



European notified body  
Identification number 0736

## EC-Type Examination (Module B) Certificate

Certificate No. **100.216**

Name and address of the manufacturer: SAINT-GOBAIN ISOVER G+H AG  
Bürgermeister-Grünzweig-Strasse 1  
67059 Ludwigshafen (Germany)

Date of issue: **26.05.2014**

Annex A.1 Item No & Item designation: **A.1/3.34 – Fire resisting divisions for high speed craft**

Product designation: Horizontal division 60

Product Type: **Loadbearing fire-resisting deck 60**

Intended purpose: Fire resisting divisions for high speed craft complying with IMO Resolution MSC.36(63)-(1994 HSC-Code) 7 and IMO Resolution MSC.97(73)-(2000 HSC-Code) 7

Testing based on (Specific standard): IMO Resolution MSC.307 (88)-(FTP-Code 2010)\*  
\*) = not applicable accordance chapter 8.3 IMO Resolution MSC.307 (88)  
IMO Resolution MSC.61(67)-(FTP-Code)

Remarks: see overleaf

The type tested was found to be in compliance with the Fire Protection requirements of Marine Equipment Directive (MED) 96/98/EC as amended by Directive 2012/32/EU 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.

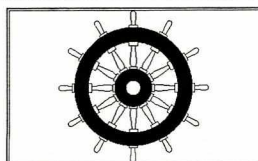
Expiry date: **25.05.2019**

Installed equipment stays approved beyond the validity date until it is revoked!

**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) is/are to be re-approved prior to it/they 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.



xxxx/yy

**Note 4: "Wheelmark" Format**

YY Last two digits of year mark affixed.

XXXX Notified Body number undertaking surveillance module



Signature (Bork)



**Technical data / approved drawings and additional conditions and remarks:**

1.  
This EC-Type Examination Certificate is based on the following document:
  - Test Report P703991 of the "SP Technical Research Institute of Sweden", 501 15 Borås (SWE) dated 03.12.2007.
  - "Assessment of a load bearing fire-resisting deck" of SP Technical Research Institute of Sweden (Mr. Lars Boström) with reference P903422C dated 07.12.2009.
2.  
This EC-Type Examination Certificate provides that the assembly of the loadbearing horizontal division coincides in all items with the construction as described in number 2.2 and the annexes to the Test Report P703991.
3.  
All measurements of the loadbearing horizontal division must be in accordance with the drawing no. AK2175 (annex no. 1 - 4 to the Test Report P703991).  
They may only be changed in compliance with the Prüf- und Zertifizierungsstelle of Dienststelle Schiffssicherheit.
4.  
The construction may be also insulated and build according to the drawing no. AK2179 dated 10.09.2009 (appendix to the assessment with reference P903422C dated 07.12.2009).
5.  
The horizontal division was tested as follows:

Insulation	= exposed side
FRP Sandwich panel	= unexposed side
6.  
As fire restricting material has to be used:
  - "FRP Sandwich panel with different insulation materials", EC-Type Examination Certificate No. 223.002, issued by Dienststelle Schiffssicherheit.
7.  
For insulating the "FRP Sandwich Panel" may also be used the identical insulating materials of the series "ULTIMATE U SeaProtect" (manufacturer: SAINT-GOBAIN ISOVER G+H AG).
8.  
Fire restricting material as per Test Report P703991 may be replaced by a different one or non combustible material, provided that its composition and physical properties (e.g. heat conductivity, density and thickness of the material) correspond with the tested material and an approval as per Directive 96/98, as amended, has been obtained.  
This has to be proved to Dienststelle Schiffssicherheit beforehand in written form.
9.  
Surface materials which will be used must be not readily ignitable and approved by an European notified body.
10.  
The equipment shall be marked in accordance with article 11 of the Council Directive 96/98 EC of 20 December 1996 on Marine Equipment as amended.
11.  
This EC-Type Examination Certificate replaces the old EC-Type Examination Certificate, issued on 12.05.2009 with a running time up to 31.05.2014.
12.  
This EC-Type Examination Certificate may only be published or transmitted unabridged.





