

# Gulf-O-Flex Insulation Tube & Coil







#### **GULF-O-FLEX INSULATION TUBE**

Flexible Closed Cell Elastomeric Pipe Insulation. The Product you can rely on .

#### DESCRIPTION

Gulf-O-Flex Tube insulation is an environmentally friendly CFC free , flexible elastomeric thermal insulation. With smooth shark skin and is available in unslit form in wall Thickness of 1/4 " , 3/8 " , 1/2 ", 3/4 ", 1 ", 1-1/4 in sizes ranging from 1/4 " ID to 4-3/8" Iron Pipe size. Gulf-O-Flex Tube is non porous and resists mildew growth.

#### **APPLICATION**

Gulf-O-Flex is used to retard heat gain and prevent Condensation or frost formation on refrigerant lines. Cold water plumbing and chilled water systems. It Also retard heat loss for hot water plumbing, liquid Heating , dual temperature piping and many solar systems.

Gulf-O-Flex is recommended for application Ranging from -40°C to +120°C. The expanded closed cell structure makes an efficient insulator and an Effective moisture vapour retarder.

Gulf-O-Flex has a very tough Shark Skin which with Stand tearing rough handling and severe environmental conditions. And yet is quite flexible for easy installation. Gulf-O-Flex has superior cold weather flexibility. Gulf-O-Flex can be used with heat tracing/heat tapes .

Cut tubular Sections and cover, flanges, etc. from our Gulf-O-Flex Sheet.

#### **INSTALLATION**

With a factory applied coating of talc on the smooth inner surface. Gulf-O-Flex slides easily over pipes or tubing for quick installation. When applied to existing lines, Tubing is slit lengthwise and snapped in to place. (Slitting can be done on the job with a sharp knife. All seams and butt joints should be sealed with an approved contact adhesive (Gulf-O-Flex Glue is available on request) making sure both surfaces to be joined are coated with adhesive. Fittings are fabricated from Miter.

#### FLAME AND SMOKE RATING.

Gulf-O-Flex Tube insulation has a flame spread rating of 25 or less and a smoke development rating of 50 or less as tested by the third party testing lab . (ASTM E 84 Method of testing surface burning characteristics of building materials complied.) Gulf-O-Flex is acceptable for use in duct/planning application.

#### OUT DOOR APPLICATIONS

Gulf-O-Flex Tube insulation is made from a UV resistant elastomeric blend, for moderate UV exposure applications, no additional protection is needed. However, for severe UV exposure applications (rooftop application) or where optimum performance is required, an approved UV protected coating or appropriate jacketing or cladding should be used. For best appearance two coats are recommended.

#### UNDERGROUND

For buried line above the water table use a clean fill such as sand (3"-5" layer) to protect Gulf-O-Flex before back filling. It is recommended that materials to be buried are properly sealed at all seams and butt joints with an approved contact adhesive. For optimum performance, the lines should be encased in a conduit to protect them from problems associated with ground water.

#### RESISTANCE TO MOISTURE VAPOUR FLOW.

The closed-cell structure and unique formulation of Gulf-O-Flex effectively retards the flow of moisture vapour and is considered a low transmittance vapour retarded. For most applications, Gulf-O-Flex needs no additional protection. Additional vapour barrier protection may be necessary for Gulf-O-Flex when installed on low temperature surfaces that are exposed to continuous high humidity.

#### SPECIFICATION COMPLIANCE.

- ASTM C 518
- ASTM D 1056-00-2C1
- CLASS 0

(Fire propagation test according to

BS 476 part 6 & 7 complies with the requirements of UK.)

• CLASS 1

(Fire propagation test according to

- BS 476 part 6 & 7 complies with the requirements of UK.)
- ASTM E-84 (25 / 50)

## **Product Data**

	Physical Properties			
1	Cell Structure	Closed		
2	Density Gms / Cm <sup>3</sup>	0.050 - 0.070 Gms / cm <sup>3</sup>	BS 476 Part 6 & 7 ASTM D 3575- 91	
3	Thermal Conductivity K Value at 40C mean Temperature	0.0391 w/m - K	ASTM C518	BS 874 1986
4	Temperature limit °C	-40 °C to +120 °C		
5	Thermal Stability % Shrinkage	2.54 (7 days at 95 °C)	ASTM D 3575-91	
6	Water Absorption	2.98	ASTM D 3575-91	
7	Water vapour Permeability perm/Max	0.19 Perm - in	ASTM E 96-95	ASTM E 96-95
8	Resistance to Ozone	Excellent	ASTM D 1149	
9	Flammability	Self Extinguishing	ASTM D 635-91	
10	Fire Rating	Class 0, Class 1 25 / 50	BS 476 Part 6 & 7 ASTM E-84	
11	Average time of Burning	Less then 4 Sec	ASTM D 1149	
12	Average extend of Burning	15min		
13	Flexibility	Excellent	ASTM D 1056-85	
14	Resistance to Weather & Ultra Violet Rays	Very Good	ASTM G 53-96	
15	Resistance to Chemicals	Very Good		
16	Odour	Negligible	SAEJ 1351	
17	Mildew resistance	No Fungal Growth	ASTM G 21-80	
18	Copper Corrosion	Negligible	ASTM C 665-94	

