

AAA10968

▽ ROUGH MACHINED

⊙ ROUGH CLEANED

▽▽ FINISH MACHINED

⊙⊙ BURRS REMOVED

▽▽▽ FINE FINISH VACUUM

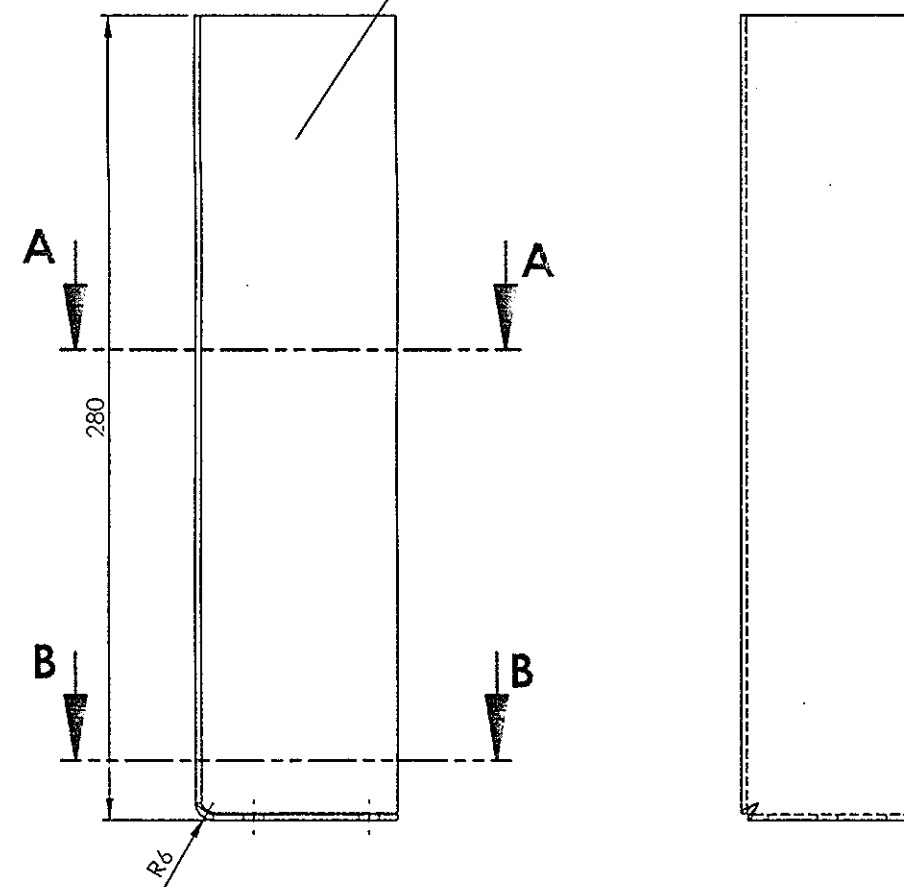
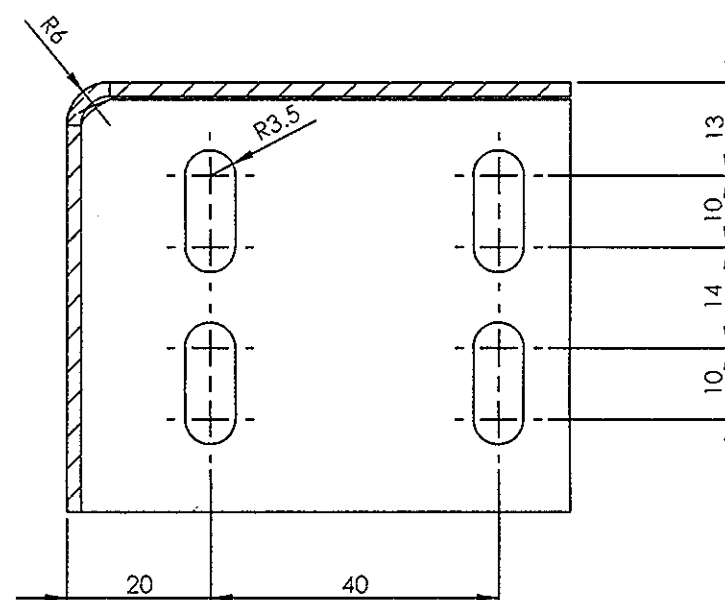
⊙⊙⊙ CHAMFERED

REVISIONS

ALT.

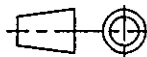
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DESCRIPTION

APPROVED &
DATESECTION A-A
SCALE 1 : 1SECTION B-B
SCALE 1 : 1

ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE SPECIFIED. FOR UNTOLERANCED DIMENSIONS AND ROUGHNESS VALUES, REFER DRAWING NO IC/STD 9 0 001.
ANY MANUAL ALTERATION SHALL AUTOMATICALLY RENDER THIS DRAWING INVALID. WELDING SYMBOLS ARE AS PER IS: 813:1986.

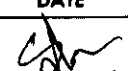
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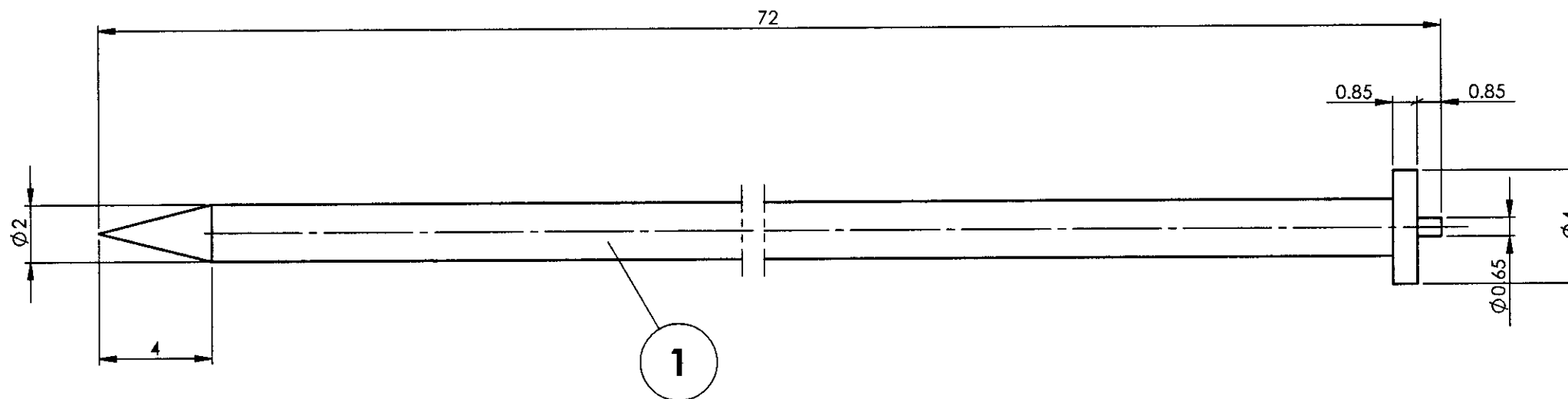
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QTY.	DESCRIPTION	DIMENSIONS	ITEM NO.	REF. DRGS	MATL.SPEC.	WT/UNIT IN KGS	REMARKS
GROUP: 1-0		SURFACE AREA IN Sq.m.:0.079			WT/ASSY IN Kgs:0.615		
BRACKET					SCALE	SSE/D	L. Panduranga Rao
					1:2.5	CHD	
					ALT.	ALTD	
						DRN	L.PANDURANGA RAO
INDIAN RAILWAY STANDARDS INTEGRAL COACH FACTORY, CHENNAI - 600038				SHEET 1 OF 1			
					AAA10968		A3

	10-04-2013	10/4/13
DATE OF LATEST ALT.	DATE OF FIRST ISSUE	AME/SME

AAA16493

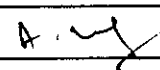
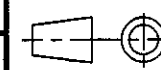
▽ ROUGH MACHINED	① ROUGH CLEANED
▽▽ FINISH MACHINED	② BURRS REMOVED
▽▽▽ FINE FINISH MACHINED	③ CHAMFERED

REVISIONS			
ALT.	ZONE	DESCRIPTION	APPROVED & DATE
a		DRAWING REVISED.	




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ANY MANUAL ALTERATION SHALL AUTOMATICALLY RENDER THIS DRAWING INVALID. WELDING SYMBOLS ARE AS PER EN ISO 2553.
WEIGHT GIVEN IN DRAWING IS FOR INDICATIVE PURPOSE ONLY

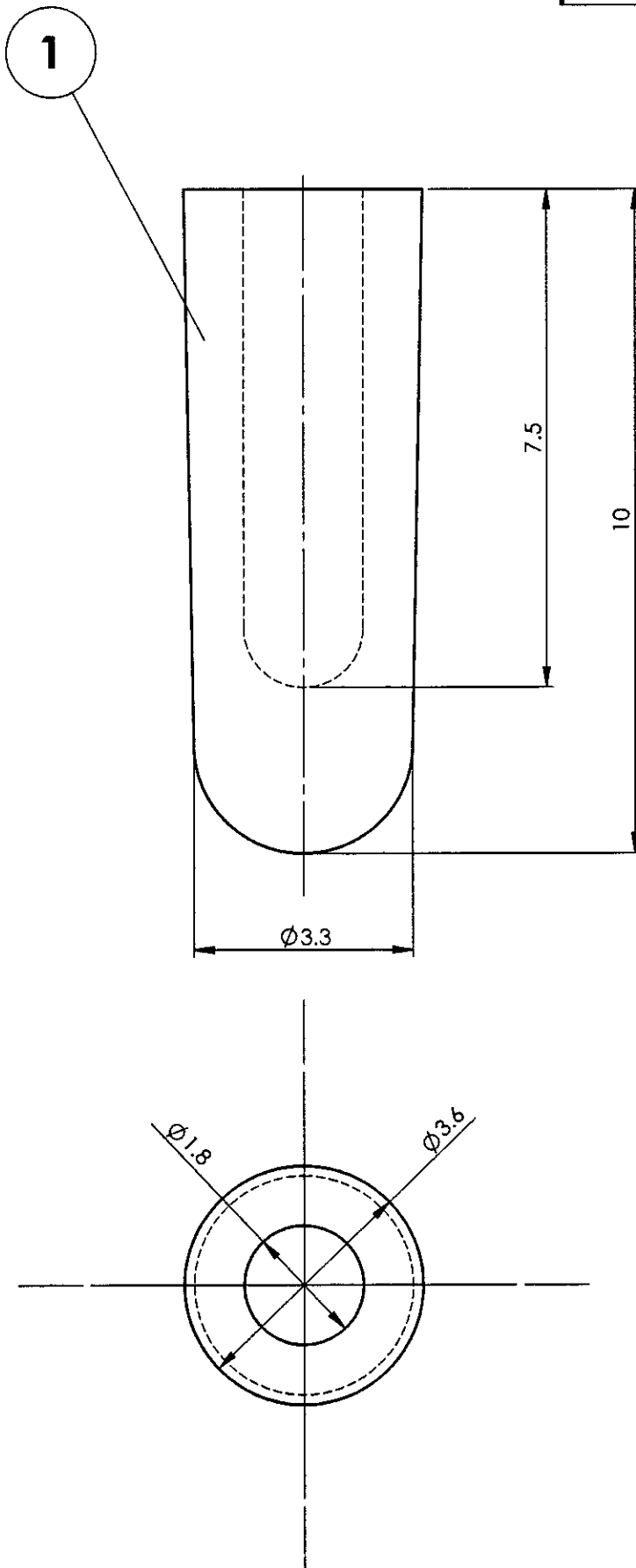
REF.DRG.NO.mi001576, ITEM-1

1	WELDING PIN	Ø 4 x 72	1		IS:6528 X04Cr18Ni10	0.002	
Default	DESCRIPTION	DIMENSIONS	ITEM NO.	REF. DRGS	MATL.SPEC.	WT/UNIT IN KGS	REMARKS
GROUP: 1-6 ROOF CONSTRUCTION		SURFACE AREA IN Sq.m.: 0.000			WT/ASSY IN Kgs:		
WELDING PIN					SCALE	SSE/D	
					5:1	CHD	
					ALT. a	ALTD	A.Palanichamy
						DRN	3D:A.Palanichamy 2D:P.Murugan
INDIAN RAILWAY STANDARDS							
INTEGRAL COACH FACTORY, CHENNAI - 600038				SHEET 1 OF 1	AAA16493		A3


AAA16494

▽ ROUGH MACHINED	① ROUGH CLEANED
▽▽ FINISH MACHINED	①b BURRS REMOVED
▽▽▽ FINE FINISH MACHINED	①8 CHAMFERED

REVISIONS				APPROVED & DATE
ALT.	ZONE	DESCRIPTION		
a		DRAWING REVISED.		



1	CAP	Ø3.6x10	1		IS:5831	0.000	
Default	DESCRIPTION	DIMENSIONS	ITEM NO.	REF. DRGS	MATL.SPEC.	WT/UNIT IN KGS	REMARKS
GROUP: 1-6 ROOF CONSTRUCTION		SURFACE AREA IN Sq.m.:0.000			WT/ASSY IN Kgs:		
CAP					SCALE	SSE/D	
					10:1	CHD	
					ALT.	ALTD	A.Palanichamy
					a	DRN	3D:A.Palanichamy 2D:P.Murugan
INDIAN RAILWAY STANDARDS INTEGRAL COACH FACTORY, CHENNAI - 600036							
					SHEET 1 OF 1	AAA16494	
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06-02-2024	19-07-2013	
DATE OF LATEST ALT.	DATE OF FIRST ISSUE	AME/SME


REF.DRG.NO.mi001576, ITEM-2

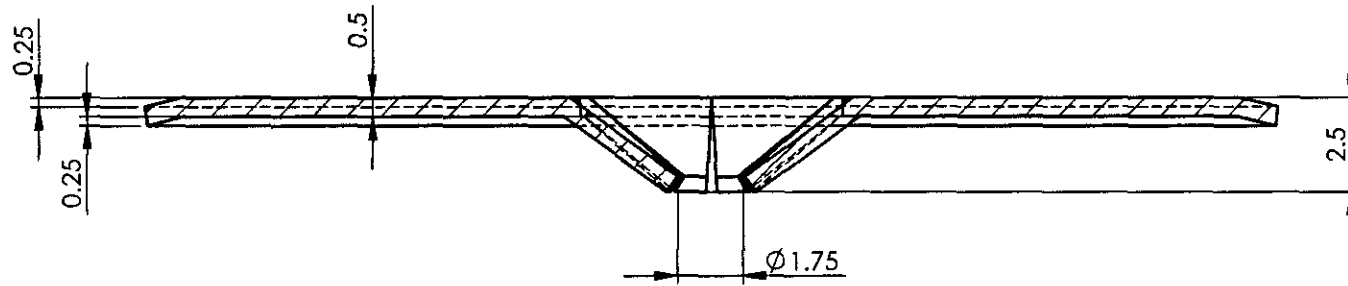
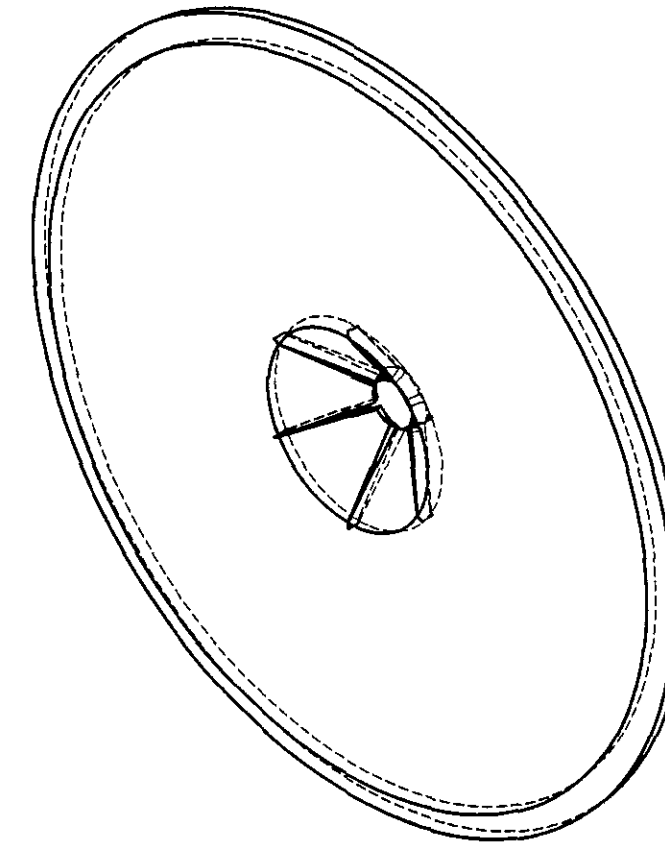
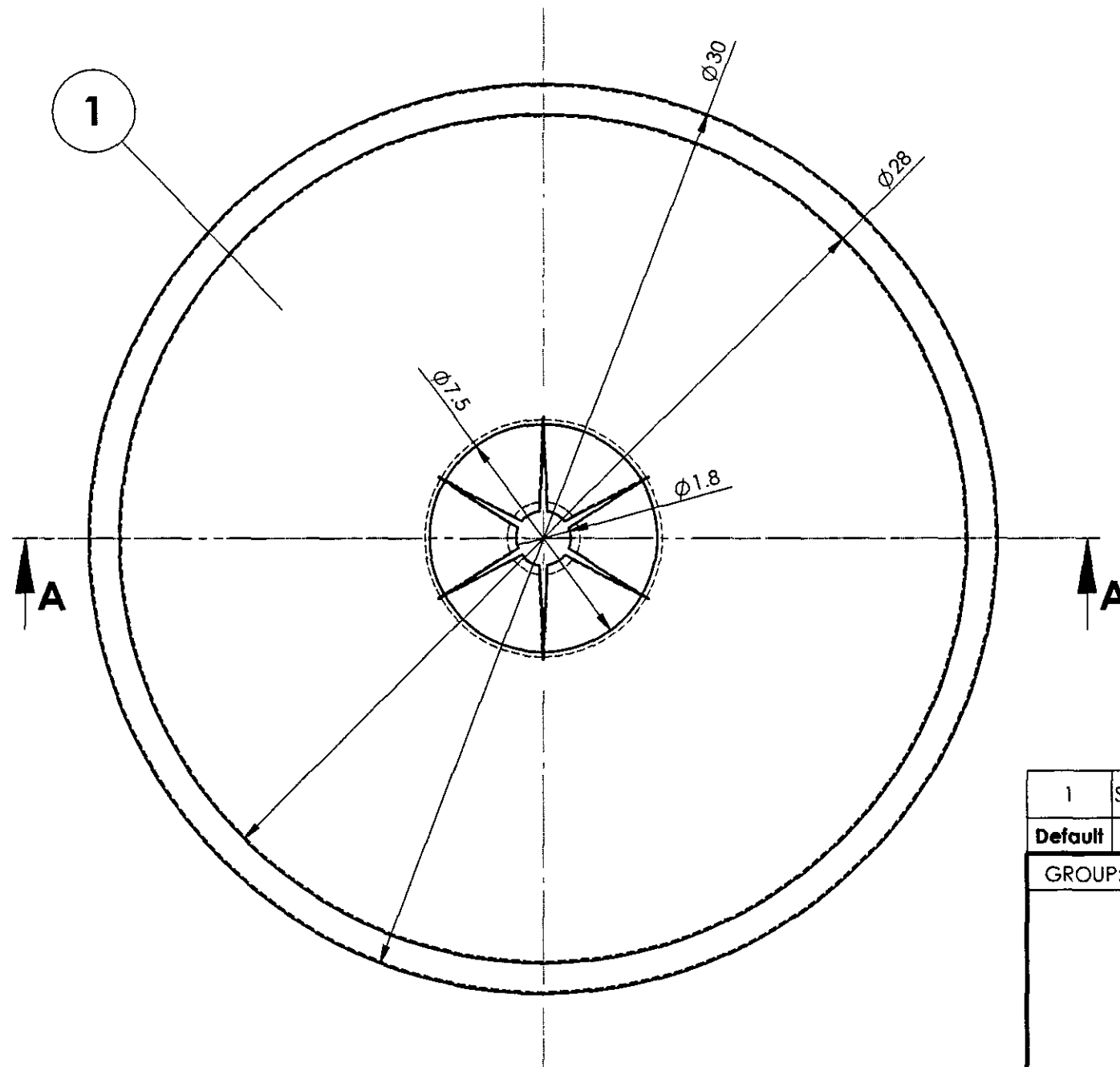
ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE SPECIFIED. FOR UNTOLERANCED DIMENSIONS AND ROUGHNESS VALUES, REFER DRAWING NO ICF/STD-9-0-001. ANY MANUAL ALTERATION SHALL AUTOMATICALLY RENDER THIS DRAWING INVALID. WELDING SYMBOLS ARE AS PER EN ISO 2553. WEIGHT GIVEN IN DRAWING IS FOR INDICATIVE PURPOSE ONLY

AAA16495

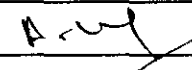
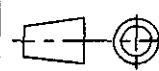
▽ ROUGH MACHINED	① ROUGH CLEANED
▽▽ FINISH MACHINED	①b BURRS REMOVED
▽▽▽ FINE FINISH MACHINED	①B CHAMFERED

REVISIONS

ALT.	ZONE	DESCRIPTION	APPROVED & DATE
a		DRAWING REVISED.	


SECTION A-A
SCALE 5 : 1

ISOMETRIC VIEW

1	SERRATED SPRING WASHER	DIA 30 x 0.5 THICK	1		IS:4072 Gr.65C6	0.003	COATING TO MDT5057
Default	DESCRIPTION	DIMENSIONS	ITEM NO	REF. DRGS	MATL.SPEC.	WT/UNIT IN KGS	REMARKS
GROUP: 1-6 ROOF CONSTRUCTION				SURFACE AREA IN Sq.m.:0.001		WT/ASSY IN Kgs:	
SERRATED SPRING WASHER					SCALE 2:1	SSE/D CHD	
					ALT. a	ALTD DRN	A.Palanichamy
							3D:A.Palanichamy 2D:P.Murugan
							
INDIAN RAILWAY STANDARDS				SHEET 1 OF 1		AAA16495	
INTEGRAL COACH FACTORY, CHENNAI - 600038						A3	

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WEIGHT GIVEN IN DRAWING IS FOR INDICATIVE PURPOSE ONLY

REF.DRG.NO.mi001576, ITEM-3

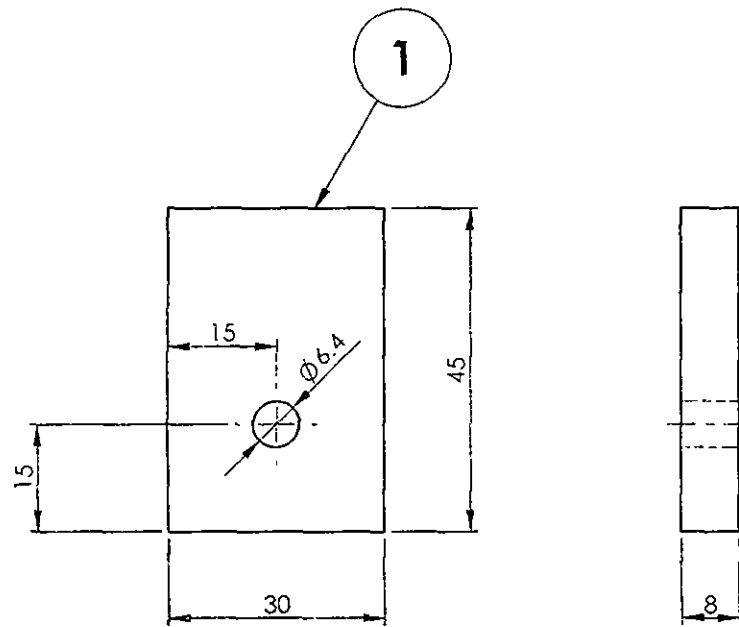
06-02-2024	19-07-2013	
DATE OF LATEST ALT.	DATE OF FIRST ISSUE	AME/SME

AAA16900

▽ ROUGH MACHINED	① ROUGH CLEANED
▽▽ FINISH MACHINED	② BURRS REMOVED
▽▽▽ FINE FINISH MACHINED	③ CHAMFERED

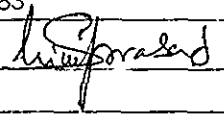
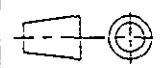
REVISIONS

ALT.	ZONE	DESCRIPTION	APPROVED & DATE
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ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE SPECIFIED. FOR UNTOLERANCED DIMENSIONS ADD TOLERANCES AS VALUES. REFER DRAWING NO IC/STD 9 0 001.
ANY MANUAL ALTERATION SHALL AUTOMATICALLY RENDER THIS DRAWING INVALID. WELDING SYMBOLS ARE AS PER IS: 813-1986.

REF.DRG.NO.4.10113.0.20.095.138

—	GROUNDING FLAP	8 x 30 x 45	1		RDSO/SPEC C- K201 X5 Cr Ni 18 10	0.084			
QTY.	DESCRIPTION	DIMENSIONS	ITEM NO.	REF. DRGS	MATL.SPEC.	WT/UNIT IN KGS	REMARKS		
GROUP: 1-6 ROOF ASSEMBLY		SURFACE AREA IN Sq.m.:0.004			WT/ASSY IN Kgs:0.083				
GROUNDING FLAP					SCALE	SSE/D			
					1:1	CHD			
					ALT.	ALTD			
						DRN	K.Sriram		
					INDIAN RAILWAY STANDARDS			SHEET 1 OF 1	
INTEGRAL COACH FACTORY, CHENNAI - 600038			AAA16900			A3			

AAA16926

▽ ROUGH MACHINED

⑦ ROUGH CLEANED

▽▽ FINISH MACHINED

⑧ BURRS REMOVED

▽▽▽ FINISH VACUUMED

⑧ CHAMFERED

REVISIONS

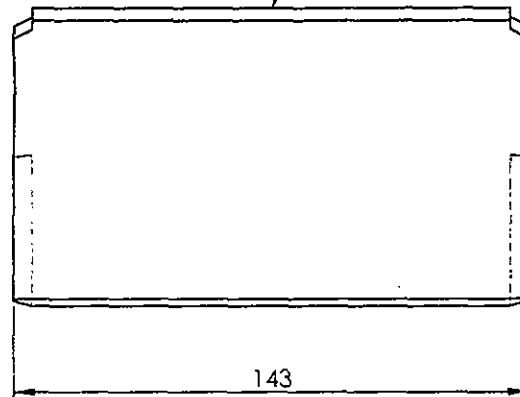
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ZONE

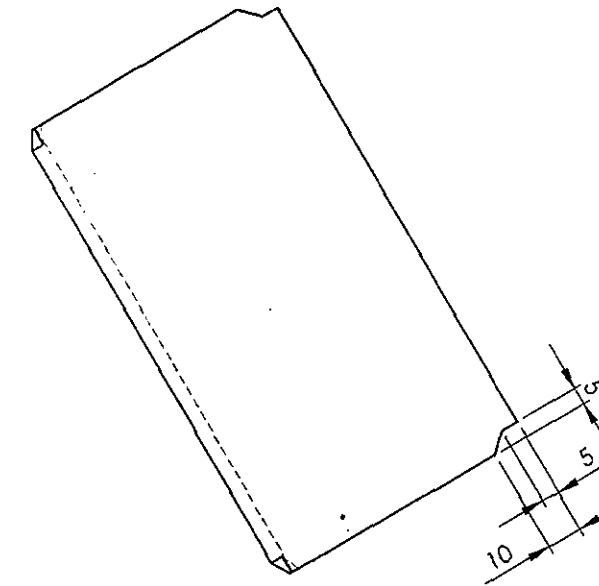
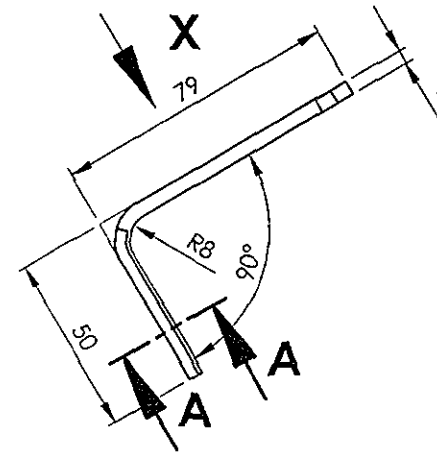
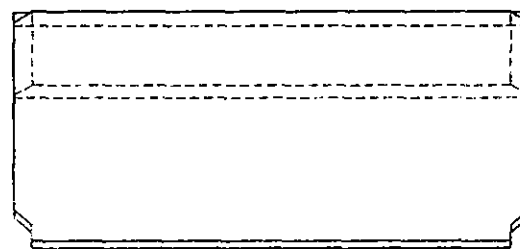
DESCRIPTION

APPROVED &
DATE

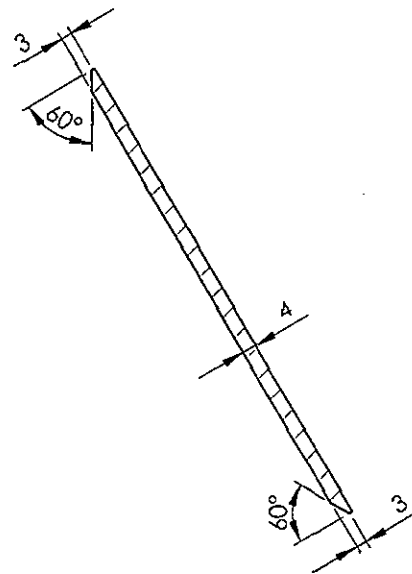
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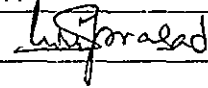
143



VIEW X



SECTION A-A

1	STIFFENING ANGLE	4 x 121 x 143	1		RDSO/SPEC C-K201 X2CrNi12	0.544	
QTY.	DESCRIPTION	DIMENSIONS	ITEM NO.	REF. DRGS	MATL.SPEC.	WT/UNIT IN KGS	REMARKS
GROUP: 1-6 ROOF ASSEMBLY		SURFACE AREA IN Sq.m.:0.036			WT/ASSY IN Kgs:0.544		
STIFFENING ANGLE					SCALE	SSE/D	<i>Signature</i>
					1:2	CHD	
					ALT.	ALTD	K.Srirom
						DRN	
INDIAN RAILWAY STANDARDS INTEGRAL COACH FACTORY, CHENNAI - 600038				SHEET 1 OF 1			
					AAA16926		
					A3		

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REF.DRG.NO.3 10113.0.20.200.123

21-03-2013

DATE OF LATEST ALT.

DATE OF FIRST ISSUE

AME/SME

1		2		3		4		5		6		7		8									
AAA16929				▽ ROUGH MACHINED		② ROUGH CLEANED		REVISIONS															
				▽▽ FINISH MACHINED		③ BURRS REMOVED		ALT.				ZONE				DESCRIPTION				APPROVED & DATE			
				▽▽▽ - AS - VAC - NEJ		④ CHAMFERED																	

1	RIB	4 x 33.5 x 70.5	1	RDSO/SPEC C- K201 X2 Cr Ni 12	0.043	
QTY.	DESCRIPTION	DIMENSIONS	ITEM NO.	REF. DRGS	MATL.SPEC.	WT/UNIT IN KGS
GROUP: 1-6 ROOF ASSEMBLY		SURFACE AREA IN Sq.m.:0.003		WT/ASSY IN Kgs:0.043		
RIB				SCALE	SSE/D	
				1:1	CHD	
				ALT.	ALTD	
					DRN	
INDIAN RAILWAY STANDARDS				SHEET 1 OF 1		
INTEGRAL COACH FACTORY, CHENNAI - 600038						
DATE OF LATEST ALT.		DATE OF FIRST ISSUE		AME/SME		
		21-03-2013				

REF.DRG.NO.4 10113.0.20.200.138

AAA16929

A3

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2

3

4

5

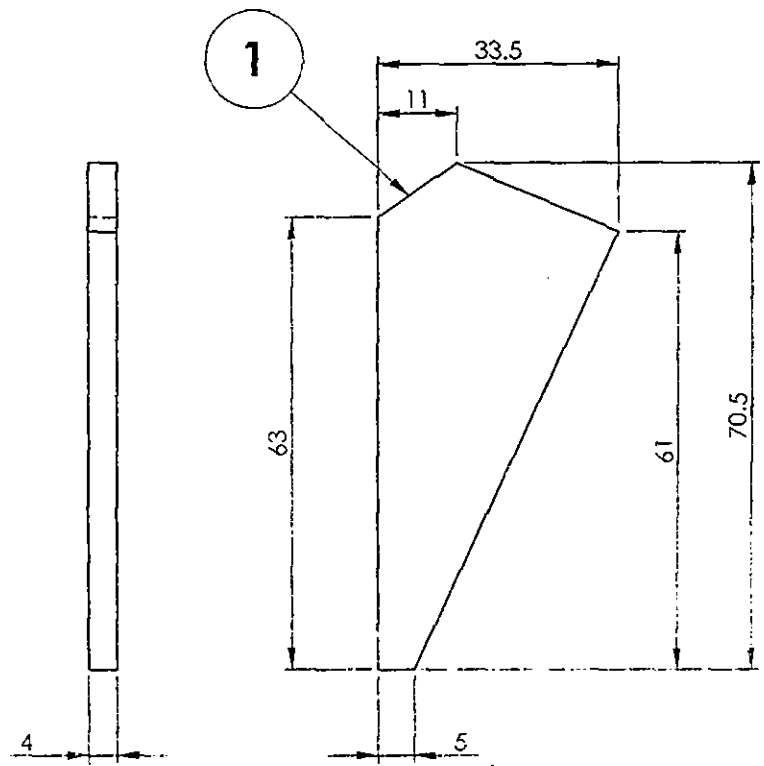
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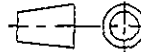
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8

▽ ROUGH MACHINED	② ROUGH CLEANED
▽▽ FINISH MACHINED	③ BURRS REMOVED
▽▽▽ H-S-VAC-NEO	⑤ CHAMFERED

REVISIONS			
ALT.	ZONE	DESCRIPTION	APPROVED & DATE

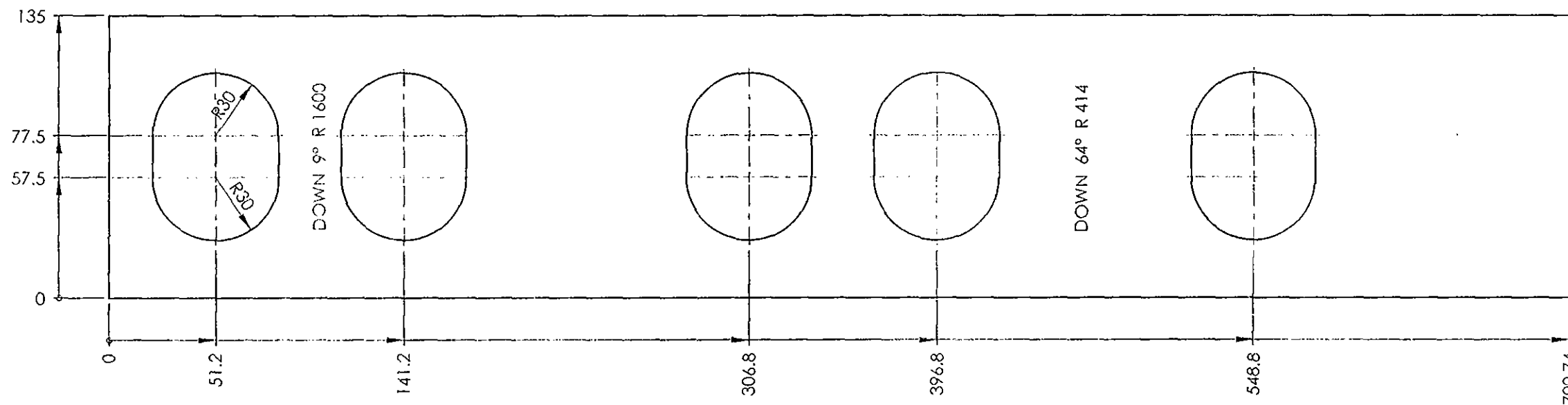
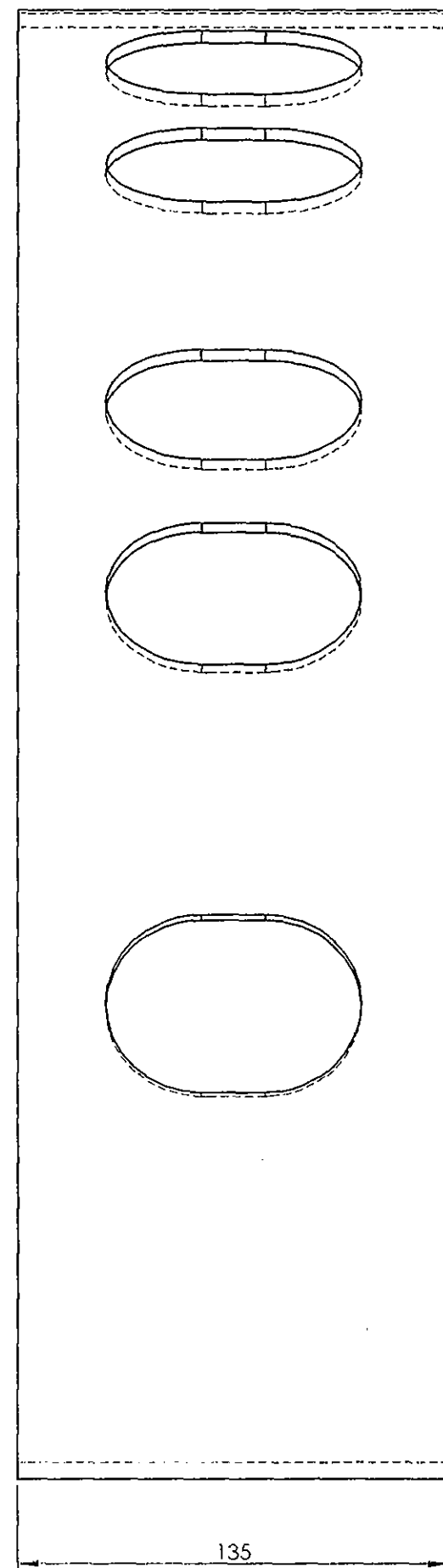
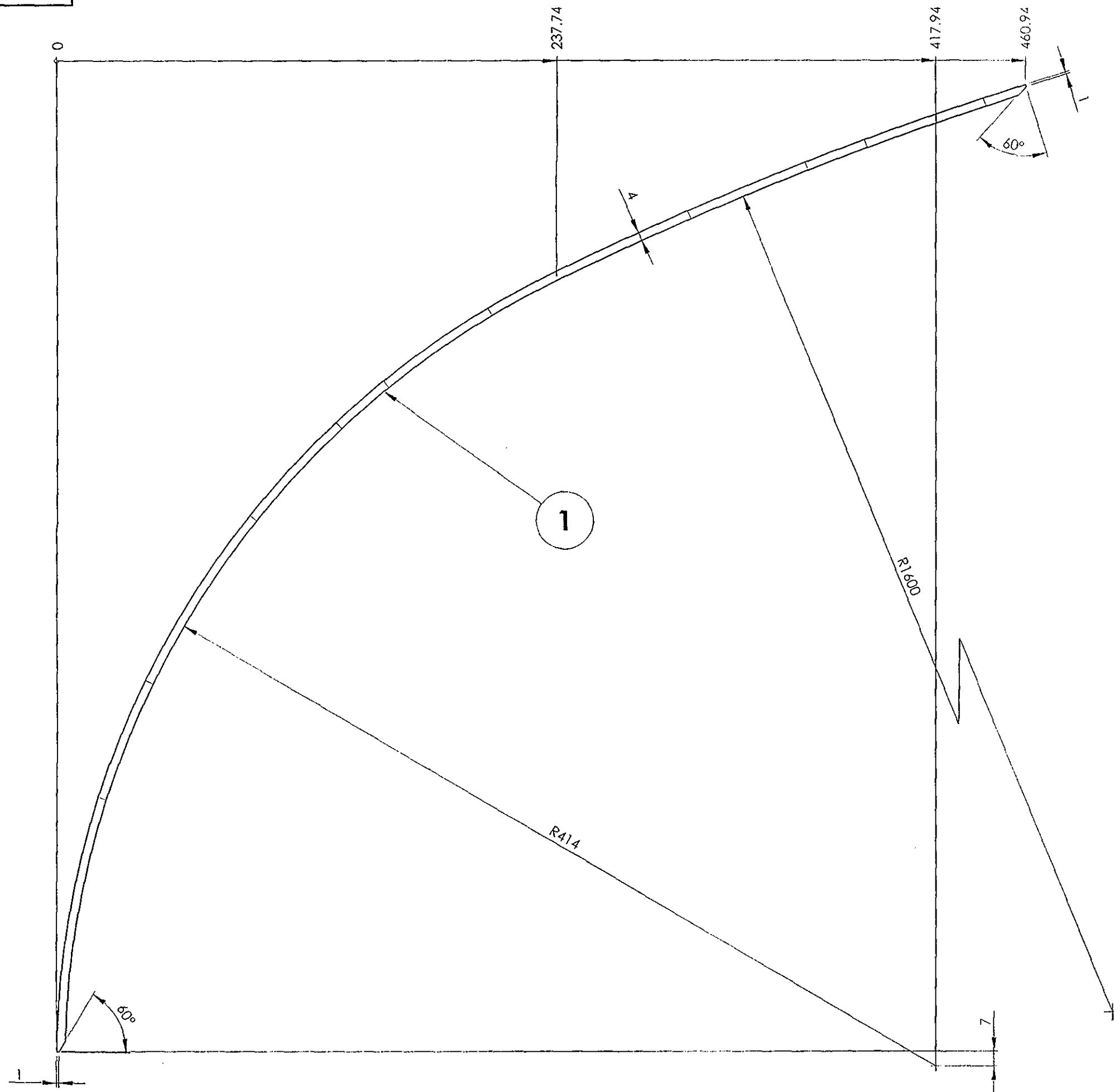


1	RIB	4 x 33.5 x 70.5	1		RDSO/SPEC C- K201 X2 Cr Ni 12	0.043	
QTY.	DESCRIPTION	DIMENSIONS	ITEM NO.	REF. DRGS	MATL.SPEC.	WT/UNIT IN KGS	REMARKS
GROUP: 1-6 ROOF ASSEMBLY		SURFACE AREA IN Sq.m.:0.003			WT/ASSY IN Kgs:0.043		
RIB					SCALE 1:1	SSE/D	<i>W. Srinivasan</i>
						CHD	
					ALT.	ALTD	
						DRN	K.Sriram
INDIAN RAILWAY STANDARDS INTEGRAL COACH FACTORY, CHENNAI - 600038				SHEET 1 OF 1			
					AAA16929		A3

AAA16932

▽ ROUGH MACHINED	① ROUGH CLEANED
▽▽ FINISH MACHINED	② BURRS REMOVED
▽▽▽ FINE FINISH MACHINED	③ CHAMFERED

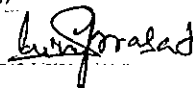
REVISIONS			APPROVED & DATE
ALT.	ZONE	DESCRIPTION	



DEVELOPMENT VIEW

REF.DRG.NO.3 10113.0.20.210.117

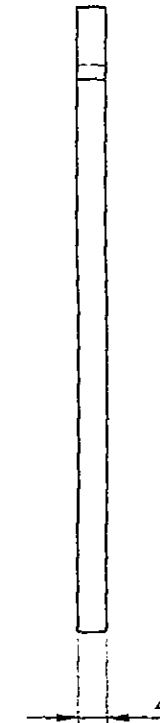
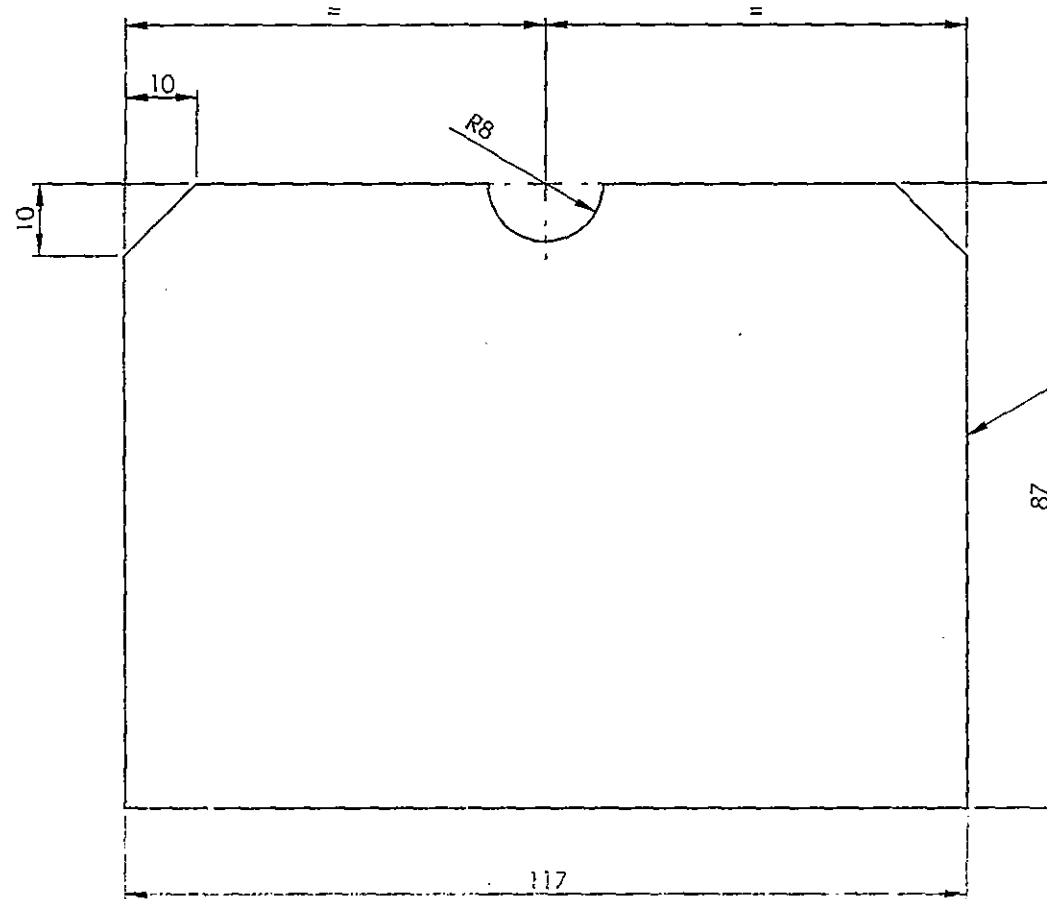
DATE OF LATEST ALT.	21-03-2013	AME/SME
DATE OF FIRST ISSUE		

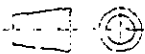
1	FLANGE	4 x 135 x 701	1	REF. DRGS	INDCO/SPEC C 1-01 X2CIN12	2.367	RE MARKS	
QTY.	DESCRIPTION	DIMENSIONS	ITEM NO.		MATL.SPEC.	WT/UNIT IN KGS		
GROUP: 1-6 ROOF ASSEMBLY		SURFACE AREA IN Sq.m: 0.160			WT/ASSY IN Kgs: 2.367			
FLANGE					SCALE 1:2	SSE/D CHD		
					ALT	ALTD		
						DRN	K.Sriram	
					INDIAN RAILWAY STANDARDS INTEGRAL COACH FACTORY, CHENNAI - 600038			

