ROCKWOOL®

Fire Protection

Installation Guide

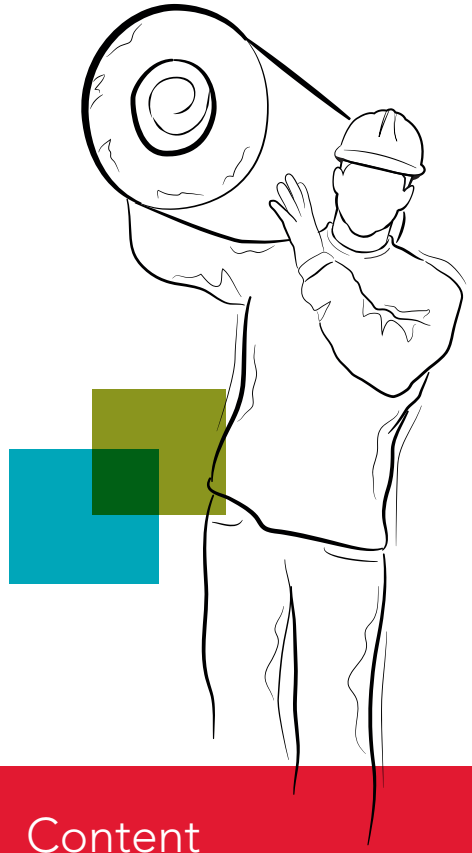
ROCKWOOL CONLIT® Fire Protection





VERSION: MAY 2019

To install a proper fire insulation, you must follow the instructions in this guide



The products are tested and classified according to EN13501-3:2005

CONLIT is the solution

ROCKWOOL has designed an even better system for fire insulation of ventilation ducts. CONLIT Fire Mat and CONLIT Fire Board cover a wide range of fire classes. The products are made of non-combustible stone wool. Both the wire mat and the fire board are covered with a black coating for a better and more user-friendly finish, forfilling the high demands for aesthetics today.



Content

Installation guide:

3 **Circular ducts with the product** CONLIT Fire Mat

4 **Rectangular ducts with the product** CONLIT Fire Mat

5 **Rectangular ducts with the product** CONLIT Fire Board

Assortment

Fire classes
Our new product range is a complete system covering all fire classes. See which products to use in order to achieve the desired fire protection in the table below.

CONLIT Fire Mat		
EI30/E60	50 mm	Black aluminum foil
EI30/EI60, rectangular ducts	60 mm	Black aluminum foil
EI60	80 mm	Black polyester fleece
EI90	80 mm	Black polyester fleece

CONLIT Fire Board		
EI30/E60	60 mm	Black aluminum foil
EI60	60 mm	Black aluminum foil
EI90	80 mm	Black aluminum foil
EI120	90 mm	Black aluminum foil

Fast and easy installation

A new smart overlap at the ends of the rolls ensures a nicer and consistent result. And with a black alu tape seal even the joints on the boards become invisble.

Installation of ducts
DS428, 4th edition, "Code of pratice for technical measures for fire protection of ventilation systems" states the following regarding fire protection of suspensions:

3.11(4)P
For fire insulated ducts the distance between suspensions as well as the tension must be designed in accordance to the instructions from the manufacturer of fire insulation.

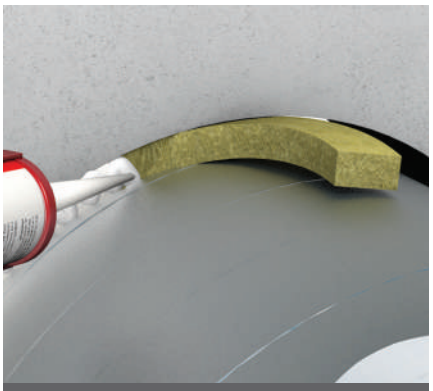
Design of suspension
The tensile stress of the bearings must not exceed 9 N/mm² (cold). Distance between bearings and cross-sections must be determined by the duct manufacturer and / or specifier. ROCKWOOL A/S is available for additional information.

