

August 1, 2018

RELIANCE WORLDWIDE CORPORATION
RICH HOULE
2300 DEFOOR HILLS ROAD NW
ATLANTA GA 30318

Re: Description: PEX PIPE, ALTERNATE PLUMBING SYSTEM
Manufacturer: RELIANCE WORLDWIDE CORPORATION
Product Name: (trans id 3082685) SHARKBITE PEX WATER DISTRIBUTION SYSTEM
Model Number(s): ½ - 2"
Product File No: 20180091

The specifications and/or plans for this plumbing product have been reviewed and determined to be in compliance with chapters SPS 382 through 384, Wisconsin Administrative Code, and Chapters 145 and 160, Wisconsin Statutes.

The Department hereby issues an alternate approval to s. SPS 382.40 (7) (e) based on the Wisconsin Statutes and the Wisconsin Administrative Code. This approval is valid until the end of August 2023.

This alternate approval is contingent upon compliance with the following stipulation(s):

- This pipe may be used for the following purposes:
 1. water services and private water mains; and
 2. water distribution
- The maximum water velocity for this piping system is 10 fps and sized in accordance with the attached table.
- For the duration of this approval the manufacturer shall maintain conformance of this piping material to ASTM F876 and/or F877.
- For the duration of this approval the manufacturer shall maintain conformance of the compression fittings (i.e. "Sharkbite" fittings) to ASSE 1061.
- All plumbing fixtures, appliances and appurtenances with ¾" or larger inlet openings and with solenoid actuated quick closing valves shall be provided with water hammer arrestors. Water hammer arrestors shall be installed in the fixture supplies serving the fixtures, appliances or appurtenances. Water hammer arrestors shall be accessible.
- Water hammer arrestors shall conform to ASME A112.26.1 or ASSE 1010.

The department is in no way endorsing this product or any advertising and is not responsible for any situation which may result from its use.

Sincerely,

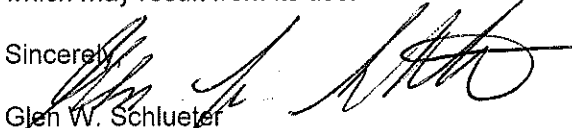

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Table 382.40-9 (Alternate)
Maximum Allowable Load for RWC SharkBite PEX Tubing
ASTM F876 and F877; (C=163)

Pressure Loss Due to Friction (in lbs. per 100 ft. of length)	Pipe Diameter (In Inches)																	
	1/2"			3/4"			1"			1-1/4"			1-1/2"			2"		
	GPM	WSFU		GPM	WSFU		GPM	WSFU		GPM	WSFU		GPM	WSFU		GPM	WSFU	
		FM	FT		FM	FT		FM	FT		FM	FT		FM	FT		FM	FT
0.5	0.5	-	0.5	1.0	-	1.0	2.5	-	2.5	4.0	-	4.0	6.5	-	8.0	13.5	4.5	19.0
1	0.5	-	0.5	1.5	-	1.5	3.5	-	3.5	6.0	-	7.0	9.5	-	12.5	19.5	6.5	20.0
2	1.0	-	1.0	2.5	-	2.5	5.0	-	6.0	9.0	-	11.5	14.0	4.5	20.0	28.5	21.5	51.0
3	1.0	-	1.0	3.0	-	3.0	6.5	-	8.0	11.0	4.0	15.0	17.5	5.5	25.5	36.0	22.0	73.0
4	1.5	-	1.5	4.0	-	4.0	7.5	-	9.5	13.0	4.5	18.0	20.5	6.5	31.0	42.0	33.0	100.0
5	1.5	-	1.5	4.5	-	5.0	8.5	-	10.5	15.0	5.0	21.5	23.0	7.5	37.0	48.0	44.0	120.0
6	2.0	-	2.0	5.0	-	6.0	9.5	-	12.5	16.5	5.5	24.0	25.5	8.5	43.5	52.5	55.0	138.0
7	2.0	-	2.0	5.5	-	6.5	10.5	4.0	14.0	18.0	6.0	26.5	28.0	11.0	50.0	57.5	68.5	162.5
8	2.0	-	2.0	5.5	-	6.5	11.0	4.0	15.0	19.0	6.0	28.0	30.0	13.5	52.5	62.0	80.0	185.0
9	2.5	-	2.5	6.0	-	7.0	12.0	4.0	16.5	20.5	6.5	31.0	32.0	16.0	54.0	NP		
10	2.5	-	2.5	6.5	-	8.0	12.5	4.5	17.5	21.5	7.0	34.0	34.0	18.5	66.5			
11	2.5	-	2.5	7.0	-	9.0	13.5	4.5	19.0	23.0	7.5	37.0	36.0	22.0	73.0			
12	2.5	-	2.5	7.0	-	9.0	14.0	4.5	20.0	24.0	8.0	40.0	37.5	25.0	78.0			
13	3.0	-	3.0	7.5	-	9.5	14.5	4.5	20.5	25.0	8.5	42.0	NP					
14	3.0	-	3.0	8.0	-	10.0	15.0	5.0	21.5	26.0	9.0	45.0						
15	3.0	-	3.0	8.0	-	10.0	16.0	5.0	23.0	NP								
16	3.0	-	3.0	8.5	-	10.5	16.5	5.5	24.0									
17	3.5	-	3.5	8.5	-	10.5	17.0	5.5	24.5									
18	3.5	-	3.5	9.0	-	11.5	17.5	5.5	25.5									
19	3.5	-	3.5	9.0	-	11.5	NP											
20	3.5	-	3.5	9.5	-	12.5												
21	4.0	-	4.0	9.5	-	12.5												
22	4.0	-	4.0	10.0	-	13.0												
23	4.0	-	4.0	10.0	-	13.0												
24	4.0	-	4.0	10.5	-	14.0												
25	4.0	-	4.0	10.5	-	14.0												
26	4.5	-	5.0	NP														
27	4.5	-	5.0															
28	4.5	-	5.0															
29	4.5	-	5.0															
30	4.5	-	5.0															
31	4.5	-	5.0															
32	4.5	-	5.0															
33	5.0	-	6.0															
34	5.0	-	6.0															
35	5.0	-	6.0															
36	5.0	-	6.0															
37	5.0	-	6.0															
38	5.0	-	6.0															
39	5.5	-	6.5															
40	NP																	

Notes: WSFU means water supply fixture units
GPM means gallons per minute
FM means predominantly flushometer type water closets or syphon jet urinals
FT means predominantly flush tank type water closets or wash down urinals
NP means not permitted, velocities exceed 10 feet per second
For using this table, round the calculated pressure loss due to friction to the next higher number shown
Comm 82.40 (7) (f) and (g) specifies minimum sizes for water distribution piping,