



**kNAUF**®  
Integral

## Product range

### Large-sized panels for separation plane and furniture construction

1,260x2,560mm* GIFAMarine1100 (oversize)**	Technical Data		Weights	
	Thickness*** mm	Density kg/m <sup>3</sup>	Panel c. kg/pcs    c. kg/m <sup>2</sup>	
<b>PRELIMINARY INFORMATION</b>	12**	c.1,100	42.6	13.2
	16**	c.1,100	56.9	17.6
	18**	c.1,100	64.0	19.8
	23	c.1,100	21.7	25.3
	25	c.1,100	88.8	27.5

  

GIFAMarine1500	Thickness*** mm	Density kg/m <sup>3</sup>	Panel ≥ kg/pcs    ≥ kg/m <sup>2</sup>	
		8	≥1,500	38.7
	10	≥1,500	48.5	15.0
	12**	≥1,500	58.1	18.0
	16**	≥1,500	77.5	24.0
	18**	≥1,500	87.2	27.0

\* The size is the usable dimension out of the delivered raw cut panel.

\*\* Special size 3,100x1,260mm is possible for orders ≥4,000m<sup>2</sup>,

\*\*\* other thicknesses ≤40mm are possible for orders ≥1,000m<sup>2</sup>,

observe special delivery time

### Special panels for floors, stages, ramps, stairs

GIFAMarine1500 Floor	Thickness*** mm	Density kg/m <sup>3</sup>	Panel ≥ kg/pcs    ≥ kg/m <sup>2</sup>	
	1200x600mm	25	≥1,500	27.0
28		≥1,500	30.2	42.0
32		≥1,500	34.6	48.0
600x600mm	25	≥1,500	13.5	37.5
	28	≥1,500	15.1	42.0
	32	≥1,500	17.3	48.0
	38	≥1,500	18.8	57.0

See-Berufsgenossenschaft  
Prüf- und Zertifizierungsstelle  
im BG-PRUFZERT  
European notified body  
Identification number 0736

### EC-Type Examination (Module B) Certificate

Certificate No. **107.065** USCG approval No. **164.109/EC0736/107.065**

Name and address of the manufacturer: **Knauf Integral KG  
Am Bahnhof 16, 74589 Satteldorf / Germany**

Date of issue: **02.10.2006**

Annex A.1 Item No & Item designation: **A.1/2.13 - Non-combustible materials**

Product designation: **Non-combustible Panel**

Product Type: **GIFAMarine 1100**

Intended purpose: **Non-combustible material complying with SOLAS 74/88 Chapter II-2 Regulation 3.33, as amended, IMO Resolution MSC.97 (73) 7.2.3 (2000 HSC-Code)**

Testing based on (Specific standard): **IMO Res. MSC. 61(67) (FTP-Code), Annex 1, Part 1**

Remarks: **see overleaf**

The type tested was found to be in compliance with the Fire protection requirements of Marine Equipment Directive (MED) 96/96/EC as amended by Directive 2002/75/EC subject to any conditions in the schedule (part of this certificate).

This certificate may only be used in connection with module(s) **D, E or F** of this directive.

Expiry date: **31.10.2011**

Signature (Notary)

The approval of the installed equipment will be in force beyond the validity date until it is renewed.

**Note 1:** This certificate will not be valid if the manufacturer makes any changes or modifications to the approved equipment, which have not been notified to, and agreed with the notified body named on this certificate.

**Note 2:** Should the specified regulations or standards be amended during the validity of this certificate, the product(s) listed to be approved prior to affixing being placed on board vessels to which the amended regulations or standards apply.

**Note 3:** The Mark of Conformity may only be affixed to the above type approved equipment and a Manufacturer's Declaration of Conformity issued when the production-control phase (module D, E, or F) of ANNEX B of the Directive is fully complied with and controlled by a written inspection agreement with a notified body.

**Note 4: "Wheelmark" Format**  
X X X X Notified Body number undertaking surveillance module

Postal address: Postfach 11 04 39, 20467 Hamburg

Office: Malmstrasse 2, 20467 Hamburg

Tel: 0 40 31 37-0, Fax: 0 40 31 37-234, e-mail: info@knai-integral.com

See-Berufsgenossenschaft  
Prüf- und Zertifizierungsstelle  
im BG-PRUFZERT  
European notified body  
Identification number 0736

### EC-Type Examination (Module B) Certificate

Certificate No. **107.066** USCG approval No. **164.109/EC0736/107.066**

Name and address of the manufacturer: **Knauf Integral KG  
Am Bahnhof 16, 74589 Satteldorf / Germany**

Date of issue: **02.10.2006**

Annex A.1 Item No & Item designation: **A.1/2.13 - Non-combustible materials**

Product designation: **Non-combustible Panel**

Product Type: **GIFAMarine 1500**

Intended purpose: **Non-combustible material complying with SOLAS 74/88 Chapter II-2 Regulation 3.33, as amended, IMO Resolution MSC.97 (73) 7.2.3 (2000 HSC-Code)**

Testing based on (Specific standard): **IMO Res. MSC. 61(67) (FTP-Code), Annex 1, Part 1**

Remarks: **see overleaf**

The type tested was found to be in compliance with the Fire protection requirements of Marine Equipment Directive (MED) 96/96/EC as amended by Directive 2002/75/EC subject to any conditions in the schedule (part of this certificate).