AAA16933

▽ ROUGH MACHINED	⊖ ROUGH CLEANED
▽▽ FINISH MACHINED	⊖⊖ BURRS REMOVED
▽▽▽ FINE FINISH MACHINED	⊖⊖⊖ CHAMFERED

REVISIONS			
ALT.	ZONE	DESCRIPTION	APPROVED & DATE



1	WEB	4 x 87 x 117	1		RDSO/SPEC C- K201 X2CrNi12	0.319	
QTY.	DESCRIPTION	DIMENSIONS	ITEM NO.	REF. DRGS	MATL.SPEC.	WT/UNIT IN KGS	REMARKS
GROUP: 1-6 ROOF ASSEMBLY		SURFACE AREA IN Sq.m.:0.022			WT/ASSY IN Kgs:0.319		
WEB					SCALE	SSE/D	K. Srirom
					1:1	CHD	
					ALT.	ALTD	
						DRN	K.Srirom
INDIAN RAILWAY STANDARDS INTEGRAL COACH FACTORY, CHENNAI - 600038							
					SHEET 1 OF 1		AAA16933

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REF.DRG.NO.3 10113.0.20.200.122

1	2	3	4	5	6	7	8	
AAA16934			▽ ROUGH MACHINED	⊙ ROUGH CLEANED	REVISIONS			
			▽▽ FINISH MACHINED	⊙⊙ BURRS REMOVED	ALT.	ZONE	DESCRIPTION	APPROVED & DATE
			▽▽▽ FINISH VACUUMED	⊙⊙⊙ CHAMFERED				

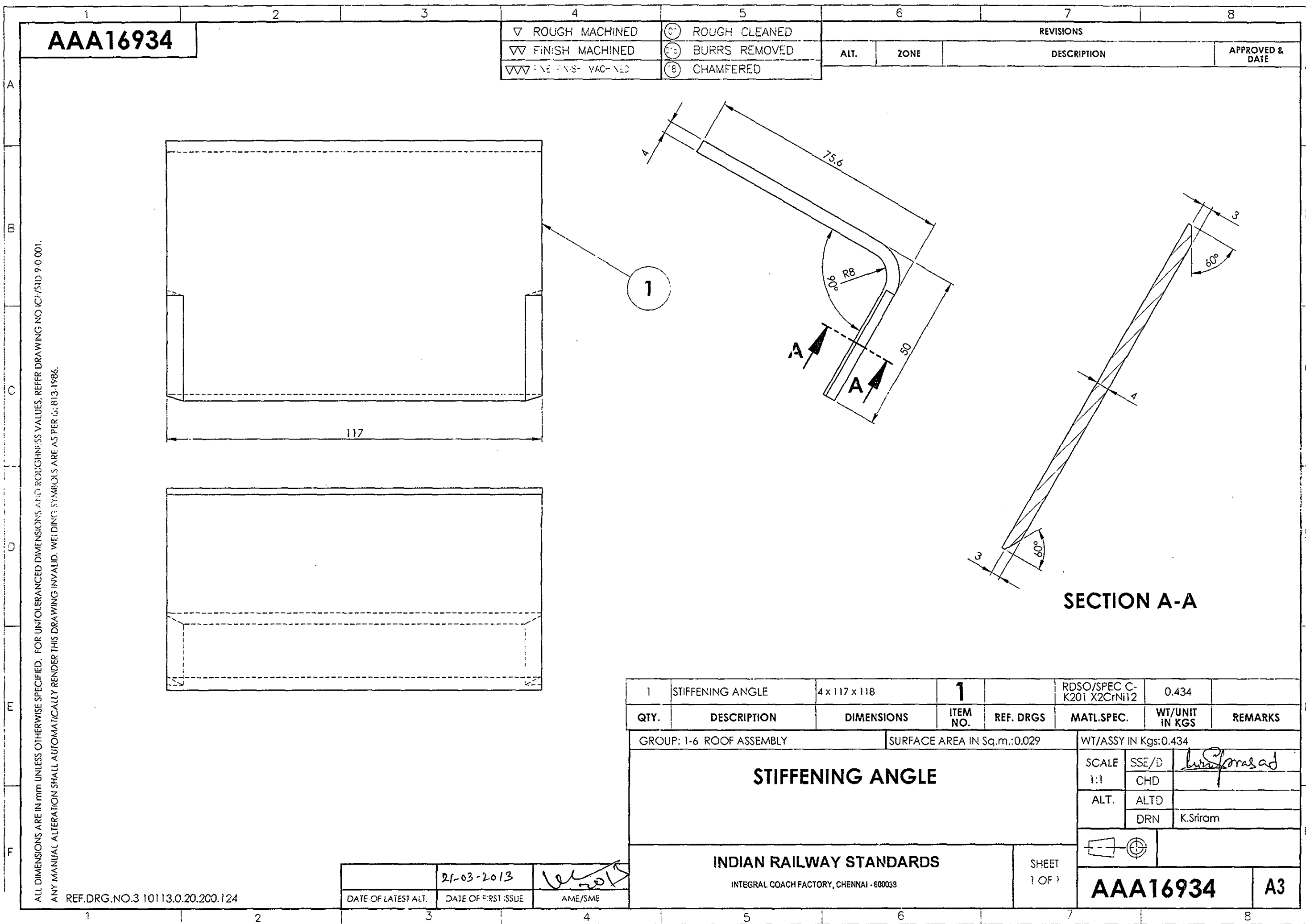
SECTION A-A

1	STIFFENING ANGLE	4 x 117 x 118	1	RDSO/SPEC C-K201 X2CrNi12	0.434	
QTY.	DESCRIPTION	DIMENSIONS	ITEM NO.	REF. DRGS	MATL.SPEC.	WT/UNIT IN KGS
GROUP: 1-6 ROOF ASSEMBLY		SURFACE AREA IN Sq.m.:0.029		WT/ASSY IN Kgs:0.434		
<h2>STIFFENING ANGLE</h2>				SCALE	SSE/D	
				1:1	CHD	
				ALT.	ALT.D	
				DRN	K.Sriram	
INDIAN RAILWAY STANDARDS INTEGRAL COACH FACTORY, CHENNAI - 600038				SHEET 1 OF 1		
DATE OF LATEST ALT.		DATE OF FIRST ISSUE		AME/SME		
		21-03-2013		21-03-2013		

REF.DRG.NO.3 10113.0.20.200.124

AAA16934

A3

[illegible]

1		2		3		4		5		6		7		8	
AAA16934				▽ ROUGH MACHINED		⊙ ROUGH CLEANED		REVISIONS							
				▽▽ FINISH MACHINED		⊙⊙ BURRS REMOVED		ALT.		ZONE		DESCRIPTION		APPROVED & DATE	
				▽▽▽ FINISH VACUUMED		⊙⊙⊙ CHAMFERED									

AAA16935

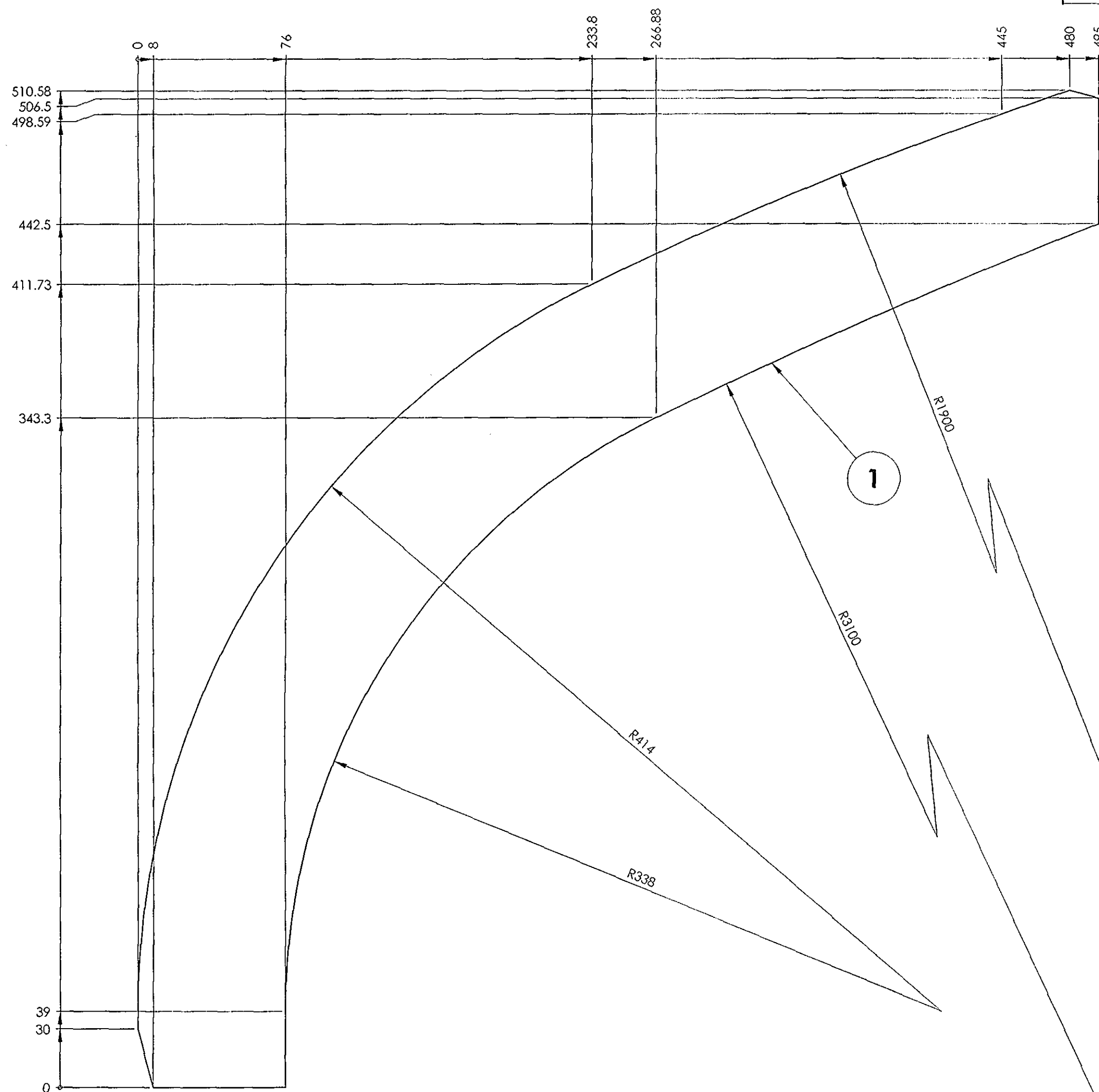
▽ ROUGH MACHINED	① ROUGH CLEANED
▽▽ FINISH MACHINED	② BURRS REMOVED
▽▽▽ FINE FINISH MACHINED	③ CHAMFERED

ALT.

ZONE

REVISIONS

DESCRIPTION

APPROVED &
DATE

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REF.DRG.NO.2 10113.0.20.210.104

DATE OF LATEST ALT.	21-03-2013	AME/SME
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1	ROOF ARCH	4 x 495 x 511	1	RDSO/SPEC C- K201 X2CrNi12	1.737		
QTY.	DESCRIPTION	DIMENSIONS	ITEM NO.	REF. DRGS	MATL.SPEC.	WT/UNIT IN KGS	REMARKS
GROUP: 1-6 ROOF ASSEMBLY		SURFACE AREA IN Sq.m.: 0.115		WT/ASSY IN Kgs: 1.737			
ROOF ARCH				SCALE 1:2	SSE/D CHD	<i>K. Sriram</i>	
				ALT	ALTD		
				DRN	K. Sriram		
INDIAN RAILWAY STANDARDS INTEGRAL COACH FACTORY, CHENNAI - 600038				SHEET 1 OF 1		AAA16935 A2	

AAA16937

▽ ROUGH MACHINED	⊖1 ROUGH CLEANED
▽▽ FINISH MACHINED	⊖1b BURRS REMOVED
▽▽▽ FINE FINISH MACHINED	⊖18 CHAMFERED

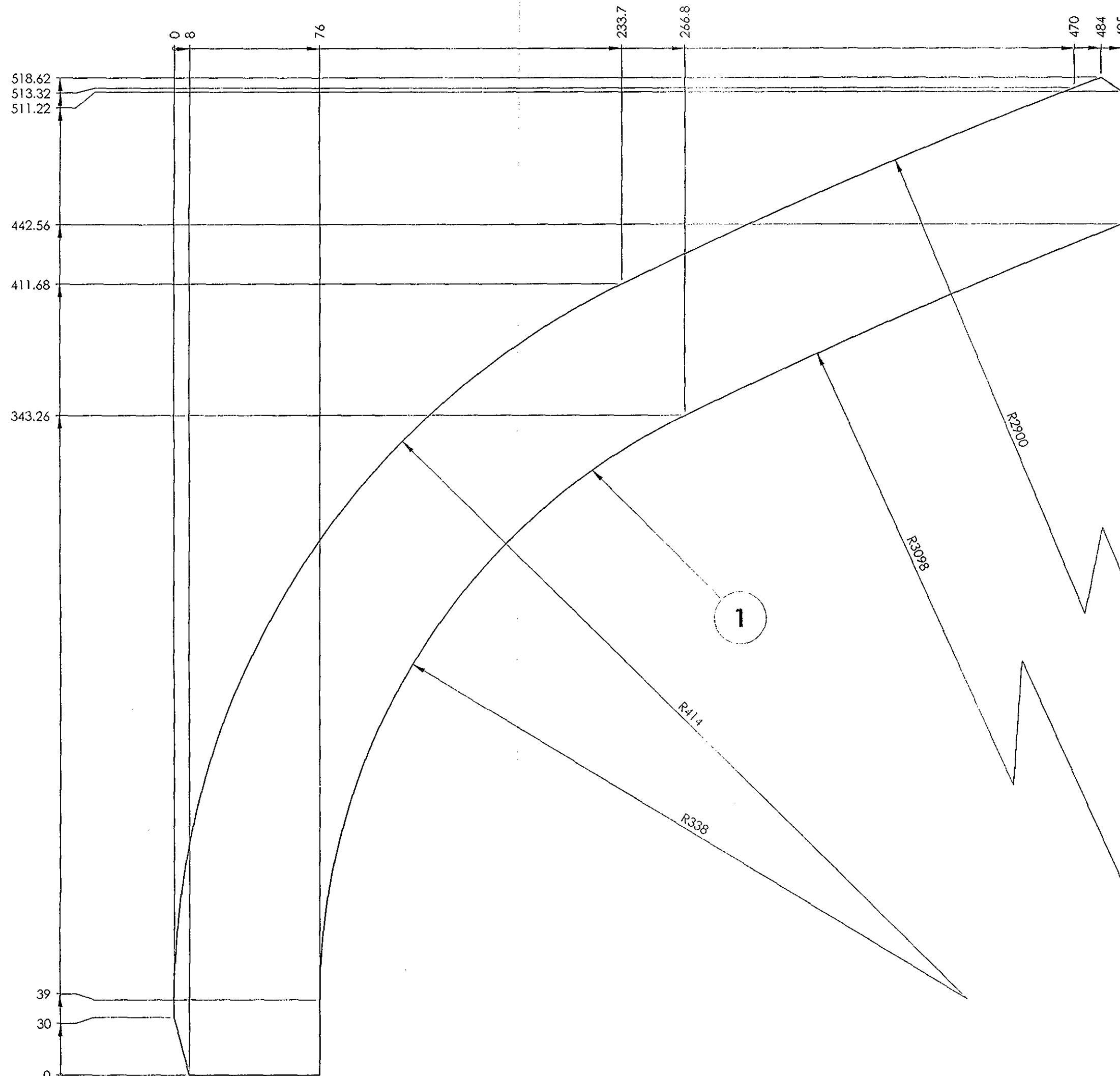
REVISIONS

ALT.

ZONE

DESCRIPTION

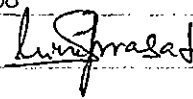
APPROVED &
DATE



ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE SPECIFIED. FOR UNTOLERANCED DIMENSIONS AND ROUGHNESS VALUES, REFER DRAWING NO IC/STD-9-0-001.
ANY MANUAL ALTERATION SHALL AUTOMATICALLY RENDER THIS DRAWING INVALID. WELDING SYMBOLS ARE AS PER IS:13-1986.

REF.DRG.NO.2 10113.0.20.210.105

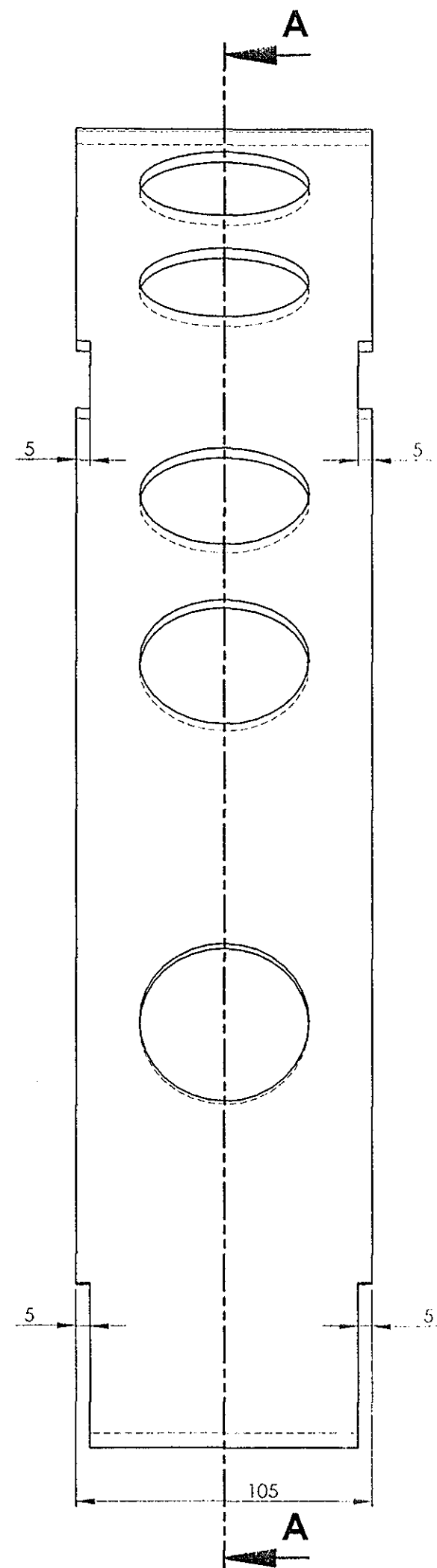
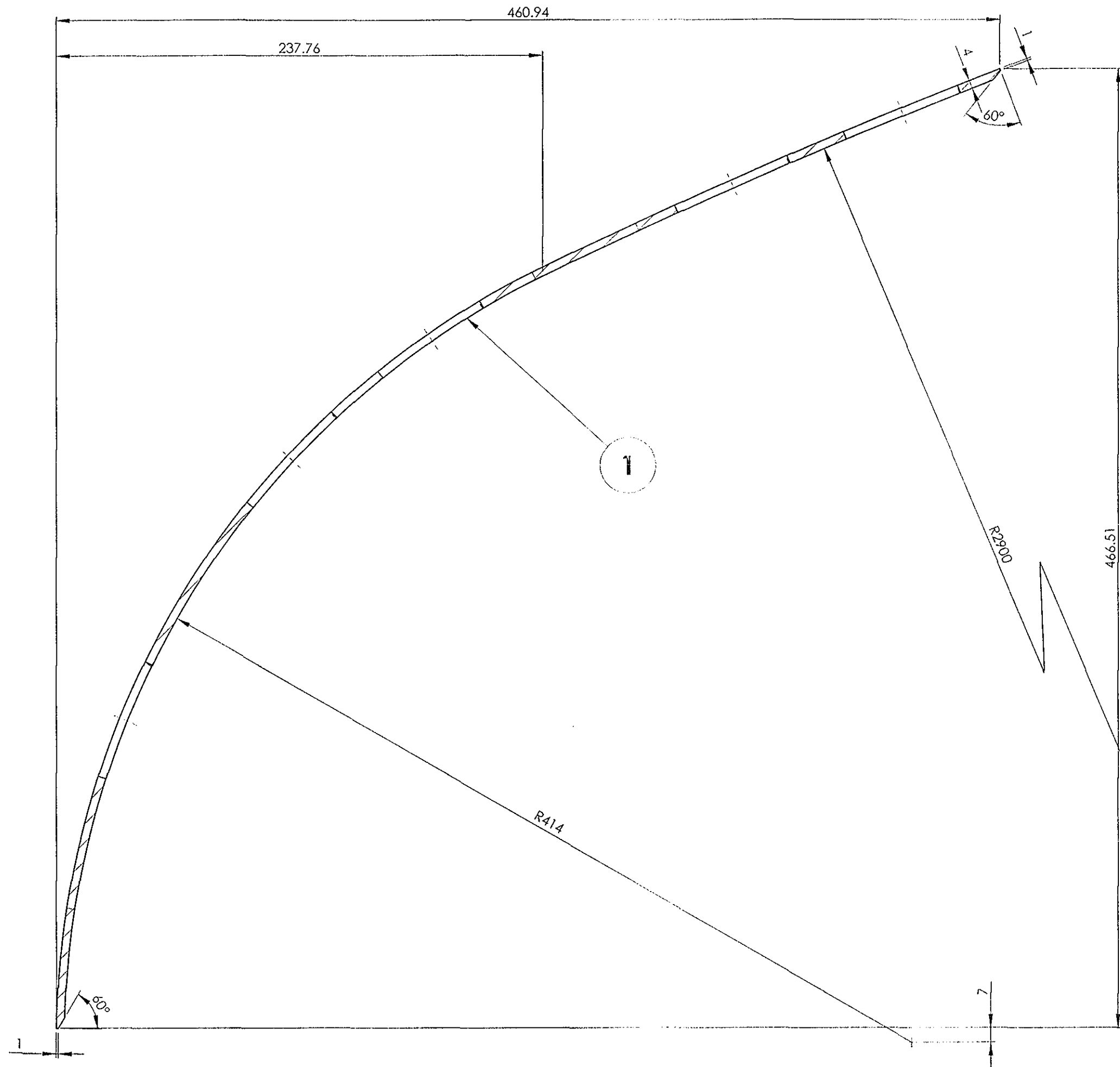
DATE OF LATEST ALL.	21-03-2013	AME/SME
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1	ROOF ARCH	4 x 495 x 519	1		RDSO/SPEC C- K201 X2CIN12	1.758	
QTY.	DESCRIPTION	DIMENSIONS	ITEM NO.	REF. DRGS	MATL.SPEC.	WT/UNIT IN KGS	REMARKS
GROUP: 1-6 ROOF ASSEMBLY		SURFACE AREA IN Sq.m.: 0.116			WT/ASSY IN Kgs: 1.758		
ROOF ARCH					SCALE 1:2	SSE/D CHD	
					ALT	ALTD	
						DRN	K.Sriram
					INDIAN RAILWAY STANDARDS INTEGRAL COACH FACTORY, CHENNAI - 600038		
SHEET 1 OF 1							
AAA16937		A2					

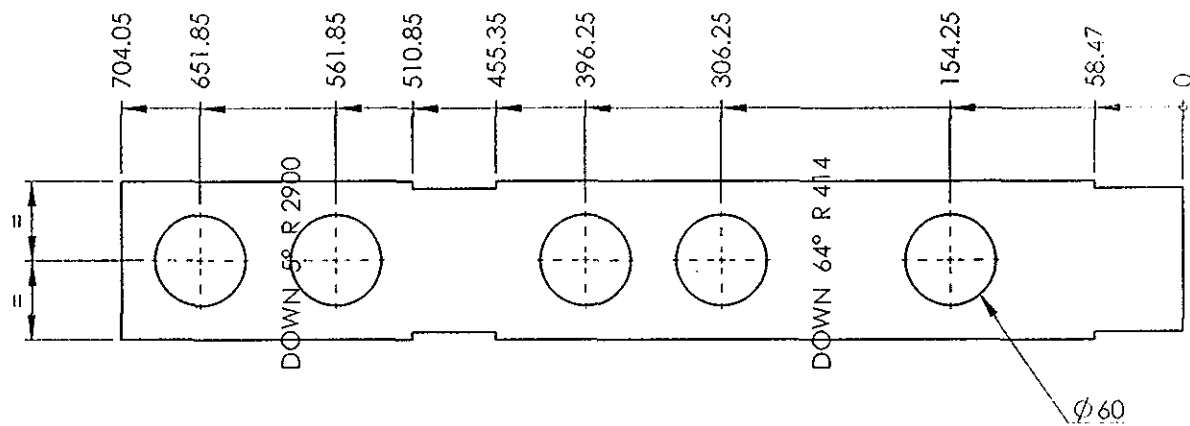
AAA16938

▽ ROUGH MACHINED	⑪ ROUGH CLEANED
▽▽ FINISH MACHINED	⑫ BURRS REMOVED
▽▽▽ FINE FINISH MACHINED	⑬ CHAMFERED

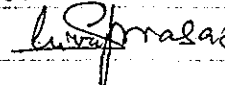
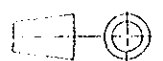
REVISIONS		APPROVED & DATE	
ALT.	ZONE	DESCRIPTION	



SECTION A-A



DEVELOPMENT VIEW

1	FLANGE	4 x 105 x 705	1		RDSO/SPEC C-K201 X2CrNi12	1.864	
QTY.	DESCRIPTION	DIMENSIONS	ITEM NO.	REF. DRGS	MATL.SPEC.	WT/UNIT IN KGS	REMARKS
GROUP: I-6 ROOF ASSEMBLY		SURFACE AREA IN Sq.m.: 0.127			WT/ASSY IN Kgs: 1.864		
FLANGE					SCALE 1:2	SSE/D	
						CHD	
					ALT	ALTD	
						DRN	K.Sriram
INDIAN RAILWAY STANDARDS INTEGRAL COACH FACTORY, CHENNAI - 600038				SHEET 1 OF 1			
					AAA16938		A2

DATE OF LATEST ALL.	21-03-2013	AME/SME
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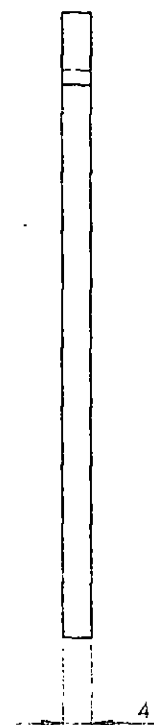
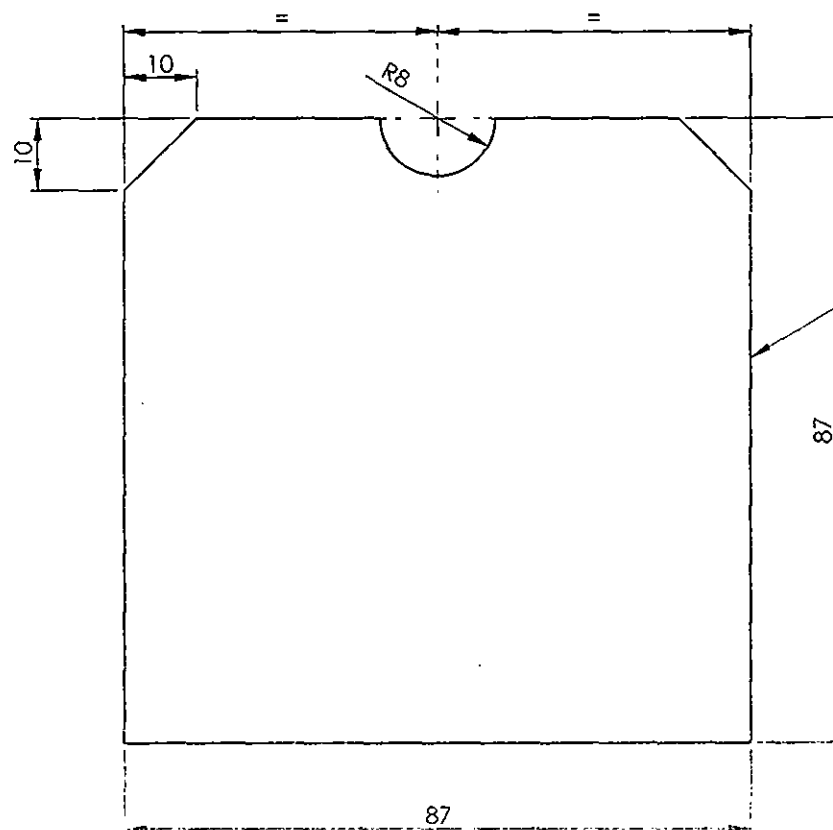
REF.DRG.NO.3 10113.0.20.210.121

ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE SPECIFIED. FOR UNTOLERANCED DIMENSIONS AND ROUGHNESS VALUES REFER DRAWING NO ICF/STD-9-0-001. ANY MANUAL ALTERATION SHALL AUTOMATICALLY RENDER THIS DRAWING INVALID. WELDING SYMBOLS ARE AS PER IS:813:1986.

AAA16939

▽ ROUGH MACHINED	⊖ ROUGH CLEANED
▽▽ FINISH MACHINED	⊖⊖ BURRS REMOVED
▽▽▽ V.E. - V.S. - VAC - V.D.	⊖⊖⊖ CHAMFERED

REVISIONS			
ALT.	ZONE	DESCRIPTION	APPROVED & DATE



1	WEB	4 x 87 x 87	1		RDSO/SPEC C-K201 X2CrNi12	0.236	
QTY.	DESCRIPTION	DIMENSIONS	ITEM NO.	REF. DRGS	MATL.SPEC.	WT/UNIT IN KGS	REMARKS
GROUP: 1-6 ROOF ASSEMBLY				SURFACE AREA IN Sq.m.:0.016		WT/ASSY IN Kgs:0.236	
WEB					SCALE 1:1	SSE/D CHD	Signature
					ALT.	ALTD	
						DRN	K.Sriram
INDIAN RAILWAY STANDARDS				SHEET 1 OF 1		AAA16939	
INTEGRAL COACH FACTORY, CHENNAI - 600038						A3	

ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE SPECIFIED. FOR UNTOLERANCED DIMENSIONS AND ROUGHNESS VALUES, REFER DRAWING NO IC/STD 9 0.001.
ANY MANUAL ALTERATION SHALL AUTOMATICALLY RENDER THIS DRAWING INVALID. WELDING SYMBOLS ARE AS PER IS: 813 1986.

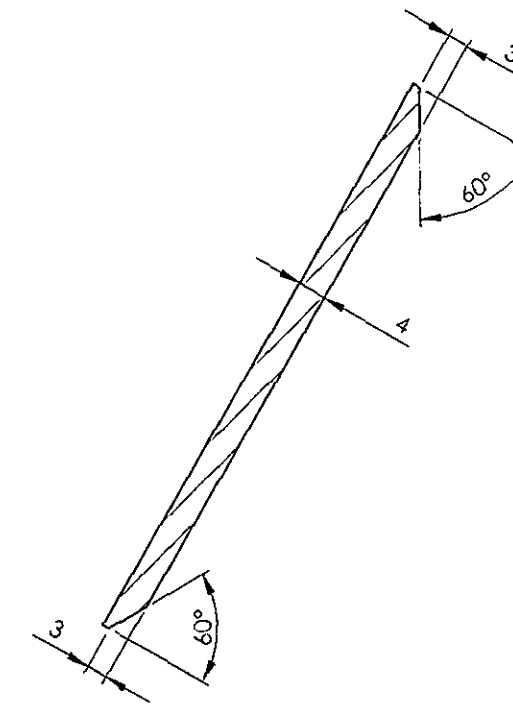
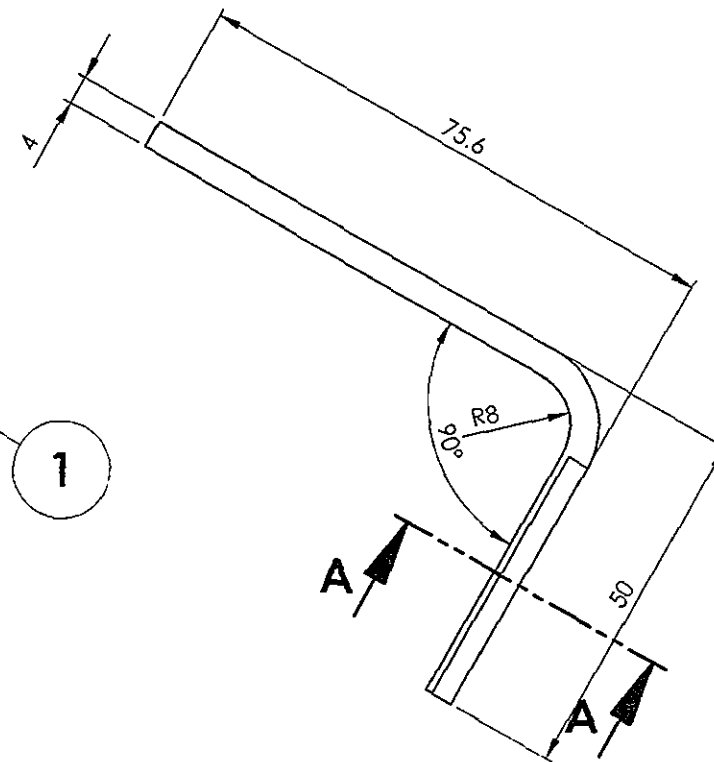
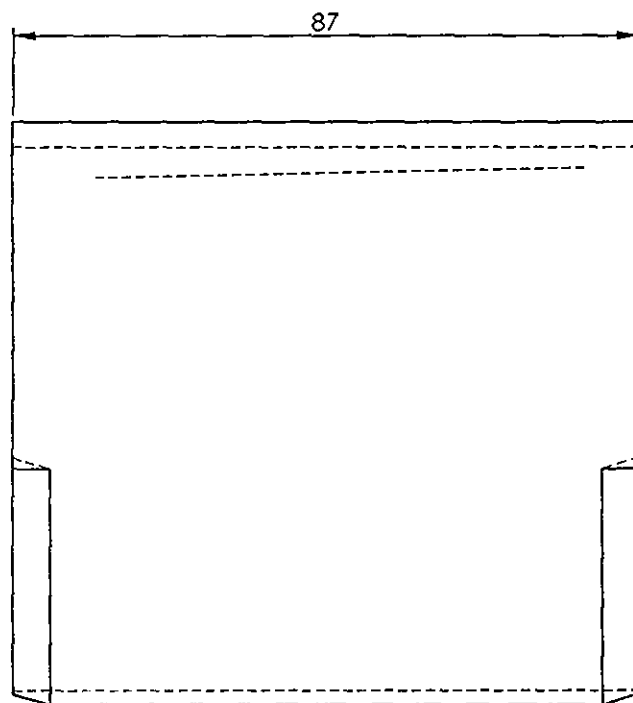
REF.DRG.NO.3 10113.0.20.200.121

	21-03-2013	Signature
DATE OF LATEST ALT.	DATE OF FIRST ISSUE	AME/SME

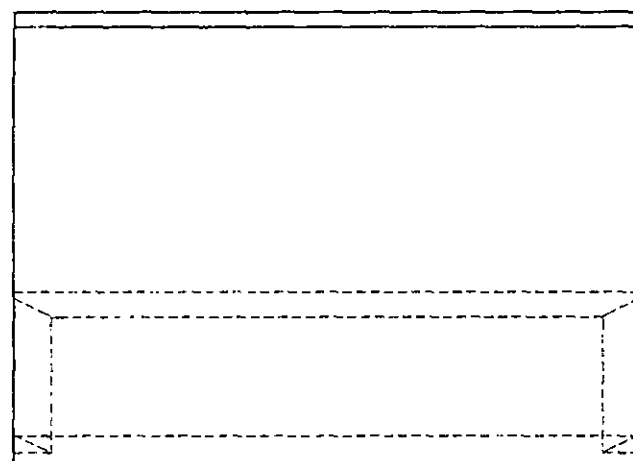
AAA16940

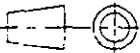
▽ ROUGH MACHINED	⊙ ROUGH CLEANED
▽▽ FINISH MACHINED	⊙⊙ BURRS REMOVED
▽▽▽ FINE FINISH MACHINED	⊙⊙⊙ CHAMFERED

REVISIONS			
ALT.	ZONE	DESCRIPTION	APPROVED & DATE



SECTION A-A



1	STIFFENING ANGLE	4 x 87 x 118	1		RDSO/SPEC C- K201 X2CrNi12	0.322	
QTY.	DESCRIPTION	DIMENSIONS	ITEM NO.	REF. DRGS	MATL.SPEC.	WT/UNIT IN KGS	REMARKS
GROUP: 1-6 ROOF ASSEMBLY		SURFACE AREA IN Sq.m.:0.022			WT/ASSY IN Kgs:0.322		
STIFFENING ANGLE					SCALE	SSE/D	<i>K.Sriram</i>
					1:1	CHD	
					ALT.	ALTD	
						DRN	K.Sriram
INDIAN RAILWAY STANDARDS INTEGRAL COACH FACTORY, CHENNAI - 600038							
					SHEET 1 OF 1	AAA16940	A3

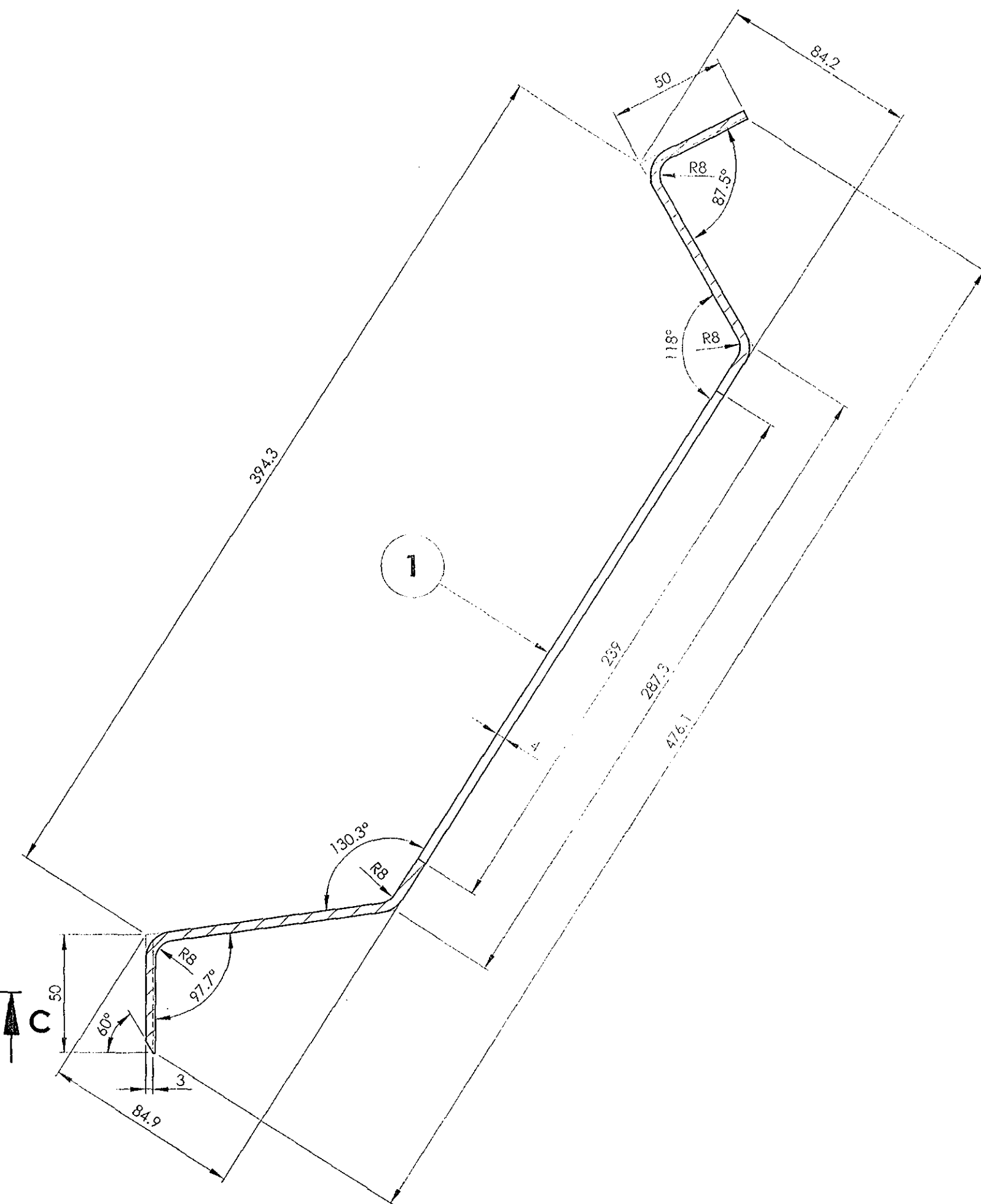
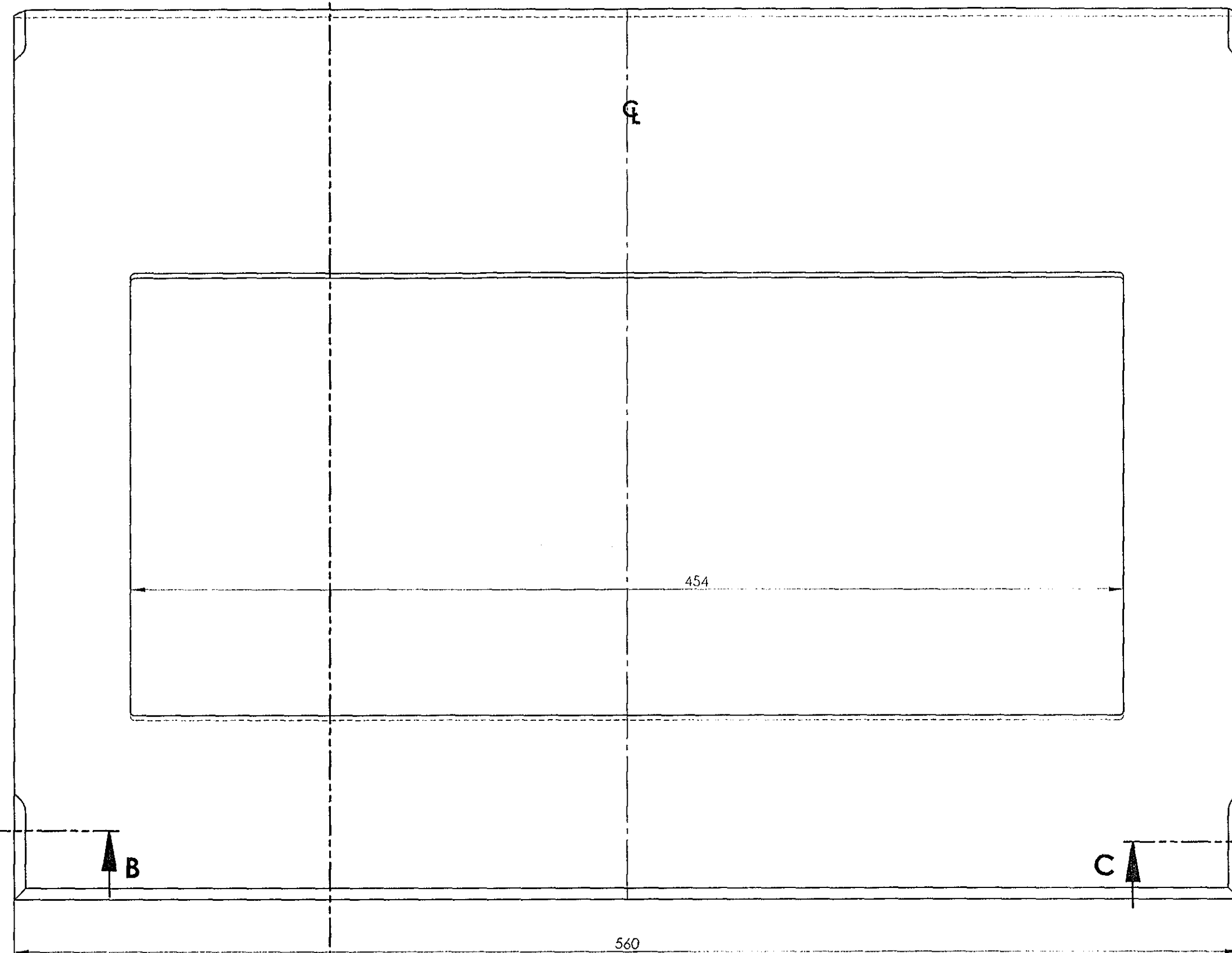
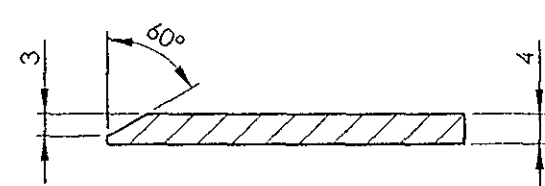
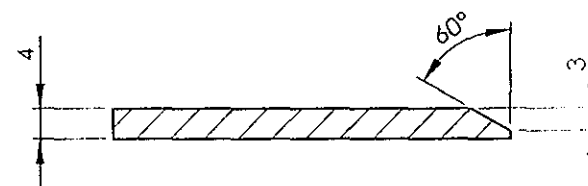
ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE SPECIFIED. FOR UNTOLERANCED DIMENSIONS AND ROUGHNESS VALUES, REFER DRAWING NO ICT/STD-9-0-001.
ANY MANUAL ALTERATION SHALL AUTOMATICALLY RENDER THIS DRAWING INVALID. WELDING SYMBOLS ARE AS PER IS: 813 1986.

