

**Declaration of Performance No: RWDOPBNL-320-001-02**

- Unique identification code of the product-type: Rhinnox D
- Type and serial number allowing identification of the product: 320RXX000
- Intended use of the construction product, in accordance with the applicable harmonized technical specification, as foreseen by the manufacturer: Thermal insulation of buildings.
- Name, registered trade name or trade mark and contact address of the manufacturer as required under article 11(5):  
ROCKWOOL B.V., Industrieweg 15, 6045 JG Roermond (NL)
- Where applicable, name and contact address of the authorized representative whose mandate covers the tasks specified in Article 12(2): n.a.
- Systems of assessment and verification of constancy of performance of the construction as set out in CPR, Annex V: 1+3
- Notified Certification body No. 0749 performed, carried out the determination of the product type, the initial inspection of the manufacturing plant and of factory production control and the continuous surveillance, assessment and evaluation of factory production control and issued the certificate of constancy of performance for reaction to fire.  
Notified testing laboratories No. 0071 and 1136 performed the test reports for the other relevant declared characteristics.
- Declared Performance:

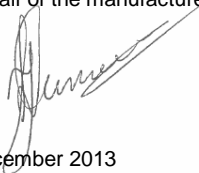
Essential Characteristics	Clauses in this and other European standard(s) related to essential characteristics	Harmonized standard EN 13162:2012+A1 2015	Declared value / NPD
Reaction to fire	4.2.6 Reaction to fire	Euroclasses	A2-s1,d0
Release of dangerous substances to the indoor environment	4.3.13 Release of dangerous substances	–	European test method under construction
Acoustic absorption index	4.3.11 Sound absorption	Declared $\alpha_p$ and $\alpha_w$	NPD
Impact noise transmission index (for floors)	4.3.9 Dynamic stiffness	Declared S [MN/m <sup>3</sup> ]	NPD
	4.3.10.2 Thickness, $d_L$	Declared $d_L$ [mm] and Class	NPD
	4.3.10.4 Compressibility c	Declared CP Level	NPD
	4.3.12 Air flow resistivity	Direct airborne sound insulation index, Declared $AF_r$ [kPas/m <sup>2</sup> ]	NPD
Direct airborne sound insulation index	4.3.12 Air flow resistivity	Declared $AF_r$ [kPas/m <sup>2</sup> ]	NPD
Continuous glowing combustion	4.3.15 Continuous glowing combustion	–	European test method under construction
Thermal resistance	4.2.1 Thermal resistance and thermal conductivity	Declared R [m <sup>2</sup> K/W] and $\lambda$ [W/mK] if possible	See annex Ad: 0,043
	4.2.2 Length and width	Declared l and b	Tolerance: l $\pm$ 2% / b $\pm$ 1.5%
	4.2.3 Thickness	Declared d or tolerance class	Thickness: 80-140 mm Tolerance class: T4
	4.2.4 Squareness	Declared $S_b$ [mm/m]	$S_b \leq 5$ mm/m
	4.2.5 Flatness	Declared $S_{max}$ [mm]	$S_{max} \leq 6$ mm
Water permeability	4.3.7.1 Short term water absorption	Declared $W_p$ [kg/m <sup>2</sup> ]	$\leq 1,0$
	4.3.7.2 Long term water absorption	Declared $W_{lp}$ [kg/m <sup>2</sup> ]	NPD
Water vapour permeability	4.3.8 Water vapour transmission	Declared $\mu$ or Z	$\mu = 1$
Compressive strength	4.3.3 Compressive stress or compressive strength	Declared CS [kPa]	90
	4.3.5 Point load	Declared $F_p$ [N]	1150
Durability of reaction to fire against heat, weathering, ageing/degradation	4.2.7 Durability characteristics <sup>a)</sup>	<sup>b)</sup>	a), b)
Durability of thermal resistance against heat, weathering, ageing/degradation	4.2.1 Thermal resistance and thermal conductivity	Declared R [m <sup>2</sup> K/W] and $\lambda$ [W/mK] if possible <sup>c)</sup>	See annex Ad: 0,043
	4.2.7 Durability characteristics	<sup>d)</sup>	DS(70,90)
Tensile/Flexural strength	4.3.4 Tensile strength perpendicular to faces <sup>e)</sup>	Declared TR [kPa]	30
Durability of compressive strength against ageing/degradation	4.3.6 Compressive creep	Declared $X_{ct}$ and $X_t$	NPD

<sup>a)</sup>No change in reaction to fire properties for mineral wool products. <sup>b)</sup>The fire performance of mineral wool does not deteriorate with time. The Euroclass classification of the product is related to the organic content, which cannot increase with time. <sup>c)</sup>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. <sup>d)</sup>For dimensional stability thickness only. <sup>e)</sup>This characteristic also covers handling and installation.

The performance of the product identified in points 1 and 2 is in conformity with the declared performance in point 8. This declaration of performance is issued under the sole responsibility of the manufacturer identified above.

Signed for and on behalf of the manufacturer by (digital signature):

W.J.E. Dumoulin  
Technical Director



Roermond, 11<sup>th</sup> of December 2013

Thickness (mm)	$R_d(m^2K/W)$
----------------	---------------

80	1.85
----	------

90	2.05
----	------

100	2.30
-----	------

110	2.55
-----	------

120	2.75
-----	------

130	3.00
-----	------

140	3.25
-----	------