Statens vegvesen

ATA Hill & Smith AS
Grev Wedels plass 2
3015 DRAMMEN

Øystein Lægreid

Behandlende enhet:	Saksbehandler/telefon:	Vår referanse:	Deres referanse:	Vår dato:
Vegdirektoratet	Matteo Pezzucchi / 22073246	18/4735-99		17.12.2018

Godkjenning av FMK C1 nød-/driftsåpning av type 2-C1-Emergency

Det vises til søknad vedrørende godkjenning av 2-C1-Emergency nød-/driftsåpning for FMK-C1 vegrekkverk fra ATA Hill & Smith AS med journalnummer 17/1309-66 datert 07.09.17 og videre dokumentasjon datert 22.12.18.

Søknaden inneholder:

- Beregningsrapport nummer 504 60 av 2-C1-Emergency fra ELU Konsult AB datert 10.09.18 og 18.11.18.
- Detaljerttegninger av 2-C1-Emergency datert 13.03.17 og generelle tegninger med ulike åpningslender.

FMK-C1 er et tosidig rekkverk som består av et føringsrør (ellipse-profil) montert på ovale stolper. Stolpene settes i stålfundamenter. Rekkverket tilfredsstiller kravene til styrkeklasse H1 med arbeidsbreddeklasse W4 og til styrkeklasse N2 med arbeidsbreddeklasse W4.

Nød-/driftsåpningen består av deler fra FMK C1 rekkverk. Føringsrørene kan demonteres ved bruk av nød-/ hurtiglåser og stolpene kan løftes fra stålfundamenter. 2-C1-Emergency kan leveres i standard lengde på 8,7 meter, 12,7 meter og 24,7 meter, se tegninger.

Med grunnlag i overnevnte gis herved adgang til bruk av 2-C1-Emergency mellom to FMK C1 rekkverk på offentlig veg i Norge.

Leverandøren skal levere bruksanvisning til brukere for å sikre kvalitet av installasjon og fremtidig vedlikehold. 2-C1-Emergency skal monteres i henhold til produsent/leverandørens installasjonsbeskrivelse. Når 2-C1-Emergency åpning demonteres skal enden av FMK-C1 sikres ved bruk av godkjente rekkverksavsluttinger. Håndbok N101 legges til grunn for valg, bruk og plassering av rekkverket og rekkverksender.

Postadresse
Statens vegvesen
Vegdirektoratet
Postboks 6706 Etterstad
0609 OSLO

Telefon: 22 07 30 00

firmapost@vegvesen.no

Org.nr: 971032081

Kontoradresse
Brynsengfaret 6A
0667 OSLO

Fakturaadresse
Statens vegvesen
Regnskap
Postboks 702
9815 Vadsø

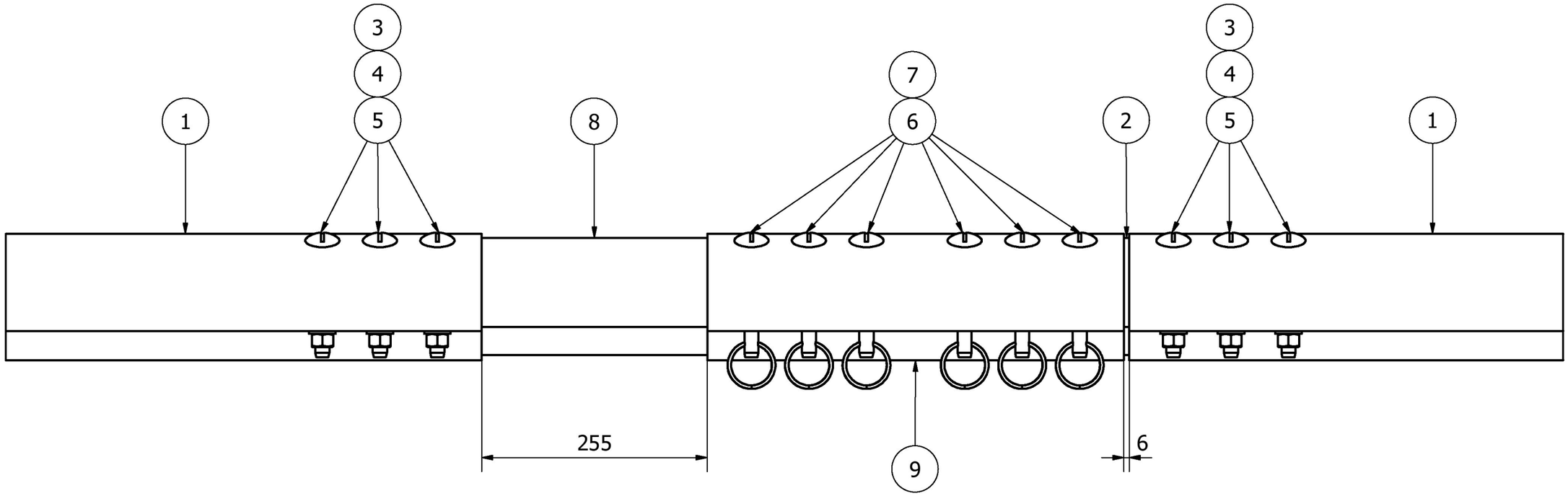
Vegdirektoratet publiserer en rekkverksliste med tilhørende gyldige dokumenter på vegvesen.no. Vegdirektoratet forbeholder seg retten til å endre eller tilbakekalle samsvargodkjenningen. Eventuelle endringer i produktets utforming eller materiale vil ugyldiggjøre denne godkjenningen.

