

— THERMAL INSULATION · ACOUSTICS · FIRE PROTECTION

Mineral wool Stone wool

Modulix Industrial Solutions

13

PRODUCT FAMILIES

40 – 200 kg/m³

DENSITY RANGE

A1

REACTION TO FIRE

from 0.035

$\lambda \cdot W/mK$

— NAVIGATION

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— MATERIAL AND USES

Insulation for every project

One range for facades, roofs, floors, building services and industrial applications.



Stone wool is a mineral wool made by melting rocks such as basalt, diabase and dolomite and spinning them into fibres. The fibrous structure provides thermal insulation and sound absorption, while its mineral nature contributes to fire protection.

97%

NATURAL FIBRES

3 – 5 μ m

FIBRE DIAMETER

40 – 200 kg/m³

OVERALL DENSITY RANGE

Produced as slabs, mats, pipe sections and loose wool. The brochure indicates melting at 1400 - 1500 °C. Form, density and performance are chosen according to use.

The specific parameters of each variant are given on the product pages.

— USER GUIDE

Choosing the product

Start from the area of use, then check the variant and dimensions.

APPLICATION	PRODUCT FAMILY	PAGE
Ventilated / clad facades	Gold / Gold Plus	05-06
ETICS facade insulation	Premium F	07
Roofs / terraces	Premium R	08
Floors / slabs	Platin	09
HVAC ducts	Private	10
Partitions / acoustics	Decibel	11
Flat industrial surfaces	Industrial Batt	12
Core for doors	Door	13
Core for sandwich panels	Panel	14
Shipbuilding	Marine	15
Industrial installations	Industrial MW	16-17
Flexible / loose-fill insulation	Roll Cast / Cast / Blowing	18

How to read the technical data

λ = thermal conductivity, in W/mK. For industrial products, values relate to the temperatures shown.

T1, T4 and T5 are thickness tolerance classes. NPD = no performance determined.

Dimensions are in mm. Compression and tensile strength perpendicular to faces are given for each variant.

— VENTILATED FACADES AND EXTERIOR CLADDING

Gold



Stone wool slabs for thermal and acoustic insulation and fire protection of ventilated and non-ventilated facades. The water-repellent structure limits the effects of moisture and helps maintain insulation performance.

Unfaced variants or faced with black, white or yellow glass fleece or aluminium foil. Reaction to fire A1 stated for the Gold series; the facing configuration is confirmed for the chosen product.

Uses

- 01 Ventilated facade systems and curtain walls.
- 02 Aluminium, PVC, fibre cement, granite, marble and glass cladding.

FORMAT L X W

1200 x 600 mm

THERMAL CONDUCTIVITY

0.035 W/mK

THICKNESS CLASS

T4

COMPRESSION / TENSION

NPD / NPD

Technical data

VARIANT	DENSITY KG/M ³	THICKNESS MM
Gold	50	30 - 120
Gold Black	50	50 - 120
Gold Yellow	50	50 - 120
Gold Alu	50	50 - 120
Gold	70	30 - 120
Gold Black	70	30 - 120
Gold Yellow	70	30 - 120
Gold	90	30 - 120
Gold Black	90	30 - 120

FACADES AND STEEL STRUCTURES

Gold Plus



Stone wool for ventilated and non-ventilated exterior cladding, in densities of 50, 70 and 90 kg/m³. Provides thermal and acoustic insulation and contributes to the fire protection of the building.

Water-repellent material with a fibrous structure for sound absorption. The series is presented with reaction to fire class A1. Suitable for reducing heat transfer and external noise.

Uses

01 Ventilated facades, vinyl siding systems and curtain walls.

02 Walls on steel frames.

FORMAT L X W

1200 x 600 mm

THERMAL CONDUCTIVITY

0.035 W/mK

THICKNESS CLASS

T5

COMPRESSION / TENSION

NPD / NPD

Technical data

VARIANT	DENSITY KG/M ³	THICKNESS MM
Gold Plus	50	30 - 200*
Gold Plus	70	50 - 120
Gold Plus	90	50 - 120

* Range stated in the brochure. Available thicknesses for the 50 kg/m³ variant are confirmed before quotation.

