Declaration of performance (DoP) EN 13165		Declaration of performance (DoP) EN 14308		Trade name	Format	
Kenncode	DoP Nr.	Kenncode	DoP Nr.			
puren-PIR MV	11111.CPR.2020.10					
120 kPa				puren Parkdach	600 x 600	
				puren MV	1200 x 600	2400 x 600
				puren MV-XL	2400 x 1200	
				puren-PIR MV ha	1200 x 600	2400 x 600
				puren MV-FB	1200 x 600	
				puren MV-K	1200 x 600	
				puren HoltaFix	1200 x 600	
				puren Dämmschalung	2400 x 1020	
				puren Unterdach (026/027)	2400 x 1020	
				puren Plus	2400 x 1020	2400 x 600
				puren PavaPlus	2400 x 1020	
				puren Basic	2400 x 1020	
				puren ProForm	2400 x 1020	
				puren Ökonomic	2400 x 1020	
				puren DBV-MV	1170 x 570	
puren-PIR MV ds	11121.CPR.2020.10					
150 kPa				puren MV	1200 x 600	2400 x 600
				puren MV-FB	1200 x 600	
				puren NE-P	1200 x 600	
				puren MV-K	1200 x 600	
puren-PIR MV-SE	12211.CPR.2020.10					
120 kPa				puren Secure	1200 x 600	2400 x 600
puren-PIR MV-SE ds	12221.CPR.2020.10					
150 kPa				puren TG	1200 x 600	2400 x 600
puren-PIR ALU	14111.CPR.2020.10					
120 kPa				puren FD-L	1200 x 600	2400 x 600
				puren FD-XL	2400 x 1200	
				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	1200 x 600	
				puren AL-K	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	2400 x 620	
				puren LivingBoard	2400 x 620	
				puren BFU	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					
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	
				puren Intrawall	1200 x 600	
puren-PIR ALU novoPIR	14112.CPR.2020.10					
				puren-PIR ALU NovoPIR	1200 x 600	2400 x 600
				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 performance (DoP) EN 13165		Declaration of performance (DoP) EN 14308		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				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		
				puren-PIR NE hf	1000 x 500
				puren-PIR NE hf (kompakt)	500 x 500
puren-PIR NE-GS	20114.CPR.2020.10				
120 kPa				puren NE-B2	1200 x 800
puren-PIR NE 32	20121.CPR.2020.10	puren-PIR NE 32	30311.CPR.2017.07		
150 kPa				puren NE-B2	1200 x 600
				puren Kompaktdach NE	600 x 600
puren-PIR NE 32-S					
150 kPa				puren NE-B2	1200 x 600
				puren Kompaktdach NE	600 x 600
puren-PIR NE 40	20131.CPR.2020.10	puren-PIR NE 40	30412.CPR.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		
				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		
				puren NE-druckfest RG 200	

Declaration of performance

puren-PIR MV

EN

11111.CPR.2020.10

1.	Unique identification code of the product-type		puren-PIR MV	
2.	Intended application		Thermal insulation for buildings	
3.	Manufacturer		puren gmbh Rengoldshauser Straße 4 - DE-88662 Ueberlingen - Germany t +49 7551 80990 - f +49 7551 809920 - www.puren.com	
4.	System(s) of assessment and verification of the constancy of performance		System 3	
5.	Harmonised standard Notified body(ies)		EN 13165:2012+A2:2016 0751 FIW München	
6.	**Performance**	Essential characteristics	Performance	harmonised technical specifications
	Thermal resistance	Thermal resistance	Table 1	EN 13165:2012 +A2:2016
	Thermal conductivity		at nominal thickness λ_D = 0,027 W/(m²·K) d_N < 80 mm λ_D = 0,026 W/(m²·K) 80 mm ≤ d_N < 120 mm λ_D = 0,025 W/(m²·K) d_N ≥ 120 mm	
		Thickness / Thickness tolerance	d_N = 20 - 220 mm T2	
	Reaction to fire		E	EN 13501-1
	Stability of fire behaviour under the influence of heat, weather and ageing / degradation		In case of exposure to fire, the behaviour of rigid polyurethane foam does not deteriorate over time	EN 13165:2012 +A2:2016
	Durability of the thermal resistance under the influence of heat, weather and ageing / degradation	Thermal resistance	R_D use table 1	
		Thermal conductivity	at nominal thickness λ_D = 0,027 W/(m²·K) d_N < 80 mm λ_D = 0,026 W/(m²·K) 80 mm ≤ d_N < 120 mm λ_D = 0,025 W/(m²·K) d_N ≥ 120 mm	
		Properties of durability	NPD	
		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 at nominal thickness λ_D = 0,027 W/(m²·K) d_N < 80 mm λ_D = 0,026 W/(m²·K) 80 mm ≤ d_N < 120 mm λ_D = 0,025 W/(m²·K) d_N ≥ 120 mm	
	Compressive strength	Compressive stress	CS(10\Y)120	
	Tensile / bending strength	Tensile strength perpendicular to the panel plane	TR50	
	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	NPD	
		Flatness after one-sided moisturisation	NPD	
	Water vapour diffusion		NPD	
	Sound absorption coefficient		NPD	
	Release of dangerous substances, release into the interior of the building		NPD	
	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.

R_D [m²·K/W]	d_N [mm]	R_D [m²·K/W]	d_N [mm]
0,70	20	1,10	30
1,45	40	1,85	50
2,20	60	2,55	70
3,05	80	3,80	100
4,80	120	5,60	140
6,40	160	7,20	180
8,00	200	8,80	220

For other thicknesses : Calculate with $R_D = d_N / \lambda_D$

Declaration of performance

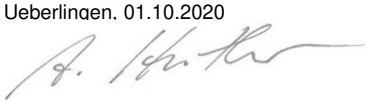
puren-PIR MV

EN

11111.CPR.2020.10

Signed for and on behalf of the manufacturer by

Dr. Andreas Huther
Executive Director
Ueberlingen, 01.10.2020



Declaration of performance

puren-PIR MV

EN

11121.CPR.2020.10

1.	Unique identification code of the product-type		puren-PIR MV ds	
2.	Intended application		Thermal insulation for buildings	
3.	Manufacturer		puren gmbh Rengoldshauser Straße 4 - DE-88662 Ueberlingen - Germany t +49 7551 80990 - f +49 7551 809920 - www.puren.com	
4.	System(s) of assessment and verification of the constancy of performance		System 3	
5.	Harmonised standard Notified body(ies)		EN 13165:2012+A2:2016 0751 FIW München	
6.	**Performance**	Essential characteristics	Performance	harmonised technical specifications
	Thermal resistance	Thermal resistance	Table 1	EN 13165:2012 +A2:2016
	Thermal conductivity		λ_D = 0,028 W/(m²·K) at nominal thickness d_N < 80 mm λ_D = 0,026 W/(m²·K) 80 mm ≤ d_N < 120 mm λ_D = 0,025 W/(m²·K) d_N ≥ 120 mm	
	Thickness / Thickness tolerance		d_N = 20 - 200 mm T2	
	Reaction to fire		E	EN 13501-1
	Stability of fire behaviour under the influence of heat, weather and ageing / degradation		In case of exposure to fire, the behaviour of rigid polyurethane foam does not deteriorate over time	EN 13165:2012 +A2:2016
	Durability of the thermal resistance under the influence of heat, weather and ageing / degradation	Thermal resistance	R_D use table 1	
		Thermal conductivity	λ_D = 0,028 W/(m²·K) at nominal thickness d_N < 80 mm λ_D = 0,026 W/(m²·K) 80 mm ≤ d_N < 120 mm λ_D = 0,025 W/(m²·K) d_N ≥ 120 mm	
		Properties of durability	NPD	
		Dimensional stability	DS(70,90)3 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 table 1 λ_D = 0,028 W/(m²·K) at nominal thickness d_N < 80 mm λ_D = 0,026 W/(m²·K) 80 mm ≤ d_N < 120 mm λ_D = 0,025 W/(m²·K) d_N ≥ 120 mm	
	Compressive strength	Compressive stress	CS(10\Y)150	
	Tensile / bending strength	Tensile strength perpendicular to the panel plane	TR40	
	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	NPD	
		Flatness after one-sided moisturisation	NPD	
	Water vapour diffusion		NPD	
	Sound absorption coefficient		NPD	
	Release of dangerous substances, release into the interior of the building		NPD	
	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.

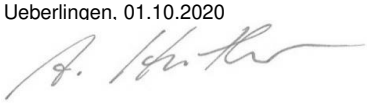
at nominal thickness R_D [m²·K/W]	d_N [mm]	at nominal thickness R_D [m²·K/W]	d_N [mm]
0,70	20	1,05	30
1,40	40	1,75	50
2,10	60	2,50	70
3,05	80	3,80	100
4,80	120	5,60	140
6,40	160	7,20	180
8,00	200		

For other thicknesses : Calculate with $R_D = d_N / \lambda_D$

11121.CPR.2020.10

Signed for and on behalf of the manufacturer by

Dr. Andreas Huther
Executive Director
Ueberlingen, 01.10.2020



Declaration of performance

puren-PIR MV-SE

EN

12211.CPR.2020.10

1.	Unique identification code of the product-type		puren-PIR MV-SE	
2.	Intended application		Thermal insulation for buildings	
3.	Manufacturer		puren gmbh Rengoldshauser Straße 4 - DE-88662 Ueberlingen - Germany t +49 7551 80990 - f +49 7551 809920 - www.puren.com	
4.	System(s) of assessment and verification of the constancy of performance		System 1 Reaction to fire System 3 all other features	
5.	Harmonised standard Notified body(ies)		EN 13165:2012+A2:2016 0751 FIW München	
6.	**Performance**	Essential characteristics	Performance	harmonised technical specifications
	Thermal resistance	Thermal resistance	Table 1	EN 13165:2012 +A2:2016
			at nominal thickness: R_D [m²·K/W] / d_N [mm]: 2,10 / 60; 3,05 / 80; 4,80 / 120; 6,40 / 160; 8,00 / 200 — at nominal thickness: R_D [m²·K/W] / d_N [mm]: 2,50 / 70; 3,80 / 100; 5,60 / 140; 7,20 / 180	
			For other thicknesses : Calculate with $R_D = d_N / \lambda_D$	
		Thermal conductivity	at nominal thickness λ_D = 0,028 W/(m²·K) d_N < 80 mm λ_D = 0,026 W/(m²·K) 80 mm ≤ d_N < 120 mm λ_D = 0,025 W/(m²·K) d_N ≥ 120 mm	
		Thickness / Thickness tolerance	d_N = 60 - 200 mm T2	
	Reaction to fire		E B-s1,d0 top / visible side	EN 13501-1
	Stability of fire behaviour under the influence of heat, weather and ageing / degradation		In case of exposure to fire, the behaviour of rigid polyurethane foam does not deteriorate over time	EN 13165:2012 +A2:2016
	Durability of the thermal resistance under the influence of heat, weather and ageing / degradation	Thermal resistance	R_D use table 1	
		Thermal conductivity	at nominal thickness λ_D = 0,028 W/(m²·K) d_N < 80 mm λ_D = 0,026 W/(m²·K) 80 mm ≤ d_N < 120 mm λ_D = 0,025 W/(m²·K) d_N ≥ 120 mm	
		Properties of durability	NPD	
		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 at nominal thickness λ_D = 0,028 W/(m²·K) d_N < 80 mm λ_D = 0,026 W/(m²·K) 80 mm ≤ d_N < 120 mm λ_D = 0,025 W/(m²·K) d_N ≥ 120 mm	
	Compressive strength	Compressive stress	CS(10\Y)120	
	Tensile / bending strength	Tensile strength perpendicular to the panel plane	TR50	
	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	NPD	
		Flatness after one-sided moisturisation	NPD	
	Water vapour diffusion		NPD	
	Sound absorption coefficient		NPD	
	Release of dangerous substances, release into the interior of the building		NPD	
	Smouldering behaviour		NPD	

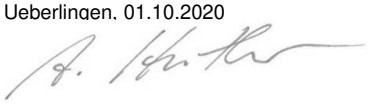
NPD: No Performance Determined

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.

12211.CPR.2020.10

Signed for and on behalf of the manufacturer by

Dr. Andreas Huther
Executive Director
Ueberlingen, 01.10.2020



Declaration of performance

puren-PIR MV-SE

EN

12221.CPR.2020.10

1.	Unique identification code of the product-type		puren-PIR MV-SE ds	
2.	Intended application		Thermal insulation for buildings	
3.	Manufacturer		puren gmbh Rengoldshauser Straße 4 - DE-88662 Ueberlingen - Germany t +49 7551 80990 - f +49 7551 809920 - www.puren.com	
4.	System(s) of assessment and verification of the constancy of performance		System 1 Reaction to fire System 3 all other features	
5.	Harmonised standard Notified body(ies)		EN 13165:2012+A2:2016 0751 FIW München	
6.	**Performance**	Essential characteristics	Performance	harmonised technical specifications
	Thermal resistance	Thermal resistance	Table 1	EN 13165:2012 +A2:2016
		Thermal conductivity	λ_D = 0,028 W/(m²·K) at nominal thickness d_N < 80 mm λ_D = 0,026 W/(m²·K) 80 mm ≤ d_N < 120 mm λ_D = 0,025 W/(m²·K) d_N ≥ 120 mm	
		Thickness / Thickness tolerance	d_N = 60 - 200 mm T2	
	Reaction to fire		E B-s1,d0 top / visible side	EN 13501-1
	Stability of fire behaviour under the influence of heat, weather and ageing / degradation		In case of exposure to fire, the behaviour of rigid polyurethane foam does not deteriorate over time	EN 13165:2012 +A2:2016
	Durability of the thermal resistance under the influence of heat, weather and ageing / degradation	Thermal resistance	R_D use table 1	
		Thermal conductivity	λ_D = 0,028 W/(m²·K) at nominal thickness d_N < 80 mm λ_D = 0,026 W/(m²·K) 80 mm ≤ d_N < 120 mm λ_D = 0,025 W/(m²·K) d_N ≥ 120 mm	
		Properties of durability	NPD	
		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 λ_D = 0,028 W/(m²·K) at nominal thickness d_N < 80 mm λ_D = 0,026 W/(m²·K) 80 mm ≤ d_N < 120 mm λ_D = 0,025 W/(m²·K) d_N ≥ 120 mm	
	Compressive strength	Compressive stress	CS(10\Y)150	
	Tensile / bending strength	Tensile strength perpendicular to the panel plane	TR50	
	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	NPD	
		Flatness after one-sided moisturisation	NPD	
	Water vapour diffusion		NPD	
	Sound absorption coefficient		NPD	
	Release of dangerous substances, release into the interior of the building		NPD	
	Smouldering behaviour		NPD	

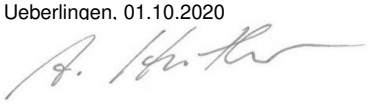
NPD: No Performance Determined

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.

12221.CPR.2020.10

Signed for and on behalf of the manufacturer by

Dr. Andreas Huther
Executive Director
Ueberlingen, 01.10.2020



Declaration of performance

puren-PIR ALU

EN

14111.CPR.2020.10

1.	Unique identification code of the product-type		puren-PIR ALU	
2.	Intended application		Thermal insulation for buildings	
3.	Manufacturer		puren gmbh Rengoldshauser Straße 4 - DE-88662 Ueberlingen - Germany t +49 7551 80990 - f +49 7551 809920 - www.puren.com	
4.	System(s) of assessment and verification of the constancy of performance		System 3	
5.	Harmonised standard Notified body(ies)		EN 13165:2012+A2:2016 0751 FIW München	
6.	**Performance**	Essential characteristics	Performance	harmonised technical specifications
	Thermal resistance	Thermal resistance	Table 1	EN 13165:2012 +A2:2016
	Reaction to fire		E	EN 13501-1
	Stability of fire behaviour under the influence of heat, weather and ageing / degradation		In case of exposure to fire, the behaviour of rigid polyurethane foam does not deteriorate over time	
	Durability of the thermal resistance under the influence of heat, weather and ageing / degradation	Thermal resistance	R_D use table 1	
		Thermal conductivity	λ_D = 0,023 W/(m²·K) at nominal thickness d_N < 80 mm λ_D = 0,022 W/(m²·K) at nominal thickness d_N ≥ 80 mm	
		Properties of durability	NPD	
		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 λ_D = 0,023 W/(m²·K) at nominal thickness d_N < 80 mm λ_D = 0,022 W/(m²·K) at nominal thickness d_N ≥ 80 mm	
	Compressive strength	Compressive stress	CS(10\Y)120	EN 13165:2012 +A2:2016
	Tensile / bending strength	Tensile strength perpendicular to the panel plane	TR50	
	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	NPD	
		Flatness after one-sided moisturisation	NPD	
	Water vapour diffusion		NPD	
	Sound absorption coefficient		NPD	
	Release of dangerous substances, release into the interior of the building		NPD	
	Smouldering behaviour		NPD	

Table 1

at nominal thickness R_D [m²·K/W]	d_N [mm]	at nominal thickness R_D [m²·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
7,25	160	8,15	180
9,05	200	10,00	220

For other thicknesses : Calculate with $R_D = d_N / \lambda_D$

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.

