



Characteristics:

Maad 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:

MAAD MONIFLEX is a fire retardant/self-extinguishing material

Thermal insulation:

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

Dimension (standard):

Max. 950 mm x 3000 mm
(Tolerances = +/- 1 %)

Density/volume weight:

13 kg/m³

Thickness:

10 mm (+/- 2 mm)
20 mm (+/- 2 mm)
30 mm (+/- 2 mm)
40 mm (+/- 3 mm)
50 mm (+/- 3 mm)
60 mm (+/- 3 mm)

Certificates

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

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



Approved for Transit and Passenger Rail (10-60 mm)		NFPA 130:2010
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)	T2	
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

	<u>Absorption</u>	<u>Insulation</u>
	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.