Med hilsen

Sigmund Reinsborg Log
seksjonssjef

Matteo Pezzucchi

Dokumentet er godkjent elektronisk og har derfor ingen håndskrevne signaturer.

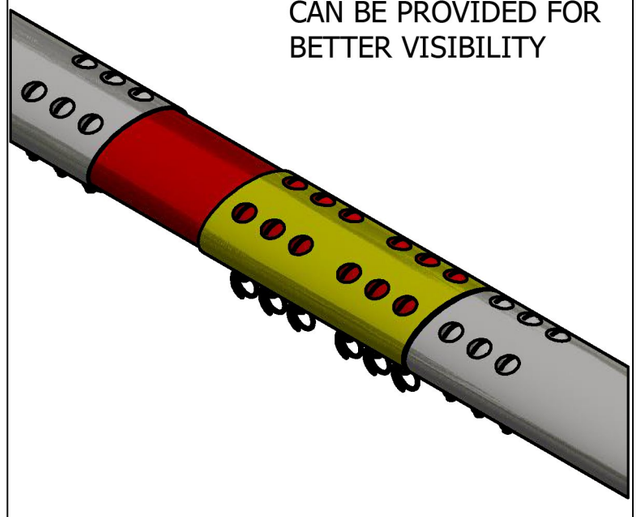


FMK-C1 EMERGENCY OPENING (1 : 5)

Finish
Ra = µm
Coating
Galvanization according to EN ISO 1461: 2009. Zinc layer thickness according to table NA.1 FE/ Zn 115.
Silicon content according to table NA.2, prefered silicon content 0.18% (limits 0.15%- 0.21%)

3D VIEW

PAINTED COMPONENTS CAN BE PROVIDED FOR BETTER VISIBILITY



ITEM	QTY	PART NAME	DIMENSION	MATERIAL	PART NO/ DESCRIPTION
1	2	2-C1M-7994	230x143x3 - 7994	S355MC	ATA Infra, FMK-C1
2	1	2-C1JA-471	221x132,5x3,5 - 471	S355MC	ATA Infra, FMK-C1, Emergency
3	12	BOLT	FMK M16	8.8 FZV	ATA Infra, FMK-C1
4	12	WASHER	BRB 17x30x3	BH 200 FZV	ATA Infra, FMK-C1
5	12	NUT	M6M 16	8 FZV	ATA Infra, FMK-C1, Emergency
6	12	EMERGENCY BOLT FMK-C1	FMK M16	8.8 FZV	ATA Infra, FMK-C1, Emergency
7	12	SPRINT	Diam 54, Wire size 4mm	S235	ATA Infra, FMK-C1, Emergency
8	1	2-C1JA- 720	230x143x3 - 720	S355MC	ATA Infra, FMK-C1, Emergency
9	1	2-C1M-471	230x143x3 - 720	S355MC	ATA Infra, FMK-C1, Emergency

Rev	Remarks	Designer	Date
1	Issued	Daniel Lissert	2017-03-13

Revision history

A3 | Tolerancess unless stated ISO 2768-1 Medium | Scale 1 : 5 | Weight 266,49 kg

Tel: 08 - 98 80 70
www.ata.se

Title: 2-C1-Emergency Opening
Part of: ATA Infra, FMK-C1
Material: See parts list
Description: Emergency opening
ATA Art No: 2-C1-Emergency
Designed by: dllt
Dimensions: Millimeter
Date: 2017-03-13
Rev:
Sheet No: 1 /5

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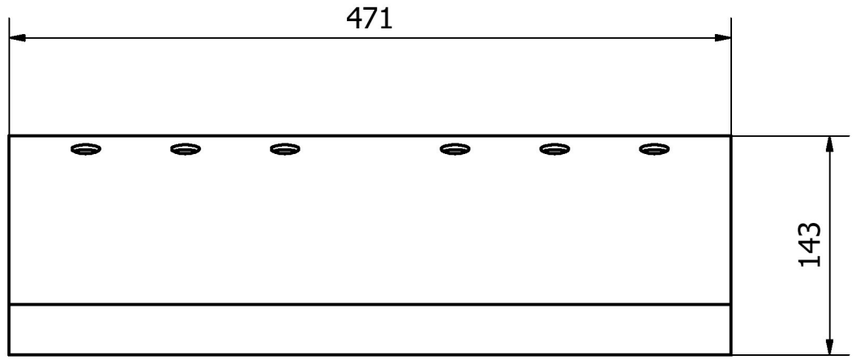
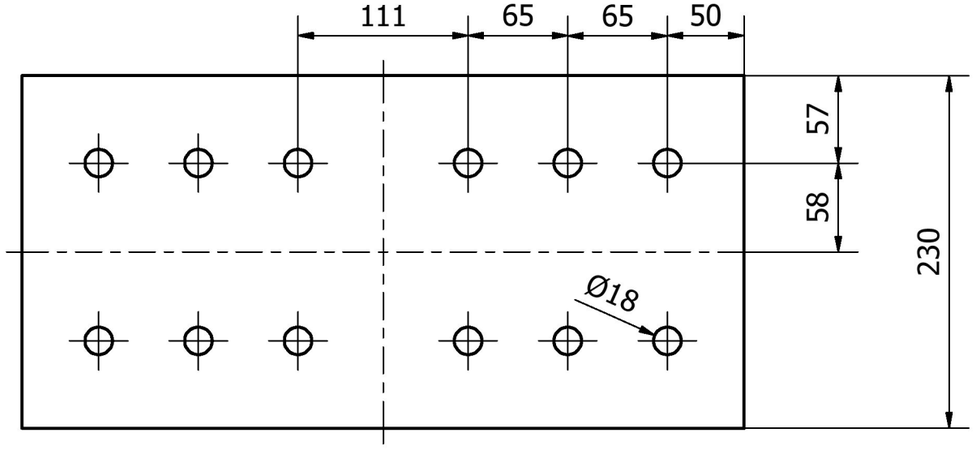
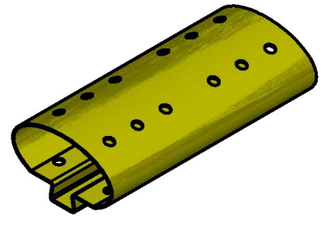


