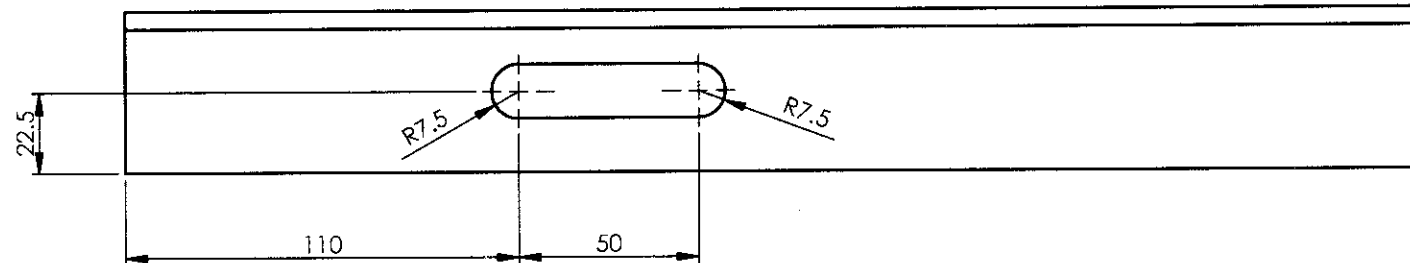
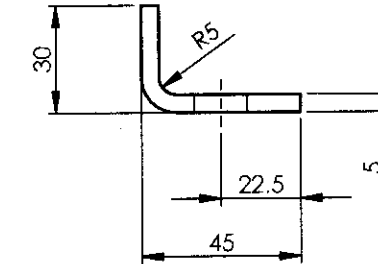
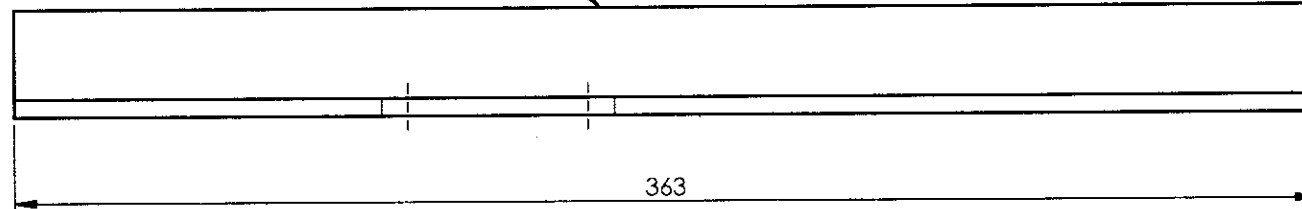


AAD16651

▽ ROUGH MACHINED	① ROUGH CLEANED
▽▽ FINISH MACHINED	①② BURRS REMOVED
▽▽▽ FINE FINISH MACHINED	①⑧ CHAMFERED

REVISIONS			
ALT.	ZONE	DESCRIPTION	APPROVED & DATE



1	ANGLE FOR PANEL FIXING	3 x 67 x 363	1	RDSO/SPEC C-K201 X2CrNi12	0.93	
Default	DESCRIPTION	DIMENSIONS	ITEM NO.	REF. DRGS	MATL.SPEC.	WT/UNIT IN KGS
GROUP: 1-6 ROOF ASSEMBLY				SURFACE AREA IN Sq.m.:		WT/ASSY IN Kgs:
ANGLE FOR PANEL FIXING.				SCALE	SSE/D	
				1:2	CHD	
				ALT.	ALTD	
				DRN	S.Bala V.Subramani	
INDIAN RAILWAY STANDARDS				SHEET 1 OF 1		
INTEGRAL COACH FACTORY, CHENNAI - 600038				AAD16651		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.-

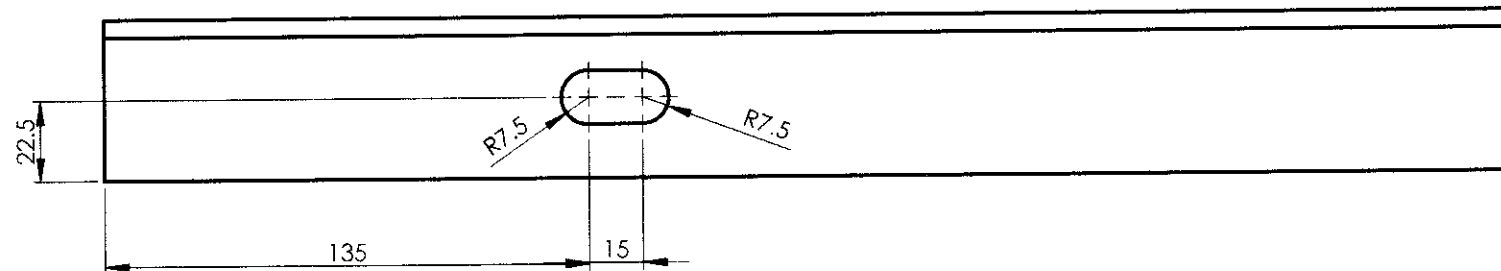
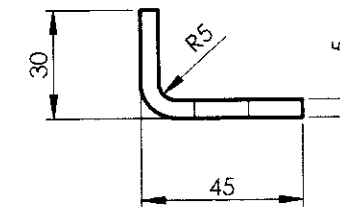
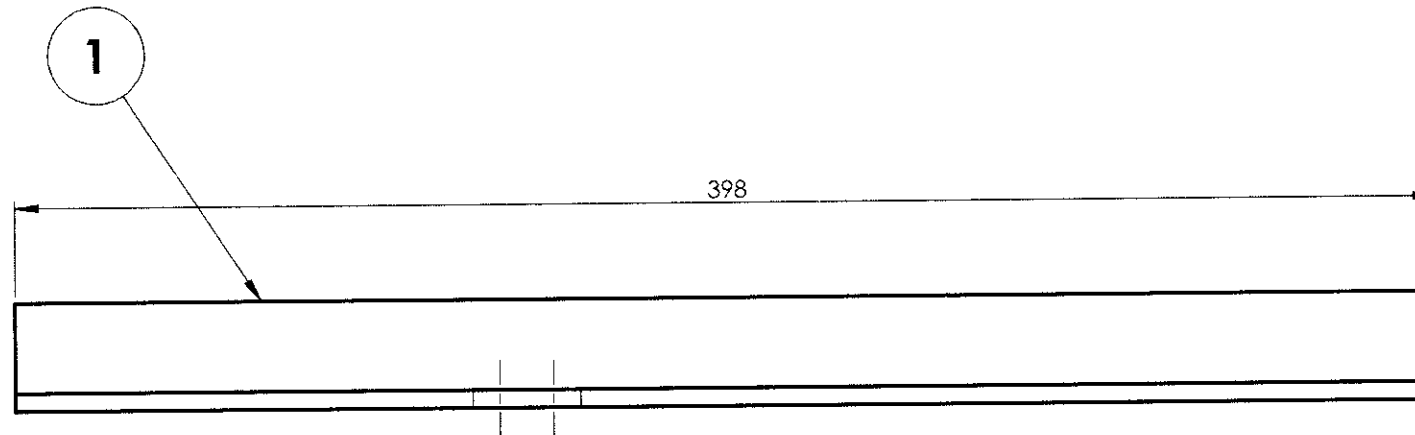
	26-08-2020	
DATE OF LATEST ALT.	DATE OF FIRST ISSUE	AME/SME

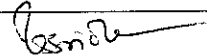
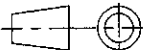
AAD16652

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

REVISIONS

ALT.	ZONE	DESCRIPTION	APPROVED & DATE
------	------	-------------	-----------------



1	ANGLE FOR AIR COOLER PIPE	3 x 67 x 398	1		RDSO/SPEC C-K201 X2CrNi12	1.05		
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:			
ANGLE FOR AIR COOLER PIPE					SCALE	SSE/D		
					1:2	CHD		
					ALT.	ALTD		
						DRN		Bala V Subramani
INDIAN RAILWAY STANDARDS								
INTEGRAL COACH FACTORY, CHENNAI - 600038					SHEET 1 OF 1			
					AAD16652		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.-

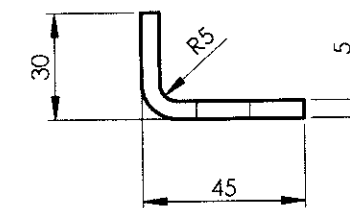
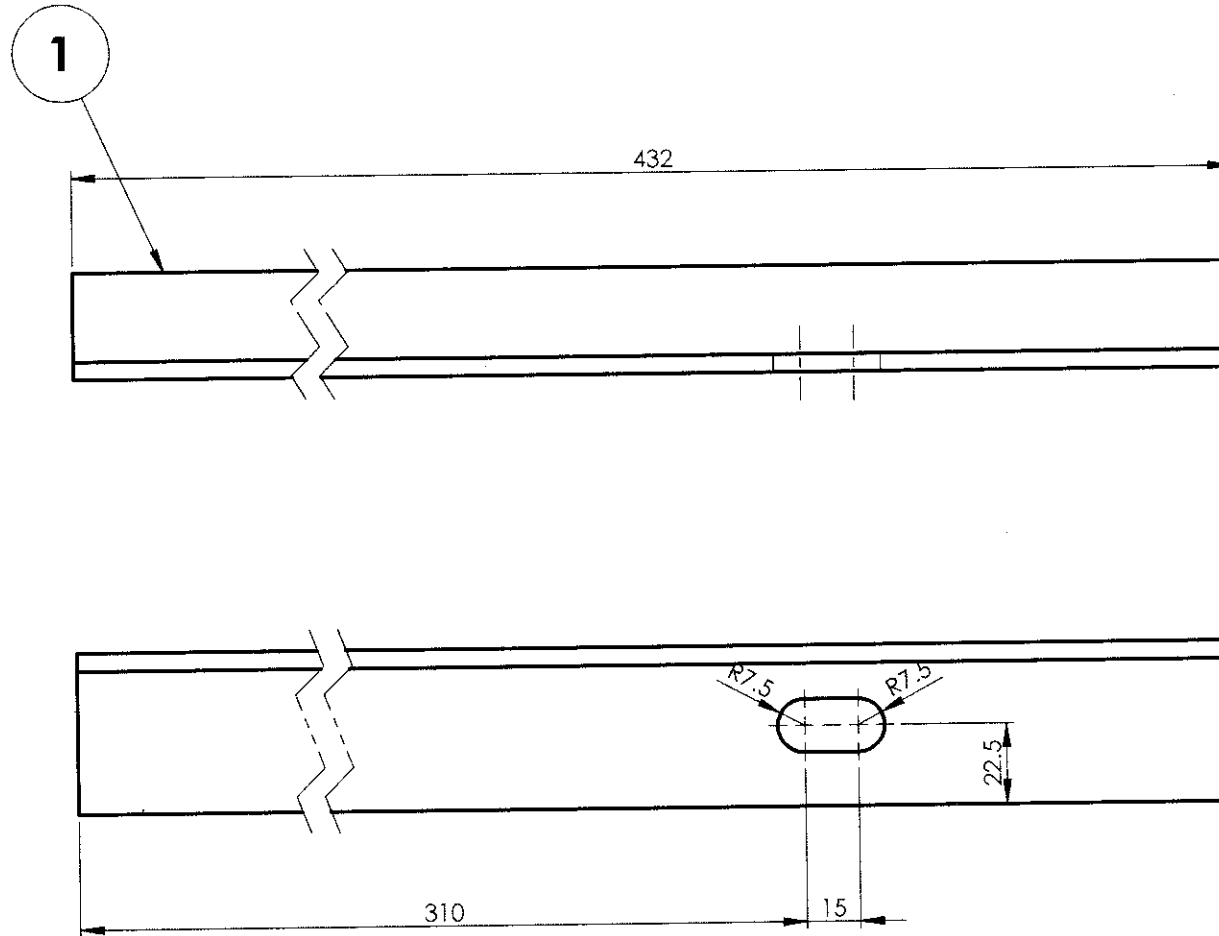
-	24-08-20	
DATE OF LATEST ALT.	DATE OF FIRST ISSUE	A.M.E./S.M.E.

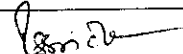
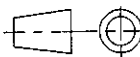
1		2		3		4		5		6		7		8																																																																																																							
AAD16653				▽ ROUGH MACHINED		① ROUGH CLEANED		REVISIONS																																																																																																													
				▽▽ FINISH MACHINED		② BURRS REMOVED		ALT.		ZONE		DESCRIPTION		APPROVED & DATE																																																																																																							
				▽▽▽ FINE FINISH MACHINED		③ CHAMFERED																																																																																																															
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>1</div><div><div>576</div><div><div></div><div></div></div></div><div><div>300</div><div>15</div><div>22.5</div><div>R7.5</div><div>R7.5</div></div><div><div>30</div><div>R5</div><div>45</div><div>5</div></div></div> <tr><td colspan="16"><table><tr><td>1</td><td>ANGLE FOR EXHAUST PIPE</td><td>3 x 67 x 576</td><td>1</td><td></td><td>RDSO/SPEC C-K201 X2CrNi12</td><td>1.52</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="5">GROUP: 1-6 Roof Construction</td><td colspan="2">SURFACE AREA IN Sq.m.:</td><td>WT/ASSY IN Kgs:</td></tr><tr><td colspan="5" rowspan="3">ANGLE FOR AIR COOLER PIPE</td><td>SCALE</td><td>SSE/D</td><td rowspan="2"></td></tr><tr><td>1:2</td><td>CHD</td></tr><tr><td>ALT.</td><td>ALTD</td><td>DRN</td><td>Bala V Subramani</td></tr><tr><td colspan="5">INDIAN RAILWAY STANDARDS</td><td colspan="2">SHEET 1 OF 1</td><td></td></tr><tr><td colspan="5">INTEGRAL COACH FACTORY, CHENNAI - 600038</td><td colspan="2"></td><td></td></tr><tr><td colspan="2">REF.DRG.NO.-</td><td>26-08-2020</td><td colspan="2">2-1-1</td><td colspan="2">AAD16653</td><td>A3</td></tr><tr><td colspan="2">DATE OF LATEST ALT.</td><td>DATE OF FIRST ISSUE</td><td colspan="2">AME/SME</td><td colspan="2"></td><td></td></tr></table></td></tr> <tr><td colspan="2">1</td><td colspan="2">2</td><td colspan="2">3</td><td colspan="2">4</td><td colspan="2">5</td><td colspan="2">6</td><td colspan="2">7</td><td colspan="2">8</td></tr>																<table><tr><td>1</td><td>ANGLE FOR EXHAUST PIPE</td><td>3 x 67 x 576</td><td>1</td><td></td><td>RDSO/SPEC C-K201 X2CrNi12</td><td>1.52</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="5">GROUP: 1-6 Roof Construction</td><td colspan="2">SURFACE AREA IN Sq.m.:</td><td>WT/ASSY IN Kgs:</td></tr><tr><td colspan="5" rowspan="3">ANGLE FOR AIR COOLER PIPE</td><td>SCALE</td><td>SSE/D</td><td rowspan="2"></td></tr><tr><td>1:2</td><td>CHD</td></tr><tr><td>ALT.</td><td>ALTD</td><td>DRN</td><td>Bala V Subramani</td></tr><tr><td colspan="5">INDIAN RAILWAY STANDARDS</td><td colspan="2">SHEET 1 OF 1</td><td></td></tr><tr><td colspan="5">INTEGRAL COACH FACTORY, CHENNAI - 600038</td><td colspan="2"></td><td></td></tr><tr><td colspan="2">REF.DRG.NO.-</td><td>26-08-2020</td><td colspan="2">2-1-1</td><td colspan="2">AAD16653</td><td>A3</td></tr><tr><td colspan="2">DATE OF LATEST ALT.</td><td>DATE OF FIRST ISSUE</td><td colspan="2">AME/SME</td><td colspan="2"></td><td></td></tr></table>																1	ANGLE FOR EXHAUST PIPE	3 x 67 x 576	1		RDSO/SPEC C-K201 X2CrNi12	1.52		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:	ANGLE FOR AIR COOLER PIPE					SCALE	SSE/D		1:2	CHD	ALT.	ALTD	DRN	Bala V Subramani	INDIAN RAILWAY STANDARDS					SHEET 1 OF 1			INTEGRAL COACH FACTORY, CHENNAI - 600038								REF.DRG.NO.-		26-08-2020	2-1-1		AAD16653		A3	DATE OF LATEST ALT.		DATE OF FIRST ISSUE	AME/SME					1		2		3		4		5		6		7		8	
<table><tr><td>1</td><td>ANGLE FOR EXHAUST PIPE</td><td>3 x 67 x 576</td><td>1</td><td></td><td>RDSO/SPEC C-K201 X2CrNi12</td><td>1.52</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="5">GROUP: 1-6 Roof Construction</td><td colspan="2">SURFACE AREA IN Sq.m.:</td><td>WT/ASSY IN Kgs:</td></tr><tr><td colspan="5" rowspan="3">ANGLE FOR AIR COOLER PIPE</td><td>SCALE</td><td>SSE/D</td><td rowspan="2"></td></tr><tr><td>1:2</td><td>CHD</td></tr><tr><td>ALT.</td><td>ALTD</td><td>DRN</td><td>Bala V Subramani</td></tr><tr><td colspan="5">INDIAN RAILWAY STANDARDS</td><td colspan="2">SHEET 1 OF 1</td><td></td></tr><tr><td colspan="5">INTEGRAL COACH FACTORY, CHENNAI - 600038</td><td colspan="2"></td><td></td></tr><tr><td colspan="2">REF.DRG.NO.-</td><td>26-08-2020</td><td colspan="2">2-1-1</td><td colspan="2">AAD16653</td><td>A3</td></tr><tr><td colspan="2">DATE OF LATEST ALT.</td><td>DATE OF FIRST ISSUE</td><td colspan="2">AME/SME</td><td colspan="2"></td><td></td></tr></table>																1	ANGLE FOR EXHAUST PIPE	3 x 67 x 576	1		RDSO/SPEC C-K201 X2CrNi12	1.52		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:	ANGLE FOR AIR COOLER PIPE					SCALE	SSE/D		1:2	CHD	ALT.	ALTD	DRN	Bala V Subramani	INDIAN RAILWAY STANDARDS							SHEET 1 OF 1				INTEGRAL COACH FACTORY, CHENNAI - 600038								REF.DRG.NO.-		26-08-2020	2-1-1		AAD16653		A3	DATE OF LATEST ALT.		DATE OF FIRST ISSUE	AME/SME																																	
1	ANGLE FOR EXHAUST PIPE	3 x 67 x 576	1		RDSO/SPEC C-K201 X2CrNi12	1.52																																																																																																															
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:																																																																																																														
ANGLE FOR AIR COOLER PIPE					SCALE	SSE/D																																																																																																															
					1:2	CHD																																																																																																															
					ALT.	ALTD	DRN	Bala V Subramani																																																																																																													
INDIAN RAILWAY STANDARDS					SHEET 1 OF 1																																																																																																																
INTEGRAL COACH FACTORY, CHENNAI - 600038																																																																																																																					
REF.DRG.NO.-		26-08-2020	2-1-1		AAD16653		A3																																																																																																														
DATE OF LATEST ALT.		DATE OF FIRST ISSUE	AME/SME																																																																																																																		
1		2		3		4		5		6		7		8																																																																																																							

AAD16654

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

REVISIONS			
ALT.	ZONE	DESCRIPTION	APPROVED & DATE



1	ANGLE FOR EXHAUST PIPE	3 x 67 x 429	1		RDSO/SPEC C- K201 X2CrNi12	1.14	
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:		
ANGLE FOR AIR COOLER PIPE					SCALE	SSE/D	
					1:2	CHD	
					ALT.	ALTD	
						DRN	Bala V Subramani
INDIAN RAILWAY STANDARDS INTEGRAL COACH FACTORY, CHENNAI - 600038				SHEET 1 OF 1			
					AAD16654		A3

DATE OF LATEST ALT.	24-08-2020	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

AAD16655

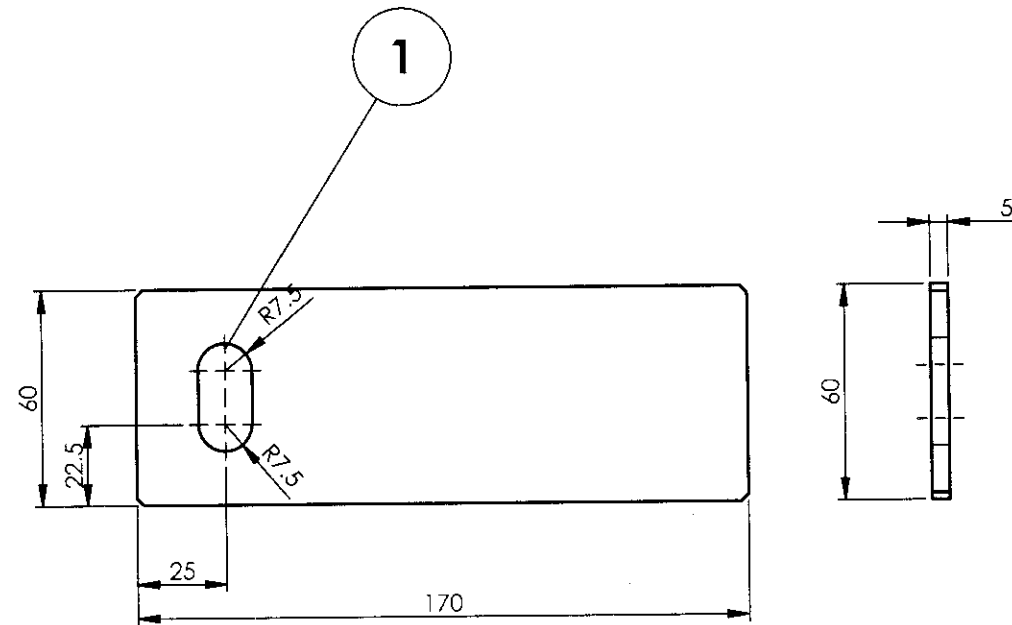
▽ ROUGH MACHINED	③ ROUGH CLEANED
▽ FINISH MACHINED	④ BURRS REMOVED
▽ FINE FINISH MACHINED	⑤ CHAMFERED

REVISIONS

ALT.

ZONE

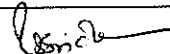

DESCRIPTION

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.IF/590

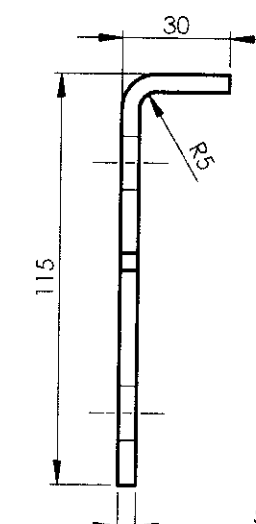
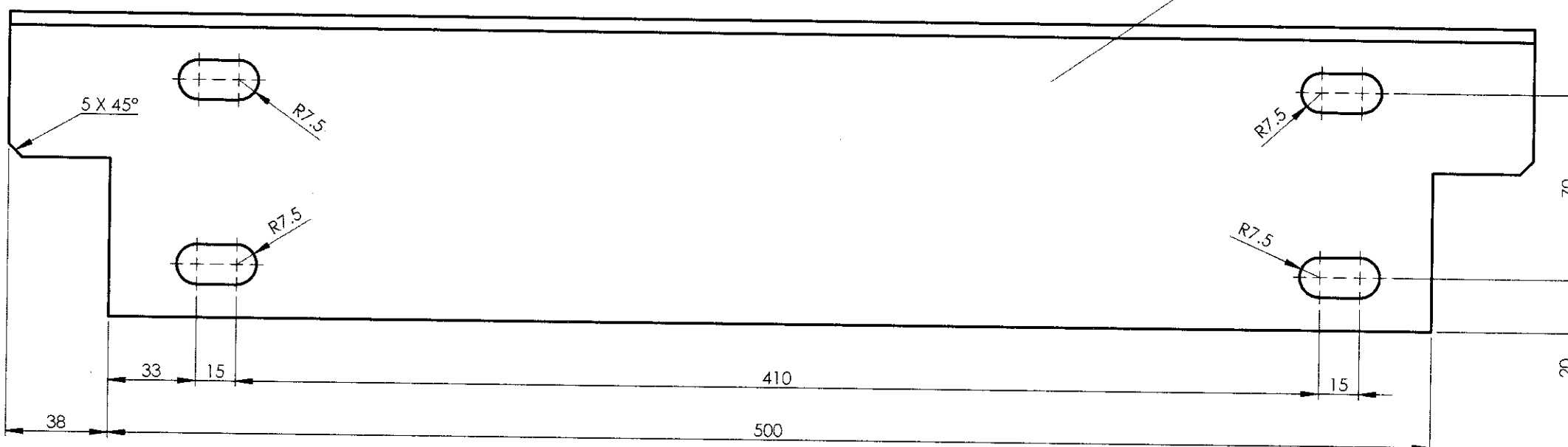
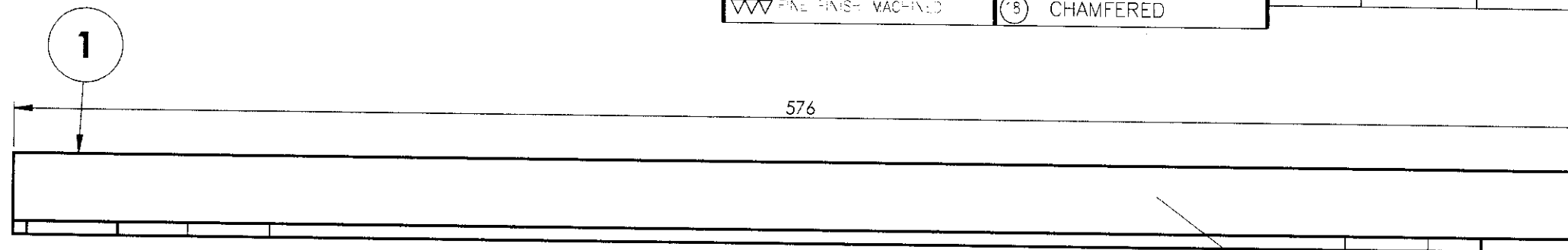
-	24-08-2020	AME/SME
DATE OF LATEST ALT.	DATE OF FIRST ISSUE	AME/SME

1	FLAT FOR AIR COOLER PIPE	5x60x170	1		RDSO/SPEC C-K201 X2CrNi12	0.39	
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:		
FLAT FOR AIR COOLER PIPE					SCALE	SSE/D	
					1:1	CHD	
					ALT.	ALTD	
						DRN	Bala V Subramani
INDIAN RAILWAY STANDARDS							
INTEGRAL COACH FACTORY, CHENNAI - 600038				SHEET 1 OF 1	AAD16655		A3

AAD16657

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

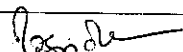
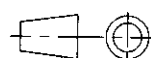
ALT.	ZONE	DESCRIPTION	APPROVED & DATE
------	------	-------------	-----------------



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.-

-	24-08-2020	<i>[Signature]</i>
DATE OF LATEST ALT.	DATE OF FIRST ISSUE	AME/SME

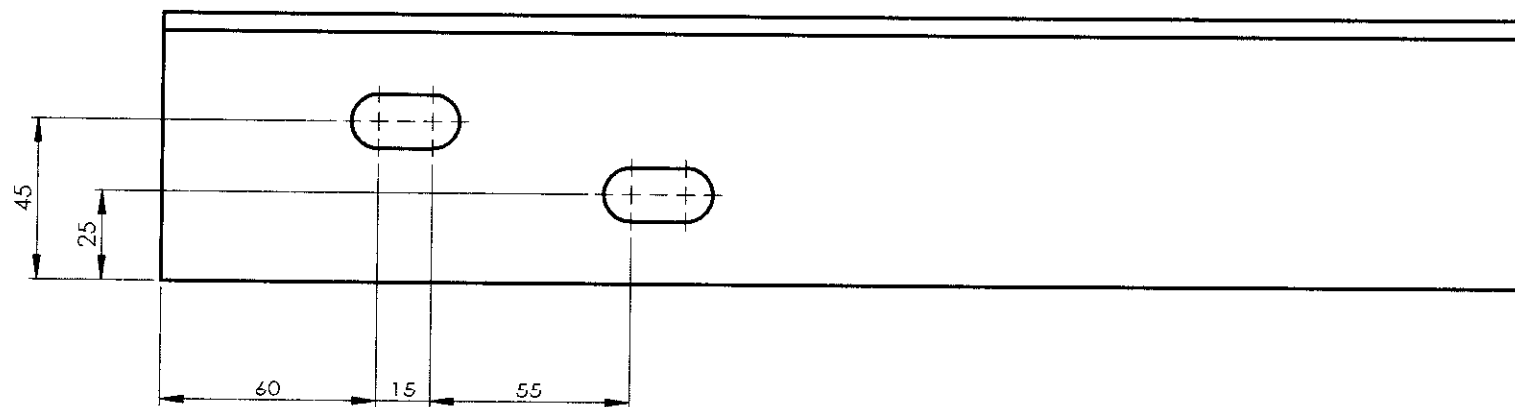
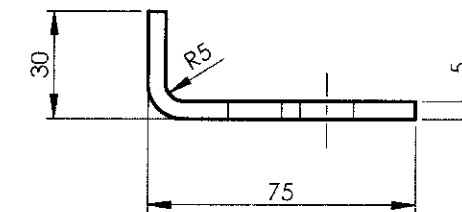
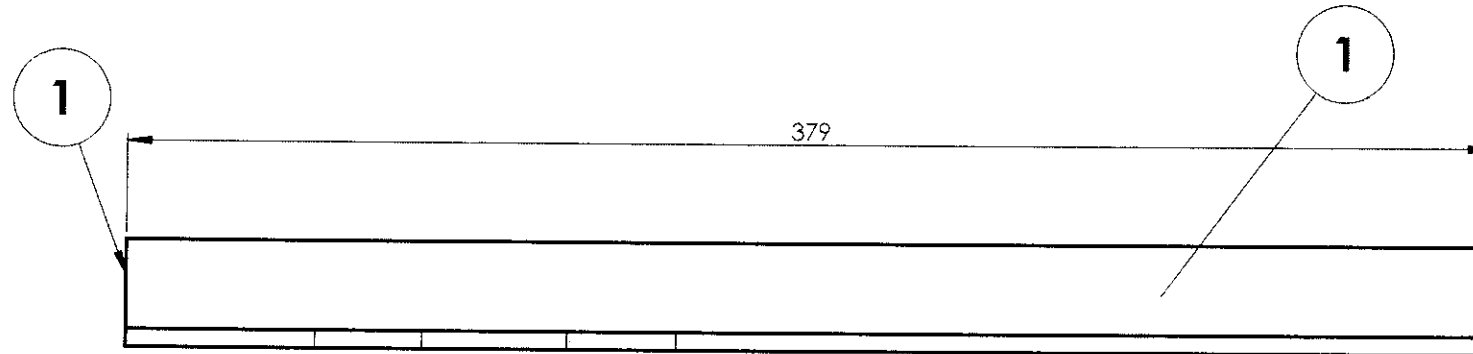
1	ANGLE FOR AIR COOLER PIPE (KOEL)	5 x 135 x 576	1		RDSO/SPEC C-K201 X2CrNi12	2.90	
QTY	DESCRIPTION	DIMENSIONS	ITEM NO.	REF. DRGS	MATL.SPEC.	WT/UNIT IN KGS	REMARKS
GROUP: 1-6 Roof Construction			SURFACE AREA IN Sq.m.:		WT/ASSY IN Kgs:		
ANGLE FOR AIR COOLER PIPE (KOEL)					SCALE	SSE/D	
					1:5	CHD	
					ALT.	ALTD	
						DRN	Bala V Subramani
INDIAN RAILWAY STANDARDS							
INTEGRAL COACH FACTORY, CHENNAI - 600038							
SHEET 1 OF 1					AAD16657		A3

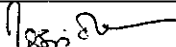
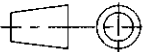
AAD16659

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

REVISIONS

ALT.	ZONE	DESCRIPTION	APPROVED & DATE
------	------	-------------	-----------------



1	ANGLE FOR AIR COOLER PIPE (KOEL)	5x95x398	1		RDSO/SPEC C-K201 X2CrNi12	1.44	
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:		
ANGLE FOR AIR COOLER PIPE (KOEL)					SCALE	SSE/D	
					1:5	CHD	
					ALT.	ALTD	
						DRN	Bala V Subramani
INDIAN RAILWAY STANDARDS							
INTEGRAL COACH FACTORY, CHENNAI - 600038				SHEET 1 OF 1	AAD16659		A3

