

**ROCKWOOL®**

RockLap H&V Pipe Sections



For rapid, efficient pipework insulation

RockLap H&V Pipe Sections are strong lengths of pre-formed insulation with a one piece, factory applied foil facing with integral self-adhesive lap. The integral lap ensures fast and easy installation: just snap the sections onto the pipe, peel off the backing tape and smooth down for a completely sealed joint.



London Underground Limited (LUL) Approved

RockLap H&V Pipe Sections

The Sections are designed for thermal and acoustic insulation of heating, ventilation and air-conditioning pipework operating in the temperature range 0°C to 250°C.

Advantages

- Resilient, high performance barrier provided by one-piece, reinforced foil with integral lap
- Fast and simple installation reduces costs and time on site
- Installation may be carried out in winter conditions
- Tape requirement reduced
- Limited combustible product with surface finish also complying to Class 0

Standards and approvals

ROCKWOOL H&V Pipe Sections are CE marked in accordance with BS EN 14303.

RockLap H&V Pipe Sections conform to BS 3958-4, 'Bonded preformed stone wool pipe sections' and can be used to satisfy BS 5422: 'Method for specifying thermal insulating materials.....'.

Description

RockLap H&V Sections are pre-formed sections of stone wool insulation. Manufactured pre-slit and provided with a factory applied foil facing complete with integral self adhesive lap.

Sizes available

Please see the table on page 3.

Density

The nominal density is not less than 120 kg/m³.

Performance

Fire

RockLap Pipe Sections are rated Euroclass A2l-s1,d0 and Class 0 as defined within the Building Regulations.

Specific heat

The specific heat of ROCKWOOL is 0.84 kJ/kgK (nom.) at 20°C.

Thermal conductivity and thermal loss

Temperature °C	*Curve 1 (W/mK)	*Curve 2 (W/mK)
10	0.033	0.034
50	0.037	0.039
100	0.044	0.046
150	0.052	0.056

*The thermal conductivity curve used, depends upon the size of the pipe section. For further information, please refer to the DOP.

<http://www.rockwool.co.uk/DOP>

Note: Due to the low emissivity of aluminium, heat losses, which depend upon the diameter, thickness and temperature of the pipe to be insulated, are reduced by approx. 9% by using aluminium faced sections compared with painted or PVC faced sections.

Cladding type	Emissivity (ε)	Other surface temp (°C)	Heat loss (W/m)
Aluminium	0.05	25.4	80
Cloth	0.90	17.0	82

A 169 mm O.D. hot water pipe running at 75°C insulated with 50 mm thick ROCKWOOL RockLap H&V Pipe Section:

Cladding type	Emissivity (ε)	Other surface temp (°C)	Heat loss (W/m)
Aluminium	0.05	28.8	25
Cloth	0.90	24.0	27

RockLap H&V Pipe Sections

pH Neutrality

ROCKWOOL insulation is chemically compatible with all types of pipes, equipment and fittings. (Guidance is given in BS 5970 regarding the treatment of austenitic stainless steel pipework and fittings). Stone wool insulation is chemically inert. A typical aqueous extract of ROCKWOOL insulation is neutral or slightly alkaline (pH 7 to 9.5).

Water Resistance

RockLap H&V Pipe Sections are water repellent.

However, when used or stored in the open, the insulation should be protected with a waterproof covering.

When used to insulate cold pipes, the joints should be sealed with foil tape to prevent condensation.

Service Temperature

RockLap H&V Pipe Sections are used to insulate pipes operating at temperatures in the range 0 to 250°C. The sections are used to insulate against frost damage. For hot pipes, the limiting temperature of the outer foil face is 80°C to maintain facing bond strength.

Durability

ROCKWOOL has been proved in service for over 50 years in all types of exposure. RockLap Sections will give effective protection for the lifetime of the pipes that they insulate.

