IT-FLEX

INSULATION SYSTEMS

GENERAL CATALOGUE

EVOCELL &MOBIUS

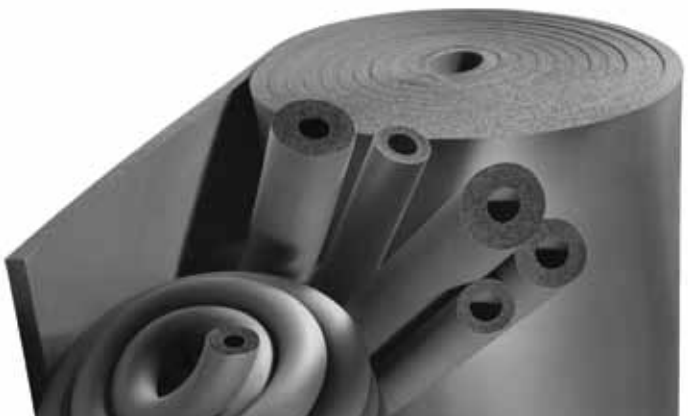
2022

MADE IN ITALY FOR THE WORLD WIDE MARKET

The evolution of elastomer technology

This is our motto that has represented the company's philosophy for the past 30 years, specializing in R&D, manufacturing and marketing elastomeric products and insulation systems suitable to satisfy all the requirements of thermal and acoustic systems of civil and industrial buildings, focussing on environmental comfort, safety, efficiency and savings in the utilization of traditional energy sources.

Evocell&Mobius S.r.l.



CERTIFICATE OF CONFORMITY UNI EN ISO 9001:2015

Mod. M06-6

CSI

CSI SpA
Sede Legale
20030 Senago - MI - I
Cascina Traversagna 21

Direzione, Uffici e Laboratori
20021 Bollate - MI - I
Viale Lombardia 20
Tel. +39 02 383301
Fax +39 02 3503940
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ACCREDIA

CSI CERT

Certificato n°: *Certificate n.:*	SQ113451	Settore EA: *EA Sector:*	14 - 29

Si certifica che il sistema di gestione per la qualità di / *we here by certify that the quality management system operated by*

EVOCELL&MOBIUS SRL

Sede legale / *Registered office*

Via A. Manzoni, 43 - 20121 Milano (MI) - Italia

Unità operativa di / *Place of business*

Via D. Albertario, 63/65 - Z.I. Bellocchi - 61032 Fano (PU) – Italia

È conforme alla norma: *Is compliance with the standard:* **UNI EN ISO 9001:2015**

Per i seguenti servizi / processi / prodotti – *Concerning the following services / processes / products*

Produzione di tubi e lastre in materiale espanso.
Commercializzazione di accessori complementari all'installazione dei tubi e delle lastre.

Il presente certificato è soggetto al rispetto del regolamento di CSICERT per la certificazione dei sistemi di gestione per la qualità delle organizzazioni.
Riferirsi alla documentazione del sistema di gestione per i dettagli delle eventuali esclusioni dei requisiti della UNI EN ISO 9001:2015
Per informazioni puntuali e aggiornate circa eventuali variazioni intervenute nello stato di validità della certificazione di cui al presente certificato, si prega di contattare CSI S.p.A.

This certificate is subject to the compliance with CSICERT regulation for the organization of quality management systems certification.
Refer to the management system documentation for details on UNI EN ISO 9001:2015 requirements exclusions.
For updated information related to validity status of the certification within this certificate, please take in contact CSI spa.

21/11/2011	20/11/2020	----------	20/11/2023
Rilascio *Issued*	Rinnovo *Renewal*	Aggiornamento *Update*	Scadenza *Expiry*

GRUPPO IMQ

CSI

Ing. P. Baldazzi
B. A. Management Systems

Data: 2020.11.23 19:03:23 +01'00'

1 di 1
Pagina/page

Our commitment to safeguard the environment

IT-FLEX
INSULATION SYSTEMS

EPD ITALY

ENVIRONMENTAL PRODUCT DECLARATION

A life cycle assessment (LCA) has been carried out on the product **IT-FLEX C1** in order to offer sustainable insulation solutions with the EPD certification

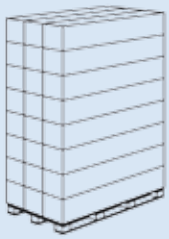
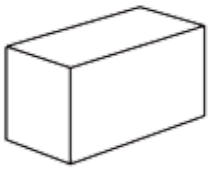
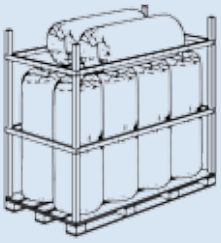
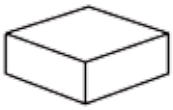
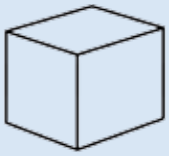
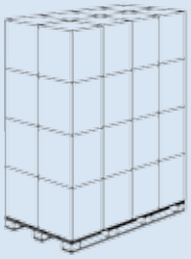
EVOCELL &MOBIUS

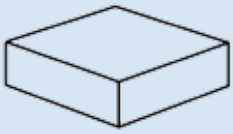
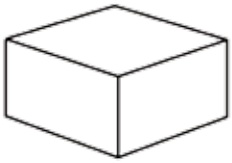
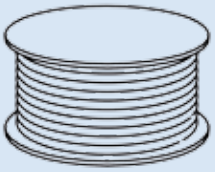
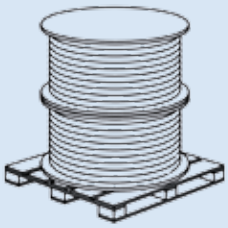
ISO 14001

Evocell&Mobius is proud to have obtained the ISO 14001 certification, recognised on a world wide level as being the reference standard for environmental management systems (EPD - Environmental Product Declaration).
This certification underlines out commitment to continuously improve our environmental performance and, moreover, our environmental sustainability policies.

EVOCELL &MOBIUS

PACKAGING/PALLETS TABLE

Packaging	Product	Packaging dimensions (cm)	m3	Pallet	Quantity packaging/ Pallet	Pallet dimensions (cm)	m3	Pallet/ Lorry
Box Tube length 2 m 	**IT-FLEX C1** **IT-FLEX C1 AD2-OG** **IT-FLEX C1 AD2** **IT-FLEX C1 R** **IT-FLEX AT** **IT-FLEX AT R** **IT-FLEX HF**	209 x 40 x h 33	0,27		24 21	210 x 120 x h 276 210 x 120 x h 242	6,95 6,09	12/13 13/14
Box Sheets in rolls h. 1 m 	**IT-FLEX C1** **IT-FLEX AT** **IT-FLEX HF** **IT-FLEX PE AL** **IT-FLEX TRIPLEX** **IT-FLEX HI TECH** **IT-FLEX UV PROTECTION** **IT-FLEX SYSTEM COVER**	108 x 54 x h 54	0,32		20 16	210 x 120 x h 280 210 x 120 x h 227	7,10 5,80	12/13
Bag Sheets in rolls h. 1,5 m 	**IT-FLEX C1 SA** "DUCT" ADHESIVE **IT-FLEX TRIPLEX** "DUCT" ADHESIVE	55 x h 150	0,36		10	210 x 104 x h 210	4,60	12/13
Box Tubes in continuous rolls 	**IT-FLEX C1 COLD COIL**	60 x 60 x h 20	0,07		72	210 x 120 x h 243	6,12	12
Box Tubes in continuous rolls 	**IT-FLEX CONTINUOS TUBES IN ROLLS**	50 x 61 x h 61	0,18		32	210 x 120 x h 250	6,30	12

Packaging	Product	Packaging dimensions (cm)	m3	Pallet	Quantity packaging/ Pallet	Pallet dimensions (cm)	m3	Pallets/ Lorry
Box Coil 10-15 m 	**ULTRASOLAR 2** in rolls	80 x 82 x h 22	0,14					
Box Coil 20-25 m 	**ULTRASOLAR 2**	80 x 82 x h 40	0,26					
Wooden bobbin 50 m, - 100 m, - 150 m 	**ULTRASOLAR 2**	120 x 120 x h 60	0,86		3 2	120 x 120 x h 192 120 x 120 x h 132	2,76 1,91	22

Stock the material in a dry and clean environment at a room temperature between 0 °C and 35 °C and RH between 50% and 70%. Do not expose the material to heat or sun rays before installation.

INDEX

THERMAL INSULATION

SYSTEMS

APPLICATION FIELDS

- INDUSTRIAL
- HEATING & PLUMBING
- AIR-CONDITIONING
- REFRIGERATION
- OIL & GAS
- MARINE
- RAILWAYS
- SOLAR/HIGH TEMPERATURE

SYMBOL LEGEND

IT-FLEX C1

- Closed-cell microcellular structure
- Excellent insulation performance
- High water vapour diffusion resistance
- Ensures safety in the event of fire
- Antimicrobial protection ULTRA-FRESH KW-100*
- λ at 0 °C ≤ 0,033 W/m•K
- $\mu \geq 10000$/ $\mu \geq 7000$
- Euroclass B_L-s2,d0 Tubes - B-s3,d0 Sheets
- *ULTRA-FRESH is a registered trademark of Thomson Research Associates, Inc

EVOCELL & MOBIUS

IT-FLEX C1 - C1R - Coil
Pre-cut tubes - AD2 OG - AD 2

Rev. 04/22

Technical data sheet

MATERIAL

Closed-cell flexible elastomeric foam (FEF).

PRODUCT RANGE

Self-adhesive and standard tubes in bars and in continuous rolls with diameters from 6 to 170 mm and thickness from 6 to 60 mm. Sheets in panels and rolls, standard and self-adhesive, with thicknesses from 6 to 60 mm.
Self-adhesive tapes with a thickness of 3 mm.

MAIN CHARACTERISTICS

Flexible and expanded CFC and HCFC-free rubber foam.
Does not contain or release dust or fibres.

PRODUCT SPECIFICATION

Flexible and expanded rubber foam thermal insulation material produced in accordance with the European Standard EN 14304.

PRODUCT APPLICATION

Thermal insulation of HVAC, refrigeration systems and industrial applications, also for exterior use (C1R version).

SAFETY AND ENVIRONMENT

EPD (Environmental Product Declaration). Declaration EPDITALY0094. Validity date 24/02/2020 - 24/02/2025. Code UNCPC 3623. Program operator: EPD Italy

Technical information	Reference data	Test standards
SERVICE TEMPERATURES Max. temperature of transported fluids Min. temperature of transported fluids	 + 110 °C - 50 °C	EN 14706 - 14707
THERMAL CONDUCTIVITY λ	Tubes 6-25 mm, Tapes and sheets 3-32 mm: at 0 °C λ ≤ 0,033 W/m•K; at 20 °C λ ≤ 0,035 W/m•K; at 40 °C λ ≤ 0,037 W/m•K Tubes 30-60 mm: at 0 °C λ ≤ 0,036 W/m•K; at 20 °C λ ≤ 0,038 W/m•K; at 40 °C λ ≤ 0,040 W/m•K Sheets 40-60 mm: at 0 °C λ ≤ 0,034 W/m•K; at 20 °C λ ≤ 0,036 W/m•K; at 40 °C λ ≤ 0,038 W/m•K	EN ISO 8497 - EN 12667
RESISTANCE TO WATER VAPOUR DIFFUSION μ	Sheets 6-25 mm; Tubes 6-19 mm μ ≥10000 Sheets 30-50 mm; Tubes 25-60 mm μ ≥7000	EN 13469 - EN 12086
REACTION TO FIRE **EUROCLASS** USA UK UK SUISSE VKF	TUBES B_L-s2,d0 SHEETS B-s3,d0 SHEETS 60 mm: E TAPES B-s2,d0 UL V0 up to thk. 13 mm CLASS 1 CLASS 0 FR2/CR PLAQUES - RF2 TUBES	EN 13501 - 1 BS 476 : PART 6 - BS 476 : PART 7 AEAI
SHIPYARDS (MED)	MEETS REQUIREMENTS	Directive Med 96/98/CE - Module D - Module B
CORROSION RISK	MEETS REQUIREMENTS	EN 13468
OZONE RESISTANCE	EXCELLENT	ISO 7326
UV RESISTANCE	GOOD	UNI ISO 4892 - 2
DIMENSIONAL TOLERANCES	In accordance with table 1 - European Standard EN 14304	

TECHNICAL CHARACTERISTICS OF THE EXTERNAL PROTECTIVE COATING (IT-FLEX C1 R):

TYPE	SCRATCH RESISTANT/UV RESISTANT PE FILM	
COLOUR	WHITE RAL 9010	
WATER VAPOUR DIFFUSION FACTOR μ	≥ 10000	EN ISO 13469
OZONE RESISTANCE	EXCELLENT	ISO 7326
UV RESISTANCE	EXCELLENT	UNI ISO 4892 - 2

* **NOTE:** for lower temperature applications please contact our technical dept. For self-adhesive tapes and sheets: max. service temp. 90 °C.
Documents and certifications are available upon registration on our website: www.evocellmobius.it
Evocell&Mobius S.r.l. reserves the right to modify data contained in this document without any obligation of notice.
Conservation of adhesive products: not greater than one year.
External applications: C1 elastomer must be protected at the time of installation.

All normatives quoted in this document are updated to the latest issued versions.

COPPER TUBES (CU)			STEEL TUBES (FE)			TUBES PE/PP/PVC	Thickness D 6 mm		Thickness F 9 mm		Thickness H 13 mm	
ø ext. mm	ø ext. mm	ø inches	ø ext. mm	ø inches	DN mm	ø ext. mm	Code	m/box	Code	m/box	Code	m/box
6,35	6	1/4”					**EVD006**	496	**EVF006**	352	**EVH006**	220
7,93	8	5/16”					**EVD008**	432	**EVF008**	300	**EVH008**	210
9,52	10	3/8”	10,10	1/8”	6		**EVD010**	364	**EVF010**	266	**EVH010**	172
12,70	12	1/2”					**EVD012**	316	**EVF012N**	240	**EVH012**	162
	14		13,60	1/4”	8							
							EVD015	266	**EVF015**	192	**EVH015**	136
15,87	16	5/8”				16						
	18		17,20	3/8”	10		**EVD018**	220	**EVF018N**	168	**EVH018**	118
19,05		3/4”				20	**EVD020**	180	**EVF020N**	152	**EVH020N**	100
22,22	22	7/8”	21,30	1/2”	15		**EVD022**	180	**EVF022**	136	**EVH022N**	100
25,40		1”				25	**EVD025**	152	**EVF025N**	120	**EVH025**	80
			26,90	3/4”	20							
28,57	28	1-1/8”					**EVD028**	130	**EVF028N**	100	**EVH028N**	80
							EVD030	112	**EVF030**	92	**EVH030**	72
						32			**EVF032N**	80	**EVH032**	58
34,92	35	1-3/8”	33,70	1”	25		**EVD035**	100	**EVF035N**	80	**EVH035**	58
									EVF038	66	**EVH038**	50
						40			**EVF040**	60	**EVH040**	48
41,27	42	1-5/8”	42,40	1-1/4”	32		**EVD042**	90	**EVF042N**	64	**EVH042**	48
									EVF045	56	**EVH045N**	48
			48,30	1-1/2”	40				**EVF048N**	56	**EVH048N**	48
						50			**EVF050N**	54	**EVH050N**	48
53,97	54	2”							**EVF054N**	54	**EVH054N**	40
									EVF057N	48	**EVH057N**	36
			60,30	2”	50				**EVF060N**	48	**EVH060N**	36
	64					63			**EVF064**	46	**EVH064N**	36
	67										**EVH067N**	32
	70								**EVF070**	40	**EVH070N**	32
	76,10		76,10	2-1/2”	65	75			**EVF076**	40	**EVH076N**	32
	80								**EVF080**	36	**EVH080N**	28
	88,90		88,90	3”	80	90			**EVF089**	36	**EVH089N**	28
			101,3/104,3	3-1/2”					**EVF102**	22	**EVH102N**	20
	108	4-1/4”							**EVF108**	22	**EVH108N**	20
	114	4-1/2”	114,30	4”	100	110			**EVF114**	22	**EVH114N**	20
						125					**EVH125N**	16
	127										**EVH127N**	16
	133								**EVF133**	16	**EVH133N**	16
			139,70	5”	125	140			**EVF140**	16	**EVH140N**	14
	159	6-1/4”	159			160					**EVH160N**	14

IT-FLEX C1

INSULATION TUBES - LENGTH 2 m

EVOCELL & MOBIUS

IT-FLEX C1

INSULATION TUBES - LENGTH 2 m

COPPER TUBES (CU)			STEEL TUBES (FE)			TUBES PE/PP/PVC	Thickness **M 19** mm		Thickness **P 25** mm		Thickness **T 32** mm	
ø ext. mm	ø ext. mm	ø inches	ø ext. mm	ø inches	DN mm	ø ext. mm	Code	m/box	Code	m/box	Code	m/box
6,35	6	1/4"					**EVM006**	98	**EVP006**	60		
7,93	8	5/16"										
9,52	10	3/8"	10,10	1/8"	6		**EVM010**	98	**EVP010N**	52	**EVT010N**	40
12,70	12	1/2"					**EVM012**	88	**EVP012N**	52	**EVT012N**	38
	14		13,60	1/4"	8							
							EVM015N	80	**EVP015N**	52	**EVT015N**	36
15,87	16	5/8"				16						
	18		17,20	3/8"	10		**EVM018**	72	**EVP018**	50	**EVT018**	32
19,05		3/4"				20	**EVM020N**	70	**EVP020**	42		
22,22	22	7/8"	21,30	1/2"	15		**EVM022**	64	**EVP022**	42	**EVT022**	32
25,40		1"				25	**EVM025N**	60	**EVP025**	40	**EVT025**	24
			26,90	3/4"	20							
28,57	28	1-1/8"					**EVM028N**	52	**EVP028**	40	**EVT028**	24
							EVM030	42				
						32	**EVM032N**	40	**EVP032N**	32	**EVT032**	22
34,92	35	1-3/8"	33,70	1"	25		**EVM035N**	40	**EVP035N**	32	**EVT035**	22
							EVM038	32				
						40	**EVM040**	32	**EVP040N**	28	**EVT040N**	18
41,27	42	1-5/8"	42,40	1-1/4"	32		**EVM042**	32	**EVP042N**	28	**EVT042N**	18
							EVM045N	32				
			48,30	1-1/2"	40		**EVM048N**	32	**EVP048N**	22	**EVT048N**	18
						50	**EVM050N**	30	**EVP050**	18	**EVT050N**	16
53,97	54	2"					**EVM054N**	30	**EVP054N**	18	**EVT054N**	16
							EVM057N	24				
			60,30	2"	50		**EVM060N**	24	**EVP060N**	18	**EVT060N**	14
	64					63	**EVM064N**	24	**EVP064N**	18	**EVT064N**	14
	70						**EVM070N**	20	**EVP070N**	16	**EVT070N**	12
	76,10		76,10	2-1/2"	65	75	**EVM076N**	20	**EVP076N**	16	**EVT076N**	12
	80						**EVM080N**	18	**EVP080N**	14	**EVT080N**	10
	88,90		88,90	3"	80	90	**EVM089N**	18	**EVP089N**	14	**EVT089N**	10
			101,3/104,3	3-1/2"			**EVM102N**	16	**EVP102N**	10	**EVT102N**	10
	108	4-1/4"					**EVM108N**	16	**EVP108N**	10	**EVT108N**	8
	110						**EVM110N**	16				
	114	4-1/2"	114,30	4"	100	110	**EVM114N**	14	**EVP114N**	10	**EVT114N**	8
						125	**EVM125N**	12	**EVP125N**	10	**EVT125N**	6
							EVM127N	12				
	133						**EVM133N**	12	**EVP133N**	8	**EVT133N**	6
			139,70	5"	125	140	**EVM140N**	10	**EVP140N**	8	**EVT140N**	6
	159	6-1/4"	159			160	**EVM160**	8	**EVP160N**	6	**EVT160N**	6
			168,30	6"	150		**EVM170N**	8	**EVP170N**	6	**EVT170N**	6

EVOCELL &MOBIUS

IT-FLEX C1

COPPER TUBES (CU)			STEEL TUBES (FE)			TUBES PE/PP/PVC	Thickness **U 40** mm		Thickness **V 50** mm		Thickness **Z 60** mm	
ø ext. mm	ø ext. mm	ø inches	ø ext. mm	ø inches	DN mm	ø ext. mm	Code	m/box	Code	m/box	Code	m/box
	18						**EVU018**	24**				
22,22	22	7/8"	21,30	1/2"	15		**EVU022**	22	**EVV022**	10**		
28,57	28	1-1/8"					**EVU028**	20	**EVV028**	8		
34,92	35	1-3/8"	33,70	1"	25		**EVU035**	18	**EVV035**	8		
41,27	42	1-5/8"	42,40	1-1/4"	32		**EVU042**	16	**EVV042**	8		
	48	1-1/2"	40				**EVU048**	12	**EVV048**	8		
53,97	54	2"					**EVU054**	10	**EVV054**	8		
	57						**EVU057**	10				
	60		60,30	2"	50		**EVU060**	10	**EVV060**	8		
	64					63	**EVU064**	10	**EVV064**	6		
	76,10		76,10	2-1/2"	65	75	**EVU076**	8	**EVV076**	6		
	88,90		88,90	3"	80	90	**EVU089**	8	**EVV089**	4		
							EVU108	8**	**EVV108**	4**	**EVZ108**	4**
	114	4-1/2"	114,30	4"	100	110	**EVU114**	8	**EVV114**	4**	**EVZ114**	4
							EVU125N	6				
			139,70	5"	125	140	**EVU140N**	6	**EVV140**	4**	**EVZ140**	2**
							EVU160	6	**EVV160**	4**		
							EVU170	6	**EVV170**	4**		

** Available on request.
Please contact our sales office.

Packaging dimensions: 209 x 40 x 33 cm.
Packaging volume = 0,27 m^3

IT-FLEX C1

INSULATION TUBES - LENGTH 2 m

IT-FLEX C1

PRE-CUT TUBES AD2-OG

INSULATION TUBES, LENGTH 2 m, WITH SELF-ADHESIVE LONGITUDINAL STRIP AD2 AND RUBBER OVERLAP (AD2-OG)

Thickness **9 mm**		Thickness **13 mm**		Thickness **19 mm**	
Code	m/box	Code	m/box	Code	m/box
EVPRO2GF010	266				
EVPRO2GF012N	240	**EVPRO2GH012**	162	**EVPRO2GM012**	88
EVPRO2GF015	192	**EVPRO2GH015**	136	**EVPRO2GM015N**	80
EVPRO2GF018N	168	**EVPRO2GH018**	118	**EVPRO2GM018**	72
EVPRO2GF020N	152	**EVPRO2GH020N**	100	**EVPRO2GM020N**	70
EVPRO2GF022	136	**EVPRO2GH022N**	100	**EVPRO2GM022**	64
EVPRO2GF025N	120	**EVPRO2GH025**	80	**EVPRO2GM025N**	60
EVPRO2GF028N	100	**EVPRO2GH028N**	80	**EVPRO2GM028N**	52
EVPRO2GF030	92	**EVPRO2GH030**	72	**EVPRO2GM030**	42
EVPRO2GF032N	80	**EVPRO2GH032**	58	**EVPRO2GM032N**	40
EVPRO2GF035N	80	**EVPRO2GH035**	58	**EVPRO2GM035N**	40
EVPRO2GF038	66	**EVPRO2GH038**	50	**EVPRO2GM038**	32
		EVPRO2GH040	48	**EVPRO2GM040**	32
EVPRO2GF042N	64	**EVPRO2GH042**	48	**EVPRO2GM042**	32
EVPRO2GF045	56	**EVPRO2GH045N**	48	**EVPRO2GM045N**	32
EVPRO2GF048N	56	**EVPRO2GH048N**	48	**EVPRO2GM048N**	32
		EVPRO2GH050N	48	**EVPRO2GM050N**	30
EVPRO2GF054N	54	**EVPRO2GH054N**	40	**EVPRO2GM054N**	30
EVPRO2GF057N	48	**EVPRO2GH057N**	36	**EVPRO2GM057N**	24
EVPRO2GF060N	48	**EVPRO2GH060N**	36	**EVPRO2GM060N**	24
EVPRO2GF064	46	**EVPRO2GH064N**	36	**EVPRO2GM064N**	24
EVPRO2GF070	40	**EVPRO2GH070N**	32	**EVPRO2GM070N**	20
EVPRO2GF076	40	**EVPRO2GH076N**	32	**EVPRO2GM076N**	20
EVPRO2GF080	36	**EVPRO2GH080N**	28	**EVPRO2GM080N**	18
EVPRO2GF089	36	**EVPRO2GH089N**	28	**EVPRO2GM089N**	18
EVPRO2GF102	22	**EVPRO2GH102N**	20	**EVPRO2GM102N**	16
EVPRO2GF108	22	**EVPRO2GH108N**	20	**EVPRO2GM108N**	16
EVPRO2GF114	22	**EVPRO2GH114N**	20	**EVPRO2GM114N**	14
		EVPRO2GH125N	16	**EVPRO2GM125N**	12
		EVPRO2GH133N	16	**EVPRO2GM133N**	12
EVPRO2GF140	16	**EVPRO2GH140N**	14	**EVPRO2GM140N**	10
		EVPRO2GH160N	14	**EVPRO2GM160**	8
				EVPRO2GM170N	8

Packaging dimensions: 209 x 40 x 33 cm.
Packaging volume = 0,27 m^3

IT-FLEX C1

PRE-CUT TUBES AD2-OG

INSULATION TUBES, LENGTH 2 m, WITH SELF-ADHESIVE LONGITUDINAL STRIP AD2 AND RUBBER OVERLAP (AD2-OG)

Thickness **25 mm**		Thickness **32 mm**	
Code	m/box	Code	m/box
EVPRO2GP018	50	**EVPRO2GT018**	32
EVPRO2GP022	42	**EVPRO2GT022**	32
EVPRO2GP028	40	**EVPRO2GT028**	24
EVPRO2GP035N	32	**EVPRO2GT035**	22
EVPRO2GP042N	28	**EVPRO2GT042N**	18
EVPRO2GP048N	22	**EVPRO2GT048N**	18
EVPRO2GP054N	18	**EVPRO2GT054N**	16
EVPRO2GP060N	18	**EVPRO2GT060N**	14
EVPRO2GP064N	18	**EVPRO2GT064N**	14
EVPRO2GP070N	16	**EVPRO2GT070N**	12
EVPRO2GP076N	16	**EVPRO2GT076N**	12
		EVPRO2GT080N	10
EVPRO2GP089N	14	**EVPRO2GT089N**	10
EVPRO2GP102N	10	**EVPRO2GT102N**	10
EVPRO2GP108N	10		
EVPRO2GP114N	10	**EVPRO2GT114N**	8
EVPRO2GP140N	8	**EVPRO2GT140N**	6
EVPRO2GP160N	6	**EVPRO2GT160N**	6
EVPRO2GP170N	6	**EVPRO2GT170N**	6

Packaging dimensions: 209 x 40 x 33 cm.
Packaging volume = 0,27 m^3

IT-FLEX C1

PRE-CUT TUBES AD2

INSULATION TUBES, LENGTH 2 m,
WITH A SELF-ADHESIVE LONGITUDINAL STRIP

Thickness 9 mm		Thickness 13 mm		Thickness 19 mm	
Code	m/box	Code	m/box	Code	m/box
EVPR2F010	266			EVPR2M010	98
EVPR2F012N	240	EVPR2H012	162	EVPR2M012	88
EVPR2F015	192	EVPR2H015	136	EVPR2M015N	80
EVPR2F018N	168	EVPR2H018	118	EVPR2M018	72
EVPR2F020N	152	EVPR2H020N	100	EVPR2M020N	70
EVPR2F022	136	EVPR2H022N	100	EVPR2M022	64
EVPR2F025N	120	EVPR2H025	80	EVPR2M025N	60
EVPR2F028N	100	EVPR2H028N	80	EVPR2M028N	52
EVPR2F030	92	EVPR2H030	72	EVPR2M030	42
EVPR2F032N	80	EVPR2H032	58	EVPR2M032N	40
EVPR2F035N	80	EVPR2H035	58	EVPR2M035N	40
EVPR2F038	66	EVPR2H038	50	EVPR2M038	32
		EVPR2H040	48	EVPR2M040	32
EVPR2F042N	64	EVPR2H042	48	EVPR2M042	32
EVPR2F045	56	EVPR2H045N	48	EVPR2M045N	32
EVPR2F048N	56	EVPR2H048N	48	EVPR2M048N	32
		EVPR2H050N	48	EVPR2M050N	30
EVPR2F054N	54	EVPR2H054N	40	EVPR2M054N	30
EVPR2F057N	48	EVPR2H057N	36	EVPR2M057N	24
EVPR2F060N	48	EVPR2H060N	36	EVPR2M060N	24
EVPR2F064	46	EVPR2H064N	36	EVPR2M064N	24
EVPR2F070	40	EVPR2H070N	32	EVPR2M070N	20
EVPR2F076	40	EVPR2H076N	32	EVPR2M076N	20
EVPR2F080	36	EVPR2H080N	28	EVPR2M080N	18
EVPR2F089	36	EVPR2H089N	28	EVPR2M089N	18
EVPR2F102	22	EVPR2H102N	20	EVPR2M102N	16
EVPR2F108	22	EVPR2H108N	20	EVPR2M108N	16
EVPR2F114	22	EVPR2H114N	20	EVPR2M114N	14
		EVPR2H125N	16	EVPR2M125N	12
		EVPR2H133N	16	EVPR2M133N	12
EVPR2F140	16	EVPR2H140N	14	EVPR2M140N	10
		EVPR2H160N	14	EVPR2M160	8
				EVPR2M170N	8

IT-FLEX C1

PRE-CUT TUBES AD2

INSULATION TUBES, LENGTH 2 m,
WITH A SELF-ADHESIVE LONGITUDINAL STRIP

Thickness **25 mm**		Thickness **32 mm**	
Code	m/box	Code	m/box
EVPR2P018	50	**EVPR2T018**	32
EVPR2P022	42	**EVPR2T022**	32
EVPR2P028	40	**EVPR2T028**	24
EVPR2P035N	32	**EVPR2T035**	22
EVPR2P042N	28	**EVPR2T042N**	18
EVPR2P048N	22	**EVPR2T048N**	18
EVPR2P054N	18	**EVPR2T054N**	16
EVPR2P060N	18	**EVPR2T060N**	14
EVPR2P064N	18	**EVPR2T064N**	14
EVPR2P070N	16	**EVPR2T070N**	12
EVPR2P076N	16	**EVPR2T076N**	12
		EVPR2T080N	10
EVPR2P089N	14	**EVPR2T089N**	10
EVPR2P102N	10	**EVPR2T102N**	10
EVPR2P108N	10		
EVPR2P114N	10	**EVPR2T114N**	8
EVPR2P140N	8	**EVPR2T140N**	6
EVPR2P160N	6	**EVPR2T160N**	6
EVPR2P170N	6	**EVPR2T170N**	6

Packaging dimensions: 209 x 40 x 33 cm.
Packaging volume = 0,27 m^3

PRE-CUT TUBES AD2

IT-FLEX C1 - COLD COIL

CONTINUOUS TUBES IN ROLLS

Diameter mm	Thickness (D) 6 mm Code	m/box	Thickness (F) 9 mm Code	m/box	Thickness (H) 13 mm Code	m/box
6	**EV7D06COIL95**	95	**EV7F06COIL70**	70		
8	**EV7D08COIL80**	80	**EV7F08COIL60**	60	**EV7H08COIL40**	40
10	**EV7D10COIL75**	75	**EV7F10COIL50**	50	**EV7H10COIL35**	35
12	**EV7D12COIL65**	65	**EV7F12COIL45**	45	**EV7H12COIL32**	32
16	**EV7D16COIL55**	55	**EV7F16COIL40**	40	**EV7H16COIL32**	32
18	**EV7D18COIL45**	45	**EV7F18COIL38**	38	**EV7H18COIL30**	30
22	**EV7D22COIL40**	40	**EV7F22COIL30**	30	**EV7H22COIL26**	26
28	**EV7D28COIL30**	30	**EV7F28COIL26**	26	**EV7H28COIL20**	20

Packaging dimensions: 60 x 60 x 21 cm.
Packaging volume = 0,07 m^3

IT-FLEX C1

*SHEETS IN ROLLS - H 1 m

Thickness (mm)	Roll (m^2/ct)	1 x 2 m panels (m^2/ct)	Sheets	
			NON-ADHESIVE Code	SELF-ADHESIVE Code
6	30	48	**EVBL06**	**EVBLA06**
10	20	32	**EVBL10**	**EVBLA10**
13	14	24	**EVBL13**	**EVBLA13**
16	12	20	**EVBL16**	**EVBLA16**
19	10	16	**EVBL19**	**EVBLA19**
25	8	12	**EVBL25**	**EVBLA25**
32	6	10	**EVBL32**	**EVBLA32**
40	4	8	**EVBL40**	**EVBLA40**
50	4	6	**EVBL50**	**EVBLA50**
60	3	4	**EVBL60**	**EVBLA60**

* For sheets of 1,5 m in height, please contact our sales dept.

