

TYPE EXAMINATION CERTIFICATE (MODULE B)

Certificate no.:
MERB0001N5G
Revision no.:
0

This Certificate is issued by DNV UK Limited based on authorisation of the Maritime & Coast Guard Agency (MCA) as an UK Approved Body to undertake conformity assessments on marine equipment in accordance with the requirements of the Merchant Shipping (Marine Equipment) Regulations 2016 as amended.

This is to certify:

that the '**A**' & '**B**' Class divisions fire integrity: - '**A**' class division

with type designation(s)

Steel Bulkhead A-60 with ROCKWOOL SeaRox FB and FM series

issued to

Rockwool Danmark A/S
Hedehusene, Denmark

is found to comply with the Regulation (UK) **MSN 1874 Amendment 10** for
Item no. **UK/3.11a (Row 2 of 2)**

according to the following requirements:

SOLAS 74 Reg. II-2/3.2, SOLAS 74 Reg. II-2/9, IMO MSC.1/Circ.1434, IMO MSC.1/Circ.1616, IMO MSC.1/Circ.1621, IMO MSC/Circ.1120

Further details of the equipment and conditions for certification are given overleaf.

Date of issue: **2025-08-01**

Expiry date: **2030-07-31**

DNV local unit:
Denmark CMC

Approval Engineer:
Izabela Misztal



Approved Body No.: **0097**



for **DNV UK Ltd.**

Digitally Signed By:
Christine Mydlak-Röder

Christine Mydlak-Röder
MER Service Responsible



**Maritime &
Coastguard
Agency**

UK Approved Body Authorised
by the MCA

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

During the period of validity of this certificate the applicable regulations (international conventions and the relevant resolutions and circulars of the IMO) and testing standards may change, therefore the product conformity may need to be re-assessed by the Approved Body.

"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 Schedule 2 of the Merchant Shipping (Marine Equipment) Regulations 2016, as amended is fully complied with and controlled by a written inspection agreement with an approved body. In case limitations of use apply, these should be indicated in the Annex.

LEGAL DISCLAIMER: Unless otherwise stated in the applicable contract with the holder of this document, or following from mandatory law, the liability of DNV AS, its parent companies and their subsidiaries as well as their officers, directors and employees ("DNV") arising from or in connection with the services rendered for the purpose of the issuance of this document or reliance thereon, whether in contract or in tort (including negligence), shall be limited to direct losses and under any circumstance be limited to USD 300 000.

Product description

"Steel Bulkhead A-60 with ROCKWOOL SeaRox FB and FM series"

is composed of steel bulkhead to be insulated with one of the following variants:

1. SeaRox FB or FM 6040 (density 60 kg/m³, minimum thickness 70 mm) between the stiffeners and SeaRox FB or FM 6040 (density 60 kg/m³, minimum thickness 35 mm) around the stiffener.
2. SeaRox FB or FM 6040 (density 60 kg/m³, minimum thickness 35 mm) between the stiffeners and SeaRox FB or FM 6040 (density 60 kg/m³, minimum thickness 35 mm) between and around the stiffener.
3. SeaRox FB or FM 6040 (density 60 kg/m³, minimum thickness 70 mm) between the stiffeners and SeaRox FB or FM 6050 (density 70 kg/m³, minimum thickness 30 mm) around the stiffener.

For all variants:

- The insulation is fixed to the bulkhead by means of standard Ø3 mm pins in combination with 30-38 mm diameter steel clips (spring washers).
- Distance between pins on the stiffeners is maximum 300 mm. Distance between pins on the bulkhead (between stiffeners) is maximum 300 mm.

For further details see Type Examination documentation below.

Application/Limitation

Approved for use as a vertical fire retarding division of class A-60.

General application: Fire on either side.

The insulation materials and adhesives used have to be approved according to the Marine Equipment Regulation and bear the UK Mark of Conformity. This requirement may also be applicable for surface materials used, if required by relevant rules and regulations.

Each product is to be supplied with its manual for installation and maintenance.

Type Examination documentation

Document No.	Rev.	Title
PHD10025A		Assessment report dated 5 July 2021 from DBI, Hvidovre, Denmark.
PHD10038A		Assessment report dated 27 October 2021 from DBI, Hvidovre, Denmark.
PHA10631f	3	Assessment report dated 30 January 2022 from DBI, Hvidovre, Denmark.
100-1 to 100-5		Drawings dated 2 July 2015 from the manufacturer.
400-1 to 400-4		Drawings dated 29 July 2015 from the manufacturer.
700-1 to 700-4		Drawings dated 25 October 2021 from the manufacturer.
PGA10661		Test report dated 4 June 2015 from DBI, Hvidovre, Denmark.
PGA10770A		Test report dated 5 January 2016 from DBI, Hvidovre, Denmark.

Tests carried out

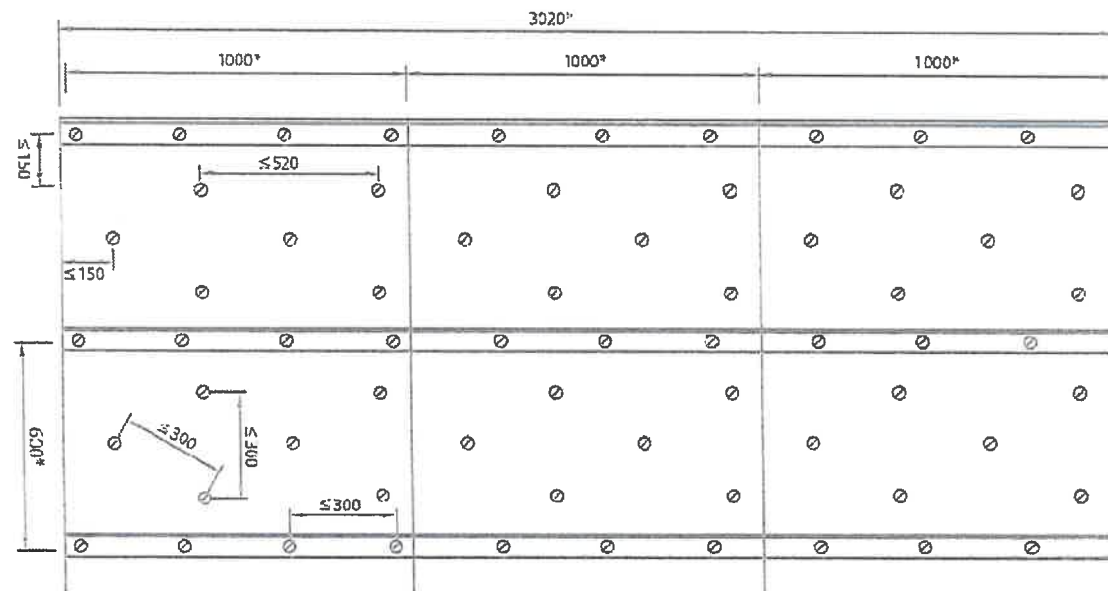
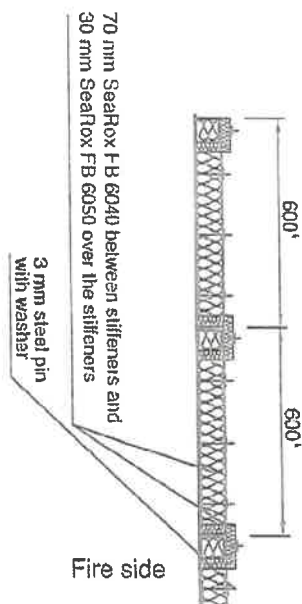
Tested according to IMO 2010 FTP Code Part 3.