Minimum thickness of ROCKWOOL Rocklap H&V to prevent condensation. Taken from BS 5422 Table 8, ambient air temperature 25°C, 80% rh

Outside diameter of steel pipe on which insulation has been based (mm)	Temperature of contents (°C)					
	Thickness of ROCKWOOL Rocklap H&V Pipe Section (mm)					
	+10		+5		0	
	CALCULATED THICKNESS (mm)	ADVISED THICKNESS (mm)	CALCULATED THICKNESS (mm)	ADVISED THICKNESS (mm)	CALCULATED THICKNESS (mm)	ADVISED THICKNESS (mm)
17	16	20	22	25	28	30
21	17	20	24	25	30	30
27	19	20	26	30	32	35
33	20	20	27	30	34	35
42	21	25	29	30	37	40
48	22	25	31	35	40	40
60	24	25	33	35	41	45
76	26	30	36	40	46	50
89	28	30	38	40	48	50
102	29	30	40	40	50	50
114	30	30	41	45	52	55
140	31	35	43	45	55	55
169	33	35	46	50	58	60
219	35	35	49	50	62	65
245	36	40	51	55	64	65
273	37	40	52	55	66	70
324	39	40	55	55	70	70
356	40	40	56	60	71	75
406	41	45	58	60	74	75
456	43	45	60	60	76	80
508	44	45	61	65	78	80
558	45	45	63	65	80	80
610	46	50	64	70	82	90

RockLap H&V Pipe Sections

H&V Pipe Section Product and Pack Sizes 140 mm OD Pipe up to 610 mm OD Pipe

Diameter/ thickness	Thicknesses														
	20	25	30	35	40	45	50	55	60	65	70	75	80	90	100
17	42	30	25	20	16	x	x	x	x	x	x	x	x	x	x
21	36	30	20	13	13	9	9	x	x	x	x	x	x	x	x
27	30	25	20	12	12	9	9	6	6	4	4	-	-	-	-
34	25	20	16	12	9	8	8	5	5	4	4	-	-	-	-
42	20	16	12	9	9	6	6	4	4	4	4	-	-	-	-
48	16	16	12	9	9	6	6	4	4	-	-	-	-	-	-
54	16	12	10	8	8	5	5	4	4	-	-	-	-	-	-
57	12	12	9	7	7	5	5	4	4	-	-	-	-	-	-
60	12	12	9	7	7	5	5	4	4	-	-	-	-	-	-
64	x	9	9	6	6	4	4	-	-	-	-	-	-	-	-
67	x	9	9	6	6	4	4	-	-	-	-	-	-	-	-
70	x	9	9	6	6	4	4	-	-	-	-	-	-	-	-
76	x	9	7	5	5	4	4	-	-	-	-	-	-	-	-
80	x	9	6	5	5	4	4	-	-	-	-	-	-	-	-
83	x	6	6	4	4	4	4	-	-	-	-	-	-	-	-
89	x	6	6	4	4	4	-	-	-	-	-	-	-	-	-
102	x	5	-	-	-	-	-	-	-	-	-	-	-	-	-
108	x	5	-	-	-	-	-	-	-	-	-	-	-	-	-
114	x	4	-	-	-	-	-	-	-	-	-	-	-	-	-
121	x	4	-	x	-	x	-	x	-	x	x	x	-	x	x
127	x	4	-	-	-	-	-	-	-	-	-	-	-	-	x
133	x	-	-	-	-	-	-	-	-	-	-	-	-	-	-
140	x	-	-	-	-	-	-	-	-	-	-	-	-	-	-
150	x	-	-	-	-	-	-	-	-	-	-	-	-	x	x
159	x	-	-	-	-	-	-	-	-	-	-	-	-	-	-
169	x	-	-	-	-	-	-	-	-	-	-	-	-	-	-
178	x	-	-	-	-	-	-	-	-	x	x	x	x	x	x
191	x	x	-	x	x	x	x	x	x	x	x	x	x	x	x
194	x	-	-	-	-	-	-	-	-	-	-	-	-	-	-
205	x	-	-	-	-	-	-	-	-	-	-	-	-	-	-
219	x	-	-	-	-	-	-	-	-	-	-	-	-	-	-
230	x	x	+	x	-	-	-	-	-	-	-	-	-	-	-
245	x	+	+	-	-	-	-	-	-	-	-	-	-	-	-
253	x	+	+	-	-	-	-	-	-	-	-	-	-	-	-
267	x	x	+	x	-	x	x	x	x	x	x	x	-	x	x
273	x	+	+	-	-	-	-	-	-	-	-	-	-	-	-
279	x	+	+	-	-	-	-	-	-	-	-	-	-	-	-
301	x	x	+	x	x	x	x	x	x	x	x	x	x	x	x
305	x	+	+	-	-	-	-	-	-	-	-	-	-	-	-
318	x	+	+	-	-	-	-	-	-	-	-	-	-	-	-
324	x	+	+	-	-	-	-	-	-	-	-	-	-	-	-
356	x	x	+	-	-	-	-	-	-	-	-	-	-	-	-
368	x	x	x	x	-	x	x	x	x	x	x	x	x	x	x
406	x	x	+	-	-	-	-	-	-	-	-	-	-	-	-
456	x	x	+	-	-	-	-	-	-	-	-	-	-	-	-
508	x	x	x	x	-	-	-	-	-	-	-	-	-	-	-
558	x	x	x	x	-	-	-	-	-	-	-	-	-	-	-
610	x	x	x	x	+	+	-	-	-	x	x	x	x	x	x

