

# U Protect for fire, thermal and acoustic insulation of ventilation and smoke extraction ducts



U Protect WM 4.0 is part of ISOVER solutions for providing fire resistance in HVAC applications by using high performing ULTIMATE mineral wool.

U Protect wired mats provide fire resistant, an easy to install, lightweight and efficient thermal and acoustic insulation solution in HVAC for circular and rectangular ventilation and smoke extraction ducts up to El 120.

Installation guidelines must be followed and all ISOVER U Protect components used.



High class insulation keeps the medium temperature as designed and secures system operating with minimal losses



## FIRE RESISTANCE

Passive fire protection system



### SOUND INSULATION

The ability of mineral wool to act as a spring results in reducing vibration and noise emissions in industrial processes



#### **FAST INSTALLATION**

Thanks to its light weight and high flexibility, it can be installed by one person without any special equipment





CHARACTERISTICS	SYMBOL	UNIT	Unit Quantities and declared values					STANDARD		
Thermal conductivity	Т	[°C]	10	50	100	150	200	300	400	EN 12667
	λ	[W/(m•K)]	0.033	0.035	0.040	0.047	0.054	0.072	0.096	
Thermal behaviour	Т	5007	< 400 °C (tape and alu-facing 80 °C)						EN 14706	
Melting point		[°C]	> 1,000 °C						-	

Characteristic	SYMBOL	Unit	QUANTITIES AND DECLARED VALUES  [mm]		STANDARD
	a <sub>w</sub>	-	Weighted sound absorption coefficient = 0.90		EN 11654
Acoustics	Acoustics - kPa·S/m³		Specific airflow resistance Afr = 60 (measured without facing)	-	EN 29053

CHARACTERISTIC (FIRE RESISTANCE)	SYMBOL	Unit Quantities and measured values					STANDARD	
Duct orientation		-	EI15	EI30	EI60	El190	El120	
Horizontal thickness	-		40	50	75 (80)	100	120	EN 1366-1
Vertical thickness		mm	40	50	75	100	120	EN 1366-8

CHARACTERISTIC	SYMBOL	Unit	QUANTITIES AND DECLARED VALUES	STANDARD
Reaction to fire	-	-	Non-combustible, Euroclass A1	EN 13501-1
Chemical behaviour	-	-	Silicone-free, Sulphide-free	AGI Q 132
Application field	-	-	U Protect WM 4.0 is part of ISOVER solutions for providing fire resistance in HVAC applications by using high performing ULTIMATE mineral wool U Protect wired mats provide fire resistant, an easy to install, lightweight and efficient thermal and acoustic insulation solution in HVAC for circular and rectangular ventilation and smoke extraction ducts up to EI 120	EN 1366-1 EN 1366-8
Water behaviour	-	-	Hydrophobic	EN 12086
CE marking	-	-	MW-EN14303-T2-ST(+)400-MV2	EN 14303
Instructions for use	-	-	Installation guidelines must be followed and ISOVER Protect components must be used (BSF, BSK, Black Tape and fire screws) in order to achieve the performance.	-
Quality management	-	-	ISOVER is certified according to EN ISO 9001 and EN ISO 14001	EN ISO 900 EN ISO 1400

Delivery form: Standard dimensions / packaging information*							
Thickness d [mm]	Width b [mm]	Length [mm]	m²/pallet	m²/pack			
100	600	3,000	64.80	3.60			
120		2,500	54.00	3.00			
30		10,000	216.00	12.00			
40		7,500	162.00	9.00			
50		6,000	129.60	7.20			
60		5,000	108.00	6.00			
70		4,300	92.90	5.16			
75		4,000	86.40	4.80			
80		3,700	79.90	4.44			
90		3,300	71.28	3.96			

<sup>\*</sup> Check availability and delivery details from your local ISOVER supplier.

1 must be installed in 2 layers 75 mm + 50 mm









### www.isover-technical-insulation.com

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