Packaging dimensions: 108 x 54 x 54 cm.
Packaging volume = 0,31 m^3

IT-FLEX C1 R

INSULATION TUBES - LENGTH 2 m - WITH EXTERNAL SCRATCH RESISTANT/UV RESISTANT WHITE PE COATING

COPPER TUBES (CU)			STEEL TUBES (FE)			TUBES PE/PP/PVC	Thickness F 9 mm		Thickness H 13 mm		Thickness M 19 mm	
ø ext. mm	ø ext. mm	ø inches	ø ext. mm	ø inches	DN mm	ø ext. mm	Code	m/box	Code	m/box	Code	m/box
6,35	6	1/4"										
7,93	8	5/16"										
9,52	10	3/8"	10,10	1/8"	6							
12,70	12	1/2"							EV9H12R	120	EV9M12R	70
	14		13,60	1/4"	8							
15,87	16	5/8"				16	EV9F16R	140	EV9H16R	100	EV9M16R	50
	18		17,20	3/8"	10		EV9F18R	130	EV9H18R	90	EV9M18R	50
19,05		3/4"				20						
22,22	22	7/8"	21,30	1/2"	15		EV9F22R	100	EV9H22R	70	EV9M22R	44
25,40		1"				25						
			26,90	3/4"	20							
28,57	28	1-1/8"					EV9F28R	80	EV9H28R	60	EV9M28R	40
						32						
34,92	35	1-3/8"	33,70	1"	25		EV9F35R	60	EV9H35R	44	EV9M35R	30
						40						
41,27	42	1-5/8"	42,40	1-1/4"	32		EV9F42R	50	EV9H42R	36	EV9M42R	24
	48		48,30	1-1/2"	40						EV9M48R	22

Different sizes available on request.

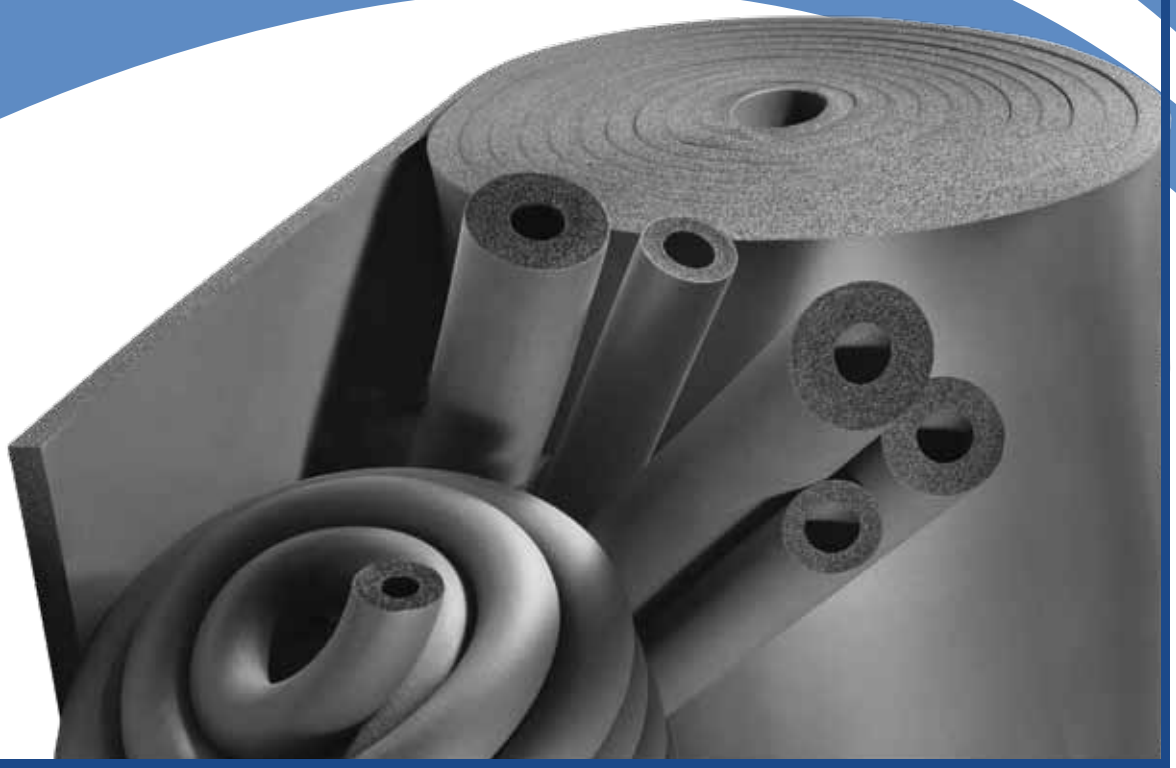
Packaging dimensions: 209 x 40 x 33 cm.
Packaging volume = 0,27 m^3

IT-FLEX C1 R

WHITE PVC JOINT-SEALING TAPE

Code	m/roll	Roll width mm	pieces/box
EV8NASTRNCB25	25	38	60

IT-FLEX AT



- Closed-cell microcellular structure
- Excellent insulation performance
- High temperature resistance
- Excellent UV resistance
- λ at 40 °C ≤ 0,042 W/m•K
- Service temperature: +150 °C

IT-FLEX AT

BIM BUILDING INFORMATION MODELING

EVOCELL & MOBIUS

Technical data sheet

IT-FLEX AT - ATR - AT Coil

Rev. 04/22

MATERIAL

Closed-cell flexible elastomeric foam (FEF).

PRODUCT RANGE

Self-adhesive and standard tubes in bars and in continuous rolls with diameters from 10 to 114 mm and thickness from 9 to 32 mm. Self-adhesive and standard sheets in panels and rolls, with thicknesses from 6 to 32 mm.
Self-adhesive tapes with a thickness of 3 mm.

PRODUCT SPECIFICATION

Flexible and expanded rubber foam thermal insulation material produced in accordance with the European Standard EN 14304.

PRODUCT APPLICATION

Thermal insulation of heating, air conditioning systems and industrial applications functioning with high temperatures fluids. Also suitable for external applications (AT R version).

MAIN CHARACTERISTICS

Flexible and expanded CFC, HCFC and PVC-free rubber foam. Does not contain or release dust or fibres.

Technical information	Reference data	Test standards
SERVICE TEMPERATURES Max. temperature of transported fluids Min. temperature of transported fluids	+ 150 °C* (+ 130 °C for sheets glued to the entire surface) - 50 °C* (- 196 °C**)	EN 14706 - 14707
THERMAL CONDUCTIVITY λ	At mean temp. of +40 °C ≤ 0,042 W/m•K	EN ISO 8497 - EN 12667
REACTION TO FIRE	**EUROCLASS** { SHEETS AND TAPES - E TUBES - E_L	EN 13501 - 1
SUISS VKF	RF3 (CR) SHEETS AND TUBES	AEAI
CORROSION RISK	MEETS TEST REQUIREMENTS	EN 13468
OZONE RESISTANCE	EXCELLENT	ISO 7326
UV RESISTANCE	GOOD	UNI ISO 4892 - 2
DIMENSIONAL TOLERANCES	In accordance with table 1 - European Standard EN 14304	

TECHNICAL CHARACTERISTICS OF THE EXTERNAL PROTECTIVE COATING (VERSIONE IT-FLEX AT R):		
TYPE	SCRATCH RESISTANT/UV RESISTANT PE FILM	
COLOUR	BLACK RAL 9005	
WATER VAPOUR DIFFUSION FACTOR μ	≥ 10000	EN ISO 12086
OZONE RESISTANCE	EXCELLENT	ISO 7326
UV RESISTANCE	EXCELLENT	UNI ISO 4892 - 2

* **NOTE:** for lower or higher temperature applications please contact our technical dept.
** For applications in cryogenic, LNG or similar systems please contact our technical department.
Documents and certifications are available upon registration on our website: www.evocellmobius.it
Evocell&Mobius S.r.l. reserves the right to modify data contained in this document without any obligation of notice.
Conservation of adhesive products: not greater than one year.

All normatives quoted in this document are updated to the latest issued versions.

COPPER TUBES (CU)			STEEL TUBES (FE)			TUBES PE/PP/PVC	Thickness F 9 mm		Thickness H 13 mm	
ø ext. mm	ø ext. mm	ø inches	ø ext. mm	ø inches	DN mm	ø ext. mm	Code	m/box	Code	m/box
6,35	6	1/4”								
7,93	8	5/16”								
9,52	10	3/8”	10,10	1/8”	6					
12,70	12	1/2”								
	14		13,60	1/4”	8					
15,87	16	5/8”				16	EV5AT09X015	140	EV5AT13X015	100
	18		17,20	3/8”	10		EV5AT09X018	130	EV5AT13X018	90
19,05		3/4”				20				
22,22	22	7/8”	21,30	1/2”	15		EV5AT09X022	100	EV5AT13X022	70
25,40		1”				25				
			26,90	3/4”	20					
28,57	28	1-1/8”					EV5AT09X028	80	EV5AT13X028	60
						32				
34,92	35	1-3/8”	33,70	1”	25		EV5AT09X035	60	EV5AT13X035	44
						40				
41,27	42	1-5/8”	42,40	1-1/4”	32		EV5AT09X042	50	EV5AT13X042	36
			48,30	1-1/2”	40		EV5AT09X048	36	EV5AT13X048	30
						50				
53,97	54	2”					EV5AT09X054	36	EV5AT13X054	26
			60,30	2”	50		EV5AT09X060	32	EV5AT13X060	24
	64					63	EV5AT09X064	32	EV5AT13X064	22
							EV5AT09X067	32	EV5AT13X067	22
	70						EV5AT09X070	30	EV5AT13X070	20
	76,10		76,10	2-1/2”	65	75	EV5AT09X076	28	EV5AT13X076	16
	80									
	88,90		88,90	3”	80	90	EV5AT09X089	22	EV5AT13X089	16
		4-1/4”	101,3/104,3	3-1/2”						
	108	4-1/2”								
	114		114,30	4”	100	110	EV5AT09X114	18		

IT-FLEX AT

INSULATION TUBES - LENGTH 2 m

IT-FLEX AT

INSULATION TUBES - LENGTH 2 m

COPPER TUBES (CU)			STEEL TUBES (FE)			TUBES PE/PP/PVC	Thickness M 19 mm		Thickness P 25 mm	
ø ext. mm	ø ext. mm	ø inches	ø ext. mm	ø inches	DN mm	ø ext. mm	Code	m/box	Code	m/box
6,35	6	1/4"								
7,93	8	5/16"								
9,52	10	3/8"	10,10	1/8"	6					
12,70	12	1/2"								
	14		13,60	1/4"	8					
15,87	16	5/8"				16	EV5AT19X015	60		
	18		17,20	3/8"	10		EV5AT19X018	60	EV5AT25X018	30
19,05		3/4"				20				
22,22	22	7/8"	21,30	1/2"	15		EV5AT19X022	44	EV5AT25X022	26
25,40		1"				25				
			26,90	3/4"	20					
28,57	28	1-1/8"					EV5AT19X028	40	EV5AT25X028	24
						32				
34,92	35	1-3/8"	33,70	1"	25		EV5AT19X035	30	EV5AT25X035	18
						40				
41,27	42	1-5/8"	42,40	1-1/4"	32		EV5AT19X042	24	EV5AT25X042	16
			48,30	1-1/2"	40		EV5AT19X048	22	EV5AT25X048	14
						50				
53,97	54	2"					EV5AT19X054	18	EV5AT25X054	12
			60,30	2"	50		EV5AT19X060	18	EV5AT25X060	10
	64					63				
	70									
	76,10		76,10	2-1/2"	65	75	EV5AT19X076	14	EV5AT25X076	8
	80									
	88,90		88,90	3"	80	90	EV5AT19X089	12	EV5AT25X089	8

* For different dimensions and thicknesses please consult our sales dept.

Packaging dimensions: 209 x 40 x 33 cm.
Packaging volume = 0,27 m^3

IT-FLEX AT

IT-FLEX AT

*SHEETS IN ROLLS H 1 m

Code	Thickness (mm)	m/box
EVBL06AT	6	30
EVBL10AT	10	20
EVBL13AT	13	14
EVBL19AT	19	10
EVBL25AT	25	8
EVBL32AT	32	6

The SYSTEM COVER finishing is also available for sheets and tubes.

Packaging dimensions: 108 x 54 x 54 cm.
Packaging volume = 0,31 m^3

IT-FLEX AT - COIL

INSULATION TUBES IN CONTINUOUS ROLLS

Diameter mm	Thickness 13 mm Code	m/box	Thickness 19 mm Code	m/box
15	**EV5ATCOIL1315**	30	**EV5ATCOIL1915**	25
18	**EV5ATCOIL1318**	30	**EV5ATCOIL1918**	25
22	**EV5ATCOIL1322**	30	**EV5ATCOIL1922**	25
28	**EV5ATCOIL1328**	25	**EV5ATCOIL1928**	20

Packaging dimensions: 50 x 60 x 60 cm.
Packaging volume = 0,18 m^3

ACCESSORIES

IT-FLEX

SELF-ADHESIVE ELASTOMERIC TAPES

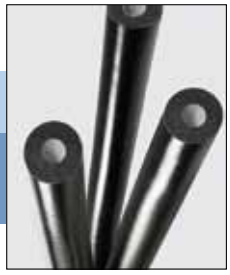
Thickness 3 mm

Code	Roll length (m)	Roll width (mm)	Packaging content (pcs./box)
EV8NASTRON315AT	15	50	12

IT-FLEX

NEOPRENE ADHESIVE

Code	Description	Packaging content (pcs.)
EV8AB425AT	425 g tin	24



IT-FLEX AT R

INSULATION TUBES - LENGTH 2 m - WITH EXTERNAL SCRATCH RESISTANT/UV RESISTANT BLACK PE COATING

COPPER TUBES (CU)			STEEL TUBES (FE)			TUBES PE/PP/PVC	Thickness H 13 mm		Thickness M 19 mm	
ø ext. mm	ø ext. mm	ø inches	ø ext. mm	ø inches	DN mm	ø ext. mm	Code	m/box	Code	m/box
6,35	6	1/4”								
7,93	8	5/16”								
9,52	10	3/8”	10,10	1/8”	6					
12,70	12	1/2”								
	14		13,60	1/4”	8					
15,87	16	5/8”				16	EV5ATR13X15	100	EV5ATR19X15	60
	18		17,20	3/8”	10		EV5ATR13X18	90	EV5ATR19X18	60
19,05		3/4”				20				
22,22	22	7/8”	21,30	1/2”	15					
							EV5ATR13X24	70	EV5ATR19X24	44
25,40		1”				25				
			26,90	3/4”	20					
28,57	28	1-1/8”								
							EV5ATR13X29	60	EV5ATR19X29	40
						32	EV5ATR13X33	44	EV5ATR19X33	30
35			33,70	1”			EV5ATR13X35	44	EV5ATR19X35	30
							EV5ATR13X42	36	EV5ATR19X42	24
							EV5ATR13X48	30	EV5ATR19X48	22
							EV5ATR13X54	26	EV5ATR19X54	20

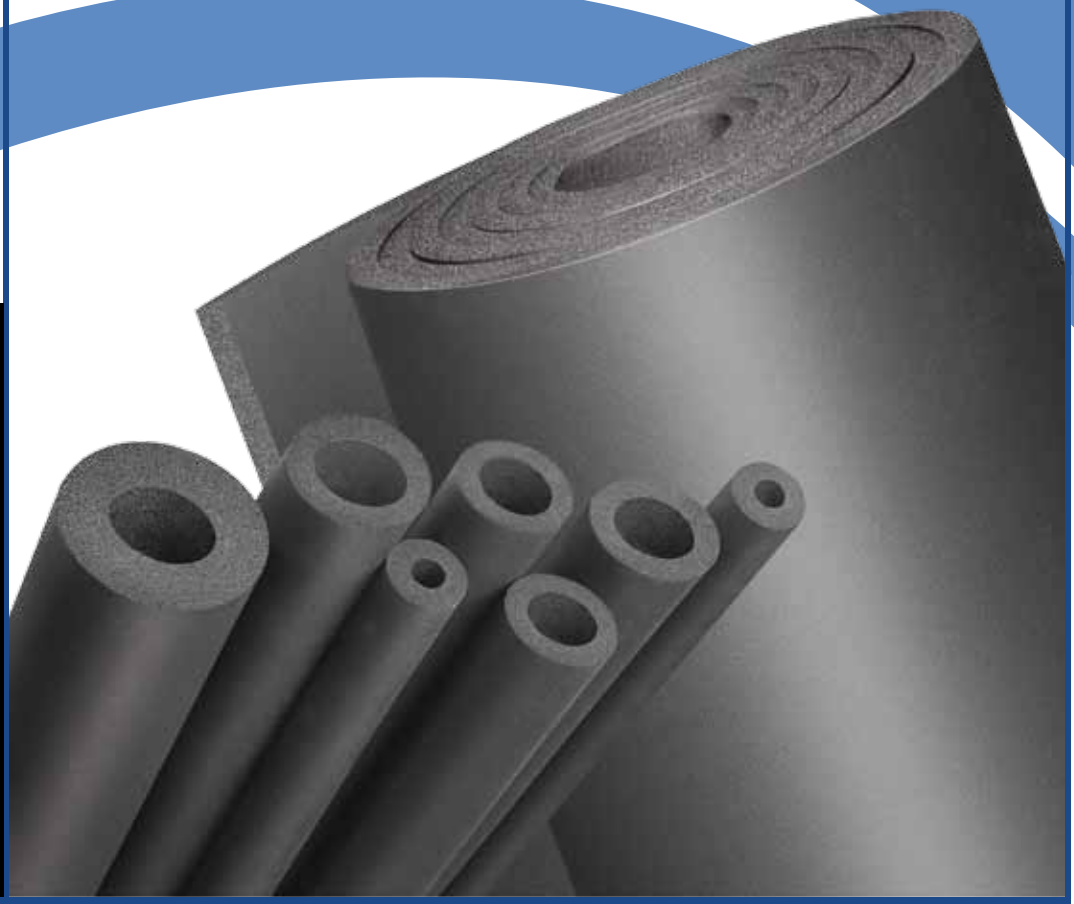
IT-FLEX AT R COIL

INSULATION TUBES IN CONTINUOUS ROLLS WITH EXTERNAL SCRATCH RESISTANT/UV RESISTANT BLACK PE COATING

Diameter mm	Thickness 13 mm Code	m/box	Thickness 19 mm Code	m/box
15	EV5ATR13X1530	30	EV5ATR19X1530	30
18	EV5ATR13X1830	30	EV5ATR19X1830	30
22	EV5ATR13X2430	30	EV5ATR19X2430	30
28	EV5ATR13X2930	30	EV5ATR19X2930	30
35	EV5ATR13X3330	30	EV5ATR19X3330	30

Packaging dimensions **Thk. 13 mm** = 80 x 80 x 30 cm - Packaging volume = 0.19 m^3
Packaging dimensions **Thk. 19 mm** = 80 x 80 x 50 cm - Packaging volume = 0.32 m^3

IT-FLEX HF HALOGEN FREE



- Excellent insulation performance
- Closed-cell microcellular structure
- Halogen free (chlorine, bromine, fluorine) and PVC free
- Low emission and low smoke toxicity in the event of fire
- IMO certified. MED Directive 96/98/CE
- λ at 0 °C ≤ 0,036 W/m•K - λ at 40 °C ≤ 0,040 W/m•K
- $\mu \geq 2000$

HALOGEN FREE

EVOCELL &MOBIUS

Technical data sheet

IT-FLEX HF "HALOGEN FREE"

Rev. 04/22

MATERIAL

Black closed-cell flexible elastomeric foam (FEF).

PRODUCT SPECIFICATION

Flexible and expanded rubber foam thermal insulation material produced in accordance with the European Standard EN 14304.

PRODUCT RANGE

Self-adhesive and standard tubes in bars with diameters from 10 to 114 mm and in thicknesses from 9 to 32 mm.
Sheets in rolls in thicknesses from 6 to 32 mm.
Self-adhesive tapes with a thickness of 3 mm.

PRODUCT APPLICATION

Thermal insulation of refrigeration, heating and air-conditioning services in commercial, industrial and domestic applications. Especially suitable for naval, rail and civil applications where low emission and low smoke toxicity material is required in the event of fire.

MAIN CHARACTERISTICS

Flexible and expanded CFC, HCFC and PVC-free rubber foam.
It is dust and fibre free and does not contain halogens.

Technical information	Reference data	Test standards
SERVICE TEMPERATURES		
Max. temperature of transported fluids	+ 130 °C	EN 14706 - 14707
Min. temperature of transported fluids	- 50 °C	
THERMAL CONDUCTIVITY λ	At mean temp. of 0 °C ≤ 0,036 W/m•K At mean temp. of 40 °C ≤ 0,040 W/m•K	EN ISO 8497 - EN 12667
WATER VAPOUR DIFFUSION FACTOR μ	≥ 2000	EN 13469 - EN 12086
REACTION TO FIRE	EUROCLASS { Tubes thk. 6-32 mm - D_L-s2,d0 Sheets thk. 6-25 mm and tapes - D-s3,d0 Sheets thk. 32 mm - E	EN - 13501 - 1
	SUISSE VKF RF 3	AEA1
RAILWAYS	HL 1 (Low emission, low toxicity in the event of fire)	EN - 45545
SHIPYARDS (MED)	Meets requirements	IMO RES. A 653 (16) - IMO MSC/Circ 1004 DIR. MED 96/98 Modules B and D Lloyd's Register
CORROSION RISK	Meets test requirements	EN 13468
ANTIMICROBIAL BEHAVIOUR	Meets requirements	AATTCC test method 30 - 2004
DIMENSIONAL TOLERANCES	In accordance with table 1 - European Standard EN 14304	

* **NOTE:** for lower temperature applications please contact our technical dept.
For self-adhesive tapes and sheets: max. service temp. 90 °C.
Conservation of adhesive products: not greater than one year.
External applications: HF elastomer must be protected at the time of installation.
Documents and certifications are available upon registration on our website: www.evocellmobius.it
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All normatives quoted in this document are updated to the latest issued versions.

COPPER TUBES (CU)			STEEL TUBES (FE)			TUBES PE/PP/PVC	Thickness H 13 mm		Thickness M 19 mm	
ø ext. mm	ø ext. mm	ø inches	ø ext. mm	ø inches	DN mm	ø ext. mm	Code	m/box	Code	m/box
6,35	6	1/4”								
7,93	8	5/16”								
9,52	10	3/8”	10,10	1/8”	6		EV10HF13x10	172		
12,70	12	1/2”					EV10HF13x12	162		
	14		13,60	1/4”	8					
							EV10HF13x15	136	EV10HF19x15	78
15,87	16	5/8”				16				
	18		17,20	3/8”	10		EV10HF13x18	118	EV10HF19x18	72
19,05		3/4”				20				
22,22	22	7/8”	21,30	1/2”	15		EV10HF13x22	98	EV10HF19x22	64
25,40		1”				25				
			26,90	3/4”	20					
28,57	28	1-1/8”					EV10HF13x28	78	EV10HF19x28	48
						32				
34,92	35	1-3/8”	33,70	1”	25		EV10HF13x35	58	EV10HF19x35	40
						40				
41,27	42	1-5/8”	42,40	1-1/4”	32		EV10HF13x42	48	EV10HF19x42	40
			48,30	1-1/2”	40		EV10HF13x48	40	EV10HF19x48	32
						50				
53,97	54	2”					EV10HF13x54	34	EV10HF19x54	32
			60,30	2”	50		EV10HF13x60	32	EV10HF19x60	28
	64					63			EV10HF19x64	24
	70		76,10	2-1/2”			EV10HF13x76	26	EV10HF19x76	20
	76,10				65	75				
	80		88,90	3”			EV10HF13x89	24	EV10HF19x89	16
	88,90		101,3/104,3	3-1/2”	80	90				
	108	4-1/4”					EV10HF13x108	16	EV10HF19x108	16
	114	4-1/2”	114,30	4”	100	110			EV10HF19x114	14

Packaging dimensions: 209 x 40 x 33 cm.
Packaging volume = 0,27 m^3

IT-FLEX HF “HALOGEN FREE”

INSULATION TUBES - LENGTH 2 m

EVOCELL & MOBIUS

IT-FLEX HF "HALOGEN FREE"

INSULATION TUBES - LENGTH 2 m

COPPER TUBES (CU)			STEEL TUBES (FE)			TUBES PE/PP/PVC	Thickness P 25 mm		Thickness T 32 mm	
ø ext. mm	ø ext. mm	ø inches	ø ext. mm	ø inches	DN mm	ø ext. mm	Code	m/box	Code	m/box
6,35	6	1/4"								
7,93	8	5/16"								
9,52	10	3/8"	10,10	1/8"	6					
12,70	12	1/2"								
	14		13,60	1/4"	8					
15,87	16	5/8"				16				
	18		17,20	3/8"	10		EV10HF25x18	50	EV10HF32x18	32
19,05		3/4"				20				
22,22	22	7/8"	21,30	1/2"	15		EV10HF25x22	42	EV10HF32x22	32
25,40		1"				25				
			26,90	3/4"	20					
28,57	28	1-1/8"					EV10HF25x28	40	EV10HF32x28	24
						32				
34,92	35	1-3/8"	33,70	1"	25		EV10HF25x35	32	EV10HF32x35	24
						40				
41,27	42	1-5/8"	42,40	1-1/4"	32		EV10HF25x42	26	EV10HF32x42	18
			48,30	1-1/2"	40		EV10HF25x48	22	EV10HF32x48	18
						50				
53,97	54	2"					EV10HF25x54	22	EV10HF32x54	14
			60,30	2"	50		EV10HF25x60	18	EV10HF32x60	14
	64					63	EV10HF25x64	12		
	70		76,10	2-1/2"			EV10HF25x76	16	EV10HF32x76	10
	76,10				65	75				
	80		88,90	3"			EV10HF25x89	12	EV10HF32x89	10
	88,90		101,3/104,3	3-1/2"	80	90			EV10HF32x102	8
	108	4-1/4"								
	114	4-1/2"	114,30	4"	100	110	EV10HF25x114	10	EV10HF32x114	8
	133									
			139,70	5"	125	140			EV10HF32x140	6

HALOGEN FREE

IT-FLEX HF "HALOGEN FREE"

SHEETS IN ROLLS H 1 m

SHEETS		
Code	Thickness (mm)	Roll (m^2/ct)
EV10HFBL06	6	15
EV10HFBL10	10	10
EV10HFBL13	13	8
EV10HFBL19	19	6
EV10HFBL25	25	4
EV10HFBL32	32	3

Packaging dimensions: 105 x 40,5 x 41 cm
Packaging volume = 0,17 m^3

IT-FLEX HF "HALOGEN FREE"

PIPING SUPPORTS

Mounting instructions:
1 - Mount the support on the piping and glue the surfaces with AB 500 adhesive.
2 - Close and seal the support.