ETICS FOR EXTERNAL WALLS

Premium F



Stone wool slabs for external wall insulation and rendered external thermal insulation composite systems (ETICS). They combine thermal and acoustic insulation with a structure that withstands facade loads.

Reaction to fire class A1 stated for the series. Vapour permeability allows moisture to escape. The slab keeps its shape and provides mechanical strength for exterior applications.

Uses

- 01 External walls.
- 02 ETICS with rendered finish.

FORMAT L X W

1200 x 600 mm

THICKNESS CLASS

T5

COMPRESSIVE STRENGTH

NPD

THICKNESS / DENSITY

Per variant

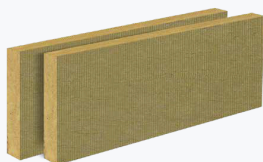
Technical data

VARIANT	CONDUCTIVITY W/MK	TENSILE STRENGTH PERPENDICULAR TO FACES KPA
Premium F	0.035 - 0.037	≥7.5
Premium F 120	0.036 - 0.038	≥10
Premium F 150	0.036 - 0.040	≥15
Premium F 150 Pro	0.036 - 0.038	≥10

Addition from the Premium F 120 data sheet: thickness 30 - 130 mm, density 120 kg/m³. These dimensions apply only to the 120 variant.

INDUSTRIAL ROOFS AND TERRACES

Premium R



Stone wool slabs for industrial roofs, terraces and pitched roofs. High density and mechanical strength support use in demanding roof systems.

Helps reduce heat loss and noise. The structure is intended for applications requiring stability and mechanical strength, including industrial and commercial buildings.

Uses

01 Roofs.

02 Terraces.

WIDTH

600 - 1200 mm

LENGTH

1200 - 2000 mm

THICKNESS CLASS

T5

TENSILE STRENGTH
PERPENDICULAR TO
FACES

NPD

Technical data

VARIANT	THICKNESS MM	CONDUCTIVITY W/MK	COMPRESSION KPA
Premium R	40 - 120	0.037	≥35
Premium R 150	30 - 40	0.036 - 0.040	25 - 40
Premium R 150	50 - 120	0.036 - 0.040	≥50

FLOOR SLABS AND FLOORS

Platin



Unfaced stone wool slabs for insulation between storeys and under floors. They reduce heat transfer and noise transmission between floors, improving comfort in residential, office and hotel buildings.

Density 110 kg/m³, thicknesses 20 - 50 mm and reaction to fire class A1 stated for the series. The material is intended for applications with vibration, impact and mechanical loads, within the declared performance.

Uses

- 01** Below and above floor slabs; ground-level floors.
- 02** Under bases subject to dynamic loads.
- 03** Floors over open passages.

FORMAT L X W

1200 x 600 mm

THERMAL CONDUCTIVITY

0.036 W/mK

THICKNESS CLASS

T5

TENSILE STRENGTH
PERPENDICULAR TO
FACES

NPD

Technical data

VARIANT	DENSITY KG/M ³	THICKNESS MM	COMPRESSION KPA
Platin	110	20 - 40	5
Platin	110	50	20

— AIR-CONDITIONING AND VENTILATION DUCTS

Private



Aluminium-faced stone wool slabs, density 70 kg/m³, designed for insulating air-conditioning and ventilation ducts.

Low thermal conductivity limits heat exchange between the installation and its surroundings. The insulation contributes to thermal and fire protection of HVAC systems and limits the effects of condensation.

Uses

01 Air-conditioning ducts.

02 Ventilation ducts.

FORMAT L X W

1200 x 600 mm

THERMAL CONDUCTIVITY

0.035 W/mK

THICKNESS CLASS

T4

COMPRESSION / TENSION

NPD / NPD

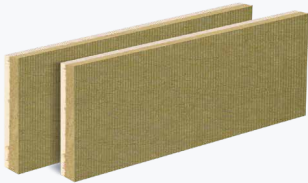
Technical data

VARIANT	DENSITY KG/M ³	THICKNESS MM
Private	70	25 - 50

Facing: aluminium. Thickness and installation method are chosen for the designed installation.

PARTITIONS AND ACOUSTIC COMFORT

Decibel



Stone wool slabs for acoustic insulation. The dense, fibrous structure absorbs sound waves, reduces reverberation and limits noise transmission between spaces.

