

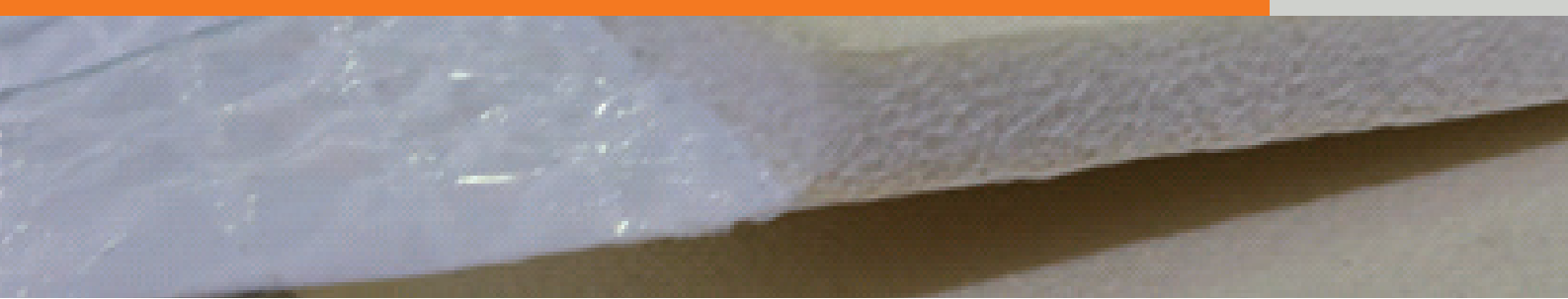
Monarflex® MonarSound FR

Noise reducing & insulating sheeting



- Reduces noise levels escaping the work site to the benefit of by-passers or residents
- Provides a climate shield on scaffolds against the effects of cold weather
- Flame retardant
- Equipped with unique Monarflex eyelets for durability
- Monarflex eyelets reduce the risk of breakout noise via the fixing points





Features & Benefits

- Weather protection with additional acoustic absorption.
- Suitable for long term projects up to 12 months.
- Enhances security for the workers on the scaffold.
- Serves as a climate shield to protect workers, machinery and open constructions against rain, wind, snow etc.
- Ensures a stable working climate on the scaffold so deadlines can be respected regardless of the weather.
- Protects surroundings from any inconveniences e.g. particles or building dust from sandblasting or water jetting from facade works as well as the noise levels associated with using high dB machinery.
- Tested to BS EN ISO 717-1 at Napier University for sound reduction.
- Tested as road noise barrier to BS EN 1793-2: 1998 and classified as B1 barrier.
- Enhances the security for the workers on the scaffold.
- Serves as a climate shield to protect workers, machinery and open constructions against rain, wind, snow etc.
- Ensures a stable working climate on the scaffold so deadlines can be respected regardless of the weather.
- Protects the surroundings from any inconveniences e.g. particles or building dust from sandblasting or water jetting from facade works.
- Helps reduce noise.

Choosing the right product

Placement of building site	Duration of building project			
	<3 months	3-6 months	6-12 months	>12 months
Surrounded by high buildings	Monar-Sound FR	Monar-Sound FR	Monar-Sound FR	
Urban/ industrial area	Monar-Sound FR	Monar-Sound FR	Monar-Sound FR	
Coast/ Offshore area	Monar-Sound FR	Monar-Sound FR	Monar-Sound FR	
Temporary roof covering system				
Interior				

Description

The Monarflex MonarSound is made from a 5 ply composition with the top layers consisting of a weather resistant LDPE fire retardant co-polymer that encapsulates a strong multifilament polyester (PET) grid which forms the weather protection layer. On the underside there is a thick (10mm) PE fire retardant special sound absorbent foam layer that provides the "bounce" effect of the acoustic sheeting. The sheeting is equipped with the unique Monarflex fixing eyelets for superior and long lasting fixing points.

Performance and Properties

Material	FR LDPE & FR PE Foam
Reinforcement	10 x 12mm mesh
Roll Size	2.00 x 10.70m, 2.25 x 10.15m
Colour	Opal white
Weight per m ²	600g (+/-7%)
Thickness	9.4mm
Tensile strength	750N/50mm
Pullout strength	1400N
Noise reduction to ISO 717-1	19dB
Noise reducing barrier rating	B1
Conforms to	BS 7955 & BS8410:2007
Thermal resistance	0,246 M2K/W
Fire class	DIN 4102. B1
Temperature stability	-40°C to +90°C
Applications	Internal & external use

Durability

Monarflex MonarSound can be used for all types of long term projects up to 12 months. The combination of high quality components forms a tough and durable sheeting for very extreme working conditions i.e. sandblasting and waterjetting. By using Monarflex MonarSound you can meet deadlines and avoid economical surprises regardless of the weather and be safe in that it fulfils all relevant British Standards like BS7955:1999 and BS 8410:2007 in accordance with HSE requirements to sheeting performance.

