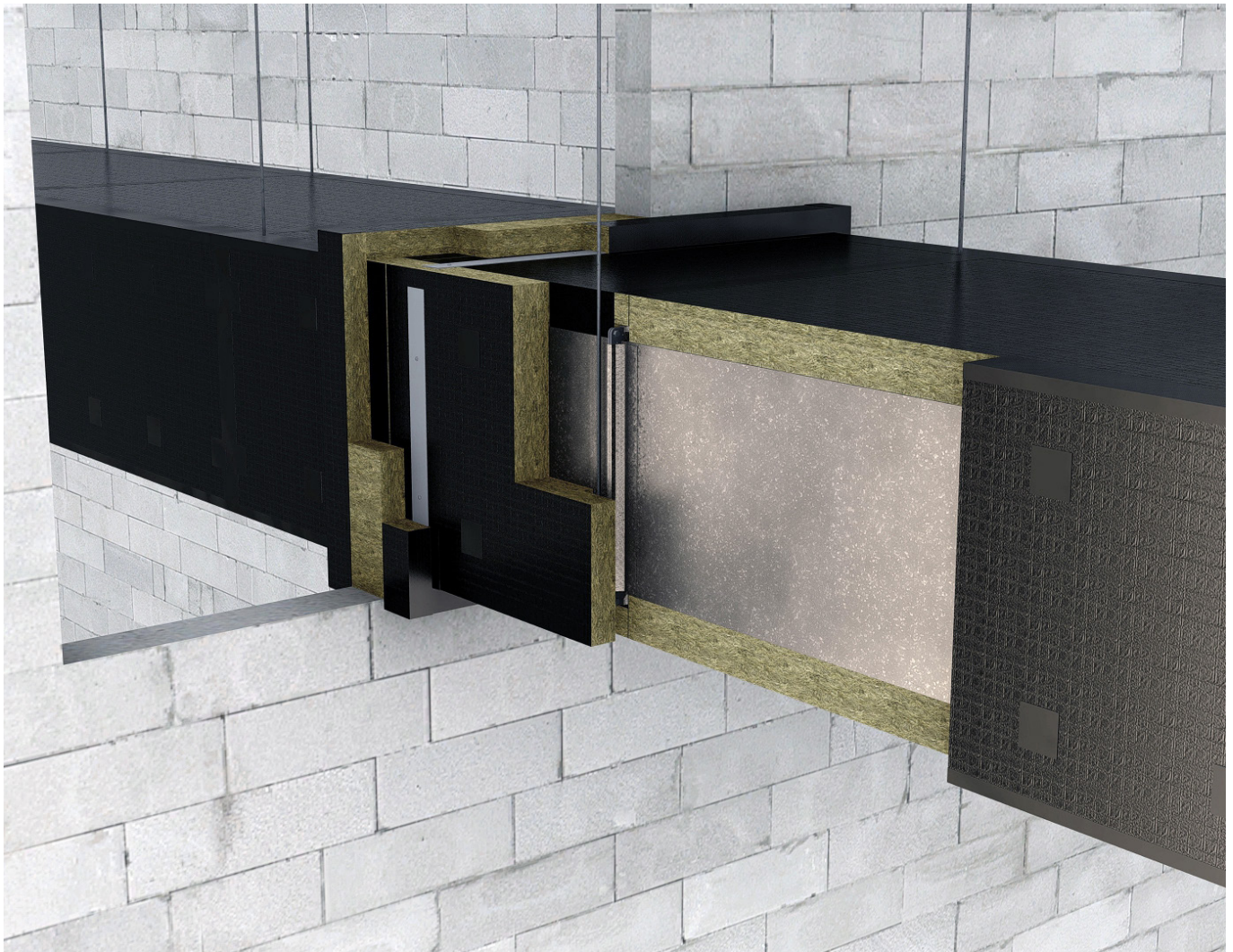
DuctRock Slab is a high-density, non-combustible stone wool insulation slab, finished with a factory-applied black aluminium foil facing. Available in three thicknesses, DuctRock Slab is capable of achieving fire resistance of up to EI 120.

FirePro® Glue and Black ALU Foil Tape are also readily available from ROCKWOOL for sealing all board joints.

- Offers up to EI 120 minutes protection to ventilation and smoke extract ductwork.
- Tested on both vertical and horizontal ducts.
- Black foil finish.
- Patented horizontal penetration detail: EP4073409.



# DuctRock Slab



## APPLICATIONS

DuctRock Slab has been designed for use with rectangular and square steel ductwork systems, and has been fire tested in conjunction with the following duct types shown below.

Ventilation duct: Type A		Ventilation duct: Type B		Smoke extract duct: Type C
Horizontal	Vertical	Horizontal	Vertical	
✓	✓	✓	✓	✓

# DuctRock Slab

## PERFORMANCE

### Fire performance

Fire rating (minutes)	Thickness of DuctRock Slab required (mm)		
	Ventilation (Types A & B)	Smoke extract (Type C)	Combustible lining
EI 60*	60	60	90**
EI 90	80	80	-
EI 120	90	90	-

\* Use 60mm DuctRock Slab for EI 30 fire ratings.