2-C1M-471 (1 : 4)
PROFILE ACC. TO DRAWING 2-C1M-7994



Finish
Ra = µm
Coating
Galvanization according to EN ISO 1461: 2009. Zinc layer thickness according to table NA.1 FE/ Zn 115.
Silicon content according to table NA.2, prefered silicon content 0.18% (limits 0.15%- 0.21%)

3D VIEW



A3	Tolerancess unless stated ISO 2768-1 Medium	Scale 1 : 4	Title 2-C1M-471	Weight 6,76 kg
Tel: 08 - 98 80 70 www.ata.se			Part of ATA Infra, FMK-C1, Emergency	Designed by dllt
			Material S355MC	Dimensions Millimeter
			Description Removable component	Date 2017-03-13
			ATA Art No 2-C1M-471	Rev / Sheet No 2 /5

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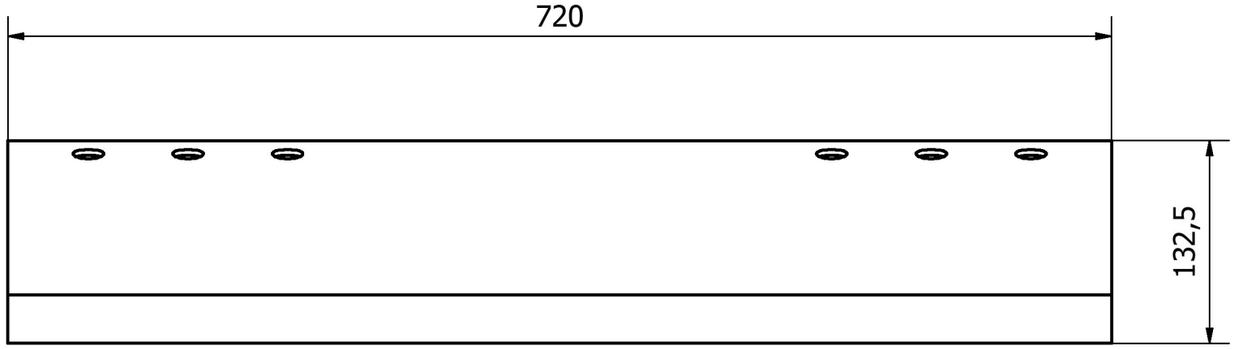
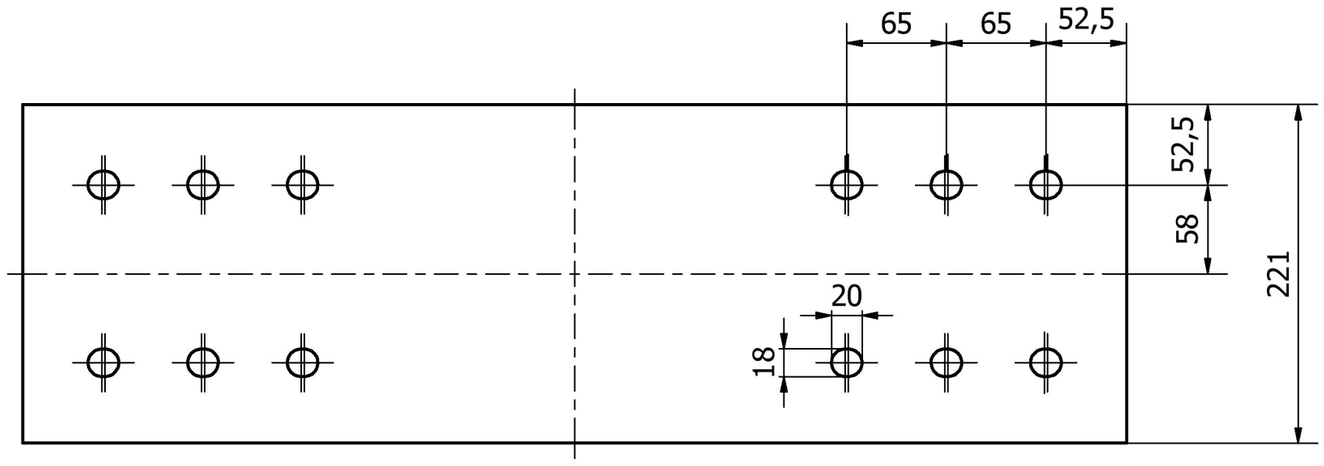
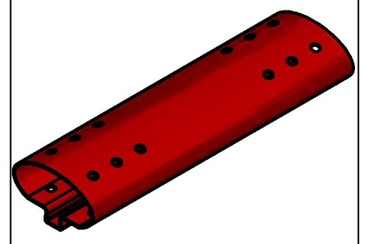


