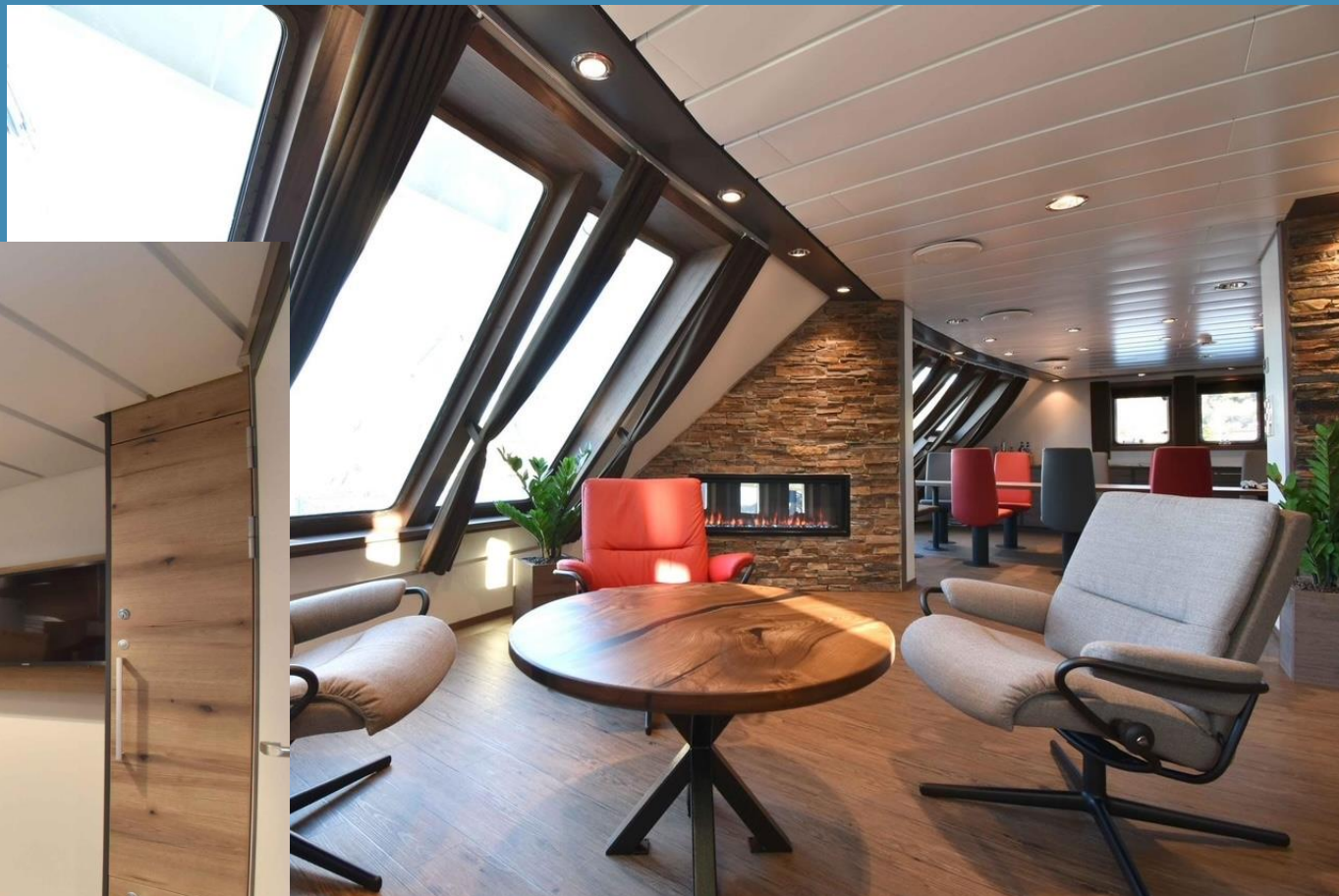




MARINE CEILING SYSTEM MMC300-B0





DNV

EC-TYPE EXAMINATION CERTIFICATE (MODULE B)

Certificate No:
MEDB00003YW
Revision No:
1

Application of: Directive 2014/90/EU of 23 July 2014 on marine equipment (MED), issued as "Forskrift om Skipsutstyr" by the Norwegian Maritime Authority. This Certificate is issued by DNV AS under the authority of the Government of Norway.

This is to certify:

That the A & B Class divisions fire integrity: B class divisions.

with type designation(s)
META MMC-300 Ceiling

Issued to

Meta AS
ÅLEN, Norway

is found to comply with the requirements in the following Regulations/Standards:

Regulation (EU) 2022/1157,

Item No. MED/3.11b, SOLAS 74 as amended, Regulation II-2/3.4 & II-2/9, IMO 2010 FTP Code, IMO MSC/Circ.1120 and IMO MSC.1/Circ.1581

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

This Certificate is valid until 2028-08-31.

Issued at Høvik on 2023-09-01

DNV local unit:
East & South Norway CMC

Approval Engineer:
Karolina Kusmider



Notified Body
No.: 0575

for DNV AS



Digitally Signed By:
Kristin Grønness Hovden
Location: DNV Høvik, Norway
on behalf of

Sverre Olav Bergli
Head of Notified Body

A U.S. Coast Guard approval number will be assigned to the equipment when the production module has been completed and will appear on the production module certificate (module D, E or F), as allowed by the "Agreement between the United States of America and the EEA EFTA states on the mutual recognition of Certificates of Conformity for Marine Equipment" signed 17 October 2005, and amended by Decision No 1/2019 dated February 22nd, 2019.

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-surveillance module (D, E or F) of Annex B of the MED is fully complied with and controlled by a written inspection agreement with a Notified Body. The product liability rests with the manufacturer or his representative in accordance with Directive 2014/90/EU.

This certificate is valid for equipment, which is conform to the approved type. The manufacturer shall inform DNV AS of any changes to the approved equipment. This certificate remains valid unless suspended, withdrawn, recalled or cancelled.

Should the specified regulations or standards be amended during the validity of this certificate, the product is to be re-approved before being placed on board a vessel to which the amended regulations or standards apply.

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 300,000 USD.



Form code: MED 201.NOR

Revision: 2022-12

www.dnv.com

Page 1 of 2



Job Id: 344.1-001365-27
Certificate No: MEDB00003YW
Revision No: 1

Product description

"META MMC-300 Ceiling"

Ceiling system composed of 0.55 mm thick, and 300 mm wide steel panels (unperforated) suspended below a structural steel core. The panels are insulated with 20 mm glass wool with type designation "Isover Ultimate U SeaProtect slab 24" with density 24 kg/m³. The overall thickness of the ceiling is 25 mm. The panels are fixed to the carrier profiles with screws. The ceiling is fixed to the structural core with adjustable hangers, type I and II. The distance between the hangers is as shown on drawing 115135 Rev A from Meta AS.

The ceiling panels can be fitted with an inspection hatch.

For further details, see drawings and test report listed under Type Examination documentation below.

Application/Limitation

Approved for use as an integrated part of a horizontal fire retarding division of class B-0.

When the ceiling is suspended at least 275 mm below a steel deck the whole construction may be regarded as fire retarding division of class A-15.

Max. panel size:	300 mm x 3000 mm	(W x L)
Max. size of access hatch:	300 mm x 300 mm	(W x L)

The insulation materials and adhesives used have to be approved according to the Marine Equipment Directive and bear the 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

Test Report No. 103020.88 dated 19 February 2010 from SINTEF NBL as, Trondheim, Norway.

Drawing No. 115135 Rev. A. dated 22 April 2009 from Meta AS.