\*\* DuctRock Slab has been tested in accordance with the criteria set out in section 11.2.2 of BS EN 1366-1:2014 (ducts with combustible lining) where additional thermocouples were positioned within the duct to record the average and maximum temperature rise. Insulation failure was defined in accordance with EN 1363-1.

This testing is detailed in the following classification reports:

PCA10496A

PCA10496B

PCA10496C

PCA10496D

PCA10496E

## PRODUCT INFORMATION

Property	Description
Length	1200mm
Width	1000mm
Thicknesses	60mm, 80mm, 90mm
Facing	Black aluminium foil
Fire resistance	Up to EI 120*

\* Subject to the application.

## STANDARDS AND APPROVALS

Certificate
DuctRock Slab has been tested in accordance with BS EN 1366: Part 1 for ventilation ducts and also BS EN 1366: Part 8 for smoke extraction ducts achieving up to EI 120 minutes*.
DuctRock Slab has been classified in accordance with EN 13501-3:2005 +A1: 2009.
Fire Resistance Classification: up to EI 120 (ve, ho, i ↔ o) S
DuctRock Slab has been classified in accordance with EN 13501-4:2016.
Fire Resistance Classification: up to EI 120 multi (ho/ve) S 500

\* Subject to the application.

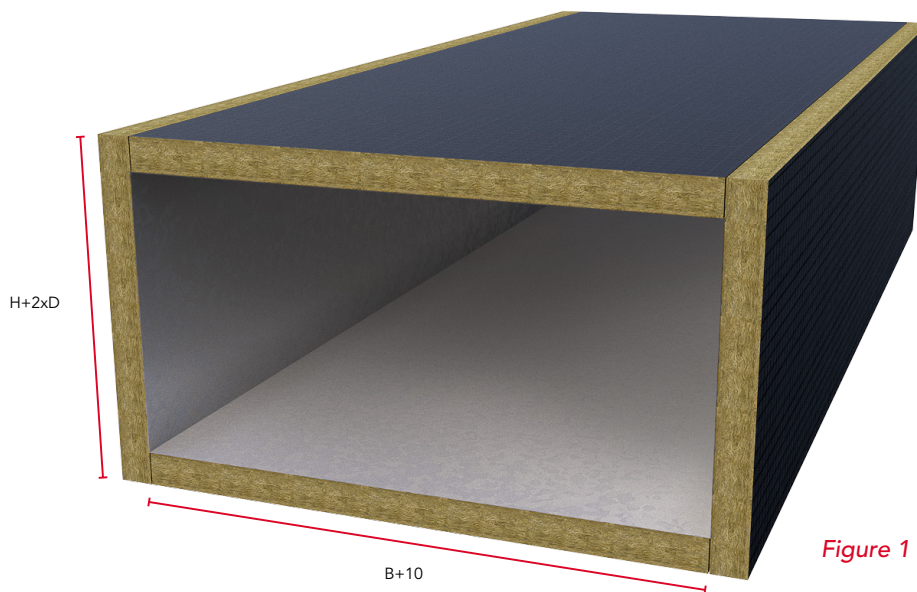
# DuctRock Slab

## INSTALLATION

DuctRock Slab can be installed onto rectangular and square steel ductwork using a combination of 2.7 Ø mm - 3.0 Ø mm stud-welded pins, 3.0 Ø mm steel washers, and FirePro Glue. All board abutments and cross joints must be covered with Black ALU Foil Tape.

DuctRock Slab thickness (mm)	Stud welded pin length (mm)
60	62mm
80	82mm
90	92mm

DuctRock Slab can be cut with an insulation saw. The top and bottom slabs should be cut 10mm wider than the width of the duct to ensure a tight cross joint with the side slabs. The side slabs should be cut to the height of the duct (H) + 2 x the insulation thickness, as shown in Figure 1.



### Top slab

When installed within horizontal applications, the top boards do not require any stud-welded pins and is simply positioned onto the duct with all board joints bonded with FirePro Glue. Board joints must be covered using Black ALU Foil Tape.

# DuctRock Slab

## Side wall slabs

The side wall slabs are installed using stud-welded pins with 350mm maximum centres along the length of the duct, and 400mm centres across the depth, as shown in Figure 2.

Side wall slabs must overlap the top and bottom boards as shown in Figures 3 & 4. All cross joints must be bonded with FirePro Glue.