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Revision no.: **0**

Marking of product

The product or packing is to be marked with name and address of manufacturer, type designation, fire-technical rating and the UK Mark of Conformity (see first page).



Bulkhead

* Dimensions may vary depending on structural design and size of insulation slab.

All measurements in mm

Danish Institute of Fire
and Security Technology

File no. PHA 10631 dL

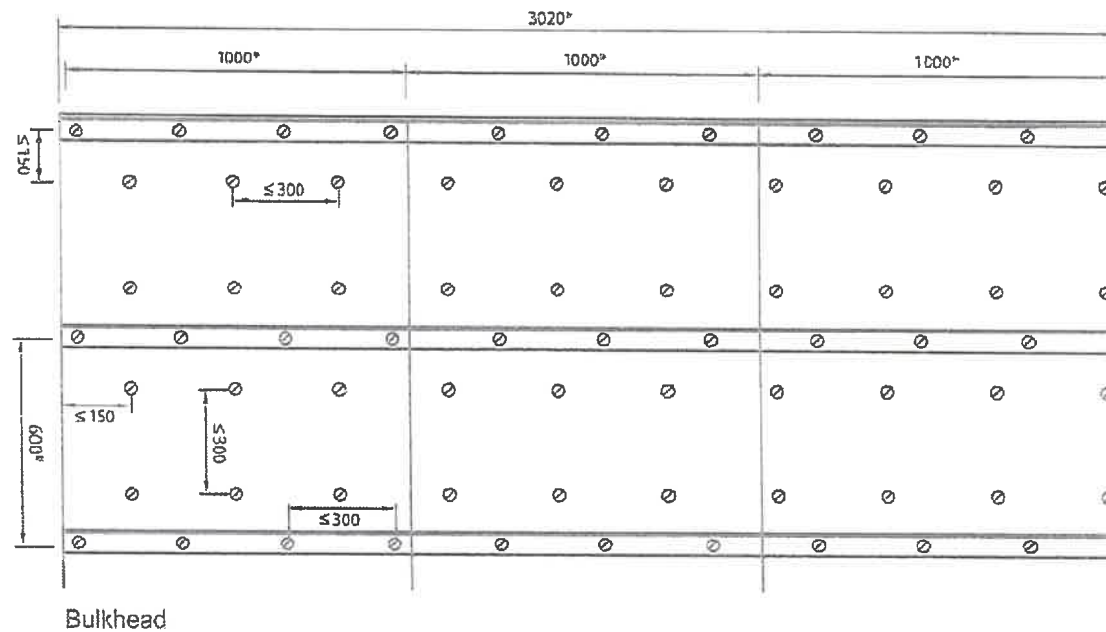
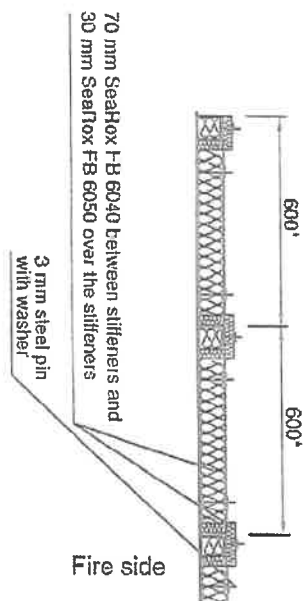
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Subject: A-60 Bulkhead SeaRox FB 6040/ SeaRox FB 6050

Date: 2015/07/02

Drawing No. 1C0-1

ROCKWOOL®
TECHNICAL INSULATION



* Dimensions may vary depending on structural design and size of insulation slab.

All measurements in mm

Danish Institute of Fire
and Security Technology

File no.

PHA 10631 e

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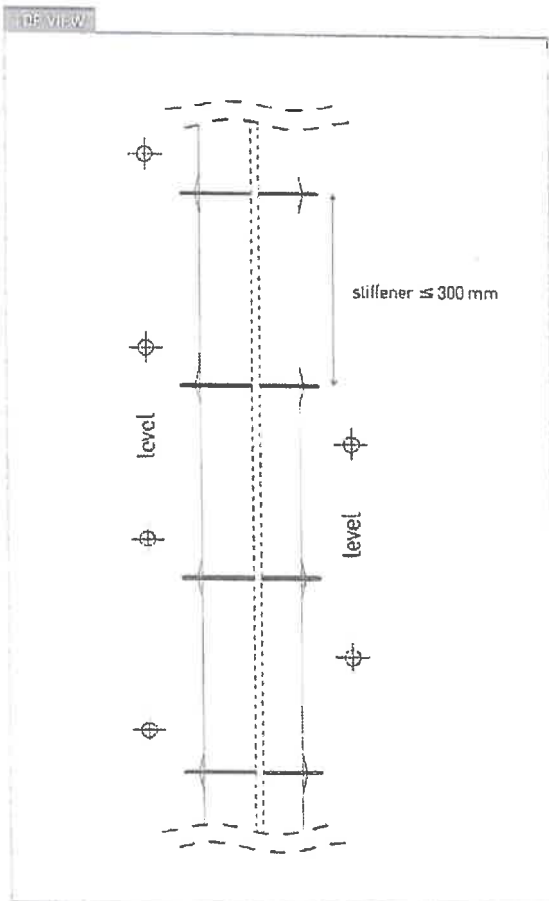
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Date: 2015/07/02

Drawing No. 100-2

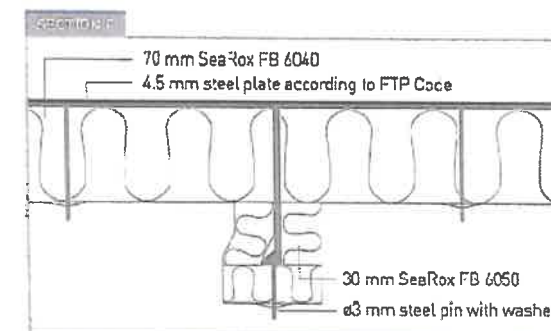
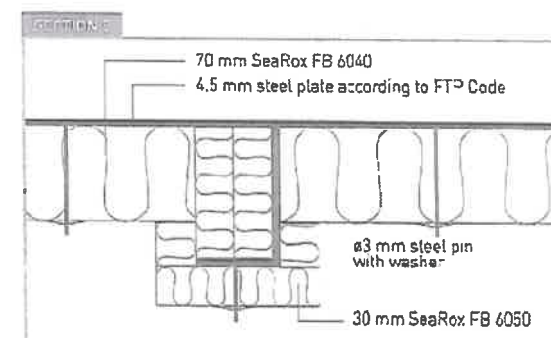
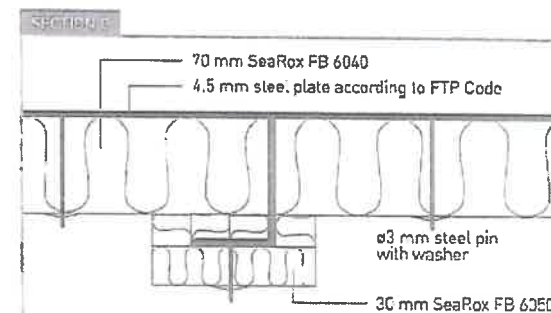
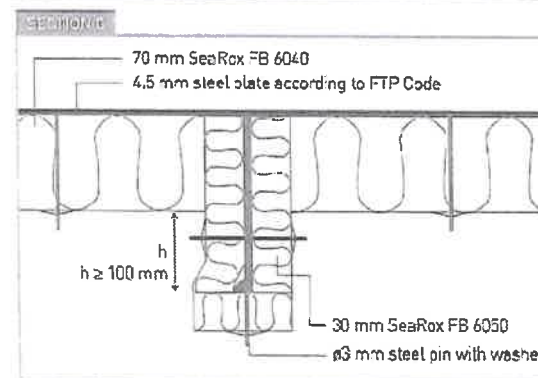
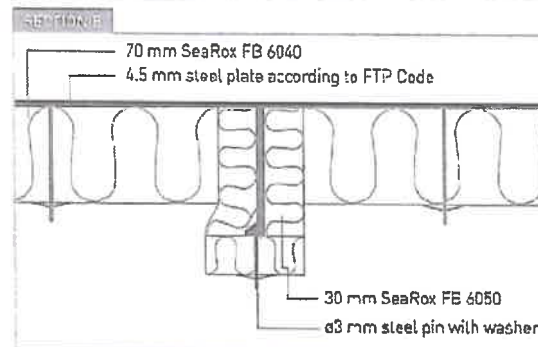
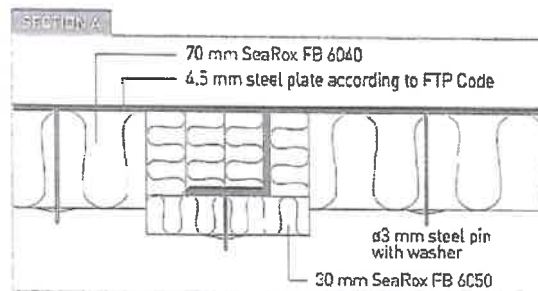
ROCKWOOL®