ø piping (mm)	Thickness13 mm	Thickness 19 mm	Thickness 25 mm	Thickness 32 mm
	Code	Code	Code	Code
18	EV10HFSU13018	EV10HFSU19018		
22	EV10HFSU13022	EV10HFSU19022	EV10HFSU25022	EV10HFSU32022
28	EV10HFSU13028	EV10HFSU19028	EV10HFSU25028	EV10HFSU32028
35	EV10HFSU13035	EV10HFSU19035	EV10HFSU25035	EV10HFSU32035
42	EV10HFSU13042	EV10HFSU19042	EV10HFSU25042	EV10HFSU32042
48	EV10HFSU13048	EV10HFSU19048	EV10HFSU25048	EV10HFSU32048
54	EV10HFSU13054	EV10HFSU19054	EV10HFSU25054	EV10HFSU32054
60	EV10HFSU13060	EV10HFSU19060	EV10HFSU25060	EV10HFSU32060
76	EV10HFSU13076	EV10HFSU19076	EV10HFSU25076	EV10HFSU32076
89	EV10HFSU13089	EV10HFSU19089	EV10HFSU25089	EV10HFSU32089
114		EV10HFSU19114	EV10HFSU25114	EV10HFSU32114

IT-FLEX HF "HALOGEN FREE"

ADHESIVE ELASTOMERIC TAPES

Thickness 3 mm			
Code	Roll length (m)	Roll width (mm)	Packaging content (pcs./box)
EV10HFN315	15	50	12

IT-FLEX

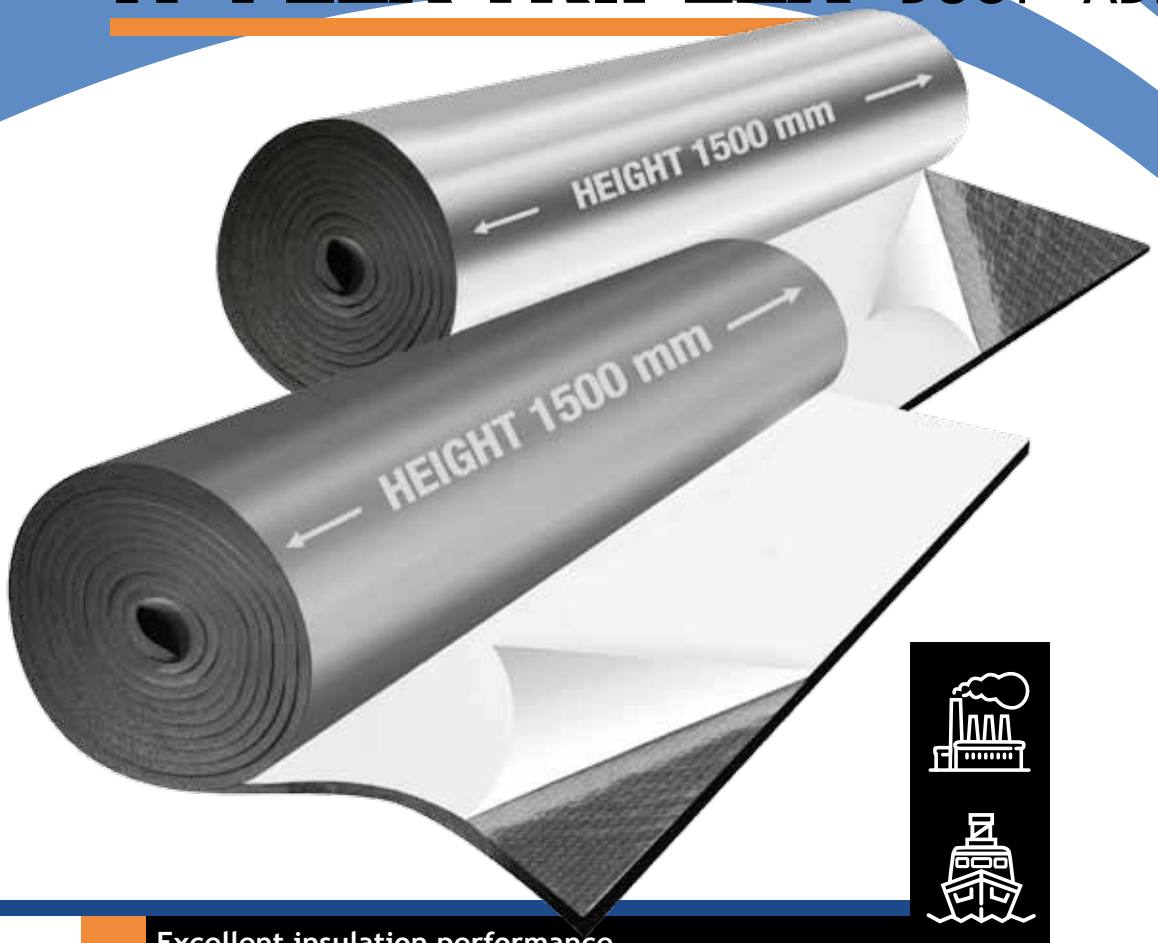
NEOPRENE ADHESIVE, DETERGENTS, PAINT

Code	Description	Packaging content (pcs.)
EV8AB850	850 g tin	12
EV8AB425	425 g tin	24
EV8DETERGENTE	1 l can	12
EV8ACVEG-G	Grey elastomeric paint 0,75 l	loose
EV8ACVEG-B	White elastomeric paint 0,75 l	loose

HALOGEN FREE

IT-FLEX C1 SA "DUCT" ADHESIVE

IT-FLEX TRIPLEX "DUCT" ADHESIVE



- Excellent insulation performance
- Closed-cell microcellular structure
- High water vapour diffusion resistance
- Ensures safety in the event of fire
- Improves installation time on ductwork and relative components
- λ at 0 °C ≤ 0,033 W/m•K
- μ ≥ 7000/10000 TRIPLEX

EVOCELL &MOBIUS

Technical data sheet

IT-FLEX C1 - SA "DUCT" ADHESIVE"
IT-FLEX TRIPLEX "DUCT ADHESIVE"

Rev. 04/22

MATERIAL

Closed-cell flexible elastomeric foam (FEF)

PRODUCT SPECIFICATION

Flexible and expanded rubber foam thermal insulation material produced in accordance with the European Standard EN 14304.

PRODUCT RANGE

Self-adhesive sheets in rolls with thicknesses from 6 to 30 mm.
Self-adhesive tapes with a thickness of 3 mm.
The Triplex version is manufactured with a multilayer protective film coating.

PRODUCT APPLICATION

Thermal insulation of ducts and components of air distribution systems also in external environments. (Triplex version).

MAIN CHARACTERISTICS

Flexible and expanded CFC and HCFC-free rubber foam.
Does not contain dust or fibres.
Sheets in rolls h = 1500 mm.

Technical information	Reference data	Test standards
SERVICE TEMPERATURES Max. temperature of transported fluids Min. temperature of transported fluids	 + 110 °C - 50 °C	EN 14706
THERMAL CONDUCTIVITY λ	At mean temp. of 0 °C ≤ 0,033 W/m•K At mean temp. of 40 °C ≤ 0,037 W/m•K	EN 12667
WATER VAPOUR DIFFUSION FACTOR μ	≥ 7000/10000 TRIPLEX	EN 12086
REACTION TO FIRE	EUROCLASS { B- s3,d0 (version SA); B-s2,d0 (tape); E (TRIPLEX version) }	EN 13501 - 1
CORROSION RISK	MEETS TEST REQUIREMENTS	EN 13468
DIMENSIONAL TOLERANCES	In accordance with table 1 - European Standard EN 14304	

TECHNICAL CHARACTERISTICS OF THE EXTERNAL PROTECTIVE COATING		
TYPE	MULTILAYER FILM COMPOSITE (PET+ALU+PE)	
COLOUR	ALUMINIUN	
TOTAL THICKNESS	≅ 100 μm	
WEIGHT	125 g m²	
OZONE RESISTANCE	EXCELLENT	
UV RESISTANCE	EXCELLENT	UNI ISO 4892 - 2

For self-adhesive tapes and sheets: maximum service temperature 90 °C.

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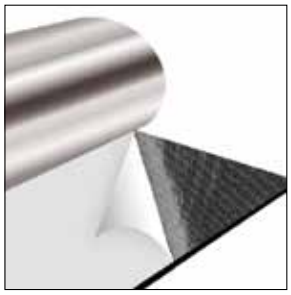
IT-FLEX C1 SA "DUCT"
SELF-ADHESIVE SHEETS IN ROLLS h. 1500 mm

Code	Thickness (mm)	Roll (m^2/sack)
EVBLA06SADUCT	6	45
EVBLA08SADUCT	8	37,5
EVBLA10SADUCT	10	30
EVBLA12SADUCT	12	22,5
EVBLA15SADUCT	15	18
EVBLA20SADUCT	20	15
EVBLA30SADUCT	30	9



IT-FLEX C1 TRIPLEX "DUCT"
SELF-ADHESIVE SHEETS IN ROLLS h. 1500 mm

WITH MULTILAYER FILM COMPOSITE (PET+ALU+PE) COATING

Code	Thickness (mm)	Roll (m^2/sack)
EVBLATR06DUCT	6	45
EVBLATR08DUCT	8	37,5
EVBLATR10DUCT	10	30
EVBLATR12DUCT	12	22,5
EVBLATR15DUCT	15	18
EVBLATR20DUCT	20	15
EVBLATR30DUCT	30	9

Packaging dimensions in polyethylene UV-protective sack: 0,55 x h. 1,50 m
Packaging volume = 0.36 m^3

IT-FLEX
ADHESIVE ELASTOMERIC TAPES

Thickness 3 mm

Code	Roll length (m)	Roll width (mm)	Packaging content (pcs./box)
EV8NASTRON3	10	50	24
EV8NASTRON315	15	50	12
EV8NASTRON100	10	100	12

IT-FLEX
NEOPRENE ADHESIVE, DETERGENTS, PAINTS

Code	Description	Packaging content (pcs.)
EV8AB850	850 g tin	12
EV8AB425	425 g tin	24
EV8DETERGENTE	1 l can	12
EV8ACVEG-G	Grey elastomeric paint 0,75 l	loose
EV8ACVEG-B	White elastomeric paint 0,75 l	loose

IT-FLEX
ADHESIVE JOINT-SEALING TAPES

Code	Roll length (m)	Roll width (mm)	Packaging content (pcs./box)
EV8NASTRNCA25	50	25	loose
EV8NASTRNCA50	50	50	loose

EVOTEC

- Excellent insulation performance
- Closed-cell microcellular structure
- High water vapour diffusion resistance
- Good flexibility and adaptability to surfaces
- Excellent mechanical resistance
- λ at 0 °C ≤ 0,033 W/m•K - λ at 40 °C ≤ 0,037 W/m•K
- μ ≥ 10000

EUROCLASS B-s2,d0

EVOTEC

EVOCELL &MOBIUS

Technical data sheet

EVOTEC

Rev. 04/22

MATERIAL

Black closed-cell flexible elastomeric foam (FEF) coupled with mineral fibre material with a black exterior finishing.

PRODUCT SPECIFICATION

Thermal insulation material produced in accordance with the European Standard EN 14304. (UNI EN 14304)

PRODUCT RANGE

Standard and self-adhesive sheets in rolls with thicknesses from 6 to 32 mm.
Self-adhesive tapes with a thickness of 3 mm.

PRODUCT APPLICATION

Thermal insulation of refrigeration, air-conditioning and heating & plumbing services in commercial, industrial and domestic applications also situated in external environments.

MAIN CHARACTERISTICS

CFC and HCFC-free rubber foam.

Technical information	Reference data	Test standards
SERVICE TEMPERATURES Max. temperature of transported fluids Min. temperature of transported fluids	 +110 °C * -50 °C	 EN 14706
THERMAL CONDUCTIVITY λ	At mean temp. of 0 °C 0,033 W/m•K At mean temp. of +40 °C 0,037 W/m•K	EN 12667
WATER VAPOUR DIFFUSION FACTOR μ	Sheets thk. 6-32 mm μ ≥ 10000	EN 12086
WATER ABSORPTION	< 0.1 kg/m^2	EN 13472/EN 1609
REACTION TO FIRE	EUROCLASS B-s2,d0	EN 13501-1
UV RESISTANCE	EXCELLENT	UNI ISO 4892-2
OZONE RESISTANCE	EXCELLENT	
CORROSION RISK	MEETS TEST REQUIREMENTS	DIN 1988 Part 7 - EN 13668

TECHNICAL CHARACTERISTICS OF THE EXTERNAL PROTECTIVE COATING

TYPE	MINERAL FIBRE MATERIAL
TOTAL THICKNESS	μm approx. 200
WEIGHT	g/m^2 approx. 250
COLOUR	BLACK RAL 9005

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EVOTEC

EVOTEC - ELASTOMER COUPLED WITH MINERAL FIBRE MATERIAL WITH A BLACK EXTERIOR FINISHING

SHEETS IN ROLLS H 1 m

NON-ADHESIVE SHEETS		
Code	Thickness (mm)	Roll (m^2/box)
EVOTECBL006	6	30
EVOTECBL010	10	20
EVOTECBL013	13	14
EVOTECBL019	19	10
EVOTECBL025	25	8
EVOTECBL032	32	6

Packaging dimensions: 108 x 54 x 54 cm
Packaging volume = 0,31 m^3

SHEETS IN ROLLS H 1.5 m

SELF-ADHESIVE SHEETS WITH MESH		
Code	Thicknness (mm)	Roll (m^2/box)
EVOTECBL00815	8	37,5
EVOTECBL01015	10	30
EVOTECBL01215	12	22,5
EVOTECBL01515	15	18
EVOTECBL02015	20	15
EVOTECBL02515	25	12
EVOTECBL03015	30	9

For non-adhesive sheets please contact our Sales Dept.

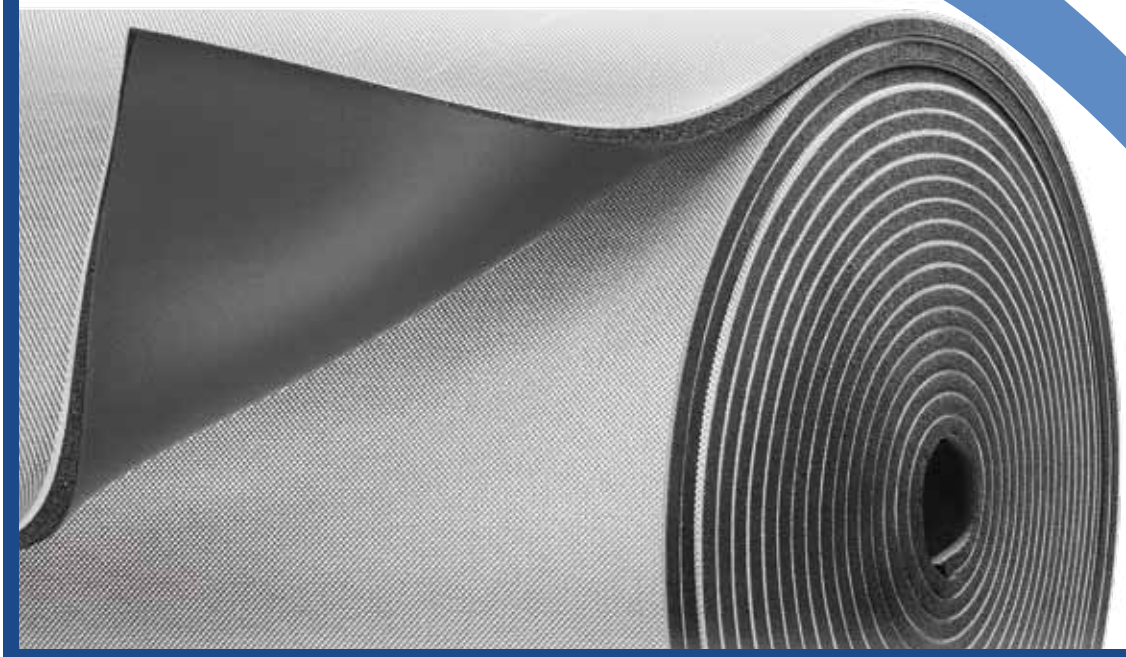
Packaging dimensions in polythene UV resistant sacks: 0,55 x H 1,50 m
Packaging volume = 0,36 m^3

EVOTEC

ADHESIVE ELASTOMERIC STRIP

Code	Roll length (m)	Roll width (mm)	Packaging content (pcs/box)
EV8NASTEVOTEC	25	50	loose

IT-FLEX PE AL



- Excellent insulation performance
- Closed-cell microcellular structure
- High water vapour diffusion resistance
- Good flexibility
- Good mechanical resistance
- λ at 0 °C ≤ 0,034 W/m•K
- $\mu \geq 10000$

IT-FLEX PE AL

EVOCELL &MOBIUS

Technical data sheet

IT-FLEX PE AL

Rev. 04/22

MATERIAL

Composite product of closed-cell flexible elastomeric foam (FEF), coupled with a cross-linked PE layer and coated with an embossed aluminized PE film.

PRODUCT SPECIFICATION

Thermal insulation material produced in accordance with the European Standard EN 14304.

PRODUCT RANGE

Standard and self-adhesive sheets in rolls with thicknesses from 6 to 32 mm.
Self-adhesive tapes with a thickness of 3 mm.

PRODUCT APPLICATION

Thermal insulation of HVAC, refrigeration systems and industrial applications, also for external use.

MAIN CHARACTERISTICS

CFC and HCFC-free rubber foam. Does not contain or release dust or fibres.

Technical information	Reference data	Test standards
SERVICE TEMPERATURES Max. temperature of transported fluids Min. temperature of transported fluids	 + 110 °C - 50 °C	EN 14706
THERMAL CONDUCTIVITY λ	At mean temp. of 0 °C ≤ 0,034 W/m•K At mean temp. of 40 °C ≤ 0,038 W/m•K	EN 12667
WATER VAPOUR DIFFUSION FACTOR μ	≥ 10000	EN 12086
REACTION TO FIRE	EUROCLASS SHEETS - E	EN 13501 - 1
CORROSION RISK	MEETS TEST REQUIREMENTS	EN 13468
OZONE RESISTANCE	EXCELLENT	ISO 7326
UV RESISTANCE	GOOD	UNI ISO 4892 - 2
DIMENSIONAL TOLERANCES	In accordance with table 1 - European Standard EN 14304	

TECHNICAL CHARACTERISTICS OF THE EXTERNAL PROTECTIVE COATING

CROSSLINKED PE	THICKNESS 3 mm
PE FILM ALUMINIZED AND EMBOSSED	THICKNESS 32 microns
COLOUR OF PROTECTIVE FILM	ALUMINIUM

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IT-FLEX PE AL

ELASTOMER COUPLED WITH CROSSLINKED PE WITH AN ALUMINATED EMBOSSED COATING - SHEETS IN ROLLS H 1 m

NON-ADHESIVE SHEETS		
Code	Thickness (mm)	Roll (m^2/box)
EV8PEALBL06 +3 mm PE ALU	6	20
EV8PEALBL10 +3 mm PE ALU	9	14
EV8PEALBL13 +3 mm PE ALU	13	12
EV8PEALBL16 +3 mm PE ALU	16	10
EV8PEALBL19 +3 mm PE ALU	19	8
EV8PEALBL25 +3 mm PE ALU	25	6
EV8PEALBL32 +3 mm PE ALU	32	4

Packaging dimensions in box: 108 x 54 x 54 cm
Packaging volume = 0,31 m^3

IT-FLEX PE AL

IT-FLEX PE AL

ADHESIVE ELASTOMERIC TAPES

Thickness 1,5 mm			
Code	Roll length (m)	Roll width (mm)	Packaging content (pcs./box)
EV8NASTROPEAL	25	50	12

Packaging dimensions in box: 56 x 29 x 32 cm
Packaging volume = 0,05 m^3

IT-FLEX TRIPLEX

- Excellent insulation performance
- Closed-cell microcellular structure
- High water vapour diffusion resistance
- Good flexibility
- Good mechanical resistance
- λ at 0 °C ≤ 0,034 W/m•K
- $\mu \geq$ 10000

IT-FLEX TRIPLEX

EVOCELL &MOBIUS

Technical data sheet

IT-FLEX TRIPLEX

Rev. 04/22

MATERIAL

Closed-cell flexible elastomeric foam (FEF), with a multilayer coating of PET-PE-ALU films.

PRODUCT SPECIFICATION

Thermal insulation material produced in accordance with the European Standard EN 14304.

PRODUCT RANGE

Standard and self-adhesive sheets in rolls with thicknesses from 6 to 32 mm.
Self-adhesive tapes with a thickness of 3 mm.

PRODUCT APPLICATION

Thermal insulation of HVAC, refrigeration systems and industrial applications.

MAIN CHARACTERISTICS

CFC and HCFC-free rubber foam. Does not contain or release dust or fibres.

Technical information	Reference data	Test standards
SERVICE TEMPERATURES Max. temperature of transported fluids Min. temperature of transported fluids	 + 110 °C - 50 °C	EN 14706
THERMAL CONDUCTIVITY λ	At mean temp. of 0 °C ≤ 0,034 W/m•K At mean temp. of 40 °C ≤ 0,038 W/m•K	EN 12667
WATER VAPOUR DIFFUSION FACTOR μ only on elastomer	Sheets thk. 6-32 mm μ ≥ 10000	EN 12086
REACTION TO FIRE	EUROCLASS E	EN 13501 - 1
CORROSION RISK	MEETS TEST REQUIREMENTS	EN 13468
OZONE RESISTANCE	EXCELLENT	ISO 7326
UV RESISTANCE	GOOD	UNI ISO 4892 - 2
DIMENSIONAL TOLERANCES	In accordance with table 1 - European Standard EN 14304	

TECHNICAL CHARACTERISTICS OF THE EXTERNAL PROTECTIVE COATING	
TOTAL THICKNNESS	≅ 100 μm
WEIGHT	≅ 125 gm^2
PROTECTIVE FILM COLOUR	ALUMINIUM

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IT-FLEX TRIPLEX

ELASTOMER COUPLED WITH A MULTILAYER COATING OF ALUMINIUM/PET/PE FILMS - SHEETS IN ROLLS H 1 m

NON-ADHESIVE SHEETS		
Code	Thickness (mm)	Roll (m^2/box)
EV8TRIBL06	6	30
EV8TRIBL10	9	20
EV8TRIBL13	13	14
EV8TRIBL16	16	12
EV8TRIBL19	19	10
EV8TRIBL25	25	8
EV8TRIBL32	32	6

Packaging dimensions in box: 108 x 54 x 54 cm
Packaging volume = 0,31 m^3

IT-FLEX TRIPLEX

ADHESIVE ELASTOMERIC TAPES

Thickness 3 mm			
Code	Roll length (m)	Roll width (mm)	Packaging content (pcs./box)
EV8NASTROTRI	10	50	24

IT-FLEX TRIPLEX

IT-FLEX HI-TEC

- Excellent insulation performance
- Closed-cell microcellular structure
- High water vapour diffusion resistance
- Good flexibility
- Good mechanical resistance
- Excellent UV resistance
- λ at 0 °C ≤ 0,034 W/m•K
- $\mu \geq 10000$

IT-FLEX HI-TEC

EVOCELL &MOBIUS

Technical data sheet

IT-FLEX HI-TEC

Rev. 04/22

MATERIAL

Closed-cell flexible elastomeric foam (FEF) coated with an embossed aluminium sheet.

PRODUCT SPECIFICATION

Thermal insulation material produced in accordance with the European Standard EN 14304.

PRODUCT RANGE

Standard and self-adhesive sheets in rolls with thicknesses from 6 to 32 mm.
Self-adhesive tapes with a thickness of 3 mm.

PRODUCT APPLICATION

Thermal insulation of HVAC, refrigeration systems and industrial applications. Also suitable for external use.

MAIN CHARACTERISTICS

CFC and HCFC-free rubber foam.
Does not contain or release dust or fibres.

Technical information	Reference data	Test standards
SERVICE TEMPERATURES Max.temperature of transported fluids Min.temperature of transported fluids	 + 110 °C - 50 °C	EN 14706
THERMAL CONDUCTIVITY λ	At mean temp. of 0 °C ≤ 0,034 W/m•K At mean temp. of 40 °C ≤ 0,038 W/m•K	EN 12667
WATER VAPOUR DIFFUSION FACTOR μ only on elastomer	Sheets thk. 6-32 mm μ ≥ 10000	EN 12086
REACTION TO FIRE	EUROCLASS C-s3,d0	EN 13501 - 1
CORROSION RISK	MEETS TEST REQUIREMENTS	EN 13468
OZONE RESISTANCE	EXCELLENT	ISO 7326
UV RESISTANCE	GOOD	UNI ISO 4892 - 2
DIMENSIONAL TOLERANCES	In accordance with table 1 - European Standard EN 14304	

TECHNICAL CHARACTERISTICS OF THE EXTERNAL PROTECTIVE COATING	
TOTAL THICKNESS	approx. 50 μm
WEIGHT	approx. 125 gm^2
PROTECTIVE FILM COLOUR	ALUMINIUM

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IT-FLEX HI-TEC

ELASTOMER COUPLED WITH AN EMBOSSED ALU SHEET. SHEET IN ROLLS H 1 m

NON-ADHESIVE SHEETS		
Code	Thickness (mm)	Roll (m^2/box)
EV8HTBL06	6	30
EV8HTBL10	9	20
EV8HTBL13	13	14
EV8HTBL16	16	12
EV8HTBL19	19	10
EV8HTBL25	25	8
EV8HTBL32	32	6

Packaging dimensions in box: 108 x 54 x 54 cm
Packaging volume = 0,31 m^3

IT-FLEX HI-TEC

AHESIVE ELASTOMERIC TAPES

Thickness 3 mm			
Code	Roll length (m)	Roll width (mm)	Packaging content (pcs./box)
EV8NASTRON3HT	10	50	24

IT-FLEX HI-TEC

IT-FLEX UV PROTECTION

- Excellent insulation performance
- Closed-cell microcellular structure
- High water vapour diffusion resistance
- Good flexibility
- Good mechanical resistance
- Excellent UV resistance
- λ at 0 °C ≤ 0,034 W/m•K
- $\mu \geq 10000$

IT-FLEX UV PROTECTION

EVOCELL &MOBIUS

Technical data sheet

IT-FLEX UV PROTECTION

Rev. 04/22

MATERIAL

Closed-cell flexible elastomeric foam (FEF), coupled with polyolefin film with high UV resistance.

PRODUCT SPECIFICATION

Thermal insulation material produced in accordance with the European Standard EN 14304.

PRODUCT RANGE

Standard and self-adhesive sheets in rolls with thicknesses from 6 to 32 mm.
Self-adhesive tapes with a thickness of 3 mm.

PRODUCT APPLICATION

Thermal insulation of HVAC, refrigeration systems and industrial applications.
Also suitable for external use.

MAIN CHARACTERISTICS

CFC and HCFC-free rubber foam. Does not contain or release dust or fibres.

Technical information	Reference data	Test standards
SERVICE TEMPERATURES Max. temperature of transported fluids Min. temperature of transported fluids	 + 110 °C - 50 °C	EN 14706
THERMAL CONDUCTIVITY λ	At mean temp. of 0 °C ≤ 0,034 W/m•K At mean temp. of 40 °C ≤ 0,038 W/m•K	EN 12667
WATER VAPOUR DIFFUSION FACTOR μ only on elastomer	Sheets thk. 6-32 mm μ ≥ 10000	EN 12086
REACTION TO FIRE	EUROCLASS E	EN 13501 - 1
CORROSION RISK	MEETS TEST REQUIREMENTS	EN 13468
OZONE RESISTANCE	EXCELLENT	ISO 7326
UV RESISTANCE	GOOD	UNI ISO 4892 - 2
DIMENSIONAL TOLERANCES	In accordance with table 1 - European Standard EN 14304	

TECHNICAL CHARACTERISTICS OF THE EXTERNAL PROTECTIVE COATING	
TYPE	POLYOLEFIN UV RESISTANT FILM
TOTAL THICKNESS	50 μm
COLOUR	BLACK RAL 9005

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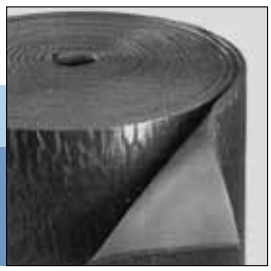
IT-FLEX UV PROTECTION

ELASTOMER COUPLED TO A BLACK POLYOLEFIN UV RESISTANT FILM.
SHEETS IN ROLLS H 1 m



NON-ADHESIVE SHEETS		
Code	Thickness (mm)	Roll (m^2/box)
EV8UVBL06	6	30
EV8UVBL10	9	20
EV8UVBL13	13	14
EV8UVBL16	16	12
EV8UVBL19	19	10
EV8UVBL25	25	8
EV8UVBL32	32	6

Packaging dimensions in box: 108 x 54 x 54 cm
Packaging volume = 0,31 m^3

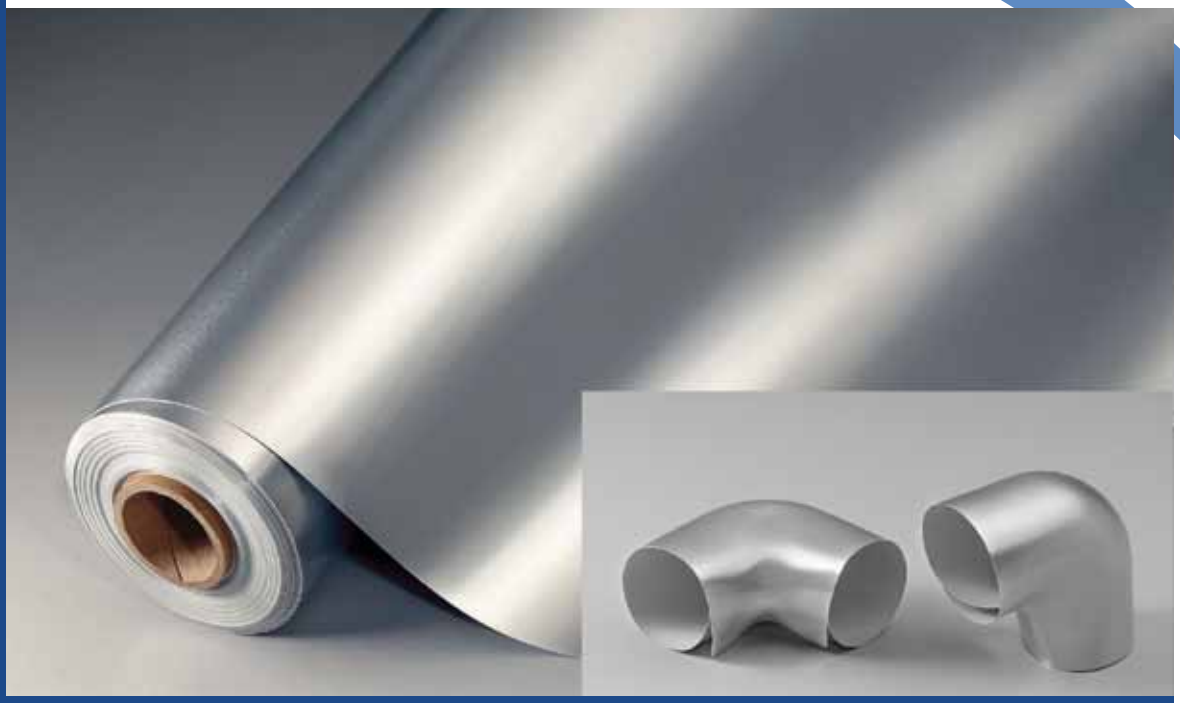
IT-FLEX UV PROTECTION

ADHESIVE ELASTOMERIC TAPES

Thickness 3 mm			
Code	Roll length (m)	Roll width (mm)	Packaging contany (pcs./box)
EV8NASTROUV	10	50	24

IT-FLEX UV PROTECTION

IT-FLEX COVER



- Good mechanical resistance
- Good adaptability to the surface to be covered
- Excellent aesthetic appearance of the finishing
- Good UV resistance

IT-FLEX COVER

EVOCELL &MOBIUS

Technical data sheet

IT-FLEX COVER

Rev. 04/22

MATERIAL

Multilayer self wrapping sheet in PVC/Aluminium/UV protection film.

PRODUCT SPECIFICATION

Protective cover for insulated pipeworks.

PRODUCT RANGE

Sheets, rolls, tapes, elbows and special shaped products with a thickness of 230 µm.

PRODUCT APPLICATION

Surface covering and finishing of insulations.

MAIN CHARACTERISTICS

Also suitable also for external applications.