Used in homes, offices, schools, conference halls, cinemas and studios, as well as in industrial spaces and machine rooms. The final acoustic performance depends on the complete wall or floor build-up.

Uses

- 01 Inner faces of external walls.
- 02 Partition walls and separating walls between adjacent spaces.
- 03 Stairwells and lift shafts; interior linings on timber frames.

FORMAT L X W

2700 x 1200 mm

THERMAL CONDUCTIVITY

0.036 W/mK

THICKNESS CLASS

T4

COMPRESSION / TENSION

NPD / NPD

Technical data

VARIANT	DENSITY KG/M ³	THICKNESS MM
Decibel	110	30 - 80

SLABS FOR INDUSTRIAL INSULATION

Industrial Batt



Unfaced stone wool slabs, 70 and 110 kg/m³, for flat surfaces requiring thermal and acoustic insulation and fire protection at high temperatures.

The flexible structure helps absorb mechanical shocks and dynamic loads from equipment.

Uses

01 Boilers, double-walled doors, pipes and exhausts.

02 Ducts, furnaces and steel structures.

03 Applications with prefabricated panels.

FORMAT L X W

1200 x 600 mm

THICKNESS

25 - 120 mm

THICKNESS CLASS

T4

COMPRESSION / TENSION

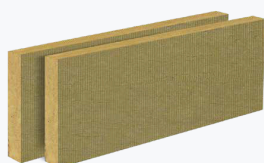
NPD / NPD

Technical data

TEMPERATURE °C	BATT 70 - 70 KG/M ³ CONDUCTIVITY W/MK	BATT 110 - 110 KG/M ³ CONDUCTIVITY W/MK
50	0.040	0.040
100	0.050	0.047
150	0.058	0.054
200	0.061	0.063
250	0.082	0.073
300	0.095	0.080
350	0.117	0.094

INSULATING CORE FOR DOORS

Door



High-density stone wool slabs for manufacturing fire-resistant doors and steel doors. The fibrous structure slows heat transfer through the door assembly.

Reaction to fire class A1 stated for the material. Density and mechanical strength support use in doors for hospitals, schools, hotels, shopping centres, offices and industrial spaces.

Uses

01 Manufacture of fire-resistant doors.

02 Manufacture of steel doors.

DENSITY / THICKNESS

70 - 200 kg/m³ / 30 - 120 mm

WIDTH / LENGTH

1200 - 2000 / 1200 - 2400 mm

THICKNESS CLASS

T5

COMPRESSION / TENSION

NPD / NPD

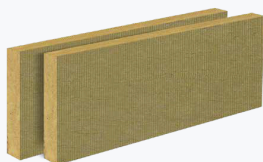
Technical data

TEMPERATURE °C	DOOR PANEL CONDUCTIVITY W/MK
50	0.040
100	0.047
150	0.054
200	0.063
250	0.073
300	0.080
350	0.094

Class A1 of the material is not a fire-resistance classification of the complete door; this is confirmed for the chosen assembly.

INSULATING CORE FOR PANELS

Panel



Stone wool slabs for use in roof and wall sandwich panels. Mechanical strength supports the panel's behaviour in compression and under in-service loads.

Material for panel systems used in industrial and commercial buildings. Provides thermal insulation and contributes to fire protection; vapour permeability limits moisture build-up.

Uses

- 01 Manufacture of roof and wall sandwich panels.
- 02 Hangars, shopping centres and industrial buildings.
- 03 Composite panels.

DENSITY / THICKNESS

**100 - 130 kg/m³ /
100 mm**

WIDTH / LENGTH

**600 - 1000 / 1200 -
2400 mm**

THERMAL CONDUCTIVITY

0.040 W/mK

THICKNESS CLASS

T5

Technical data

VARIANT	COMPRESSION KPA	TENSILE STRENGTH PERPENDICULAR TO FACES KPA
Panel	≥60	≥100

SLABS AND MATS FOR SHIPBUILDING

Marine



Stone wool slabs and mats made for marine insulation. The range includes Marine Batt slabs, Alu variants and Marine MW mats.