CONLIT Fire Mat

Installation of circular ducts

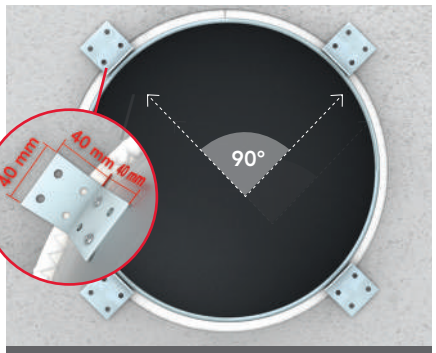
Applicable to both horizontal and vertical ventialtion ducts

1 Sealing around the gap



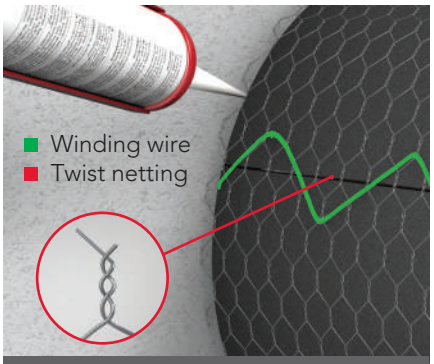
Fill the gab with CONLIT Fire Mat and seal with CONLIT Glue. The gap must not exceed 20 mm.

2 Brackets



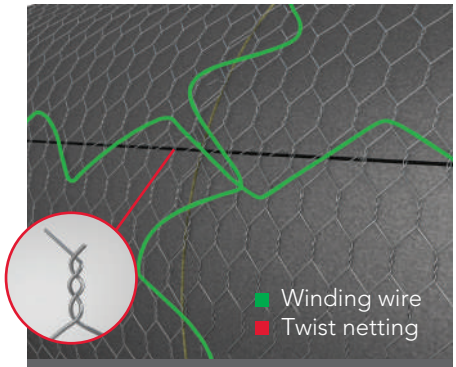
On both sides of the penetration 4 brackets are fastened to the duct with 2 self-tapping screws in each. Brackets min. 40x40x40x3. Must have a min. of 20 mm overlap in wall/deck. Screws 3.2x25mm

3 Seal against wall or deck



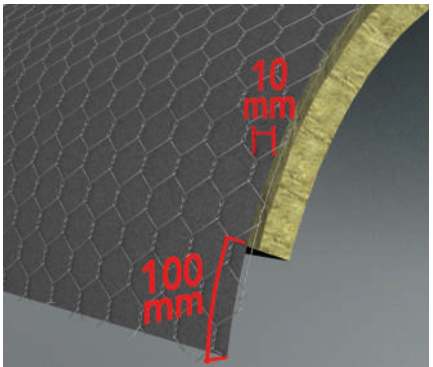
Install CONLIT Fire Mat and connect the joints with either winding wire, twisted netting or metal rings. Stick the mat to the wall or deck with CONLIT Glue

4 Joints

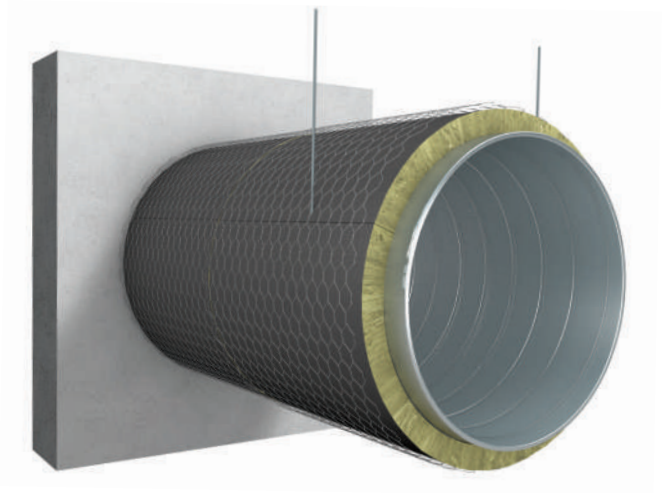


Install CONLIT Fire Mat and connect all joints (longitudinal and transverse) with either winding wire, twisted netting or metal rings. Minimum 6 joints per. running meter

5 Overlap



Overlap of the foil at both ends and sides, make the installation easier.