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.-

1		2		3		4		5		6		7		8	
AAD16683				▽ ROUGH MACHINED		⊖ ROUGH CLEANED		REVISIONS							
				▽▽ FINISH MACHINED		⊖⊖ BURRS REMOVED		ALT.		ZONE		DESCRIPTION		APPROVED & DATE	
				▽▽▽ FINE FINISH MACHINED		⊖⊖⊖ CHAMFERED									
A															
B															
C															
D															
E															
F															
G															
H															
I															
J															
K															
L															
M															
N															
O															
P															
Q															
R															
S															
T															
U															
V															
W															
X															
Y															
Z															
AA															
AB															
AC															
AD															
AE															
AF															
AG															
AH															
AI															
AJ															
AK															
AL															
AM															
AN															
AO															
AP															
AQ															
AR															
AS															
AT															
AU															
AV															
AW															
AX															
AY															
AZ															
BA															
BB															
BC															
BD															
BE															
BF															
BG															
BH															
BI															
BJ															
BK															
BL															
BM															
BN															
BO															
BP															
BQ															
BR															
BS															
BT															
BU															
BV															
BW															
BX															
BY															
BZ															
CA															
CB															
CC															
CD															
CE															
CF															
CG															
CH															
CI															
CJ															
CK															
CL															
CM															
CN															
CO															
CP															
CQ															
CR															
CS															
CT															
CU															
CV															
CW															
CX															
CY															
CZ															
DA															
DB															
DC															
DD															
DE															
DF															
DG															
DH															
DI															
DJ															
DK															
DL															
DM															
DN															
DO															
DP															
DQ															
DR															
DS															
DT															
DU															
DV															
DW															
DX															
DY															
DZ															
EA															
EB															
EC															
ED															
EE															
EF															
EG															
EH															
EI															
EJ															
EK															
EL															
EM															
EN															
EO															
EP															
EQ															
ER															
ES															
ET															
EU															
EV															
EW															
EX															
EY															
EZ															
FA															
FB															
FC															
FD															
FE															
FF															
FG															
FH															
FI															
FJ															
FK															
FL															
FM															
FN															
FO															
FP															
FQ															
FR															
FS															
FT															
FU															
FV															
FW															
FX															
FY															
FZ															
GA															
GB															
GC															
GD															
GE															
GF															
GG															
GH															
GI															
GJ															
GK															
GL															
GM															
GN															
GO															
GP															
GQ															
GR															
GS															
GT															
GU															
GV															
GW															
GX															
GY															
GZ															
HA															
HB															
HC															
HD															
HE															
HF															
HG															
HH															
HI															
HJ															
HK															
HL															
HM															
HN															
HO															
HP															
HQ															
HR															
HS															
HT															
HU															
HV															
HW															
HX															
HY															
HZ															
IA															
IB															
IC															
ID															
IE															
IF															
IG															
IH															
II															
IJ															
IK															
IL															
IM															
IN															
IO															
IP															
IQ															
IR															
IS															
IT															
IU															
IV															
IW															
IX															
IY															
IZ															
JA															
JB															
JC															
JD															
JE															
JF															
JG															
JH															
JI															
JJ															
JK															
JL															
JM															
JN															
JO															
JP															
JQ															
JR															
JS															
JT															
JU															
JV															
JW															
JX															
JY															
JZ															
KA															
KB															
KC															
KD															
KE															
KF															
KG															
KH															
KI															
KJ															
KK															
KL															
KM															
KN															
KO															
KP															
KQ															
KR															
KS															
KT															
KU															
KV															
KW															
KX															
KY															
KZ															
LA															
LB															
LC															
LD															
LE															
LF															
LG															
LH															
LI															
LJ															
LK															
LL															
LM															
LN															
LO															
LP															
LQ															
LR															
LS															
LT															
LU															
LV															
LW															
LX															
LY															
LZ															
MA															
MB															
MC															
MD															
ME															
MF															
MG															
MH															
MI															
MJ															
MK															
ML															
MM															
MN															
MO															
MP															
MQ															
MR															
MS															
MT															
MU															
MV															
MW															
MX															
MY															
MZ															
NA															
NB															
NC															
ND															
NE															
NF															
NG															
NH															
NI															
NJ															
NK															
NL															
NM															
NN															
NO															
NP															
NQ															
NR															
NS															
NT															
NU															
NV															
NW															
NX															
NY															
NZ															
OA															
OB															
OC															
OD															
OE															
OF															
OG															
OH															
OI															
OJ															
OK															
OL															
OM															
ON															
OO															
OP															
OQ															
OR															
OS															
OT															
OU															
OV															
OW															
OX															
OY															
OZ															
PA															
PB															
PC															
PD															
PE															
PF															
PG															
PH															
PI															
PJ															
PK															
PL															
PM															
PN															
PO															
PP															
PQ															
PR															
PS															
PT															
PU															
PV															
PW															
PX															
PY															
PZ															
QA															
QB															
QC															
QD															
QE															
QF															
QG															
QH															
QI															
QJ															
QK															
QL															
QM															
QN															
QO															
QP															
QQ															
QR															
QS															
QT															
QU															
QV															
QW															
QX															
QY															
QZ															
RA															
RB															
RC															
RD															
RE															
RF															
RG															
RH															
RI															
RJ															
RK															
RL															
RM															
RN															
RO															
RP															
RQ															
RR															
RS															
RT															
RU															
RV															
RW															
RX															
RY															
RZ															
SA															
SB															
SC															
SD															
SE															
SF															
SG															
SH															
SI															
SJ															
SK															
SL															
SM															
SN															
SO															
SP															
SQ															
SR															
SS															
ST															
SU															
SV															
SW															
SX															
SY															
SZ															
TA															
TB															
TC															
TD															
TE															
TF															
TG															
TH															
TI															
TJ															
TK															
TL															
TM															
TN															
TO															
TP															
TQ															
TR															
TS															
TT															
TU															
TV															
TW															
TX															
TY															
TZ															
UA															
UB															
UC															
UD															
UE															
UF															
UG															
UH															
UI															
UJ															
UK															
UL															
UM															
UN															
UO															
UP															
UQ															
UR															
US															
UT															
UU															
UV															
UW															
UX															
UY															
UZ															
VA															
VB															
VC															
VD															
VE															
VF															
VG															
VH															
VI															
VJ															
VK															
VL															
VM															
VN															
VO															
VP															
VQ															
VR															
VS															
VT															
VU															
VV															
VW															
VX															
VY															
VZ															
WA															
WB															
WC															
WD															
WE															
WF															
WG															
WH															
WI															
WJ															
WK															
WL															
WM															
WN															
WO															
WP															
WQ															
WR															
WS															
WT															
WU															
WV															
WW															
WX															
WY															
WZ															
XA															
XB															
XC															
XD															
XE															
XF															
XG															
XH															
XI															
XJ															
XK															
XL															
XM															
XN															
XO															
XP															
XQ															
XR															
XS															
XT															
XU															
XV															
XW															
XX															
XY															
XZ															
YA															
YB															
YC															
YD															
YE															
YF															
YG															
YH															
YI															
YJ															
YK															
YL															
YM															
YN															
YO															
YP															
YQ															
YR															
YS															
YT															
YU															
YV															
YW															
YX															
YY															
YZ															
ZA															
ZB															
ZC															
ZD															
ZE															
ZF															
ZG															
ZH															
ZI															
ZJ															
ZK															
ZL															
ZM															
ZN															
ZO															
ZP															
ZQ															
ZR															
ZS															
ZT															
ZU															
ZV															
ZW															
ZX															
ZY															
ZZ															

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.	24-08-2020	AME/SME
---------------------	------------	---------

1		2		3		4		5		6		7		8	
INDIAN RAILWAY STANDARDS				INTEGRAL COACH FACTORY, CHENNAI - 600038				SHEET 1 OF 1		AAD16683		A3			

1	ANGLE FOR AIR COOLER PIPE (KOEL)	5 x 97 x 398	1		RDSO/SPEC C-K201 X2CrNi12	1.25	
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:
ANGLE FOR AIR COOLER PIPE (KOEL)					SCALE	SSE/D	
					1:2	CHD	
					ALT.	ALTD	
					DRN	Bala V Subramani	
INDIAN RAILWAY STANDARDS					SHEET 1 OF 1		
INTEGRAL COACH FACTORY, CHENNAI - 600038					AAD16683		A3

AAD16708

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

REVISIONS

ALT.

ZONE

DESCRIPTION

APPROVED &
DATE

1

400

70

R7.5

5 X 45°

R7.5

70

20

15

40

30

340

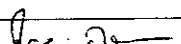
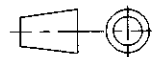
60

30

R5

115

5

1	ANGLE FOR AIR COOLER PIPE (KOEL)	5 x135 x 400	1		RDSO/SPEC C-K201 X2CrNi12	2.01	
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:		
ANGLE FOR AIR COOLER PIPE (KOEL)					SCALE	SSE/D	
					1:5	CHD	
					ALT.	ALTD	
						DRN	Bala V Subramani
INDIAN RAILWAY STANDARDS							
INTEGRAL COACH FACTORY, CHENNAI - 600038				SHEET 1 OF 1	AAD16708		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.-

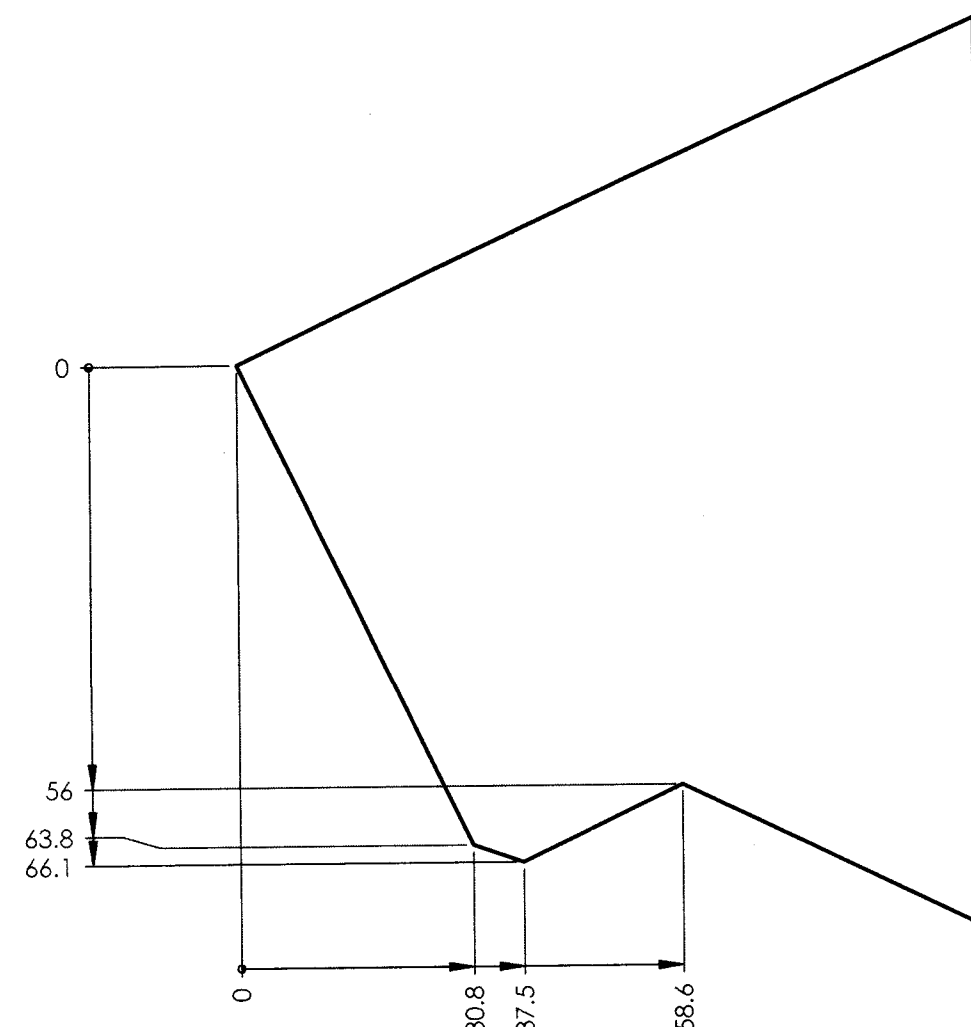
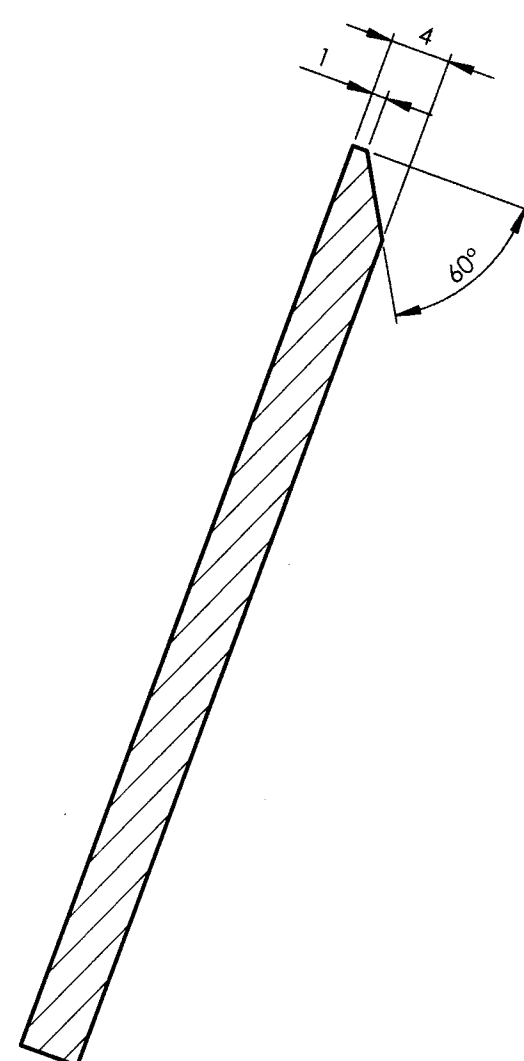
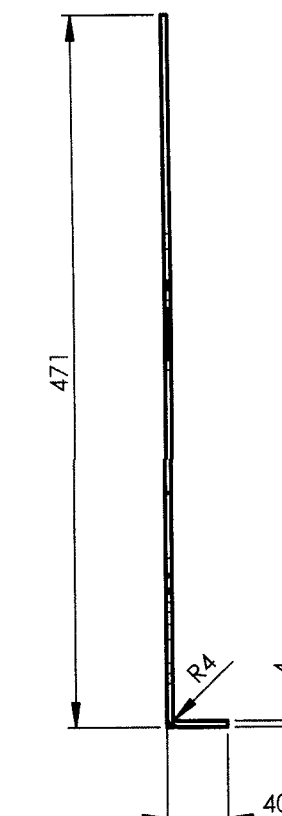
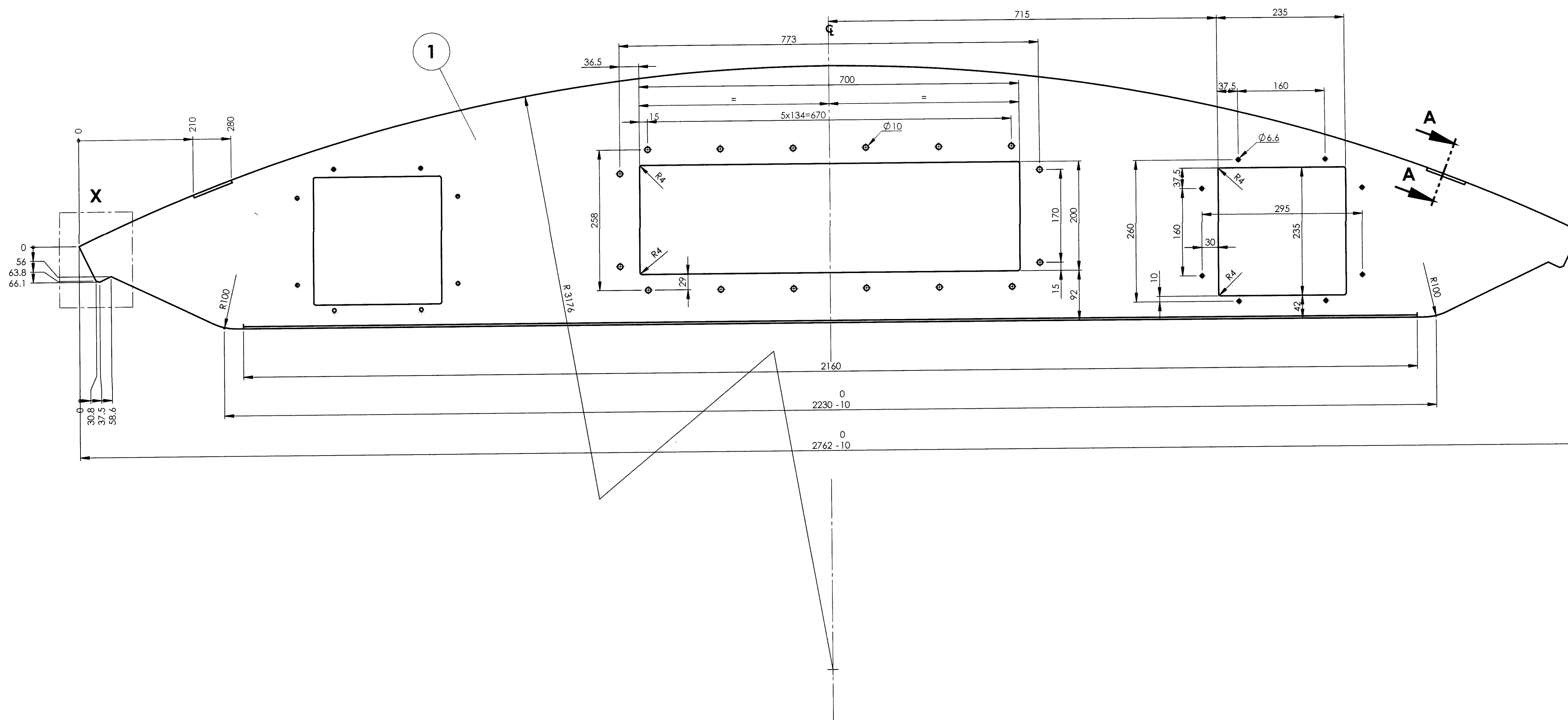
-	08-2020	
DATE OF LATEST ALT.	DATE OF FIRST ISSUE	AME/SME

AAD16969

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

① ROUGH CLEANED
② BURRS REMOVED
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-9-0001. ANY MANUAL ALTERATION SHALL AUTOMATICALLY RENDER THIS DRAWING INVALID. WELDING SYMBOLS ARE AS PER IS 813:1986.

REF.DRG.NO.

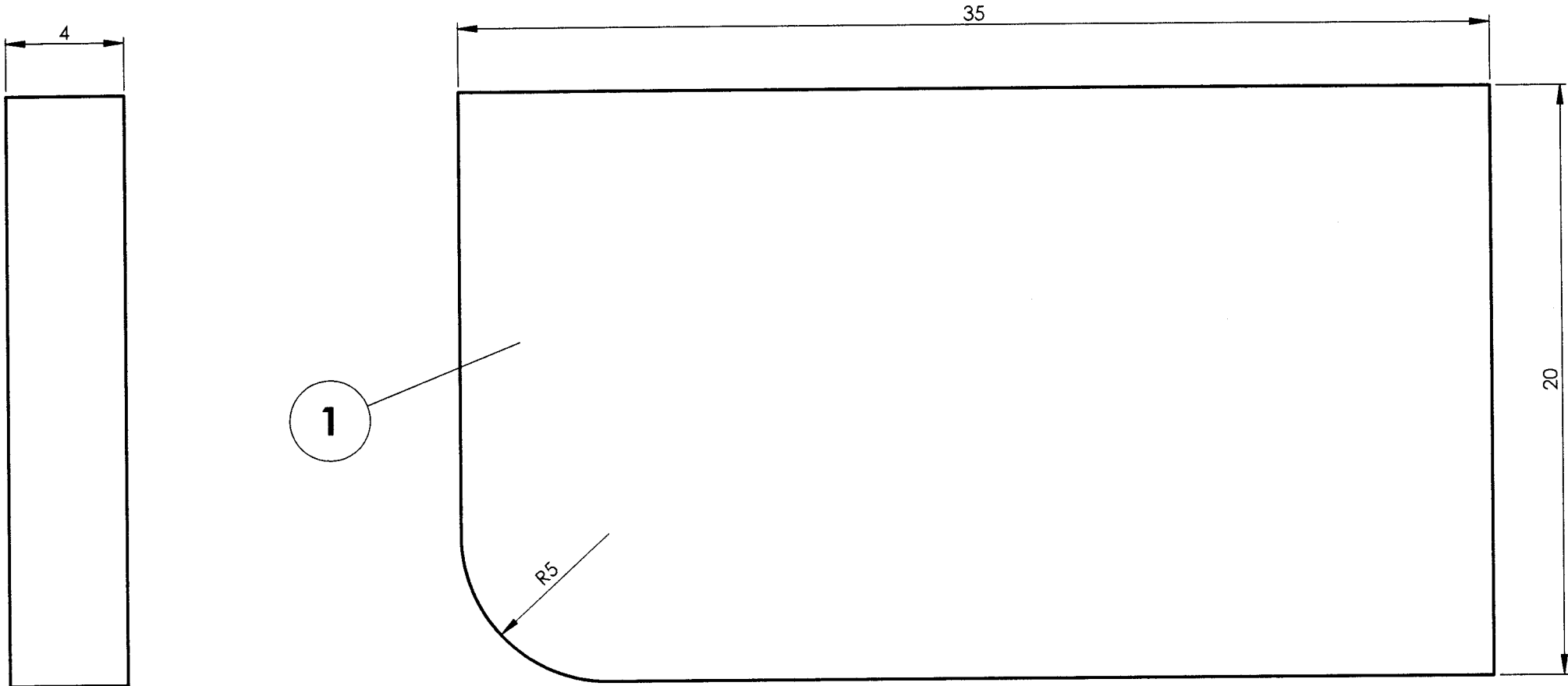
22-7-2024
DATE OF LATEST ALT. DATE OF FIRST ISSUE A/E/SME

1	FRONT SHEET	4 x 504 x 2762	1		RDSO/SPEC C- K201 X2 Cr Ni 12	25.673	
Default	DESCRIPTION	DIMENSIONS	ITEM NO.	REF. DRGS	MATLSPEC.	WT/UNIT IN KGS	REMARKS
GROUP: 1-6 Roof Construction			SURFACE AREA IN Sq.m.: 1.646			WT/ASSY IN Kgs: 25.673	
FRONT SHEET			SCALE		SSE/D <i>H. Irshath Ahamed</i>		
			1:5		CHD		
			ALT.		ALTD		
					DRN H. Irshath Ahamed		
INDIAN RAILWAY STANDARDS				SHEET			
INTEGRAL COACH FACTORY, CHENNAI - 600038				1 OF 1			
				AAD16969		A	

AAD16973

▽ 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 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.

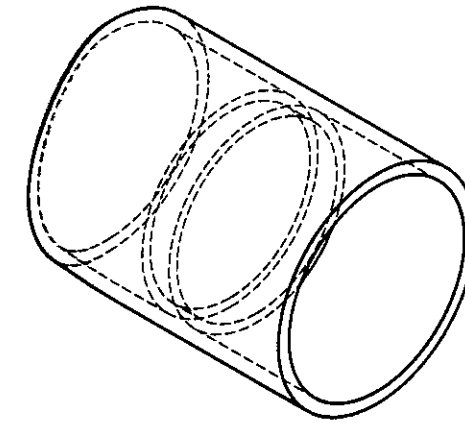
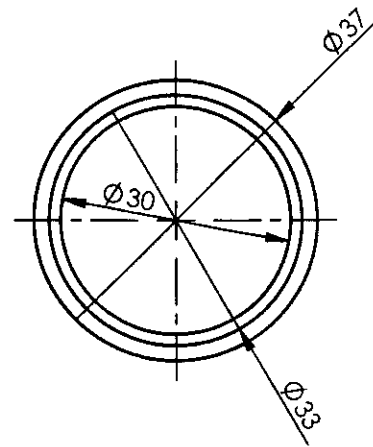
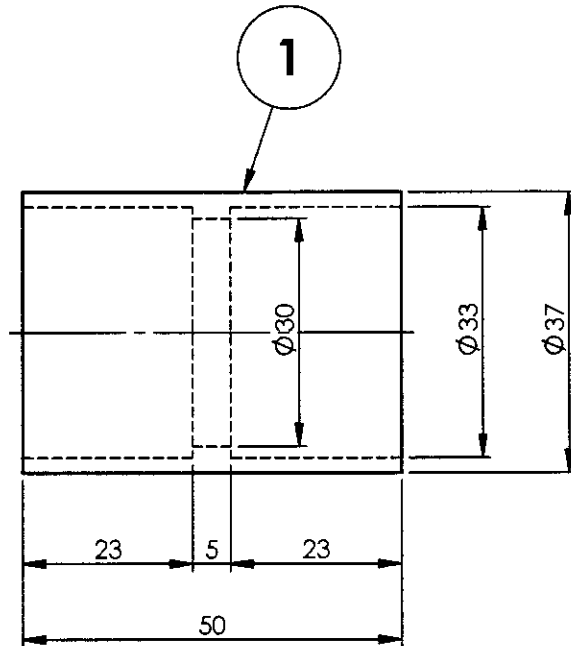
	22-7-2024	<i>Lo</i>
DATE OF LATEST ALT.	DATE OF FIRST ISSUE	AME/SME

1	CLOSING PIECE	4 x 20 x 35	1		RDSO SPEC C-K201 X2 Cr Ni 12	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:
CLOSING PIECE					SCALE 5:1	SSE/D CHD	<i>L. Pandiranga</i>
					ALT.	ALTD	
						DRN	H. Irshath Ahamed
INDIAN RAILWAY STANDARDS				SHEET 1 OF 1		A3	
INTEGRAL COACH FACTORY, CHENNAI - 600038						AAD16973	

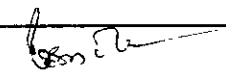
AAE16764


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

REVISIONS			
ALT.	ZONE	DESCRIPTION	APPROVED & DATE
a		DIAMETER ALTD FROM Ø27 TO Ø30. VIEWS UPDATED.	



ISOMETRIC VIEW

1	COUPLER FOR CONDUITS	50 x 50	1		AISI-304	0.09	
Default	DESCRIPTION	DIMENSIONS	ITEM NO.	REF. DRGS	MATL.SPEC.	WT/UNIT IN KGS	REMARKS
GROUP: 1-6 Roof Construction				SURFACE AREA IN Sq.m.:0.01		WT/ASSY IN Kgs:	
COUPLER FOR CONDUITS					SCALE 1:1	SSE/D CHD	
					ALT. a	ALTD DRN	AMAL GEORGE 3D: Amal George 2D: Kunti Thakur
INDIAN RAILWAY STANDARDS					SHEET 1 OF 1		
INTEGRAL COACH FACTORY CHENNAI - 600038					AAE16764		A3

15-10-2024	18-07-2023	
DATE OF LATEST ALT.	DATE OF FIRST ISSUE	AME/SME

REF.DRG.NO.-

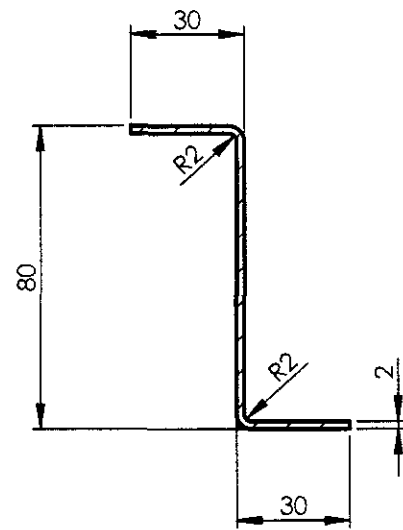
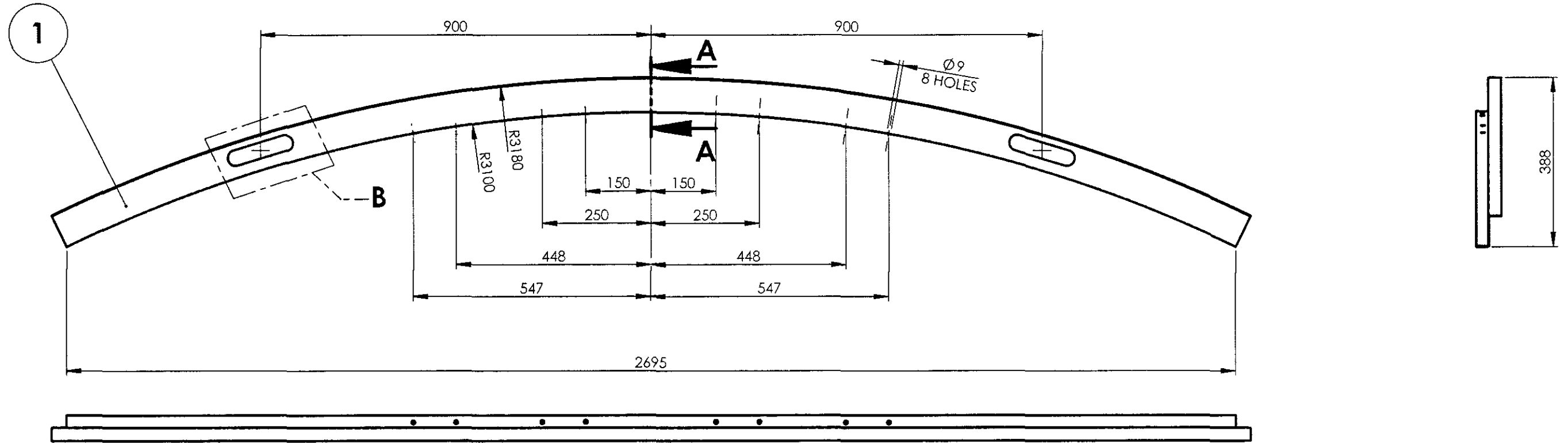
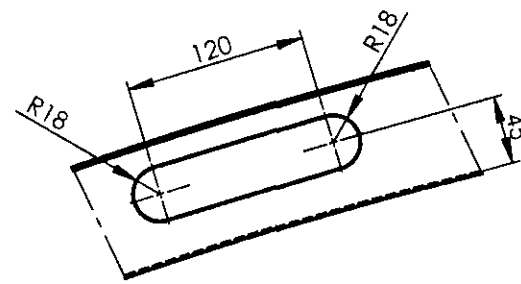
ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE SPECIFIED. FOR UNTOLERANCED DIMENSIONS AND ROUGHNESS VALUES, REFER DRAWING NO ICF/STD-9-0-001. ANY MANUAL ALTERATION SHALL AUTOMATICALLY RENDER THIS DRAWING INVALID. WELDING SYMBOLS ARE AS PER EN ISO 2553. WEIGHT GIVEN IN DRAWING IS FOR INDICATIVE PURPOSE ONLY

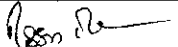

AA16126

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

REVISIONS

ALT.	ZONE	DESCRIPTION	APPROVED & DATE
------	------	-------------	-----------------

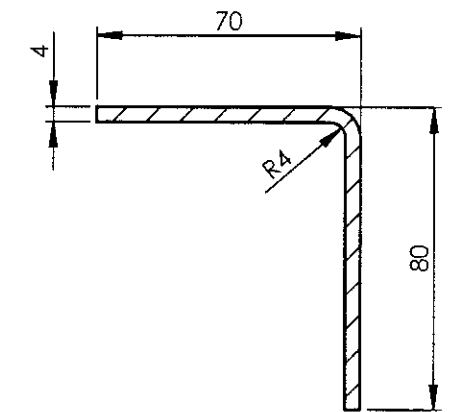
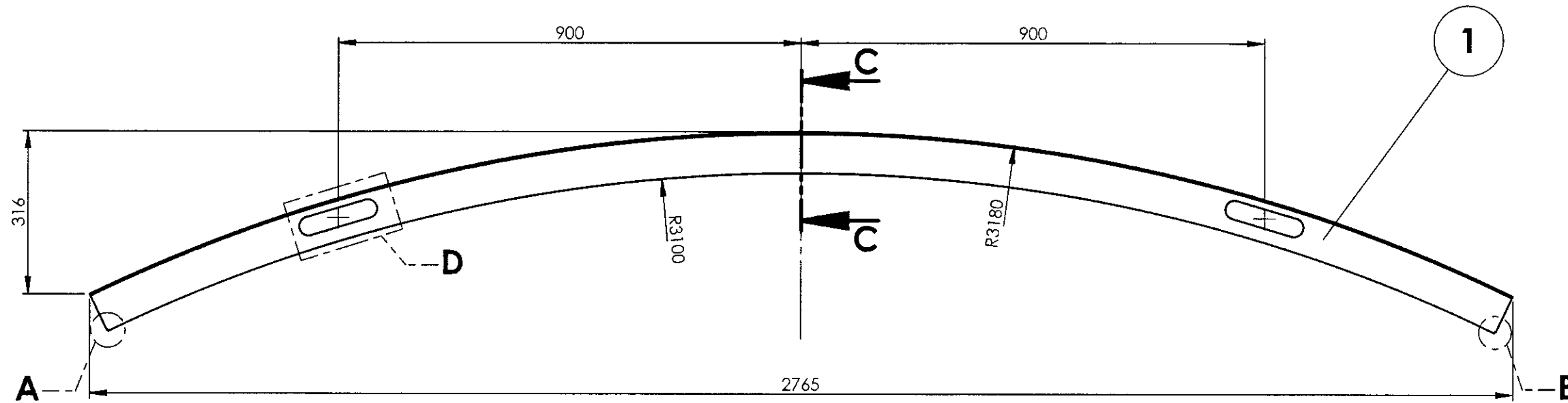
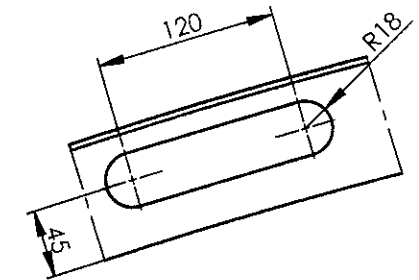
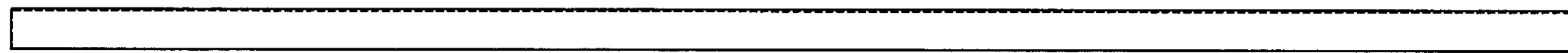
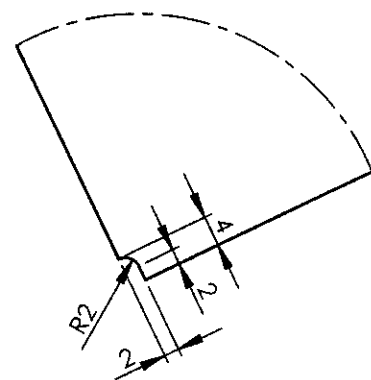
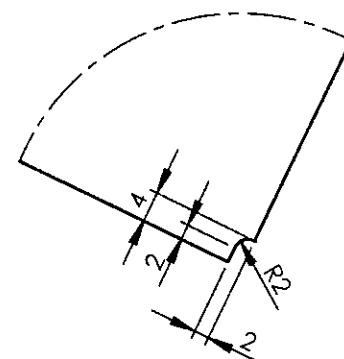
SECTION A-A
SCALE 1 : 2DETAIL B
SCALE 1 : 5