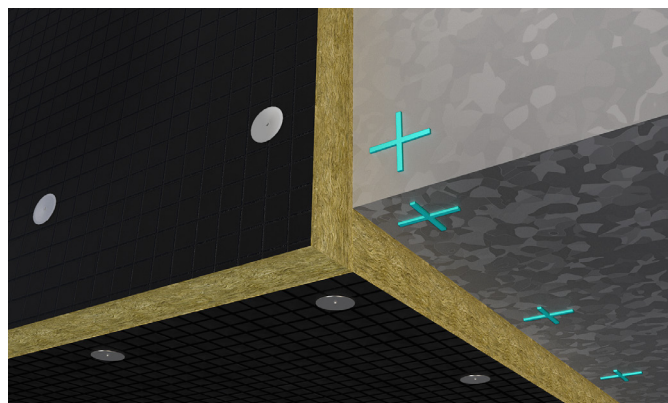
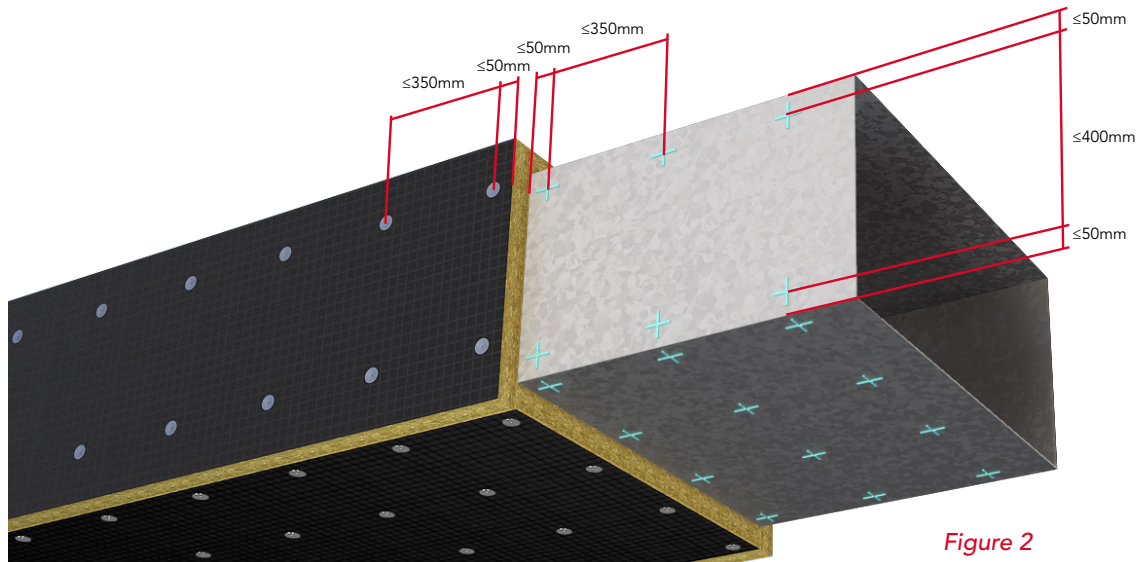


Figure 3  
Cross joint horizontal duct.

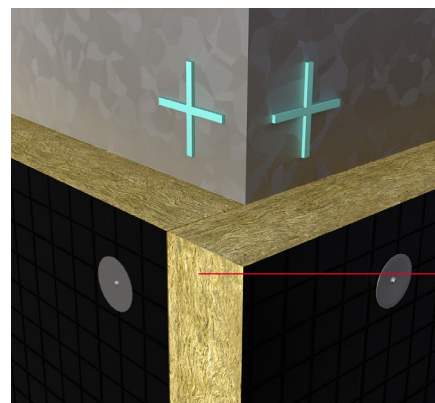


Figure 4  
Cross joint vertical duct.

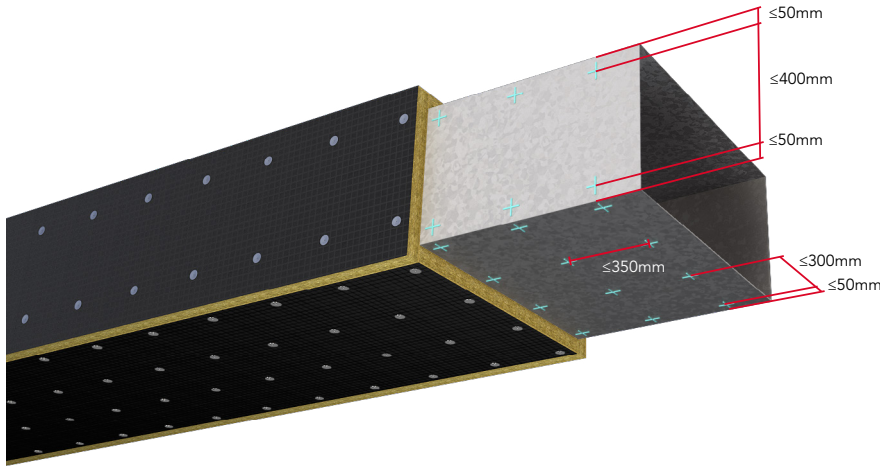
Board edges must be covered with Black ALU Foil Tape.

*Important: To ensure that there is a strong bond between the welded pin and the duct, always ensure that the welded pin is sufficiently isolated from the foil surface of the insulation during welding.*

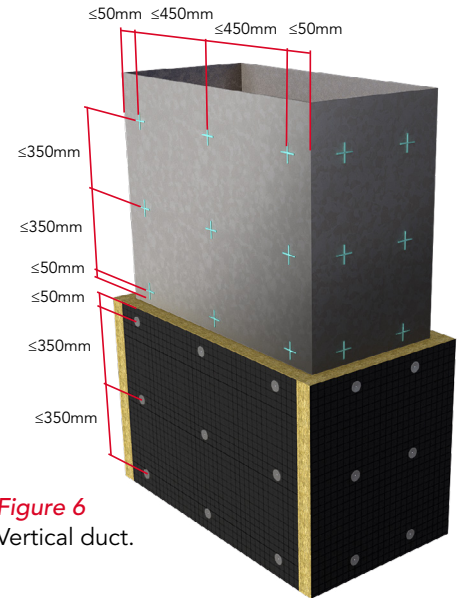
# DuctRock Slab

## Base slab

Install the base slabs with stud-welded pins at a maximum of 350mm centres along the length of the duct, 300mm centres across the width of horizontal ducts, and 450mm across the width of vertical ducts, as shown in Figures 5 and 6.