Tests carried out

Tested according to FTP Code Part 3 and in compliance with IMO 2010 FTP Code Ch. 8.

Marking of product

The product is to be marked with name and address of manufacturer, type designation, fire technical rating, the MED Mark of Conformity and USCG Approval Number if applicable (see first page).

Form code: MED 201.NOR

Revision: 2022-12

www.dnv.com

Page 2 of 2





TYPE EXAMINATION CERTIFICATE – EC MODULE B

Certificate no.:
MEDB000056T
Revision No.:
1

Application of: Directive 2014/90/EU of 23 July 2014 on marine equipment (MED), issued as "Forskrift om Skipsutstyr" by the Norwegian Maritime Authority. This Certificate is issued by DNV AS under the authority of the Government of Norway.

This is to certify:

that the **A & B Class divisions fire integrity: B class divisions.**

with type designation(s)

Meta MMC-300 (Perforated B-0)

issued to

Meta AS
ALEN, Norway

is found to comply with the requirements in the following Regulations/Standards:

Regulation (EU) 2024/1975,

item No. MED/3.11b. SOLAS 74 as amended, Regulation II-2/3.4 & II-2/9, IMO 2010 FTP Code, IMO MSC/Circ.1120 and IMO MSC.1/Circ.1581

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

This Certificate is valid until **2030-05-24**.

Issued at **Høvik** on **2025-05-25**

DNV local unit:
East & South Norway CMC

Approval Engineer:
Izabela Misztal



Notified Body
No.: 0575

for DNV AS



Digitally Signed By:
Christine Mydla-Röder

Location: **DNV Høvik, Norway**

Mydla-Röder, Christine

Head of Notified Body

A U.S. Coast Guard approval number will be assigned to the equipment when the production module has been completed and will appear on the production module certificate (module D, E or F), as allowed by the "Agreement between the United States of America and the EEA EFTA states on the mutual recognition of Certificates of Conformity for Marine Equipment" signed 17 October 2005, and amended by Decision No 1/2023 dated August 21st, 2023.

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-surveillance module (D, E or F) of Annex B of the MED is fully complied with and controlled by a written inspection agreement with a Notified Body. The product liability rests with the manufacturer or his representative in accordance with Directive 2014/90/EU. This certificate is valid for equipment, which is conform to the approved type. The manufacturer shall inform DNV AD of any changes to the approved equipment. This certificate remains valid unless suspended, withdrawn, recalled or canceled. Should the specified regulations or standards be amended during the validity of this certificate, the product is to be re-approved before being placed on board a vessel to which the amended regulations or standards apply.

LEGAL DISCLAIMER: Unless otherwise stated in the applicable contract with the holder of this document, or following from mandatory law, the liability of DNV AD, 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.



Job ID: **344.1-009205-2**
Certificate no.: **MEDB000056T**
Revision No.: **1**

Product description

"Meta MMC-300 (Perforated B-0)" is a ceiling system composed of 0,65 mm thick and 300 mm wide steel panels (perforated) suspended below a structural steel core. The panels are insulated with 25 mm glass wool of type designation "Ultimate SeaProtect Slab" of 36 kg/m³ density manufactured by Isover Saint-Gobain.

Total thickness of the ceiling: 25 mm.

Along their length, the panels are jointed together by carrier profiles with screws (Ø3,9 x 13 mm) and carrying nabs on the carrier profiles. Along the short ends the panels are jointed together in an end to end connecting profile.

The ceiling panels can be fitted with an inspection hatch 300 mm x 300 mm (W x L).

For further details, please see a drawing and a test report listed under Type Examination documentation below.

Application/Limitation

Approved for use as a class B-0 ceiling panel and when the ceiling is suspended at least 275 mm below a steel deck the whole construction may be regarded as fire retarding division of class A-15.

Max. panel size: 300 mm x 2950 mm (W x L).

Max. distance between hangers, longitudinal direction: 530 mm

Max. distance between hangers and connecting profile, longitudinal direction: 150 mm

Max. distance between hangers and bulkhead, longitudinal direction: 300 mm

Max. distance between hangers, transvers direction: 950 mm

Max. distance between hangers and bulkhead, transvers direction: 255 mm

The insulation materials and adhesives used have to be approved according to the Marine Equipment Directive and bear the 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 use.

Type Examination documentation

Test report no. 150070-23-T2 dated 13 May 2019 from RISE, Trondheim, Norway.

Drawing no. 118397-B0 dated 25 February 2019 from manufacturer.

