



European notified body
Identification number 0736



DGUV Test

Prüf- und Zertifizierungsstelle
BG Verkehr
Dienststelle Schiffssicherheit

EC-Type Examination (Module B) Certificate

Certificate No. **100.219**

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

Date of issue: **27.05.2014**

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

Product designation: Vertical division 30

Product Type: **Loadbearing fire-resisting bulkhead 30 (restricted application)**

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: **26.05.2019**



Signature (Bork)

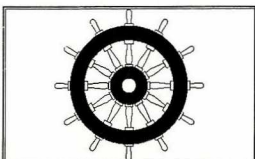


Installed equipment stays approved beyond the validity date until it is revoked!

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

Technical data / approved drawings and additional conditions and remarks:

1.

This EC-Type Examination Certificate is based on the following document:

- Test Report P703992 of the "SP Technical Research Institute of Sweden", 501 15 Borås (SWE) dated 19.12.2007.
- "Assessment of a load bearing fire-resisting bulkhead" of SP Technical Research Institute of Sweden (Mr. Lars Boström) with reference P903422A dated 07.12.2009.

2.

This EC-Type Examination Certificate provides that the assembly of the loadbearing vertical division coincides in all items with the construction as described in number 2.2 and the annexes to the Test Report no. P703992.

3.

All measurements of the loadbearing vertical division must be in accordance with the drawing no. AK2173 (annex no. 1 + 2 to the Test Report P703992).

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. AK2185 dated 10.09.2009 (appendix to the assessment with reference P903422A dated 07.12.2009).

5.

The vertical division was tested as follows:

Insulation	= exposed side
FRP Sandwich panel	= unexposed side

6.

Restricted application:

Fire against the insulated side

7.

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.

8.

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).

9.

Fire restricting material as per Test Report P703992 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.

10.

Surface materials which will be used must be not readily ignitable and approved by an European notified body.

11.

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.

12.

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.

13.

This EC-Type Examination Certificate may only be published or transmitted unabridged.



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1. Supplement to EC-Type Examination Certificate

Certificate-No. 100.219

dated 27.05.2014

Product designation: Vertical division 30

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

Type: Loadbearing fire-resisting bulkhead 30
(restricted application)

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

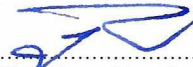
The approved type with the above certificate number may be further manufactured and sold with the alterations / additions stated above.