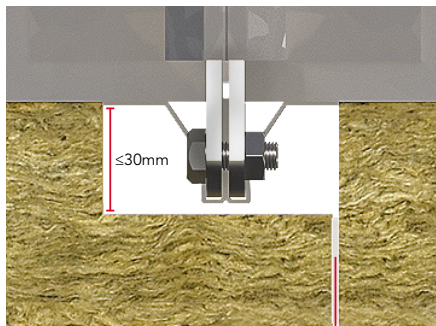
**Figure 5**  
Horizontal duct.



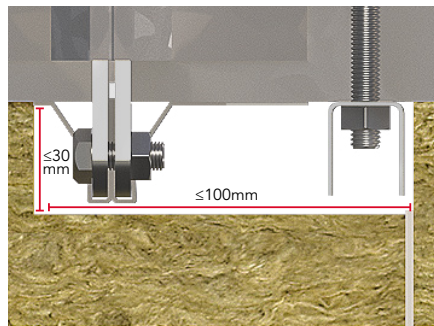
**Figure 6**  
Vertical duct.

## Detailing around flanges and drop rod hangers

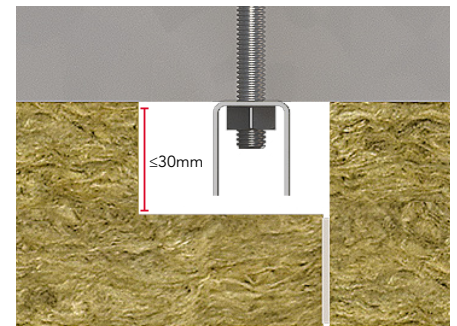
Where the DuctRock Slab bypasses a flange, drop rod hanger, or both, cut a notch into the insulation as shown in Figure 7a-c. The insulation can be cut with an insulation knife or insulation saw. All board joints must be bonded with FirePro Glue.



**Figure 7a**  
Glue the joints with FirePro Glue.



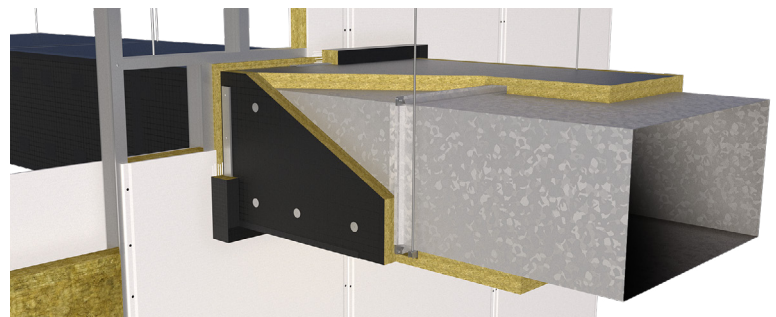
**Figure 7b**



**Figure 7c**

## Dry wall penetration

In order to maintain fire performance, provide stability, and minimise noise transfer, ROCKWOOL have developed a patented solution (EP4073409) for installing DuctRock Slab at the point where the duct penetrates a dry wall system.