Shaded red square indicates that these sections are packed in multiples in cardboard cartons. Number indicates linear metres per carton. These sections are "split".

x This size is currently not available

- Available to order. These sections come "split" and are packed as single lengths which are shrink wrapped in polyethylene.

+ Available to order. These sections come "unsplit" and are packed as single lengths which are shrink wrapped in polyethylene.

'split' Sections are pre-split through the outer foil facing and underlying ROCKWOOL section.

'unsplit' Sections are not pre-split through the outer foil facing and underlying ROCKWOOL section.

RockLap H&V Pipe Sections

Typical specification

Pipes to be insulated with *mm thick ROCKWOOL Rocklap H&V Pipe Sections, having a nominal density not less than 120 kg/m³, with a factory applied facing which is a laminate of close mesh reinforcement between two layers of foil including integral lap for fixing. The whole to comply with BS 5422:2009 and BS 5970 water vapour permeance and Building Regulations Class O definition. Fixing to be in accordance with manufacturer's instructions, by peeling protective tape from self-adhesive lap and pressing lap smoothly over joint. Where adjacent Sections abut, approved 75 mm wide aluminium tape to be used to maintain integrity of the vapour barrier. For external applications please see HVAC Specification Detail Guide for external finishes.

*insert required thickness

Handling

RockLap H&V Pipe Sections are easy to cut to any shape with a sharp knife.

When stored outside, avoid contact with the ground and cover with a securely anchored waterproof sheet.

Maintenance

Once installed RockLap H&V Pipe Sections should need no maintenance.

RockLap H&V Pipe Sections

ROCKWOOL properties

As an environmentally conscious company, ROCKWOOL promotes the sustainable production and use of insulation and is committed to a continuous process of environmental improvement.



All ROCKWOOL products provide outstanding thermal protection as well as four added benefits:

- **Fire resistance**
- **Acoustic comfort**
- **Sustainable materials**
- **Durability**

Health and safety

The safety of ROCKWOOL stone wool is confirmed by current UK and Republic of Ireland health & safety regulations and EU directive 97/69/EC: ROCKWOOL fibres are not classified as a possible human carcinogen. A Material Safety Data Sheet is available and can be downloaded from www.rockwool.co.uk to assist in the preparation of risk assessments, as required by the Control of Substances Hazardous to Health Regulations (COSHH).

Environment

Made from a renewable and plentiful naturally occurring resource, ROCKWOOL insulation saves fuel costs and energy in use and relies on trapped air for its thermal properties.

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

ROCKWOOL is approximately 97% recyclable.

For waste ROCKWOOL material that may be generated during installation or at end of life, we are happy to discuss the individual requirements of contractors and users considering returning these materials to our factory for recycling.

Interested?

For further details visit our website at www.rockwool.co.uk or phone ROCKWOOL Technical Support on 01656 862621.

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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 ROCKWOOL RockLap H&V Pipe sections.

ROCKWOOL Limited does not accept responsibility for the consequences of using ROCKWOOL RockLap H&V Pipe Sections in applications different from those described within this data sheet. Expert advice should be sought where such different applications are contemplated, or where the extent of any listed application is in doubt.