PIPE INSULATION

Expanded polystyrene is widely used for the application of insulating chilled water pipe lines, Air conditioning ducts, hot water pipes etc.

Ori-Pipes sections are manufactured as the semicircular shells

Ori-Pipe sections are available for all standard pipe sizes.

Based on Customer's specification, pipe sections are produced in different grades ranging from 16Kg/m^3 density to 35Kg/m^3 and are available with aluminium facing.

Depending on the specific application and requirement, the Grade and Thickness of Poystyrene sections are selected. Standard wall thickness available are 25mm,40mm, 50mm and 75mm.

Our sophisticated, modern manufacturing facilities at Rusayl, include computer-programmed cutting system, that enables to produce sections of any size and thickness.

Pipe Size Dia (Steel Pipe)		Insulation Section ID	Thickness of Insulation Section	Grad/Density
Inch	Mm	MM	MM	
½ "	15	18	Available in	Available in
¾ "	20	30		
1"	25	36	25	SD/16KG/M^3
1 ¼ "	32	44		
1 ½ "	40	50	40	HD/20KG/M^3
2"	50	62		
2 ½ "	65	78	50	EHD/25KG/M^3
3"	75	91		
4"	100	116	75	UHD/30KG/M^3
5"	125	145		
6"	150	170		SHD/35KG/M^3
8"	200	220		
10"	250	275		

Pipe Size Dia (copper Pipe)	Insulation section ID	Thickness of Insulation Section

mm	*mm*	*mm*
12	14	25.50
15	17	25.50
22	24	25.50
28	30	25.50
35	37	25.50
42	44	25.50
54	56	25.50
76.10	78	25.50
108	110	25.50

Minimum Insulation Thickness to prevent condensation		
Pipe temp ^{o}C	**Insulation thickness when outdoor conditions are mm**	
	20^{o}C and 70% RH	**20^{o}C and 80% RH**
0	45	50
-10	50	55
-20	60	65
-30	70	75
-40	85	90

Refrigeration pipelines are insulated mainly for two reasons

1. Reduction in heat gain from the environment
2. To control the formation condensation at the surface of the pipe carrying cold fluid. The design of the insulation thickness for the refrigerator pipes depends on various factors like pipe line fluid temperature, DPT of the surrounding air, heat transfer rate.