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

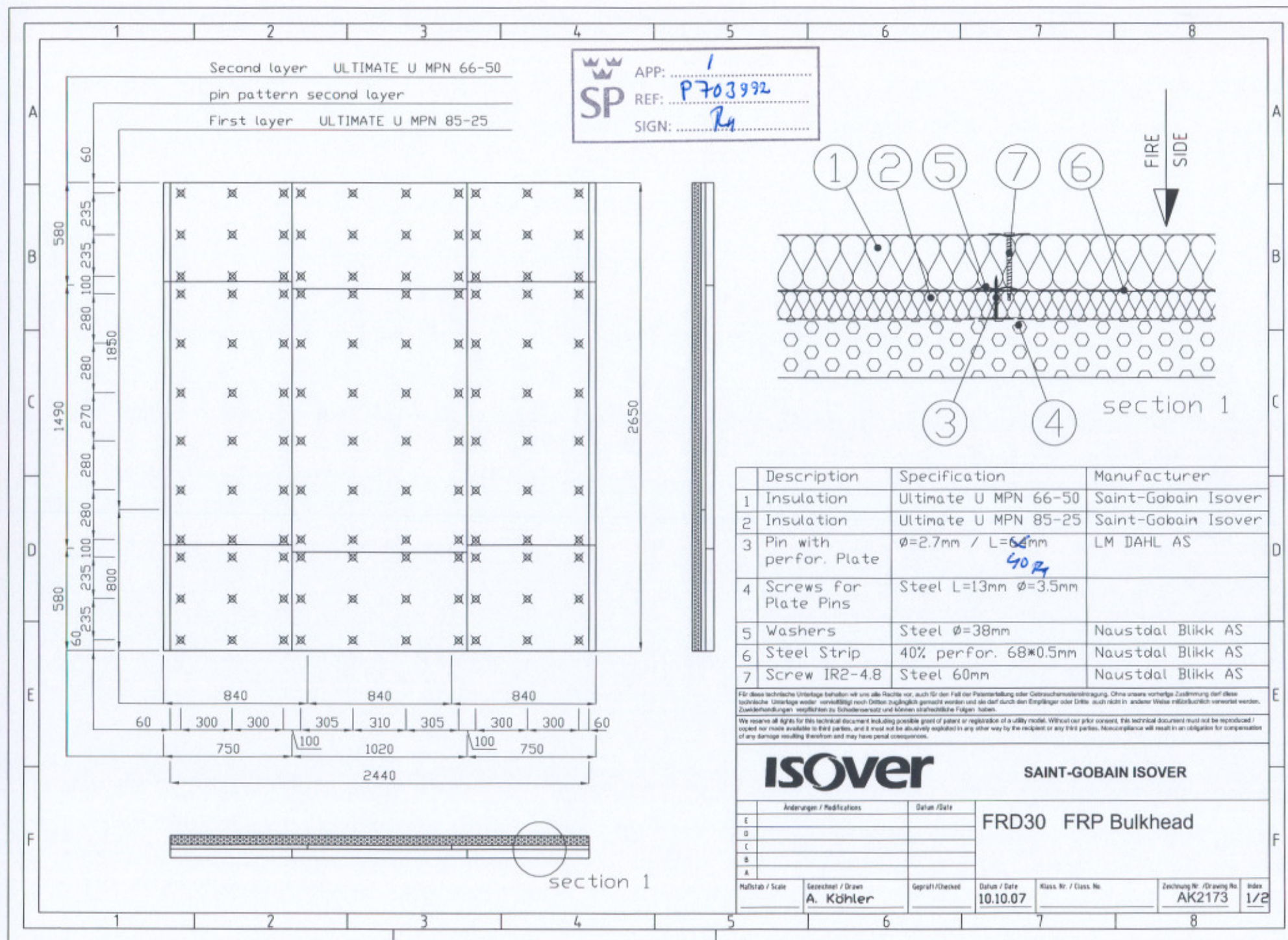
This Supplement to EC-Type Examination Certificate will be expired on: **26.05.2019**

Hamburg, 13.01.2015




Signature (Bork)

