

## PAROC COS 15

### Concrete panel slab



|                      |   |
|----------------------|---|
| Certification Number | 0809-CPR-1015 / Eurofins Expert Services Ltd, P.O. Box 1001, FI-02044 VTT, Finland              |
| Designation Code     | MW-EN13162-T5-DS(70,-)-CS(10)15-WS-WL(P)-MU1  |
| Short Description    | Rigid, fire safe stone wool slab with high thermal insulation performance.                      |
| Application          | Thermal insulation in concrete prefabricated panels and concrete constructions casting in situ. |

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                 |
| 600 x 1200 mm             | 30 - 160 mm               |
| In accordance with EN 822 | In accordance with EN 823 |

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

Other Dimensions Other sizes available on request.

### Packaging

Package Type Plastic Package, Plastic Packages on a Pallet or slabs on wooden 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 $\lambda_D$ | 0,036 W/mK                     | EN 13162:2012 + A1:2015 (EN 13162) |
| 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 $W_p$             | $\leq 1 \text{ kg/m}^2$ | EN 13162:2012 + A1:2015 (EN 1609)  |
| Water Absorption, Long Term $WL(P)$ , $W_{lp}$ | $\leq 3 \text{ kg/m}^2$ | 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) |

High moisture transmission capacity of stone wool provides for drying of temporary dampness.

## 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), $\sigma_{10}$ | 15 kPa | EN 13162:2012 + A1:2015 (EN 826)   |
| Compressive Strength CS(Y), $\sigma_m$                       | NPD    | 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, $\sigma_{mt}$ | NPD   | EN 13162:2012 + A1:2015 (EN 1607) |

Rigid insulation for constructions with static load or dynamic loading caused by concrete pouring.

## 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 <sub>ct</sub>    | 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.

Head Office: PAROC GROUP, P.O. Box 240 (Energiakuja 3), FI-00181 Helsinki Finland, Tel. +358 46 876 8000, [www.paroc.com](http://www.paroc.com)

The information in this brochure describes the conditions and technical properties of the disclosed products, valid at the time of publication of this document and until replaced by the next printed or digital version. The latest version of this brochure is always available on the Paroc website. Our information material presents applications for which the functions and technical properties of our products have been approved. However, the information does not mean a commercial guarantee. We do not assume liability of the use of third party components used in the application or the installation of our products. We cannot warrant the suitability of our products if used in an area or conditions which are not provided in our information material. As a result of constant further development of our products we reserve the right to make alterations to our information material at any time. PAROC is a registered trademark of Paroc Group. This data sheet is valid in following countries: international use (general information).