Declaration of		Declaration of performance	Trade name	Format	Format		
(DoP) EN 131		(DoP) EN 14308					
Kenncode	DoP Nr.	Kenncode DoP Nr.					
puren-PIR MV	11111.CPR.2020.10						
120 kPa			puren Parkdach puren MV	600 x 600 1200 x 600	2400 x 600		
			puren MV-XL puren-PIR MV ha puren MV-FB	2400 x 1200 1200 x 600 1200 x 600	2400 x 600		
			puren MV-K puren HoltaFix puren Dämmschalung	1200 x 600 1200 x 600 2400 x 1020			
			puren Unterdach (026/027) puren Plus puren PavaPlus	2400 x 1020 2400 x 1020 2400 x 1020	2400 x 600		
			puren Basic puren ProForm	2400 x 1020 2400 x 1020 2400 x 1020			
			puren Ökonomic puren DBV-MV	2400 x 1020 1170 x 570			
puren-PIR MV ds	11121.CPR.2020.10						
150 kPa			puren MV-FB	1200 x 600 1200 x 600	2400 x 600		
TO THE STATE OF	12211.CPR.2020.10		puren NE-P puren MV-K	1200 x 600 1200 x 600			
puren-PIR MV-SE 120 kPa			puren Secure	1200 x 600	2400 x 600		
puren-PIR MV-SE ds 150 kPa	12221.CPR.2020.10		puren TG	1200 x 600	2400 x 600		
puren-PIR ALU	14111.CPR.2020.10		50.1	1000 000	0.400 000		
120 kPa			puren FD-L puren FD-XL	1200 x 600 2400 x 1200	2400 x 600		
			puren FD-L MLP	1200 x 600	2400 x 600		
			puren FD-XL MLP	2400 x 1200	2400 x 1200		
			puren-PIR ALU ha	1200 x 600	2400 x 600		
			puren FAL puren AL-K	1200 x 600 1200 x 600			
			puren Corepur	1200 x 600	2400 x 600		
			puren Intrawall	1200 x 600			
			puren UKD	2400 x 620			
			puren Unterdach (023)	2400 x 1020			
			puren Perfect	2400 x 1020			
			puren Compact	2400 x 1020	2400 x 620		
			puren SilentPro	2400 x 1020			
			puren MetalFix puren LivingBoard	2400 x 620 2400 x 620			
			puren BFU	2400 x 620 2400 x 620			
			puren DBV	1170 x 570			
puren-PIR ALU-W	14114.CPR.2020.10		Sto-PUR-Hartschaumplatte	500 x 500			
puren-PIR ALU ds	14121.CPR.2020.10		oto i ott i iaitoonaampiatto	, 300 x 300			
150 kPa			puren FD-L	1200 x 600	2400 x 600		
			puren FD-L MLP	1200 x 600	2400 x 600		
			puren FAL	1200 x 600			
			puren AL-K	1200 x 600 1200 x 600			
puren-PIR ALU novoPIR	14112.CPR.2020.10		puren Intrawall	1200 X 600			
PER STATE OF THE S	2.011.1.2020.10		puren-PIR ALU NovoPIR	1200 x 600	2400 x 600		
TOTAL DID ALL C	14110 000 0000 / 5		puren-PIR ALU NovoPIR ha	1200 x 600	2400 x 600		
puren-PIR ALU-S	14113.CPR.2020.10		puren-PIR ALU NovoPIR-S	1200 x 600	2400 x 600		
			puren Intrawall S	1200 x 600			
puren-PIR ALD	84112.CPR.2020.10		puren ALD	2500 x 1200			
puren-PIR APE	86111.CPR.2020.10		puren APE	2500 x 1200			
puren-PIR PVC	86112.CPR.2020.10		puren PVC	2500 x 1200			
puren-PIR ALU-G	84111.CPR.2020.10						
			puren GDS AL	1200 x 1200			

Declaration of (DoP) EN 131	f performance	Declaration o (DoP) EN 143	f performance	Trade name	Format	
Kenncode	DoP Nr.	Kenncode	DoP Nr.			
puren-PIR SE	20221.CPR.2020.10	puren-PIR SE	30111.CPR.2017.07			
Class C	20221.0111.2020.10	paron i ii oz	00111.0111.2017.07	puren PIR Class C	1000 x 500	
				puren Kompaktdach Class C	500 x 500	
puren-PIR NE	20111.CPR.2020.10					
WDVS				purenotherm WDVS	1000 x 500	
				purenotherm BSR	1000 x 250	
puren-PIR NE-S	20112.CPR.2020.10					
WDVS				purenotherm WDVS (S)	1000 x 500	
puren-PIR NE-G	20113.CPR.2020.10					
120 kPa				puren NE-B2	1200 x 800	
				puren-PIR NE	1200 x 800	
		puren-PIR NE HF	30211.CPR.2017.07	DID NE L	1000 500	
				puren PIR NE hf (kompokt)	1000 x 500	
DUD NE CO	20114.CPR.2020.10			puren-PIR NE hf (kompakt)	500 x 500	
puren-PIR NE-GS 120 kPa	20114.07H.2020.10			puren NE-B2	1200 x 800	
	00101 ODD 0000 10	DID NIE 00	00011 ODD 0017 07	puren NC-B2	1200 X 800	
puren-PIR NE 32 150 kPa	20121.CPR.2020.10	puren-PIR NE 32	30311.CPR.2017.07	puren NE-B2	1200 x 600	
150 KFa				puren Kompaktdach NE	600 x 600	
DID NE 00 C				puren Rompartuach NE	000 X 000	
puren-PIR NE 32-S 150 kPa				puren NE-B2	1200 x 600	
150 KFa				puren Kompaktdach NE	600 x 600	
nuron DID NE 40	20131.CPR.2020.10	puren-PIR NE 40	30412.CPR.2017.07	paron nomparadon ne	000 X 000	
puren-PIR NE 40	20101.0111.2020.10	parent in the 40	00+12.0111.2017.07	puren NE-druckfest RG 40	1000 x 500	
				puren Kompaktdach RG 40	500 x 500	
puren-PIR NE 50	20132.CPR.2020.10	puren-PIR NE 50	30413.CPR.2017.07			
parent intive oo	20102.0111.2020.10	parent in the oo	00+10.0111.2017.07	puren NE-druckfest RG 50	1000 x 500	
				puren Kompaktdach RG 50	500 x 500	
				puren-PIR NE 50 Schwelleneleme	1200 x 400	
puren-PIR NE 60	20133.CPR.2020.10	puren-PIR NE 60	30414.CPR.20170.7			
,				puren NE-druckfest RG 60	1000 x 500	
				puren Kompaktdach RG 60	500 x 500	
puren-PIR NE 80	20135.CPR.2020.10	puren-PIR NE 80	30415.CPR.2017.07			
				puren NE-druckfest RG 80	1000 x 500	
				puren Kompaktdach RG 80	500 x 500	
puren-PIR NE 100	20136.CPR.2020.10	puren-PIR NE 100	30416.CPR.2017.07			
				puren NE-druckfest RG 100	1000 x 500	
				puren Kompaktdach RG 100	500 x 500	
		puren-PIR NE 120	30417.CPR.2017.07			
				puren NE-druckfest RG 120		
		puren-PIR NE 145	30418.CPR.2017.07			
				puren NE-druckfest RG 145		
		puren-PIR NE 200	30419.CPR.2017.07			
		parent in the 200	50410.0111.2017.07	puren NE-druckfest RG 200		
	I	I	I	purent NE-didontest FIG 200		

puren-PIR MV



11111.CPR.2020.10 puren-PIR MV 1. Unique identification code of the product-type Thermal insulation for buildings 2. Intended application puren gmbh 3. Manufacturer Rengoldshauser Straße 4 - DE-88662 Ueberlingen - Germany t +49 7551 80990 - f +49 7551 809920 - www.puren.com System(s) of assessment and verification of the 4. constancy of performance EN 13165:2012+A2:2016 Harmonised standard 5. Notified body(ies) 0751 FIW München harmonised technical 6. Performance Essential characteristics Performance specifications Thermal resistance Table 1 at nominal thickness at nominal thickness Thermal resistance $R_D \left[m^2 \cdot K/W \right]$ $d_N \ [mm]$ $R_D \; [m^2 \cdot K/W]$ $d_N \, [mm] \,$ 0,70 30 20 1,10 1,45 40 1,85 50 2.20 60 2.55 70 3,05 80 100 3.80 120 4.80 5.60 140 EN 13165:2012 6,40 160 7,20 180 +A2:2016 8,00 200 8.80 220 For other thicknesses: Calculate with $R_D = d_N / \lambda_D$ at nominal thickness $d_N < 80 \text{ mm}$ Thermal conductivity $\lambda_D = 0.027$ $W/(m^2 \cdot K)$ $80 \text{ mm} \le d_N < 120 \text{ mm}$ $\lambda_{D} = 0.026$ W/(m²·K) $d_N \ge 120 \text{ mm}$ $\lambda_D =$ 0,025 $W/(m^2 \cdot K)$ Thickness / $d_N =$ 20 - 220 mm T2 Thickness tolerance EN 13501-1 Ε Reaction to fire Stability of fire behaviour under the influence In case of exposure to fire, the behaviour of rigid polyurethane foam does not deteriorate over time of heat, weather and ageing / degradation use table 1 Durability of the thermal Thermal resistance resistance under the at nominal thickness $d_N < 80 \text{ mm}$ influence of heat, weather Thermal conductivity $\lambda_D = 0.027$ $W/(m^2 \cdot K)$ and ageing / degradation $80~\text{mm} \leq d_N < 120~\text{mm}$ $\lambda_D = 0.026$ $W/(m^2 \cdot K)$ $\lambda_D = 0.025$ $W/(m^2 \cdot K)$ $d_N \ge 120 \text{ mm}$ Properties of durability NPD DS(70,90)3 Dimensional stability DS(-20,-)2 Deformation with defined **DLT(2)5** pressure and temperature stress Determination of the R_D use table 1 values of thermal at nominal thickness resistance and thermal $\lambda_D=0,027$ $d_N < 80 \text{ mm}$ W/(m²·K) conductivity after ageing $\lambda_D = 0.026$ $W/(m^2 \cdot K)$ $80 \text{ mm} \le d_N < 120 \text{ mm}$ $W/(m^2 \cdot K)$ $d_N \ge 120 \text{ mm}$ EN 13165:2012 $\lambda_{\rm D} = 0.025$ Compressive strength CS(10\Y)120 +A2:2016 Compressive stress TR50 Tensile / bending strength Tensile strength perpendicular to the panel plane Durability of compressive NPD Creep behaviour under strength under the compressive stress influence of ageing and degradation Water permeability short-term water NPD absorption long-term water absorption NPD Flatness after one-sided NPD moisturisation NPD Water vapour diffusion Sound absorption coefficient NPD Release of dangerous substances, release into the NPD interior of the building NPD Smouldering behaviour

NPD: No Performance Determined

2/2

puren-PIR MV



11111.CPR.2020.10

Signed for and on behalf of the manufacturer by

Dr. Andreas Huther

Executive Director Ueberlingen, 01.10.2020 4. /h. h

puren-PIR MV

NPD:

No Performance Determined



11121.CPR.2020.10 puren-PIR MV ds 1. Unique identification code of the product-type Thermal insulation for buildings 2. Intended application puren gmbh 3. Manufacturer Rengoldshauser Straße 4 - DE-88662 Ueberlingen - Germany t +49 7551 80990 - f +49 7551 809920 - www.puren.com System(s) of assessment and verification of the 4. constancy of performance EN 13165:2012+A2:2016 Harmonised standard 5. Notified body(ies) 0751 FIW München harmonised technical 6. Performance Essential characteristics Performance specifications Thermal resistance Table 1 at nominal thickness at nominal thickness Thermal resistance $R_D \left[m^2 \cdot K/W \right]$ $d_N \ [mm]$ $R_D \; [m^2 \cdot K/W]$ $d_N \, [mm] \,$ 0,70 30 20 1,05 1,40 40 1,75 50 2.10 60 2.50 70 3,05 80 100 3.80 120 4.80 5.60 140 EN 13165:2012 6,40 160 7,20 180 +A2:2016 8,00 200 For other thicknesses: Calculate with $R_D = d_N / \lambda_D$ at nominal thickness $d_N < 80 \text{ mm}$ Thermal conductivity $\lambda_D = 0.028$ $W/(m^2 \cdot K)$ $80 \text{ mm} \le d_N < 120 \text{ mm}$ $\lambda_{D} = 0.026$ W/(m²·K) $d_N \ge 120 \text{ mm}$ $\lambda_D =$ 0,025 $W/(m^2 \cdot K)$ Thickness / $d_N =$ 20 - 200 mm T2 Thickness tolerance EN 13501-1 Ε Reaction to fire Stability of fire behaviour under the influence In case of exposure to fire, the behaviour of rigid polyurethane foam does not deteriorate over time of heat, weather and ageing / degradation use table 1 Durability of the thermal Thermal resistance resistance under the at nominal thickness $d_N < 80 \text{ mm}$ influence of heat, weather Thermal conductivity $\lambda_D = 0.028$ $W/(m^2 \cdot K)$ and ageing / degradation $80~\text{mm} \leq d_N < 120~\text{mm}$ $\lambda_D = 0.026$ $W/(m^2 \cdot K)$ $\lambda_D =$ $W/(m^2 \cdot K)$ $d_N \ge 120 \text{ mm}$ 0,025 Properties of durability NPD DS(70,90)3 Dimensional stability DS(-20,-)2 Deformation with defined pressure and temperature stress Determination of the R_D use table 1 values of thermal at nominal thickness resistance and thermal $\lambda_D=0,028$ $d_N < 80 \text{ mm}$ W/(m²·K) conductivity after ageing $\lambda_D = 0.026$ $W/(m^2 \cdot K)$ $80 \text{ mm} \le d_N < 120 \text{ mm}$ $W/(m^2 \cdot K)$ $d_N \ge 120 \text{ mm}$ EN 13165:2012 $\lambda_{\rm D} = 0.025$ Compressive strength CS(10\Y)150 +A2:2016 Compressive stress TR40 Tensile / bending strength Tensile strength perpendicular to the panel plane Durability of compressive NPD Creep behaviour under strength under the compressive stress influence of ageing and degradation Water permeability short-term water NPD absorption long-term water absorption NPD Flatness after one-sided NPD moisturisation NPD Water vapour diffusion Sound absorption coefficient NPD Release of dangerous substances, release into the NPD interior of the building NPD Smouldering behaviour

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.

2/2

puren-PIR MV



11121.CPR.2020.10

Signed for and on behalf of the manufacturer by

Dr. Andreas Huther **Executive Director**

Ueberlingen, 01.10.2020 4. /h. h

puren-PIR MV-SE



12211.CPR.2020.10 puren-PIR MV-SE 1. Unique identification code of the product-type Thermal insulation for buildings Intended application 2. puren gmbh 3. Manufacturer Rengoldshauser Straße 4 - DE-88662 Ueberlingen - Germany t +49 7551 80990 - f +49 7551 809920 - www.puren.com System(s) of assessment and verification of the System 1 Reaction to fire 4. constancy of performance System 3 all other features EN 13165:2012+A2:2016 Harmonised standard 5. Notified body(ies) 0751 FIW München harmonised technical 6. Performance Essential characteristics Performance specifications Thermal resistance Table 1 at nominal thickness at nominal thickness Thermal resistance $R_D \left[m^2 \cdot K/W \right]$ $d_N \, [mm]$ $R_D \; [m^2 \cdot K/W]$ $d_N \ [mm]$ 2,10 2.50 70 60 3,05 3,80 100 80 4,80 120 5.60 140 6,40 160 7,20 180 EN 13165:2012 8.00 200 +A2:2016 For other thicknesses: Calculate with $R_D = d_N / \lambda_D$ at nominal thickness Thermal conductivity $\lambda_{D} = 0.028$ $W/(m^2 \cdot K)$ $d_N < 80 \text{ mm}$ $80 \text{ mm} \le d_N < 120 \text{ mm}$ $\lambda_{D} = 0.026$ W/(m²·K) $d_N \ge 120 \text{ mm}$ $\lambda_D = 0.025$ $W/(m^2 \cdot K)$ $d_N = 60 - 200 \text{ mm}$ Thickness / T2 Thickness tolerance Reaction to fire F EN 13501-1 B-s1,d0 top / visible side Stability of fire behaviour under the influence In case of exposure to fire, the behaviour of rigid polyurethane of heat, weather and ageing / degradation foam does not deteriorate over time Durability of the thermal use table 1 Thermal resistance resistance under the at nominal thickness influence of heat, weather Thermal conductivity $\lambda_{D} = 0.028$ $W/(m^2 \cdot K)$ $d_N < 80 \text{ mm}$ and ageing / degradation $80 \text{ mm} \le d_N < 120 \text{ mm}$ $\lambda_{D} = 0.026$ $W/(m^2 \cdot K)$ $d_N \ge 120 \text{ mm}$ $\lambda_D = 0.025$ $W/(m^2 \cdot K)$ Properties of durability NPD Dimensional stability DS(70,90)3 DS(-20,-)2 Deformation with defined DLT(2)5 pressure and temperature Determination of the use table 1 values of thermal at nominal thickness resistance and thermal $\lambda_D=0,028$ $W/(m^2 \cdot K)$ $d_N < 80 \ mm$ conductivity after ageing $\lambda_D=0,026$ $W/(m^2 \cdot K)$ $80 \text{ mm} \le d_N < 120 \text{ mm}$ 0,025 $W/(m^2 \cdot K)$ $d_N \ge 120 \text{ mm}$ EN 13165:2012 Compressive stress CS(10\Y)120 Compressive strength +A2:2016 Tensile / bending strength Tensile strength **TR50** perpendicular to the panel NPD Durability of compressive Creep behaviour under strength under the compressive stress influence of ageing and degradation NPD Water permeability short-term water absorption long-term water absorption NPD NPD Flatness after one-sided moisturisation NPD Water vapour diffusion Sound absorption coefficient NPD Release of dangerous substances, release into the NPD interior of the building Smouldering behaviour NPD

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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puren-PIR MV-SE



12211.CPR.2020.10

Signed for and on behalf of the manufacturer by

Dr. Andreas Huther
Executive Director
Ueberlingen, 01.10.2020

ΕN

puren-PIR MV-SE



12221.CPR.2020.10 puren-PIR MV-SE ds 1. Unique identification code of the product-type Thermal insulation for buildings Intended application 2. puren gmbh 3. Manufacturer Rengoldshauser Straße 4 - DE-88662 Ueberlingen - Germany t +49 7551 80990 - f +49 7551 809920 - www.puren.com System(s) of assessment and verification of the System 1 Reaction to fire 4. constancy of performance System 3 all other features EN 13165:2012+A2:2016 Harmonised standard 5. Notified body(ies) 0751 FIW München harmonised technical 6. Performance Essential characteristics Performance specifications Thermal resistance Table 1 at nominal thickness at nominal thickness Thermal resistance $R_D \left[m^2 \cdot K/W \right]$ $d_N \, [mm]$ $R_D \; [m^2 \cdot K/W]$ $d_N \ [mm]$ 2,10 2.50 70 60 3,05 3,80 100 80 4,80 120 5.60 140 6,40 160 7,20 180 EN 13165:2012 8.00 200 +A2:2016 For other thicknesses: Calculate with $R_D = d_N / \lambda_D$ at nominal thickness Thermal conductivity $\lambda_{D} = 0.028$ $W/(m^2 \cdot K)$ $d_N < 80 \text{ mm}$ $80 \text{ mm} \le d_N < 120 \text{ mm}$ $\lambda_{D} = 0.026$ W/(m²·K) $d_N \ge 120 \text{ mm}$ $\lambda_D = 0.025$ $W/(m^2 \cdot K)$ $d_N = 60 - 200 \text{ mm}$ Thickness / T2 Thickness tolerance Reaction to fire F EN 13501-1 B-s1,d0 top / visible side Stability of fire behaviour under the influence In case of exposure to fire, the behaviour of rigid polyurethane of heat, weather and ageing / degradation foam does not deteriorate over time Durability of the thermal use table 1 Thermal resistance resistance under the at nominal thickness influence of heat, weather Thermal conductivity $\lambda_{D} = 0.028$ $W/(m^2 \cdot K)$ $d_N < 80 \text{ mm}$ and ageing / degradation $80 \text{ mm} \le d_N < 120 \text{ mm}$ $\lambda_{D} = 0.026$ $W/(m^2 \cdot K)$ $d_N \ge 120 \text{ mm}$ $\lambda_D = 0.025$ $W/(m^2 \cdot K)$ Properties of durability NPD Dimensional stability DS(70,90)3 DS(-20,-)2 Deformation with defined DLT(2)5 pressure and temperature Determination of the use table 1 values of thermal at nominal thickness resistance and thermal $\lambda_D=0,028$ $W/(m^2 \cdot K)$ $d_N < 80 \ mm$ conductivity after ageing $\lambda_D=0,026$ $W/(m^2 \cdot K)$ $80 \text{ mm} \le d_N < 120 \text{ mm}$ 0,025 $W/(m^2 \cdot K)$ $d_N \ge 120 \text{ mm}$ EN 13165:2012 Compressive stress CS(10\Y)150 Compressive strength +A2:2016 Tensile / bending strength Tensile strength **TR50** perpendicular to the panel NPD Durability of compressive Creep behaviour under strength under the compressive stress influence of ageing and degradation NPD Water permeability short-term water absorption long-term water absorption NPD NPD Flatness after one-sided moisturisation NPD Water vapour diffusion Sound absorption coefficient NPD Release of dangerous substances, release into the NPD interior of the building Smouldering behaviour NPD

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.