TECHNICAL INSULATION



Danish Institute of Fire
and Security Technology
File no. PHA10631 d

[Signature]



Note: Insulation around stiffener can alternatively be done pre-cut to the shape of the stiffener/bulb

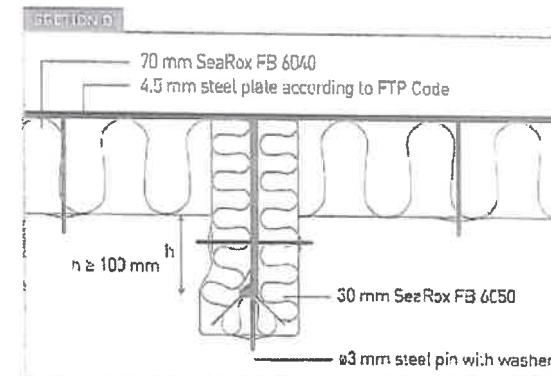
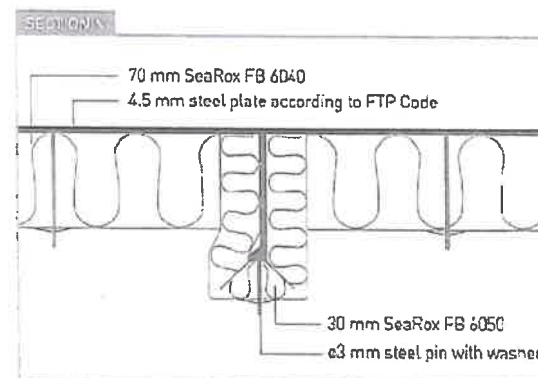
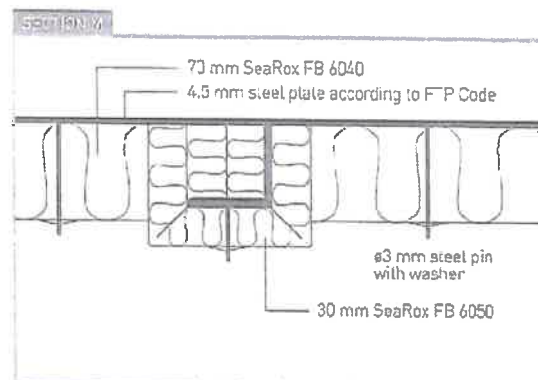
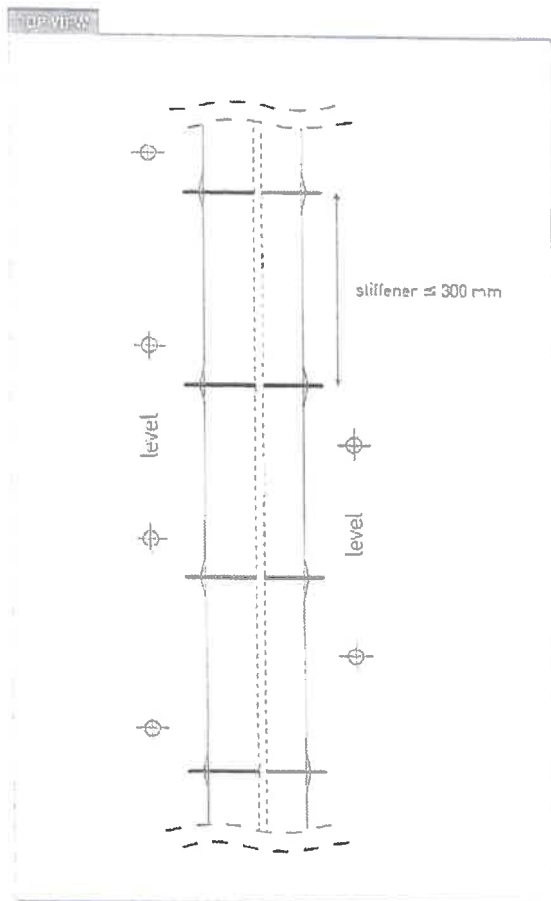
Subject: A-60 Bulkhead SeaRox FB 6040/ SeaRox FB 6050

Date: 2015/07/02

Drawing No. 100-3

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TECHNICAL INSULATION



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File no. PHA 10631 d

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Subject: A-60 Bulkhead SeaRox FB 6040/ SeaRox FB 6050

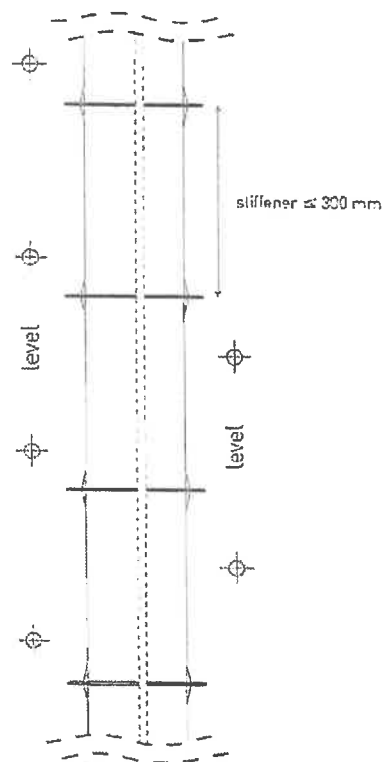
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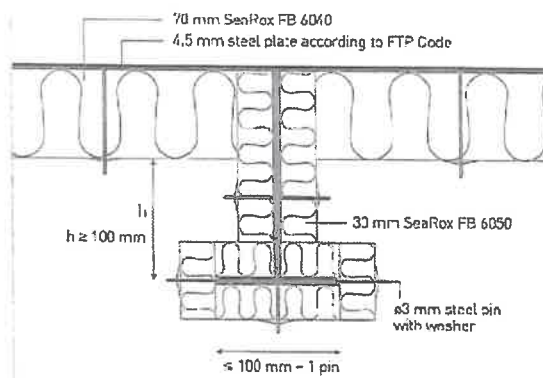
ROCKWOOL®

