





Slabs aluminium faced – Density 90 kg/m³

ULTIMATE U SeaProtect 90 Alu1 provides a unique highperformance 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 ABSORPTION

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.







CHARACTERISTIC	SYMBOL	UNIT	QUANTITIES AND DECLARED VALUES STANDARD							
Thermal conductivity	т	[°C]	10	50	100	150	200	300	400	
Thermal conductivity	$\lambda_{_{N,R}}$	[W/(m•K)]	0.031	0.035	0.040	0.046	0.054	0.070	0.091	DIN EN 12667
Thermal behaviour	т	[°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.							
CHARACTERISTIC	SYMBOL	UNIT		THICKNESS VALUES				STANDARD		
Sound absorption value	a _w	-		50 mm			0.95			DIN EN 29053
CHARACTERISTIC	SYMBOL	UNIT		QUANTITIES AND DE- CLARED VALUES		VALUES		STANDARD		
Air flow resistivity	σ	[KPa• s/m2]	Density 90 kg/m³			100			DIN EN 29053	
CHARACTERISTIC	SYMBOL	UNIT	QUANTITIES AND DECLARED VALUES					STANDARD		
Specific thermal capacity	с	kJ/(kg⋅K)	1.00					ISO 10456		
Reaction to 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		
Chemical behaviour	-	-	Sulphide free Low chloride content on demand Water repellent content on demand				-			
Application field	-	-	Thermal insulation, acoustic insulation and fire protection construc- tions in shipbuilding.				-			
Material	-	-	Mineral wool with quality mark RAL by the Gütegemeinschaft Min- eralwolle e.V., unrisky regarding health according to German decree on dangerous substances, decree on prohibition of chemicals and to guideline EU 97/69 Nota Q.					-		
Facing	-	-	One-sided faced with reinforced aluminium foil				-			
Water vapour diffusion resistance factor	μ	-	~ 1.0			EN 12086				
Thermal coefficient of expansion	α	1/K	No change in dimensions within the application field.			-				
Dynamic Stiffness	s'	M•N/m ³	≤7				-			
Instructions for transfor- mation	-	-	Can be cut and punched. Due to the differentiation of density, opti- mal delivery forms are possible for each application field.			-				
Density		kg/m³	67							
Quality management	-	-	ISOVER is certified according to DIN EN ISO 9001 and DIN EN ISO 14001				EN ISO 9001 EN ISO 14001			





DELIVERY FORM: STANDARD DIMENSIONS / PACKAGING INFORMATION*							
THICKNESS D [MM]	WIDTH B [MM]	LENGTH [MM]					
30	1200	600					
40	1200	600					
50	1200	600					
60	1200	600					

* On some products, minimum order quantities are requested. ** Further dimensions on request.



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 lsover sales offices. We deliver only according to our terms of trade and terms of delivery.

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