Declaration of performance

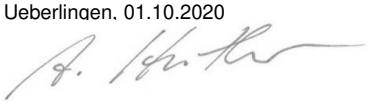
puren-PIR ALU

EN

14111.CPR.2020.10

Signed for and on behalf of the manufacturer by

Dr. Andreas Huther
Executive Director
Ueberlingen, 01.10.2020



Declaration of performance

puren-PIR ALU NovoPIR

EN

14112.CPR.2020.10

1.	Unique identification code of the product-type	puren-PIR ALU NovoPIR
2.	Intended application	Thermal insulation for buildings
3.	Manufacturer	puren gmbh Rengoldshauser Straße 4 - DE-88662 Ueberlingen - Germany t +49 7551 80990 - f +49 7551 809920 - www.puren.com
4.	System(s) of assessment and verification of the constancy of performance	System 3
5.	Harmonised standard Notified body(ies)	EN 13165:2012+A2:2016 0751 FIW München

6.	Performance	Essential characteristics	Performance	harmonised technical specifications
	Thermal resistance	Thermal resistance	Table 1	EN 13165:2012 +A2:2016
		Thermal conductivity	λ_D = 0,021 W/(m²·K)	
		Thickness / Thickness tolerance	d_N = 60 - 200 mm T2	
	Reaction to fire		E	EN 13501-1
	Stability of fire behaviour under the influence of heat, weather and ageing / degradation		In case of exposure to fire, the behaviour of rigid polyurethane foam does not deteriorate over time	
	Durability of the thermal resistance under the influence of heat, weather and ageing / degradation	Thermal resistance	R_D use table 1	
		Thermal conductivity	λ_D = 0,021 W/(m²·K)	
		Properties of durability	NPD	
		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 λ_D = 0,021 W/(m²·K)	
	Compressive strength	Compressive stress	CS(10\Y)120	
	Tensile / bending strength	Tensile strength perpendicular to the panel plane	TR40	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	NPD	
		Flatness after one-sided moisturisation	NPD	
	Water vapour diffusion		NPD	
	Sound absorption coefficient		NPD	
	Release of dangerous substances, release into the interior of the building		NPD	
	Smouldering behaviour		NPD	

Table 1

at nominal thickness		at nominal thickness	
R_D [m²·K/W]	d_N [mm]	R_D [m²·K/W]	d_N [mm]
2,85	60	3,30	70
3,80	80	4,75	100
5,70	120	6,65	140
7,60	160	8,55	180
9,50	200		

For other thicknesses : Calculate with $R_D = d_N / \lambda_D$

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

Declaration of performance

puren-PIR ALU-S

EN

14113.CPR.2020.10

1.	Unique identification code of the product-type		puren-PIR ALU-S
2.	Intended application		Thermal insulation for buildings
3.	Manufacturer		puren gmbh Rengoldshauser Straße 4 - DE-88662 Ueberlingen - Germany t +49 7551 80990 - f +49 7551 809920 - www.puren.com
4.	System(s) of assessment and verification of the constancy of performance		System 3
5.	Harmonised standard Notified body(ies)		EN 13165:2012+A2:2016 0751 FIW München
6.	**Performance**	Essential characteristics	Performance / harmonised technical specifications
	Thermal resistance	Thermal resistance	Table 1 (see below) — EN 13165:2012 +A2:2016
		Thermal conductivity	λ_D = 0,020 W/(m²·K) — EN 13165:2012 +A2:2016
		Thickness / Thickness tolerance	d_N = 50 - 220 mm T2 — EN 13165:2012 +A2:2016
	Reaction to fire		E — EN 13501-1
	Stability of fire behaviour under the influence of heat, weather and ageing / degradation		In case of exposure to fire, the behaviour of rigid polyurethane foam does not deteriorate over time
	Durability of the thermal resistance under the influence of heat, weather and ageing / degradation	Thermal resistance	R_D use table 1
		Thermal conductivity	λ_D = 0,020 W/(m²·K)
		Properties of durability	NPD
		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 λ_D = 0,020 W/(m²·K)
	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	NPD
		Flatness after one-sided moisturisation	NPD
	Water vapour diffusion		NPD
	Sound absorption coefficient		NPD
	Release of dangerous substances, release into the interior of the building		NPD
	Smouldering behaviour		NPD

Table 1

at nominal thickness		at nominal thickness	
R_D [m²·K/W]	d_N [mm]	R_D [m²·K/W]	d_N [mm]
2,50	50	3,00	60
4,00	80	5,00	100
6,00	120	7,00	140
8,00	160	9,00	180
10,00	200	11,00	220
For other thicknesses :		Calculate with $R_D = d_N / \lambda_D$	

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

Declaration of performance

puren-PIR ALU-W

EN

14114.CPR.2020.10

1.	Unique identification code of the product-type		puren-PIR ALU-W	
2.	Intended application		Thermal insulation for buildings	
3.	Manufacturer		puren gmbh Rengoldshauser Straße 4 - DE-88662 Ueberlingen - Germany t +49 7551 80990 - f +49 7551 809920 - www.puren.com	
4.	System(s) of assessment and verification of the constancy of performance		System 3	
5.	Harmonised standard Notified body(ies)		EN 13165:2012+A2:2016 0751 FIW München	
6.	**Performance**	Essential characteristics	Performance	harmonised technical specifications
	Thermal resistance	Thermal resistance	Table 1 at nominal thickness: R_D [m²·K/W] / d_N [mm]: 2,05 / 50; 3,30 / 80 at nominal thickness: R_D [m²·K/W] / d_N [mm]: 2,50 / 60 For other thicknesses : Calculate with $R_D = d_N / \lambda_D$	EN 13165:2012 +A2:2016
		Thermal conductivity	λ_D = 0,024 W/(m²·K)	
		Thickness / Thickness tolerance	d_N = 50 - 80 mm T2	
	Reaction to fire		E	EN 13501-1
	Stability of fire behaviour under the influence of heat, weather and ageing / degradation		In case of exposure to fire, the behaviour of rigid polyurethane foam does not deteriorate over time	
	Durability of the thermal resistance under the influence of heat, weather and ageing / degradation	Thermal resistance	R_D use table 1	
		Thermal conductivity	λ_D = 0,024 W/(m²·K)	
		Properties of durability	NPD	
		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 λ_D = 0,024 W/(m²·K)	
	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	NPD	
		Flatness after one-sided moisturisation	NPD	
	Water vapour diffusion		NPD	
	Sound absorption coefficient		NPD	
	Release of dangerous substances, release into the interior of the building		NPD	
	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

Declaration of performance

puren-PIR Isobric

EN

14115.CPR.2020.10

1.	Unique identification code of the product-type		puren-PIR Isobric	
2.	Intended application		Thermal insulation for buildings	
3.	Manufacturer		puren gmbh Rengoldshauser Straße 4 - DE-88662 Ueberlingen - Germany t +49 7551 80990 - f +49 7551 809920 - www.puren.com	
4.	System(s) of assessment and verification of the constancy of performance		System 3	
5.	Harmonised standard Notified body(ies)		EN 13165:2012+A2:2016 0751 FIW München	
6.	**Performance**	Essential characteristics	Performance	harmonised technical specifications
	Thermal resistance	Thermal resistance	Table 1 at nominal thickness: R_D [m²·K/W] / d_N [mm] 0,90 / 22 — 1,25 / 30 1,65 / 40 — 2,05 / 50 2,50 / 60 — 3,10 / 75 For other thicknesses : Calculate with $R_D = d_N / \lambda_D$	EN 13165:2012 +A2:2016
		Thermal conductivity	λ_D = 0,024 W/(m²·K)	
		Thickness / Thickness tolerance	d_N = 22 - 75 mm T2	
	Reaction to fire		E	EN 13501-1
	Stability of fire behaviour under the influence of heat, weather and ageing / degradation		In case of exposure to fire, the behaviour of rigid polyurethane foam does not deteriorate over time	
	Durability of the thermal resistance under the influence of heat, weather and ageing / degradation	Thermal resistance	R_D use table 1	
		Thermal conductivity	λ_D = 0,024 W/(m²·K)	
		Properties of durability	NPD	
		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 λ_D = 0,024 W/(m²·K)	
	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	NPD	
		Flatness after one-sided moisturisation	NPD	
	Water vapour diffusion		NPD	
	Sound absorption coefficient		NPD	
	Release of dangerous substances, release into the interior of the building		NPD	
	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

Declaration of performance

puren-PIR ALU

EN

14121.CPR.2020.10

1.	Unique identification code of the product-type		puren-PIR ALU ds	
2.	Intended application		Thermal insulation for buildings	
3.	Manufacturer		puren gmbh Rengoldshauser Straße 4 - DE-88662 Ueberlingen - Germany t +49 7551 80990 - f +49 7551 809920 - www.puren.com	
4.	System(s) of assessment and verification of the constancy of performance		System 3	
5.	Harmonised standard Notified body(ies)		EN 13165:2012+A2:2016 0751 FIW München	
6.	**Performance**	Essential characteristics	Performance	harmonised technical specifications
	Thermal resistance	Thermal resistance	Table 1	EN 13165:2012 +A2:2016
	Reaction to fire		E	EN 13501-1
	Stability of fire behaviour under the influence of heat, weather and ageing / degradation		In case of exposure to fire, the behaviour of rigid polyurethane foam does not deteriorate over time	
	Durability of the thermal resistance under the influence of heat, weather and ageing / degradation	Thermal resistance	R_D use table 1	
		Thermal conductivity	λ_D = 0,023 W/(m²·K) at nominal thickness d_N < 80 mm λ_D = 0,022 W/(m²·K) at nominal thickness d_N ≥ 80 mm	
		Properties of durability	NPD	
		Dimensional stability	DS(70,90)3 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 table 1 λ_D = 0,023 W/(m²·K) at nominal thickness d_N < 80 mm λ_D = 0,022 W/(m²·K) at nominal thickness d_N ≥ 80 mm	
	Compressive strength	Compressive stress	CS(10\Y)150	EN 13165:2012 +A2:2016
	Tensile / bending strength	Tensile strength perpendicular to the panel plane	TR40	
	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	NPD	
		Flatness after one-sided moisturisation	NPD	
	Water vapour diffusion		NPD	
	Sound absorption coefficient		NPD	
	Release of dangerous substances, release into the interior of the building		NPD	
	Smouldering behaviour		NPD	

Table 1

at nominal thickness R_D [m²·K/W]	d_N [mm]	at nominal thickness R_D [m²·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
7,25	160	8,15	180
9,05	200		

For other thicknesses : Calculate with $R_D = d_N / \lambda_D$

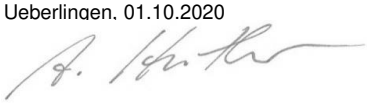
NPD: No Performance Determined

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.

14121.CPR.2020.10

Signed for and on behalf of the manufacturer by

Dr. Andreas Huther
Executive Director
Ueberlingen, 01.10.2020



Declaration of performance

TOPDEK 022 PIR FD

EN

16111.CPR.2020.10

1.	Unique identification code of the product-type		TOPDEK 022 PIR FD	
2.	Intended application		Thermal insulation for buildings	
3.	Manufacturer		puren gmbh Rengoldshauser Straße 4 - DE-88662 Ueberlingen - Germany t +49 7551 80990 - f +49 7551 809920 - www.puren.com	
4.	System(s) of assessment and verification of the constancy of performance		System 3	
5.	Harmonised standard Notified body(ies)		EN 13165:2012+A2:2016 0751 FIW München	
6.	**Performance**	Essential characteristics	Performance	harmonised technical specifications
	Thermal resistance	Thermal resistance	Table 1 at nominal thickness: R_D [m²·K/W] / d_N [mm]: 3,60 / 80; 5,45 / 120; 7,25 / 160; 9,05 / 200 at nominal thickness: R_D [m²·K/W] / d_N [mm]: 4,50 / 100; 6,35 / 140; 8,15 / 180; 10,00 / 220 For other thicknesses : Calculate with $R_D = d_N / \lambda_D$	EN 13165:2012 +A2:2016
		Thermal conductivity	λ_D = 0,022 W/(m²·K)	
		Thickness / Thickness tolerance	d_N = 80 - 220 mm T2	
	Reaction to fire		E	EN 13501-1
	Stability of fire behaviour under the influence of heat, weather and ageing / degradation		In case of exposure to fire, the behaviour of rigid polyurethane foam does not deteriorate over time	
	Durability of the thermal resistance under the influence of heat, weather and ageing / degradation	Thermal resistance	R_D use table 1	
		Thermal conductivity	λ_D = 0,022 W/(m²·K)	
		Properties of durability	NPD	
		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 λ_D = 0,022 W/(m²·K)	
	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	NPD	
		Flatness after one-sided moisturisation	NPD	
	Water vapour diffusion		NPD	
	Sound absorption coefficient		NPD	
	Release of dangerous substances, release into the interior of the building		NPD	
	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

Declaration of performance

puren-PIR NE

EN

20111.CPR.2020.10

1.	Unique identification code of the product-type	puren-PIR NE
2.	Intended application	Thermal insulation for buildings
3.	Manufacturer	puren gmbh Rengoldshauser Straße 4 - DE-88662 Ueberlingen - Germany t +49 7551 80990 - f +49 7551 809920 - www.puren.com
4.	System(s) of assessment and verification of the constancy of performance	System 3
5.	Harmonised standard Notified body(ies)	EN 13165:2012+A2:2016 0751 FIW München

6. Performance

Essential characteristics	Performance	harmonised technical specifications
Thermal resistance	Table 1	EN 13165:2012 +A2:2016
Thermal resistance	at nominal thickness R_D [m²·K/W] / d_N [mm] and at nominal thickness R_D [m²·K/W] / d_N [mm]: 0,70 / 20 — 1,10 / 30 1,45 / 40 — 1,85 / 50 2,20 / 60 — 2,55 / 70 3,05 / 80 — 3,80 / 100 4,80 / 120 — 5,60 / 140 6,40 / 160 — 7,20 / 180 8,00 / 200 — 8,80 / 220 9,60 / 240 — 10,40 / 260 11,20 / 280 — 12,00 / 300 For other thicknesses : Calculate with $R_D = d_N / \lambda_D$	
Thermal conductivity	at nominal thickness λ_D = 0,027 W/(m²·K) d_N < 80 mm λ_D = 0,026 W/(m²·K) 80 mm ≤ d_N < 120 mm λ_D = 0,025 W/(m²·K) d_N ≥ 120 mm	
Thickness / Thickness tolerance	d_N = 20 - 300 mm T3	
Reaction to fire	E	EN 13501-1
Stability of fire behaviour under the influence of heat, weather and ageing / degradation	In case of exposure to fire, the behaviour of rigid polyurethane foam does not deteriorate over time	
Durability of the thermal resistance under the influence of heat, weather and ageing / degradation — Thermal resistance	R_D use table 1	
Durability of the thermal resistance under the influence of heat, weather and ageing / degradation — Thermal conductivity	at nominal thickness λ_D = 0,027 W/(m²·K) d_N < 80 mm λ_D = 0,026 W/(m²·K) 80 mm ≤ d_N < 120 mm λ_D = 0,025 W/(m²·K) d_N ≥ 120 mm	
Durability of the thermal resistance under the influence of heat, weather and ageing / degradation — Properties of durability	NPD	
Durability of the thermal resistance under the influence of heat, weather and ageing / degradation — Dimensional stability	DS(70,90)3 DS(-20,-)2	
Durability of the thermal resistance under the influence of heat, weather and ageing / degradation — Deformation with defined pressure and temperature stress	DLT(2)5	
Durability of the thermal resistance under the influence of heat, weather and ageing / degradation — Determination of the values of thermal resistance and thermal conductivity after ageing	R_D use table 1 at nominal thickness λ_D = 0,027 W/(m²·K) d_N < 80 mm λ_D = 0,026 W/(m²·K) 80 mm ≤ d_N < 120 mm λ_D = 0,025 W/(m²·K) d_N ≥ 120 mm	
Compressive strength	CS(10\Y)120	EN 13165:2012 +A2:2016
Tensile / bending strength — Tensile strength perpendicular to the panel plane	TR100	
Durability of compressive strength under the influence of ageing and degradation — Creep behaviour under compressive stress	NPD	
Water permeability — short-term water absorption	WS(P)0,3	
Water permeability — long-term water absorption	at nominal thickness WL(T)3,5 d_N < 80 mm WL(T)2,5 80 mm ≤ d_N < 120 mm WL(T)1,5 d_N ≥ 120 mm	
Water permeability — Flatness after one-sided moisturisation	NPD	
Water vapour diffusion	NPD	
Sound absorption coefficient	NPD	