REF.DRG.NO.3 10113.0.20.200.117

AAA16941

▽ ROUGH MACHINED	⑥1 ROUGH CLEANED
▽▽ FINISH MACHINED	⑥1b BURRS REMOVED
▽▽▽ FINE FINISH MACHINED	⑥1c CHAMFERED

REVISIONS			APPROVED & DATE
ALT.	ZONE	DESCRIPTION	

SECTION A-A
SCALE 1 : 2SECTION B-B
SCALE 1 : 1SECTION C-C
SCALE 1 : 1

ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE SPECIFIED. FOR UNTOLERANCED DIMENSIONS AND ROUGHNESS VALUES, REFER DRAWING NO ICF/STD-9-0-001.
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REF.DRG.NO.1 10113.0.20.200.127

DATE OF LATEST ALT.	21-03-2013	AME/SME
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1	TERMINAL FRAME	4 x 560 x 568	1	REF. DRGS	RDSO/SPEC C- K201 X2CIN12	6.658	REMARKS
QTY.	DESCRIPTION	DIMENSIONS	ITEM NO.	REF. DRGS	MATL.SPEC.	WT/UNIT IN KGS	REMARKS
GROUP: 1-6 ROOF ASSEMBLY				SURFACE AREA IN Sq.m.: 0.432		WT/ASSY IN Kgs: 6.658	
TERMINAL FRAME					SCALE 1:2	SSE/D CHD	<i>Amrinder</i>
					ALT	ALTD	K.Sriram
INDIAN RAILWAY STANDARDS INTEGRAL COACH FACTORY, CHENNAI - 600038					DRN		
					SHEET 1 OF 1		
					AAA16941		A2

AAA16942

▽ ROUGH MACHINED

① ROUGH CLEANED

▽▽ FINISH MACHINED

② BURRS REMOVED

▽▽▽ FINE FINISH MACHINED

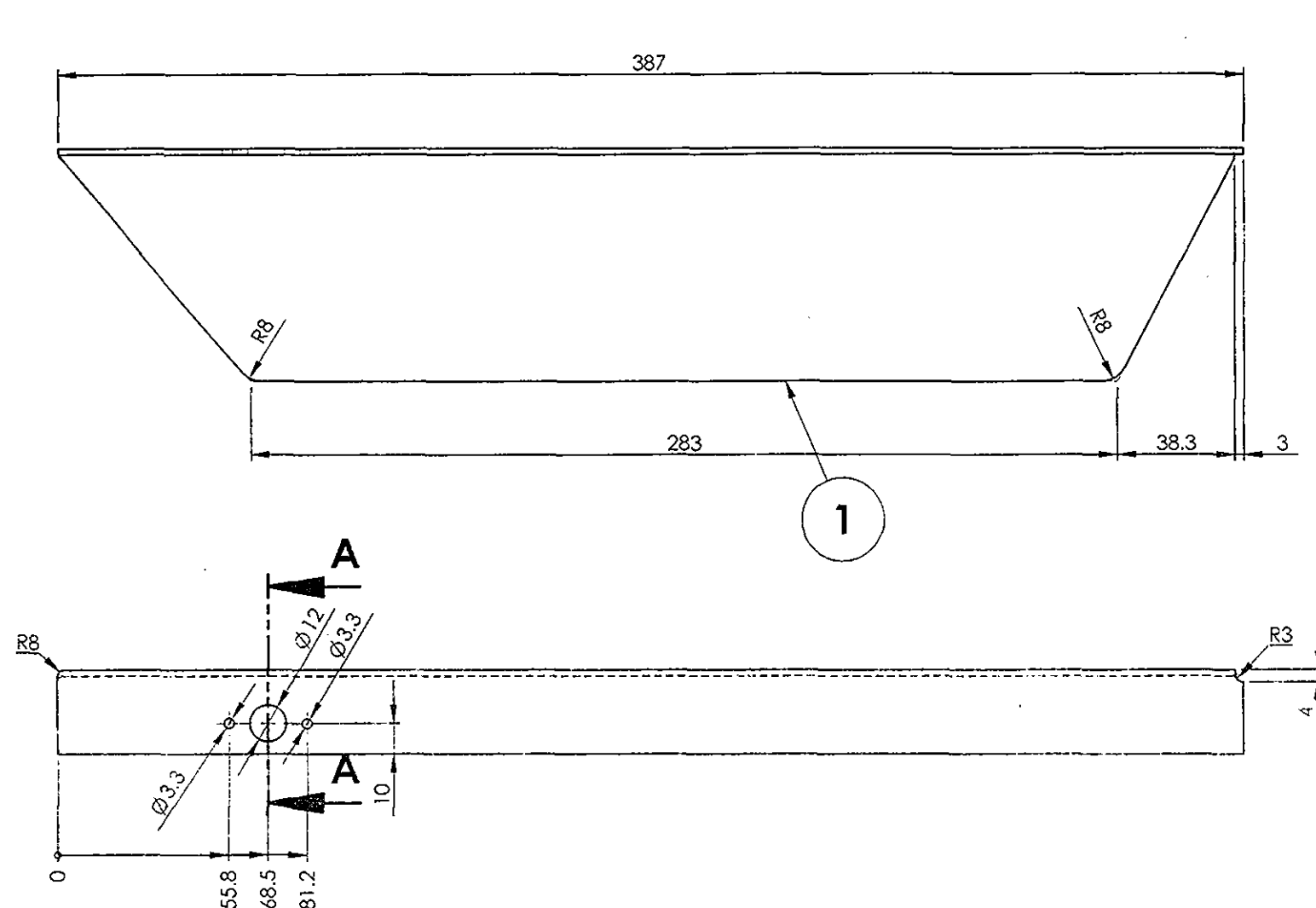
③ CHAMFERED

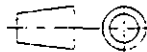
REVISIONS

ALT.

ZONE

DESCRIPTION

APPROVED &
DATESECTION A-A
SCALE 1:1

1	CLOSING ANGLE	2 x 101 x 387	1		RDSO/SPEC C- K201 X2CrNi12	0.556		
QTY.	DESCRIPTION	DIMENSIONS	ITEM NO.	REF. DRGS	MATL.SPEC.	WT/UNIT IN KGS	REMARKS	
GROUP: 1-6 ROOF ASSEMBLY		SURFACE AREA IN Sq.m.:0.071			WT/ASSY IN Kgs:0.556			
CLOSING ANGLE					SCALE	SSE/D	K.Sriram	
					1:2	CHD		
					ALT.	ALTD	K.Sriram	
						DRN		
INDIAN RAILWAY STANDARDS INTEGRAL COACH FACTORY, CHENNAI - 600038				SHEET 1 OF 1			AAA16942	A3

ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE SPECIFIED. FOR UNTOLERANCED DIMENSIONS AND ROUGHNESS VALUES, REFER DRAWING NO ICF/STD 9.0.001.
ANY MANUAL ALTERATION SHALL AUTOMATICALLY RENDER THIS DRAWING INVALID. WELDING SYMBOLS ARE AS PER IS: 813-1986.

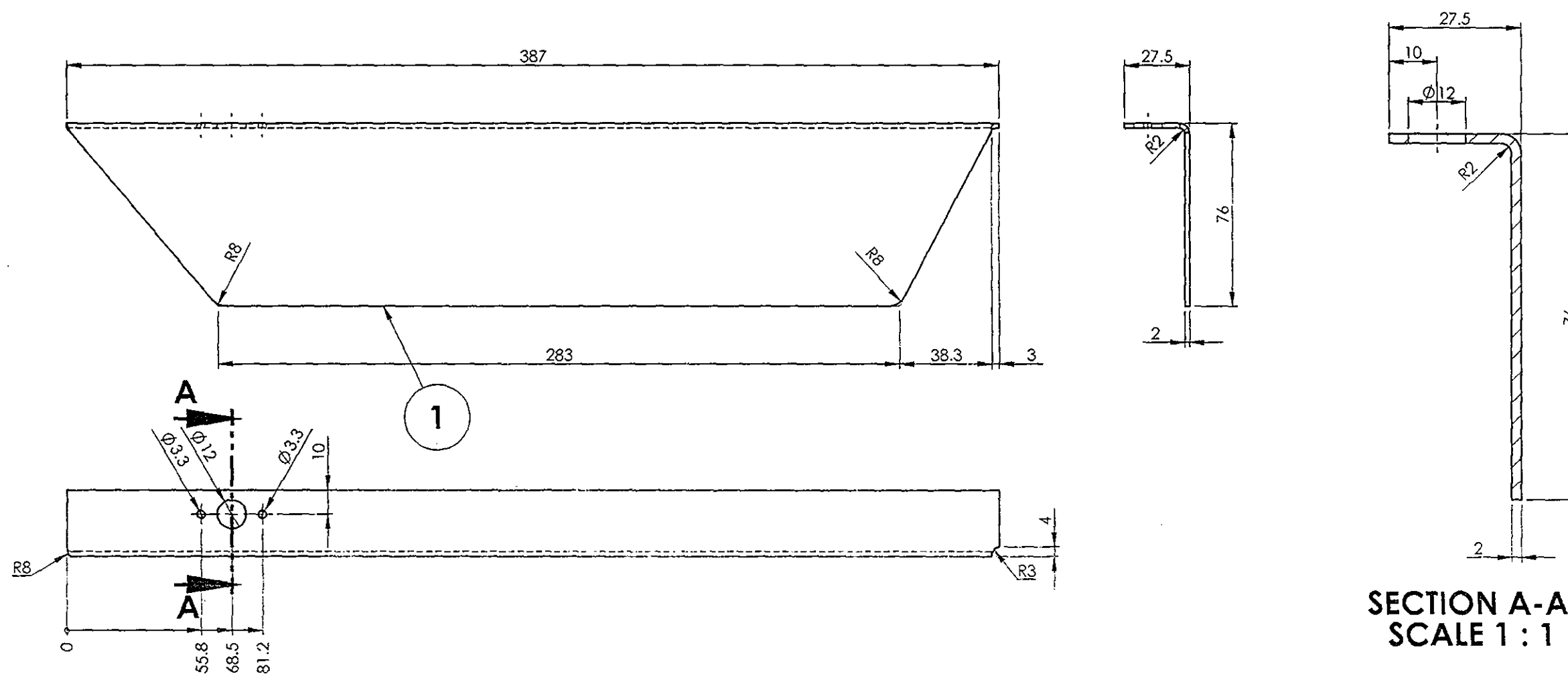
REF.DRG.NO.3 10113.0.20.200.128

	21-03-2013	
DATE OF LATEST ALT.	DATE OF FIRST ISSUE	AME/SME

AAA16943

▽ ROUGH MACHINED	⊖ ROUGH CLEANED
▽▽ FINISH MACHINED	⊖⊖ BURRS REMOVED
▽▽▽ FINE FINISH - VACUUM	⊖⊖⊖ CHAMFERED

REVISIONS			
ALT.	ZONE	DESCRIPTION	APPROVED & DATE

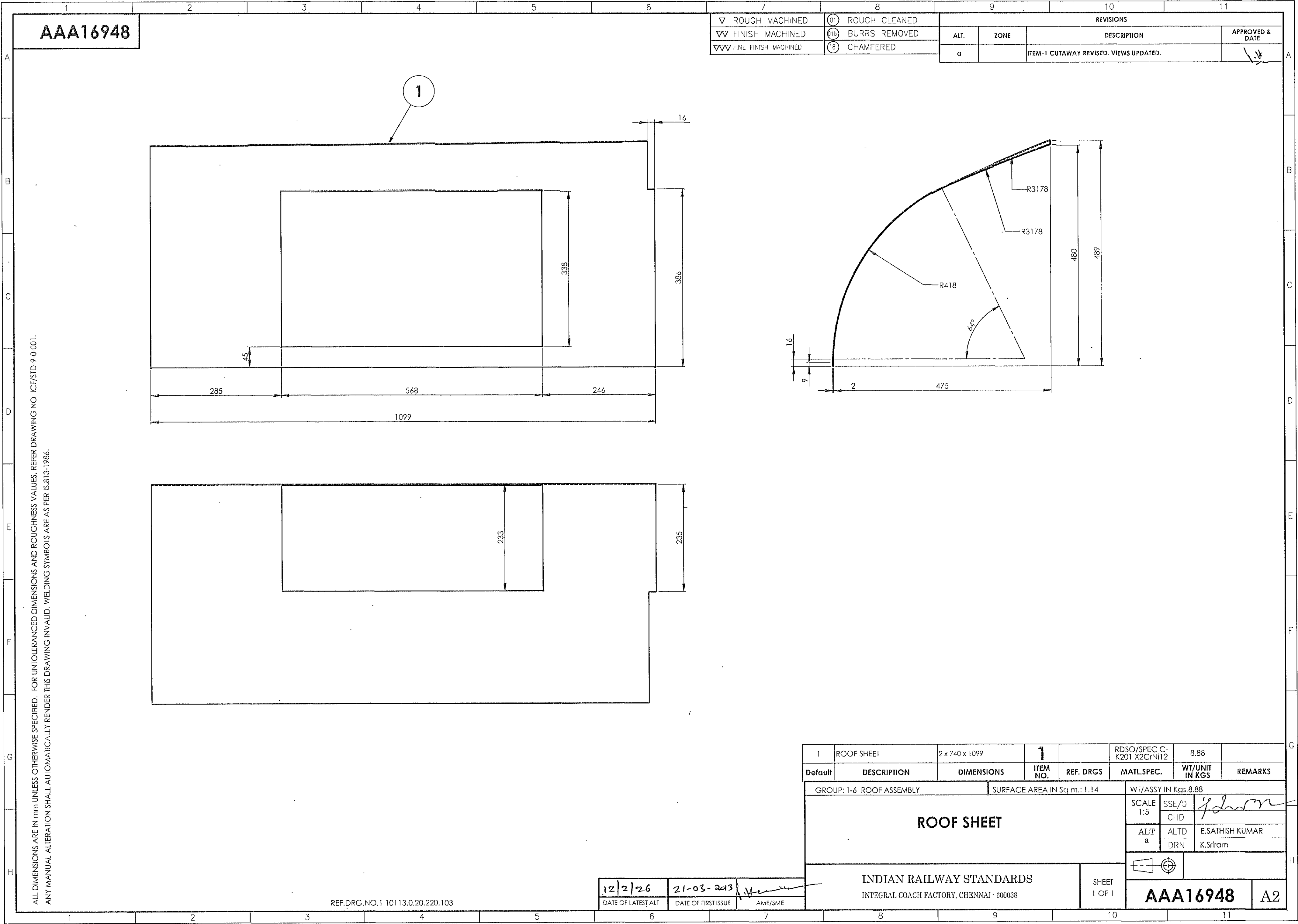
SECTION A-A
SCALE 1:1

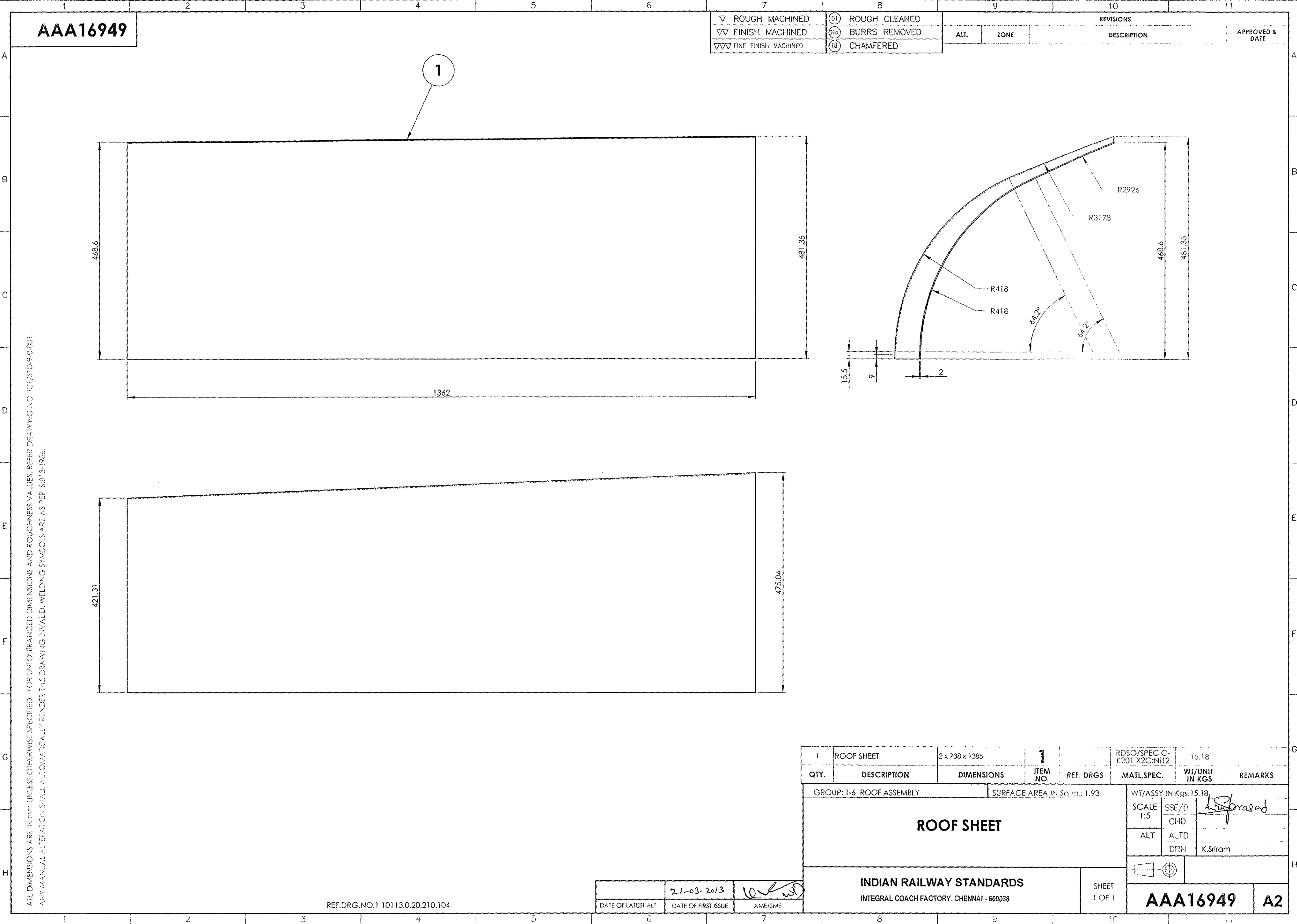
1	CLOSING ANGLE	2 x 101 x 387	1		RDSO/SPEC C-K201 X2CrNi12	0.069	
QTY.	DESCRIPTION	DIMENSIONS	ITEM NO.	REF. DRGS	MATL.SPEC.	WT/UNIT IN KGS	REMARKS
GROUP: 1-6 ROOF ASSEMBLY				SURFACE AREA IN Sq.m.:0.07		WT/ASSY IN Kgs:0.56	
CLOSING ANGLE					SCALE 1:2	SSE/D	Signature
					ALT.	ALTD	
						DRN	K.Sriram
INDIAN RAILWAY STANDARDS					SHEET 1 OF 1		
INTEGRAL COACH FACTORY, CHENNAI - 600038					AAA16943		
					A3		

ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE SPECIFIED. FOR UNTOLERANCED DIMENSIONS AND ROUGHNESS VALUES, REFER DRAWING NO ICF/STD-9 0 001.
ANY MANUAL ALTERATION SHALL AUTOMATICALLY RENDER THIS DRAWING INVALID. WELDING SYMBOLS ARE AS PER IS: 813:1986.

REF.DRG.NO.3 10113.0.20.200.129

	21-03-2013	Signature
DATE OF LATEST ALT.	DATE OF FIRST ISSUE	AME/SME





AAA16949

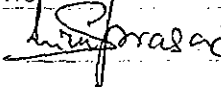

▽ ROUGH MACHINED	① ROUGH CLEANED
▽▽ FINISH MACHINED	①b BURRS REMOVED
▽▽▽ FINE FINISH MACHINED	①8 CHAMFERED

REVISIONS			APPROVED & DATE
ALT.	ZONE	DESCRIPTION	


ALL DIMENSIONS ARE IN mm, UNLESS OTHERWISE SPECIFIED. FOR UNTOLERANCED DIMENSIONS AND ROUGHNESS VALUES, REFER DRAWING NO. 107/STD-9-0-001. ANY MANUAL ALTERATION SHALL AUTOMATICALLY RENDER THIS DRAWING INVALID. WELDING SYMBOLS ARE AS PER IS:813-1986.

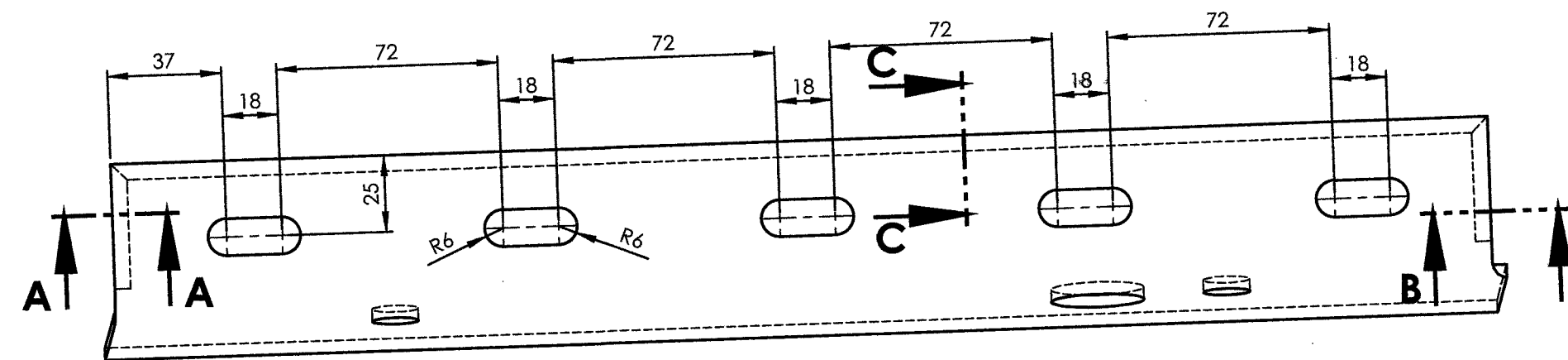
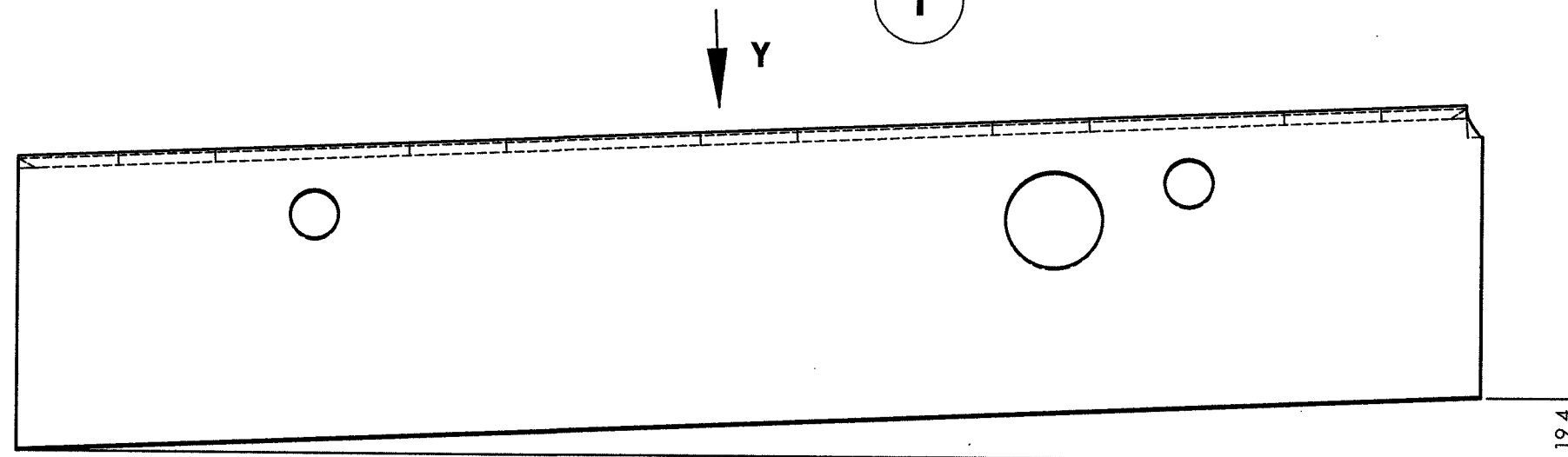
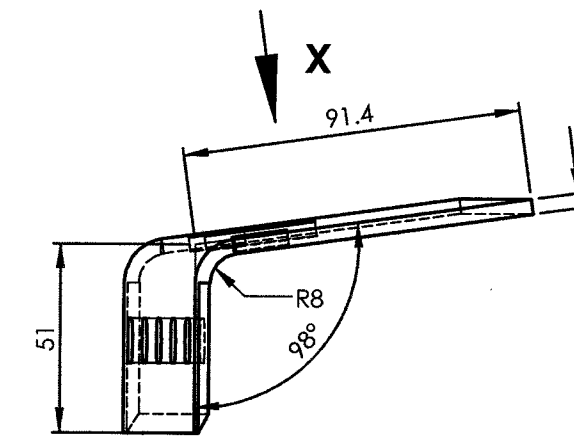
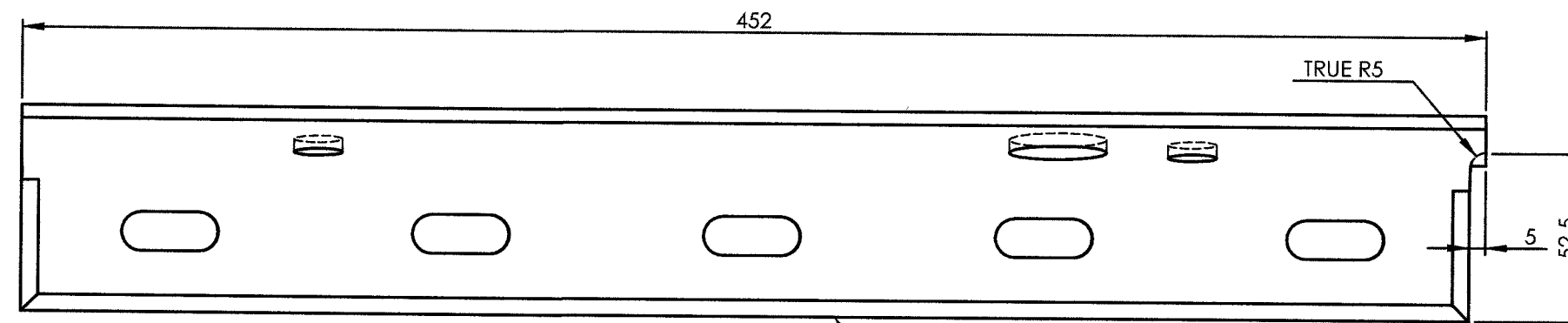
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DATE OF LATEST ALT.	21-03-2013	AME/SME
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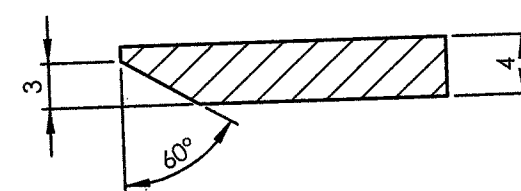
1	ROOF SHEET	2 x 738 x 1385	1		RDSO/SPEC C-K201 X2CrNi12	15.18	
QTY.	DESCRIPTION	DIMENSIONS	ITEM NO.	REF. DRGS	MATL.SPEC.	WT/UNIT IN KGS	REMARKS
GROUP: I-6 ROOF ASSEMBLY		SURFACE AREA IN Sq.m : 1.93			WT/ASSY IN Kgs:15.18		
ROOF SHEET					SCALE 1:5	SSE/D	
						CHD	
					ALT	ALTD	
						DRN	K.Sriram
INDIAN RAILWAY STANDARDS INTEGRAL COACH FACTORY, CHENNAI - 600038							
					SHEET 1 OF 1	AAA16949	A2

AAA16950

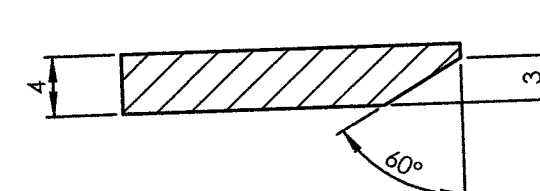
▽ ROUGH MACHINED	①1 ROUGH CLEANED	REVISIONS			
▽▽ FINISH MACHINED	①1b BURRS REMOVED	ALT.	ZONE	DESCRIPTION	APPROVED & DATE
▽▽▽ FINE FINISH MACHINED	①8 CHAMFERED	a		Ø 30 HOLES ADDED.	



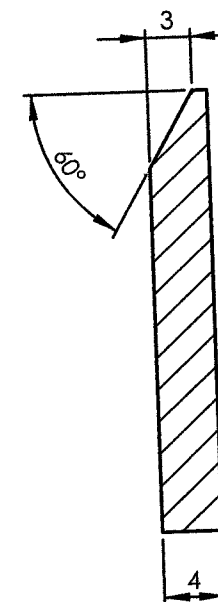
VIEW Y



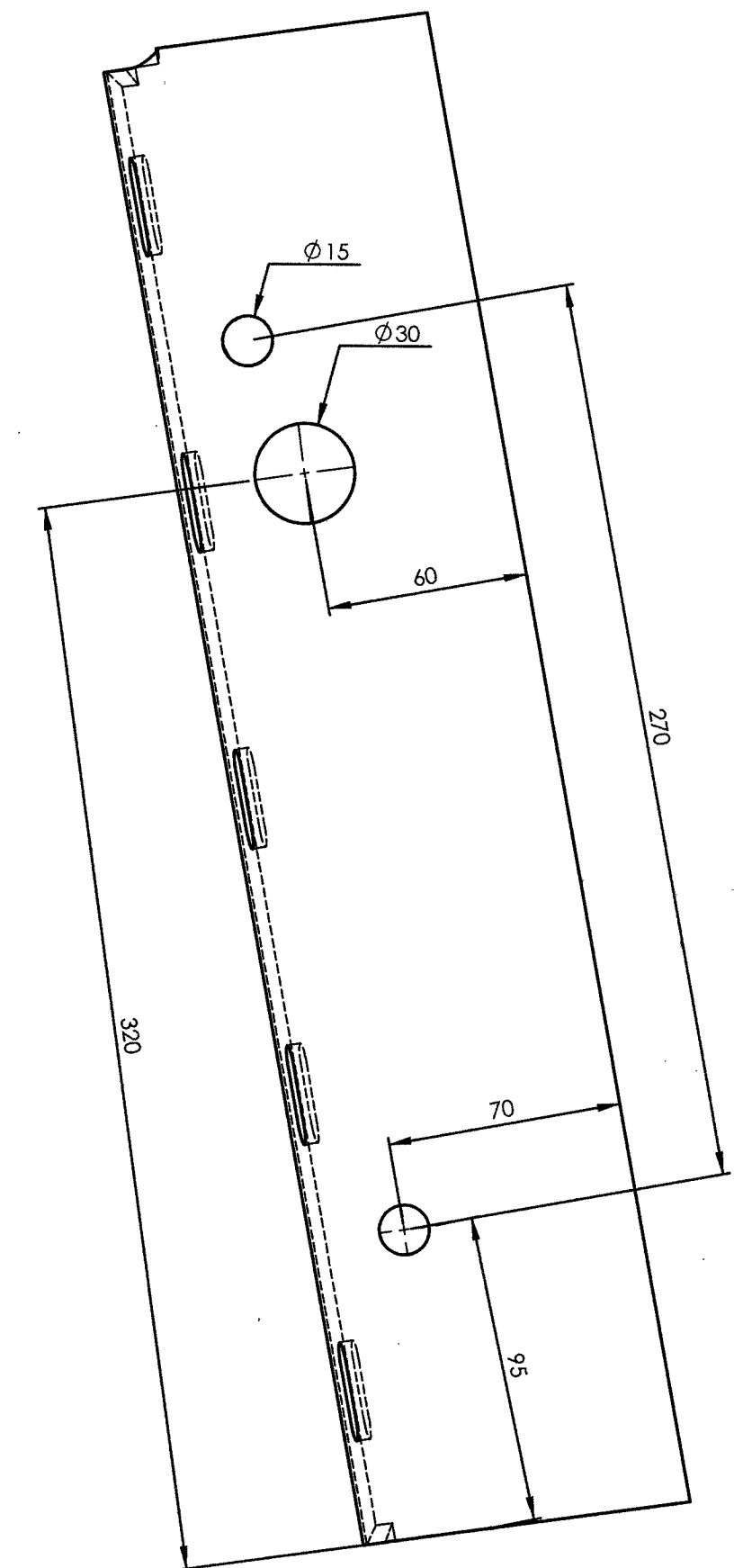
SECTION A-A
SCALE 2 : 1



SECTION B-B
SCALE 2 : 1



SECTION C-C
SCALE 2 : 1



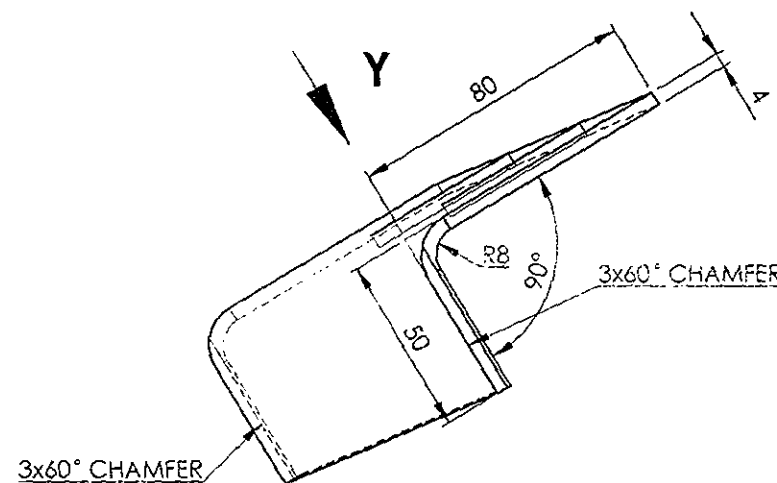
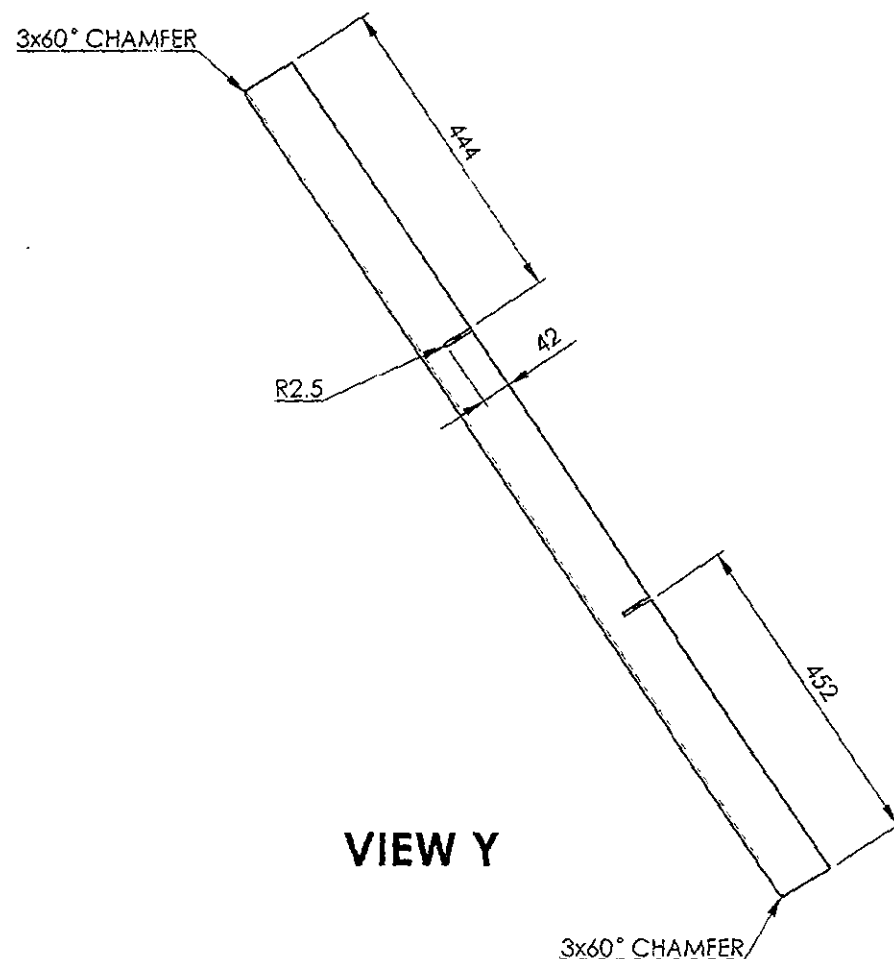
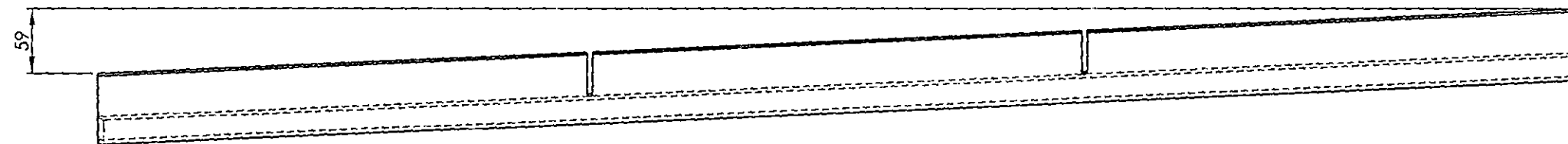
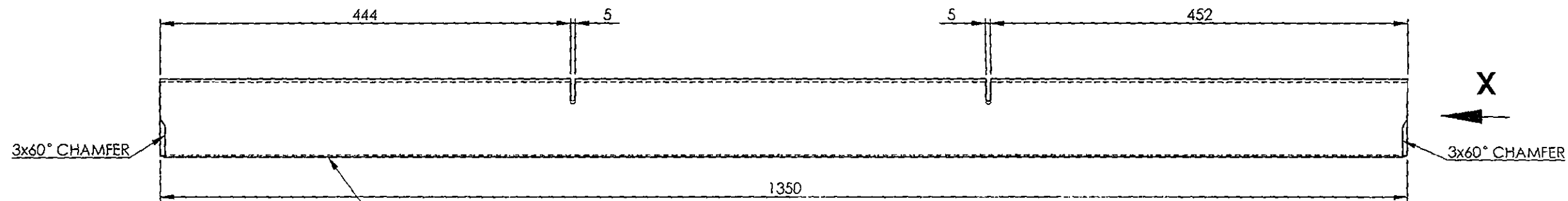
VIEW X

1	STIFFENING ANGLE	4 x 157 x 458	1		RDSO/SPEC C- K201 X2CrNi12	1.84	
QTY.	DESCRIPTION	DIMENSIONS	ITEM NO.	REF. DRGS	MATL.SPEC.	WT/UNIT IN KGS	REMARKS
GROUP: 1-6 ROOF ASSEMBLY		SURFACE AREA IN Sq.m.: 0.12			WT/ASSY IN Kgs:		
STIFFENING ANGLE					SCALE 1:2	SSE/D CHD	S. Panduranga Rao
					ALT a	ALTD	E.SATHISH KUMAR
						DRN	K.Sriram
					INDIAN RAILWAY STANDARDS INTEGRAL COACH FACTORY, CHENNAI - 600038		
AAA16950		A2					
8		9		10		11	

AAA16951

▽ ROUGH MACHINED	③ ROUGH CLEANED
▽▽ FINISH MACHINED	④ BURRS REMOVED
▽▽▽ FINE FINISH MACHINED	⑤ CHAMFERED

REVISIONS			
ALT.	ZONE	DESCRIPTION	APPROVED & DATE

VIEW X
SCALE 1:2

VIEW Y

1	STIFFENING ANGLE	4 x 121 x 1353	1		RDSO/SPEC C-K201 X2CrNi12	5.22	
QTY.	DESCRIPTION	DIMENSIONS	ITEM NO.	REF. DRGS	MATL.SPEC.	WT/UNIT IN KGS	REMARKS
GROUP: 1-6 ROOF ASSEMBLY		SURFACE AREA IN Sq.m.:0.34			WT/ASSY IN Kgs:5.22		
STIFFENING ANGLE					SCALE	SSE/D	
					1:10	CHD	
					ALT.	ALTD	
						DRN	K.Srirom
INDIAN RAILWAY STANDARDS INTEGRAL COACH FACTORY, CHENNAI - 600038							
					SHEET 1 OF 1		AAA16951

ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE SPECIFIED. FOR UNTOLERANCED DIMENSIONS AND ROUGHNESS VALUES, REFER DRAWING NO IC/STD 9 0 001.
ANY MANUAL ALTERATION SHALL AUTOMATICALLY RENDER THIS DRAWING INVALID. WELDING SYMBOLS ARE AS PER IS: 813:1986.

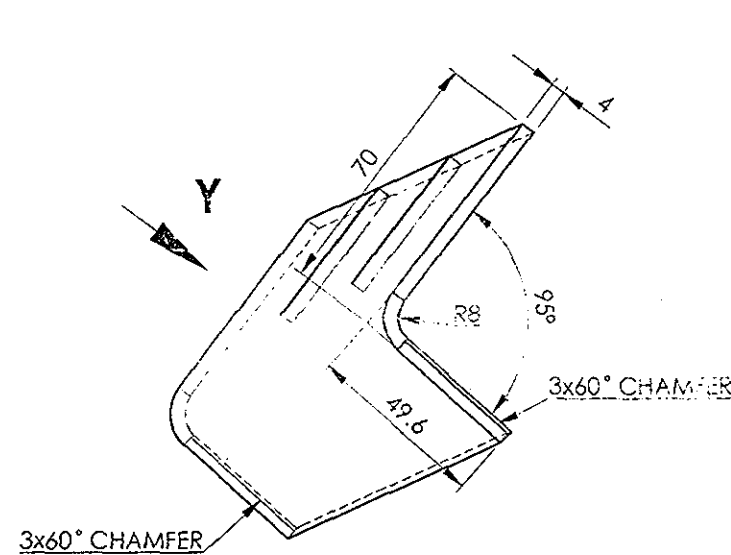
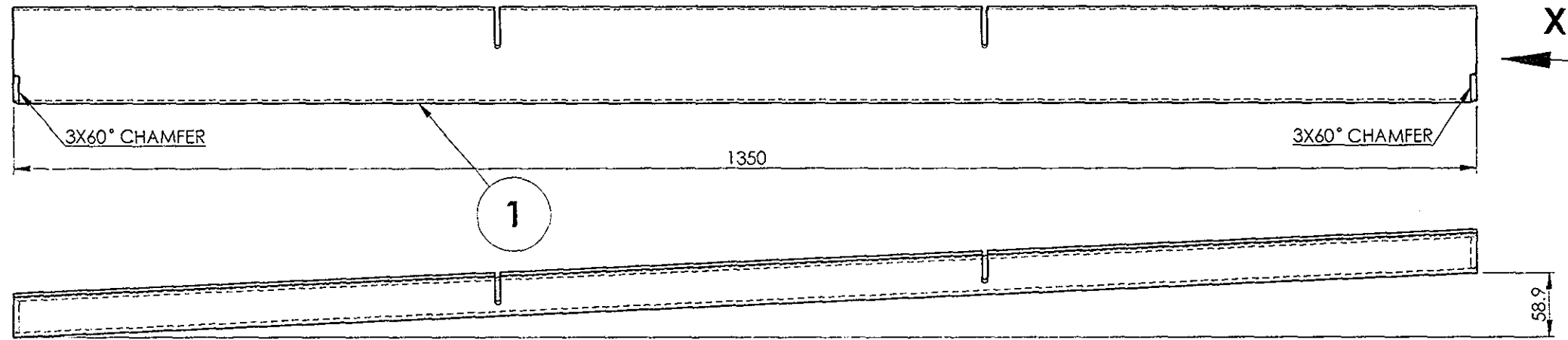
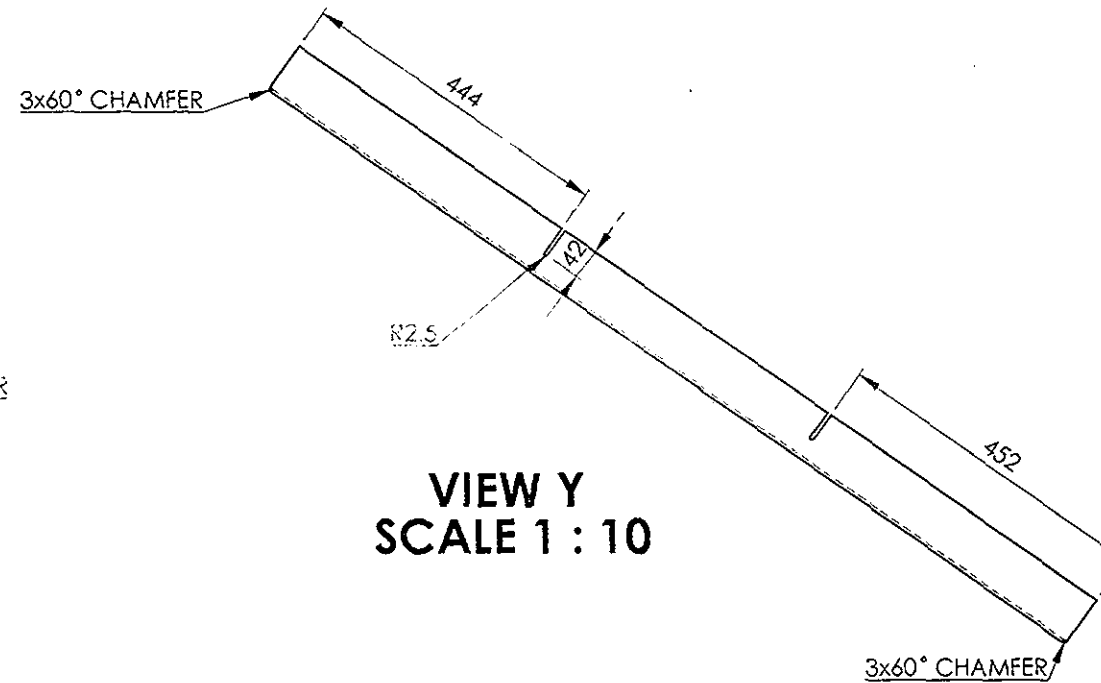
REF.DRG.NO.2 10113.0.20.200.110

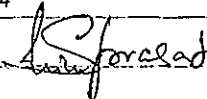
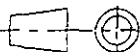
DATE OF LATEST ALT.	21-03-2013	AME/SME
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AAA16952

▽ ROUGH MACHINED	⊙ ROUGH CLEANED
▽▽ FINISH MACHINED	⊙ BURRS REMOVED
▽▽▽ FINE FINISH MACHINED	⊙ CHAMFERED

REVISIONS				APPROVED & DATE	
ALT.	ZONE	DESCRIPTION			

VIEW X
SCALE 1 : 2VIEW Y
SCALE 1 : 10

1	STIFFENING ANGLE	4 x 121 x 1350	1		RDSO/SPEC C-K201 X2CrNi12	4.84	
QTY.	DESCRIPTION	DIMENSIONS	ITEM NO.	REF. DRGS	MATL.SPEC.	WT/UNIT IN KGS	REMARKS
GROUP: 1-6 ROOF ASSEMBLY		SURFACE AREA IN Sq.m.:0.32			WT/ASSY IN Kgs:4.84		
STIFFENING ANGLE					SCALE	SSE/D	
					1:5	CHD	
					ALT.	ALTD	
						DRN	K.Sriram
INDIAN RAILWAY STANDARDS INTEGRAL COACH FACTORY, CHENNAI - 600038							
					SHEET 1 OF 1		AAA16952

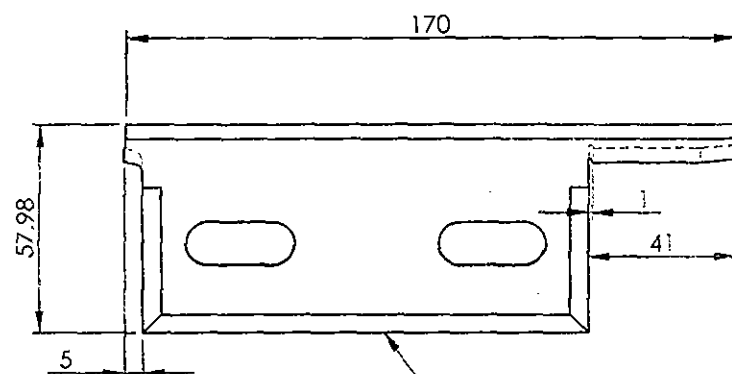
ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE SPECIFIED. FOR UNTOLERANCED DIMENSIONS, AND ROUGHNESS VALUES, REFER DRAWING NO. ICI/STD 9 0 001.
ANY MANUAL ALTERATION SHALL AUTOMATICALLY RENDER THIS DRAWING INVALID. WELDING SYMBOLS ARE AS PER IS: 813:1986.