2/2

puren-PIR MV-SE



12221.CPR.2020.10

Signed for and on behalf of the manufacturer by

Dr. Andreas Huther
Executive Director
Ueberlingen, 01.10.2020

ΕN

puren-PIR ALU



14111.CPR.2020.10 puren-PIR ALU 1. Unique identification code of the product-type Thermal insulation for buildings Intended application 2. puren gmbh 3. Manufacturer Rengoldshauser Straße 4 - DE-88662 Ueberlingen - Germany t +49 7551 80990 - f +49 7551 809920 - www.puren.com System(s) of assessment and verification of the System 3 4. constancy of performance EN 13165:2012+A2:2016 Harmonised standard 5. Notified body(ies) 0751 FIW München harmonised technical 6. Performance Essential characteristics Performance specifications Thermal resistance Table 1 at nominal thickness at nominal thickness Thermal resistance $R_D \; [m^2 \cdot K/W]$ $d_N \, [mm]$ $R_D \; [m^2 \cdot K/W]$ $d_N \ [mm]$ 0,85 20 1,30 30 1,70 40 2,15 50 2.60 60 3.00 70 3,60 80 100 4.50 5,45 120 6.35 140 EN 13165:2012 7,25 +A2:2016 160 8,15 180 9.05 200 220 10.00 For other thicknesses: Calculate with $R_D = d_N / \lambda_D$ at nominal thickness $d_N < 80 \text{ mm}$ Thermal conductivity $\lambda_D = 0.023$ $W/(m^2 \cdot K)$ $d_N \ge 80 \text{ mm}$ W/(m²·K) $\lambda_{D} = 0.022$ Thickness / $d_N =$ 20 - 220 mm Thickness tolerance T2 Reaction to fire EN 13501-1 Stability of fire behaviour under the influence In case of exposure to fire, the behaviour of rigid polyurethane of heat, weather and ageing / degradation foam does not deteriorate over time Durability of the thermal use table 1 Thermal resistance resistance under the at nominal thickness influence of heat, weather Thermal conductivity $d_N < 80 \ mm$ $\lambda_D = 0.023$ $W/(m^2 \cdot K)$ and ageing / degradation $d_N \ge 80 \text{ mm}$ $\lambda_{D} = 0.022$ $W/(m^2 \cdot K)$ Properties of durability NPD Dimensional stability DS(70,90)3 DS(-20,-)2 Deformation with defined DLT(2)5 pressure and temperature stress Determination of the use table 1 Rn values of thermal at nominal thickness resistance and thermal $d_N < 80 \text{ mm}$ $\lambda_{D} = 0.023$ W/(m²·K) conductivity after ageing $\lambda_D = 0.022$ $d_N \ge 80 \text{ mm}$ $W/(m^2 \cdot K)$ Compressive strength Compressive stress CS(10\Y)120 EN 13165:2012 Tensile / bending strength Tensile strength TR50 +A2:2016 perpendicular to the panel Durability of compressive NPD Creep behaviour under strength under the compressive stress influence of ageing and degradation NPD Water permeability short-term water absorption long-term water absorption NPD Flatness after one-sided NPD moisturisation Water vapour diffusion NPD NPD Sound absorption coefficient Release of dangerous substances, release into the NPD interior of the building Smouldering behaviour NPD 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.

2/2

puren-PIR ALU



14111.CPR.2020.10

Signed for and on behalf of the manufacturer by

Dr. Andreas Huther
Executive Director
Ueberlingen, 01.10.2020

FI

puren-PIR ALU NovoPIR



Unique identification cod	puren-PIR ALU N	lovoPIR				
Intended application		Thermal insulation for buildings				
Manufacturer				38662 Ueberlinger	•	
System(s) of assessmen		t +49 7551 80990 System 3) - f +49 7551 8	809920 - www.pure	en.com	
constancy of performand Harmonised standard	e	EN 13165:2012+	A2·2016			
Notified body(ies)		0751 FIW Münc				
Performance	Essential characteristics	Performance				harmonised technica specifications
Thermal resistance	Thermal resistance	Table 1	ninal thickness d _N [mm]	at nom R _D [m²·K/W]	inal thickness d _N [mm]	
		2,85 3,80 5,70 7,60 9,50 For other thickness	60 80 120 160 200	3,30 4,75 6,65 8,55	70 100 140 180 $R_0 = d_{N} / \lambda_0$	EN 13165:2012 +A2:2016
	Thermal conductivity Thickness / Thickness tolerance		N/(m²·K)		.U SN / 7.U	
Reaction to fire Stability of fire behaviour u		E		ehaviour of rigid p		EN 13501-1
Durability of the thermal resistance under the influence of heat, weather and ageing / degradation	Thermal conductivity Properties of durability Dimensional stability Deformation with defined pressure and temperature stress Determination of the values of thermal resistance and thermal conductivity after ageing	DS(70,90)3 DS(-20,-)2 DLT(2)5 R _D use table 1	<i>N</i> /(m²-K) <i>N</i> /(m²-K)			
Compressive strength Tensile / bending strength	Compressive stress Tensile strength perpendicular to the panel	CS(10\Y)120 TR40				EN 13165:2012 +A2:2016
Durability of compressive strength under the influence of ageing and degradation	trength under the compressive stress fluence of ageing and					_
Water permeability	short-term water absorption	NPD				
	long-term water absorption	NPD				
	Flatness after one-sided moisturisation	NPD				
Water vapour diffusion		NPD				
Sound absorption coefficie Release of dangerous subsinterior of the building		NPD NPD				-

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.

Signed for and on behalf of the manufacturer by

Dr. Andreas Huther **Executive Director** Ueberlingen, 01.10.2020

puren-PIR ALU-S



14113.CPR.2020.10 puren-PIR ALU-S Unique identification code of the product-type 1. Thermal insulation for buildings Intended application 2. puren gmbh 3. Manufacturer Rengoldshauser Straße 4 - DE-88662 Ueberlingen - Germany t +49 7551 80990 - f +49 7551 809920 - www.puren.com System(s) of assessment and verification of the 4. constancy of performance EN 13165:2012+A2:2016 Harmonised standard 5. Notified body(ies) 0751 FIW München harmonised technical 6. Performance Essential characteristics Performance specifications Thermal resistance Table 1 at nominal thickness at nominal thickness Thermal resistance $R_D \; [m^2 \cdot K/W]$ $d_N \ [mm]$ $R_D \; [m^2 \cdot K/W]$ $d_N \, [mm] \,$ 2,50 60 50 3,00 4,00 5,00 100 80 6.00 120 7.00 140 EN 13165:2012 8,00 160 180 +A2:2016 9.00 220 10.00 200 11.00 For other thicknesses: Calculate with $R_D = d_N / \lambda_D$ Thermal conductivity $\lambda_{\rm D} = 0.020$ $W/(m^2 \cdot K)$ Thickness / $d_N =$ 50 - 220 mm T2 Thickness tolerance EN 13501-1 Reaction to fire Stability of fire behaviour under the influence In case of exposure to fire, the behaviour of rigid polyurethane of heat, weather and ageing / degradation foam does not deteriorate over time Durability of the thermal Thermal resistance R_D use table 1 resistance under the Thermal conductivity $\lambda_{D} = 0.020$ $W/(m^2 \cdot K)$ influence of heat, weather Properties of durability NPD and ageing / degradation Dimensional stability DS(70,90)3 DS(-20,-)2 Deformation with defined **DLT(2)5** pressure and temperature stress Determination of the R_D use table 1 values of thermal $\lambda_D = 0.020$ W/(m²·K) resistance and thermal conductivity after ageing CS(10\Y)120 Compressive strength Compressive stress Tensile / bending strength Tensile strength TR50 EN 13165:2012 +A2:2016 perpendicular to the panel plane NPD Durability of compressive Creep behaviour under strength under the compressive stress influence of ageing and degradation Water permeability short-term water NPD absorption long-term water absorption NPD Flatness after one-sided NPD moisturisation NPD Water vapour diffusion Sound absorption coefficient NPD Release of dangerous substances, release into the NPD interior of the building Smouldering behaviour NPD

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.

Signed for and on behalf of the manufacturer by

Dr. Andreas Huther Executive Director Ueberlingen, 01.10.2020

Ueberlingen, 01.10.2020

puren-PIR ALU-W



Unione ide (CC) (C)	f	puren-PIR ALU-	W				
Unique identification cod	le of the product-type						
Intended application		Thermal insulation for buildings					
		puren gmbh					
Manufacturer				38662 Ueberlinger 309920 - www.pure			
System(s) of assessmer constancy of performance		System 3					
Harmonised standard		EN 13165:2012	+A2:2016				
Notified body(ies)		0751 FIW Mün	chen				
Performance						harmonised technica	
Thermal resistance	Essential characteristics	Performance Table 1				specifications	
mermai resistance	Thermal resistance		minal thickness	at nom	inal thickness		
	mermai resistance	R _D [m²·K/W]	d _N [mm]	R _D [m ² .K/W]	d _N [mm]		
		2,05	50	2,50	60	EN 40405-0040	
		3,30	80			EN 13165:2012 +A2:2016	
		For other thickness	sses:	Calculate with R	$d_D = d_N / \lambda_D$	+A2.2010	
	Thermal conductivity	$\lambda_{D} = 0.024$	W/(m²·K)				
	Thickness /	$d_N = 50 - 80 \text{ m}$	m				
Departies to five	Thickness tolerance	T2 E				EN 13501-1	
Reaction to fire Stability of fire behaviour u	ndar the influence		sura to fire the h	oboviour of rigid n	olyurothana	EN 13501-1	
of heat, weather and agein		foam does not o		ehaviour of rigid p	oryurethane		
Durability of the thermal	Thermal resistance	Ram does not determine over time $\lambda_{D} = 0.024 \qquad W/(m^2 \cdot K)$ NPD				-	
resistance under the	Thermal conductivity						
influence of heat, weather and ageing / degradation	-						
	DS(70,90)3 DS(-20,-)2						
	Deformation with defined pressure and temperature stress	DLT(2)5					
	Determination of the	R _D use table	1			-	
	values of thermal	$\lambda_D = 0.024$	W/(m²·K)				
	resistance and thermal conductivity after ageing	,	,				
Compressive strength	Compressive stress	CS(10\Y)120					
Tensile / bending strength	Tensile strength perpendicular to the panel plane	TR50				EN 13165:2012 +A2:2016	
Durability of compressive strength under the influence of ageing and degradation	Creep behaviour under compressive stress	NPD					
Water permeability	short-term water absorption	NPD					
	long-term water absorption						
	Flatness after one-sided moisturisation	NPD					
Water vapour diffusion		NPD					
Sound absorption coefficie		NPD				-	
Release of dangerous substinterior of the building	NPD						
Smouldering behaviour		NPD					

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.

Signed for and on behalf of the manufacturer by

Dr. Andreas Huther **Executive Director**

Ueberlingen, 01.10.2020 4. / fr. Kr

puren-PIR Isobric



14115.CPR.2020.10 puren-PIR Isobric Unique identification code of the product-type 1. Thermal insulation for buildings Intended application 2. puren gmbh 3. Manufacturer Rengoldshauser Straße 4 - DE-88662 Ueberlingen - Germany t +49 7551 80990 - f +49 7551 809920 - www.puren.com System(s) of assessment and verification of the System 3 4. constancy of performance EN 13165:2012+A2:2016 Harmonised standard 5. Notified body(ies) 0751 FIW München harmonised technical 6. Performance Essential characteristics Performance specifications Thermal resistance Table 1 at nominal thickness at nominal thickness Thermal resistance $R_D \; [m^2 \cdot K/W]$ $d_N \ [mm]$ $R_D \; [m^2 \cdot K/W]$ $d_N \, [mm] \,$ 0,90 22 30 1,25 1,65 2,05 40 EN 13165:2012 2.50 60 3.10 75 +A2:2016 Calculate with $R_D = d_N / \lambda_D$ For other thicknesses: Thermal conductivity 0,024 $W/(m^2 \cdot K)$ 22 - 75 mm Thickness / $d_N =$ T2 Thickness tolerance Reaction to fire EN 13501-1 Stability of fire behaviour under the influence In case of exposure to fire, the behaviour of rigid polyurethane of heat, weather and ageing / degradation foam does not deteriorate over time use table 1 Durability of the thermal Thermal resistance resistance under the Thermal conductivity $\lambda_D =$ 0,024 $W/(m^2 \cdot K)$ influence of heat, weather Properties of durability NPD and ageing / degradation DS(70,90)3 Dimensional stability DS(-20,-)2 DLT(2)5 Deformation with defined pressure and temperature stress Determination of the R_{D} use table 1 values of thermal 0,024 $W/(m^2 \cdot K)$ resistance and thermal conductivity after ageing Compressive strength CS(10\Y)120 Compressive stress Tensile / bending strength Tensile strength **TR50** EN 13165:2012 +A2:2016 perpendicular to the panel Durability of compressive NPD Creep behaviour under strength under the compressive stress influence of ageing and degradation NPD Water permeability short-term water absorption long-term water absorption NPD Flatness after one-sided NPD moisturisation NPD Water vapour diffusion Sound absorption coefficient NPD Release of dangerous substances, release into the **NPD** interior of the building

NPD: No Performance Determined

Smouldering behaviour

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.

NPD

Signed for and on behalf of the manufacturer by

Dr. Andreas Huther Executive Director Ueberlingen, 01.10.2020

Jeberlingen. 01.10.2020

puren-PIR ALU



14121.CPR.2020.10 puren-PIR ALU ds 1. Unique identification code of the product-type Thermal insulation for buildings Intended application 2. puren gmbh 3. Manufacturer Rengoldshauser Straße 4 - DE-88662 Ueberlingen - Germany t +49 7551 80990 - f +49 7551 809920 - www.puren.com System(s) of assessment and verification of the System 3 4. constancy of performance EN 13165:2012+A2:2016 Harmonised standard 5. Notified body(ies) 0751 FIW München harmonised technical 6. Performance Essential characteristics Performance specifications Thermal resistance Table 1 at nominal thickness at nominal thickness Thermal resistance $R_D \; [m^2 \cdot K/W]$ $d_N \, [mm]$ $R_D \; [m^2 \cdot K/W]$ $d_N \ [mm]$ 0,85 20 1,30 30 1,70 40 2,15 50 2.60 60 3.00 70 3,60 80 4,50 100 5,45 120 6.35 140 EN 13165:2012 7,25 +A2:2016 160 8,15 180 9.05 200 For other thicknesses: Calculate with $R_D = d_N / \lambda_D$ at nominal thickness $d_N < 80 \text{ mm}$ Thermal conductivity $\lambda_D = 0.023$ $W/(m^2 \cdot K)$ $d_N \ge 80 \text{ mm}$ W/(m²·K) $\lambda_{D} = 0.022$ Thickness / $d_N =$ 20 - 200 mm Thickness tolerance T2 Reaction to fire EN 13501-1 Stability of fire behaviour under the influence In case of exposure to fire, the behaviour of rigid polyurethane of heat, weather and ageing / degradation foam does not deteriorate over time Durability of the thermal use table 1 Thermal resistance resistance under the at nominal thickness influence of heat, weather Thermal conductivity $d_N < 80 \ mm$ $\lambda_D = 0.023$ $W/(m^2 \cdot K)$ and ageing / degradation $d_N \ge 80 \text{ mm}$ $\lambda_{D} = 0.022$ $W/(m^2 \cdot K)$ Properties of durability NPD Dimensional stability DS(70,90)3 DS(-20,-)2 Deformation with defined NPD pressure and temperature stress Determination of the use table 1 Rn values of thermal at nominal thickness resistance and thermal $d_N < 80 \text{ mm}$ $\lambda_{D} = 0.023$ W/(m²·K) conductivity after ageing $\lambda_D = 0.022$ $d_N \ge 80 \text{ mm}$ $W/(m^2 \cdot K)$ Compressive strength Compressive stress CS(10\Y)150 EN 13165:2012 Tensile / bending strength Tensile strength TR40 +A2:2016 perpendicular to the panel Durability of compressive NPD Creep behaviour under strength under the compressive stress influence of ageing and degradation NPD Water permeability short-term water absorption long-term water absorption NPD Flatness after one-sided NPD moisturisation Water vapour diffusion NPD NPD Sound absorption coefficient Release of dangerous substances, release into the NPD interior of the building Smouldering behaviour NPD 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.

2/2

puren-PIR ALU



14121.CPR.2020.10

Signed for and on behalf of the manufacturer by

Dr. Andreas Huther
Executive Director
Ueberlingen, 01.10.2020

ΕN

TOPDEK 022 PIR FD



	R.2020.10		TORREY AND RID ED			
Unique	e identification cod	le of the product-type	TOPDEK 022 PIR FD			
Intende	ed application		Thermal insulation for buildings			
Manufa	acturer		puren gmbh Rengoldshauser Straße 4 - DE-88662 Ueberlingen - Germany t +49 7551 80990 - f +49 7551 809920 - www.puren.com			
	n(s) of assessmer ncy of performand	nt and verification of the	System 3			
	nised standard d body(ies)		EN 13165:2012+A2:2016 0751 FIW München			
Perfo	ormance		5 /	harmonised technica		
	ıl resistance	Essential characteristics	Performance Table 1	specifications		
		Thermal resistance	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	EN 13165:2012 +A2:2016		
		Thermal conductivity	$\lambda_{\rm D} = 0.022 W/(m^2 \cdot K)$	_		
		Thickness / Thickness tolerance	d _N = 80 - 220 mm T2			
Reactio	n to fire	THICKIESS (CICIALICE	E	EN 13501-1		
of heat, Durabili resistan influence			In case of exposure to fire, the behaviour of rigid polyurethane foam does not deteriorate over time $R_D \text{use table 1} \\ \lambda_D = 0.022 \qquad W/(\text{m}^2\text{-K}) \\ \text{NPD}$			
and age	eing / degradation	Dimensional stability	DS(70,90)3 DS(-20,-)2			
		Deformation with defined pressure and temperature stress	DLT(2)5			
		Determination of the values of thermal resistance and thermal conductivity after ageing	R_D use table 1 $\lambda_D = 0.022$ W/(m²·K)			
	essive strength	Compressive stress	CS(10\Y)120			
Tensile	/ bending strength	Tensile strength perpendicular to the panel plane	TR50	EN 13165:2012 +A2:2016		
strength	ity of compressive n under the se of ageing and ation	Creep behaviour under compressive stress	NPD			
Water p	permeability	short-term water absorption	NPD			
		long-term water absorption Flatness after one-sided	NPD NPD			
		moisturisation				
Water vapour diffusion			NPD			
	absorption coefficie	nt stances, release into the	NPD NPD	-		
interior	of the building	starices, release trito trie				
Smould	lering behaviour		NPD			

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.