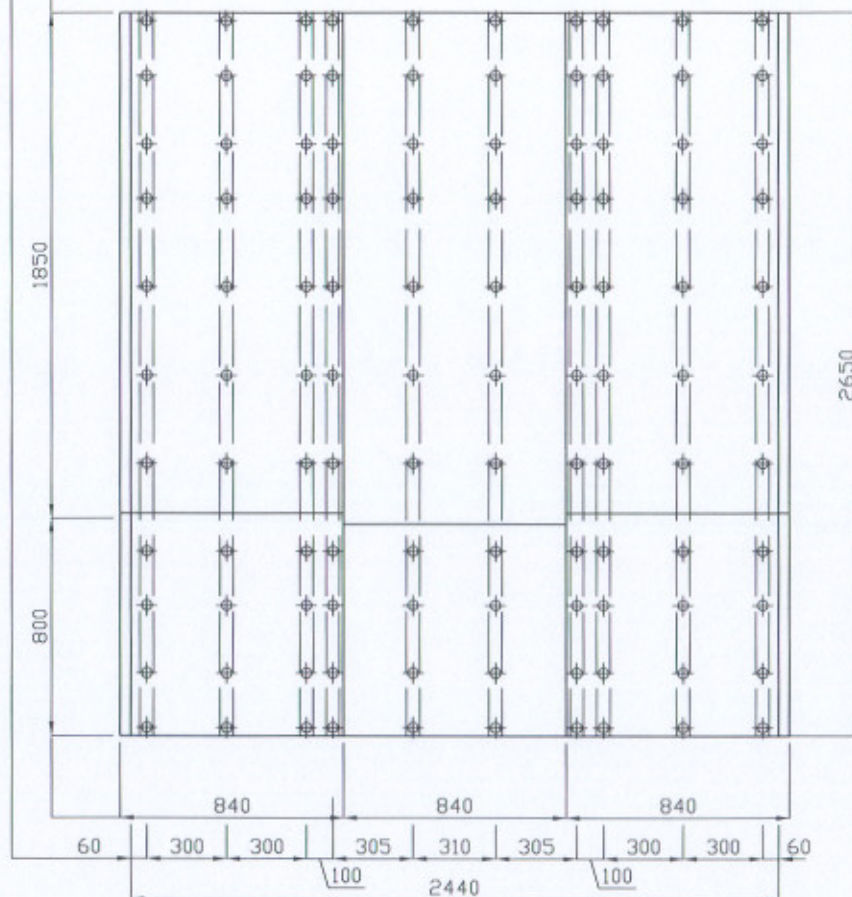




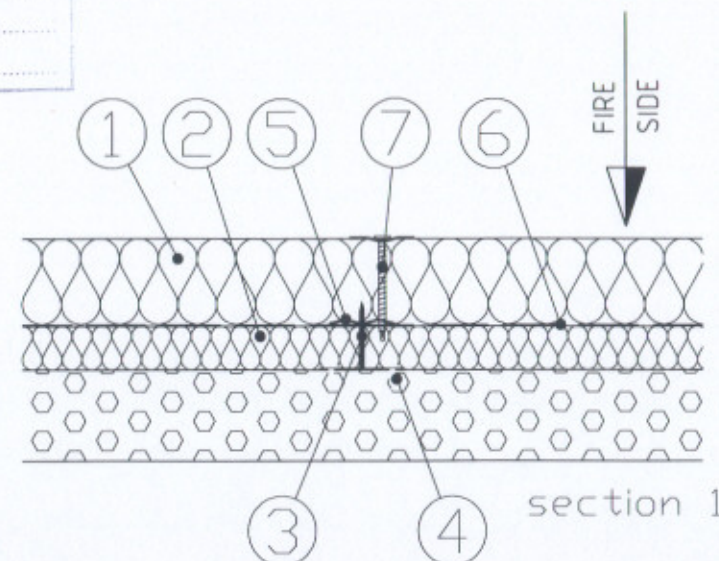
pin pattern first layer

First layer ULTIMATE U MPN 85-25

APP: 2
REF: P703992
SIGN: 74



section 1



	Description	Specification	Manufacturer
1	Insulation	Ultimate U MPN 66-50	Saint-Gobain Isover
2	Insulation	Ultimate U MPN 85-25	Saint-Gobain Isover
3	Pin with perfor. Plate	$\phi=2.7\text{mm}$ / $L=40\text{mm}$	LM DAHL AS
4	Screws for Plate Pins	Steel $L=13\text{mm}$ $\phi=3.5\text{mm}$	
5	Washers	Steel $\phi=38\text{mm}$	Naustdal Blikk AS
6	Steel Strip	40% perfor. $68*0.5\text{mm}$	Naustdal Blikk AS
7	Screw IR2-4.8	Steel 60mm	Naustdal Blikk AS