ROCKWOOL products:

– CONLIT Fire Mat
– CONLIT Glue
– CONLIT Tape

Accessories:

– Brackets and screws
– VWinding wire, min. 0,7 mm

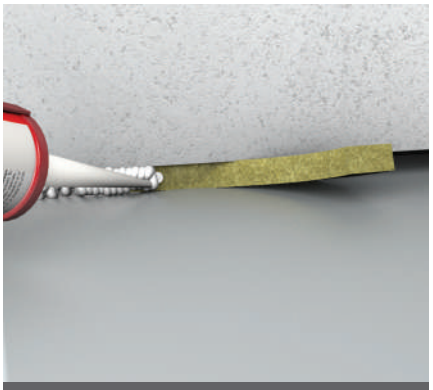
	Thickness
EI30/E60	50 mm (Black alu foil)
EI60	80 mm (Black polyester fleece)
EI90	80 mm (Black polyester fleece)

CONLIT Fire Mat

Installation of rectangular ducts

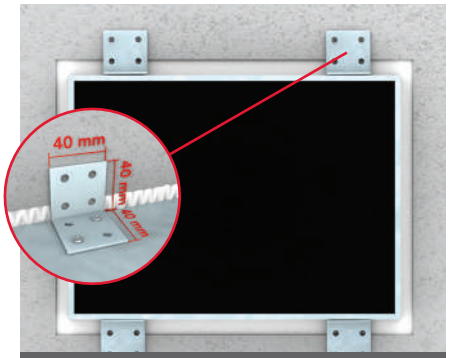
Applicable to both horizontal and vertical ventialtion ducts

1 Sealing around the gap



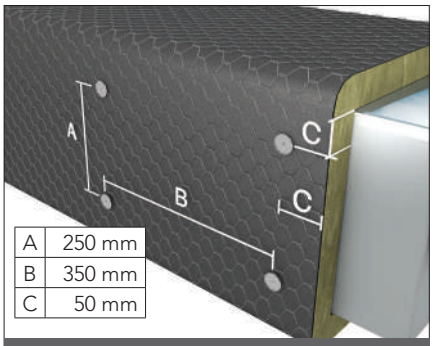
Fill the gab with CONLIT Fire Mat and seal with CONLIT Glue. The gap must not exceed 20 mm.

2 Brackets



On both sides of the penetration 4 brackets are fastened to the duct with 2 self-tapping screws in each. Brackets min. 40x40x40x3. Must have a min. of 20 mm overlap in wall/deck Screws 3.2x25mm

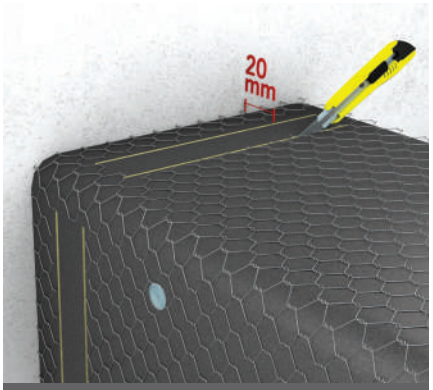
3 Positioning of welding pins



A	250 mm
B	350 mm
C	50 mm

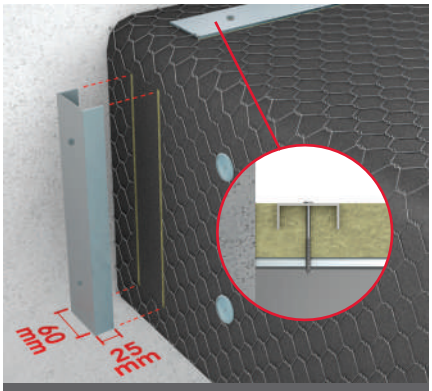
Install CONLIT Fire Mat 60. On the bottom surface for horizontal ducts and all 4 sides of vertical ducts, the insulation is attached with welding pins as shown above. Distances shown are maximum.

