



Application type **Thermal and acoustic**

Construction type **Ducts and pipes**



ROCKWOOL

Techwrap2 and Techtube

High performance acoustic solutions for pipes and equipment

Rockwool Techwrap2 and Techtube form part of a range of high performance Rockwool acoustic insulation products.

Techwrap2 and Techtube are pre-covered with Rockwool Acoustic Membrane and reinforced aluminium foil, engineered to provide the highest standard of noise control to circular and rectangular ductwork, rainwater, soil-vent, service and process pipes.

Because isolation of the mass layer from the underlying surface is critical to acoustic performance, Techwrap2 and Techtube have been designed to maintain their original thickness subsequent to installation.

Advantages

- Thickness maintained at corners, bends and fixing locations to maintain superior acoustic performance
- Single application of materials
- Easy to handle and install
- Excellent thermal insulation properties

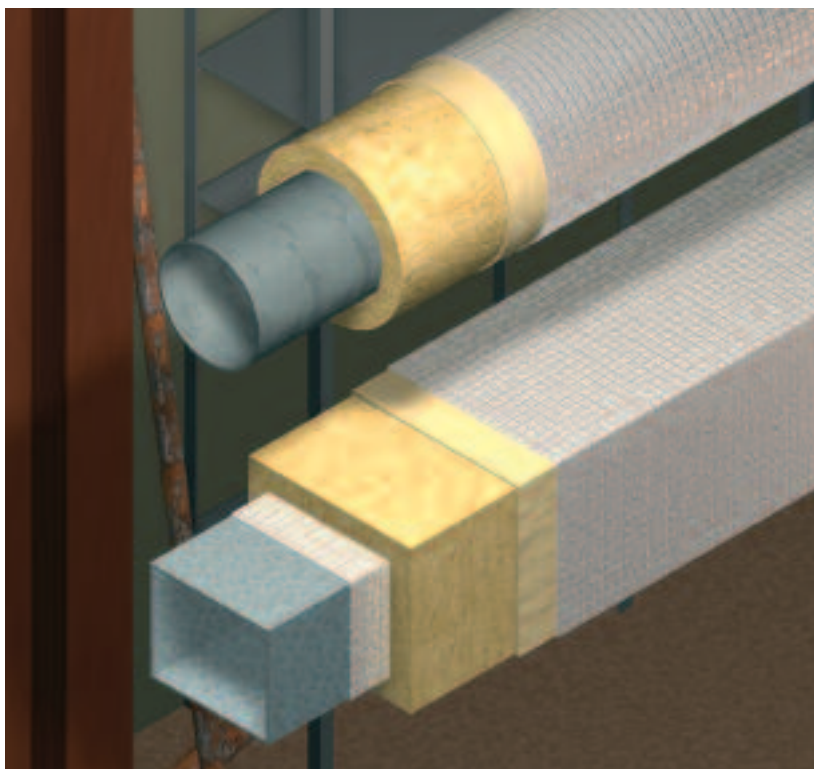
Description

Techwrap2 is constructed from strips (lamellae) of Rockwool bonded on edge to Rockwool Acoustic Membrane to provide high resistance to compression:

- Reinforced aluminium foil (inner)
- Rockwool lamella acoustic insulation
- Rockwool Acoustic Membrane
- Reinforced aluminium foil (outer)

Techtube is a strong pre-formed Rockwool pipe section pre-covered with Rockwool Acoustic Membrane:

- Rockwool pipe section
- Rockwool Acoustic Membrane
- Reinforced aluminium foil (outer)



High performance Techwrap2 and Techtube constructions

Applications

Techwrap2 is ideally suited for use on ducts, enclosures and larger diameter pipes and Techtube for use on rainwater, soil-vent, service and process pipes.

Service temperatures

Techwrap2 and Techtube can be used to provide thermal and acoustic insulation to pipes and equipment operating at temperatures in the range 0°C to 230°C. The outer facing temperatures should not exceed 80°C. At temperatures below ambient, the foil facing must be continued onto the pipe surface in order to maintain the vapour barrier.

Dimensions

Techwrap2	
length	1000, 2000 mm
width	1000 mm
Rockwool thickness	25, 40, 50 mm
mass Layer	5, 10 kg/m ²

Techtube	
length	1000 mm
to suit pipe OD	17 to 610 mm
Rockwool thickness	20 to 100 mm*
mass layer	5, 10 kg/m ²

*Some combinations of OD and thickness may not be available.

Other forms of insulation, sizes, thicknesses, mass layer types and surface weights may be available to special order.

Installation

General

Rockwool Acoustic Membrane should be positioned outermost from the sound source and overlapped at all joints.

Techwrap2

Techwrap2 should be cut 25 mm oversize and a 25 mm strip of Rockwool removed to create an overlap. All cutting operations can be completed using a sharp knife.