REF.DRG.NO.2 10113.0.20.200.112

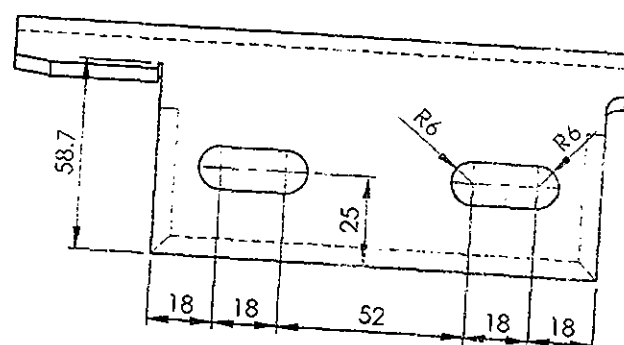
AAA16953

▽ ROUGH MACHINED	⊖ ROUGH CLEANED
▽▽ FINISH MACHINED	⊖⊖ BURRS REMOVED
▽▽▽ FINE FINISH MACHINED	⊖⊖⊖ CHAMFERED

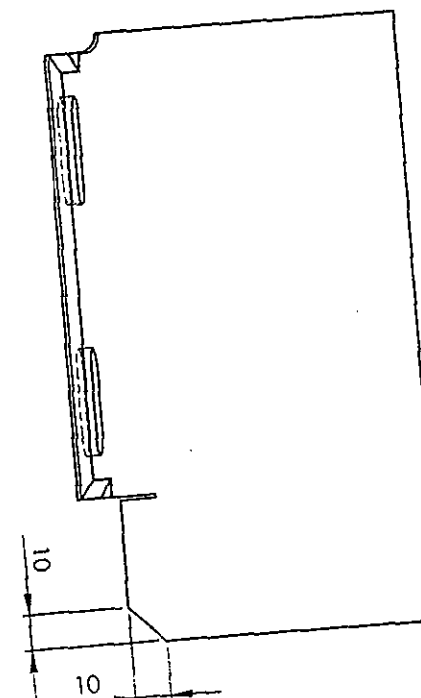
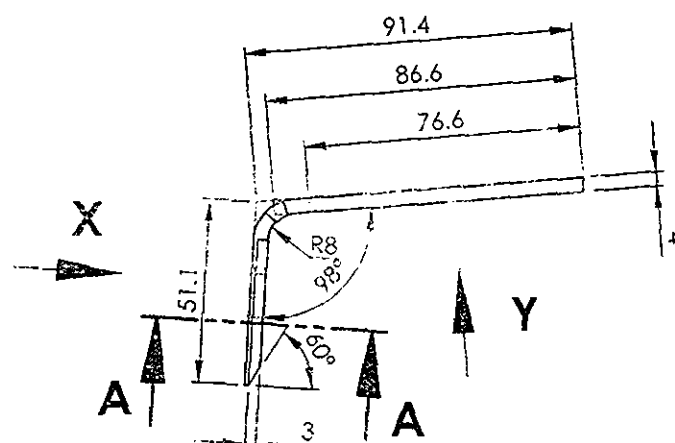
REVISIONS			
ALT.	ZONE	DESCRIPTION	APPROVED & DATE



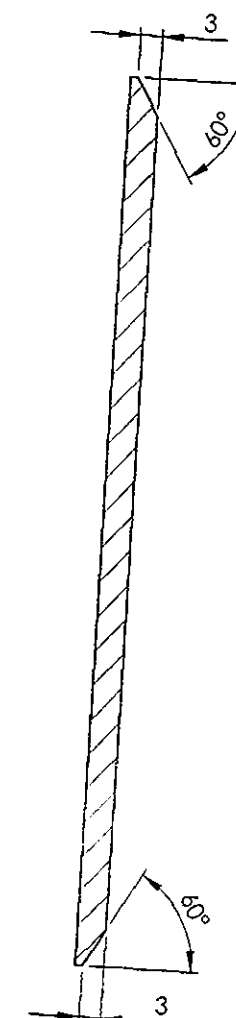
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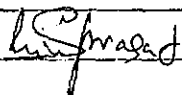
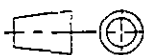


VIEW X



VIEW Y

SECTION A-A
SCALE 1:1

1	STIFFENING ANGLE	4 x 136 x 170	1		RDSO/SPEC C- K201 X2CrNi12	0.63	
QTY.	DESCRIPTION	DIMENSIONS	ITEM NO.	REF. DRGS	MATL.SPEC.	WT/UNIT IN KGS	REMARKS
GROUP: 1-6 ROOF ASSEMBLY		SURFACE AREA IN Sq.m.:0.04			WT/ASSY IN Kgs:0.63		
STIFFENING ANGLE					SCALE	SSE/D	
					1:2	CHD	
					ALT.	ALTD	
						DRN	K.Srirom
INDIAN RAILWAY STANDARDS INTEGRAL COACH FACTORY, CHENNAI - 600038							
					SHEET 1 OF 1		AAA16953

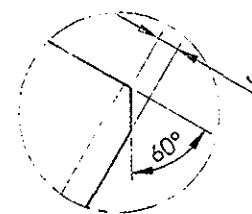
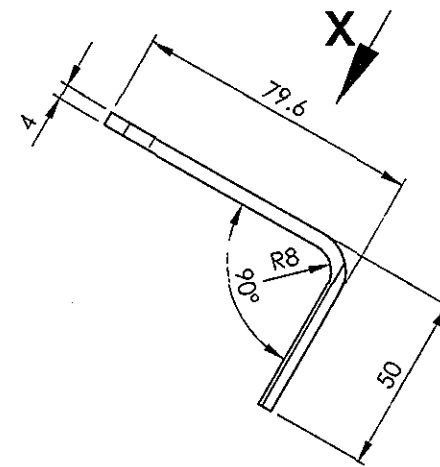
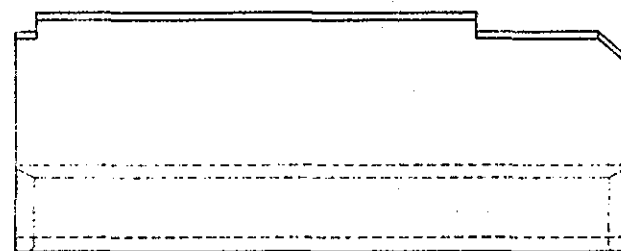
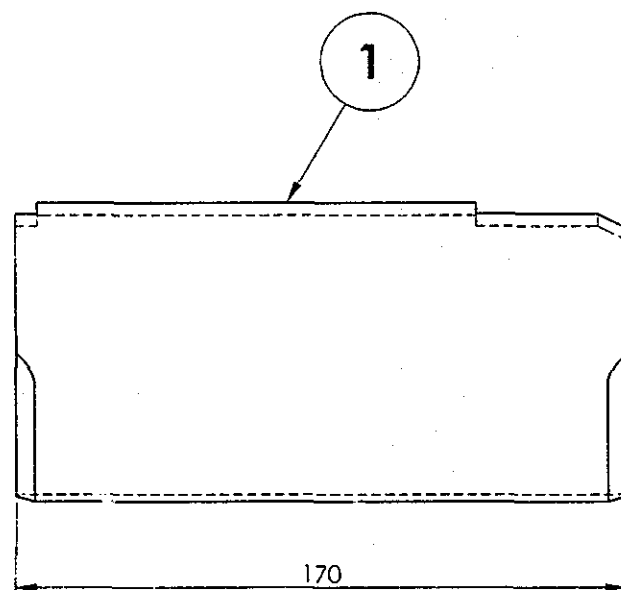
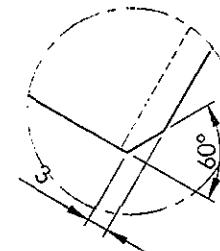
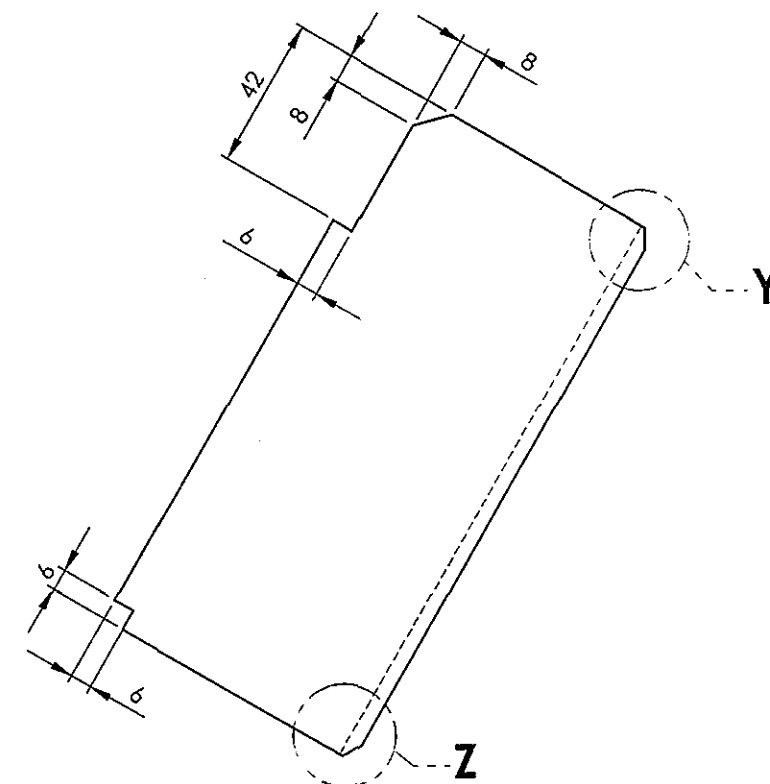
ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE SPECIFIED. FOR UNTOLERANCED DIMENSIONS AND ROUGHNESS VALUES, REFER DRAWING NO ICF/STD 9 0 001.
ANY MANUAL ALTERATION SHALL AUTOMATICALLY RENDER THIS DRAWING INVALID. WELDING SYMBOLS ARE AS PER IS: 813-1986.

REF.DRG.NO.3 10113.C.20.200.114

AAA16954

▽ ROUGH MACHINED	⊖ ROUGH CLEANED
▽▽ FINISH MACHINED	⊖⊖ BURRS REMOVED
▽▽▽ FINE FINISH VAC-NEO	⊖⊖⊖ CHAMFERED

REVISIONS			
ALT.	ZONE	DESCRIPTION	APPROVED & DATE

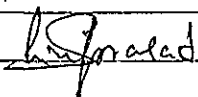
DETAIL Y
SCALE 1:1DETAIL Z
SCALE 1:1

VIEW X

ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE SPECIFIED. FOR UNTOLERANCED DIMENSIONS AND ROUGHNESS VALUES, REFER DRAWING NO ICF/STD 9 0 001.
ANY MANUAL ALTERATION SHALL AUTOMATICALLY RENDER THIS DRAWING INVALID. WELDING SYMBOLS ARE AS PER IS: 813:1986.

REF.DRG.NO.3 10113.0.20.200.116

DATE OF LATEST ALT.	21-03-2013	AME/SME
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1	STIFFENING ANGLE	4 x 121 x 170	1		RDSO/SPEC C- K201 X2CrNi12	0.64	
QTY.	DESCRIPTION	DIMENSIONS	ITEM NO.	REF. DRGS	MATL.SPEC.	WT/UNIT IN KGS	REMARKS
GROUP: 1-6 ROOF ASSEMBLY		SURFACE AREA IN Sq.m.:0.04			WT/ASSY IN Kgs:0.64		
STIFFENING ANGLE					SCALE 1:2	SSE/D CHD	
					ALT.	ALTD	
						DRN	K.Srirom
					INDIAN RAILWAY STANDARDS INTEGRAL COACH FACTORY, CHENNAI - 600038		
SHEET 1 OF 1							

AAA16955

▽ ROUGH MACHINED

⊙ ROUGH CLEANED

▽▽ FINISH MACHINED

⊙⊙ BURRS REMOVED

▽▽▽ FINISH VAC-UMED

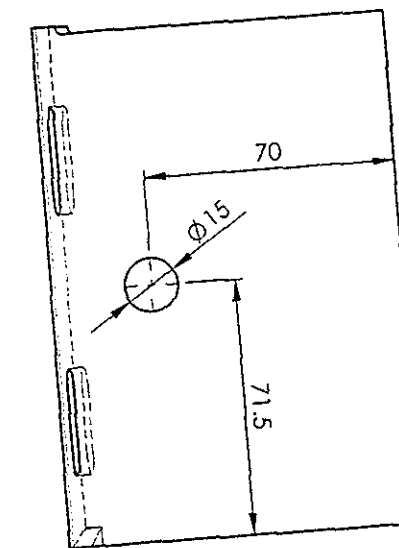
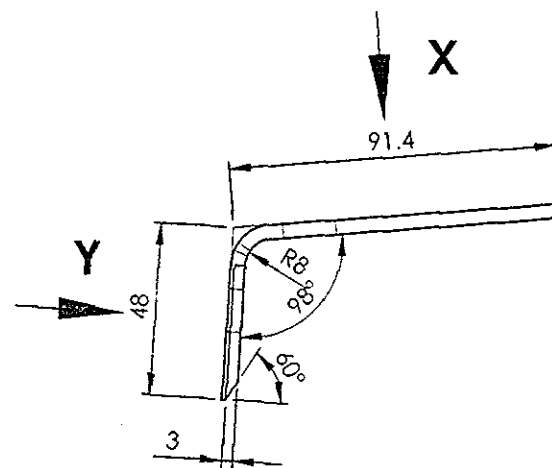
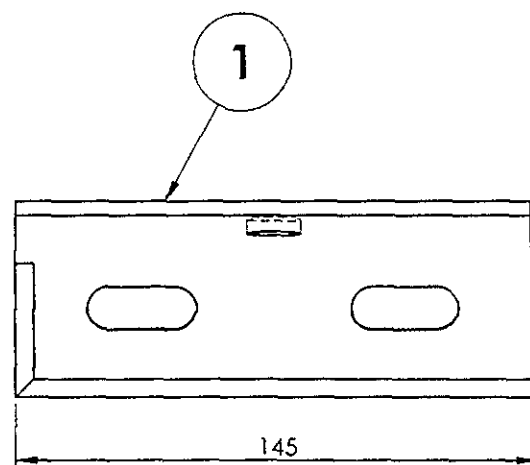
⊙⊙ CHAMFERED

REVISIONS

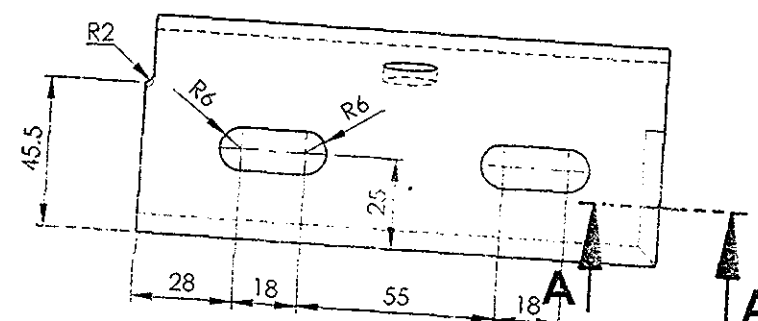
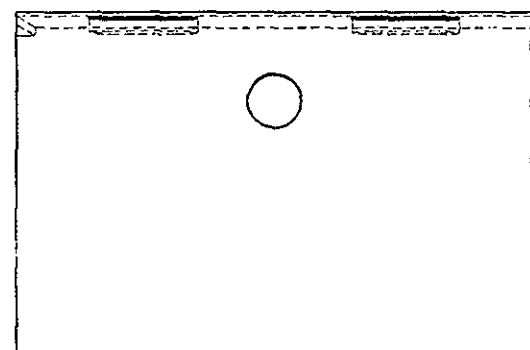
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ZONE

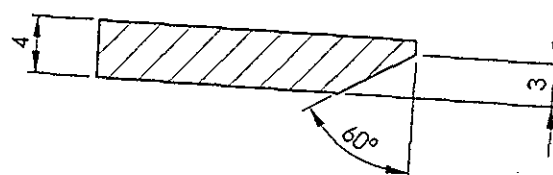
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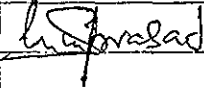
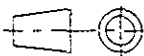
APPROVED &
DATE

VIEW X



VIEW Y

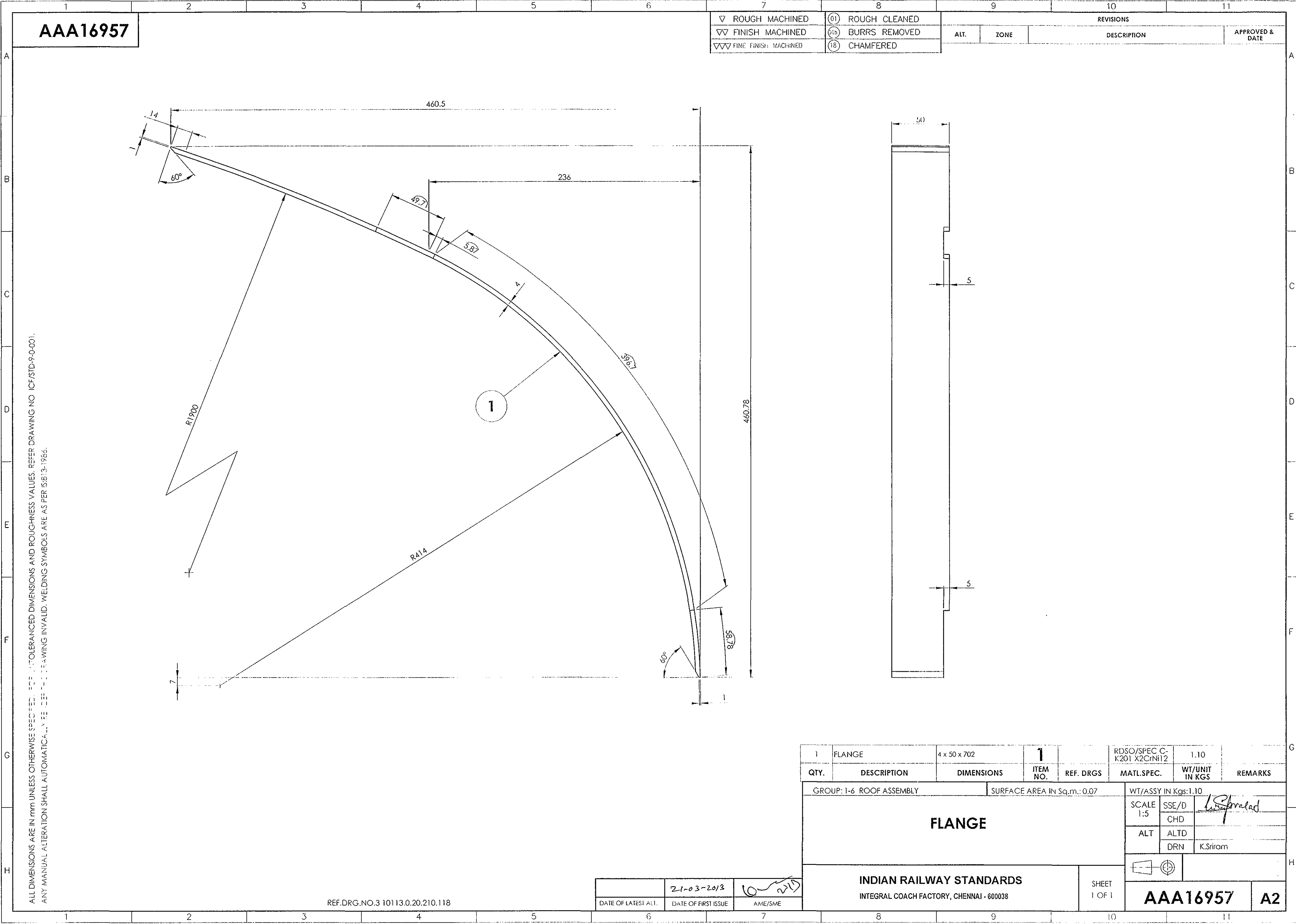
SECTION A-A
SCALE 2 : 1

1	STIFFENING ANGLE	4 x 135 x 145	1		RDSO/SPEC C-K201 X2CrNi12	0.57	
QTY.	DESCRIPTION	DIMENSIONS	ITEM NO.	REF. DRGS	MATL.SPEC.	WT/UNIT IN KGS	REMARKS
GROUP: 1-6 ROOF ASSEMBLY		SURFACE AREA IN Sq.m.:0.04			WT/ASSY IN Kgs:0.57		
STIFFENING ANGLE					SCALE	SSE/D	
					1:2	CHD	
					ALT.	ALTD	
						DRN	K.Srirom
INDIAN RAILWAY STANDARDS INTEGRAL COACH FACTORY, CHENNAI - 600038							
					SHEET 1 OF 1		AAA16955

ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE SPECIFIED. FOR UNTOLERANCED DIMENSIONS AT 10° ROUGHNESS VALUES, REFER DRAWING NO ICF/STD 9 0 001.
ANY MANUAL ALTERATION SHALL AUTOMATICALLY RENDER THIS DRAWING INVALID. WELDING SYMBOLS ARE AS PER IS: 813-1986.

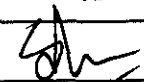
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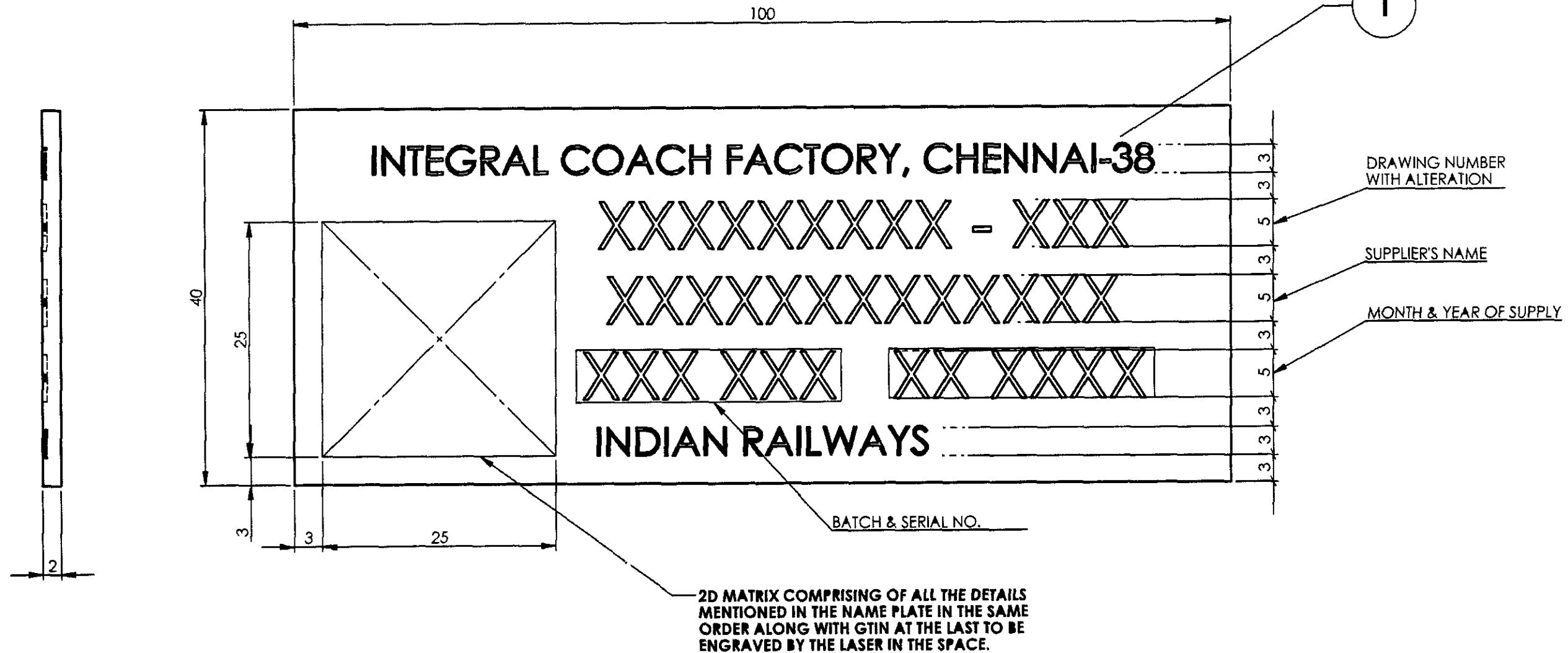
	21-03-2013	
DATE OF LATEST ALT.	DATE OF FIRST ISSUE	A.M.E./S.M.E.



AAA51072

▽ ROUGH MACHINED	① ROUGH CLEANED
▽▽ FINISH MACHINED	①① BURRS REMOVED
▽▽▽ FINE FINISH MACHINED	①①① CHAMFERED

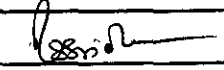
REVISIONS			
ALT.	ZONE	DESCRIPTION	APPROVED & DATE
a		NAME PLATE REVISED.	-sd-
b		DESIGN REVISED.	-sd-
c		BATCH & SERIAL NO. ADDED	-sd-
d		NOTE-2 ADDED.	




2D MATRIX COMPRISING OF ALL THE DETAILS MENTIONED IN THE NAME PLATE IN THE SAME ORDER ALONG WITH GTIN AT THE LAST TO BE ENGRAVED BY THE LASER IN THE SPACE.

NOTE:

1. LETTERS TO BE PUNCHED OR ENGRAVED.
2. ALTERNATIVELY AISI-304/SS-304 (X02Cr19Ni10)/IS:6911(X04Cr19Ni9) ALSO ACCEPTABLE.

1	NAME PLATE FOR SUPPLIER IDENTIFICATION	2x40x100	1		RDSO/SPEC C-K201 X2 Cr Ni 12	0.063	\$
QTY	DESCRIPTION	DIMENSIONS	ITEM NO.	REF. DRGS	MATL.SPEC.	WT/UNIT IN KGS	REMARKS
GROUP: 5-1 Body Side Doors		SURFACE AREA IN Sq.m.:0.009		WT/ASSY IN Kgs:			
NAME PLATE FOR SUPPLIER IDENTIFICATION				SCALE 2:1	SSE/D		
				ALT. d	CHD		
INDIAN RAILWAY STANDARDS				ALT. d	ALTD	KUNTI THAKUR	
				ALT. d	DRN	G. NAGESWARAN	
INDIAN RAILWAY STANDARDS				SHEET 1 OF 1		AAA51072 A3	
INTEGRAL COACH FACTORY, CHENNAI - 600038							

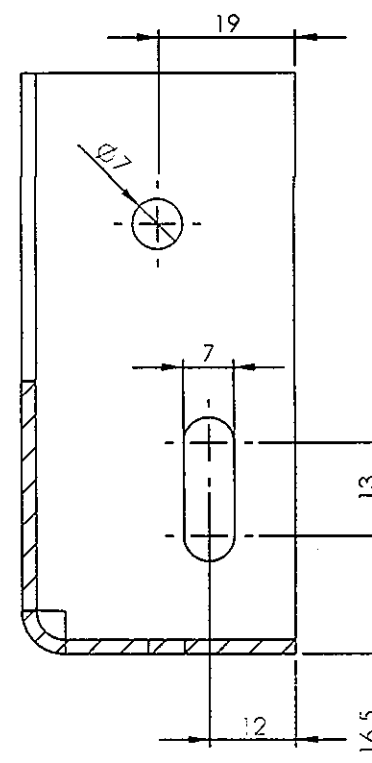
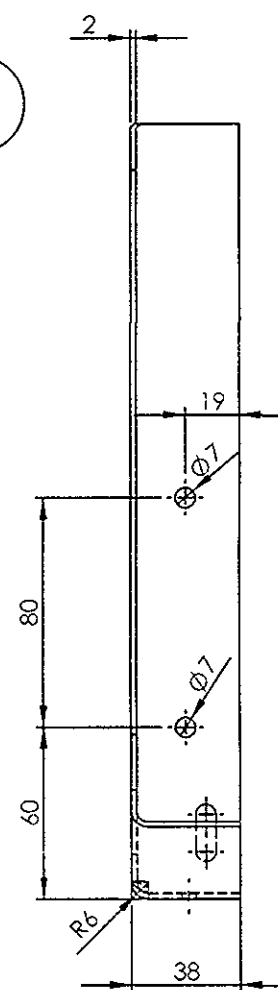
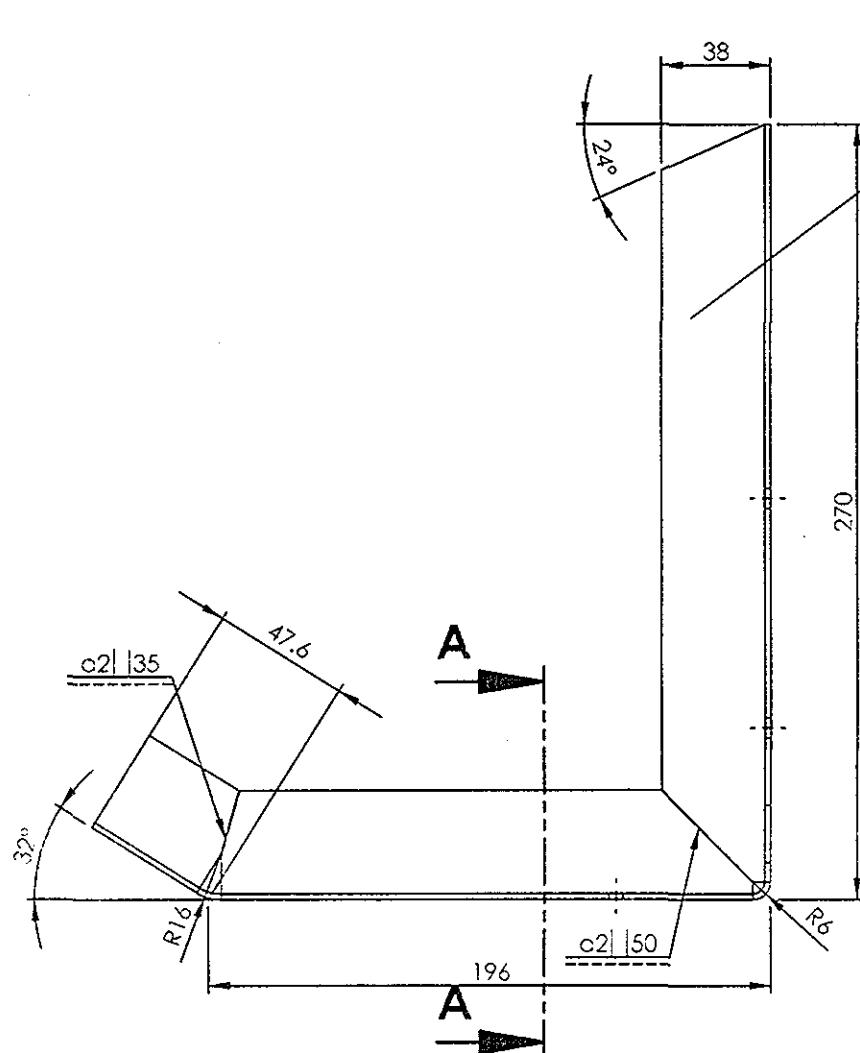
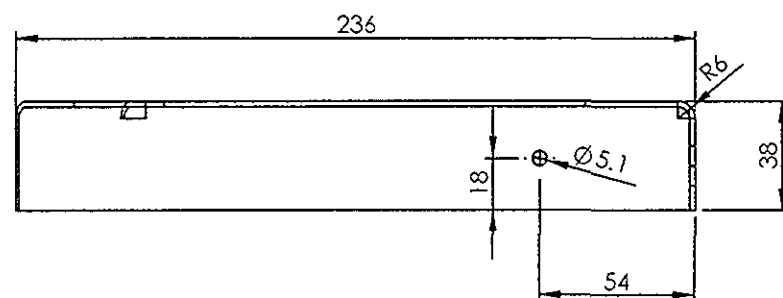
06-07-2024	02.06.2010	
DATE OF LATEST ALT.	DATE OF FIRST ISSUE	AME/SME


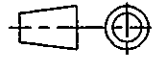
REF.DRG.NO.

AAB10005

▽ ROUGH MACHINED	① ROUGH CLEANED
▽ FINISH MACHINED	② BURRS REMOVED
▽ FINISH VACUUM	③ CHAMFERED

REVISIONS			
ALT.	ZONE	DESCRIPTION	APPROVED & DATE

SECTION A-A
SCALE 1 : 1

1	BRACKET	2x72x508	1		RDSO/SPEC C-K201 X2CrNi12	0.547	
QTY.	DESCRIPTION	DIMENSIONS	ITEM NO.	REF. DRGS	MATL.SPEC.	WT/UNIT IN KGS	REMARKS
GROUP: 1-0		SURFACE AREA IN Sq.m.:0.071			WT/ASSY IN Kgs:0.547		
BRACKET					SCALE	SSE/D	
					1:2.5	CHD	
					ALT.	ALTD	
						DRN	L.PANDURANGA RAO
INDIAN RAILWAY STANDARDS INTEGRAL COACH FACTORY, CHENNAI - 600038				SHEET 1 OF 1			
					AAB10005		A3

ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE SPECIFIED. FOR UNTOLERANCED DIMENSIONS AND FINISHNESS VALUES, REFER DRAWING NO IC1/STD 9 0 001.
ANY MANUAL ALTERATION SHALL AUTOMATICALLY RENDER THIS DRAWING INVALID. WELDING SYMBOLS ARE AS PER IS: 813:1986.

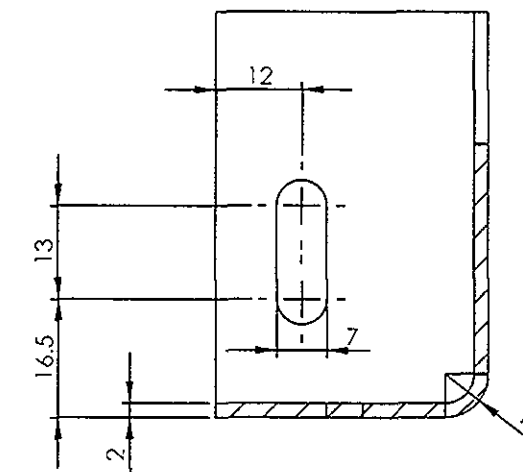
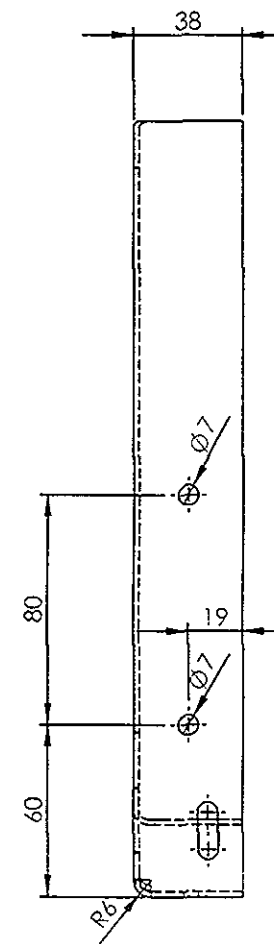
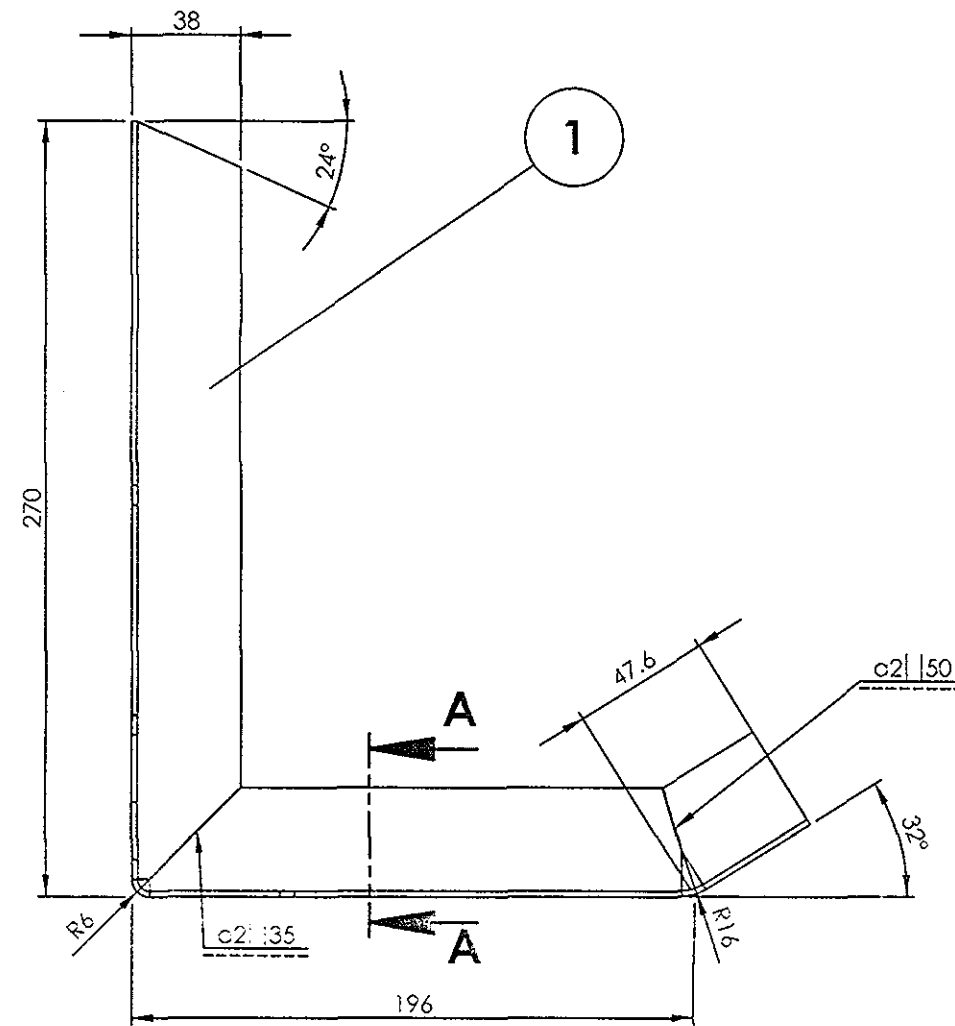
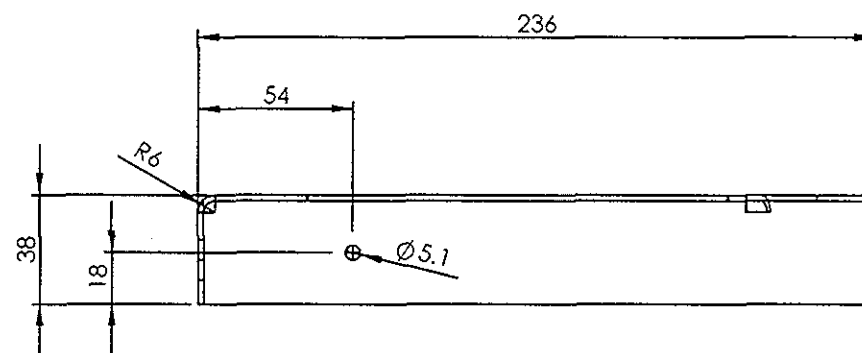
REF.DRG.NO.3 10113.0.20.095.112

DATE OF LATEST ALT.	10-04-2013	AME/SME
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AAB10006

▽ ROUGH MACHINED	⊖ ROUGH CLEANED
▽▽ FINISH MACHINED	⊖⊖ BURRS REMOVED
▽▽▽ FINE FINISH MACHINED	⊖⊖⊖ CHAMFERED

REVISIONS			
ALT.	ZONE	DESCRIPTION	APPROVED & DATE

SECTION A-A
SCALE 1 : 1

1	BRACKET	2x72x508	1		RDSO/SPEC C-K201 X2CrNi12	0.547	
QTY.	DESCRIPTION	DIMENSIONS	ITEM NO.	REF. DRGS	MATL.SPEC.	WT/UNIT IN KGS	REMARKS
GROUP: 1-0		SURFACE AREA IN Sq.m.:0.071			WT/ASSY IN Kgs:0.547		
BRACKET					SCALE	SSE/D	<i>h. S. Prasad</i>
					1:2	CHD	
					ALT.	ALTD	
					DRN	L.PANDURANGA RAO	
INDIAN RAILWAY STANDARDS				SHEET 1 OF 1	AAB10006		A3
INTEGRAL COACH FACTORY, CHENNAI - 600038							

ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE SPECIFIED. FOR UNTOLERANCED DIMENSIONS AND ROUGHNESS VALUES, REFER DRAWING NO ICY/STD 9 0 001.
ANY MANUAL ALTERATION SHALL AUTOMATICALLY RENDER THIS DRAWING INVALID. WELDING SYMBOLS ARE AS PER IS: 813 1986.