TECHNICAL INSULATION

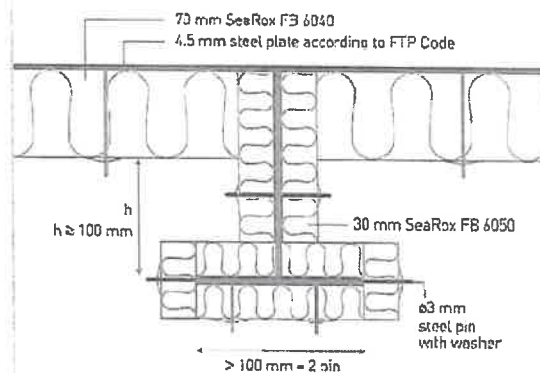
REVIEW



SECTION C



SECTION A



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and Security Technology

File no.

PHA10631 d

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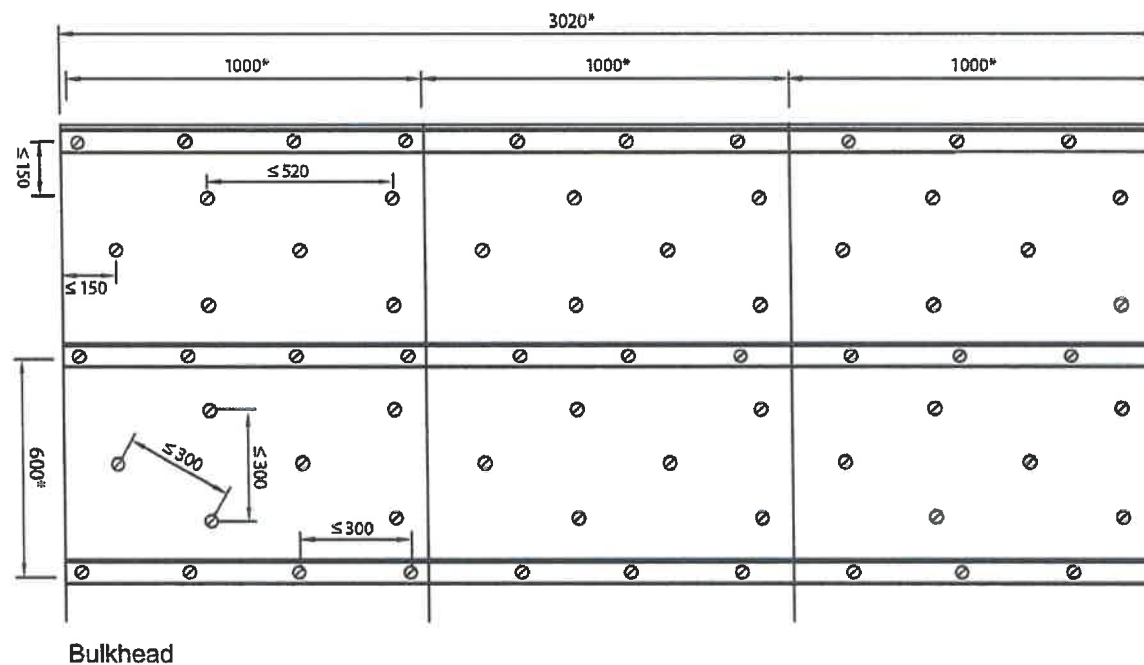
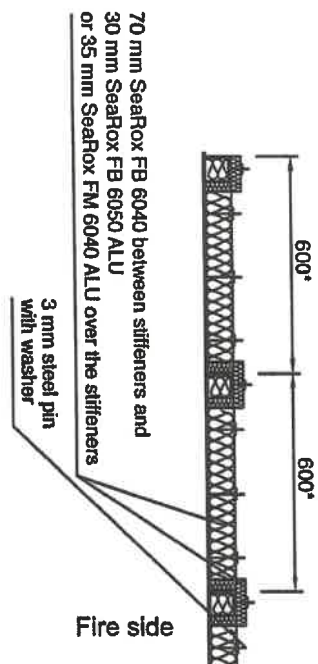
Subject: A-60 Bulkhead SeaRox FB 6040/ SeaRox FB 6050

Date: 2015/07/02

Drawing No. 100-5

ROCKWOOL®

TECHNICAL INSULATION



* Dimensions may vary depending on structural design and size of insulation slab.

All measurements in mm

British Institute of Fire
and Security Technology

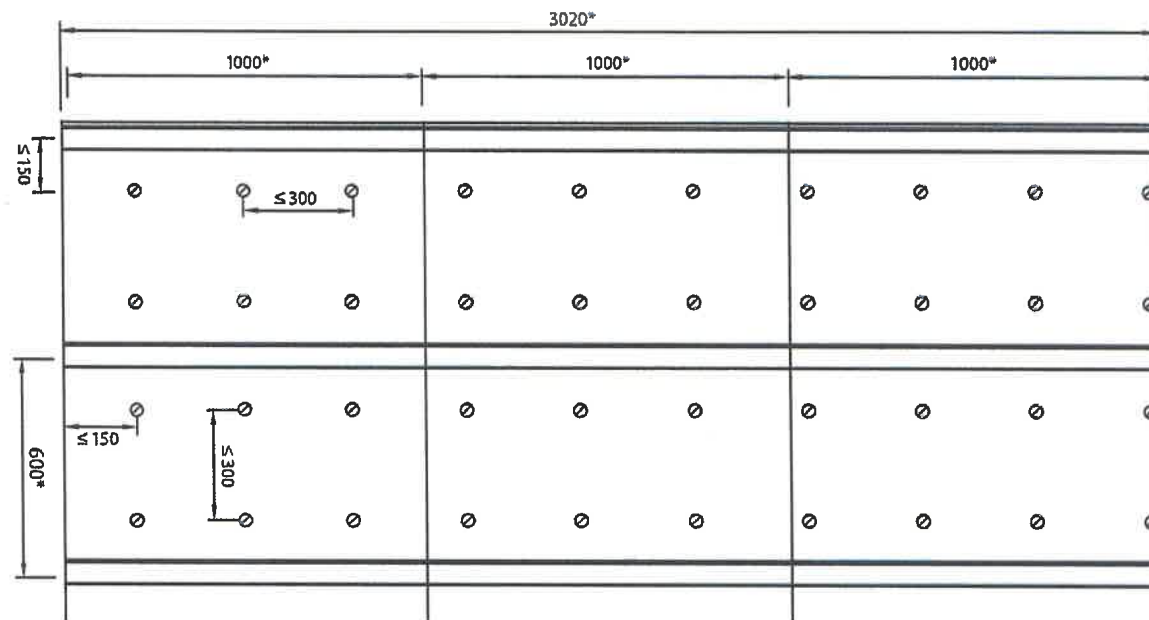
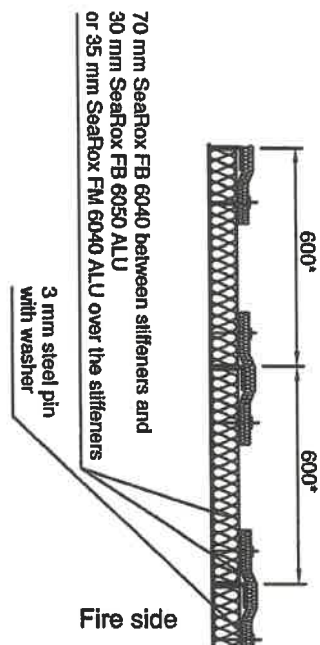
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Subject: A-60 Bulkhead SeaRox FB 6040/
SeaRox FB 6050 ALU or SeaRox FM 6040 ALU

Date: 2016/07/29

Drawing No. 400-1

ROCKWOOL®
TECHNICAL INSULATION



Bulkhead

* Dimensions may vary depending on structural design and size of insulation slab.