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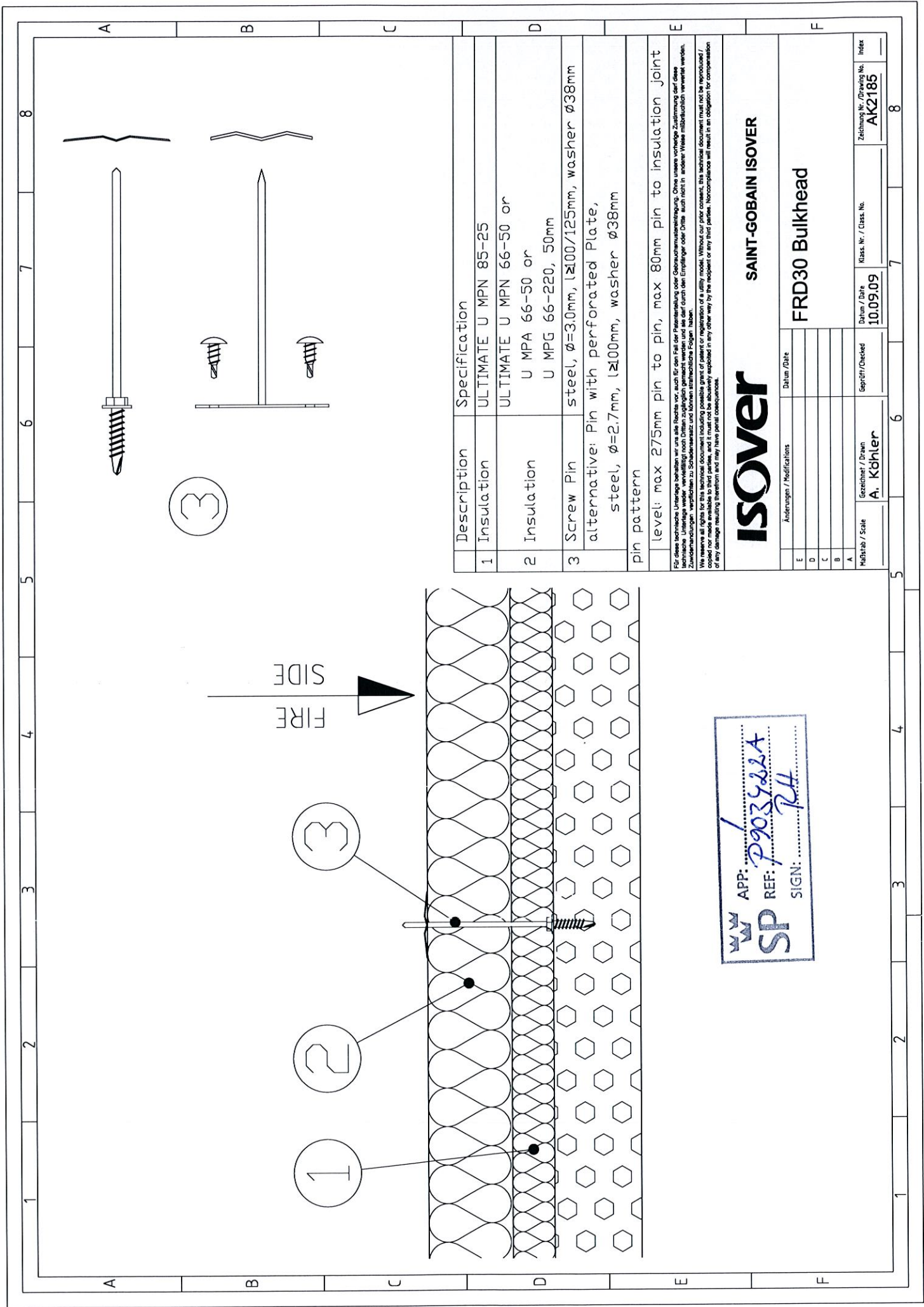
ISOVER

SAINT-GOBAIN ISOVER

Änderungen / Modifications		Datum / Date	
E			
D			
C			
B			
A			
Gezeichnet / Drawn		Geprüft / Checked	
A. Köhler		10.10.07	
Maststab / Scale		Klass. Nr. / Class. No.	
		AK2173	
Zeichnung Nr. / Drawing No.		Index	
		2/2	

FRD30 FRP Bulkhead

top view - level layer 1+2



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 Screw Pin	steel, $\phi=3.0\text{mm}$, $\text{L}\approx 100/125\text{mm}$, washer $\phi 38\text{mm}$ alternative: Pin with perforated Plate, steel, $\phi=2.7\text{mm}$, $\text{L}\approx 100\text{mm}$, washer $\phi 38\text{mm}$
pin pattern	

level: max 275mm pin to pin, max 80mm pin to insulation joint

ISOVER		SAINT-GOBAIN ISOVER	
Änderungen / Modifications		Datum / Date	
E			
D			
C			
B			
A			
Gezeichnet / Drawn		Geprüft / Checked	
A. Köhler		10.09.09	
Klass. Nr. / Class. No.		Zeichnung Nr. / Drawing No.	
		AK2185	
Index			

APP: **SP**
REF: **7903422A**
SIGN: **RH**