1	ROOF ARCH	2x132x2823	1		RDSO/SPEC C-K201 X2 Cr Ni 12	5.850	
QTY	DESCRIPTION	DIMENSIONS	ITEM NO.	REF. DRGS	MATL.SPEC.	WT/UNIT IN KGS	REMARKS
GROUP: 1-6 Roof Construction		SURFACE AREA IN Sq.m.:0.745			WT/ASSY IN Kgs:		
ROOF ARCH					SCALE	SSE/D	
					1:10	CHD	
					ALT.	ALTD	
						DRN	3D: Amal George 2D: Kunti Thakur
INDIAN RAILWAY STANDARDS				SHEET 1 OF 1			
INTEGRAL COACH FACTORY CHENNAI - 600038					AAF16126		A3

AA16127

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

REVISIONS			
ALT.	ZONE	DESCRIPTION	APPROVED & DATE

SECTION C-C
SCALE 1 : 2DETAIL D
SCALE 1 : 5DETAIL A
SCALE 1 : 1DETAIL B
SCALE 1 : 1

1	ROOF ARCH (ANGLE)	4x142x2825	1		RDSO/SPEC C-K201 X2 Cr Ni 12	12.69	
QTY	DESCRIPTION	DIMENSIONS	ITEM NO.	REF. DRGS	MATL.SPEC.	WT/UNIT IN KGS	REMARKS
GROUP: 1-6 Roof Construction				SURFACE AREA IN Sq.m.:0.82		WT/ASSY IN Kgs:	
ROOF ARCH					SCALE 1:10	SSE/D CHD	
					ALT.	ALTD	
						DRN	3D: AMAL GEORGE 2D: KUNITHAKUR
INDIAN RAILWAY STANDARDS				SHEET 1 OF 1		AA16127	
INTEGRAL COACH FACTORY, CHENNAI - 600038						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

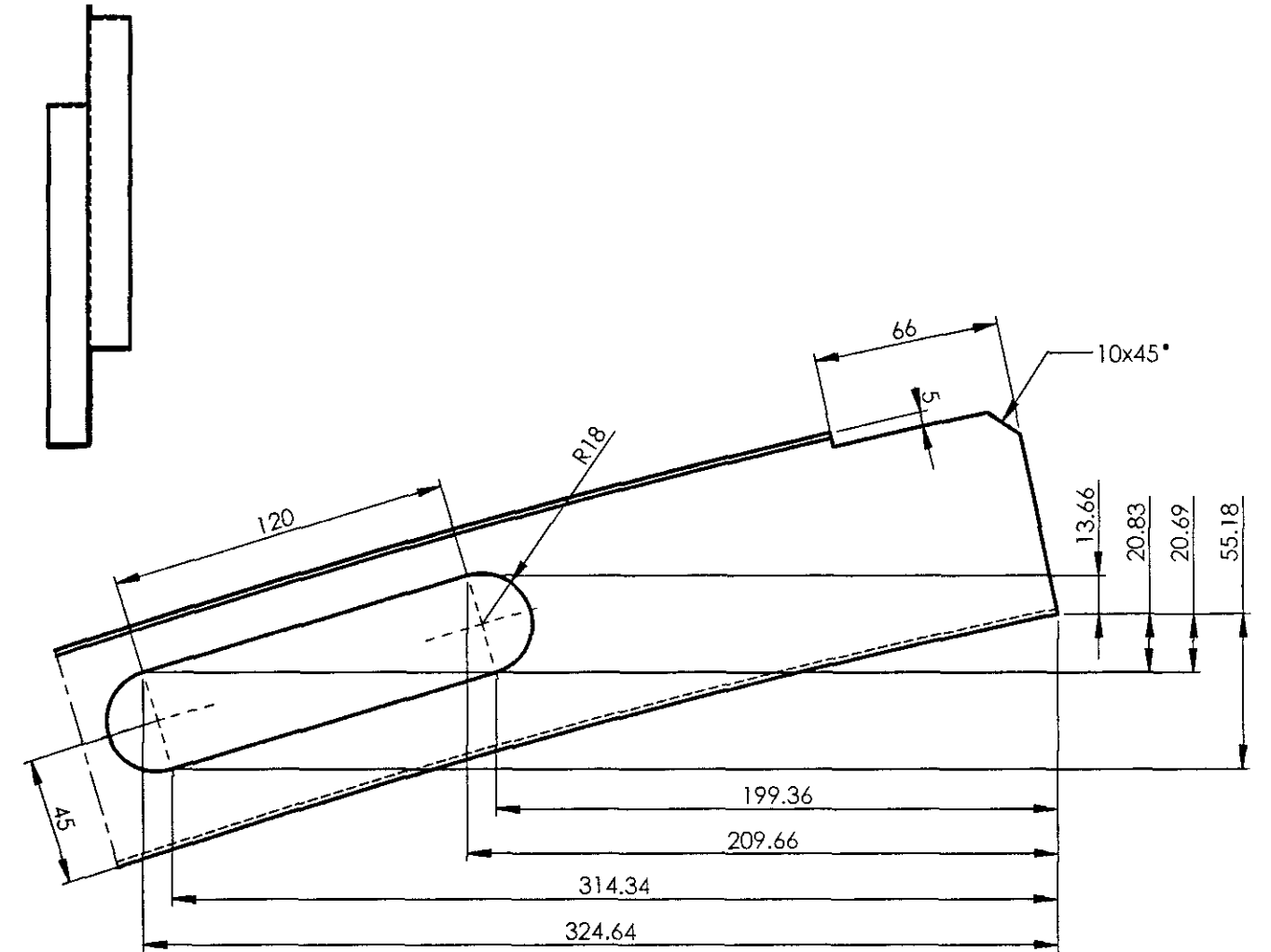
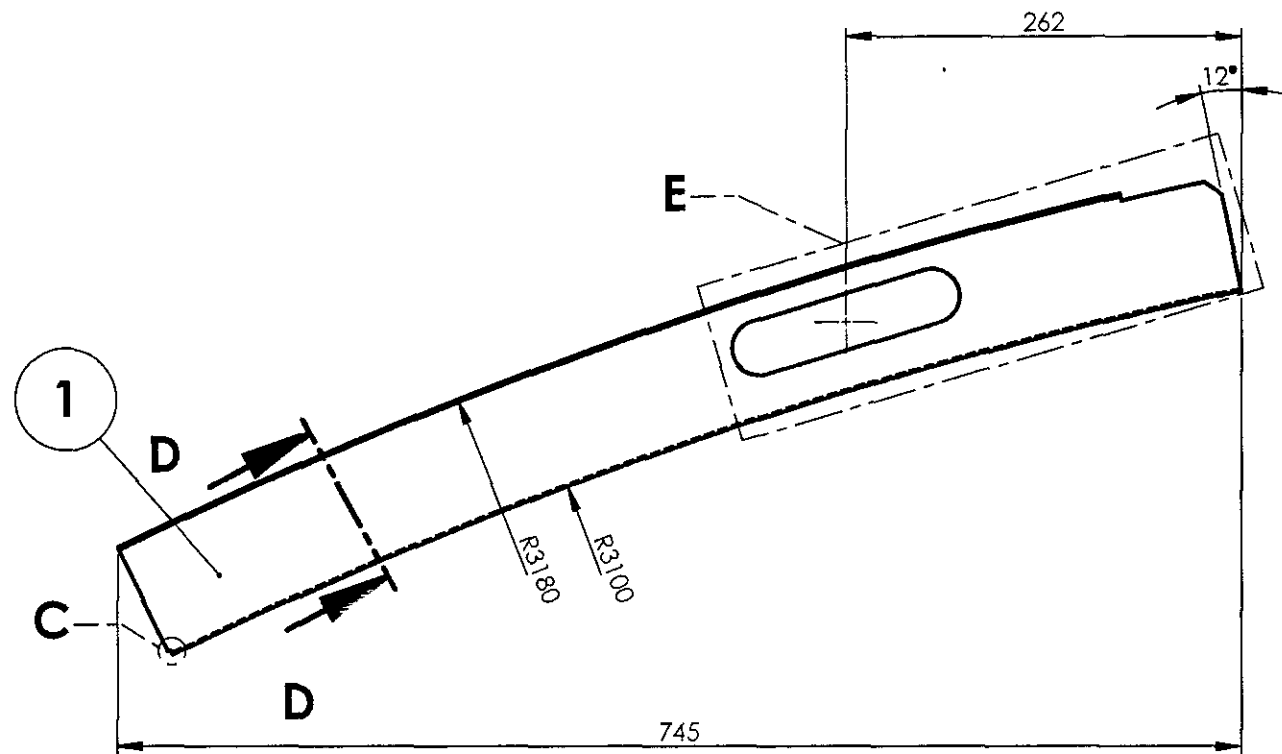
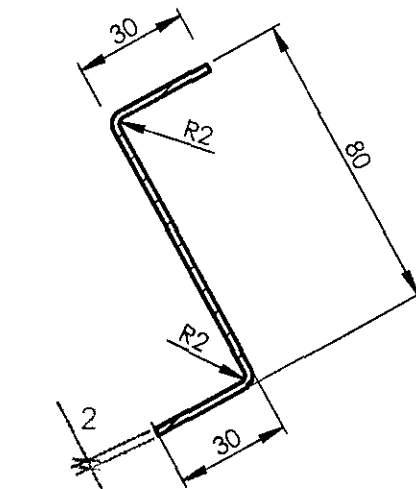
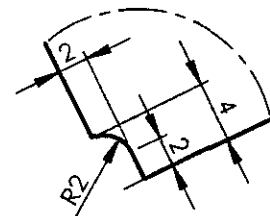
REF.DRG.NO.

	28-07-2025	
DATE OF LATEST ALT.	DATE OF FIRST ISSUE	A.M.E./S.M.E.

AA16128

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

REVISIONS			
ALT.	ZONE	DESCRIPTION	APPROVED & DATE

DETAIL E
SCALE 2 : 5SECTION D-D
SCALE 1 : 2DETAIL C
SCALE 2 : 1

1	PART ROOF ARCH	2 x 132 x 741	1		RDSO/SPEC C-K201 X2 Cr Ni 12	1.50	
QTY	DESCRIPTION	DIMENSIONS	ITEM NO.	REF. DRGS	MATL.SPEC.	WT/UNIT IN KGS	REMARKS
GROUP: 1-6 Roof Construction				SURFACE AREA IN Sq.m.:0.19		WT/ASSY IN Kgs:	
PART ROOF ARCH					SCALE	SSE/D	
					1:5	CHD	
					ALT.	ALTD	
INDIAN RAILWAY STANDARDS					DRN	3D: AMAL GEORGE 2D: KUNTI THAKUR	
					SHEET 1 OF 1		
INTEGRAL COACH FACTORY, CHENNAI - 600038					AA16128		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 EN ISO 2553.
WEIGHT GIVEN IN DRAWING IS FOR INDICATIVE PURPOSE ONLY

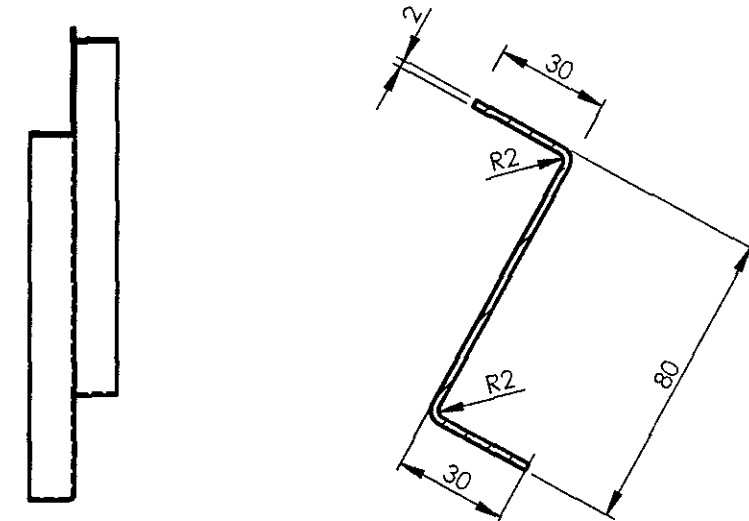
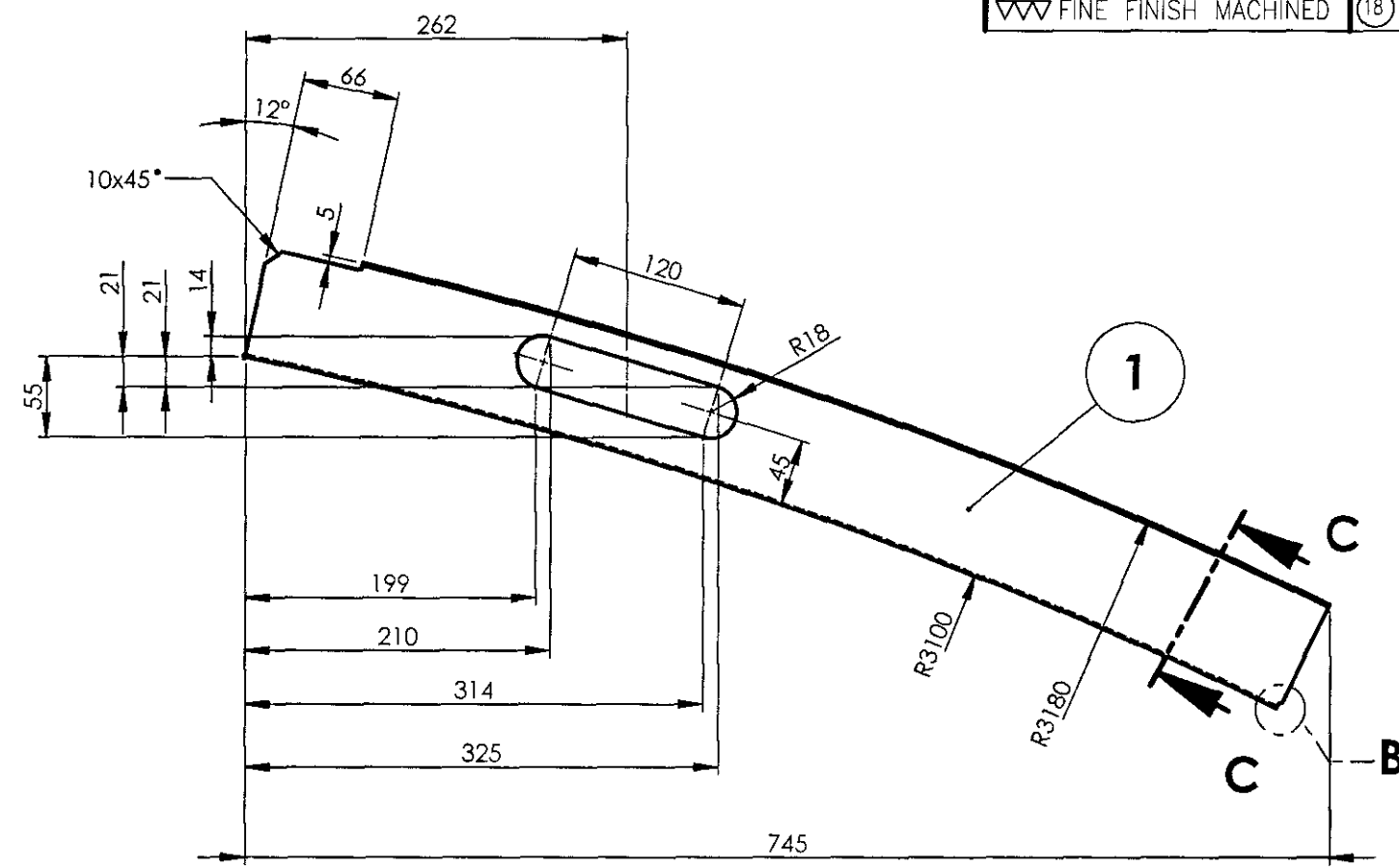
REF.DRG.NO.

	28 -07-2025	
DATE OF LATEST ALT.	DATE OF FIRST ISSUE	AME/SME

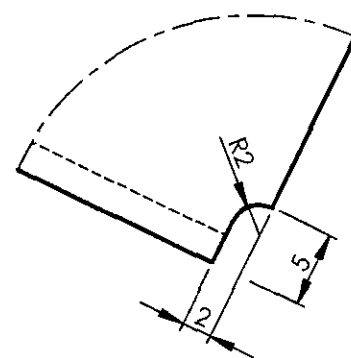
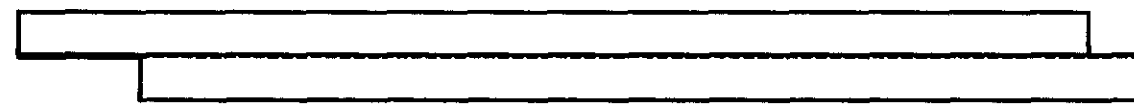
AAF16129

▽ ROUGH MACHINED	①1 ROUGH CLEANED
▽▽ FINISH MACHINED	①1b BURRS REMOVED
▽▽▽ FINE FINISH MACHINED	①8 CHAMFERED

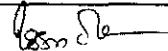
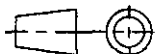
REVISIONS			
ALT.	ZONE	DESCRIPTION	APPROVED & DATE



SECTION C-C
SCALE 1 : 2



DETAIL B
SCALE 2 : 1


1	PART ROOF ARCH (RH)	2x132x741	1		RDSO/SPEC C- K201 X2 Cr Ni 12	1.50	
QTY.	DESCRIPTION	DIMENSIONS	ITEM NO.	REF. DRGS	MATL.SPEC.	WT/UNIT IN KGS	REMARKS
GROUP: 1-6 Roof Construction		SURFACE AREA IN Sq.m.:0.19			WT/ASSY IN Kgs:		
PART ROOF ARCH					SCALE	SSE/D	
					1:5	CHD	
					ALT.	ALTD	
						DRN	3D: AMAL GEORGE 2D: KUNTI THAKUR
INDIAN RAILWAY STANDARDS INTEGRAL COACH FACTORY, CHENNAI - 600038				SHEET 1 OF 1			
					AAF16129		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 EN ISO 2553.
WEIGHT GIVEN IN DRAWING IS FOR INDICATIVE PURPOSE ONLY

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

REVISIONS			
ALT.	ZONE	DESCRIPTION	APPROVED & DATE

REF.DRG.NO.

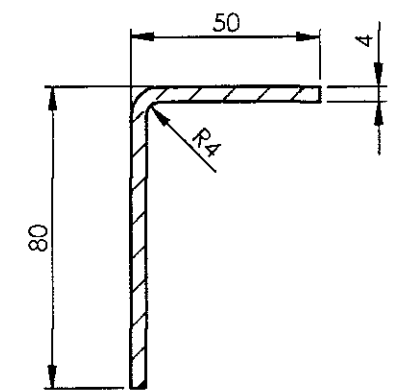
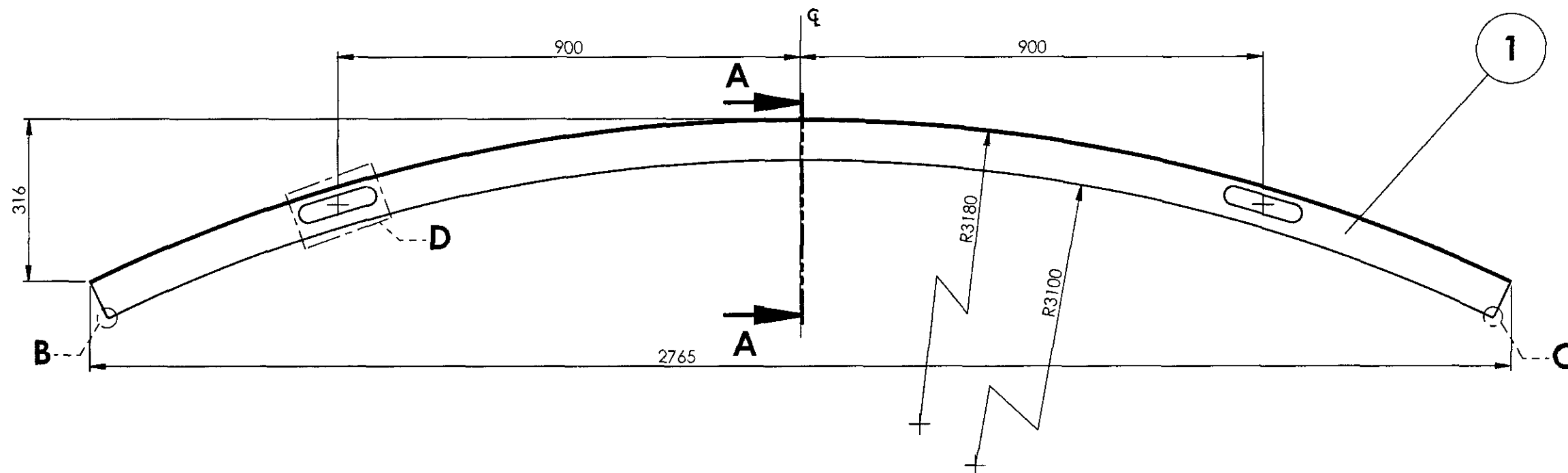
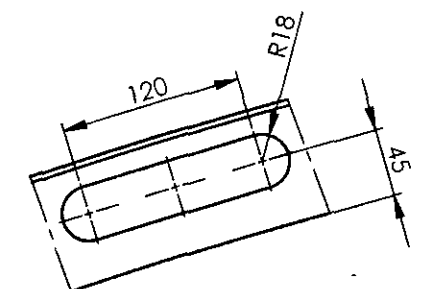
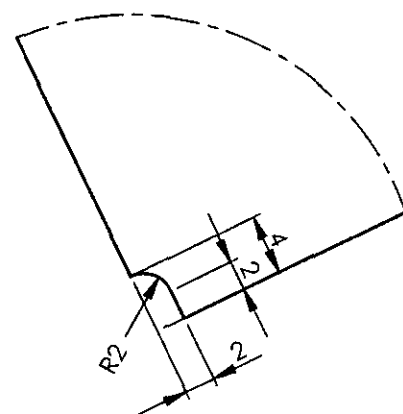
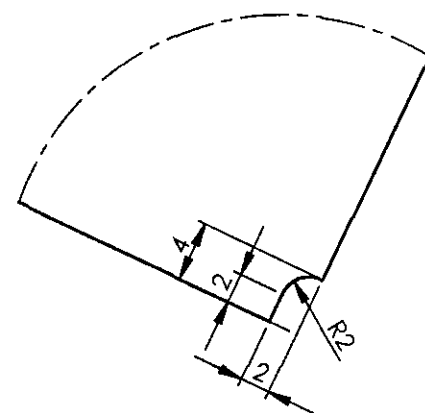
	28 -07-2025	
DATE OF LATEST ALT.	DATE OF FIRST ISSUE	AME/SME

AA16131

▽ ROUGH MACHINED	③1 ROUGH CLEANED
▽▽ FINISH MACHINED	③1b BURRS REMOVED
▽▽▽ FINE FINISH MACHINED	③1c CHAMFERED

REVISIONS

ALT.	ZONE	DESCRIPTION	APPROVED & DATE
------	------	-------------	-----------------

SECTION A-A
SCALE 1 : 2DETAIL D
SCALE 1 : 5DETAIL B
SCALE 2 : 1DETAIL C
SCALE 2 : 1

1	ROOF ARCH (ANGLE)	4 x 122 x 2825	1		RDSO/SPEC C- K201 X2 Cr Ni 12	10.86	
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 ARCH				SCALE	SSE/D	1:10	
				ALT.	CHD		
				ALT.	ALTD		
				DRN	DRN	3D: AMAL GEORGE 2D: KUNTI THAKUR	
INDIAN RAILWAY STANDARDS				SHEET 1 OF 1		AA16131	
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 EN ISO 2553
WEIGHT GIVEN IN DRAWING IS FOR INDICATIVE PURPOSE ONLY

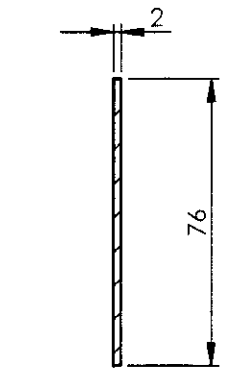
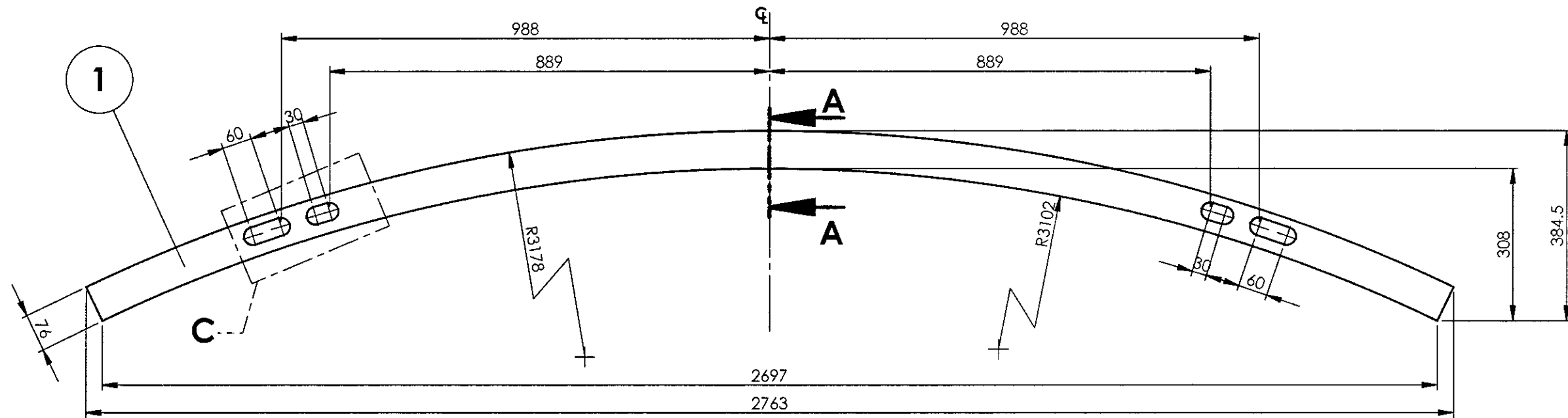
REF.DRG.NO.

DATE OF LATEST ALT.	28-07-2025	AME/SME
---------------------	------------	---------

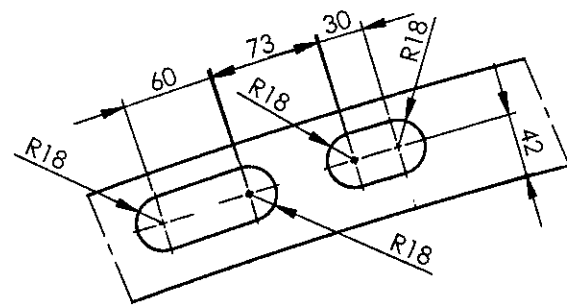
AAF16132

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

REVISIONS			
ALT.	ZONE	DESCRIPTION	APPROVED & DATE



SECTION A-A
SCALE 1 : 2

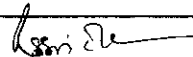


DETAIL C
SCALE 1 : 5

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 EN ISO 2553.
WEIGHT GIVEN IN DRAWING IS FOR INDICATIVE PURPOSE ONLY

REF.DRG.NO.

	28 -07-2025	
DATE OF LATEST ALT.	DATE OF FIRST ISSUE	AME/SME

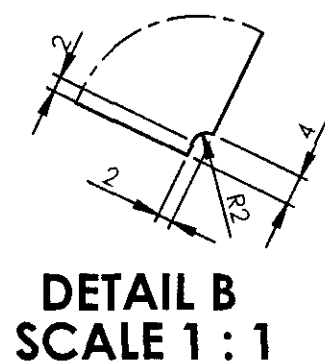
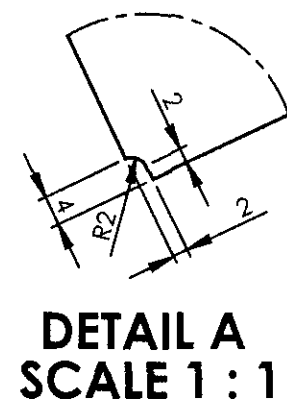
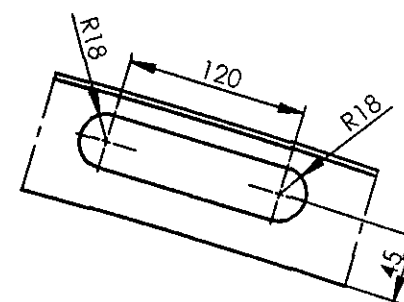
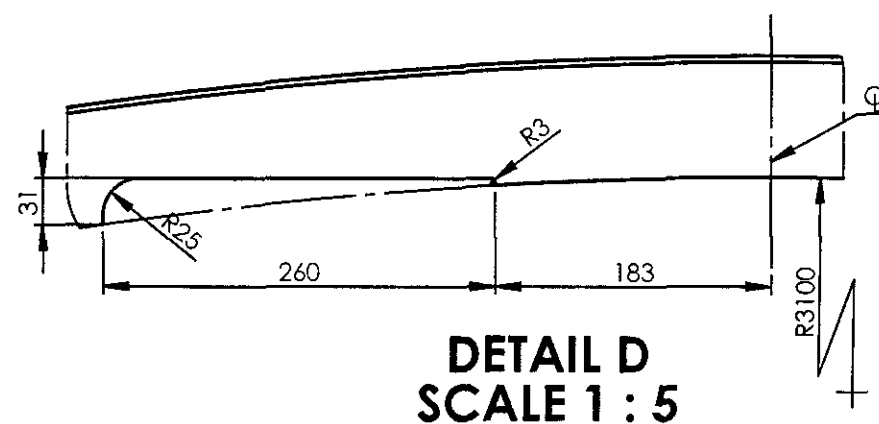
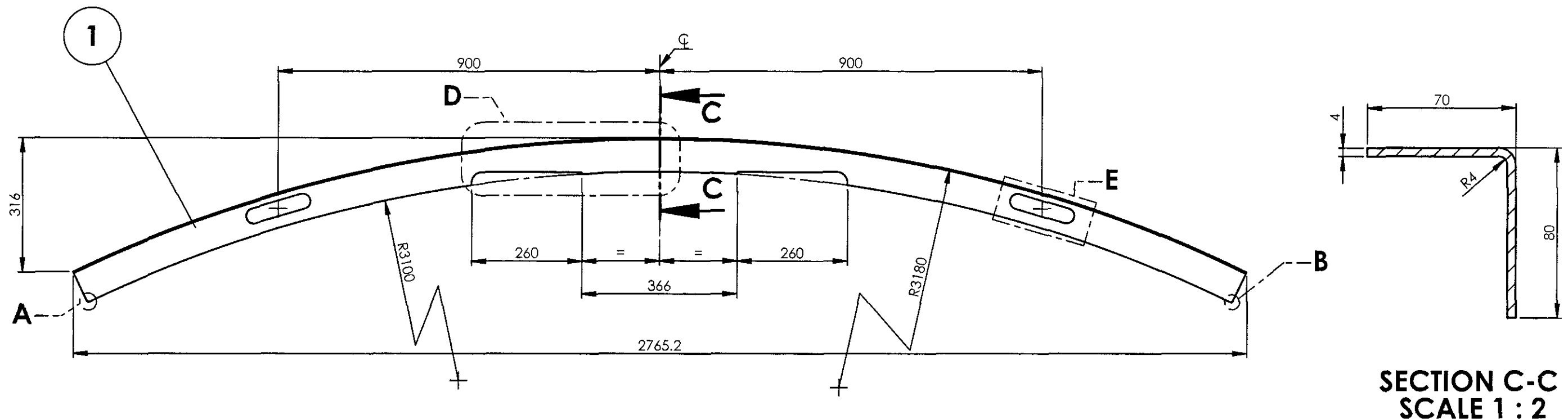
1	PLATE FOR END ROOF ARCH	2 x 384 x 2763	1		RDSO/SPEC C-K201 X2CrNi12	3.27	
QTY	DESCRIPTION	DIMENSIONS	ITEM NO.	REF. DRGS	MATL.SPEC.	WT/UNIT IN KGS	REMARKS
GROUP: 1-6 Roof Construction		SURFACE AREA IN Sq.m.:0.42			WT/ASSY IN Kgs:		
PLATE FOR ARCH					SCALE	SSE/D	
					1:1	CHD	
					ALT.	ALTD	
						DRN	3D: AMAL GEORGE 2D: KUNTI THAKUR
					INDIAN RAILWAY STANDARDS		SHEET 1 OF 1
INTEGRAL COACH FACTORY, CHENNAI - 600038				AAF16132		A3	

AA16147

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

REVISIONS

ALT.	ZONE	DESCRIPTION	APPROVED & DATE
------	------	-------------	-----------------



1	ROOF ARCH	4x142x2825	1		RDSO/SPEC C- K201 X2 Cr Ni 12	12.43	
QTY	DESCRIPTION	DIMENSIONS	ITEM NO.	REF. DRGS	MATL.SPEC.	WT/UNIT IN KGS	REMARKS
GROUP: 1-6 Roof Construction		SURFACE AREA IN Sq.m.:0.80			WT/ASSY IN Kgs:		
ROOF ARCH					SCALE	SSE/D	
					1:10	CHD	
					ALT.	ALTD	3D: AMAL GEORGE 2D: KUNTILHAKUR
						DRN	
					INDIAN RAILWAY STANDARDS INTEGRAL COACH FACTORY, CHENNAI - 600038		
SHEET 1 OF 1							
					AAF16147		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 EN ISO 2553.
WEIGHT GIVEN IN DRAWING IS FOR INDICATIVE PURPOSE ONLY

REF.DRG.NO.

