



Masonry cavity wall insulation designed for full fill and partial fill applications

NyRock Cavity Slab 032 is a full and partial fill stone wool slab designed for the thermal insulation of masonry cavity walls.

Suitable for use in new builds, renovations or extensions, the lightweight slabs are easy to handle and simple to install providing an accurate fit against the blockwork.

Manufactured using patented technology, NyRock Cavity Slab 032 has a more efficient fibre structure that increases the density of air pockets trapped within each slab. This results in an improved thermal performance when compared to traditional stone wool products.

- Low thermal conductivity of 0.032 W/mK.
- NyRock Cavity Slab 032 is able to resist temperatures of over 1,000°C achieving the highest Euroclass A1 non-combustibility classification as defined in EN13501-1.
- The slab features an additive to make the product highly water repellent.
- The slabs come in a 455mm width to suit standard vertical wall tie spacings allowing a closely knitted joint with adjacent slabs.
- BBA certified for full fill applications (in thicknesses of 100 200mm), other than in very severe exposure zones with fair-faced masonry.
 BBA Certificate 22/6252.
- BBA certified for partial fill applications (in thicknesses of 50 -200mm).
 BBA Certificate 22/6252.



Low lambda non-combustible insulation designed for use in both fully and partially filled masonry cavity walls.

NyRock Cavity Slab 032 is manufactured using NyRock technology, a patented highspeed technological innovation that delivers the lowest lambda stone wool cavity insulation in the UK.



APPLICATIONS

NyRock Cavity Slab 032 can be used for thermal insulation of external masonry cavity walls, and for the thermal insulation and acoustic protection of masonry party walls between dwellings.

Certified by the British Board of Agrément (BBA) and granted Certificate 22/6252 as full fill and partial fill thermal insulation in external masonry cavity walls, up to 25 metres in height, in new domestic and non-domestic buildings (additional requirements apply for buildings above 12 metres).

The NHBC accepts the use of NyRock Cavity Slab 032 in all exposure locations, other than in a full fill application in very severe exposure locations with fair-faced masonry, provided it is installed, used and maintained in accordance with the BBA Certificate, in relation to NHBC Standards, Chapter 6.1, External masonry walls.

Building standards have also recognised that where party cavity-walls between connected buildings are untreated, considerable heat can escape through them. Using NyRock Cavity Slab 032 to fully fill the party wall will reduce the u-value to 0.00 W/m²K.

PERFORMANCE

Thermal performance

Tested to BS EN 13162:2012 + A1:2015 achieving a thermal conductivity lambda (λ) value of 0.032 W/mK.

Fire performance

NyRock Cavity Slab 032 is non-combustible achieving a reaction to fire classification of A1, as defined in EN13501-1. NyRock Cavity Slab 032 is suitable for use in building of every purpose group, also acting as an effective cavity barrier when tightly fitted between masonry leaves where an insulated wall connects with an uninsulated wall cavity.

Acoustic performance

The non-directional fibre orientation and density of stone wool means that sound waves are trapped, and vibrations dampened which can significantly reduce outside sources of noise when used in an external wall.

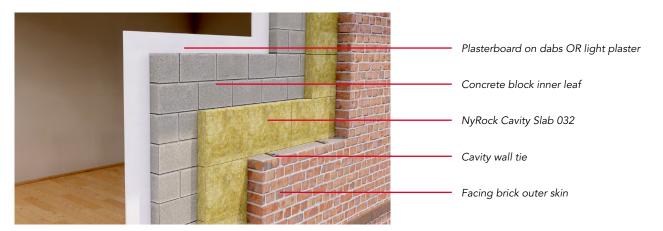
ROCKWOOL insulation retains its shape and thickness for the lifetime of the building, which means it performs acoustically decade after decade.

TYPICAL U-VALUES

Application performance - Full fill application 1

102mm facing brick outer skin, NyRock Cavity Slab 032 Full Fill, 100mm internal concrete block (various densities) Internal finishes: light plaster or plasterboard on dab.

