

# PermaTherm 427 Pipe Insulation for Ammonia Refrigeration Indoor Use

<b>Ambient Temperature</b> 90° Fahrenheit	<b>Ambient Relative Humidity</b> 80%	<b>Dew Point</b> 83° Fahrenheit	<b>Wind Velocity</b> 0 MPH
Pipe is in horizontal position		Table based on ASTM C 680-95	

NPS Pipe Size Inches	Service Temperature Fahrenheit							
	-110	-90	-70	-50	-20	0	20	40
0.5	2.5	2.5	2.5	2	2	1.5	1.5	1
0.75	2.5	2.5	2.5	2.5	2.5	2	1.5	1.5
1	3	3	2.5	2.5	2.5	2	1.5	1.5
1.25	3	3	3	2.5	2.5	2	1.5	1.5
1.5	3	3	3	2.5	2.5	2	1.5	1.5
2	3.5	3	3	3	2.5	2	1.5	1.5
2.5	3.5	3.5	3	3	3	2.5	2	1.5
3	3.5	3.5	3.5	3	3	2.5	2	1.5
4	4	3.5	3.5	3	3	2.5	2	1.5
5	4	4	3.5	3.5	3	3	2	1.5
6	4	4	3.5	3.5	3	3	2	1.5
8	4	4	4	3.5	3	3	2	1.5
10	4.5	4.5	4	3.5	3	3	2	1.5
12	4.5	4.5	4	4	3	3	2	1.5
14	4.5	4.5	4.5	4	3.5	3	2	1.5
16	5	5	4.5	4.5	4	3	2	1.5
18	5	5	4.5	4.5	4	3	2	1.5
20	5	5	5	4.5	4.5	3.5	2.5	1.5
22	5.5	5.5	5	5	5	3.5	2.5	2
24	6	6	5.5	5	5	3.5	2.5	2

The suggested thicknesses assume proper installation. Tables are to be used for guidelines only. Consult a design engineer familiar with this application for proper system design specifications.

Blue Indicates Double Layer