



# NyRock® RainScreen 032

## Low lambda non-combustible stone wool insulation for ventilated facades

NyRock RainScreen 032 is a stone wool insulation product specifically developed for use within ventilated cladding systems, as well as sealed systems such as curtain walling.

Manufactured using patented technology, NyRock RainScreen 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.

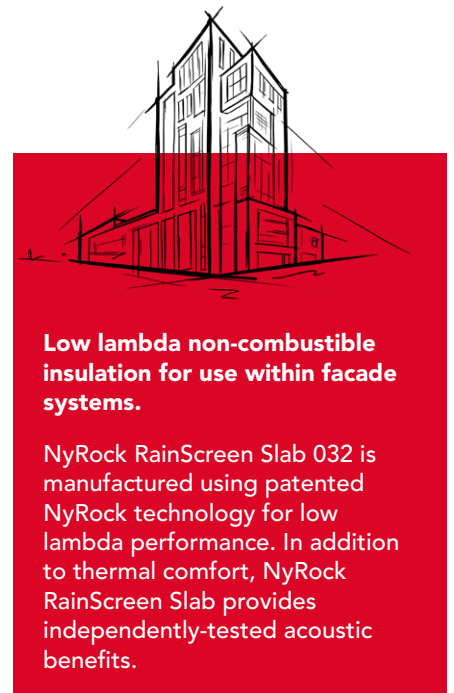
Once installed, the product's high density works in combination with a factory-applied water repelling agent to give improved resistance to rain ingress during construction.

The product can be easily fitted around brackets and other awkward details, and when tightly butted, adjacent slabs effectively 'knit' together to provide a continuous insulating layer, reducing heat losses that would otherwise be caused by gaps.

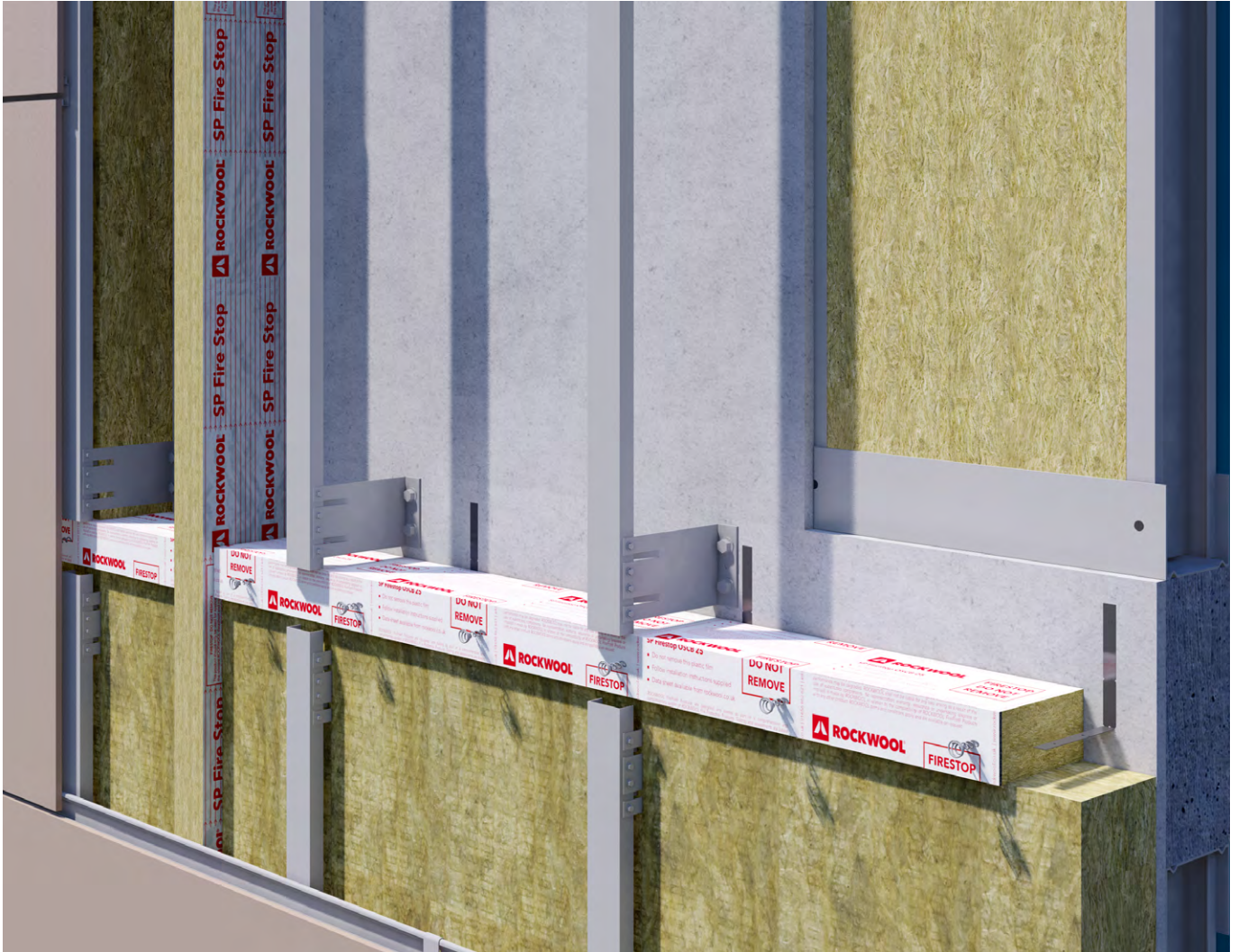
For optimum thermal performance in framed structures, combine NyRock RainScreen Slab 032 with NyRock Frame Slab 032.