1-C2JA-720 (1:4)
PROFILE ACC. TO DRAWING 2-C1JA-471



Finish
Ra = µm
Coating
Galvanization according to EN ISO 1461: 2009. Zinc layer thickness according to table NA.1 FE/ Zn 115.
Silicon content according to table NA.2, prefered silicon content 0.18% (limits 0.15%- 0.21%)

3D VIEW



A3	Tolerancess unless stated ISO 2768-1 Medium	Scale 1:4	Title 2-C1JA		Weight 11,34 kg
Tel: 08 - 98 80 70 www.ata.se			Part of ATA Infra, FMK-C1, Emergency		Designed by dllt
			Material S355MC		Dimensions Millimeter
			Description Extended joint		Date 2017-03-13
			ATA Art No 2-C1JA-471	Rev	Sheet No 3 /5

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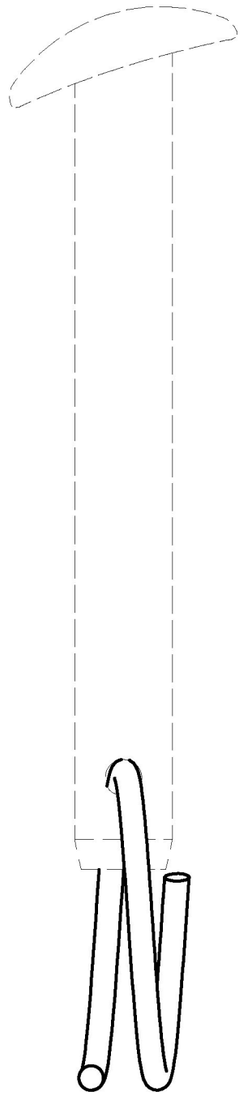

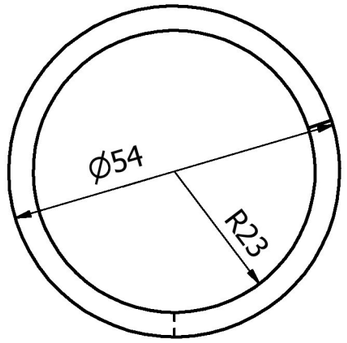

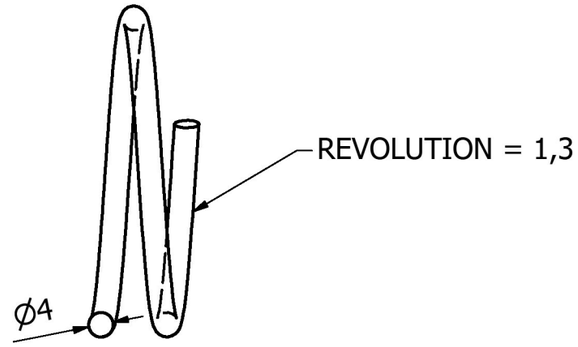

SPRINT, FMK-C1 EMERGENCY OPENING (1:1)

A3	Tolerancess unless stated ISO 2768-1 Medium	Scale 1:1	Title Emergency sprint	Weight 0,02 kg
Tel: 08 - 98 80 70 www.ata.se			Part of ATA Infra, FMK-C1, Emergency	Designed by dllt
			Material S235JR	Dimensions Millimeter
			Description Sprint	Date 2017-03-13
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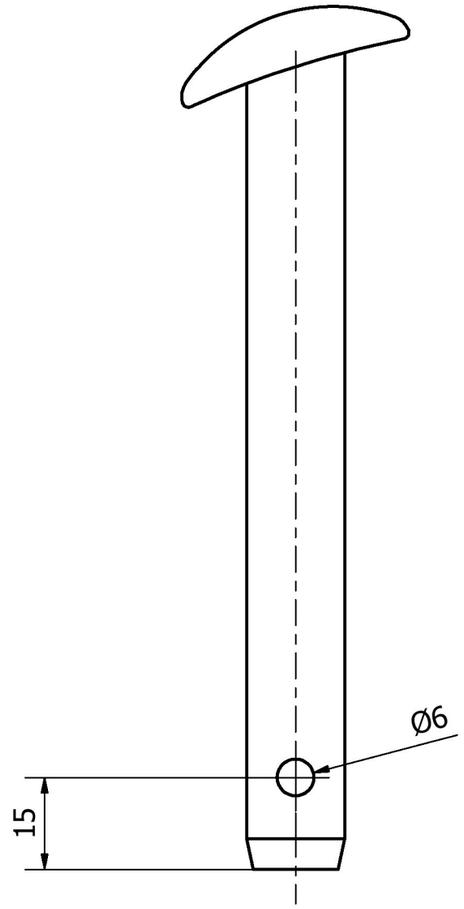

EMERGENCY BOLT (1 : 1)
M16 ACC. TO DRAWING 2-C1B-133

A3	Tolerancess unless stated ISO 2768-1 Medium	Scale 1 : 1	Title M16 FMK-C1	Weight 0,27 kg
Tel: 08 - 98 80 70 www.ata.se			Part of ATA Infra, FMK-C1, Emergency	Designed by dllt
			Material	Dimensions Millimeter
			Description Emergency bolt	Date 2017-03-13
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Dismantling of FMK-C1 VRS 8 m /
Demontering av FMK-C1 8 m

