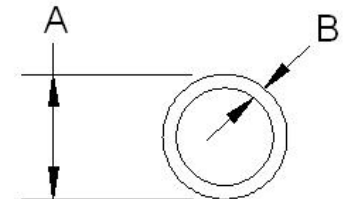


PRODUCT SUBMITTAL 101

Product: RAUPEX[®] UV Shield Pipe (Red/White/Blue)
Date: 31 March 2019 (supersedes 01 January 2017)



Article No.	Nominal Size in	Average OD A in (mm)	Minimum Wall Thickness B in (mm)	Weight lb/ft (kg/m)	Capacity Gal/ft (l/m)
235331	3/8	0.500 (12.70)	0.070 (1.78)	0.04 (0.07)	0.0050 (0.0624)
235351	1/2	0.625 (15.88)	0.070 (1.78)	0.06 (0.08)	0.0098 (0.1222)
235361	5/8	0.750 (19.05)	0.083 (2.12)	0.08 (0.11)	0.0134 (0.1671)
235371*	3/4	0.875 (22.22)	0.097 (2.47)	0.10 (0.15)	0.0189 (0.2356)
235381*	1	1.125 (28.58)	0.125 (3.18)	0.17 (0.26)	0.0316 (0.3939)
132571*	1 1/4	1.375 (34.92)	0.153 (3.88)	0.25 (0.37)	0.0467 (0.5827)
132581*	1 1/2	1.625 (41.28)	0.181 (4.59)	0.35 (0.52)	0.0650 (0.8118)
132591*	2	2.125 (53.98)	0.236 (6.00)	0.60 (0.90)	0.1114 (1.3906)

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TECHNICAL DESCRIPTION

Specification	English	SI	Standard	Specification	English	SI	Standard
Minimum Density	58 lb/ft ³	926 kg/m ³	ASTM F876	Tensile Strength	4194-4355 psi @ 68°F	26-30 N/mm ² @ 20°C	--
Min. Degree of Crosslinking	70%	70%	ASTM F876		2610-2900 psi @ 176°F per ASTM D638	18-20 N/mm ² @ 80°C per ASTM D638	
Max. Thermal Conductivity	2.84 Btu in/(ft ² °F hr)	0.41 W/(m°C)	DIN 16892	IZOD Impact Resistance	No Break	No Break	--
Coefficient of Linear Expansion	9.33 x 10 ⁻⁴ in/ft°F @ 68°F	0.14 mm/(m°C) @ 20°C	Mean @ 20-70°C per DIN 16892	Roughness	e=0.00028 in	e=0.007 mm	--
	1.33 x 10 ⁻³ in/ft°F @ 212°F	0.2 mm/(m°C) @ 100°C		Temperature Working Range	-40 to 200°F	-40 to 93°C	--
Modulus of Elasticity	87,000-130,500 psi @ 68°F	600-900 N/mm ² @ 20°C	Minimum @ 20°C per DIN 16892	Max. Short-term Exposure	150 psig @ 210°F (48 hr)	1035 kPa @ 99°C (48 hr)	ASTM F876
	43,500-58,000 psi @ 176°F	300-400 N/mm ² @ 80°C		UV Resistance	See TB218		ASTM F2657

FUNCTIONAL DESCRIPTION

RAUPEX UV Shield pipe is produced using the high-pressure peroxide method for crosslinked polyethylene (PEXa) in accordance with ASTM F876, F877, CSA B137.5 and PPI TR-3, and is certified to NSF 14/61 standards. RAUPEX UV Shield pipe also meets the requirements of ASTM F2023 for chlorine resistance. RAUPEX pipe is manufactured by REHAU using a quality management system which has been certified to the latest version of ISO 9001.

RAUPEX UV Shield pipe is specifically designed for use with the EVERLOC+® compression-sleeve system certified to ASTM F877. See Technical Bulletin 261 for other compatible PEX fitting systems. .

Use of RAUPEX UV Shield pipe in heating systems requires corrosion protection and/or isolation by using a heat exchanger or non-ferrous components throughout the system.

* RAUPEX White UV Shield pipes in these sizes are listed for use in residential fire sprinkler systems. RAUPEX Red and Blue UV Shield pipes are not certified for fire sprinkler systems. RAUPEX pipes may not be used for fire sprinkler applications other than those defined in NFPA 13D or IRC P2904.

LONG TERM STRENGTH

The maximum temperature and pressure ratings of the RAUPEX pipe are in accordance to ASTM F876, CSA B137.5 and PPI TR-3. The designer shall determine the actual conditions and apply the appropriate and additional design factors as required for any particular project. The temperature and pressure ratings apply to the application of RAUPEX pipe for conveying heating and cooling water at the 2.0 safety factor on allowable working pressure according to ASTM and CSA. According to the REHAU *PEXa Limited Warranty*, the RAUPEX pipe warranty period of 25 years is for operating conditions at or below 180°F (82.2°C) in permitted applications when the handling, use, installation and maintenance continually complies with all REHAU technical guidelines.

RAUPEX SDR9

maximum pressures and temperatures

design factors

160 psi @ 73.4°F (1055 kPa @ 23°C)	0.50 (per ASTM F876, CSA B137.5)
130 psi @ 120°F (900 kPa @ 49°C)	0.50 (per ASTM F876, CSA B137.5)
100 psi @ 180°F (690 kPa @ 82.2°C)	0.50 (per ASTM F876, CSA B137.5)
80 psi @ 200°F (550 kPa @ 93.3°C)*	0.50 (per ASTM F876, CSA B137.5)

* REHAU defines Elevated Temperature Applications as those with operating conditions greater than 180°F (82.2°C). When REHAU PEXa pipes are planned to be operated in Elevated Temperature Applications, contact REHAU Engineering to verify your project conditions comply with the REHAU *PEXa Limited Warranty* in accordance to REHAU *Technical Bulletin TB230 Elevated Temperature Applications*.