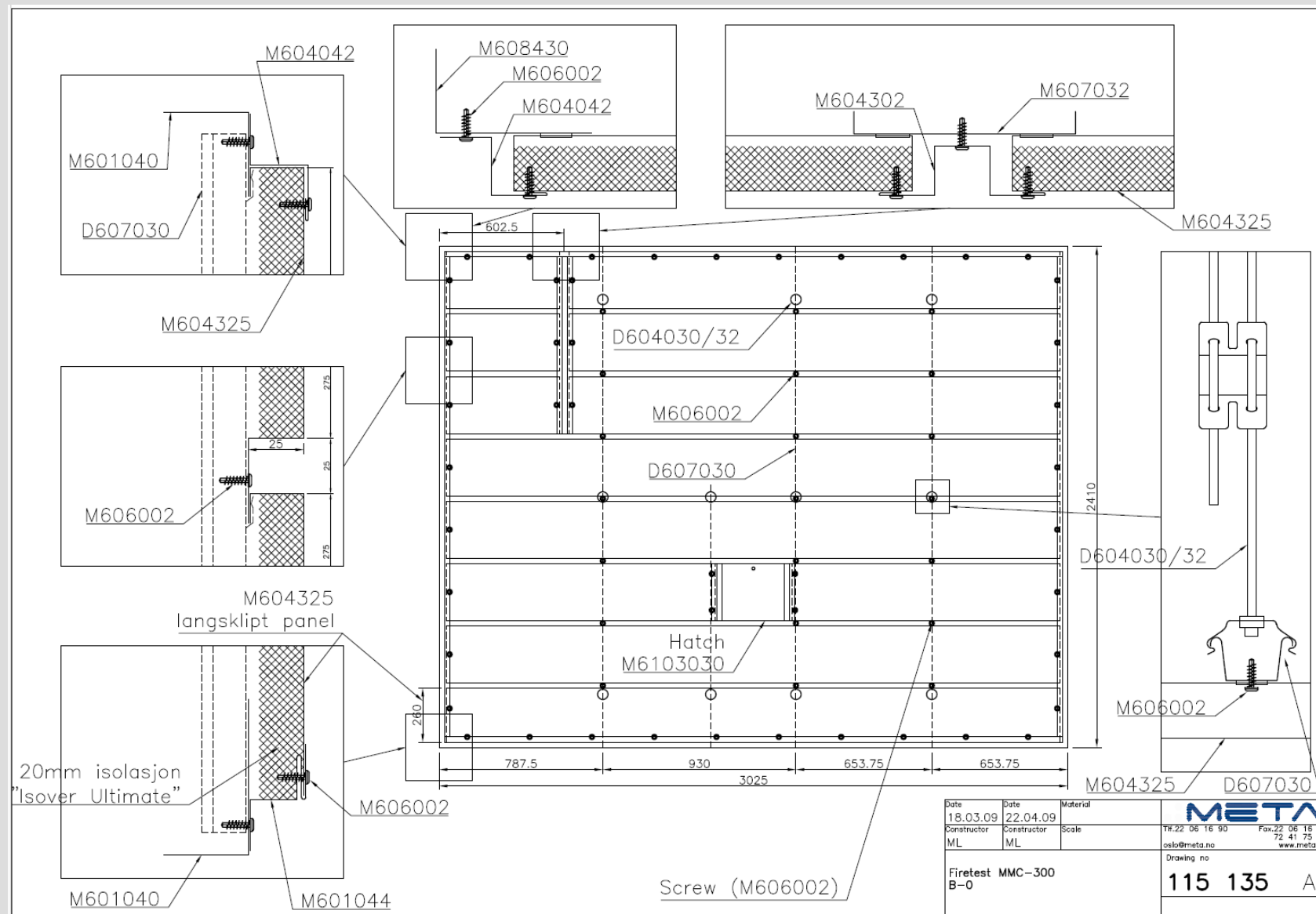
Tests carried out

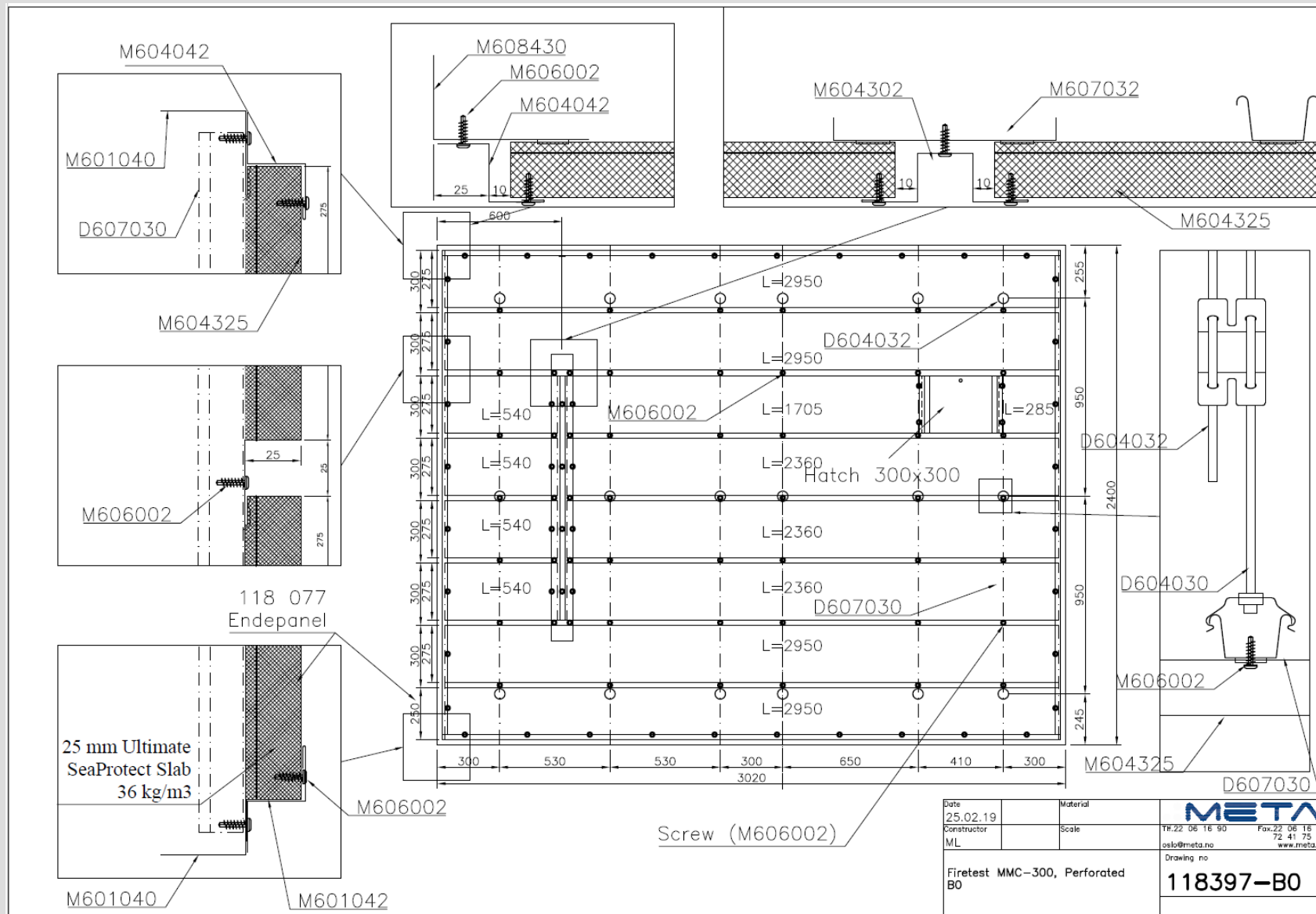
Tested according to IMO 2010 FTP Code Part 3.


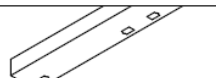
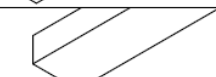






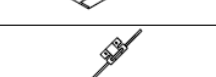

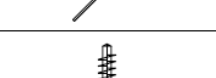
Marking of product

The product or packing is to be marked with name and address of manufacturer, type designation, fire technical rating, the MED Mark of Conformity and USCG Approval Number if applicable (see first page).






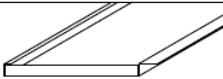
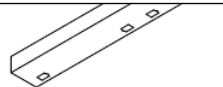



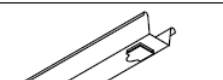
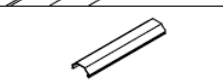




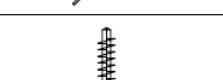


Component list for Meta MMC B0 – Unperforated (Meta Marine Ceiling)	
	M604325 Panel MMC-300/275-25 (0,55 steel) With 20mm Ultimate Seaprotect slab 24 kg/m ³
	M608430 Wall carrier (0,9 steel) 38/70 mm L=2400 mm
	M601040 First and last mounting profile (0,9 steel) 38/70 mm L=2400 mm
	M604042 End and side cover profile (0,7 steel) 23/26/25 mm L=2500 mm
	M601044 Last cover profile (0,7 steel) 23/25/25 mm L=2500 mm
	D607030 Junction carrier profile (0,9 steel) L=2400 mm
	D607035 Junction carrier connecting profile (0,9 steel)
	M607032 Panel joint profile 100, L=2400 mm (0,9 steel)
	M604302 – 25/22/25/22/25 L=2500 mm Panel end to end cover profile (0,7 steel)
	D604030 Butterfly clip with resilient damper, L=200 mm
	Hanging rod: D604032 L=300, D604033 L=500, D604034 L=750, D604035 L=1000, D604036 L=1500
	M606002 Screw 3,9x13

File	20.02.03	Page	31.01.14	Model	
Constructor	MI	Constructor	MI	Scale	
Component list Meta MMC Meta Marine Ceiling B0 – Unperforated					

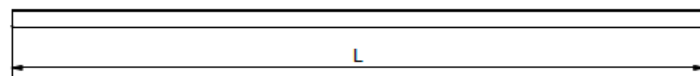
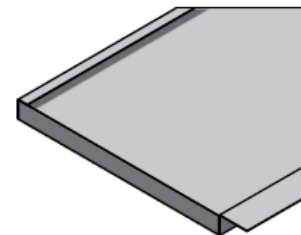
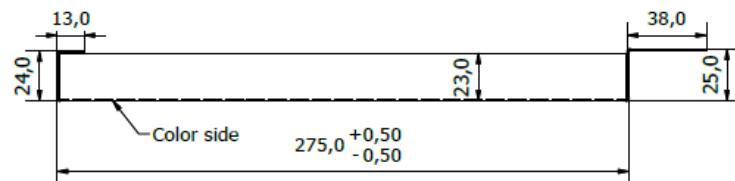
	19.02.06.16.90	File: 20.02.03	19.02.06.16.90
ask@meta.no	19.02.06.16.90	ask@meta.no	19.02.06.16.90
Drawing no		Drawing no	
MMC-B0-Unperf			