Inner block W/mK	Dense 1900-2250kg/m³ 1.130 W/mK		Medium Dense 1400-1450kg/m³ 0.470 W/mK		Aircrete Hi Strength 750kg/m³		Aircrete Std 600kg/m³ 0.150 W/mK	
Internal finish	Light plaster	Plasterboard on dab	Light Plasterboard plaster on dab		Light plaster	Plasterboard on dab	Light plaster	Plasterboard on dab
Cavity (mm)	U-value W/m²K	U-value W/m²K	U-value W/m²K	U-value W/m²K	U-value W/m²K	U-value W/m²K	U-value W/m²K	U-value W/m²K
100	0.28	0.27	0.27	0.26	0.26	0.25	0.25	0.24
125	0.23	0.22	0.23	0.22	0.21	0.21	0.21	0.20
150	0.20	0.19	0.19	0.19	0.18	0.18	0.18	0.18
200	0.15	0.15	0.15	0.14	0.14	0.14	0.14	0.14



Application performance - Full fill application 2

Render on 100mm medium dense block outer, NyRock Cavity Slab 032 full fill, 100mm internal concrete block (medium dense or Standard Aircrete) Internal finishes: light plaster or plasterboard on dab.

Inner block W/mK	Dense 1900-2250kg/m³		Medium Dense 1400-1450kg/m³ 0.470 W/mK		Aircrete Hi Strength 750kg/m³ 0.190 W/mK		Aircrete Std 600kg/m³ 0.150 W/mK		
VV/MK	Light	1.130 W/mK Light Plasterboard		Light Plasterboard		Light Plasterboard		Light Plasterboard	
Internal finish	plaster	on dab	plaster	on dab	plaster	on dab	plaster	on dab	
Cavity (mm)	U-value W/m²K	U-value W/m²K	U-value W/m²K	U-value W/m²K	U-value W/m²K	U-value W/m²K	U-value W/m²K	U-value W/m²K	
100	0.28	0.27	0.28	0.26	0.26	0.25	0.25	0.24	
125	0.23	0.22	0.23	0.22	0.22	0.21	0.21	0.21	
150	0.20	0.19	0.19	0.19	0.18	0.18	0.18	0.18	
200	0.15	0.15	0.15	0.14	0.14	0.14	0.14	0.14	

The U-values shown in the constructions above are based on the following:

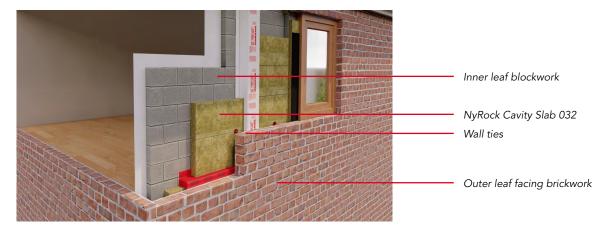
- Internal face of walls is lined with either plasterboard on dab or 13mm lightweight plaster
- Block sizes assumed to be 440 x 215mm, mortar joints assumed to be 10mm wide
- Wall ties are stainless steel with a cross-sectional area of 12.5mm² for cavities up to 170mm wide
- For cavities widths greater than 170mm, the cross-sectional area of tie is assumed to be 25mm

TYPICAL U-VALUES

Application performance - Partial fill application 1

102mm facing brick outer skin, 50mm clear cavity space, NyRock Cavity Slab 032 Partial Fill, 100mm internal concrete block (various densities) Internal finishes: light plaster or plasterboard on dab.

Inner block W/mK	Dense 1900-2250kg/m³ 1.130 W/mK		Medium Dense 1400-1450kg/m³ 0.470 W/mK		Aircrete Hi Strength 750kg/m³ 0.190 W/mK		Aircrete Std 600kg/m³ 0.150 W/mK	
Internal finish	Light plaster	Plasterboard on dab			Light plaster	Plasterboard on dab	Light plaster	Plasterboard on dab
Cavity (mm)	U-value W/m²K	U-value W/m²K	U-value W/m²K	U-value W/m²K	U-value W/m²K	U-value W/m²K	U-value W/m²K	U-value W/m²K
100	0.27	0.26	0.26	0.25	0.25	0.24	0.24	0.23
125	0.22	0.21	0.22	0.21	0.21	0.20	0.20	0.20
150	0.19	0.18	0.19	0.18	0.18	0.17	0.18	0.17
200	0.15	0.14	0.14	0.14	0.14	0.14	0.14	0.13



Application performance - Partial fill application 2

Render on 100mm medium dense block outer, 50mm clear cavity space, NyRock Cavity Slab 032 partial fill, 100mm internal concrete block (medium dense or Standard Aircrete) Internal finishes: light plaster or plasterboard on dab.