European notified body  
Identification number 0736

## 1. Supplement to EC-Type Examination Certificate

**Certificate-No. 100.216**

**dated 26.05.2014**

**Product designation:** Horizontal division 60

**Item designation:** A.1/3.34 - Fire resisting divisions for high speed craft

**Type:** Loadbearing fire-resisting deck 60

---

**Manufacturer:** SAINT-GOBAIN ISOVER G+H AG  
Bürgermeister-Grünzweig-Strasse 1  
67059 Ludwigshafen (Germany)

---

**Reference:** Assessment for the change of insulation issued by "SP Technical Research Institute of Sweden" (Mr. P. Johansson) with the reference P903422D dated 01.12.2014.

**Alteration / Addition:** For the non-combustible material ISOVER-marine slab ULTIMATE U MPN 85 / ISOVER-marine slab ULTIMATE U SeaProtect slab 85 the following insulation shall be used:

**- ISOVER-marine slab ULTIMATE U SeaProtect slab 86**  
**EC-Type Examination Certificate No. 114.477, issued by Ship Safety Division**

---

The approved type with the above certificate number may be further manufactured and sold with the alterations / additions stated above.

The other regulations of the EC-Type Examination Certificate are not affected by this supplement.

This Supplement to EC-Type Examination Certificate will be expired on: **25.05.2019**

Hamburg, 13.01.2015



  
Signature (Bork)



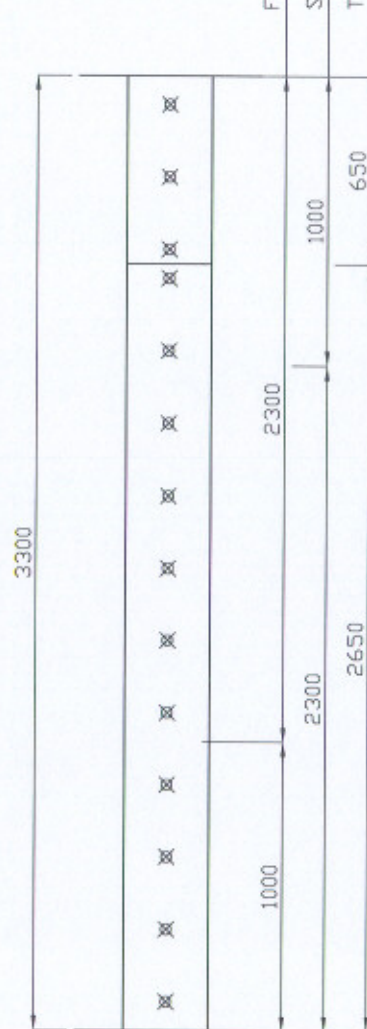






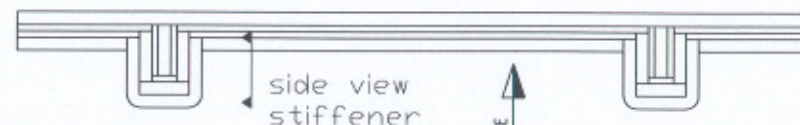
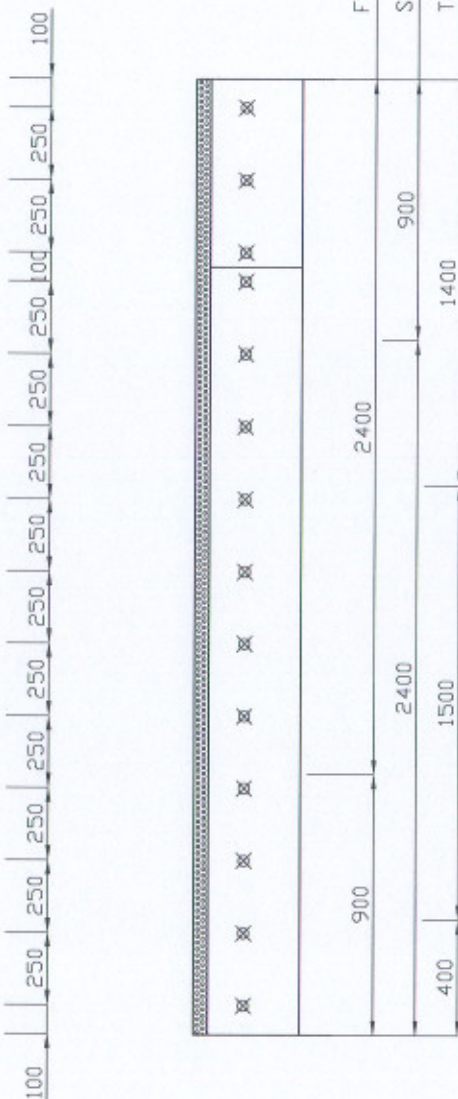
top view  
stiffener