## Thickness Recommendations to control Condensation

THICKNESS RECOMMENDATIONS									
PIPE SIZE USED	LINET	EMP	LINE TEMP		LINE TEMP		LINE T	MP	
	50°F	10°C	35°F	2°C	0°F	- 18°C	- 20°F	- 29°C	
NORMAL CONDITIONS ( Max 85 Deg.F,29Deg.C -70% RH )									
3/8" l.D.thru 1-3/8" IPS	3/8"		1/2"		3/4"		1"		
Over 1-3/8"thru 3"IPS	3/8"		1/2"		1"		1"		
Over 3"IPS thru 4"IPS	1/2"		1/2"		1"		1-1/4"		
Over 4" IPS	1/2"		3/4"		1"		1-1/4"		
MILD CONDITIONS ( Max 80 Deg.F, 26Deg.C -50%RH ) 3/8" I.D. thru 2-1/8" IPS	3/8"		3/8"		1/2"		1/2"		
Over2-1/8'thru 3"IPS	3/8"		3/8"		1/2"		3/4"		
Over 3"IPS thru 4"IPS	1/2"		1/2"		3/4"		3/4"		
Over 4" IPS	1/2"	1/2"		1/2"		3/4"			
SEVERE CONDITOINS ( Max.90 Deg.F, 32 Deg.C80%RH) 3/8" l.D. thru 1-1/4" IPS	3/4"		3/4"		1-1/4	n	1-1/4"		
Over 1-1/4" ID thru 4" IPS	3/4"		1"		1-1/2	n	1-1/2"		
Over 4" IPS	3/4"		1-1/4"		1-3/4	n	2″		





# Pipe "R" Values per Square Foot

Pipe O.D or Normal Insulation I.D.		R Value 3/8″(10mm) Wall	R Value 1/2 "(13mm) Wall	R Value 3/4"(19mm) Wall	R Value 1"(25mm) Wall
3/8″	9mm	2.5	3.0	5.1	
1⁄2″	13mm	2.4	3.1	5.1	-
5/8″	16mm	2.4	3.1	5.2	6.7
3⁄4″	19mm	2.3	3.1	5.1	6.5
7/8″	22mm	2.2	3.1	5.1	6.5
1-1/8″	29mm	2.1	3.1	5.3	6.8
1-3/8″	35mm	1.6	3.1	5.1	6.7
1-5/8″	41mm	2.2	3.1	4.9	6.4
1-1/2" IPS	48mm	2.3	2.9	4.7	6.9
2-1/8″	54mm	2.2	3.0	4.7	6.3
2" IPS	60mm	2.2	3.0	4.6	6.2
2-1/2" IPS	64mm	2.2	3.0	4.5	6.0
2-5/8″	67mm	2.2	3.0	4.5	6.0
3-1/8″	79mm	2.2	2.9	4.4	5.9
3″ IPS	89mm	2.2	2.9	4.4	5.8
3-5/8″	92mm	2.1	2.9	4.4	5.8
3-1/2" IPS	102mm	2.1	2.9	4.3	5.7
4-1/8″	105mm	2.1	2.9	4.3	5.7