Component list for Meta MMC B0 – Perforated (Meta Marine Ceiling)	
	M604325 Panel MMC-300/275-25 (0,55 steel) With 25mm Ultimate Seaprotect slab 36 kg/m3
	M608430 Wall carrier (0,9 steel) 38/70 mm L=2400 mm
	M601040 First and last mounting profile (0,9 steel) 38/70 mm L=2400 mm
	M604042 End and side cover profile (0,7 steel) 23/26/25 mm L=2500 mm
	M601044 Last cover profile (0,7 steel) 23/25/25 mm L=2500 mm
	D607030 Junction carrier profile (0,9 steel) L=2400 mm
	D607035 Junction carrier connecting profile (0,9 steel)
	M607032 Panel joint profile 100, L=2400 mm (0,9 steel)
	M604302 – 25/22/25/22/25 L=2500 mm Panel end to end cover profile (0,7 steel)
	D604030 Butterfly clip with resilient damper, L=200 mm
	Hanging rod: D604032 L=300, D604033 L=500, D604034 L=750, D604035 L=1000, D604036 L=1500
	M606002 Screw 3,9x13

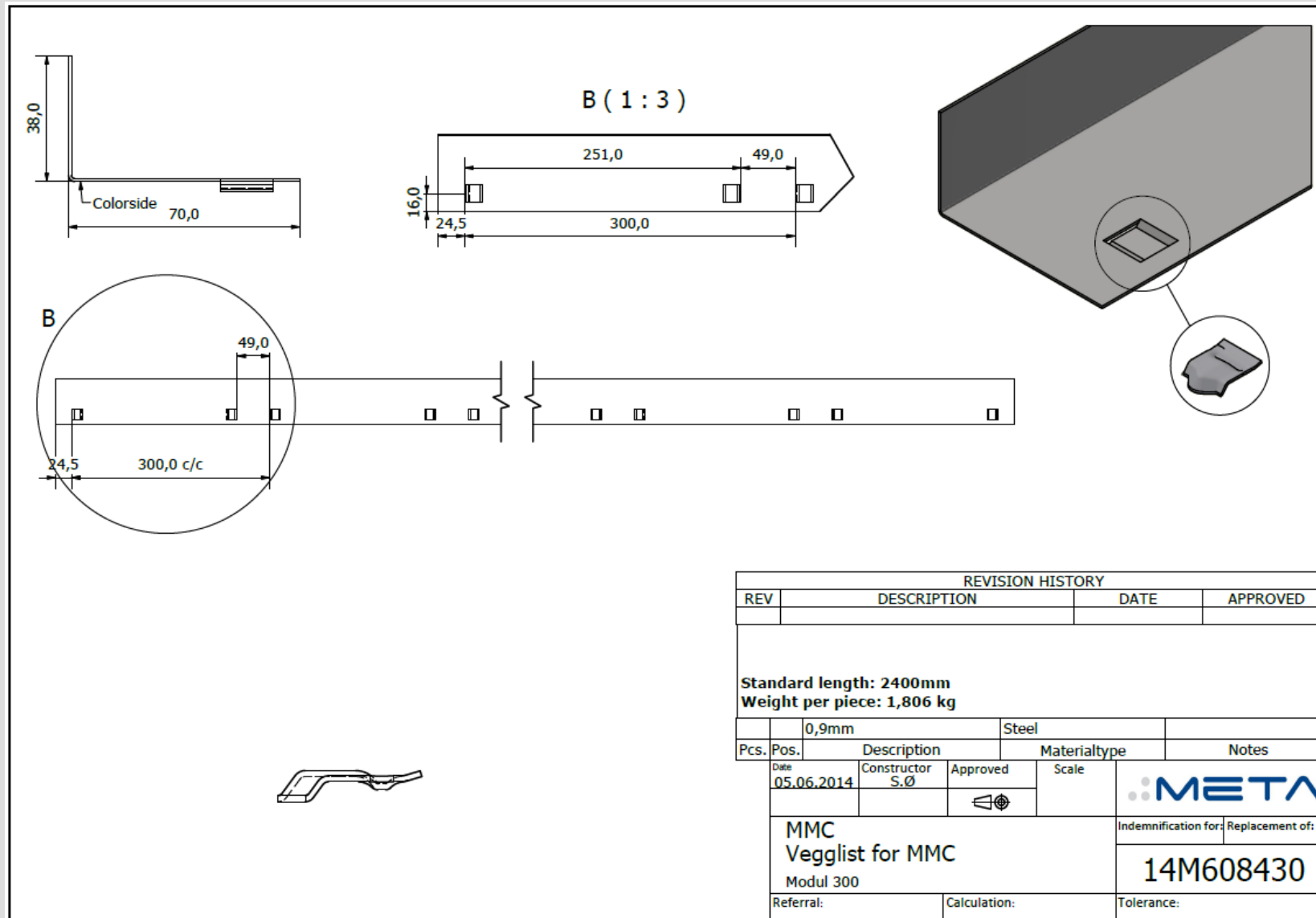
File 20.02.03	Date 31.01.14	Initial	META
Drawn by M	Constructed M	Scale	1:1
Component list Meta MMC Meta Marine Ceiling B0 – Perforated		Drawn by	MMC-B0-Perf

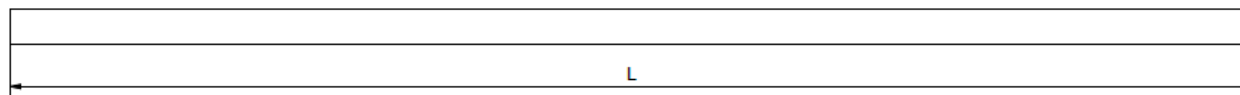
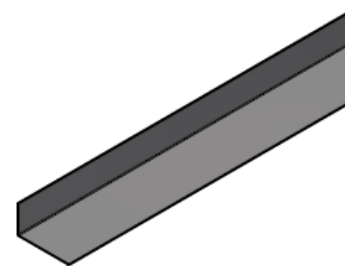
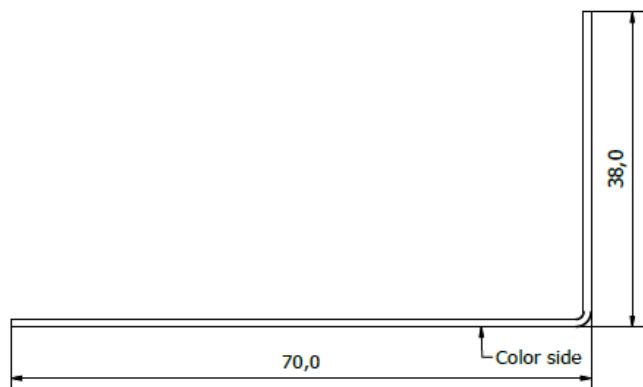






REVISION HISTORY					
REV	DESCRIPTION			DATE	APPROVED
Tolerance:					
L= 0-1000 ± 1,0mm L= 1000-3000 ± 1,5mm L= 3000-5000 ± 2,0mm					
90° angel, Width and height cheked with template					
Weight pr.m: 2,101 kg					
		0,7mm		Steel	
pcs.	Pos.	Description		Materialtype	Notes
Date		Constructor	Approved	Scale	
05.06.2014		S.Ø			
MMC				Indemnification for:	Replacement of:
300/275 - 25				14M604325	
B=275 H=25, fuge 25mm					
Referral:			Calculation:		Tolerance:

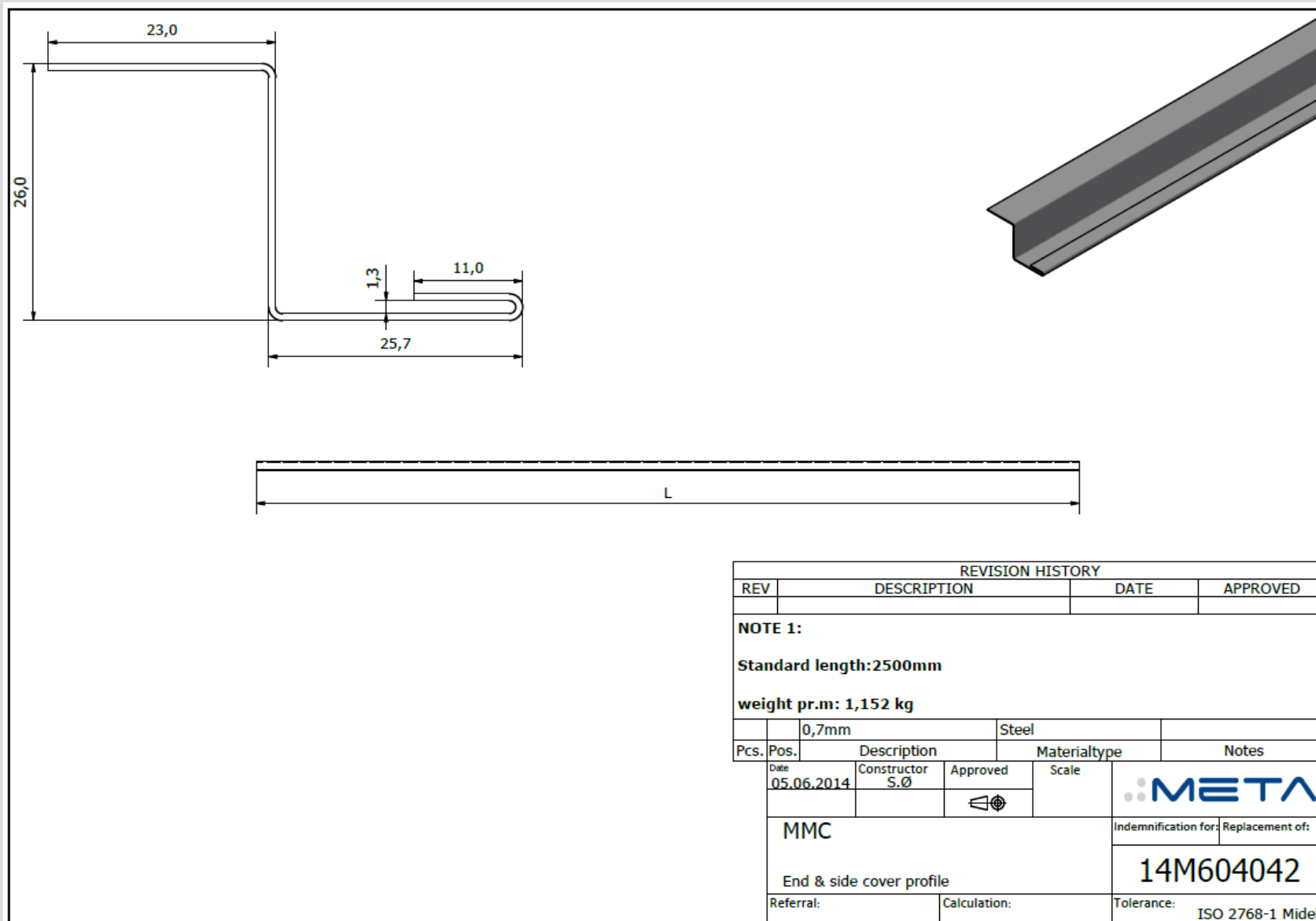


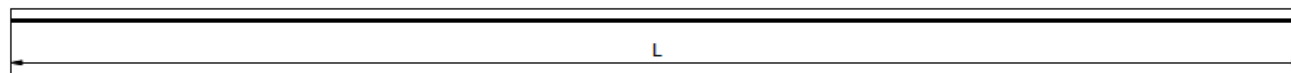
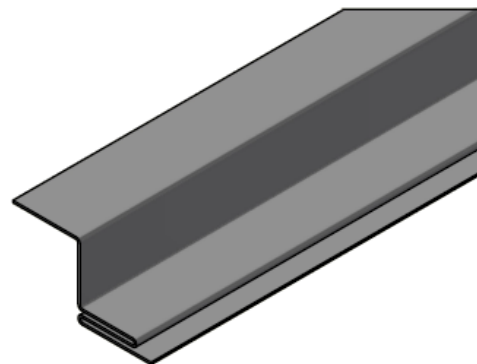
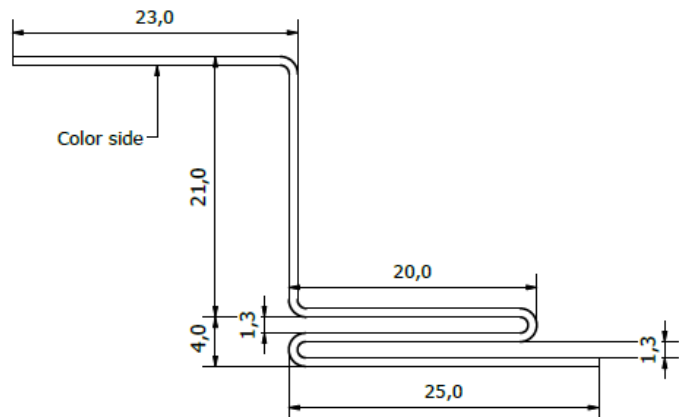






REVISION HISTORY				
REV	DESCRIPTION		DATE	APPROVED
NOTE 1:				
Standard length: 2400mm				
weight: 1,806 kg				
		0,9 mm	Steel	
Pcs.	Pos.	Description	Material	Notes
Date	Constructor	Approved	Scale	
05.06.2014	S.Ø			
MMC			Indemnification for:	Replacement of:
First & last wall mounting profile			14M601040	
Referral:		Calculation:	Tolerance:	ISO 2768-1 Middels

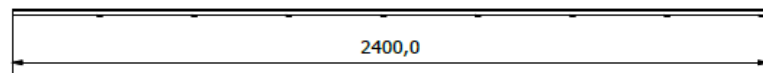
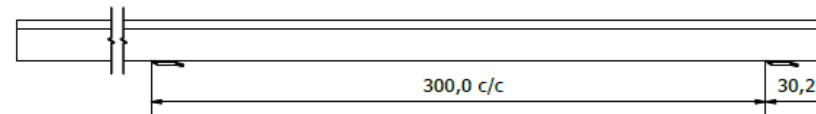
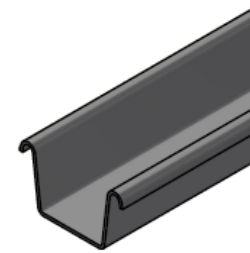
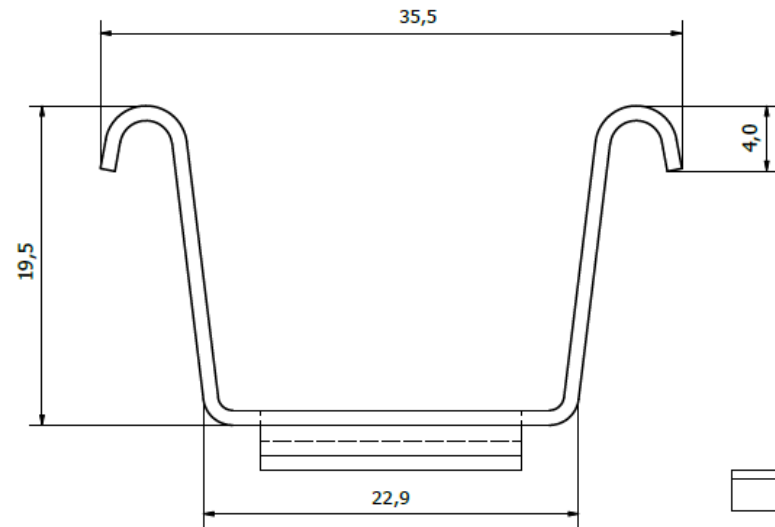