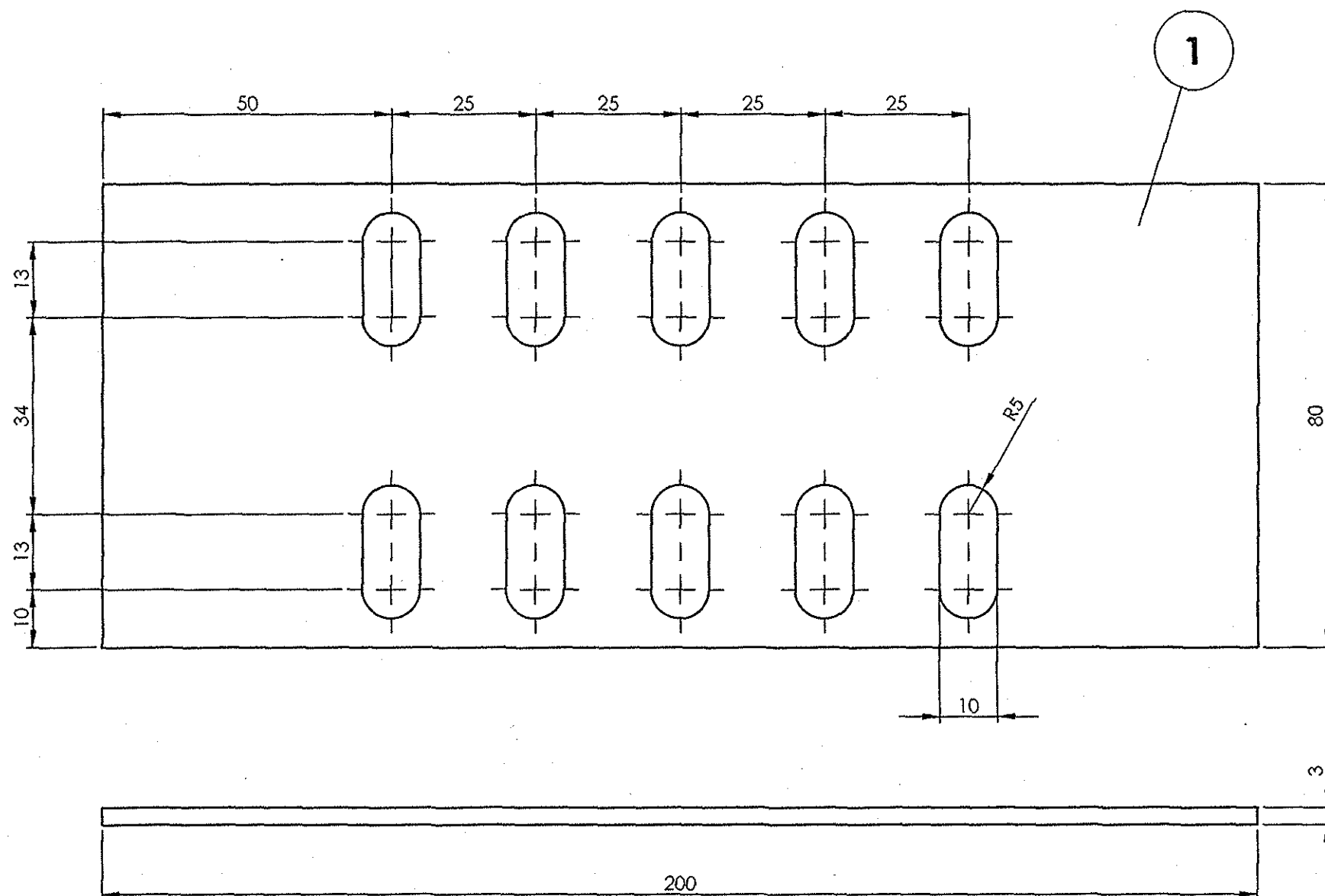
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	10-04-2013	<i>10/4/13</i>
DATE OF LATEST ALT.	DATE OF FIRST ISSUE	AME/SME

AAB16550

▽ ROUGH MACHINED	① ROUGH CLEANED
▽▽ FINISH MACHINED	② BURRS REMOVED
▽▽▽ FINE FINISH MACHINED	③ CHAMFERED


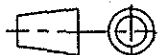
REVISIONS			
ALT.	ZONE	DESCRIPTION	APPROVED & DATE



ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE SPECIFIED. FOR UNTOLERANCED DIMENSIONS AND ROUGHNESS VALUES, REFER DRAWING NO ICF/STD-9-0-001.
ANY MANUAL ALTERATION SHALL AUTOMATICALLY RENDER THIS DRAWING INVALID. WELDING SYMBOLS ARE AS PER IS: 813-1986.
WEIGHT GIVEN IN DRAWING IS FOR INDICATIVE PURPOSE ONLY

REF.DRG.NO.-

DATE OF LATEST ALT.	9/2/16	A. M.
DATE OF FIRST ISSUE		AME/SME

1	FLAT	3x80x200	1		RDSO/SPEC C-K201 X2CrNi12	0.33	
QTY.	DESCRIPTION	DIMENSIONS	ITEM NO.	REF. DRGS	MATL.SPEC.	WT/UNIT IN KGS	REMARKS
GROUP: 1-6		SURFACE AREA IN Sq.m.:			WT/ASSY IN Kgs:		
FLAT					SCALE	SSE/D	
					1:1	CHD	
					ALT.	ALTD	
						DRN	P.MURUGAN
INDIAN RAILWAY STANDARDS							
INTEGRAL COACH FACTORY, CHENNAI - 600038					SHEET 1 OF 1	AAB16550	A3

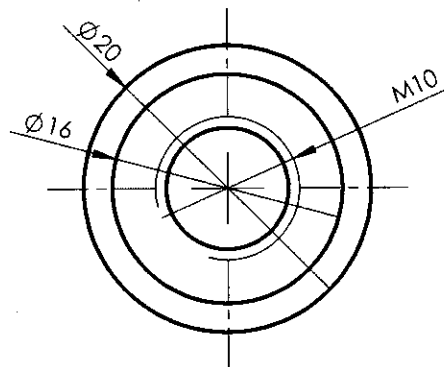
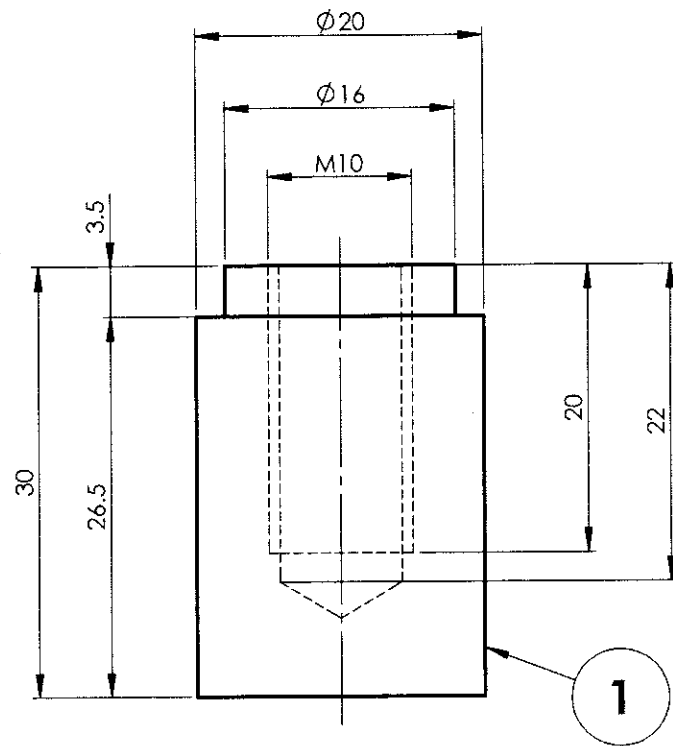
1		2		3		4		5		6		7		8	
AAD16884						▽ ROUGH MACHINED		⑩ ROUGH CLEANED		REVISIONS					
						▽▽ FINISH MACHINED		⑪ BURRS REMOVED		ALT.		ZONE		DESCRIPTION	
						▽▽▽ FINE FINISH MACHINED		⑫ CHAMFERED						APPROVED & DATE	

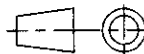
ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE SPECIFIED. FOR UNTOLERANCED DIMENSIONS AND ROUGHNESS VALUES, REFER DRAWING NO ICF/STD-9-0-001. ANY MANUAL ALTERATION SHALL AUTOMATICALLY RENDER THIS DRAWING INVALID. WELDING SYMBOLS ARE AS PER IS: 813-1986. WEIGHT GIVEN IN DRAWING IS FOR INDICATIVE PURPOSE ONLY

1	SCREWING PIECE	Ø 20 X 30	1		AISI 304	0.06	
QTY	DESCRIPTION	DIMENSIONS	ITEM NO.	REF. DRGS	MATL.SPEC.	WT/UNIT IN KGS	REMARKS
GROUP: 1-6 Roof Construction		SURFACE AREA IN Sq.m.:		WT/ASSY IN Kgs:			
SCREWING PIECE				SCALE	SSE/D	S. Panduranga	
				2:1	CHD		
				ALT.	ALTD		
INDIAN RAILWAY STANDARDS				DRN	S K MUTHUKUMAR		
INTEGRAL COACH FACTORY, CHENNAI - 600038				SHEET 1 OF 1		A3	

REF.DRG.NO.	DATE OF LATEST ALT.	DATE OF FIRST ISSUE	AME/SME
	06-03-21	16/03/21	

REVISIONS			
ALT.	ZONE	DESCRIPTION	APPROVED & DATE

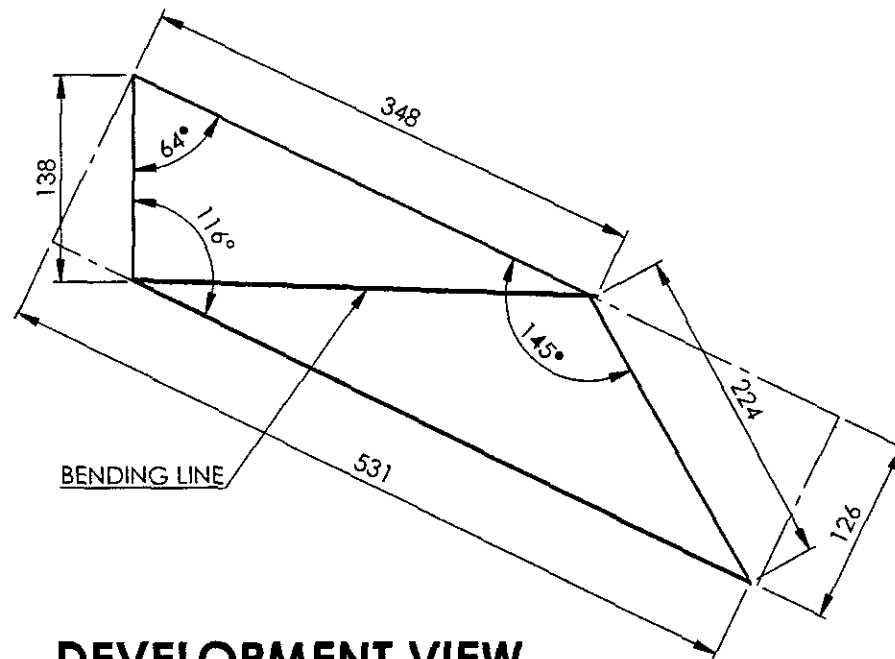
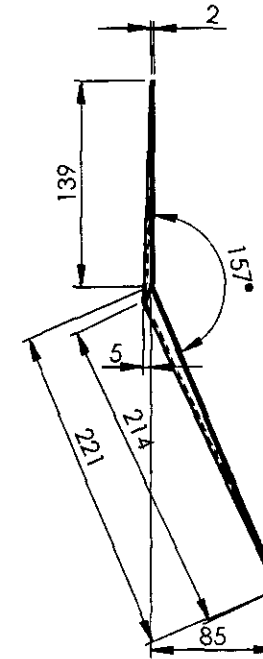
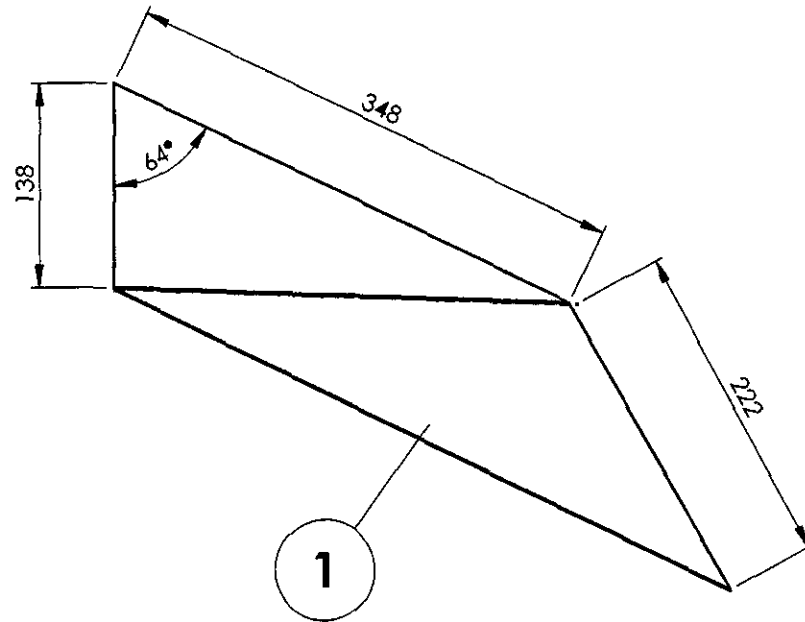


I	SCREWING PIECE	Ø 20 X 30	1		AI SI 304	0.06	
QTY	DESCRIPTION	DIMENSIONS	ITEM NO.	REF. DRGS	MATL.SPEC.	WT/UNIT IN KGS	REMARKS
GROUP: 1-6 Roof Construction		SURFACE AREA IN Sq.m.:			WT/ASSY IN Kgs:		
SCREWING PIECE					SCALE	SSE/D	S. Panduranga R.
					2:1	CHD	
					ALT.	ALTD	
					-	DRN	S K MUTHUKUMAR
INDIAN RAILWAY STANDARDS INTEGRAL COACH FACTORY, CHENNAI - 600038				SHEET 1 OF 1			
					AAD16884		
					A3		

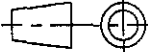
AAE16690

▽ ROUGH MACHINED	① ROUGH CLEANED
▽▽ FINISH MACHINED	①b BURRS REMOVED
▽▽▽ FINE FINISH MACHINED	①8 CHAMFERED

REVISIONS			
ALT.	ZONE	DESCRIPTION	APPROVED & DATE
a		DIMENSION REVISED. VIEWS UPDATED.	V. 12/1



DEVELOPMENT VIEW

1	SIDE SHEET	2 x 126 x 531	1		RDSO SPEC C-K201 X2 Cr Ni 12	865.21	
Default	DESCRIPTION	DIMENSIONS	ITEM NO.	REF. DRGS	MATL.SPEC.	WT/UNIT IN KGS	REMARKS
GROUP: 1-6 Roof Construction		SURFACE AREA IN Sq.m.:			WT/ASSY IN Kgs:865.21		
SIDE SHEET					SCALE	SSE/D	<i>V. 15/12/24</i>
					1:5	CHD	
					ALT.	ALTD	E.SATHISH KUMAR
					2	DRN	E.SATHISH KUMAR
INDIAN RAILWAY STANDARDS INTEGRAL COACH FACTORY, CHENNAI - 600038							
					SHEET 1 OF 1		AAE16690

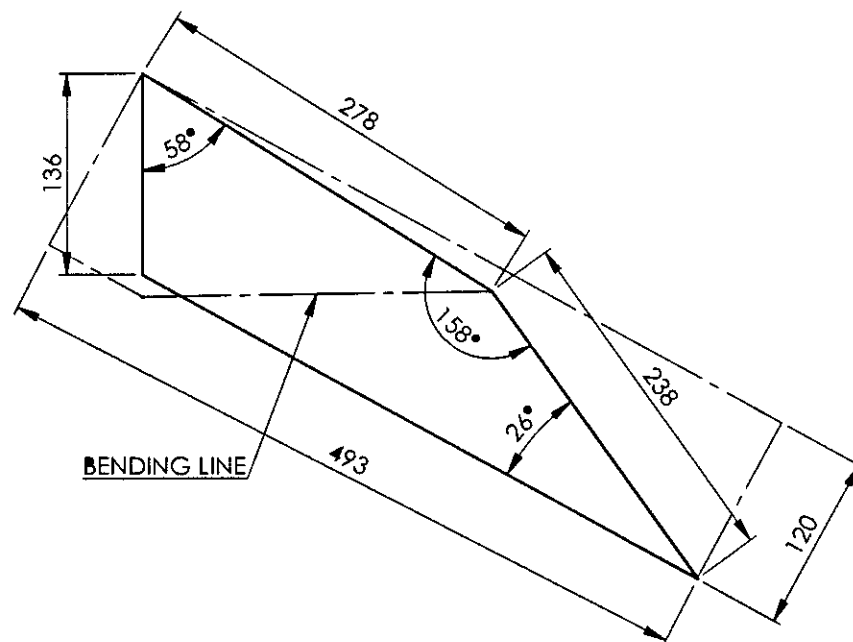
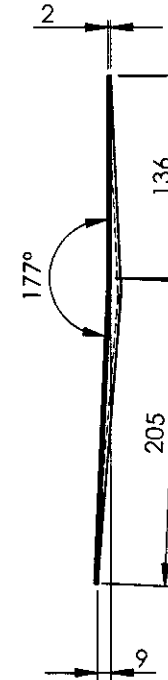
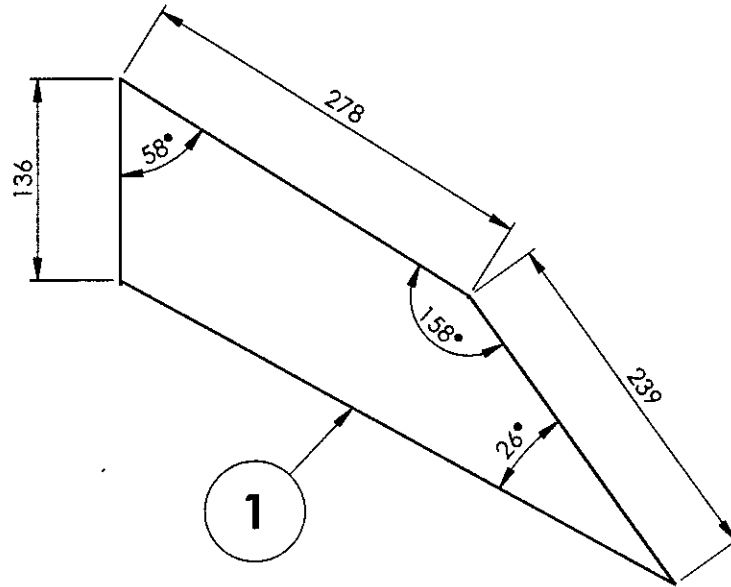
ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE SPECIFIED. FOR UNTOLERANCED DIMENSIONS AND ROUGHNESS VALUES, REFER DRAWING NO ICF/STD-9-0-001.
ANY MANUAL ALTERATION SHALL AUTOMATICALLY RENDER THIS DRAWING INVALID. WELDING SYMBOLS ARE AS PER IS: 813-1986.

REF.DRG.NO.-

AAE16691

▽ ROUGH MACHINED	① ROUGH CLEANED
▽▽ FINISH MACHINED	①b BURRS REMOVED
▽▽▽ FINE FINISH MACHINED	①c CHAMFERED

REVISIONS			
ALT.	ZONE	DESCRIPTION	APPROVED & DATE
a		DIMENSION REVISED. VIEWS UPDATED.	<i>[Signature]</i> 15/3/24



DEVELOPMENT VIEW

1	SIDE SHEET	2 x 119 x 493	1		RDSO SPEC C-K201 X2 Cr Ni 12	612.89	
Default	DESCRIPTION	DIMENSIONS	ITEM NO.	REF. DRGS	MATL.SPEC.	WT/UNIT IN KGS	REMARKS
GROUP: 1-6 Roof Construction				SURFACE AREA IN Sq.m.:		WT/ASSY IN Kgs: 612.89	
SIDE SHEET					SCALE 1:5	SSE/D CHD	<i>[Signature]</i>
					ALT. a	ALTD DRN	E.SATHISH KUMAR
INDIAN RAILWAY STANDARDS INTEGRAL COACH FACTORY, CHENNAI - 600038					SHEET 1 OF 1		
					AAE16691		A3

15-03-24	07-06-23	<i>[Signature]</i> 15/3/24
DATE OF LATEST ALT.	DATE OF FIRST ISSUE	AME/SME

ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE SPECIFIED. FOR UNTOLERANCED DIMENSIONS AND ROUGHNESS VALUES, REFER DRAWING NO ICF/STD-9-0-001.
ANY MANUAL ALTERATION SHALL AUTOMATICALLY RENDER THIS DRAWING INVALID. WELDING SYMBOLS ARE AS PER IS: 813-1986.

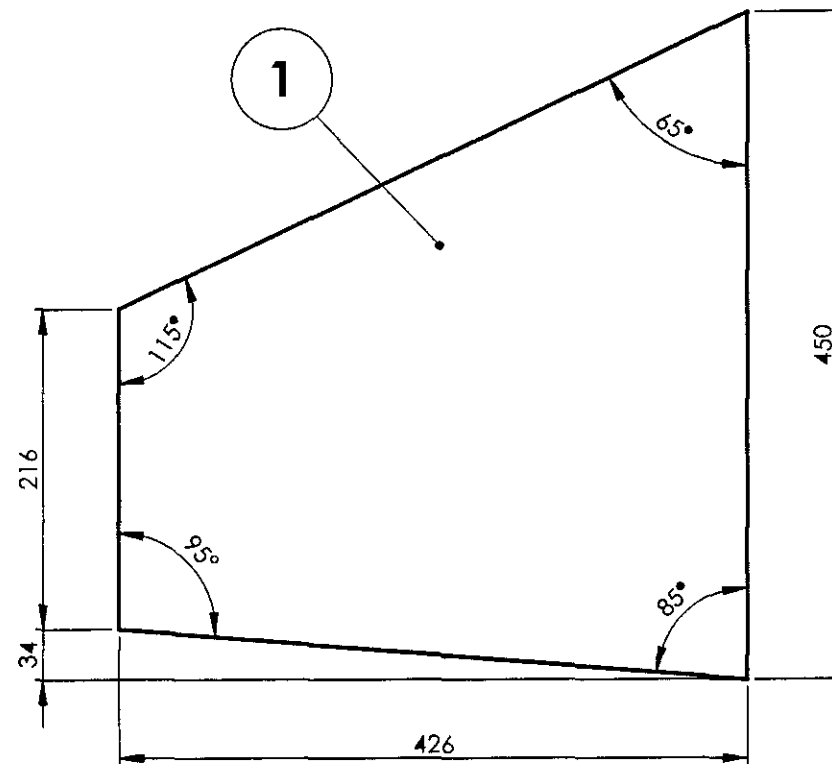
REF.DRG.NO.-

AAE16692

▽ ROUGH MACHINED	① ROUGH CLEANED
▽▽ FINISH MACHINED	①b BURRS REMOVED
▽▽▽ FINE FINISH MACHINED	①8 CHAMFERED

REVISIONS

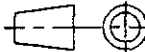
ALT.	ZONE	DESCRIPTION	APPROVED & DATE
		DIMENSION REVISED. VIEWS UPDATED.	<i>V. 19/3/24</i>



ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE SPECIFIED. FOR UNTOLERANCED DIMENSIONS AND ROUGHNESS VALUES, REFER DRAWING NO ICF/STD-9-0-001.
ANY MANUAL ALTERATION SHALL AUTOMATICALLY RENDER THIS DRAWING INVALID. WELDING SYMBOLS ARE AS PER EN ISO 2553.
WEIGHT GIVEN IN DRAWING IS FOR INDICATIVE PURPOSE ONLY


REF.DRG.NO.-

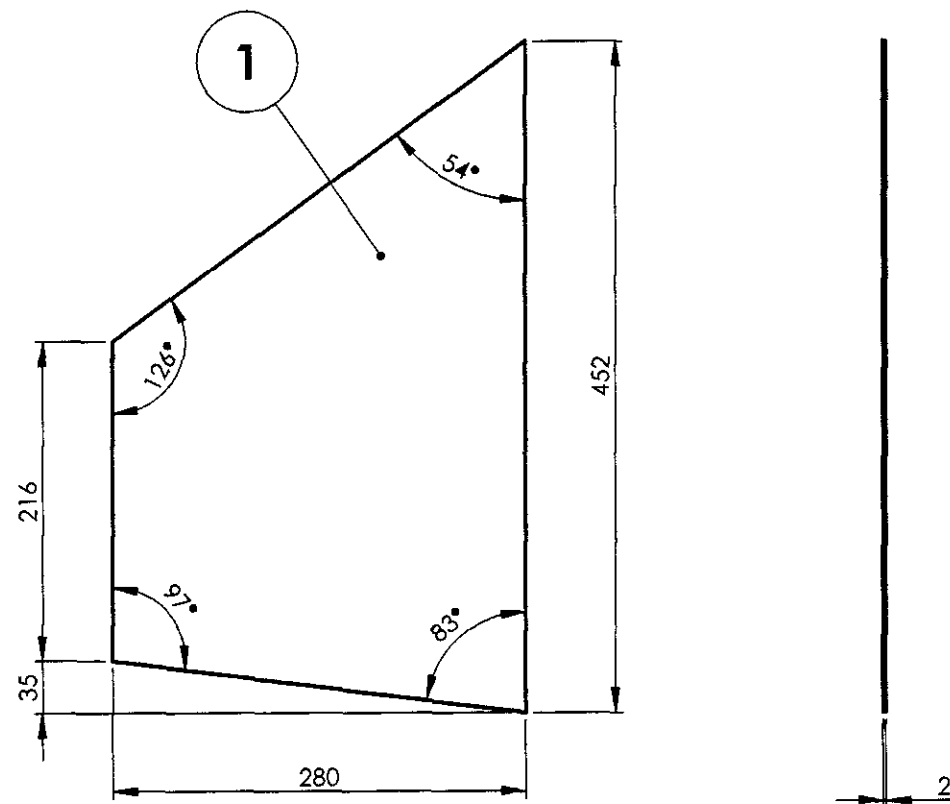
15-03-24	07-06-23	<i>V. 19/3/24</i>
DATE OF LATEST ALT.	DATE OF FIRST ISSUE	AME/SME

1	BOTTOM SHEET	2 x 426 x 450	1		RDSO SPEC C - K201 X2 Cr Ni 12	2.27	
QTY	DESCRIPTION	DIMENSIONS	ITEM NO.	REF. DRGS	MATL.SPEC.	WT/UNIT IN KGS	REMARKS
GROUP: 1-6 Roof Construction		SURFACE AREA IN Sq.m.:			WT/ASSY IN Kgs:		
BOTTOM SHEET					SCALE	SSE/D	<i>L. Panduranga Rao</i>
					1:5	CHD	
					ALT.	ALTD	E.SATHISH KUMAR
					2	DRN	E.SATHISH KUMAR
INDIAN RAILWAY STANDARDS				SHEET 1 OF 1			
INTEGRAL COACH FACTORY, CHENNAI - 600038					AAE16692		A3

AAE16693

▽ ROUGH MACHINED	① ROUGH CLEANED
▽▽ FINISH MACHINED	①⑥ BURRS REMOVED
▽▽▽ FINE FINISH MACHINED	①⑧ CHAMFERED

REVISIONS			
ALT.	ZONE	DESCRIPTION	APPROVED & DATE
a		DIMENSION REVISED. VIEWS UPDATED.	 1/2/24



1	TOP SHEET	3 x 280 x 452	1		RDSO SPEC C-K201 X2 Cr Ni 12	1.49	
QTY	DESCRIPTION	DIMENSIONS	ITEM NO.	REF. DRGS	MATL.SPEC.	WT/UNIT IN KGS	REMARKS
GROUP: 1-6 Roof Construction				SURFACE AREA IN Sq.m.:		WT/ASSY IN Kgs:	
TOP SHEET					SCALE 1:5	SSE/D CHD	19/3/24
					ALT. a	ALTD	E.SATHISH KUMAR
						DRN	E.SATHISH KUMAR
INDIAN RAILWAY STANDARDS					SHEET 1 OF 1		
INTEGRAL COACH FACTORY, CHENNAI - 600038					AAE16693		A3

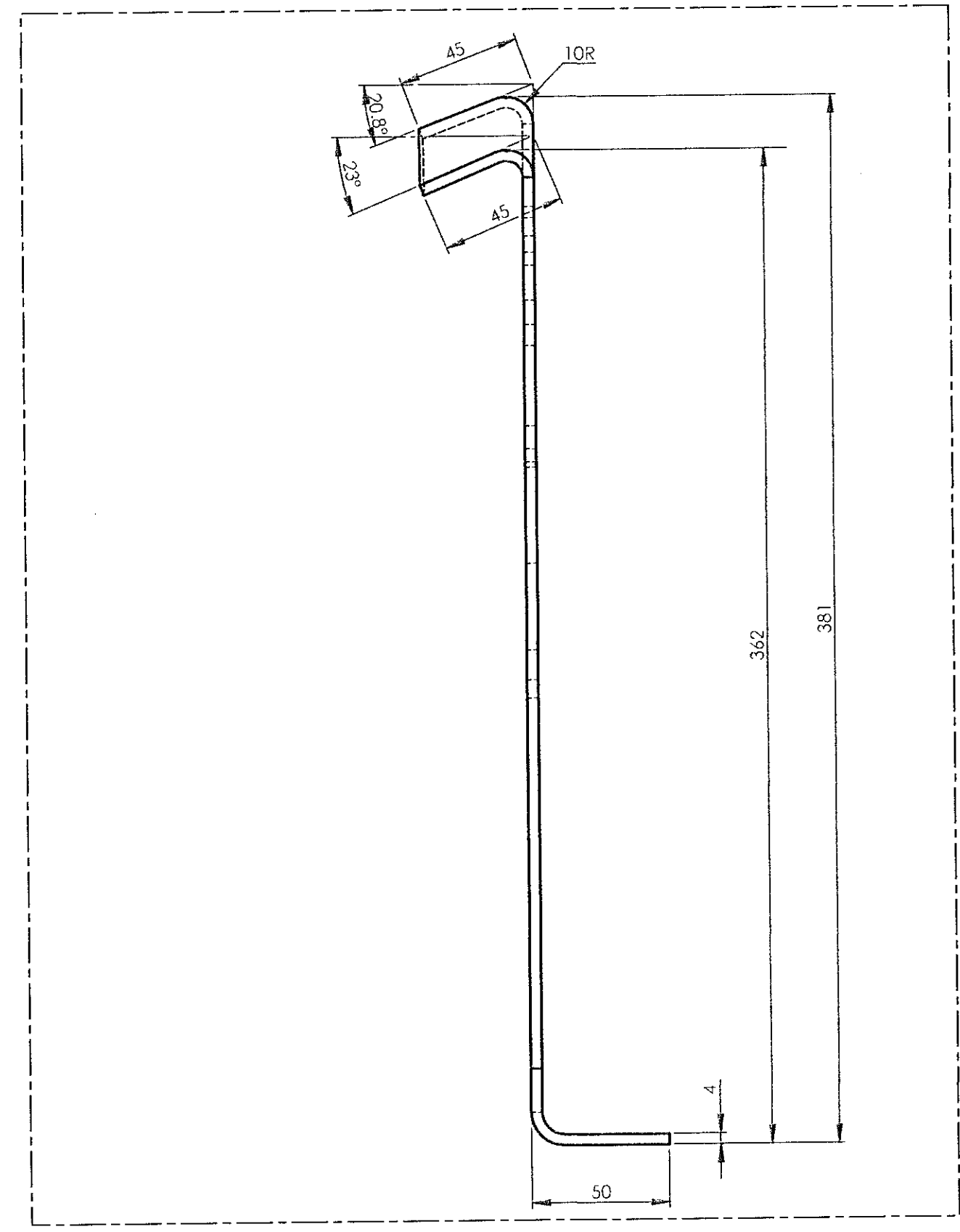
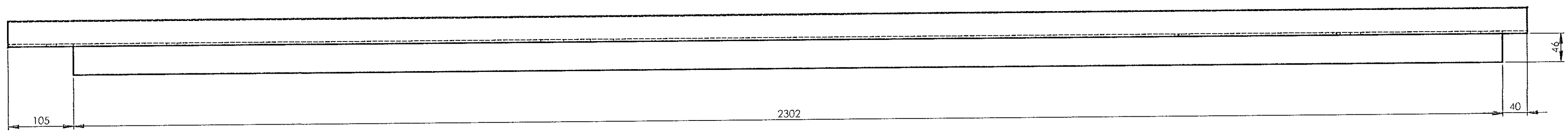
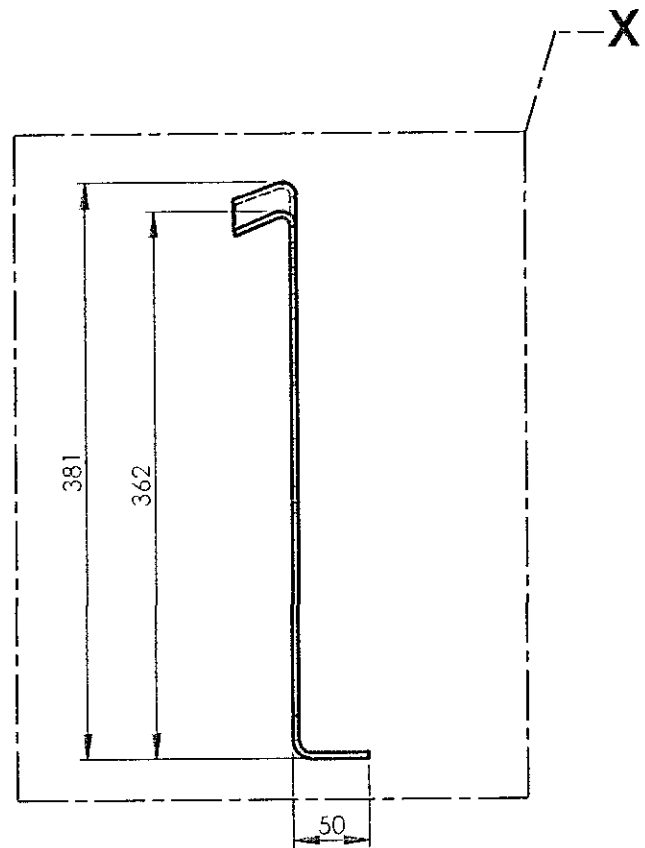
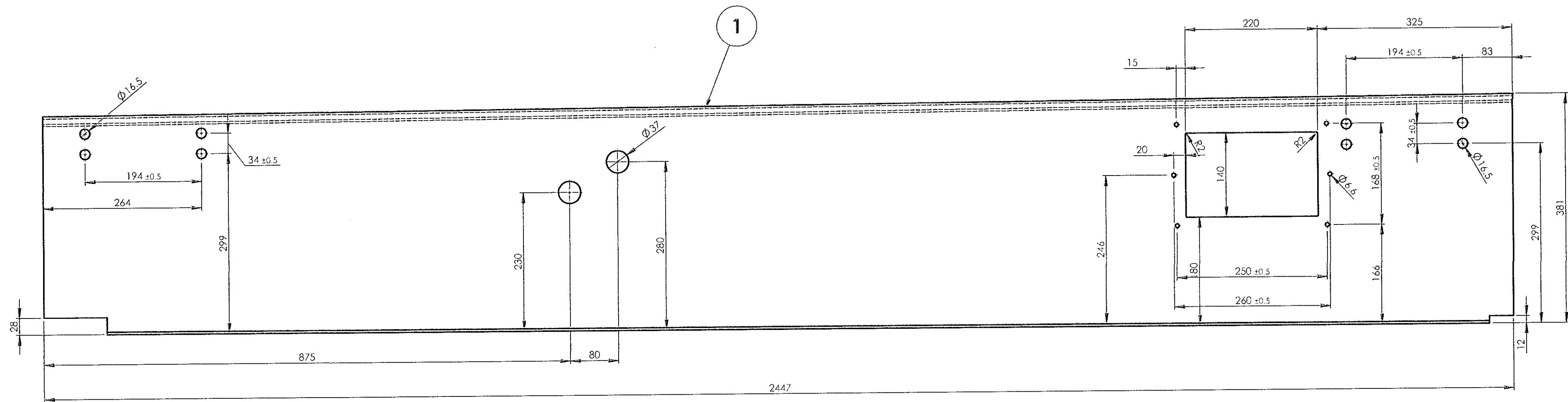
15-03-24	07-06-23	19/3/24
DATE OF LATEST ALT.	DATE OF FIRST ISSUE	AME/SME

REF.DRG.NO.-

ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE SPECIFIED. FOR UNTOLERANCED DIMENSIONS AND ROUGHNESS VALUES, REFER DRAWING NO ICF/STD-9-0-001.
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WEIGHT GIVEN IN DRAWING IS FOR INDICATIVE PURPOSE ONLY

AAF16121

12		13		14		15		16	
▽ ROUGH MACHINED		①1 ROUGH CLEANED		REVISIONS		APPROVED & DATE			
▽▽ FINISH MACHINED		①② BURRS REMOVED		ALT.	ZONE	DESCRIPTION			
▽▽▽ FINE FINISH MACHINED		①③ CHAMFERED		a		CUTAWAY ADDED AND VIEWS UPDATED.			



DETAIL X
SCALE 1 : 2

ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE SPECIFIED. FOR UNTOLERANCED DIMENSIONS AND ROUGHNESS VALUES, REFER DRAWING NO ICF/STD-9-0001. ANY MANUAL ALTERATION SHALL AUTOMATICALLY RENDER THIS DRAWING INVALID. WELDING SYMBOLS ARE AS PER IS 813:1986. WEIGHT GIVEN IN DRAWING IS FOR INDICATIVE PURPOSE ONLY.

REF.DRG.NO.

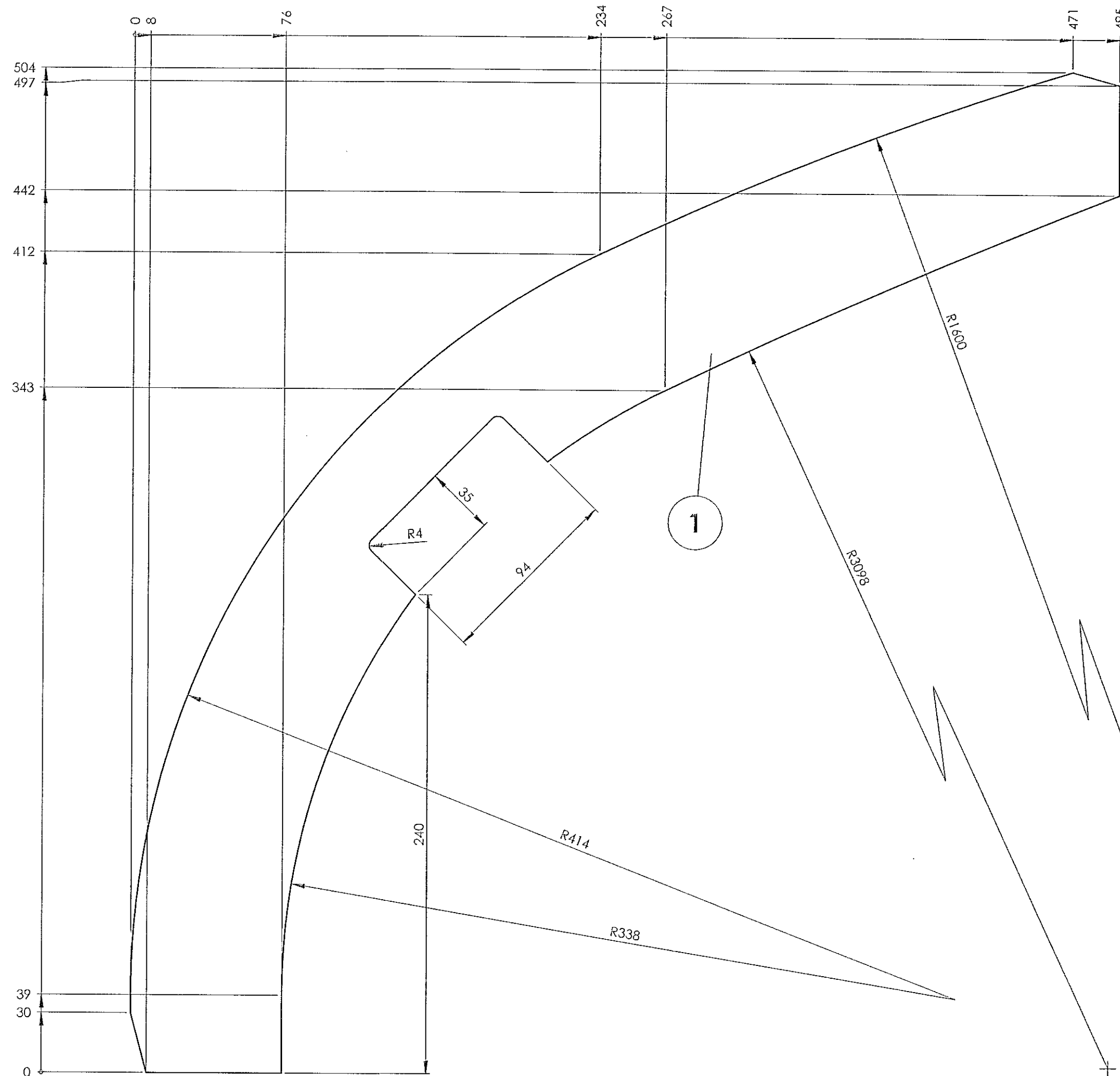
DATE OF LATEST ALT. 01/01/20
DATE OF FIRST ISSUE 01/09/20
AME/SME

1	MEMBER	4 x 459 x 2447	1		RDSO/SPEC C- K201 X2 GY NI 12	33.764	
QTY	DESCRIPTION	DIMENSIONS	ITEM NO.	REF. DRGS	MATL.SPEC.	WT/UNIT IN KGS	REMARKS
GROUP: 1-6 Roof Construction		SURFACE AREA IN Sq.m.: 2.139		WT/ASSY IN Kgs:			
MEMBER		SCALE 1:5	SSE/D CHD				
		ALT. a	ALTD DRN	E.SATHISH KUMAR S K MUTHUKUMAR/RAVI			
		INDIAN RAILWAY STANDARDS INTEGRAL COACH FACTORY, CHENNAI - 600038		SHEET 1 OF 1		AAF16121 A1	

AAF16158

▽ ROUGH MACHINED	① ROUGH CLEANED
▽▽ FINISH MACHINED	①⑤ BURRS REMOVED
▽▽▽ FINE FINISH MACHINED	①⑧ CHAMFERED

REVISIONS				APPROVED & DATE	
ALT.	ZONE	DESCRIPTION			



ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE SPECIFIED. FOR UNTOLERANCED DIMENSIONS AND ROUGHNESS VALUES, REFER DRAWING NO. ICF/STD-9-0-001. ANY MANUAL ALTERATION SHALL AUTOMATICALLY RENDER THIS DRAWING INVALID. WELDING SYMBOLS ARE AS PER IS:813-1986.

REF.DRG.NO.2 10113.0.20.210.103

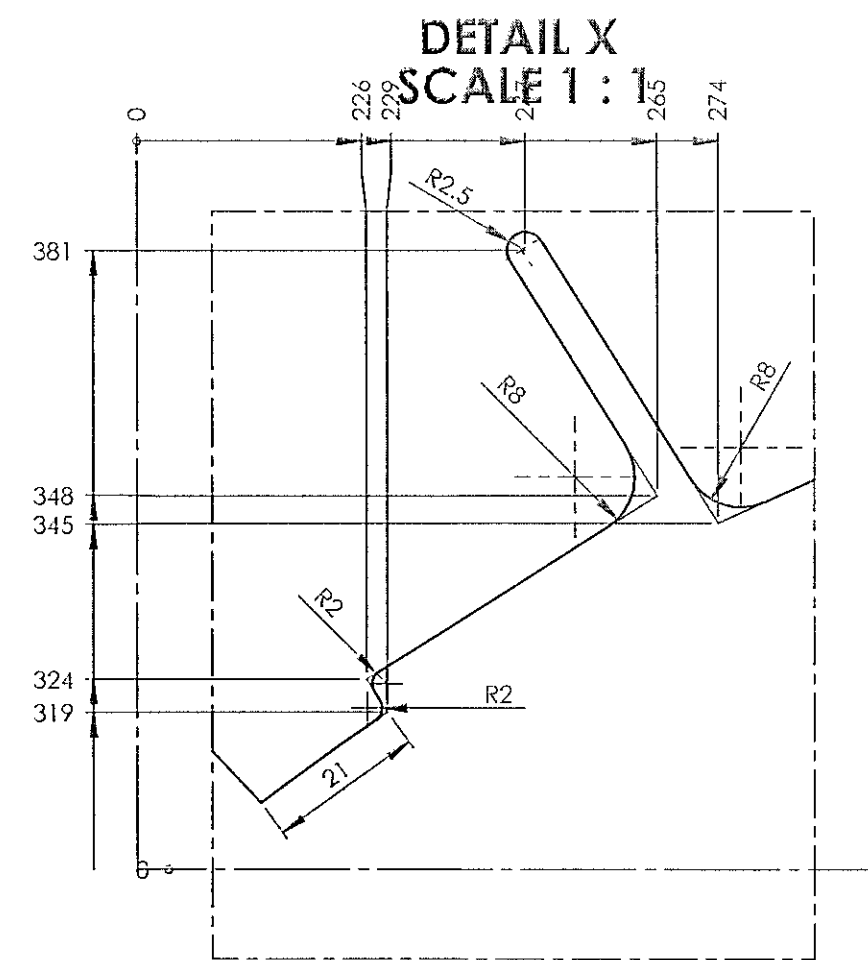
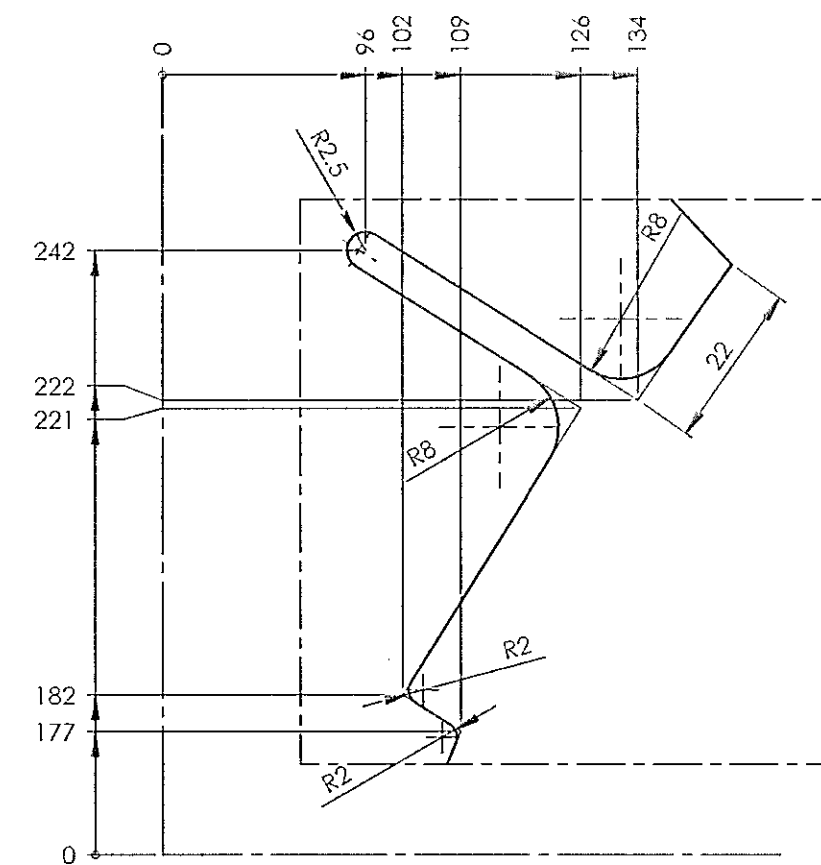
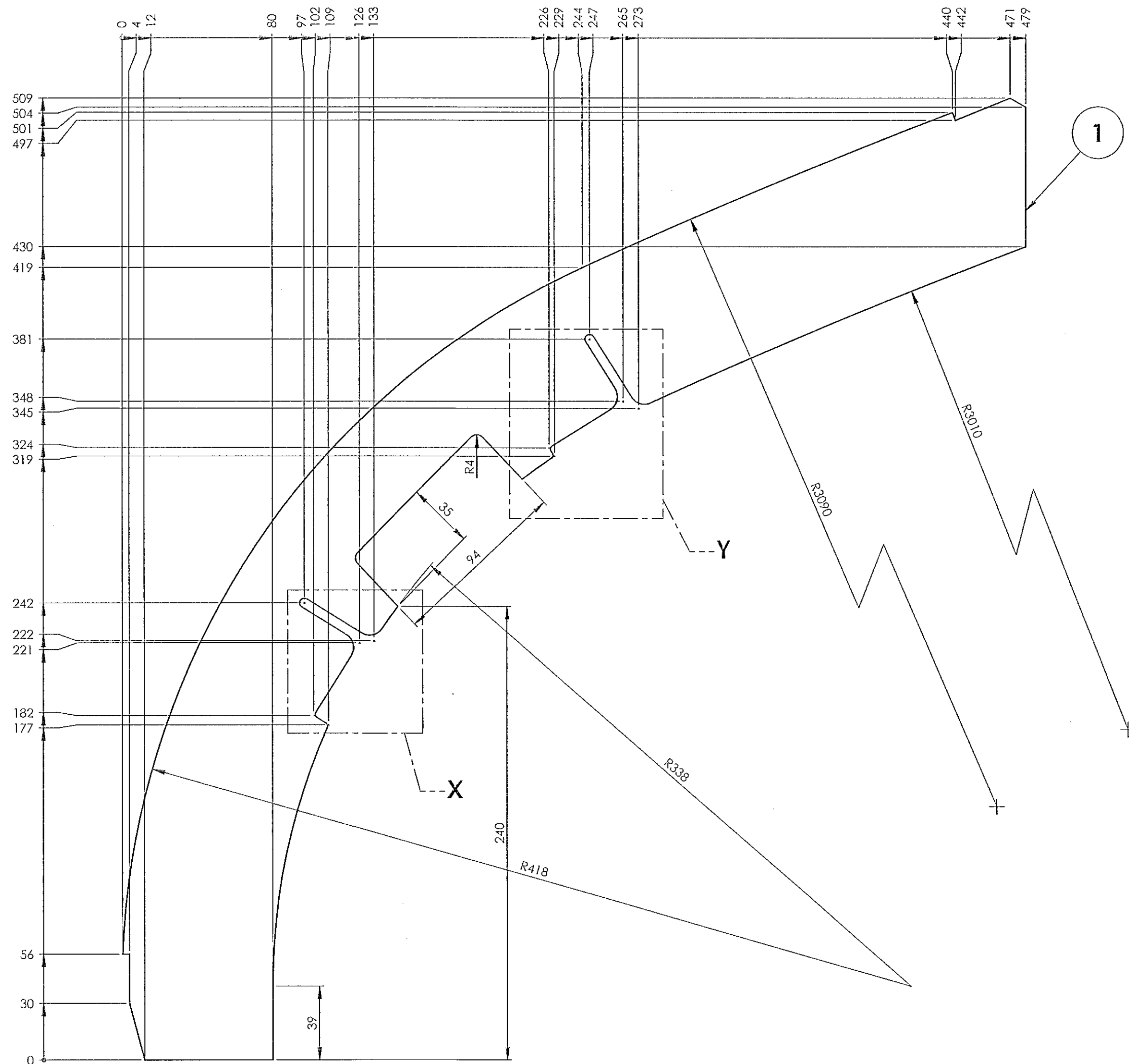
DATE OF LATEST ALT.	04/09/25	AME/SME
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1	ROOF ARCH	4 x 495 x 505	1		RDSO/SPEC C-K201 X2CrNi12	1.623	
QTY	DESCRIPTION	DIMENSIONS	ITEM NO.	REF. DRGS	MATL.SPEC.	WT/UNIT IN KGS	REMARKS
GROUP: 1-6 Roof Construction				SURFACE AREA IN Sq.m.: 0.108		WT/ASSY IN Kgs: 1.623	
ROOF ARCH					SCALE 1:2	SSE/D CHD	E.SATHISH KUMAR
					ALT	ALTD	
						DRN	
INDIAN RAILWAY STANDARDS					SHEET 1 OF 1		
INTEGRAL COACH FACTORY, CHENNAI - 600038					AAF16158		
					A2		

AAF16159

▽ ROUGH MACHINED	01 ROUGH CLEANED
▽▽ FINISH MACHINED	01a BURRS REMOVED
▽▽▽ FINE FINISH MACHINED	01b CHAMFERED


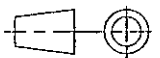
REVISIONS			
ALT.	ZONE	DESCRIPTION	APPROVED & DATE



ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE SPECIFIED. FOR UNTOLERANCED DIMENSIONS AND ROUGHNESS VALUES, REFER DRAWING NO ICF/STD-9-0-001. ANY MANUAL ALTERATION SHALL AUTOMATICALLY RENDER THIS DRAWING INVALID. WELDING SYMBOLS ARE AS PER EN ISO 2553. WEIGHT GIVEN IN DRAWING IS FOR INDICATIVE PURPOSE ONLY.