Technical information	Reference data	Test standards
TOTAL WEIGHT	340 g/mq	EN 22 286
THICKNESS	Approx: 230 µm	
BREAKING LOAD	MD 200 N/ 15mm-CD 175 N/15mm	EN ISO 527-3
ELONGATION	MD 48% - CD 51%	EN ISO 527-3
TEAR STRENGTH	MD 70 N - CD 28 N	EN ISO 527-3
BORING RESISTANCE	ø 0,8 mm 23 N - ø 0,3 mm 87 N	pr EN 14 477
TEAR STRENGTH (NAIL)	MD 50 N - CD 42 N	EN 12310-1
LOI (Oxigen Index Limit)	35,5% O_2	ASTEM D 2863 - ISO 4589
UV RESISTANCE (Stability Test)	EXCELLENT	ASTEM G 26 - ISO 4892 - 2
WATER VAPOUR DIFFUSION	< 0,028 g/mq/d	ASTM F 1429 - ISO 15106 - 2
SD (Equivalent stratus of air)	> 1500 m	
EMISSIVITY ε	94%	
SERVICE TEMPERATURE	From -25 °C to +75 °C	
REACTION TO FIRE	Class 0 - B1	BS 476 part 6 & 7 - DIN 4102 - 1
RADIANT PANEL INDEX	0,50	ASTM E 162 - 02
FLAME	1 (to 1,5 min) - 3 (to 4,5 min)	ASTM E 662 - 03
NO FLAME	0 (to 1,5 min) - 0 (to 4,5 min)	ASTM E 662 - 03

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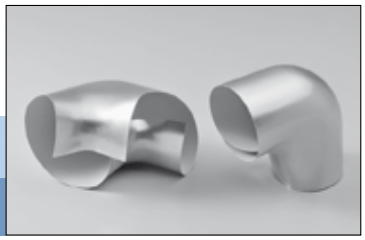
IT-FLEX COVER

COVERING ROLL IN PVC/ALU/UV PROTECTIVE FILM
H 1 m

Thickness 230 µm		
Code	Roll dimension	m^2/roll
EV6COVER230	1 x 25 m	25
EV6COVER230Adesivo	1 x 25 m	25



IT-FLEX COVER

90° ELBOWS

Quantity: 10 pcs/box
Other dimensions on request

Ø Piping		Insulation thickness				
		13 mm	15 mm	20 mm	25 mm	30 mm
Pollici	mm					
	14	●				
3/8”	18	●	●	●	●	●
1/2”	22	●	●	●	●	●
3/4”	28	●	●	●	●	●
1”	35	●	●	●	●	●
1-1/4”	42			●	●	●
1-1/2”	48			●	●	●
	54			●		
	57					
2”	60			●	●	●
	64					
	70					
2-1/2”	76			●	●	●
3”	89			●	●	●
	102			●	●	●
	108					
4”	114			●	●	●
	127					
	134				●	●
5”	140				●	●

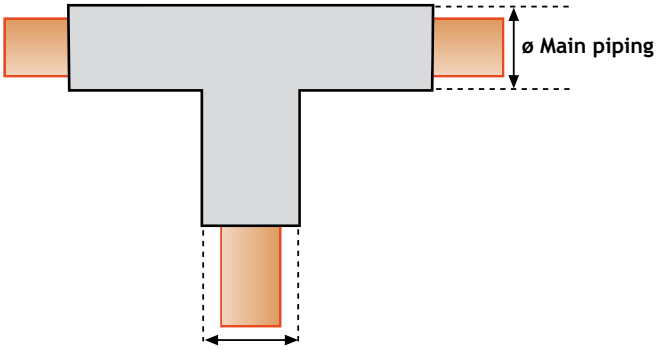
IT-FLEX COVER

SELF-ADHESIVE TAPES

Thickness 80 µm		
Code	Dimensions Width (mm) x Length (m)	Content/box n. pcs.
EV8NASTCOVE25	25 x 50	48
EV8NASTCOVE50	50 x 50	24

IT-FLEX COVER

TABLE FOR CHOOSING THE T PIECES IN COVER SHEET



ø ext. insulated piping (mm)	External diameter of the bypass piping in mm																								
	52	57	61	67	74	83	88	94	100	108	116	120	128	136	140	149	156	169	176	182	189	194	214	218	245
External diameter of the main piping in mm																									
52	■																								
57	■	■																							
61	■	■	■																						
67	■	■	■	■																					
74			■	■	■																				
83			■	■	■	■																			
88			■	■	■	■	■																		
94			■	■	■	■	■	■																	
100			■	■	■	■	■	■	■																
103			■	■	■	■	■	■	■																
108			■	■	■	■	■	■	■	■															
116											■														
120												■													
128													■												
136														■											
140				■				■		■		■	■		■										
149																■									
156								■		■					■		■								
169															■	■	■	■							
176																			■						
182																				■					
189																					■				
194																						■			
214															■		■	■		■	■	■	■		
245																					■			■	■

POLYPAK

- Excellent mechanical resistance
- Excellent adaptability to the insulation surfaces
- Excellent aesthetic appearance of the finishing

POLYPAK

EVOCELL &MOBIUS

Technical data sheet

POLYPAK

Rev. 04/22

MATERIAL

Self-wrapping PVC sheet.

PRODUCT SPECIFICATION

Protective covering of the insulation.

PRODUCT RANGE

Rolls, elbows and special pieces with a thickness of 0,35 mm.

PRODUCT APPLICATION

External covering and finishing of the insulation.

Technical information	Reference data	Test standards
REACTION TO FIRE	CL 1 (I)	UNI 8457 - UNI 9174
WATER VAPOUR DIFFUSION FACTOR μ	≥ 50.000	DIN 52615
IMPACT RESISTANCE	$Kj/m^2 \geq 400$	DIN EN ISO 8256
TENSILE STRENGTH	$N/mm^2 > 35$	DIN EN ISO 527
ELASTIC MODULUS	N/mm^2 1800	DIN EN ISO 527
THERMAL EXPANSION COEFFICIENT	$I/K\ 0,9 \times 10^{-4}$	LEITZ DILATOMETER
EMISSIVITY FACTOR ε	97%	ISO 10292 - A
COLOUR	GREY RAL 7032	

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POLYPAK

POLYPAK
PVC SELF-WRAPPING COVERING SHEET - H 1 m

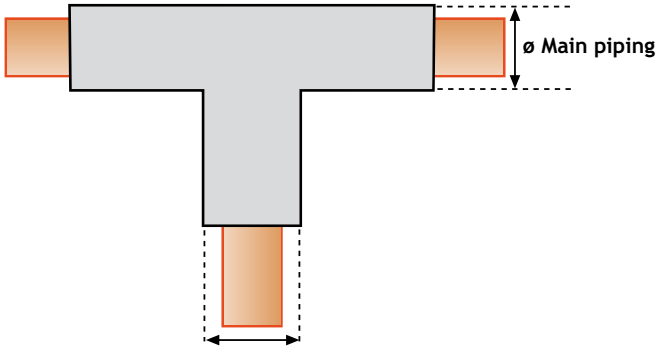
Thickness 0,35 mm		
Code	Roll dimension	m^2/roll
AC POLYPAK	1 x 25 m	25

POLYPAK
PVC SELF-WRAPPING ELBOWS

Ø Piping		Insulation thickness										
		20 mm	25 mm	30 mm	32 mm	40 mm	50 mm	60 mm	70 mm	80 mm	90 mm	100 mm
Inches	mm											
3/8”	17	●	●	●	●	●	●					
1/2”	21	●	●	●	●	●	●					●
3/4”	27	●	●	●	●	●	●					
1”	34	●	●	●	●	●	●	●	●			●
1-1/4”	43	●	●	●	●	●	●	●	●	●		
1-1/2”	48	●	●	●	●	●	●	●	●	●	●	●
	54	●		●	●		●					
	57			●								
2”	60	●	●	●	●	●	●	●	●	●	●	●
	64	●		●				●				
	70	●		●		●	●	●	●	●	●	
2-1/2”	76	●	●	●	●	●	●	●	●	●	●	●
3”	89	●	●	●	●	●	●	●	●	●		●
	102	●	●	●		●	●	●				
	108	●	●	●		●	●	●	●	●		●
4”	114	●	●	●	●	●	●	●		●		●
	127			●			●					
	134		●	●		●	●		●	●	●	●
5”	140		●	●	●	●	●	●	●	●	●	●
	159		●	●		●	●	●	●	●	●	●
6”	168		●	●	●	●	●	●	●	●	●	●
	194					●	●	●	●	●		●
8”	219		●	●		●	●	●	●	●		●
	245						●			●		
	267						●	●		●		●
	273		●	●						●		
10”	324		●	●			●					
12”	356		●									

POLYPAK

TABLE FOR CHOOSING THE T PIECES IN POLYPAK SHEET



ø ext. insulated piping (mm)	External diameter of the bypass piping in mm																								
External diameter of the main piping in mm	52	57	61	67	74	83	88	94	100	108	116	120	128	136	140	149	156	169	176	182	189	194	214	218	245
52	■																								
57	■	■																							
61	■	■	■																						
67	■	■	■	■																					
74			■	■	■																				
83			■	■	■	■																			
88			■	■	■	■	■																		
94			■	■	■	■	■	■																	
100			■	■	■	■	■	■	■																
103			■	■	■	■	■	■	■																
108			■	■	■	■	■	■	■	■															
116											■														
120												■													
128													■												
136														■											
140				■				■		■		■	■		■										
149																■									
156								■		■					■		■								
169															■	■	■	■							
176																			■						
182																				■					
189																					■				
194																						■			
214															■		■	■		■	■	■	■		
245																					■			■	■

IT-FLEX TCA

- Good mechanical resistance
- Excellent adaptability to the insulation surfaces
- Excellent UV resistance

IT-FLEX TCA

EVOCELL &MOBIUS

Technical data sheet

IT-FLEX TCA

Rev. 04/22

MATERIAL

ALU sheet (99,5%).

PRODUCT SECIFICATION

External protective covering of insulation.

PRODUCT RANGE

Tubes, elbow and special shaped parts with diameters from 70 mm to 500 mm, and thicknesses from 0,5 to 1 mm.

PRODUCT APPLICATION

Surface covering protection for insulations. Also suitable for external applications.

Tubes:	Diameters from 70 to 300 mm, length 1 m, with thicknesses from 0,6 mm.
Elbows:	Diameters from 70 to 300 mm, produced in segments with 3,2 mm double hole.
Special pieces:	Diameters from 70 to 300 mm, T connectors and reducers: H. 100,150, 200 mm.

TECHNICAL INFORMATION

Mechanical properties

	Yield strength load % 0,2 (mpa)	Tensil strength (mpa)	Elongation (A50) %
Standard	120	140	1
Test results	188,21	195.78	46,7

Chemical composition

		Sl %	Fe %	Cu %	Mn %	Mg %	Zn %	Ti %	Al %
Standard	Min								
	Max	0,25	0,40	0,05	0,05	0,05	0,07	0,05	99,50
Test results		0,087	0,353	0,006	0,004	0,002	0,009	0,0065	99,534

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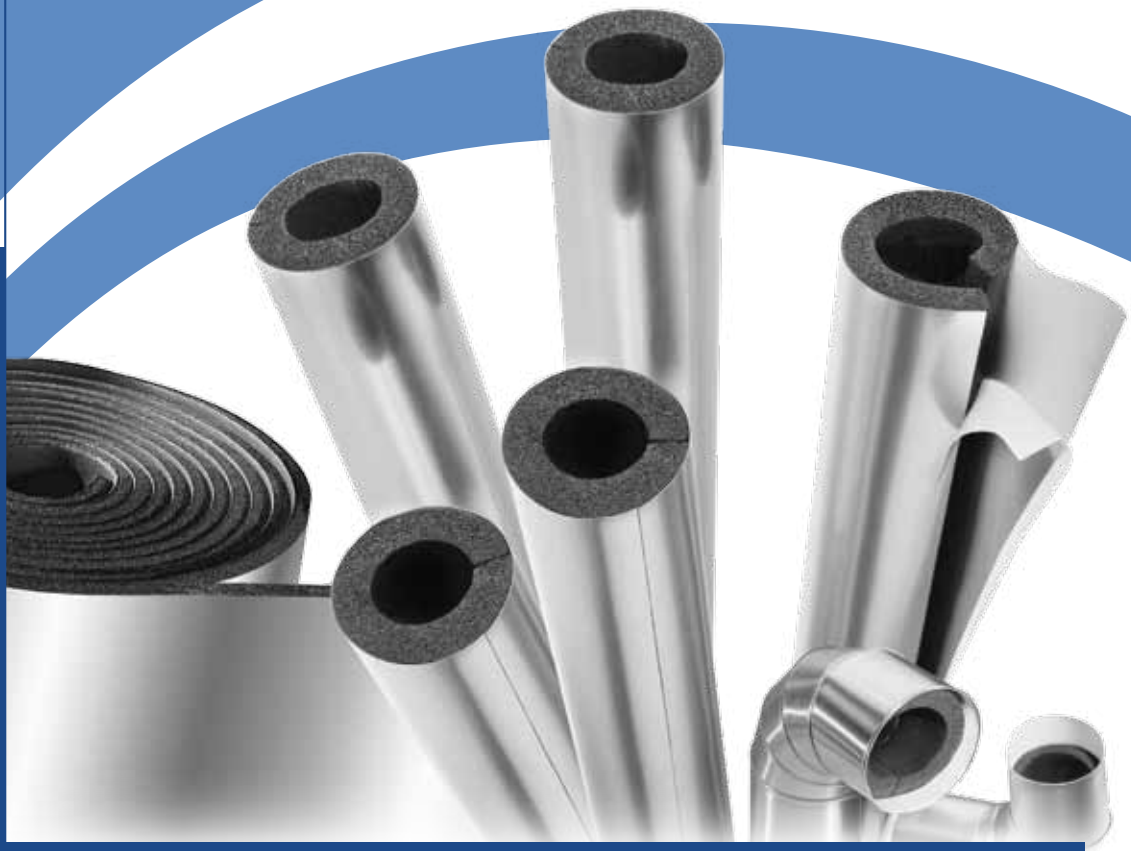
IT-FLEX TCA

TUBE H 1 m, AND ELBOW COVERINGS IN ALUMINIUM

ø external PIPE (mm)	Code Thk. 6/10	Circumference
70	EV4TAL070X022	22
80	EV4TAL080X026	26
90	EV4TAL090X028	28
100	EV4TAL100X032	32
110	EV4TAL110X036	36
120	EV4TAL120X038	38
130	EV4TAL130X042	42
140	EV4TAL140X044	44
150	EV4TAL150X048	48
160	EV4TAL160X050	50
170	EV4TAL170X053	53
180	EV4TAL180X056	56
190	EV4TAL190X060	60
200	EV4TAL200X064	64
210	EV4TAL210X066	66
220	EV4TAL220X070	70
230	EV4TAL230X072	72
240	EV4TAL240X077	77
250	EV4TAL250X080	80
260	EV4TAL260X082	82
270	EV4TAL270X085	85
280	EV4TAL280X088	88
290	EV4TAL290X091	91
300	EV4TAL300X097	97

ø ELBOWS (mm)	Code Thk. 6/10	Circumference
70	EV4CAL070X022	22
80	EV4CAL080X026	26
90	EV4CAL090X028	28
100	EV4CAL100X032	32
110	EV4CAL110X036	36
120	EV4CAL120X038	38
130	EV4CAL130X042	42
140	EV4CAL140X044	44
150	EV4CAL150X048	48
160	EV4CAL160X050	50
170	EV4CAL170X053	53
180	EV4CAL180X056	56
190	EV4CAL190X060	60
200	EV4CAL200X064	64
210	EV4CAL210X066	66
220	EV4CAL220X070	70
230	EV4CAL230X072	72
240	EV4CAL240X077	77
250	EV4CAL250X080	80
260	EV4CAL260X082	82
270	EV4CAL270X085	85
280	EV4CAL280X088	88
290	EV4CAL290X091	91
300	EV4CAL300X097	97

IT-FLEX SYSTEM COVER



- Composite insulation system with external protection
- Closed-cell microcellular structure
- Excellent insulation performance
- High water vapour diffusion resistance
- High mechanical resistance
- Quick and easy to install
- λ at 0 °C ≤ 0,033 W/m•K
- $\mu \geq 10000$

BIM BUILDING INFORMATION MODELING

Technical data sheet

IT-FLEX SYSTEM COVER

Rev. 04/22 A

MATERIAL

Closed-cell flexible elastomeric foam (FEF), coupled with a multi-layered sheet in PVC/Aluminium/UV protective film.

PRODUCT SPECIFICATION

Flexible and expanded rubber foam thermal insulation material produced in accordance with the European Standard EN 14304.

PRODUCT RANGE

Self-adhesive and standard tubes in bars and in continuous rolls with diameters from 6 to 170 mm and thickness from 6 to 60 mm. Sheets in panels and rolls, standard and self-adhesive with thicknesses from 6 to 60 mm. Tapes with a thickness of 3 mm.

PRODUCT APPLICATION

Thermal insulation of HVAC, refrigeration systems and industrial applications, also for exterior use (C1R version).

MAIN CHARACTERISTICS

Flexible and expanded CFC and HCFC-free rubber foam.
Does not contain or release dust or fibres.

Technical information	Reference data	Test standards
SERVICE TEMPERATURES Max. temperature of transported fluids Min. temperature of transported fluids	 + 110 °C - 50 °C	 EN 14706 - 14707
THERMAL CONDUCTIVITY λ	Sheets, tapes, tubes 6-25 mm: at 0 °C λ ≤ 0,033 W/m•K; at 20 °C λ ≤ 0,036 W/m•K; at 40 °C λ ≤ 0,037 W/m•K Tubes 32-60 mm: at 0 °C λ ≤ 0,036 W/m•K; at 20 °C λ ≤ 0,038 W/m•K; at 40 °C λ ≤ 0,040 W/m•K	EN ISO 8497 - EN 12667
RESISTANCE TO WATER VAPOUR DIFFUSION μ only on elastomer	Sheets and tubes μ ≥10000	EN 13469 - EN 12086
REACTION TO FIRE OF ELASTOMER UK UK USA	EUROCLASS { TUBES B_L - s2, d0; SHEETS B - s3, d0; SHEETS 60 mm: E; TAPES B - s2, d0 } CLASS 1 CLASS 0 UL V0 up to thk. 13 mm	EN 13501 - 1 BS 476 : PART 6 - BS 476 : PART 7
CORROSION RISK	MEETS TEST REQUIREMENTS	EN 13468
OZONE RESISTANCE	EXCELLENT	ISO 7326
UV RESISTANCE	GOOD	UNI ISO 4892 - 2
DIMENSIONAL TOLERANCES	In accordance with table 1 - European Standard EN 14304	
REACTION TO FIRE OF THE COMPLETE SYSTEM (ELASTOMER + CLADDING)	EUROCLASS { TUBES C_L - s2, d0; SHEETS C - s3, d0 }	EN 13501 - 1

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Technical data sheet

IT-FLEX SYSTEM COVER
(RIVESTIMENTO PROTETTIVO ESTERNO)

Rev. 04/22 B

MATERIAL
Self wrapping multilayer coating of PVC/ALU/UV protective film.

PRODUCT SPECIFICATION
Protective covering of insulated pipeworks

PRODUCT RANGE
Rolls, tapes, elbows and special shapes with a thickness of 230 µm.

PRODUCT APPLICATION
Surface covering and finishing of insulations.

MAIN CHARACTERISTICS
Also suitable for external applications.

Technical information	Reference data	Test standards
TOTAL WEIGHT	340 g/mq	EN 22 286
THICKNESS	approx. 230 µm	
BREAKING LOAD	MD 200 N/ 15mm-CD 175 N/15mm	EN ISO 527-3
ELONGATION	MD 48% - CD 51%	EN ISO 527-3
TEAR STRENGTH	MD 70 N - CD 28 N	EN ISO 527-3
BORING RESISTANCE	ø 0,8 mm 23 N - ø 0,3 mm 87 N	pr EN 14 477
TEAR STRENGTH (NAIL)	MD 50 N - CD 42 N	EN 12310-1
LOI (Oxigen Index Limit)	35,5% O_2	ASTM D 2863 - ISO 4589
UV RESISTANCE (Stability Test)	EXCELLENT	ASTM G 26 - ISO 4892 - 2
WATER VAPOUR DIFFUSION	< 0,028 g/mq/d	ASTM F 1429 - ISO 15106 - 2
SD (Equivalent stratus of air)	> 1500 m	
EMISSIVITY ε	94%	
SERVICE TEMPERATURE	from -25 °C to +65 °C	
REACTION TO FIRE	Class 0 - B1	BS 476 part 6 & 7 - DIN 4102 - 1
RADIANT PANEL INDEX	0,50	ASTM E 162 - 02
FLAME	1 (at 1,5 min) - 3 (at 4,5 min)	ASTM E 662 - 03
NO FLAME	0 (at 1,5 min) - 0 (at 4,5 min)	ASTM E 662 - 03

REACTION TO FIRE OF THE COMPLETE SYSTEM (ELASTOMER + CLADDING)	EUROCLASS	TUBES C_L - s2, d0 SHEETS C - s3, d0	EN 13501 - 1

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IT-FLEX SYSTEM COVER

PRE-CUT, SELF-ADHESIVE TUBES - LENGTH 1 m

COPPER TUBES (CU)			STEEL TUBES (FE)			TUBES PE/PP/PVC	Thickness **9** mm		Thickness **13** mm	
ø ext. mm	ø ext. mm	ø inches	ø ext. mm	ø inches	DN mm	ø ext. mm	Code	m/box	Code	m/box
6,35	6	1/4"								
7,93	8	5/16"								
9,52	10	3/8"	10,10	1/8"	6					
12,70	12	1/2"								
	14		13,60	1/4"	8					
							EV1C09X015	99	EV1C13X015	73
15,87	16	5/8"				16				
	18		17,20	3/8"	10		EV1C09X018	81	EV1C13X018	62
19,05		3/4"				20				
22,22	22	7/8"	21,30	1/2"	15		EV1C09X022	71	EV1C13X022	58
25,40		1"				25				
			26,90	3/4"	20					
28,57	28	1-1/8"					EV1C09X028	52	EV1C13X028	43
						32				
34,92	35	1-3/8"	33,70	1"	25		EV1C09X035	39	EV1C13X035	31
						40				
41,27	42	1-5/8"	42,40	1-1/4"	32		EV1C09X042	32	EV1C13X042	27
			48,30	1-1/2"	40		EV1C09X048	28	EV1C13X048	21
						50				
53,97	54	2"					EV1C09X054	24	EV1C13X054	20
			60,30	2"	50		EV1C09X060	24	EV1C13X060	18
	64					63	EV1C09X064	24	EV1C13X064	18
	70									
	76,10		76,10	2-1/2"	65	75	EV1C09X076	20	EV1C13X076	12
	80									
	88,90		88,90	3"	80	90	EV1C09X089	13	EV1C13X089	12
		4-1/4"	101,3/104,3	3-1/2"			EV1C09X102	10	EV1C13X102	9
	108	4-1/2"					EV1C09X108	10	EV1C13X108	8
	114		114,30	4"	100	110	EV1C09X114	8	EV1C13X114	8
						125	EV1C09X125	8	EV1C13X125	7
	133						EV1C09X133	6	EV1C13X133	6
						140	EV1C09X140	6	EV1C13X140	6
	159	6-1/4"	159			160	EV1C09X160	4	EV1C13X160	4

PRE-CUT, SELF-ADHESIVE TUBES

Packaging dimensions: 102 x 39 x 39 cm.
Packaging volume = 0,16 m^3

IT-FLEX SYSTEM COVER

PRE-CUT, SELF-ADHESIVE TUBES - LENGTH 1 m

COPPER TUBES (CU)			STEEL TUBES (FE)			TUBES PE/PP/PVC	Thickness 19 mm		Thickness 25 mm	
ø ext. mm	ø ext. mm	ø inches	ø ext. mm	ø inches	DN mm	ø ext. mm	Code	m/box	Code	m/box
6,35	6	1/4"								
7,93	8	5/16"								
9,52	10	3/8"	10,10	1/8"	6					
12,70	12	1/2"								
	14		13,60	1/4"	8					
							EV1C19X015	47		
15,87	16	5/8"				16				
	18		17,20	3/8"	10		EV1C19X018	42	EV1C25X018	30
19,05		3/4"				20				
22,22	22	7/8"	21,30	1/2"	15		EV1C19X022	33	EV1C25X022	27
25,40		1"				25				
			26,90	3/4"	20					
28,57	28	1-1/8"					EV1C19X028	27	EV1C25X028	22
						32				
34,92	35	1-3/8"	33,70	1"	25		EV1C19X035	21	EV1C25X035	16
						40				
41,27	42	1-5/8"	42,40	1-1/4"	32		EV1C19X042	20	EV1C25X042	15
			48,30	1-1/2"	40		EV1C19X048	16	EV1C25X048	12
						50				
53,97	54	2"					EV1C19X054	15	EV1C25X054	11
			60,30	2"	50		EV1C19X060	15	EV1C25X060	9
	64					63	EV1C19X064	15		
	70									
	76,10		76,10	2-1/2"	65	75	EV1C19X076	11	EV1C25X076	8
	80									
	88,90		88,90	3"	80	90	EV1C19X089	9	EV1C25X089	6
		4-1/4"	101,3/104,3	3-1/2"			EV1C19X102	7	EV1C25X102	4
	108	4-1/2"					EV1C19X108	7	EV1C25X108	3
	114		114,30	4"	100	110	EV1C19X114	6	EV1C25X114	3
						125	EV1C19X125	5	EV1C25X125	3
	133						EV1C19X133	4	EV1C25X133	3
						140	EV1C19X140	4	EV1C25X140	2
	159	6-1/4"	159			160	EV1C19X160	3	EV1C25X160	2

PRE-CUT, SELF-ADHESIVE TUBES

IT-FLEX SYSTEM COVER

PRE-CUT, SELF-ADHESIVE TUBES - LENGTH 1 m

COPPER TUBES (CU)			STEEL TUBES (FE)			TUBES PE/PP/PVC	Thickness 32 mm	
ø ext. mm	ø ext. mm	ø inches	ø ext. mm	ø inches	DN mm	ø ext. mm	Code	m/box
6,35	6	1/4”						
7,93	8	5/16”						
9,52	10	3/8”	10,10	1/8”	6			
12,70	12	1/2”						
	14		13,60	1/4”	8			
15,87	16	5/8”				16		
	18		17,20	3/8”	10		EV1C32X018	16
19,05		3/4”				20		
22,22	22	7/8”	21,30	1/2”	15		EV1C32X022	15
25,40		1”				25		
			26,90	3/4”	20			
28,57	28	1-1/8”					EV1C32X028	12
						32		
34,92	35	1-3/8”	33,70	1”	25		EV1C32X035	11
						40		
41,27	42	1-5/8”	42,40	1-1/4”	32		EV1C32X042	11
			48,30	1-1/2”	40		EV1C32X048	9
						50		
53,97	54	2”					EV1C32X054	8
			60,30	2”	50		EV1C32X060	8
	64					63		
	70							
	76,10		76,10	2-1/2”	65	75	EV1C32X076	6
	80							
	88,90		88,90	3”	80	90	EV1C32X089	4
		4-1/4”	101,3/104,3	3-1/2”			EV1C32X102	4
	108	4-1/2”					EV1C32X108	3
	114		114,30	4”	100	110	EV1C32X114	3
						125	EV1C32X125	3
	133						EV1C32X133	2
						140	EV1C32X140	2
	159	6-1/4”	159			160	EV1C32X160	2

IT-FLEX SYSTEM COVER

SHAPE 3 ELBOWS

COPPER TUBES (CU)			STEEL TUBES (FE)			TUBES PE/PP/PVC	Thickness 9 mm	Thickness 13 mm	Thickness 19 mm
ø ext. mm	ø ext. mm	ø inches	ø ext. mm	ø inches	DN mm	ø ext. mm	Code	Code	Code
6,35	6	1/4”							
7,93	8	5/16”							
9,52	10	3/8”	10,10	1/8”	6				
12,70	12	1/2”							
	14		13,60	1/4”	8				
15,87	16	5/8”				16			
	18		17,20	3/8”	10		EV2CC09X018	EV2CC13X018	EV2CC19X018
19,05		3/4”				20			
22,22	22	7/8”	21,30	1/2”	15		EV2CC09X022	EV2CC13X022	EV2CC19X022
25,40		1”				25			
			26,90	3/4”	20				
28,57	28	1-1/8”					EV2CC09X028	EV2CC13X028	EV2CC19X028
						32			
34,92	35	1-3/8”	33,70	1”	25		EV2CC09X035	EV2CC13X035	EV2CC19X035
						40			
41,27	42	1-5/8”	42,40	1-1/4”	32		EV2CC09X042	EV2CC13X042	EV2CC19X042
			48,30	1-1/2”	40		EV2CC09X048	EV2CC13X048	EV2CC19X048
						50			
53,97	54	2”					EV2CC09X054	EV2CC13X054	EV2CC19X054
			60,30	2”	50		EV2CC09X060	EV2CC13X060	EV2CC19X060
	64					63	EV2CC09X064		EV2CC19X064
	70								
	76,10		76,10	2-1/2”	65	75	EV2CC09X076	EV2CC13X076	EV2CC19X076
	80								
	88,90		88,90	3”	80	90	EV2CC09X089	EV2CC13X089	EV2CC19X089
			101,3/104,3	3-1/2”			EV2CC09X102	EV2CC13X102	EV2CC19X102
	108	4-1/4”					EV2CC09X108	EV2CC13X108	EV2CC19X108
	114	4-1/2”	114,30	4”	100	110	EV2CC09X114	EV2CC13X114	EV2CC19X114
						125	EV2CC09X125	EV2CC13X125	EV2CC19X125
	133						EV2CC09X133	EV2CC13X133	EV2CC19X133
			139,70	5”	125	140	EV2CC09X140	EV2CC13X140	EV2CC19X140
	159	6-1/4”	159			160	EV2CC09X160	EV2CC13X160	EV2CC19X160