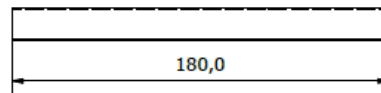
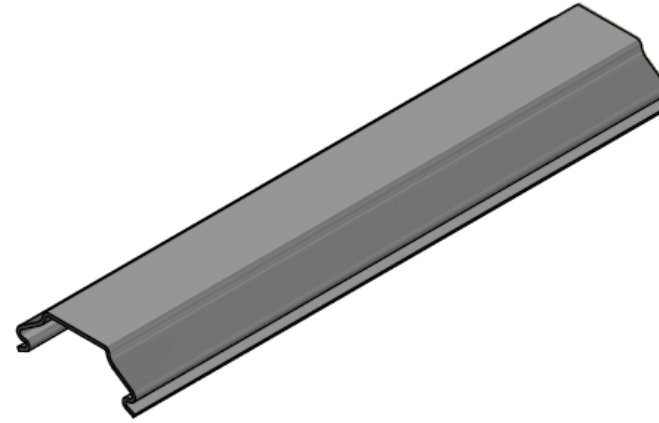
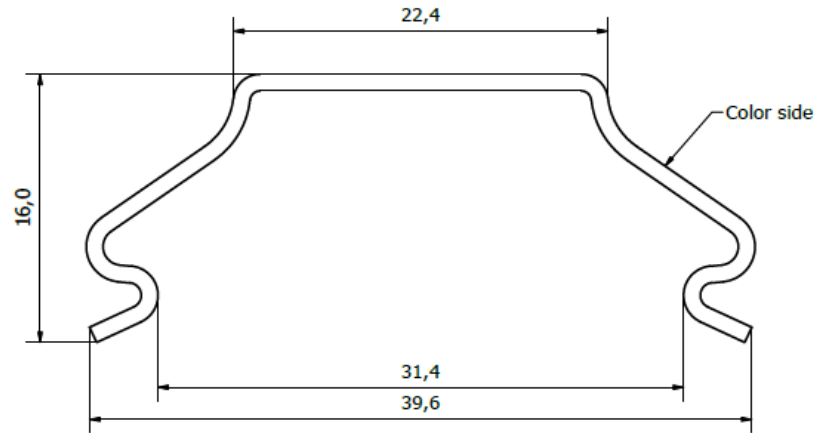
REVISION HISTORY					
REV	DESCRIPTION			DATE	APPROVED
NOTE 1:					
Standard length: 2500mm weight pr.m: 1,478 kg					
		0,7 mm		Steel	
Pcs.	Pos.	Description		Material	Notes
	Date	Constructor	Approved	Scale	
	05.06.2014	S.Ø			
MMC				Indemnification for: Replacement of:	
Last cover profile				14M601044	
Referral:		Calculation:		Tolerance: ISO 2768-1 Middels	







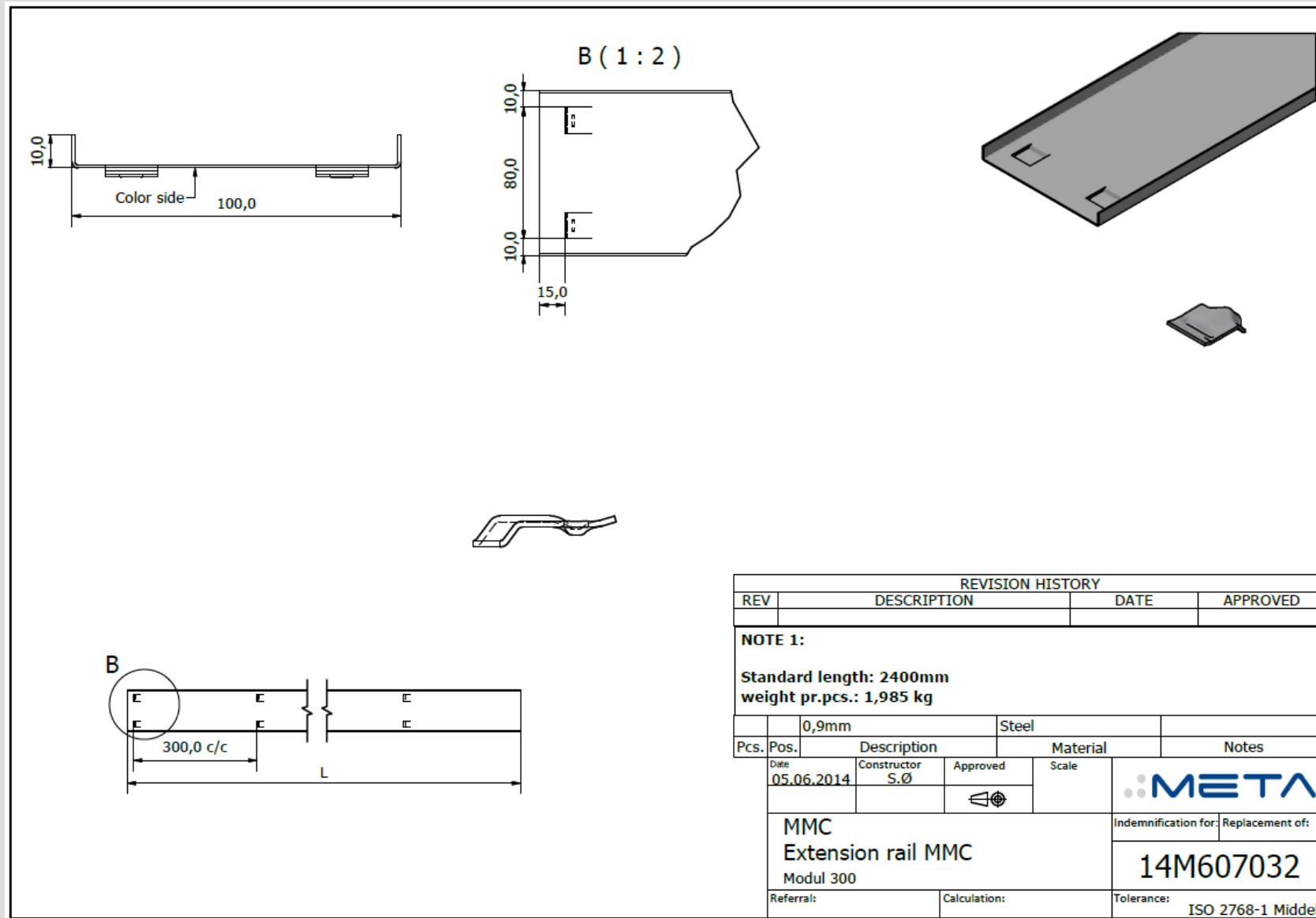
REVISION HISTORY					
REV	DESCRIPTION			DATE	APPROVED
NOTE 1:					
Weight pr. m: 1,186 kg					
	0,9mm			Steel	
Pcs.	Pos.	Description		Material	Notes
Date		Constructor	Approved	Scale	
05.06.2014		S.Ø		1:40	
MMC				Indemnification for:	Replacement of:
Junction carrier profile				14D607030	
Modul 300					
Referral:			Calculation:	Tolerance:	