Declaration of performance

puren-PIR NE

EN

20111.CPR.2020.10

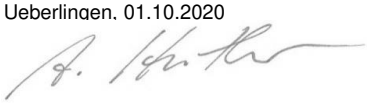
	Release of dangerous substances, release into the interior of the building	NPD	
	Smouldering behaviour	NPD	

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



Declaration of performance

puren-PIR NE-S

EN

20112.CPR.2020.10

1.	Unique identification code of the product-type		puren-PIR NE-S	
2.	Intended application		Thermal insulation for buildings	
3.	Manufacturer		puren gmbh Rengoldshauser Straße 4 - DE-88662 Ueberlingen - Germany t +49 7551 80990 - f +49 7551 809920 - www.puren.com	
4.	System(s) of assessment and verification of the constancy of performance		System 3	
5.	Harmonised standard Notified body(ies)		EN 13165:2012+A2:2016 0751 FIW München	
6.	**Performance**	Essential characteristics	Performance	harmonised technical specifications
	Thermal resistance	Thermal resistance	Table 1	EN 13165:2012 +A2:2016
		Thermal conductivity	λ_D = 0,025 W/(m²·K) at nominal thickness d_N < 80 mm λ_D = 0,024 W/(m²·K) 80 mm ≤ d_N < 120 mm λ_D = 0,023 W/(m²·K) d_N ≥ 120 mm	
		Thickness / Thickness tolerance	d_N = 20 - 300 mm T3	
	Reaction to fire		E	EN 13501-1
	Stability of fire behaviour under the influence of heat, weather and ageing / degradation		In case of exposure to fire, the behaviour of rigid polyurethane foam does not deteriorate over time	
	Durability of the thermal resistance under the influence of heat, weather and ageing / degradation	Thermal resistance	R_D use table 1	
		Thermal conductivity	λ_D = 0,025 W/(m²·K) at nominal thickness d_N < 80 mm λ_D = 0,024 W/(m²·K) 80 mm ≤ d_N < 120 mm λ_D = 0,023 W/(m²·K) d_N ≥ 120 mm	
		Properties of durability	NPD	
		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 λ_D = 0,025 W/(m²·K) at nominal thickness d_N < 80 mm λ_D = 0,024 W/(m²·K) 80 mm ≤ d_N < 120 mm λ_D = 0,023 W/(m²·K) d_N ≥ 120 mm	
	Compressive strength	Compressive stress	CS(10\Y)120	EN 13165:2012 +A2:2016
	Tensile / bending strength	Tensile strength perpendicular to the panel plane	TR100	
	Durability of compressive strength under the influence of ageing and degradation	Creep behaviour under compressive stress	NPD	
	Water permeability	short-term water absorption	WS(P)0,3	
		long-term water absorption	WL(T)3,5 at nominal thickness d_N < 80 mm WL(T)2,5 80 mm ≤ d_N < 120 mm WL(T)1,5 d_N ≥ 120 mm	
		Flatness after one-sided moisturisation	NPD	
	Water vapour diffusion		NPD	
	Sound absorption coefficient		NPD	

Thermal resistance		Thermal resistance	
	at nominal thickness		at nominal thickness
R_D [m²·K/W]	d_N [mm]	R_D [m²·K/W]	d_N [mm]
0,80	20	1,20	30
1,60	40	2,00	50
2,40	60	2,80	70
3,30	80	4,15	100
5,20	120	6,05	140
6,95	160	7,80	180
8,65	200	9,55	220
10,40	240	11,30	260
12,15	280	13,00	300
For other thicknesses :		Calculate with $R_D = d_N / \lambda_D$	

Declaration of performance

puren-PIR NE-S

EN

20112.CPR.2020.10

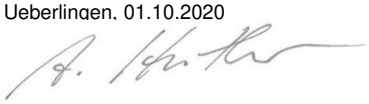
	Release of dangerous substances, release into the interior of the building	NPD	
	Smouldering behaviour	NPD	

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



Declaration of performance

puren-PIR NE

EN

20113.CPR.2020.10

1.	Unique identification code of the product-type		puren-PIR NE-G	
2.	Intended application		Thermal insulation for buildings	
3.	Manufacturer		puren gmbh Rengoldshauser Straße 4 - DE-88662 Ueberlingen - Germany t +49 7551 80990 - f +49 7551 809920 - www.puren.com	
4.	System(s) of assessment and verification of the constancy of performance		System 3	
5.	Harmonised standard Notified body(ies)		EN 13165:2012+A2:2016 0751 FIW München	
6.	**Performance**	Essential characteristics	Performance	harmonised technical specifications
	Thermal resistance	Thermal resistance	Table 1	EN 13165:2012 +A2:2016
		Thermal conductivity	λ_D = 0,027 W/(m²·K) at nominal thickness d_N < 80 mm λ_D = 0,026 W/(m²·K) 80 mm ≤ d_N < 120 mm λ_D = 0,025 W/(m²·K) d_N ≥ 120 mm	
		Thickness / Thickness tolerance	d_N = 20 - 300 mm T2	
	Reaction to fire		E	EN 13501-1
	Stability of fire behaviour under the influence of heat, weather and ageing / degradation		In case of exposure to fire, the behaviour of rigid polyurethane foam does not deteriorate over time	EN 13165:2012 +A2:2016
	Durability of the thermal resistance under the influence of heat, weather and ageing / degradation	Thermal resistance	R_D use table 1	
		Thermal conductivity	λ_D = 0,027 W/(m²·K) at nominal thickness d_N < 80 mm λ_D = 0,026 W/(m²·K) 80 mm ≤ d_N < 120 mm λ_D = 0,025 W/(m²·K) d_N ≥ 120 mm	
		Properties of durability	NPD	
		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 λ_D = 0,027 W/(m²·K) at nominal thickness d_N < 80 mm λ_D = 0,026 W/(m²·K) 80 mm ≤ d_N < 120 mm λ_D = 0,025 W/(m²·K) d_N ≥ 120 mm	
	Compressive strength	Compressive stress	CS(10\Y)120	
	Tensile / bending strength	Tensile strength perpendicular to the panel plane	TR100	
	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	NPD	
		Flatness after one-sided moisturisation	NPD	
	Water vapour diffusion		NPD	
	Sound absorption coefficient		NPD	
	Release of dangerous substances, release into the interior of the building		NPD	
	Smouldering behaviour		NPD	

R_D [m²·K/W]	d_N [mm]	R_D [m²·K/W]	d_N [mm]
0,70	20	1,10	30
1,45	40	1,85	50
2,20	60	2,55	70
3,05	80	3,80	100
4,80	120	5,60	140
6,40	160	7,20	180
8,00	200	8,80	220
9,60	240	10,40	260
11,20	280	12,00	300

For other thicknesses : Calculate with $R_D = d_N / \lambda_D$

NPD: No Performance Determined

Declaration of performance

puren-PIR NE

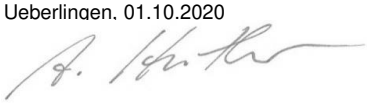
EN

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.

Signed for and on behalf of the manufacturer by

Dr. Andreas Huther
Executive Director
Ueberlingen, 01.10.2020



Declaration of performance

puren-PIR NE

EN

20114.CPR.2020.10

1.	Unique identification code of the product-type		puren-PIR NE-GS
2.	Intended application		Thermal insulation for buildings
3.	Manufacturer		puren gmbh Rengoldshauser Straße 4 - DE-88662 Ueberlingen - Germany t +49 7551 80990 - f +49 7551 809920 - www.puren.com
4.	System(s) of assessment and verification of the constancy of performance		System 3
5.	Harmonised standard Notified body(ies)		EN 13165:2012+A2:2016 0751 FIW München
6.	**Performance**	Essential characteristics	Performance / harmonised technical specifications
	Thermal resistance	Thermal resistance	Table 1

at nominal thickness		at nominal thickness	
R_D [m²·K/W]	d_N [mm]	R_D [m²·K/W]	d_N [mm]
0,75	20	1,15	30
1,50	40	1,90	50
2,30	60	2,65	70
3,20	80	4,00	100
5,00	120	5,80	140
6,65	160	7,50	180
8,30	200	9,15	220
10,00	240	10,80	260
11,65	280	12,50	300
For other thicknesses :		Calculate with $R_D = d_N / \lambda_D$	

EN 13165:2012 +A2:2016

	Thermal conductivity		at nominal thickness
		λ_D = 0,026 W/(m²·K)	d_N < 80 mm
		λ_D = 0,025 W/(m²·K)	80 mm ≤ d_N < 120 mm
		λ_D = 0,024 W/(m²·K)	d_N ≥ 120 mm
	Thickness / Thickness tolerance	d_N = 20 - 300 mm T2	
	Reaction to fire	E	EN 13501-1
	Stability of fire behaviour under the influence of heat, weather and ageing / degradation	In case of exposure to fire, the behaviour of rigid polyurethane foam does not deteriorate over time	
	Durability of the thermal resistance under the influence of heat, weather and ageing / degradation	Thermal resistance	R_D use table 1
		Thermal conductivity	at nominal thickness
			λ_D = 0,026 W/(m²·K) d_N < 80 mm
			λ_D = 0,025 W/(m²·K) 80 mm ≤ d_N < 120 mm
			λ_D = 0,024 W/(m²·K) d_N ≥ 120 mm
		Properties of durability	NPD
		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
			at nominal thickness
			λ_D = 0,026 W/(m²·K) d_N < 80 mm
			λ_D = 0,025 W/(m²·K) 80 mm ≤ d_N < 120 mm
			λ_D = 0,024 W/(m²·K) d_N ≥ 120 mm
	Compressive strength	Compressive stress	CS(10\Y)120
	Tensile / bending strength	Tensile strength perpendicular to the panel plane	TR100
	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	NPD
		Flatness after one-sided moisturisation	NPD
	Water vapour diffusion		NPD
	Sound absorption coefficient		NPD
	Release of dangerous substances, release into the interior of the building		NPD
	Smouldering behaviour		NPD

EN 13165:2012 +A2:2016

NPD: No Performance Determined

Declaration of performance

puren-PIR NE

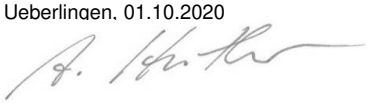
EN

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.

Signed for and on behalf of the manufacturer by

Dr. Andreas Huther
Executive Director
Ueberlingen, 01.10.2020



Declaration of performance

puren-NE

EN

20121.CPR.2020.10

1.	Unique identification code of the product-type		puren-PIR NE 32	
2.	Intended application		Thermal insulation for buildings	
3.	Manufacturer		puren gmbh Rengoldshauser Straße 4 - DE-88662 Ueberlingen - Germany t +49 7551 80990 - f +49 7551 809920 - www.puren.com	
4.	System(s) of assessment and verification of the constancy of performance		System 3	
5.	Harmonised standard Notified body(ies)		EN 13165:2012+A2:2016 0751 FIW München	
6.	**Performance**	Essential characteristics	Performance	harmonised technical specifications
	Thermal resistance	Thermal resistance	Table 1	EN 13165:2012 +A2:2016
		Thermal conductivity	λ_D = 0,027 W/(m²·K) at nominal thickness d_N < 80 mm λ_D = 0,026 W/(m²·K) at nominal thickness 80 mm ≤ d_N < 120 mm λ_D = 0,025 W/(m²·K) at nominal thickness d_N ≥ 120 mm	
		Thickness / Thickness tolerance	d_N = 20 - 300 mm T2	
	Reaction to fire		E	EN 13501-1
	Stability of fire behaviour under the influence of heat, weather and ageing / degradation		In case of exposure to fire, the behaviour of rigid polyurethane foam does not deteriorate over time	EN 13165:2012 +A2:2016
	Durability of the thermal resistance under the influence of heat, weather and ageing / degradation	Thermal resistance	R_D use table 1	
		Thermal conductivity	λ_D = 0,027 W/(m²·K) at nominal thickness d_N < 80 mm λ_D = 0,026 W/(m²·K) at nominal thickness 80 mm ≤ d_N < 120 mm λ_D = 0,025 W/(m²·K) at nominal thickness d_N ≥ 120 mm	
		Properties of durability	NPD	
		Dimensional stability	DS(70,90)3 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 table 1 λ_D = 0,027 W/(m²·K) at nominal thickness d_N < 80 mm λ_D = 0,026 W/(m²·K) at nominal thickness 80 mm ≤ d_N < 120 mm λ_D = 0,025 W/(m²·K) at nominal thickness d_N ≥ 120 mm	
	Compressive strength	Compressive stress	CS(10\Y)150	
	Tensile / bending strength	Tensile strength perpendicular to the panel plane	TR100	
	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	NPD	
		Flatness after one-sided moisturisation	NPD	
	Water vapour diffusion		NPD	
	Sound absorption coefficient		NPD	
	Release of dangerous substances, release into the interior of the building		NPD	
	Smouldering behaviour		NPD	

NPD: No Performance Determined

Declaration of performance

puren-NE

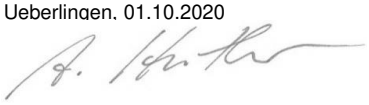
EN

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.

Signed for and on behalf of the manufacturer by

Dr. Andreas Huther
Executive Director
Ueberlingen, 01.10.2020



Declaration of performance

puren-NE

EN

20122.CPR.2020.10

1.	Unique identification code of the product-type		puren-PIR NE 32-S
2.	Intended application		Thermal insulation for buildings
3.	Manufacturer		puren gmbh Rengoldshauser Straße 4 - DE-88662 Ueberlingen - Germany t +49 7551 80990 - f +49 7551 809920 - www.puren.com
4.	System(s) of assessment and verification of the constancy of performance		System 3
5.	Harmonised standard Notified body(ies)		EN 13165:2012+A2:2016 0751 FIW München
6.	**Performance**	Essential characteristics	Performance / harmonised technical specifications

Thermal resistance

Essential characteristics	Performance	harmonised technical specifications
Thermal resistance	Table 1	EN 13165:2012 +A2:2016

R_D [m²·K/W]	at nominal thickness d_N [mm]	R_D [m²·K/W]	at nominal thickness d_N [mm]
0,75	20	1,15	30
1,50	40	1,90	50
2,30	60	2,65	70
3,20	80	4,00	100
5,00	120	5,80	140
6,65	160	7,50	180
8,30	200	9,15	220
10,00	240	10,80	260
11,65	280	12,50	300
For other thicknesses :		Calculate with $R_D = d_N / \lambda_D$	

Essential characteristics	Performance	harmonised technical specifications
Thermal conductivity	λ_D = 0,026 W/(m²·K) at nominal thickness d_N < 80 mm λ_D = 0,025 W/(m²·K) 80 mm ≤ d_N < 120 mm λ_D = 0,024 W/(m²·K) d_N ≥ 120 mm	EN 13165:2012 +A2:2016
Thickness / Thickness tolerance	d_N = 20 - 300 mm T2	EN 13165:2012 +A2:2016

Reaction to fire		E	EN 13501-1
Stability of fire behaviour under the influence of heat, weather and ageing / degradation		In case of exposure to fire, the behaviour of rigid polyurethane foam does not deteriorate over time	EN 13165:2012 +A2:2016
Durability of the thermal resistance under the influence of heat, weather and ageing / degradation	Thermal resistance	R_D use table 1	
	Thermal conductivity	λ_D = 0,026 W/(m²·K) at nominal thickness d_N < 80 mm λ_D = 0,025 W/(m²·K) 80 mm ≤ d_N < 120 mm λ_D = 0,024 W/(m²·K) d_N ≥ 120 mm	
	Properties of durability	NPD	
	Dimensional stability	DS(70,90)3 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 table 1 λ_D = 0,026 W/(m²·K) at nominal thickness d_N < 80 mm λ_D = 0,025 W/(m²·K) 80 mm ≤ d_N < 120 mm λ_D = 0,024 W/(m²·K) d_N ≥ 120 mm	
Compressive strength	Compressive stress	CS(10\Y)150	
Tensile / bending strength	Tensile strength perpendicular to the panel plane	TR100	
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	NPD	
	Flatness after one-sided moisturisation	NPD	
Water vapour diffusion		NPD	
Sound absorption coefficient		NPD	
Release of dangerous substances, release into the interior of the building		NPD	
Smouldering behaviour		NPD	

NPD: No Performance Determined

Declaration of performance

puren-NE

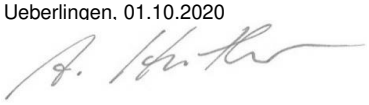
EN

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.

