



ULTIMATE

U Thermo datasheets

Mineral Wool

May 2010

Manufactured in Springs according to ISO 9001 : 2008
South Africa

ISOVER
SAINT-GOBAIN

ULTIMATE : A new generation mineral wool

Developed by ISOVER for high temperature applications



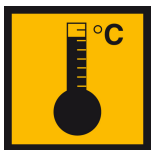
Thermal insulation

- *Excellent lambda values*
- *Shot free*



Fast and efficient installation

- *Unique lightness*
- *Soft touch*
- *Outstanding flexibility*



Maximum Service Temperature

- *Covers full thermal range required by high temperature applications*



Non hazardous to health

- *EUCEB certificate*

U Thermo product range

Wired Mattress

- U Thermo Matt
 - 3
 - 6
 - 8



Felt

- U Thermo Felt
 - 3
 - 6



Boards

- U Thermo Board
 - 3
 - 6
 - 8



Pipe sections

- U Thermo Pipe



U Thermo datasheets

All the performances of the products are evaluated according to European Norms* (EN)

- EN 12 667 for Thermal Conductivity, measures carried out at CRIR laboratory (France, accredited)
- EN 14 706 for Maximum Service Temperature, measures carried out at FIW laboratory (Germany, accredited)
- EN 13 501 Fire Classification of construction products and building elements

ULTIMATE products are all EUCEB certificated, they meet the European criteria in being non-carcinogenic

*EN standards are used across european countries for the certification of products



Wired Mattress



U Thermo Matt

ULTIMATE



Stonewool

▲ Density (kg/m³)

160



Insulmatt

120



Insulmatt

100



Insulmatt

80



Insulmatt

ULTIMATE



U Thermo Matt 8



U Thermo Matt 6



U Thermo Matt 3

Maximum Service Temperature*

Conductivity (400°C)

620°C

86 mW/m.K

550°C

98 mW/m.K

400°C

125 mW/m.K

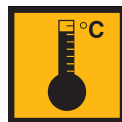
*under 500 Pa, according to EN 14 706

U Thermo Matt 3



Thermal conductivity according to EN 12 667

T [°C]	50	100	200	300	400	500	600
λ [W/(m.K)]	0,036	0,044	0,064	0,090	0,125	0,169	0,224



Maximum service temperature

$T_{\max} = 400^{\circ}\text{C}$ under 500 Pa according to EN 14 706



Non combustible, fire class A1 according to EN 13 501



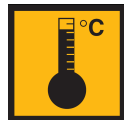
Non hazardous to health, EUCB certificate

U Thermo Matt 6



Thermal conductivity according to EN 12 667

T [°C]	50	100	200	300	400	500	600
λ [W/(m.K)]	0,034	0,039	0,054	0,074	0,098	0,129	0,166



Maximum service temperature

$T_{\max} = 550^{\circ}\text{C}$ under 500 Pa according to EN 14 706



Non combustible, fire class A1 according to EN 13 501



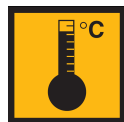
Non hazardous to health, EUCEB certificate

U Thermo Matt 8



Thermal conductivity according to EN 12 667

T [°C]	50	100	200	300	400	500	600
λ [W/(m.K)]	0,033	0,038	0,051	0,067	0,086	0,110	0,138



Maximum service temperature

$T_{\max} = 620^{\circ}\text{C}$ under 500Pa according to EN 14 706



Non combustible, fire class A1 according to EN 13 501



Non hazardous to health, EUCB certificate

U Thermo Matt 3, 6 & 8 : Dimensions



Type	Product name	Thickness (mm)			
		40	50	75	100
Wired Mattress	U Thermo Matt 3	x	x	x	x
	U Thermo Matt 6	x	x	x	x
	U Thermo Matt 8	x	x	x	
Dimensions	Length (mm)	5000	5000	3000	3000
	Width (mm)	1200	1200	1200	1200

"X" = available from stock

Type	Product name	Surface weight (kg/m ²)				Remark
		40	50	75	100	
Wired Mattress	U Thermo Matt 3	1,6	2,0	3,0	4,0	*
	U Thermo Matt 6	2,4	3,0	4,5	6,0	**
	U Thermo Matt 8	3,2	4,0	6,0		***

* Remark : density of the products ~40 kg/m³ (indicative value)

** Remark : density of the products ~60 kg/m³ (indicative value)

*** Remark : density of the products ~80 kg/m³ (indicative value)

**A 100mm U Thermo Matt 8 is available on special order.
Foil facing available on special order.**



Felt



U Thermo Felt

ULTIMATE

Stonewool

Density (kg/m³)

100



Insulfelt

80



Insulfelt

60



Insulfelt

ULTIMATE



U Thermo Felt 6



U Thermo Felt 3

Maximum Service Temperature*

550°C

400°C

Conductivity (400°C)

98 mW/m.K

125 mW/m.K

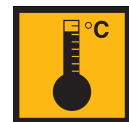
*under 500 Pa, according to EN 14 706

U Thermo Felt 3



Thermal conductivity according to EN 12 667

T [°C]	50	100	200	300	400	500	600
λ [W/(m.K)]	0,036	0,044	0,064	0,090	0,125	0,169	0,224



Maximum service temperature

$T_{\max} = 400^{\circ}\text{C}$ under 500 Pa according to EN 14 706



Non combustible, fire class A1 according to EN 13 501



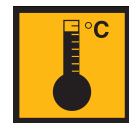
Non hazardous to health EUCB certificate

