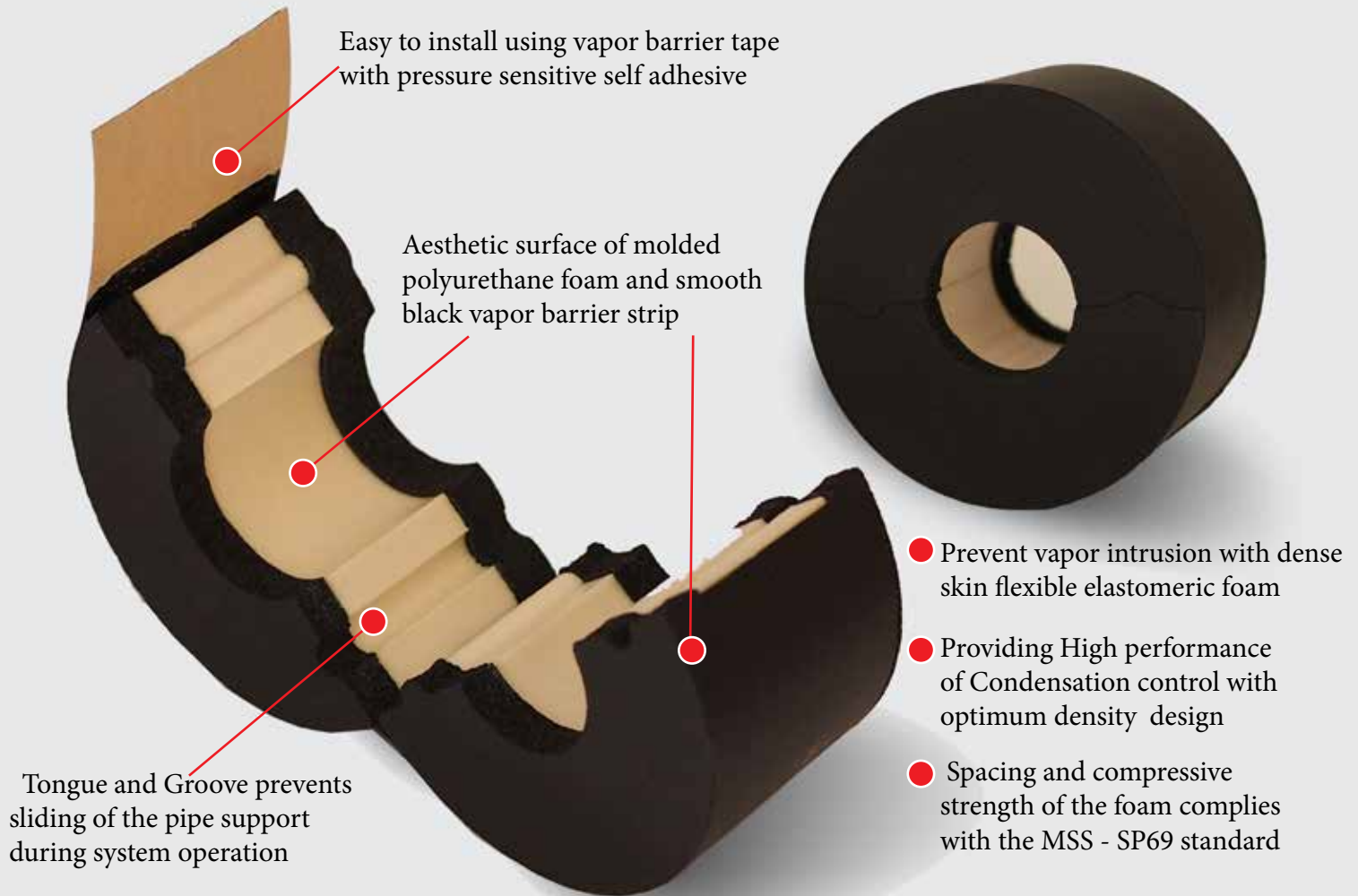


# ASA LOC-O

## Round type Pipe Support Insulation



### Composite Moulded Polyurethane and Flexible Elastomeric Foam as Pipe Support to prevent thermal bridge and total condensation control

In the past, simple wood block or dowel inserts were normally used with pipe insulation protection shields to support insulation at hanger locations, but things have changed. With increasing environmental concerns, like mold and mildew problems, and a greater emphasis on green building, engineers are taking a closer look at their support systems to choose the most efficient. In addition, newer specifications call for colder piping systems for chilled water and other cold lines, which has created the need for a wider array of pipe insulation support systems than currently offered by manufacturers.

