

Declaration of performance

purenit



EN

40131.CPR.2021.09

1.	Unique identification code of the product type	purenit																														
2.	Intended use	Thermal insulation in buildings and construction applications including floors, walls and roofs, for construction elements with no contact to water and soil																														
3.	Manufacturer	purenit gmbh Rengoldshauser Straße 4 - DE-88662 Ueberlingen - Germany t +49 7551 80990 - f +49 7551 809920 - www.puren.com																														
5.	Systems(s) of assessment and verification of constancy of performance	System 3																														
6.	Harmonised standard	not available																														
6.	Notified authorities	0751																														
8.	European technical evaluation / Registration technical assessment body	ETA-18/0604 Deutsches Institut für Bautechnik (DIBt) Kolonnenstraße 30 B, DE-10829 Berlin																														
7.	Essential characteristics	Declared Performance																														
	Reaction to fire	E																														
	Thermal conductivity	$\lambda_D =$ W/(m·K) $\lambda_D = 0,083$ W/(m·K) $d_N \leq 40$ mm $\lambda_D = 0,085$ W/(m·K) $40 \text{ mm} < d_N \leq 60$ mm $\lambda_D = 0,088$ W/(m·K) $d_N > 60$ mm																														
	Thermal resistance	Table 1 <table border="1"> <thead> <tr> <th colspan="2">at nominal thickness</th> <th colspan="2">at nominal thickness</th> <th colspan="2">at nominal thickness</th> </tr> <tr> <th>R_D [m²·K/W]</th> <th>d_N [mm]</th> <th>R_D [m²·K/W]</th> <th>d_N [mm]</th> <th>R_D [m²·K/W]</th> <th>d_N [mm]</th> </tr> </thead> <tbody> <tr> <td>0,20</td> <td>20</td> <td>0,35</td> <td>30</td> <td>0,45</td> <td>40</td> </tr> <tr> <td>0,55</td> <td>50</td> <td>0,70</td> <td>60</td> <td>0,75</td> <td>70</td> </tr> <tr> <td>0,90</td> <td>80</td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table> For other thicknesses : Calculate with $R_n = d_N / \lambda_n$	at nominal thickness		at nominal thickness		at nominal thickness		R_D [m ² ·K/W]	d_N [mm]	R_D [m ² ·K/W]	d_N [mm]	R_D [m ² ·K/W]	d_N [mm]	0,20	20	0,35	30	0,45	40	0,55	50	0,70	60	0,75	70	0,90	80				
at nominal thickness		at nominal thickness		at nominal thickness																												
R_D [m ² ·K/W]	d_N [mm]	R_D [m ² ·K/W]	d_N [mm]	R_D [m ² ·K/W]	d_N [mm]																											
0,20	20	0,35	30	0,45	40																											
0,55	50	0,70	60	0,75	70																											
0,90	80																															
	Coverision for humidity																															
	mass-based moisture content at 23°C / 50% rel. humidity	$U_{23/50} = 0,017$																														
	mass-based moisture content at 23°C / 80% rel. humidity	$U_{23/80} = 0,028$																														
	mass-based moisture conversion coefficient	$f_u = 2,86$																														
	Coverision for humidity (23°C / 50% rel. humidity to at 23°C / 80% rel. humidity)	$F_m (23/50-23/80) = 1,03$																														
	Water absorption by short term, partial immersion	$W_p \leq 0,5$ kg/m ²																														
	by long-term, partial or complete immersion	Performance not assessed																														
	Hygroscopic sorption characteristics Moisture absorption (desorption) at 23 °C / 80 % relative humidity	$u \leq 3,0$ Mass-%																														
	Water vapor diffusion	$\mu = 8$																														
	Compressive strength	≥ 7100 kPa																														
	Tensile strength perpendicular to panel plane	≥ 800 kPa																														
	Flexural strength	Performance not assessed																														
	Shear strength	Performance not assessed																														
	Deformation with defined pressure and temperature load	Performance not assessed																														
	Creep behaviour under compressive stress	Performance not assessed																														
	Bulk density	550 kg/m ³																														
	Nominal thickness	$d_N = 20 - 80$ mm																														
	Nominal length	≤ 6000 mm																														
	Nominal width	≤ 1350 mm																														
	Perpendicularity	$S_b \leq 2$ mm																														
	Flatness	≤ 2 mm																														
	Surface flatness after one-sided humification	Performance not assessed																														
	Dimensional stability	Performance not assessed																														

NPD: No Performance Determined

The performance of the product identified above is in conformity with the declared performances. The above manufacturer is solely responsible for this declaration of performance in accordance with Annex III of Regulation (EU) No. 305/2011.

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Signed for and on behalf of the manufacturer by

Dr. Andreas Huther
Executive Director
Ueberlingen, 01.09.2021