Step 1 (Fig 1)
Remove the locking rings (12x) and the bolts
Steg 1 (Fig 1)
Ta bort låsringarna (12x) och bultarna

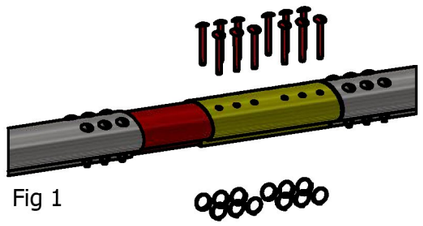


Fig 1

Step 2 (Fig 2)
Push the locking sleeve (yellow) as shown
Steg 2 (Fig 2)
Skjut låshylsan (gul) enligt skiss

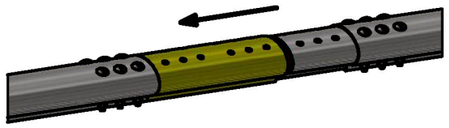


Fig 2

Step 3 (Fig 3)
Unscrew and remove bolts and nuts (6x) at the beam that will be removed. Use a 24 mm wrench
Steg 3 (Fig 3)
Lossa och ta bort bultar och muttrar (6X) på navföljaren som skall demonteras. Använd en 24 mm fast nyckel

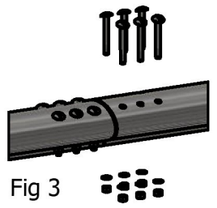


Fig 3

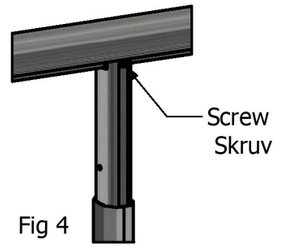


Fig 4

Step 4 (Fig 4)
Unscrew the Hex socket screw (2x each post) to release the beam from the posts (2x). Use a 10 mm hex key
Steg 4 (Fig 4)
Lossa insex-skruvarna på stolparna (2x per stolpe) för att frigöra navföljaren från stolparna (2x). Använd 10 mm insexnycke

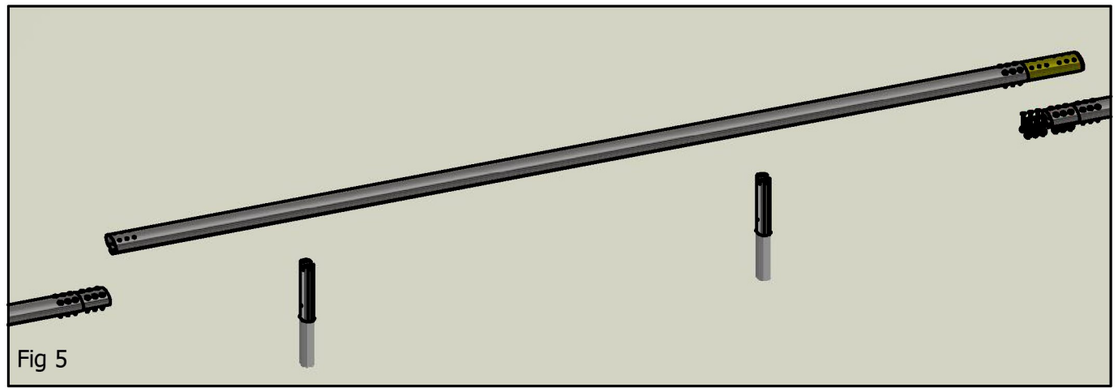
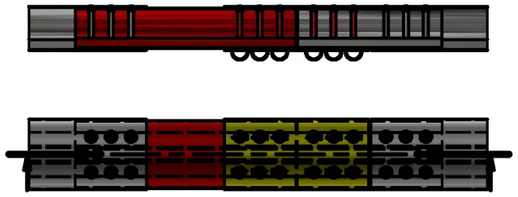
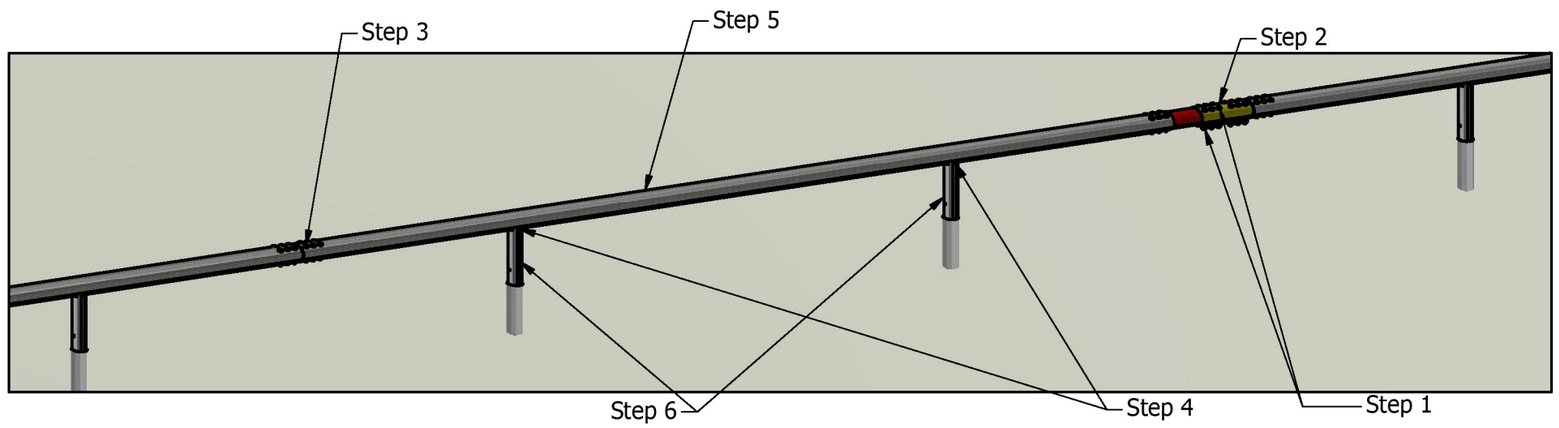