IT-FLEX SYSTEM COVER

SHAPE 3 ELBOWS

COPPER TUBES (CU)			STEEL TUBES (FE)			TUBES PE/PP/PVC	Thickness 25 mm	Thickness 32 mm	Thickness 40 mm
ø ext. mm	ø ext. mm	ø inches	ø ext. mm	ø inches	DN mm	ø ext. mm	Code	Code	Code
6,35	6	1/4”							
7,93	8	5/16”							
9,52	10	3/8”	10,10	1/8”	6				
12,70	12	1/2”							
	14		13,60	1/4”	8				
15,87	16	5/8”				16			
	18		17,20	3/8”	10		EV2CC25X018	EV2CC32X018	EV2CC40X018
19,05		3/4”				20			
22,22	22	7/8”	21,30	1/2”	15		EV2CC25X022	EV2CC32X022	EV2CC40X022
25,40		1”				25			
			26,90	3/4”	20				
28,57	28	1-1/8”					EV2CC25X028	EV2CC32X028	EV2CC40X028
						32			
34,92	35	1-3/8”	33,70	1”	25		EV2CC25X035	EV2CC32X035	EV2CC40X035
						40			
41,27	42	1-5/8”	42,40	1-1/4”	32		EV2CC25X042	EV2CC32X042	EV2CC40X042
			48,30	1-1/2”	40		EV2CC25X048	EV2CC32X048	EV2CC40X048
						50			
53,97	54	2”					EV2CC25X054	EV2CC32X054	EV2CC40X054
			60,30	2”	50		EV2CC25X060	EV2CC32X060	EV2CC40X060
	64					63			
	70								
	76,10		76,10	2-1/2”	65	75	EV2CC25X076	EV2CC32X076	EV2CC40X076
	80								
	88,90		88,90	3”	80	90	EV2CC25X089	EV2CC32X089	EV2CC40X089
			101,3/104,3	3-1/2”			EV2CC25X102	EV2CC32X102	EV2CC40X102
	108	4-1/4”					EV2CC25X108	EV2CC32X108	EV2CC40X108
	114	4-1/2”	114,30	4”	100	110	EV2CC25X114	EV2CC32X114	EV2CC40X114
						125	EV2CC25X125	EV2CC32X125	EV2CC40X125
	133						EV2CC25X133	EV2CC32X133	EV2CC40X133
			139,70	5”	125	140	EV2CC25X140	EV2CC32X140	EV2CC40X140
	159	6-1/4”	159			160	EV2CC25X160	EV2CC32X160	EV2CC40X160

IT-FLEX SYSTEM COVER

SHAPE 3 ELBOWS

COPPER TUBES (CU)			STEEL TUBES (FE)			TUBES PE/PP/PVC	Thickness **50** mm
ø ext. mm	ø ext. mm	ø inches	ø ext. mm	ø inches	DN mm	ø ext. mm	Code
6,35	6	1/4”					
7,93	8	5/16”					
9,52	10	3/8”	10,10	1/8”	6		
12,70	12	1/2”					
	14		13,60	1/4”	8		
15,87	16	5/8”				16	
	18		17,20	3/8”	10		**EV2CC50X018**
19,05		3/4”				20	
22,22	22	7/8”	21,30	1/2”	15		**EV2CC50X022**
25,40		1”				25	
			26,90	3/4”	20		
28,57	28	1-1/8”					**EV2CC50X028**
						32	
34,92	35	1-3/8”	33,70	1”	25		**EV2CC50X035**
						40	
41,27	42	1-5/8”	42,40	1-1/4”	32		**EV2CC50X042**
			48,30	1-1/2”	40		**EV2CC50X048**
						50	
53,97	54	2”					**EV2CC50X054**
			60,30	2”	50		**EV2CC50X060**
	64					63	
	70						
	76,10		76,10	2-1/2”	65	75	**EV2CC50X076**
	80						
	88,90		88,90	3”	80	90	**EV2CC50X089**
			101,3/104,3	3-1/2”			**EV2CC50X102**
	108	4-1/4”					**EV2CC50X108**
	114	4-1/2”	114,30	4”	100	110	**EV2CC50X114**
						125	**EV2CC50X125**
	133						**EV2CC50X133**
			139,70	5”	125	140	**EV2CC50X140**
	159	6-1/4”	159			160	**EV2CC50X160**

SHAPE 3 ELBOWS

IT-FLEX SYSTEM COVER

SHAPE 1B ELBOWS
(With thickness loss)

COPPER TUBES (CU)			STEEL TUBES (FE)			TUBES PE/PP/PVC	Thickness 9 mm	Thickness 13 mm	Thickness 19 mm
ø ext. mm	ø ext. mm	ø inches	ø ext. mm	ø inches	DN mm	ø ext. mm	Code	Code	Code
6,35	6	1/4”							
7,93	8	5/16”							
9,52	10	3/8”	10,10	1/8”	6				
12,70	12	1/2”							
	14		13,60	1/4”	8				
15,87	16	5/8”				16			
	18		17,20	3/8”	10		EV2CCB09X018	EV2CCB13X018	EV2CCB19X018
19,05		3/4”				20			
22,22	22	7/8”	21,30	1/2”	15		EV2CCB09X022	EV2CCB13X022	EV2CCB19X022
25,40		1”				25			
			26,90	3/4”	20				
28,57	28	1-1/8”					EV2CCB09X028	EV2CCB13X028	EV2CCB19X028
						32			
34,92	35	1-3/8”	33,70	1”	25		EV2CCB09X035	EV2CCB13X035	EV2CCB19X035
						40			
41,27	42	1-5/8”	42,40	1-1/4”	32		EV2CCB09X042	EV2CCB13X042	EV2CCB19X042
			48,30	1-1/2”	40		EV2CCB09X048	EV2CCB13X048	EV2CCB19X048
						50			
53,97	54	2”					EV2CCB09X054	EV2CCB13X054	EV2CCB19X054
			60,30	2”	50		EV2CCB09X060	EV2CCB13X060	EV2CCB19X060
	64					63			
	70								
	76,10		76,10	2-1/2”	65	75	EV2CCB09X076	EV2CCB13X076	EV2CCB19X076
	80								
	88,90		88,90	3”	80	90	EV2CCB09X089	EV2CCB13X089	EV2CCB19X089
			101,3/104,3	3-1/2”			EV2CCB09X102	EV2CCB13X102	EV2CCB19X102
	108	4-1/4”					EV2CCB09X108	EV2CCB13X108	EV2CCB19X108
	114	4-1/2”	114,30	4”	100	110	EV2CCB09X114	EV2CCB13X114	EV2CCB19X114
						125	EV2CCB09X125	EV2CCB13X125	EV2CCB19X125
	133						EV2CCB09X133	EV2CCB13X133	EV2CCB19X133
			139,70	5”	125	140	EV2CCB09X140	EV2CCB13X140	EV2CCB19X140
	159	6-1/4”	159			160	EV2CCB09X160	EV2CCB13X160	EV2CCB19X160

IT-FLEX SYSTEM COVER

SHAPE 1B ELBOWS
(With thickness loss)

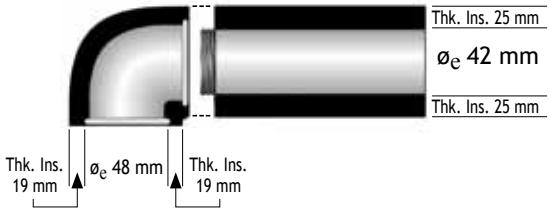
COPPER TUBES (CU)			STEEL TUBES (FE)			TUBES PE/PP/PVC	Thickness **25** mm	Thickness **32** mm	Thickness **40** mm
ø ext. mm	ø ext. mm	ø inches	ø ext. mm	ø inches	DN mm	ø ext. mm	Code	Code	Code
6,35	6	1/4"							
7,93	8	5/16"							
9,52	10	3/8"	10,10	1/8"	6				
12,70	12	1/2"							
	14		13,60	1/4"	8				
15,87	16	5/8"				16			
	18		17,20	3/8"	10		EV2CCB25X018	EV2CCB32X018	EV2CCB40X018
19,05		3/4"				20			
22,22	22	7/8"	21,30	1/2"	15		EV2CCB25X022	EV2CCB32X022	EV2CCB40X022
25,40		1"				25			
			26,90	3/4"	20				
28,57	28	1-1/8"					EV2CCB25X028	EV2CCB32X028	EV2CCB40X028
						32			
34,92	35	1-3/8"	33,70	1"	25		EV2CCB25X035	EV2CCB32X035	EV2CCB40X035
						40			
41,27	42	1-5/8"	42,40	1-1/4"	32		EV2CCB25X042	EV2CCB32X042	EV2CCB40X042
			48,30	1-1/2"	40		EV2CCB25X048	EV2CCB32X048	EV2CCB40X048
						50			
53,97	54	2"					EV2CCB25X054	EV2CCB32X054	EV2CCB40X054
			60,30	2"	50		EV2CCB25X060	EV2CCB32X060	EV2CCB40X060
	64					63			
	70								
	76,10		76,10	2-1/2"	65	75	EV2CCB25X076	EV2CCB32X076	EV2CCB40X076
	80								
	88,90		88,90	3"	80	90	EV2CCB25X089	EV2CCB32X089	EV2CCB40X089
			101,3/104,3	3-1/2"			EV2CCB25X102	EV2CCB32X102	EV2CCB40X102
	108	4-1/4"					EV2CCB25X108	EV2CCB32X108	EV2CCB40X108
	114	4-1/2"	114,30	4"	100	110	EV2CCB25X114	EV2CCB32X114	EV2CCB40X114
						125	EV2CCB25X125	EV2CCB32X125	EV2CCB40X125
	133						EV2CCB25X133	EV2CCB32X133	EV2CCB40X133
			139,70	5"	125	140	EV2CCB25X140	EV2CCB32X140	EV2CCB40X140
	159	6-1/4"	159			160	EV2CCB25X160	EV2CCB32X160	EV2CCB40X160

IT-FLEX SYSTEM COVER

SHAPE 1B ELBOWS
(With thickness loss)

COPPER TUBES (CU)			STEEL TUBES (FE)			TUBES PE/PP/PVC	Thickness **50** mm
ø ext. mm	ø ext. mm	ø inches	ø ext. mm	ø inches	DN mm	ø ext. mm	Code
6,35	6	1/4”					
7,93	8	5/16”					
9,52	10	3/8”	10,10	1/8”	6		
12,70	12	1/2”					
	14		13,60	1/4”	8		
15,87	16	5/8”				16	
	18		17,20	3/8”	10		**EV2CCB50X018**
19,05		3/4”				20	
22,22	22	7/8”	21,30	1/2”	15		**EV2CCB50X022**
25,40		1”				25	
			26,90	3/4”	20		
28,57	28	1-1/8”					**EV2CCB50X028**
						32	
34,92	35	1-3/8”	33,70	1”	25		**EV2CCB50X035**
						40	
41,27	42	1-5/8”	42,40	1-1/4”	32		**EV2CCB50X042**
			48,30	1-1/2”	40		**EV2CCB50X048**
						50	
53,97	54	2”					**EV2CCB50X054**
			60,30	2”	50		**EV2CCB50X060**
	64					63	
	70						
	76,10		76,10	2-1/2”	65	75	**EV2CCB50X076**
	80						
	88,90		88,90	3”	80	90	**EV2CCB50X089**
			101,3/104,3	3-1/2”			**EV2CCB50X102**
	108	4-1/4”					**EV2CCB50X108**
	114	4-1/2”	114,30	4”	100	110	**EV2CCB50X114**
						125	**EV2CCB50X125**
	133						**EV2CCB50X133**
			139,70	5”	125	140	**EV2CCB50X140**
	159	6-1/4”	159			160	**EV2CCB50X160**

Indications for choosing the SYSTEM COVER shape 1/B elbow (type with insulation thickness loss) for fittings threaded in cast iron.



NB: In order to maintain a constant external dimension of the insulation system, the diagram shows how, when ordering the insulation for elbows and T pieces, the following factors should be taken into consideration:

1) The increase in diameter of the pipework (elbows and T pieces).

2) The reduction of the insulation thickness on the pipework (elbows and T pieces).

IT-FLEX SYSTEM COVER

ELASTOMERIC FOAM SHEET COATED WITH A FOIL IN PVC+ALU+UV PROTECTION FILM - SHEETS H 1 m

NON-ADHESIVE SHEETS			SELF-ADHESIVE SHEETS		
Code	Thickness (mm)	Roll (m^2/box)	Code	Thickness (mm)	Roll (m^2/box)
EV1CBL06	6	30	**EV1CBLA06**	6	30
EV1CBL10	9	20	**EV1CBLA10**	9	20
EV1CBL13	13	14	**EV1CBLA13**	13	14
EV1CBL19	19	10	**EV1CBLA19**	19	10
EV1CBL25	25	8	**EV1CBLA25**	25	8
EV1CBL32	32	6	**EV1CBLA32**	32	6

Packaging dimensions: 108 x 54 x 54 cm
Packaging volume = 0,31 m^3

NB: For External applications it is advisable to attach the system using small plastic tacks as illustrated in the photographs below. It is also recommended to seal the system with aluminium coloured marine silicone sealant.

ULTRASOLAR 2

Composite systems consisting of two twinned tubes in corrugated stainless steel (AISI 316L), covered with high performance elastomeric insulation material and a sensor cable. Produced in rolls of considerable lengths on bobbins, allowing for a more practical, fast and reliable installation and a reduction of waste ensuring substantial savings. The insulation covering is available in both black and a brick red colour which helps to enhance the aesthetic appearance of systems.

ULTRASOLAR 2

Technical data sheet

ULTRASOLAR 2

Rev. 04/22

MATERIAL

Composite system in rolls consisting of 2 twinned tubes in corrugated stainless steel AISI 316 L, IT-FLEX AT R insulation covering and a sensor cable.

PRODUCT SPECIFICATION

Steel: In accordance with the European Standard EN EN 10088-2/DIN 1744:1.4404.
Insulation: In accordance with the European Standard EN 143044.

PRODUCT RANGE

Tubes in rolls in lengths of 10-15-20-25 m, bobbins in lengths of 50-100-150 m in DN 16-20-25.
Insulation thickness of 10 mm.

PRODUCT APPLICATION

The production of thermal fluid distribution systems in solar thermal applications or applications carrying high temperature fluids (+150 °C in continuous operation; +180 °C in intermittent operation). It is also suitable for external applications.

TECHNICAL SPECIFICATIONS OF THE CORRUGATED STAINLESS STEEL AISI 316 L TUBE

TYPE DN	THICKNESS (mm)	EXTERNAL DIAMETER (mm)	TOLERANCE (mm)
16	0,18	21,6	± 0,25
20	0,18	26,6	± 0,25
25	0,20	32,2	± 0,30

TECHNICAL SPECIFICATIONS OF THE INSULATION

MAIN PROPERTIES	REFERENCE VALUES	TEST STANDARDS
SERVICE TEMPERATURES OF TRANSPORTED FLUIDS	- 50 °C* + 150 °C	EN 14707
THERMAL CONDUCTIVITY λ AT A MEAN TEMPERATURE OF + 40 °C	≤ 0,038 W/m•K	EN ISO 8497
FIRE PERFORMANCE EUROCLASS	E_L	EN 13501-1
WATER ABSORPTION	< 0.1 kg/m^2	EN 13472
OZONE RESISTANCE	EXCELLENT	ISO 7326
UV RESISTANCE	EXCELLENT	UNI ISO 4892-2
ANTIMICROBIAL BEHAVIOUR	MEETS TEST REQUIREMENTS	AATCC TEST METHOD 30 - 2004
CORROSION RISK	MEETS TEST REQUIREMENTS	EN 13468

TECHNICAL SPECIFICATIONS OF THE EXTERNAL INSULATION

TYPE	FILM IN LDPE	
COLOUR	BRICK	
THICKNESS	≅ 350 µm	
ELONGATION AT BREAK (%)	200 MD/550 TD	ISO 527-3

TECHNICAL SPECIFICATIONS OF SENSOR CABLE

TYPE	Silicone rubber (double thread)	
SERVICE TEMPERATURES	from - 60 °C to +180 °C	
SECTION	1 mm^2	EN ISO 12086
NOMINAL TENSION	Uo/U 300/500 V	

Documents and certifications are available upon registration on our website: www.evocellmobius.it
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THE EVOLUTION OF ELASTOMERIC TECHNOLOGY

PRODUCT RANGE

NEW EVOLUTION

ULTRASOLAR 2

2 TWINNED TUBES IN CORRUGATED STAINLESS STEEL AISI 316
WITH AN INSULATION COVERING OF 10 mm.

DN TYPE	THK. STEEL TUBE (mm)	EXT. DIAMETER-STEEL TUBE	ROLL LENGTH (m)	BOBBIN LENGTH (m)
DN 16	0,18	21,6	10, 15, 20, 25	50, 100, 150
DN 20	0,18	26,6	10, 15, 20, 25	50, 100
DN 25	0,20	32,2	15, 20, 25	50, 100

ULTRASOLAR 2

EVOCELL &MOBIUS

THE EVOLUTION OF ELASTOMERIC TECHNOLOGY

ACCESSORIES

A range of fittings with different types of attachments and shapes to use for connecting the various parts of the system to be installed.

ULTRASOLAR 2

EVOCELL &MOBIUS

ULTRASOLAR 2

COMPOSITE SYSTEM IN ROLLS, COMPLETE WITH 2 TWINNED TUBES IN STAINLESS STEEL AISI 316

Code	Description	ø	m/bob
ULTRAS216150R	Ultrasolar 2 **DN16** Thk.10 150 m. Red	16	150
ULTRAS216100R	Ultrasolar 2 **DN16** Thk.10 100 m. Red	16	100
ULTRAS216050R	Ultrasolar 2 **DN16** Thk.10 50 m. Red	16	50
ULTRAS220100R	Ultrasolar 2 **DN20** Thk.10 100 m. Red	20	100
ULTRAS220050R	Ultrasolar 2 **DN20** Thk.10 50 m. Red	20	50
ULTRAS225100R	Ultrasolar 2 **DN25** Thk.10 100 m. Red	25	100
ULTRAS225050R	Ultrasolar 2 **DN25** Thk.10 50 m. Red	25	50

BOBINE

BOBBINS

ROLLS

Code	Description	ø	m/roll
ULTRAS216010R	Ultrasolar 2 **DN16** Thk.10 10 m. Red	16	10
ULTRAS216015R	Ultrasolar 2 **DN16** Thk.10 15 m. Red	16	15
ULTRAS216020R	Ultrasolar 2 **DN16** Thk.10 20 m. Red	16	20
ULTRAS216025R	Ultrasolar 2 **DN16** Thk.10 25 m. Red	16	25
ULTRAS220010R	Ultrasolar 2 **DN20** Thk.10 10 m. Red	20	10
ULTRAS220015R	Ultrasolar 2 **DN20** Thk.10 15 m. Red	20	15
ULTRAS220020R	Ultrasolar 2 **DN20** Thk.10 20 m. Red	20	20
ULTRAS220025R	Ultrasolar 2 **DN20** Thk. 25 m. Red	20	25
ULTRAS225015R	Ultrasolar 2 **DN25** Thk.10 15 m. Red	25	15
ULTRAS225020R	Ultrasolar 2 **DN25** Thk.10 20 m. Red	25	20
ULTRAS225025R	Ultrasolar 2 **DN25** Thk.10 25 m. Red	25	25

ROLLS

Coil 10 - 15 m
Packaging dimension: 80 x 82 x 22 cm
Packaging volume = 0,14 m^3

Coil 20 - 25 m
Packaging dimension: 80 x 82 x 40 cm
Packaging volume = 0,26 m^3

Wood bobbin 50 - 100 - 150 m
Packaging dimension: 120 x 120 x 60 cm
Packaging volume = 0,86 m^3

FITTINGS KIT

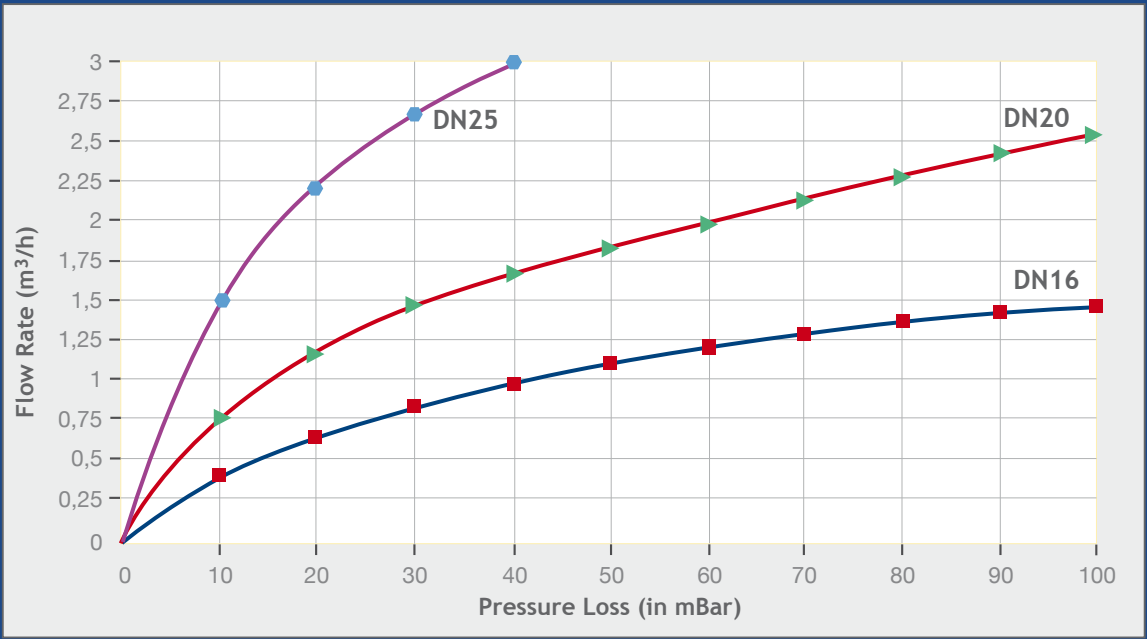
ULTRASOLAR 2

FITTINGS KIT WITH 4 PIECES

Code	Description
RACDN16-1M	Fittings kit DN 16X1" MALE
RACDN16-1/2M	Fittings kit DN 16X1/2" MALE
RACDN16-3/4M	Fittings kit DN 16X3/4" MALE
RACDN20-1M	Fittings kit DN 20X1" MALE
RACDN20-3/4M	Fittings kit DN 20X3/4" MALE
RACDN25-1M	Fittings kit DN 25X1" MALE
RACDN25-11/4M	Fittings kit DN 25X1-1/4" MALE
RACDN16-15R	Fittings kit DN 16X15 COPPER
RACDN16-2218R	Fittings kit DN 16X22/18 COPPER
RACDN20-2218R	Fittings kit DN 20X22/18 COPPER
RACDN25-2218R	Fittings kit DN 25X22/18 COPPER
RACDN16-16	Fittings kit DN 16 X DN16
RACDN20-20	Fittings kit DN 20 X DN20
RACDN25-25	Fittings kit DN 25 X DN25
RACDN16-1F	Fittings kit DN 16X1" FEMALE
RACDN16-1/2F	Fittings kit DN 16X1/2" FEMALE
RACDN16-3/4F	Fittings kit DN 16X3/4" FEMALE
RACDN20-1F	Fittings kit DN 20X1" FEMALE
RACDN20-3/4F	Fittings kit DN 20X3/4" FEMALE
RACDN25-1F	Fittings kit DN 25X1" FEMALE
RACDN16-22C	Fittings kit DN 16X22 COPPER ELBOW
RACDN16-3/4C	Fittings kit DN 16X3/4" COPPER ELBOW
RACDN16-18	Fittings kit DN 16 X 18
RACDN16-22	Fittings kit DN 16 X 22
RACDN20-18	Fittings kit DN 20 X 18
RACDN20-22	Fittings kit DN 20 X 22
RACDN25-18	Fittings kit DN 25 X 18
RACDN25-22	Fittings kit DN 25 X 22
RACTEE16-22R	Fittings kit T 16X22

EVOCELL &MOBIUS

Table of pressure losses of corrugated stainless steel AISI 316 L pipes.



ULTRASOLAR 2

ACOUSTIC

RANGE OF PRODUCTS FOR
ACOUSTIC INSULATION

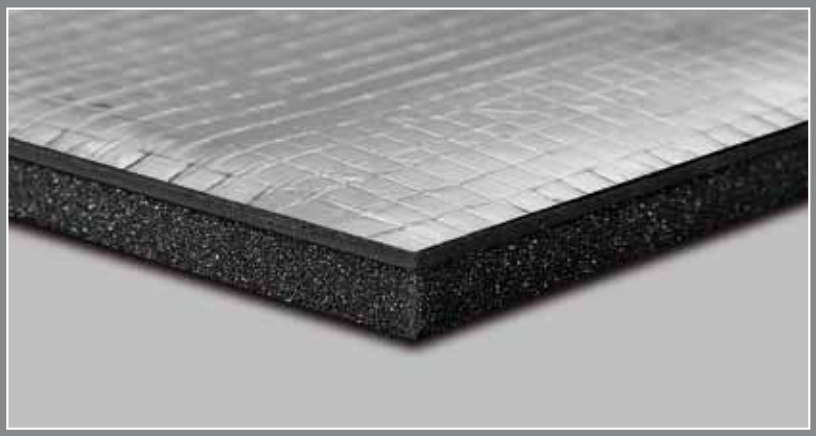
EVOCELL &MOBIUS

EVOSOUND HD-RUB

A range of acoustic-insulation rolled sheets produced by the coupling of high-density elastomeric and rubber foamed material (FEF). Available in different thicknesses, they are suitable for solving problems of acoustic insulation in building and industrial applications.

EVOSOUND HD-RUB LFS

A range of acoustic-insulation rolled sheets produced by the coupling of high-density elastomeric and rubber foamed material (FEF) and an external protective covering in aluminium. They are ideal for solving problems of acoustic insulation in building and industrial applications and are available in different thicknesses on request.



Technical data sheet

EVOSOUND HD-RUB - HD-RUB LFS

MATERIAL

High-density soundproofing barrier layer coupled with a flexible elastomeric foam sheet (FEF).

PRODUCT RANGE

Sheets in rolls with dimensions of 1 x 2 m (see the specific composition).

PRODUCT APPLICATION

Acoustic insulation of walls, floors and ceilings; enclosures for motors and air-conditioning equipment; acoustic insulation of water pipes, drains and heating & plumbing services in commercial, industrial and domestic applications.

SPECIFIC COMPOSITION

Compound composed of 2 mm of elastomeric high-density barrier covered on one or both sides by a rubber elastomeric foamed sheet made of FEF. Available in different thicknesses.

Technical information	Reference data	Test standards
SERVICE TEMPERATURES	from -45 °C to +110 °C	EN 14706
THERMAL CONDUCTIVITY λ	At mean temp. of 0 °C ≤ 0,034 W/m•K At mean temp. of 40 °C ≤ 0,038 W/m•K	EN 12667
WEIGHT	Approx. 4 kg/m^2	ASTM D 1662
MEASUREMENT OF NOISE FROM WASTE WATER INSTALLATIONS REDUCTION OF AIR-BORNE SOUND TRANSMISSION STRUCTURE-BORNE SOUND LEVEL	Flow rate 0,5l/s 1l/s 2l/s 4l/s dB (A) 12 12 10,5 10,5 Flow rate 0,5l/s 1l/s 2l/s 4l/s dB (A) 15,5 16,6 18,4 19,6	UNI EN 14366
SOUNDPROOFING POWER INDEX R_W	27 dB (-1; -4)	EN ISO 140-3 - UNI EN ISO 717-1
HARDNESS*	80 ± 10 Shore A	ASTM D 2240 / UNI EN ISO 868 / DIN 53505
TENSILE STRENGTH*	> 1 N/mm^2	
ELONGATION AT BREAK*	> 20 %	ASTM D 412 / DIN 53504 / UNI 6065
FIRE PERFORMANCE - EUROCLASS	HD-RUB - D-s2,d0 HD-RUB LFS - B-s1,d0	EN 13501 - 1
ANTIMICROBIAL BEHAVIOUR	EXCELLENT	

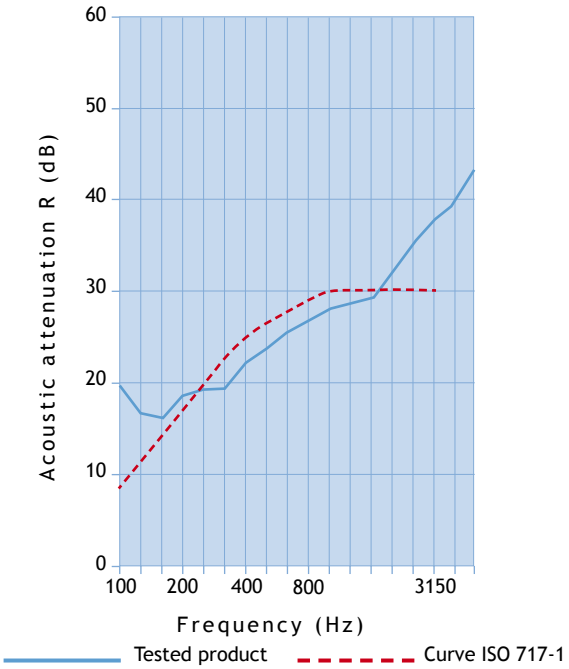
*Data refer exclusively to the 2 mm high density layer.

SOUND REDUCTION INDEX

(Ref. European Standard UNI EN ISO 140-3 and 717-1)

FREQ. Hz	R dB
100	20,4
125	15,8
160	14,9
200	17,4
250	18,5
315	18,7
400	21,3
500	21,9
630	23,9
800	25,3
1000	26,7
1250	28,1
1600	28,7
2000	29,4
2500	31,0
3150	35,2
4000	38,6
5000	44,0

$R_W (C;C_{tr})$ = 27 (-1;-4) dB



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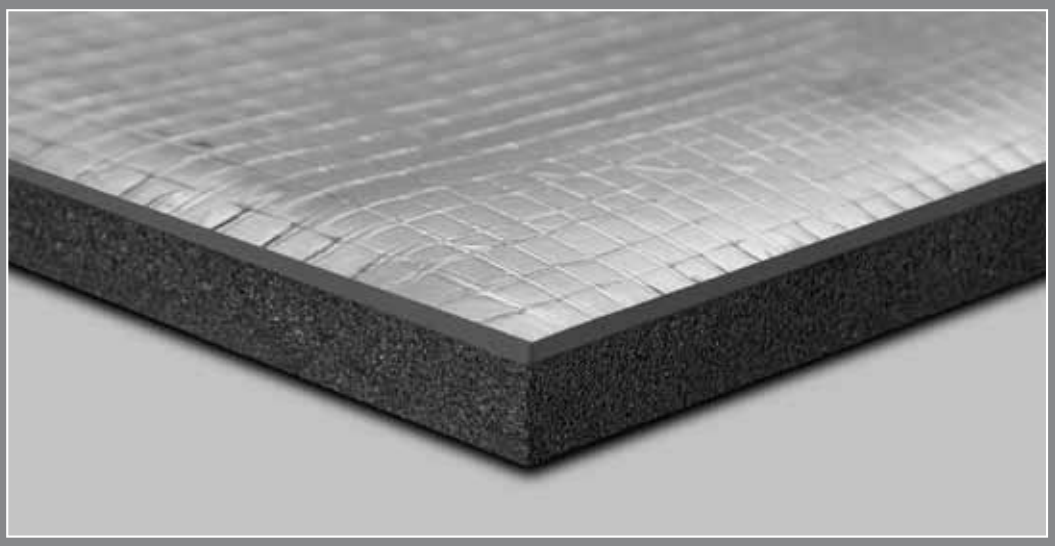
EVOSOUND HD-RUB/HF



A range of multi-layered acoustic-insulation rolled sheets produced by the coupling of elastomeric and rubber foamed material (FEF) **IT-FLEX HALOGEN FREE**, a high density elastomeric material and an external aluminium covering. Available in different thicknesses, they are suitable for solving problems of acoustic insulation in building and industrial applications, where Halogen free materials are required to meet the high safety standards.

