

## PAROC Linio 80

### Rendered facade lamella



|                      |   |
|----------------------|---|
| Certification Number | 0809-CPR-1015 / Eurofins Expert Services Ltd, P.O. Box 1001, FI-02044 VTT, Finland  |
| Designation Code     | MW-EN13162-T5-DS(70,90)-CS(Y)50-TR80-WS-WL(P)-MU1   |
| Short Description    | Rigid, fire safe stone wool lamella with high thermal insulation performance.   |
| Application          | Thermal insulation for rendered facades. Separate mechanical connectors are normally not necessary (NB national regulations and system holders instructions) as lamellas are glued with a full surface to the base. |

PAROC stone wool products are capable of withstanding high temperatures. The binder starts to evaporate when its temperature exceeds approximately 200 °C. The insulating properties remain unchanged, but the compressive stress weakens. The softening temperature of stone wool products is over 1000 °C.

### Dimensions

| Dimensions                |                           |
|---------------------------|---------------------------|
| Width x Length            | Thickness                 |
| 200 x 1200 mm             | 50 - 440 mm               |
| In accordance with EN 822 | In accordance with EN 823 |

| Dimensional Stability  |       |                                   |
|--|-------|-----------------------------------|
| Property   | Value | According to                      |
| Dimensional Stability under Specified Temperature and Humidity Conditions, DS(70,90) | ≤ 1 % | EN 13162:2012 + A1:2015 (EN 1604) |

Other thicknesses on request

### Packaging

Package Type

Plastic Package, Plastic Packages on a Pallet or Loose Product on a Pallet

## Fire Properties

| Reaction to Fire            |       |                                      |
|-----------------------------|-------|--------------------------------------|
| Property                    | Value | According to                         |
| Reaction to Fire, Euroclass | A1    | EN 13162:2012 + A1:2015 (EN 13501-1) |

| Continuous Glowing Combustion |       |                         |
|-------------------------------|-------|-------------------------|
| Property                      | Value | According to            |
| Continuous Glowing Combustion | NPD   | EN 13162:2012 + A1:2015 |

| Other Fire Properties |                 |              |
|-----------------------|-----------------|--------------|
| Property              | Value           | According to |
| Combustibility        | Non-combustible | EN ISO 1182  |

## Thermal Properties

| Thermal Resistance               |                                |                                  |
|----------------------------------|--------------------------------|----------------------------------|
| Property                         | Value                          | According to                     |
| Thermal Resistance               | <a href="#">See attachment</a> | EN 13162:2012 + A1:2015          |
| Thermal Conductivity $\lambda_D$ | 0,040 W/mK                     | EN 13162:2012 + A1:2015          |
| Thickness Tolerance, T           | T5                             | EN 13162:2012 + A1:2015 (EN 823) |

| Direct Airborne Sound Insulation Index |       |                                    |
|--|-------|------------------------------------|
| Property                               | Value | According to                       |
| Air Flow Resistivity $AF_R$            | NPD   | EN 13162:2012 + A1:2015 (EN 29053) |

## Moisture Properties

| Water Permeability                           |                         |                                    |
|--|-------------------------|------------------------------------|
| Property                                     | Value                   | According to                       |
| Water Absorption, Short Term $W_S, W_p$      | $\leq 1 \text{ kg/m}^2$ | EN 13162:2012 + A1:2015 (EN 1609)  |
| Water Absorption, Long Term $W_L(P), W_{lp}$ | $\leq 3 \text{ kg/m}^2$ | EN 13162:2012 + A1:2015 (EN 12087) |

| Water Vapour Permeability           |       |                                    |
|-------------------------------------|-------|------------------------------------|
| Property                            | Value | According to                       |
| Water Vapour Resistance Z           | NPD   | EN 13162:2012+A1:2015              |
| Water Vapour Transmission $MU, \mu$ | 1     | EN 13162:2012 + A1:2015 (EN 12086) |

## Sound Properties

| Acoustic Absorption Index |       |                                      |
|---------------------------|-------|--------------------------------------|
| Property                  | Value | According to                         |
| Sound Absorption          | NPD   | EN 13162:2012 + A1:2015 (EN ISO 354) |

## Impact Noise Transmission Index (for Floors)

| Property             | Value | According to                         |
|----------------------|-------|--------------------------------------|
| Dynamic Stiffness SD | NPD   | EN 13162:2012 + A1:2015 (EN 29052-1) |
| Compressibility      | NPD   | EN 13162:2012 + A1:2015              |

## Mechanical Properties

| Compressive Strength   |        |                                    |
|--|--------|------------------------------------|
| Property   | Value  | According to                       |
| Compressive Stress at 10 % deformation CS(10), $\sigma_{10}$ | NPD    | EN 13162:2012 + A1:2015 (EN 826)   |
| Compressive Strength CS(Y), $\sigma_m$                       | 50 kPa | EN 13162:2012 + A1:2015 (EN 826)   |
| Point Load PL(5)   | NPD    | EN 13162:2012 + A1:2015 (EN 12340) |

| Tensile/Flexural Strength                                 |        |                                   |
|---|--------|-----------------------------------|
| Property  | Value  | According to                      |
| Tensile Strength Perpendicular to Faces TR, $\sigma_{mt}$ | 80 kPa | EN 13162:2012 + A1:2015 (EN 1607) |

## Emissions

| Release of Dangerous Substances to the Indoor Environment |       |                         |
|---|-------|-------------------------|
| Property  | Value | According to            |
| Release of Dangerous Substances                           | NPD   | EN 13162:2012 + A1:2015 |

## Durability

| Durability of Compressive Strength against Ageing/Degradation |       |                                   |
|---|-------|-----------------------------------|
| Property  | Value | According to                      |
| Compressive Creep CC(i1/i2/y) $\sigma_c$ , $X_{ct}$           | NPD   | EN 13162:2012 + A1:2015 (EN 1606) |

Durability of Reaction to Fire Against Heat, Weathering, Ageing/Degradation  
 The fire performance of mineral wool does not deteriorate with time. The Euroclass classification of product is related to the organic content, which cannot increase with time.

Durability of Thermal Resistance Against Heat, Weathering, Ageing/Degradation  
 Thermal conductivity of mineral wool products does not change with time, experience has shown the fibre structure to be stable and the porosity contains no other gases than atmospheric air.

## Installation

Lamellas are installed with adhesive mortar. Separate mechanical fasteners are not normally needed (check the system owner instructions).

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