First layer  
Second layer  
Third layer



side view  
stiffener

First layer  
Second layer  
Third layer



top view stiffener

FIRE SIDE

APP: 2  
REF: P703991  
SIGN: Ryt

First layer on stiffener	Ultimate U MPN 85-25
Second layer on stiffener	Ultimate U MPN 66-50
Third layer on stiffener	Ultimate U MWN 66-50

Für diese technische Unterlage behalten wir uns alle Rechte vor, auch für den Fall der Patenterteilung oder Gebrauchsmustererteilung. Ohne unsere vorherige Zustimmung darf diese technische Unterlage weder vervielfältigt noch Dritten zugänglich gemacht werden und sie darf durch den Empfänger oder Dritte auch nicht in anderer Weise inoffiziell verwendet werden. Zuwiderhandlungen verpflichten zu Schadensersatz und können strafrechtliche Folgen haben.

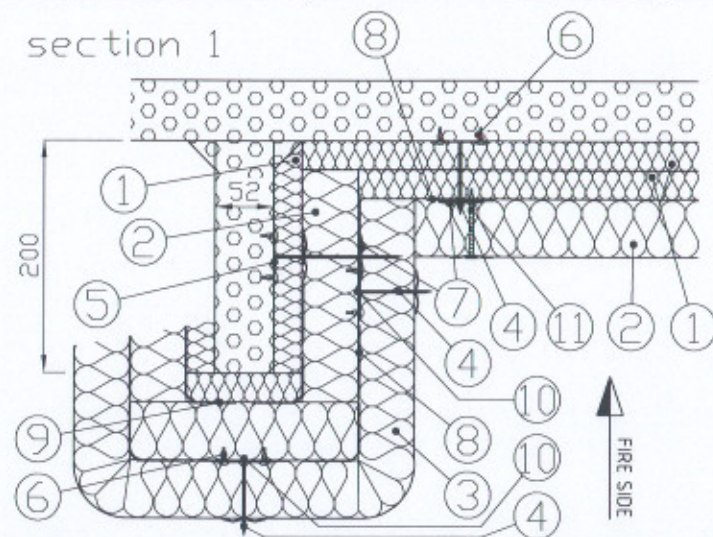
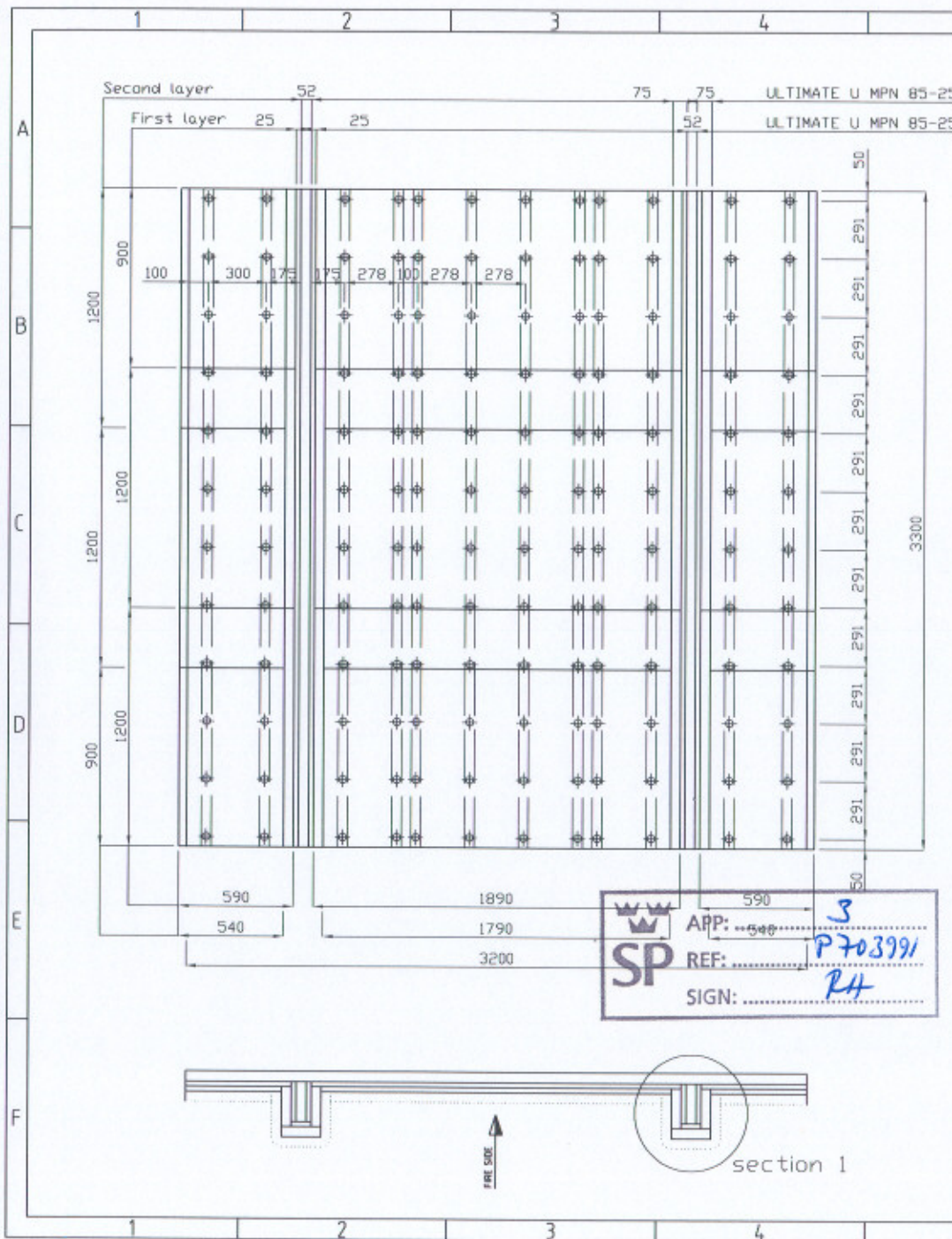
We reserve all rights for this technical document including possible patent or registration of a utility model. Without our prior consent, this technical document must not be reproduced / copied nor made available to third parties, and it must not be actively exploited in any other way by the recipient or any third parties. Noncompliance will result in an obligation for compensation of any damage resulting therefrom and may have penal consequences.