DATE OF LATEST ALT

28-07-2025

DATE OF FIRST ISSUE

AME/SME

INDIAN RAILWAY STANDARDS

INTEGRAL COACH FACTORY, CHENNAI - 600038

SHEET
1 OF 1

AAF16219

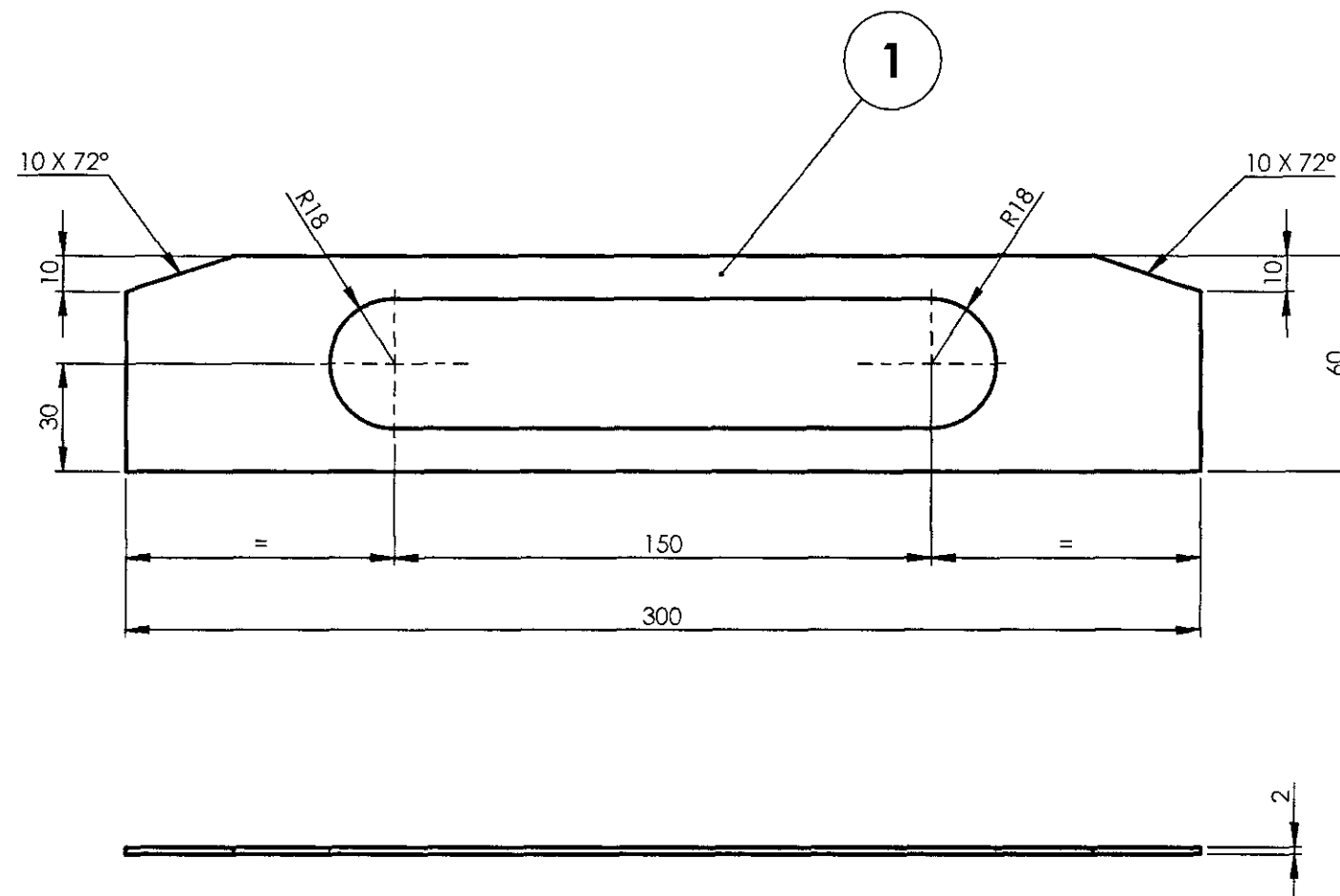
▽ ROUGH MACHINED	① ROUGH CLEANED
▽▽ FINISH MACHINED	② BURRS REMOVED
▽▽▽ FINE FINISH MACHINED	③ CHAMFERED

REVISIONS

ALT.

ZONE

DESCRIPTION

APPROVED &
DATE

1	STIFFENING PLATE FOR END ROOF ARCH	2 x 40 x 300	1		RDSO/SPEC C-K201 X2CrNi12	0.18	
QTY	DESCRIPTION	DIMENSIONS	ITEM NO.	REF. DRGS	MATL.SPEC.	WT/UNIT IN KGS	REMARKS
GROUP: 1-6 Roof Construction				SURFACE AREA IN Sq.m.:0.02		WT/ASSY IN Kgs:	
STIFFENER FOR ROOF ARCH					SCALE	SSE/D	1:2
					ALT.	CHD	
						ALTD	
						DRN	Amal George
INDIAN RAILWAY STANDARDS				SHEET 1 OF 1		AAAF16219	
INTEGRAL COACH FACTORY, CHENNAI - 600038						A3	

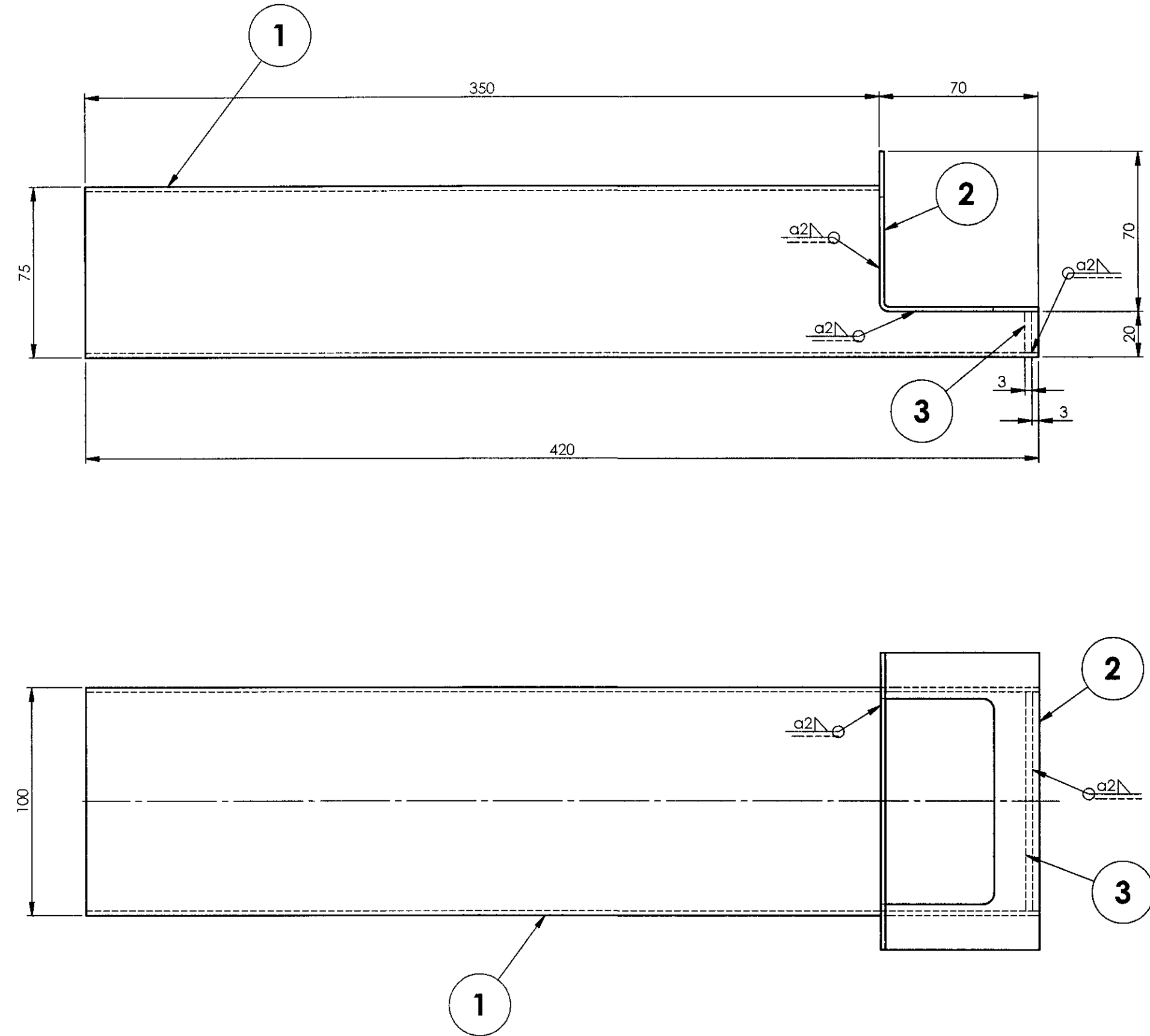
ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE SPECIFIED. FOR UNTOLERANCED DIMENSIONS AND ROUGHNESS VALUES, REFER DRAWING NO ICF/STD-9-0-001.
ANY MANUAL ALTERATION SHALL AUTOMATICALLY RENDER THIS DRAWING INVALID. WELDING SYMBOLS ARE AS PER EN ISO 2553.
WEIGHT GIVEN IN DRAWING IS FOR INDICATIVE PURPOSE ONLY

REF.DRG.NO.-

-	28-07-2025	
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 IS813:1986. WEIGHT GIVEN IN DRAWING IS FOR INDICATIVE PURPOSE ONLY.

32916056

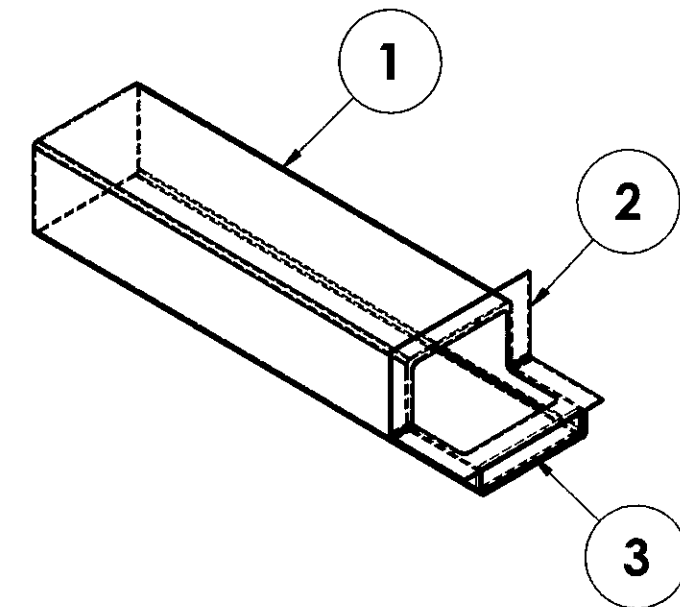
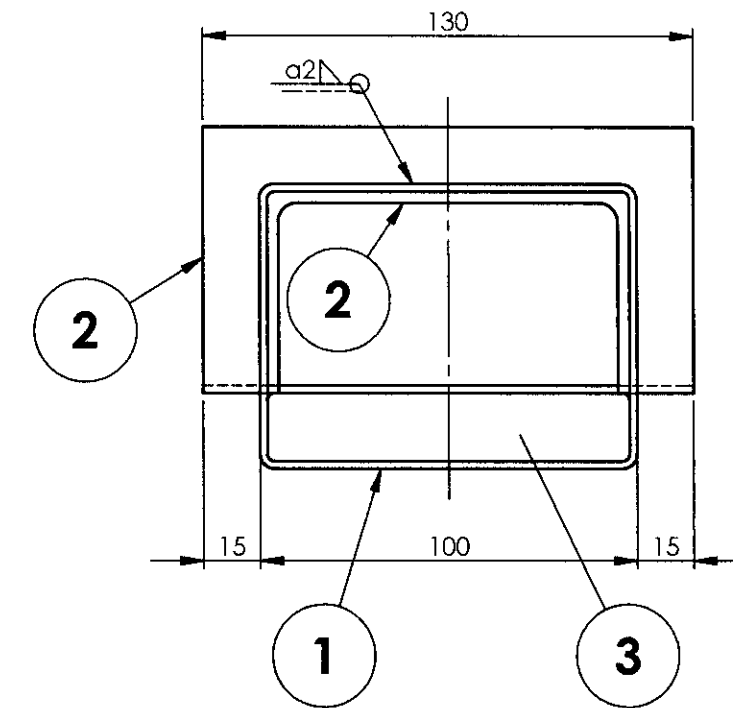


NOTE:-

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 PREFERANCES 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. FINISHED ASSEMBLY SHALL BE APPLIED WITH (AIRLESS SPRAY) ECO FRIENDLY WATER BASED MODIFIED EPOXY ZINC PHOSPHATE ETCH PRIMER TO ICF/MD/SPEC-231.

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

REVISIONS			
ALT.	ZONE	DESCRIPTION	APPROVED & DATE
a		MATERIAL REVISED	
b		WIDTH OF DRAIN PIPE ARRGT REDUCED BY 50mm AND VIEWS ALTERD ACCORDINGLY	

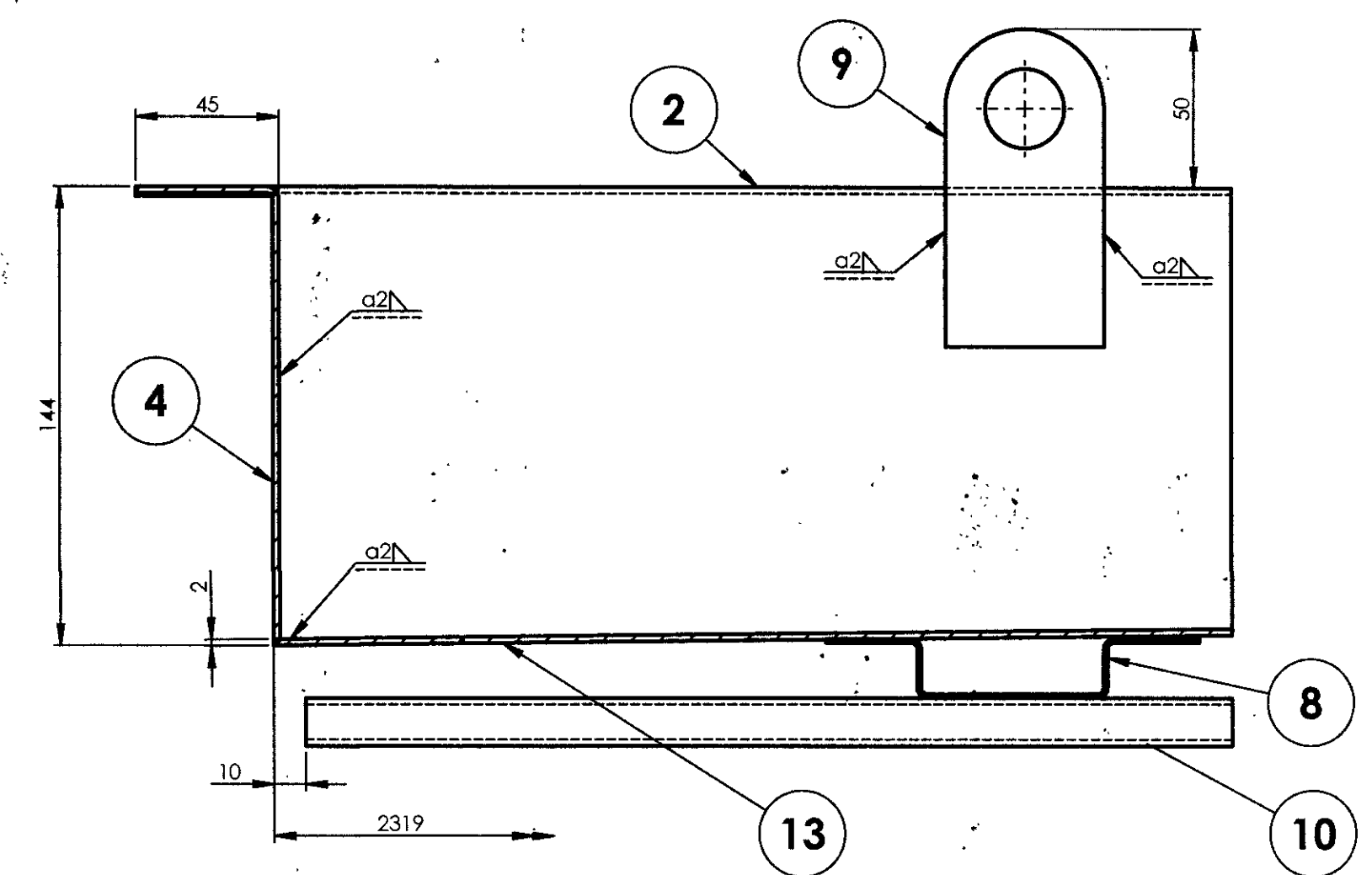


1	CLOSING PIECE		3	AAD16905		0.04		
1	ANGLE		2	AAD16904		0.15		
1	RECTANGULAR PIPE		1	AAD16903		2.01		
Default	DESCRIPTION	DIMENSIONS	ITEM NO.	REF.DRGS.	MATL	WT/UNIT IN KGS	REMARKS	
GROUP: I-6 Roof Construction		SURFACE AREA IN Sq.m.: 0.280			WT/ASSY IN Kgs:			
DRAIN PIPE ARRGT					SCALE 1:5	SSE/D CHD	<i>S. Panduranga Rao</i>	
					ALT b	ALTD	S K MUTHUKUMAR	
						DRN	S K MUTHUKUMAR	
					INDIAN RAILWAY STANDARDS INTEGRAL COACH FACTORY, CHENNAI - 600038			
SHEET 1 OF 1		32916056	A2					

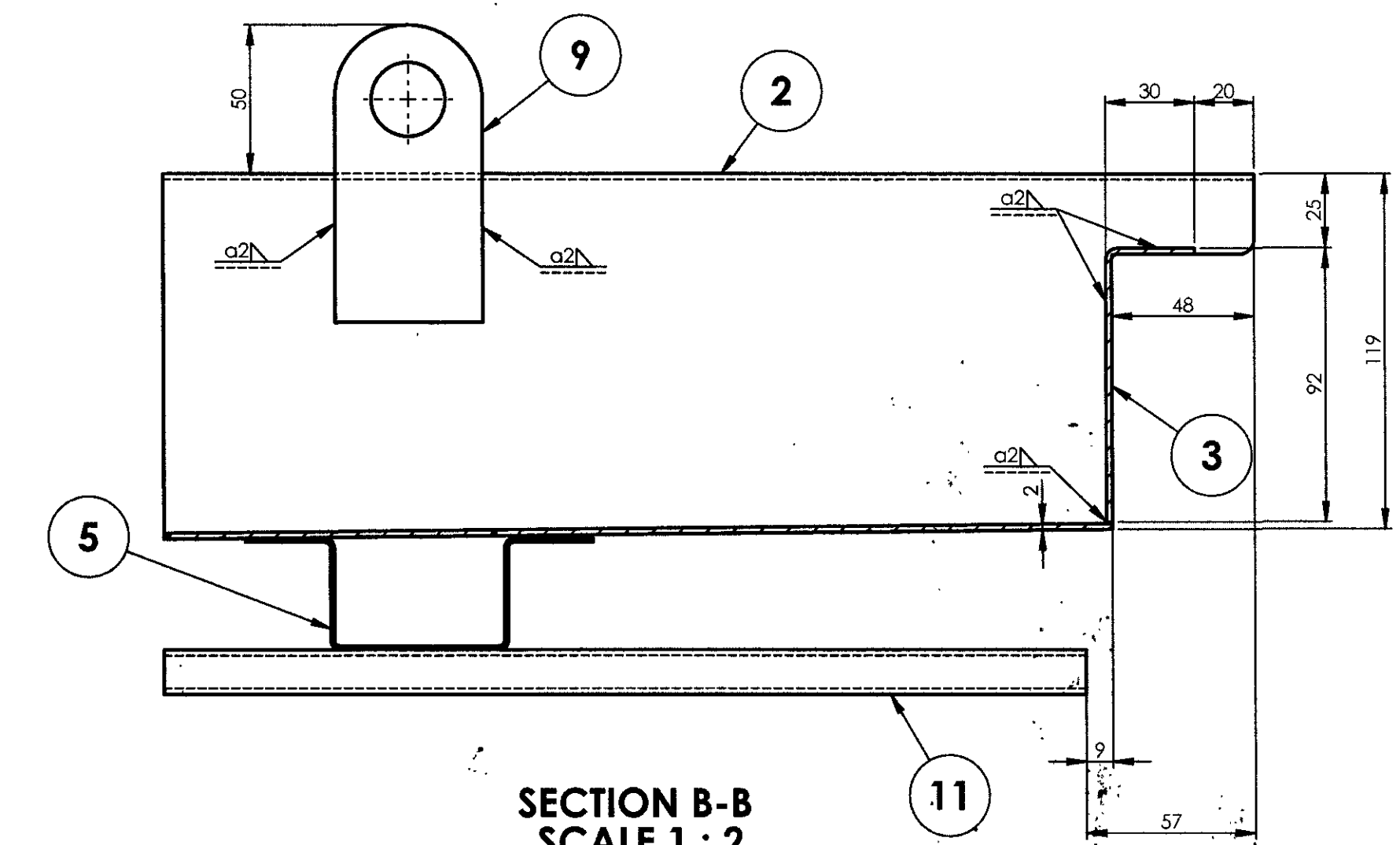
23-2-2022	22-07-2021	
DATE OF LATEST ALT.	DATE OF FIRST ISSUE	AME/SME

REF.DRG.NO.-

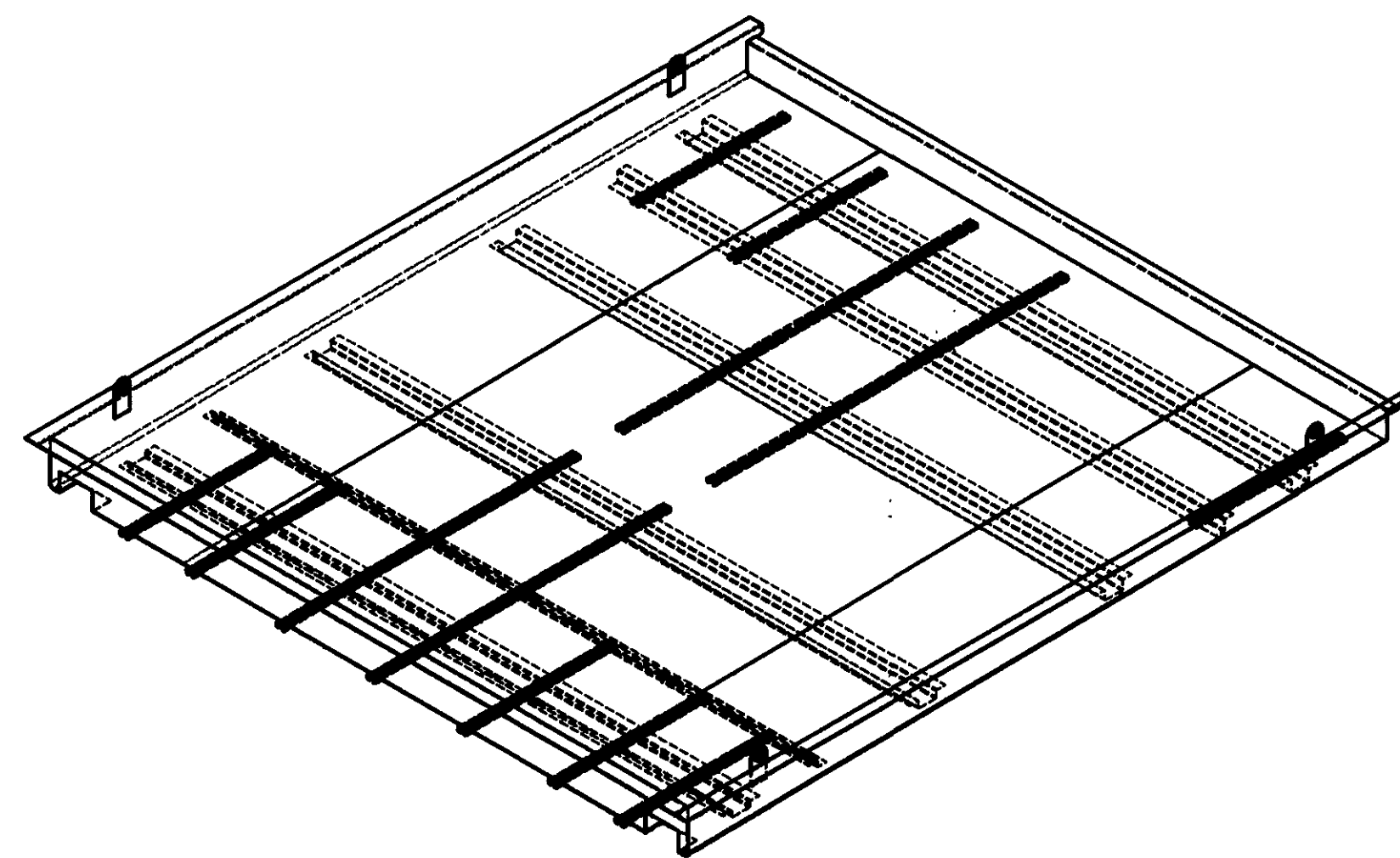
▽ ROUGH MACHINED	① ROUGH CLEANED
▽▽ FINISH MACHINED	② BURRS REMOVED
▽▽▽ FINE FINISH MACHINED	③ CHAMFERED



SECTION A-A
SCALE 1 : 2



SECTION B-B
SCALE 1 : 2



ISOMETRIC VIEW

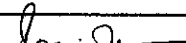

DETAIL G
SCALE 1 : 2

REF.DRG.NO.-

DATE OF LATEST ALT.	21-10-2022	✓ 21/10/22
DATE OF FIRST ISSUE		AME/SME

GROUP: 1-6 Roof Construction	SURFACE AREA IN Sq.m.: 17.035
<p align="center">SS TROUGH BELOW AC UNIT FOR LHB POWER CAR</p>	

INDIAN RAILWAY STANDARDS
INTEGRAL COACH FACTORY, CHENNAI - 600038

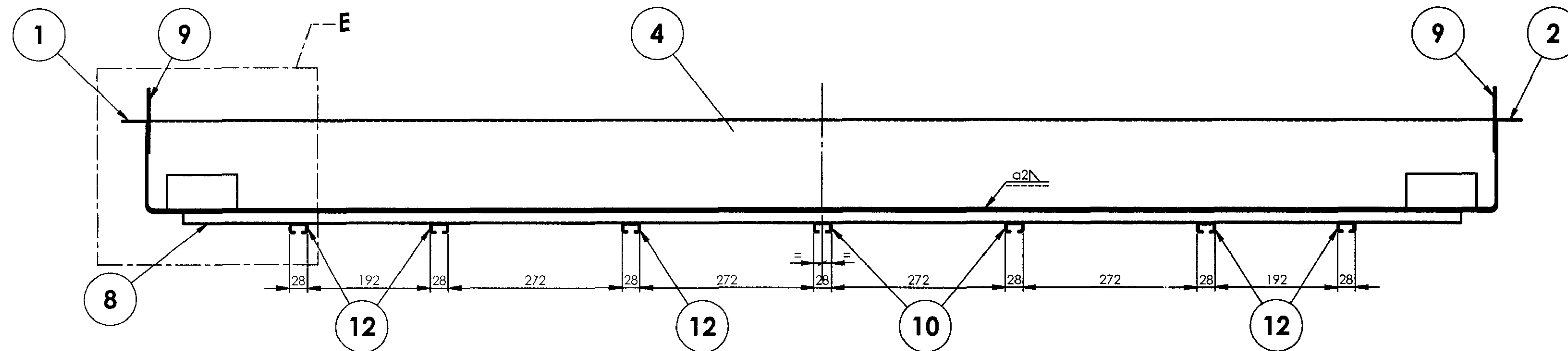
No. 17.035 SCALE 1:10 ALT. -	WT/ASSY IN Kgs: SSE/D CHD ALTD DRN Amal George	
SHEET 1 OF 2		LWLRRM
3816022		A1