**Figure 8**  
ROCKWOOL patented dry wall penetration detail.

# DuctRock Slab

## Installation procedure: Dry wall penetration

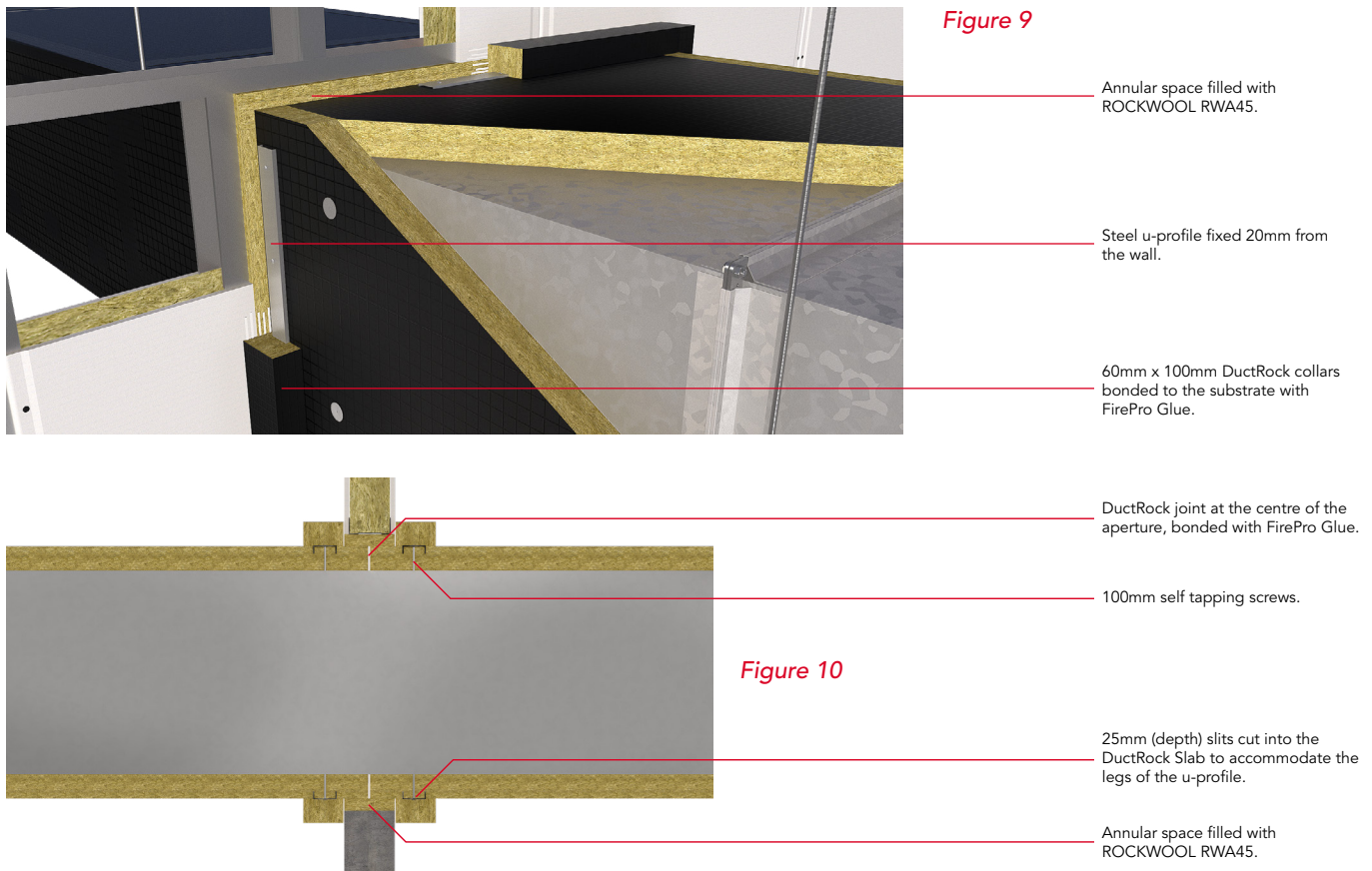
1. A joint in the DuctRock Slab must be accommodated at the centre point of the aperture, as shown in Figure 10.
2. Fill the remaining annular space between the DuctRock Slab and supporting structure of the dry wall system with ROCKWOOL RWA45 as shown in Figure 9.
3. To stiffen the duct around the penetration, a 1.5mm thick steel u-profile (60mm x 25mm) must be fitted approx. 20mm from the wall, to both the vertical and horizontal sides of the duct (both sides of the aperture). The length of the profile can be determined using the following formula:

$$\text{Duct width / height} + (2 \times \text{insulation thickness}) - 50\text{mm}$$

Examples shown in table below:

Duct size (mm)	Insulation thickness (mm)	U-profile length (mm)	
		Horizontal	Vertical
1500 (L) x 1000 (W) x 500 (H)	90	1130	630
1500 (L) x 1000 (W) x 250 (H)	90	1130	380

4. Before applying the u-profile to the DuctRock Slab, slits must be cut into the insulation to allow the profile sides to penetrate the insulation (Figure 10). The u-profile can be attached to the ductwork using 100mm self-tapping screws (four to the top and bottom slabs, and two to the vertical slabs).
5. Once the u-profiles have been applied, an insulated collar must be installed around the perimeter of the aperture. The collar can be cut from the DuctRock Slab. Fix the collars in place with FirePro Glue, as shown in Figure 9. Use nails to temporarily hold the collars in place whilst the glue cures.
6. Black ALU Foil Tape can be used to cover any exposed edges of the collars.



# DuctRock Slab

## Installation procedure: Floor penetration

1. Maintain a 30mm gap between the ductwork and floor structure. Fill the gap between the duct and the floor structure with a ROCKWOOL Slab (e.g. ROCKWOOL RWA45), as shown in Figure 11a. The flexible slab can be sealed within the void using FirePro Glue.
2. Secure the duct to the floor structure using four 50mm x 50mm x 45mm x 2.5mm galvanised steel angles to both sides of the aperture. The angles can be fixed using two 3.2mm x 25mm self-tapping screws. Alternatively, the duct can be secured with a 40mm x 40mm x 3mm L profile as shown in Figure 11b. The length of the L profile should be equal to the width of the duct and installed to both sides (duct width).
3. Apply a DuctRock collar to the perimeter of the aperture and on both sides as shown in Figure 11a. The collars can be fixed using FirePro Glue and temporarily held in place with nails until the glue cures.