Fig 5

Step 5 (Fig 5)
Pull the beam at the end with the locking sleeve and the pull out the beam
Steg 5 (Fig 5)
Lyft navföljare i änden med låshylsan och dra sedan för att lossa den.

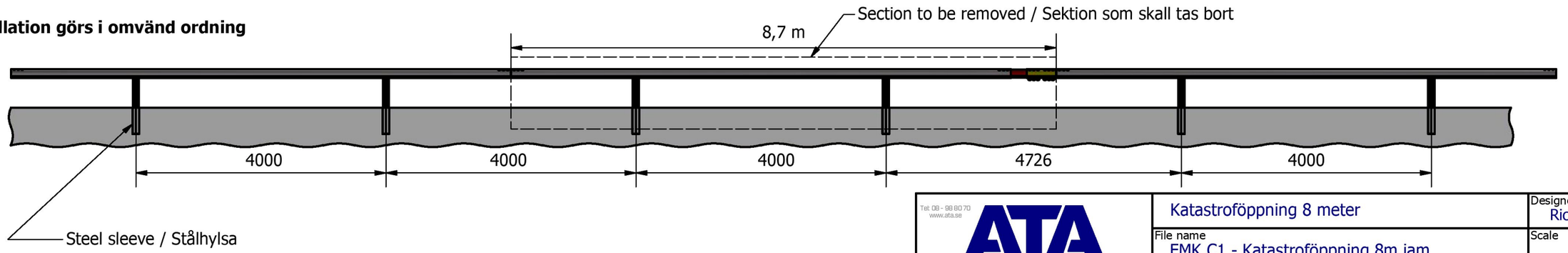


Step 6
Lift up and remove the posts (2x)
Steg 6
Lyft upp och ta bort lösa stolpar (2x)



Reinstallation is done in reverse order

Återinstallation görs i omvänd ordning



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Katastroföppning 8 meter		Designed by: Rickard Ekdahl
File name: FMK C1 - Katastroföppning 8m.iam		Scale: 1 : 70
		Date: 2018-10-04
Part of: ATA Infra, FMK-C1	Rev: 2018:01	Sheet No: 1 /1

Dismantling of FMK-C1 VRS 16 m /
Demontering av FMK-C1 16 m

Step 1 (Fig 1)
Remove the locking rings (12x) and the bolts
Steg 1 (Fig 1)
Ta bort låsringarna (12x) och bultarna

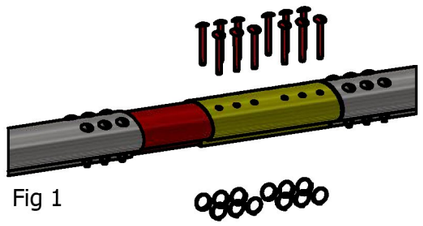


Fig 1

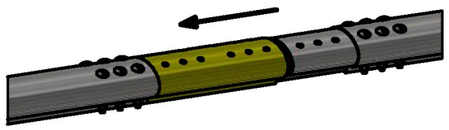


Fig 2

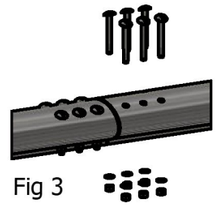


Fig 3

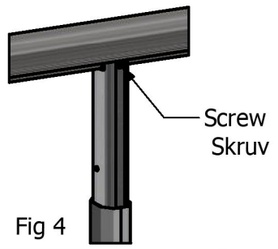


Fig 4

Step 2 (Fig 2)
Push the locking sleeve (yellow) as shown
Steg 2 (Fig 2)
Skjut låshylsan (gul) enligt skiss

Step 3 (Fig 3)
Unscrew and remove bolts and nuts (6x / beam) at the beams that will be removed. Use a 24 mm wrench
Steg 3 (Fig 3)
Lossa och ta bort bultar och muttrar (6X / navföljare) på navföljarna som skall demonteras. Använd en 24 mm fast nyckel