53816022

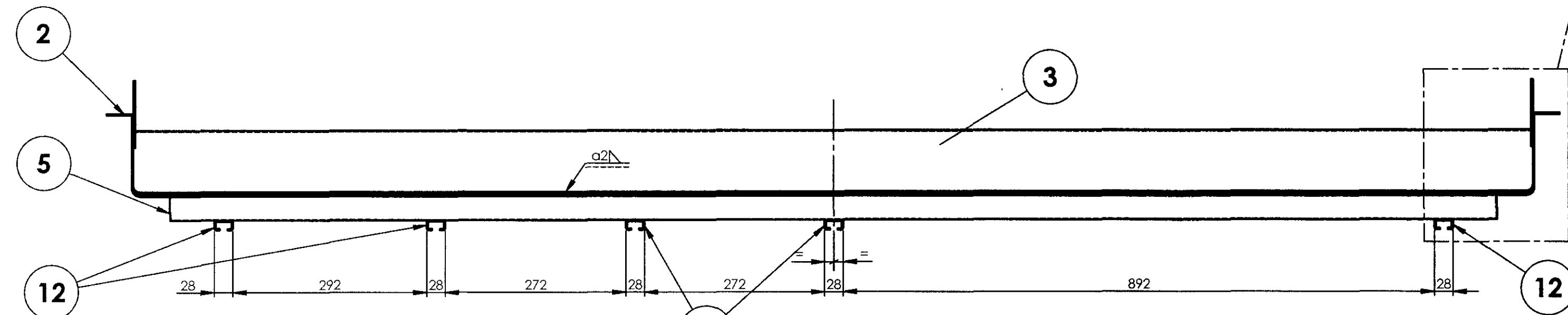
▽ ROUGH MACHINED
▽▽ FINISH MACHINED
▽▽▽ FINE FINISH MACHINED

① ROUGH CLEANED
⑥ BURRS REMOVED
⑩ CHAMFERED

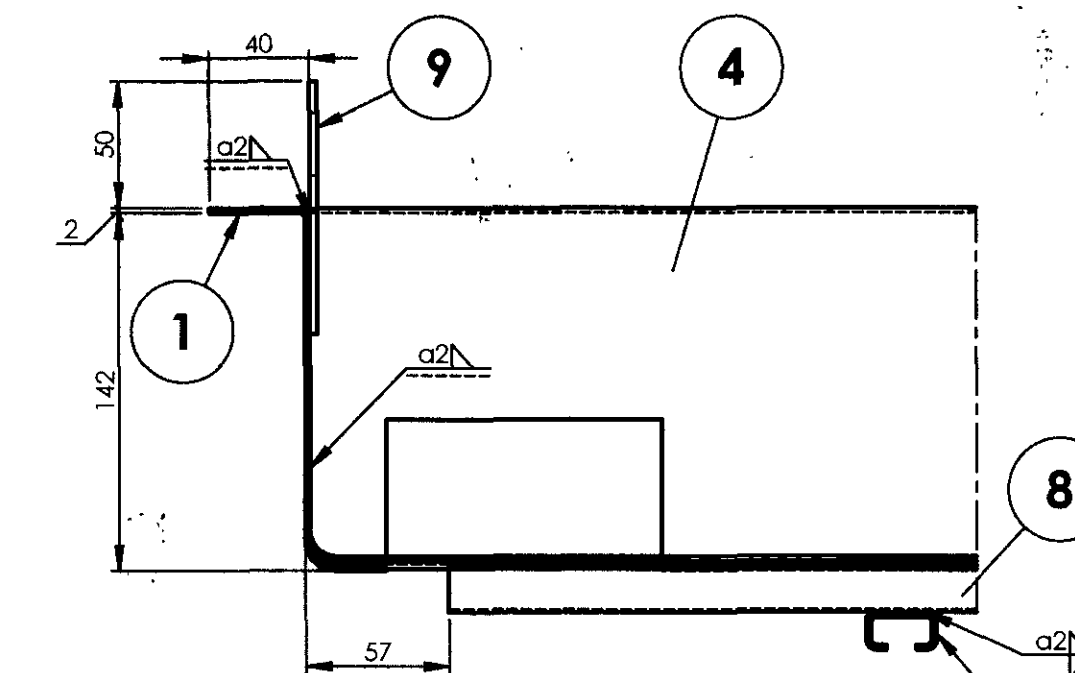
REVISIONS
ALT. ZONE DESCRIPTION APPROVED & DATE



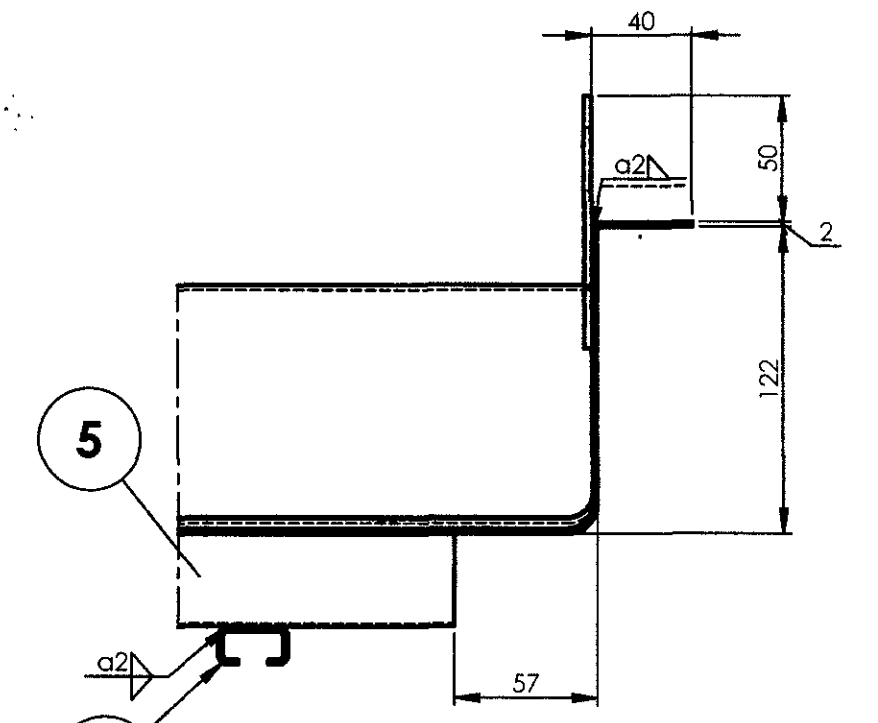
SECTION D-D
SCALE 1 : 6



SECTION C-C
SCALE 1 : 6



DETAIL E
SCALE 1 : 3

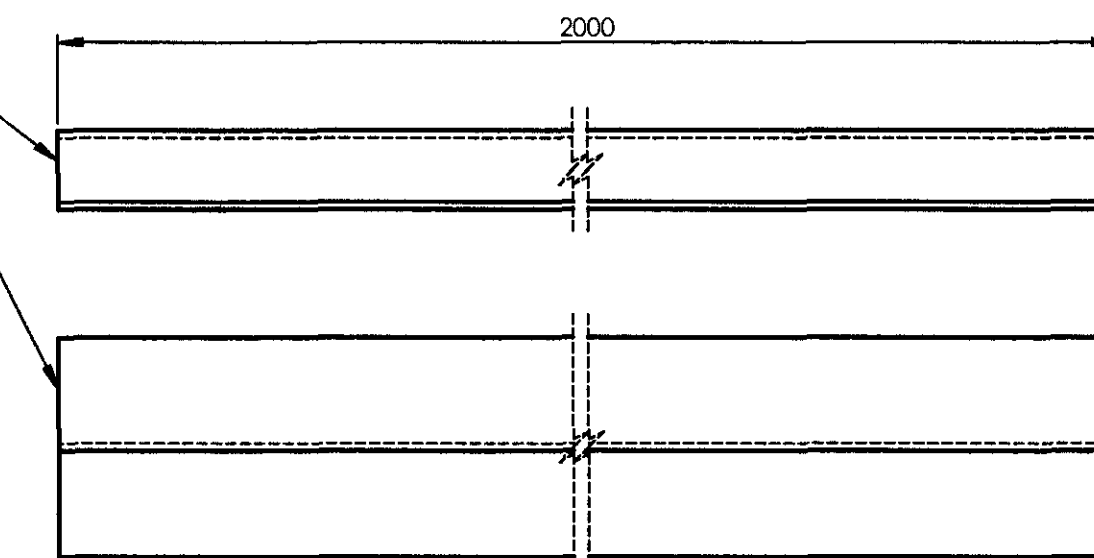


DETAIL F
SCALE 1 : 3

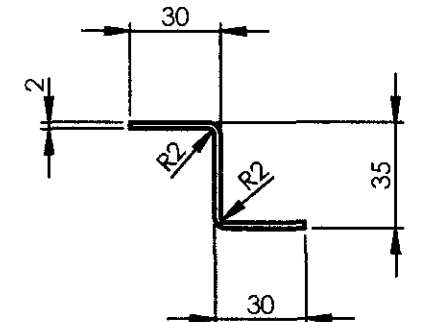
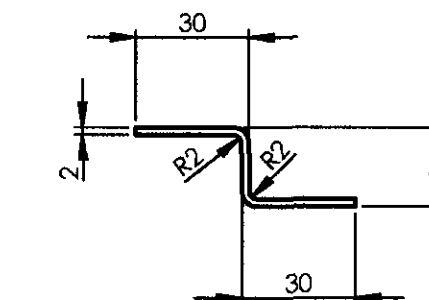
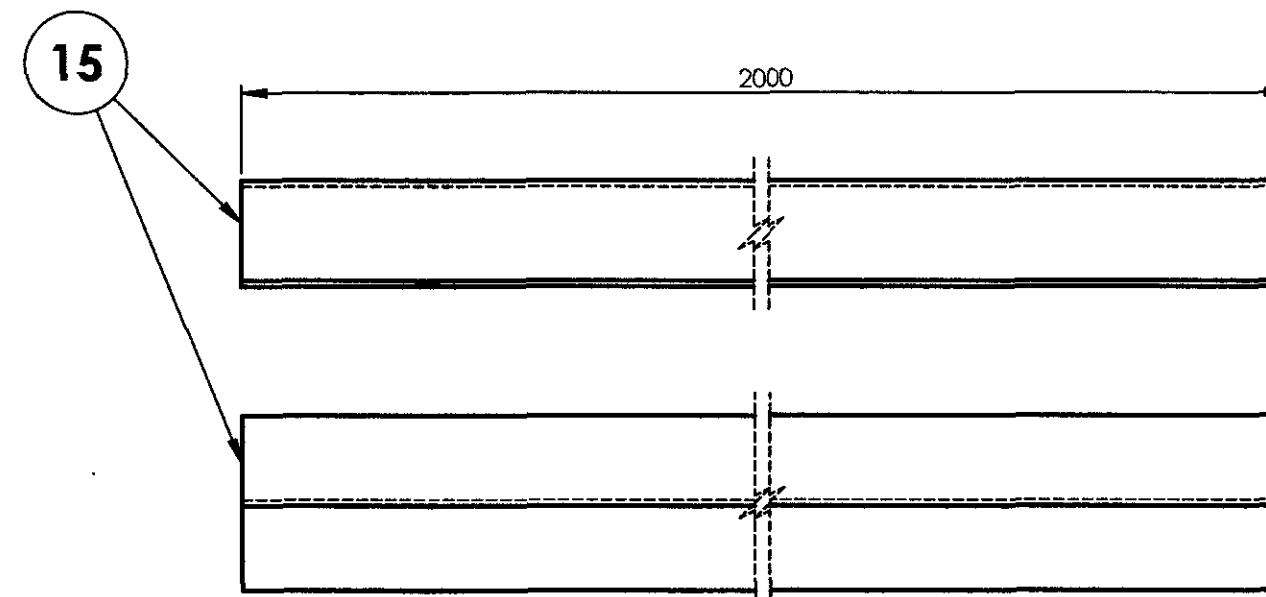
NOTE :

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. ALL WELD PERFORMANCE CLASS SHALL BE **CP C2** UNLESS SPECIFIED OTHERWISE.
9. ALTERNATIVELY, MATERIAL SPEC. ASTM A240 TYPE - 304 ALSO ACCEPTABLE IN PLACE OF IS: 6911 X04Cr19Ni9 FOR SS TROUGH ASSY.
10. FINISHED ASSEMBLY SHALL BE APPLIED WITH (AIRLESS SPRAY) ECO FRIENDLY WATER BASED MODIFIED EPOXY ZINC PHOSPHATE ETCH PRIMER TO ICF/MD/SPEC-231.
11. SUITABLE MASKING SHALL BE DONE ON TOP FLANGE OF TROUGH BEFORE APPLICATION OF PRIMER PAINT.
12. FOR ITEM-1, 2 & 13 LEAK PROOF BUTT JOINT SHALL BE MADE THROUGH TIG/LASER/ RESISTANCE SEAM WELDING WITH STRIP WELDING PROCESS.

DETAIL FOR ITEM-14
SCALE 2 : 5



DETAIL FOR ITEM-15
SCALE 2 : 5



1	Z MEMBER	2 x 87 x 2000	15		IS:6911 X04Cr19Ni9	2.83	
1	Z MEMBER	2 x 73 x 2000	14		IS:6911 X04Cr19Ni9	2.38	
1	BOTTOM SHEET	2 x 1230 x 2319	13		IS:6911 X04Cr19Ni9	45.64	
8	C-BAR	L=500	12	AAB16185		0.49	
2	C-BAR	L=1175	11	AAB16185		1.14	
2	C-BAR	L=980	10	AAB16185		0.95	
4	LIFTING HOOK		9	AAD16951		0.10	
1	STIFFENER		8	AAB16156		2.95	
1	STIFFENER		7	AAB16099		3.19	
1	STIFFENER		6	AAB16098		3.43	
1	STIFFENER		5	AAB16021		3.71	
1	TROUGH BACK SHEET		4	AAB16210		6.00	
1	TROUGH FRONT SHEET		3	AAB16209		4.04	
1	TROUGH SIDE SHEET		2	AAB16208		22.36	
1	TROUGH SIDE SHEET		1	AAB16207		22.36	

Default	DESCRIPTION	DIMENSIONS	ITEM NO.	REF.DRG.	MATL	WT/UNIT IN KGS	REMARKS
GROUP: 1-6 Roof Construction		SURFACE AREA IN Sq.m.: 17.035		WT/ASSY IN Kgs:			
		SCALE 1:10		SSE/D		CHD	
				ALT.		ALTD	
				DRN		Amal George	
				LWLRRM			
				SHEET 2 OF 2		53816022	
				A1			

INDIAN RAILWAY STANDARDS
INTEGRAL COACH FACTORY, CHENNAI - 600038

SHEET
2 OF 2

53816022

A1

83116015

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

⑩ ROUGH CLEANED
⑪ BURRS REMOVED
⑫ CHAMFERED

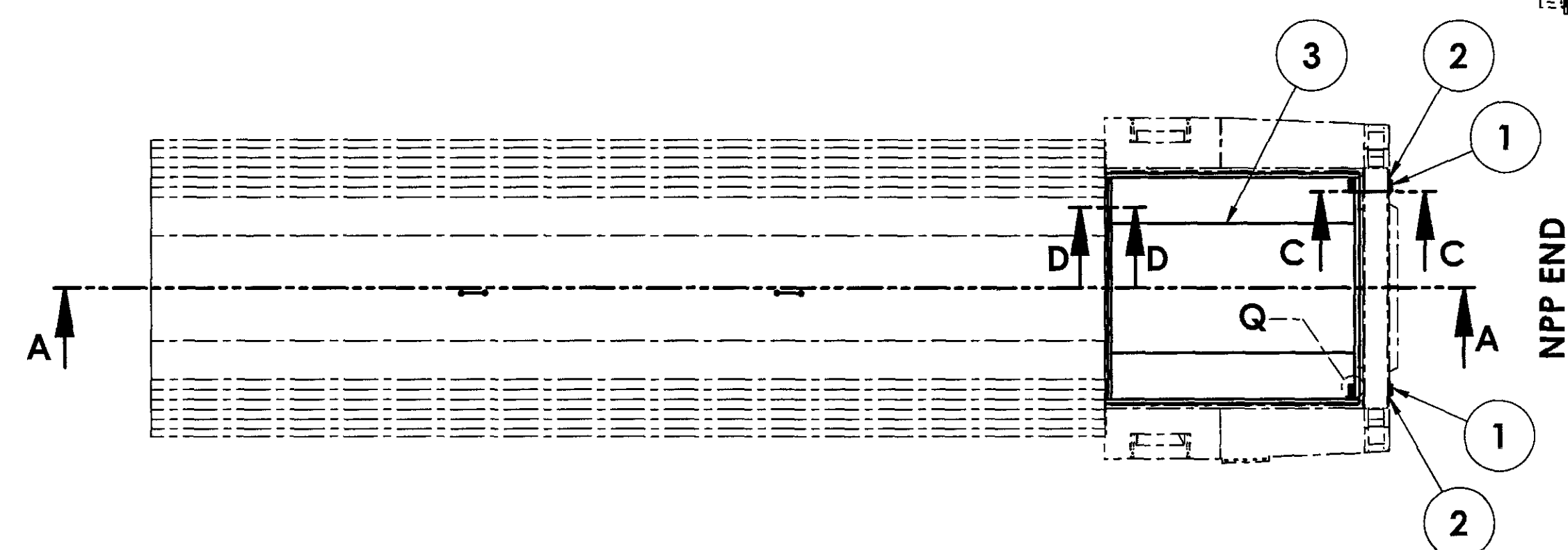
REVISIONS

ALT.

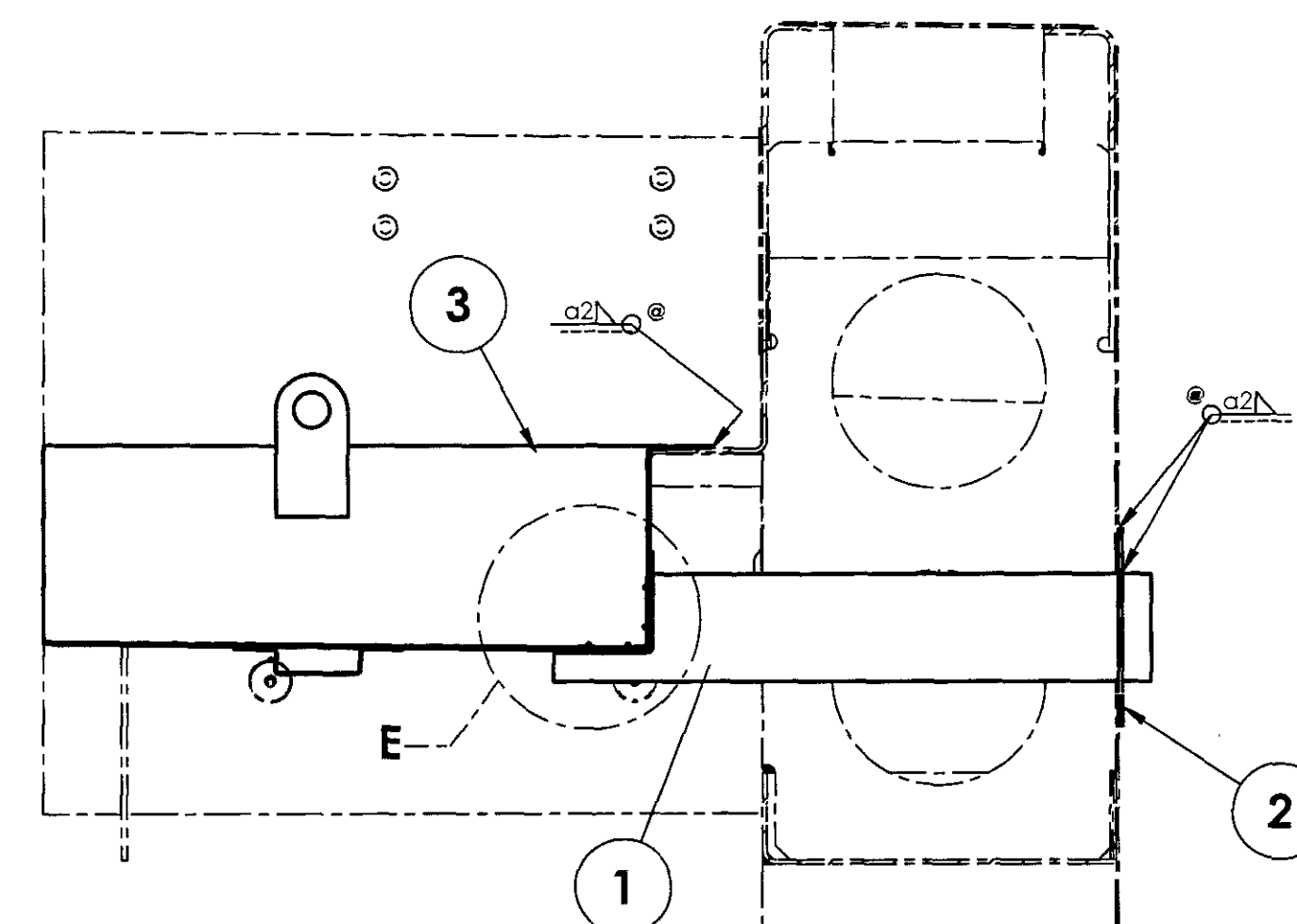
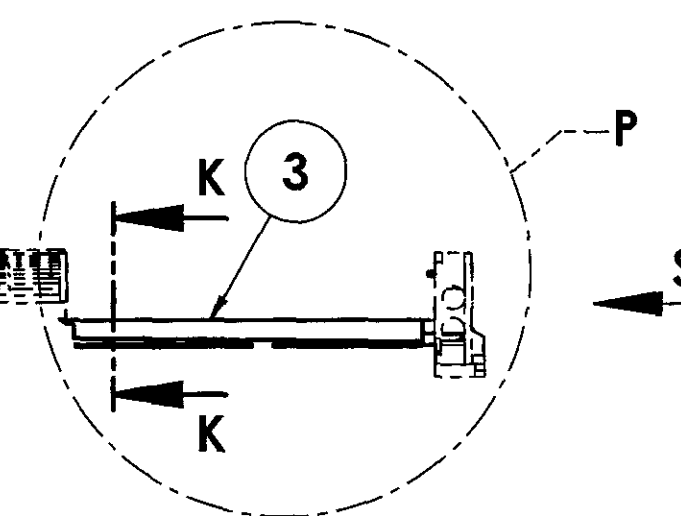
ZONE

DESCRIPTION

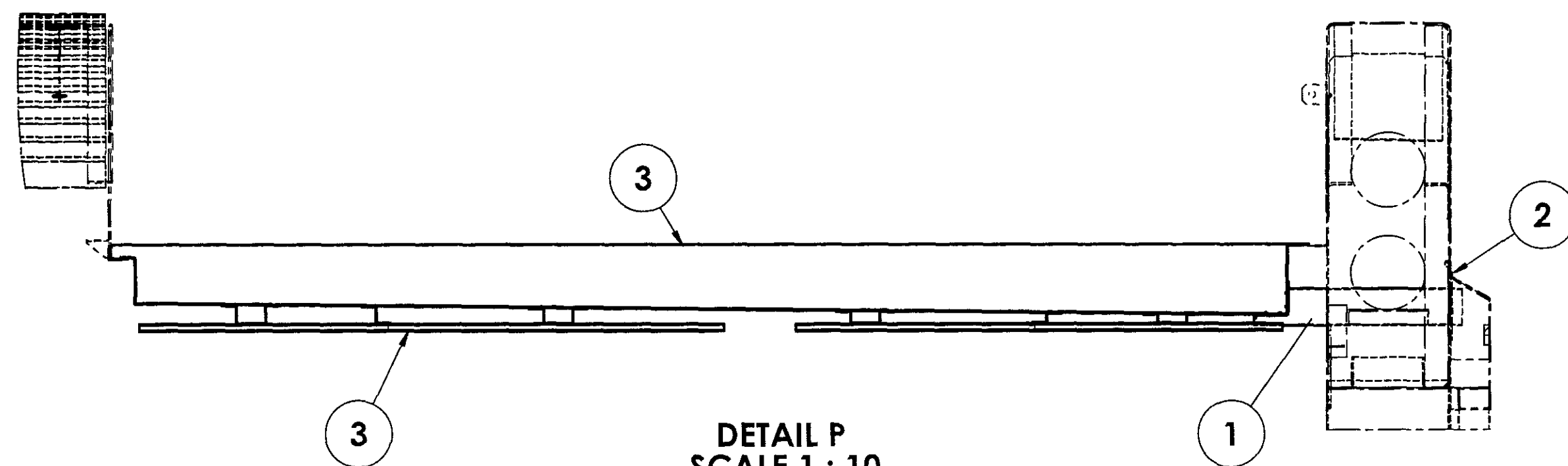
APPROVED & DATE



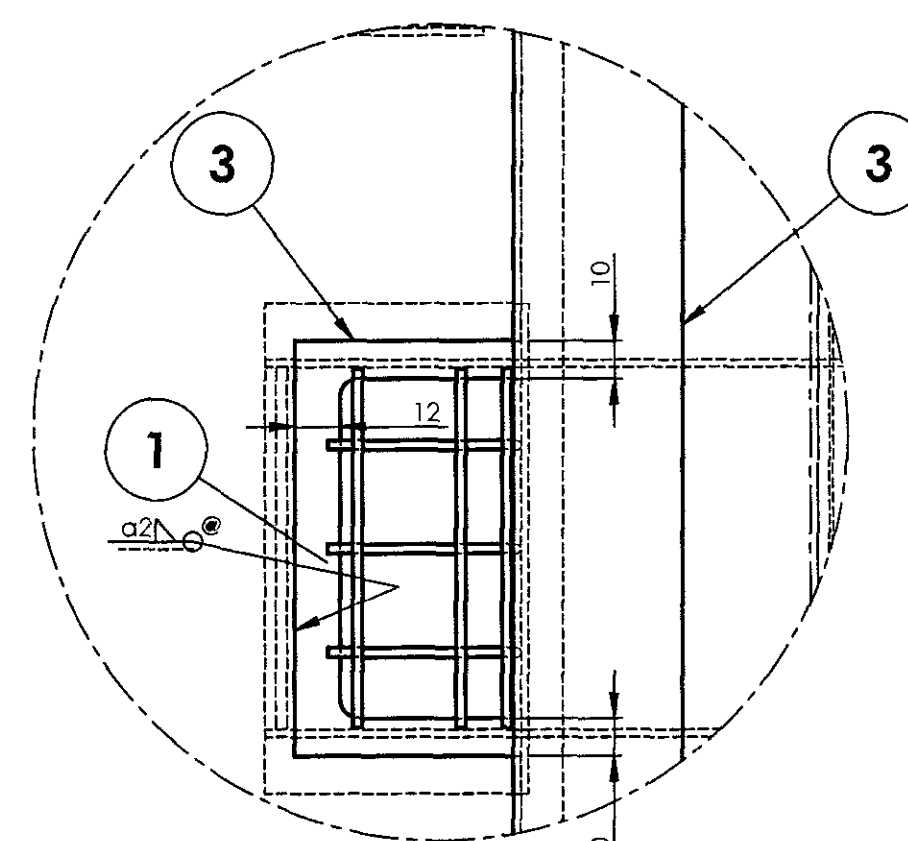
SECTION A-A
SCALE 1 : 50



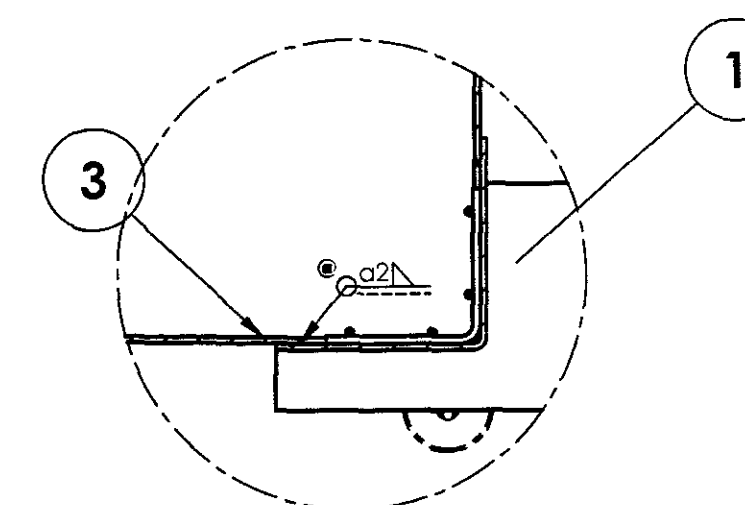
SECTION C-C
SCALE 1 : 5



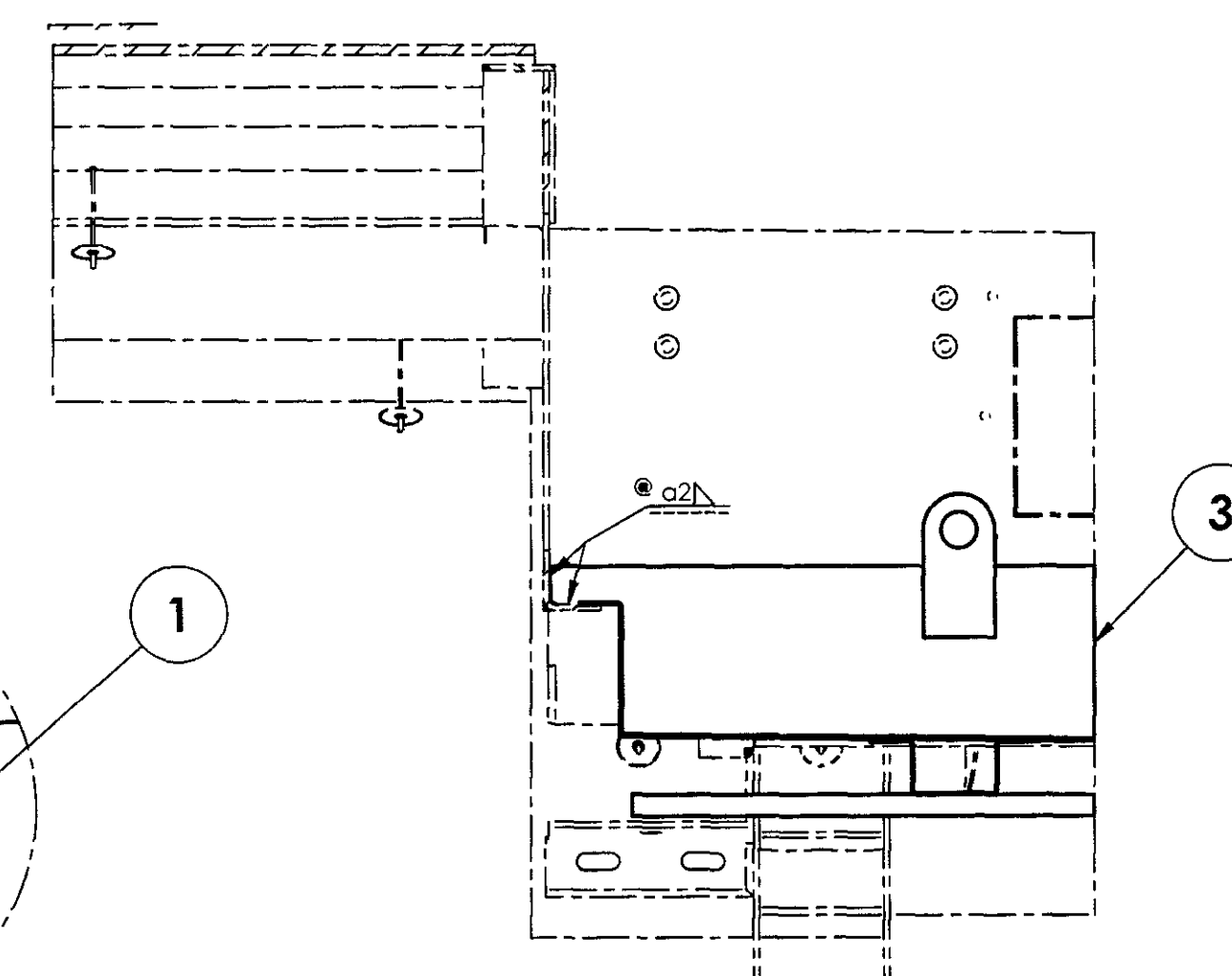
DETAIL P
SCALE 1 : 10



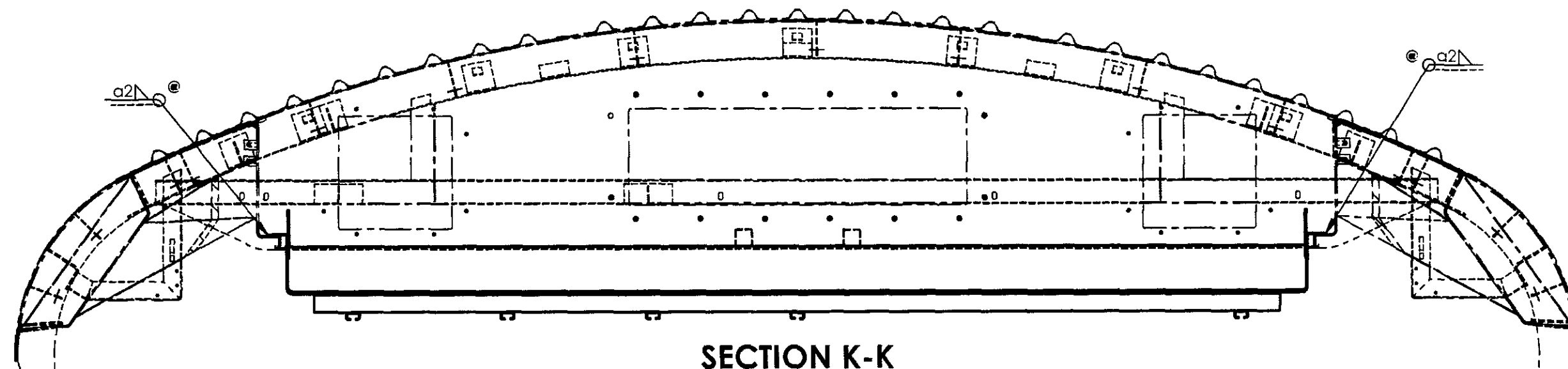
DETAIL Q
SCALE 1 : 2



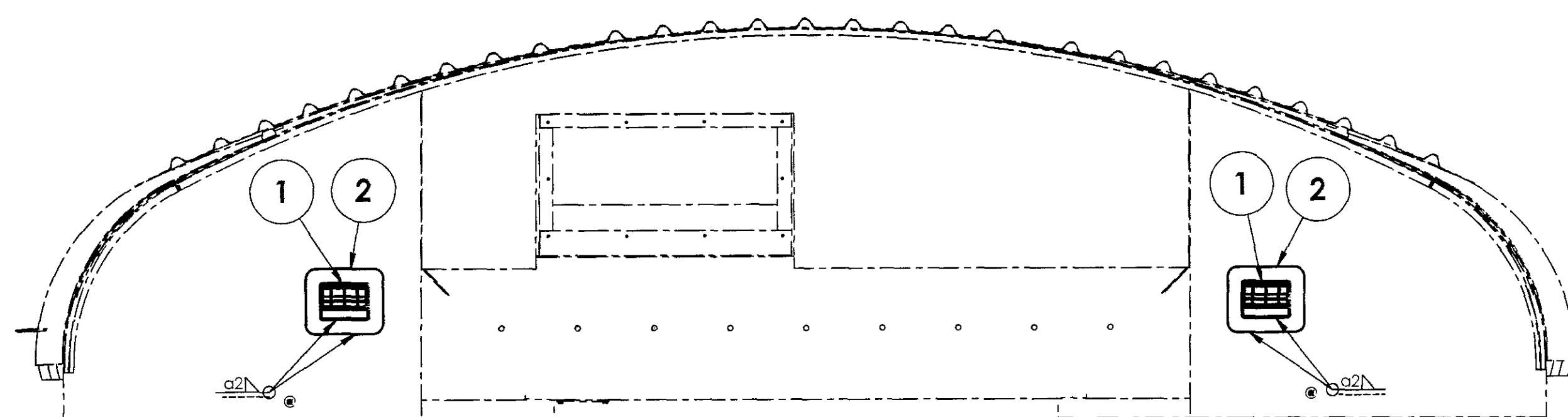
DETAIL E
SCALE 2 : 5



SECTION D-D
SCALE 1 : 5



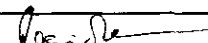
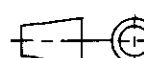
SECTION K-K
SCALE 1 : 10



VIEW FROM - S
SCALE 1 : 10

NOTE :

1. WHILE ASSEMBLING THE ITEMS - 1, 2 & 3, THE INFRINGEMENTS ON ROOF ASSY. FINAL ROOF ASSEMBLIES AND END WALL SHALL BE SUITABLY TRIMMED AND WELDED LEAK PROOF.
2. STAINLESS STEEL ELECTRODE OF SAME COMPOSITION AS PER TABLE-3 OF RDSO/SPEC C-K201 SHALL BE USED FOR WELDING.
3. ALL WELDINGS SHALL BE TIG WELDING UNLESS OTHERWISE SPECIFIED.
4. FOR WELD TESTING PREFERENCES REFER DRG. No. ICF/STD-9-0-998.
5. FOR WELD PROCEDURE SPECIFICATION REFER DRG. No. ICF/STD-9-0-999.
6. ALL WELDED JOINTS SPATTERS SHALL BE GROUND.
7. ALL WELDED JOINTS SHALL BE PICKLED AND PASSIVATED BEFORE SURFACE TREATMENT.
8. ALL SHARP CORNERS SHALL BE ROUNDED OFF.
9. ALL WELD PERFORMANCE CLASS SHALL BE CP C2 UNLESS OTHERWISE SPECIFIED.
10. ITEMS - 1, 2 & 3 TO BE SUPPLIED LOOSE AND WELDED AT BODY SHELL ASSY STAGE.
11. TROUGH ASSY. SHALL BE WELDED PROPERLY TO AVOID WATER LEAKAGE INSIDE THE COACH.
12. LEAK PROOF WELDING SHALL BE ENSURED.