- Low thermal conductivity of 0.032 W/mK
- BBA certified
- Non-combustible Euroclass A1
- Independently tested acoustic benefits
- Water repellent yet breathable
- Stone wool is dimensionally stable and has been proven to provide the same performance for more than 55 years after installation.\*
- Can be recycled and reprocessed, reducing landfill costs, with zero ODP and GWP.

\*FIW, Durability Project Mineral Wool (2016), "Conclusions and Outlook." Available via EURIMA (European Insulation Manufacturers Association) at [https://www.eurima.org/uploads/ModuleXtender/Publications/168/2017-02-21\\_EURIMA-55YearsOfUse\\_Info\\_Sheet\\_V08\\_final.pdf](https://www.eurima.org/uploads/ModuleXtender/Publications/168/2017-02-21_EURIMA-55YearsOfUse_Info_Sheet_V08_final.pdf)



# NyRock RainScreen 032



## APPLICATIONS

NyRock RainScreen 032 is suitable for use on the following construction types:

- Steel frame, timber frame or masonry walls in conjunction with a cladding system;
- Steel frame or timber frame with a masonry outer leaf

# NyRock RainScreen 032

## PERFORMANCE

### Thermal performance

Thermal conductivity = 0.032 W/mK

### Acoustic performance

As demonstrated by independent in-situ laboratory testing, NyRock RainScreen 032 helps to reduce the transfer of airborne noise - with results for typical systems as high as  $R_w$  60 dB.

### Fire performance

Rated Euroclass A1 when assessed to EN 13501-1 using test data from reaction-to-fire tests.

### Water resistance

ROCKWOOL stone wool repels liquid water due to its fibre orientation and the presence of water-repellent additives.

### Condensation control

The vapour resistivity of ROCKWOOL mineral wool is 5.9MN/gm. The slabs therefore reduce the risk of condensation, allowing natural drying-out of the structure.