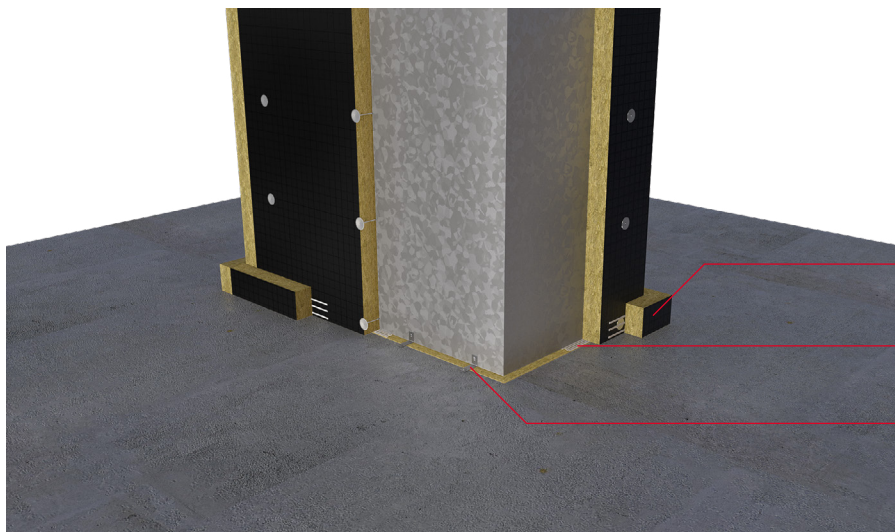


Figure 11a

60mm x 100mm DuctRock collars bonded with FirePro Glue.

Seal the ROCKWOOL Slab within the aperture space with FirePro Glue.

Secure the duct to the substrate using four 50mm x 50mm x 45mm x 2.5mm galvanised steel angles fixed with 3.2mm x 25mm self tapping screws.

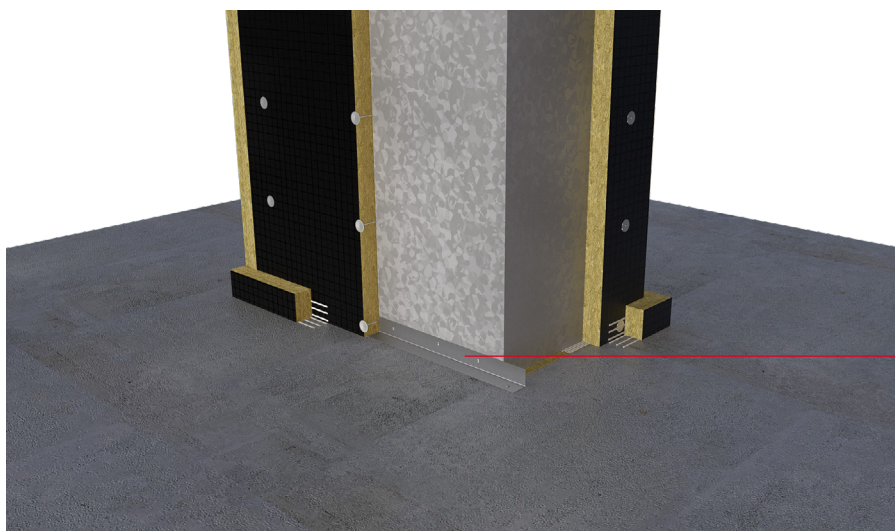


Figure 11b

40mm x 40mm x 3mm galvanised steel L-profile fixed with 3.2mm x 15mm self-tapping screws to the duct, and 7.5mm x 62mm screws to the floor.

# DuctRock Slab

## Elbows

Elbows can be protected by cutting the DuctRock Slab into fan-shaped segments, as shown in Figure 12a. Alternatively, v-shaped slits can be cut into the back of the DuctRock Slab, allowing it to wrap around the elbow as shown in Figure 12b. Fill the v-shaped channels with FirePro Glue before applying to the duct, and use nails to temporarily hold the insulation in place, whilst the glue cures.

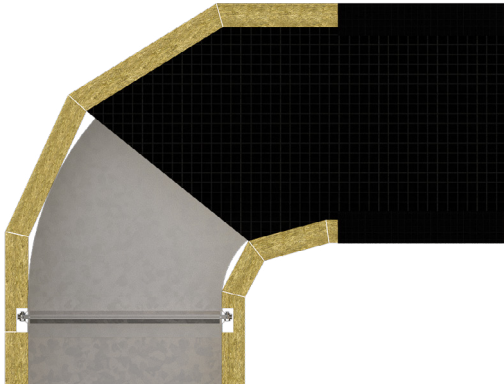


Figure 12a

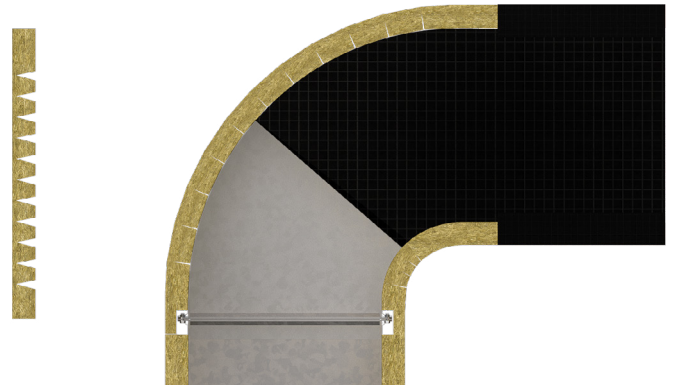
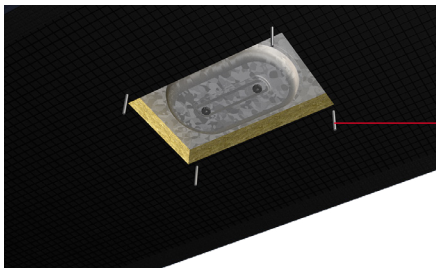