All measurements in mm

Danish Institute of Fire
and Security Technology

File no. PHA 10631 F

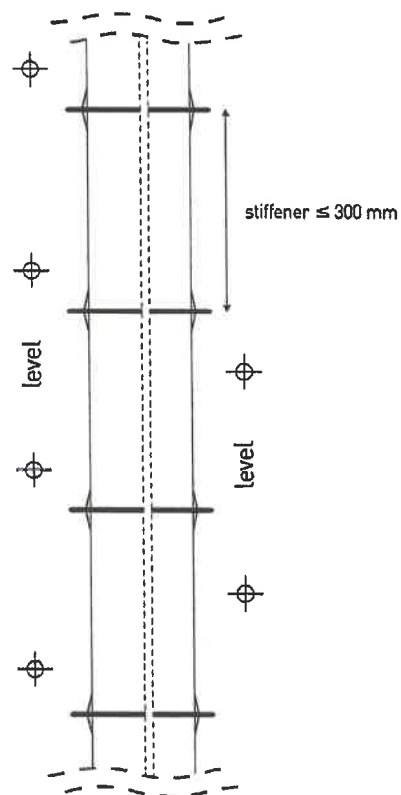
Subject: A-60 Bulkhead SeaRox FB 6040/
SeaRox FB 6050 ALU or SeaRox FM 6040 ALU

Date: 2016/07/29

Drawing No. 400-2

ROCKWOOL®
TECHNICAL INSULATION

TOP VIEW



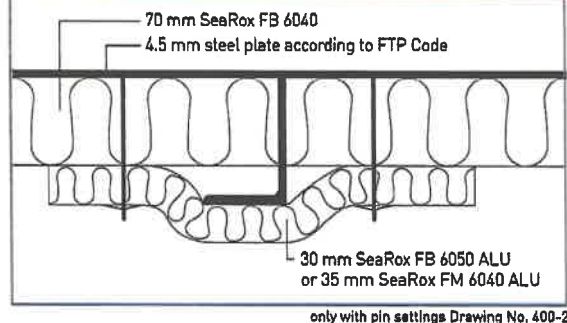
Danish Institute of Fire
and Security Technology

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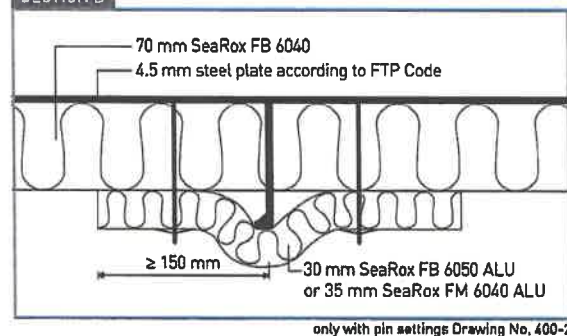
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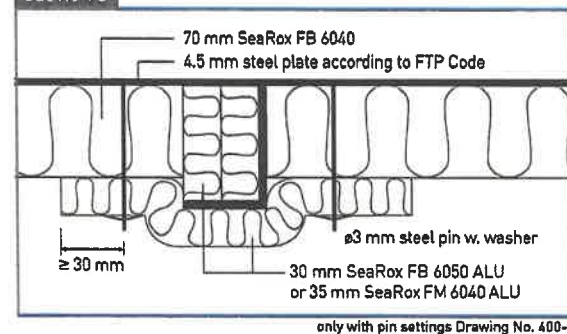
SECTION A



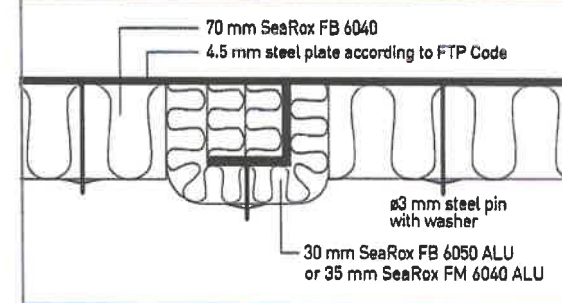
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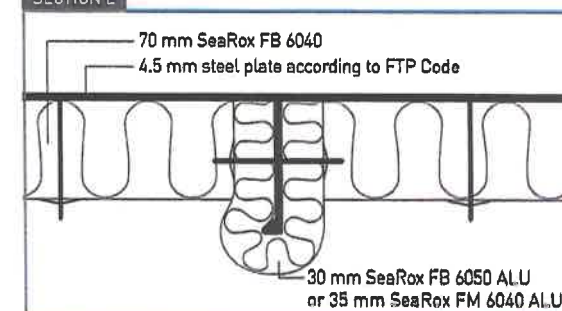
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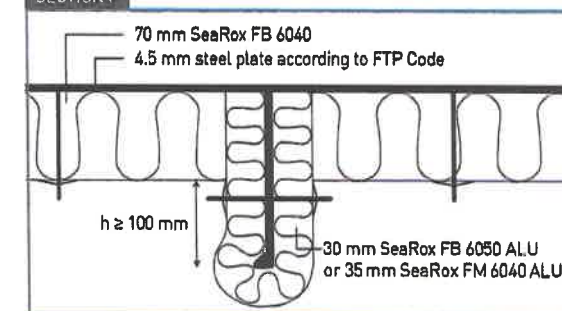
SECTION D



SECTION E



SECTION F



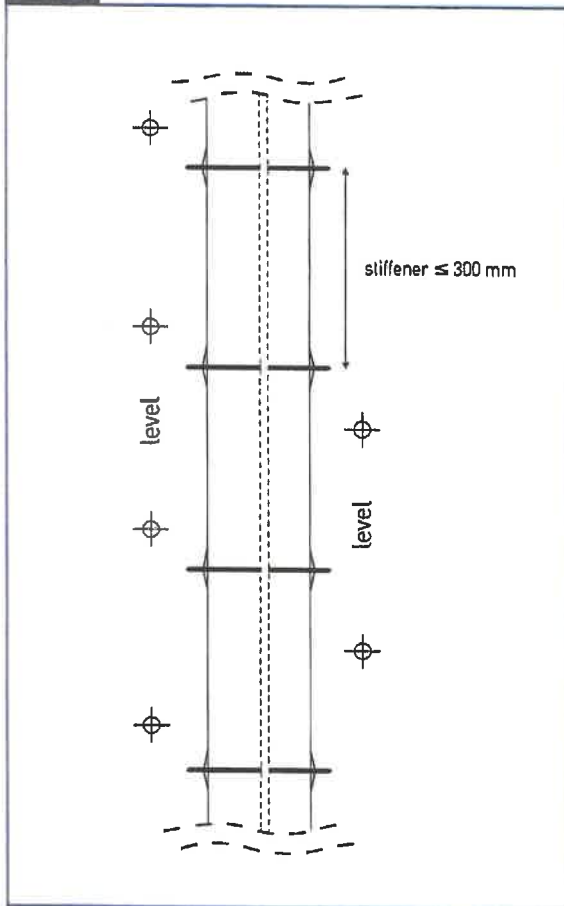
Subject: A-60 Bulkhead SeaRox FB 6040/
SeaRox FB 6050 ALU or SeaRox FM 6040 ALU