REF.DRG.NO.2 10113.0.20.210.112

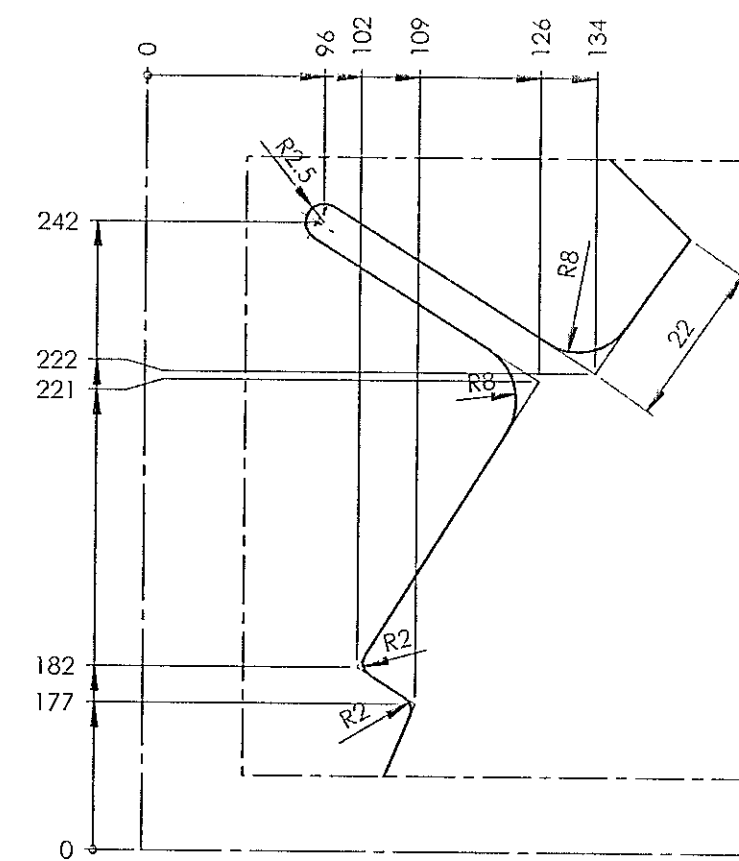
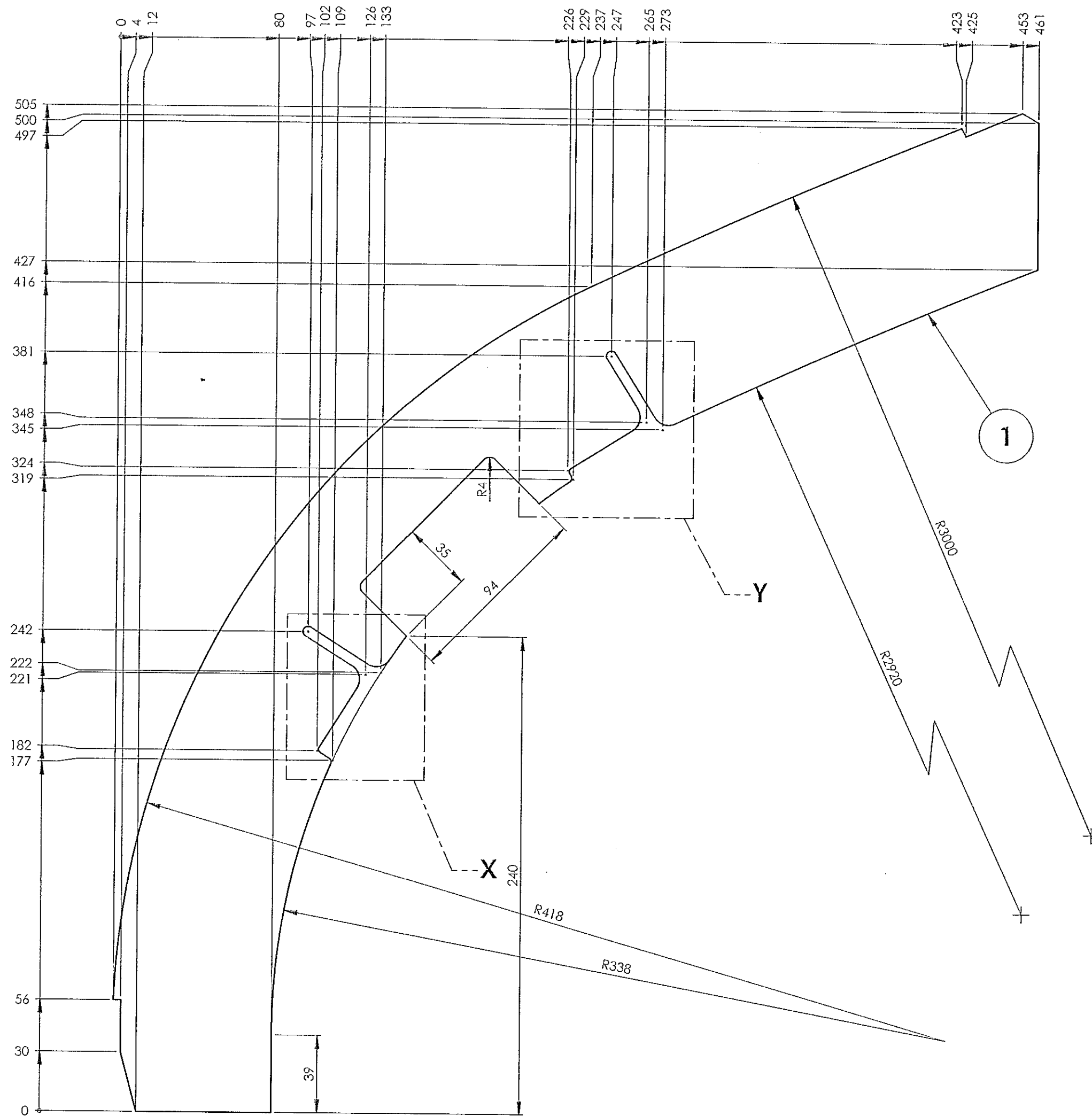
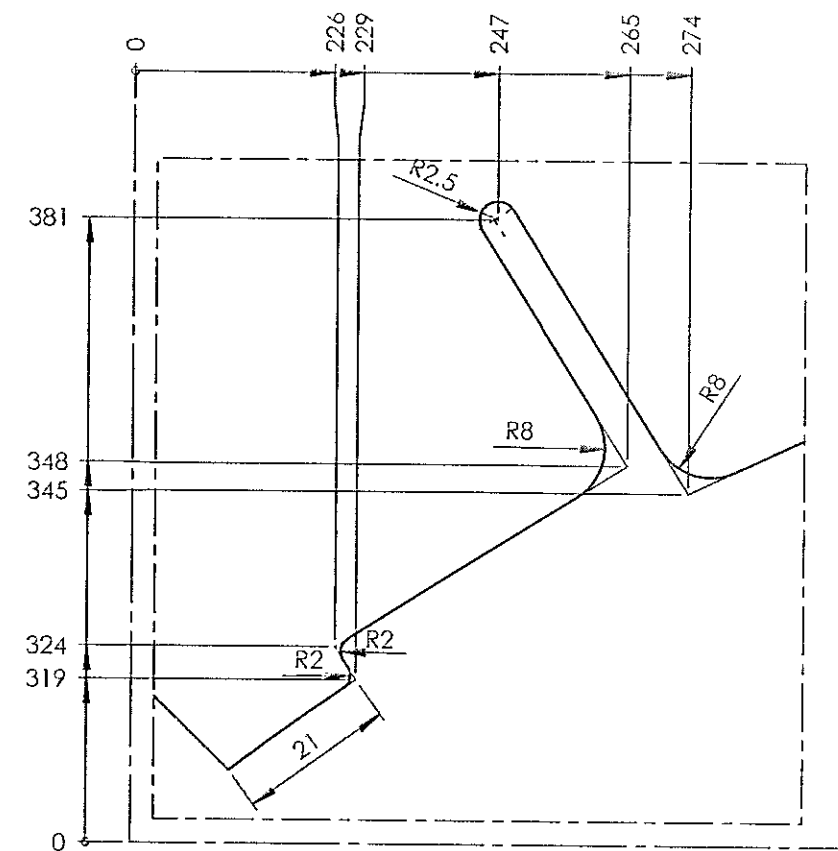
DATE OF LATEST ALT.	04/09/25	AME/SME
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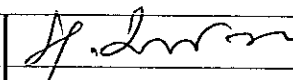
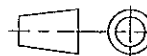
1	ROOF ARCH	4 x 479 x 508.5	1		RDSO/SPEC C-K201 X2CrNi12	1.660		
QTY	DESCRIPTION	DIMENSIONS	ITEM NO.	REF. DRGS	MATL.SPEC.	WT/UNIT IN KGS	REMARKS	
GROUP: I-6 Roof Construction			SURFACE AREA IN Sq.m.: 0.111		WT/ASSY IN Kgs:			
ROOF ARCH					SCALE 1:2	SSE/D		
						CHD		
					ALT'	ALTD		
						DRN		E.SATHISH KUMAR
INDIAN RAILWAY STANDARDS INTEGRAL COACH FACTORY, CHENNAI - 600038								
					SHEET 1 OF 1	AAF16159		
							A2	

AAFI16160

▽ ROUGH MACHINED	01 ROUGH CLEANED
▽▽ FINISH MACHINED	01b BURRS REMOVED
▽▽▽ FINE FINISH MACHINED	018 CHAMFERED

REVISIONS			
ALT.	ZONE	DESCRIPTION	APPROVED & DATE

DETAIL X
SCALE 1 : 1DETAIL Y
SCALE 1 : 1

1	ROOF ARCH	4 x 462 x 505	1		RDSO/SPEC C-K201 X2CrNi12	1.614	
QTY	DESCRIPTION	DIMENSIONS	ITEM NO.	REF. DRGS	MATL.SPEC.	WT/UNIT IN KGS	REMARKS
GROUP: 1-6 Roof Construction		SURFACE AREA IN Sq.m.: 0.108			WT/ASSY IN Kgs:		
ROOF ARCH					SCALE 1:2	SSE/D	
						CHD	
					ALT	ALTD	
						DRN	
INDIAN RAILWAY STANDARDS INTEGRAL COACH FACTORY, CHENNAI - 600038							
					SHEET 1 OF 1		AAF16160

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REF.DRG.NO.

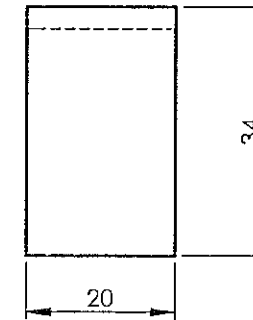
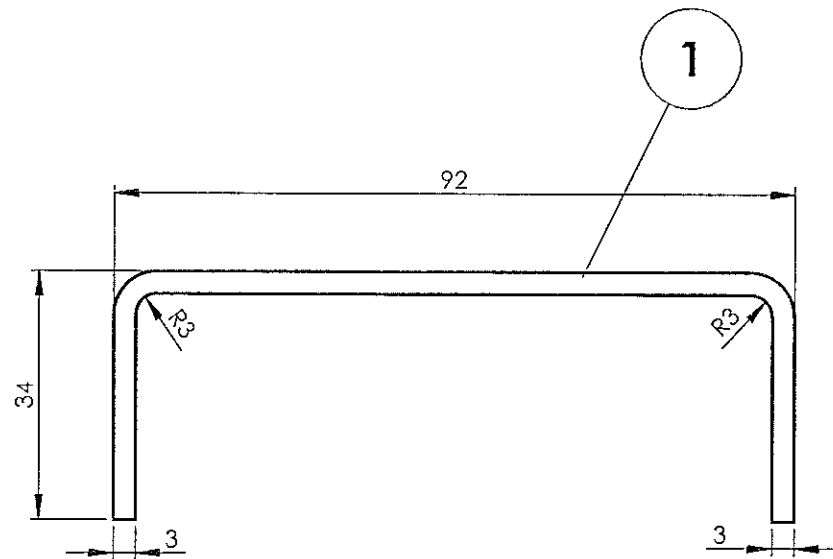
DATE OF LATEST ALT.	04/09/25	AME/SME
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AAAF16161

▽ ROUGH MACHINED	① ROUGH CLEANED
▽▽ FINISH MACHINED	①b BURRS REMOVED
▽▽▽ FINE FINISH MACHINED	①8 CHAMFERED

REVISIONS

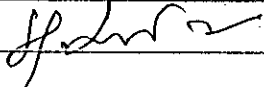
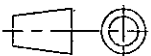
ALT.	ZONE	DESCRIPTION	APPROVED & DATE
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WEIGHT GIVEN IN DRAWING IS FOR INDICATIVE PURPOSE ONLY

REF.DRG.NO.-

-	04/09/25	<i>[Signature]</i>
DATE OF LATEST ALT.	DATE OF FIRST ISSUE	AME/SME

1	BACK PIECE	3x20x148	1		RDSO SPEC C-K201 X2 Cr NI 12	0.07	
QTY	DESCRIPTION	DIMENSIONS	ITEM NO.	REF. DRGS	MATL.SPEC.	WT/UNIT IN KGS	REMARKS
GROUP: 1-6 Roof Construction		SURFACE AREA IN Sq.m.:			WT/ASSY IN Kgs:		
BACK PIECE					SCALE 1:1	SSE/D	
						CHD	
					ALT.	ALTD	
						DRN	VIJAYAKUMAR R
INDIAN RAILWAY STANDARDS				SHEET 1 OF 1			
INTEGRAL COACH FACTORY, CHENNAI - 600038					AAF16161		A3

82716006

▽ ROUGH MACHINED
▽▽ FINISH MACHINED
▽▽▽ FINE FINISH MACHINED

(01) ROUGH CLEANED
(01b) BURRS REMOVED
(18) CHAMFERED

REVISIONS

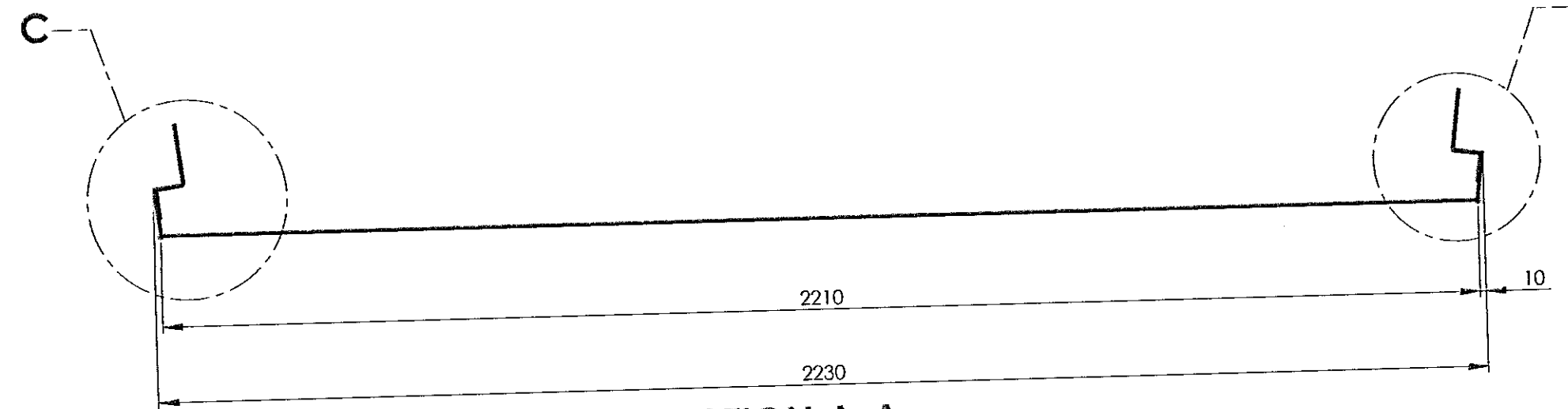
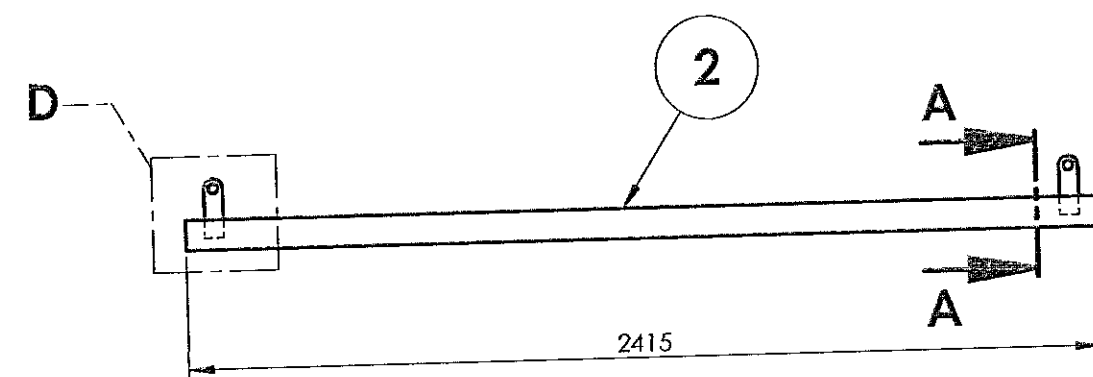
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ZONE

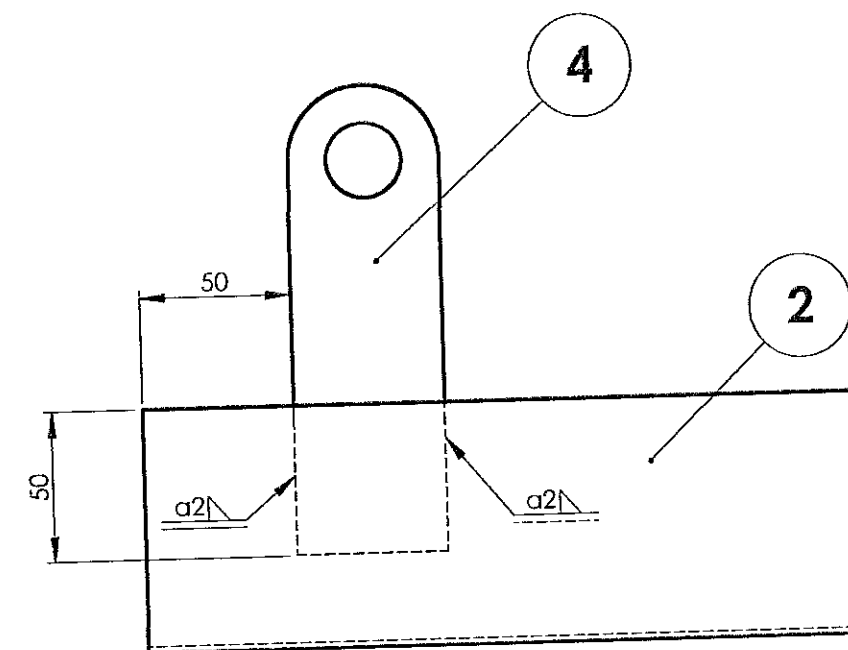
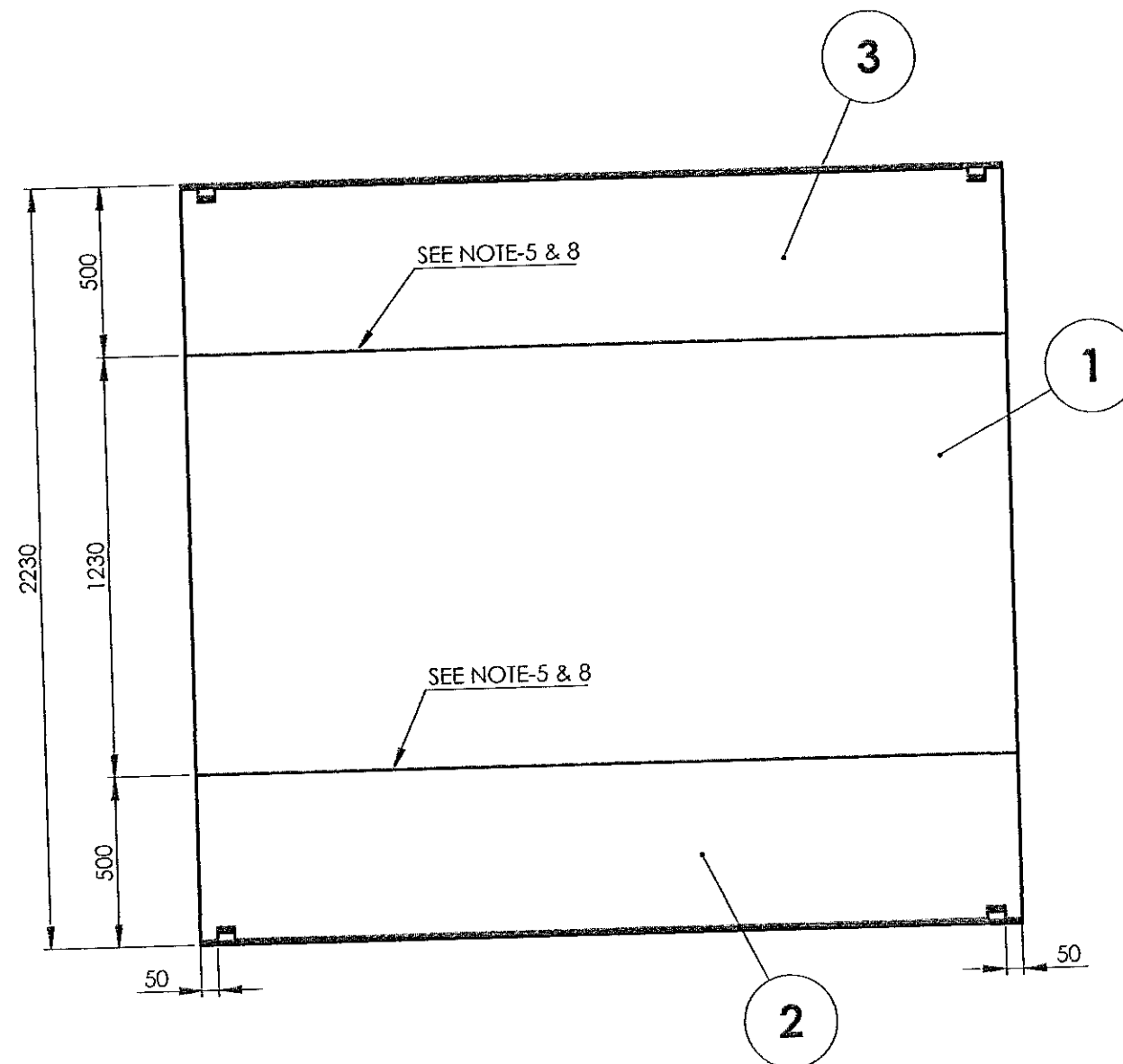
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APPROVED &
DATE

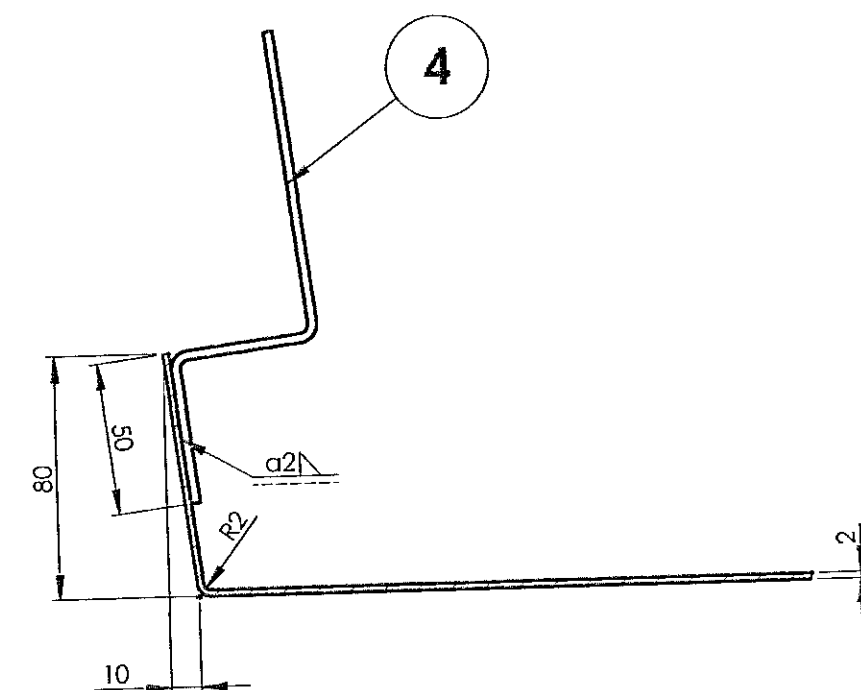
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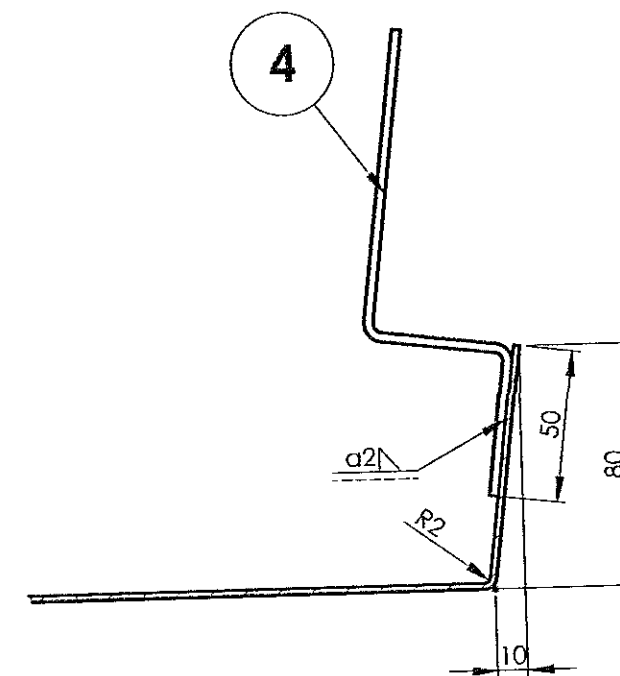
SECTION A-A
SCALE 1 : 10



DETAIL D
SCALE 1 : 2.5



DETAIL C
SCALE 1 : 2.5



DETAIL B
SCALE 1 : 2.5

NOTE:

1. STAINLESS STEEL ELECTRODE OF SAME COMPOSITION AS PER TABLE-3 OF RDSO/SPEC C-K201 SHALL BE USED FOR WELDING.
2. ALL WELD SPATTERS SHALL BE GROUND.
3. ALL WELDED JOINTS SHALL BE PICKLED AND PASSIVATED BEFORE SURFACE TREATMENT.
4. ALL SHARP CORNERS SHALL BE ROUNDED OFF.
5. WELDING OF SHEET JOINT SHALL BE OF LEAK PROOF BUTT JOINT AND SHALL BE MADE THROUGH TIG/LASER/RESISTANCE SEAM WELD PROCESS.
6. FOR WELD TESTING PREFERENCES REFER DRG.NO.ICF/STD-9-0-998.
7. FOR WELD PROCEDURE SPECIFICATION REFER DRG.NO.ICF/STD-9-0-999.
8. ROOF SHEET ASSY WITH SINGLE JOINT CAN ALSO BE ACCEPTABLE.

4	LIFTING HOOK		4	AAF16435		0.21	
1	ROOF SHEET		3	AAF16106		21.94	
1	ROOF SHEET		2	AAF16105		21.94	
1	ROOF SHEET	2 x 1230 x 2415	1		RDSO SPEC C-K201 X5 Cr Ni 18 10	47.53	
QTY.	DESCRIPTION	DIMENSIONS	ITEM NO.	REF.DRGS.	MATL	WT/UNIT IN KGS	REMARKS
GROUP: 1-6 Roof Construction				SURFACE AREA IN Sq.m.: 11542955.86		WT/ASSY IN Kgs:	
ROOF SHEET ASSY				SCALE 1:20	SSE/D CHD	E.SATHISH KUMAR E. SATHISH KUMAR	
				ALT a	ALTD DRN		
INDIAN RAILWAY STANDARDS				SHEET 1 OF 1		LWFAC/PP2	
INTEGRAL COACH FACTORY, CHENNAI - 600038				82716006		A2	

21/01/26	08/08/25	AME/SME
DATE OF LATEST ALT.	DATE OF FIRST ISSUE	AME/SME

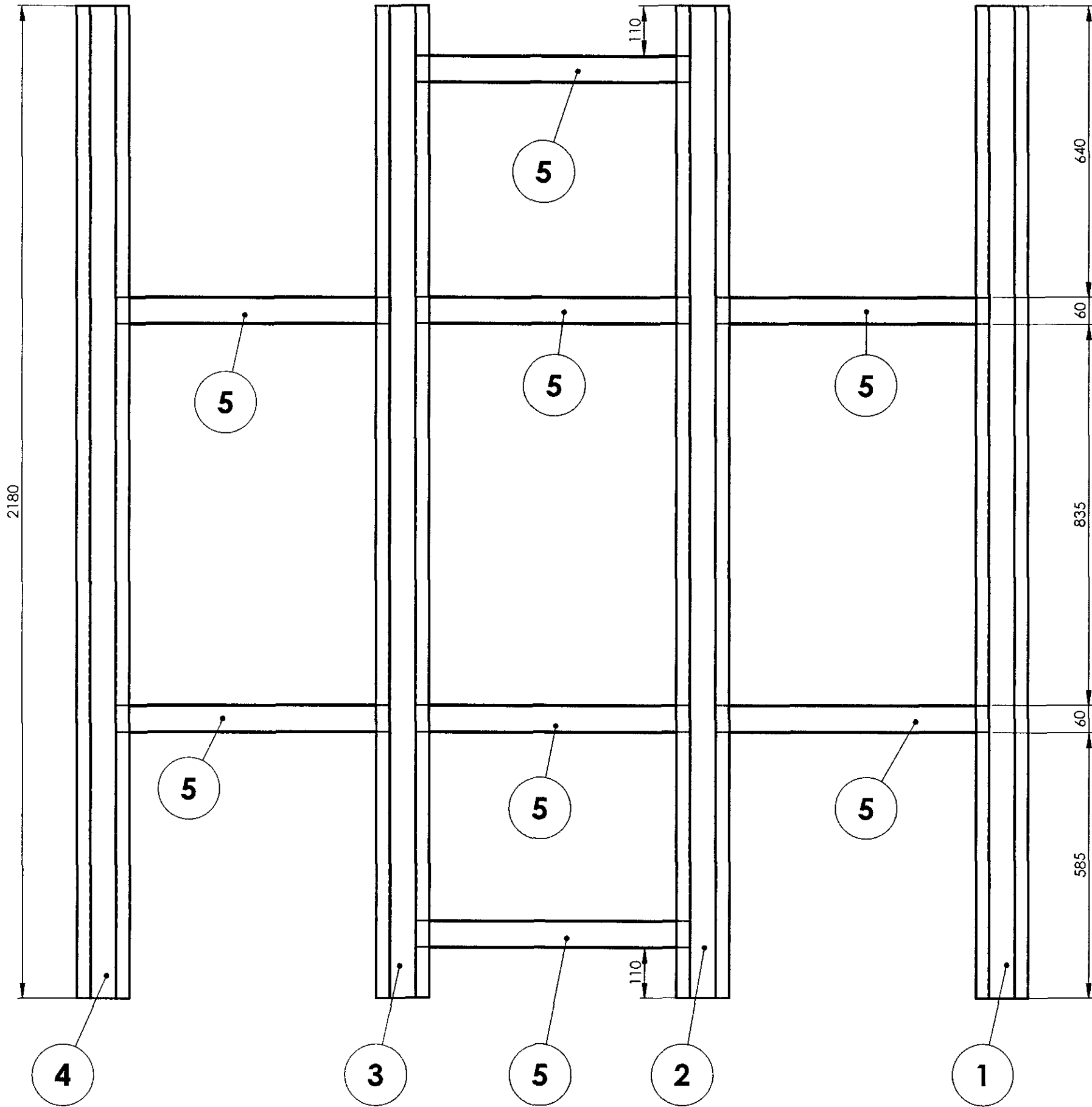
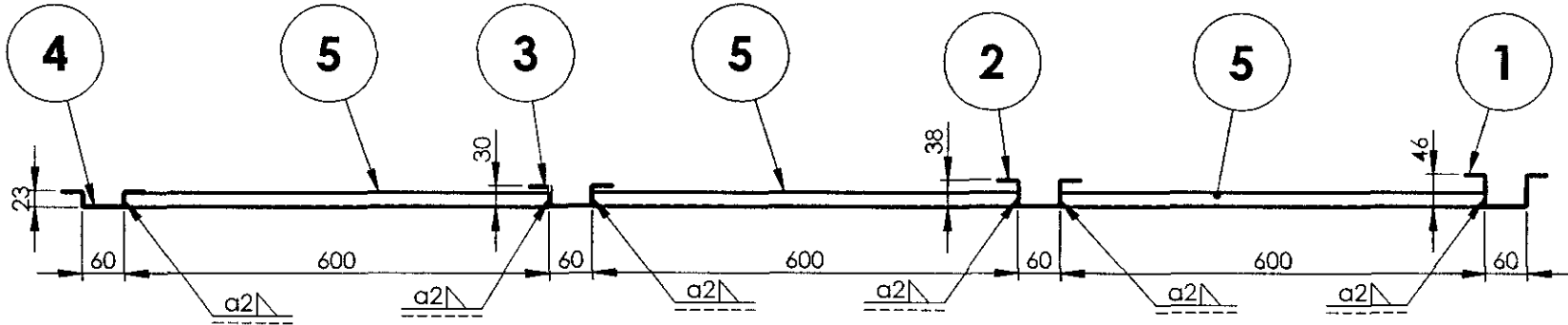
REF.DRG.NO.-

ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE SPECIFIED. FOR UNTOLERANCED DIMENSIONS AND ROUGHNESS VALUES, REFER DRAWING NO ICF/STD-9-0-001. ANY MANUAL ALTERATION SHALL AUTOMATICALLY RENDER THIS DRAWING INVALID. WELDING SYMBOLS ARE AS PER IS:813-1986. WEIGHT GIVEN IN DRAWING IS FOR INDICATIVE PURPOSE ONLY

82716008

▽ ROUGH MACHINED	01 ROUGH CLEANED
▽▽ FINISH MACHINED	01b BURRS REMOVED
▽▽▽ FINE FINISH MACHINED	01c CHAMFERED

REVISIONS			
ALT.	ZONE	DESCRIPTION	APPROVED & DATE



NOTE:

- ALL WELDING SHALL BE OF TIG UNLESS OTHERWISE SPECIFIED.
- STAINLESS STEEL ELECTRODE OF SAME COMPOSITION AS PER TABLE-3 OF RDSO/SPEC. CK-201 SHALL BE USED FOR WELDING.
- ALL WELDED JOINTS SPATTERS SHALL BE GROUND.
- ALL SHARP CORNERS SHALL BE ROUNDED OFF.
- ALL WELDED JOINTS SHALL BE PICKLED AND PASSIVATED BEFORE SURFACE TREATMENT.
- FOR WELD TESTING PREFERANCES REFER DRG. No. ICF/STD-9-0-998.
- FOR WELD PROCEDURE SPECIFICATION REFER DRG. No. ICF/STD-9-0-999.

QTY.	DESCRIPTION	DIMENSIONS	ITEM NO.	REF.DRGS.	MATL	WT/UNIT IN KGS	REMARKS
8	STIFFENER		5	AAF16113		0.9	
1	STIFFENER		4	AAF16111		5.33	
1	STIFFENER		3	AAF16110		5.82	
1	STIFFENER		2	AAF16109		6.38	
1	STIFFENER		1	AAF16108		6.94	

GROUP: 1-6 Roof Construction SURFACE AREA IN Sq.m.: 4014849.31 WT/ASSY IN Kgs:

FRAME WORK FOR FLAT ROOF ASSEMBLY

INDIAN RAILWAY STANDARDS
INTEGRAL COACH FACTORY, CHENNAI - 600038

SCALE 1:20	SSE/D	CHD	ALT	ALTD	DRN	E.SATHISH KUMAR
LWFAC/PP2						
82716008						A2

ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE SPECIFIED. FOR UNTOLERANCED DIMENSIONS AND ROUGHNESS VALUES, REFER DRAWING NO. ICF/STD-9-0-001. ANY MANUAL ALTERATION SHALL AUTOMATICALLY RENDER THIS DRAWING INVALID. WELDING SYMBOLS ARE AS PER EN ISO 2553. WEIGHT GIVEN IN DRAWING IS FOR INDICATIVE PURPOSE ONLY

REF.DRG.NO.-

DATE OF LATEST ALT.	DATE OF FIRST ISSUE	AME/SME
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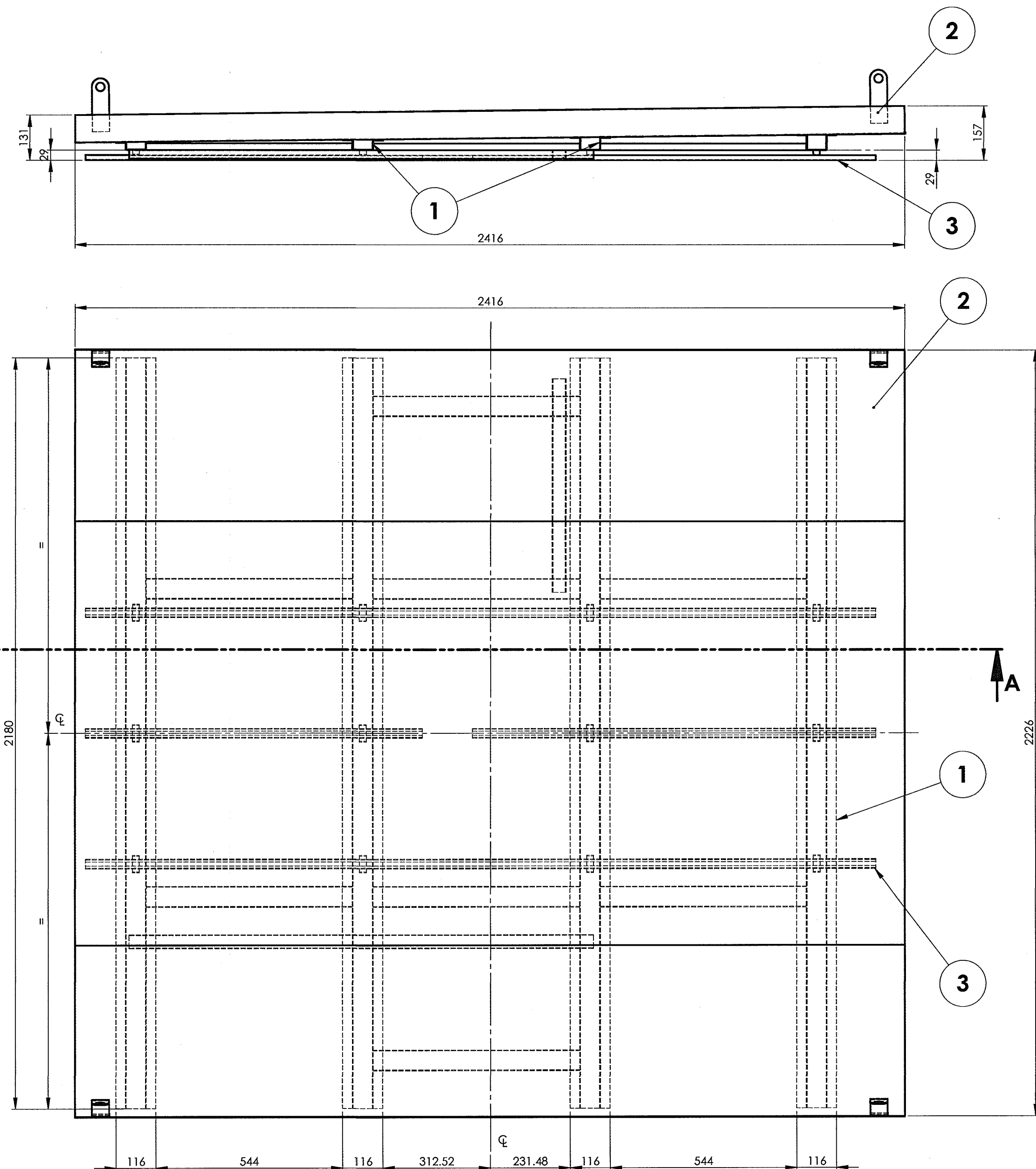
83016008

▽ ROUGH MACHINED
▽▽ FINISH MACHINED
▽▽▽ FINE FINISH MACHINED

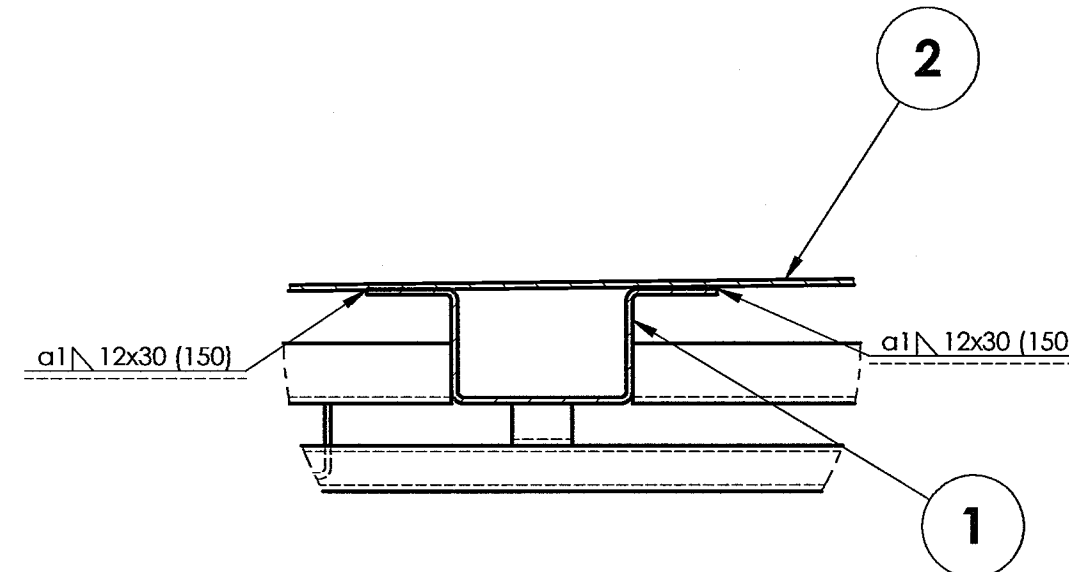
(01) ROUGH CLEANED
(01b) BURRS REMOVED
(01c) CHAMFERED

REVISIONS				APPROVED & DATE
ALT.	ZONE	DESCRIPTION		
a		VIEWS UPDATED AS PER THE CHANGE IN DESIGN OF ITEM-2.		

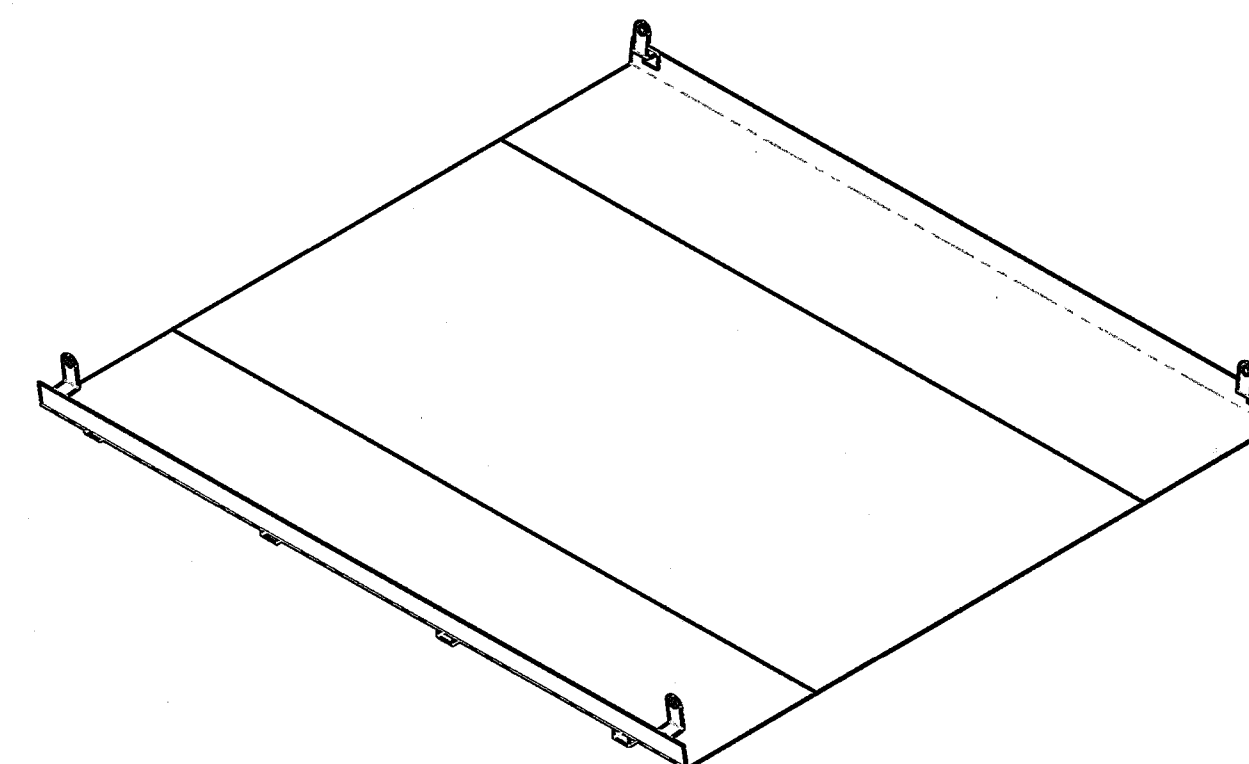
END WALL



END ROOF ARCH

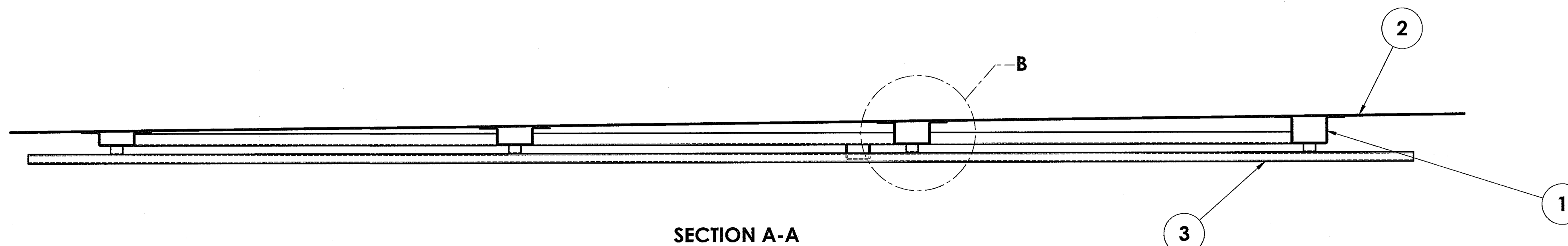
DETAIL B
SCALE 2 : 5

ISOMETRIC VIEW



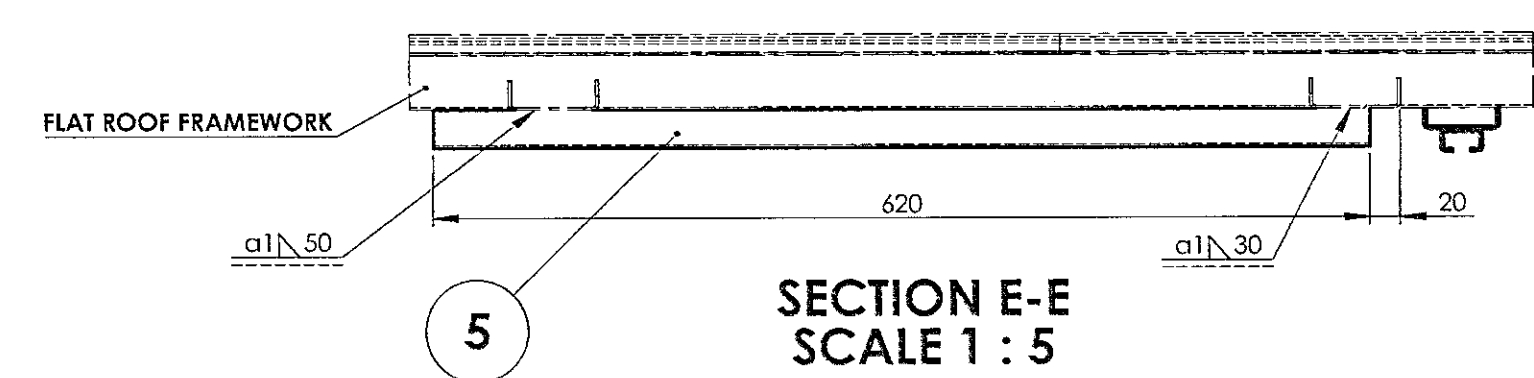
NOTE:

1. STAINLESS STEEL ELECTRODE OF SAME COMPOSITION AS PER TABLE-3 OF RDSO/SPEC. C-K201 SHALL BE USED FOR WELDING.
2. ALL WELDINGS SHALL BE TIG WELDING UNLESS OTHERWISE SPECIFIED.
3. ALL WELD SPATTERS SHALL BE GROUND.
4. ALL WELDED JOINTS SHALL BE PICKLED AND PASSIVATED BEFORE SURFACE TREATMENT.
5. ALL SHARP CORNERS SHALL BE ROUNDED OFF.
6. ALL WELD PERFORMANCE CLASS SHALL BE **CP C2** UNLESS OTHERWISE SPECIFIED.
7. FOR WELD TESTING PREFERENCES REFER DRG. No. ICF/STD-9-0-998.
8. FOR WELD PROCEDURE SPECIFICATION REFER DRG. No. ICF/STD-9-0-999.
9. FINISHED ASSEMBLY SHALL BE APPLIED WITH (AIRLESS SPRAY)ECO FRIENDLY WATER BASED MODIFIED EPOXY ZINC PHOSPHATE ETCH PRIMER TO ICF/MD/SPEC-231.