Figure 12b

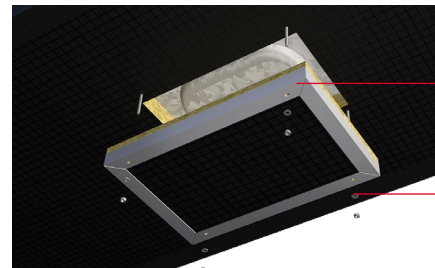
## Access hatches

DuctRock Slab can be cut and positioned within a steel frame to form a removable cover in the location of the steel access hatch. The insulated cover can be attached to the duct using four M8 threaded rods (Figure 13a), ensuring the rods are secured on both sides of the duct. The cover is then fixed to the rods using steel M8 nuts and washers. The thickness of insulation should be appropriate to the fire resistance required.



4 x M8 threaded rods secured to both sides of the duct.

Figure 13a



Steel frame for housing the removable insulated cover.

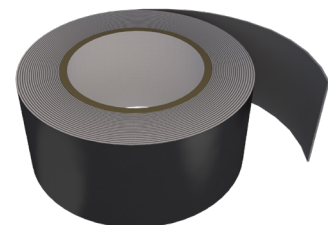
Removable cover secured to the threaded rods with M8 nuts and washers.

Figure 13b

## Ancillaries

FirePro Glue and Black ALU Foil Tape are available from ROCKWOOL stockists.

Stud welded pins and self-tapping screws are available through CEVaC Limited, Tel: +44 (0) 1403 786503.



# DuctRock Slab

## SPECIFICATION CLAUSES

All ductwork is to be insulated with.....\* mm DuctRock Slab, having a factory applied reinforced black aluminium foil to one face, and tested in accordance with BS EN 1366: Part 1 and/or BS EN 1366:Part 8.

DuctRock Slab is to be fixed to the duct using 2.7mm - 3.0mm diameter welded steel pins and 30mm spring steel washers.

All joints are to be filled with FirePro Glue and held tightly closed.

### Installed to steel ductwork which complies with the following specification criteria:

Steel duct dimensions up to 1000mm x 1250mm (height x width) and 1500mm in length.

With leakage class B, in accordance with EN 1507. Further information on leakage classes can also be found in DW/144: Specification for Sheet Metal Ductwork low, medium and high pressure/velocity air systems.

With an under-pressure or over-pressure up to 500Pa.

Steel flanges to be spot welded to the duct:

- Ventilation duct – 20mm flange.
- Smoke extract duct – 30mm flange.

Flanges to be held together with either a 20mm flange joint profile (duct types A & B) or 30mm flange joint profile (duct type C). All flange joints to be sealed with sealing grease.

With stiffeners as follows:

- EI 120 – Ventilation duct: 1 x 15 Ø mm steel pipe in each duct segment.
- EI 120 – Smoke extract duct: 2 x 15 Ø mm steel pipes in each duct segment.

Sealed with and appropriate duct sealant and 5mm x 15mm EPDM tape.

The duct suspension system complies with the following specification criteria:

### Horizontal ducts:

Fire resistance	Max tensile stress of suspension device	Max shearing stress of screws	Max distance from suspension device to duct joint
EI 30	9 N/mm <sup>2</sup>	15 N/mm <sup>2</sup>	150mm
EI 60	9 N/mm <sup>2</sup>	15 N/mm <sup>2</sup>	150mm
EI 90	6 N/mm <sup>2</sup>	10 N/mm <sup>2</sup>	150mm
EI 120	6 N/mm <sup>2</sup>	10 N/mm <sup>2</sup>	150mm
EI 120 (Smoke extract)	6 N/mm <sup>2</sup>	10 N/mm <sup>2</sup>	150mm

With distance between suspension devices not exceeding 1500mm.

The lateral distance between the outer vertical surface of the steel duct and the centre line of the suspension rod shall not exceed 50mm.

### Vertical ducts:

With distance between supporting structures not exceeding 5m.

# DuctRock Slab

Any duct penetrations comply with the following specification criteria:

## Horizontal:

Penetrating in rigid wall constructions or flexible walls with a minimum thickness of:

- EI 30 – 70mm.
- EI 60 – 95mm.
- EI 90 – 95mm.
- EI 120 – 130mm.

**And with a fire resistance equal to or greater than the tested DuctRock Slab thickness.**

For horizontal penetrations, the gap between the DuctRock Slab and supporting structure will not exceed 20mm.