1	SS TROUGH BELOW A/C UNIT FOR LHB POWER CAR	3	53816022		127.358		
2	COVER SHEET	2	AAD16906		0.34		
2	DRAIN PIPE COMPLETE	1	83116016		2.224		
QTY.	DESCRIPTION	DIMENSIONS	ITEM NO.	REF.DRGS.	MATL	WT/UNIT IN KGS	REMARKS
GROUP: 1-6 Roof Construction			SURFACE AREA IN Sq.m.: 129.528		WT/ASSY IN Kgs:		
SS TROUGH ARRANGEMENT FOR AMRIT BHARAT POWER CAR					SCALE	SSE/D	
					1:50	CHD	
					ALT.	ALTD	
					DRN	Amal George	
INDIAN RAILWAY STANDARDS						LWLRRM/PP2	
INTEGRAL COACH FACTORY, CHENNAI - 600035						83116015	
SHEET					1 OF 1		A1

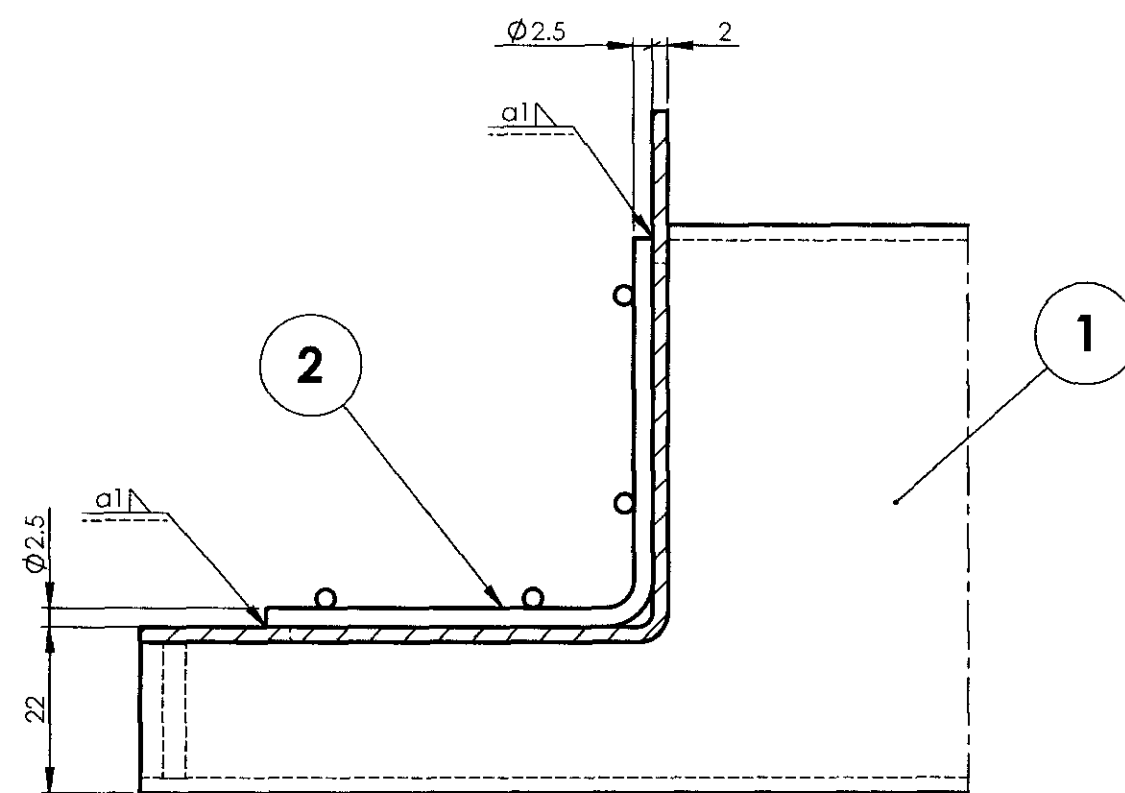
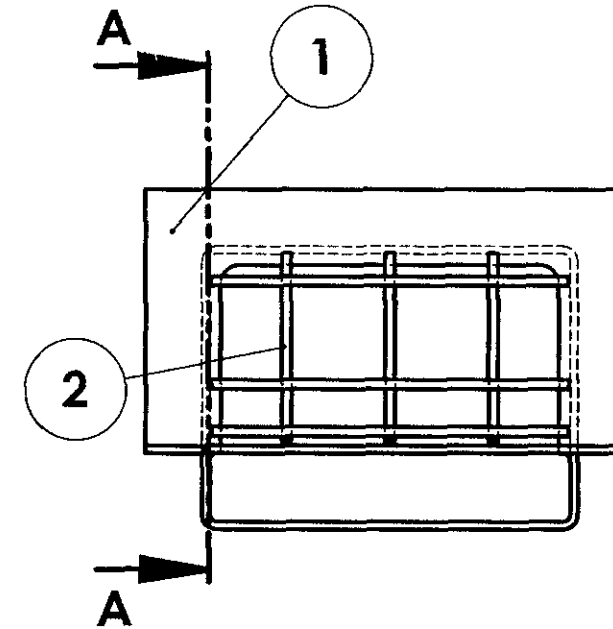
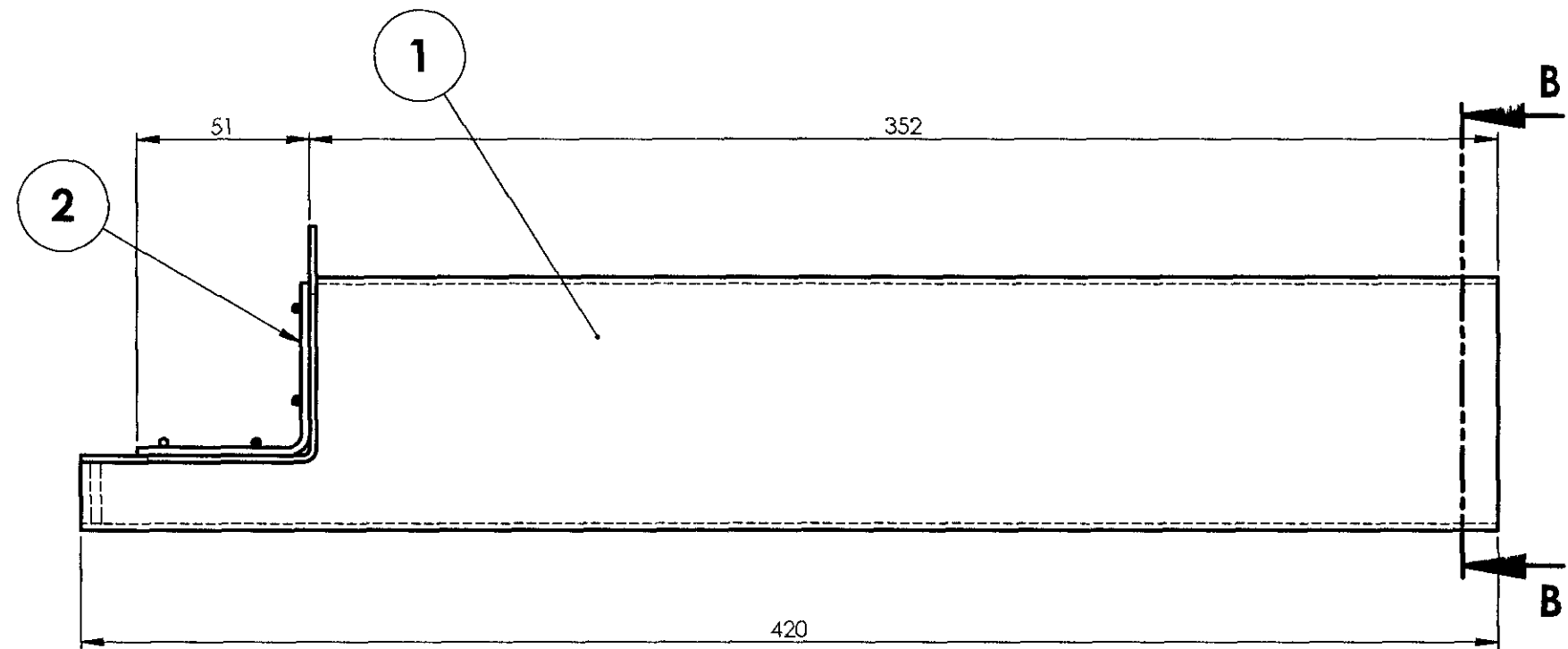
REF.DRG.NO.

12-08-2025
DATE OF LATEST ALT. DATE OF FIRST ISSUE
AME/SME

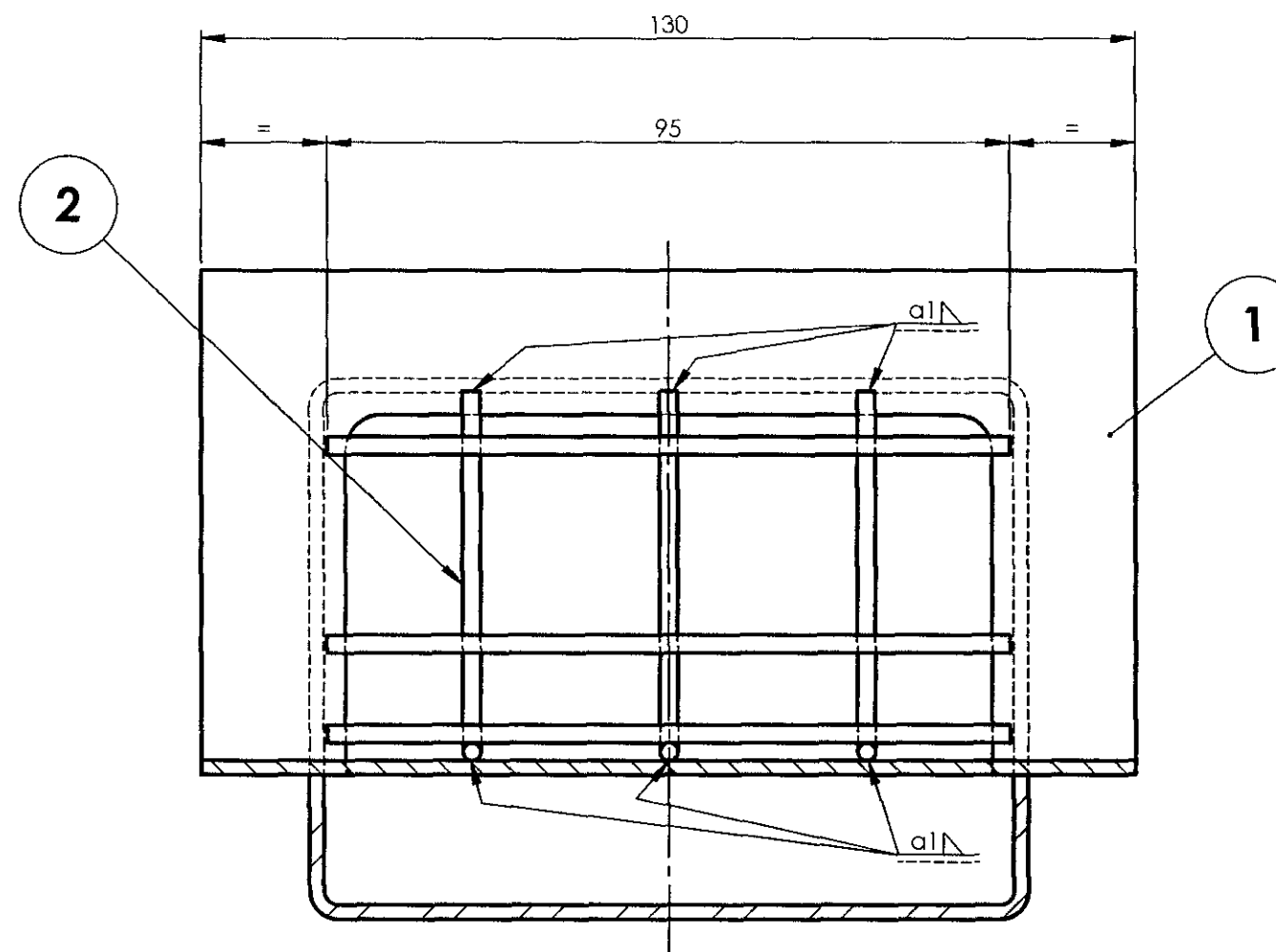
83116016

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

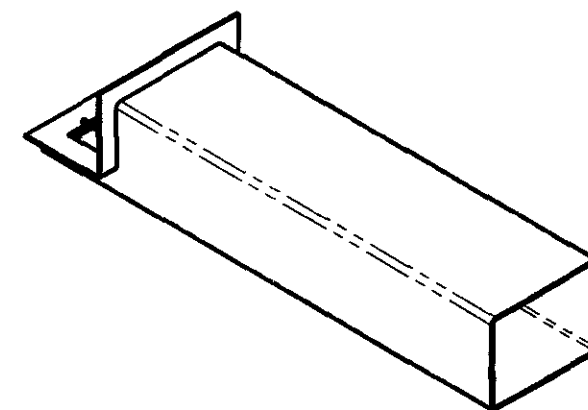
REVISIONS				APPROVED & DATE	
ALT.	ZONE	DESCRIPTION			



SECTION A-A
SCALE 1 : 1



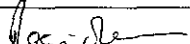
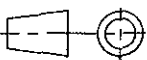
SECTION B-B
SCALE 1 : 1



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 PREFERANCES REFER DRG. No. ICF/STD-9-0-998.
8. FOR WELD PROCEDURE SPECIFICATION REFER DRG. No. ICF/STD-9-0-999.

1	WELDED SS WIRE FABRIC		2	AAF14233		0.03	
1	DRAIN PIPE ARRGT		1	32916056		2.197	
QTY	DESCRIPTION	DIMENSIONS	ITEM NO.	REF.DRGS.	MATL	WT/UNIT IN KGS	REMARKS
GROUP: 1-6 Roof Construction		SURFACE AREA IN Sq.m.: 0.29			WT/ASSY IN Kgs:		
DRAIN PIPE COMPLETE					SCALE 1:2	SSE/D	
						CHD	
					ALT	ALTD	
						DRN	Amal George
INDIAN RAILWAY STANDARDS INTEGRAL COACH FACTORY, CHENNAI - 600038					LWLRRM/PP2		
					83116016		
				SHEET 1 OF 1	A2		

	12-08-2025	
DATE OF LATEST ALT	DATE OF FIRST ISSUE	AME/SME

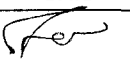
ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE SPECIFIED. FOR UNTOLERANCED DIMENSIONS AND ROUGHNESS VALUES, REFER DRAWING NO. ICF/STD-9-0-001. ANY MANUAL ALTERATION SHALL AUTOMATICALLY RENDER THIS DRAWING INVALID. WELDING SYMBOLS ARE AS PER EN ISO 2553. WEIGHT GIVEN IN DRAWING IS FOR INDICATIVE PURPOSE ONLY.

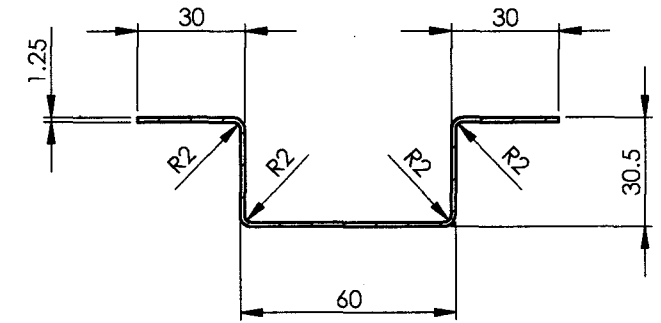
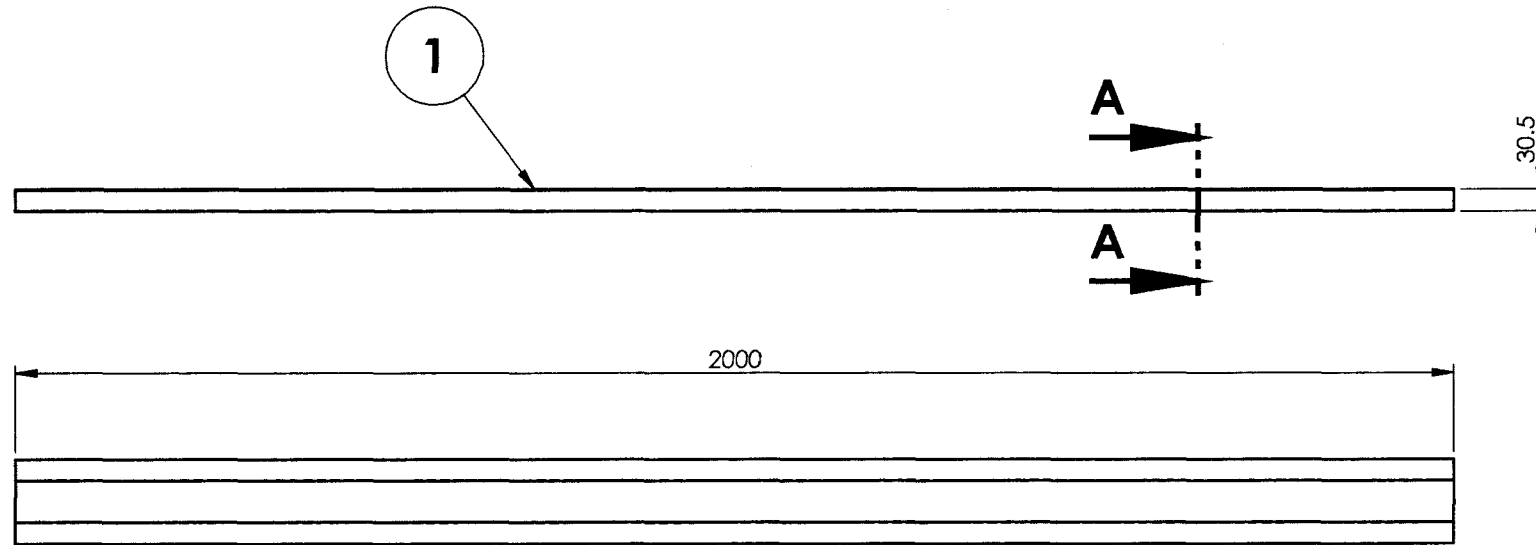
1		2		3		4		5		6		7		8	
AAB16021				▽ ROUGH MACHINED		① ROUGH CLEANED		REVISIONS							
				▽▽ FINISH MACHINED		①b BURRS REMOVED		ALT.		ZONE		DESCRIPTION		APPROVED & DATE	
				▽▽▽ FINE FINISH MACHINED		①8 CHAMFERED		b				MATERIAL SPECIFICATION ALTERED			
<div><div><div>1</div><div></div></div><div></div><div><p>SECTION A-A SCALE 1 : 2</p></div><div></div></div>															
<div><div><div>1</div><div>STIFFENER</div><div>1.25x185x2000</div><div>1</div><div></div><div>IS:6911 X04Cr19Ni9</div><div>3.71</div><div></div></div><div><div>Default</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</div><div>SURFACE AREA IN Sq.m.:</div><div>WT/ASSY IN Kgs:</div></div><div><div>SCALE 1:10</div><div>SSE/D CHD</div><div>ALT. b</div><div>ALTD</div><div>DRN</div><div>S.K.MUTHUKUMAR</div><div>S.K.MUTHUKUMAR</div></div><div><div></div><div></div></div><div><div>INDIAN RAILWAY STANDARDS</div><div>INTEGRAL COACH FACTORY, CHENNAI - 600038</div><div>SHEET 1 OF 1</div><div>AAB16021</div><div>A3</div></div></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

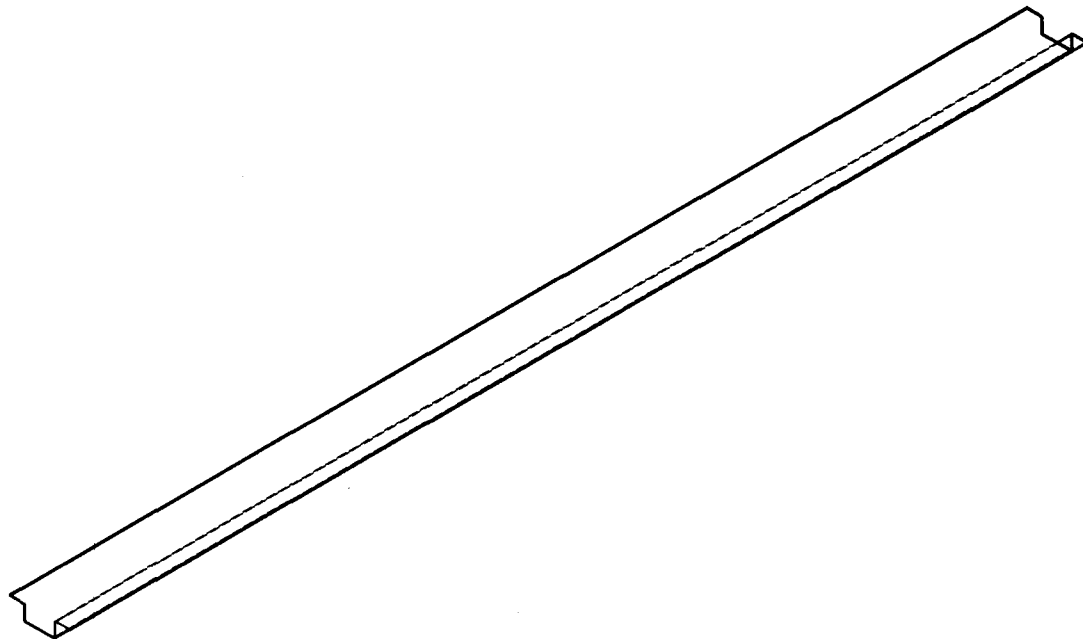
AAB16098

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

REVISIONS			
ALT.	ZONE	DESCRIPTION	APPROVED & DATE
b		MATERIAL SPECIFICATION ALTERED	



SECTION A-A
SCALE 1 : 2



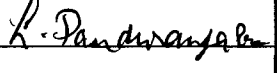
1	STIFFENER	1.25x171x2000	1		IS:6911 X04Cr19Ni9	3.43	
Default	DESCRIPTION	DIMENSIONS	ITEM NO.	REF. DRGS	MATL.SPEC.	WT/UNIT IN KGS	REMARKS

GROUP: 1-6

SURFACE AREA IN Sq.m.:

WT/ASSY IN Kgs:

STIFFENER

SCALE 1:1	SSE/D CHD	
ALT. b	ALTD DRN	S K MUTHUKUMAR S.K.MUTHUKUMAR


INDIAN RAILWAY STANDARDS

INTEGRAL COACH FACTORY, CHENNAI - 600038

SHEET
1 OF 1

AAB16098

A3

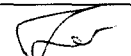
30-1-2024	12-06-2015	
DATE OF LATEST ALT.	DATE OF FIRST ISSUE	AME/SME

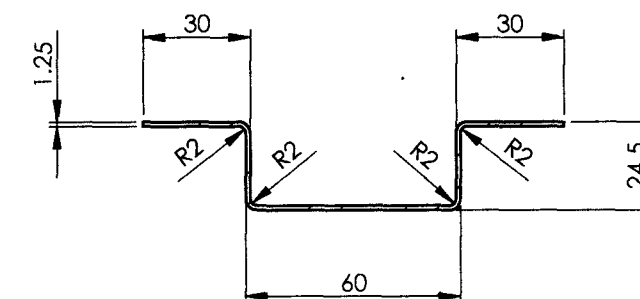
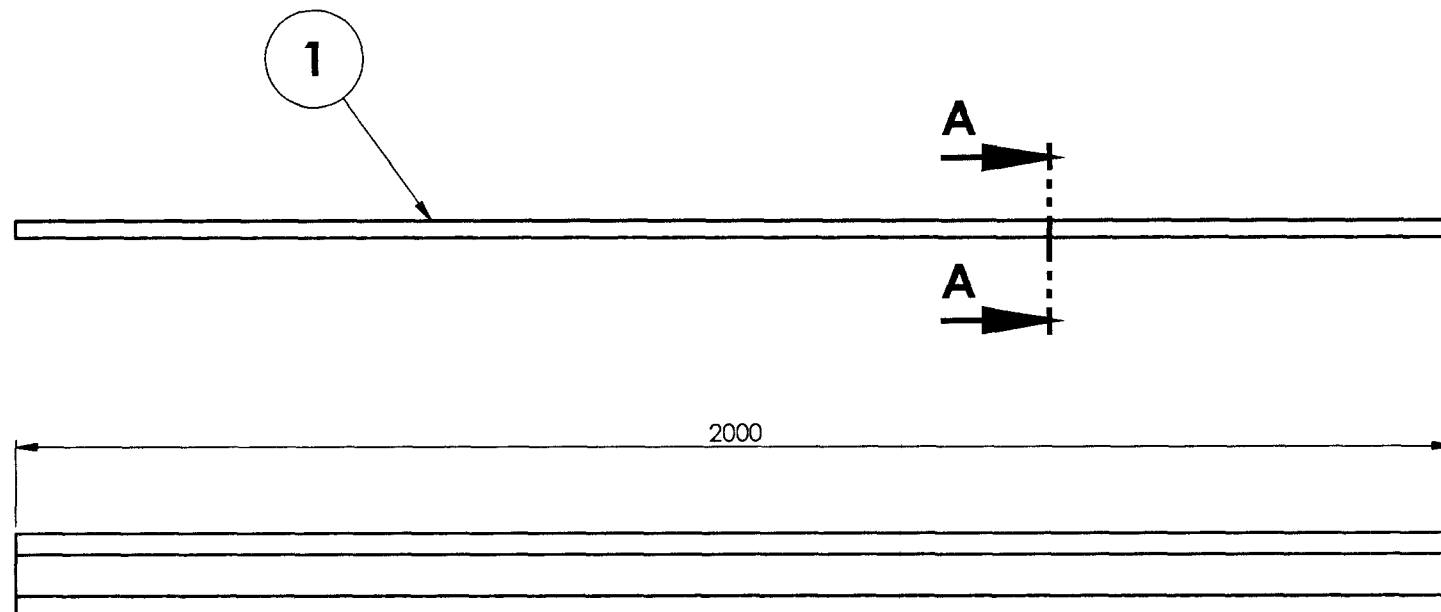
REF.DRG.NO.-

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

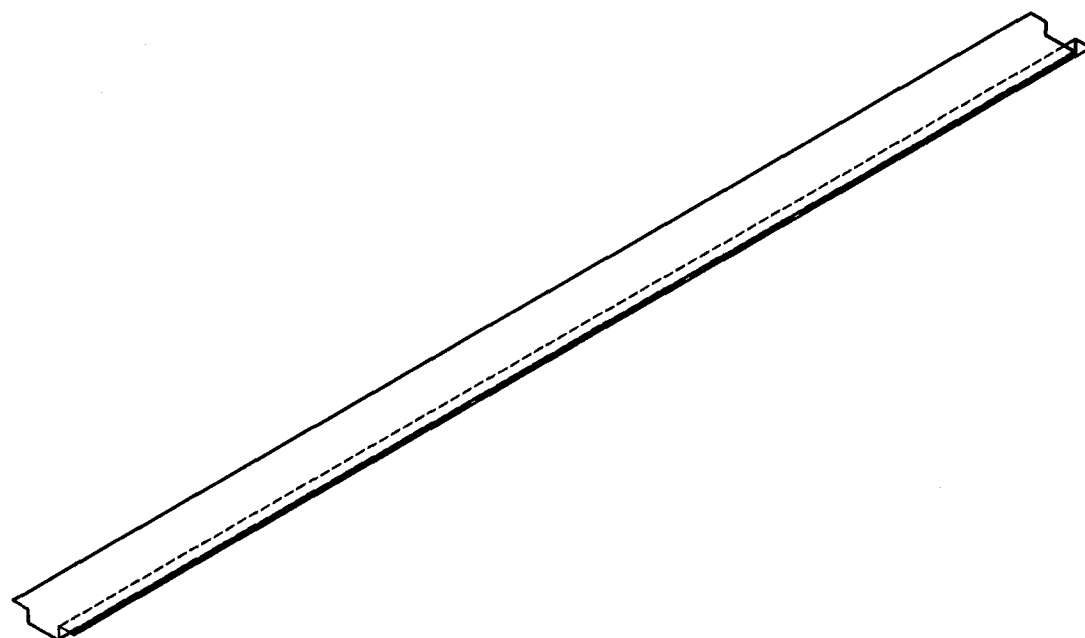
AAB16099


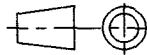
▽ ROUGH MACHINED	① ROUGH CLEANED
▽▽ FINISH MACHINED	①b BURRS REMOVED
▽▽▽ FINE FINISH MACHINED	①B CHAMFERED

REVISIONS				APPROVED & DATE
ALT.	ZONE	DESCRIPTION		
b		MATERIAL SPECIFICATION ALTERED		



SECTION A-A
SCALE 1 : 2




1	STIFFENER	1.25x1.59x2000	1		IS:6911 X04Cr19Ni9	3.19	
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:		
STIFFENER					SCALE	SSE/D	
					1:1	CHD	
					ALT.	ALTD	S K MUTHUKUMAR
					b	DRN	S.K.MUTHUKUMAR
INDIAN RAILWAY STANDARDS							
INTEGRAL COACH FACTORY, CHENNAI - 600038					SHEET 1 OF 1		AAB16099
							A3

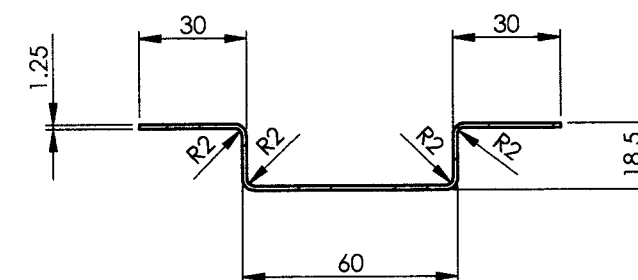
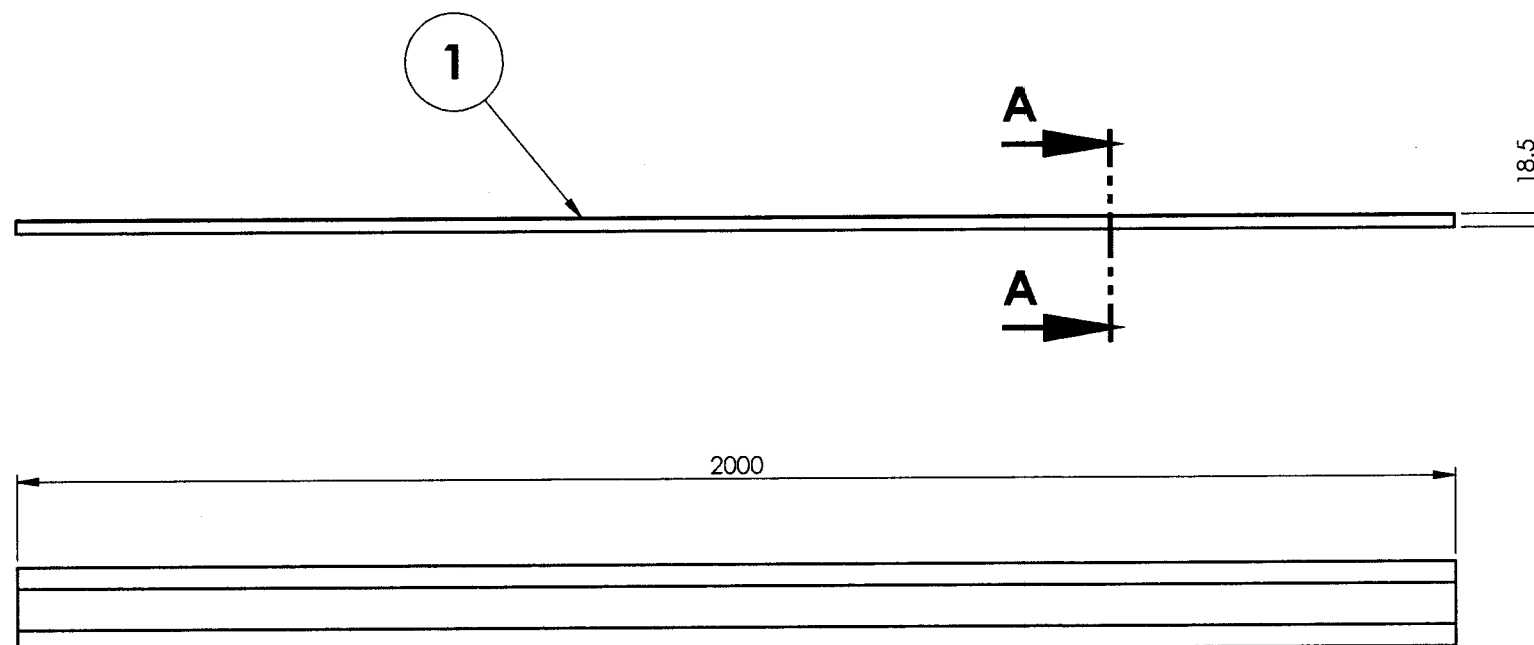
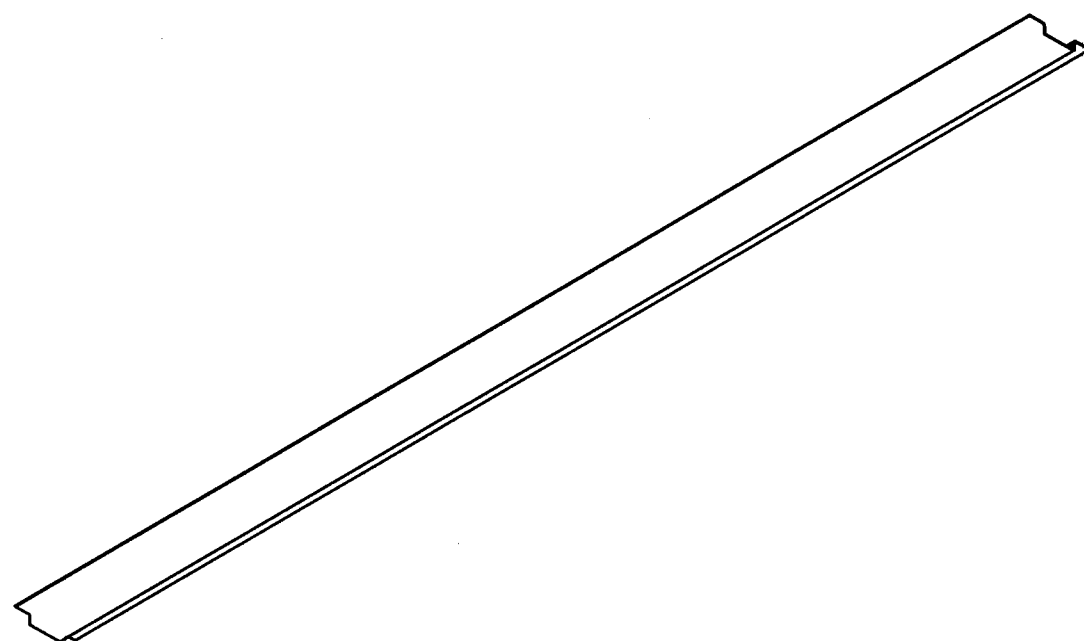
ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE SPECIFIED. FOR UNTOLERANCED DIMENSIONS AND ROUGHNESS VALUES, REFER DRAWING NO ICF/STD-9-0-001.
ANY MANUAL ALTERATION SHALL AUTOMATICALLY RENDER THIS DRAWING INVALID. WELDING SYMBOLS ARE AS PER IS: 813:1986.
WEIGHT GIVEN IN DRAWING IS FOR INDICATIVE PURPOSE ONLY