**ISOVER**

SAINT-GOBAIN ISOVER

Änderungen / Modifications		Datum / Date		FRD60 FRP Deck	
E					
D					
C					
B					
A					
Maßstab / Scale	Gezeichnet / Drawn	Geprüft / Checked	Datum / Date	Klass. Nr. / Class. No.	Zeichnung Nr. / Drawing No.
	A. Köhler		10.10.07		AK2174
					2/4





Description	Specification	Manufacturer
1	Ultimate U MPN 85-25	Saint-Gobain Isover
2	Insulation	Ultimate U MPN 66-50
3	Insulation	Ultimate U MPN 66-50
4	Pin with perfor. Plate	LM DAHL AS
5	Pin with perfor. Plate	LM DAHL AS
6	Screws for Plate Pins	Steel L=13mm $\phi$ =3.5mm
7	Washers	Steel $\phi$ =38mm
8	Steel Strip	40% perfor. 68*0.5mm
9	(around stiff.)	40% perfor. 25*0.5mm
10	Steel Strip as No. 8 (along stiff.)	Naustdal Blikk AS
11	Screw IR2-4.8	Steel 60mm; with clip
		Naustdal Blikk AS

Für diese technische Unterlage behalten wir uns alle Rechte vor, auch für den Fall der Patentierung oder Gebrauchsmusteranmeldung. Ohne unsere vorherige Zustimmung darf diese technische Unterlage weder vervielfältigt noch Dritten zugänglich gemacht werden und sie darf durch den Empfänger oder Dritte auch nicht in anderer Weise nützlichen verwerdet werden. Zuwiderhandlungen verpflichten zu Schadenersatz und können strafrechtliche Folgen haben.

We reserve all rights for this technical document including possible grant of patent or registration of a utility model. Without our prior consent, this technical document must not be reproduced / copied nor made available to third parties, and it must not be otherwise exploited in any other way by the recipient or any third parties. Noncompliance will result in an obligation for compensation of any damage resulting therefrom and may have penal consequences.