4 Cut to U-profil



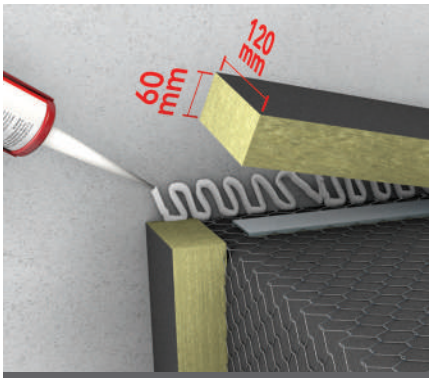
For horizontal ducts only, cut 2 slits into in the insulation on all 4 sides of the duct as shown above. Stick the mat to the wall or deck with CONLIT Glue.

5 U-Profil

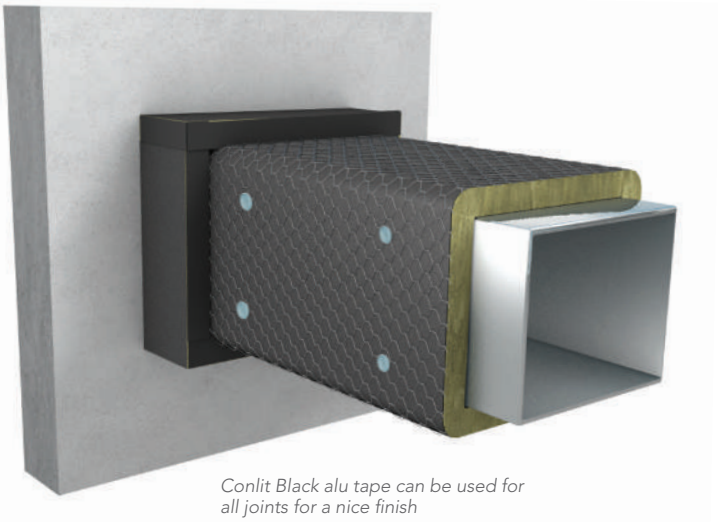


For horizontal ducts only, the U-profile is mounted in the slits and are attached to the duct with self-tapping screws per 300 mm, but min. 2 in each.

6 Insulation collar



Glue the collar to the wall/deck with CONLIT Glue. Attach the collar to the duct with welding pins. The collar is made of CONLIT Fire Mat 60.



Conlit Black alu tape can be used for all joints for a nice finish

ROCKWOOL products:

– CONLIT Fire Mat 60
– CONLIT Glue
– CONLIT Tape

Accessories:

– Brackets and screws
– Winding wire, min. 0,7 mm
– U-profil and screws

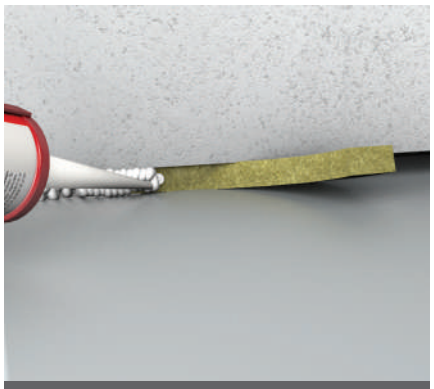
	Thickness
EI30/E60	60 mm (Black alu foil)

CONLIT Fire Board

Installation of rectangular ducts

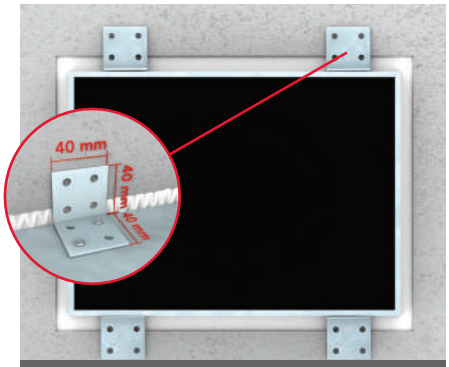
Applicable to both horizontal and vertical ventialtion ducts, based on EI30/ E60. For EI60, EI90 and EI120 pay attention to notes.