For horizontal penetrations U-profiles 1.5mm thick, with dimensions 60mm x 25mm must be installed approximately 20mm from the wall and on both sides of the wall. The legs of the u-profiles are lowered into slits cut into DuctRock Slab and fixed to the duct by means of:

4.8 Ø mm x 100mm for EI 30 & EI 120.

Self-tapping screws; four on the top and bottom profiles, and two on the vertical profiles.

## Vertical:

Penetrating rigid floor constructions with a minimum thickness of:

- EI 30 – 100mm.
- EI 60 – 100mm.
- EI 90 – 150mm.
- EI 120 – 150mm.

**And with a fire resistance equal to or greater than the tested DuctRock Slab thickness.**

For vertical penetrations, the duct is to be stabilised using four 'L' galvanised steel angles of 50mm x 50mm x 45mm x 2.5mm, or a 40mm x 40mm x 3mm L profile, which are fixed to the vertical steel duct and the supporting structure on both sides of the floor.

The NBS clauses that include DuctRock Slab can be found on NBS Source: [source.thenbs.com](https://source.thenbs.com)

### LEGAL NOTICES

#### General safety requirements – Building Safety Act 2022

ROCKWOOL Limited is committed to supporting specifiers, resellers, and users of ROCKWOOL products for the full life cycle of the product to comply with the obligations and responsibilities set out in the Building Safety Act 2022. With regard to the general safety requirements of the Act, ROCKWOOL Limited cannot control or foresee every situation where its products might be used. We therefore strongly advise that specifiers, resellers, and users contact us where use of ROCKWOOL products is contemplated in applications different from those explicitly described in the latest, relevant ROCKWOOL product datasheets; especially in applications that can be reasonably foreseen as critical to safety.

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#### The ROCKWOOL Trademark

ROCKWOOL® – our trademark

The ROCKWOOL trademark was initially registered in Denmark as a logo mark back in 1936. In 1937, it was accompanied with a word mark registration; a registration which is now extended to more than 60 countries around the world.

The ROCKWOOL trademark is one of the most important assets of the ROCKWOOL Group, and is therefore well-protected and defended by ROCKWOOL throughout the world.

If you require permission to use the ROCKWOOL logo for your business, advertising or promotion, you must apply for a Trade Mark Usage Agreement.

To apply, write to:  
[marketcom@rockwool.com](mailto:marketcom@rockwool.com)

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To apply, write to:  
[marketcom@rockwool.com](mailto:marketcom@rockwool.com)

### HEALTH & SAFETY

A Material Safety Data Sheet is available and can be downloaded from [rockwool.com/uk](http://rockwool.com/uk) to assist in the preparation of risk assessments, as required by the Control of Substances Hazardous to Health Regulations (COSHH).

# DuctRock Slab

Company:	ROCKWOOL Limited
Version:	Version 3.02 February 2026 <i>(to check this is the latest version, please refer to <a href="https://rockwool.com/uk">rockwool.com/uk</a>)</i>
Revised on:	28.01.2026
Product name:	DuctRock Slab
Replaces version:	Version 3.01 January 2025
Changes made:	<ul style="list-style-type: none"><li>• Updated version control information</li><li>• Updated product names</li><li>• Updated images</li></ul>
Additional information:	

*Please ensure you are using the latest version of this document by verifying it on our official website. Do not rely on printed or previously downloaded copies, as these may be out of date.*

*Please contact the ROCKWOOL Technical Support Team if you would like to access archived versions of this document.*

# DuctRock Slab

## ROCKWOOL stone wool – safe to install and live alongside

There are no hazardous classifications associated with stone wool insulation manufactured by ROCKWOOL UK according to EU REACH and UK REACH regulations on health and the environment.

ROCKWOOL safe use instruction sheets and material safety data sheets (where applicable) can be downloaded [here](#).



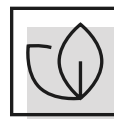
### Sustainability

ROCKWOOL products are used to help enrich modern living, supporting more resilient and comfortable buildings.

We transform abundant, natural volcanic rock into stone wool insulation products that help our customers tackle energy consumption, noise pollution, fire resilience, and climate change challenges such as water scarcity and flooding.

Since our stone wool is endlessly recyclable with no loss in its performance properties, we can take back clean, uncontaminated new off-cuts, and unused ROCKWOOL stone wool insulation from construction sites in the UK. Our service, Rockcycle®, takes back our stone wool and recycles it back into production where it is used to make new ROCKWOOL products.

Our annual sustainability reports, which set out progress against our sustainability goals and further details of the positive impacts of using our products, can be found on our website.



### Environment

ROCKWOOL takes a fact-based, auditable approach to documenting our progress in maximising our products' positive impact and minimising the effect our operations have on the environment, backed by third-party references and methodologies. Further details can be found online in our annual sustainability report.

Our high-tech production process uses filters, pre-heaters, after-burners, and other cleaning and collection systems that help to reduce the effects of our manufacturing operations on the environment.

ROCKWOOL stone wool insulation does not contain (and has never contained) gases that have ozone depletion potential (ODP) or global warming potential (GWP).

