



## U SeaProtect Slab Alu1

Slabs aluminium faced – density from 20 to 120 kg/m<sup>3</sup>

### U SeaProtect Slab Alu1

ULTIMATE mineral wool provides a unique high-performance profile: it combines safety, comfort and ease of handling.



#### Effective fire protection

ULTIMATE provides effective fire resistance, but also very good performance in reaction to fire.



#### Excellent Thermal insulation

Excellent thermal insulation combined with unique efficiency.



#### Optimal acoustic performance

Improved acoustic comfort due to its excellent sound absorption and sound insulation properties.



#### Light weight

Increase insulation – reduce weight. ULTIMATE combines high fire & thermal performance with very low weight.



**ISOVER**  
SAINT-GOBAIN

# U SeaProtect Slab Alu1

Slabs aluminium faced – density from 20 to 120 kg/m<sup>3</sup>



Characteristic	Symbol	Unit	Quantities and measured values	Standard
Application fields	-	-	Thermal insulation, acoustic insulation and fire protection constructions in shipbuilding.	-
Material	-	-	Mineral wool with quality mark RAL by the Gütegemeinschaft Mineralwolle e.V., unriskey regarding health according to German decree on dangerous substances, decree on prohibition of chemicals and to guideline EU 97/69 Nota Q.	-
Thermal conductivities	T	[°C]	10    50    100    150    200    300    400	DIN EN 12 667
U SeaProtect Slab 24	$\lambda_{N,P}$	[W/(m·K)]	0,034    0,040    0,049    0,062    0,080    0,124    -	
U SeaProtect Slab 36	$\lambda_{N,P}$	[W/(m·K)]	0,032    0,037    0,045    0,055    0,069    0,104    0,153	
U SeaProtect Slab 46	$\lambda_{N,P}$	[W/(m·K)]	0,032    0,036    0,042    0,051    0,060    0,086    0,122	
U SeaProtect Slab 56	$\lambda_{N,P}$	[W/(m·K)]	0,031    0,036    0,041    0,049    0,057    0,078    0,104	
U SeaProtect Slab 66	$\lambda_{N,P}$	[W/(m·K)]	0,031    0,035    0,040    0,047    0,054    0,072    0,096	
U SeaProtect Slab 76	$\lambda_{N,P}$	[W/(m·K)]	0,031    0,035    0,040    0,047    0,054    0,072    0,096	
U SeaProtect Slab 86	$\lambda_{N,P}$	[W/(m·K)]	0,031    0,035    0,040    0,046    0,054    0,070    0,091	
U SeaProtect Slab 90	$\lambda_{N,P}$	[W/(m·K)]	0,031    0,035    0,040    0,046    0,054    0,070    0,091	
U SeaProtect Slab 100	$\lambda_{N,P}$	[W/(m·K)]	0,031    0,035    0,040    0,046    0,054    0,070    0,091	
Thermal behaviour	-	[°C]	≤ 650 by pure thermal stress (U SeaProtect Slab 40 – 120) ≤ 550 by pure thermal stress (U SeaProtect Slab 24 – 40) U SeaProtect Slab Alu1: The thickness of the insulating layer has to be correctly dimensioned so that the faced side is exposed to a maximum of 100 °C. From 150 °C on the binder starts to volatilise.	AGI Q 132
Behaviour in fire	-	-	Melting point according to DIN 4102, part 17: ≥ 1000 °C. Non combustible according to IMO-Resolution MSC.61(67)-(FTP- Code), IMO MSC/Circ. 1120. Homologated for shipbuilding according to EC Type Examination Certificate Nr.: 114.483	DIN 4102 IMO
Thermal coefficient of expansion	$\alpha$	1/K	No change in dimensions within the application field.	-
Water vapour diffusion resistance factor	$\mu$	-	~ 1,0	EN 12086
Specific thermal capacity	c	[kJ/(kg·K)]	~ 1,0	-
Dynamic stiffness	s'	M·N/m <sup>3</sup>	U SeaProtect Slab 90: ≤ 7    U SeaProtect Slab 100: ≤ 8	-
Air flow resistivity	$\sigma$	[KPa· s/m <sup>2</sup> ]	U SeaProtect Slab 24: 15    U SeaProtect Slab 66: 60    U SeaProtect Slab 90: 100 U SeaProtect Slab 36: 30    U SeaProtect Slab 76: 80 U SeaProtect Slab 56: 50    U SeaProtect Slab 86: 90	DIN EN 29053
Sound absorption value	$\alpha_w$	-	U SeaProtect Slab 24 Alu1 50 mm: 0,70    U SeaProtect Slab 56 Alu1 70 mm: 0,85    U SeaProtect Slab 76 Alu1 20 mm: 0,70 U SeaProtect Slab 36 Alu1 70 mm: 0,85    U SeaProtect Slab 66 Alu1 30 mm: 0,80    U SeaProtect Slab 76 Alu1 25 mm: 0,80 U SeaProtect Slab 56 Alu1 30 mm: 0,80    U SeaProtect Slab 66 Alu1 50 mm: 0,90    U SeaProtect Slab 86 Alu1 50 mm: 0,90	DIN EN 29053
Chemical behaviour	-	-	Sulphide free. Low chloride content on demand. Water repellent content on demand.	-
Facing	-	-	One-sided faced with reinforced aluminium foil	-
Instruction for transformation	-	-	Can be cut and punched. Due to the differentiation of density optimal delivery forms are possible for each application field.	-
Miscellaneous	-	-	ISOVER is certified according to DIN EN ISO 9001 and DIN EN ISO 14001.	DIN EN ISO 9001 DIN EN ISO 14001

Delivery form*			
	Width	Length	Thickness
Slab 24-36	600 mm	1.200 mm	30, 40, 50, 60, 70, 80, 100 mm
Slab 46-66	600 mm	1.200 mm	30, 40, 50, 60, 70, 80 mm
Slab 76-86	600 mm	1.200 mm	20, 25, 40, 50 mm
Slab 90-100	600 mm	1.200 mm	30, 40, 50, 60 mm

\* on some products, minimum order quantities are requested  
\*\*further dimensions on request

[www.isover-technical-insulation.com](http://www.isover-technical-insulation.com)

The technical information corresponds to our present state of knowledge and experience at the date of printing (see imprint). But no legal guarantee can be given, unless it has been explicitly agreed. The state of experience and knowledge is developing continuously. Please see to it that you always use the latest edition of this information. The described product applications do not take special circumstances in consideration. Please verify whether our products are appropriate for the concrete application. For further information please contact our Isover sales offices. We deliver only according to our terms of trade and terms of delivery.

**ISOVER**  
SAINT-GOBAIN