### U-values

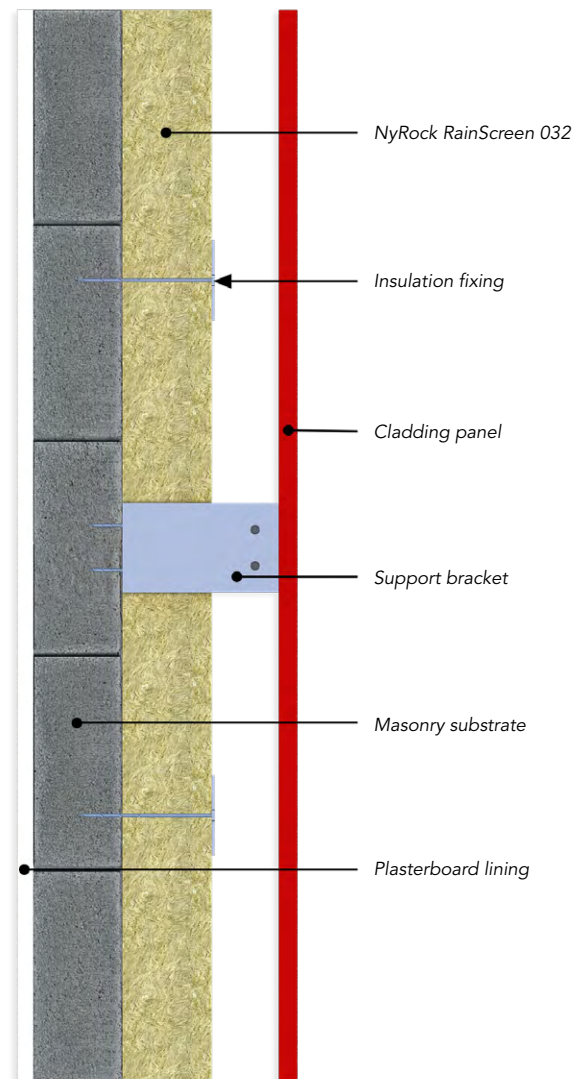
#### 1. Cladding system in conjunction with concrete/masonry

NyRock RainScreen 032 between metal bracket system on 150mm reinforced concrete (plasterboard on dabs).

NyRock RainScreen 032 (mm)	U-Value (W/m <sup>2</sup> K)
110	0.30
115	0.29
120	0.28
125	0.27
130	0.26
135	0.25
145	0.24
150	0.23
160	0.22
170	0.21
180	0.20
190	0.19
200	0.18
215	0.17
230	0.16
245	0.15

#### Notes

- Tables based on pointloss scenarios where only the rainscreen brackets bridge the thermal insulation layer.
- U-values shown have been calculated with a thermal bridging allowance which has been determined using a 3-dimensional analysis in accordance with BR443. The system modelled included 8mm Rockpanel Rockclad and Ash & Lacey AXIAL brackets.



# NyRock RainScreen 032

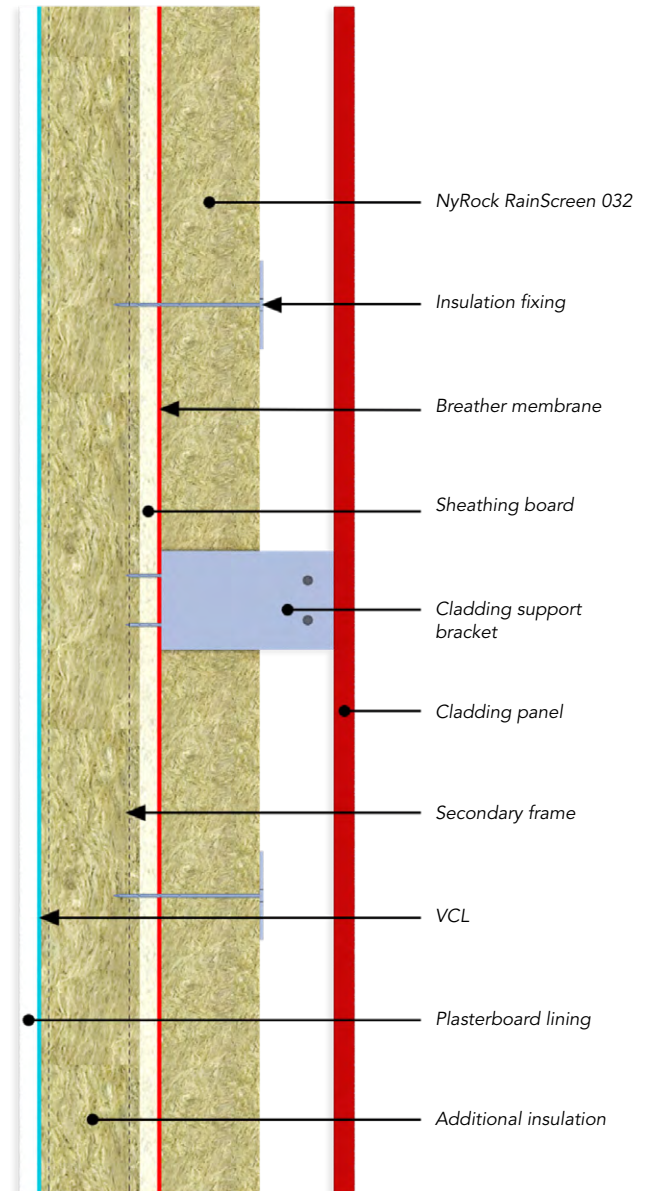
## 2. Cladding system in conjunction with steel frame filled with NyRock Frame Slab 032

