



Isover DOMO PLUS

Mineral fibreglass insulation

TECHNICAL SPECIFICATION

Insulation rolls made of Isover fibreglass wool. The production is based on defibration of melt of glass and other additives and ingredients. Produced mineral fibres are then shaped into rolls on the production line. Fibres are made water-repellent on their entire surface. Insulation in construction have to be protected suitably (steam protection foil, suitable protection against dust settling in loosely laid constructions, other construction layers).

APPLICATION

Isover DOMO PLUS rolls are suitable for any thermal, acoustic, no-load insulation for pitch roofs, hanging false ceilings, cavity insulation (increase in acoustic insulation), and non-running roof constructions.

PACKAGING, TRANSPORT, WAREHOUSING

The Isover DOMO PLUS rolls are packaged into PE foil. They come in MPS packs (IMPS = 24 rolls, volume 4,09 m³). Loose packages can be supplied after an agreement with the manufacturer. Rolls have to be transported in covered vehicles under conditions preventing them from getting wet or being degraded. The products are stored indoors or outdoors depending on the conditions specified in the current ISOVER price list.

BENEFITS

- fire-resistant
- very good thermal insulation performance
- excellent acoustic properties in terms of noise absorption
- low vapour resistance - good water vapour penetrability
- environmentally friendly and hygienic
- completely hydrophobic
- long life span
- resistant to wood-destroying pests, rodents, and insect
- easy workability - can be cut, drilled into, etc.
- dimensional stability during temperature change
- high elasticity



DIMENSIONS AND PACKAGING

Thickness [mm]	TWIN 100/50	TWIN 120/60	TWIN 160/80	100	120	140	160	180	200	220
Length x width [mm]	8400 x 1200	7200 x 1200	5700 x 1200	8400 x 1200	7400 x 1200	6400 x 1200	5600 x 1200	5000 x 1200	4450 x 1200	3900 x 1200
Volume per package [ks]	2	2	2	1	1	1	1	1	1	1
Volume per package [m ³]	20.16	17.28	13.68	10.08	8.88	7.68	6.72	6.00	5.34	4.68
	1.01	1.04	1.09	1.01	1.07	1.08	1.08	1.08	1.07	1.03
Quantity per palette [m ²]	483.84	414.72	328.32	241.92	213.12	184.32	161.28	144.00	128.16	112.32
Declared thermal resistance R _D [m ² ·K·W ⁻¹]	2.60/1.30	3.15/1.55	4.20/2.10	2.60	3.15	3.65	4.20	4.70	5.25	5.75

Note: Name TWIN 10/5 - in the packing are 2 rolls, same thickness 50 mm, applicable as one roll 100 mm.

TECHNICAL PARAMETERS

Parameter	Unit	Methodology	Value	Designation code
Geometric shape				
Length <i>l</i>	[% , mm]	EN 822	±2 %	
Width <i>b</i>	[% , mm]	EN 822	±1.5 %	
Thickness <i>d</i>	[% , mm]	EN 823	-5 % or -5 mm ¹⁾	Class of thickness tolerances T1
Deviation from squareness of the edge on length and width <i>S_e</i>	[mm·m ⁻¹]	EN 824	5	
Deviation from flatness <i>S_{max}</i>	[mm]	EN 825	6	
Relative change in length Δ <i>ε_l</i> , in width Δ <i>ε_b</i> , in thickness Δ <i>ε_d</i>	[%]	EN 1604	1	Dimensional stability under the specified temperature and humidity conditions DS (23,90)
Thermal technical properties				
Declared value of the thermal conductivity coefficient λ _D ²⁾	[W·m ⁻¹ ·K ⁻¹]	Declaration according to EN 13162+A1 Measurement according to EN 12667	0.038	
Design thermal conductivity λ _D ³⁾	[W·m ⁻¹ ·K ⁻¹]	CSN 73 0540-3	0.041	
Specific heat capacity c _D	[J·kg ⁻¹ ·K ⁻¹]	CSN 73 0540-3	840	
Fire safety properties				
Reaction to fire class	[-]	Declaration according to EN 13501-1+A1	A1	
Maximum temperature for use	[°C]		200	
Melting temperature <i>t_m</i>	[°C]	DIN 4102 part 17	< 1000	
Hydrothermal properties				
Water vapour diffusion resistance factor μ	[-]	EN 13162+A1	1	Declared value for water vapour diffusion resistance factor MU1
Other properties				
Density	[kg·m ⁻³]	EN 1602	13	

¹⁾ Whichever gives the greatest numerical tolerance.