Signed for and on behalf of the manufacturer by

Dr. Andreas Huther Executive Director Ueberlingen, 01,10,2020

Ueberlingen, 01.10.2020

puren-PIR NE



111.CPR.2020.10						
	do of the product time	puren-PIR NE				
Unique identification co	de of the product-type	Thermal inculation for buildings				
Intended application		Thermal insulation for buildings				
Manufacturer	Manufacturer			88662 Ueberlingen	- Germany	
System(s) of assessme	at and verification of the	t +49 7551 80 System 3)990 - f +49 7551	809920 - www.purer	n.com	
constancy of performan						
Harmonised standard Notified body(ies)		EN 13165:20 0751 FIW M				
Performance	Essential characteristics	Performance				harmonised technical specifications
Thermal resistance		Table 1				specifications
	Thermal resistance	at R _D [m².K/W]	nominal thickness d _N [mm]	at nomii R _D [m²·K/W]	nal thickness d _N [mm]	
		0,70	20	1,10	30	
		1,45	40	1,85	50 70	
		2,20 3,05	60 80	2,55 3,80	70 100	
		4,80	120	5,60	140	
		6,40	160	7,20	180	EN 10105-0010
		8,00	200	8,80	220	EN 13165:2012 +A2:2016
		9,60	240	10,40	260	1776.2010
		11,20 For other thick	280	12,00	300	
		rui other thick	illesses .	Calculate with R _E at nominal thickness		
	Thermal conductivity	$\lambda_{D} = 0.027$	W/(m²·K)	d _N < 80 mm		
		$\lambda_D = 0.026$	W/(m².K)	80 mm ≤ d _N < 120	mm	
		$\lambda_{D} = 0.025$	W/(m²·K)	d _N ≥ 120 mm		
	Thickness /	$d_N = 20 - 30$	00 mm			
Reaction to fire	Thickness tolerance	T3 E				EN 13501-1
Stability of fire behaviour u	nder the influence		oosure to fire. the	behaviour of rigid po	olyurethane	LIN TOJUT-T
of heat, weather and ageir			ot deteriorate over		.,	
Durability of the thermal	Thermal resistance	R _D use tak				
resistance under the	T	1		at nominal thickness		
influence of heat, weather and ageing / degradation	i nermai conductivity	$\lambda_{\rm D} = 0.027$	W/(m².K)	$d_N < 80 \text{ mm}$ 80 mm $\leq d_N < 120$	mm	
and ageing / degradation		$\lambda_{\rm D} = 0.026$ $\lambda_{\rm D} = 0.025$	W/(m ² ·K) W/(m ² ·K)	$d_N \ge 120 \text{ mm}$	111111	
	Properties of durability	NPD	· · · (III IV)	IV C		
	Dimensional stability	DS(70,90)3 DS(-20,-)2				
	Deformation with defined	DLT(2)5				1
	pressure and temperature stress					
	Determination of the values of thermal	R _D use tak	ole 1	at nominal thickness		
	resistance and thermal	$\lambda_{D} = 0.027$	$W/(m^2 \cdot K)$	$d_N < 80 \text{ mm}$		
	conductivity after ageing	$\lambda_D = 0.026$	W/(m²·K)	$80 \text{ mm} \le d_N < 120$	mm	
		$\lambda_{\rm D} = 0.025$	W/(m²·K)	d _N ≥ 120 mm		EN 40405 0015
Compressive strength	Compressive stress	CS(10\Y)120 TR100				EN 13165:2012 +A2:2016
Tensile / bending strength	Tensile strength perpendicular to the panel plane	10100				+A2.2010
Durability of compressive						
strength under the influence of ageing and	compressive stress	NPD				
degradation						
Water permeability	short-term water absorption	WS(P)0,3				
	long-term water absorption			at nominal thickness	i	
		WL(T)3,5		d _N < 80 mm		
		WL(T)2,5		$80 \text{ mm} \le d_N < 120$	mm	
		WL(T)1,5		d _N ≥ 120 mm		_
	Eletpoop often an elelel	NDD				
	Flatness after one-sided moisturisation	NPD				
Water vapour diffusion	Flatness after one-sided moisturisation	NPD NPD				

puren-PIR NE



2011	1.CPR.2020.10		
	Release of dangerous substances, release into the interior of the building	NPD	
	Smouldering behaviour	NPD	

2/2

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.

Signed for and on behalf of the manufacturer by

Dr. Andreas Huther **Executive Director** Ueberlingen, 01.10.2020 4. /h.K

puren-PIR NE-S



20112.CPR.2020.10 puren-PIR NE-S 1. Unique identification code of the product-type Thermal insulation for buildings Intended application 2. puren gmbh 3. Manufacturer Rengoldshauser Straße 4 - DE-88662 Ueberlingen - Germany t +49 7551 80990 - f +49 7551 809920 - www.puren.com System(s) of assessment and verification of the 4. constancy of performance EN 13165:2012+A2:2016 Harmonised standard 5. Notified body(ies) 0751 FIW München harmonised technical 6. Performance Essential characteristics Performance specifications Thermal resistance Table 1 at nominal thickness at nominal thickness Thermal resistance $R_D \left[m^2 \cdot K/W \right]$ $d_N \, [mm]$ $R_D \; [m^2 \cdot K/W]$ $d_N \, [mm] \,$ 0,80 20 30 1,20 1,60 2,00 40 2.40 60 2.80 70 3,30 80 4,15 100 120 6.05 5.20 140 6,95 7,80 160 180 EN 13165:2012 9,55 220 8,65 200 +A2:2016 10,40 240 11,30 260 12.15 280 13,00 300 For other thicknesses: Calculate with $R_D = d_N / \lambda_D$ at nominal thickness $d_N < 80 \text{ mm}$ Thermal conductivity $\lambda_{D} = 0.025$ $W/(m^2 \cdot K)$ $80 \text{ mm} \le d_N < 120 \text{ mm}$ $\lambda_D=0,024$ W/(m²·K) $\lambda_D =$ $d_N \ge 120 \text{ mm}$ 0,023 $W/(m^2 \cdot K)$ $d_N =$ 20 - 300 mm Thickness / Thickness tolerance Т3 EN 13501-1 Reaction to fire In case of exposure to fire, the behaviour of rigid polyurethane Stability of fire behaviour under the influence of heat, weather and ageing / degradation foam does not deteriorate over time use table 1 Durability of the thermal Thermal resistance resistance under the at nominal thickness influence of heat, weather Thermal conductivity $\lambda_D = 0.025$ $W/(m^2 \cdot K)$ $d_N < 80 \text{ mm}$ and ageing / degradation $\lambda_D = 0.024$ $W/(m^2 \cdot K)$ $80 \text{ mm} \le d_N < 120 \text{ mm}$ $\lambda_D =$ 0,023 $W/(m^2 \cdot K)$ $d_N \ge 120 \text{ mm}$ Properties of durability NPD Dimensional stability DS(70,90)3 DS(-20,-)2 Deformation with defined DLT(2)5 pressure and temperature stress Determination of the Rn use table 1 values of thermal at nominal thickness resistance and thermal $d_N < 80 \text{ mm}$ $\lambda_{\rm D} = 0.025$ W/(m2.K) $80~\text{mm} \leq d_N < 120~\text{mm}$ conductivity after ageing $\lambda_D = 0.024$ $W/(m^2 \cdot K)$ $\lambda_D = 0.023$ $d_N \ge 120 \text{ mm}$ $W/(m^2 \cdot K)$ Compressive strength Compressive stress CS(10\Y)120 EN 13165:2012 TR100 +A2:2016 Tensile / bending strength Tensile strength perpendicular to the panel Durability of compressive Creep behaviour under NPD strength under the compressive stress influence of ageing and degradation Water permeability short-term water WS(P)0,3 absorption long-term water absorption at nominal thickness WL(T)3,5 $d_N < 80 \text{ mm}$ $80 \text{ mm} \le d_N < 120 \text{ mm}$ WL(T)2,5 $d_N \ge 120 \text{ mm}$ WL(T)1,5 Flatness after one-sided NPD moisturisation Water vapour diffusion NPD Sound absorption coefficient NPD

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puren-PIR NE-S



20112.CPR.2020.10						
	Release of dangerous substances, release into the interior of the building	NPD				
	Smouldering behaviour	NPD				
NPD:	No Performance Determined					

2/2

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.

Signed for and on behalf of the manufacturer by

Dr. Andreas Huther **Executive Director** Ueberlingen, 01.10.2020 4. /h.K

puren-PIR NE



20113.CPR.2020.10 puren-PIR NE-G 1. Unique identification code of the product-type Thermal insulation for buildings Intended application 2. puren gmbh 3. Manufacturer Rengoldshauser Straße 4 - DE-88662 Ueberlingen - Germany t +49 7551 80990 - f +49 7551 809920 - www.puren.com System(s) of assessment and verification of the 4. constancy of performance EN 13165:2012+A2:2016 Harmonised standard 5. Notified body(ies) 0751 FIW München harmonised technical 6. Performance Essential characteristics Performance specifications Thermal resistance Table 1 at nominal thickness at nominal thickness Thermal resistance $R_D \; [m^2 \cdot K/W]$ $d_N \, [mm]$ $R_D \; [m^2 \cdot K/W]$ $d_N \, [mm] \,$ 0,70 20 30 1,10 1,45 1,85 40 2.20 60 2.55 70 3,05 80 100 3.80 120 4.80 5.60 140 6,40 160 7,20 180 EN 13165:2012 220 8.00 200 8.80 +A2:2016 9,60 240 10,40 260 11.20 280 12,00 300 For other thicknesses: Calculate with $R_D = d_N / \lambda_D$ at nominal thickness $d_N < 80 \text{ mm}$ Thermal conductivity $\lambda_{D} = 0.027$ $W/(m^2 \cdot K)$ $80 \text{ mm} \le d_N < 120 \text{ mm}$ $\lambda_D=0,026$ W/(m²·K) $\lambda_D =$ $d_N \ge 120 \text{ mm}$ 0,025 $W/(m^2 \cdot K)$ $d_N =$ 20 - 300 mm Thickness / Thickness tolerance T2 EN 13501-1 Reaction to fire In case of exposure to fire, the behaviour of rigid polyurethane Stability of fire behaviour under the influence of heat, weather and ageing / degradation foam does not deteriorate over time use table 1 Durability of the thermal Thermal resistance resistance under the at nominal thickness influence of heat, weather Thermal conductivity $\lambda_{D} = 0.027$ $W/(m^2 \cdot K)$ $d_N < 80 \text{ mm}$ and ageing / degradation $\lambda_D = 0.026$ $W/(m^2 \cdot K)$ $80 \text{ mm} \le d_N < 120 \text{ mm}$ $\lambda_D =$ 0,025 $W/(m^2 \cdot K)$ $d_N \ge 120 \text{ mm}$ Properties of durability NPD Dimensional stability DS(70,90)3 DS(-20,-)2 Deformation with defined DLT(2)5 pressure and temperature stress Determination of the Rn use table 1 values of thermal at nominal thickness resistance and thermal $d_N < 80 \text{ mm}$ $\lambda_{\rm D} = 0.027$ W/(m2.K) $80~\text{mm} \leq d_N < 120~\text{mm}$ conductivity after ageing $\lambda_D = 0.026$ $W/(m^2 \cdot K)$ $\lambda_D = 0.025$ $d_N \ge 120 \text{ mm}$ EN 13165:2012 $W/(m^2 \cdot K)$ Compressive strength Compressive stress CS(10\Y)120 +A2:2016 TR100 Tensile / bending strength Tensile strength perpendicular to the panel Durability of compressive Creep behaviour under NPD strength under the compressive stress influence of ageing and degradation Water permeability short-term water **NPD** absorption long-term water absorption NPD Flatness after one-sided NPD moisturisation Water vapour diffusion NPD Sound absorption coefficient NPD Release of dangerous substances, release into the NPD interior of the building NPD Smouldering behaviour

puren-PIR NE



20113.CPR.2020.10

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.

2/2

Signed for and on behalf of the manufacturer by

Dr. Andreas Huther **Executive Director** Ueberlingen, 01.10.2020 f. / fr. the

puren-PIR NE



14.CPR.2020.10		PUYAN DID NE CC	
Unique identification co	de of the product-type	puren-PIR NE-GS	
Intended application		Thermal insulation for buildings	
Manufacturer		puren gmbh Rengoldshauser Straße 4 - DE-88662 Ueberlingen - Germany t +49 7551 80990 - f +49 7551 809920 - www.puren.com	
constancy of performan	nt and verification of the ce	System 3	
Harmonised standard Notified body(ies)		EN 13165:2012+A2:2016 0751 FIW München	
Performance	Essential characteristics	harmor Performance specific	nised technica
Thermal resistance	2330 mai onaraotenstios	Table 1	ations
	Thermal resistance	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	65:2012 16
	Thermal conductivity	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	
	Thickness / Thickness tolerance	d _N = 20 - 300 mm	
Reaction to fire	THICKIESS (DIETATICE	E EN 135	01-1
of heat, weather and agein Durability of the thermal resistance under the influence of heat, weather and ageing / degradation	Thermal resistance	foam does not deteriorate over time $R_D \qquad \text{use table 1} \qquad \qquad \text{at nominal thickness} \\ \lambda_D = 0.026 \qquad W/(m^2 \cdot K) \qquad d_N < 80 \text{ mm} \\ \lambda_D = 0.025 \qquad W/(m^2 \cdot K) \qquad 80 \text{ mm} \leq d_N < 120 \text{ mm} \\ \lambda_D = 0.024 \qquad W/(m^2 \cdot K) \qquad d_N \geq 120 \text{ mm} \\ NPD \qquad \qquad NPD$	
	Dimensional stability	DS(70,90)3	
	Deformation with defined pressure and temperature stress	DS(-20,-)2 DLT(2)5	
	Determination of the values of thermal resistance and thermal conductivity after ageing	$\begin{array}{lll} R_D & \text{use table 1} & & \text{at nominal thickness} \\ \lambda_D = & 0,026 & W/(m^2\cdot K) & d_N < 80 \text{ mm} \\ \lambda_D = & 0,025 & W/(m^2\cdot K) & 80 \text{ mm} \le d_N < 120 \text{ mm} \\ \lambda_D = & 0,024 & W/(m^2\cdot K) & d_N \ge 120 \text{ mm} \end{array}$	65:2012
Compressive strength Tensile / bending strength	Compressive stress Tensile strength perpendicular to the panel plane	CS(10\Y)120 +A2:20	
Durability of compressive strength under the influence of ageing and degradation	Creep behaviour under compressive stress	NPD	
Water permeability	short-term water absorption long-term water absorption	NPD NPD	
	Flatness after one-sided moisturisation	NPD	
Water vapour diffusion	moistanidation	NPD	
Sound absorption coefficie		NPD NPD	
Release of dangerous sub interior of the building	ostances, release into the	NPD	

puren-PIR NE



20114.CPR.2020.10

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.

2/2

Signed for and on behalf of the manufacturer by

Dr. Andreas Huther **Executive Director** Ueberlingen, 01.10.2020 f. / fr. the

puren-NE



20121.CPR.2020.10 puren-PIR NE 32 1. Unique identification code of the product-type Thermal insulation for buildings Intended application 2. puren gmbh 3. Manufacturer Rengoldshauser Straße 4 - DE-88662 Ueberlingen - Germany t +49 7551 80990 - f +49 7551 809920 - www.puren.com System(s) of assessment and verification of the 4. constancy of performance EN 13165:2012+A2:2016 Harmonised standard 5. Notified body(ies) 0751 FIW München harmonised technical 6. Performance Essential characteristics Performance specifications Thermal resistance Table 1 at nominal thickness at nominal thickness Thermal resistance $R_D \; [m^2 \cdot K/W]$ $d_N \, [mm]$ $R_D \; [m^2 \cdot K/W]$ $d_N \, [mm] \,$ 0,70 30 20 1,10 1,45 1,85 40 2.20 60 2.55 70 3,05 80 100 3.80 120 4.80 5.60 140 6,40 160 7,20 180 EN 13165:2012 220 8.00 200 8.80 +A2:2016 9,60 240 10,40 260 11,20 280 12,00 300 For other thicknesses: Calculate with $R_D = d_N / \lambda_D$ at nominal thickness $d_N < 80 \text{ mm}$ Thermal conductivity $\lambda_{D} = 0.027$ $W/(m^2 \cdot K)$ $80 \text{ mm} \le d_N < 120 \text{ mm}$ $\lambda_D=0,026$ W/(m²·K) $\lambda_D =$ $d_N \ge 120 \text{ mm}$ 0,025 $W/(m^2 \cdot K)$ $d_N =$ 20 - 300 mm Thickness / Thickness tolerance T2 EN 13501-1 Reaction to fire In case of exposure to fire, the behaviour of rigid polyurethane Stability of fire behaviour under the influence of heat, weather and ageing / degradation foam does not deteriorate over time use table 1 Durability of the thermal Thermal resistance resistance under the at nominal thickness influence of heat, weather Thermal conductivity $\lambda_{D} = 0.027$ $W/(m^2 \cdot K)$ $d_N < 80 \text{ mm}$ and ageing / degradation $\lambda_D = 0.026$ $W/(m^2 \cdot K)$ $80 \text{ mm} \le d_N < 120 \text{ mm}$ $\lambda_D =$ 0,025 $W/(m^2 \cdot K)$ $d_N \ge 120 \text{ mm}$ Properties of durability NPD Dimensional stability DS(70,90)3 DS(-20,-)2 NPD Deformation with defined pressure and temperature stress Determination of the Rn use table 1 values of thermal at nominal thickness resistance and thermal $d_N < 80 \text{ mm}$ $\lambda_{\rm D} = 0.027$ W/(m2.K) $80~\text{mm} \leq d_N < 120~\text{mm}$ conductivity after ageing $\lambda_D = 0.026$ $W/(m^2 \cdot K)$ $\lambda_D = 0.025$ $d_N \ge 120 \text{ mm}$ EN 13165:2012 $W/(m^2 \cdot K)$ Compressive strength Compressive stress CS(10\Y)150 +A2:2016 TR100 Tensile / bending strength Tensile strength perpendicular to the panel Durability of compressive Creep behaviour under NPD strength under the compressive stress influence of ageing and degradation Water permeability short-term water **NPD** absorption long-term water absorption NPD Flatness after one-sided NPD moisturisation Water vapour diffusion NPD Sound absorption coefficient NPD Release of dangerous substances, release into the NPD interior of the building NPD Smouldering behaviour

puren-NE



20121.CPR.2020.10

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.