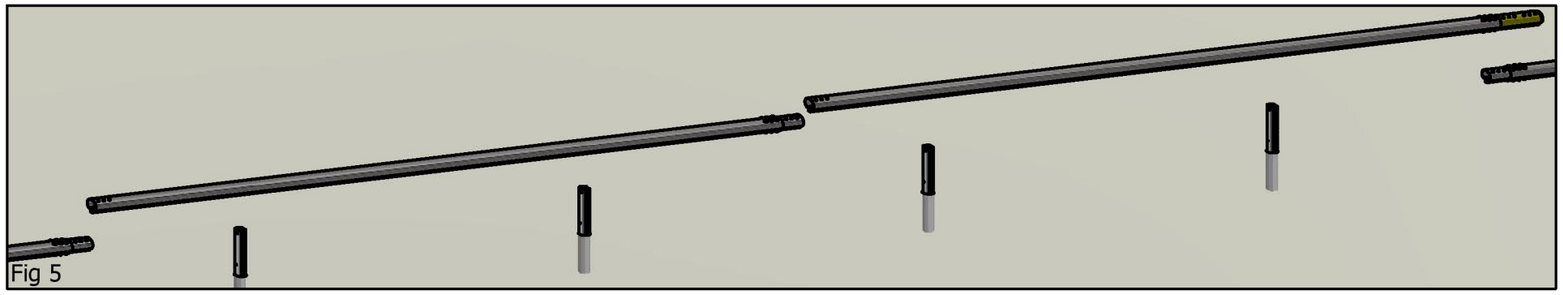
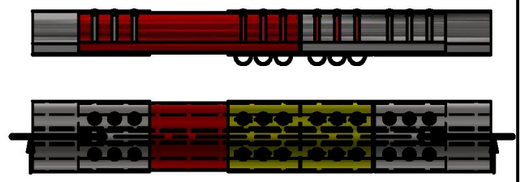


Fig 5

Step 4 (Fig 4)
Unscrew the Hex socket screw (2x each post) to release the beam from the posts (4x). Use a 10 mm hex key
Steg 4 (Fig 4)
Lossa insex-skruvarna på stolparna (2x per stolpe) för att frigöra navföljaren från stolparna (4x). Använd 10 mm insexnycke

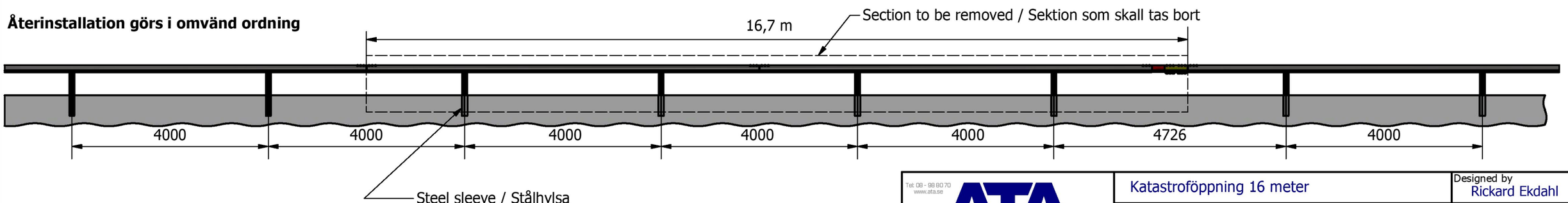


Step 5 (Fig 5)
Pull the beam at the end with the locking sleeve and the pull out the beam
Steg 5 (Fig 5)
Lyft navföljare i änden med låshylsan och dra sedan för att lossa den.

Step 6
Lift up and remove the posts (4x)
Steg 6
Lyft upp och ta bort lösa stolpar (4x)

Reinstallation is done in reverse order

Återinstallation görs i omvänd ordning



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Katastroföppning 16 meter		Designed by: Rickard Ekdahl
File name: FMK C1 - Katastroföppning 16 m.iam		Scale: 1 : 80
		Date: 2018-10-05
Part of: ATA Infra, FMK-C1	Rev: 2018:01	Sheet No: 1 /1

Dismantling of FMK-C1 VRS 24 m /
Demontering av FMK-C1 24 m

Step 1 (Fig 1)
Remove the locking rings (12x) and the bolts
Steg 1 (Fig 1)
Ta bort låsringarna (12x) och bultarna

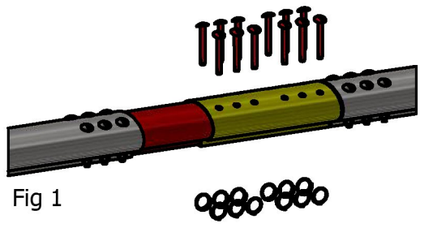


Fig 1

Step 2 (Fig 2)
Push the locking sleeve (yellow) as shown
Steg 2 (Fig 2)
Skjut låshylsan (gul) enligt skiss

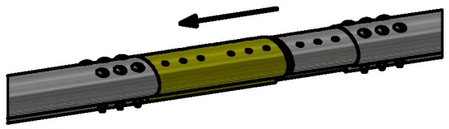


Fig 2

Step 3 (Fig 3)
Unscrew and remove bolts and nuts (6x / beam) at the beams that will be removed. Use a 24 mm wrench
Steg 3 (Fig 3)
Lossa och ta bort bultar och muttrar (6X / navföljare) på navföljarna som skall demonteras. Använd en 24 mm fast nyckel

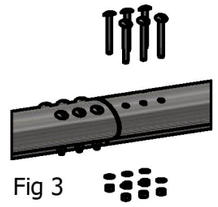


Fig 3

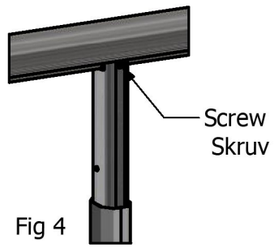


Fig 4

Step 4 (Fig 4)
Unscrew the Hex socket screw (2x each post) to release the beam from the posts (6x). Use a 10 mm hex key
Steg 4 (Fig 4)
Lossa insex-skruvarna på stolparna (2x per stolpe) för att frigöra navföljaren från stolparna (6x). Använd 10 mm insexnycke