²⁾ Declared values were set under the following conditions (reference temperature 10 °C, humidity *u_{dry}*, which is reached by drying) according EN ISO 10456.

³⁾ It is valid for typical use in construction with risk of condensation. In the case of construction without any risk of condensation it is possible to use the declared value of thermal conductivity.

RELATED DOCUMENTS

- Declaration of Performance 030-WS1-DoP-14-w3
- Environmental Product Declaration
- ISO 9001, ISO 14001, OHSAS 18001

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TECHNICAL PARAMETERS

Parameter	Unit	Methodology	Value	Designation code			
Acoustic properties⁴⁾							
The practical sound absorption coefficient α_p	[-]	EN 13162+A1	Level of practical sound absorption coefficient	AP			
		EN ISO 11654					
		Measurement according to EN ISO 354					
	Frequency	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz
Thickness	60 mm	0.35	0.80	0.85	0.95	1.00	1.00
	80 mm	0.45	0.95	1.00	1.00	1.00	1.00
	100 mm	0.60	1.00	1.00	1.00	1.00	1.00
Weighted sound absorption coefficient α_w	[-]	EN ISO 11654 (for NRC according ASTM C423)	Level of weighted sound absorption coefficient	AW			
		Single number value			α_w	α_{str}	NCR
Sound Absorption Average α_{str}	Thickness	60 mm	0.95	0.77	0.90		
Noise Reduction Coefficient NRC		80 mm	1.00	0.86	1.00		
		100 mm	1.00	0.91	1.00		
Specific air flow resistivity r	[kPa·s·m ⁻²]	EN 13162+A1	Level of air flow resistivity	AFr			
		Measurement according to EN 29053			12,3		
Environmental properties / impacts							
Volume of Pre-consumer recycled content for production	[%]	ČSN ISO 14021	-				
Volume of Post-consumer recycled content for production	[%]	ČSN ISO 14021	-				
Non-hazardous waste disposed ⁵⁾	[kg /FU ⁶⁾]	EN 15804+A1, ČSN ISO 14025	0.497	NHWD			
Total use of non-renewable primary energy resources	[MJ /FU]	EN 15804+A1, ČSN ISO 14025	41.2	PENRT			
Global Warming Potential	[kg CO ₂ ekv. /FU]	EN 15804+A1, ČSN ISO 14025	2.59	GWP			
Ozone Depletion	[kg CFC 11 ekv. /FU]	EN 15804+A1, ČSN ISO 14025	715 E-08	ODP			
Acidification potential	[kg SO ₂ ekv. /FU]	EN 15804+A1, ČSN ISO 14025	0.0258	AP			
Eutrophication potential	[kg PO ₄ ³⁻ ekv. /FU]	EN 15804+A1, ČSN ISO 14025	0.0023	EP			
Photochemical ozone creation	[kg C ₂ H ₄ ekv. /FU]	EN 15804+A1, ČSN ISO 14025	0.00684	POPC			
Abiotic depletion potential for non-fossil resources	[kg Sb ekv. /FU]	EN 15804+A1, ČSN ISO 14025	1,56 E-06	ADP-elements			
Abiotic depletion potential for fossil resources	[MJ (Calorific value) /FU]	EN 15804+A1, ČSN ISO 14025	50.4	ADP-fossil fuels			

⁴⁾ Informative non-declared value beyond scope of CPR, obtained by concrete tests.

⁵⁾ In this case it is standard mixed waste.

⁶⁾ FU = functional unit (1 m² of insulation by 100 mm thick for live cycle phases A1-A3).



Example of product application Isover DOMO PLUS