Date: 2016/07/29

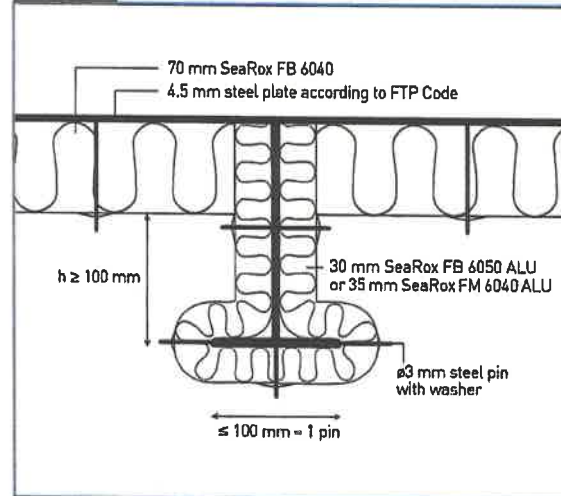
Drawing No. 400-3

ROCKWOOL®
TECHNICAL INSULATION

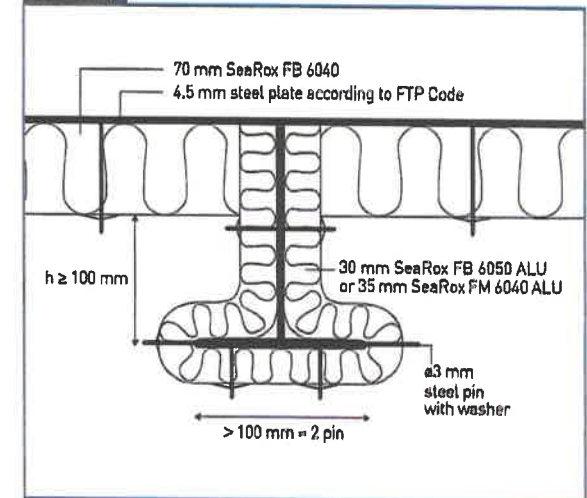
TOP VIEW



SECTION G



SECTION H



Danish Institute of Fire
and Security Technology
File no.

PHA10631 F

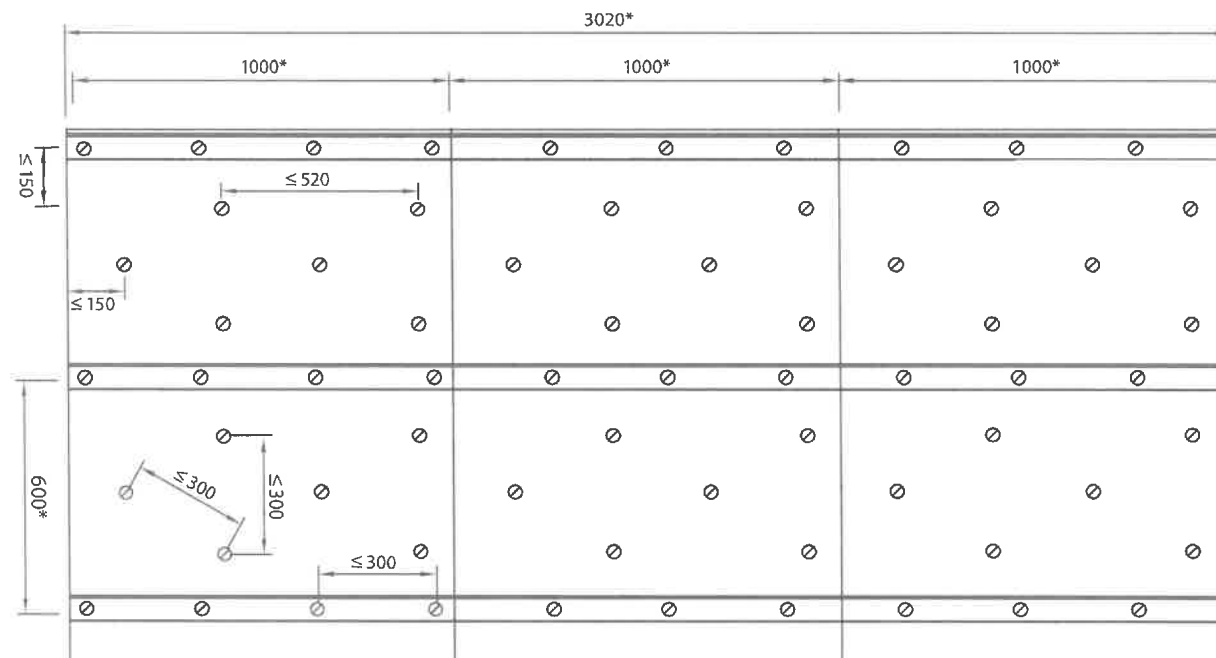
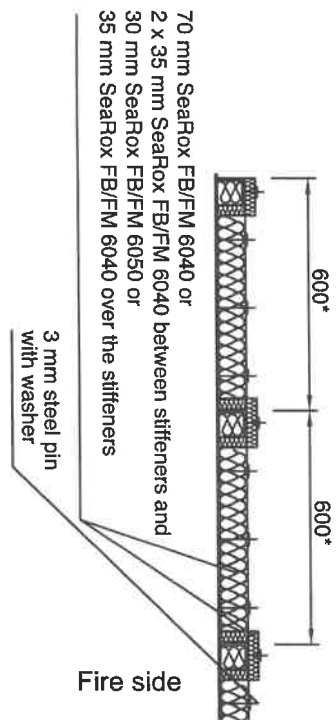
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Subject: A-60 Bulkhead SeaRox FB 6040/
SeaRox FB 6050 ALU or SeaRox FM 6040 ALU

Date: 2016/07/29

Drawing No. 400-4

ROCKWOOL®
TECHNICAL INSULATION



Bulkhead

* Dimensions may vary depending on structural design and size of insulation material.