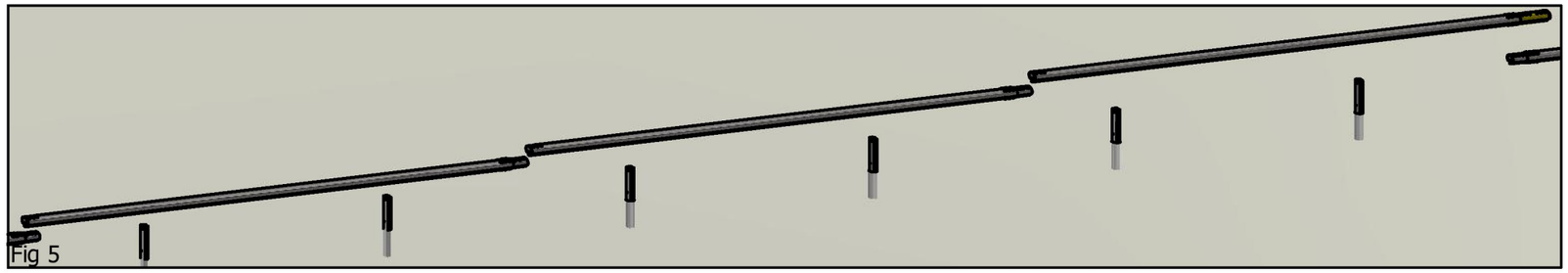
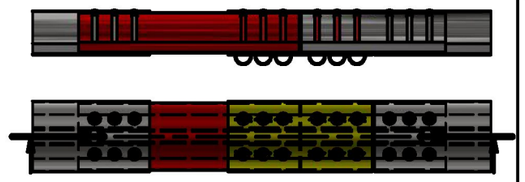
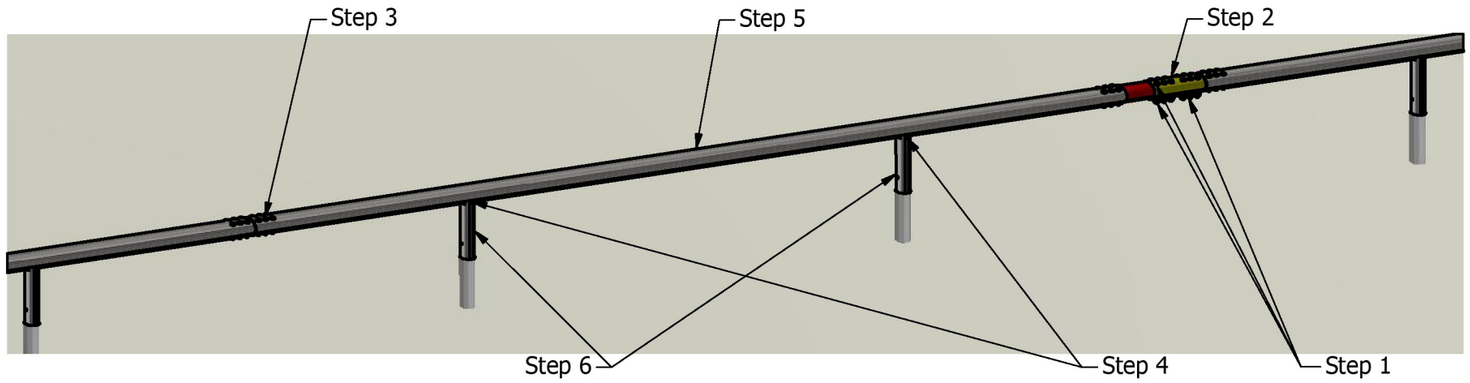


Fig 5

Step 5 (Fig 5)
Pull the beam at the end with the locking sleeve and the pull out the beam
Steg 5 (Fig 5)
Lyft navföljare i änden med låshylsan och dra sedan för att lossa den.

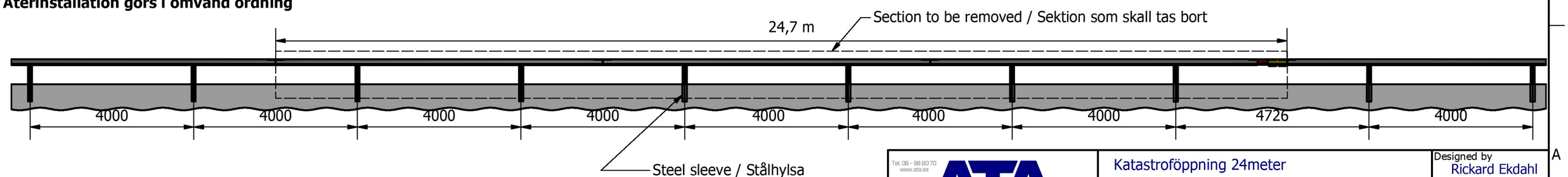
Step 6
Lift up and remove the posts (6x)
Steg 6
Lyft upp och ta bort lösa stolpar (6x)





Reinstallation is done in reverse order

Återinstallation görs i omvänd ordning



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	Date: 2018-10-05
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