**ASA LOC-O** - the innovation pipe insulation support, which engineered designed to meet MSS Standard SP-69 (Manufacturers standardization society of the Valve and Fitting Industry, Inc.). Each set of ASA LOC-O is preformed to fit the O.D. of the pipe.

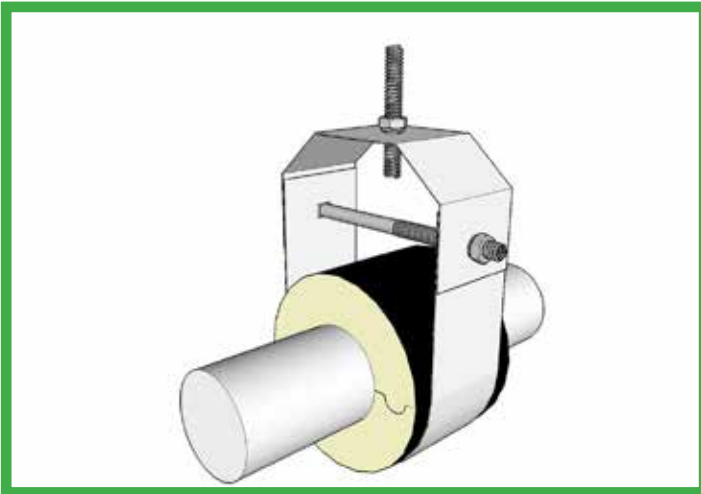
High density and compressive strength of conventional pipe support insulation does not necessarily deliver the best condensation control. High density and compressive strength are also prone to crack at the load bearing point. ASA LOC-O density is designed to withstand the weight of pipe, valves, flanges and fluid media inside without compressing the ASA LOC-O's thickness. ASA LOC-O's compressive strength is engineered to meet the recommended spacing between supports and extend the life expectancy of the system.

Physical property	Technical Data	Standard Testing
Density	100 - 120 Kg/m <sup>3</sup> 6.3 - 5.5 lb/ft <sup>3</sup>	-
Recommend pipe size	Up to 24 inch (DN 600)	-
Thermal Conductivity	0.025 W/(m.K) 0.17 Btu-in/hr.ft <sup>2</sup> .°F	ASTM C518
Service Temperature	Max 248°F (120 °C) Min -328°F (-200°C)	-
Compressive Strength	Perpendicular 20 Kg/cm <sup>2</sup>	ASTM D1621
Water Absorption by Wt.	< 1%	ASTM D209
Water Vapor Permeability	Polyurethane : 2 Perm - inch Elastomeric Foam : 0.1 Perm - inch	ASTM E96
Close Cell content	Min 92%	-
Flammability	Class V-0 Self Extinguishing	UL 94 ASTM D635
Environmental Aspect	Non CFC / HCFC material	-

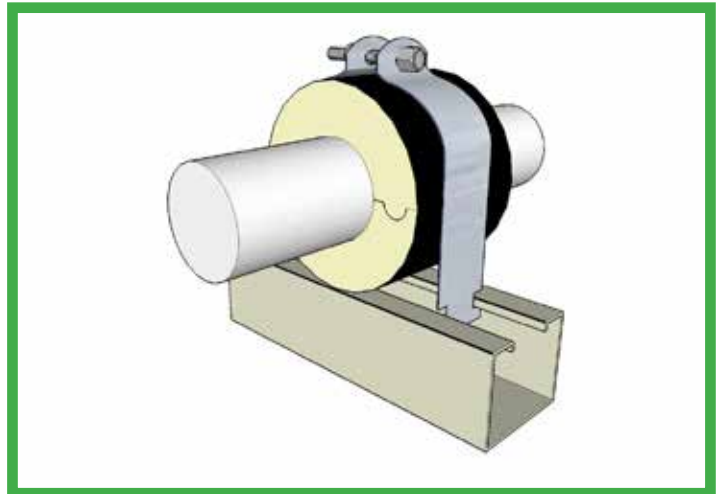
Physical Property	ASA LOC-O (Moulded foam)	Wood block	Phenolic foam	PVC pipe half cut	PU (Sliced foam)
<b>Material</b>	Closed Cell PU foam	Hard Wood	Phenolic foam	PVC injection	Semi open cell PU foam
<b>Condensation control</b>	Very good	Poor	Poor	Poor	Medium
<b>Density</b>	100 - 120 Kg/m <sup>3</sup>	400 - 800 Kg/m <sup>3</sup>	80 - 160 Kg/m <sup>3</sup>	1400 Kg/m <sup>3</sup>	150 - 250 Kg/m <sup>3</sup>
<b>Thermal Conductivity</b>	0.021 W/m.K	0.17 W/m.K	0.6 W/m.K	0.15 W/m.K	0.28 W/m.K
<b>Compressive Strength</b>	15 - 20 Kg/cm <sup>2</sup>	100 - 1000 Kg/cm <sup>2</sup>	Easy to crack	550 - 890 Kg/cm <sup>2</sup>	Too stiff and more likely to crack
<b>Fire performance</b>	Self extinguish	Flamamable	Self extinguish	Melt & Drip	Self Extinguish
<b>Service Temp</b>	-200 to 120°C	0 to 120°C	-180 to 125°C	< 60°C	-200 to 80°C
<b>Installation</b>	Easy & Fast	Difficult & Slow	Easy & Fast	Difficult & Slow	Easy & Fast
<b>Price</b>	Economical	High	High	Low	Medium

