

# **ADVAROOF MATE**

## DESCRIPTION

ADVAROOF MATE is an extruded polystyrene rigid foam with skin, colored blue throughout according to DIN 18164 part 1, June 1979 Type WS, or according to ASTM standard C 578-95. It is available with and without shiplap edge treatment.

ADVAROOF MATE SL is same specifications as for ADVAROOF MATE but with shiplap profile on all four edges.

#### USES

Thermal Insulation Board for:

- Roofs
- Floors
- Permeter

### ADVANTAGES

ADVAROOF MATE SL in the upside-down roof, the insulation material is exposed to temperature extremes, thermal cycling, mechanical stresses (e.g. live loads construction site traffic), and high relative humidity.

The insulation material must be able to withstand such conditions and should therefore, possess the following characteristics;

- Closed-cell and homogeneous structure
- Negligible low moisture absorption
- Long-term high insulation efficiency
- Good mechanical strength
- Resistance to ageing and rotting
- Good dimensional stability
- High Resistance to thermal cycling

Numerous laboratory tests and more than 40 years of practical experience have shown that ADVAROOF MATE reliability meets all these requirements.

# **APPLICATION INSTRUCTIONS**

ADVAROOF MATE SL boards should be applied loose with tight staggered joints over the waterproofing membrane.

The waterproofing membrane should be good quality, non-rotting material. In order to protect single layer high-polymeric membranes from mechanical damage caused by rough concrete surface, a protection sheet should be installed underneath.

Roofing membrane containing solvents, which could attack ADVAROOF MATE SL plastic foam, should not be used.

ADVAROOF MATE SL boards should not be laid directly over microscopic material such as rag based felt.

Roofers Associations, membrane manufactures and other expert should be consulted for suitable membrane specifications.

The roof-deck surface should be smooth to prevent damage of the waterproofing membrane.

### **BOARD DIMENSIONS (mm)**

ADVAROOF MATE SL (with shiplap edges):

Thickness: 30,40, 50, 60, 75, 80, 100mm Width: 600mm (covering dimension)

ADVAROOF MATE without shiplap edges (butt edge)

Thickness: 20, 25, 30,40, 50, 60, 75, 80, 100mm Width: 600mm Length: 1250mm

\*Other thicknesses are available upon request.



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# **ADVAROOF MATE**

# **TECHNICAL SPECIFICATIONS**

PROPERTIES	STANDARDS	UNIT	RESULT
Density, min.	DIN 53420	kg/m <sup>3</sup>	35
	ASTM D 1622	lb/ft <sup>3</sup>	2-2.2
Thermal Conductivity 2 at 10°C (50°F)	DIN 52612	W/m · k	0.028
mean temperature of test	DIN 52616		
mean temperature 23.9°C (75°F)	ASTM C 177-97 or		
	ASTM C 518-98	Btu · in/ft2 · h · °F	0.20
Compressive Strength at 10% deflection	DIN 53421	kPa	300
	ASTM D 1621-95	psi	43
	DIN 53428	% by Vol.	0.2
Water Absorption by submersion	ASTM D 2842	% by Vol.	≤1
	(+1% by Vol. precision)		
Water vapour diffusion resistance factor $\boldsymbol{\mu}$	DIN 52615	μ	100-200
Water vapour permeability	ASTM E 96-00	Perm-inch	0.4-0.6
Capillarity	-	-	None
Heat Stability/Compressive Creep	DIN 18164	20kPa, 80°C Type	WD
		2.8 PSI, 176°F	
		40kPa, 70°C Type	WS
		5.6 PSI, 158°F	
Linear Coefficient of thermal expansion and contraction	DIN 52328	°C	70 · 10 <sup>-6</sup>
(Heating soaking conditions)		°F	<b>39</b> · 10 <sup>-6</sup>
Irreversible dimensional variation (Result of Laboratory test with	-	%	<0.2
temperature changes up to 60°C (140°F))			
Fire Classification upon customer request	DIN 4102	Building Material Class	B1 (difficult ignite)
Fire Classification (Germany)	DIN 4102	Building Material Class	B2 (difficult ignite)
Underwriters Laboratories (UL) classification according to	Flame spread	165	5
ASTM-E 84 standard Test Method for Surface Burning	Smoke developed		165
Characteristics of Building Materials Under designation ASTM C	For max. 4 pcf density		
578-95	and 4" max thickness		

The information given in this datasheet is based on both current development work and many years of field experience. Whilst every effort is made to ensure that the information is reliable, we cannot accept responsibility for any work carried out with our materials as we have no control over methods of application, site, conditions, etc.



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