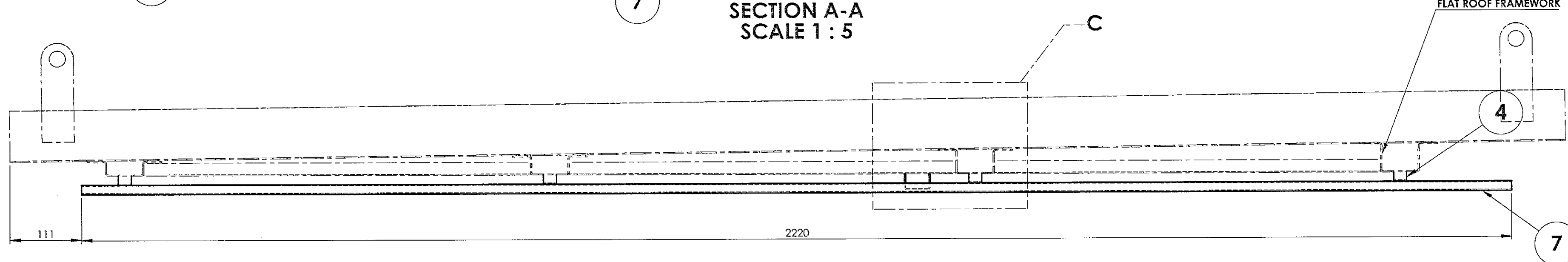
SECTION A-A
SCALE 1 : 5

1	WELDING PARTS ON FLAT SS TROUGH	3	83016009		9.48	
1	ROOF SHEET ASSY	2	82716006		92.27	
1	FRAME WORK FOR FLAT ROOF ASSEMBLY	1	82716008		31.64	
QTY	DESCRIPTION	DIMENSIONS	ITEM NO.	REF.DRGS.	MATL	WT/UNIT IN KGS
GROUP: 1-6 Roof Construction				SURFACE AREA IN Sq.m.: 16.78		
FLAT ROOF ASSEMBLY FOR RMPU				WT/ASSY IN Kgs:		
				SCALE 1:20	SSE/D CHD	
				ALT. a	ALTD AMAL GEORGE	
				DRN	Amal George	
INDIAN RAILWAY STANDARDS				SHEET 1 OF 1		
INTEGRAL COACH FACTORY, CHENNAI - 600038				83016008		
				A1		

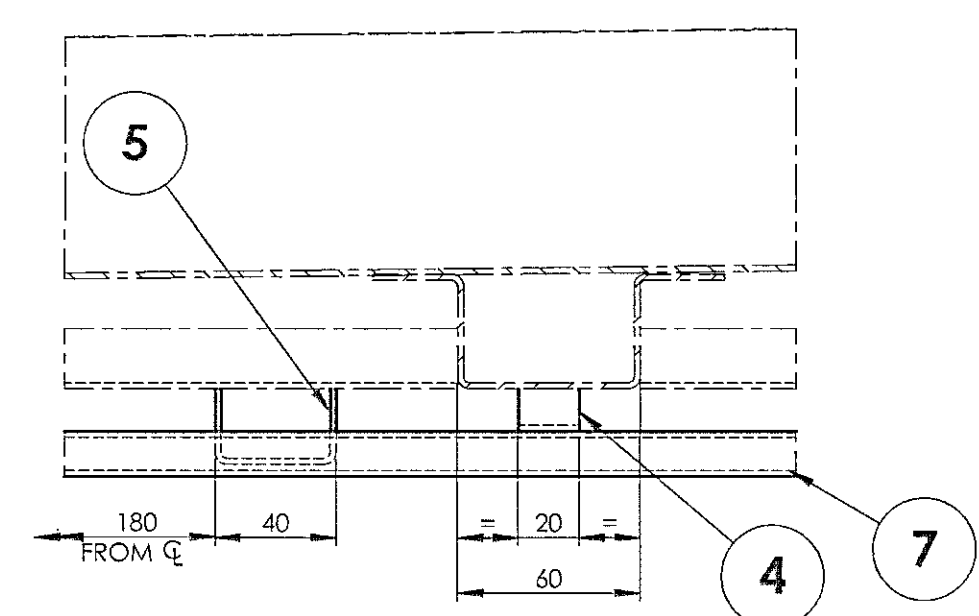
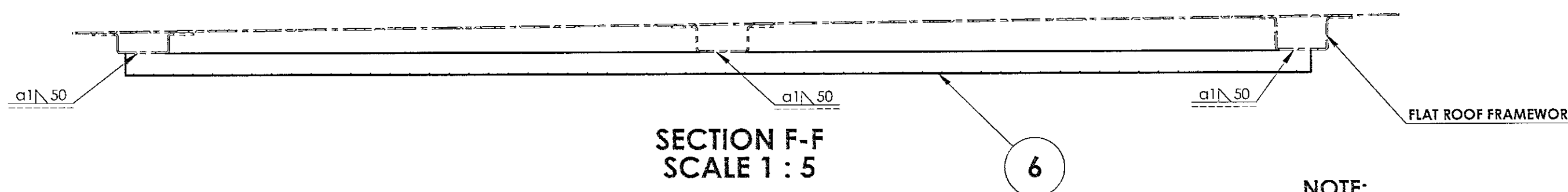
22-01-2026	16-07-2025	
DATE OF LATEST ALT.	DATE OF FIRST ISSUE	AME/SME



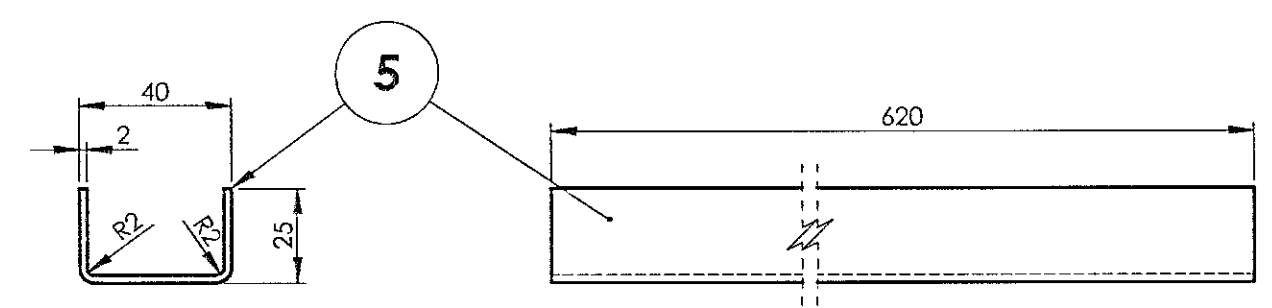
SECTION A-A
SCALE 1 : 5



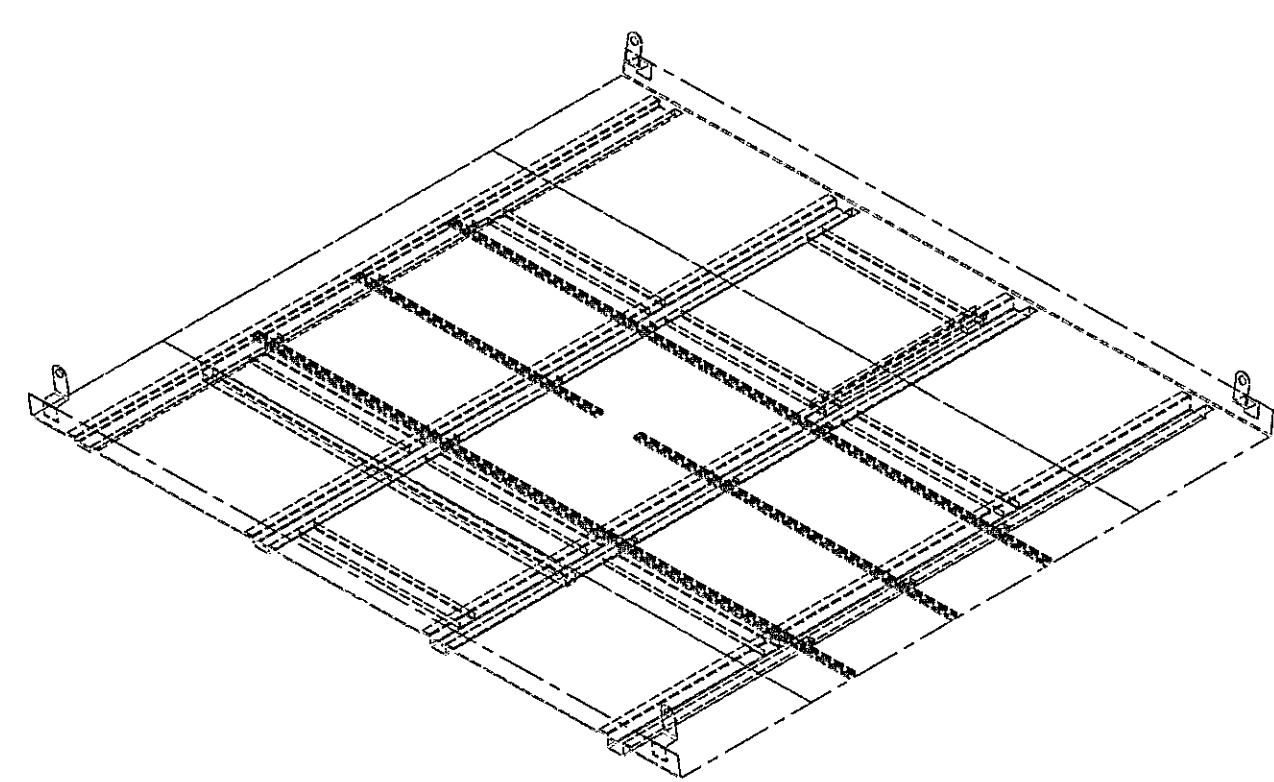
SECTION F-F
SCALE 1 : 5




DETAIL FOR ITEM-5
SCALE 1 : 2



Technical drawing of a U-shaped channel. The cross-section shows a width of 40, a height of 25, a bottom radius of $r30$, and a wall thickness of 2. The longitudinal view shows a length of 1350 with a break in the middle. A circled number 6 is above the longitudinal view.



15-01-2026	16-07-2025	
DATE OF LATEST ALT.	DATE OF FIRST ISSUE	A.M.E./S.M.E.

1. STAINLESS STEEL ELECTRODE OF SAME COMPOSITION AS PER TABLE-3 OF RDSO/SPEC C-2021 SHALL BE USED FOR WELDING.
2. ALL WELDINGS SHALL BE TIG WELDING UNLESS OTHERWISE SPECIFIED.
3. ALL WELD SPATTERS SHALL BE GROUND.
4. ALL WELDED JOINTS SHALL BE PICKLED AND PASSIVATED BEFORE SURFACE TREATMENT.
5. ALL SHARP CORNERS SHALL BE ROUNDED OFF.
6. ALL WELD PERFORMANCE CLASS SHALL BE **CP C2** UNLESS OTHERWISE SPECIFIED.
7. FOR WELD TESTING PREFERENCES REFER DRG. NO. ICF/STD-9-0-998.
8. FOR WELD PROCEDURE SPECIFICATION REFER DRG. NO. ICF/STD-9-0-999.

1	C-BAR	L= 900	8	AAB16185		0.88	
2	C-BAR	L= 2220	7	AAB16185		2.16	
1	CHANNEL FOR FIXING PARTITION	2 x 82 x 1350	6		RDSO SPEC C-K201 X2 Cr-Ni 12	1.80	
1	CHANNEL FOR FIXING PARTITION	2 x 82 x 620	5		RDSO SPEC C-K201 X2 Cr-Ni 12	0.83	
12	CHANNEL		4	AAE16292		0.02	
1	C-BAR	L=980	3	AAB16185		0.95	
1	C-BAR	L= 1175	2	AAB16185		1.14	
2	C-BAR	L=2300	1	AAB16185		2.24	
QTY	DESCRIPTION	DIMENSIONS	ITEM NO.	REF.DRGS.	MATL	WT/UNIT IN KGS	REMARKS

GROUP: 1-6 Roof Construction	SURFACE AREA IN Sq.m.: 16.75	WT/ASSY IN Kgs:
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WELDING PARTS ON FLAT ROOF ASSEMBLY

INDIAN RAILWAY STANDARDS
INTEGRAL COACH FACTORY, CHENNAI - 600038

SHEET
1 OF 1

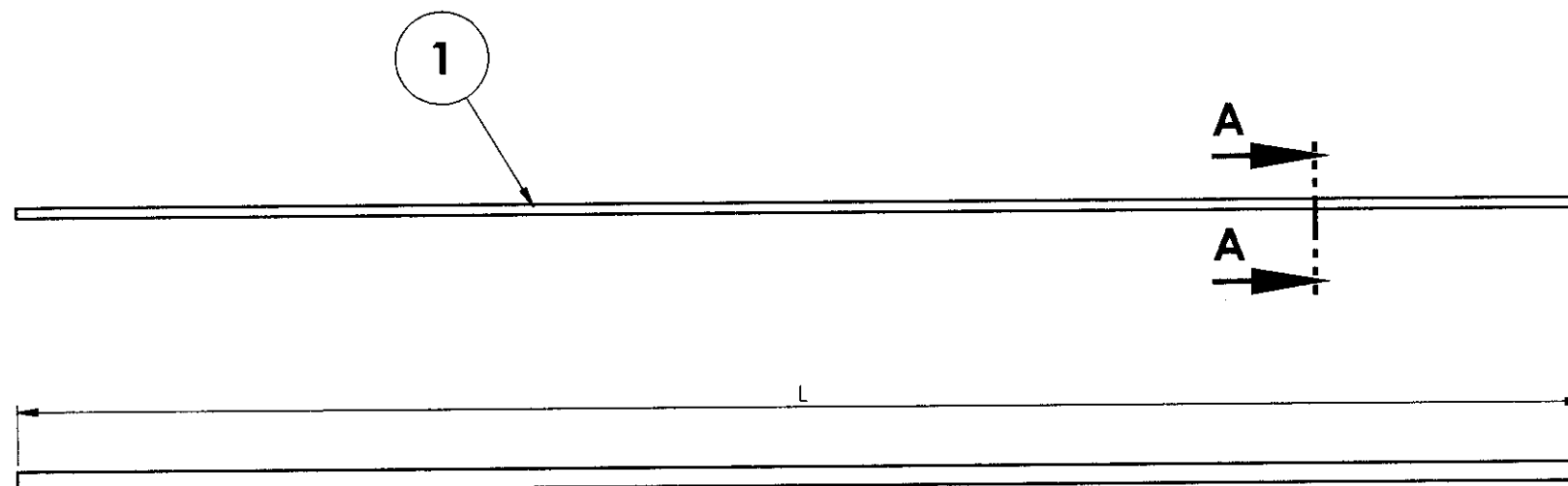
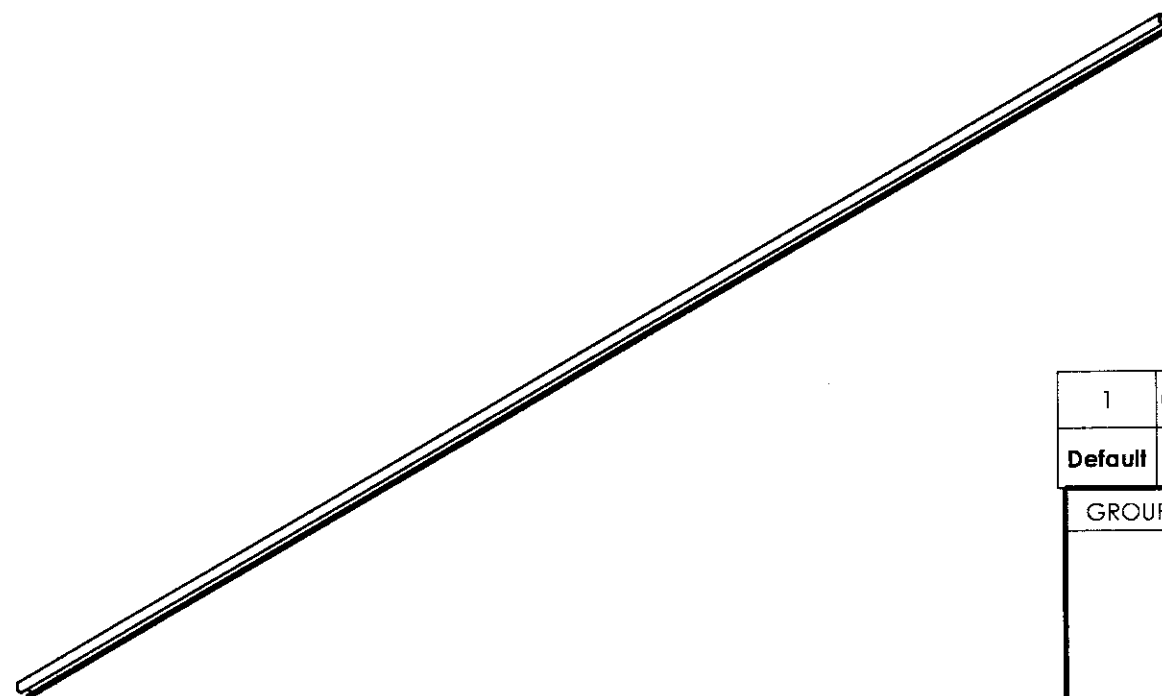
83016009

	A1
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AAB16185

▽ ROUGH MACHINED	① ROUGH CLEANED
▽▽ FINISH MACHINED	② BURRS REMOVED
▽▽▽ FINE FINISH MACHINED	③ CHAMFERED

REVISIONS				APPROVED & DATE
ALT.	ZONE	DESCRIPTION		
a		LENGTH OF ITEM - 1 MENTIONED AS "L"		

SECTION A-A
SCALE 1:1

1	C-BAR	2 x 15 x 28 x L	1		IS:6911-92; X04Cr19Ni9	2.24							
Default	DESCRIPTION	DIMENSIONS	ITEM NO.	REF. DRGS	MATL.SPEC.	WT/UNIT IN KGS	REMARKS						
GROUP: 1-6		SURFACE AREA IN Sq.m.:			WT/ASSY IN Kgs:								
C-BAR					SCALE 1:20	SSE/D CHD	L. Panduranga Rao						
					ALT. a	ALTD DRN		S.K.MUTHUKUMAR					
					INDIAN RAILWAY STANDARDS INTEGRAL COACH FACTORY, CHENNAI - 600038					SHEET 1 OF 1		AAB16185	A3

REF.DRG.NO.-

ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE SPECIFIED. FOR UNTOLERANCED DIMENSIONS AND ROUGHNESS VALUES, REFER DRAWING NO ICF/STD-9-0-001.
ANY MANUAL ALTERATION SHALL AUTOMATICALLY RENDER THIS DRAWING INVALID. WELDING SYMBOLS ARE AS PER IS: 813:1986.
WEIGHT GIVEN IN DRAWING IS FOR INDICATIVE PURPOSE ONLY

1		2		3		4		5		6		7		8	
AAE16292				▽ ROUGH MACHINED		① ROUGH CLEANED		REVISIONS							
				▽▽ FINISH MACHINED		② BURRS REMOVED		ALT.		ZONE		DESCRIPTION		APPROVED & DATE	
				▽▽▽ FINE FINISH MACHINED		③ CHAMFERED									
A															
B															
C															
D															
E															
F															
ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE SPECIFIED. FOR UNTOLERANCED DIMENSIONS AND ROUGHNESS VALUES, REFER DRAWING NO ICF/STD-9-0-001. ANY MANUAL ALTERATION SHALL AUTOMATICALLY RENDER THIS DRAWING INVALID. WELDING SYMBOLS ARE AS PER IS 813:1986. WEIGHT GIVEN IN DRAWING IS FOR INDICATIVE PURPOSE ONLY															
REF.DRG.NO.															
1															
2															
3															
4															
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6															
7															
8															

1

20

2

R2

50

14

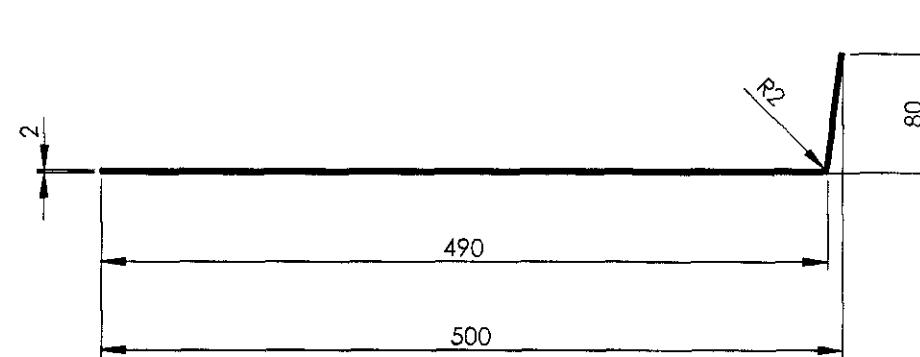
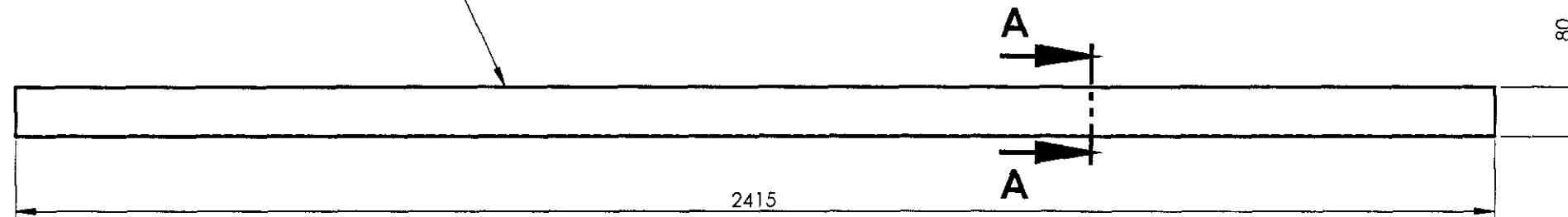
1	CHANNEL	2 x 20 x 70	1		IS:6911 X04Cr19Ni9	0.02	
QTY	DESCRIPTION	DIMENSIONS	ITEM NO.	REF. DRGS	MATL.SPEC.	WT/UNIT IN KGS	REMARKS
GROUP: 1-6 Roof Construction					SURFACE AREA IN Sq.m.:		WT/ASSY IN Kgs:
CHANNEL					SCALE 2:1	SSE/D CHD	L. Pandurangam
					ALT.	ALTD	
						DRN	S K MUTHUKUMAR/RAVI
INDIAN RAILWAY STANDARDS					SHEET 1 OF 1		
INTEGRAL COACH FACTORY, CHENNAI - 600038					AAE16292		A3

	27.8.22	
DATE OF LATEST ALT.	DATE OF FIRST ISSUE	AME/SME

AAAF16105

▽ ROUGH MACHINED	① ROUGH CLEANED
▽▽ FINISH MACHINED	①b BURRS REMOVED
▽▽▽ FINE FINISH MACHINED	①8 CHAMFERED

REVISIONS				APPROVED & DATE	
ALT.	ZONE	DESCRIPTION			



SECTION A-A
SCALE 1 : 5

ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE SPECIFIED. FOR UNTOLERANCED DIMENSIONS AND ROUGHNESS VALUES, REFER DRAWING NO ICF/STD-9-0-001.
ANY MANUAL ALTERATION SHALL AUTOMATICALLY RENDER THIS DRAWING INVALID. WELDING SYMBOLS ARE AS PER IS: 813-1986.
WEIGHT GIVEN IN DRAWING IS FOR INDICATIVE PURPOSE ONLY

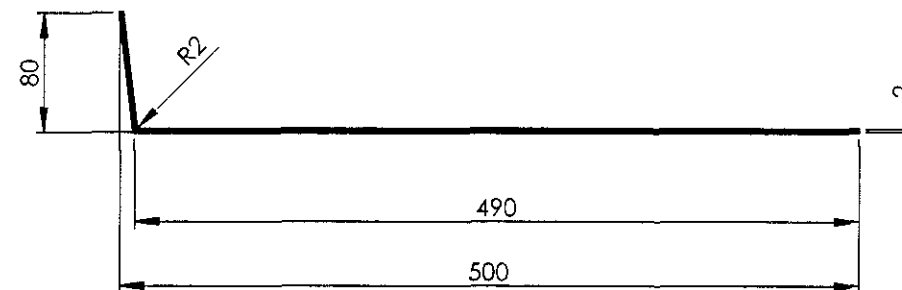
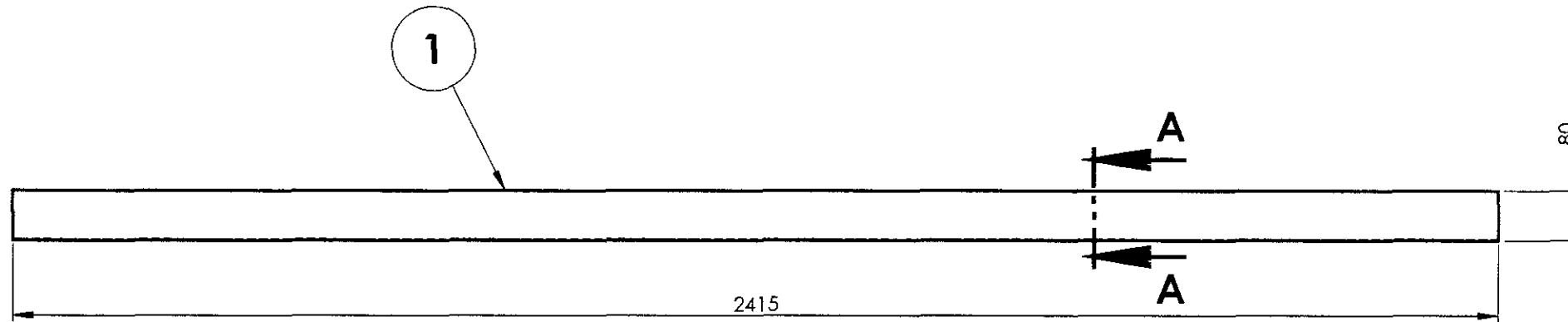
REF.DRG.NO.-

	8/8/25	
DATE OF LATEST ALT	DATE OF FIRST ISSUE	AME/SME

1	ROOF SHEET	2x568x2415	1		RDSO SPEC C-K201 X5 Cr NI 18 10	21.94	
QTY	DESCRIPTION	DIMENSIONS	ITEM NO.	REF. DRGS	MATL.SPEC.	WT/UNIT IN KGS	REMARKS
GROUP: 1-6 Roof Construction				SURFACE AREA IN Sq.m.:		WT/ASSY IN Kgs:	
ROOF SHEET					SCALE	SSE/D	L. Panduranga Rao
					1:20	CHD	
					ALT.	ALTD	
INDIAN RAILWAY STANDARDS						DRN	E.SATHISH KUMAR
					SHEET 1 OF 1		
INTEGRAL COACH FACTORY, CHENNAI - 600038					AAAF16105		A3

▽ ROUGH MACHINED	① ROUGH CLEANED
▽▽ FINISH MACHINED	①b BURRS REMOVED
▽▽▽ FINE FINISH MACHINED	①8 CHAMFERED

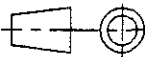
ALT.	ZONE	DESCRIPTION	APPROVED & DATE
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SECTION A-A
SCALE 1 : 5

REF.DRG.NO.-

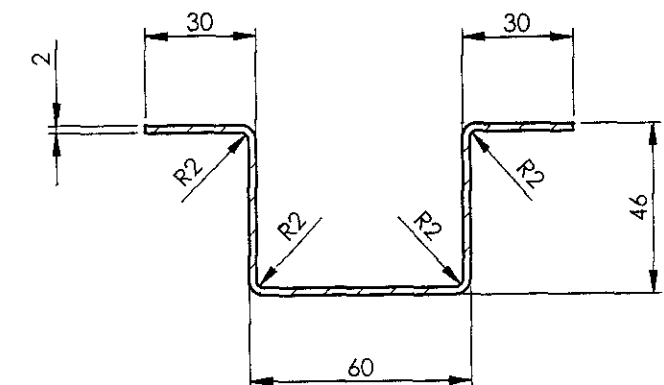
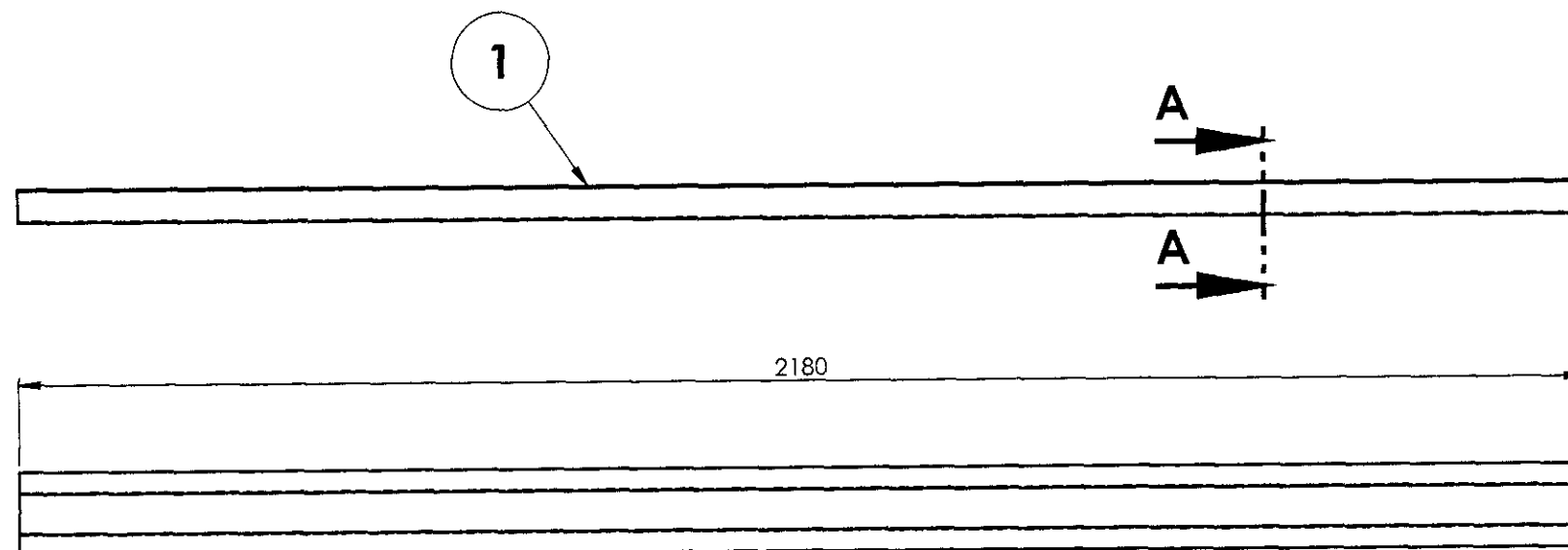
-	8/8/25	
DATE OF LATEST ALT.	DATE OF FIRST ISSUE	AME/SME

1	ROOF SHEET	2x568x2415	1		RDSO SPEC C- K201 X5 Cr Ni 18 10	21.94	
QTY	DESCRIPTION	DIMENSIONS	ITEM NO.	REF. DRGS	MATL.SPEC.	WT/UNIT IN KGS	REMARKS
GROUP: 1-6 Roof Construction		SURFACE AREA IN Sq.m.:			WT/ASSY IN Kgs:		
ROOF SHEET					SCALE	SSE/D	<i>L. Panduranga Rao</i>
					1:20	CHD	
					ALT.	ALTD	
						DRN	E.SATHISH KUMAR
INDIAN RAILWAY STANDARDS INTEGRAL COACH FACTORY, CHENNAI - 600035				SHEET 1 OF 1			
					AAF16106		A3

AA16108

▽ ROUGH MACHINED	① ROUGH CLEANED
▽▽ FINISH MACHINED	①b BURRS REMOVED
▽▽▽ FINE FINISH MACHINED	①8 CHAMFERED

REVISIONS				APPROVED & DATE	
ALT.	ZONE	DESCRIPTION			

SECTION A-A
SCALE 1 : 2

1	STIFFENER	2x196x2180	1		IS:6911 X04Cr19Ni9	6.94	
QTY	DESCRIPTION	DIMENSIONS	ITEM NO.	REF. DRGS	MATL.SPEC.	WT/UNIT IN KGS	REMARKS
GROUP: 1-6 Roof Construction		SURFACE AREA IN Sq.m.:			WT/ASSY IN Kgs:		
STIFFENER					SCALE	SSE/D	L. Panduranga R.
					1:1	CHD	
					ALT.	ALTD	
					DRN	E.SATHISH KUMAR	
					INDIAN RAILWAY STANDARDS		
INTEGRAL COACH FACTORY, CHENNAI - 600038							
					AAF16108		A3

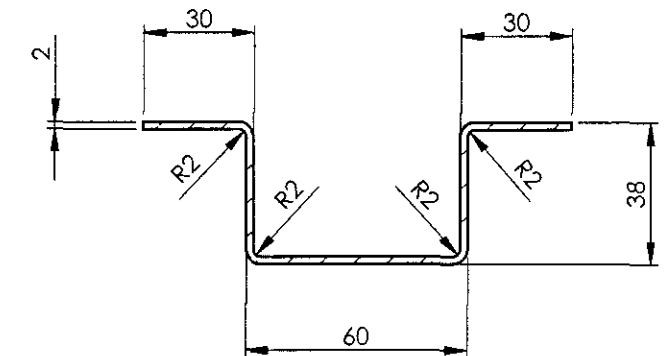
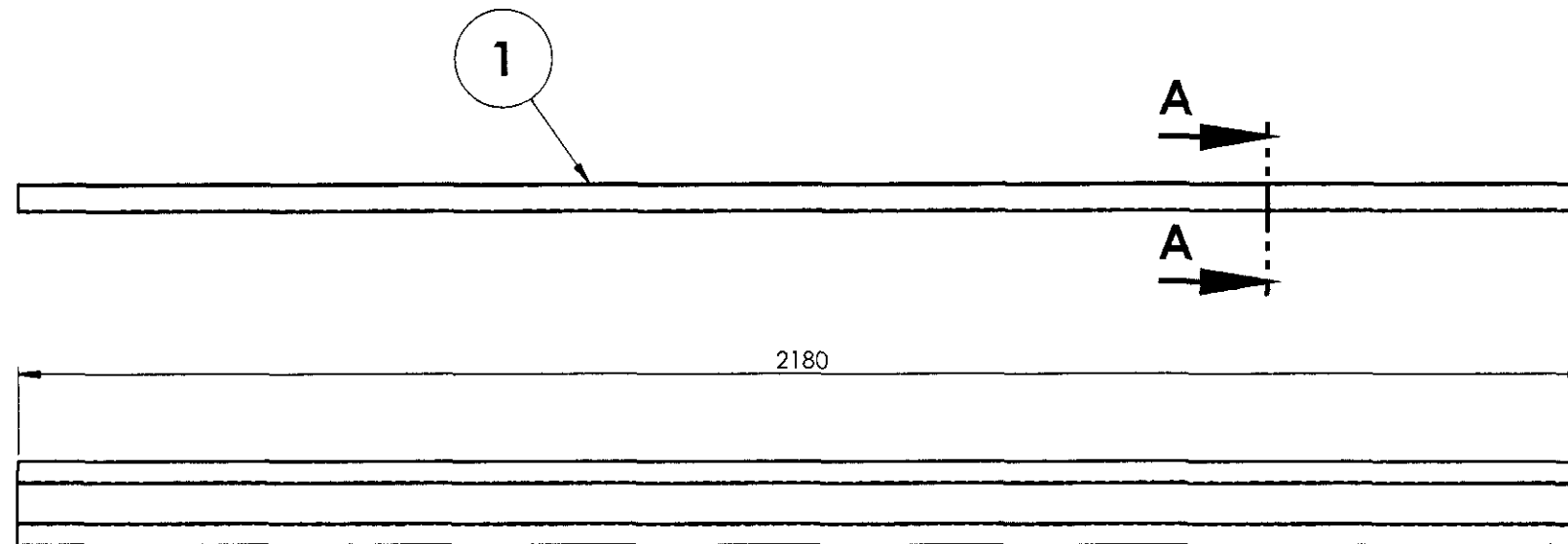
ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE SPECIFIED. FOR UNTOLERANCED DIMENSIONS AND ROUGHNESS VALUES, REFER DRAWING NO ICF/STD-9.0.001.
ANY MANUAL ALTERATION SHALL AUTOMATICALLY RENDER THIS DRAWING INVALID. WELDING SYMBOLS ARE AS PER IS: 813-1986.
WEIGHT GIVEN IN DRAWING IS FOR INDICATIVE PURPOSE ONLY

REF.DRG.NO.-

AAf16109

▽ ROUGH MACHINED	① ROUGH CLEANED
▽▽ FINISH MACHINED	① BURRS REMOVED
▽▽▽ FINE FINISH MACHINED	⑱ CHAMFERED

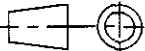
REVISIONS			
ALT.	ZONE	DESCRIPTION	APPROVED & DATE

SECTION A-A
SCALE 1 : 2

ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE SPECIFIED. FOR UNTOLERANCED DIMENSIONS AND ROUGHNESS VALUES, REFER DRAWING NO ICF/STD-9-0-001.
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WEIGHT GIVEN IN DRAWING IS FOR INDICATIVE PURPOSE ONLY

REF.DRG.NO.-

-	24/25	Sh
DATE OF LATEST ALT	DATE OF FIRST ISSUE	AME/SME

1	STIFFENER	2x180x2180	1		IS:6911 X04Cr19Ni9	6.38	
QTY	DESCRIPTION	DIMENSIONS	ITEM NO.	REF. DRGS	MATL.SPEC.	WT/UNIT IN KGS	REMARKS
GROUP: 1-6 Roof Construction		SURFACE AREA IN Sq.m.:			WT/ASSY IN Kgs:		
STIFFENER					SCALE	SSE/D	L. Panduranga Rao
					1:1	CHD	
					ALT.	ALTD	E.SATHISH KUMAR
						DRN	
INDIAN RAILWAY STANDARDS INTEGRAL COACH FACTORY, CHENNAI - 600038				SHEET 1 OF 1			
					AAf16109		
					A3		

AA16110

▽ ROUGH MACHINED	① ROUGH CLEANED
▽▽ FINISH MACHINED	①b BURRS REMOVED
▽▽▽ FINE FINISH MACHINED	①B CHAMFERED

REVISIONS

ALT.