2/2

Signed for and on behalf of the manufacturer by

Dr. Andreas Huther
Executive Director
Ueberlingen, 01.10.2020

puren-NE



2012	2.CPR.2020.10							
2012	2.UPN.2U2U.1U		DID	NIE O				
1.	Unique identification coo	le of the product-type	puren-PIR					
2.	Intended application		Thermal insulation for buildings					
3.	Manufacturer	t +49 755	hauser		-88662 Ueberlingen 809920 - www.pure			
4.	System(s) of assessment constancy of performance		System 3					
5.	Harmonised standard Notified body(ies)	EN 13165 0751 FIW	-					
6.	Performance	Essential characteristics	Performar	nce				harmonised technical specifications
	Thermal resistance	Ecocitical orial action choice	Table 1					opocinioations
		Thermal resistance	R _D [m ² ·l ² 0,7 1,5 2,3 3,2 5,0 6,6 8,3 10,0 11,6	<td>minal thickness d_N [mm] 20 40 60 80 120 160 200 240 280</td> <td>at nomi R_D [m²-K/W] 1,15 1,90 2,65 4,00 5,80 7,50 9,15 10,80 12,50</td> <td>nal thickness d_N [mm] 30 50 70 100 140 180 220 260 300</td> <td>EN 13165:2012 +A2:2016</td>	minal thickness d _N [mm] 20 40 60 80 120 160 200 240 280	at nomi R _D [m²-K/W] 1,15 1,90 2,65 4,00 5,80 7,50 9,15 10,80 12,50	nal thickness d _N [mm] 30 50 70 100 140 180 220 260 300	EN 13165:2012 +A2:2016
		Thermal conductivity	For other to $\lambda_D = 0.02$ $\lambda_D = 0.02$ $\lambda_D = 0.02$	26 25 24	W/(m²-K) W/(m²-K) W/(m²-K)	Calculate with R_l at nominal thickness $d_N < 80$ mm 80 mm $\leq d_N < 120$ $d_N \geq 120$ mm	;	
		Thickness / Thickness tolerance	$d_N = 20 \cdot T2$	- 300 r	nm			
	Reaction to fire	THICKITESS (CIETATICE	E					EN 13501-1
	Stability of fire behaviour under the influence		In case of exposure to fire, the behaviour of rigid polyurethane foam does not deteriorate over time					
	of heat, weather and agein Durability of the thermal resistance under the influence of heat, weather and ageing / degradation	Thermal resistance Thermal conductivity	R_D use $\lambda_D = 0.02$ $\lambda_D = 0.02$ $\lambda_D = 0.02$	table 26 25		at nominal thickness $d_N < 80 \text{ mm}$ $80 \text{ mm} \le d_N < 120$ $d_N \ge 120 \text{ mm}$		
		Properties of durability	NPD					
		Dimensional stability	DS(70,90) DS(-20,-)2					
		Deformation with defined pressure and temperature stress	NPD					
		Determination of the values of thermal resistance and thermal conductivity after ageing	R_D use $\lambda_D = 0.03$ $\lambda_D = 0.03$ $\lambda_D = 0.03$	25	1 W/(m²-K) W/(m²-K) W/(m²-K)	at nominal thickness $d_N < 80 \text{ mm}$ $80 \text{ mm} \le d_N < 120$ $d_N \ge 120 \text{ mm}$		EN 13165:2012
	Compressive strength Tensile / bending strength	Compressive stress Tensile strength perpendicular to the panel plane	CS(10\Y)1 TR100		()			+A2:2016
	Durability of compressive strength under the influence of ageing and degradation	Creep behaviour under compressive stress	NPD					
	Water permeability	short-term water absorption long-term water absorption	NPD NPD					
		Flatness after one-sided	NPD					-
	Water vapour diffusion	moisturisation	NPD					-
	Sound absorption coefficie		NPD					
	Release of dangerous substituterior of the building	stances, release into the	NPD NPD			-		
NIDD:	Smouldering behaviour							

puren-NE



20122.CPR.2020.10

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.

2/2

Signed for and on behalf of the manufacturer by

Dr. Andreas Huther
Executive Director
Ueberlingen, 01.10.2020

puren-PIR NE 40



20131.CPR.2020.10 puren-PIR NE 40 1. Unique identification code of the product-type Thermal insulation for buildings Intended application 2. puren gmbh 3. Manufacturer Rengoldshauser Straße 4 - DE-88662 Ueberlingen - Germany t +49 7551 80990 - f +49 7551 809920 - www.puren.com System(s) of assessment and verification of the 4. constancy of performance EN 13165:2012+A2:2016 Harmonised standard 5. Notified body(ies) 0751 FIW München harmonised technical 6. Performance Essential characteristics Performance specifications Thermal resistance Table 1 at nominal thickness at nominal thickness Thermal resistance $R_D \; [m^2 \cdot K/W]$ $d_N \, [mm]$ $R_D \; [m^2 \cdot K/W]$ $d_N \, [mm] \,$ 0,70 20 30 1,10 1,45 1,85 40 2.20 60 2.55 70 3,05 80 100 3.80 120 4.80 5.60 140 6,40 160 7,20 180 EN 13165:2012 220 8.00 200 8.80 +A2:2016 9,60 240 10,40 260 11.20 280 12,00 300 For other thicknesses: Calculate with $R_D = d_N / \lambda_D$ at nominal thickness $d_N < 80 \text{ mm}$ Thermal conductivity $\lambda_{D} = 0.027$ $W/(m^2 \cdot K)$ $80 \text{ mm} \le d_N < 120 \text{ mm}$ $\lambda_D=0,026$ W/(m²·K) $\lambda_D =$ $d_N \ge 120 \text{ mm}$ 0,025 $W/(m^2 \cdot K)$ $d_N =$ 20 - 300 mm Thickness / Thickness tolerance T2 EN 13501-1 Reaction to fire In case of exposure to fire, the behaviour of rigid polyurethane Stability of fire behaviour under the influence of heat, weather and ageing / degradation foam does not deteriorate over time use table 1 Durability of the thermal Thermal resistance resistance under the at nominal thickness influence of heat, weather Thermal conductivity $\lambda_{D} = 0.027$ $W/(m^2 \cdot K)$ $d_N < 80 \text{ mm}$ and ageing / degradation $\lambda_D = 0.026$ $W/(m^2 \cdot K)$ $80 \text{ mm} \le d_N < 120 \text{ mm}$ $\lambda_D =$ 0,025 $W/(m^2 \cdot K)$ $d_N \ge 120 \text{ mm}$ Properties of durability NPD Dimensional stability DS(70,90)3 DS(-20,-)2 NPD Deformation with defined pressure and temperature stress Determination of the Rn use table 1 values of thermal at nominal thickness resistance and thermal $\lambda_D = 0.027$ $d_N < 80 \text{ mm}$ W/(m2.K) $80~\text{mm} \leq d_N < 120~\text{mm}$ conductivity after ageing $\lambda_D = 0.026$ $W/(m^2 \cdot K)$ $\lambda_D = 0.025$ $d_N \ge 120 \text{ mm}$ EN 13165:2012 $W/(m^2 \cdot K)$ Compressive strength Compressive stress CS(10\Y)250 +A2:2016 TR150 Tensile / bending strength Tensile strength perpendicular to the panel Durability of compressive Creep behaviour under NPD strength under the compressive stress influence of ageing and degradation Water permeability short-term water **NPD** absorption long-term water absorption NPD Flatness after one-sided NPD moisturisation Water vapour diffusion NPD Sound absorption coefficient NPD Release of dangerous substances, release into the NPD interior of the building NPD Smouldering behaviour

puren-PIR NE 40



20131.CPR.2020.10

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.

2/2

Signed for and on behalf of the manufacturer by

Dr. Andreas Huther **Executive Director** Ueberlingen, 01.10.2020 f. / fr. the

puren-PIR NE 50



20132.CPR.2020.10 puren-PIR NE 50 1. Unique identification code of the product-type Thermal insulation for buildings Intended application 2. puren gmbh 3. Manufacturer Rengoldshauser Straße 4 - DE-88662 Ueberlingen - Germany t +49 7551 80990 - f +49 7551 809920 - www.puren.com System(s) of assessment and verification of the 4. constancy of performance EN 13165:2012+A2:2016 Harmonised standard 5. Notified body(ies) 0751 FIW München harmonised technical 6. Performance Essential characteristics Performance specifications Thermal resistance Table 1 at nominal thickness at nominal thickness Thermal resistance $R_D \; [m^2 \cdot K/W]$ $d_N \, [mm]$ $R_D \; [m^2 \cdot K/W]$ $d_N \, [mm] \,$ 0,70 30 20 1,05 1,40 1,75 40 2.10 60 2.50 70 2,95 80 3,70 100 120 4.60 5.35 140 6,90 6,15 160 180 EN 13165:2012 220 7,65 200 8.45 +A2:2016 9,20 240 10,00 260 10.75 280 300 11,50 For other thicknesses: Calculate with $R_D = d_N / \lambda_D$ at nominal thickness $d_N < 80 \text{ mm}$ Thermal conductivity $\lambda_D = 0.028$ $W/(m^2 \cdot K)$ $80 \text{ mm} \le d_N < 120 \text{ mm}$ $\lambda_D = 0.027$ W/(m²·K) $\lambda_D =$ $d_N \ge 120 \text{ mm}$ 0,026 $W/(m^2 \cdot K)$ $d_N =$ 20 - 300 mm Thickness / Thickness tolerance T2 EN 13501-1 Reaction to fire In case of exposure to fire, the behaviour of rigid polyurethane Stability of fire behaviour under the influence of heat, weather and ageing / degradation foam does not deteriorate over time use table 1 Durability of the thermal Thermal resistance resistance under the at nominal thickness influence of heat, weather Thermal conductivity $\lambda_D = 0.028$ $W/(m^2 \cdot K)$ $d_N < 80 \text{ mm}$ and ageing / degradation $\lambda_D = 0.027$ $W/(m^2 \cdot K)$ $80 \text{ mm} \le d_N < 120 \text{ mm}$ $\lambda_D =$ 0,026 $W/(m^2 \cdot K)$ $d_N \ge 120 \text{ mm}$ Properties of durability NPD Dimensional stability DS(70,90)3 DS(-20,-)2 NPD Deformation with defined pressure and temperature stress Determination of the Rn use table 1 values of thermal at nominal thickness resistance and thermal $\lambda_D = 0.028$ $d_N < 80 \text{ mm}$ W/(m2.K) $80~\text{mm} \leq d_N < 120~\text{mm}$ conductivity after ageing $W/(m^2 \cdot K)$ $\lambda_{D} = 0.027$ $\lambda_D = 0.026$ $d_N \ge 120 \text{ mm}$ EN 13165:2012 $W/(m^2 \cdot K)$ Compressive strength Compressive stress CS(10\Y)350 +A2:2016 TR150 Tensile / bending strength Tensile strength perpendicular to the panel Durability of compressive Creep behaviour under NPD strength under the compressive stress influence of ageing and degradation Water permeability short-term water **NPD** absorption long-term water absorption NPD Flatness after one-sided NPD moisturisation Water vapour diffusion NPD Sound absorption coefficient NPD Release of dangerous substances, release into the NPD interior of the building NPD Smouldering behaviour

puren-PIR NE 50



20132.CPR.2020.10

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.

2/2

Signed for and on behalf of the manufacturer by

Dr. Andreas Huther **Executive Director** Ueberlingen, 01.10.2020 f. / fr. the

puren-PIR NE 60



20133.CPR.2020.10 puren-PIR NE 60 1. Unique identification code of the product-type Thermal insulation for buildings Intended application 2. puren gmbh 3. Manufacturer Rengoldshauser Straße 4 - DE-88662 Ueberlingen - Germany t +49 7551 80990 - f +49 7551 809920 - www.puren.com System(s) of assessment and verification of the 4. constancy of performance EN 13165:2012+A2:2016 Harmonised standard 5. Notified body(ies) 0751 FIW München harmonised technical 6. Performance Essential characteristics Performance specifications Thermal resistance Table 1 at nominal thickness at nominal thickness Thermal resistance $R_D \; [m^2 \cdot K/W]$ $d_N \, [mm]$ $R_D \; [m^2 \cdot K/W]$ $d_N \, [mm] \,$ 0,65 30 20 1,00 1,35 1,70 40 2.05 60 2.40 70 2,85 80 3,55 100 120 4.40 5.15 140 5,90 160 6,65 180 EN 13165:2012 7,40 220 200 8,10 +A2:2016 8,85 240 9,60 260 10.35 280 300 11,10 For other thicknesses: Calculate with $R_D = d_N / \lambda_D$ at nominal thickness $d_N < 80 \text{ mm}$ Thermal conductivity $\lambda_{D} = 0.029$ $W/(m^2 \cdot K)$ $80 \text{ mm} \le d_N < 120 \text{ mm}$ $\lambda_D=0,028$ W/(m²·K) $\lambda_D =$ $d_N \ge 120 \text{ mm}$ 0,027 $W/(m^2 \cdot K)$ $d_N =$ 20 - 300 mm Thickness / Thickness tolerance T2 EN 13501-1 Reaction to fire In case of exposure to fire, the behaviour of rigid polyurethane Stability of fire behaviour under the influence of heat, weather and ageing / degradation foam does not deteriorate over time use table 1 Durability of the thermal Thermal resistance resistance under the at nominal thickness influence of heat, weather Thermal conductivity $\lambda_{D} = 0.029$ $W/(m^2 \cdot K)$ $d_N < 80 \text{ mm}$ and ageing / degradation $\lambda_D = 0.028$ $W/(m^2 \cdot K)$ $80 \text{ mm} \le d_N < 120 \text{ mm}$ $\lambda_D =$ 0,027 $W/(m^2 \cdot K)$ $d_N \ge 120 \text{ mm}$ Properties of durability NPD Dimensional stability DS(70,90)3 DS(-20,-)2 NPD Deformation with defined pressure and temperature stress Determination of the Rn use table 1 values of thermal at nominal thickness resistance and thermal $\lambda_D = 0.029$ $d_N < 80 \text{ mm}$ W/(m2.K) $80~\text{mm} \leq d_N < 120~\text{mm}$ conductivity after ageing $\lambda_D = 0.028$ $W/(m^2 \cdot K)$ $\lambda_D = 0.027$ $d_N \ge 120 \text{ mm}$ EN 13165:2012 $W/(m^2 \cdot K)$ Compressive strength Compressive stress CS(10\Y)450 +A2:2016 TR150 Tensile / bending strength Tensile strength perpendicular to the panel Durability of compressive Creep behaviour under NPD strength under the compressive stress influence of ageing and degradation Water permeability short-term water **NPD** absorption long-term water absorption NPD Flatness after one-sided NPD moisturisation Water vapour diffusion NPD Sound absorption coefficient NPD Release of dangerous substances, release into the NPD interior of the building NPD Smouldering behaviour

puren-PIR NE 60

2/2



20133.CPR.2020.10

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.

Signed for and on behalf of the manufacturer by

Dr. Andreas Huther
Executive Director
Ueberlingen, 01.10.2020

puren-PIR NE 80



20135.CPR.2020.10 puren-PIR NE 80 1. Unique identification code of the product-type Thermal insulation for buildings Intended application 2. puren gmbh 3. Manufacturer Rengoldshauser Straße 4 - DE-88662 Ueberlingen - Germany t +49 7551 80990 - f +49 7551 809920 - www.puren.com System(s) of assessment and verification of the 4. constancy of performance EN 13165:2012+A2:2016 Harmonised standard 5. Notified body(ies) 0751 FIW München harmonised technical 6. Performance Essential characteristics Performance specifications Thermal resistance Table 1 at nominal thickness at nominal thickness Thermal resistance $R_D \; [m^2 \cdot K/W]$ $d_N \, [mm]$ $R_D \; [m^2 \cdot K/W]$ $d_N \, [mm] \,$ 0,65 30 20 1,00 1,30 40 1,65 2.00 60 2.30 70 2,75 80 3,40 100 120 4.25 5.00 140 5,70 6,40 160 180 EN 13165:2012 220 7.10 200 7,85 +A2:2016 8,55 240 9,25 260 10,00 280 10.70 300 For other thicknesses: Calculate with $R_D = d_N / \lambda_D$ at nominal thickness $d_N < 80 \text{ mm}$ Thermal conductivity $\lambda_D = 0.030$ $W/(m^2 \cdot K)$ $80 \text{ mm} \le d_N < 120 \text{ mm}$ $\lambda_D =$ 0,029 W/(m²·K) $\lambda_D =$ $d_N \ge 120 \text{ mm}$ 0,028 $W/(m^2 \cdot K)$ $d_N =$ 20 - 300 mm Thickness / Thickness tolerance T2 EN 13501-1 Reaction to fire In case of exposure to fire, the behaviour of rigid polyurethane Stability of fire behaviour under the influence of heat, weather and ageing / degradation foam does not deteriorate over time use table 1 Durability of the thermal Thermal resistance resistance under the at nominal thickness influence of heat, weather Thermal conductivity $\lambda_{D} = 0.030$ $W/(m^2 \cdot K)$ $d_N < 80 \text{ mm}$ and ageing / degradation $\lambda_D = 0.029$ $W/(m^2 \cdot K)$ $80 \text{ mm} \le d_N < 120 \text{ mm}$ $\lambda_D =$ 0,028 $W/(m^2 \cdot K)$ $d_N \ge 120 \text{ mm}$ Properties of durability NPD Dimensional stability DS(70,90)3 DS(-20,-)2 NPD Deformation with defined pressure and temperature stress Determination of the Rn use table 1 values of thermal at nominal thickness resistance and thermal $\lambda_D = 0.030$ $d_N < 80 \text{ mm}$ W/(m2.K) $80~\text{mm} \leq d_N < 120~\text{mm}$ conductivity after ageing $\lambda_D = 0.029$ $W/(m^2 \cdot K)$ $\lambda_D = 0.028$ $d_N \ge 120 \text{ mm}$ EN 13165:2012 $W/(m^2 \cdot K)$ Compressive strength Compressive stress CS(10\Y)650 +A2:2016 TR150 Tensile / bending strength Tensile strength perpendicular to the panel Durability of compressive Creep behaviour under NPD strength under the compressive stress influence of ageing and degradation Water permeability short-term water **NPD** absorption long-term water absorption NPD Flatness after one-sided NPD moisturisation Water vapour diffusion NPD Sound absorption coefficient NPD Release of dangerous substances, release into the NPD interior of the building NPD Smouldering behaviour

puren-PIR NE 80



20135.CPR.2020.10

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.