Inner block W/mK	Dense 1900-2250kg/m³ 1.130 W/mK		Medium Dense 1400-1450kg/m³ 0.470 W/mK		Aircrete Hi Strength 750kg/m³ 0.190 W/mK		Aircrete Std 600kg/m³ 0.150 W/mK	
Internal finish	Light plaster	Plasterboard on dab			Light plaster	Plasterboard on dab	Light plaster	Plasterboard on dab
Cavity (mm)	U-value W/m²K	U-value W/m²K	U-value W/m²K	U-value W/m²K	U-value W/m²K	U-value W/m²K	U-value W/m²K	U-value W/m²K
100	0.27	0.26	0.26	0.25	0.25	0.24	0.24	0.23
125	0.22	0.22	0.22	0.21	0.21	0.20	0.20	0.20
150	0.19	0.18	0.19	0.18	0.18	0.17	0.18	0.17
200	0.15	0.14	0.14	0.14	0.14	0.14	0.14	0.14

The U-values shown in the constructions above are based on the following:

- Internal face of walls is lined with either plasterboard on dab or 13mm lightweight plaster
- Block sizes assumed to be 440 x 215mm, mortar joints assumed to be 10mm wide
- Wall ties are stainless steel with a cross-sectional area of 12.5mm² for cavities up to 170mm wide
- For cavities widths greater than 170mm, the cross-sectional area of tie is assumed to be 25mm

PRODUCT INFORMATION

Thickness	Thermal resistance m ² K/W	Width (mm)	Length (mm)	Pieces/ pack	Area/ pack (m²)	Packs/ pallet	Pieces/ pallet
100	3.13	455	1200	4	2.18	15	60
125	3.91	455	1200	3	1.64	15	45
150	4.69	455	1200	2	1.09	20	40
200	6.25	455	1200	2	1.09	15	30

ADDITIONAL INFORMATION

Durability

The product is durable, rot proof, water resistant and sufficiently stable to remain effective as insulation for the life of the building.*

Water Resistance and Moisture

The product will resist the transfer of water across the cavity. The orientation of the water repellent fibres prevent water crossing the wall construction, providing the slabs are correctly installed and sound building techniques are applied to the cavity wall construction (see our installation manual for further guidance on this). Any water penetrating the outer leaf will drain down the surface of the slab.

Condensation

Vapour resistivity = 5.9 MNs/gm, preventing ingress of liquid water, but allowing the escape of water vapour.

ROCKWOOL stone wool insulation allows the construction to breathe, reducing the risk of condensation, which can lead to rot, mould and humidity damage.

STANDARDS AND APPROVALS

Certificate

Manufactured in accordance with BS EN 13162:2012+A1:2015 Thermal insulation products for buildings. Factory made mineral wool (MW) products. Designation code: MW-EN13162-T4-DS(70,90)-WS-WL(P)-MU1

Manufactured under ISO 14001 Environmental Management Systems, and ISO 9001 Quality Management Systems.

BBA (British Board of Agrement) Certified for use in buildings up to 12m high and for use in multi-storey applications up to 25m in height. Certificate no. 22/6252.







INSTALLATION

The product must be installed in accordance with the current ROCKWOOL guidelines. For further information please visit www.rockwool.com/uk or contact our Technical Solutions Team on 01656 868490.

^{*}Source: BBA certification 22/6252

SPECIFICATION CLAUSES

The following NBS clauses include ROCKWOOL Cavity:

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DISCLAIMERS

ROCKWOOL Limited, its affiliates, its agents and employees and all persons acting on its or their behalf (collectively "ROCKWOOL"), disclaim any and all liability for any errors, inaccuracies or incompleteness contained in any datasheet or in any other disclosure relating to any product.

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Information contained in this data sheet is up-to-date as at the date of issue. As ROCKWOOL Limited cannot control or anticipate the conditions under which this product may be used, each user should review the information in specific context of the planned use. To the maximum extent permitted by law, ROCKWOOL Limited will not be responsible for damages of any nature resulting from the use or reliance upon the information contained in this data sheet. No express or implied warranties are given other than those implied by law.

SUSTAINABILITY

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 & 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.com/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 insulation is recyclable and can be transformed into new ROCKWOOL products. For waste ROCKWOOL material that may be generated during installation, we are happy to discuss the individual requirements of contractors and users considering returning these materials to our factory for recycling.