Uses

01 Shipbuilding; cofferdam walls and fire-resistant partitions.

02 Fire-resistant doors; pipes, boiler tanks and steam funnels.

THICKNESS CLASS

T4

COMPRESSION / TENSION

NPD / NPD

Technical data

VARIANT	DENSITY KG/M ³	THICKNESS MM	WIDTH X LENGTH MM	Λ W/MK
Marine Batt 45	45	30 - 60	600 × 1200	0.035
Marine Batt 45 Alu	45	30 - 60	600 × 1200	0.035
Marine Batt 110	110	30 - 60	600 × 1200	0.036
Marine Batt 110 Alu	110	30 - 60	600 × 1200	0.036
Marine Batt 140	140	30	600 × 1200	0.036
Marine Batt 140 Alu	140	30	600 × 1200	0.036
Marine Batt 150	150	30 - 60	600 × 1200	0.037
Marine MW 45	45	50 - 100	1200 × 3000 - 5000	0.036
Marine MW 60	60	30 - 100	1000 × 3000 - 8000	0.036
Marine MW 125	125	30 - 60	1000 × 3000 - 8000	0.036

MATS FOR INDUSTRIAL INSTALLATIONS AND PROCESSES

Industrial MW



Stone wool mats for insulating industrial installations and equipment. The water-repellent structure and chemical resistance help protect metal surfaces from moisture.

Cl^- , Na^+ and SO_4^{2-} ion contents are within the limits accepted by ASTM C795-92. Thermal conductivity is given separately for each variant and temperature.

Uses

- 01 Boilers, double-walled vessels, pipes and exhausts.
- 02 Ducts, furnaces, steel structures and prefabricated panels.
- 03 Thermal and geothermal power plants; heat-transfer pipes.
- 04 Fire-protection corridor constructions.

THICKNESS CLASS

T1

COMPRESSION / TENSION

NPD / NPD

Technical data

VARIANT	DENSITY KG/M ³	THICKNESS / WIDTH X LENGTH MM
Industrial MW 650	80	50 - 60 / 1000 × 5000 70 - 120 / 1000 × 3000
Industrial MW 700	90	50 - 60 / 1000 × 5000 70 - 120 / 1000 × 3000
Industrial MW 720	100	50 - 60 / 1000 × 5000 70 - 120 / 1000 × 3000
Industrial MW 750	125	50 - 60 / 1000 × 5000 70 - 120 / 1000 × 3000

Thermal conductivity values versus temperature are given on the next page.

VALUES VERSUS TEMPERATURE

Industrial MW

Each column corresponds to a mat variant. Values are in W/mK and read at the temperature shown in each row.

TEMPERATURE °C	MW 650 80 KG/M ³	MW 700 90 KG/M ³	MW 720 100 KG/M ³	MW 750 125 KG/M ³
50	0.039	0.039	0.038	0.037
100	0.049	0.049	0.048	0.047
150	0.058	0.057	0.056	0.054
200	0.069	0.066	0.065	0.063
250	0.080	0.077	0.075	0.073
300	0.090	0.085	0.082	0.080
350	0.110	0.102	0.096	0.094



Available formats

Thicknesses 50 - 60 mm: width 1000 mm, length 5000 mm.

Thicknesses 70 - 120 mm: width 1000 mm, length 3000 mm.

— FLEXIBLE INSULATION AND LOOSE-FILL WOOL

Roll Cast / Cast / Blowing



Flexible stone wool materials for thermal and acoustic insulation, high-temperature applications and fire protection. The structure adapts to various surfaces and equipment.

Roll Cast is presented as an unfaced material. The online data sheet adds the dimensions, density and maximum service temperature for this variant.

Uses

- 01** Installations, double-walled vessels and exhaust pipes.
- 02** Laboratory equipment, electrical appliances, furnaces and cables.

