



U SeaProtect Slab Alu1

Slabs aluminium faced - density from 20 to 100 kg/m³

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



Fire resistance

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



Thermal insulation

Excellent thermal insulation combined with unique efficiency



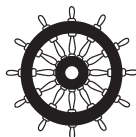
Sound insulation

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



Lightweight

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



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density from 20 to 100 kg/m³**

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., unrisksy regarding health according to German decree on dangerous substances, decree on prohibition of chemicals and to guideline EU 97/69 Nota Q							-
Thermal conductivity	T	[°C]	10	50	100	150	200	300	400	EN 14706
USP Slab 24	$\lambda_{N,P}$	[W/(m·K)]	0.034	0.040	0.049	0.062	0.080	0.124	-	
USP Slab 36	$\lambda_{N,P}$	[W/(m·K)]	0.032	0.037	0.045	0.055	0.069	0.104	0.153	
USP Slab 46	$\lambda_{N,P}$	[W/(m·K)]	0.032	0.036	0.042	0.051	0.060	0.086	0.122	
USP Slab 56	$\lambda_{N,P}$	[W/(m·K)]	0.031	0.036	0.041	0.049	0.057	0.078	0.104	
USP Slab 66 + 76	$\lambda_{N,P}$	[W/(m·K)]	0.031	0.035	0.040	0.047	0.054	0.072	0.096	
USP Slab 86 + 90 + 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 - 100) ≤ 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	-	[°C]	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	α	[1/K]	No change in dimensions within the application field							-
Water vapour diffusion resistance factor	μ	-	- 1.0							EN 12086
Specific thermal capacity	c	[kJ/(kg·K)]	- 1.0							-
Dynamic stiffness	s'	[M·N/m ³]	USP Slab 90: ≤ 7			USP Slab 100: ≤ 8				-
Air flow resistivity	σ	[KPa·s/m ²]	USP Slab 24: 15 USP Slab 36: 30 USP Slab 56: 50			USP Slab 66: 60 USP Slab 76: 80 USP Slab 86: 90		USP Slab 90: 100		DIN EN 29053
Sound absorption value	α_w	-	USP Slab 24 50 mm: 1.00 USP Slab 36 70 mm: 1.00 USP Slab 48 100 mm: 1.00 USP Slab 56 30 mm: 0.80		USP Slab 56 70 mm: 1.00 USP Slab 66 30 mm: 0.85 USP Slab 66 50 mm: 1.00 USP Slab 76 25 mm: 0.65		USP Slab 76 20 mm: 0.55 USP Slab 86 50 mm: 0.95 USP Slab 90 50 mm: 0.95		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: Standard dimensions / packaging information*			
	Width [mm]	Length [mm]	Thickness [mm]
Slab 24-36	600	1.200	30, 40, 50, 60, 70, 80, 100
Slab 46-66	600	1.200	30, 40, 50, 60, 70, 80
Slab 76-86	600	1.200	20, 25, 40, 50
Slab 90-100	600	1.200	30, 40, 50, 60

* On some products minimum order quantities are requested

** Further dimensions on request

www.isover-technical-insulation.com

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