NyRock RainScreen 032 on 100mm deep metal studs at 600mm centres with 100mm NyRock Frame Slab 032 installed within the frame.

NyRock RainScreen 032 (mm)	NyRock Frame Slab 032 (mm)	U-Value (W/m <sup>2</sup> K)
50	100	0.30
55	100	0.29
60	100	0.28
65	100	0.27
70	100	0.26
75	100	0.25
80	100	0.24
85	100	0.23
95	100	0.22
105	100	0.21
115	100	0.20
125	100	0.19
145	100	0.18
160	100	0.17
180	100	0.16
200	100	0.15

NyRock RainScreen 032 on 150mm deep metal studs at 600mm centres with 150mm NyRock Frame Slab 032 installed within the frame.

NyRock RainScreen 032 (mm)	NyRock Frame Slab 032 (mm)	U-Value (W/m <sup>2</sup> K)
50	150	0.26
55	150	0.25
60	150	0.24
65	150	0.23
70	150	0.22
80	150	0.21
90	150	0.20
100	150	0.19
110	150	0.18
125	150	0.17
150	150	0.16
170	150	0.15
190	150	0.14



### Notes

- U-values shown have been calculated with a thermal bridging allowance which has been determined using a 3-dimensional analysis in accordance with BR443. The systems modelled included 8mm RockPanel RockClad and FastFrame rainscreen brackets

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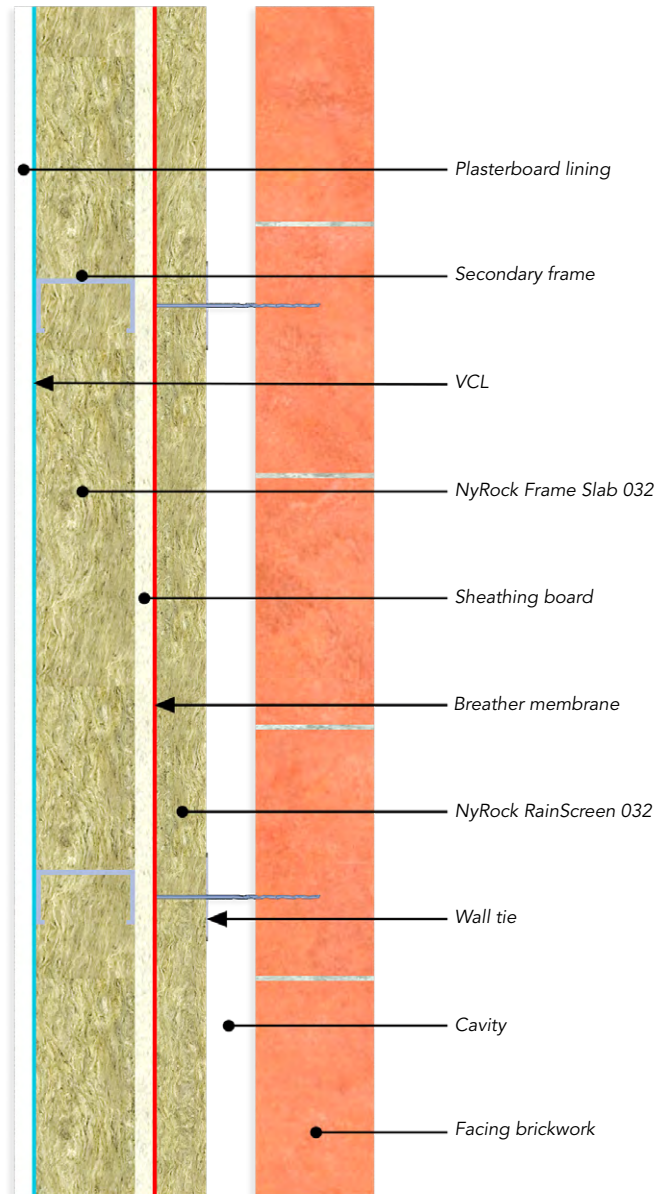
### 3. Masonry outer in conjunction with steel frame filled with NyRock Frame Slab 032