ROLL CAST: L X W /
THICKNESS

**5000 x 1200 mm /
50 mm**

DENSITY / THICKNESS
CLASS

80 kg/m³ / T1

MAXIMUM SERVICE
TEMPERATURE

650 °C (EN 14706)

REACTION TO FIRE

A1 (EN 13501-1)

Technical data

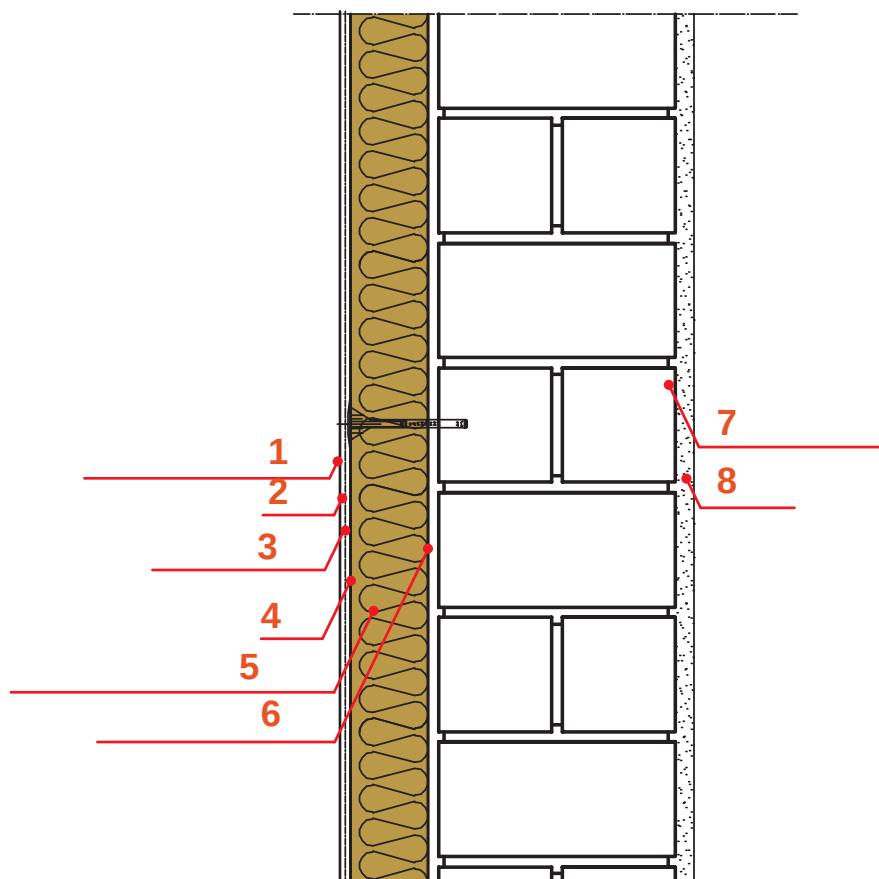
TEMPERATURE °C	ROLL CAST CONDUCTIVITY W/MK
50	0.039
100	0.049
150	0.058
200	0.069
250	0.080
300	0.090
350	0.110

Cast: 0,036 W/mK. Blowing: 0,036 W/mK. Dimensions and density of these two variants are confirmed separately; Roll Cast values do not apply to them.

— PREMIUM F / MASONRY WALL

Facade with ETICS

Section through a masonry wall with external insulation and rendered finish.