Technical data sheet

EVOSOUND HD-RUB/HF

MATERIAL

Halogen-free compound composed of a soundproofing barrier layer coupled with a flexible elastomeric foam sheet (FEF) and an external aluminium covering.

PRODUCT RANGE

Sheets in rolls with dimensions of 1 x 2 m (see the specific composition).

PRODUCT APPLICATION

Acoustic insulation of walls, floors and ceilings; enclosures for motors and air-conditioning equipment; acoustic insulation of water pipes, drains and heating & plumbing services in commercial, industrial and domestic applications, where high safety standards exist in case of fire.

SPECIFIC COMPOSITION

Compound composed of 2 mm of elastomeric high-density barrier coupled with 10 mm rubber elastomeric foamed sheet made of FEF and aluminium covering.
Available in different thicknesses.

Technical information	Reference data	Test standards
SERVICE TEMPERATURES	from -45 °C to +130 °C	EN 14706
THERMAL CONDUCTIVITY λ	At mean temp. of 0 °C ≤ 0,034 W/m•K At mean temp. of 40 °C ≤ 0,038 W/m•K	EN 12667
WEIGHT	Approx. 4 kg/m2	ASTM D 1662
MEASUREMENT OF NOISE FROM WASTE WATER INSTALLATIONS REDUCTION OF AIR-BORNE SOUND TRANSMISSION STRUCTURE-BORNE SOUND LEVEL	Flow rate 0,5l/s 1l/s 2l/s 4l/s dB (A) 12 12 10,5 10,5 Flow rate 0,5l/s 1l/s 2l/s 4l/s dB (A) 15,5 16,6 18,4 19,6	UNI EN 14366
SOUNDPROOFING POWER INDEX R_W	27 dB (-1; -4)	EN ISO 140-3 - UNI EN ISO 717-1
HARDNESS*	80 ± 10 Shore A	ASTM D 2240 / UNI EN ISO 868 / DIN 53505
TENSILE STRENGTH*	> 1 N/mm2	ASTM D 412 / DIN 53504 / UNI 6065
ELONGATION AT BREAK*	> 20 %	–
FIRE PERFORMANCE - EUROCLASS	C-s2,d0	EN 13501 - 1
ANTIMICROBIAL BEHAVIOUR	EXCELLENT	–

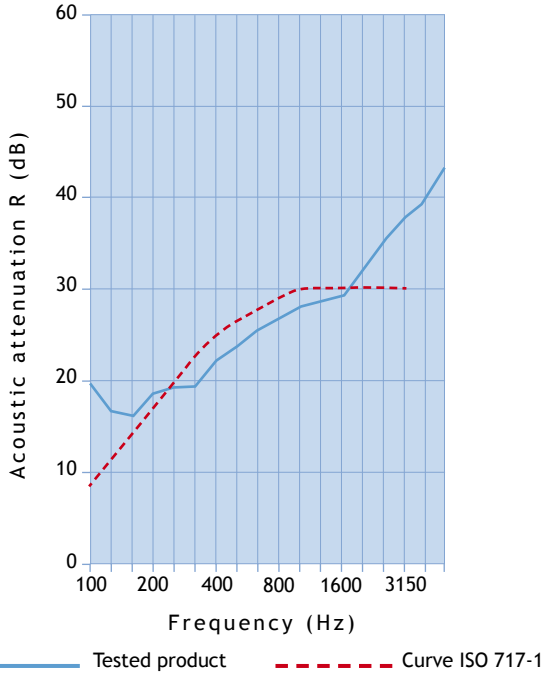
*Data refer exclusively to the 2 mm high density layer.

SOUND REDUCTION INDEX

(Ref. European Standard UNI EN ISO 140-3 and 717-1)

FREQ. Hz	R dB
100	20,4
125	15,8
160	14,9
200	17,4
250	18,5
315	18,7
400	21,3
500	21,9
630	23,9
800	25,3
1000	26,7
1250	28,1
1600	28,7
2000	29,4
2500	31,0
3150	35,2
4000	38,6
5000	44,0

R_W ($C;C_{tr}$) = 27 (-1;-4) dB



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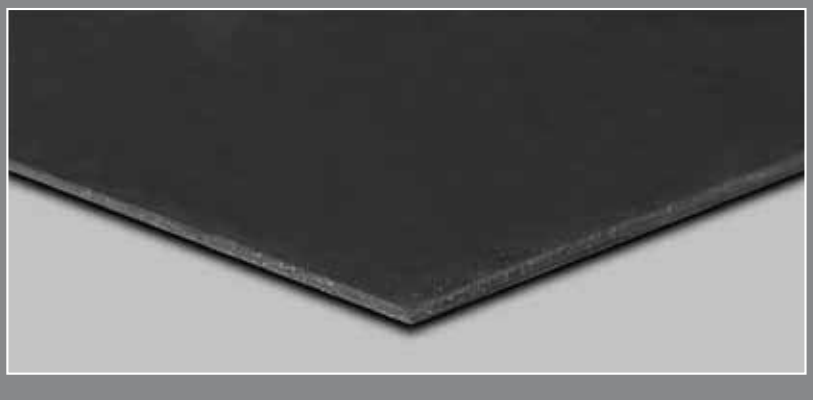
EVOSOUND HD

A range of sound-proofing high density polymers compound sheets with high performance in noise reduction, especially at low frequencies. An ideal solution for industrial and domestic applications.

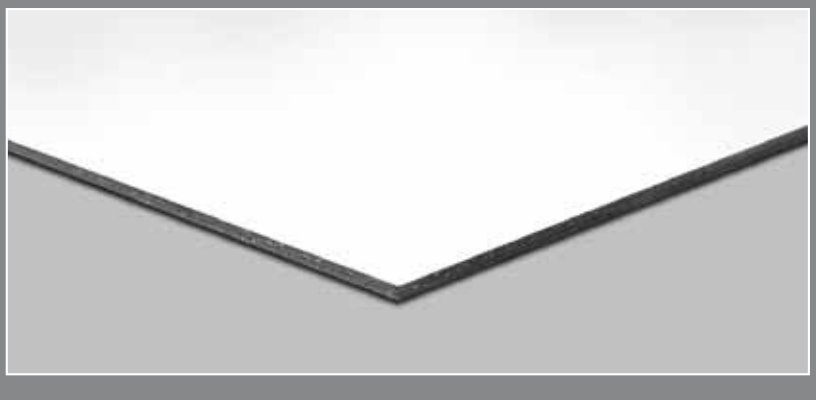


EVOSOUND FR

A range of sound-proofing high density polymers compound sheets with excellent fire performance. It is ideal for solving acoustic insulation problems of various structural and plant components in building and industry.

EUROSOUND NAV

A range of sound-proofing high density polymers compound sheets with a white covering. An ideal acoustic solution for structural and system components in the shipbuiding sector.



Technical data sheet

EVOSOUND HD - EVOSOUND FR - EUROSOUND NAV

MATERIAL

A soundproofing material made of a polymeric compound and high density mineral fillers. The product is free of lead, unrefined aromatic oils and bitumen and does not contain substances which are hazardous to human health.

PRODUCT RANGE

Available in sheets and rolls in a range of thicknesses from 1 mm to 5 mm and in widths up to 1200 mm.

PRODUCT APPLICATION

A flexible high performance noise barrier useful for reducing airborne sound transmission and as a component of an acoustic system with good low frequency sound barrier characteristics.

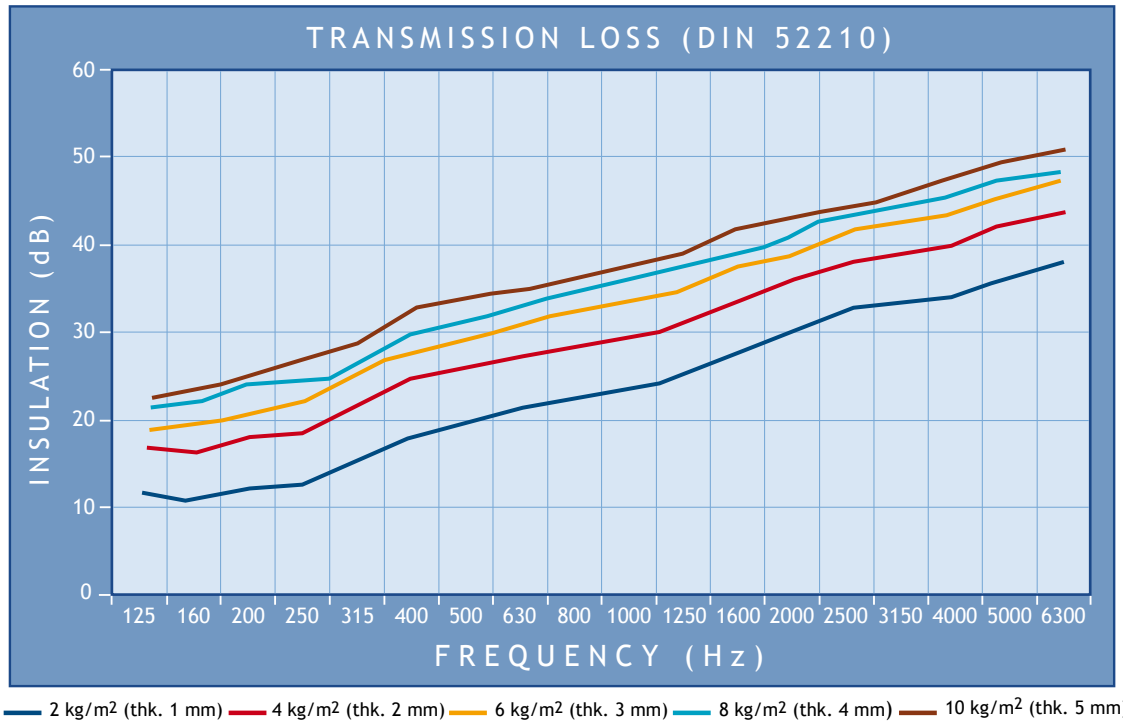
SPECIFIC COMPOSITION

Compound composed of a 2 mm elastomeric high-density barrier. Available in different thicknesses.

Technical information	Reference data		Test standards
	HD and FR TYPE	NAV TYPE	
SERVICE TEMPERATURES	-20 °C / +110 °C	-30 °C / +90 °C	EN 14706
WEIGHT	1,90 ± 0,1 g/cm3	2,1 ± 0,1 g/cm3	EN ISO 1183-1 and 2
HARDNESS* (SHORE A)	80 ± 10 Shore A	85 ± 10 Shore A	EN ISO 868
TENSILE STRENGTH*	> 1 N/mm2	> 1 N/mm2	DIN 53504 / UNI 6065
ELONGATION AT BREAK*	> 20 %	> 20 %	DIN 53504 / UNI 6065
FIRE PORFORMANCE	FR: B-s2,d0		EN 13501-1
SHIPYARDS (MED)		EUROSOUND NAV MEETS REQUIREMENTS	IMO RES. MSC 307 (88) IMO MSC/Circ. 1004 MED 2014/90/EU Modules B and D

*Data refer exclusively to the 2 mm high density layer.

Refers to EVOSOUND HD and EVOSOUND FR



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EVOSOUND OC

A range of granulated FEF material in a resin binder supplied in sheet form, for use as a soundproofing and for impact sound insulation in sub-floor applications. Also used as a system component for thermal and acoustic insulation in industrial applications.

Technical data sheet

EVOSOUND OC

MATERIAL

Granulated Flexible Elastomeric Foam (FEF) held together by a polyurethane resin binder.

PRODUCT APPLICATION

Acoustic absorption.

PRODUCT RANGE

Sheets available in a range of thicknesses from 10 to 40 mm. Available at density of 160 kg/m3 or 240 kg/m3 (tolerance -20 +120 kg/m3).
Different thicknesses available on request.

STORAGE CONDITIONS/ SHELF LIFE

Store the material in a dry and clean environment at a temperature between 0 °C and 35 °C and a RH between 50% and 70%. Do not expose the material to heat or direct sunlight before installing.

Technical information	Reference data	Test standards
SERVICE TEMPERATURES	-45 °C / +110 °C	
FIRE PERFORMANCE EUROCLASS	Self-extinguishing, non-flame propagating	
ACOUSTIC ABSORPTION (α)	Thk. 25 mm, Δ 240 Kg/m3	
250 Hz.	0,26	
500 Hz.	0,70	
1000 Hz.	0,90	UNI EN ISO 354
2000 Hz.	0,85	
4000 Hz.	0,85	
5000 Hz.	0,85	

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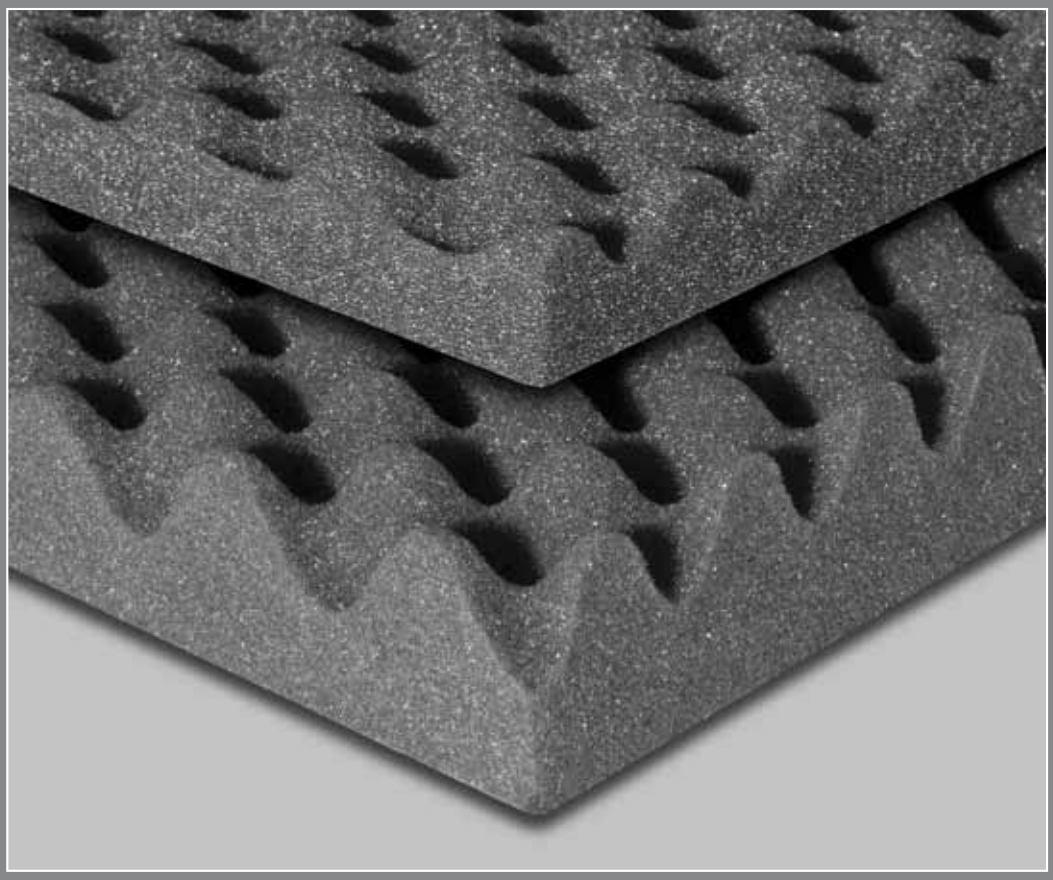
EVOSOUND OC

EVOSOUND SILENT PLUS BU



EVOSOUND SILENT PLUS BU is a range of products produced in flexible polyurethane foam in self-adhesive version with a waved surface and mainly used to increase sound absorption on the various structural components in industrial and domestic applications.

Technical data sheet

EVOSOUND SILENT PLUS BU

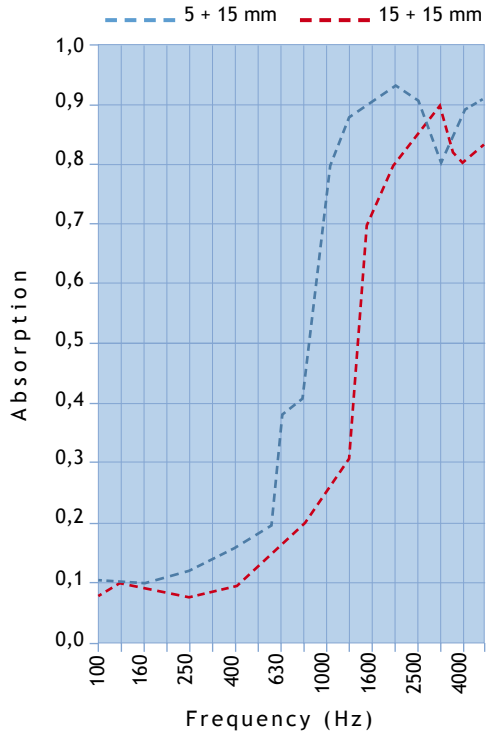
MATERIAL

Flexible polyurethane foam with with waved surface, standard grey anthracite in colour.

PRODUCT APPLICATION

Thermal and acoustic insulation.

Technical information	Reference data	Test standards
SERVICE TEMPERATURES	from -40 °C to + 70 °C	
DENSITY	25 Kg/m^3	ISO 845
TENSILE STRENGTH	130 kPa	ISO 1798
BREAKING ELONGATION	170 %	ISO 1798
COMPRESSION RESISTANCE	4 ± 15% kPa	ISO 3386/1
COMPRESSION LOAD		ISO 1856 - A
50%, 22 H, 70 °C	12 %	
DIMENSIONAL STABILITY	100 °C	ISO 2796
FIRE PERFORMANCE	MEETS REQUIREMENTS	MVSS302



EVOSOUND SILENT PLUS BU density 30 kg/m^3
Acoustic absorption coefficient on standing wave tubes.

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EVOSOUND NORUMOR

This is a flexible polyethylene insulating sheath with a scratch resistant protective covering. It is the most economical and practical solution for reducing audible noise from water pipes and drains.

Technical data sheet

EVOSOUND NORUMOR

MATERIAL

Flexible polyethylene foam (PEF) with scratch resistant protective coating.

PRODUCT RANGE

Tubes in rolls with diameters from 40 to 125 mm and a thickness of 4 mm.

PRODUCT APPLICATION

Acoustic insulation of drainage systems.

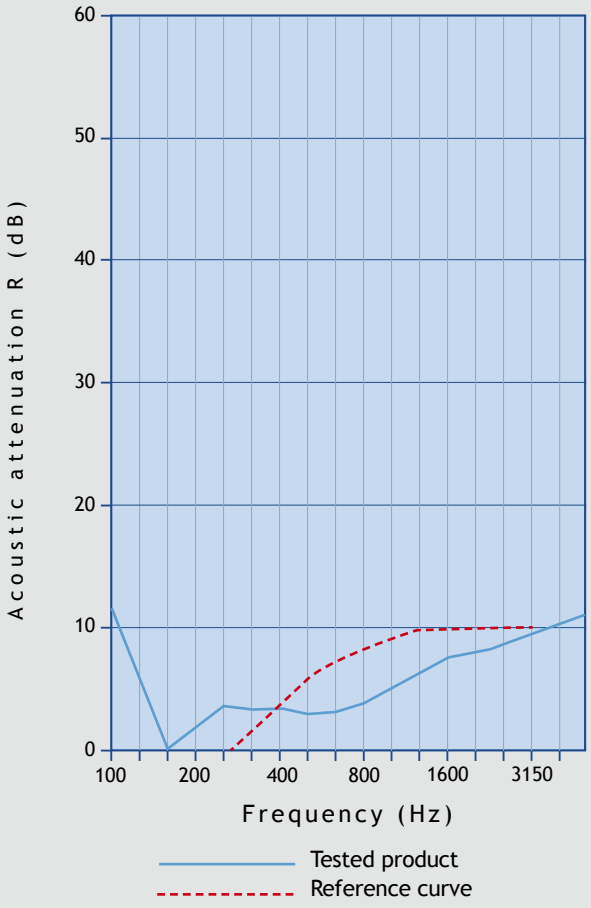
ACOUSTIC INSULATION TEST

(Ref. European Standards UNI EN ISO 10140-1-2 - UNI EN ISO 717 -)

Sample area	S = 1,50	m^2
Volume of the receiving room	V = 69,6	m^3
Volume of the transmitting room	86	m^3

FREQ. Hz	R dB	U dB
100	12,1	1,6
125	3,9	1,4
160	0,4	1,5
200	2,5	1,4
250	4,0	1,0
315	2,9	1,0
400	3,2	0,8
500	2,6	0,7
630	2,8	0,7
800	3,7	0,7
1000	4,5	0,6
1250	5,4	0,6
1600	6,4	0,6
2000	7,2	0,6
2500	8,0	0,6
3150	9,4	0,6
4000	10,5	0,6
5000	11,7	0,6

RW (C;C_{tr}) = 6 (-1;-3) dB
K=2.00 - 95%

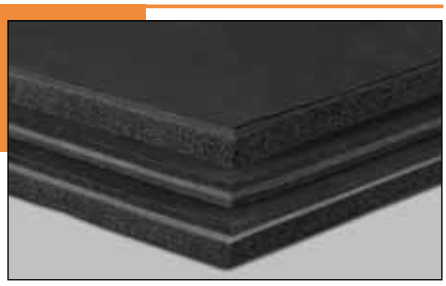


TEST RESULTS WITH NORUMOR THICKNESS 5 mm

Sound level of drainage pipe	70 dB (A) -
Noise reduction with NORUMOR	6 dB (A) -
Noise reduction of the walling	32 dB (A) =
MEASURED AMBIENT NOISE LEVEL	32 dB (A)

NB: For drainage pipes, the current legislation imposes a limit of 35 dB as being the level of noise not to be exceeded in the environment.

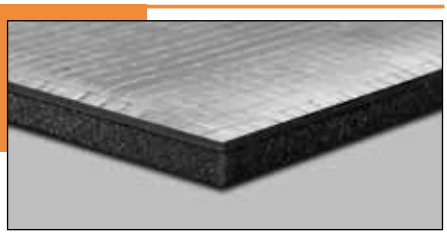
EVOSOUND HD-RUB



Code	Description	Sheet
EVOSHDRUBC112	EVOSOUND HD RUB C1-12 1X2	1x2
EVOSHDRUBC112SA	EVOSOUND HD RUB C1-12 1X2 ADHESIVE	1x2

Different thicknesses available on request.
(Available in self-adhesive version)
Packaging dimensions: 103 x 20 x 20 cm = (volume = 0.04 m^3).

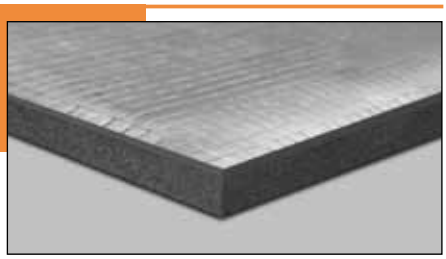
EVOSOUND HD-RUB LFS



Code	Description	Sheet
EVOSHDRUBLFSC112	EVOSOUND HD RUB LFS C1-12 1X2	1x2
EVOSHDRUBLFSC112SA	EVOSOUND HD RUB LFS C1-12 1X2 ADHESIVE	1x2

Different thicknesses available on request.
(Available in self-adhesive version)
Packaging dimensions: 103 x 20 x 20 cm = (volume = 0.04 m^3).

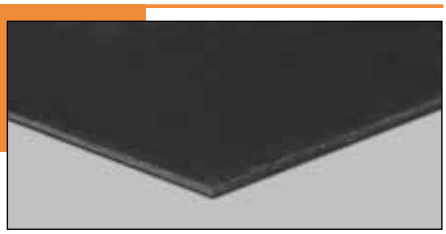
EVOSOUND HD-RUB/HF



Code	Description	Sheet
EVOSHDRUBHF12	EVOSOUND HD RUB HF-12 1X2	1x2
EVOSHDRUBAHF12	EVOSOUND HD RUB HF-12 1X2 ADHESIVE	1x2

Different thicknesses available on request.
Packaging dimensions: 103 x 20 x 20 cm = (volume = 0.04 m^3).

EVOSOUND HD



Code	Thk.	Description	Bobbins	Sheet
EVOSHD4KG/M2	2 mm	EVOSOUND HD 4KG/M^2 (mass)	50	1x2
EVOSHD6KG/M2	2,5 mm	EVOSOUND HD 5KG/M^2 (mass)	50	1x2
EVOSHD8KG/M2	4 mm	EVOSOUND HD 8KG/M^2 (mass)	25	1x2
EVOSHD10KG/M2	5 mm	EVOSOUND HD 10KG/M^2 (mass)	25	1x2

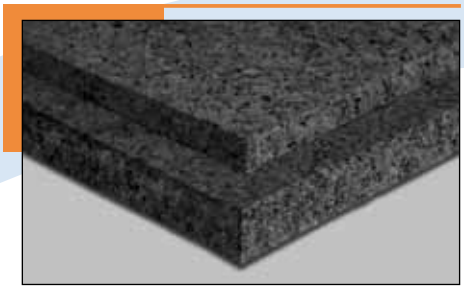
EVOSOUND FR

Code	Thk.	Description	Bobbins	Sheet
EVOSHDFR4KG/M2	2 mm	EVOSOUND HD 4KG/M^2 (mass)	50	1x2
EVOSHDFR5KG/M2	2,5 mm	EVOSOUND HD 5KG/M^2 (mass)	50	1x2
EVOSHDFR8KG/M2	4 mm	EVOSOUND HD 8KG/M^2 (mass)	25	1x2
EVOSHDFR10KG/M2	5 mm	EVOSOUND HD 10KG/M^2 (mass)	25	1x2

EUROSOUND NAV

Code	Thk.	Description	Bobbins	Sheet
02ES-04-NAV	2 mm	EUROSOUND NAV 4KG/M^2 (mass)	50	1x2
2,5ES-05-NAV	2,5 mm	EUROSOUND NAV 5KG/M^2 (mass)	50	1x2
04ES-08-NAV	4 mm	EUROSOUND NAV 8KG/M^2 (mass)	25	1x2

EVOSOUND OC



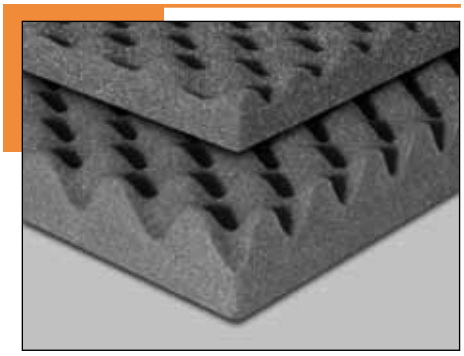
Code	Thk.	Description	Sheet
EVOC 240OC-10	10 mm	AGGLOMERATED ACOUSTIC 2X1 240 OC 10mm	1x2
EVOC 240OC-15	15 mm	AGGLOMERATED ACOUSTIC 2X1 240 OC 15mm	1x2
EVOC 240OC-20	20 mm	AGGLOMERATED ACOUSTIC 2X1 240 OC 20mm	1x2
EVOC 240OC-25	25 mm	AGGLOMERATED ACOUSTIC 2X1 240 OC 25mm	1x2
EVOC 240OC-30	30 mm	AGGLOMERATED ACOUSTIC 2X1 240 OC 30mm	1x2
EVOC 240OC-40	40 mm	AGGLOMERATED ACOUSTIC 2X1 240 OC 40mm	1x2

ADHESIVE

Code	Thk.	Description	Sheet
EVOC 240OC-10SA	10 mm	AGGLOMERATED ACOUSTIC 2X1 240 OC 10mm	1x2
EVOC 240OC-15SA	15 mm	AGGLOMERATED ACOUSTIC 2X1 240 OC 15mm	1x2
EVOC 240OC-20SA	20 mm	AGGLOMERATED ACOUSTIC 2X1 240 OC 20mm	1x2
EVOC 240OC-25SA	25 mm	AGGLOMERATED ACOUSTIC 2X1 240 OC 25mm	1x2
EVOC 240OC-30SA	30 mm	AGGLOMERATED ACOUSTIC 2X1 240 OC 30mm	1x2
EVOC 240OC-40SA	40 mm	AGGLOMERATED ACOUSTIC 2X1 240 OC 40mm	1x2

The sheets are supplied on 1 x 2 m pallets.
Different thicknesses available on request.

EVOSOUND SILENT PLUS BU



Code	Description	Sheet
PUSILBU15X15	SILENT PLUS BU POLYUR.AD.15X15 (self-adhesive)	1x1,6
PUSILBU20X30	SILENT PLUS BU POLYUR.AD.20X30 (self-adhesive)	1x1,6

(*) Packed on pallet: 1000 x 1600 x 1650 mm.
1 pallet = 64 flat sheets - m^2 102,4
(**) Packed on pallet: 1000 x 1600 x 1650 mm.
1 pallet = 40 flat sheets - m^2 64

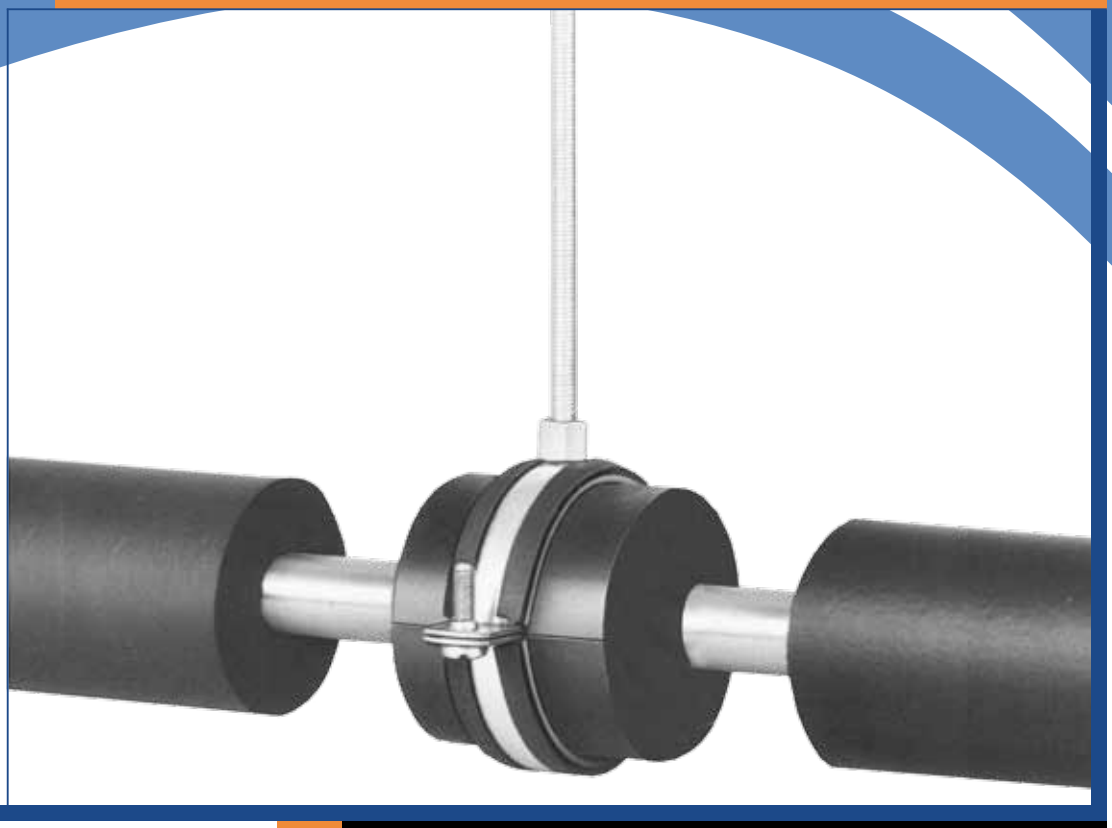
Different thicknesses available on request.