2/2

Signed for and on behalf of the manufacturer by

Dr. Andreas Huther **Executive Director** Ueberlingen, 01.10.2020 f. / fr. the

puren-PIR NE 100



20136.CPR.2020.10 puren-PIR NE 100 1. Unique identification code of the product-type Thermal insulation for buildings Intended application 2. puren gmbh 3. Manufacturer Rengoldshauser Straße 4 - DE-88662 Ueberlingen - Germany t +49 7551 80990 - f +49 7551 809920 - www.puren.com System(s) of assessment and verification of the 4. constancy of performance EN 13165:2012+A2:2016 Harmonised standard 5. Notified body(ies) 0751 FIW München harmonised technical 6. Performance Essential characteristics Performance specifications Thermal resistance Table 1 at nominal thickness at nominal thickness Thermal resistance $R_D \; [m^2 \cdot K/W]$ $d_N \, [mm]$ $R_D \; [m^2 \cdot K/W]$ $d_N \, [mm] \,$ 0,60 20 0,90 30 1,25 1,55 40 1.85 60 2.15 70 2,55 80 3,20 100 120 4.00 4.65 140 5,30 6,00 160 180 EN 13165:2012 220 6,65 200 7,30 +A2:2016 8,00 240 8,65 260 9,30 280 300 10,00 For other thicknesses : Calculate with $R_D = d_N / \lambda_D$ at nominal thickness $d_N < 80 \text{ mm}$ Thermal conductivity $\lambda_D = 0.032$ $W/(m^2 \cdot K)$ $80 \text{ mm} \le d_N < 120 \text{ mm}$ $\lambda_D=0,031$ W/(m²·K) $d_N \ge 120 \text{ mm}$ $\lambda_D = 0.03$ $W/(m^2 \cdot K)$ 20 - 300 mm $d_N =$ Thickness / Thickness tolerance T2 EN 13501-1 Reaction to fire In case of exposure to fire, the behaviour of rigid polyurethane Stability of fire behaviour under the influence of heat, weather and ageing / degradation foam does not deteriorate over time use table 1 Durability of the thermal Thermal resistance resistance under the at nominal thickness influence of heat, weather Thermal conductivity $\lambda_{D} = 0.032$ $W/(m^2 \cdot K)$ $d_N < 80 \text{ mm}$ and ageing / degradation $\lambda_D = 0.031$ $W/(m^2 \cdot K)$ $80 \text{ mm} \le d_N < 120 \text{ mm}$ $\lambda_D =$ 0,03 $W/(m^2 \cdot K)$ $d_N \ge 120 \text{ mm}$ Properties of durability NPD Dimensional stability DS(70,90)3 DS(-20,-)2 NPD Deformation with defined pressure and temperature stress Determination of the Rn use table 1 values of thermal at nominal thickness resistance and thermal $\lambda_D = 0.032$ $d_N < 80 \text{ mm}$ W/(m2.K) $80~\text{mm} \leq d_N < 120~\text{mm}$ conductivity after ageing $\lambda_D = 0.031$ $W/(m^2 \cdot K)$ $d_N \ge 120 \text{ mm}$ EN 13165:2012 $W/(m^2 \cdot K)$ $\lambda_D = 0.03$ Compressive strength Compressive stress CS(10\Y)900 +A2:2016 TR150 Tensile / bending strength Tensile strength perpendicular to the panel Durability of compressive Creep behaviour under NPD strength under the compressive stress influence of ageing and degradation Water permeability short-term water **NPD** absorption long-term water absorption NPD Flatness after one-sided NPD moisturisation Water vapour diffusion NPD Sound absorption coefficient NPD Release of dangerous substances, release into the NPD interior of the building NPD Smouldering behaviour

puren-PIR NE 100



20136.CPR.2020.10

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.

2/2

Signed for and on behalf of the manufacturer by

Dr. Andreas Huther **Executive Director** Ueberlingen, 01.10.2020 f. / fr. the

puren-PIR SE



20221.CPR.2020.10 puren-PIR SE 1. Unique identification code of the product-type Thermal insulation for buildings Intended application 2. puren gmbh 3. Manufacturer Rengoldshauser Straße 4 - DE-88662 Ueberlingen - Germany t +49 7551 80990 - f +49 7551 809920 - www.puren.com System(s) of assessment and verification of the System 1 Reaction to fire 4. constancy of performance System 3 all other features EN 13165:2012+A2:2016 Harmonised standard 5. Notified body(ies) 0751 FIW München harmonised technical 6. Performance Essential characteristics Performance specifications Thermal resistance Table 1 at nominal thickness at nominal thickness Thermal resistance $R_D \; [m^2 \cdot K/W]$ $d_N \, [mm]$ $R_D \; [m^2 \cdot K/W]$ $d_N \ [mm]$ 1.45 50 40 1,85 2,20 2,55 70 60 3.05 80 3.80 100 4,80 120 5,60 140 6,40 160 7.20 180 8,00 200 8,80 220 EN 13165:2012 260 9.60 240 10.40 +A2:2016 11,20 280 12,00 300 For other thicknesses: Calculate with $R_D = d_N / \lambda_D$ at nominal thickness $d_N < 80 \text{ mm}$ Thermal conductivity $\lambda_D=0,027$ $W/(m^2 \cdot K)$ $80~\text{mm} \leq d_N < 120~\text{mm}$ $\lambda_{D} = 0.026$ $W/(m^2 \cdot K)$ $d_N \ge 120 \text{ mm}$ $\lambda_D =$ 0,025 $W/(m^2 \cdot K)$ Thickness / $d_N =$ 40 - 300 mm T2 Thickness tolerance Reaction to fire C-s3,d0 EN 13501-1 Stability of fire behaviour under the influence In case of exposure to fire, the behaviour of rigid polyurethane foam does not deteriorate over time of heat, weather and ageing / degradation use table 1 Durability of the thermal Thermal resistance resistance under the at nominal thickness influence of heat, weather Thermal conductivity $d_N < 80 \text{ mm}$ $\lambda_D = 0.027$ $W/(m^2 \cdot K)$ and ageing / degradation $\lambda_D = 0.026$ $W/(m^2 \cdot K)$ $80~\text{mm} \leq d_N < 120~\text{mm}$ 0,025 $W/(m^2 \cdot K)$ $d_N \ge 120 \text{ mm}$ Properties of durability **NPD** DS(70,90)3 Dimensional stability DS(-20,-)2 Deformation with defined NPD pressure and temperature Determination of the use table 1 values of thermal at nominal thickness resistance and thermal $\lambda_D = 0.027$ $W/(m^2 \cdot K)$ $d_N < 80 \text{ mm}$ conductivity after ageing $80 \text{ mm} \le d_N < 120 \text{ mm}$ $\lambda_{D} = 0.026$ W/(m2.K) $\lambda_D = 0.025$ $W/(m^2 \cdot K)$ $d_N \ge 120 \text{ mm}$ EN 13165:2012 CS(10\Y)150 +A2:2016 Compressive strength Compressive stress Tensile / bending strength Tensile strength TR100 perpendicular to the panel plane Durability of compressive NPD Creep behaviour under strength under the compressive stress influence of ageing and degradation NPD Water permeability short-term water absorption long-term water absorption NPD Flatness after one-sided NPD moisturisation NPD Water vapour diffusion Sound absorption coefficient NPD Release of dangerous substances, release into the NPD interior of the building Smouldering behaviour NPD

NPD: No Performance Determined contains R 365/227

puren-PIR SE



20221.CPR.2020.10

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, 01.10.2020 f. / fr. the

puren-PIR SE 30111.CPR.2017.07



=NI

Intended use			Therr faciliti		ulatin	g mate	erials f	or tec	hnical	buildir	ng equ	uipmer	nt and	indus	trial op	eratio	EN nal
Unique identification code of the	produ	ıct type	puren-	PIR SE													
Identification of the construction	produ	ct	see ba	tch nun	nber / i	mprint o	on prod	uct									
Manufacturer				, dshause					gen - Ge uren.con								
Systems(s) of assessment and v constancy of performance	erifica	ation of	Systen Systen				on to fii er featu	-									
Harmonised standard			EN 143	308:200)9+A1:	2013											
Notified authorities			0751	FIW M	üncher	ı											
Essential characteristics			Decla	ared Pe	erform	nance										Technic specific	
Reaction to fire			Reactio	n to Fire	class							C-s3,	d0			EN 135	01-1
Resilience of Reaction to Fire un influence of ageing/degradation	der th	ie	The rea	action to	fire doe	s not ch	ange ov	er time									
Durability of heat transfer resista thermal conductivity under the in aging and high temperatures				ination o			neat tran	sfer resi	stance u	ınd therr	mal cond	ductivity	after agi	ing, dep	ending	EN 143	80
Thermal conductivity	λ_{D}	W/(m·K)		0,027		0,0	026					0,0)25				
at application temperature	10	°C	d _N	< 80 mm	8	0 mm ≤ d	_N < 120 n	nm				d	_N ≥ 120 m	nm			
at nominal thickness	d_N	mm	20	50	60	80	100	120	140	160	180	200	220	240	260	280	300
Thermal resistance	R_{D}	m²-K/W	0,70	1,85	2,20	3,05	3,80	4,80	5,60	6,40	7,20	8,00	8,80	9,60		11,20	
other application temperatures			NPD				interni	culate va	ides may	be deteri	mined by	iiicai iii	прованог	or calcu	ilated with	то – ч	770
upper application limit temperatu	ıre											NPD					
Compressive strength				ssion sto		0 % con	npressio	n	σ ₁₀	150	kPa	CS(10)\Y)150)			
Dimensional stability			tempera	sional sta ature and ng to EN	d humic	lity cond			8h / 70°C 90 % r.F.	$\Delta \epsilon_{d}$	≤ 2% ≤ 6% ≤ 0,5%	DS(TI	H)3			EN 143	80
			conditio	0				48	h / -20°C		≤ 0,5 % ≤ 2%						
all other characteristics accordin	g to E	N 14308										NPD					
all other characteristics accordin NPD: No Performance Determ	•	N 14308		0	N 16U4 -	- testing		48	h / -20°C			,	,		cor	ntains F	₹ :

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



Signed for the manufacturer and on behalf of the manufacturer by:

puren-PIR NE HF 30211.CPR.2017.07

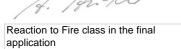


00211.0111.2017.07																	El
Intended use			Therr faciliti		ulatin	g mate	erials f	or tecl	hnical	buildir	ng equ	uipmen	t and	indust	rial op	eratio	nal
Unique identification code of the	produ	ict type	puren-	PIR NE	HF												
dentification of the construction	orodu	ct	see ba	itch nur	nber / i	mprint c	n prod	uct									
Manufacturer				, dshause		e 4 - DE- 19 7551 8											
Systems(s) of assessment and v constancy of performance	erifica	ation of	Systen	n 3													
Harmonised standard			EN 143	308:200)9+A1:	2013											
Notified authorities			0751	FIW M	üncher	1											
Essential characteristics			Decla	ared P	erform	nance										Technic specific	
Reaction to fire			Reactio	on to Fire	class							E				EN 135	
Resilience of Reaction to Fire un influence of ageing/degradation	der th	ie	The rea	action to	fire doe	s not cha	ange ov	er time				-					
Durability of heat transfer resista thermal conductivity under the in aging and high temperatures				ination o			eat tran	sfer resi	stance u	ınd thern	nal cond	ductivity a	after agi	ng, dep	ending	EN 143	.08
Thermal conductivity	λ_{D}	W/(m·K)	0,027		0,0	26					0,0	25				
at application temperature	10	°C	dv	< 80 mm		 0 mm ≤ d _i		nm					≥ 120 m	ım			
at nominal thickness	d _N	mm	20	40	60	80	100	120	140	160	180	200	220	240	260	280	300
Thermal resistance	R_D	m².K/W	0,70	1,45	2,20	3,05	3,80	4,80	5,60	6,40	7,20	8,00	8,80	9,60	10,40	11,20	12,00
temperature range	+100	0 ℃	0,040 0,035 0,030 0,025 0,020 0,015 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010 0,010	λ _D [W/(-15	50	-100		-50		+0	+10	+50	— d < 80 — 80 m — d ≥ 1	ım ≤ d < 20 mm ides gas		tight +150
upper application limit temperatu	re					emperat	ure			t [°C]	°C	ST(+)1	20				
					rain at 1	0 % com	pressio	n	σ ₁₀	120	kPa	CS(10)		-	
Compressive strength									010	5	🛥	33(10	,	•			
Compressive strength Dimensional stability			Dimens	ature an ng to EN	ability ur d humid	nder spec lity condi - testing			8h / 70°C 90 % r.F. 8h / -20°C	$\Delta \epsilon_{\text{l}}, \Delta \epsilon_{\text{b}}$	≤ 6%	DS(TF	1)3			EN 143	808

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



Signed for the manufacturer and on behalf of the manufacturer by:



puren-PIR NE 32 30311.CPR.2017.07



ΕN

																FI
Intended use			Thern faciliti		sulatin	g mate	erials f	or tecl	hnical	building e	equipmer	nt and	indus	trial op	eratio	nal
Unique identification code of the	produ	ct type	puren-	PIR NE	32											
dentification of the construction	orodu	ct	see ba	tch nun	nber/i	mprint o	on prod	uct								
Manufacturer			_	dshause				-	gen - Ge uren.com	•						
Systems(s) of assessment and v constancy of performance	erifica	ation of	System	า 3												
Harmonised standard			EN 143	308:200)9+A1:	2013										
Notified authorities			0751	FIW M	üncher	ı										
Essential characteristics			Decla	red Pe	erform	nance									Technic specific	
Reaction to fire			Reactio	n to Fire	class						E				EN 135	01-1
Resilience of Reaction to Fire un nfluence of ageing/degradation	der th	е	The rea	ction to	fire doe	s not ch	ange ov	er time								
Ourability of heat transfer resista hermal conductivity under the in aging and high temperatures			Determ on the a				neat tran	sfer resi	stance u	ınd thermal c	conductivity	after ag	ing, dep	ending	EN 143	80
Thermal conductivity	λ_{D}	W/(m·K)	0,027		0,0	026				0,0	025				
at application temperature	10	°C	d _N	< 80 mm	8	0 mm ≤ d	_N < 120 n	nm			d	_N ≥ 120 m	nm			
at nominal thickness	d_N	mm	20 0,70	40	60	80	100	120	140 5,60	160 18 6,40 7,2		220 8,80	240	260	280 11,20	300
			0,040 - 0,035 - 0,030 - 0,025 - 0,020 - 0,015 - 0					×	X	X-X	×-×-×	× × ×	— d < 80 — 80 m — d ≥ 1 — both s	nm ≤ d < 120 mm sides gas		tight
			0,010	00	-15	60	-100)	-50	t [°C]	0 +10	+50	facing	+100		+150
upper application limit temperatu	re		accordi	ng to EN	14706					120 °C	ST(+)	120				
Compressive strength				ssion sti ng to EN		0 % con	npressio	n	σ_{10}	150 kPa	CS(10)\Y)15()			
Dimensional stability			tempera	ature and	d humid	nder spe lity cond - testing			8h / 70°C 90 % r.F. h / -20°C	$\begin{split} \Delta \epsilon_{l}, \Delta \epsilon_{b} &\leq 2\% \\ \Delta \epsilon_{d} &\leq 6\% \\ \Delta \epsilon_{l}, \Delta \epsilon_{b} &\leq 0, 5 \\ \Delta \epsilon_{d} &\leq 2\% \end{split}$	DS(TH	Н)З			EN 143	80
all other characteristics according	g to El	N 14308									NPD					
IDD. No Porformance Determ	inad															

NPD: No Performance Determined

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



Signed for the manufacturer and on behalf of the manufacturer by:

Dr. Andreas Huther Managing Director Ueberlingen, 01.07.2017

Jeberlingen, 01.07.2017

puren-PIR NE 40 30412.CPR.2017.07



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																Εl
Intended use			Thern faciliti		ulatin	g mate	erials f	for tecl	hnical	building	equipme	nt and	indus	trial op	eratio	nal
Unique identification code of the	produ	ct type	puren-	PIR NE	40											
dentification of the construction	produ	ct	see ba	tch nun	nber / i	mprint o	on prod	uct								
Manufacturer			_	dshause				Jeberlinç - www.pı	-	•						
Systems(s) of assessment and viconstancy of performance	erifica	ation of	System	า 3												
Harmonised standard			EN 143	308:200)9+A1:	2013										
Notified authorities			0751	FIW M	üncher	ı										
Essential characteristics			Decla	red Po	erform	nance									Technic specific	
Reaction to fire			Reactio	n to Fire	class						Е				EN 135	01-1
Resilience of Reaction to Fire un nfluence of ageing/degradation	der th	е	The rea	ction to	fire doe	s not ch	ange ov	er time								
Durability of heat transfer resista thermal conductivity under the in aging and high temperatures			Determ on the a				neat tran	sfer resi	stance u	ınd thermal	conductivity	after ag	ing, dep	ending	EN 143	808
Thermal conductivity	λ_{D}	W/(m·K)	0,027		0,0	026				0,	025				
at application temperature	10	°C	d _N	< 80 mm	8	0 mm ≤ d	_N < 120 n	nm				d _N ≥ 120 n	nm			
at nominal thickness	d_N	mm	20 0,70	40	60 2,20	80 3,05	100 3,80	120 4,80	140 5,60		80 200 ,20 8,00	220 8,80	9,60	260	280 11,20	300
temperature range	+10		0,040 - 0,035 - 0,030 - 0,025 - 0,020 - 0,015 - 0				*			XXX-	***		— d≥1	0 nm ≤ d < 120 mm		tight
			0,010	00	-15	60	-100)	-50	t [°C]	+0 +10	+50	facing		umusion	+150
upper application limit temperatu	re		upper a			emperat	ure			120 °C	ST(+)120				
Compressive strength			compre			0 % con	npressio	n	σ_{10}	250 kPa	CS(1	0\Y)250	0			
Dimensional stability			Dimens	ional sta ature and ng to EN	ability ur d humid	nder spe lity cond - testing			8h / 70°C 90 % r.F. sh / -20°C	$\begin{split} \Delta \epsilon_{l}, \Delta \epsilon_{b} &\leq 2 \\ \Delta \epsilon_{d} &\leq 6 \\ \Delta \epsilon_{l}, \Delta \epsilon_{b} &\leq 0 \\ \Delta \epsilon_{d} &\leq 2 \end{split}$	% ,5% DS(T	H)3			EN 143	808
all other characteristics accordin	g to E	N 14308									NPD					
NPD: No Performance Determ	ined															

NPD: No Performance Determined

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



Signed for the manufacturer and on behalf of the manufacturer by:

