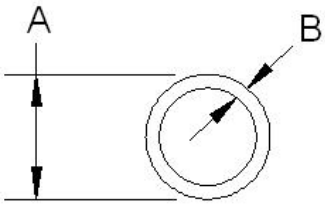
REHAU®
Unlimited Polymer Solutions

PRODUCT SUBMITTAL 101

Product: RAUPEX® UV Shield Pipe (Red/White/Blue)
Date: January 1, 2017 (supersedes 15 April 2015)



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)

TECHNICAL DESCRIPTION

Specification	English	SI	Standard
Minimum Density	58 lb/ft³	926 kg/m³	ASTM F876
Min. Degree of Crosslinking	70%	70%	ASTM F876
Max. Thermal Conductivity	2.84 Btu in/(ft²°F hr)	0.41 W/(m°K)	DIN 16892
Coefficient of Linear Expansion	9.33 x 10-4 in/ft°F @ 68°F 1.33 x 10-3 in/ft°F @ 212°F	0.14 mm/(m°C) @ 20°C 0.2 mm/(m°C) @ 100°C	Mean @ 20-70°C per DIN 16892
Modulus of Elasticity	87,000-130,500 psi @ 68°F 43,500-58,000 psi @176°F	600-900 N/mm² @ 20°C 300-400 N/mm² @ 80°C	Minimum @ 20°C per DIN 16892

Specification	English	SI	Standard
Tensile Strength	4194-4355 psi @ 68°F 2610-2900 psi @ 176°F per ASTM D638	26-30 N/mm² @ 20°C 18-20 N/mm² @ 80°C per ASTM D638	--
IZOD Impact Resistance	No Break	No Break	--
Roughness	e=0.00028 in	e=0.007 mm	--
Temperature Working Range	-40 to 200°F	-40 to 93°C	--
Max. Short-term Exposure	150 psig @ 210°F (48 hr)	1035 kPa @ 99°C (48 hr)	ASTM F876
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.

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)
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.*