System build-up

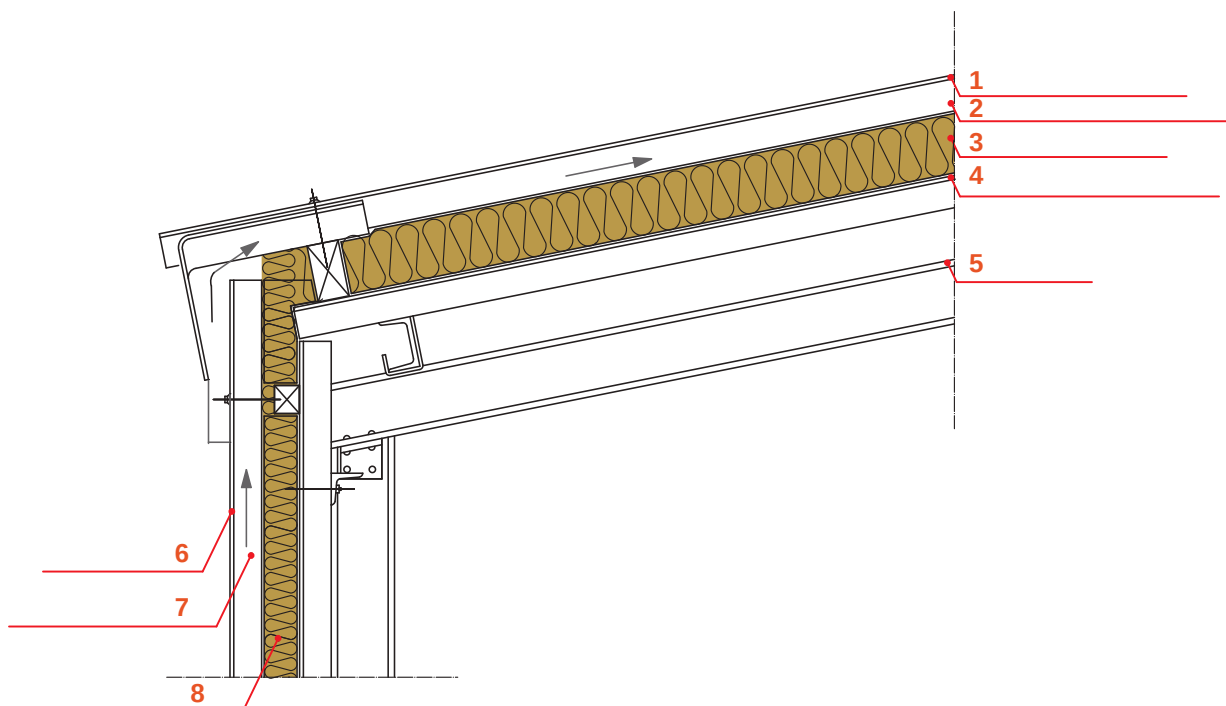
01 Exterior finish	05 Premium F stone wool
02 Render	06 Adhesive mortar
03 Reinforcing mesh	07 Masonry wall
04 Render	08 Interior plaster

Indicative detail. Build-up and fixings are adapted to the project and site conditions.

— PREMIUM R + GOLD / GOLD PLUS

Roof and ventilated facade

Junction between a pitched roof on a steel structure and a ventilated facade.



System build-up

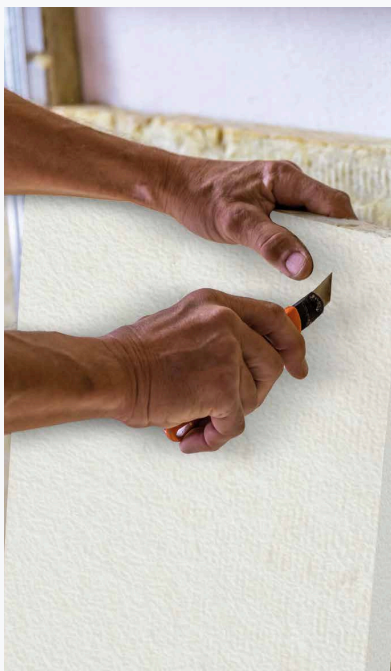
- | | | | |
|----|--|----|-----------------------------|
| 01 | Trapezoidal sheet roofing | 05 | Load-bearing structure |
| 02 | Ventilation between the sheet corrugations | 06 | Facade cladding |
| 03 | Premium R stone wool | 07 | Ventilation cavity |
| 04 | Roof layer under the trapezoidal sheet | 08 | Gold / Gold Plus stone wool |

Indicative detail. Build-up and fixings are adapted to the project and site conditions.

— PRACTICAL INFORMATION

Handling and storage

Keeping the packaging and protecting the product helps preserve the insulation properties.



1

Covered storage

Store products indoors. Outdoors, cover the packs completely with a tarpaulin.

2

Protection from the environment

Protect the packs from water, moisture and sunlight.

3

Keep on pallets

Avoid direct contact with the ground. Do not stack pallets during storage or transport.

4

Protected transport

Cover the load with a tarpaulin. Do not place materials on top that could damage the packaging or the product.

When handling

Wear suitable clothing and equipment to protect skin, eyes and airways.

Dispose of packaging according to local waste regulations.

For quotation: state the product, variant, thickness, dimensions, quantity and place of use.



Mineral wool Stone wool

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AVAILABILITY IS CONFIRMED FOR EACH PRODUCT.