Dr. Andreas Huther Managing Director Ueberlingen, 01.07.2017

eberlingen, 01.07.2017

puren-PIR NE 50 30413.CPR.2017.07



ntended use					ulatin	g mate	erials f	or tecl	hnica <u>l</u>	buildir	ng equ	iipmen	t and	indust	trial op	eratio	nal
mended use			faciliti														
Inique identification code of the	produ	ct type	puren-l														
dentification of the construction	produ	ct	see ba		nber / iı	mprint o	on prod	uct									
Manufacturer			Rengolo t +49 75	Ishause													
Systems(s) of assessment and vonstancy of performance	/erifica	ition of	System	ı 3													
larmonised standard			EN 143	808:200)9+A1:2	2013											
lotified authorities			0751	FIW M	üncher	1											
Essential characteristics	5		Decla	red Pe	erform	ance										Technic specific	
leaction to fire			Reaction	n to Fire	class							E				EN 135	01-1
esilience of Reaction to Fire ur	nder th	е	The rea	ction to	fire doe	s not cha	ange ove	er time									
urability of heat transfer resista nermal conductivity under the in ging and high temperatures			Determi on the a				neat tran	sfer resi	stance (und therr	nal cond	ductivity a	after agi	ng, depe	ending	EN 143	08
hermal conductivity	λ_{D}	W/(m·K)		0,028		0,0)27					0,0	26				
-1!		00	d	< 80 mm	80	 0 mm ≤ d	_N < 120 m	ım				d₀	ı ≥ 120 m	ım			
at application temperature	10	°C	u _N .														
at application temperature at nominal thickness	d _N	mm	20	40	60	80 2.95	100	120	140	160	180	200	220	240	260	280	
at nominal thickness Thermal resistance in the application	d _N R _D	mm m²-K/W	20 0,70		60 2,10	80 2,95	3,70	4,60	5,35	6,15	6,90	7,65 linear inte	8,45	9,20	10,00	10,75	
at nominal thickness	d _N R _D	mm m².K/W	20 0,70 0,045	40 1,40	60 2,10		3,70	4,60	5,35	6,15	6,90	7,65	8,45	9,20	10,00	10,75	11,
at nominal thickness hermal resistance in the application	d _N R _D	mm m²-K/W	20 0,70	40 1,40	60 2,10		3,70	4,60	5,35	6,15	6,90	7,65	8,45	9,20	10,00	10,75	11,
at nominal thickness hermal resistance in the application	d _N R _D	mm m²-K/W	20 0,70 0,045	40 1,40	60 2,10		3,70	4,60	5,35	6,15	6,90	7,65	8,45	9,20	10,00	10,75	11,
at nominal thickness hermal resistance in the application	d _N R _D	mm m²-K/W	20 0,70 0,045 0,040	40 1,40	60 2,10		3,70	4,60	5,35	6,15	6,90	7,65	8,45	9,20	10,00	10,75	11,
at nominal thickness hermal resistance in the application	d _N R _D	mm m²-K/W	20 0,70 0,045 0,040 0,035	40 1,40	60 2,10		3,70	4,60	5,35 llues may	6,15 be determ	6,90 mined by	7,65	8,45 erpolation	9,20 or calcul	10,00	$10,75$ $R_D = d_N$	11,
at nominal thickness hermal resistance in the application	d _N R _D	mm m²-K/W	20 0,70 0,045 0,040 0,035 0,030	40 1,40	60 2,10		3,70	4,60	5,35 llues may	6,15	6,90 mined by	7,65	8,45 erpolation	9,20 or calcul	10,00 lated with	$10,75$ $R_D = d_N$ values	11,,ι
at nominal thickness Thermal resistance in the application	d _N R _D	mm m²-K/W	20 0,70 0,045 0,040 0,035 0,030 0,025	40 1,40	60 2,10		3,70	4,60	5,35 llues may	6,15 be determ	6,90 mined by	7,65	8,45 erpolation	9,20 or calcul	10,00 lated with	10,75 R _D = d _N	11,ξ
at nominal thickness hermal resistance in the application	d _N R _D	mm m²-K/W	20 0,70 0,045 0,040 0,035 0,030 0,025 0,020 0,015	40 1,40 λ _D [W/(ι	60 2,10 m·K)]	2,95	3,70 Interm	4,60 ediate va	5,35 Ilues may	6,15 be determ	6,90 mined by	7,65 linear inte	8,45 erpolation	9,20 or calcul	10,00 lated with leasured < 80 0mm ≤ d ≥ 120mm oth sides ght facing	values 120mm gas diffus	11,4
at nominal thickness hermal resistance in the application	d _N R _D	mm m²-K/W	20 0,70 0,045 0,040 0,035 0,030 0,025 0,020 0,015	40 1,40	60 2,10 m·K)]		3,70	4,60 ediate va	5,35 llues may	6,15 be determ	6,90 mined by	7,65	8,45 erpolation	9,20 or calcul	10,00 lated with	values 120mm gas diffus	11,ι
at nominal thickness hermal resistance in the application temperature range	d _N R _D -177 +51	mm m²-K/W	20 0,70 0,045 0,040 0,035 0,030 0,025 0,020 0,015 0,010 -2 upper al according	40 1,40 λ _D [W/(r) 00 pplication to EN	60 2,10 m·K)] × -1 on limit to I 14706	2,95	3,70 Interm	4,60 ediate va	5,35 Ilues may	6,15 be determ	6,90 mined by	7,65 linear inte	8,45 erpolation	9,20 or calcul	10,00 lated with leasured < 80 0mm ≤ d ≥ 120mm oth sides ght facing	values 120mm gas diffus	11,4
at nominal thickness hermal resistance in the application	d _N R _D -177 +51	mm m²-K/W	20 0,70 0,045 0,040 0,035 0,030 0,025 0,020 0,015 0,010 -2 upper al accordir compresaccordir	40 1,40 λ _D [W/(r 000 poplication of to EN ssion structure of the EN	60 2,10 m·K)] -1 on limit ti J 14706 rain at 1 J 826	2,95 50 emperat 0 % con	3,70 Interm	4,60 ediate va	5,35 Ilues may	6,15 be detern	6,90 mined by	7,65 linear inte	8,45 erpolation	9,20 or calcul	10,00 lated with leasured < 80 0mm ≤ d ≥ 120mm oth sides ght facing	values 120mm gas diffus	11,4 λ _D
at nominal thickness hermal resistance in the application temperature range	d _N R _D -177 +51	mm m²-K/W	20 0,70 0,045 0,040 0,035 0,030 0,025 0,020 0,015 0,010 -2 upper al accordir compres accordiral compress accordiral compress accordiral compress accordinal compress accordinate compress accordinate compress accordinate compress accordinate compress ac	1,40 λ _D [W/(r) 00 opplication on the sistence of the EN contail statuture and the EN contail stat	60 2,10 m·K)] -1 on limit to 114706 rain at 1 1826 ability urd humid	2,95 50 emperat 0 % conder specity conditions	3,70 Interm	4,60 ediate va	5,35 Idues may	$\begin{array}{c} 6,15 \\ \text{be detern} \end{array}$ $t \ [^{\circ}\text{C} \\ \\ \Delta \epsilon_{i}, \Delta \epsilon_{b} \\ \Delta \epsilon_{i}, \Delta \epsilon_{b} \end{array}$	6,90 mined by +0 +0 *C kPa \$ 2% \$ 6% \$ 0,5%	7,65 linear inte	8,45 propolation +50	9,20 or calcul	10,00 lated with leasured < 80 0mm ≤ d ≥ 120mm oth sides ght facing	values 120mm gas diffus	11, 'λ _D
at nominal thickness thermal resistance in the application temperature range oper application limit temperature	d _N R _D -17/+5/	mm m²-K/W 0 °C to 0 °C	20 0,70 0,045 0,040 0,035 0,030 0,025 0,020 0,015 0,010 -2 upper al accordir compress accordir Dimensitempera	1,40 λ _D [W/(r) 00 opplication on the sistence of the EN contail statuture and the EN contail stat	60 2,10 m·K)] -1 on limit to 114706 rain at 1 1826 ability urd humid	2,95 50 emperat 0 % conder specity conditions	3,70 Interm	4,60 ediate va	5,35 slues may	$\begin{array}{c} 6,15 \\ \text{be detern} \end{array}$ $t \ [^{\circ}\text{C} \\ \\ \Delta \epsilon_{i}, \Delta \epsilon_{b} \\ \Delta \epsilon_{i}, \Delta \epsilon_{b} \end{array}$	6,90 mined by +0 +0 C kPa ≤ 2% ≤ 6%	+10 NPD CS(10	8,45 propolation +50	9,20 or calcul	10,00 lated with leasured < 80 0mm ≤ d ≥ 120mm oth sides ght facing	values < 120mm gas diffus	11, λ _D

NPD: No Performance Determined / no performance declared

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



Signed for the manufacturer and on behalf of the manufacturer by:

Dr. Andreas Huther Managing Director Ueberlingen, 01.07.2017

A. / fr. the

puren-PIR NE 60 30414.CPR.20170.7



Thermal insulating materials for technical building equipment and industrial operational Intended use puren-PIR NE 60 Unique identification code of the product type Identification of the construction product see batch number / imprint on product Rengoldshauser Straße 4 - DE-88662 Ueberlingen - Germany Manufacturer t +49 7551 80990 - f +49 7551 809920 - www.puren.com Systems(s) of assessment and verification of constancy of performance System 3 EN 14308:2009+A1:2013 Harmonised standard 0751 FIW München Notified authorities Technical **Declared Performance** Essential characteristics specification Reaction to fire Reaction to Fire class Ε EN 13501-1 Resilience of Reaction to Fire under the The reaction to fire does not change over time influence of ageing/degradation EN 14308 Durability of heat transfer resistance and Determination of the values of heat transfer resistance und thermal conductivity after aging, depending thermal conductivity under the influence of on the application temperature aging and high temperatures Thermal conductivity W/(m·K) 0.029 0.028 0.027 10 °c d_N < 80 mm $d_N \ge 120 \text{ mm}$ $80 \text{ mm} \le d_N < 120 \text{ mm}$ at application temperature at nominal thickness 100 220 300 20 40 60 80 120 140 160 180 200 240 260 280 3,55 4,40 9,60 10,35 11,10 0,65 1,35 2.85 5,15 5,90 6,65 7,40 8,10 8,85 Thermal resistance $R_D = m^2 \cdot K/W$ Intermediate values may be determined by linear interpolation or calculated with $R_D = d_N / \lambda_D$ -170 °C to λ_D [W/(m·K)] in the application 0,035 temperature range +50 °C upper application limit temperature 0,030 Compressive strength 0,025 Dimensional stability all other characteristics according to EN 14308 measured values 0.020 NPD: No Performance Determined d < 8080 mm ≤ d < 120 mm The performance of the product identified above d ≥ 120 mm responsible for this Declaration of Performance i both sides gas diffusion tight facings

Dr. Andreas Huther

Managing Director Ueberlingen, 01.07.2017 4. /fr. K

Signed for the manufacturer and on behalf

0,010

-150

-100

t [°C]

+50

+100

+150

puren-PIR NE 80 30415.CPR.2017.07



facings

+100

+150

+50

Thermal insulating materials for technical building equipment and industrial operational Intended use puren-PIR NE 80 Unique identification code of the product type Identification of the construction product see batch number / imprint on product Rengoldshauser Straße 4 - DE-88662 Ueberlingen - Germany Manufacturer t +49 7551 80990 - f +49 7551 809920 - www.puren.com Systems(s) of assessment and verification of constancy of performance System 3 EN 14308:2009+A1:2013 Harmonised standard 0751 FIW München Notified authorities Technical **Declared Performance** Essential characteristics specification Reaction to fire Reaction to Fire class Ε EN 13501-1 Resilience of Reaction to Fire under the The reaction to fire does not change over time influence of ageing/degradation EN 14308 Durability of heat transfer resistance and Determination of the values of heat transfer resistance und thermal conductivity after aging, depending thermal conductivity under the influence of on the application temperature aging and high temperatures Thermal conductivity W/(m·K) 0.030 0.029 0,028 10 °c d_N < 80 mm $d_N \ge 120 \text{ mm}$ $80 \text{ mm} \le d_N < 120 \text{ mm}$ at application temperature at nominal thickness 100 220 300 20 40 60 80 120 140 160 180 200 240 260 280 2,75 3,40 9,25 10,00 10,70 0,65 1,30 4,25 5,00 5,70 6,40 7,10 7,85 8,55 Thermal resistance $R_D = m^2 \cdot K/W$ Intermediate values may be determined by linear interpolation or calculated with $R_D = d_N / \lambda_D$ -170 °C to in the application $\lambda_D \ [W/(m{\cdot}K)]$ 0.045 temperature range +130 °C upper application limit temperature 0,040 Compressive strength 0.035 Dimensional stability 0,030 all other characteristics according to EN 14308 0,025 -x--- measured values NPD: No Performance Determined d < 8080 mm ≤ d < 120 mm The performance of the product identified above 0,015 d ≥ 120 mm responsible for this Declaration of Performance i both sides gas diffusion tight

Dr. Andreas Huther
Managing Director
Ueberlingen, 01.07.2017

Signed for the manufacturer and on behalf Dr. Andreas Huther

0,010

-150

-100

t [°C]

puren-PIR NE 100 30416.CPR.2017.07



Intended use					ulatin	g mate	erials f	or tec	hnical	buildir	ng equ	ıipmer	nt and	indust	trial or	peratio	nal
mended use			faciliti														
Inique identification code of the			puren-l	PIR NE	100												
dentification of the construction	produ	ct	see ba		nber / i	mprint o	on prod	uct									
Manufacturer			puren g Rengolo t +49 75	dshause													
Systems(s) of assessment and voonstancy of performance	erifica	ation of	System	າ 3													
larmonised standard			EN 143	308:200)9+A1:	2013											
Notified authorities			0751	FIW M	üncher	1											
Essential characteristics			Decla	red Pe	erform	nance										Technic specific	
eaction to fire			Reactio	n to Fire	class							E				EN 135	501-1
tesilience of Reaction to Fire un	der th	е	The rea	ction to	fire doe	s not ch	ange ov	er time				:					
nurability of heat transfer resista nermal conductivity under the in ging and high temperatures			Determi				neat tran	sfer resi	stance (und thern	mal cond	ductivity	after agi	ing, dep	ending	EN 143	808
hermal conductivity	λ_{D}	W/(m·K)	0,032		0,0	031					0,0	030				
at application temperature	10	°C	d _N -	< 80 mm	8	∣ 0 mm ≤ d	_N < 120 n	l nm				d _i	_N ≥ 120 m	nm			
at nominal thickness	d_{N}	mm	20	40	60	80	100	120	140	160	180	200	220	240	260	280	30
hermal resistance	R_D	m².K/W	0,60	1,25	1,85	2,55	3,20	4,00	4,65	5,30	6,00	6,65	7,30	8,00	8,65	9,30	10,0
in the application	-17	0 °C to		λ _D [W/(m.K\1		Interm	ediate va	lues may	be deterr	nined by	linear inte	erpolation	or calcul	lated with	$H_D = d_N$	/λ _D
temperature range	+12		0,050	7.65 [117.((/)							1					
			0,045									1					
			0,040														
			0,040													×	
			0,035											××	XX		-
			0,030										×	×/\			_
														× m	easured	values	
			0,025							×		1	-	d	< 80		
			0,020						×			 	<u> </u>	80	0mm ≤ d	< 120mn	
			0.045				*						-	d	≥ 120mr	n	
			0,015		×							1	-	bo	oth sides	gas diffu	sion
			0,010 -2	00	-1	50	-10	00	-50		+0	<u>;</u> +10	+50	τιζ	ght facing +100	js 	+150
			upper a	policatio	n limit t	emperat	ure			t [°C							
pper application limit temperatu	ire		accordir	ng to EN	l 14706	-					°C	NPD					
ompressive strength			compre	ng to EN	1826				σ ₁₀			CS(10)\Y)900)			
			Dimens tempera						8h / 70°C 90 % r.F.		≤ 2% ≤ 6%					EN 143	308
imensional stability			accordir	ng to EN		•			h / -20°C	$\Delta \epsilon_{\text{l}}, \Delta \epsilon_{\text{b}}$		DS(T	H)3				
I other characteristics according	g to E	N 14308										NPD					

NPD: No Performance Determined / no performance declared

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



Signed for the manufacturer and on behalf of the manufacturer by:

Dr. Andreas Huther Managing Director Ueberlingen, 01.07.2017

A. / fr. the

puren-PIR NE 120 30417.CPR.2017.07



																	Ε
Intended use			Thern faciliti		ulatin	g mate	erials t	for tec	hnical	buildir	ng equ	uipmer	nt and	indust	rial op	peratio	nal
Unique identification code of the	produ	ct type	puren-	PIR NE	120												
dentification of the construction	produ	ct	see ba	tch nur	nber / i	mprint o	on prod	luct									
Manufacturer			_	dshause				Jeberlinç - www.pi	_	•							
Systems(s) of assessment and veconstancy of performance	erifica	ation of	Systen	n 3													
Harmonised standard			EN 143	308:200)9+A1:	2013											
Notified authorities			0751	FIW M	üncher	1											
Essential characteristics			Decla	red P	erform	nance										Technic specific	
eaction to fire			Reactio	n to Fire	class							E				EN 135	01-1
desilience of Reaction to Fire un fluence of ageing/degradation	der th	е	The rea	ction to	fire doe	s not ch	ange ov	er time				-					
Durability of heat transfer resistanermal conductivity under the inging and high temperatures			Determ on the a				neat tran	nsfer resi	stance	und therr	mal cond	ductivity	after agi	ng, depe	ending	EN 143	808
hermal conductivity	λ_{D}	W/(m·K)	0,034		0,0	033					0,0	032				
at application temperature	10	°C	d _N	< 80 mm	8	∣ 0 mm ≤ d	_N < 120 n	nm				d	_N ≥ 120 m	m			
at nominal thickness	$d_{N} \\$	mm	20	40	60	80	100	120	140	160	180	200	220	240	260	280	30
hermal resistance	R_D	m².K/W	0,55	1,15	1,75	2,40	3,00	3,75	4,35	5,00	5,60	6,25	6,85	7,50	8,10	8,75	9,3
in the application	17	0 °C to		λ _D [W/(m IC\1		Interm	nediate va	llues may	be deteri	nined by	linear inte	erpolation	or calcul	ated with	$R_D = d_N$	/ λ _D
temperature range	+12		0,050	VD [VV/	111-10/]							1					
			0.045													//	
			0,045														
			0,040									 		//		×	
														/ //	.××		
			0,035									1//		<××			
			0.030										××				
			0,030									*	-	× m		values	
			0,025							×	(< 80		_
									·				-			< 120mm	וי
			0,020				,		^			†			≥ 120mi		
			0,015												oth sides ght facin	gas diffu gs	sion
				200	-1	50	-10	00	-50	t [°C	+0	+10	+50		+100		+150
pper application limit temperatu	ire		accordi	ng to EN	l 14706						°C	NPD					
compressive strength			compre			0 % con	npressio	n	σ_{10}	1200	kPa	CS(10)\Y)120	0			
			Dimens	ional sta	ability ur	nder spe			8h / 70°C		≤ 2%					EN 143	108
imensional stability			tempera accordi			lity condi	itions		90 % r.F.	As. As.	≤ 6% < 0.5%	DS(T	H)3			LIV 140	.50
			conditio		N 10U4 -	- ເອຣແກ່g		48	8h / -20°C	;	≤ 0,5% ≤ 2%	,					
Il other characteristics accordin	g to E	N 14308										NPD					
DD N D (, ,															

NPD: No Performance Determined / no performance declared

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



Signed for the manufacturer and on behalf of the manufacturer by:

Dr. Andreas Huther Managing Director Ueberlingen, 01.07.2017

eberlingen, 01.07.2017

puren-PIR NE 145 30418.CPR.2017.07



																	Е
Intended use			Therr facilit		ulatin	g mate	erials f	or tecl	hnical	buildir	ng equ	ıipmen	t and i	ndust	rial op	eratio	nal
Unique identification code of the	produ	ct type	puren-	PIR NE	145												
dentification of the construction p	orodu	ct	see ba	tch nun	nber / i	mprint o	on prod	uct									
Manufacturer				gmbh dshause 551 8099													
Systems(s) of assessment and viconstancy of performance	erifica	ation of	Syster	n 3													
Harmonised standard			EN 14	308:200)9+A1:	2013											
Notified authorities			0751	FIW M	ünchei	n											
Essential characteristics			Decla	ared Pe	erforn	nance										Technic specific	
Reaction to fire			Reaction	on to Fire	class							E				EN 135	01-1
Resilience of Reaction to Fire uninfluence of ageing/degradation	der th	е	The rea	action to	fire doe	s not ch	ange ov	er time									
Ourability of heat transfer resistan hermal conductivity under the intaging and high temperatures				ination o			neat tran	sfer resi	stance u	ınd thern	nal con	ductivity a	after agir	ng, depe	ending	EN 143	80
Thermal conductivity	λ_{D}	W/(m·K)	0,036		0,0	035					0,0	34				
at application temperature	10	°C	d _N	< 80 mm	8	0 mm ≤ d	_N < 120 n	nm				d _N	≥ 120 m	m			
at nominal thickness	d_{N}	mm	20	40	60	80	100	120	140	160	180	200	220	240	260	280	30
Thermal resistance	R_D	m².K/W	0,55	1,10	1,65	2,25	2,85	3,50	4,10	4,70	5,25	5,85	6,45	7,05	7,60	8,20	8,8
in the application temperature range	-170 +130	0 °C to	0,055	λ _D [W/(ι	m·K)]		interm	lediate va	iues may	be deterr	ninea by	linear inte	rpolation	or calcul	ated witr	$K_D = G_N$	/ λ _D
			0,050								<u> </u>						
			0,045													,×-•×	
			0,040											.××- ³	××		
			0,035									×	××	- measu		es	
			0,030							9	×-×	(X (+	- d < 80			
			0,025							××	.~		+	80 m	m≤d<	120 mm	_
			0.000					×					+	– d≥1	20 mm		
			0,020		,		X						-	- both s	ides gas	diffusion	tight
			0,015 -20	00	-15	50	-100)	-50	t [°C]	+0	+10	+50	facing	+100		+150
pper application limit temperatu	re			application			ture			1 0	°C	NPD					
Compressive strength			compre	ession str ng to EN	ain at 1 I 826	0 % con			σ_{10}	1700		CS(10	\Y)170	0			
Dimensional stability			temper	sional sta ature and ing to EN	d humic	lity condi			8h / 70°C 90 % r.F.		≤ 6%	DS(TF	I)3			EN 143	80
			conditio					48	h / -20°C		≤ 2%					-	
Il other characteristics according	to E	N 14308										NPD					
DD. No Dorformanaa Datarmi	inad																