Gulf-0	D-Flex	Coppe	er Pipe	Iron	Pipe			Tubin	g Unit I	Lengtl	h 1.8 M	eters (	Standa	ard)			
Nominal Insulation Size ID		Nominal Size OD		Nominal Size IPS		Nominal 6 mm wall		Nominal 9 mm wall		Nominal 13 mm wall		Nominal 19 mm wall		Nominal 25 mm wall		Nominal 32 mm wall	
mm	inch	mm	inch	mm	inch	No. of Per Carton	Total Meters Per Carton	No.of Pcs per Carton	Total Meters Per Carton								
6	1/4	6	1/4	-	-	180	324	168	302.4	90	162	50	90	35	63	30	54
9	3/8	9	3/8	-	-	170	306	130	234	80	144	40	72	25	45	25	45
13	1/2	13	1/2	6	1/4	150	270	115	207	65	117	40	72	25	45	20	36
16	5/8	16	5/8	10	3/8	120	216	90	162	60	108	35	63	25	45	20	36
19	3/4	19	3/4	-	-	100	180	76	136.8	45	81	30	54	20	36	15	27
22	7/8	22	7/8	13	1/2	90	162	70	126	40	72	30	54	20	36	15	27
25	1	25	1	-	-	80	144	55	99	40	72	25	45	20	36	15	27
28	1-1/8	-	1-1/8	19	3/4	70	126	55	99	36	64.8	25	45	18	32.4	15	27
32	1-1/4	32	1-1/4	-	-	-	-	40	72	30	54	20	36	15	27	15	27
35	1-3/8	35	1-3/8	25	1	60	108	36	64.8	30	54	20	36	15	27	12	21.6
38	1-1/2	38	1-1/2	-	-	-	-	-	-	24	43.2	17	30.60	12	21.6	12	21.6
42	1-5/8	42	1-5/8	32	1-1/4	-	-	30	54	25	45	17	30.60	12	21.6	10	18
48	1-7/8	48	1-7/8	38	1-1/2	-	-	25	45	20	36	15	27	10	18	10	18
51	2	51	2	-	-	-	-	-	-	20	36	15	27	9	16.2	9	16.2
54	2-1/8	54	2-1/8	-	-	-	-	25	45	20	36	15	27	9	16.2	9	16.2
60	2-3/8	60	2-3/8	51	2	-	-	20	36	18	32.4	12	21.6	9	16.2	6	10.8
67	2-5/8	67	2-5/8	-	-	-	-	-	-	15	27	10	18	8	14.4	6	10.8
73	2-7/8	73	2-7/8	-	-	-	-	-	-	15	27	10	18	6	10.8	4	7.2
76	3	76	3	-	-	-	-	-	-	12	21.6	10	18	6	10.8	4	7.2
79	3-1/8	79	3-1/8	-	-	-	-	-	-	12	21.6	10	18	6	10.8	4	7.2
89	3-1/2	89	3-1/2	75	3	-	-	-	-	10	18	8	14.4	6	10.8	4	7.2





### GULF-O-FLEX INSULATION TUBE COIL COIL LONGER, MORE EFFICIENT LESS WASTE

#### DESCRIPTION

Gulf-O-Flex Insulation Tube Coil is a system designed for convenience and labor savings with superior toughness. It is provided in continuous-length coils, designed to minimize waste, reduce butt joints, and is packaged in easy-handle, easy-store cartons. The pipe insulation is tough but flexible elastomeric thermal insulation, black in color, supplied as continuous length unslit tubing in nominal wall thicknesses of 3/8"(9mm) and 1/2"(13mm) in popular sizes up to 1-1/8" ID. Its closed cell structure makes it an efficient insulation with the proven performance of Gulf-O-Flex ECR. It is manufactured without the use of CFC's, HCFC's or HFC's. It is also formaldehyde free, dust free, fiber free and resists mold and mildew.

#### USES

Gulf-O-Flex Insulation Tube Coil is engineered for air conditioning applications in which speed, ease of installation; convenient handling and on-site durability are of primary importance. It slides on the pipe easier, making the installation job faster and more profitable for contractors.

#### **INSTALLATION**

Gulf-O-Flex Insulation Tube Coil uncoils easily from its convenient carton, so it can be cut to desired lengths for longer runs with fewer seams. It also slides on the pipe easier, making the installation job faster and more profitable for contractors. The specially formulated lubricating powder effectively reduces friction, and relaxed I.D. tolerances accommodate elbows and fittings. Its thermal conductivity (0.27), WVT (0.80), flame spread and smoke developed index (25/50) and temperature use ranges (-70°F to +220°F) are the best. Installs with simple hand tools and Gulf-O-Glue (which is a low V.O.C. adhesive). Gulf-O-Glue is a contact adhesive, therefore, in all cases both surfaces to be joined are coated with adhesive.

## Dimensions of box: 50x50x20 cms

Tube		Thickness 6 mm	Tube		Thickness 9 mm	Tube		•
Inches	mm	m/Box	Inches	s mm	m/Box	Inches	mm	
1/4″	6	50	1/4″	6	40	1/4″	6	į
5/16″	8	48	5/16″	8	37	5/16″	8	
3/8″	9	46	3/8″	9	34	3/8″	9	
1/2″	12	40	1/2″	12	31	1/2″	12	
5/8″	15	38	5/8″	15	27	5/8″	15	ļ
3/4″	18	30	3/4″	18	23	3/4″	18	
7/8″	22	23	7/8″	22	19	7/8″	22	
11/8″	28	20	11/8″	28	14	11/8″	28	



13 mm