Signed for and on behalf of the manufacturer by

Dr. Andreas Huther
Executive Director
Ueberlingen, 01.10.2020



Declaration of performance

puren-PIR NE 40

EN

20131.CPR.2020.10

1.	Unique identification code of the product-type	puren-PIR NE 40
2.	Intended application	Thermal insulation for buildings
3.	Manufacturer	puren gmbh Rengoldshauser Straße 4 - DE-88662 Ueberlingen - Germany t +49 7551 80990 - f +49 7551 809920 - www.puren.com
4.	System(s) of assessment and verification of the constancy of performance	System 3
5.	Harmonised standard Notified body(ies)	EN 13165:2012+A2:2016 0751 FIW München

6. Performance

	Essential characteristics	Performance	harmonised technical specifications
Thermal resistance	Thermal resistance	Table 1	EN 13165:2012 +A2:2016
	Thermal conductivity	λ_D = 0,027 W/(m²·K) at nominal thickness d_N < 80 mm λ_D = 0,026 W/(m²·K) at nominal thickness 80 mm ≤ d_N < 120 mm λ_D = 0,025 W/(m²·K) at nominal thickness d_N ≥ 120 mm	
	Thickness / Thickness tolerance	d_N = 20 - 300 mm T2	
Reaction to fire		E	EN 13501-1
Stability of fire behaviour under the influence of heat, weather and ageing / degradation		In case of exposure to fire, the behaviour of rigid polyurethane foam does not deteriorate over time	EN 13165:2012 +A2:2016
Durability of the thermal resistance under the influence of heat, weather and ageing / degradation	Thermal resistance	R_D use table 1	
	Thermal conductivity	λ_D = 0,027 W/(m²·K) at nominal thickness d_N < 80 mm λ_D = 0,026 W/(m²·K) at nominal thickness 80 mm ≤ d_N < 120 mm λ_D = 0,025 W/(m²·K) at nominal thickness d_N ≥ 120 mm	
	Properties of durability	NPD	
	Dimensional stability	DS(70,90)3 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 table 1 λ_D = 0,027 W/(m²·K) at nominal thickness d_N < 80 mm λ_D = 0,026 W/(m²·K) at nominal thickness 80 mm ≤ d_N < 120 mm λ_D = 0,025 W/(m²·K) at nominal thickness d_N ≥ 120 mm	
Compressive strength	Compressive stress	CS(10\Y)250	
Tensile / bending strength	Tensile strength perpendicular to the panel plane	TR150	
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	NPD	
	Flatness after one-sided moisturisation	NPD	
Water vapour diffusion		NPD	
Sound absorption coefficient		NPD	
Release of dangerous substances, release into the interior of the building		NPD	
Smouldering behaviour		NPD	

NPD: No Performance Determined

Declaration of performance

puren-PIR NE 40

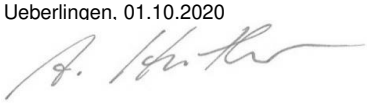
EN

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.

Signed for and on behalf of the manufacturer by

Dr. Andreas Huther
Executive Director
Ueberlingen, 01.10.2020



Declaration of performance

puren-PIR NE 50

EN

20132.CPR.2020.10

1.	Unique identification code of the product-type		puren-PIR NE 50	
2.	Intended application		Thermal insulation for buildings	
3.	Manufacturer		puren gmbh Rengoldshauser Straße 4 - DE-88662 Ueberlingen - Germany t +49 7551 80990 - f +49 7551 809920 - www.puren.com	
4.	System(s) of assessment and verification of the constancy of performance		System 3	
5.	Harmonised standard Notified body(ies)		EN 13165:2012+A2:2016 0751 FIW München	
6.	**Performance**	Essential characteristics	Performance	harmonised technical specifications
	Thermal resistance	Thermal resistance	Table 1	EN 13165:2012 +A2:2016
		Thermal conductivity	λ_D = 0,028 W/(m²·K) at nominal thickness d_N < 80 mm λ_D = 0,027 W/(m²·K) 80 mm ≤ d_N < 120 mm λ_D = 0,026 W/(m²·K) d_N ≥ 120 mm	
		Thickness / Thickness tolerance	d_N = 20 - 300 mm T2	
	Reaction to fire		E	EN 13501-1
	Stability of fire behaviour under the influence of heat, weather and ageing / degradation		In case of exposure to fire, the behaviour of rigid polyurethane foam does not deteriorate over time	EN 13165:2012 +A2:2016
	Durability of the thermal resistance under the influence of heat, weather and ageing / degradation	Thermal resistance	R_D use table 1	
		Thermal conductivity	λ_D = 0,028 W/(m²·K) at nominal thickness d_N < 80 mm λ_D = 0,027 W/(m²·K) 80 mm ≤ d_N < 120 mm λ_D = 0,026 W/(m²·K) d_N ≥ 120 mm	
		Properties of durability	NPD	
		Dimensional stability	DS(70,90)3 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 table 1 λ_D = 0,028 W/(m²·K) at nominal thickness d_N < 80 mm λ_D = 0,027 W/(m²·K) 80 mm ≤ d_N < 120 mm λ_D = 0,026 W/(m²·K) d_N ≥ 120 mm	
	Compressive strength	Compressive stress	CS(10\Y)350	
	Tensile / bending strength	Tensile strength perpendicular to the panel plane	TR150	
	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	NPD	
		Flatness after one-sided moisturisation	NPD	
	Water vapour diffusion		NPD	
	Sound absorption coefficient		NPD	
	Release of dangerous substances, release into the interior of the building		NPD	
	Smouldering behaviour		NPD	

R_D [m²·K/W]	d_N [mm]	R_D [m²·K/W]	d_N [mm]
0,70	20	1,05	30
1,40	40	1,75	50
2,10	60	2,50	70
2,95	80	3,70	100
4,60	120	5,35	140
6,15	160	6,90	180
7,65	200	8,45	220
9,20	240	10,00	260
10,75	280	11,50	300

For other thicknesses : Calculate with $R_D = d_N / \lambda_D$

NPD: No Performance Determined

Declaration of performance

puren-PIR NE 50

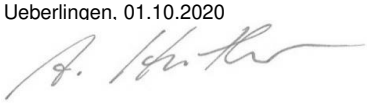
EN

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.

Signed for and on behalf of the manufacturer by

Dr. Andreas Huther
Executive Director
Ueberlingen, 01.10.2020



Declaration of performance

puren-PIR NE 60

EN

20133.CPR.2020.10

1.	Unique identification code of the product-type		puren-PIR NE 60
2.	Intended application		Thermal insulation for buildings
3.	Manufacturer		puren gmbh Rengoldshauser Straße 4 - DE-88662 Ueberlingen - Germany t +49 7551 80990 - f +49 7551 809920 - www.puren.com
4.	System(s) of assessment and verification of the constancy of performance		System 3
5.	Harmonised standard Notified body(ies)		EN 13165:2012+A2:2016 0751 FIW München
6.	**Performance**	Essential characteristics	Performance / harmonised technical specifications

Thermal resistance	Thermal resistance	Table 1		EN 13165:2012 +A2:2016
		at nominal thickness R_D [m²·K/W]	d_N [mm]	at nominal thickness R_D [m²·K/W] / d_N [mm]
		0,65	20	1,00 / 30
		1,35	40	1,70 / 50
		2,05	60	2,40 / 70
		2,85	80	3,55 / 100
		4,40	120	5,15 / 140
		5,90	160	6,65 / 180
		7,40	200	8,10 / 220
		8,85	240	9,60 / 260
		10,35	280	11,10 / 300
		For other thicknesses :		Calculate with $R_D = d_N / \lambda_D$
	Thermal conductivity			at nominal thickness
		λ_D = 0,029	W/(m²·K)	d_N < 80 mm
		λ_D = 0,028	W/(m²·K)	80 mm ≤ d_N < 120 mm
		λ_D = 0,027	W/(m²·K)	d_N ≥ 120 mm
	Thickness / Thickness tolerance	d_N = 20 - 300 mm T2		
Reaction to fire		E		EN 13501-1
Stability of fire behaviour under the influence of heat, weather and ageing / degradation		In case of exposure to fire, the behaviour of rigid polyurethane foam does not deteriorate over time		
Durability of the thermal resistance under the influence of heat, weather and ageing / degradation	Thermal resistance	R_D use table 1		
	Thermal conductivity			at nominal thickness
		λ_D = 0,029	W/(m²·K)	d_N < 80 mm
		λ_D = 0,028	W/(m²·K)	80 mm ≤ d_N < 120 mm
		λ_D = 0,027	W/(m²·K)	d_N ≥ 120 mm
	Properties of durability	NPD		
	Dimensional stability	DS(70,90)3 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 table 1		
				at nominal thickness
		λ_D = 0,029	W/(m²·K)	d_N < 80 mm
		λ_D = 0,028	W/(m²·K)	80 mm ≤ d_N < 120 mm
		λ_D = 0,027	W/(m²·K)	d_N ≥ 120 mm
Compressive strength	Compressive stress	CS(10\Y)450		EN 13165:2012 +A2:2016
Tensile / bending strength	Tensile strength perpendicular to the panel plane	TR150		
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	NPD		
	Flatness after one-sided moisturisation	NPD		
Water vapour diffusion		NPD		
Sound absorption coefficient		NPD		
Release of dangerous substances, release into the interior of the building		NPD		
Smouldering behaviour		NPD		

NPD: No Performance Determined

Declaration of performance

puren-PIR NE 60

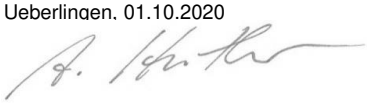
EN

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



Declaration of performance

puren-PIR NE 80

EN

20135.CPR.2020.10

1.	Unique identification code of the product-type		puren-PIR NE 80
2.	Intended application		Thermal insulation for buildings
3.	Manufacturer		puren gmbh Rengoldshauser Straße 4 - DE-88662 Ueberlingen - Germany t +49 7551 80990 - f +49 7551 809920 - www.puren.com
4.	System(s) of assessment and verification of the constancy of performance		System 3
5.	Harmonised standard Notified body(ies)		EN 13165:2012+A2:2016 0751 FIW München
6.	**Performance**	Essential characteristics	Performance / harmonised technical specifications

Thermal resistance — Thermal resistance

Table 1

at nominal thickness R_D [m²·K/W]	d_N [mm]	at nominal thickness R_D [m²·K/W]	d_N [mm]
0,65	20	1,00	30
1,30	40	1,65	50
2,00	60	2,30	70
2,75	80	3,40	100
4,25	120	5,00	140
5,70	160	6,40	180
7,10	200	7,85	220
8,55	240	9,25	260
10,00	280	10,70	300

For other thicknesses : Calculate with $R_D = d_N / \lambda_D$

Thermal conductivity

λ_D =	0,030	W/(m²·K)	at nominal thickness d_N < 80 mm
λ_D =	0,029	W/(m²·K)	80 mm ≤ d_N < 120 mm
λ_D =	0,028	W/(m²·K)	d_N ≥ 120 mm

Thickness / Thickness tolerance: d_N = 20 - 300 mm; T2

→ EN 13165:2012 +A2:2016

Reaction to fire		E	EN 13501-1
Stability of fire behaviour under the influence of heat, weather and ageing / degradation		In case of exposure to fire, the behaviour of rigid polyurethane foam does not deteriorate over time	EN 13165:2012 +A2:2016
Durability of the thermal resistance under the influence of heat, weather and ageing / degradation	Thermal resistance	R_D use table 1	
	Thermal conductivity	λ_D = 0,030 W/(m²·K) at nominal thickness d_N < 80 mm λ_D = 0,029 W/(m²·K) 80 mm ≤ d_N < 120 mm λ_D = 0,028 W/(m²·K) d_N ≥ 120 mm	
	Properties of durability	NPD	
	Dimensional stability	DS(70,90)3 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 table 1 λ_D = 0,030 W/(m²·K) at nominal thickness d_N < 80 mm λ_D = 0,029 W/(m²·K) 80 mm ≤ d_N < 120 mm λ_D = 0,028 W/(m²·K) d_N ≥ 120 mm	
Compressive strength	Compressive stress	CS(10\Y)650	
Tensile / bending strength	Tensile strength perpendicular to the panel plane	TR150	
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	NPD	
	Flatness after one-sided moisturisation	NPD	
Water vapour diffusion		NPD	
Sound absorption coefficient		NPD	
Release of dangerous substances, release into the interior of the building		NPD	
Smouldering behaviour		NPD	

NPD: No Performance Determined

Declaration of performance

puren-PIR NE 80

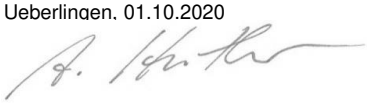
EN

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.

Signed for and on behalf of the manufacturer by

Dr. Andreas Huther
Executive Director
Ueberlingen, 01.10.2020



Declaration of performance

puren-PIR NE 100

EN

20136.CPR.2020.10

1.	Unique identification code of the product-type		puren-PIR NE 100
2.	Intended application		Thermal insulation for buildings
3.	Manufacturer		puren gmbh Rengoldshauser Straße 4 - DE-88662 Ueberlingen - Germany t +49 7551 80990 - f +49 7551 809920 - www.puren.com
4.	System(s) of assessment and verification of the constancy of performance		System 3
5.	Harmonised standard Notified body(ies)		EN 13165:2012+A2:2016 0751 FIW München
6.	**Performance**	Essential characteristics	Performance / harmonised technical specifications

Thermal resistance	Thermal resistance	Table 1		EN 13165:2012 +A2:2016
		at nominal thickness	at nominal thickness	
		R_D [m²·K/W]	d_N [mm]	R_D [m²·K/W]	d_N [mm]
		0,60	20	0,90	30
		1,25	40	1,55	50
		1,85	60	2,15	70
		2,55	80	3,20	100
		4,00	120	4,65	140
		5,30	160	6,00	180
		6,65	200	7,30	220
		8,00	240	8,65	260
		9,30	280	10,00	300
		For other thicknesses :		Calculate with $R_D = d_N / \lambda_D$	
	Thermal conductivity			at nominal thickness	
		λ_D = 0,032	W/(m²·K)	d_N < 80 mm	
		λ_D = 0,031	W/(m²·K)	80 mm ≤ d_N < 120 mm	
		λ_D = 0,03	W/(m²·K)	d_N ≥ 120 mm	
	Thickness / Thickness tolerance	d_N = 20 - 300 mm T2			
Reaction to fire		E			EN 13501-1
Stability of fire behaviour under the influence of heat, weather and ageing / degradation		In case of exposure to fire, the behaviour of rigid polyurethane foam does not deteriorate over time			EN 13165:2012 +A2:2016
Durability of the thermal resistance under the influence of heat, weather and ageing / degradation	Thermal resistance	R_D use table 1			
	Thermal conductivity			at nominal thickness	
		λ_D = 0,032	W/(m²·K)	d_N < 80 mm	
		λ_D = 0,031	W/(m²·K)	80 mm ≤ d_N < 120 mm	
		λ_D = 0,03	W/(m²·K)	d_N ≥ 120 mm	
	Properties of durability	NPD			
	Dimensional stability	DS(70,90)3 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 table 1			
				at nominal thickness	
		λ_D = 0,032	W/(m²·K)	d_N < 80 mm	
		λ_D = 0,031	W/(m²·K)	80 mm ≤ d_N < 120 mm	
		λ_D = 0,03	W/(m²·K)	d_N ≥ 120 mm	
Compressive strength	Compressive stress	CS(10\Y)900			
Tensile / bending strength	Tensile strength perpendicular to the panel plane	TR150			
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	NPD			
	Flatness after one-sided moisturisation	NPD			
Water vapour diffusion		NPD			
Sound absorption coefficient		NPD			
Release of dangerous substances, release into the interior of the building		NPD			
Smouldering behaviour		NPD			

NPD: No Performance Determined

Declaration of performance

puren-PIR NE 100

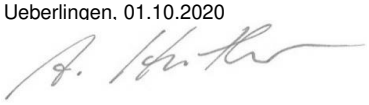
EN

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.