NPD: No Performance Determined

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



Signed for the manufacturer and on behalf of the manufacturer by:

Dr. Andreas Huther Managing Director Ueberlingen, 01.07.2017

leberlingen, 01.07.2017

puren-PIR NE 200 30419.CPR.2017.07



																	Ε
Intended use			Therr facilit		ulatir	ng mate	erials f	for tec	hnical	buildir	ng equ	uipmen	it and	indust	rial op	eratio	nal
Unique identification code of the	produ	ıct type	puren-	PIR NE	200												
dentification of the construction p	produ	ct	see ba	tch nun	nber /	imprint o	on prod	luct									
Manufacturer				dshause		e 4 - DE- 49 7551 8											
Systems(s) of assessment and v constancy of performance	erifica	ation of	Syster	n 3													
Harmonised standard			EN 14	308:200)9+A1:	2013											
Notified authorities			0751	FIW M	ünche	n											
Essential characteristics			Decla	ared Pe	erforn	nance										Technic specific	
Reaction to fire			Reaction	on to Fire	class							E				EN 135	01-1
Resilience of Reaction to Fire un influence of ageing/degradation	der th	ne	The rea	action to	fire doe	es not ch	ange ov	er time									
Durability of heat transfer resistar thermal conductivity under the inlaging and high temperatures				ination o		alues of hoerature	neat tran	nsfer resi	stance u	und therr	mal cond	ductivity a	after agi	ng, depe	ending	EN 143	38
Thermal conductivity	λ_{D}	W/(m·K)	0,044		0,0	043					0,0)42				
at application temperature	10	°C	d _N	< 80 mm	8	30 mm ≤ d	_N < 120 n	nm				d _N	_N ≥ 120 m	m			
at nominal thickness	d_N	mm	20	40	60	80	100	120	140	160	180	200	220	240	260	280	30
Thermal resistance	R_{D}	m².K/W	0,45	0,90	1,35	1,85	2,30	2,85	3,30	3,80	4,25	4,75 linear inte	5,20	5,70	6,15	6,65	7,1
in the application temperature range		O °C to O °C	0,050 0,045 0,040 0,035 0,030 0,025	λ _D [W/(i	m·K)]	50	-100	0	-50		+0	+10	+50	d ≥ 1	m ≤ d < 20 mm ides gas	120 mm	tight +150
upper application limit temperatu	re									t [°C]		NPD					
Compressive strength			accordi	ng to EN	l 826	10 % con	•	on	σ_{10}			CS(10	\Y)270	0			
Dimensional stability			temper	ature and	d humid	nder spe dity cond – testing			8h / 70°C 90 % r.F. 8h / -20°C	$\Delta \epsilon_{\text{d}}$ $\Delta \epsilon_{\text{l}}, \Delta \epsilon_{\text{b}}$	≤ 2% ≤ 6% ≤ 0,5% ≤ 2%	DS(TF	H)3			EN 143	38
all other characteristics according	g to E	N 14308										NPD					
AIDD. No Porformance Determ	inad																

NPD: No Performance Determined

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



Signed for the manufacturer and on behalf of the manufacturer by:

Dr. Andreas Huther Managing Director Ueberlingen, 01.07.2017

deberlingen, 01.07.2017

puren-PIR NE 70 30424.CPR.2019.04



																	Εľ
Intended use			Thern faciliti		ulatin	g mate	erials f	or tec	hnical	buildir	ng equ	ıipmer	nt and	indust	rial op	peratio	nal
Unique identification code of the	produ	ct type	puren-	PIR NE	70												
dentification of the construction	produ	ct	see ba	tch nun	nber / i	mprint o	on prod	uct									
Manufacturer			_	dshause		e 4 - DE- 9 7551 8			-								
Systems(s) of assessment and voonstancy of performance	erifica	ation of	System	n 3													
Harmonised standard			EN 143	308:200)9+A1:	2013											
lotified authorities			0751	FIW M	üncher	1											
Essential characteristics			Decla	red Pe	erform	nance										Technic specific	
leaction to fire			Reactio	n to Fire	class							E				EN 135	01-1
tesilience of Reaction to Fire un	der th	е	The rea	ction to	fire doe	s not ch	ange ov	er time									
Durability of heat transfer resista nermal conductivity under the in ging and high temperatures			Determ on the a				neat tran	sfer resi	stance (und therr	mal cond	ductivity	after agi	ng, depe	ending	EN 143	80
Thermal conductivity	λ_{D}	W/(m·K)	0,029		0,0	028					0,0)27				
at application temperature	10	°C	d _N	< 80 mm	8	∣ 0 mm ≤ d	_N < 120 n	l nm				d _i	_N ≥ 120 m	nm			
at nominal thickness	$d_{N} \\$	mm	20	40	60	80	100	120	140	160	180	200	220	240	260	280	30
hermal resistance	R_D	m².K/W	0,65	1,35	2,05	2,85	3,55	4,40	5,15	5,90	6,65	7,40	8,10	8,85	9,60	10,35	
in the application		0 °C to		λ _D [W/(m·K)l		interm	ediale va	liues may	be deteri	ninea by	iiriear irite	erpolation	or calcul	ated with	$R_D = d_N$	ΛD
temperature range	+	0 ℃	0,035 0,030 0,025									**************************************					
			0,020						×	XX		 	-	80	< 80 0mm ≤ d	< 120mm	1
			0,010	200	× 1	50	*-					10	-	bo	tht facing	gas diffu	
			-2	200	-1	50	-10	JU	-50	t [°C	+0	+10	+50		+100		+150
pper application limit temperatu	re					0.0/	,					NPD					
Compressive strength				ssion sti ng to EN		0 % con	npressio	n	σ_{10}	500	kPa	CS(10)\Y)500)			
imensional stability			Dimens	ional sta ature and ng to EN	ability ur d humid	nder spe lity cond - testing			8h / 70°C 90 % r.F. 8h / -20°C	$\Delta \epsilon_{d}$ $\Delta \epsilon_{l}$, $\Delta \epsilon_{b}$	≤ 2% ≤ 6% ≤ 0,5% ≤ 2%	DS(T	H)3			EN 143	80
Il other characteristics according	g to E	N 14308										NPD					
IDD No Doutous Dotous		/															

NPD: No Performance Determined / no performance declared

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



Signed for the manufacturer and on behalf of the manufacturer by:

Dr. Andreas Huther Managing Director Ueberlingen, 01.04.2019

eberlingen, 01.04.2019

purenit C 40141.CPR.2018.10



Thermal Insulation for Buildings (ThIB) Intended use Unique identification code of the product type purenit C Identification of the construction product see batch number / imprint on product puren gmbh Rengoldshauser Straße 4 - DE-88662 Ueberlingen - Germany Manufacturer t +49 7551 80990 - f +49 7551 809920 - www.puren.com Systems(s) of assessment and verification of reaction to fire constancy of performance System 3 all other features Harmonised standard not available 0672 MPA Stuttgart reaction to fire Notified authorities 0751 FIW München all other features European technical evaluation / Registration ETA-18/0604 Deutsches Institut für Bautechnik (DIBt) technical assessment body Kolonnenstraße 30 B, DE-10829 Berlin Notified body(bodies) for verification of 0751 FIW München constancy of performance

constancy	or perioring									Toohniaal
Essential characteristics	S		Decla	red Perform	nance					Technical specification
Reaction to fire		F	Reactio	n to Fire class				C-s3,d0		EN 13501-1
Thermal conductivity	:	λ _D \	N/(m·K)			0,0	096			
at nominal thic	ckness	d _N r	mm	20	30	40	50	60		
at nominal thickness	F	R_D	m²·K/W	0,20	0,30	0,40	0,50	0,60		
Coversion for humidity			o EN IS	SO 10456	Interme	ediate values may	be determined by I		or calculated with not assessed	$H_D = d_N / \lambda_D$
mass-based moisture	U ₂₃			/ 50% rel. hum	idity					
content	U ₂₃			/ 80% rel. hum	•					
mass-based moisture conversion coefficient		f _u								
Coversion for humidity	F _{m (23/50-23/}	/80) 2	23°C / 5	60% rel. humidit	ty to at 23°C / 8	0% rel. humidity				
Compressive strength	d	7.0	compres EN 826	ssion strain at 1	10 % compress	ion according to	kPa	7100		
Tensile strength perpendicul panel plane	lar to	t	o EN 1	607				Performance	e not assessed	
Flexural strength		t	o EN 1	2089				Performance	e not assessed	
Shear strength			o EN 1	2090				Performance	e not assessed	
Deformation with defined pre- temperature load		d t	o EN 1	605				Performance	e not assessed	
Creep behaviour under compatress	pressive	t	o EN 1	606				Performance	e not assessed	not availabl
Water absorption	V	V_{p} t	o EN 1	609			kg/m²	≤ 0,5		
Moisture absorption (desorp	tion)	- 11	Hygroso 12571	copic sorption o	haracteristics a	icc. to EN ISO	Mass-%	≤ 3,0		
Water absorption		f	or long	term water abs	sorption by imm	ersion		Performance	e not assessed	
Water vapor diffusion		μ t	o EN 1	2086			-	8		
Bulk density		t	o EN 1	602			kg/m³	550	+40 / -40	
Nominal thickness		d _N t	o EN 8	23			mm	20 - 60	±1	
Nominal length		t	o EN 8	22			mm	≤ 6000	±8	
Nominal width		t	o EN 8	22			mm	≤ 1350	±5	
Perpendicularity	Sb	t	o EN 8	24			mm/m	≤ 2		
Flatness		t	o EN 8	25			mm	≤ 2		
Surface flatness after one-si	ded humif	icatict	o EN 8	25				Performance	e not assessed	
Dimensional stability		t	o EN 1	604				Performance	e not assessed	

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



Signed for the manufacturer and on behalf of the manufacturer by:

Dr. Andreas Huther Managing Director Ueberlingen, 01.02.2020

Jeberlingen, 01.02.2020

purenit 40243.CPR.2018.10



Intended use Thermal Insulation for Buildings (ThIB) Unique identification code of the product type purenit Identification of the construction product see batch number / imprint on product puren gmbh Rengoldshauser Straße 4 - DE-88662 Ueberlingen - Germany Manufacturer t +49 7551 80990 - f +49 7551 809920 - www.puren.com reaction to fire Systems(s) of assessment and verification of constancy of performance all other features System 3 Harmonised standard not available 1322 IBS Linz reaction to fire Notified authorities 0751 FIW München all other features European technical evaluation / Registration ETA-18/0604 Deutsches Institut für Bautechnik (DIBt) technical assessment body Kolonnenstraße 30 B, DE-10829 Berlin Notified body(bodies) for verification of FIW München 0751 constancy of performance Essential characteristics **Declared Performance** Ε Reaction to fire Reaction to Fire class EN 13501-1 0,083 0,085 Thermal conductivity λ_{D} W/(m·K) d ≤ 40 mm 40 mm < d ≤ 60 mm at nominal thickness 20 30 40 50 60 d_N m²·K/W 0,20 0,35 0,45 0,55 0,70 R_{D} at nominal thickness Intermediate values may be determined by linear interpolation or calculated with $\,R_D$ = $d_N\,/\,\lambda_D$ Coversion for humidity to EN ISO 10456 0,017 U 23/50 at 23°C / 50% rel. humidity mass-based moisture content U _{23/80} at 23°C / 80% rel. humidity 0,028 mass-based moisture 2,86 fu conversion coefficient Coversion for humidity F_{m (23/50-23/80)} 23°C / 50% rel. humidity to at 23°C / 80% rel. humidity 1,03 compression strain at 10 % compression according to kPa Compressive strength 7100 EN 826 Tensile strength perpendicular to to EN 1607 Performance not assessed panel plane Flexural strength to EN 12089 Performance not assessed Shear strength to EN 12090 Performance not assessed Deformation with defined pressure and to FN 1605 Performance not assessed temperature load Creep behaviour under compressive to EN 1606 Performance not assessed stress not available

kg/m²

kg/m³

mm

mm

mm

mm

mm/m

Mass-%

≤ 0.5

≤ 3.0

20 - 60

≤ 6000

≤ 1350

≤ 2

≤ 2

8 550

Performance not assessed

Performance not assessed

Performance not assessed

+40 / -40

±1

±8

±5

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

Hygroscopic sorption characteristics acc. to EN ISO

for long term water absorption by immersion



Signed for the manufacturer and on behalf of the manufacturer by:

Surface flatness after one-sided humificatioto EN 825

 W_{p}

u

Sh

to EN 1609

to EN 12086

to EN 1602

to EN 823

to EN 822

to EN 822

to EN 824

to EN 825

to EN 1604

Dr. Andreas Huther Managing Director Ueberlingen, 01.02.2020

Water absorption

Water absorption

Bulk density

Water vapor diffusion

Nominal thickness

Nominal length

Nominal width

Flatness

Perpendicularity

Dimensional stability

Moisture absorption (desorption)

Ueberlingen, 01.02.2020

puren-PIR ALU-G



84111.CPR.2020.10 puren-PIR ALU-G 1. Unique identification code of the product-type Thermal insulation for buildings Intended application 2. puren gmbh 3. Manufacturer Rengoldshauser Straße 4 - DE-88662 Ueberlingen - Germany t +49 7551 80990 - f +49 7551 809920 - www.puren.com System(s) of assessment and verification of the 4. constancy of performance EN 13165:2012+A2:2016 Harmonised standard 5. Notified body(ies) 0751 FIW München harmonised technical 6. Performance Essential characteristics Performance specifications Thermal resistance Table 1 at nominal thickness at nominal thickness Thermal resistance $R_D \left[m^2 \cdot K/W \right]$ $d_N \ [mm]$ $R_D \; [m^2 \cdot K/W]$ $d_N \ [mm]$ 1,35 40 30 1,80 2,70 3,60 80 60 EN 13165:2012 4.50 100 5.45 120 +A2:2016 5,90 130 For other thicknesses: Calculate with $R_D = d_N / \lambda_D$ Thermal conductivity $\lambda_D = 0.022$ $W/(m^2 \cdot K)$ 30 - 130 mm Thickness / Thickness tolerance T2 Reaction to fire EN 13501-1 Ε Stability of fire behaviour under the influence In case of exposure to fire, the behaviour of rigid polyurethane of heat, weather and ageing / degradation foam does not deteriorate over time use table 1 Durability of the thermal Thermal resistance R_{D} resistance under the Thermal conductivity $\lambda_D =$ 0,022 $W/(m^2 \cdot K)$ influence of heat, weather NPD Properties of durability and ageing / degradation Dimensional stability DS(70,90)3 DS(-20,-)2 Deformation with defined NPD pressure and temperature stress R_D Determination of the use table 1 values of thermal $\lambda_D =$ 0,022 W/(m²·K) resistance and thermal conductivity after ageing Compressive strength Compressive stress CS(10\Y)120 EN 13165:2012 Tensile / bending strength Tensile strenath **TR40** perpendicular to the panel +A2:2016 plane Durability of compressive NPD Creep behaviour under strength under the compressive stress influence of ageing and degradation NPD Water permeability short-term water absorption long-term water absorption NPD NPD Flatness after one-sided moisturisation Water vapour diffusion NPD Sound absorption coefficient NPD Release of dangerous substances, release into the NPD interior of the building NPD Smouldering behaviour

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.

Signed for and on behalf of the manufacturer by

Dr. Andreas Huther Executive Director Ueberlingen, 01.10.2020

Jeberlingen. 01.10.2020

puren-PIR ALD



84112.CPR.2020.10 puren-PIR ALD Unique identification code of the product-type 1. Thermal insulation for buildings Intended application 2. puren gmbh 3. Manufacturer Rengoldshauser Straße 4 - DE-88662 Ueberlingen - Germany t +49 7551 80990 - f +49 7551 809920 - www.puren.com System(s) of assessment and verification of the 4. constancy of performance System 3 EN 13165:2012+A2:2016 Harmonised standard 5. Notified body(ies) 0751 FIW München 1173 WFR Gent 1136 CSTC Brüssel harmonised technical 6. Performance Essential characteristics Performance specifications Thermal resistance Table 1 at nominal thickness at nominal thickness Thermal resistance $R_D \; [m^2 \cdot K/W]$ $d_N \ [mm]$ $R_D \; [m^2 \cdot K/W]$ $d_N \, [mm] \,$ 1,25 40 30 1,65 2,05 2,50 60 EN 13165:2012 3.30 80 +A2:2016 Calculate with $R_D = d_N / \lambda_D$ For other thicknesses: Thermal conductivity 0.024 $W/(m^2 \cdot K)$ 30 - 80 mm Thickness / $d_N =$ T2 Thickness tolerance Reaction to fire D-s2.d0 EN 13501-1 Stability of fire behaviour under the influence In case of exposure to fire, the behaviour of rigid polyurethane of heat, weather and ageing / degradation foam does not deteriorate over time use table 1 Durability of the thermal Thermal resistance resistance under the Thermal conductivity $\lambda_D =$ 0,024 $W/(m^2 \cdot K)$ influence of heat, weather Properties of durability NPD and ageing / degradation DS(70,90)3 Dimensional stability DS(-20,-)1 Deformation with defined NPD pressure and temperature stress Determination of the R_{D} use table 1 values of thermal 0,024 $W/(m^2 \cdot K)$ resistance and thermal conductivity after ageing Compressive strength CS(10\Y)150 Compressive stress Tensile strength Tensile / bending strength **TR80** EN 13165:2012 +A2:2016 perpendicular to the panel Durability of compressive NPD Creep behaviour under strength under the compressive stress influence of ageing and degradation NPD Water permeability short-term water absorption long-term water absorption NPD Flatness after one-sided NPD moisturisation NPD Water vapour diffusion Sound absorption coefficient NPD Release of dangerous substances, release into the **NPD** interior of the building NPD Smouldering behaviour

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.

