

Vario[®] KM Duplex UV Smart vapor retarder

Properties	Sign	Unit	Performance characteristics Norms				
Material			Modified polyamide reinforced with specialty fleece	-			
Lamination			Specialty fleece made of polypropylene -				
Fire behavior			Class E – normal flammable	EN 13 501			
Dynamic diffusion equivalent air layer thickness	S _d	m	0.3 ≤ sd ≤ 5.0 (humidity variable) ¹⁾	EN ISO 12 572			
Static diffusion equivalent air layer thickness	S _d	m	2.04 ²⁾	EN 19 31			
Tear resistance (nail shank)		N	≥ 50	EN 13 984			
Tensile strength		N/50 mm	≥ 110 EN 13				
Mass per unit area		g/m²	Ca. 80	-			
Resistance against water penetration			W1				
Temperature resistance		°C	- 40 up to + 80	-			
UV resistance			1 month (< 55 MJ/m²) – immediate coverage recommended, especially in times of high UV-load (summer)³)				
Aroma density			Protects from fumigation of old preservers like o.g. Lindan or PCP into the living space				
Instructions for use	E.g. as vapor barrier and air blocker according to DIN 4108 in connection with: -> ISOVER Vario® sealing compound & sealing tape -> ISOVER Vario® tapes -> ISOVER Integra ZUB underlay According to ZVDH-guidelines insulation has to be installed in a way that the position permanence and function are guaranteed permanently. Especially mechanic deformations occurring during construction such as dwindling, twisting, flection under service load etc. are not to be excluded. Therefore in every case – also when no interior trim is being attached – the insulation and air-tight layer have to be secured mechanically by profiles or battens. Their distance should be based on the recommendation of the gypsum cardboard industry and should not exceed max. 50 cm. Likewise this mechanic security of air-tight and insulation layer has to occur before a Blower-Door-Test. The heating in hibernal shells, after the integration of windows, especially by heated screeds can lead to critical moistening of the building fabric as a consequence of convection. More accurate information to this special case can be found in the leaflet "Vario Anwendung im winterlichen Rohbau" via www.isover.de						
A+ (VOC-Decree)	* Information sur le niveau d'émission de substances volatiles dans l'air intérieur, présentant un risque de toxicité par inhalation, sur une échelle de classe allant de A+ (très faibles émissions) à C (fortes émissions).						
A+ A B C	(Information about the degree of emission of volatile substances in indoor air that depict a toxic risk during inhalation, on a scale of A+ (very low emission) to C (high emission).)						

1) The variable s_d-Value of the ISOVER Vario® KM, Vario® KM Duplex UV, Vario® KM Supraplex and Vario® XtraSafe can only be registered by a dynamic calculation program (e.g. according to bibliographical reference [10] in DIN 4108-3: 2001-07). The water vapor diffusion resistance in dependence of the average relative air humidity is deposited in the relevant simulation software (e.g. WUFI® from Fraunhofer Institut für Bauphysik IBP).

2) Static diffusion equivalent air layer thickness for the calculation according to DIN 4108-3 (method according to Glaser).

3) The resistant between the produced by the membranes in the IVI state is 55 M I/m² Transferred to the average global radiation in Central Flurone this

³⁾ The energy which has to be endured by the membranes in the UV-test is 55 MJ/m². Transferred to the average global radiation in Central Europe this corresponds to 3 months UV exposure/resistance. As the UV-load can be higher depending on the season, the resistance might be shorter. We always recommend to immediately cover the membranes and due to changes in the UV-load over the year the immediate coverage is even more crucial in the summer time.

Delivery forms									
Thickness mm	m²/roll	pieces/package	rolls/palette	Length mm	Width mm	R_D			
Ca. 0.2	60	-	42	40,000	1,500	-			
Ca. 0.2	30	-	63	20,000	1,500	-			

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