EVOSOUND NORUMOR

Code	Description	m/box
PE NORUMOR 40	POLYETHYLENE SHEATH Ø 40 Thk. 4	150
PE NORUMOR 50	POLYETHYLENE SHEATH Ø 50 Thk. 4	135
PE NORUMOR 63	POLYETHYLENE SHEATH Ø 63 Thk. 4	105
PE NORUMOR 75	POLYETHYLENE SHEATH Ø 75 Thk. 4	90
PE NORUMOR 80	POLYETHYLENE SHEATH Ø 80 Thk. 4	90
PE NORUMOR 90	POLYETHYLENE SHEATH Ø 90 Thk. 4	75
PE NORUMOR 100	POLYETHYLENE SHEATH Ø 100 Thk. 4	75
PE NORUMOR 110	POLYETHYLENE SHEATH Ø 110 Thk. 4	75
PE NORUMOR 125	POLYETHYLENE SHEATH Ø 125 Thk. 4	60

Acoustic insulation in rolls, length 15 m, thickness 4 mm.
Different thicknesses available on request.
Packaging dimensions: 106 x 52 x 52 cm = (volume = 0.29 m^3).

IT-FLEX TUBE SUPPORTS



- Closed-cell microcellular structure
- Excellent insulation performance
- High resistance to water vapour diffusion
- High mechanical resistance
- High compression resistance
- Quick and easy to install
- λ at 10 °C ≤ 0,036 W/m•K

IT-FLEX TUBE SUPPORTS

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Technical data sheet

IT-FLEX TUBE SUPPORTS

Rev. 03/22

MATERIAL

Expanded polyurethane foam (PIR) coupled to flexible elastomeric foam (FEF) and external cover in PVC and/or PVC-ALU-UV resistant protective film.

PRODUCT SPECIFICATIONS

Composite thermal insulation to optimize connections between the support brackets and the insulated pipeworks.

PRODUCT RANGE

Tube supports with diameters from 18 to 170 mm and thicknesses from 13 to 32 mm.
Length 50 mm.

PRODUCT APPLICATION

Mechanical protection, condensation prevention and to safeguard the properties of the insulation material on pipeworks in general.

MAIN CHARACTERISTICS

The PIR foam uses CO_2 as the expanding agent.

TECHNICAL CHARACTERISTICS OF THE POLYURETHANE INSULATION

Technical information	Reference data	Test standards
DENSITY	approx. 60 - 80 kg m^3*	ISO 845
SERVICE TEMPERATURES Max. temperature of transported fluids Min. temperature of transported fluids	 + 120 °C - 180 °C	
THERMAL CONDUCTIVITY λ	At mean temp. of 10 °C 0,036 W/m•K	ASTM C 518
REACTION TO FIRE	B2	DIN 4102
WATER VAPOUR TRANSMISSION	25 (+/- 10) / 30 (+/- 10) g/m^2 - 24 h { 80 kg m^3 / 60 kg m^3	ISO 1663
WATER ABSORPTION	5%	ISO 2896
% OF CLOSSED CELLS approx. 60 - 80 kg m^3*	92%	ASTM D 2856
COMPRESSION RESISTANCE Parallel / Perpendicular	kPa 670 (+/- 80) / 440 (+/- 120) } 60 kg m^3 970 (+/- 120) / 670 (+/- 150) } 80 kg m^3	ISO 844
TENSILE STRENGTH Parallel / Perpendicular	kPa 860 (+/- 90) / 710 (+/- 130) } 60 kg m^3 1280 (+/- 160) / 1000 (+/- 220) } 80 kg m^3	ASTM D 1623
SHEAR STRENGTH	kPa 350 (+/- 60) → 60 kg m^3 kPa 550 (+/- 80) → 80 kg m^3	ASTM C 273
DIMENSION STABILITY Length - Width - Thickness	at - 25 °C x 48 h +0,5% +0,5% at + 100 °C x 48 h +1,0% +1,0%	ISO 2796

*** NB: Density PIR 60 kg/m3 for pipe supports up to a diameter of 35 mm.**
Density PIR 80 kg/m3 for pipe supports with diameters from 42 to 219 mm.

For the elastomeric parts refer to the **IT-FLEX C1** technical characteristics.

TECHNICAL DATA OF EXTERNAL COATING

TYPE	PVC SCRATCH PROOF/ANTI UV FILM	PVC FILM + ALUMINIUM + UV PROTECTIVE FILM	
COLOUR	BLACK RAL 9005	ALUMINIUM	
RESISTANCE TO VAPOUR WATER DIFFUSION μ	≥ 15.000	≥ 15.000	EN ISO 12086
OZONE RESISTANCE	EXCELLENT	EXCELLENT	ISO 7326
UV RESISTANCE	EXCELLENT	EXCELLENT	UNI ISO 4892 - 2

Documents and certifications are available upon registration on our website: www.evocellmobius.it
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All normatives quoted in this document are updated to the latest issued versions.

IT-FLEX TUBE SUPPORTS

FOR PIPING WITH A BLACK PVC COVERING

Thickness 13 mm		Thickness 19 mm		Thickness 25 mm		Thickness 32 mm	
ø piping (mm)	Code	ø piping (mm)	Code	ø piping (mm)	Code	ø piping (mm)	Code
18	**EV3SUP13x018**	18	**EV3SUP19x018**	18	**EV3SUP25x018**	18	**EV3SUP32x018**
22	**EV3SUP13x022**	22	**EV3SUP19x022**	22	**EV3SUP25x022**	22	**EV3SUP32x022**
28	**EV3SUP13x028**	28	**EV3SUP19x028**	28	**EV3SUP25x028**	28	**EV3SUP32x028**
35	**EV3SUP13x035**	35	**EV3SUP19x035**	35	**EV3SUP25x035**	35	**EV3SUP32x035**
42	**EV3SUP13x042**	42	**EV3SUP19x042**	42	**EV3SUP25x042**	42	**EV3SUP32x042**
48	**EV3SUP13x048**	48	**EV3SUP19x048**	48	**EV3SUP25x048**	48	**EV3SUP32x048**
54	**EV3SUP13x054**	54	**EV3SUP19x054**	54	**EV3SUP25x054**	54	**EV3SUP32x054**
60	**EV3SUP13x060**	60	**EV3SUP19x060**	60	**EV3SUP25x060**	60	**EV3SUP32x060**
64	**EV3SUP13x064**	64	**EV3SUP19x064**	64	**EV3SUP25x064**	64	**EV3SUP32x064**
67	**EV3SUP13x067**	67	**EV3SUP19x067**	67	**EV3SUP25x067**	67	**EV3SUP32x067**
70	**EV3SUP13x070**	70	**EV3SUP19x070**	70	**EV3SUP25x070**	70	**EV3SUP32x070**
76	**EV3SUP13x076**	76	**EV3SUP19x076**	76	**EV3SUP25x076**	76	**EV3SUP32x076**
80	**EV3SUP13x080**	80	**EV3SUP19x080**	80	**EV3SUP25x080**	80	**EV3SUP32x080**
89	**EV3SUP13x089**	89	**EV3SUP19x089**	89	**EV3SUP25x089**	89	**EV3SUP32x089**
102	**EV3SUP13x102**	102	**EV3SUP19x102**	102	**EV3SUP25x102**	102	**EV3SUP32x102**
108	**EV3SUP13x108**	108	**EV3SUP19x108**	108	**EV3SUP25x108**	108	**EV3SUP32x108**
114	**EV3SUP13x114**	114	**EV3SUP19x114**	114	**EV3SUP25x114**	114	**EV3SUP32x114**
125	**EV3SUP13x125**	125	**EV3SUP19x125**	125	**EV3SUP25x125**	125	**EV3SUP32x125**
133	**EV3SUP13x133**	133	**EV3SUP19x133**	133	**EV3SUP25x133**	133	**EV3SUP32x133**
140	**EV3SUP13x140**	140	**EV3SUP19x140**	140	**EV3SUP25x140**	140	**EV3SUP32x140**
160	**EV3SUP13x160**	160	**EV3SUP19x160**	160	**EV3SUP25x160**	160	**EV3SUP32x160**

Mounting instructions:

1 - mount the support on the piping and glue the surfaces with AB 850 adhesive.

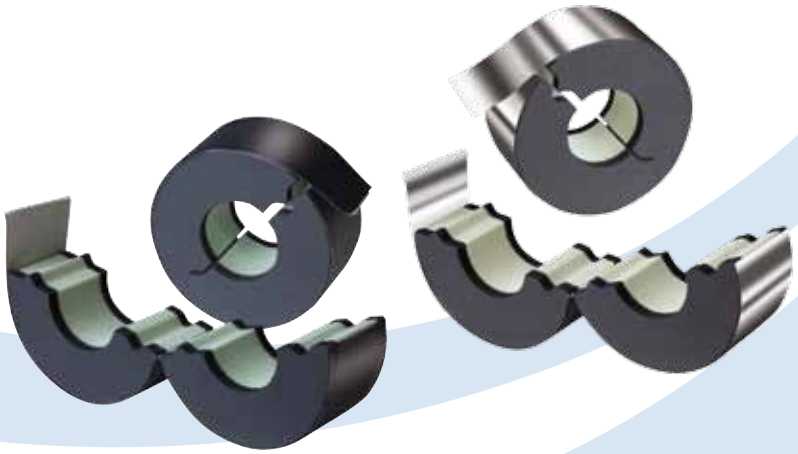
2 - Close and seal the support.

IT-FLEX TUBE SUPPORTS

FOR PIPING WITH EXTERNAL COATING IN PVC/ALUMINIUM/ PROTECTIVE UV FILM

Thickness 13 mm		Thickness 19 mm		Thickness 25 mm		Thickness 32 mm	
ø piping (mm)	Code	ø piping (mm)	Code	ø piping (mm)	Code	ø piping (mm)	Code
18	**EV3SAU13x018**	18	**EV3SAU19x018**	18	**EV3SAU25x018**	18	**EV3SAU32x018**
22	**EV3SAU13x022**	22	**EV3SAU19x022**	22	**EV3SAU25x022**	22	**EV3SAU32x022**
28	**EV3SAU13x028**	28	**EV3SAU19x028**	28	**EV3SAU25x028**	28	**EV3SAU32x028**
35	**EV3SAU13x035**	35	**EV3SAU19x035**	35	**EV3SAU25x035**	35	**EV3SAU32x035**
42	**EV3SAU13x042**	42	**EV3SAU19x042**	42	**EV3SAU25x042**	42	**EV3SAU32x042**
48	**EV3SAU13x048**	48	**EV3SAU19x048**	48	**EV3SAU25x048**	48	**EV3SAU32x048**
54	**EV3SAU13x054**	54	**EV3SAU19x054**	54	**EV3SAU25x054**	54	**EV3SAU32x054**
60	**EV3SAU13x060**	60	**EV3SAU19x060**	60	**EV3SAU25x060**	60	**EV3SAU32x060**
64	**EV3SAU13x064**	64	**EV3SAU19x064**	64	**EV3SAU25x064**	64	**EV3SAU32x064**
67	**EV3SAU13x067**	67	**EV3SAU19x067**	67	**EV3SAU25x067**	67	**EV3SAU32x067**
70	**EV3SAU13x070**	70	**EV3SAU19x070**	70	**EV3SAU25x070**	70	**EV3SAU32x070**
76	**EV3SAU13x076**	76	**EV3SAU19x076**	76	**EV3SAU25x076**	76	**EV3SAU32x076**
80	**EV3SAU13x080**	80	**EV3SAU19x080**	80	**EV3SAU25x080**	80	**EV3SAU32x080**
89	**EV3SAU13x089**	89	**EV3SAU19x089**	89	**EV3SAU25x089**	89	**EV3SAU32x089**
102	**EV3SAU13x102**	102	**EV3SAU19x102**	102	**EV3SAU25x102**	102	**EV3SAU32x102**
108	**EV3SAU13x108**	108	**EV3SAU19x108**	108	**EV3SAU25x108**	108	**EV3SAU32x108**
114	**EV3SAU13x114**	114	**EV3SAU19x114**	114	**EV3SAU25x114**	114	**EV3SAU32x114**
125	**EV3SAU13x125**	125	**EV3SAU19x125**	125	**EV3SAU25x125**	125	**EV3SAU32x125**
133	**EV3SAU13x133**	133	**EV3SAU19x133**	133	**EV3SAU25x133**	133	**EV3SAU32x133**
140	**EV3SAU13x140**	140	**EV3SAU19x140**	140	**EV3SAU25x140**	140	**EV3SAU32x140**
160	**EV3SAU13x160**	160	**EV3SAU19x160**	160	**EV3SAU25x160**	160	**EV3SAU32x160**

N.B. The metal collars are supplied in request.



IT-FLEX ACCESSORIES

- Adhesive elastomeric tapes
- Self-adhesive insulation tapes in PE and PVC
- Aluminium self-adhesive insulation tapes
- Aluminium endcappings
- Accessories for installing foils and PVC T fittings
- Glues
- Detergents
- Elastomeric paints

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CNX ADHESIVE

Coverage of adhesive on sheets approx. 3-4 mq/kg

	Tube thickness mm	m/kg
Coverage of adhesive applied to both the surfaces of the tubes	6	200
	9	130
	13	90
	19	40
	25	30
	32	20

Drying time before gluing: from 5/10 minutes at a room-temperature of 20 °C

ALUMINIUM JOINTING TAPES

TECHNICAL DATA

Working temperature range	from - 40 °C to + 80 °C
Tape thickness	mm 0,025
Elongation at break	3%
Fire behaviour	Nonflammable (DIN 4102 Norm)
Storage conditions	at approx. 20/25 °C with relative air humidity max 65%

PVC JOINTING TAPES

TECHNICAL DATA

Fire behaviour	B1 (DIN 4102)
Tape thickness	mm 0,10
Tensile strength	MPa 15
Elongation at break	125%
Temperature limit	+ 80 °C
Storage conditions	at approx. 20/25 °C with relative air humidity max 65%

SELF-ADHESIVE ELASTOMERIC TAPES

Working temperature range: from - 40 °C to + 86 °C

Dimensions: Thk. 3 mm. Width 50 mm. Length 10 m.

COLOURED ELASTOMERIC PAINTS

TECHNICAL DATA

Available colours	Grey - White Blue - Red on request
Density	1,25 - 1,35 Kg/dm³ at 20 °C
Temperature range	from - 50 °C to + 120 °C
Application temperature	from 5 °C to + 30 °C
Drying time	1 - 2 hours
Coverage by surface	5 mq/l
Packaging	3 l tins or 20 l tubs

Performance on insulating pipes m/l

Diameter mm	thickness 6 mm	thickness 9 mm	thickness 13 mm	thickness 19 mm	thickness 25 mm	thickness 32 mm
6	ml 71	ml 46				
8	ml 64	ml 43				
10	ml 58	ml 42	ml 35	ml 25		
12	ml 53	ml 36	ml 34	ml 24		
14	ml 49	ml 31	ml 34	ml 23		
16	ml 46	ml 29	ml 28	ml 22		
18	ml 43	ml 25	ml 26	ml 20	ml 15	ml 11
20	ml 41					
22	ml 38	ml 22	ml 23	ml 18	ml 14	ml 10
25	ml 35					
27	ml 33	ml 20	ml 20	ml 16	ml 13	ml 9
34	ml 28	ml 18	ml 16	ml 15	ml 12	ml 9
42	ml 23	ml 18	ml 16	ml 14	ml 11	ml 8
48		ml 16	ml 15	ml 13	ml 11	ml 8
54		ml 15	ml 14	ml 12	ml 10	ml 7
60		ml 14	ml 13	ml 11	ml 10	ml 7
70		ml 13	ml 11	ml 10	ml 9	ml 6
76		ml 12	ml 10	ml 9	ml 8	ml 6
89		ml 11	ml 9	ml 9	ml 8	ml 6
102		ml 10	ml 9	ml 8	ml 7	ml 5
108		ml 9	ml 8	ml 8	ml 7	ml 5
114		ml 8	ml 8	ml 7	ml 6	ml 5
127			ml 7	ml 7	ml 6	ml 5
134			ml 7	ml 6	ml 5	ml 4
140			ml 6	ml 5	ml 5	ml 4
160			ml 6	ml 5	ml 4	ml 5

ALUMINIUM ENDCAPPINGS

mm 18 for insulating pipes with a diameter between 24 and 34 mm
mm 23 for insulating pipes with a diameter between 43 and 49 mm
mm 28 for insulating pipes with a diameter between 61 and 90 mm
mm 138 for insulating pipes with a diameter between 102 and 115 mm

ELASTOMERIC TAPES

IT-FLEX
SELF-ADHESIVE ELASTOMERIC TAPES

Thickness 3 mm			
Code	Roll length (m)	Roll width (mm)	Packaging content (pcs./box)
EV8NASTRON3	10	50	24
EV8NASTRON315	15	50	12
EV8NASTRON100	10	100	12
EV8NASTRON315AT	15	50	12

IT-FLEX PE AL
SELF-ADHESIVE ELASTOMERIC TAPES

Thickness 1,5 mm			
Code	Roll length (m)	Roll width (mm)	Packaging content (pcs./box)
EV8NASTROPEAL	25	50	12

IT-FLEX TRIPLEX
SELF-ADHESIVE ELASTOMERIC TAPES

Thickness 3 mm			
Code	Roll length (m)	Roll width (mm)	Packaging content (pcs./box)
EV8NASTROTRI	10	50	24

IT-FLEX UV PROTECTION
SELF-ADHESIVE ELASTOMERIC TAPES

Thickness 3 mm			
Code	Roll length (m)	Roll width (mm)	Packaging content (pcs./box)
EV8NASTROUV	10	50	24

IT-FLEX HI TEC
SELF-ADHESIVE ELASTOMERIC TAPES

Thickness 3 mm			
Code	Roll length (m)	Roll width (mm)	Packaging content (pcs./box)
EV8NASTRON3HT	10	50	24

Packaging dimensions: 45 x 32 x 45 cm - Packaging volume = 0,06 m^3 (length 10)
Packaging dimensions: 56 x 31 x 29 cm - Packaging volume = 0,05 m^3 (length 15)

IT-FLEX COVER
SELF-ADHESIVE TAPE

Thickness 80 µm		
Code	Dimensions Width (mm) x Length (m)	Packaging content (pcs./box)
EV8NASTCOVE25	25 x 50	48
EV8NASTCOVE50	50 x 50	24

Packaging dimensions: 44 x 44 x 31 cm - Packaging volume = 0,06 m3

IT-FLEX
PVC ADHESIVE JOINTING TAPES

Code	Colour	Roll length (m)	Roll width (mm)	Packaging content (pcs./box)
EV8NASTRNCN25	Black	25	25	96
EV8NASTRNCN38	Black	25	38	60
EV8NASTRNCG25	Grey	33	25	90
EV8NASTRNCG50	Grey	33	50	18

IT-FLEX C1 R
WHITE PVC JOINTING TAPES

Code	Roll length (m)	Roll width (mm)	Packaging content (pcs./box)
EV8NASTRNCB25	25	38	60

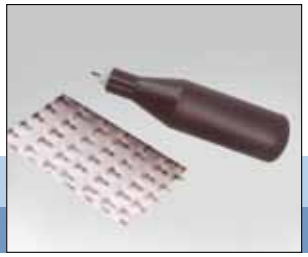
IT-FLEX
ALUMINIUM JOINTING TAPES

Code	Roll length (m)	Roll width (mm)	Packaging content (pcs./box)
EV8NASTRNCA25	50	25	Loose
EV8NASTRNCA50	50	50	Loose

JOINTING TAPES

IT-FLEX
ALUMINIUM ENDCAPPINGS

Code	ø Piping from mm - to mm	Roll length (m)	Packaging content (pcs./box)
EV8TA18	22 - 34	10	5
EV8TA23	43 - 49	10	5
EV8TA28	61 - 90	10	5
EV8TA38	102 - 115	10	5



IT-FLEX
VARIOUS ACCESSORIES

Code	Description	Packaging content (pcs.)
EV8PNT	Straight awl	1
EV8CHIODINI	Plastic tacks	1000

IT-FLEX
GLUES, DETERGENTS, PAINTS

Code	Description	Packaging content (pcs.)
EV8AB850	850 g tin	12
EV8AB425	425 g tin	24
EV8AB425AT	425 g tin	24
EV8DETERGENTE	da 1 l can	12
EV8ACVEG-G	0,75 l can of grey elastomeric paint	loose
EV8ACVEG-B	0,75 l can of white elastomeric paint	loose
EV8AB425P	425 g tin with brush	12
EV8AB200P	200 g tin with brush	24
EV8AB2300	2300 g tin	6

KIT OF THREE KNIVES IN PLASTIC TUBE

Composed of
No. 1 90 mm smooth blade knife. Length - 180 mm
No. 1 170 mm smooth blade knife. Length - 280 mm
No. 1 150 mm smooth blade knife. Length - 300 mm

COMPLETE BAG

Composed of
No. 1 90 mm smooth blade knife. Length - 180 mm
No. 1 170 mm smooth blade knife. Length - 280 mm
No. 1 150 mm smooth blade knife. Length - 300 mm
No. 1 meterstick
No. 1 compass
No. 1 10 mm brush
No. 1 14 mm brush
No. 1 pumice stone
No. 1 stylus pen
No. 1 copper pipe

GLUE PUMP WITH 17 mm BRUSH

Description
Glue pump with 17 mm brush

IT-FLEX
TECHNICAL DOCUMENTATION

1	Dimensional tolerances specified by European Product Standard EN 14304
2	Thermal conductivity λ and insulation materials
3	Water vapour resistance factor μ
4	The calculation of insulation thicknesses - The prevention of condensation in systems working with cold fluids
5	The resistance of **IT-FLEX C1** to chemical agents
6	The CE Marking of flexible elastomeric foam (FEF)
7	The environmental sustainability of buildings
8	Information regarding smoke toxicity

EVOCELL &MOBIUS

Dimensional tolerances specified by European Product Standard EN 14304

Dimensions in mm

Key: D_i = Ø inside diameter - D_{iD} = Ø inside nominal diameter (Ref. Tubes) - d_D = Nominal thickness

Form of delivery	Length	Width	Thickness		Squareness	Inside diameter	
			Declared	Tolerance		$D_i \leq 100$	$D_i > 100$
Tubes	± 1,5%	-	$d_D \leq 8$	**± 1**	3,0 mm	$D_{iD}+1 \leq D_i \leq D_{iD}+4$	$D_{iD}+1 \leq D_i \leq D_{iD}+6$
			$8 < d_D \leq 18$	**± 1,5**	-		
			$18 < d_D \leq 31$	**± 2,5**	-	-	-
			$d_D > 31$	**± 3**	-		
Sheets	± 1,5%	± 2%	$d_D \leq 6$	**± 1**	3,0 mm/m (length/width)	-	-
			$6 < d_D \leq 19$	**± 1,5**	-		
			$d_D > 19$	**± 2**	3,0 mm (thickness)		
Rolls	+ 5% - 1.5%	± 2%	$d_D \leq 6$	**± 1**	3,0 mm/m (length/width)	-	-
			$6 < d_D \leq 19$	**± 1,5**	-		
			$d_D > 19$	**± 2**	3,0 mm (thickness)		
Tapes	+ 5% - 1.5%	± 2%	$d_D = 3$	**- 0.1 + 1,5**	-	-	-

Dimensional tolerances

Thermal conductivity λ and insulation materials

• Thermal conductivity is defined by the λ (lambda value) symbol, and represents the quantity of heat passing through the contact surfaces of two materials, both of which have a volume of 1 cubic meter and a difference in temperature of 1 °C.

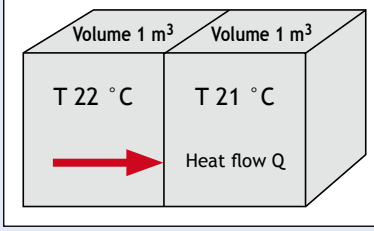


Illustration of heat flow passing between 2 surfaces

• Thermal conductivity is measured in W/m• K and materials are considered insulation materials when their thermal conductivity λ value is lower than 0,100 W/m • K.

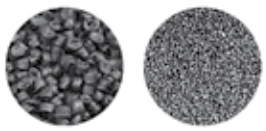
• Materials with the lowest λ value are considered as having the best insulation properties.

• For insulating materials, the main parameters which influence thermal conductivity are as follows:

- Chemical composition of the material

- Density (in general, a higher density corresponds to a higher λ value and therefore less effective insulating properties).

- Characteristics of the cell structure



Cell structure examples

• It is important to be able to simulate and stabilize the air quantity contained in its structure in order to guarantee an optimal λ value.

• Due to its intrinsic characteristics (compact microcellular structure, dimensions of cells and high number of closed-cells), black closed-cell flexible elastomeric foam Insulation material (FEF) has low thermal conductivity values, which must meet the maximum values for these materials stipulated by the recent European Standard EN 14304 and should not exceed a value of 0,050 W/m• K (at a mean working temperature of 10 °C).

The following table defines the thermal conductivity values of the **IT-FLEX C1** insulation material at the different mean temperatures as specified on the certificates issued by specialized laboratories.

MEAN TEMPERATURE °C	0	+20	+40
λ (W/m•K) ≤	0,035	0,037	0,039

Water vapour resistance factor μ

• This is defined by the μ (MU) symbol and is a measured value which determines the effectiveness of an insulating material to act as a barrier against water vapour transmission.

• It is an important parameter to assess the suitability of the insulation material, especially in applications such as refrigeration and air-conditioning systems which carry cold fluids.

• Higher μ values guarantee a longer life and greater efficiency of the insulation material.

• For thermal insulation materials in general and especially for elastomeric foam, resistance to transmission of water vapour is strictly linked to the following characteristics:

- A microcellular structure with a high amount of closed cells (> 90/95%)

- Small cell dimensions

- An excellent cohesion of the cell walls

- Homogeneous material thickness

•To prevent the risk of condensation, the external surface temperature of the insulation should be equal to or higher than the dew point in the working environment.

• μ CONVERSION FACTOR IN EQUIVALENT AIR THICKNESS

The following formula underlines how the air stratum can be obtained for a specific insulation material, taking into consideration that air, in normal conditions, is the best possible thermal insulation material compared to all others, with a thermal conductivity of 0,020 W/m• K.

From the formula: SA = μ • s

where:

SA = Equivalent air layer thickness (meters)

- μ = The water vapour resistance factor of the insulation material to be used

- s = Thickness (meters) of the insulation material to be used

Water vapour resistance factor μ

• Assuming the elastomeric foam **IT-FLEX C1** will be used, with a water vapour transmission value of **μ ≥ 7000**, the equivalent air layer thickness resulting from the calculation would be as follows:

Thk. **IT-FLEX** insulation	6 mm	SA=10000 x 0,006	= 60 meters
Thk. **IT-FLEX** insulation	9 mm	SA=10000 x 0,009	= 90 meters
Thk. **IT-FLEX** insulation	13 mm	SA=10000 x 0,013	= 130 meters
Thk. **IT-FLEX** insulation	19 mm	SA=10000 x 0,019	= 190 meters
Thk. **IT-FLEX** insulation	25 mm	SA=7.000 x 0,025	= 175 meters
Thk. **IT-FLEX** insulation	32 mm	SA=7.000 x 0,032	= 224 meters
Thk. **IT-FLEX** insulation	40 mm	SA=7.000 x 0,040	= 280 meters
Thk. **IT-FLEX** insulation	50 mm	SA=7.000 x 0,050	= 350 meters
Thk. **IT-FLEX** insulation	60 mm	SA=7.000 x 0,060	= 420 meters

N.B.

For information purposes it is important to clarify that water vapour transmission μ is purely a numeric comparison parameter used for making calculations.
This value is not used and is not among the parameters needed to calculate thermal dispersions, which are necessary to choose the correct insulation thickness for the various applications.

Calculation of insulation thickness to avoid the formation of condensation on pipeworks functioning with low temperature fluids - calculation rules

These are necessary for specific cases in which the fluids carried in the piping have a lower temperature than that of the external environment.

This combination is made worse due to the likely presence of humidity in the air of the environment which is a major cause of condensation formation. This can greatly reduce energy saving and can lead to severe corrosion of the system's pipework.

Therefore, the insulation has two purposes:

- to safeguard energy saving.
- preserve and protect the installation (exposed to the air and its humidity), ensuring that the external surface temperature is never lower than the dew point temperature of the environment.

In order to establish the correct insulation thickness, the following data are necessary and a calculation should be made based on the formula illustrated below.

1) Temperature of the fluid in the system's piping

2) Temperature of the external environment

3) Ambient relative humidity

4) COEFFICIENT of external ventilation/internal environment

The formula is necessary to calculate the correct required insulation thickness in order to avoid the formation of condensation (basically, this calculation helps to obtain the value relative to the insulation applications on flat surfaces which however represent the maximum dispersed surfaces and therefore the most difficult situations).

$$S = \frac{\lambda}{\alpha a} \times \left(\frac{ta - ti}{ta - tr} - 1 \right)$$

S = Insulation material thickness (expressed in meters)

λ = Thermal conductivity of the insulation material, expressed in W/m•K (the value obtained at the mean functioning temperature should be inserted).

α_a = External surface coefficient expressed as W/m²•K (data obtained from the following table).

ta = Ambient temperature °C

ti = Fluid temperature inside the pipework °C

tr = Air dew point temperature °C

α_a reference values for the calculation

Value	Type of ventilation
5 W/m²·K	Low ventilation
9 W/m²·K	Normal ventilation (internal environment)
12 W/m²·K	High ventilation (external environment)

Calculation of insulation thickness to avoid the formation of condensation on pipeworks functioning with low temperature fluids - The value of ta - tr is shown in table 1 below.

