

# Declaration of performance

purenit



EN

40231.CPR.2021.09

1.	Unique identification code of the product type	purenit C																														
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 1 reaction to fire System 3 all other features																														
6.	Harmonised standard	not available																														
6.	Notified authorities	0672 reaction to fire 0751 all other features																														
8.	European technical evaluation / Registration technical assessment body	ETA-18/0604 Deutsches Institut für Bautechnik (DIBt) Kolonnenstraße 30 B, DE-10829 Berlin																														
7.	<b>Essential characteristics</b>	<b>Declared Performance</b>																														
	Reaction to fire	C-s2,d0																														
	Thermal conductivity	$\lambda_D = 0,096$ W/(m·K)																														
		$\lambda_D =$ W/(m·K) $d_N \leq 40$ mm																														
		$\lambda_D =$ W/(m·K) $40$ mm < $d_N \leq 60$ mm																														
		$\lambda_D =$ 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><math>R_D</math> [m<sup>2</sup>·K/W]</th> <th><math>d_N</math> [mm]</th> <th><math>R_D</math> [m<sup>2</sup>·K/W]</th> <th><math>d_N</math> [mm]</th> <th><math>R_D</math> [m<sup>2</sup>·K/W]</th> <th><math>d_N</math> [mm]</th> </tr> </thead> <tbody> <tr> <td>0,20</td> <td>20</td> <td>0,30</td> <td>30</td> <td>0,40</td> <td>40</td> </tr> <tr> <td>0,50</td> <td>50</td> <td>0,60</td> <td>60</td> <td>0,70</td> <td>70</td> </tr> <tr> <td>0,80</td> <td>80</td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>	at nominal thickness		at nominal thickness		at nominal thickness		$R_D$ [m <sup>2</sup> ·K/W]	$d_N$ [mm]	$R_D$ [m <sup>2</sup> ·K/W]	$d_N$ [mm]	$R_D$ [m <sup>2</sup> ·K/W]	$d_N$ [mm]	0,20	20	0,30	30	0,40	40	0,50	50	0,60	60	0,70	70	0,80	80				
at nominal thickness		at nominal thickness		at nominal thickness																												
$R_D$ [m <sup>2</sup> ·K/W]	$d_N$ [mm]	$R_D$ [m <sup>2</sup> ·K/W]	$d_N$ [mm]	$R_D$ [m <sup>2</sup> ·K/W]	$d_N$ [mm]																											
0,20	20	0,30	30	0,40	40																											
0,50	50	0,60	60	0,70	70																											
0,80	80																															
		For other thicknesses : Calculate with $R_n = d_N / \lambda_n$																														
	Covercion for humidity																															
	mass-based moisture content at 23°C / 50% rel. humidity	$U_{23/50}$ Performance not assessed																														
	at 23°C / 80% rel. humidity	$U_{23/80}$ Performance not assessed																														
	mass-based moisture conversion coefficient	$f_u$ Performance not assessed																														
	Covercion for humidity (23°C / 50% rel. humidity to at 23°C / 80% rel. humidity)	$F_m (23/50-23/80)$ Performance not assessed																														
	Water absorption																															
	by short term, partial immersion	$W_p \leq 0,5$ kg/m <sup>2</sup>																														
	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	$\geq 7100$ kPa																														
	Tensile strength perpendicular to panel plane	$\geq 800$ 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 <sup>3</sup>																														
	Nominal thickness	$d_N = 20 - 80$ mm																														
	Nominal length	$\leq 6000$ mm																														
	Nominal width	$\leq 1350$ mm																														
	Perpendicularity	$S_b \leq 2$ mm																														
	Flatness	$\leq 2$ 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