REF.DRG.NO.-

AAB16156

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

REVISIONS			
ALT.	ZONE	DESCRIPTION	APPROVED & DATE
b		MATERIAL SPECIFICATION ALTERED	

SECTION A-A
SCALE 1 : 2

1	STIFFENER	1.25x147x2000	1		IS:6911 X04Cr19Ni9	2.95	
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:		
STIFFENER					SCALE	SSE/D	<i>L. Panduranga Rao</i>
					1:1	CHD	
					ALT.	ALTD	S.K.MUTHUKUMAR
					b	DRN	H. Irshath Ahamed
INDIAN RAILWAY STANDARDS							
INTEGRAL COACH FACTORY, CHENNAI - 600038					SHEET 1 OF 1	AAB16156	
							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

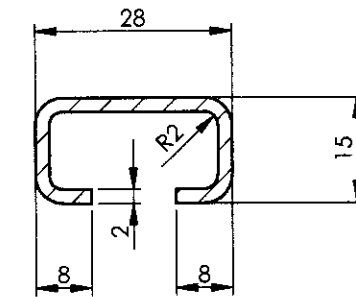
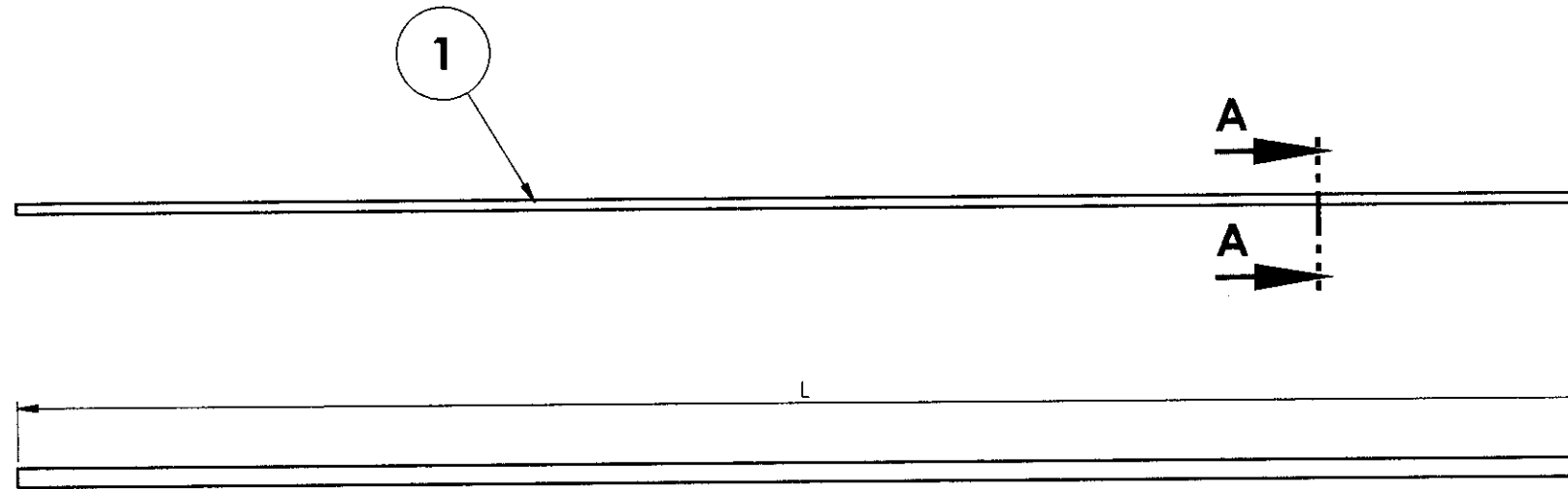
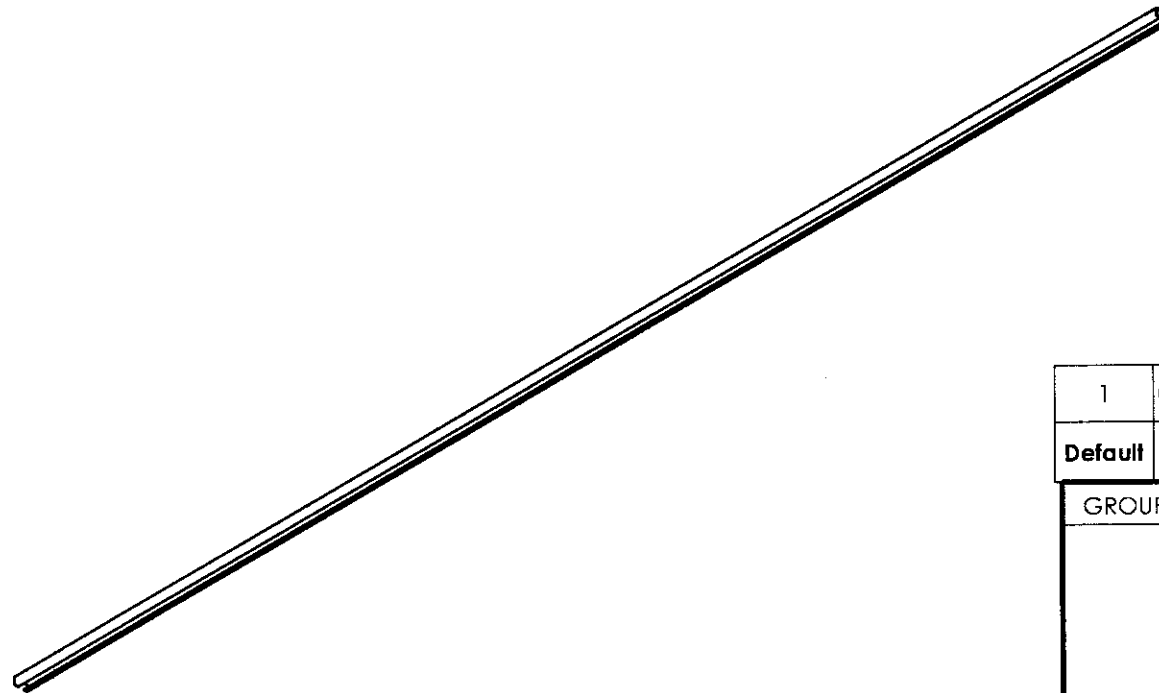
REF.DRG.NO.-

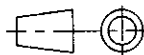
30-9-24	12-06-2015	<i>[Signature]</i>
DATE OF LATEST ALT.	DATE OF FIRST ISSUE	AME/SME

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	SSE/D	L. Panduranga Rao	
					1:20	CHD		
					ALT.	ALTD	S.K.MUTHUKUMAR	
					a	DRN	S.K.MUTHUKUMAR	
INDIAN RAILWAY STANDARDS								
INTEGRAL COACH FACTORY, CHENNAI - 600038					SHEET 1 OF 1		AAB16185	A3

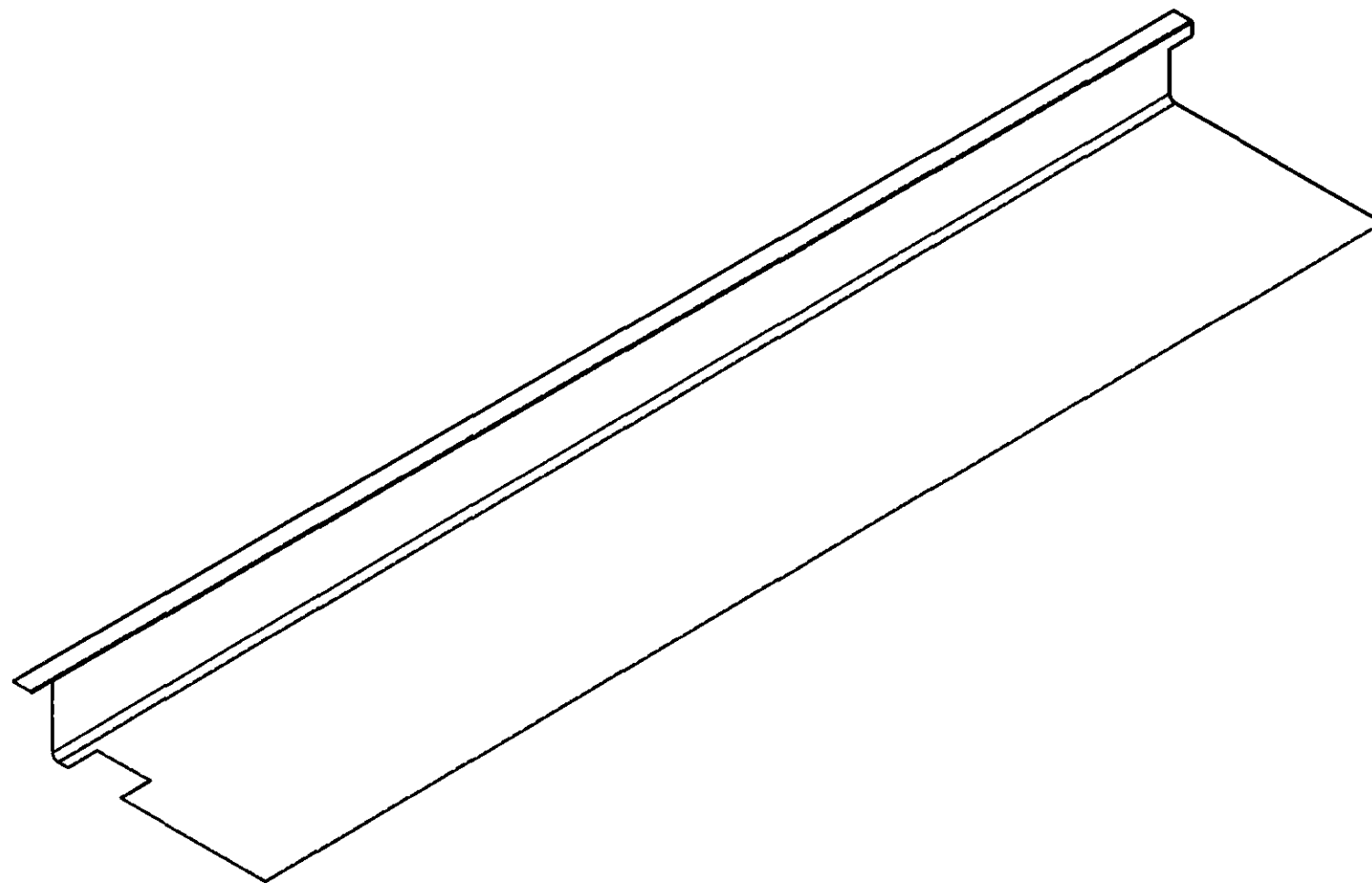
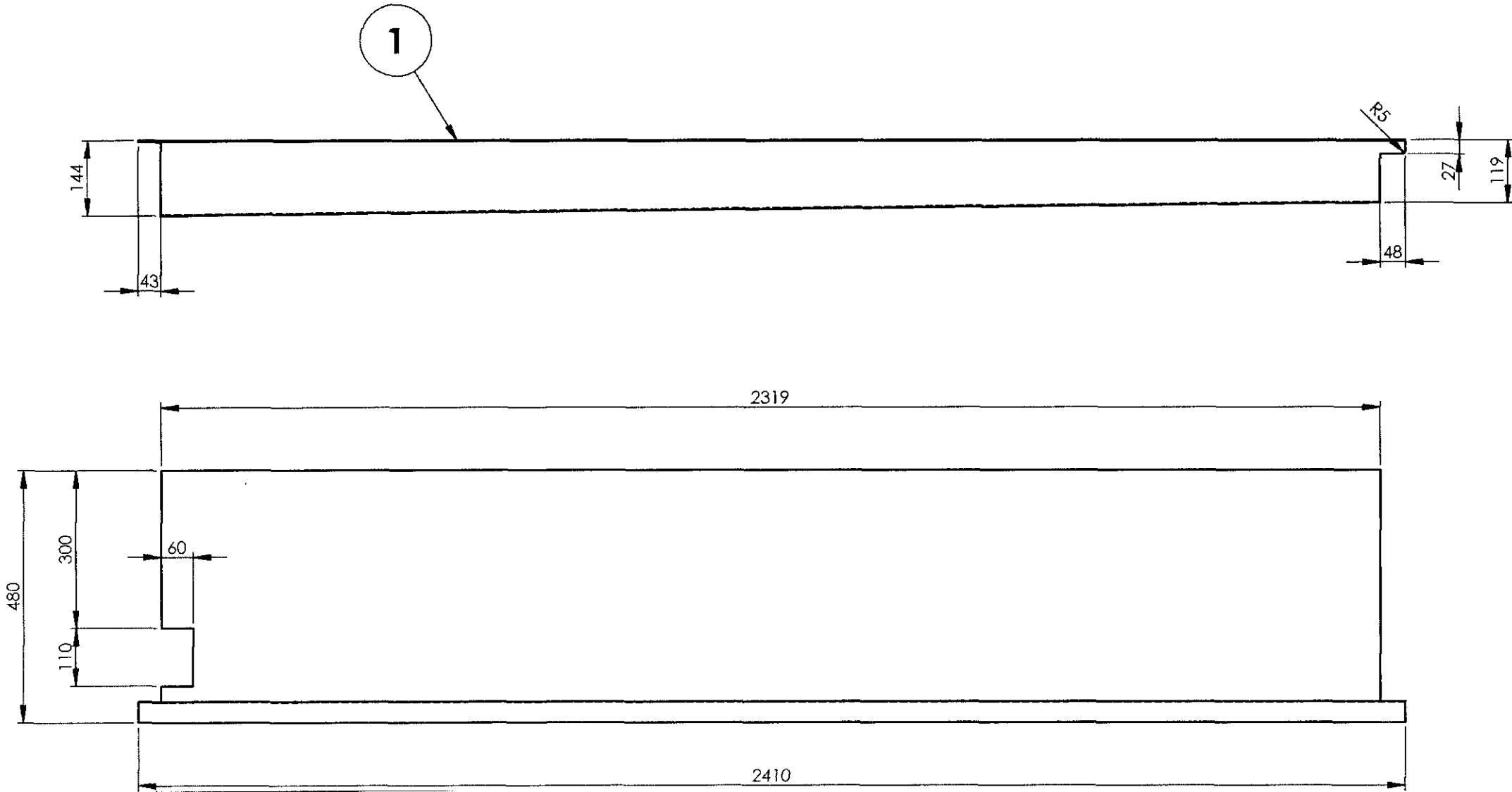
REF.DRG.NO.-

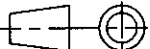
ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE SPECIFIED. FOR UNTOLERANCED DIMENSIONS AND ROUGHNESS VALUES, REFER DRAWING NO ICF/STD-9-0-001.
ANY MANUAL ALTERATION SHALL AUTOMATICALLY RENDER THIS DRAWING INVALID. WELDING SYMBOLS ARE AS PER IS: 813:1986.
WEIGHT GIVEN IN DRAWING IS FOR INDICATIVE PURPOSE ONLY

AAB16207

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

REVISIONS			
ALT.	ZONE	DESCRIPTION	APPROVED & DATE
c		DESIGN AND MATERIAL REVISED.	
d		CUTAWAY AND FLANGE DIMENSIONS ALTERED FROM 43 TO 48 AND FROM 45 TO 40 RESPECTIVELY. RM SIZE, MATERIAL AND DRG REVISED.	
e		CUTAWAY SIZE AND LOCATION ALTERED	

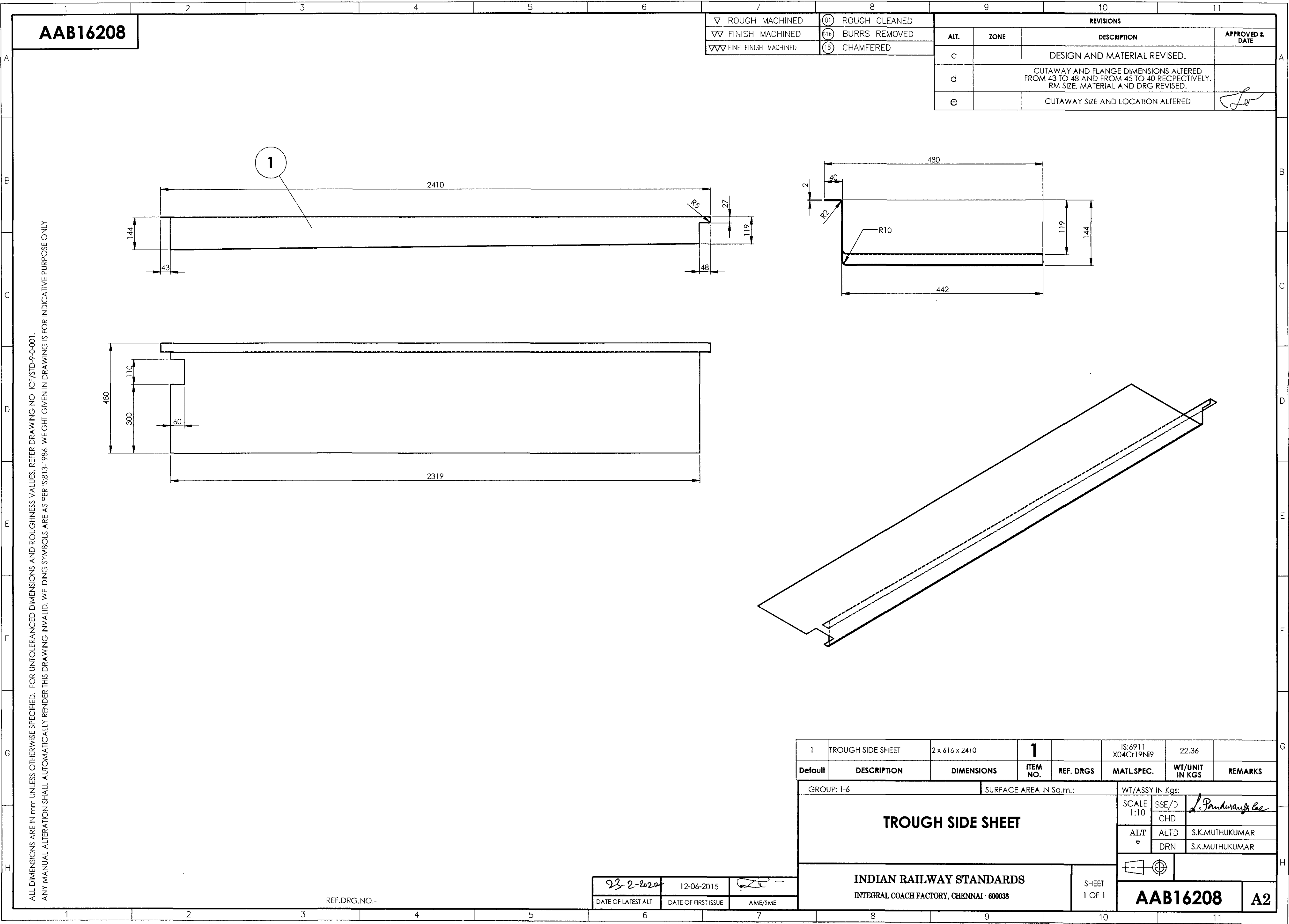


1	TROUGH SIDE SHEET	2 x 616 x 2410	1		IS:6911 X04Cr19Ni9	22.36		
QTY	DESCRIPTION	DIMENSIONS	ITEM NO.	REF. DRGS	MATL.SPEC.	WT/UNIT IN KGS	REMARKS	
GROUP: 1-6			SURFACE AREA IN Sq.m.:		WT/ASSY IN Kgs:			
TROUGH SIDE SHEET					SCALE 1:10	SSE/D	<i>S. Panduranga Rao</i>	
						CHD		
					ALT e	ALTD	S K MUTHUKUMAR	
						DRN	S K MUTHUKUMAR	
INDIAN RAILWAY STANDARDS INTEGRAL COACH FACTORY, CHENNAI - 600038				SHEET 1 OF 1				
					AAB16207		A2	

93-2-2022	12-06-2015	
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 IC/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

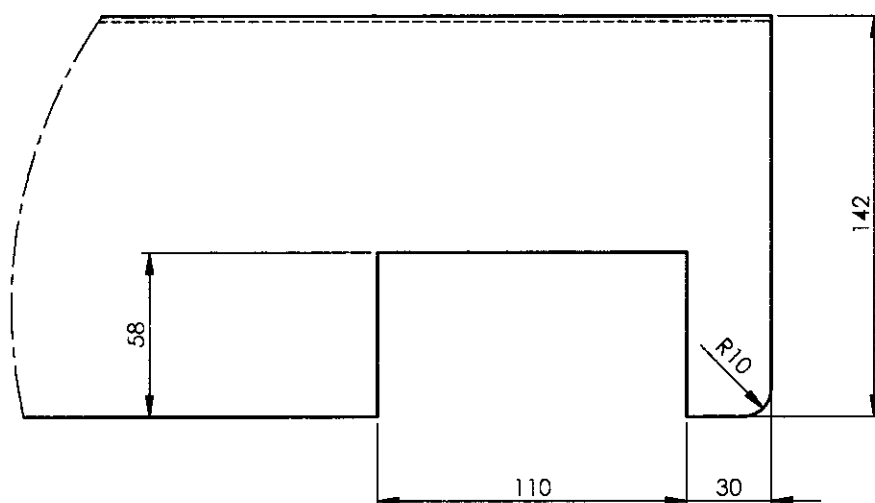
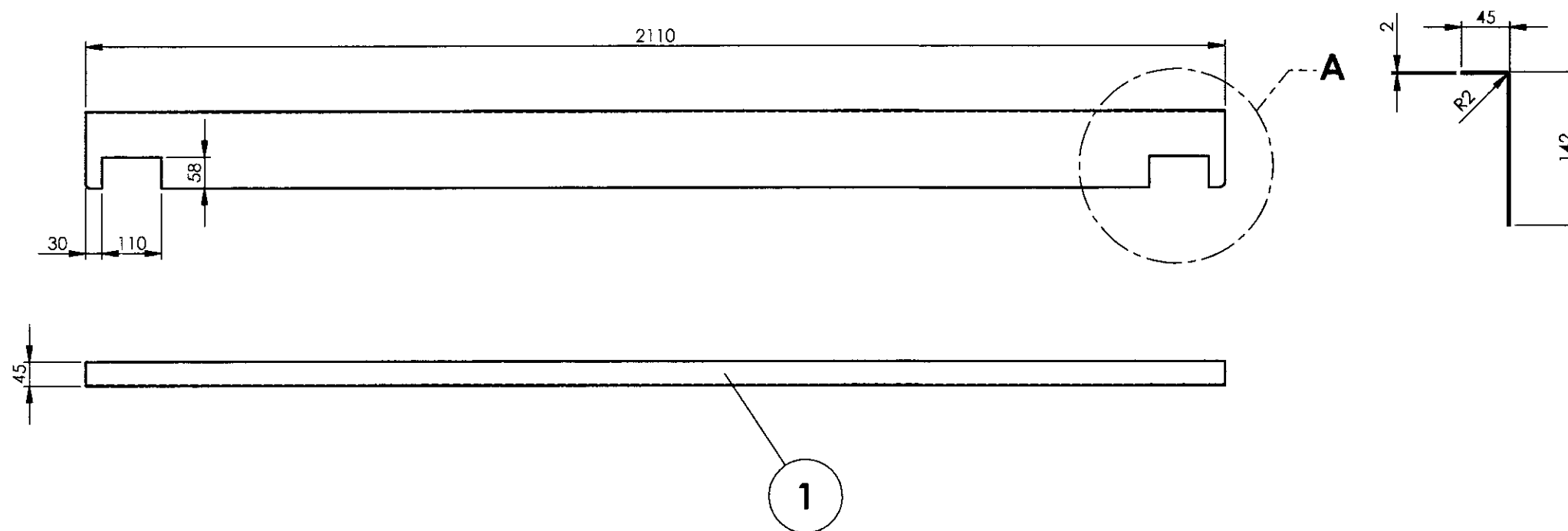


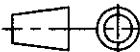
1		2		3		4		5		6		7		8																	
AAB16209				▽ ROUGH MACHINED		① ROUGH CLEANED		REVISIONS																							
				▽▽ FINISH MACHINED		② BURRS REMOVED		ALT.		ZONE		DESCRIPTION		APPROVED & DATE																	
				▽▽▽ FINE FINISH MACHINED		③ CHAMFERED		a				MATERIAL SPEC REVISED. RADIUS ALTERED FROM R30 TO R10																			
								b				FLANGE DIMENSION ALTERED FROM 45 TO 30. RM SIZE, MATERIAL AND DRG REVISED.																			
<div><p>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</p><p>2110</p><p>R10</p><p>30</p><p>2</p><p>R30</p><p>92</p></div>																															
1		TROUGH FRONT SHEET		2 x 118 x 2110		1				IS:6911 X04Cr19Ni9		4.01																			
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:																			
TROUGH FRONT SHEET										SCALE 1:10		SSE/D CHD																			
										ALT. b		ALTD		S.K.MUTHUKUMAR																	
										DRN		S.K.MUTHUKUMAR																			
INDIAN RAILWAY STANDARDS										SHEET 1 OF 1		AAB16209 A3																			
INTEGRAL COACH FACTORY, CHENNAI - 600036																															
REF.DRG.NO.-		30-9-2024		-																											
		DATE OF LATEST ALT.		DATE OF FIRST ISSUE		AME/SME																									

AAB16210

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

REVISIONS			
ALT.	ZONE	DESCRIPTION	APPROVED & DATE
d		MATERIAL SPECIFICATION ALTERED.	
e		BOTH CUTAWAY SIZE AND LOCATION ALTERED	<i>[Signature]</i>

DETAIL A
SCALE 1 : 2.5

1	TROUGH BACK SHEET	2 x 183 x 2110	1		IS:6911 X04Cr19Ni9	6.00	
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:		
TROUGH BACK SHEET					SCALE	SSE/D	<i>S. Ponduranga Rao</i>
					1:10	CHD	
					ALT.	ALTD	S.K.MUTHUKUMAR
					e	DRN	S.K.MUTHUKUMAR
INDIAN RAILWAY STANDARDS							
INTEGRAL COACH FACTORY, CHENNAI - 600038				SHEET 1 OF 1		AAB16210	
						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
WEIGHT GIVEN IN DRAWING IS FOR INDICATIVE PURPOSE ONLY

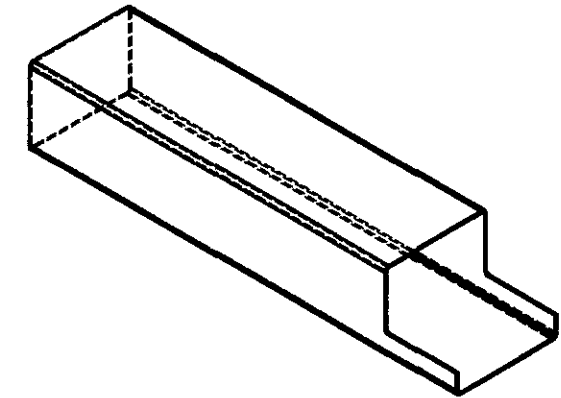
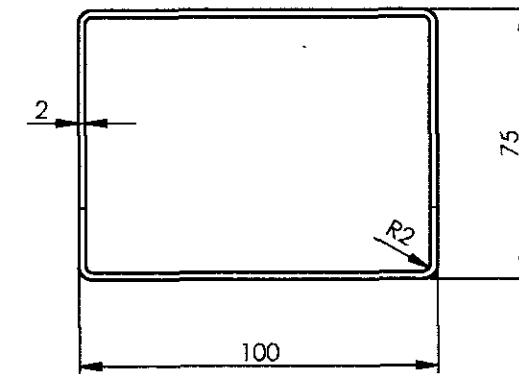
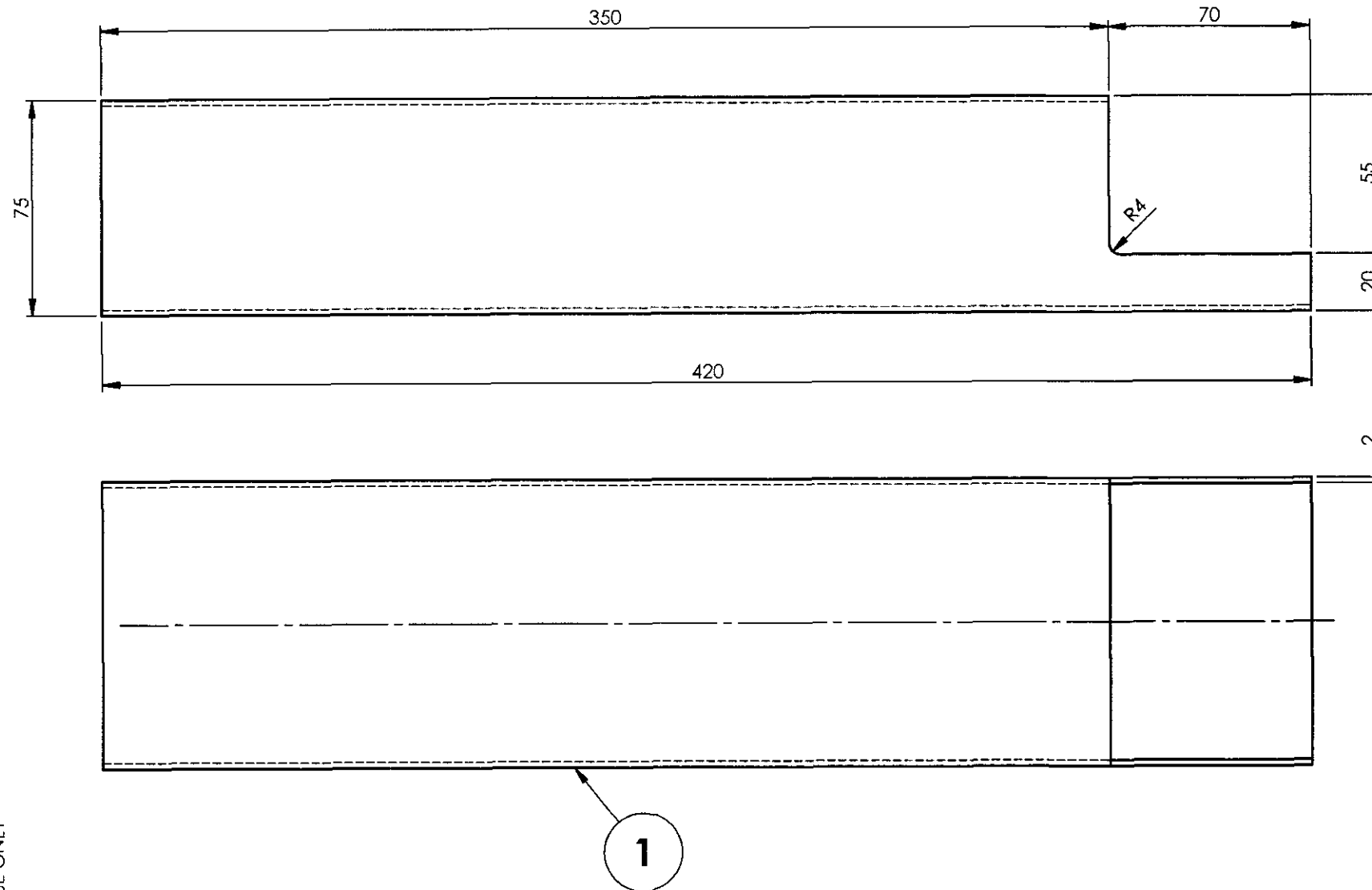
REF.DRG.NO.-

23-2-2022	12-06-2015	<i>[Signature]</i>
DATE OF LATEST ALT.	DATE OF FIRST ISSUE	AME/SME

AAD16903

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

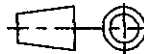
REVISIONS			
ALT.	ZONE	DESCRIPTION	APPROVED & DATE
a		NOTE ADDED	
b		WIDTH OF ITEM-1 ALTERED FROM 150 TO 100	<i>[Signature]</i>



@ - ASTM A554 GRADE MT-304 (OR) ASTM A269/A269M GR TP304 (OR) OTHER EQUIVALENT SPECIFICATIONS SHALL BE FOLLOWED.