Signed for and on behalf of the manufacturer by

Dr. Andreas Huther
Executive Director
Ueberlingen, 01.10.2020



Declaration of performance

puren-PIR SE

EN

20221.CPR.2020.10

1.	Unique identification code of the product-type		puren-PIR SE
2.	Intended application		Thermal insulation for buildings
3.	Manufacturer		puren gmbh Rengoldshauser Straße 4 - DE-88662 Ueberlingen - Germany t +49 7551 80990 - f +49 7551 809920 - www.puren.com
4.	System(s) of assessment and verification of the constancy of performance		System 1 Reaction to fire System 3 all other features
5.	Harmonised standard Notified body(ies)		EN 13165:2012+A2:2016 0751 FIW München
6.	**Performance**	Essential characteristics	Performance / harmonised technical specifications

Thermal resistance

Table 1

at nominal thickness R_D [m²·K/W]	d_N [mm]	at nominal thickness R_D [m²·K/W]	d_N [mm]
1,45	40	1,85	50
2,20	60	2,55	70
3,05	80	3,80	100
4,80	120	5,60	140
6,40	160	7,20	180
8,00	200	8,80	220
9,60	240	10,40	260
11,20	280	12,00	300
For other thicknesses :		Calculate with $R_D = d_N / \lambda_D$	

Essential characteristics	Performance		harmonised technical specifications
Thermal resistance			EN 13165:2012 +A2:2016
Thermal conductivity	λ_D = 0,027 W/(m²·K)	at nominal thickness d_N < 80 mm	
	λ_D = 0,026 W/(m²·K)	80 mm ≤ d_N < 120 mm	
	λ_D = 0,025 W/(m²·K)	d_N ≥ 120 mm	
Thickness / Thickness tolerance	d_N = 40 - 300 mm T2		
Reaction to fire	C-s3,d0		EN 13501-1
Stability of fire behaviour under the influence of heat, weather and ageing / degradation	In case of exposure to fire, the behaviour of rigid polyurethane foam does not deteriorate over time		EN 13165:2012 +A2:2016
Durability of the thermal resistance under the influence of heat, weather and ageing / degradation – Thermal resistance	R_D use table 1		
Thermal conductivity	λ_D = 0,027 W/(m²·K)	at nominal thickness d_N < 80 mm	
	λ_D = 0,026 W/(m²·K)	80 mm ≤ d_N < 120 mm	
	λ_D = 0,025 W/(m²·K)	d_N ≥ 120 mm	
Properties of durability	NPD		
Dimensional stability	DS(70,90)3 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 table 1		
	λ_D = 0,027 W/(m²·K)	at nominal thickness d_N < 80 mm	
	λ_D = 0,026 W/(m²·K)	80 mm ≤ d_N < 120 mm	
	λ_D = 0,025 W/(m²·K)	d_N ≥ 120 mm	
Compressive strength – Compressive stress	CS(10\Y)150		
Tensile / bending strength – Tensile strength perpendicular to the panel plane	TR100		
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	NPD		
Flatness after one-sided moisturisation	NPD		
Water vapour diffusion	NPD		
Sound absorption coefficient	NPD		
Release of dangerous substances, release into the interior of the building	NPD		
Smouldering behaviour	NPD		

NPD: No Performance Determined

contains R 365/227

Declaration of performance

puren-PIR SE

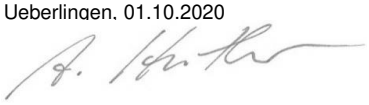
EN

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.

Signed for and on behalf of the manufacturer by

Dr. Andreas Huther
Executive Director
Ueberlingen, 01.10.2020



Declaration of Performance

puren-PIR SE
30111.CPR.2017.07

EN

Intended use	Thermal insulating materials for technical building equipment and industrial operational facilities
Unique identification code of the product type	puren-PIR SE
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 1 Reaction to fire System 3 all other features
Harmonised standard	EN 14308:2009+A1:2013
Notified authorities	0751 FIW München

Essential characteristics	Declared Performance			Technical specification
Reaction to fire	Reaction to Fire class		C-s3, d0	EN 13501-1
Resilience of Reaction to Fire under the influence of ageing/degradation	The reaction to fire does not change over time			EN 14308
Durability of heat transfer resistance and thermal conductivity under the influence of aging and high temperatures	Determination of the values of heat transfer resistance und thermal conductivity after aging, depending on the application temperature			
Thermal conductivity λ_D W/(m·K)	0,027	0,026	0,025	
at application temperature 10 °C	d_N < 80 mm	80 mm ≤ d_N < 120 mm	d_N ≥ 120 mm	

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	10,40	11,20	12,00

Intermediate values may be determined by linear interpolation or calculated with $R_D = d_N / \lambda_D$

other application temperatures	NPD				
upper application limit temperature				NPD	EN 14308
Compressive strength	compression strain at 10 % compression according to EN 826	σ_{10}	150 kPa	CS(10\Y)150	
Dimensional stability	Dimensional stability under specified temperature and humidity conditions according to EN 1604 – testing conditions	48h / 70°C 90 % r.F.	$\Delta\varepsilon_l$, $\Delta\varepsilon_b \leq 2\%$ $\Delta\varepsilon_d \leq 6\%$	DS(TH)3	
		48h / -20°C	$\Delta\varepsilon_l$, $\Delta\varepsilon_b \leq 0{,}5\%$ $\Delta\varepsilon_d \leq 2\%$		
all other characteristics according to EN 14308				NPD	

NPD: No Performance Determined

contains R 365/227

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.

CE

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

Dr. Andreas Huther
Managing Director
Ueberlingen, 01.07.2017

Declaration of Performance

puren-PIR NE HF
30211.CPR.2017.07

EN

Intended use	Thermal insulating materials for technical building equipment and industrial operational facilities
Unique identification code of the product type	puren-PIR NE HF
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 3
Harmonised standard	EN 14308:2009+A1:2013
Notified authorities	0751 FIW München

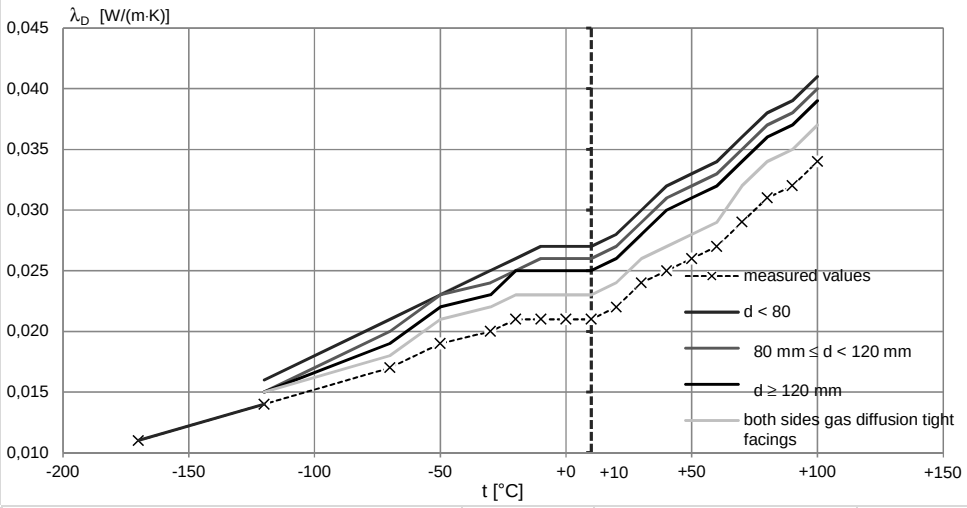
Essential characteristics	Declared Performance			Technical specification
Reaction to fire	Reaction to Fire class		E	EN 13501-1
Resilience of Reaction to Fire under the influence of ageing/degradation	The reaction to fire does not change over time			EN 14308
Durability of heat transfer resistance and thermal conductivity under the influence of aging and high temperatures	Determination of the values of heat transfer resistance und thermal conductivity after aging, depending on the application temperature			

Thermal conductivity λ_D W/(m·K)	0,027	0,026	0,025
at application temperature 10 °C	d_N < 80 mm	80 mm ≤ d_N < 120 mm	d_N ≥ 120 mm

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

Intermediate values may be determined by linear interpolation or calculated with $R_D = d_N / \lambda_D$

in the application temperature range -170 °C to +100 °C



upper application limit temperature	upper application limit temperature according to EN 14706			120 °C	ST(+)120
Compressive strength	compression strain at 10 % compression according to EN 826		σ_{10}	120 kPa	CS(10\Y)120
Dimensional stability	Dimensional stability under specified temperature and humidity conditions according to EN 1604 – testing conditions	48h / 70°C 90 % r.F.	$\Delta\varepsilon_l, \Delta\varepsilon_b \leq 2\%$ $\Delta\varepsilon_d \leq 6\%$		DS(TH)3
		48h / -20°C	$\Delta\varepsilon_l, \Delta\varepsilon_b \leq 0{,}5\%$ $\Delta\varepsilon_d \leq 2\%$		
all other characteristics according to EN 14308				NPD	

EN 14308

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.

CE

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

Dr. Andreas Huther
Managing Director
Ueberlingen, 01.07.2017

Reaction to Fire class in the final application	Classification report 902 9524 000-3 Notified body 0672	DL-s2,d0	EN 13501-1

Declaration of Performance

puren-PIR NE 32
30311.CPR.2017.07

EN

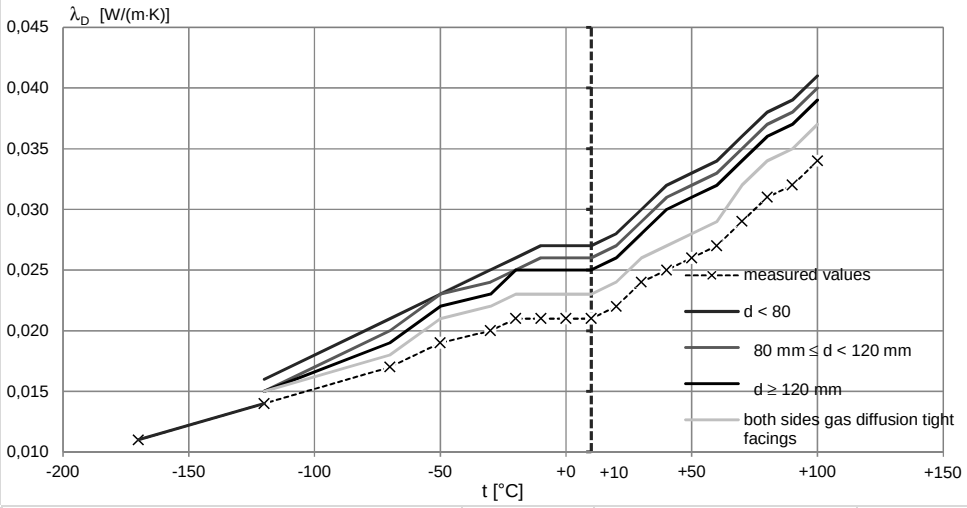
Intended use	Thermal insulating materials for technical building equipment and industrial operational facilities
Unique identification code of the product type	puren-PIR NE 32
Identification of the construction product	see batch number / imprint on product
Manufacturer	puren gmbh Rengoldshauser Straße 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 3
Harmonised standard	EN 14308:2009+A1:2013
Notified authorities	0751 FIW München

Essential characteristics	Declared Performance			Technical specification
Reaction to fire	Reaction to Fire class		E	EN 13501-1
Resilience of Reaction to Fire under the influence of ageing/degradation	The reaction to fire does not change over time			EN 14308
Durability of heat transfer resistance and thermal conductivity under the influence of aging and high temperatures	Determination of the values of heat transfer resistance und thermal conductivity after aging, depending on the application temperature			
Thermal conductivity λ_D W/(m·K)	0,027	0,026	0,025	
at application temperature 10 °C	d_N < 80 mm	80 mm ≤ d_N < 120 mm	d_N ≥ 120 mm	

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

Intermediate values may be determined by linear interpolation or calculated with $R_D = d_N / \lambda_D$

in the application temperature range -170 °C to +100 °C



upper application limit temperature	upper application limit temperature according to EN 14706			120 °C	ST(+)120
Compressive strength	compression strain at 10 % compression according to EN 826	σ_{10}		150 kPa	CS(10\Y)150
Dimensional stability	Dimensional stability under specified temperature and humidity conditions according to EN 1604 – testing conditions	48h / 70°C 90 % r.F.	$\Delta\varepsilon_l$, $\Delta\varepsilon_b \leq 2\%$ $\Delta\varepsilon_d \leq 6\%$	DS(TH)3	EN 14308
		48h / -20°C	$\Delta\varepsilon_l$, $\Delta\varepsilon_b \leq 0{,}5\%$ $\Delta\varepsilon_d \leq 2\%$		
all other characteristics according to EN 14308				NPD	

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.

CE

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

Dr. Andreas Huther
Managing Director
Ueberlingen, 01.07.2017

Declaration of Performance

puren-PIR NE 40
30412.CPR.2017.07

EN

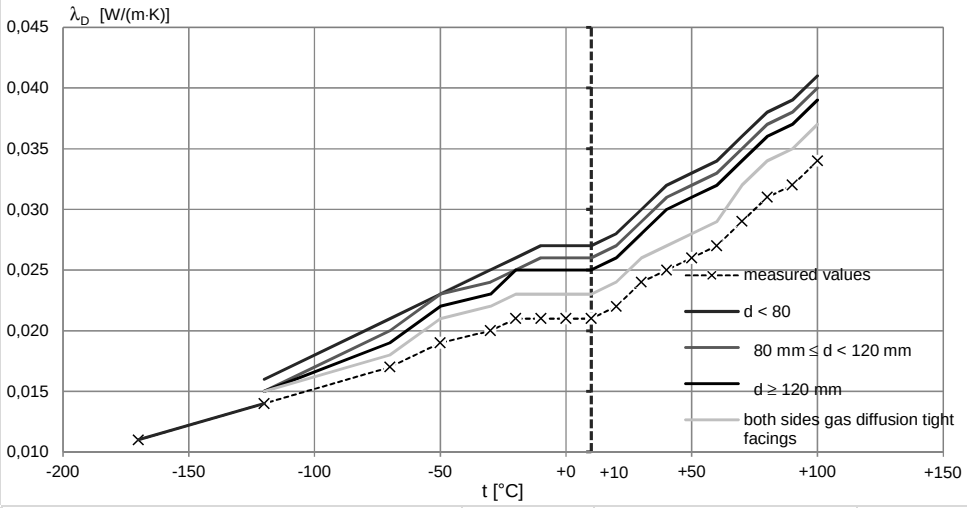
Intended use	Thermal insulating materials for technical building equipment and industrial operational facilities
Unique identification code of the product type	puren-PIR NE 40
Identification of the construction product	see batch number / imprint on product
Manufacturer	puren gmbh Rengoldshauser Straße 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 3
Harmonised standard	EN 14308:2009+A1:2013
Notified authorities	0751 FIW München

Essential characteristics	Declared Performance			Technical specification
Reaction to fire	Reaction to Fire class		E	EN 13501-1
Resilience of Reaction to Fire under the influence of ageing/degradation	The reaction to fire does not change over time			EN 14308
Durability of heat transfer resistance and thermal conductivity under the influence of aging and high temperatures	Determination of the values of heat transfer resistance und thermal conductivity after aging, depending on the application temperature			
Thermal conductivity λ_D W/(m·K)	0,027 (d_N < 80 mm)	0,026 (80 mm ≤ d_N < 120 mm)	0,025 (d_N ≥ 120 mm)	
at application temperature 10 °C				

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

Intermediate values may be determined by linear interpolation or calculated with $R_D = d_N / \lambda_D$

in the application temperature range -170 °C to +100 °C



upper application limit temperature	upper application limit temperature according to EN 14706			120 °C	ST(+)120
Compressive strength	compression strain at 10 % compression according to EN 826	σ_{10}		250 kPa	CS(10\Y)250
Dimensional stability	Dimensional stability under specified temperature and humidity conditions according to EN 1604 – testing conditions	48h / 70°C 90 % r.F.	$\Delta\varepsilon_l$, $\Delta\varepsilon_b \leq 2\%$ $\Delta\varepsilon_d \leq 6\%$		DS(TH)3
		48h / -20°C	$\Delta\varepsilon_l$, $\Delta\varepsilon_b \leq 0{,}5\%$ $\Delta\varepsilon_d \leq 2\%$		
all other characteristics according to EN 14308					NPD

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.