Assessment

The Code of practice for noise and vibration control on construction and open sites BS 5228-1 2009, refers to the need to reduce noise levels, which local Authorities often requires to be considered as part of planning permission. By introducing a noise barrier that provides a at least 10 dB noise level at low frequency (like at 100 Hz) the general noise level is cut in half. Breakout noise is the biggest concern as this may account for 5-10dB noise level, so correct installation is as crucial as the noise reduction from the sheeting material itself. Breakout noise often comes from gaps or the actual installation fixings, so sealed fixing points or overlaps are crucial and Monarflex MonarSound acoustic sheeting provides these.

Acoustic Control

There are no guidelines for rating the performance of scaffold sheeting. However, BS EN-1793-2: 1998 "Road traffic noise reducing devices - Test method for determining the acoustic performance" allows for the method for categorising the sound reduction performance of barriers that may be used to control road traffic noise.

Source room volume: 150.00 m³
Receiving room volume V: 48.00m³

Frequency f HZ	Dn T 1/3 Octave dB
50	13.2
63	18.8
80	16.4
100	17.9
125	15.3
180	15.0
200	15.3
250	14.5
315	14.6
400	14.4
500	15.7
630	16.0
800	16.8
1000	18.1
1250	18.9
1600	20.1
2000	21.8
2500	23.0
3150	24.3
4000	25.9
5000	27.9

Rating according to ISO 717-1

$$D_{nt,w}(C;C_{tr}) = 19(0; -2) \text{ dB}$$

Evaluation based on field measurement results obtained in one-third-octave bands by an engineering method.

$$C_{50-3150} = 0\text{dB}; C_{50-5000} = 0\text{dB}; C_{100-5000} = 0\text{dB};$$

$$C_{tr,50-3150} = -2\text{dB}; C_{tr,50-5000} = -2\text{dB}; C_{tr,100-5000} = -2\text{dB};$$

Application

Take care to overlap the lower sheet externally for weather protection. Fixing the sheeting to the scaffold must be done according to calculations, taking factors such as wind, building season and height of the surrounding buildings into consideration. We recommend the use of x 1 Monarflex Anchor & Strap fixing/m² but any fixing must be placed according to calculations for each project.

Delivery And Storage

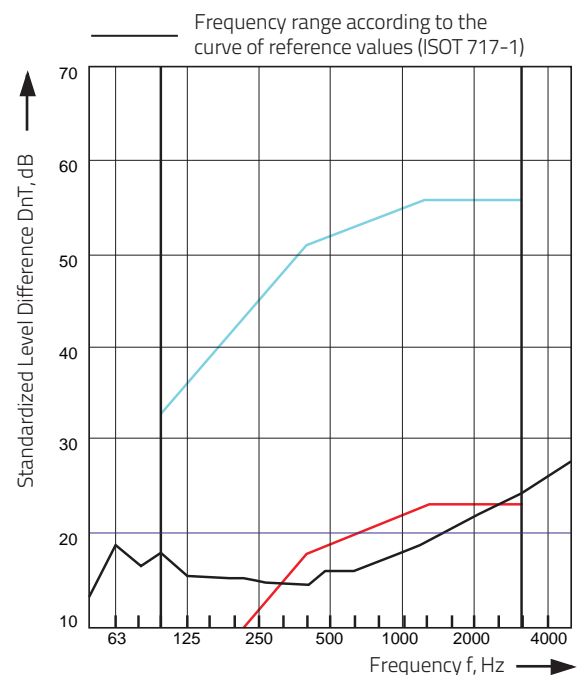
The Monarflex MonarSound is supplied on pallets with each roll individually wrapped in PE foil with label and name identification. The rolls must be stored lying under cover on a pallet and away from heat and direct sunlight.

Health And Safety

Health and safety data sheets are available for all materials. Please contact Icopal's Technical Services Department for further information.

Quality Assurance

Monarflex MonarSound is manufactured under a Quality Management System approved to ISO 9001: 2000 by BSI Quality Assurance.



For further information call 0161 865 4444 or visit www.monarflex.co.uk

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IC03158
Dec 2015