

## Slabs unfaced - Density 90 kg/m<sup>3</sup>



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 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	T	[°C]	10	50	100	150	200	300	400	DIN EN 12667
	$\lambda_{N,R}$	[W/(m·K)]	0.031	0.035	0.040	0.046	0.054	0.070	0.091	
Thermal behaviour	T	[°C]	$\leq 650$ by pure thermal stress (U SeaProtect Slab 40 – 100) $\leq 600$ by pure thermal stress (U SeaProtect Slab 24 – 40) U SeaProtect Slab: 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

CHARACTERISTIC	SYMBOL	UNIT	THICKNESS	VALUES	STANDARD
Sound absorption value	$\alpha_w$	-	50 mm	0.95	DIN 29053

CHARACTERISTIC	SYMBOL	UNIT	QUANTITIES AND DECLARED VALUES	VALUES	STANDARD
Air flow resistivity	$\sigma$	[KPa·s/m <sup>2</sup> ]	Density 90 kg/m <sup>3</sup>	100	DIN EN 29053

CHARACTERISTIC	SYMBOL	UNIT	QUANTITIES AND DECLARED VALUES	STANDARD
Specific thermal capacity	c	kJ/(kg.K)	1.00	ISO 10456
Reaction to fire	-	-	Melting point according to DIN 4102, part 17: $\geq 1000$ °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.: 114.477 U SeaProtect Slab 90: certified construction for A 60 (floating floor) 100.185; top-layer only according to static calculation	EN 13501-1
Chemical behaviour	-	-	Sulphide free Low chloride content on demand Water repellent content on demand	AGI Q132 EN 13468 ASTM C795
Application field	-	-	Thermal insulation, acoustic insulation and fire protection constructions in shipbuilding.	EN 14303
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.	CINI 2.1.05
Water vapour diffusion resistance factor	$\mu$	-	- 1.0	-
Thermal coefficient of expansion	$\alpha$	1/K	No change in dimensions within the application field.	-
Dynamic Stiffness	s'	M·N/m <sup>3</sup>	$\leq 7$	-
Instructions for transformation	-	-	Can be cut and punched. Due to the differentiation of density optimal delivery forms are possible for each application field.	-
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	600	1200
40	600	1200
50	600	1200
60	600	1200

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