CE

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

Dr. Andreas Huther
Managing Director
Ueberlingen, 01.07.2017

Declaration of Performance

puren-PIR NE 50
30413.CPR.2017.07

EN

Intended use	Thermal insulating materials for technical building equipment and industrial operational facilities
Unique identification code of the product type	puren-PIR NE 50
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 3
Harmonised standard	EN 14308:2009+A1:2013
Notified authorities	0751 FIW München

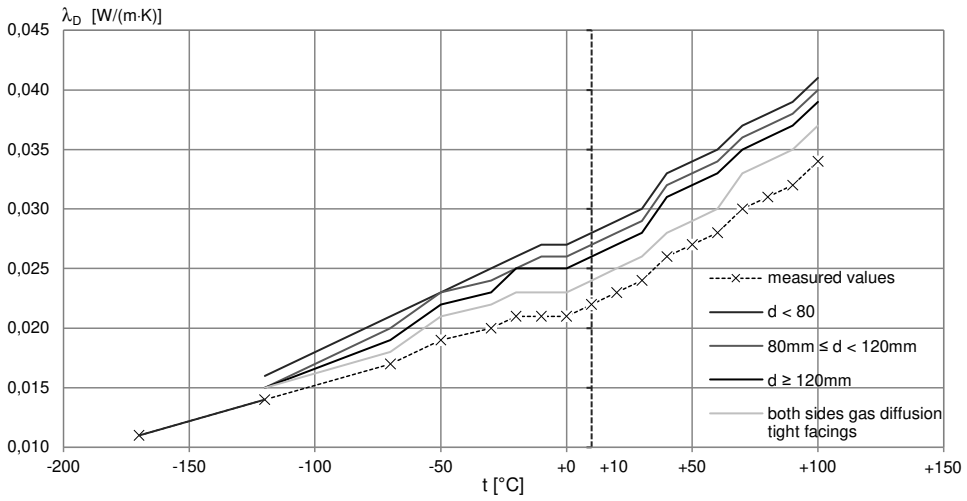
Essential characteristics	Declared Performance		Technical specification
Reaction to fire	Reaction to Fire class	E	EN 13501-1
Resilience of Reaction to Fire under the influence of ageing/degradation	The reaction to fire does not change over time		EN 14308
Durability of heat transfer resistance and thermal conductivity under the influence of aging and high temperatures	Determination of the values of heat transfer resistance und thermal conductivity after aging, depending on the application temperature		

Thermal conductivity λ_D W/(m·K)	0,028	0,027	0,026
at application temperature 10 °C	d_N < 80 mm	80 mm ≤ d_N < 120 mm	d_N ≥ 120 mm

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	1,40	2,10	2,95	3,70	4,60	5,35	6,15	6,90	7,65	8,45	9,20	10,00	10,75	11,50

Intermediate values may be determined by linear interpolation or calculated with $R_D = d_N / \lambda_D$

in the application temperature range -170 °C to +50 °C



upper application limit temperature	upper application limit temperature according to EN 14706			°C	NPD
Compressive strength	compression strain at 10 % compression according to EN 826	σ_{10}	350 kPa		CS(10\Y)350
Dimensional stability	Dimensional stability under specified temperature and humidity conditions according to EN 1604 – testing conditions	48h / 70°C 90 % r.F.	$\Delta\varepsilon_l$, $\Delta\varepsilon_b \leq 2\%$ $\Delta\varepsilon_d \leq 6\%$		DS(TH)3
		48h / -20°C	$\Delta\varepsilon_l$, $\Delta\varepsilon_b \leq 0{,}5\%$ $\Delta\varepsilon_d \leq 2\%$		
all other characteristics according to EN 14308					NPD

EN 14308

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.

CE

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

Dr. Andreas Huther
Managing Director
Ueberlingen, 01.07.2017

Declaration of Performance

puren-PIR NE 60
30414.CPR.20170.7

EN

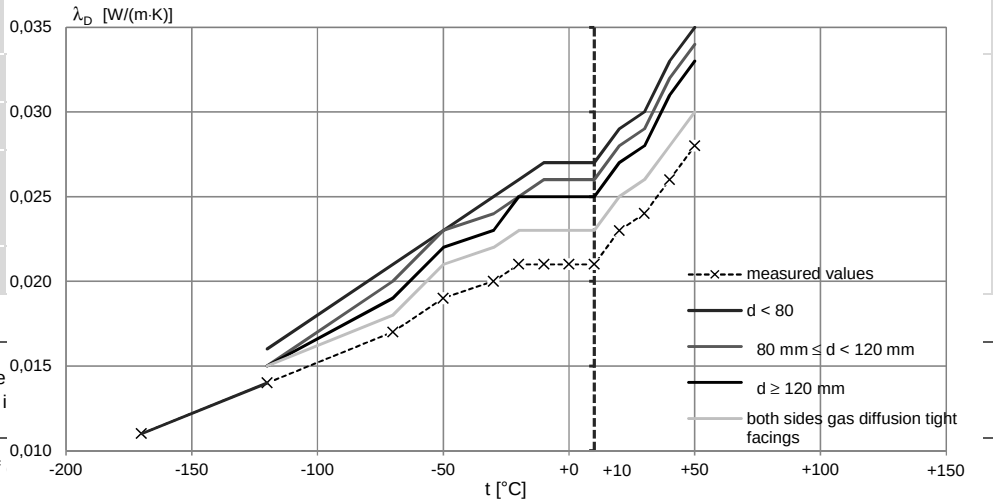
Intended use	Thermal insulating materials for technical building equipment and industrial operational facilities
Unique identification code of the product type	puren-PIR NE 60
Identification of the construction product	see batch number / imprint on product
Manufacturer	puren gmbh Rengoldshauser Straße 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 3
Harmonised standard	EN 14308:2009+A1:2013
Notified authorities	0751 FIW München

Essential characteristics	Declared Performance		Technical specification
Reaction to fire	Reaction to Fire class	E	EN 13501-1
Resilience of Reaction to Fire under the influence of ageing/degradation	The reaction to fire does not change over time		EN 14308
Durability of heat transfer resistance and thermal conductivity under the influence of aging and high temperatures	Determination of the values of heat transfer resistance und thermal conductivity after aging, depending on the application temperature		

Thermal conductivity λ_D W/(m·K)	0,029			0,028			0,027									
at application temperature 10 °C	d_N < 80 mm			80 mm ≤ d_N < 120 mm			d_N ≥ 120 mm									
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	0,65	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	11,10	

Intermediate values may be determined by linear interpolation or calculated with $R_D = d_N / \lambda_D$

in the application temperature range	-170 °C to +50 °C
upper application limit temperature	
Compressive strength	
Dimensional stability	
all other characteristics according to EN 14308	



NPD: No Performance Determined

The performance of the product identified above responsible for this Declaration of Performance i

Signed for the manufacturer and on behalf

Dr. Andreas Huther
Managing Director
Ueberlingen, 01.07.2017

Declaration of Performance

puren-PIR NE 80
30415.CPR.2017.07

EN

Intended use	Thermal insulating materials for technical building equipment and industrial operational facilities
Unique identification code of the product type	puren-PIR NE 80
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 3
Harmonised standard	EN 14308:2009+A1:2013
Notified authorities	0751 FIW München

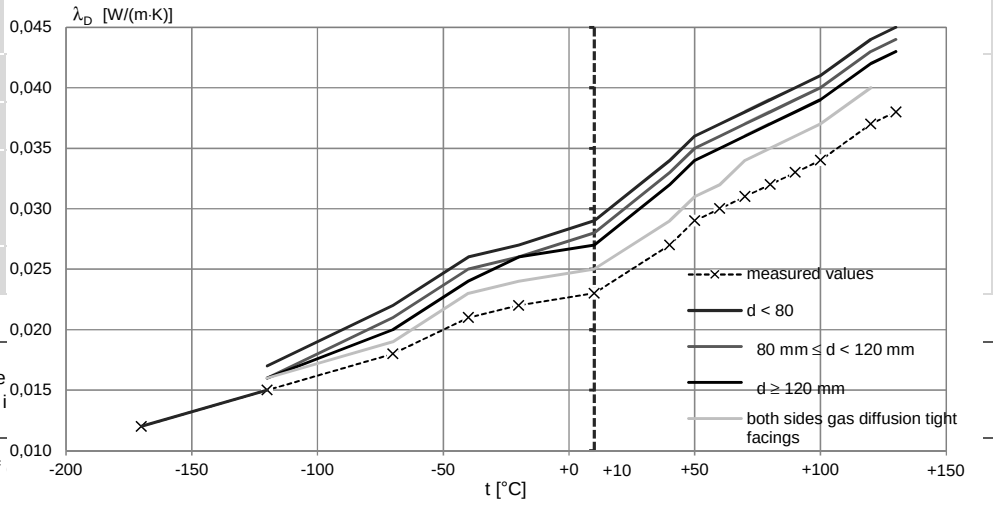
Essential characteristics	Declared Performance		Technical specification
Reaction to fire	Reaction to Fire class	E	EN 13501-1
Resilience of Reaction to Fire under the influence of ageing/degradation	The reaction to fire does not change over time		EN 14308
Durability of heat transfer resistance and thermal conductivity under the influence of aging and high temperatures	Determination of the values of heat transfer resistance und thermal conductivity after aging, depending on the application temperature		

Thermal conductivity λ_D W/(m·K)	0,030	0,029	0,028
at application temperature 10 °C	d_N < 80 mm	80 mm ≤ d_N < 120 mm	d_N ≥ 120 mm

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	0,65	1,30	2,00	2,75	3,40	4,25	5,00	5,70	6,40	7,10	7,85	8,55	9,25	10,00	10,70

Intermediate values may be determined by linear interpolation or calculated with $R_D = d_N / \lambda_D$

in the application temperature range	-170 °C to +130 °C
upper application limit temperature	
Compressive strength	
Dimensional stability	
all other characteristics according to EN 14308	



NPD: No Performance Determined

The performance of the product identified above responsible for this Declaration of Performance i

Signed for the manufacturer and on behalf

Dr. Andreas Huther
Managing Director
Ueberlingen, 01.07.2017

Declaration of Performance

puren-PIR NE 100
30416.CPR.2017.07

EN

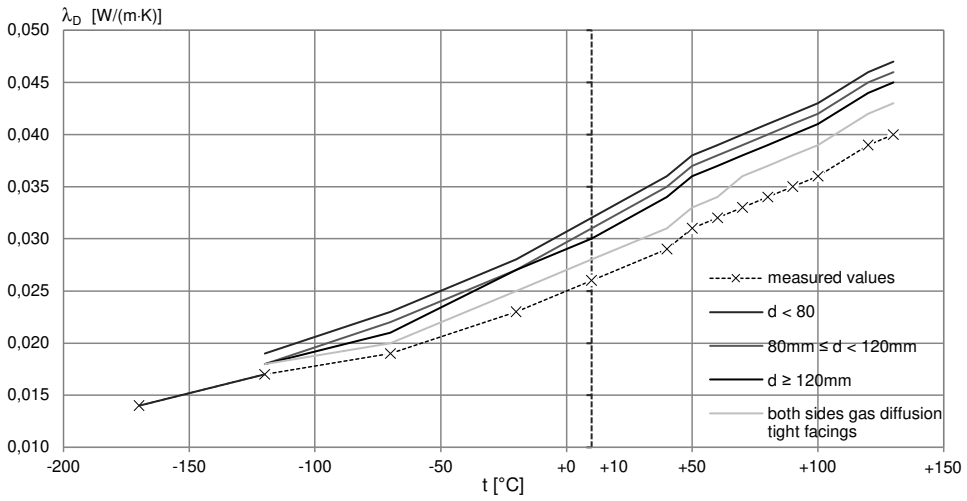
Intended use	Thermal insulating materials for technical building equipment and industrial operational facilities
Unique identification code of the product type	puren-PIR NE 100
Identification of the construction product	see batch number / imprint on product
Manufacturer	puren gmbh Rengoldshauser Straße 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 3
Harmonised standard	EN 14308:2009+A1:2013
Notified authorities	0751 FIW München

Essential characteristics	Declared Performance			Technical specification
Reaction to fire	Reaction to Fire class		E	EN 13501-1
Resilience of Reaction to Fire under the influence of ageing/degradation	The reaction to fire does not change over time			EN 14308
Durability of heat transfer resistance and thermal conductivity under the influence of aging and high temperatures	Determination of the values of heat transfer resistance und thermal conductivity after aging, depending on the application temperature			
Thermal conductivity λ_D W/(m·K)	0,032	0,031	0,030	
at application temperature 10 °C	d_N < 80 mm	80 mm ≤ d_N < 120 mm	d_N ≥ 120 mm	

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	0,60	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	10,00

Intermediate values may be determined by linear interpolation or calculated with $R_D = d_N / \lambda_D$

in the application temperature range -170 °C to +120 °C



upper application limit temperature	upper application limit temperature according to EN 14706			°C	NPD
Compressive strength	compression strain at 10 % compression according to EN 826	σ_{10}	900 kPa		CS(10\Y)900
Dimensional stability	Dimensional stability under specified temperature and humidity conditions according to EN 1604 – testing conditions	48h / 70°C 90 % r.F.	$\Delta\varepsilon_l$, $\Delta\varepsilon_b \leq 2\%$ $\Delta\varepsilon_d \leq 6\%$		DS(TH)3
		48h / -20°C	$\Delta\varepsilon_l$, $\Delta\varepsilon_b \leq 0{,}5\%$ $\Delta\varepsilon_d \leq 2\%$		
all other characteristics according to EN 14308					NPD

EN 14308

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.

CE

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

Dr. Andreas Huther
Managing Director
Ueberlingen, 01.07.2017

Declaration of Performance

puren-PIR NE 120
30417.CPR.2017.07

EN

Intended use	Thermal insulating materials for technical building equipment and industrial operational facilities
Unique identification code of the product type	puren-PIR NE 120
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 3
Harmonised standard	EN 14308:2009+A1:2013
Notified authorities	0751 FIW München

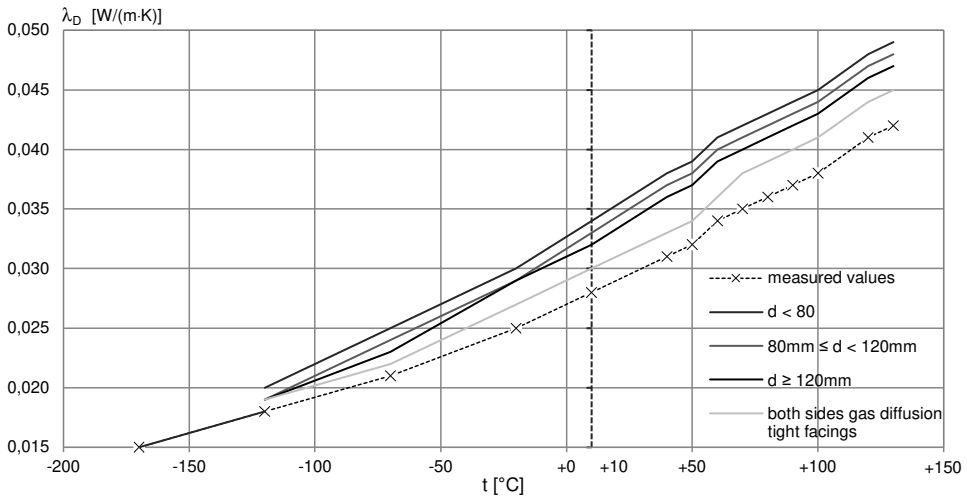
Essential characteristics	Declared Performance		Technical specification
Reaction to fire	Reaction to Fire class	E	EN 13501-1
Resilience of Reaction to Fire under the influence of ageing/degradation	The reaction to fire does not change over time		EN 14308
Durability of heat transfer resistance and thermal conductivity under the influence of aging and high temperatures	Determination of the values of heat transfer resistance und thermal conductivity after aging, depending on the application temperature		

Thermal conductivity λ_D W/(m·K)	0,034	0,033	0,032
at application temperature 10 °C	d_N < 80 mm	80 mm ≤ d_N < 120 mm	d_N ≥ 120 mm

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	0,55	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	9,35

Intermediate values may be determined by linear interpolation or calculated with $R_D = d_N / \lambda_D$

in the application temperature range -170 °C to +120 °C



upper application limit temperature	upper application limit temperature according to EN 14706			°C	NPD
Compressive strength	compression strain at 10 % compression according to EN 826		σ_{10}	1200 kPa	CS(10\Y)1200
Dimensional stability	Dimensional stability under specified temperature and humidity conditions according to EN 1604 – testing conditions	48h / 70°C 90 % r.F.	$\Delta\varepsilon_l$, $\Delta\varepsilon_b \leq 2\%$ $\Delta\varepsilon_d \leq 6\%$		DS(TH)3
		48h / -20°C	$\Delta\varepsilon_l$, $\Delta\varepsilon_b \leq 0{,}5\%$ $\Delta\varepsilon_d \leq 2\%$		
all other characteristics according to EN 14308					NPD

EN 14308

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.