NyRock RainScreen 032 on 100mm deep metal studs at 600mm centres with 100mm NyRock Frame Slab 032 installed within the frame.

NyRock RainScreen 032 (mm)	NyRock Frame Slab 032 (mm)	U-Value (W/m <sup>2</sup> K)
50	100	0.26
75	100	0.22
100	100	0.18
125	100	0.16
150	100	0.14
180	100	0.13
200	100	0.12
235	100	0.10

NyRock RainScreen 032 with channel restraint system on 140mm or 150mm deep studs at 600mm centres with 140mm NyRock Frame Slab 032 installed within the frame.

NyRock RainScreen 032 (mm)	NyRock Frame Slab 032 (mm)	U-Value (W/m <sup>2</sup> K)
50	140	0.25
75	140	0.21
100	140	0.17
125	140	0.15
150	140	0.13
180	140	0.12
200	140	0.11
235	140	0.10



#### Typical specification

The rainscreen insulation is to be NyRock RainScreen 032 ..... mm thickness, as manufactured by ROCKWOOL Limited, Pencoed, Bridgend CF35 6NY, secured to the substrate with metal and polypropylene fixings in accordance with NyRock RainScreen 032 data sheet.

Horizontal joints should be staggered and all joints tight butted.

#### Notes

- U-values shown have been calculated with a thermal bridging allowance which has been determined using a 3-dimensional analysis in accordance with BR443. The systems modelled included 8mm Rockpanel Rockclad and FastFrame rainscreen brackets

# NyRock RainScreen 032

## PRODUCT INFORMATION

Length (mm)	Width (mm)	Standard thicknesses (mm)
1200 (Plain)	600	Available in a range of sizes between 50mm and 200mm. Please see current price list for availability.

## STANDARDS AND APPROVALS

Certificate
BBA (British Board of Agrément) Certified for use in ventilated rainscreen cladding systems on both domestic and non-domestic buildings. Certificate no. 22/6417
NyRock RainScreen 032 satisfies the requirements of BS EN 13162 – “Thermal insulation products for buildings. Factory made mineral wool (MW) products”.



## INSTALLATION

### Work on site

NyRock RainScreen 032 is supplied in shrink-wrapped polythene packs. Pallets are fitted with a waterproof hood that is suitable for outside storage.

The product can be easily cut and shaped using a sharp knife.

### Fixings

A suggested fixing pattern is provided; however the adequacy of this or any other fixing pattern should be verified on a per-project basis through assessment by a suitably qualified individual.

The following non-exhaustive list of companies can supply fixings suitable for use with NyRock RainScreen 032: Ejot, Fischer, ITW Construction Products, Hilti.

### Exposure

It is recommended that the sequence of construction is programmed in such way that insulation is left exposed for as little time as possible.

While ROCKWOOL insulation is impregnated with a water repelling agent, and is resistant to wind and rain, it is not designed to offer indefinite protection to a substructure. Depending on the nature of the substrate, a protective membrane may be required. Such design issues will require assessment by a suitably qualified individual.

