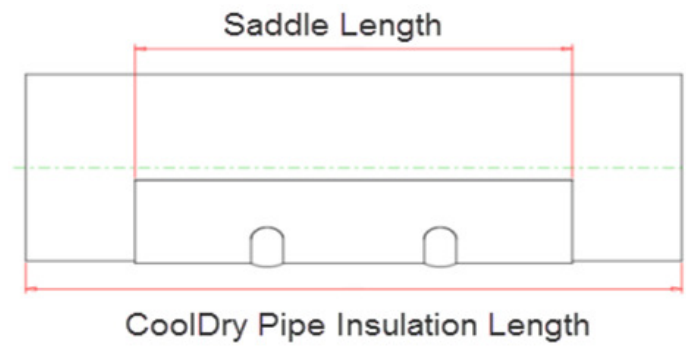


(Inner Diameter of Insulation for NPS)



For CoolDry Insulated Saddle in Clevis or Band Type Hangers				
Nominal Pipe Size	Saddle Length	Span Length Between Saddles	"Design" Compressive Strength 3X Safety Factor	Recommended Grade/Density of Phenolic Foam Pipe Insulation
		(feet)	(psi)	(lb./ft ³)
1/2"	6"	7	4.4	3.75
3/4"	6"	7	4.7	3.75
1"	6"	7	5.7	3.75
1-1/4"	6"	7	6.2	3.75
1-1/2"	6"	7	6.7	3.75
2"	6"	10	10.7	3.75
2-1/2"	6"	11	14.9	3.75
3"	6"	12	18.2	3.75
3-1/2"	6"	14	23.1	3.75
4"	9"	14	16.5	3.75
5"	9"	16	21.7	3.75
6"	9"	16	24.6	3.75
8"	9"	16	30	3.75
10"	9"	16	35.7	3.75
12"	12"	16	30.9	5.0
14"	12"	16	33.6	5.0
16"	12"	16	38.3	5.0
18"	12"	16	43	5.0
20"	18"	16	31.2	5.0
24"	18"	16	36.8	5.0
30"	18"	20	52.6	5.0

Specified conditions:

- Schedule 40 pipe, filled with water (water density based on 62.36 lb./ ft³.)
- Pipe Insulation used on non-support locations is 1" thick, 3 lb./ft.³ density glass fiber.
- Safety factor = 3X
- The Pipe Insulation used at the pipe support location is a High Density Phenolic Foam.
- Concentrated loads such as valves and flanges must be added if applicable. These are design responsibilities and should be thoroughly accounted for by a qualified engineer.
- Contact Buckaroos, Inc. for CoolDry applications assistance outside the scope of the above "Design" reference values.

These calculations are fairly simplistic and are not meant to replace proper system design by a qualified engineer. These calculations only account for the specified dead load of the pipe system. They do not address factors such as seismic restraint, wind load, forces due to expansion/contraction, axial loads, clamping forces, etc. These calculations assume that the forces are reasonably evenly dispersed across neighboring pipe supports and that the forces at each individual support are evenly exerted over the area of insulation between the shield/saddle and the pipe (up to a max of 120° of pipe circumference).

Please visit the Engineering Guide Specification under the Guide Spec tab.