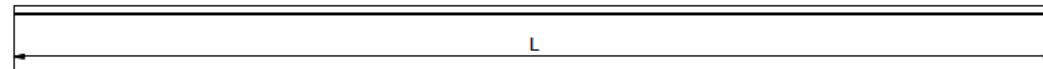
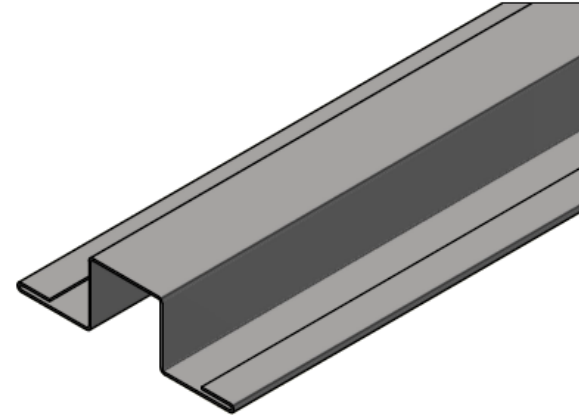
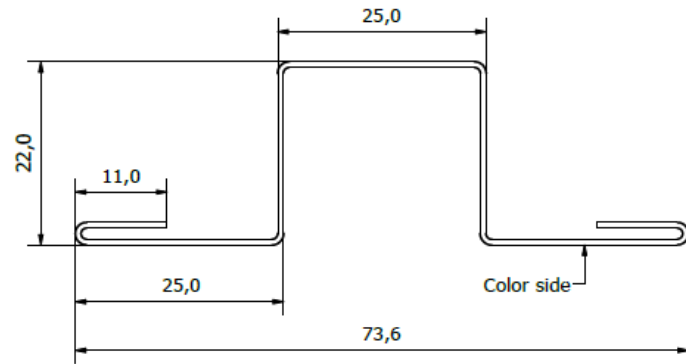






REVISION HISTORY					
REV	DESCRIPTION			DATE	APPROVED
NOTE 1:					
Standardlengde: 180mm					
Vekt pr. stk: 0,094 kg					
	1 mm		Steel		
Pcs.	Pos.	Description	Material	Notes	
Date	Constructor	Approved	Scale		
05.06.2014	S.Ø				
MMC				Indemnification for:	Replacement of:
Junction carrier				14D607035	
connecting profile					
Referral:		Calculation:		Tolerance:	
				ISO 2768-1 Middels	

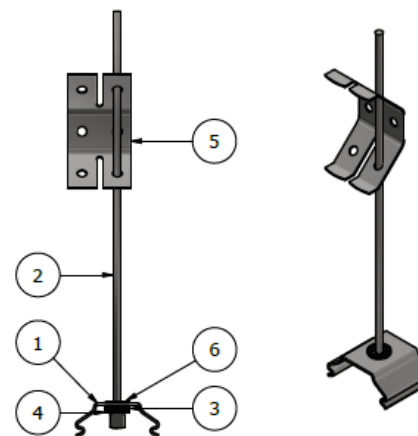
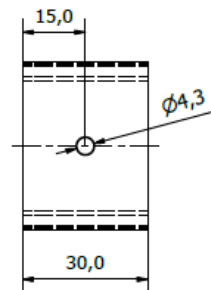
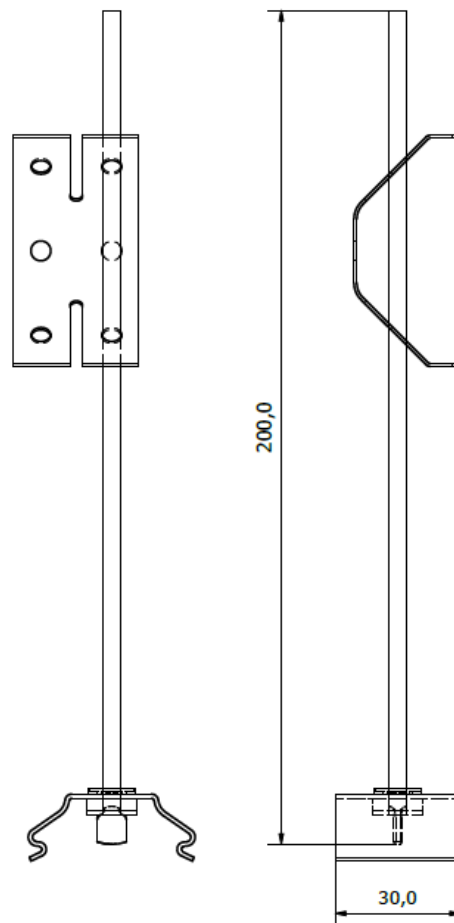








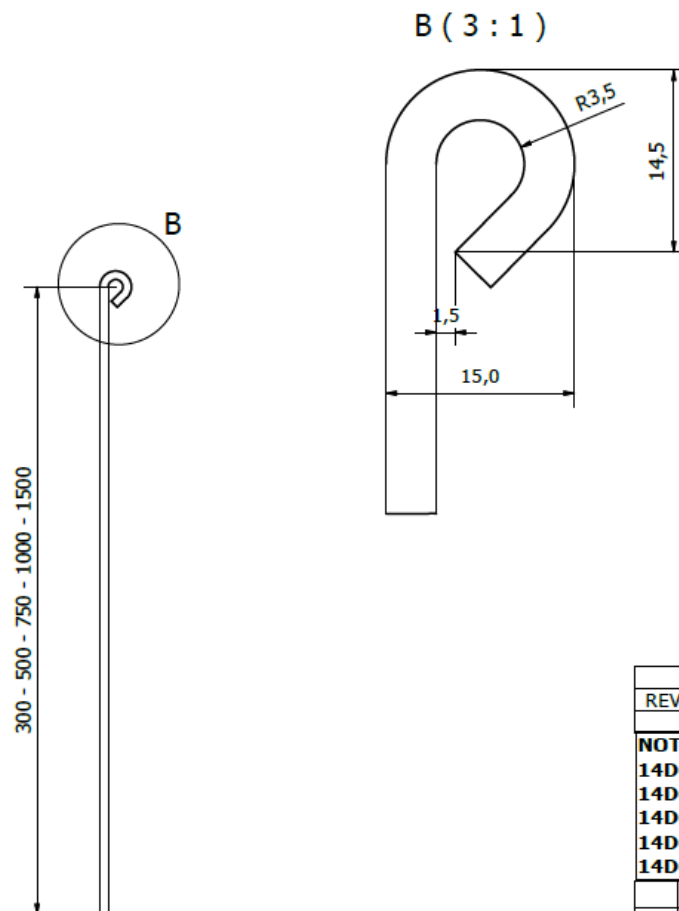
REVISION HISTORY					
REV	DESCRIPTION			DATE	APPROVED
Note 1:					
Standard length: 2500mm					
Weight pr.psc.: 1,886 kg					
		0,7mm	Steel		
Pcs.	Pos.	Description	Material		Notes
Date	Constructor	Approved	Scale		
05.06.2014	S.Ø				
MMC				Indemnification for:	Replacement of:
Panel end to end cover profile				14M604302	
Referral:		Calculation:		Tolerance:	ISO 2768-1 Middel