1 Sealing around the gap



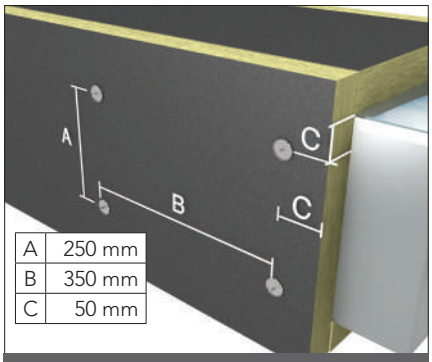
Fill the gab with CONLIT Fire Board and seal with CONLIT Glue. The gap must not exceed 20 mm

2 Brackets



On both sides of the penetration 4 brackets are fastened to the duct with 2 self-tapping screws in each. Brackets min. 40x40x40x3.Must have a min. of 20 mm overlap in wall/deck. Screws 3.2x25mm

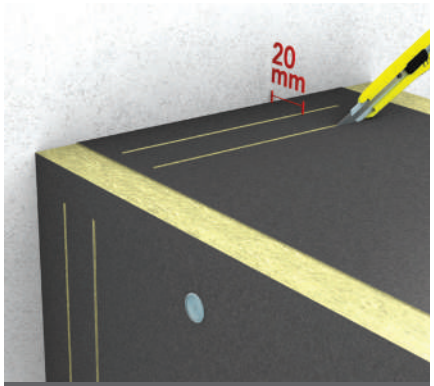
3 Positioning of welding pins



A	250 mm
B	350 mm
C	50 mm

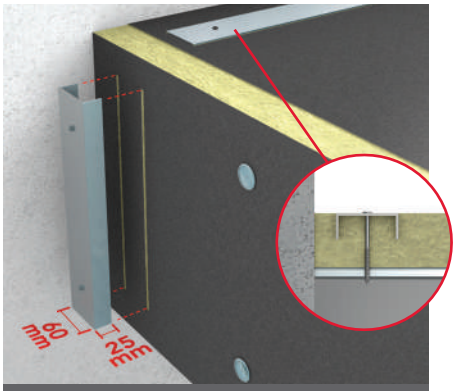
Install CONLIT Fire Board. On all 4 sides of the ducts the insulation is welded with pins as shown above. The stated distances are maximum.

4 Cut to U-profil



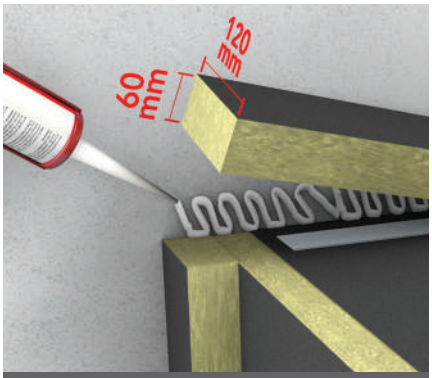
For horizontal ducts only, cut 2 slits into in the insulation on all 4 sides of the duct as shown above. Stick the board to the wall or deck with CONLIT Glue.

5 U-profil



For horizontal ducts only, the U-profile is mounted in the slits and are attached to the duct with self-tapping screws per 300 mm, but min. 2 in each.

6 Insulation collar



Glue the collar to the wall/deck with CONLIT Glue. Attach the collar to the duct with welding pins. The collar is made of CONLIT Fire Board.



Conlit Black alu tape can be used for all joints for a nice finish

ROCKWOOL products:

– CONLIT Fire Board
– CONLIT Glue
– CONLIT Tape

Accessories:

– Brackets and screwsr
– U-profil og screws

	Thickness
EI30/E60	60 mm (Black alu foil)
EI60	60 mm (Black alu foil)
EI90	80 mm (Black alu foil)
EI120	90 mm (Black alu foil)

Note: For EI60, EI90 and EI120 all product joints have to be glued with CONLIT glue.

At the ROCKWOOL Group, we're committed to enriching the lives of everyone who experiences our solutions. Our expertise is perfectly suited to tackle many of today's biggest sustainability and development challenges, from energy consumption and noise pollution, to fire-resilience, water scarcity and flooding. Our range of products reflect the diverse needs of the world, while supporting our stakeholders in reducing their own carbon footprint.

Stone wool is a versatile material and forms the basis of all our businesses. With over 11,000 passionate colleagues in 39 countries, we're the world leader in stone wool solutions, from building insulation to acoustic ceilings; external cladding systems to horticultural solutions; engineered fibres for industrial use to insulation for the process industry – as well as marine and offshore

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