All measurements in mm



TECHNICAL INSULATION

Subject: A-60 Steel Bulkhead

Plate: SeaRox FB/FM 6040

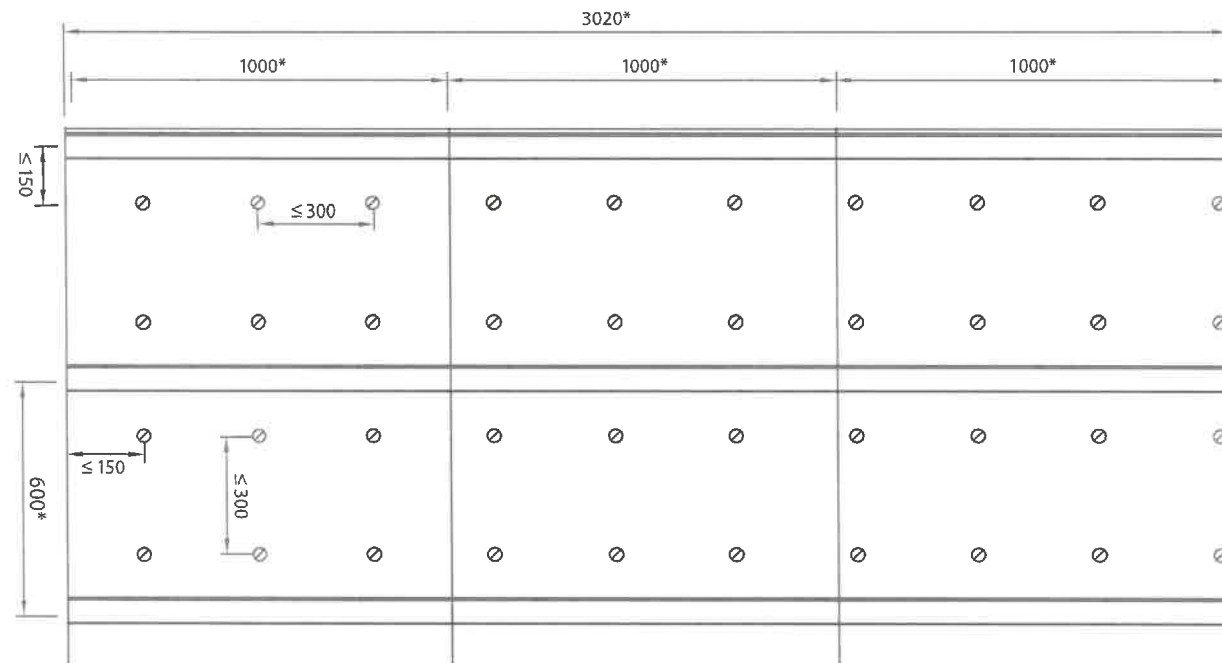
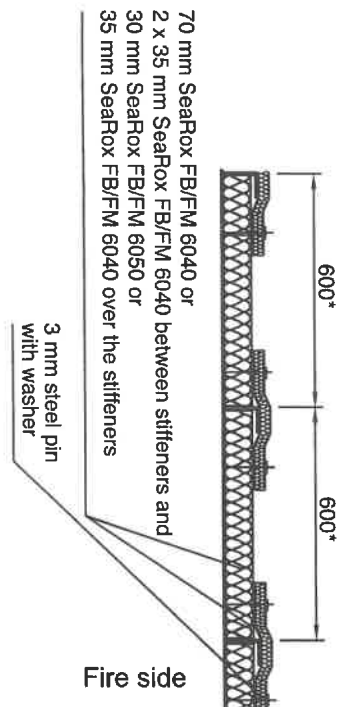
Stiffener: SeaRox FB/FM 6050 or SeaRox FB/FM 6040



Date: 2021/10/25

Designer: DG

Drawing No. 700-1 / Rev 2



Bulkhead

* Dimensions may vary depending on structural design and size of insulation material.

All measurements in mm



TECHNICAL INSULATION

Subject: A-60 Steel Bulkhead

Plate: SeaRox FB/FM 6040

Stiffener: SeaRox FB/FM 6050 or SeaRox FB/FM 6040

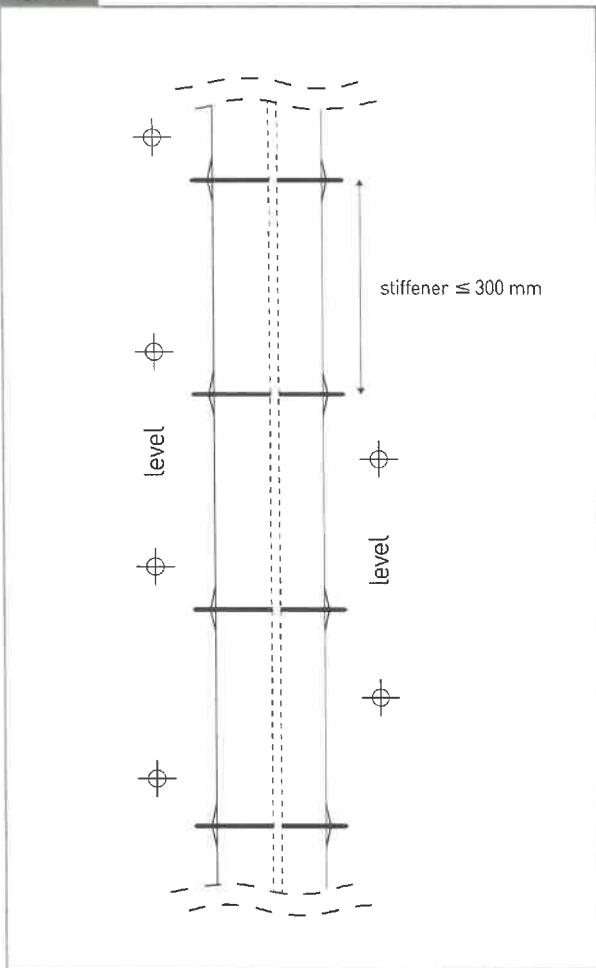
Date: 2021/10/25

Designer: DG

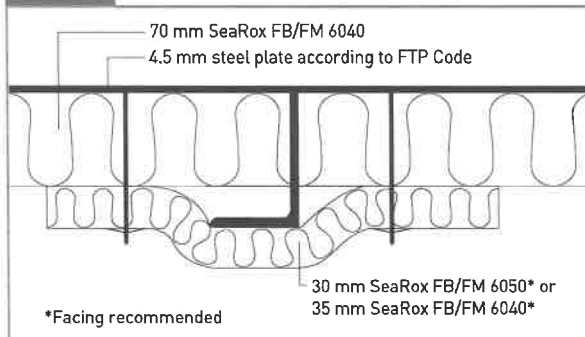
Drawing No. 700-2 / Rev 2



TOP VIEW

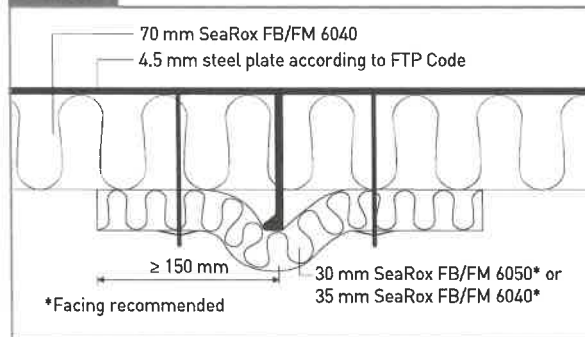


SECTION A



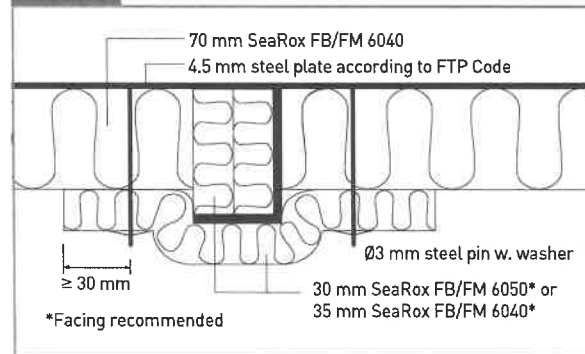
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SECTION B