Table 1 - ta - tr value

Air temperature °C	Maximum humidity g/m³	Permitted air cooling °C until the formation of condensation for relative humidity														Maximum humidity g/m³	Air temperature °C
		30%	35%	40%	45%	50%	55%	60%	65%	70%	75%	80%	85%	90%	95%		
-20	0.90	-	10.4	9.1	8.0	7.0	6.0	5.2	4.5	3.7	2.9	2.3	1.7	1.1	0.5	0.90	-20
-15	1.40	12.3	10.8	9.6	8.3	7.3	6.4	5.4	4.6	3.8	3.1	2.4	1.8	1.2	0.6	1.40	-15
-10	2.17	12.9	11.3	9.9	8.7	7.6	6.6	5.7	4.8	3.9	3.2	2.5	1.8	1.2	0.6	2.17	-10
- 5	3.27	13.4	11.7	10.3	9.0	7.9	6.8	5.8	5.0	4.1	3.3	2.6	1.9	1.2	0.6	3.27	- 5
0	4.8	13.9	12.2	10.7	9.3	8.1	7.1	6.0	5.1	4.2	3.5	2.7	1.9	1.3	0.7	4.8	0
2	5.6	14.3	12.6	11.0	9.7	8.5	7.4	6.4	5.4	4.6	3.8	3.0	2.2	1.5	0.7	5.6	2
4	6.4	14.7	13.0	11.4	10.1	8.9	7.7	6.7	5.8	4.9	4.0	3.1	2.3	1.5	0.7	6.4	4
6	7.3	15.1	13.4	11.8	10.4	9.2	8.1	7.0	6.1	5.1	4.1	3.2	2.3	1.5	0.7	7.3	6
8	8.3	15.6	13.8	12.2	10.8	9.6	8.4	7.3	6.2	5.1	4.2	3.2	2.3	1.5	0.8	8.3	8
10	9.4	16.0	14.2	12.6	11.2	10.0	8.6	7.4	6.3	5.2	4.2	3.3	2.4	1.6	0.8	9.4	10
12	10.7	16.5	14.6	13.0	11.6	10.1	8.8	7.5	6.3	5.3	4.3	3.3	2.4	1.6	0.8	10.7	12
14	12.1	16.9	15.1	13.4	11.7	10.3	8.9	7.6	6.5	5.4	4.3	3.4	2.5	1.6	0.8	12.1	14
16	13.6	17.4	15.5	13.6	11.9	10.4	9.0	7.8	6.6	5.5	4.4	3.5	2.5	1.7	0.8	13.6	16
18	15.4	17.8	15.7	13.8	12.1	10.6	9.2	7.9	6.7	5.6	4.5	3.5	2.6	1.7	0.8	15.4	18
20	17.3	18.1	15.9	14.0	12.3	10.7	9.3	8.0	6.8	5.6	4.6	3.6	2.6	1.7	0.8	17.3	20
22	19.4	18.4	16.1	14.2	12.5	10.9	9.5	8.1	6.9	5.7	4.7	3.6	2.6	1.7	0.8	19.4	22
24	21.8	18.6	16.4	14.4	12.6	11.1	9.6	8.2	7.0	5.8	4.7	3.7	2.7	1.8	0.8	21.8	24
26	24.4	18.9	16.6	14.7	12.8	11.2	9.7	8.4	7.1	5.9	4.8	3.7	2.7	1.8	0.9	24.4	26
28	27.2	19.2	16.6	14.9	13.0	11.4	9.9	8.5	7.2	6.0	4.9	3.8	2.8	1.8	0.9	27.2	28
30	30.3	19.5	17.1	15.1	13.2	11.6	10.1	8.6	7.3	6.1	5.0	3.8	2.8	1.8	0.9	30.3	30
35	39.4	20.2	17.7	15.7	13.7	12.0	10.4	9.0	7.6	6.3	5.1	4.0	2.9	1.9	0.9	39.3	35
40	50.7	20.9	18.4	16.1	14.2	12.4	10.8	9.3	7.9	6.5	5.3	4.1	3.0	2.0	1.0	50.7	40
45	64.5	21.6	19.0	16.7	14.7	12.8	11.2	9.6	8.1	6.8	5.5	4.3	3.1	2.1	1.0	64.5	45
50	82.3	22.3	19.7	17.3	15.2	13.3	11.6	9.9	8.4	7.0	5.7	4.4	3.2	2.1	1.0	82.3	50

Table 2 - Thickness in mm of **IT-FLEX C1** required to avoid the formation of condensation on flat surfaces

ta Ambient temperature		+ 15 °C					+ 20 °C					+ 25 °C					+ 30 °C					+ 35 °C				
		60	70	80	85	90	60	70	80	85	90	60	70	80	85	90	60	70	80	85	90	60	70	80	85	90
FLUID TEMPERATURE °C	+ 15	-	-	-	-	-	-	-	-	4	8	-	-	7	11	19	-	6	12	18	31	5	10	17	25	41
	+ 10	-	-	-	4	8	-	-	7	12	20	-	6	13	19	31	6	10	18	26	42	7	12	22	32	51
	+ 5	-	-	8	12	19	-	7	13	19	31	6	10	18	26	41	8	13	23	33	54	10	16	27	39	62
	0	4	7	13	20	31	6	10	18	27	43	8	13	23	33	52	10	16	28	40	64	12	19	33	46	73
	- 5	6	10	18	27	41	9	14	24	34	55	10	16	28	40	63	12	19	33	46	74	14	22	37	52	82
	- 10	8	13	23	33	51	11	17	28	41	64	13	20	34	48	74	15	22	38	53	85	16	25	41	58	91
	- 20	13	20	33	48	72	15	23	37	53	83	16	25	41	58	89	19	28	47	66	104	20	31	51	72	112
	- 30	17	26	43	61	92	19	29	48	67	105	21	31	51	72	109	22	33	55	76	120	23	34	56	79	123

IT-FLEX C1

TABLE CARACTERISTICS OF CHEMICAL RESISTANCE

ORGANIC CHEMICALS	CONCENTRATION LEVEL	TEST DURATION				
		1h	24h	48h	72h	1 Week
Acetic Acid	20%	=	=	=	SC	SC
Concentrated Acetic Acid	99 - 100%	=	SC	SC	SC	SC
Acetone	-	MC	MC-FC	MC-FC	FC	
Acetic Aldehyde	-	=	=		=	=
Ethyl Alcohol	-	=	=	=	=	=
Methil Alcohol	-	=	=	=	=	=
Benzol	-	MC	MC-FC	FC	FC	FC
Motor fuel FAM	Liquid	MC-FC	MC-FC	MC-FC	MC-FC	MC-FC
Chloroform	-	SC	MC-FC	-	MC-FC	-
Detergent and Surfactant	30%	=	=	=	=	=
Hexane	Gas or liquid	=	=	=	=	=
Ethyl Ether	-	=	=	=	SC	SC-MC
Formalin (Water solution -40% of Formaldehyde	Solution 40%	=	=	=	=	=
Freon 11 (boiling point 74 F)	Liquid and Gas	MC	MC	MC	MC	MC
Freon 113 (boiling point 114 F)	Liquid and Gas	=		=	=	=
Gas Oil	-	=	=	=	=	SC
Glycerine	-	=	=	=	=	=
Ethylene Glycol	-	=	=	=	=	=
Molasses	-	=	=	=	=	=
Methane	Gas	=		=	=	=
Oils ASTM specifications 1,2,3	-	=	=	=	=	=
Linseed Oil	-	=	=	=	SC	SC
Castor Oil	-	=	=	=	=	=
Soybean Oil	-	=	=	=	=	=
Hydraulic Oil	-	=	=	=	=	=
Petroleum	-	=	=	=	=	=
Crude Petroleum	-		=		=	=
Carbon Sulphide	Gas	=	=	=	=	=
Carbon Sulphide	Liquid	=	SC	SC	SC	SC
Carbon Tetrachloride	-	SC	SC-FC	SC-MC	MC	MC
Trichloroethylene	-	MC	MC-FC	MC-FC	FC	FC
Tricresyl Phosphate	-	=	SC	SC	SC-MC	SC-MC

LEGEND					
	No attack	=	Small attack	SC
	Medium attack	MC	Strong attack	FC

IT-FLEX C1

TABLE CARACTERISTICS OF CHEMICAL RESISTANCE

INORGANIC CHEMICALS	CONCENTRATION LEVEL	TEST DURATION				
		1h	24h	48h	72h	1 Week
Hydrochloric Acid	20%	=	=	=	=	=
Hydrochloric Acid	concentrated	=	=	=	SC	SC
Hydrofluoric Acid	48%	=		=	=	=
Phosphoric Acid	concentrated	=	=	=	=	=
Nitric Acid	20%	=	=	=	SC	SC
Nitric Acid	concentrated	SC	MC	MC	MC-FC	FC
Sugared Water	30%	=	=	=	=	=
Hydrogen Peroxide	30%	SC	FC	FC	FC	FC
Hydrogen Peroxide	3%	=	=	=	=	FC
Ammonia	gas	=	=4h	-	-	-
Ammonia	high concentration	=	=	=	=	=
Silicic Anhydride	concentrated	=	=	=	=	=
Sulphur Dioxide	gas	SC	SC-MC 4h	-	-	=
Sodium Carbonate	saturated solution	=	=	=	=	=
Chlorine	gas and liquid	MC/FC	-	-	-	=
Sodium Chloride	saturated solution	=	=	=	=	=
Zinc Chloride	saturated solution	=	=	=	=	=
Hydrogen Sulphide	gas	SC-MC 4h	MC-FC	-	-	-
Ammonium Nitrate	saturated solution	=	=	=	=	=
Ammonium Phostphate	solution 30%	=	=	=	=	=
Calcium Hydrate	saturated solution	=	=	=	=	=
Sodium Nitrate	saturated solution	=	=	=	=	=
Potassium Nitrate	30% or gas	=	=	=	=	=
Ammonium Sulphate	solution 30%	=	=	=	=	=
Sodium Sulphate	saturated solution	=	=	=	=	=
Rocksalt	melting mixture	=	=	=	=	=

LEGEND					
	No attack	=	Small attack	SC
	Medium attack	MC	Strong attack	FC

The CE Marking of flexible elastomeric foam (FEF)

SUMMARY

INTRODUCTION

A plan for a reduction of polluting emissions in the atmosphere was defined at a worldwide level in 1990 during the well-known Kyoto Conference and was aimed at encouraging the Member Countries to adopt an adequate energy policy which, without penalizing the environmental comfort, could boost a sustainable growth especially for developed countries.

The EU Member Countries, at that time already engaged in creating a united "future", had already begun to introduce important regulations and standards (in certain specific sectors), aimed at implementing the Kyoto plan as soon as possible.

Among the different sectors, the building segment represented over 30% of the total energy consumption and was therefore worthy of prompt interventions.

DIRECTIVE 89/106/EEC and EU Regulation No.305/2011 of March 9, 2011

The EU Directive for building materials (89/106/EEC) was promulgated by a panel of experts. It contained the main characteristics and parameters for the materials to be used, with the aim to guarantee more quality, safety, comfort and energy saving in the construction sector.

In March 2011 the EU Community approved the Regulation No. 305 published on April 4, 2011, which abrogated the EU Directive 89/106/ECC and officially came into force for manufacturers of building materials from July 1st 2013.

The aim of the Regulation was to guarantee, define all the conditions related to the commercialization of goods (free circulation in the EU) and to unify the administrative regulations in one single document, valid for all EU Member Countries.

The Regulation also updated the main requirements of building materials, including those of insulation materials used in the construction sector, as shown in the following Table 1.

The CE Marking of flexible elastomeric foam (FEF) - EUROPEAN STANDARD - EN 14304: 2009 + A1: 2013

LIST OF REQUIREMENTS AS PER REGULATION No. 305/2011 (Table 1)

CONSTRUCTION MATERIALS	INSULATION MATERIALS
- MECHANICAL RESISTANCE AND STABILITY	- THERMAL CONDUCTIVITY
- SAFETY IN THE EVENT OF FIRE	- REACTION TO FIRE
- HYGIENE, HEALTH AND ENVIRONMENT	- WATER VAPOUR DIFFUSION
- SAFETY AND ACCESSIBILTY DURING UTILIZATION	- SERVICE TEMPERATURE
- NOISE PROTECTION	- TYPE OF INSTALLATION (INSTABILITY)
- ENERGY SAVING AND HEAT RETENTION	- HEALTH AND SAFETY
- SUSTAINABLE USE OF NATURAL RESOURCES	

Standard EN 14304 edition November 2009

With regards to building materials, the EU Directive stipulated that specific standards should be harmonized for each type of product, in order to guarantee its proper use, also based on its technical properties, some of which are not comparable between different types already on the market.

As regards Flexible Elastomeric Foam (FEF), the Standard EN 14304 was prepared and approved by the competent Technical Commission on November 2009 and published in the in the Official Journal of the European Union in 2010.

Manufacturers were informed that application of the new Standard for the purpose of CE Marking would become compulsory starting from August 1st 2012.

With the following tables we will try to provide the operators of this sector with some useful information regarding the contents and the obligations included in the Standard.

EUROPEAN STANDARD - EN 14304 - November 2009

THERMAL INSULATION PRODUCTS FOR BUILDING EQUIPMENT AND INDUSTRIAL INSTALLATIONS - FACTORY MADE FLEXIBLE ELASTOMERIC FOAM (FEF) PRODUCTS - SPECIFICATION

The CE Marking of flexible elastomeric foam (FEF)

REQUIREMENTS AND OBLIGATIONS

The main technical specifications of elastomeric products for thermal insulation (FEF) included in the Standard are:

- Thermal conductivity*
- Dimensions and relevant tolerances*
- Dimensional stability
- Reaction to fire*
- Min. and max. service temperatures
- Water absorption
- Resistance to water vapour diffusion*
- Trace quantities of water soluble ions and the pH value*
- Sound absorption
- Release of dangerous substances*

The specifications marked with (*) in the above table 2 will be analyzed hereafter, because these are the most significant and helpful features for market operators.

THERMAL CONDUCTIVITY

This is defined as the most important characteristic of insulation materials, is defined with the λ (lambda) symbol and measured in W/m•K. Thus, the lower a material's lambda value, the better its ability to insulate. Usually a material is defined as being an insulation product when its thermal conductivity value is less than 0.100 W/m•K. The European Standard EN 14304 stipulates that the thermal conductivity value of elastomeric insulation products (FEF) must not exceed 0.050 W/m•K at a mean temperature of 10 °C.

The lambda value is determined by testing the products and is fixed by the following standards:

-EN 12667 for flat surface products (sheets) and EN 12939 for thicknesses.

-EN ISO 8497 for cylindric products (tubes).

It is defined along the whole range of the product's service temperatures (with a min. limit of -170 °C). Tests must be performed on the minimum and maximum thicknesses of the full production range. The manufacturer is allowed to declare just one lambda value, valid for the whole range of thicknesses, with the condition that the highest value resulting from the different tests is the one to be declared.

DIMENSIONAL TOLERANCES

These are the variable sizes determined by the Standards:

EN 822 and EN 823 for sheet panels, rolls and tapes.

EN 13467 for tubes.

The standard tolerances are as follows:

Dimensions in mm

Key: D_i = inside diameter - D_{iD} = inside nominal diameter (Ref. Tubes) - d_D = Nominal thickness

Form of delivery	Length	Width	Thickness		Squareness	Inside diameter	
			Declared	Tolerance		$D_i \leq 100$	$D_i > 100$
Tubes	± 1,5%	-	$d_D \leq 8$	**± 1**	3,0 mm	$D_{iD}+1 \leq D_i \leq D_{iD}+4$	$D_{iD}+1 \leq D_i \leq D_{iD}+6$
			$8 < d_D \leq 18$	**± 1,5**	-		
			$18 < d_D \leq 31$	**± 2,5**	-	-	-
			$d_D > 31$	**± 3**	-		
Sheets	± 1,5%	± 2%	$d_D \leq 6$	**± 1**	3,0 mm/m (length/width)	-	-
			$6 < d_D \leq 19$	**± 1,5**	-		
			$d_D > 19$	**± 2**	3,0 mm (thickness)		
Rolls	+ 5% - 1.5%	± 2%	$d_D \leq 6$	**± 1**	3,0 mm/m (length/width)	-	-
			$6 < d_D \leq 19$	**± 1,5**	-		
			$d_D > 19$	**± 2**	3,0 mm (thickness)		
Tapes	+ 5% - 1.5%	± 2%	$d_D = 3$	**- 0.1 + 1,5**	-	-	-

REACTION TO FIRE

In order to standardize and regulate at EU level one of the most important aspects linked to safety and security of the environment, i.e. the reaction to fire of building materials (insulation materials included), several standards were promulgated and enforced, as follows:

- EN 13501-1:2002 Classification based on reaction to fire for building materials Part 1 (Reaction to Fire)

The CE Marking of flexible elastomeric foam (FEF)

EUROCLASS - APPLICATION TABLE

Reaction to fire classes			Smoke classes			Dripping classes		
A1	Incombustible		No test required			No test required		
A2		Non Combustible	s1		Limited or absent	d0	—	Absent for the first ten minutes
B		Level of combustion increasing from class B to class E	s2		Present	d1		Low dripping of incandescent material for less than 10 seconds
C			s3		Significant	d2		Significant
D			No test			No indications or d2		
E								
F	N.d.P. Performance not declared							

TEST REGULATION AND EUROPEAN CLASSIFICATION

EN 13501-1:2002	Fire classification of building products. Part 1 Fire behaviour
EN 13238:2001	Method of air-conditioning
EN ISO 1182: 2002	Non-combustibility test
EN ISO 1716:2002	Calculation of calorific values
EN ISO 11925-2:2002	Flammability of construction products in direct contact with flame
EN 13823:2002	Fire behaviour test for construction products excluding floors (S.B.I. test)
EN ISO 9239-1:2002	Fire behaviour test for floors (radiant panel)

The CE Marking of flexible elastomeric foam (FEF)

N.B

In the new european classification for all classes from **A2** to **E**, additional characteristics are required that are marked by the letters:

s = smoke

d = dripping

and should be included to the initial classification.

If tests are carried out separately on tubes, the initial classification will have a subscript B_L, and for sheets it will be only **B**, as indicated below:

-B_L (tubes)

-B_{FL} (pavements)

RESISTANCE TO WATER VAPOUR DIFFUSION

This property is defined by the μ (mu) symbol and is determined by the following standards:

-EN 12086 Flat products

-EN 13469 Cylindrical products

Alternatively, the **EN ISO 10456** Standard can be applied.

The value should be indicated at intervals of 1000 to a maximum of 15000 and should never be less than the declared value, (this value should always be preceded by the symbol ≥ greater or identical), as shown in the following table:

RESISTANCE TO WATER VAPOUR DIFFUSION

LEVEL		DECLARED VALUE
1000	≥	1000
2000	≥	2000
3000	≥	3000
4000	≥	4000
↓		↓
15000	≥	15000

The CE Marking of flexible elastomeric foam (FEF)

TRACES OF SOLUBLE IONS IN THE WATER, PH VALUE AND THE RELEASE OF DANGEROUS SUBSTANCES (Halogens).

- chlorides
- fluorides
- silicates
- sodium

The traces of **CHLORIDE- FLUORIDE - SILICATE - SODIUM** ions (that can cause possible corrosion of metal piping) together with the product's **PH** value, are evaluated based on the European Standard **EN 13458**.

MANUFACTURER'S OBLIGATIONS (Evocell&Mobius S.r.l.):

a) Production control in the factory

b) Additional sample tests taken from the factory based on a specific control plan

OBLIGATIONS OF THE NOTIFIED BODY

For Evocell&Mobius S.r.l. this is CSI Spa of BOLLATE, MILAN - n. 0497

a) Initial product test

b) Initial inspection of the factory and the production control precedures

c) Permanent monitoring, evaluation and approval of factory production controls

The CE Marking of flexible elastomeric foam (FEF)

CE 01234	CE conformity marking, consisting of the "CE"-symbol given in Directive 93/68/EEC Identification number of the certification body (for products under system 1)
AmyCo Ltd, PO Box 21, B-1050 **09** 0134-CPD-00234	Name or identifying mark and registered address of the producer Two last digits of the year for affixing CE marking (ITT) Certificate number (for products under system 1)
EN 14304: 2009 Flexible Elastomeric Foam, intended to be used as thermal insulation product for building equipment and industrial installations Reaction to fire - Class B Thermal conductivity see Manufacturer's Literature FEF - EN - 14304 - ST(+) 115 - ST(-) 200 - MU 7000 - CL 1	No. of dated version of European Standard Description of the product and Information on regulated characteristics Designation code (in accordance with Clause 6 for the relevant characteristics according to Table ZA. 1)

FEF - EN-14304 Reference Standard

ST (+)-ST (-): Maximum and minimum service temperatures

MU 7000: Water vapour diffusion coefficient

CL1: Chloride ions soluble in water

The Regulation (EU) 305 / 2011 has modified and replaced some rules compared to the Directive 89/106/EEC as listed below:

1. The Declaration of Performance (Mandatory from july 1st 2013) repalces the Declaration of Conformity.

2. The Certificate of Constancy of Performance replaces the EC Certificate of Conformity released by the Notified Body.

DOCUMENTATION RELEVANT TO CE MARKINGS

Apart from the labelling previously illustrated, the documents accompanying the CE Trademark (updated when the European Regulation came into force) are as follows:

The product's Certificate of Constancy of Performance (substituting the Certificate of Conformity) released by the notified Body.

Declaration of Performance (DoP) released by the manufacturer, accompanied by the safety data sheet in accordance with the EU Regulation No.1907/2006 (Reach).

TECHNICAL MEMO 7

The environmental sustainability of buildings

Introduction

In a era of renewed politics to safeguard the environment and its natural resources, strongly linked to construction and the protection of buildings (on a european level, the section of industry linked to construction comsumes approximately 45% of total energy, causing pollution and producing almost 50% of the total refuse) and as well as the need to continuously finalise Energy Performance Certificates, the prerequisites to study and promote their environmental sustainability through the following protocols.
The table illustrates the main features of the two types of certificates, aimed, as well as an improved management of traditional energy sources, at guaranteeing adequate personal and environmental protection.

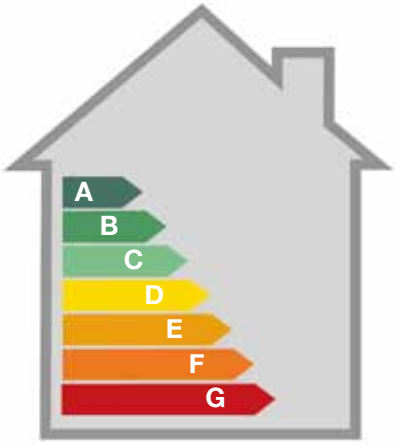
COMPARISON OF THE 2 SYSTEMS

ENVIRONMENTAL CERTIFICATION	ENERGY PERFORMANCE CERTIFICATION
Declares the performance (and environmental impacts on health) of the building, including energy consumption.	Declares, through a class of attributed energy consumption (in KWh/mq year) in order to evaluate performance. Energy consumption increases starting from cat. A up until cat. G (see diagram)
IT IS VOLUNTARY (It could become obligatory if required)	**IT IS OBLIGATORY**
• To take advantage of tax incentives • For public buildings • For ERP buildings • For new public tenders	• For new buildings (Public and/or private) • To take advantage of tax incentives • For deeds of sale

DIAGRAM OF THE ENERGY EFFICIENCY CLASS ATTRIBUTIONS OF BUILDINGS

LOW ENERGY CONSUMPTION

HIGH ENERGY CONSUMPTION



THE "ENERGY QUALITY" OF A BUILDING DECREASES FROM CATEGORY A TO CATEGORY G

PROTOCOLS FOR THE CERTIFICATION OF THE ENVIRONMENTAL SUSTAINABILITY OF BUILDINGS

List of world wide protocols:

● BREEAM - ENGLAND	INBAR - ITALY
BLUE ANGEL - GERMANY	ITACA - ITALY
CASACLIMA - ITALY	● LEED GBC - UNITED STATES
● CASBEE - JAPAN	MINERGIE ECO - SWITZERLAND
ECOLABEL - EUROPE	QUALITEL - FRANCE
GREEN STAR - AUSTRALIA	SB100 ANAB - ITALY
HQE - FRANCE	SWAN ECOLABELLING - NORTH EUROPE

The most widespread on a world wide scale are **BREEAM, CASBEE and LEED GBC.**

The diffusion of the protocols in Italy is carried out by:

ITACA - the most widespread on a national level

LEED (GBC Italia) - in the Lombardy and Trentino A.A. regions.

CASACLIMA - Trentino A.A.

LEED & BREEAM mapping - **IT-FLEX C1**

The protocols of environmental certification analyzed and used to qualify the use of **IT-FLEX C1** for the sustainability of buildings are **BREEAM** and **LEED**. These protocols do not certify the product itself used in the constructions, but the whole building based on specific classifications.

Table 1 illustrates the main operarational concepts.

	BREEAM	LEED
Certification standard	Building Research Establishment Environmental Assessment Method	Leadership in Energy and Environmental Design
Foundation	1990, Building Research Establishment (Bre)	1998, U.S. Green Building Council (USGBC)
Protocol specifications	It defines a set of principles and requirements which affect the entire life cycle of the building under examination (from design to disposal)	It is a voluntary protocol based on points attribution that state the performance qualities of the building
Assessment Parameters	- Management - Health and Wellness - Energy - Transportation - Water - Minerals - Waste Management - Land Use And Ecology - Pollution	- Integrative process - Location of transport - Sustainable sites - Water Management - Energy and atmosphere - Materials and resources - Internal environmental quality - Innovation - Regional priority
Scoring scale	★ Pass ★★ GOOD ★★★ VERY GOOD ★★★★ EXCELLENT ★★★★★ OUTSTANDING	Certified >40 Points Silver >50 Points Gold >60 Points Platinum >80 Points

It is on the inside of buildings that **IT-FLEX C1** elastomeric insulation plays a fundamental role, contributing, with its technical characteristics to enhance the following aspects:

- **Energy saving**
- **Greater efficiency of systems**
- **Protection against corrosion**
- **Reduction and prevention of CO_2 emissions**

The results are briefly expressed and illustrated in the following tables:

BREEAM PROTOCOL

IT-FLEX C1 can contribute, together with other materials, to obtaining 8 credits for a total of 40 points. By multiplying the points obtained from each credit by the relative weighting percentage of each category, the contribution percentage of the credits to the certification can be obtained.

LEED PROTOCOL

IT-FLEX C1 contributes to obtain a prerequisite and 4 credits. These can score a maximum of 21 points.

To view the BREEAM or LEED mapping in detail, please consult the “Documentation” page for the **IT-FLEX C1** brand, available on our website www.evocellmobius.it.

Smoke and toxicity: Notes on the important points and the main evaluation criteria

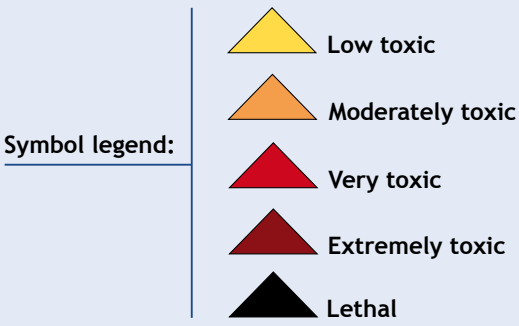
As part of the essential requirements stipulated by the European Directive on construction products (89/106/EEC now Regulation No. 305/2011) and specifically referring to insulation materials, safety in the event of fire and in the use of products represent two points fundamental to their installation.

The smoke and the relative toxicity that can derive from the combustion of the insulation material are factors that have already been previously evaluated at a european level in the following regulations:

- DIN 53436 (vehicles)	Smoke toxicity test
- IMO - MSC 61/67 (shipbuilding)	FTP Code and Solas (limit values of smoke and toxicity)
- NF F 16-101 (1988) (railway sector)	Smoke classification from F1 to F5
- VCI- 800 °C	Concentration of dioxins and furans

Toxic concentrations expressed in mg/kg of body weight are indicated in the following table:

ELEMENT/GAS	TOXIC CONCENTRATION (mg/kg)	LEVEL OF TOXCITY
ETHANOL	10.000	
MORPHINE	1.000	
DDT	100	
NICOTINE	5	
DIOXIN	0,001	
BOTOX	0,00001	
BROMHEXINE	-	
CO	-	
HCN	0,7	



Smoke and toxicity: Notes on the important points and the main evaluation criteria

The following table (ref. ISO TR 9122-5) identifies the value of the Lc 50 concentration in ppm (parts per million) which determines unconsciousness in humans after 30 minutes of exposure:

CO (Carbon monoxide)	1000/2000 ppm
HCN (Hydrogen cyanide)	90/120 ppm
HCl (Hydrochloric acid)	5000 ppm
NOx (Nitric oxide)	100/200 ppm

EXAMPLE OF LIMITATIONS AND REQUIREMENTS (Shipbuilding)

The classification criteria of smoke (optical density **DM**) and their toxicity are stipulated by the IMO resolutions and the FTP code and addressed in the resolution MSC. 61 (67) for high-speed shipbuilding.

SMOKE (Optical density) - Set parameters

a) For material used as the surface of bulkheads, claddings and ceilings, the DM must not exceed a value of 200 in all test conditions.

b) For material used as the main platform surface floor covering, the DM must not exceed a value of 400 in all test conditions.

c) For plastic pipes and electric cables the DM must not exceed a value of 400 in all test conditions.

SMOKE (Toxicity) - Set parameters

In all test conditions, the concentration (ppm) of gases must not exceed the values of:

TYPES OF GAS

NOT HARMFUL	IRRITANTS	HALOGENATED TOXICS
CO_2 60.000 ppm	ACROLEIN 1,7 ppm	HCN 140 ppm
	FORMALDEHYDE 3,2	CO 1450 ppm
	ppm	NO 350 ppm
	SO2 120 ppm	HF 590 ppm
		HCl 310 ppm
		HBr 50 ppm

N.B. In order to be suitable for specific uses, the products must fall within the values imposed regarding the optical density and smoke toxicity characteristics.

Evocell&Mobius S.r.l.

IT-FLEX - Insulation Systems

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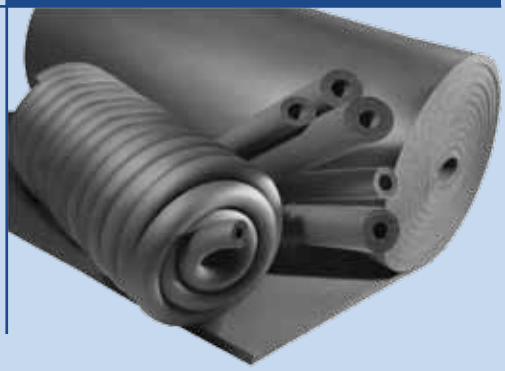
The evolution of elastomer technology



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