**ISOVER**

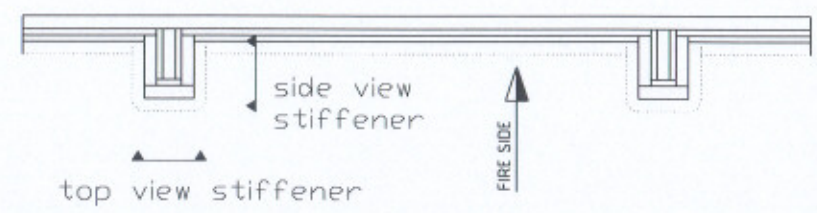
SAINT-GOBAIN ISOVER


Änderungen / Modifications	Datum / Date
E	
D	
C	
B	
A	
FRD60 FRP Deck	
top view - level layer 1+2	
Maßstab / Scale	Gezeichnet / Drawn
	A. Köhler
Gepüft / Checked	Datum / Date
	10.10.07
Klass. Nr. / Class. No.	Zeichnung Nr. / Drawing No.
	AK2174
Index	3/4



top view  
stiffener

side view  
stiffener





 APP: 4  
 REF: P70399  
 SIGN: RH

First layer on stiffener	Ultimate U MPN 85-25
Second layer on stiffener	Ultimate U MPN 66-50
Third layer on stiffener	Ultimate U MWN 66-50

Für diese technische Unterlage behalten wir uns alle Rechte vor, auch für den Fall der Patenterteilung oder Gebrauchsmusteranmeldung. Ohne unsere vorherige Zustimmung darf diese technische Unterlage weder vervielfältigt noch Dritten zugänglich gemacht werden und sie darf durch den Empfänger oder Dritte, auch nicht in anderer Weise mittelbarlich verwertet werden. Zuwiderhandlungen verpflichten zu Schadenersatz und können strafrechtliche Folgen haben.

We reserve all rights for this technical document including possible grant of patent or registration of a utility model. Without our prior consent, this technical document must not be reproduced / copied nor made available to third parties, and it must not be otherwise exploited in any other way by the recipient or any third parties. Noncompliance will result in an obligation for compensation of any damage resulting therefrom and may have penal consequences.



SAINT-GOBAIN ISOVER

Änderungen / Modifications		Datum / Date		FRD60 FRP Deck  stiffener layer 1+2		
E						
D						
C						
B						
A						
Maßstab / Scale	Gezeichnet / Drawn <b>A. Köhler</b>	Gepflicht / Checked	Datum / Date <b>10.10.07</b>	Klass. Nr. / Class. No.	Zeichnung Nr. / Drawing No. <b>AK2174</b>	Index <b>4/4</b>