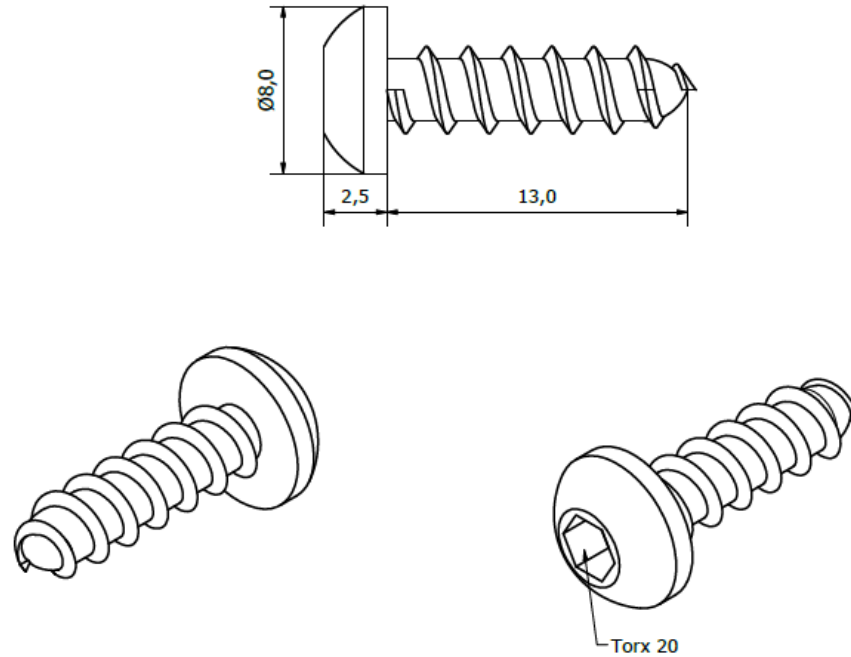
REVISION HISTORY					
REV	DESCRIPTION			DATE	APPROVED
NOTE 1: For profile on POS1 (clip) see drawing 14D607035					
Weight pr. psc.: N/A					
1	6	Starlock 4mm uncapped			
1	5	Butterfly			
1	4	Screen dial 4,3x12x1,23		ELZ	
1	3	Tapered grommets		Black PVC	
1	2	Rod			
1	1	Clip			
Pcs.	Pos.	Description		Material	Notes
Date		Constructor	Approved	Scale	
05.06.2014		S.Ø			
MMC Butterfly clip whit damper				Indemnification for: Replacement of:	
				14D604030	
Referral:		Calculation:		Tolerance:	
				ISO 2768-1 Middels	







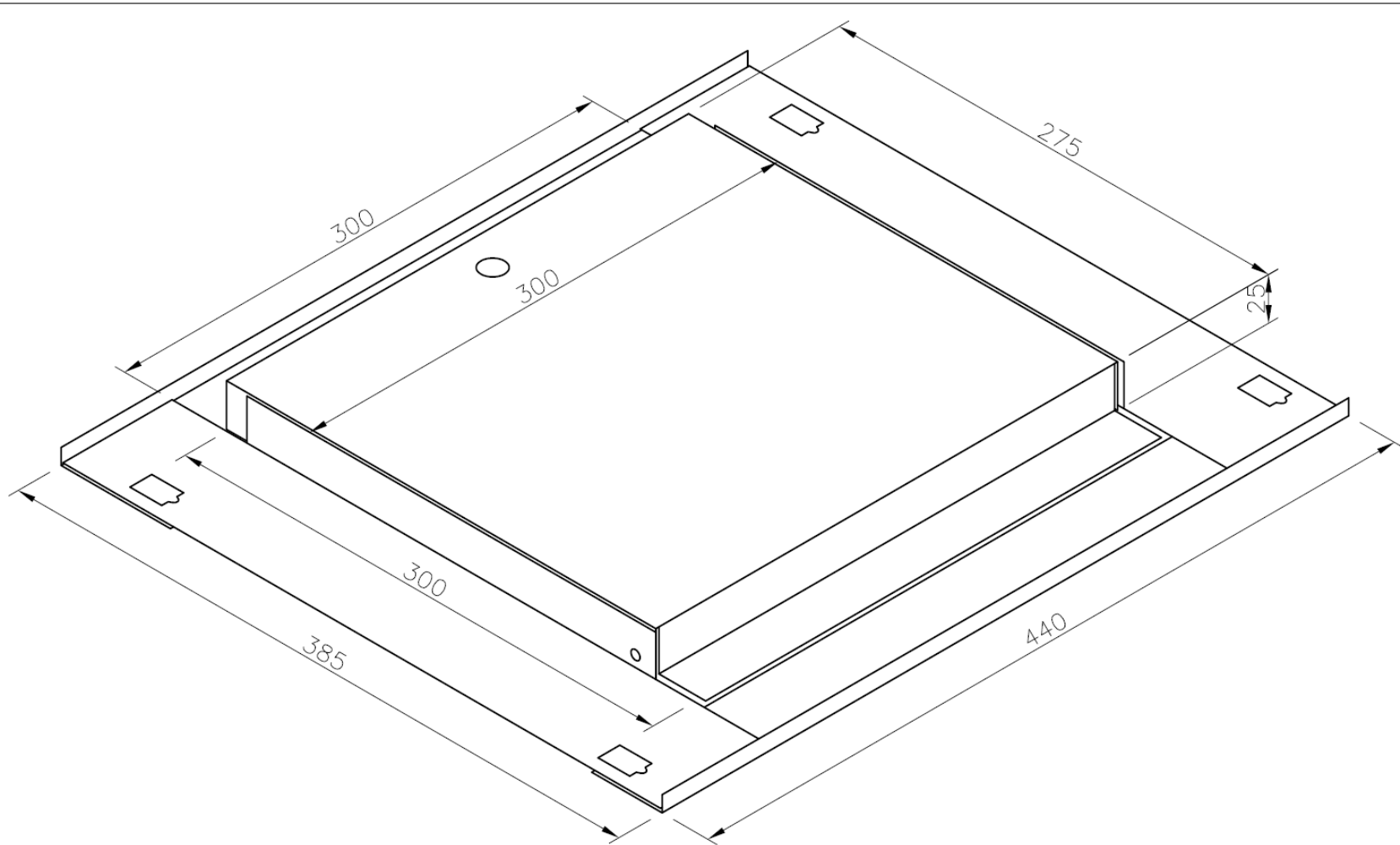
REVISION HISTORY				
REV	DESCRIPTION		DATE	APPROVED
NOTE 1:				
14D604032= L=300				
14D604033= L=500				
14D604034= L=750				
14D604035= L=1000				
14D604036= L=1500				
	Rod Ø4		Galvanise	
Pcs.	Pos.	Description	Material	Notes
Date	05.06.2014	Constructor S.Ø	Approved	Scale
				
MMC			Indemnification for:	Replacement of:
Hanging rod			14D604032	
Referral:		Calculation:		Tolerance: ISO 2768-1 Middels






Date 05.06.2014	Constructor S.Ø	Approved 	Scale		
MMC Screw 3,9x13 self drilling M606001				Indemnification for:	Replacement of:
				M606001	
Referral:		Calculation:		Tolerance: ISO 2768-1 Middels	





Date 21.11.07	Date	Material		
Constructor MI	Constructor	Scale	Tlf: 22 06 16 90 info@meta.no	Fax: 22 06 16 90 72 41 78 50 www.meta.no
Inspection hatch 300x300 For MMC 300/275-25 <u>Assembled</u>			Drawing no 14M6103030	