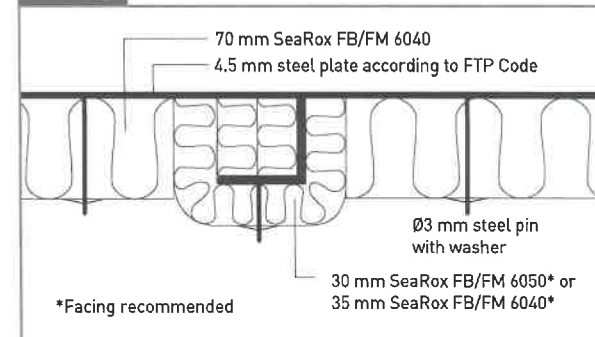
only with pin settings Drawing No. 700-2

SECTION C

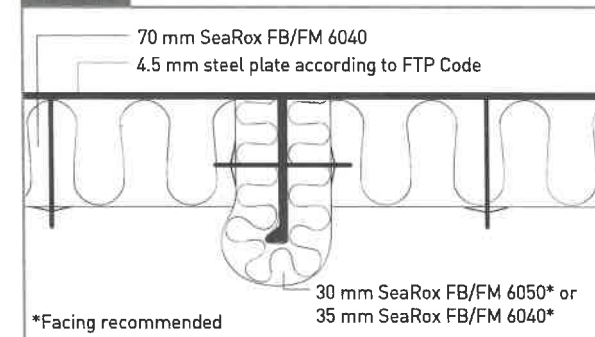


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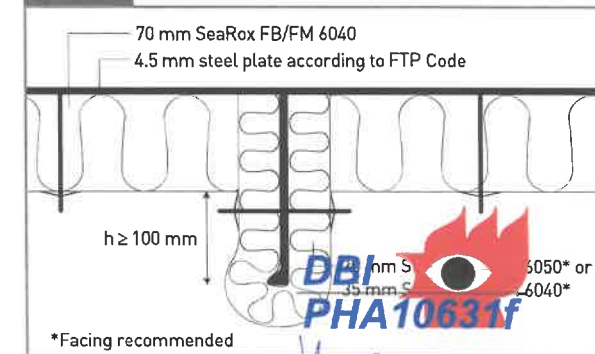
SECTION D



SECTION E



SECTION F



DBI
PHA10631f



TECHNICAL INSULATION

Subject: A-60 Steel Bulkhead

Plate: SeaRox FB/FM 6040

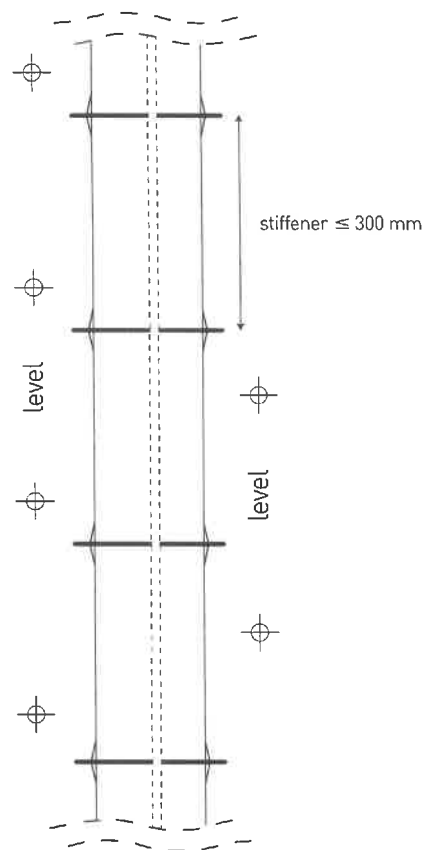
Stiffener: SeaRox FB/FM 6050 or SeaRox FB/FM 6040

Date: 2021/10/25

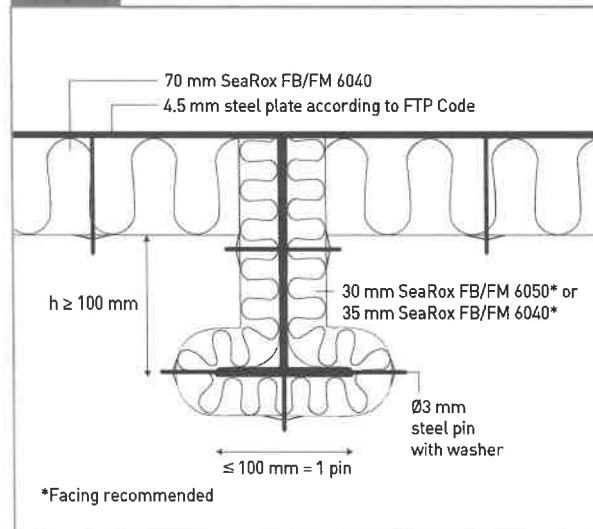
Designer: DG

Drawing No. 700-3 / Rev 2

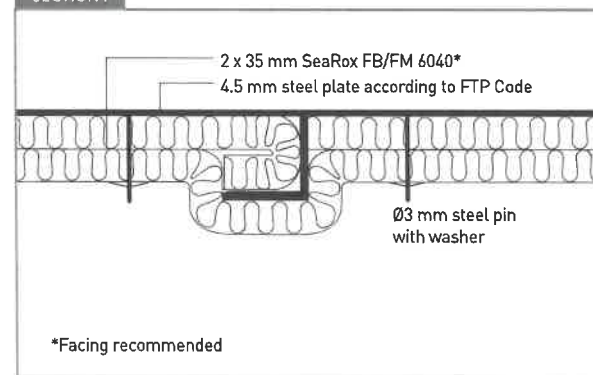
TOP VIEW



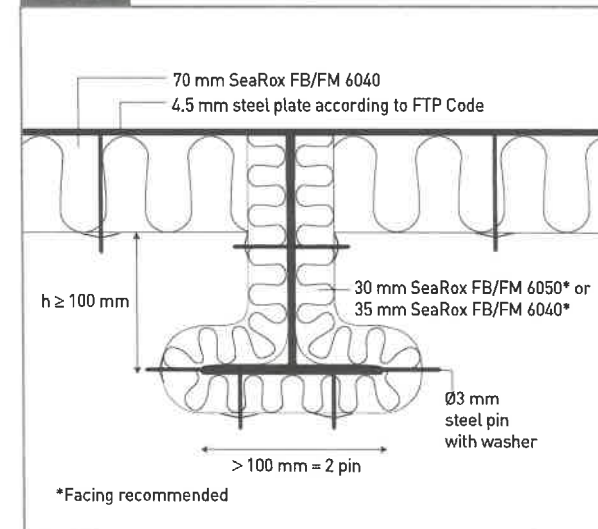
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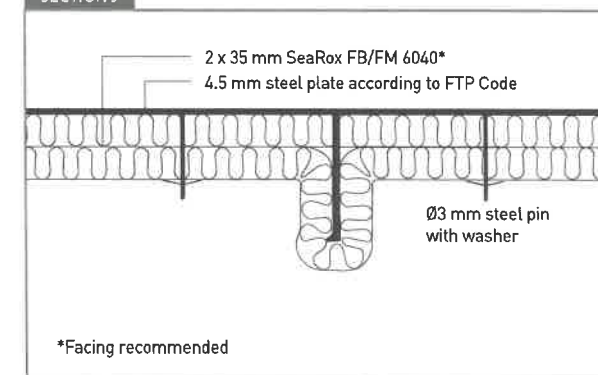
SECTION I



SECTION H



SECTION J



TECHNICAL INSULATION

Subject: A-60 Steel Bulkhead

Plate: SeaRox FB/FM 6040

Stiffener: SeaRox FB/FM 6050 or SeaRox FB/FM 6040



Date: 2021/10/25

Designer: DG

Drawing No. 700-4 / Rev 2