

PAROC Fire Steel Protect

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Certification Number	0809-CPR-1015 / Eurofins Expert Services Ltd, P.O. Box 1001, FI-02044 VTT, Finland
Designation Code	MW-EN13162-T5-DS(70,-)-WS-WL(P)-MU1
Short Description	Very rigid, stone wool slab with high fire performance.
Application	Fire insulation of steel structures.
Nominal Density	160 kg/m ³

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	20 mm
600 x 1200 mm	25 mm
600 x 1200 mm	30 mm
600 x 1200 mm	40 mm
600 x 1200 mm	50 mm
600 x 1200 mm	60 mm
mm	In accordance with EN 823
In accordance with EN 822	

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

Packaging

Package Type	Plastic Packages on a Pallet
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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

Special structures may require a separate fire tests

Thermal Properties

Thermal Resistance		
Property	Value	According to
Thermal Conductivity λ_D	0,038 W/mK	EN 13162:2012 + A1:2015
Thickness Tolerance, T	T5	EN 13162:2008 (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, μ	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+A1:2015

Mechanical Properties

Compressive Strength		
Property	Value	According to
Compressive stress at 10 % deformation CS(10), σ_{10}	NPD	EN 13162:2012 + A1:2015 (EN 826)
Compressive Strength CS(Y), σ_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, σ_{mt}	NPD	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) σ_c , X_{ct}	NPD	EN 13162:2012 + A1:2015 (EN 1606)

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