Steel	Copper	ASA LOC-O	Length	Thickness, mm (inch)					
In. (mm)	In. (mm)	I.D. (mm)	mm	13 mm (1/2")	19 mm (3/4")	25 mm (1")	32 mm (1-1/4")	38 mm (1-1/2")	50 mm (2")
-	3/8" (10)	10	50	OL-13x010S	OL-19x010S	-	-	-	-
-	1/2" (12)	12	50	OL-13x012S	OL-19x012S	-	-	-	-
-	5/8" (15)	15	50	OL-13x015S	OL-19x015S	OL-25x015S	-	-	-
-	3/4" (20)	20	50	OL-13x020S	OL-19x020S	OL-25x020S	OL-32x020S	OL-38x020S	OL-50x020S
1/2" (15)	7/8" (22)	22	50	OL-13x022S	OL-19x022S	OL-25x022S	OL-32x022S	OL-38x022S	OL-50x022S
3/4" (20)	1-1/8" (28)	28	50	OL-13x028S	OL-19x028S	OL-25x028S	OL-32x028S	OL-38x028S	OL-50x028S
1" (25)	1-3/8" (35)	35	50	OL-13x035S	OL-19x035S	OL-25x035S	OL-32x035S	OL-38x035S	OL-50x035S
1 1/4" (32)	1-5/8" (42)	42	50	OL-13x042S	OL-19x042S	OL-25x042S	OL-32x042S	OL-38x042S	OL-50x042S
1 1/2" (40)	-	48	50	OL-13x048S	OL-19x048S	OL-25x048S	OL-32x048S	OL-38x048S	OL-50x048S
-	2-1/8" (54)	54	50	OL-13x054S	OL-19x054S	OL-25x054S	OL-32x054S	OL-38x054S	OL-50x054S
2" (50)	-	60	50	OL-13x060S	OL-19x060S	OL-25x060S	OL-32x060S	OL-38x060S	OL-50x060S
-	2-5/8" (67)	67	50	OL-13x067S	OL-19x067S	OL-25x067S	OL-32x067S	OL-38x067S	OL-50x067S
-	-	73	50	OL-13x073S	OL-19x073S	OL-25x073S	OL-32x073S	OL-38x073S	OL-50x073S
2 1/2" (65)	-	76	50	OL-13x073S	OL-19x073S	OL-25x073S	OL-32x073S	OL-38x073S	OL-50x073S
3" (80)	-	89	50	OL-13x089S	OL-19x089S	OL-25x089S	OL-32x089S	OL-38x089S	OL-50x089S
4" (100)	-	114	50	OL-13x114S	OL-19x114S	OL-25x114S	OL-32x114S	OL-38x114S	OL-50x114S
5" (125)	-	140	50	-	OL-19x140S	OL-25x140S	OL-32x140S	OL-38x140S	OL-50x140S
6" (150)	-	168	50	-	OL-19x168S	OL-25x168S	OL-32x168S	OL-38x168S	OL-50x168S
8" (200)	-	219	75	-	OL-19x219M	OL-25x219M	OL-32x219M	OL-38x219M	OL-50x219M
10" (250)	-	273	75	-	OL-19x273M	OL-25x273M	OL-32x273M	OL-38x273M	OL-50x273M
12" (300)	-	324	75	-	OL-19x324M	OL-25x324M	OL-32x324M	OL-38x324M	OL-50x324M
14" (350)	-	355	75	-	OL-19x355M	OL-25x355M	OL-32x355M	OL-38x355M	OL-50x355M
16" (400)	-	406	75	-	OL-19x406M	OL-25x406M	OL-32x406M	OL-38x406M	OL-50x406M
18" (457)	-	457	100	-	OL-19x457L	OL-25x457L	OL-32x457L	OL-38x457L	OL-50x457L
20" (500)	-	510	100	-	OL-19x510L	OL-25x510L	OL-32x510L	OL-38x510L	OL-50x510L
24" (600)	-	609	100	-	-	-	OL-32x609L	OL-38x609L	OL-50x609L