This certificate may only be used in connection with module(s) **D, E or F** of this directive.

Expiry date: **31.10.2011**

Signature (Notary)

The approval of the installed equipment will be in force beyond the validity date until it is renewed.

**Note 1:** This certificate will not be valid if the manufacturer makes any changes or modifications to the approved equipment, which have not been notified to, and agreed with the notified body named on this certificate.

**Note 2:** Should the specified regulations or standards be amended during the validity of this certificate, the product(s) listed to be approved prior to affixing being placed on board vessels to which the amended regulations or standards apply.

**Note 3:** The Mark of Conformity may only be affixed to the above type approved equipment and a Manufacturer's Declaration of Conformity issued when the production-control phase (module D, E, or F) of ANNEX B of the Directive is fully complied with and controlled by a written inspection agreement with a notified body.

**Note 4: "Wheelmark" Format**  
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PRELIMINARY INFORMATION

European notified body  
Identification number 0736

## Certificate

No. **08003**  
valid until **28.01.2011**

The quality system of the company

**Knauf Integral KG  
Am Bahnhof 16, D - 74589 Satteldorf**

for the products listed in the annex

is in conformity with **Module D (Production Quality Assurance)**  
of the Council Directive 96/96/EC on marine Equipment.

"In pursuance of the EU/USCG Mutual Recognition Agreement, signed February 27th, 2004, and in accordance with the Council Decision 2004/425/EC of April 21st 2004, the manufacturer is permitted to affix under our authorization the U.S. Coast Guard approval number on the relevant equipment as assigned by us on the EC type approval certificate (Module B) or the annex thereto."

Signature

Wolfgang Kuisberg (Notary)

Hamburg, 31.01.2006

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Office: Malmstrasse 2, 20467 Hamburg

Phone: 0 40 31 37-0, Fax: 0 40 31 37-234

European notified body  
Identification number 0736

## Certificate

On 25<sup>th</sup> of June 2004 Eurofins Danmark A/S received a sample of a fire retorted calcium sulphate panel with edge trim around the panel edges, panel thickness 28 mm, bare finish on top and bottom with the name

**GIFAMarine  
Knauf Integral KG**

The emissions were tested according to the AgBB-scheme and guidelines of the DIBt (AgBB - Committee for Health-hazard Evaluation of Building Products, DIBt - German Institute for Building Technology). Sampling, testing and evaluation were performed according to EN 13419-1, EN 13419-3, ISO 16000-3, ISO 16000-6, ISO 16000-9, ISO 16000-11, ISO 16011-1 in the latest versions, see the test report no. 21.1019-71-161.

**Evaluation of the test result according to AgBB guidelines:**

- Chromogenic substances were not detectable after 3 and after 28 days.
- The sum of VOC (TVOC) after 3 days was below the limit of 10.000 µg/m<sup>3</sup>.
- The sum of VOC (TVOC) after 28 days was below the limit of 1.000 µg/m<sup>3</sup>.
- The sum of SVOC after 28 days was below the limit of 100 µg/m<sup>3</sup>.
- After 28 days the value R was calculated from the detected VOC with single concentrations above 5µg/m<sup>3</sup>. This value R was below the limit of 1.
- The sum of VOC without LC1-value after 28 days was below the limit of 100 µg/m<sup>3</sup>.
- Formaldehyde after 28 days was below the limit of 120 µg/m<sup>3</sup>.

The tested product is suitable for indoor application, according to the AgBB guide line (version July 2004).

29<sup>th</sup> of June 2006

Signature

Thomas Nordgaard M.Sc. (Chemistry)

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**TECHNICAL DATA**

Type of element Characteristics	GIFamarine 1100	GIFamarine 1500	unit
density	≥1,100	≥1,500	kg/m <sup>3</sup>
produced thickness	13 - 25	13 - 42	mm
possible to be abraded to	≥12	≥6	mm
tolerance of thickness	+/- 0,2	+/- 0,2	mm
max. length x max. width (raw edges)	3,130 x 1,280	2,560 x 1,260	mm
max. length x max. width (cut edges)	3,100 x 1,260	2,500 x 1,200	mm
surface hardness acc. Brinell	≥ 20	≥ 40	N/mm <sup>2</sup>
pull off bond strength	≥ 0,6	≥ 1,2	N/mm <sup>2</sup>
pH-value	7 - 8		—

**hygroscopic, hygrothermal and thermal values**

balanced humidity at 20°C 65 % rel. air humidity	1,0 - 1,3	1,0 - 1,3	%
expansion / shrinkage by changing the rel. air humidity on 30% (at 20°C)	0,6	0,6	mm/m
surface water absorption acc. to Copp (EN 20535)	< 300	< 300	g/m <sup>2</sup>
expansion of the thickness after 24 h water storage	≤ 0,5	≤ 0,5	%
expansion / shrinkage by rise / drop in temperature	≤ 0,02	≤ 0,02	mm/(mK)
thermal extension coefficient α	12,9*10 <sup>-6</sup>	12,9*10 <sup>-6</sup>	1/K
value of vapor diffusion resistance μ	17	30/50	1
diffusion equivalent air layer thickness s <sub>d</sub> (board thickness 19mm)	0,34	≥ 0,75	m
conductivity of heat λ	0,38	0,44	W/mK
specific heat capacity c	> 1,000	> 1,000	J/(kgK)
fire classification	non-combustible		—