Maad

Technical data sheet



Dimension (standard):	Max. 950 mm x 3000 mm (Tolerances = +/- 1 %)
Density/volume weight:	13 kg/m³
<u>Thickness:</u>	10 mm (+/- 2 mm) 20 mm (+/- 2 mm) 30 mm (+/- 2 mm) 40 mm (+/- 3 mm) 50 mm (+/- 3 mm) 60 mm (+/- 3 mm)

Characteristics:

Moniflex is an environmental friendly product fully complying with REACH and made of natural cellulose polymers. The product is constructed of Crosswise glued, pleated cellulose foil with a small amount of fire retardant added. Moniflex contains no loose fibers and is therefore easy to cut and handle.

Water retention:

< 2%, typical content at 23°C (50% R.H.) Due to its construction, Moniflex drains off condensed water and maintains its insulation properties even if affected by high humidity.

Fire retardant properties:

MONIFLEX is a fire retardant/self-extinguishing material

Thermal insulation:

0,0541 W/(m*K) at 10 °C (EN 12667, replacing DIN 52612).

Certificates

R1 Plain Moniflex	R1 Laminated Moniflex – one side with aluminum foil	CEN/TS 45545-2:2009	
HL3 (R1) (10 mm)	HL3 (R1) (10-60 mm)		
HL3 (R1) (20 mm)			
Flammability	S4 (10 mm)	DIN 5510-2:2009	
	S3 (20-60 mm)	S3 (20-60 mm)	
Dripping	ST2 (10-60 mm)		
Smoke Class	SR2 (10-60 mm)		
Smoke toxicity	FED (15) = <0,01(10-60), FED (30) = 0,01 (10-60 mm)		
F1, M1	10-60 mm	NF F 16 101/102/STM-S-	
Smoke and toxicity	F1	001 Index C	
Reaction to fire	M1		
Class	1B (10-60 mm)	UNI CEI 11170-01-02-03	
UNI 8457	I		
UNI 9174	Ib		
Approved for Transit and Passen	ger Rail (10-60 mm)	NFPA 130:2010	

Maad Sp. z o.o. ul. 1 Maja 21 42-217 Częstochowa NIP PL 949 20 39 45 tel. 34 322 60 83 e-mail: biuro@maad.com.pl





ASTM E662:2009	Optical smoke density Ds 4 min 24,2 (< 100)	
ASTM E162:2009	Spread of flame Is 1,8 (≤ 25)	
PN-K-02512:2000	P2, D1, R1 (10-60 mm)	
UIC Code 564-2	A, C, A (10-60 mm)	
GOST 30402-96	B2	Russian Federation
GOST 12.1.044-89 (p.2.14)	D2	Certificate of conformity
GOST 12.1.044-89 (p.2.16)	Т2	
GOST 30244-94	G2	
GOST 12.1.044-89 (p.4.3)	Hardly combustible	

Acoustics:

According to ISO 354:1985 (DIN 52212) and ISO 140:978

Absorption		Insulation
	aw	dB
Moniflex 50 mm	0,4	5
Moniflex 60 mm	0,4	4

Expected life time:

Moniflex has an expected life time of up to 30 years in normal use.



