

Ductwrap and Ductslab

Tools required

- Sharp insulation knife
- Insulation saw
- Tape measure
- Snips

Ancillary products

Self adhesive aluminium foil tape, stick pins, 19 - 22 SWG x 50mm mesh galvanised wire netting or aluminium bands

Fixing and application

Typical specification clauses for ductwork

The following specifications are for guidance purposes only and should be read in conjunction with recommendations given in BS 5970.

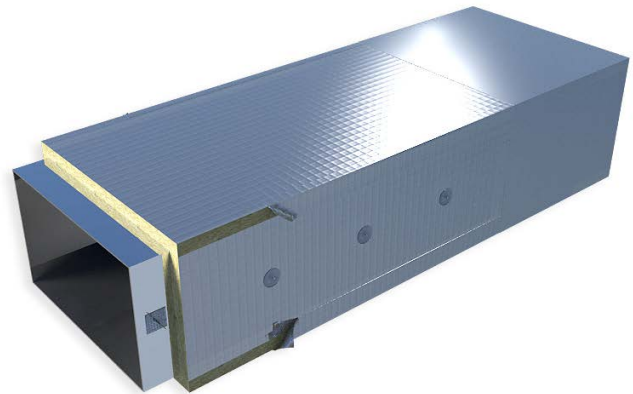
1. External applications (weather protected)

The duct insulation is to be Ductslab manufactured by ROCKWOOL Limited, Pencoed, Bridgend, CF35 6NY, secured to the ducting by means of a suitable adhesive and/or self-adhesive stick pins*, applied in accordance with the manufacturer's recommendations.

All joints are to be securely taped with 75mm wide plain soft aluminium foil self-adhesive tape (Idenden type T303, or similar and approved) to maintain a continuous vapour barrier. The final surface treatment is to be as diagram opposite.

Note: The pins and washers are necessary to avoid sagging of the insulation, particularly on larger size ducts and on the undersides of ducts. Fixing centres will depend on the size of the duct and the weight of the insulating material. The excess projection of the pins above the washers should be cut off and the washer sealed using the soft aluminium self-adhesive tape to maintain the integrity of the vapour barrier. The maximum surface temperature of the ductwork should not exceed the recommended maximum service temperature of the self-adhesive stick pins.

(Guidance should be sought from the manufacturer of the stick pins).



External application of Ductslab with weather protection

a. Flat aluminium zinc coated steel protection

- Mild steel sheet continuously hot dipped with 185g/m² aluminium-zinc coating to BS EN 10326 and BS EN 10327, applied directly to insulating material.
- 0.4mm thick flat sheet.
- Fixed and installed in accordance with BS5970.

b. Ribbed aluminium-zinc coated steel protection

- Mild steel sheet continuously hot dipped with 185g/m² aluminium-zinc coating to BS EN 10326 and BS EN 10327, applied directly to insulating material.
- 0.4mm thick ribbed sheet .
- Fixed and installed in accordance with BS5970.

c. Aluminium sheeting protection

- Apply flat (embossed) or profiled aluminium cladding directly to insulating material.
- 0.56mm thick on pipework.
- 0.71mm thick on ductwork.
- Fixed and installed in accordance with BS5970.

d. Mild steel sheet

- Mild steel sheet continuously hot dipped with aluminium-zinc coating to BS EN 10326 and BS EN 10327, applied directly to insulating material.
- Fixed and installed in accordance with BS5970.

e. Self adhesive weather resistant zero perm multi-layer laminate

- Apply multi-layer laminate directly over ducts and pipework, ensuring 75mm overlap for a complete vapour barrier.
- Fixed and installed in accordance with BS5970.

f. Polyisobutylene

- Polyisobutylene, minimum thickness 0.8mm. Fixed and installed in accordance with BS5970.

g. Roofing felt protection

- Secure in position with galvanized wire netting, of 1mm x 25mm mesh. Finish with two coats of black bituminous paint.
- Fixed and installed in accordance with BS5970.

NBS Clauses

ROCKWOOL Ductslab and Ductwrap are associated with the following NBS Clauses:

T90 Heating systems – domestic

- 390 Feed and expansion cisterns

U90 General ventilation - domestic

- 490 Site applied insulation to ductwork

Y30 Mechanical Thermal Insulation

- 340 Mineral fibre insulation slabs

2. Horizontal ducts concealed from view

To be insulated with ROCKWOOL Ductwrap/ Ductslab, nominal density 45 kg/m³, having a factory applied reinforced aluminium foil facing. Joints to be securely taped with 75mm minimum wide soft aluminium self adhesive tape. The insulation on the underside of the ducting to be additionally secured by suitable insulation hangers at 300mm centres.

The whole to be further supported by means of:-

- 19-22 SWG x 50mm mesh galvanised wire netting. Where a vapour barrier is required, care to be taken when applying wire mesh support to avoid damaging the aluminium foil.

or

- Aluminium Bands, circumferential at nominal 300mm centres. Bands located over the outer surface typically 50mm from the circumferential joint of the Ductwrap and Ductslab. Do not over tighten the aluminium bands, as this will locally reduce the thickness of the insulation and reduce the thermal efficiency.

Note: Additional measures may be necessary to prevent sagging

or

Subject to the client's approval, alternative fixings can be used in place, or alongside the above.

Other installation information

For operating temperatures below ambient a vapour barrier is required.

Provision should be made at all exposed edges to ensure continuation of the aluminium foil to the duct surface. Aluminium foil to be secured with 75mm wide aluminium self-adhesive tape (i.e. Idenden T303 or similar and approved).

Where support pins/hangers puncture the foil, they should be sealed using aluminium foil tape to maintain the vapour barrier.

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.