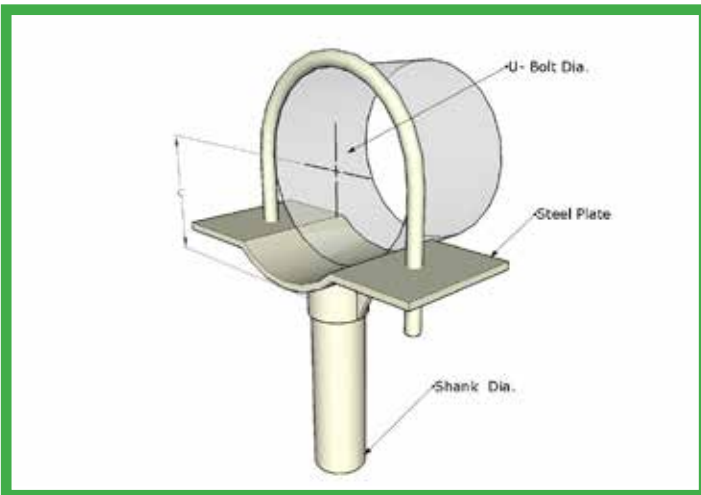
NPS	DN	ASA LOC-O I.D.	Wt. per ft. Empty pipe"		Wt. per ft. Fully Flooded"		Hanger spacing , ft/m acc. To MSS-SP-69					
							Standard steel pipe				Copper Tube	
							Water		Steam		Water	
in	mm	mm	lb	Kg	lb	Kg	ft	m	ft	m	ft	m.
1/2"	15	22	0.85	0.39	0.98	0.44	7	2	8	2	5	2
3/4"	20	28	1.13	0.51	1.36	0.62	7	2	9	3	5	2
1"	25	35	1.68	0.76	2.05	0.93	7	2	9	3	6	2
1-1/4"	32	42	2.27	1.03	2.92	1.32	7	2	9	3	6	2
1-1/2"	40	48	2.72	1.23	3.6	1.63	9	3	12	4	8	2
2"	50	60	3.65	1.66	5.11	2.32	10	3	13	4	8	2
2-1/2"	65	76	5.79	2.63	7.87	3.57	11	3	14	4	9	3
3"	80	89	7.58	3.44	10.8	4.90	12	4	15	5	10	3
4"	100	114	10.8	4.90	16.3	7.39	14	4	17	5	12	4
5"	125	140	14.6	6.62	23.3	10.57	16	5	19	6	13	4
6"	150	168	18.9	8.57	31.5	14.29	17	5	21	6	14	4
8"	200	219	28.6	12.97	50.3	22.82	19	6	24	7	16	5
10"	250	273	40.5	18.37	74.7	33.88	20	6	24	7	18	5
12"	300	324	53.5	24.27	102.2	46.36	20	6	24	7	19	6
14"	350	355	63.4	28.76	122.2	55.43	20	6	24	7	-	-
16"	400	406	82.8	37.56	159.5	72.35	20	6	24	7	-	-
18"	450	457	104.7	47.49	201.8	91.53	20	6	24	7	-	-
20"	500	510	123.1	55.84	243.9	110.63	20	6	24	7	-	-



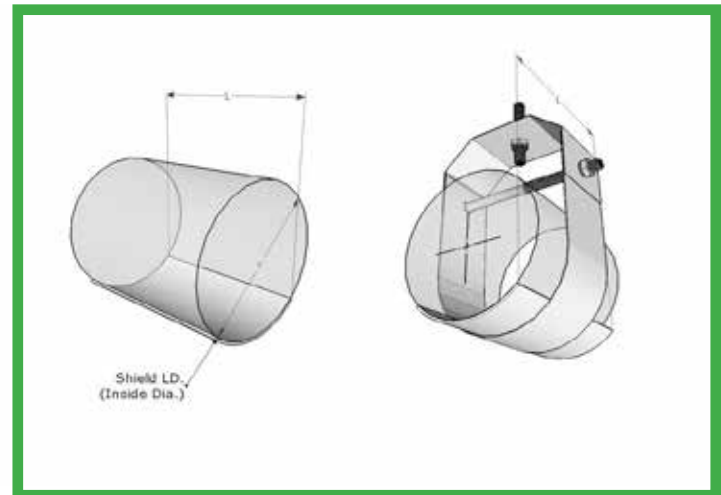
WITH CLEVIS PIPE HANGER



WITH PIPE SUPPORT ELEMENT



WITH U-BOLT AND PIPE SUPPORT



WITH PIPE SHIELD