Signed for and on behalf of the manufacturer by

No Performance Determined

Dr. Andreas Huther Executive Director Ueberlingen, 01.10.2020

Jeberlingen. 01.10.2020

puren-PIR APE



86111.CPR.2020.10 puren-PIR APE 1. Unique identification code of the product-type Thermal insulation for buildings Intended application 2. puren gmbh 3. Manufacturer Rengoldshauser Straße 4 - DE-88662 Ueberlingen - Germany t +49 7551 80990 - f +49 7551 809920 - www.puren.com System(s) of assessment and verification of the 4. constancy of performance EN 13165:2012+A2:2016 Harmonised standard 5. Notified body(ies) 0751 FIW München 1173 WFR Gent 1136 CSTC Brüssel harmonised technical 6. Performance Essential characteristics Performance specifications Thermal resistance Table 1 at nominal thickness at nominal thickness Thermal resistance $R_D \left[m^2 \cdot K/W \right]$ $d_N \ [mm]$ $R_D \; [m^2 \cdot K/W]$ $d_N \ [mm]$ 1,60 40 2,00 50 2,40 60 3,30 4.15 100 EN 13165:2012 For other thicknesses: Calculate with $R_D = d_N / \lambda_D$ +A2:2016 at nominal thickness $\lambda_{D} = 0.025$ $d_N < 80 \text{ mm}$ Thermal conductivity $W/(m^2 \cdot K)$ $d_N \ge 80 \text{ mm}$ $\lambda_D = 0.024$ $W/(m^2 \cdot K)$ Thickness / $d_N =$ 40 - 100 mm T2 Thickness tolerance EN 13501-1 Reaction to fire Stability of fire behaviour under the influence In case of exposure to fire, the behaviour of rigid polyurethane of heat, weather and ageing / degradation foam does not deteriorate over time Durability of the thermal Thermal resistance use table 1 resistance under the at nominal thickness influence of heat, weather Thermal conductivity $d_N < 80 \ mm$ $\lambda_{D} = 0.025$ $W/(m^2 \cdot K)$ and ageing / degradation $\lambda_D =$ 0,024 $W/(m^2 \cdot K)$ $d_N \ge 80 \text{ mm}$ Properties of durability NPD Dimensional stability DS(70,90)3 NPD NPD Deformation with defined pressure and temperature stress Determination of the R_D use table 1 values of thermal at nominal thickness resistance and thermal $d_N < 80 \text{ mm}$ $\lambda_{D} = 0.025$ W/(m2.K) $d_N \ge 80 \text{ mm}$ conductivity after ageing $\lambda_D = 0.024$ $W/(m^2 \cdot K)$ CS(10\Y)150 EN 13165:2012 Compressive strength Compressive stress Tensile / bending strength Tensile strength **TR80** +A2:2016 perpendicular to the panel Durability of compressive NPD Creep behaviour under strength under the compressive stress influence of ageing and degradation NPD Water permeability short-term water absorption long-term water absorption NPD NPD Flatness after one-sided moisturisation Water vapour diffusion NPD Sound absorption coefficient NPD Release of dangerous substances, release into the NPD interior of the building Smouldering behaviour NPD

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.

2/2

puren-PIR APE



86111.CPR.2020.10

Signed for and on behalf of the manufacturer by

Dr. Andreas Huther
Executive Director
Ueberlingen, 01.10.2020

puren-PIR PVC



		puren-PIR PVC		
Unique identification cod	le of the product-type	parent itti vo		
Intended application		Thermal insulation for buildings		
Manufacturer		puren gmbh Rengoldshauser Straße 4 - DE-88662 Uebe t +49 7551 80990 - f +49 7551 809920 - ww		
System(s) of assessmer constancy of performance		System 3		
Harmonised standard Notified body(ies)		EN 13165:2012+A2:2016 0751 FIW München 1173 WFF	R Gent	1136 CSTC Brüssel
Performance				harmonised technica
	Essential characteristics	Performance		specifications
Thermal resistance	Thermal resistance	$ \begin{array}{c cccc} Table \ 1 & & & & \\ & & \text{at nominal thickness} & & \\ R_D \ [m^2\text{-}K/W] & & d_N \ [mm] & R_D \ [m^2\text{-}K] \\ & 1,65 & 40 & 2,08 \\ & 2,50 & 60 & \\ \hline For other thicknesses : & Calculate \\ \end{array} $		EN 13165:2012 +A2:2016
	Thermal conductivity Thickness /	$\begin{array}{lll} \lambda_D = & 0.024 & W/(m^2 \cdot K) \\ d_N = & 40 - 60 \ mm \end{array}$	C WILL TID = QN / ND	
Donation to fire	Thickness tolerance	T2 E		EN 12501 1
Reaction to fire Stability of fire behaviour u	nder the influence	In case of exposure to fire, the behaviour of	f rigid polyurethane	EN 13501-1
of heat, weather and agein		foam does not deteriorate over time	i figia polyaretriane	
Durability of the thermal	Thermal resistance	R _D use table 1		
resistance under the influence of heat, weather and ageing / degradation	Thermal conductivity Properties of durability	$\begin{array}{lll} \lambda_D = & 0.024 & & W/(m^2 \cdot K) \\ NPD & & & \end{array}$		_
and agoing / dog.adailon	Dimensional stability	DS(70,90)3 DS(-20,-)1		
	Deformation with defined pressure and temperature stress	NPD		
	Determination of the values of thermal resistance and thermal conductivity after ageing	$\begin{array}{ll} R_D & \text{use table 1} \\ \lambda_D = & 0.024 & W/(m^2\text{-}K) \end{array}$		
Compressive strength	Compressive stress	CS(10\Y)150		
Tensile / bending strength	Tensile strength perpendicular to the panel plane	TR80		EN 13165:2012 +A2:2016
Durability of compressive strength under the influence of ageing and degradation	Creep behaviour under compressive stress	NPD		
Water permeability	short-term water absorption	NPD		
	long-term water absorption			
	Flatness after one-sided moisturisation	NPD		
Water vapour diffusion		NPD		
Sound absorption coefficie		NPD		
Release of dangerous substinterior of the building Smouldering behaviour	stances, release into the	NPD NPD		

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.

Signed for and on behalf of the manufacturer by

Dr. Andreas Huther **Executive Director**

Ueberlingen, 01.10.2020 4. /h. K

puren Systemschraube 97091.CPR.2017.07



ΕN

Intended use	Self-drilling screws for woodbonding according to ETA-11/0024
Unique identification code of the product type	puren Systemschraube
Identification of the construction product	see batch number / imprint on product
Manufacturer	puren gmbh Rengoldshauser Straße 4 - DE-88662 Ueberlingen - Germany t +49 7551 80990 - f +49 7551 809920 - www.puren.com
Systems(s) of assessment and verification of constancy of performance	System 2+
Notified authorities	not available
European technical evaluation / Registration	
technical evaluation	ETA Danmark A/S Kollegievej 6, 2920 Charlottenlund, Dänemark
European technical evaluation / Registration	ETA-11/0024
Inspection body, system of evaluation /	1034 - HFB Engineering GmbH Zschortauer Str. 42, 04129 Leipzig, Deutschland
Certificate of conformity of the factory production control	103/LCPD-1086/1/2012
Essential characteristics	Declared Performance Technical speci
Tanada atuan ath	f (1.31) 20.0

Essential characteristics	Declared Performance		Technical speci
Tensile strength	$f_{tens,k}$ [kN]	20,0	
Breaking torque	f _{tor,k} [Nm]	22,0	
Yield moment	$M_{y,k}$ [Nm]	20,0	not available
Head withdrawal parameter	f _{ax,k} [N/mm²]	11,1	
Pull-through parameter	f _{head,k} [N/mm²]	12,0	

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



Signed for the manufacturer and on behalf of the manufacturer by:

puren-DB 100 98091.CPR.2018.07



F٨

Intended use	Plastic and elastomer vapour	barrier men	nbrane			
Unique identification code of the product type	puren-DB 100					
Identification of the construction product	see batch number / imprint on produ	uct				
Manufacturer	puren gmbh Rengoldshauser Straße 4 - DE-88662 U t +49 7551 80990 - f +49 7551 809920	•	•			
Systems(s) of assessment and verification of constancy of performance	System 3					
Harmonised standard	EN 13984:2013					
Notified authorities	0767 MPA Dresden Reaction 0799 KIWA TBU Greven all other	on to fire er features				
Essential characteristics	Declared Performance			toler min	rance max	Technical specification
Reaction to fire	Reaction to Fire class		E			EN 13501-1
length		[m]	50			
width		[m]	1,50	-0,5%	+1,5%	
straightness		[mm/10m]	75			
thickness		[mm]	0,75			
area density		[g/m²]	200	-10%	+10%	
Resistance to air passage	[m³/	/(m²·h·50Pa)]	airtight			
waterproofness	passed with	[kPa/24h]	2			
water vapour permeability S _c		[m]	≥ 100			
durability of water vapour on-state resistance against artificial ageing			bestanden			EN 13984
maximum tensile strength lengthwise / across		[N/50mm]	530 / 400			
elongation with maximum tensile strength lengthwise / across		[%]	18 / 15			
tear propagation resistance (nail shank) lengthwise / across		[N]	350 / 350			
Temperature resistance		[°C]	-40 / +100			
Natural weathering		[Months]	3			
visible defects			keine			
all other characteristics according to EN 13984 NPD: No Performance Determined / no perfo			NPD			

NPD: No Performance Determined / no performance declared

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



Signed for the manufacturer and on behalf of the manufacturer by:

puren-DB blau 98092.CPR.2018.07



F٨

Intended use	Plastic and elastomer vapour barrier me	embrane
Unique identification code of the product type	puren-DB blau	
Identification of the construction product	see batch number / imprint on product	
Manufacturer	puren gmbh Rengoldshauser Straße 4 - DE-88662 Ueberlingen - t +49 7551 80990 - f +49 7551 809920 - www.puren.	
Systems(s) of assessment and verification of constancy of performance	System 3	
Harmonised standard	EN 13984:2013	
Notified authorities	0767 MPA Dresden Reaction to fire 0799 KIWA TBU Greven all other features	
Essential characteristics	Declared Performance	tolerance Technical min max specification
Reaction to fire	Reaction to Fire class	E EN 13501-1
length	[m]	50
width	[m]	1,50 -0,5% +1,5%
straightness	[mm/10m]	75
thickness	[mm]	0,75
area density	[g/m²]	165 -10% +10%
Resistance to air passage	[m³/(m²·h·50Pa)]	airtight
waterproofness	passed with [kPa/24h]	2
water vapour permeability S _c	[m]	≥ 3
durability of water vapour on-state resistance against artificial ageing		bestanden EN 13984
maximum tensile strength lengthwise / across	[N/50mm]	400 / 400
elongation with maximum tensile strength lengthwise / across	[%]	15 / 20
tear propagation resistance (nail shank) lengthwise / across	[N]	350 / 400
Temperature resistance	[°C]	-40 / +100
Natural weathering	[Months]	3
visible defects		keine
all other characteristics according to EN 13984		NPD

NPD: No Performance Determined / no performance declared

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



Signed for the manufacturer and on behalf of the manufacturer by:

puren-DB 12 98093.CPR.2018.07

Intended use



ΕN

Intended use	Plastic and elastomer vapour barrier me	mbrane			
Unique identification code of the product type	puren-DB 12				
Identification of the construction product	see batch number / imprint on product				
Manufacturer	puren gmbh Rengoldshauser Straße 4 - DE-88662 Ueberlingen - t +49 7551 80990 - f +49 7551 809920 - www.puren.	•			
Systems(s) of assessment and verification of constancy of performance	System 3				
Harmonised standard	EN 13984:2013				
Notified authorities	0767 MPA Dresden Reaction to fire 0799 KIWA TBU Greven all other features				
Essential characteristics	Declared Performance		tole min	rance max	Technical specification
Reaction to fire	Reaction to Fire class	Е			EN 13501-1
length	[m]	50			
vidth	[m]	1,50	-0,5%	+1,5%	
straightness	[mm/10m]	75			
hickness	[mm]	0,75			
area density	[g/m²]	165	-10%	+10%	
Resistance to air passage	[m³/(m²·h·50Pa)]	airtight			
waterproofness	passed with [kPa/24h]	2			
water vapour permeability S _d	[m]	10	-3	+3,00	
durability of water vapour on-state resistance against artificial ageing		bestanden			EN 13984
maximum tensile strength lengthwise / across	[N/50mm]	400 / 400	-30	+30	
elongation with maximum tensile strength engthwise / across	[%]	15 / 20	-5	+5	
rear propagation resistance (nail shank) engthwise / across	[N]	350 / 400	-35	+35	
Temperature resistance	[°C]	-40 / +80			
Natural weathering	[Months]	3			
visible defects		keine			
all other characteristics according to EN 13984 NPD: No Performance Determined / no perfo		NPD			

NPD: No Performance Determined / no performance declared

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



Signed for the manufacturer and on behalf of the manufacturer by:

puren-DB hygrotop 98094.CPR.2020.01



Intended use Plastic and elastomer vapour barrier membrane Unique identification code of the product type puren-DB hygrotop Identification of the construction product see batch number / imprint on product Rengoldshauser Straße 4 - DE-88662 Ueberlingen - Germany Manufacturer t +49 7551 80990 - f +49 7551 809920 - www.puren.com Systems(s) of assessment and verification of System 3 constancy of performance EN 13859-1:2014 Harmonised standard 0767 MPA Dresden Reaction to fire Notified authorities 0799 KIWA TBU Greven all other features tolerance Declared Performance Essential characteristics specification Reaction to fire Reaction to Fire class Ε EN 13501-1 50 length [m] width 1,50 [m] thickness [mm] 0.95 [g/m²] 235 -5% area density Dimensional accuracy [%] < 1 Resistance to air passage $[m^3/(m^2 \cdot h \cdot 50Pa)]$ < 0,1 W₁ [Class] Resistance to water penetration Sd +2 00 water vapour permeability 3 -1 [m] durability of water vapour on-state resistance bestanden against artificial ageing EN 13859-1 500 / 350 maximum tensile strength lengthwise / across -10 +10 [N/50mm] after ageing 450 / 300 elongation with maximum tensile strength 60 / 70 -6 +6 lengthwise / across [%] 50 / 60 after ageing tear propagation resistance (nail shank) [N] 300 / 400 -10 +10 lengthwise / across Temperature resistance [°C] -40 / +100 Natural weathering [Months] 3 visible defects keine all other characteristics according to EN

NPD

NPD: No Performance Determined / no performance declared

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



Signed for the manufacturer and on behalf of the manufacturer by:

Dr. Andreas Huther Managing Director Ueberlingen 01.01.2020 4. /fr. Kr

13859-1

puren-DS AL 98095.CPR.2018.07



ΞΝ

Intended use	Bitumen water vapour control layer				
Unique identification code of the product type	puren-DS AL				
Identification of the construction product	see batch number / imprint on product	ee batch number / imprint on product			
Manufacturer	puren gmbh Rengoldshauser Straße 4 - DE-88662 Ueberlingen - t +49 7551 80990 - f +49 7551 809920 - www.puren.	Rengoldshauser Straße 4 - DE-88662 Ueberlingen - Germany			
Systems(s) of assessment and verification of constancy of performance	System 3				
Harmonised standard	EN 13970:2005				
Notified authorities	2007 KIWA Dresden				
Essential characteristics	Declared Performance		tole min	rance max	Technical specification
Reaction to fire	Reaction to Fire class	Е			EN 13501-1
length	[m]	50			
width	[m]	1,08	-2mm	+2mm	
straightness	[mm/10m]	20			
thickness	[mm]	0,25	+0,05		
area density	[g/m²]	370	-1%	+5%	
Resistance to air passage	[m³/(m²·h·50Pa)]	airtight			
waterproofness	passed with [kPa/24h]	200			
water vapour permeability	[m]	≥ 1500			EN 13970
maximum tensile strength lengthwise / across	[N/50mm]	200 / 200			EN 13970
elongation with maximum tensile strength lengthwise / across	[%]	20 / 20			
tear propagation resistance (nail shank) lengthwise / across	[N]	/			
cohesive resistance of joining seam	[N]	200			
Resistance to thermal distortion	[°C]	≥ 100			
cold bending behaviour	[°C]	≤ -18			
all other characteristics according to EN 13970 NPD: No Performance Determined / no per		NPD			

NPD: No Performance Determined / no performance declared

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



Signed for the manufacturer and on behalf of the manufacturer by:

puren-UDB diffucell 98096.CPR.2018.07



Intended use Underlays for roofing Unique identification code of the product type puren-UDB diffucell Identification of the construction product see batch number / imprint on product Rengoldshauser Straße 4 - DE-88662 Ueberlingen - Germany Manufacturer t +49 7551 80990 - f +49 7551 809920 - www.puren.com Systems(s) of assessment and verification of System 3 constancy of performance Harmonised standard EN 13859-1:2014 1508 Prüfinstitut Hoch Reaction to fire Notified authorities 0799 KIWA TBU Greven all other features

Essential characteristics		Declared Performance		tole min	rance max	Technical specification
Reaction to fire		Reaction to Fire class	Е			EN 13501-1
length		[m]	50			
width		[m]	1,50	-5mm	+5mm	
thickness		[mm]	0,65			
area density		[g/m²]	170	-8%	+8%	
Dimensional accuracy		[%]	< 1			
Resistance to air passage		[m³/(m²·h·50Pa)]	< 0,009	< 0,009		
Resistance to water penetration		[Class]	W1			
	after ageing	[Class]	W1			
water vapour permeability	S_d	[m]	0,03	-0,02	+0,02	
maximum tensile strength length	wise / across	[N/50mm]	330 / 270	-30	+30	EN 13859-1
	after ageing		260 / 240	-30	+30	
elongation with maximum tensile lengthwise / across	strength	To/1	90 / 115	-30	+30	
Torrigation of actions	after ageing	[%]	60 / 75	-30	+30	
tear propagation resistance (nail lengthwise / across	shank)	[N]	220 / 230	-20	+20	
Temperature resistance		[°C]	-40 / +100	-40 / +100 -40 3		
cold bending behaviour		[°C]	-40			
Natural weathering		[Months]	3			
all other characteristics according to EN 13859-1			NPD			

NPD: No Performance Determined / no performance declared

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Signed for the manufacturer and on behalf of the manufacturer by:

Dr. Andreas Huther Managing Director Ueberlingen 01.07.2018 A. / fr. the

puren-UDB hightech 98097.CPR.2018.07



Intended use Underlays for roofing Unique identification code of the product type puren-UDB hightech Identification of the construction product see batch number / imprint on product Rengoldshauser Straße 4 - DE-88662 Ueberlingen - Germany Manufacturer t +49 7551 80990 - f +49 7551 809920 - www.puren.com Systems(s) of assessment and verification of System 3 constancy of performance EN 13859-1:2014 Harmonised standard 0432 MPA Erwitte Reaction to fire Notified authorities 0799 KIWA TBU Greven all other features

Essential characteristics	Declared Performance			tolerance min max		
Reaction to fire	Reaction to Fire class	Е			EN 13501-1	
length	[m]	50				
width	[m]	1,50	-0,5%	+1,5%		
straightness	[mm/10m]	30				
thickness	[mm]	> 0,80				
area density	[g/m²]	310	-5%	+5%		
Dimensional accuracy	[%]	-2				
Resistance to water penetration	[Class]	W1				
after ag	ing [Class]	W1				
Resistance to water pressure	[cm Water column]	> 400	> 400			
water vapour permeability	S_d [m]	0,18	-0,04	+0,04	EN 13859-1	
maximum tensile strength lengthwise / acr	[N/50mm]	300 / 350	-30	+30	LIN 13039-1	
after ag	sing [14/30/11/11]	300 / 350	-30	+30		
elongation with maximum tensile strength lengthwise / across	[%]	50 / 70	-10	+10		
after ag	sing [70]	50 / 70	-10	+10		
tear propagation resistance (nail shank) lengthwise / across	[N]	200 / 200	-20	+20		
Temperature resistance	[°C]	-40 / +80				
cold bending behaviour	[°C]	-20				
Natural weathering	[Months]	3				
all other characteristics according to EN 13859-1		NPD				

NPD: No Performance Determined / no performance declared

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Signed for the manufacturer and on behalf of the manufacturer by:

Dr. Andreas Huther Managing Director Ueberlingen 01.07.2018 4. / futher