U Thermo Felt 6



Thermal conductivity according to EN 12 667

T [°C]	50	100	200	300	400	500	600
λ [W/(m.K)]	0,034	0,039	0,054	0,074	0,098	0,129	0,166



Maximum service temperature

$T_{\max} = 550^{\circ}\text{C}$ under 500 Pa according to EN 14 706



Non combustible, fire class A1 according to EN 13 501



Non hazardous to health EUCB certificate

U Thermo Felt 3 & 6 : Dimensions



Type	Product name	Thickness (mm)		
Felt	U Thermo Felt 3	25	40	50
		x	x	x
	U Thermo Felt 6			x
Dimensions	Length (mm)	5000	5000	5000
	Width (mm)	1200	1200	1200

"X " = available from stock

Type	Product name	Surface weight (kg/m ²)			Remark
Felt	U Thermo Felt 3	25	40	50	
		1,0	1,6	2,0	*
	U Thermo Felt 6			3,0	**

* Remark : density of the products ~40 kg/m³ (indicative value)

** Remark : density of the products ~60 kg/m³ (indicative value)



Boards



U Thermo Board

ULTIMATE



Stonewool

▲ Density (kg/m³)

160



Insulboard

120



Insulboard

100



Insulboard

80



Insulboard

60



Insulboard

ULTIMATE



U Thermo Board 8



U Thermo Board 6



U Thermo Board 3

Maximum Service Temperature*

Conductivity (400°C)

640°C

86 mW/m.K

580°C

98 mW/m.K

450°C

125 mW/m.K

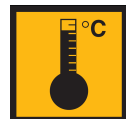
*under 500 Pa, according to EN 14 706

U Thermo Board 3



Thermal conductivity according to EN 12 667

T [°C]	50	100	200	300	400	500	600
λ [W/(m.K)]	0,036	0,044	0,064	0,090	0,125	0,169	0,224



Maximum service temperature

$T_{\max} = 450^{\circ}\text{C}$ under 500 Pa according to EN 14 706



Non combustible, fire class A1 according to EN 13 501



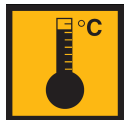
Non hazardous to health EUCEB certificate

U Thermo Board 6



Thermal conductivity according to EN 12 667

T [°C]	50	100	200	300	400	500	600
λ [W/(m.K)]	0,034	0,039	0,054	0,074	0,098	0,129	0,166



Maximum service temperature

$T_{\max} = 580^{\circ}\text{C}$ under 500Pa according to EN 14 706



Non combustible, fire class A1 according to EN 13 501



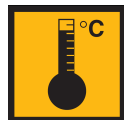
Non hazardous to health EUCB certificate

U Thermo Board 8



Thermal conductivity according to EN 12 667

T [°C]	50	100	200	300	400	500	600
λ [W/(m.K)]	0,033	0,038	0,051	0,067	0,086	0,110	0,138



Maximum service temperature

$T_{\max} = 640^{\circ}\text{C}$ under 500 Pa according to EN 14 706



Non combustible, fire class A1 according to EN 13 501



Non hazardous to health EUCEB certificate

U Thermo Board 3, 6 & 8 : Dimensions



Type	Product name	Thickness (mm)			
		25	50	75	100
Boards	U Thermo Board 3	x	x	x	x
	U Thermo Board 6	x	x	x	x
	U Thermo Board 8	x	x		
Dimensions	Length (mm)	1200	1200	1200	1200
	Width (mm)	600	600	600	600

"X " = available from stock

Type	Product name	Surface weight (kg/m ²)				Remark
		25	50	75	100	
Boards	U Thermo Board 3	1	2	3	4	*
	U Thermo Board 6	1,5	3,0	4,5	6,0	**
	U Thermo Board 8	2,0	4,0			***

* Remark : density of the products ~40 kg/m³ (indicative value)

** Remark : density of the products ~60 kg/m³ (indicative value)

*** Remark : density of the products ~80 kg/m³ (indicative value)

Foil facing available on special order.



Pipe sections



 **U Thermo Pipe**
ULTIMATE

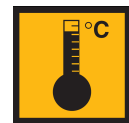


U Thermo Pipe



Thermal conductivity according to EN 12 667

T [°C]	50	100	150	200	300	400
λ [W/(m.K)]	0,037	0,043	0,051	0,060	0,083	0,111



Maximum service temperature

$T_{\max} = 660^{\circ}\text{C}$ under 500 Pa according to EN 14 706



Non combustible, fire class A1 according to EN 13 501



Non hazardous to health EUCB certificate

U Thermo Pipe



Dimensions

Length(mm)	Nominal Bore (mm)	Thickness (mm)
1000 mm	15 mm NB to 300 mm NB	25 mm to 100 mm

Foil and canvas where painting/colour coding is required, available on special order.

U Thermo Pipe



Dimensions

Pipe		Wall thickness (mm)										
Nominal bore (mm)	Outside diameter (mm)	20	25	30	40	50	60	70	75	80	90	100
15	21,3		X		X							
20	26,9		X			X						
25	33,7		X		X	X						
32	42,4					X						
40	48,3		X		X	X						
50	60,3		X		X	X	X					
65	76,1		X		X							
80	88,9		X		X	X						
90												
100	114,3		X		X	X						X
115												
125	139,7				X							
150	168,3		X		X	X				X		X
175												
200	219,1				X	X						X
225												
250	273,0					X						X
275												
300	323,9					X						X

"X " = available from stock

Non standard U Thermo Pipes available on special order.