5

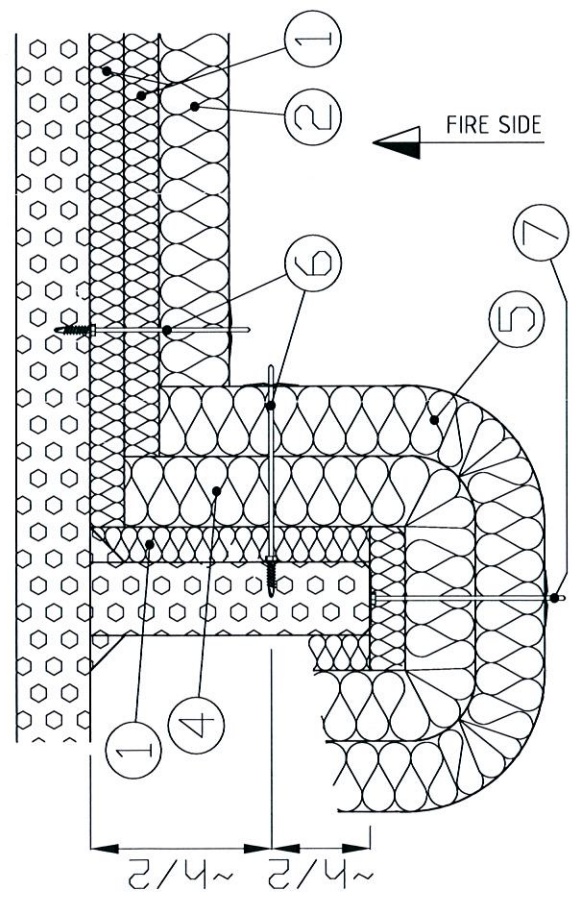
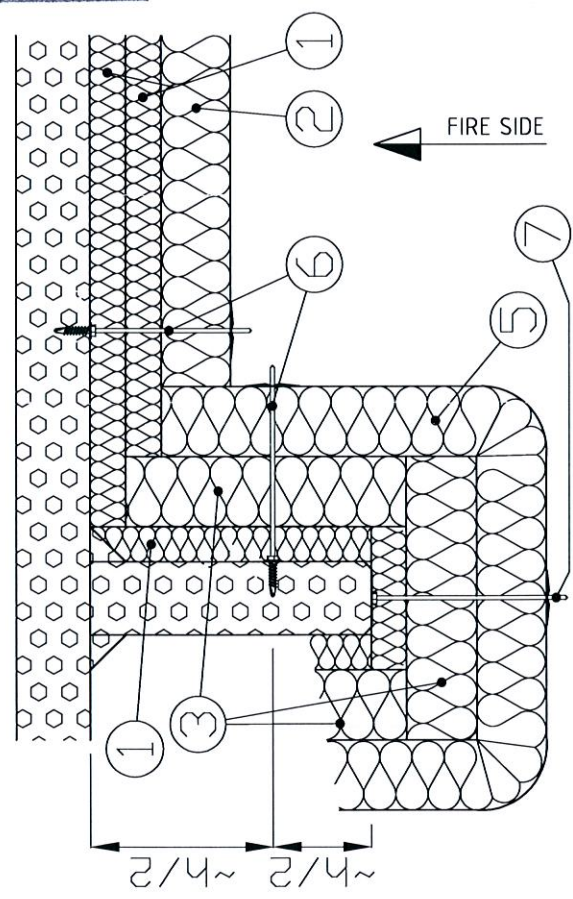
6

7

8



APP: *i*  
REF: *P90342C*  
SIGN: .....



Description	Specification
1 Insulation	ULTIMATE U MPN 85-25
2 Insulation	ULTIMATE U MPN 66-50 or U MPA 66-50 or U MPG 66-220, 50mm
3 Insulation	ULTIMATE U MPN 66-50
4 Insulation	ULTIMATE U MPN 66-50 or U Marine Wired Mat 66N, 50mm
5 Insulation	ULTIMATE U Marine Wired Mat 66N, 50mm or U Marine Wired Mat 66Alu1, 50mm or U Marine Wired Mat 66GC2, 50mm or U Marine Wired Mat 66V1, 50mm
6 Screw Pin	steel, $\phi=3.0\text{mm}$ , $l \geq 20/145\text{mm}$ , washer $\phi 38\text{mm}$ alternative: Pin with perforated Plate, steel, $\phi=2.7\text{mm}$ , $l \geq 20\text{mm}$ or $140\text{mm}$ , washer $\phi 38\text{mm}$ 7 glued perfor. Plate Pin; $\phi=2.7\text{mm}$ , $l \geq 20\text{mm}$ , washer $\phi 38\text{mm}$ pin pattern level: max 200mm pin to pin, max 80mm pin to insulation joint stiffener: max 275mm pin to pin along the stiffener

Für diese technische Unterlage behalten wir uns alle Rechte vor, auch für den Fall der Patentierung oder Gebrauchsmusteranmeldung. Ohne unsere vorherige Zustimmung darf diese technische Unterlage weder vervielfältigt noch Dritten zugänglich gemacht werden und sie darf durch den Empfänger oder Dritte auch nicht in anderer Weise mündlichlich verwendet werden. We reserve all rights for this technical document including possible patent or registration of a utility model. Without our prior consent, this technical document must not be reproduced or used in any way other than for the purpose of the request or any other patent. Noncompliance will result in an obligation for compensation of any damage resulting therefrom and may have penal consequences.

<b>ISOVER</b>		<b>SAINT-GOBAIN ISOVER</b>	
Änderungen / Modifications		Datum / Date	
E			
D			
C			
B			
A			
Gezeichnet / Drawn <b>A. Köhler</b>		Geprüft / Checked	
Datum / Date <b>10.09.09</b>		Klass. Nr. / Class. No.	
Zeichnung Nr. / Drawing No. <b>AK2179</b>		Index	