Subjecting NyRock RainScreen 032 to any level of exposure is contingent on a visual inspection of the insulation prior to the installation of the cladding. In the unlikely event that any slabs have become physically damaged or otherwise contaminated, they should be replaced.

Once the weatherproof layer is installed, the resulting ventilated cavity will ensure that any wetted slabs will naturally dry out, regaining all of their original performance and properties.

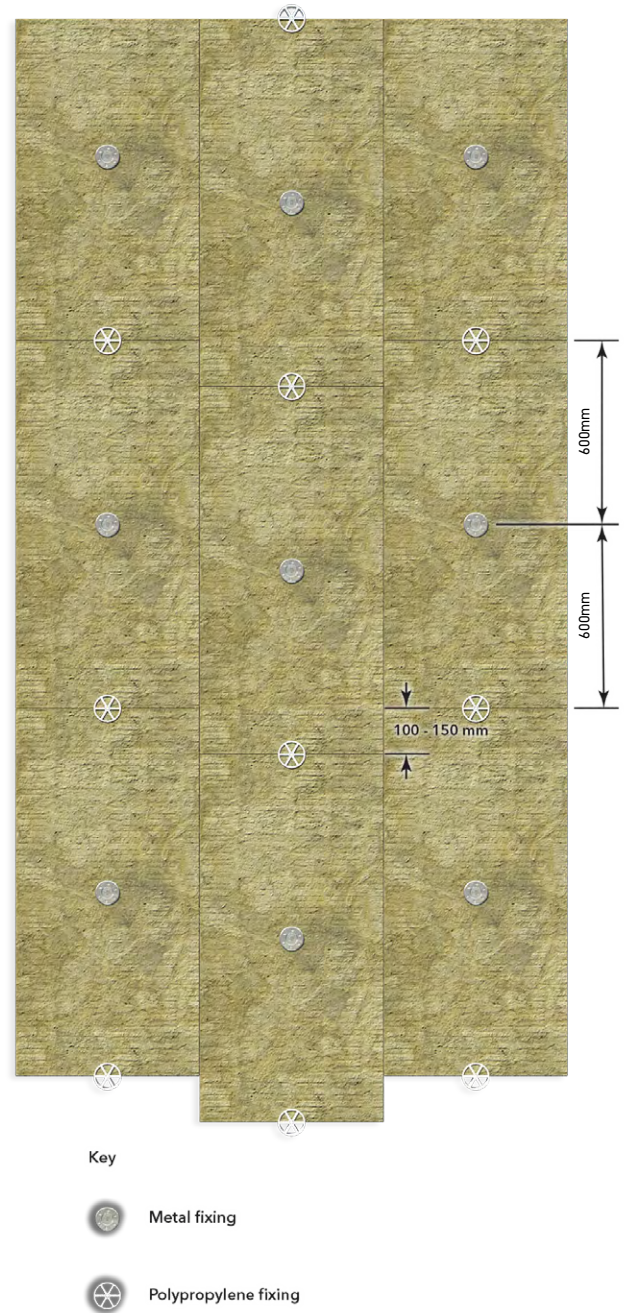
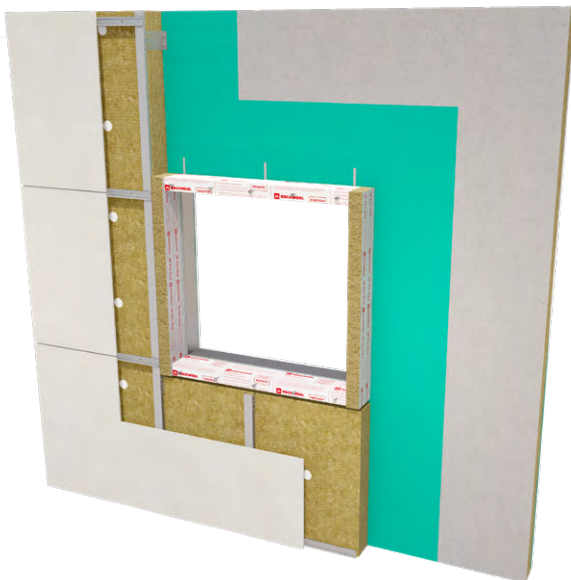
# NyRock RainScreen 032

For use on steel frame, timber frame, or masonry walls in conjunction rainscreen cladding.