CE

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

Dr. Andreas Huther
Managing Director
Ueberlingen, 01.07.2017

Declaration of Performance

puren-PIR NE 145
30418.CPR.2017.07

EN

Intended use	Thermal insulating materials for technical building equipment and industrial operational facilities
Unique identification code of the product type	puren-PIR NE 145
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 3
Harmonised standard	EN 14308:2009+A1:2013
Notified authorities	0751 FIW München

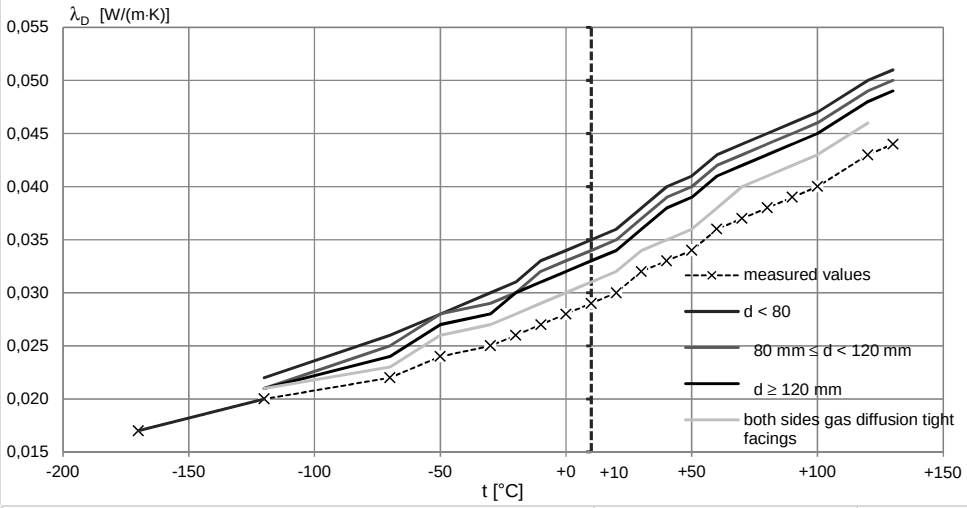
Essential characteristics	Declared Performance			Technical specification
Reaction to fire	Reaction to Fire class		E	EN 13501-1
Resilience of Reaction to Fire under the influence of ageing/degradation	The reaction to fire does not change over time			EN 14308
Durability of heat transfer resistance and thermal conductivity under the influence of aging and high temperatures	Determination of the values of heat transfer resistance und thermal conductivity after aging, depending on the application temperature			

Thermal conductivity λ_D W/(m·K)	0,036	0,035	0,034
at application temperature 10 °C	d_N < 80 mm	80 mm ≤ d_N < 120 mm	d_N ≥ 120 mm

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	0,55	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	8,80

Intermediate values may be determined by linear interpolation or calculated with $R_D = d_N / \lambda_D$

in the application temperature range -170 °C to +130 °C



upper application limit temperature	upper application limit temperature according to EN 14706			°C	NPD
Compressive strength	compression strain at 10 % compression according to EN 826	σ_{10}	1700 kPa		CS(10\Y)1700
Dimensional stability	Dimensional stability under specified temperature and humidity conditions according to EN 1604 – testing conditions	48h / 70°C 90 % r.F.	$\Delta\varepsilon_l$, $\Delta\varepsilon_b \leq 2\%$ $\Delta\varepsilon_d \leq 6\%$		DS(TH)3
		48h / -20°C	$\Delta\varepsilon_l$, $\Delta\varepsilon_b \leq 0{,}5\%$ $\Delta\varepsilon_d \leq 2\%$		
all other characteristics according to EN 14308					NPD

EN 14308

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.

CE

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

Dr. Andreas Huther
Managing Director
Ueberlingen, 01.07.2017

Declaration of Performance

puren-PIR NE 200
30419.CPR.2017.07

EN

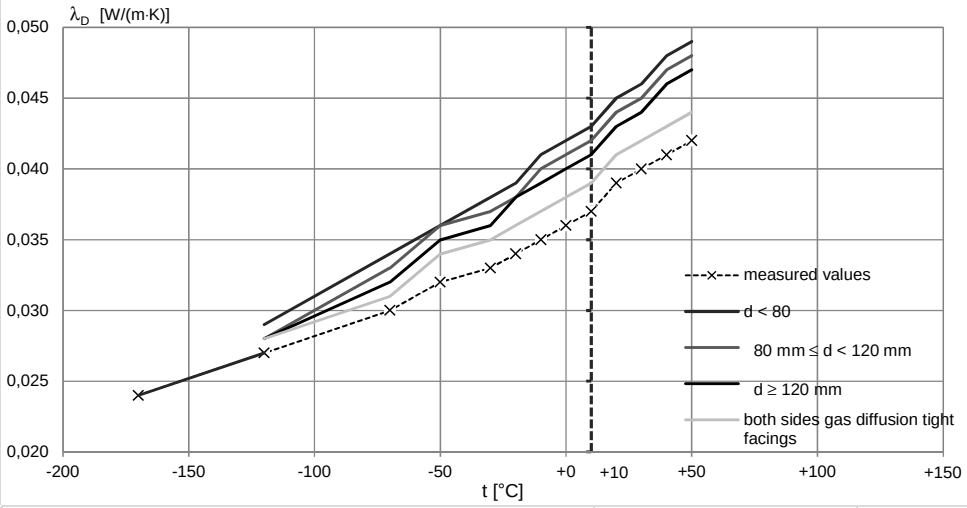
Intended use	Thermal insulating materials for technical building equipment and industrial operational facilities
Unique identification code of the product type	puren-PIR NE 200
Identification of the construction product	see batch number / imprint on product
Manufacturer	puren gmbh Rengoldshauser Straße 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 3
Harmonised standard	EN 14308:2009+A1:2013
Notified authorities	0751 FIW München

Essential characteristics	Declared Performance			Technical specification
Reaction to fire	Reaction to Fire class		E	EN 13501-1
Resilience of Reaction to Fire under the influence of ageing/degradation	The reaction to fire does not change over time			EN 14308
Durability of heat transfer resistance and thermal conductivity under the influence of aging and high temperatures	Determination of the values of heat transfer resistance und thermal conductivity after aging, depending on the application temperature			
Thermal conductivity λ_D W/(m·K)	0,044	0,043	0,042	
at application temperature 10 °C	d_N < 80 mm	80 mm ≤ d_N < 120 mm	d_N ≥ 120 mm	

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	0,45	0,90	1,35	1,85	2,30	2,85	3,30	3,80	4,25	4,75	5,20	5,70	6,15	6,65	7,10

Intermediate values may be determined by linear interpolation or calculated with $R_D = d_N / \lambda_D$

in the application temperature range -170 °C to +50 °C



upper application limit temperature				NPD	EN 14308
Compressive strength	compression strain at 10 % compression according to EN 826	σ_{10}	2700 kPa	CS(10\Y)2700	
Dimensional stability	Dimensional stability under specified temperature and humidity conditions according to EN 1604 – testing conditions	48h / 70°C 90 % r.F.	$\Delta\varepsilon_l$, $\Delta\varepsilon_b \leq 2\%$ $\Delta\varepsilon_d \leq 6\%$	DS(TH)3	
		48h / -20°C	$\Delta\varepsilon_l$, $\Delta\varepsilon_b \leq 0{,}5\%$ $\Delta\varepsilon_d \leq 2\%$		
all other characteristics according to EN 14308				NPD	

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.

CE

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

Dr. Andreas Huther
Managing Director
Ueberlingen, 01.07.2017

Declaration of Performance

puren-PIR NE 70
30424.CPR.2019.04

EN

Intended use	Thermal insulating materials for technical building equipment and industrial operational facilities
Unique identification code of the product type	puren-PIR NE 70
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 3
Harmonised standard	EN 14308:2009+A1:2013
Notified authorities	0751 FIW München

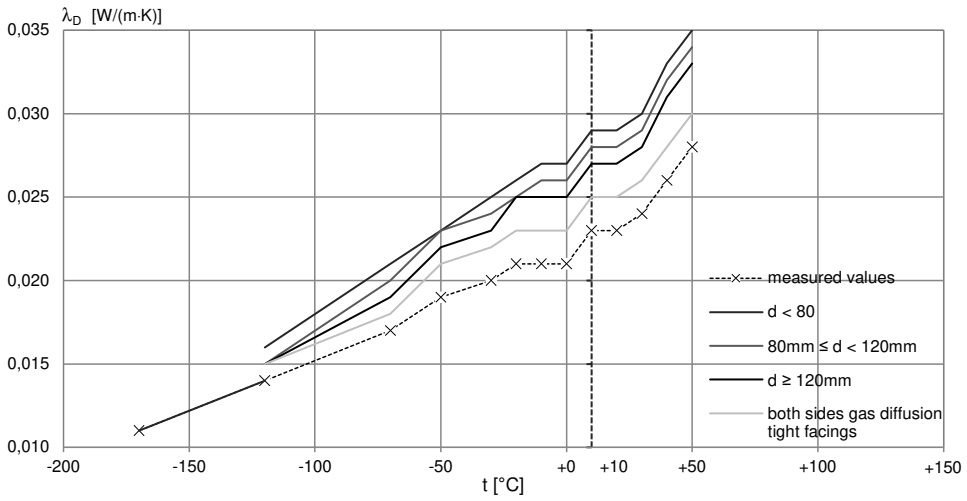
Essential characteristics	Declared Performance			Technical specification
Reaction to fire	Reaction to Fire class		E	EN 13501-1
Resilience of Reaction to Fire under the influence of ageing/degradation	The reaction to fire does not change over time			EN 14308
Durability of heat transfer resistance and thermal conductivity under the influence of aging and high temperatures	Determination of the values of heat transfer resistance und thermal conductivity after aging, depending on the application temperature			

Thermal conductivity λ_D W/(m·K)	0,029	0,028	0,027
at application temperature 10 °C	d_N < 80 mm	80 mm ≤ d_N < 120 mm	d_N ≥ 120 mm

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	0,65	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	11,10

Intermediate values may be determined by linear interpolation or calculated with $R_D = d_N / \lambda_D$

in the application temperature range 0 °C to +0 °C



upper application limit temperature				NPD	EN 14308
Compressive strength	compression strain at 10 % compression according to EN 826	σ_{10}	500 kPa	CS(10\Y)500	
Dimensional stability	Dimensional stability under specified temperature and humidity conditions according to EN 1604 – testing conditions	48h / 70°C 90 % r.F.	$\Delta\varepsilon_l$, $\Delta\varepsilon_b \leq 2\%$ $\Delta\varepsilon_d \leq 6\%$	DS(TH)3	
		48h / -20°C	$\Delta\varepsilon_l$, $\Delta\varepsilon_b \leq 0{,}5\%$ $\Delta\varepsilon_d \leq 2\%$		
all other characteristics according to EN 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.

CE

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

Dr. Andreas Huther
Managing Director
Ueberlingen, 01.04.2019

Declaration of Performance

purenit C
40141.CPR.2018.10

EN

Intended use	Thermal Insulation for Buildings (ThIB)
Unique identification code of the product type	purenit C
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 1 reaction to fire System 3 all other features
Harmonised standard	not available
Notified authorities	0672 MPA Stuttgart reaction to fire 0751 FIW München all other features
European technical evaluation / Registration	ETA-18/0604
technical assessment body	Deutsches Institut für Bautechnik (DIBt) Kolonnenstraße 30 B, DE-10829 Berlin
Notified body(bodies) for verification of constancy of performance	0751 FIW München

Essential characteristics		Declared Performance							Technical specification
Reaction to fire		Reaction to Fire class					C-s3,d0		EN 13501-1
Thermal conductivity	λ_D	W/(m·K)			0,096				
at nominal thickness	d_N	mm	20	30	40	50	60		
at nominal thickness	R_D	m²·K/W	0,20	0,30	0,40	0,50	0,60		
		Intermediate values may be determined by linear interpolation or calculated with $R_D = d_N / \lambda_D$							
Coversion for humidity		to EN ISO 10456					Performance not assessed		not available
mass-based moisture content	$U_{23/50}$	at 23°C / 50% rel. humidity							
	$U_{23/80}$	at 23°C / 80% rel. humidity							
mass-based moisture conversion coefficient	f_u								
Coversion for humidity	$F_{m\ (23/50-23/80)}$	23°C / 50% rel. humidity to at 23°C / 80% rel. humidity							
Compressive strength	σ_{10}	compression strain at 10 % compression according to EN 826				kPa	7100		
Tensile strength perpendicular to panel plane		to EN 1607					Performance not assessed		
Flexural strength		to EN 12089					Performance not assessed		
Shear strength		to EN 12090					Performance not assessed		
Deformation with defined pressure and temperature load		to EN 1605					Performance not assessed		
Creep behaviour under compressive stress		to EN 1606					Performance not assessed		
Water absorption	W_p	to EN 1609				kg/m²	≤ 0,5		
Moisture absorption (desorption)	u	Hygroscopic sorption characteristics acc. to EN ISO 12571				Mass-%	≤ 3,0		
Water absorption		for long term water absorption by immersion					Performance not assessed		
Water vapor diffusion	μ	to EN 12086				-	8		
Bulk density		to EN 1602				kg/m³	550	+40 / -40	
Nominal thickness	d_N	to EN 823				mm	20 - 60	±1	
Nominal length		to EN 822				mm	≤ 6000	±8	
Nominal width		to EN 822				mm	≤ 1350	±5	
Perpendicularity	S_b	to EN 824				mm/m	≤ 2		
Flatness		to EN 825				mm	≤ 2		
Surface flatness after one-sided humificati		to EN 825					Performance not assessed		
Dimensional stability		to EN 1604					Performance 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.

CE

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

Dr. Andreas Huther
Managing Director
Ueberlingen, 01.02.2020

Declaration of Performance

purenit
40243.CPR.2018.10

EN

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
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 1 reaction to fire System 3 all other features
Harmonised standard	not available
Notified authorities	1322 IBS Linz reaction to fire 0751 FIW München all other features
European technical evaluation / Registration	ETA-18/0604
technical assessment body	Deutsches Institut für Bautechnik (DIBt) Kolonnenstraße 30 B, DE-10829 Berlin
Notified body(bodies) for verification of constancy of performance	0751 FIW München

Essential characteristics		Declared Performance							Technical specification
Reaction to fire		Reaction to Fire class					E		EN 13501-1
Thermal conductivity	λ_D	W/(m·K)		0,083 d ≤ 40 mm		0,085 40 mm < d ≤ 60 mm			
at nominal thickness	d_N	mm	20	30	40	50	60		
at nominal thickness	R_D	m²·K/W	0,20	0,35	0,45	0,55	0,70		
		Intermediate values may be determined by linear interpolation or calculated with $R_D = d_N / \lambda_D$							
Coversion for humidity		to EN ISO 10456							not available
mass-based moisture content	$U_{23/50}$	at 23°C / 50% rel. humidity					0,017		
	$U_{23/80}$	at 23°C / 80% rel. humidity					0,028		
mass-based moisture conversion coefficient	f_u						2,86		
Coversion for humidity	$F_{m\ (23/50-23/80)}$	23°C / 50% rel. humidity to at 23°C / 80% rel. humidity					1,03		
Compressive strength	σ_{10}	compression strain at 10 % compression according to EN 826				kPa	7100		
Tensile strength perpendicular to panel plane		to EN 1607					Performance not assessed		
Flexural strength		to EN 12089					Performance not assessed		
Shear strength		to EN 12090					Performance not assessed		
Deformation with defined pressure and temperature load		to EN 1605					Performance not assessed		
Creep behaviour under compressive stress		to EN 1606					Performance not assessed		
Water absorption	W_p	to EN 1609				kg/m²	≤ 0,5		
Moisture absorption (desorption)	u	Hygroscopic sorption characteristics acc. to EN ISO 12571				Mass-%	≤ 3,0		
Water absorption		for long term water absorption by immersion					Performance not assessed		
Water vapor diffusion	μ	to EN 12086				-	8		
Bulk density		to EN 1602				kg/m³	550	+40 / -40	
Nominal thickness	d_N	to EN 823				mm	20 - 60	±1	
Nominal length		to EN 822				mm	≤ 6000	±8	
Nominal width		to EN 822				mm	≤ 1350	±5	
Perpendicularity	S_b	to EN 824				mm/m	≤ 2		
Flatness		to EN 825				mm	≤ 2		
Surface flatness after one-sided humificati		to EN 825					Performance not assessed		
Dimensional stability		to EN 1604					Performance 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.