75 mm wide plain aluminium foil self-adhesive tape should be used to seal the joints.

Fixings

Welded or mechanically attached steel pins should be used to fix Techwrap2 to the duct. However, subject to the manufacturer's approval, adhesive applied insulation hangers may be used in place of welded pins. Particular attention should be paid to support of the Techwrap2 at joint locations and where sagging may occur, eg in 'soffit' areas.

The number of pins required will depend upon size and orientation of the duct. However, where pins are employed at Techwrap2 edges, 4 number are recommended at 1000 mm edges and 7 number at 2000 mm edges. Additional 'lines' of pins should be at nominal 300 mm spacings.

Techtube

All joints should be taped with self-adhesive aluminium foil tape. Techtube is generally secured with aluminium bands at approximately 200 mm maximum centres.

Work on site

Techwrap2 and Techtube are easily cut to shape with a sharp knife.

Fire performance

The base materials of Techwrap2 and Techtube are rated non combustible in accordance with ISO 1182.

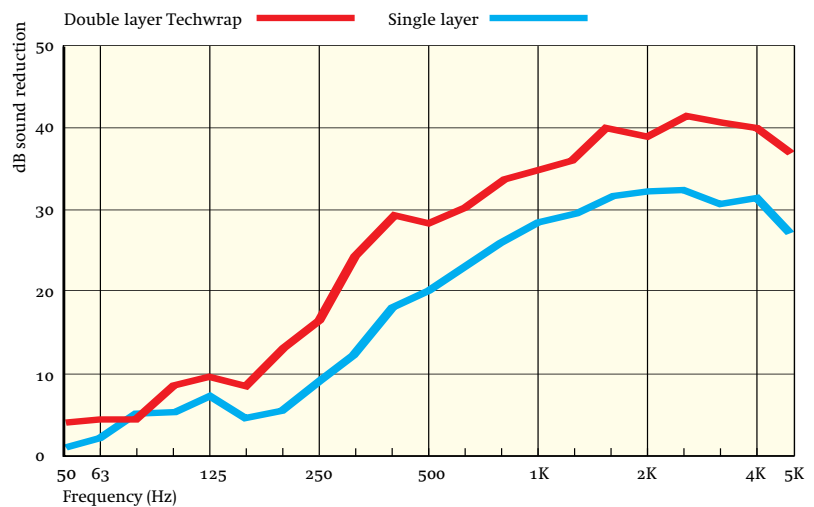
Thermal conductivity

Techwrap2	0.039 W/mK
Techtube	0.033 W/mK

(at 10 °C mean product temperature)

Test programme and results

Rockwool Techwrap has been independently tested at the Acoustical Investigation & Research Organisation (AIRO) laboratory.



dB improvements through 0.8 mm steel duct for single and double layers of Techwrap

The test programme conducted at AIRO was designed to indicate as closely as possible the true-to-life acoustic performance of Techwrap when applied to ductwork. Techwrap was installed in-situ on a 6 mm length of 600 mm × 1000 mm duct. As expected, sound leakage was noted at inaccessible duct bearer locations during the test. As with other likely on-site irregularities, this leakage may not have been adequately represented by a more simple flat panel test. To show the actual improvements provided by Techwrap, the noise reduction provided by the original 'untreated' duct is excluded from the above graph.

Environment

Rockwool products rely on trapped air for their thermal properties, which has neither ozone depleting nor global warming potential.

Health and safety

Current HSE 'CHIP' Regulations and EU directive 97/69/EC confirm the safety of Rockwool mineral wool; Rockwool fibres are not classified as a possible human carcinogen.

The maximum exposure limit for mineral wool is 5mg/m³, 8 hour time-weighted average.

A Material Safety Data Sheet is available from the Rockwool Marketing Services Department to assist in the preparation of risk assessments, as required by the Control of Substances Hazardous to Health Regulations (COSHH).

Rockwool Limited reserves the right to alter or amend the specification of products without notice as our policy is one of constant improvement.

The information contained in this data sheet is believed to be correct at the date of publication. Whilst Rockwool will endeavour 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 this data sheet.

The above applications do not necessarily represent an exhaustive list of applications for Techwrap2 and Techtube. Rockwool Limited does not accept responsibility for the consequences of using Techwrap2 and Techtube in applications different from those described above. Expert advice should be sought where such different applications are contemplated, or where the extent of any listed application is in doubt.



SoundPro range of acoustic solutions

Techwrap2 and Techtube are a part of the Rockwool SoundPro range of acoustic solutions. Further information on the SoundPro range is available from Rockwool Marketing Services on 01656 862621.



Rockwool Limited
Pencoed, Bridgend. CF35 6NY

E info@rockwool.co.uk
www.rockwool.co.uk

Technical Information

For further details visit our website at www.rockwool.co.uk or phone the Technical Hotline on 0871 222 1780