



Non-combustible stone wool insulation for ductwork

Manufactured from non-combustible stone wool insulation, DuctSlab is a semi-rigid slab, whereas DuctWrap is a lightweight flexible roll.

Both products come with a vapour-resistant reinforced aluminium foil facing.

- Acoustically absorbent
- Non-combustible
- Water repellent
- Easy to handle and install



ROCKWOOL DuctWrap and DuctSlab provide thermal insulation for air conditioning, warm air and extract ducts.

For more information visit rockwool.com/uk

Pencoed, Bridgend CF35 6NY Tel: (+44) 1656 862 621 • technical.solutions@rockwool.com



APPLICATIONS

ROCKWOOL DuctWrap and DuctSlab are designed for the thermal insulation of ductwork and water storage tanks.

Product required per metre of duct

The formulae to determine the length of DuctWrap or DuctSlab are shown to the right.

The required thickness of DuctWrap and DuctSlab insulation will depend on such factors as duct air temperatures, ambient air temperatures and the designed heat losses.

For further information, please see the tables in the ROCKWOOL Guide to BS 5422: 2023.



PERFORMANCE

Fire

The products are classified A1 in accordance with BS EN 13501-1 and are non-combustible.

Thermal

| Temperature | 10°C | 50°C | 100°C | 150°C | 200°C |
|-------------------|-------|-------|-------|-------|-------|
| DuctSlab λ (W/mK) | 0.035 | 0.042 | 0.054 | 0.069 | 0.086 |
| DuctWrap λ (W/mK) | 0.034 | 0.040 | 0.050 | 0.063 | 0.079 |

Service temperature and limiting surface temperature

ROCKWOOL DuctWrap and DuctSlab are certified for service temperatures of up to 230°C.

In order to maintain the bond strength of the foil facing, the insulation thickness should be specified to maintain a maximum outer surface temperature no greater than 80°C.

Acoustic performance

DuctSlab and DuctWrap absorb sound and vibration, and when combined with an outer cladding or mass layer, can improve the sound insulation of ductwork.

Contact ROCKWOOL Technical for more information.

PRODUCT INFORMATION

Dimensions

For current size availability, please see the latest version of the ROCKWOOL Price List.

STANDARDS AND APPROVALS

Certificates

DuctWrap and DuctSlab products are CE marked in accordance with BS EN 14303. For more information please visit rockwool.com/uk/dop

DuctWrap and DuctSlab can be used to satisfy the requirements of BS 5422 'Method for specifying thermal insulating materials'.

The product has been authorised for use in LUL surface and sub-surface premises when installed in accordance with this data sheet - please refer to the LUL Approved Product Register website www.LU-apr.co.uk for specific details.



SPECIFICATION CLAUSES

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) to maintain a continuous vapour barrier. The final surface treatment is to be:



External application of DuctSlab with weather protection

*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).

| a) Flat aluminium zinc coated steel protection | Mild steel sheet continuously hot dipped with 185g/m ² aluminium-zinc coating to BS EN 10326 applied directly to insulating material. 0.4mm thick flat sheet. Fixed and installed in accordance with BS 5970. |
|--|---|
| b) Ribbed aluminium-zinc coated steel protection | Mild steel sheet continuously hot dipped with 185g/m ² aluminium-zinc coating to BS EN 10326 applied directly to insulating material. 0.4mm thick ribbed sheet. Fixed and installed in accordance with BS 5970. |
| 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 BS 5970. |
| d) Mild steel sheet | Mild steel sheet continuously hot dipped with aluminium-zinc coating to BS EN 10326 applied directly to insulating material. Fixed and installed in accordance with BS 5970. |
| 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 BS 5970. |
| f) Polyisobutylene | Polyisobutylene, minimum thickness 0.8mm. Fixed and installed in accordance with BS 5970. |
| 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 BS 5970. |

NBS clauses

ROCKWOOL DuctWrap and DuctSlab 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 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.
N.B. 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.

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).

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

BUILDING SAFETY AND PRODUCT USE

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.

ROCKWOOL Limited reserves the right to amend the specification of its products without notice. Changes to the ROCKWOOL manufacturing process, or to pertinent regulations, may be reflected in changes to tested and certified product performance. Whilst ROCKWOOL Limited endeavours to keep its publications up to date, readers will appreciate that between publications there may be pertinent changes in the law or other developments affecting the accuracy of the information contained in our publications.

ROCKWOOL Limited does not accept responsibility for the consequences of using (including testing or certifying) its products in applications different from those explicitly described in the relevant ROCKWOOL product datasheets. Expert advice should be sought, and ROCKWOOL Limited should be contacted, where such different use is contemplated, or where the extent of any use described by ROCKWOOL Limited is in doubt.

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

Trademarks

Registered trademarks of the ROCKWOOL Group include but are not limited to:

ROCKWOOL[®], RockClose[®], RainScreen Duo Slab[®], HardRock[®], RockFloor[®] Flexi[®], RockFall[®], FirePro[®], DuctRock[®], BeamClad[®], NyRock[®]

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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 enrich modern living, creating safer, healthier and more climate-resilient communities.

We transform abundant, natural volcanic rock into stone wool insulation products that are used to reduce energy demand, lower fuel bills and help address society's climate change challenges.

ROCKWOOL stone wool insulation is recyclable and can be transformed into new ROCKWOOL products. Please contact us for details of how we can work together to recycle waste ROCKWOOL stone wool material that may be generated during on-site installation.

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).