CE

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

Dr. Andreas Huther
Managing Director
Ueberlingen, 01.02.2020

Declaration of performance

puren-PIR ALU-G

EN

84111.CPR.2020.10

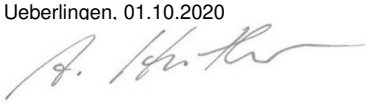
1.	Unique identification code of the product-type		puren-PIR ALU-G	
2.	Intended application		Thermal insulation for buildings	
3.	Manufacturer		puren gmbh Rengoldshauser Straße 4 - DE-88662 Ueberlingen - Germany t +49 7551 80990 - f +49 7551 809920 - www.puren.com	
4.	System(s) of assessment and verification of the constancy of performance		System 3	
5.	Harmonised standard Notified body(ies)		EN 13165:2012+A2:2016 0751 FIW München	
6.	**Performance**	Essential characteristics	Performance	harmonised technical specifications
	Thermal resistance	Thermal resistance	Table 1 at nominal thickness: R_D [m²·K/W] / d_N [mm]: 1,35 / 30; 2,70 / 60; 4,50 / 100; 5,90 / 130 at nominal thickness: R_D [m²·K/W] / d_N [mm]: 1,80 / 40; 3,60 / 80; 5,45 / 120 For other thicknesses : Calculate with $R_D = d_N / \lambda_D$	EN 13165:2012 +A2:2016
		Thermal conductivity	λ_D = 0,022 W/(m²·K)	
		Thickness / Thickness tolerance	d_N = 30 - 130 mm T2	
	Reaction to fire		E	EN 13501-1
	Stability of fire behaviour under the influence of heat, weather and ageing / degradation		In case of exposure to fire, the behaviour of rigid polyurethane foam does not deteriorate over time	
	Durability of the thermal resistance under the influence of heat, weather and ageing / degradation	Thermal resistance	R_D use table 1	
		Thermal conductivity	λ_D = 0,022 W/(m²·K)	
		Properties of durability	NPD	
		Dimensional stability	DS(70,90)3 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 table 1 λ_D = 0,022 W/(m²·K)	
	Compressive strength	Compressive stress	CS(10\Y)120	
	Tensile / bending strength	Tensile strength perpendicular to the panel plane	TR40	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	NPD	
		Flatness after one-sided moisturisation	NPD	
	Water vapour diffusion		NPD	
	Sound absorption coefficient		NPD	
	Release of dangerous substances, release into the interior of the building		NPD	
	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



Declaration of performance

puren-PIR ALD

EN

84112.CPR.2020.10

1.	Unique identification code of the product-type		puren-PIR ALD	
2.	Intended application		Thermal insulation for buildings	
3.	Manufacturer		puren gmbh Rengoldshauser Straße 4 - DE-88662 Ueberlingen - Germany t +49 7551 80990 - f +49 7551 809920 - www.puren.com	
4.	System(s) of assessment and verification of the constancy of performance		System 3	
5.	Harmonised standard Notified body(ies)		EN 13165:2012+A2:2016 0751 FIW München 1173 WFR Gent 1136 CSTC Brüssel	
6.	**Performance**	Essential characteristics	Performance	harmonised technical specifications
	Thermal resistance	Thermal resistance	Table 1 at nominal thickness: R_D [m²·K/W] / d_N [mm]: 1,25 / 30; 2,05 / 50; 3,30 / 80; at nominal thickness: R_D [m²·K/W] / d_N [mm]: 1,65 / 40; 2,50 / 60 For other thicknesses : Calculate with $R_D = d_N / \lambda_D$	EN 13165:2012 +A2:2016
		Thermal conductivity	λ_D = 0,024 W/(m²·K)	
		Thickness / Thickness tolerance	d_N = 30 - 80 mm T2	
	Reaction to fire		D-s2,d0	EN 13501-1
	Stability of fire behaviour under the influence of heat, weather and ageing / degradation		In case of exposure to fire, the behaviour of rigid polyurethane foam does not deteriorate over time	
	Durability of the thermal resistance under the influence of heat, weather and ageing / degradation	Thermal resistance	R_D use table 1	
		Thermal conductivity	λ_D = 0,024 W/(m²·K)	
		Properties of durability	NPD	
		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	R_D use table 1 λ_D = 0,024 W/(m²·K)	
	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	NPD	
		Flatness after one-sided moisturisation	NPD	
	Water vapour diffusion		NPD	
	Sound absorption coefficient		NPD	
	Release of dangerous substances, release into the interior of the building		NPD	
	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

Declaration of performance

puren-PIR APE

EN

86111.CPR.2020.10

1.	Unique identification code of the product-type		puren-PIR APE	
2.	Intended application		Thermal insulation for buildings	
3.	Manufacturer		puren gmbh Rengoldshauser Straße 4 - DE-88662 Ueberlingen - Germany t +49 7551 80990 - f +49 7551 809920 - www.puren.com	
4.	System(s) of assessment and verification of the constancy of performance		System 3	
5.	Harmonised standard Notified body(ies)		EN 13165:2012+A2:2016 0751 FIW München 1173 WFR Gent 1136 CSTC Brüssel	
6.	**Performance**	Essential characteristics	Performance	harmonised technical specifications
	Thermal resistance	Thermal resistance	Table 1 at nominal thickness: R_D [m²·K/W] / d_N [mm]: 1,60 / 40; 2,40 / 60; 4,15 / 100; 2,00 / 50; 3,30 / 80 For other thicknesses : Calculate with $R_D = d_N / \lambda_D$	EN 13165:2012 +A2:2016
		Thermal conductivity	at nominal thickness λ_D = 0,025 W/(m²·K) d_N < 80 mm λ_D = 0,024 W/(m²·K) d_N ≥ 80 mm	
		Thickness / Thickness tolerance	d_N = 40 - 100 mm T2	
	Reaction to fire		E	EN 13501-1
	Stability of fire behaviour under the influence of heat, weather and ageing / degradation		In case of exposure to fire, the behaviour of rigid polyurethane foam does not deteriorate over time	
	Durability of the thermal resistance under the influence of heat, weather and ageing / degradation	Thermal resistance	R_D use table 1	
		Thermal conductivity	at nominal thickness λ_D = 0,025 W/(m²·K) d_N < 80 mm λ_D = 0,024 W/(m²·K) d_N ≥ 80 mm	
		Properties of durability	NPD	
		Dimensional stability	DS(70,90)3 NPD	
		Deformation with defined pressure and temperature stress	NPD	
		Determination of the values of thermal resistance and thermal conductivity after ageing	R_D use table 1 at nominal thickness λ_D = 0,025 W/(m²·K) d_N < 80 mm λ_D = 0,024 W/(m²·K) d_N ≥ 80 mm	
	Compressive strength	Compressive stress	CS(10\Y)150	EN 13165:2012 +A2:2016
	Tensile / bending strength	Tensile strength perpendicular to the panel plane	TR80	
	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	NPD	
		Flatness after one-sided moisturisation	NPD	
	Water vapour diffusion		NPD	
	Sound absorption coefficient		NPD	
	Release of dangerous substances, release into the interior of the building		NPD	
	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.

Declaration of performance

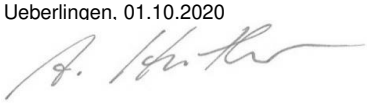
puren-PIR APE

EN

86111.CPR.2020.10

Signed for and on behalf of the manufacturer by

Dr. Andreas Huther
Executive Director
Ueberlingen, 01.10.2020



Declaration of performance

puren-PIR PVC

EN

86112.CPR.2020.10

1.	Unique identification code of the product-type		puren-PIR PVC	
2.	Intended application		Thermal insulation for buildings	
3.	Manufacturer		puren gmbh Rengoldshauser Straße 4 - DE-88662 Ueberlingen - Germany t +49 7551 80990 - f +49 7551 809920 - www.puren.com	
4.	System(s) of assessment and verification of the constancy of performance		System 3	
5.	Harmonised standard Notified body(ies)		EN 13165:2012+A2:2016 0751 FIW München 1173 WFR Gent 1136 CSTC Brüssel	
6.	**Performance**	Essential characteristics	Performance	harmonised technical specifications
	Thermal resistance	Thermal resistance	Table 1 at nominal thickness: R_D [m²·K/W] / d_N [mm]: 1,65 / 40; 2,50 / 60; 2,05 / 50 For other thicknesses : Calculate with $R_D = d_N / \lambda_D$	EN 13165:2012 +A2:2016
		Thermal conductivity	λ_D = 0,024 W/(m²·K)	
		Thickness / Thickness tolerance	d_N = 40 - 60 mm T2	
	Reaction to fire		E	EN 13501-1
	Stability of fire behaviour under the influence of heat, weather and ageing / degradation		In case of exposure to fire, the behaviour of rigid polyurethane foam does not deteriorate over time	EN 13165:2012 +A2:2016
	Durability of the thermal resistance under the influence of heat, weather and ageing / degradation	Thermal resistance	R_D use table 1	
		Thermal conductivity	λ_D = 0,024 W/(m²·K)	
		Properties of durability	NPD	
		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	R_D use table 1 λ_D = 0,024 W/(m²·K)	
	Compressive strength	Compressive stress	CS(10\Y)150	
	Tensile / bending strength	Tensile strength perpendicular to the panel plane	TR80	
	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	NPD	
		Flatness after one-sided moisturisation	NPD	
	Water vapour diffusion		NPD	
	Sound absorption coefficient		NPD	
	Release of dangerous substances, release into the interior of the building		NPD	
	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

Declaration of Performance

puren Systemschraube
97091.CPR.2017.07

EN

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 / evaluation	1034 - HFB Engineering GmbH Zschortauer Str. 42, 04129 Leipzig, Deutschland
Certificate of conformity of the factory production control	1034-CPD-1986/1/2012

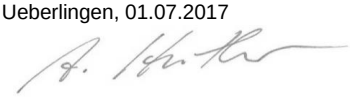
Essential characteristics	Declared Performance		Technical spec
Tensile strength	$f_{tens,k}$ [kN]	20,0	not available
Breaking torque	$f_{tor,k}$ [Nm]	22,0	
Yield moment	$M_{y,k}$ [Nm]	20,0	
Head withdrawal parameter	$f_{ax,k}$ [N/mm²]	11,1	
Pull-through parameter	$f_{head,k}$ [N/mm²]	12,0	

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.

CE

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

Dr. Andreas Huther
Managing Director
Ueberlingen, 01.07.2017



Declaration of Performance

puren-DB 100
98091.CPR.2018.07

EN

Intended use	Plastic and elastomer vapour barrier membrane
Unique identification code of the product type	puren-DB 100
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 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 min	tolerance max	Technical specification
Reaction to fire	Reaction to Fire class	E			EN 13501-1
length	[m]	50			EN 13984
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_d	[m]	≥ 100			
durability of water vapour on-state resistance against artificial ageing		bestanden			
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			

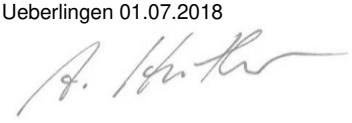
NPD: No Performance Determined / no performance declared

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.

CE

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

Dr. Andreas Huther
Managing Director
Ueberlingen 01.07.2018



Declaration of Performance

puren-DB blau
98092.CPR.2018.07

EN

Intended use	Plastic and elastomer vapour barrier membrane
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 - Germany t +49 7551 80990 - f +49 7551 809920 - www.puren.com
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 min	tolerance max	Technical specification
Reaction to fire	Reaction to Fire class	E			EN 13501-1
length	[m]	50			EN 13984
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_d	[m]	≥ 3			
durability of water vapour on-state resistance against artificial ageing		bestanden			
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			

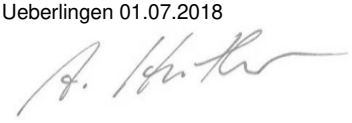
NPD: No Performance Determined / no performance declared

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.

CE

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

Dr. Andreas Huther
Managing Director
Ueberlingen 01.07.2018



Declaration of Performance

puren-DB 12
98093.CPR.2018.07

EN

Intended use	Plastic and elastomer vapour barrier membrane
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 - Germany t +49 7551 80990 - f +49 7551 809920 - www.puren.com
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 min	tolerance max	Technical specification
Reaction to fire	Reaction to Fire class	E			EN 13501-1
length	[m]	50			EN 13984
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_d	[m]	10	-3	+3,00	
durability of water vapour on-state resistance against artificial ageing		bestanden			
maximum tensile strength lengthwise / across	[N/50mm]	400 / 400	-30	+30	
elongation with maximum tensile strength lengthwise / across	[%]	15 / 20	-5	+5	
tear propagation resistance (nail shank) lengthwise / 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			

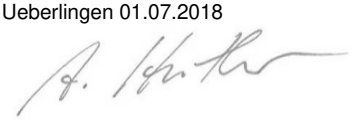
NPD: No Performance Determined / no performance declared

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.

CE

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

Dr. Andreas Huther
Managing Director
Ueberlingen 01.07.2018



Declaration of Performance

puren-DB hygrotop
98094.CPR.2020.01

EN

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
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 3
Harmonised standard	EN 13859-1:2014
Notified authorities	0767 MPA Dresden Reaction to fire 0799 KIWA TBU Greven all other features

Essential characteristics	Declared Performance		tolerance min	tolerance max	Technical specification
Reaction to fire	Reaction to Fire class	E			EN 13501-1
length	[m]	50			EN 13859-1
width	[m]	1,50			
thickness	[mm]	0,95			
area density	[g/m²]	235	-5%		
Dimensional accuracy	[%]	< 1			
Resistance to air passage	[m³/(m²·h·50Pa)]	< 0,1			
Resistance to water penetration	[Class]	W1			
water vapour permeability S_d	[m]	3	-1	+2,00	
durability of water vapour on-state resistance against artificial ageing		bestanden			
maximum tensile strength lengthwise / across	[N/50mm]	500 / 350	-10	+10	
after ageing		450 / 300			
elongation with maximum tensile strength lengthwise / across	[%]	60 / 70	-6	+6	
after ageing		50 / 60			
tear propagation resistance (nail shank) lengthwise / across	[N]	300 / 400	-10	+10	
Temperature resistance	[°C]	-40 / +100			
Natural weathering	[Months]	3			
visible defects		keine			
all other characteristics according to EN 13859-1		NPD			

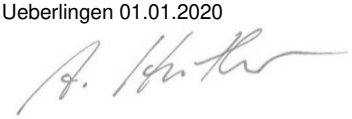
NPD: No Performance Determined / no performance declared

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.

CE

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

Dr. Andreas Huther
Managing Director
Ueberlingen 01.01.2020



Declaration of Performance

puren-DS AL
98095.CPR.2018.07

EN

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
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 3
Harmonised standard	EN 13970:2005
Notified authorities	2007 KIWA Dresden

Essential characteristics	Declared Performance		tolerance min	tolerance max	Technical specification
Reaction to fire	Reaction to Fire class	E			EN 13501-1
length	[m]	50			EN 13970
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 S_d	[m]	≥ 1500			
maximum tensile strength lengthwise / across	[N/50mm]	200 / 200			
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			

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.

CE

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

Dr. Andreas Huther
Managing Director
Ueberlingen 01.07.2018

Declaration of Performance

puren-UDB diffucell
98096.CPR.2018.07

EN

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
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 3
Harmonised standard	EN 13859-1:2014
Notified authorities	1508 Prüfinstitut Hoch — Reaction to fire 0799 KIWA TBU Greven — all other features

Essential characteristics	Declared Performance		tolerance min	tolerance max	Technical specification
Reaction to fire	Reaction to Fire class	E			EN 13501-1
length	[m]	50			EN 13859-1
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			
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 lengthwise / across	[N/50mm]	330 / 270	-30	+30	
after ageing		260 / 240	-30	+30	
elongation with maximum tensile strength lengthwise / across	[%]	90 / 115	-30	+30	
after ageing		60 / 75	-30	+30	
tear propagation resistance (nail shank) lengthwise / across	[N]	220 / 230	-20	+20	
Temperature resistance	[°C]	-40 / +100			
cold bending behaviour	[°C]	-40			
Natural weathering	[Months]	3			
all other characteristics according to EN 13859-1		NPD			

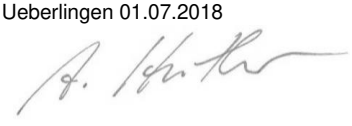
NPD: No Performance Determined / no performance declared

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.

CE

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

Dr. Andreas Huther
Managing Director
Ueberlingen 01.07.2018



Declaration of Performance

puren-UDB hightech
98097.CPR.2018.07

EN

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
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 3
Harmonised standard	EN 13859-1:2014
Notified authorities	0432 MPA Erwitte — Reaction to fire 0799 KIWA TBU Greven — all other features

Essential characteristics	Declared Performance		tolerance min	tolerance max	Technical specification
Reaction to fire	Reaction to Fire class	E			EN 13501-1
length	[m]	50			EN 13859-1
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 ageing	[Class]	W1			
Resistance to water pressure	[cm Water column]	> 400			
water vapour permeability S_d	[m]	0,18	-0,04	+0,04	
maximum tensile strength lengthwise / across	[N/50mm]	300 / 350	-30	+30	
after ageing		300 / 350	-30	+30	
elongation with maximum tensile strength lengthwise / across	[%]	50 / 70	-10	+10	
after ageing		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

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.

CE

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

Dr. Andreas Huther
Managing Director
Ueberlingen 01.07.2018