ZONE

DESCRIPTION

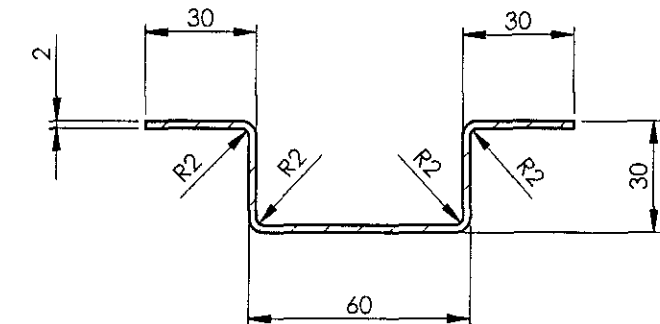
APPROVED &
DATE

1

A

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2180

SECTION A-A
SCALE 1 : 2

ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE SPECIFIED. FOR UNTOLERANCED DIMENSIONS AND ROUGHNESS VALUES, REFER DRAWING NO ICF/STD-9-0-001.
ANY MANUAL ALTERATION SHALL AUTOMATICALLY RENDER THIS DRAWING INVALID. WELDING SYMBOLS ARE AS PER IS: 813-1986.
WEIGHT GIVEN IN DRAWING IS FOR INDICATIVE PURPOSE ONLY

REF.DRG.NO.-

-	8/8/25	dw
DATE OF LATEST ALT.	DATE OF FIRST ISSUE	AME/SME

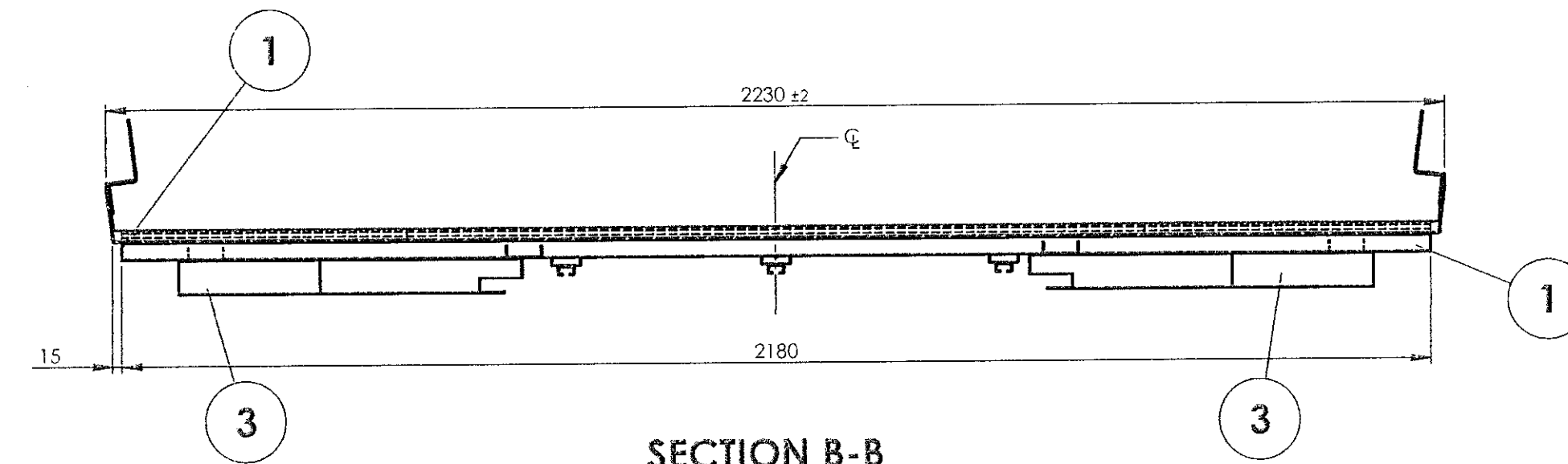
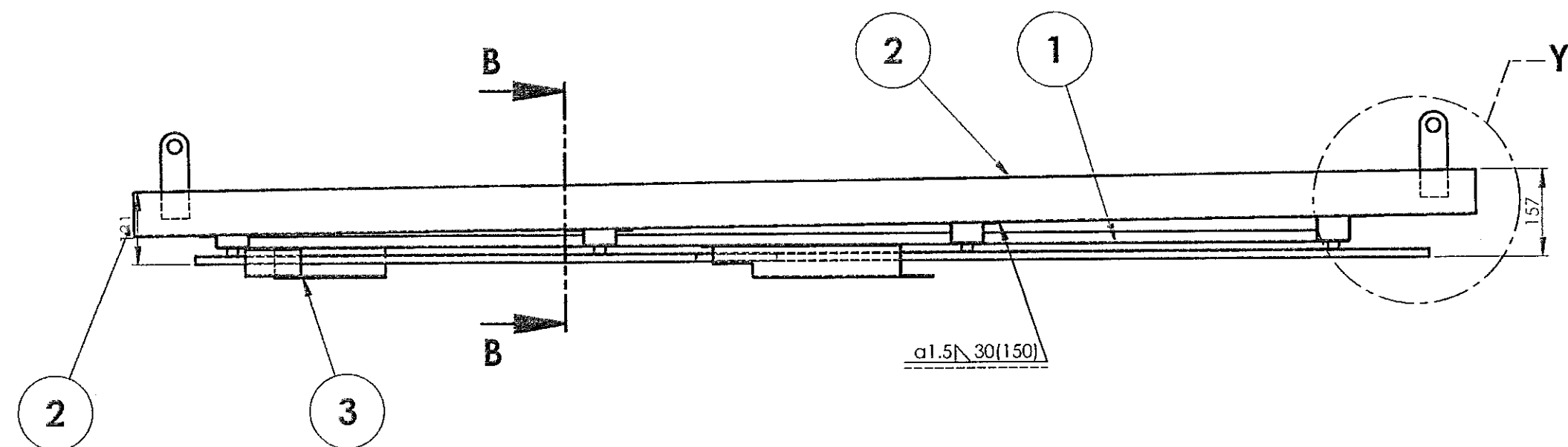
1	STIFFENER	2x164x2180	1		IS:6911 X04Cr19Ni9	5.82	
QTY	DESCRIPTION	DIMENSIONS	ITEM NO.	REF. DRGS	MATL.SPEC.	WT/UNIT IN KGS	REMARKS
GROUP: 1-6 Roof Construction				SURFACE AREA IN Sq.m.:		WT/ASSY IN Kgs:	
STIFFENER					SCALE 1:1	SSE/D CHD	L. Pandurangam
					ALT.	ALTD	
						DRN	E.SATHISH KUMAR
INDIAN RAILWAY STANDARDS				SHEET 1 OF 1		AA16110	
INTEGRAL COACH FACTORY, CHENNAI - 600038						A3	

1		2		3		4		5		6		7		8																																																			
AAf16111				▽ ROUGH MACHINED		① ROUGH CLEANED		REVISIONS																																																									
				▽▽ FINISH MACHINED		② BURRS REMOVED		ALT.		ZONE		DESCRIPTION		APPROVED & DATE																																																			
				▽▽▽ FINE FINISH MACHINED		③ CHAMFERED																																																											
<div>ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE SPECIFIED. FOR UNTOLERANCED DIMENSIONS AND ROUGHNESS VALUES, REFER DRAWING NO ICF/STD-9-0-001. ANY MANUAL ALTERATION SHALL AUTOMATICALLY RENDER THIS DRAWING INVALID. WELDING SYMBOLS ARE AS PER IS: 813-1986. WEIGHT GIVEN IN DRAWING IS FOR INDICATIVE PURPOSE ONLY</div> <div><div>1</div><div>2180</div><div>A</div><div>A</div></div> <div><div>2</div><div>30</div><div>R2</div><div>60</div><div>23</div><div>30</div><div>R2</div><div>R2</div><div>R2</div></div> <div>SECTION A-A SCALE 1 : 2</div>																																																																	
<table><tr><td>1</td><td>STIFFENER</td><td>2x150x2180</td><td>1</td><td></td><td>IS:6911 X04Cr19Ni9</td><td>5.33</td><td></td></tr><tr><td>QTY</td><td>DESCRIPTION</td><td>DIMENSIONS</td><td>ITEM NO.</td><td>REF. DRGS</td><td>MATL.SPEC.</td><td>WT/UNIT IN KGS</td><td>REMARKS</td></tr><tr><td colspan="4">GROUP: 1-6 Roof Construction</td><td colspan="2">SURFACE AREA IN Sq.m.:</td><td colspan="2">WT/ASSY IN Kgs:</td></tr><tr><td colspan="5" rowspan="4">STIFFENER</td><td>SCALE 1:1</td><td>SSE/D CHD</td><td>L. Ramesh Babu</td></tr><tr><td>ALT.</td><td>ALTD</td><td></td></tr><tr><td>DRN</td><td>E.SATHISH KUMAR</td><td></td></tr><tr><td colspan="2">INDIAN RAILWAY STANDARDS</td><td colspan="2">SHEET 1 OF 1</td></tr><tr><td colspan="2">INTEGRAL COACH FACTORY, CHENNAI - 600038</td><td colspan="2"></td><td colspan="2">AAf16111</td><td colspan="2">A3</td></tr></table>																1	STIFFENER	2x150x2180	1		IS:6911 X04Cr19Ni9	5.33		QTY	DESCRIPTION	DIMENSIONS	ITEM NO.	REF. DRGS	MATL.SPEC.	WT/UNIT IN KGS	REMARKS	GROUP: 1-6 Roof Construction				SURFACE AREA IN Sq.m.:		WT/ASSY IN Kgs:		STIFFENER					SCALE 1:1	SSE/D CHD	L. Ramesh Babu	ALT.	ALTD		DRN	E.SATHISH KUMAR		INDIAN RAILWAY STANDARDS		SHEET 1 OF 1		INTEGRAL COACH FACTORY, CHENNAI - 600038				AAf16111		A3	
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REF.DRG.NO.-		DATE OF LATEST ALT.		DATE OF FIRST ISSUE		AME/SME																																																											
1		2		3		4		5		6		7		8																																																			

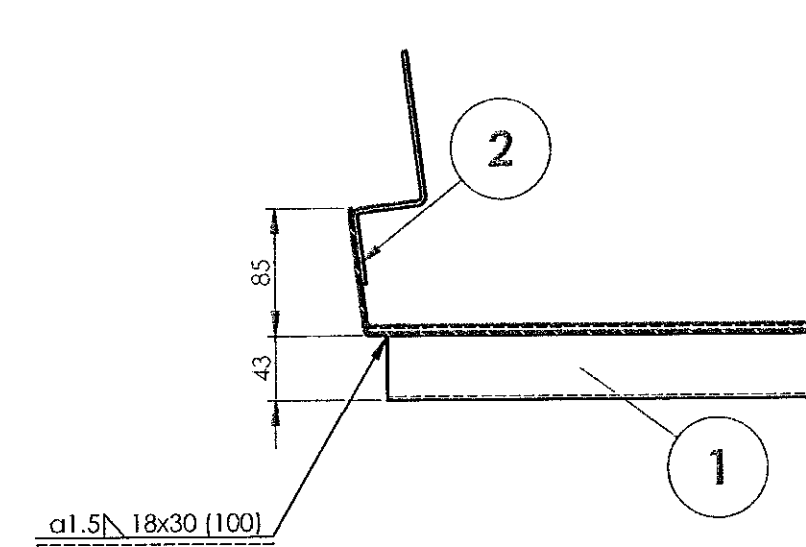
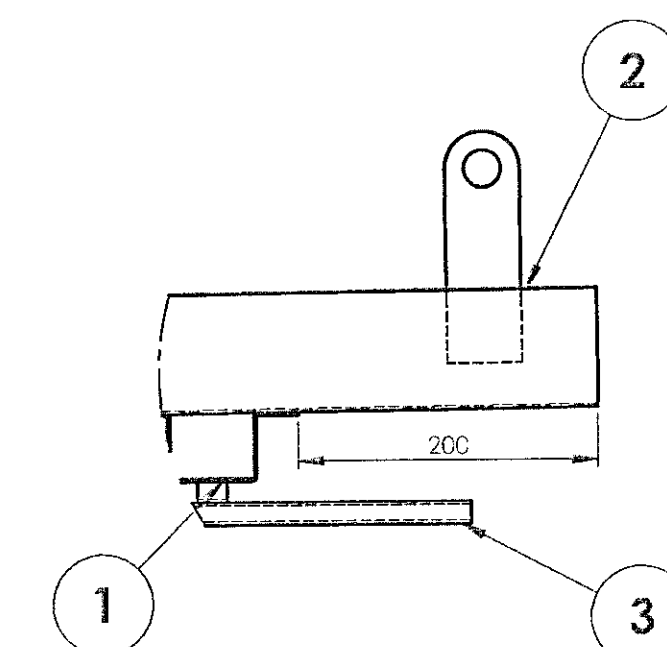
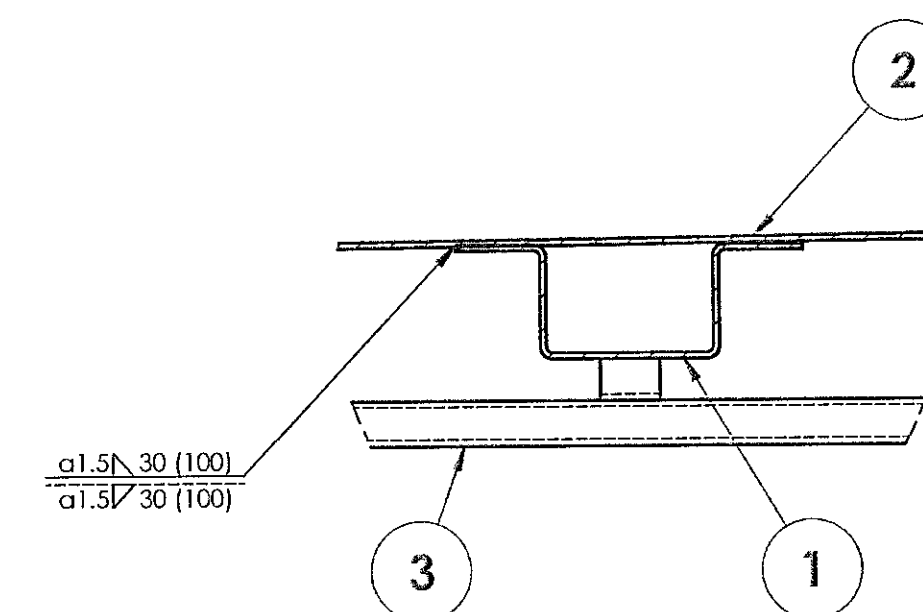
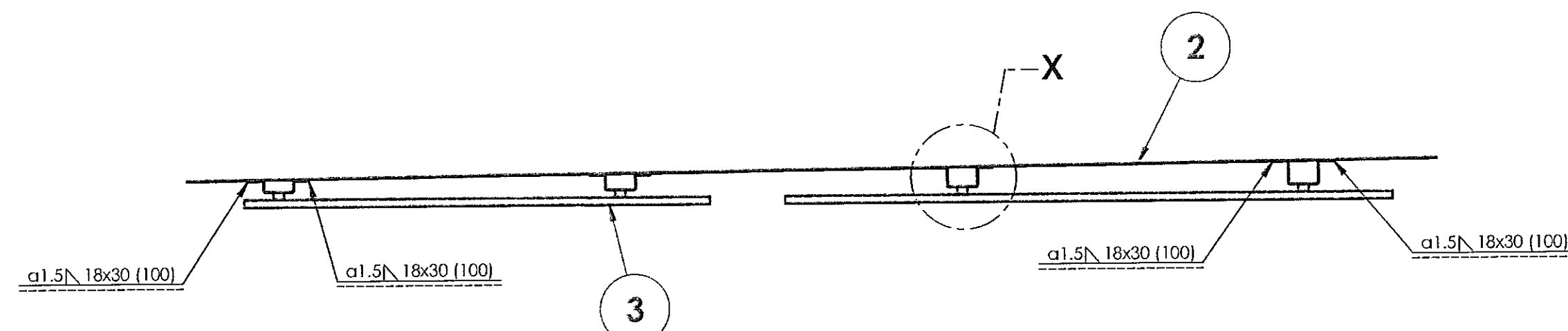
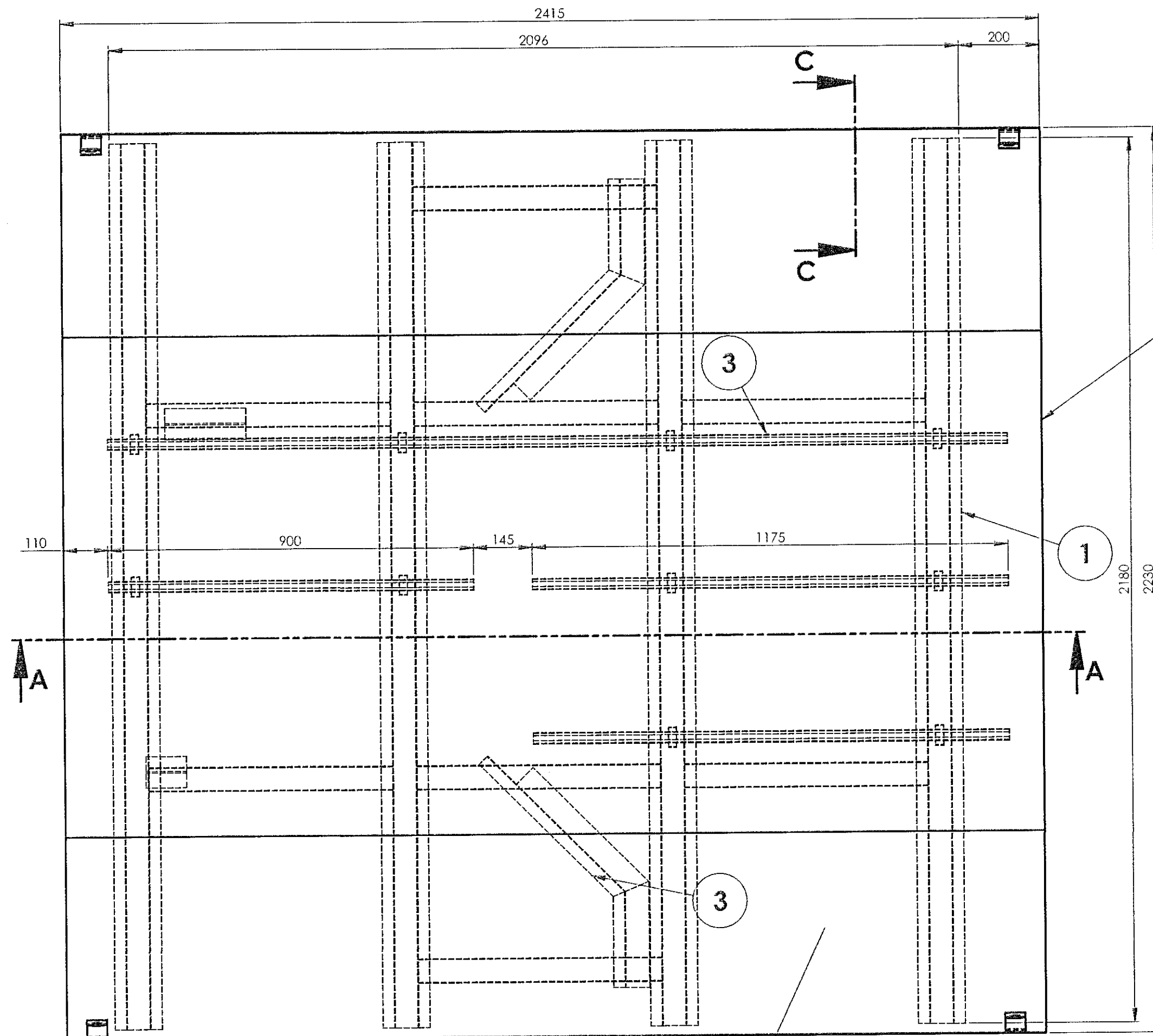
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AAF16113				▽ ROUGH MACHINED		① ROUGH CLEANED		REVISIONS								
				▽▽ FINISH MACHINED		② BURRS REMOVED		ALT.		ZONE		DESCRIPTION			APPROVED & DATE	
				▽▽▽ FINE FINISH MACHINED		③ CHAMFERED										
<div><div><div>1</div><div><div>A</div><div>A</div></div><div>600</div></div><div><div>2</div><div>20</div><div>R2</div><div>R3</div><div>60</div></div><div>SECTION A-A SCALE 1 : 2</div></div>																
<div><div><div>1</div><div>STIFFENER</div><div>2 x 92 x 600</div><div>1</div><div></div><div>IS:6911 X04Cr19Ni9</div><div>0.90</div><div></div></div><div><div>QTY</div><div>DESCRIPTION</div><div>DIMENSIONS</div><div>ITEM NO.</div><div>REF. DRGS</div><div>MATL.SPEC.</div><div>WT/UNIT IN KGS</div><div>REMARKS</div></div><div><div>GROUP: 1-6 Roof Construction</div><div>SURFACE AREA IN Sq.m.:</div><div>WT/ASSY IN Kgs:</div></div><div><div>STIFFENER</div><div>SCALE 1:1</div><div>SSE/D CHD</div><div>ALT.</div><div>ALTD</div><div>DRN</div><div>E.SATHISH KUMAR</div></div><div><div>INDIAN RAILWAY STANDARDS</div><div>INTEGRAL COACH FACTORY, CHENNAI - 600038</div><div>SHEET 1 OF 1</div><div>AAF16113</div><div>A3</div></div></div>																
REF.DRG.NO.-		DATE OF LATEST ALT.		DATE OF FIRST ISSUE		AME/SME										
1		2		3		4		5		6		7		8		

82716005

12	13	14	15	16
▽ ROUGH MACHINED	⑦ ROUGH CLEANED	REVISIONS		
▽▽ FINISH MACHINED	⑧ BURRS REMOVED	Alt.	ZONE	APPROVED & DATE
▽▽▽ FINE FINISH MACHINED	⑨ CHAMFERED	a		ITEM-2 & 3 REVISED AND VIEWS UPDATED.



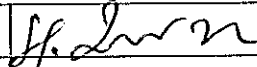

SECTION B-B

SECTION C-C
SCALE 1 : 5DETAIL Y
SCALE 1 : 5DETAIL X
SCALE 1 : 2.5

SECTION A-A

NOTE :

1. STAINLESS STEEL ELECTRODE OF SAME COMPOSITION AS PER TABLE-3 OF RDSO/SPEC. CK-201 SHALL BE USED FOR WELDING.
2. ALL WELDING SHALL BE OF TIG UNLESS OTHERWISE SPECIFIED.
3. FOR WELD TESTING PREFERENCES REFER DRG. No. ICF/STD-9-0-998.
4. FOR WELD PROCEDURE SPECIFICATION REFER DRG. No. ICF/STD-9-0-999.
5. ALL WELDED JOINTS SPATTERS SHALL BE GROUND.
6. ALL WELDED JOINTS SHALL BE PICKLED AND PASSIVATED BEFORE SURFACE TREATMENT.
7. ALL SHARP CORNERS SHALL BE ROUNDED OFF.
8. ALTERNATIVELY MATERIAL SPEC. ASTM A240 TYPE-304 ALSO ACCEPTABLE IN PLACE OF IS: 6911 X04C19Ni9.

1	WELDING PARTS		3	82716007		9.43	
1	ROOF SHEET ASSY		2	82716006		92.27	
1	FRAME WORK FOR FLAT ROOF ASSEMBLY		1	82716008		31.64	
QTY.	DESCRIPTION	DIMENSIONS	ITEM NO.	REF.DRGS.	MATL	WT/UNIT IN KGS	REMARKS
GROUP: 1-6 Roof Construction			SURFACE AREA IN Sq.m.: 16737627.4			WT/ASSY IN Kgs:	
FLAT ROOF ASSEMBLY						SCALE 1:10	SSF/D CHD 
						ALT. a	E.SATHISH KUMAR
						DRN	E.SATHISH KUMAR
							
INDIAN RAILWAY STANDARDS INTEGRAL COACH FACTORY, CHENNAI - 600038				SHEET 1 OF 1	82716005		A

23/01/26	08/03/25	AME/SHE
DATE OF LATEST ALT	DATE OF FIRST ISSUE	AME/SHE

REF.DRG.NO.:-

82716006

▽ ROUGH MACHINED
▽▽ FINISH MACHINED
▽▽▽ FINE FINISH MACHINED

(01) ROUGH CLEANED
(01b) BURRS REMOVED
(18) CHAMFERED

REVISIONS

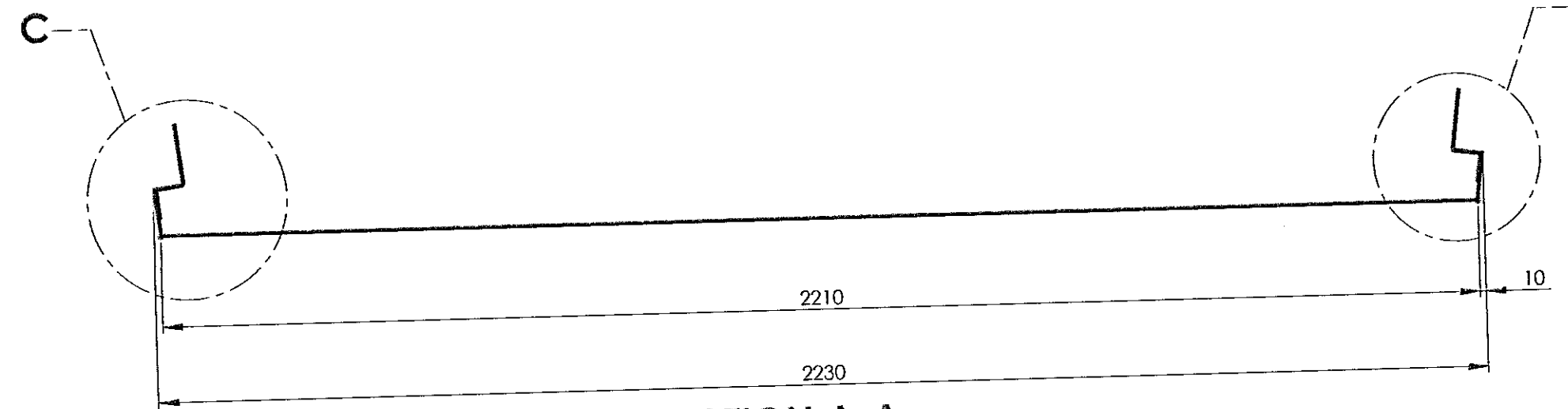
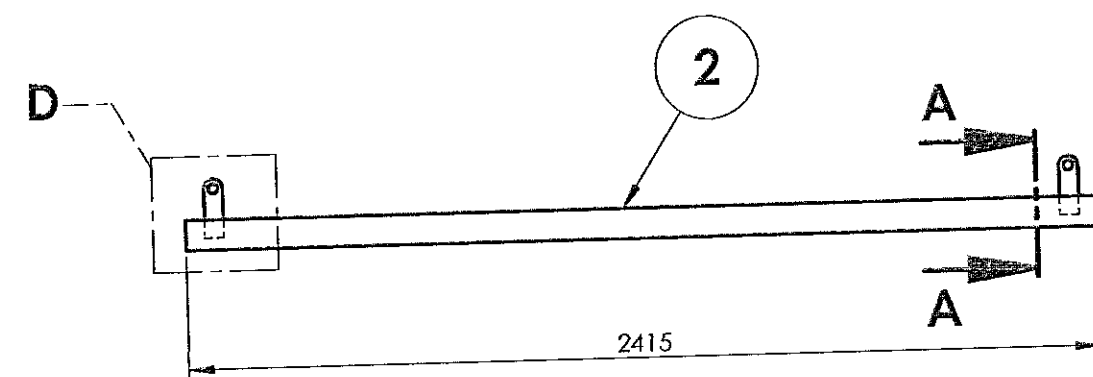
ALT.

ZONE

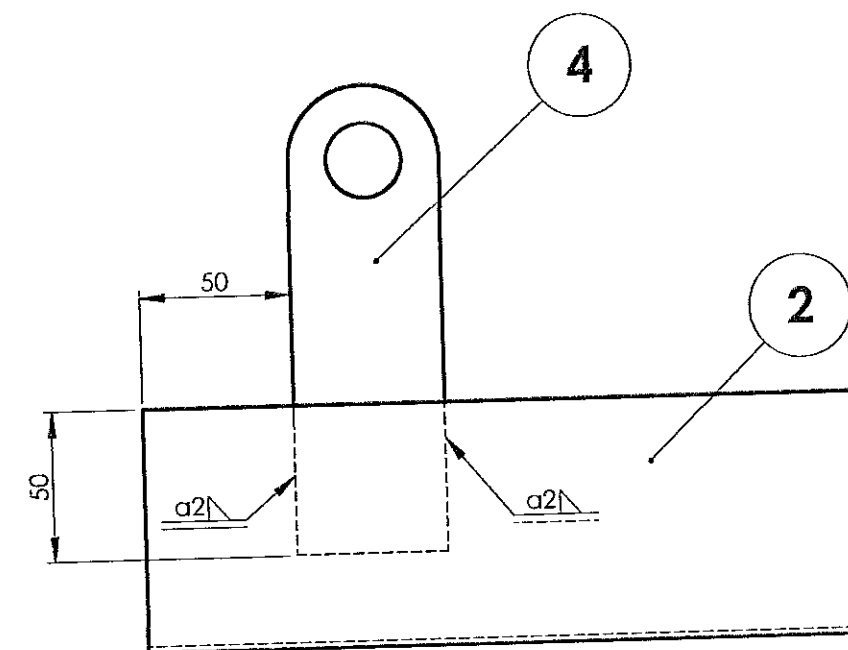
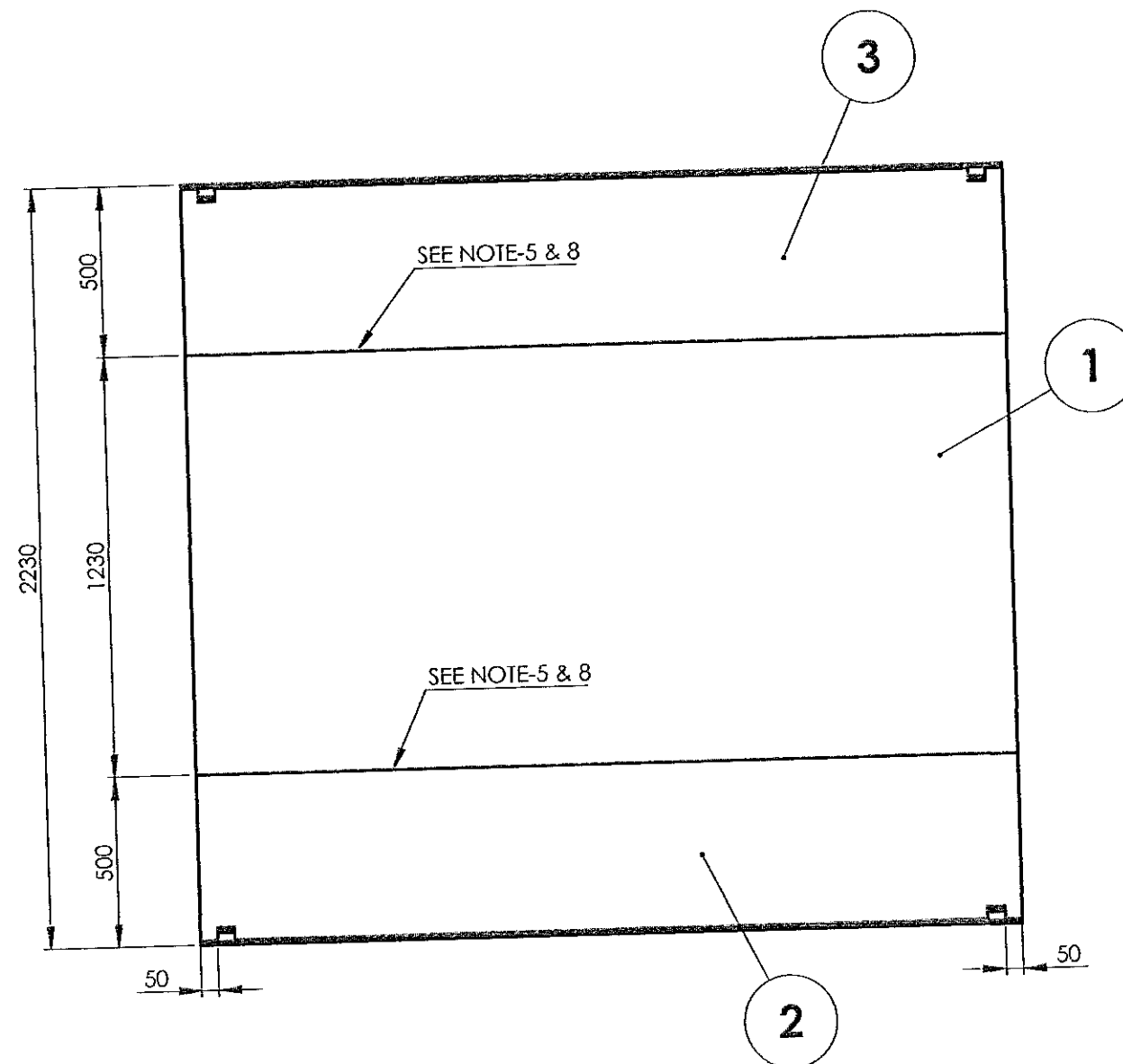
DESCRIPTION

APPROVED &
DATE

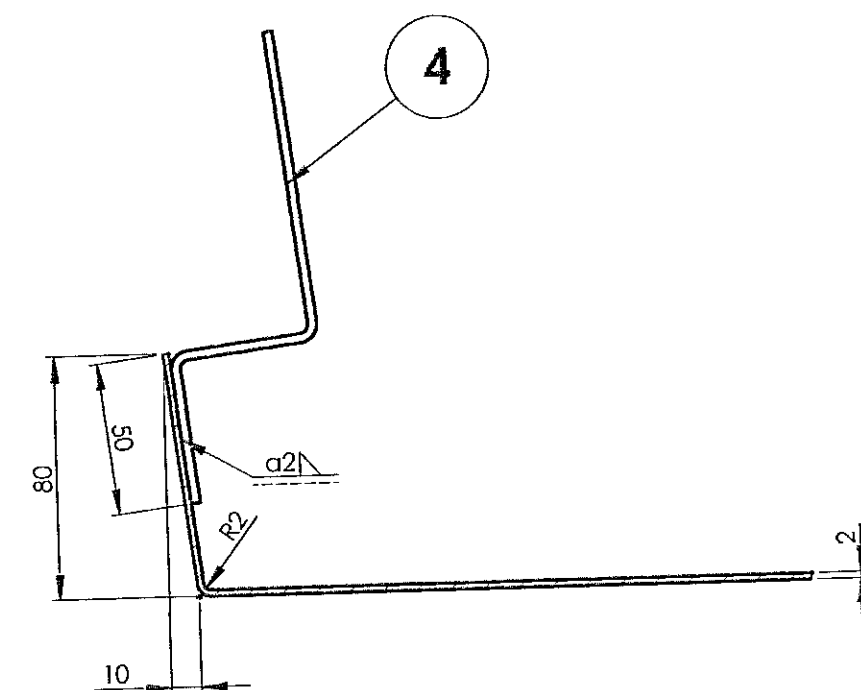
ITEM-4 ADDED AND VIEWS UPDATED.



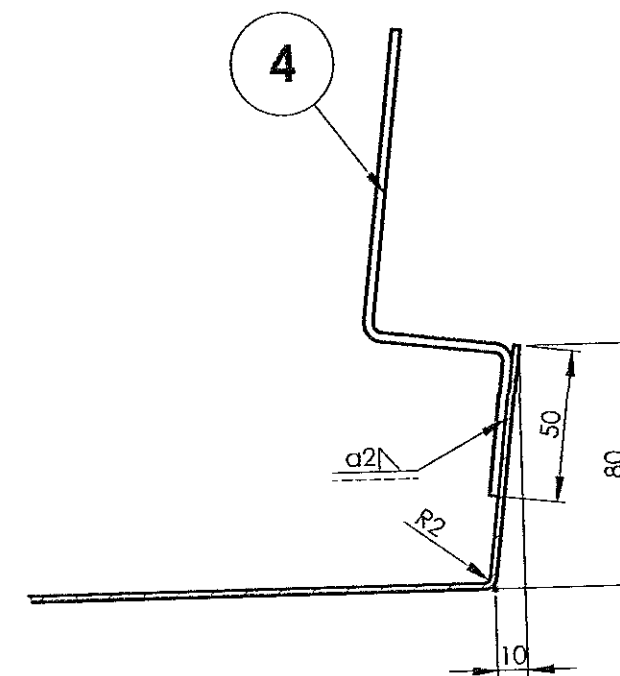
SECTION A-A
SCALE 1 : 10



DETAIL D
SCALE 1 : 2.5



DETAIL C
SCALE 1 : 2.5



DETAIL B
SCALE 1 : 2.5

NOTE:

1. STAINLESS STEEL ELECTRODE OF SAME COMPOSITION AS PER TABLE-3 OF RDSO/SPEC C-K201 SHALL BE USED FOR WELDING.
2. ALL WELD SPATTERS SHALL BE GROUND.
3. ALL WELDED JOINTS SHALL BE PICKLED AND PASSIVATED BEFORE SURFACE TREATMENT.
4. ALL SHARP CORNERS SHALL BE ROUNDED OFF.
5. WELDING OF SHEET JOINT SHALL BE OF LEAK PROOF BUTT JOINT AND SHALL BE MADE THROUGH TIG/LASER/RESISTANCE SEAM WELD PROCESS.
6. FOR WELD TESTING PREFERENCES REFER DRG.NO.ICF/STD-9-0-998.
7. FOR WELD PROCEDURE SPECIFICATION REFER DRG.NO.ICF/STD-9-0-999.
8. ROOF SHEET ASSY WITH SINGLE JOINT CAN ALSO BE ACCEPTABLE.

4	LIFTING HOOK		4	AAF16435		0.21	
1	ROOF SHEET		3	AAF16106		21.94	
1	ROOF SHEET		2	AAF16105		21.94	
1	ROOF SHEET	2 x 1230 x 2415	1		RDSO SPEC C-K201 X5 Cr Ni 18 10	47.53	
QTY.	DESCRIPTION	DIMENSIONS	ITEM NO.	REF.DRGS.	MATL	WT/UNIT IN KGS	REMARKS
GROUP: 1-6 Roof Construction				SURFACE AREA IN Sq.m.: 11542955.86		WT/ASSY IN Kgs:	
ROOF SHEET ASSY				SCALE 1:20	SSE/D CHD	E.SATHISH KUMAR E. SATHISH KUMAR	
				ALT a	ALTD DRN		
INDIAN RAILWAY STANDARDS				SHEET 1 OF 1		LWFAC/PP2	
INTEGRAL COACH FACTORY, CHENNAI - 600038				82716006		A2	

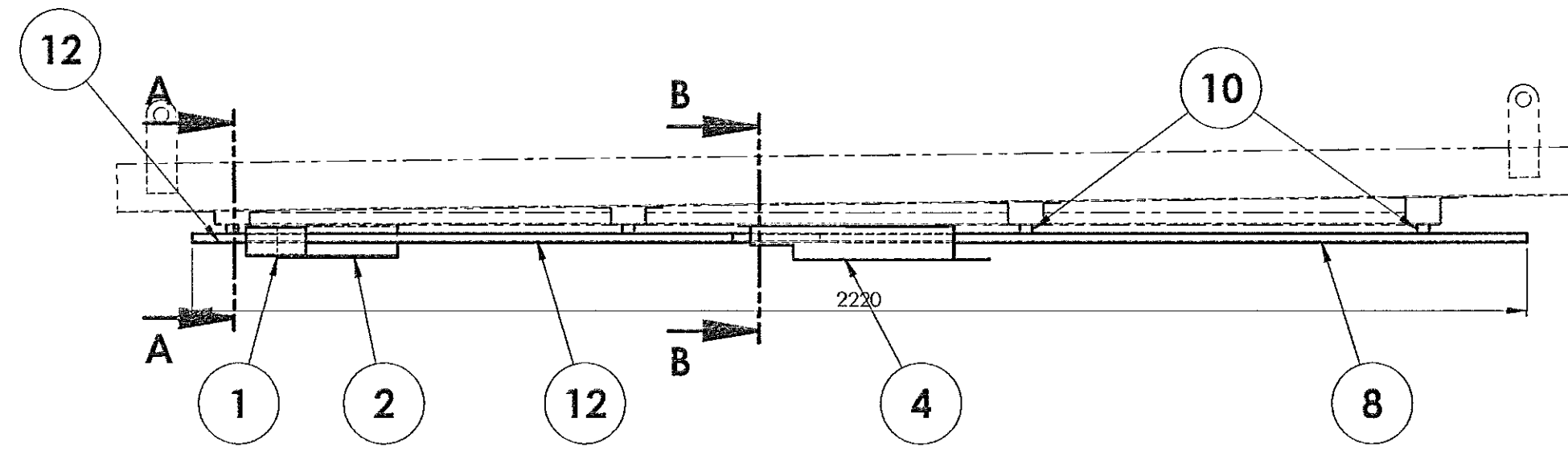
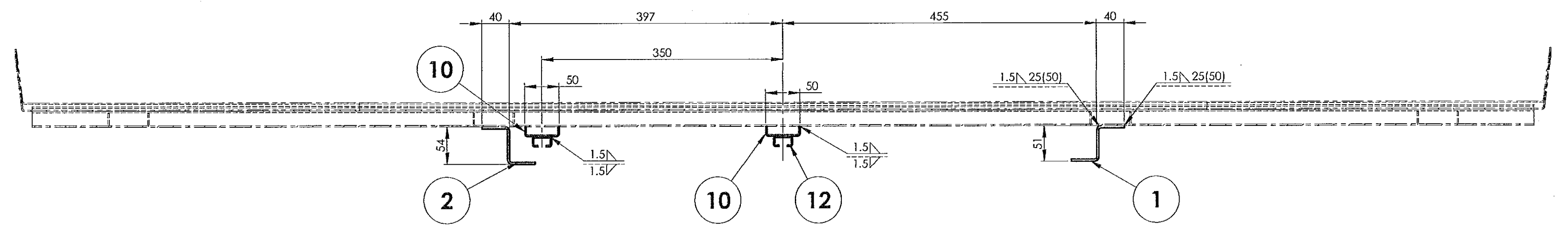
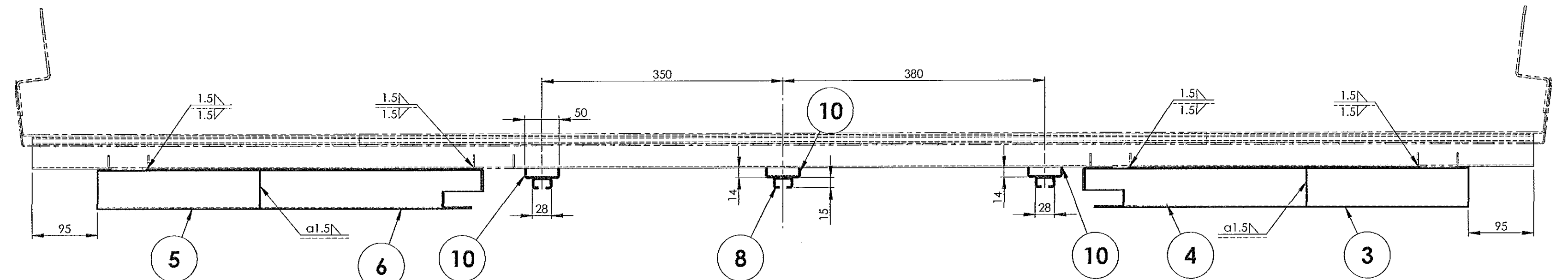
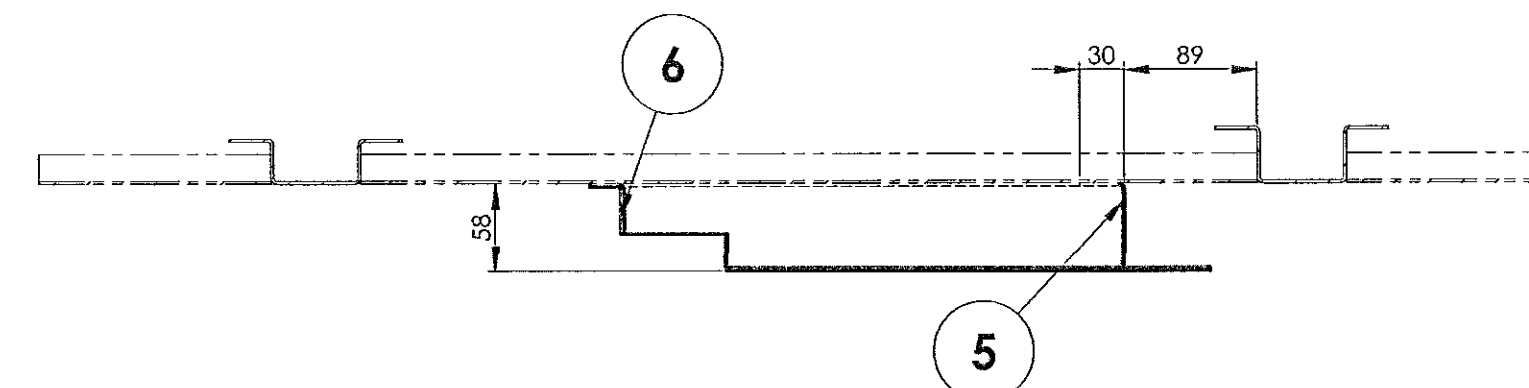
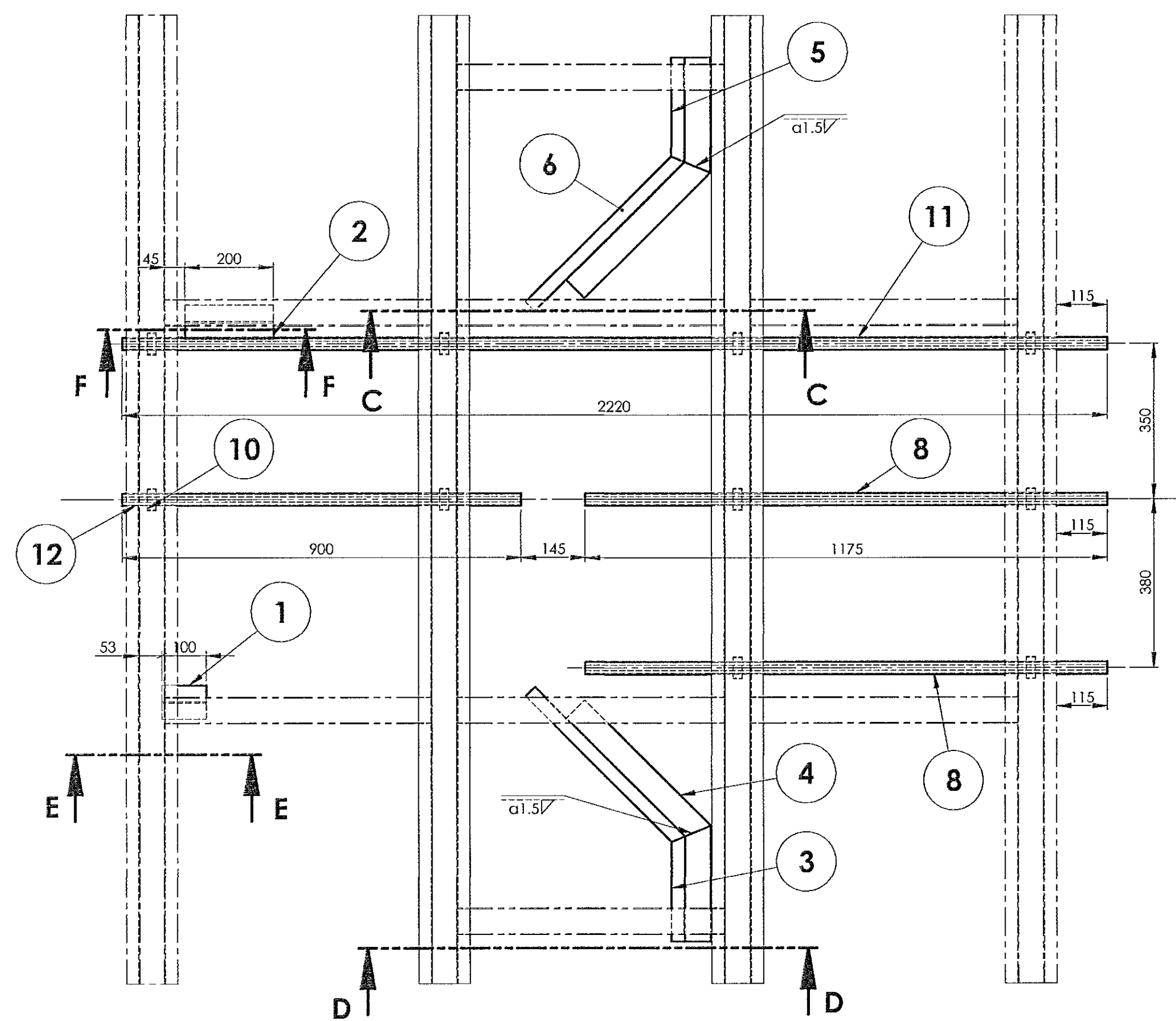
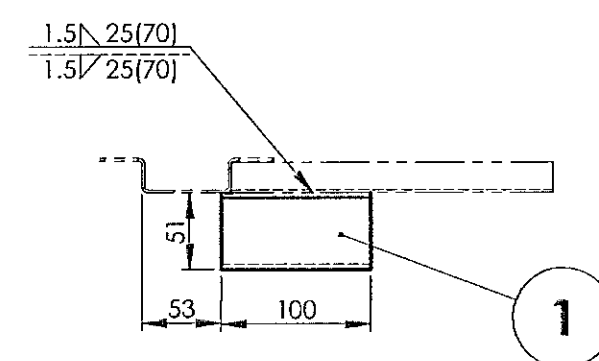
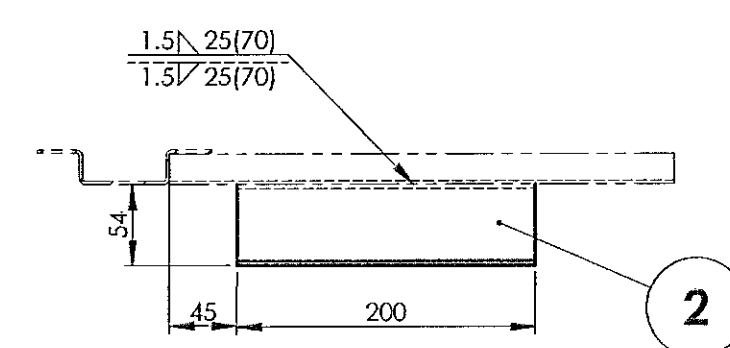
21/01/26 08/08/25
DATE OF LATEST ALT. DATE OF FIRST ISSUE ABE/SME

REF.DRG.NO.-

ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE SPECIFIED. FOR UNTOLERANCED DIMENSIONS AND ROUGHNESS VALUES, REFER DRAWING NO ICF/STD-9-0-001.
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82716007

12		13		14		15		16	
▽ ROUGH MACHINED		(01) ROUGH CLEANED		REVISIONS		APPROVED & DATE			
▽▽ FINISH MACHINED		(01b) BURRS REMOVED		ALT.	ZONE	DESCRIPTION			
▽▽▽ FINE FINISH MACHINED		(01c) CHAMFERED		a		ITEMS-11 & 12 ADDED, ITEMS- 7& 9 DELETED, VIEWS UPDATED.			

SECTION A-A
SCALE 1 : 5SECTION B-B
SCALE 1 : 5SECTION C-C
SCALE 1 : 5SECTION D-D
SCALE 1 : 5SECTION E-E
SCALE 1 : 5SECTION F-F
SCALE 1 : 5

NOTE:

- ALL WELDING SHALL BE OF TIG UNLESS OTHERWISE SPECIFIED.
- STAINLESS STEEL ELECTRODE OF SAME COMPOSITION AS PER TABLE-3 OF RDSO/SPEC. CK-201 SHALL BE USED FOR WELDING.
- ALL WELDED JOINTS SPATTERS SHALL BE GROUND.
- ALL SHARP CORNERS SHALL BE ROUNDED OFF.
- ALL WELDED JOINTS SHALL BE PICKLED AND PASSIVATED BEFORE SURFACE TREATMENT.
- FOR WELD TESTING PREFERENCES REFER DRG. No. ICF/STD-9-0-998.
- FOR WELD PROCEDURE SPECIFICATION REFER DRG. No. ICF/STD-9-0-999.

1	C-BAR	L = 900	12	AAB16185		0.88	
1	C-BAR	L = 2220	11	AAB16185		2.16	
10	CHANNEL		10	AAE16292		0.02	
1	C-BAR	L = 900	9	AAB16185		0.95	
2	C-BAR	L = 1175	8	AAB16185		1.14	
1	C-BAR	L = 2300	7	AAB16185		2.24	
1	Z - STIFFENER		6	AAE16333		0.95	
1	Z - STIFFENER		5	AAE16332		0.54	
1	Z - STIFFENER		4	AAE16331		0.95	
1	Z - STIFFENER		3	AAE16330		0.54	
1	Z - STIFFENER		2	AAE16329		0.60	
1	Z - STIFFENER		1	AAE16328		0.29	
QTY.	DESCRIPTION	DIMENSIONS	ITEM NO.	REF.DRGS.	MATL	WT/UNIT IN KGS	REMARKS
GROUP: 1-6 Roof Construction				SURFACE AREA IN Sq.m.: 16737.627. WT/ASSY IN Kgs:			
WELDING PARTS				SCALE 1:20	SSE/D CHD	E.SATHISH KUMAR	
				ALT.	ALTD.	E.SATHISH KUMAR	
				a	DRN	E.SATHISH KUMAR	
INDIAN RAILWAY STANDARDS				SHEET		LWFAC/PP2	
INTEGRAL COACH FACTORY, CHENNAI - 600038				1 OF 1		82716007	
REF.DRG.NO.-				DATE OF LATEST ALT.		DATE OF FIRST ISSUE	
				AME/SME			

01/20 08/08/25
DATE OF LATEST ALT. DATE OF FIRST ISSUE AME/SME

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