- Slabs should be close-butted at all vertical and horizontal joints. The horizontal joints of the insulation should be staggered in accordance with good practice.
- Fixings should have a minimum head diameter of 70 mm. A typical fixing pattern has three fixings per square metre with one metal fixing at the centre of every slab (see Figure 1).
- The product should be cut and tightly fitted around cladding support elements.
- For a typical installation, a breathable membrane is placed between the sheathing board and the product (see Figures 1 and 2). A VCL is placed between the plasterboard and the frame (see Figures 1 to 3).

## Cavity barriers:

ROCKWOOL recommends the use of SP FireStop vertically and SP FireStop OSCB horizontally.



**Figure 1**

Typical fixing pattern with 3 fixings per square metre

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For use on steel frame or timber frame with a brick outer leaf.

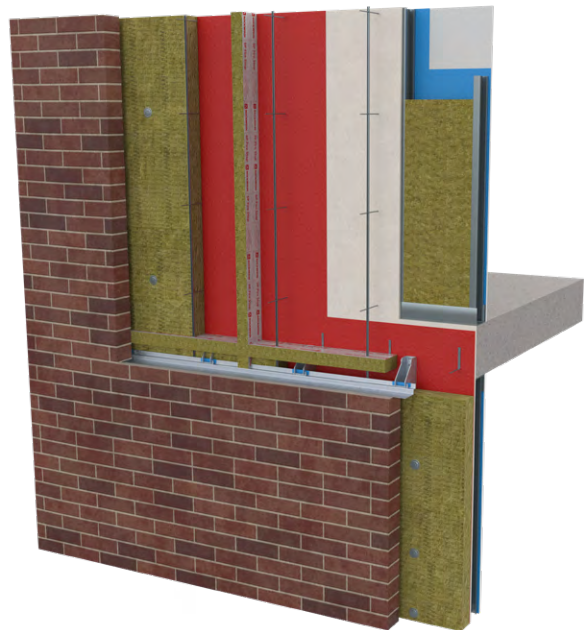
- The slabs should be close-butted at all vertical and horizontal joints, and at corners. The horizontal joints of the slabs should be staggered, in accordance with good practice.
- Slabs should be carefully cut to fit around any protrusions into the cavity.
- A VCL is placed between the plasterboard and the frame. A breathable membrane is placed between the sheathing board and the product—see Figure 1.
- The insulation should be installed to coincide with the frame, with retaining discs used in conjunction with the wall ties at no more than 600 mm horizontally and 450 mm vertically.
- After each section of the leading leaf is built, excess mortar should be removed from the cavity face and mortar droppings cleaned from exposed edges of the installed board, before installation of the next run of boards. Use of a cavity board or a cavity batten will protect the installed board edges and

## Cavity barriers:

ROCKWOOL recommends the use of SP FireStop vertically and horizontally.

## Masonry restraint systems:

NyRock RainScreen 032 is compatible with masonry restraint systems. With such systems we recommend that insulation fixings are installed as per Figure 1. For information on available systems, please contact providers such as ACS Stainless or Ancon.



## SPECIFICATION CLAUSES

ROCKWOOL NyRock RainScreen 032 are associated with the following NBS clauses:

H11
110
H11
780
H92
776
P10
217



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## 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](mailto: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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#### Photography and illustrations

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If you require permission to use ROCKWOOL images, you must apply for a Usage Agreement.

To apply, write to:  
[marketcom@rockwool.com](mailto:marketcom@rockwool.com)

# NyRock RainScreen 032

## 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](#).



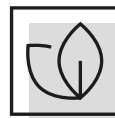
### Sustainability

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).