REF.DRG.NO.-

23-2-2022	22-07-2021	<i>[Signature]</i>
DATE OF LATEST ALT	DATE OF FIRST ISSUE	AME/SME

1	RECTANGULAR PIPE	2t x100 x 75 x 420	1		SS-304	2.01	@
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:		
RECTANGULAR PIPE					SCALE	SSE/D	<i>L Panduranga Rao</i>
					1:5	CHD	
					ALT.	ALTD	S K MUTHUKUMAR
					b	DRN	S K MUTHUKUMAR
INDIAN RAILWAY STANDARDS INTEGRAL COACH FACTORY, CHENNAI - 600038							
					SHEET 1 OF 1		
					AAD16903		A3

AAD16904

▽ ROUGH MACHINED

▽▽ FIN'SH MACHINED

▽▽▽ FINE FINISH MACHINED

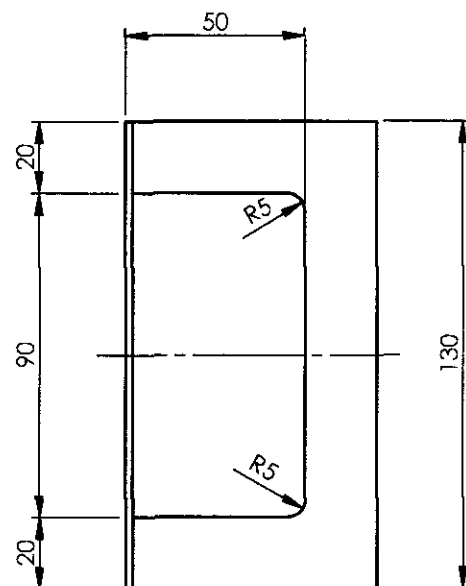
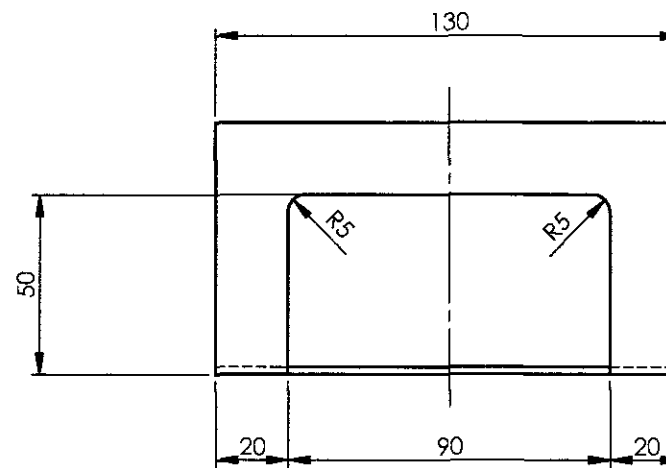
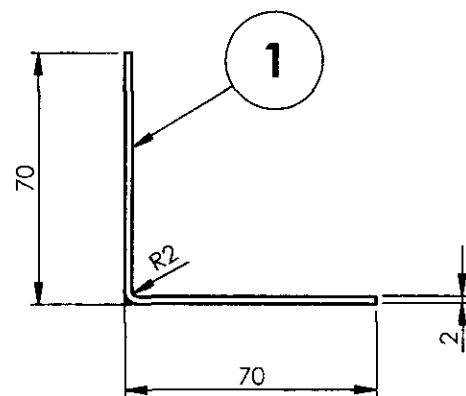
① ROUGH CLEANED

② BURRS REMOVED

③ CHAMFERED

REVISIONS

ALT.	ZONE	DESCRIPTION	APPROVED & DATE
a		MATERIAL REVISED	
b		LENGTH OF ITEM - 1 ALTD FROM 180 TO 130	



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.-

23-02-2022	22-07-2021	
DATE OF LATEST ALT.	DATE OF FIRST ISSUE	AME/SME

1	ANGLE	2 x 136 x 130	1		IS:6911 X04Cr19Ni9	0.15	
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:		
ANGLE					SCALE	SSE/D	S. Panduranga Rao
					1:1	CHD	
					ALT. b	ALTD	S K MUTHUKUMAR
						DRN	S K MUTHUKUMAR
					INDIAN RAILWAY STANDARDS		
INTEGRAL COACH FACTORY, CHENNAI - 600038			AAD16904			A3	

A		B		C		D		E		F	
REF.DRG.NO.		DATE OF LATEST ALT.		DATE OF FIRST ISSUE		AME/SME		INDIAN RAILWAY STANDARDS INTEGRAL COACH FACTORY, CHENNAI - 600038		SHEET 1 OF 1	
23-02-2022		22-07-2021						GROUP: 1-6 Roof Construction		SURFACE AREA IN Sq.m.:	
								CLOSING PIECE		WT/ASSY IN Kgs:	
								SCALE 2:1		SSE/D CHD	
								ALT. b		ALTD DRN	
								S K MUTHUKUMAR		S K MUTHUKUMAR	
								AAD16905		A3	

1		2		3		4		5		6		7		8	
AAD16906				▽ ROUGH MACHINED		① ROUGH CLEANED		REVISIONS							
				▽▽ FINISH MACHINED		② BURRS REMOVED		ALT.		ZONE		DESCRIPTION		APPROVED & DATE	
				▽▽▽ FINE FINISH MACHINED		③ CHAMFERED		b				MATERIAL REVISED			
								c				RM SIZE AND CUTAWAY SIZE REVISED.			

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	COVER SHEET	3 x 137 x 162	1		IS:6911 X04Cr19Ni9	0.34	
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:	
COVER SHEET					SCALE 1:1	SSE/D CHD	
					ALT. c	ALTD	S K MUTHUKUMAR
						DRN	S K MUTHUKUMAR
					INDIAN RAILWAY STANDARDS		
INTEGRAL COACH FACTORY, CHENNAI - 600038					AAD16906		A3

23-2-22	30-06-2021	
DATE OF LATEST ALT	DATE OF FIRST ISSUE	AME/SME

A

B

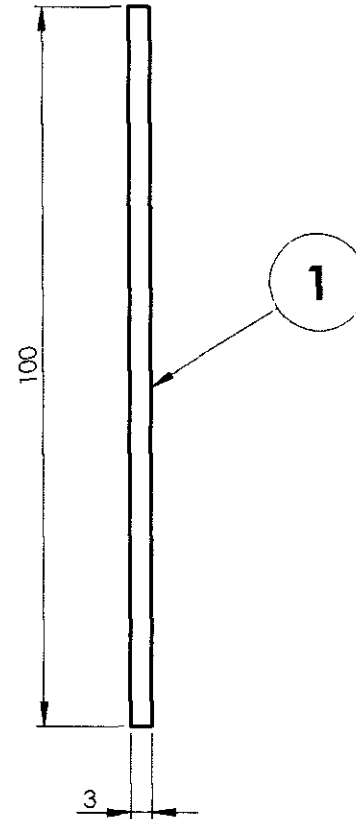
C


D

E

F

REF.DRG.NO.



REVISIONS			
ALT.	ZONE	DESCRIPTION	APPROVED & DATE
a		MATERIAL REVISED	
b		HOLE DIA ALTERED FROM 20 TO 25	

A

B

C

D

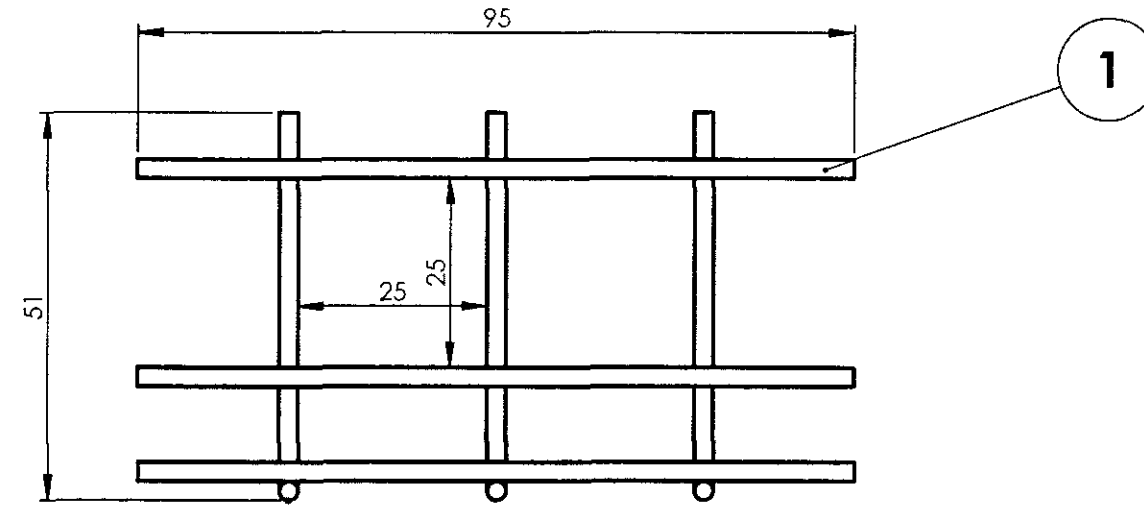
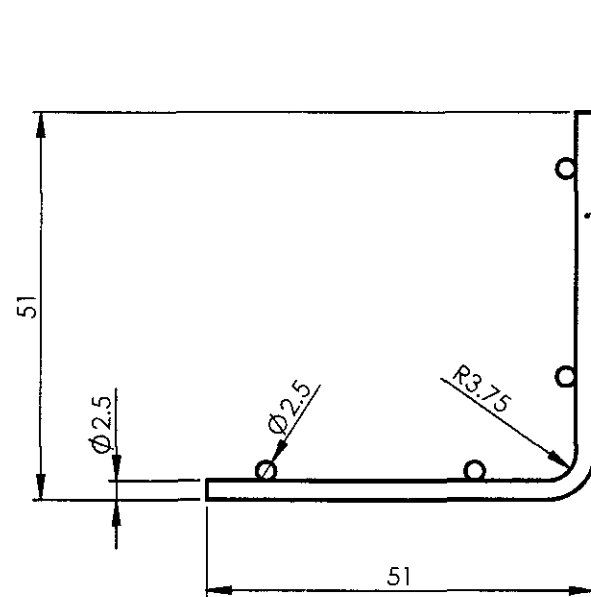
E

F

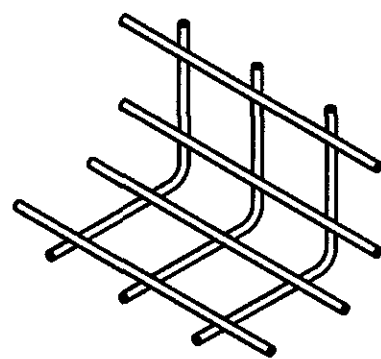
AAF16233

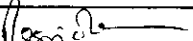
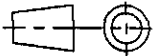
▽ ROUGH MACHINED	① ROUGH CLEANED
▽▽ FINISH MACHINED	② BURRS REMOVED
▽▽▽ FINE FINISH MACHINED	③ CHAMFERED

REVISIONS				APPROVED & DATE	
ALT.	ZONE	DESCRIPTION			

**NOTE:**

- @ 1. WELDED SS FABRIC TO IS:4948-2002, SIZE Ø2.5/25x25 CLAUSE 5.4 (SQUARE MESH SL No.6 OF ANNEXURE-A) TO BE USED.
- @ 2. SS 304 MAY BE USED AS AN ALTERNATE MATERIAL.

**ISOMETRIC VIEW**

1	WELDED SS WIRE FABRIC	95 x 98	1		IS 4528 X04Cr13	0.03	@
QTY	DESCRIPTION	DIMENSIONS	ITEM NO.	REF. DRGS	MATL.SPEC.	WT/UNIT IN KGS	REMARKS
GROUP: 1-6 Roof Construction		SURFACE AREA IN Sq.m.:0.01			WT/ASSY IN Kgs:		
WELDED SS WIRE FABRIC					SCALE	SSE/D	
					1:1	CHD	
					ALT.	ALTD	
						DRN	Amal George
INDIAN RAILWAY STANDARDS INTEGRAL COACH FACTORY, CHENNAI - 600038				SHEET 1 OF 1			
					AAF16233		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 EN ISO 2553.
WEIGHT GIVEN IN DRAWING IS FOR INDICATIVE PURPOSE ONLY

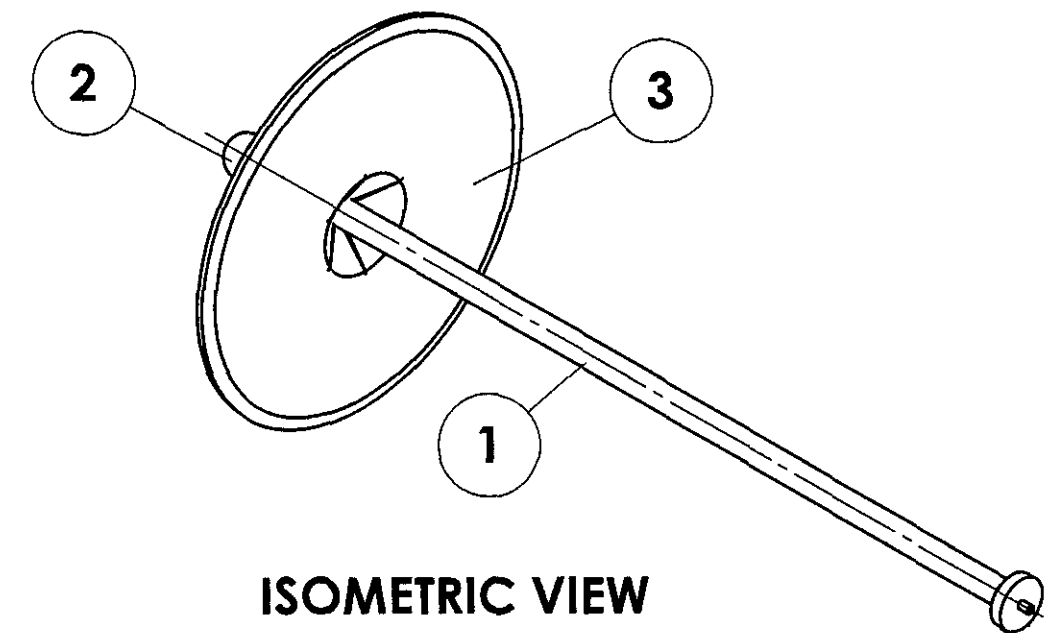
REF.DRG.NO.-

-	12-08-2025	
DATE OF LATEST ALT.	DATE OF FIRST ISSUE	AME/SME

49516008

▽ ROUGH MACHINED	01 ROUGH CLEANED
▽▽ FINISH MACHINED	01b BURRS REMOVED
▽▽▽ FINE FINISH MACHINED	18 CHAMFERED

REVISIONS			
ALT.	ZONE	DESCRIPTION	APPROVED & DATE
a		NOTE REVISED. VIEWS UPDATED AS PER DETAIL.	



ISOMETRIC VIEW

NOTE:

- ITEM-1 TO BE RESISTANCE WELDED AS SHOWN IN THE RESPECTIVE DRAWING AND ITEMS-2&3 TO BE SUPPLIED IN LOOSE (TO BE ASSEMBLED IN FURNISHING AFTER INSERTING THERMAL INSULATION).
- 5% EXCESS QTY OF ITEMS-2&3 TO BE SUPPLIED AGAINST THE QTY CALLED FOR IN THE RESPECTIVE ASSEMBLY DRAWINGS.

1	SERRATED SPRING WASHER		3	AAA16495		0.003	
1	CAP		2	AAA16494		0.000	
1	WELDING PIN		1	AAA16493		0.002	
QTY.	DESCRIPTION	DIMENSIONS	ITEM NO.	REF.DRGS.	MATL	WT/UNIT IN KGS	REMARKS

GROUP: 1-6 ROOF CONSTRUCTION

SURFACE AREA IN Sq.m.:0.002

WT/ASSY IN Kgs:

WELDING PIN ASSEMBLY

SCALE 1:1	SSE/D CHD	
ALT. a	ALTD DRN	A.Palanichamy 3D:A.Palanichamy 2D:P.Murugan

INDIAN RAILWAY STANDARDS

INTEGRAL COACH FACTORY, CHENNAI - 600038

SHEET 1 OF 1

LWGSCWAC2

49516008 A3

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

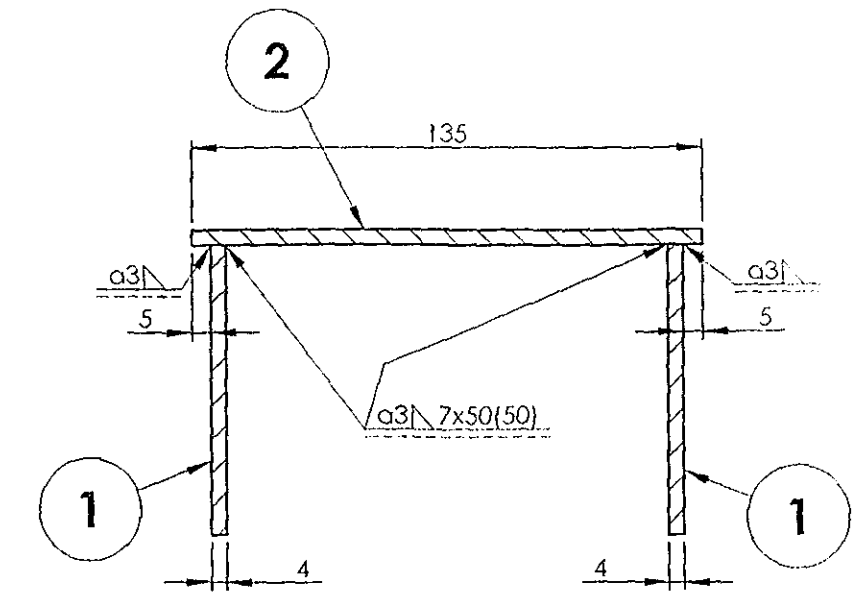
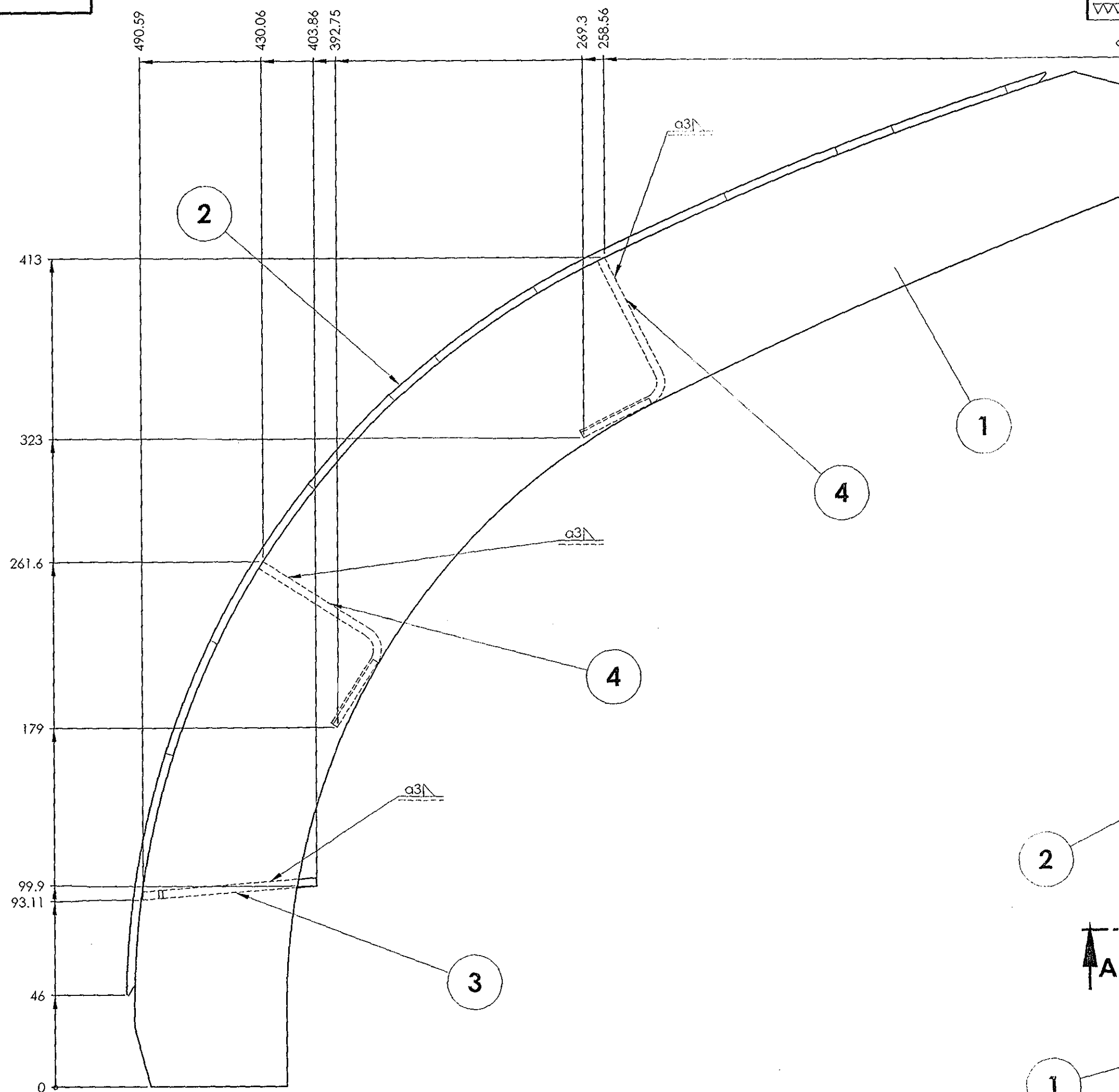
REF.DRG.NO.mi005176

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

59316016

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

REVISIONS			
ALT.	ZONE	DESCRIPTION	APPROVED & DATE

SECTION A-A
SCALE 1 : 2

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. ALL WELDINGS SHALL BE TIG WELDING UNLESS OTHERWISE SPECIFIED.
6. ALL BUTT WELDINGS TO BE DONE AT COACH OUTSIDE AND ROUGH GRINDING TO BE DONE ON THE SAME SIDE. PENETRATION SHOULD NOT BE GROUND.

2	STIFFENING ANGLE		4	AAA16934		0.434	
1	WEB		3	AAA16933		0.319	
1	FLANGE		2	AAA16932		2.367	
2	ROOF ARCH		1	AAA16930		1.722	
QTY.	DESCRIPTION	DIMENSIONS	ITEM NO.	REF.DRGS.	MATL	WT/UNIT IN KGS	REMARKS

GROUP: 1-6 ROOF ASSEMBLY SURFACE AREA IN Sq.m.: 0.467 WT/ASSY IN Kgs: 6.998

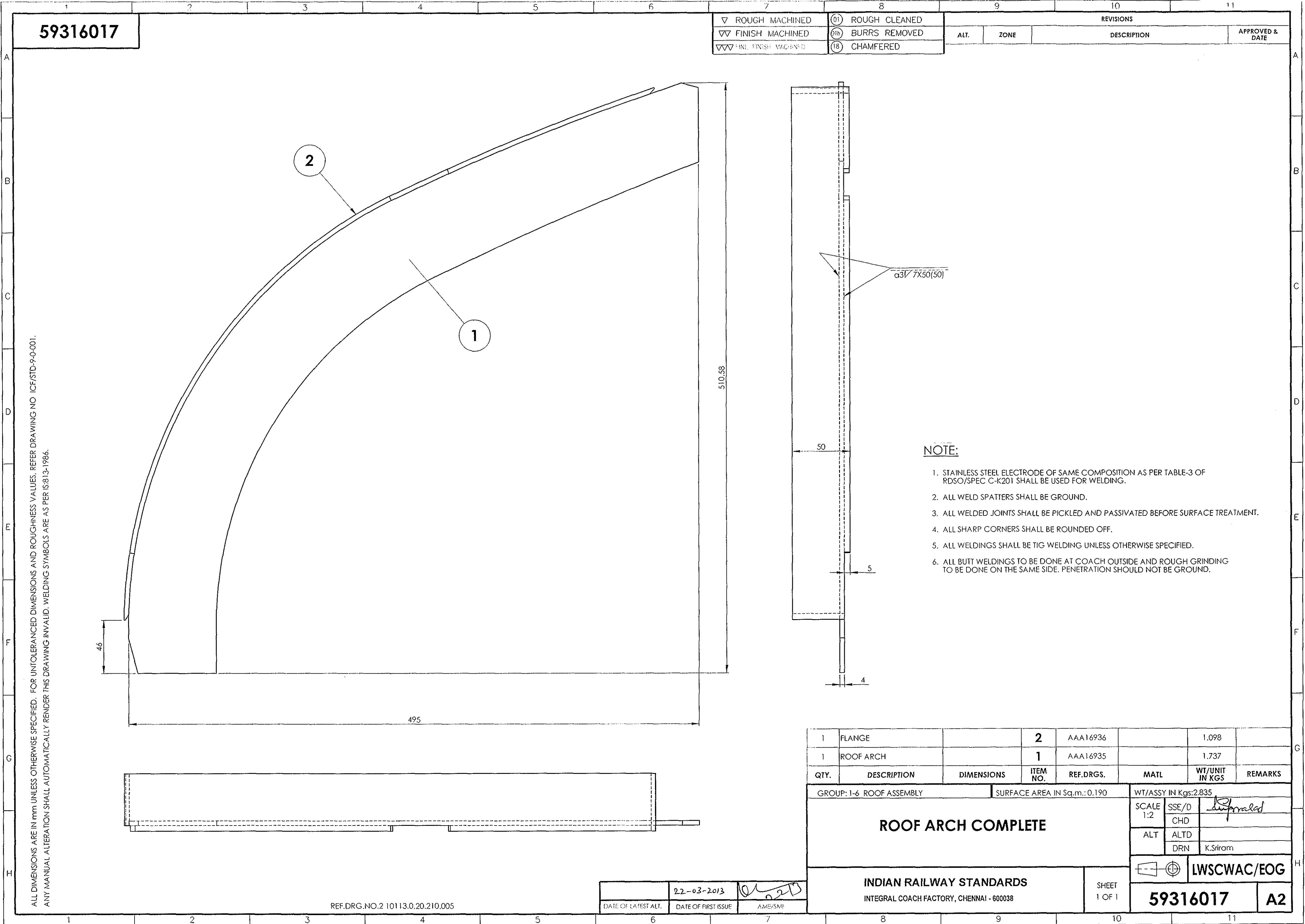
ROOF ARCH COMPLETE

SCALE 1:5	SSE/D	CHD	DRN	K.Sriram
ALT	ALTD	DRN		

INDIAN RAILWAY STANDARDS
INTEGRAL COACH FACTORY, CHENNAI - 600038SHEET
1 OF 1LWSCWAC/EOG
59316016
A2

DATE OF LATEST A.D.	22-03-2013	DATE OF PRELIMINARY ISSUE	22-03-2013	AMP/SME
---------------------	------------	---------------------------	------------	---------

REF.DRG. NO. 2 10113.0.20.210.004



59316017

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

(01) ROUGH CLEANED
(01b) BURRS REMOVED
(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. ICF/STD-9-0-001.
ANY MANUAL ALTERATION SHALL AUTOMATICALLY RENDER THIS DRAWING INVALID. WELDING SYMBOLS ARE AS PER IS 813-1986.

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. ALL WELDINGS SHALL BE TIG WELDING UNLESS OTHERWISE SPECIFIED.
6. ALL BUTT WELDINGS TO BE DONE AT COACH OUTSIDE AND ROUGH GRINDING TO BE DONE ON THE SAME SIDE. PENETRATION SHOULD NOT BE GROUND.

1	FLANGE		2	AAA16936		1.098	
1	ROOF ARCH		1	AAA16935		1.737	
QTY.	DESCRIPTION	DIMENSIONS	ITEM NO.	REF.DRGS.	MATL	WT/UNIT IN KGS	REMARKS
GROUP: 1-6 ROOF ASSEMBLY				SURFACE AREA IN Sq.m.: 0.190		WT/ASSY IN Kgs: 2.835	
ROOF ARCH COMPLETE					SCALE 1:2	SSE/D	<i>Supraled</i>
					CHD		
					ALT	ALTD	
					DRN		K.Sriram
INDIAN RAILWAY STANDARDS					LWSCWAC/EOG		
INTEGRAL COACH FACTORY, CHENNAI - 600038					SHEET 1 OF 1		
					59316017		
					A2		

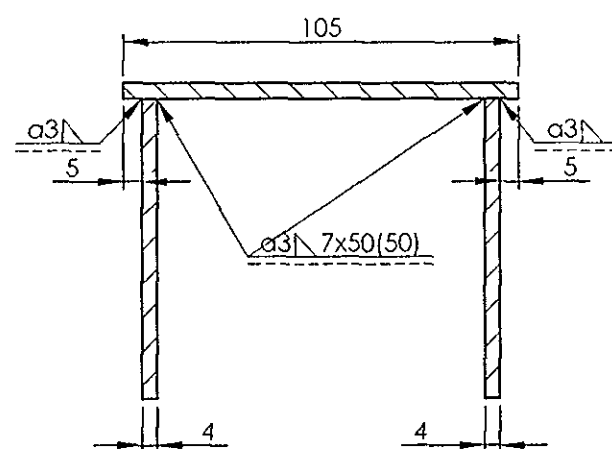
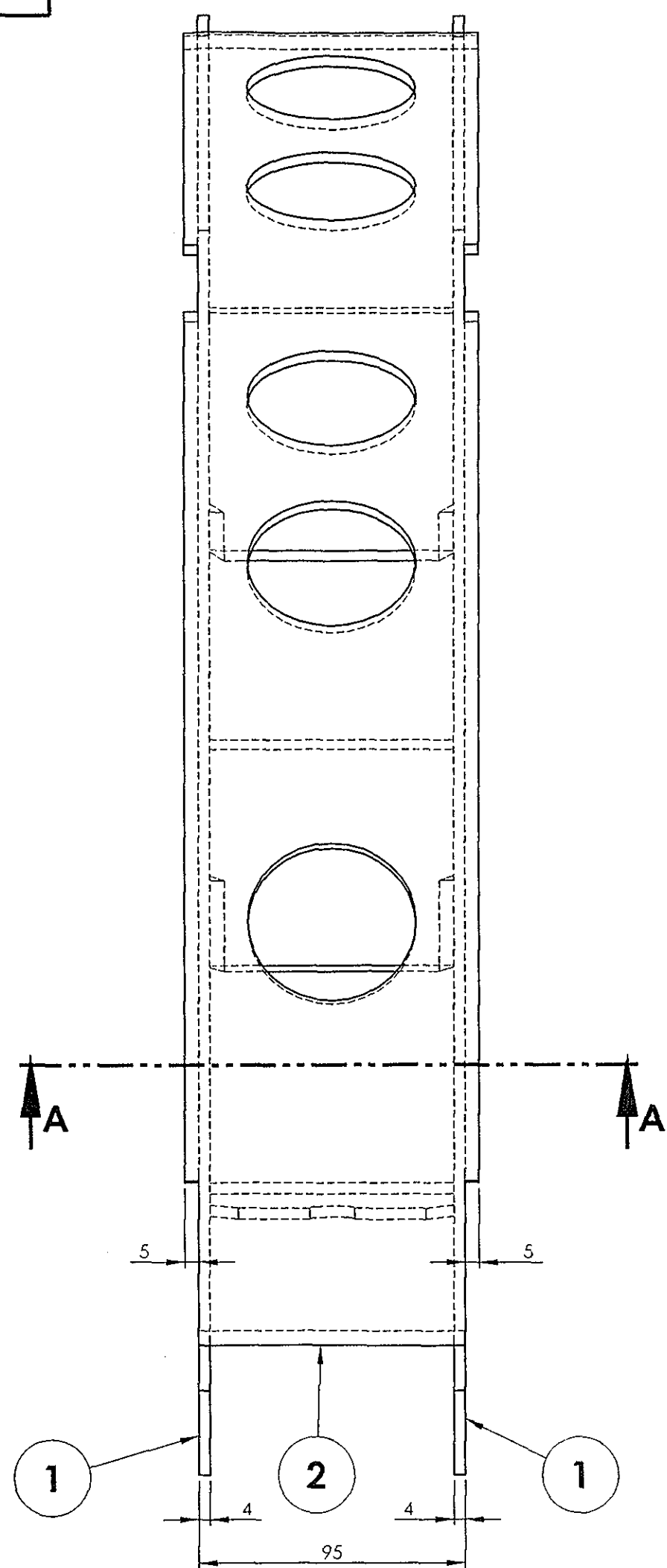
REF.DRG.NO.2 10113.0.20.210.005

	22-03-2013	<i>22B</i>
DATE OF LATEST ALT.	DATE OF FIRST ISSUE	AME/SAM

59316018

▽ ROUGH MACHINED	01 ROUGH CLEANED
▽▽ FINISH MACHINED	01b BURRS REMOVED
▽▽▽ FINE FINISH MACHINED	18 CHAMFERED

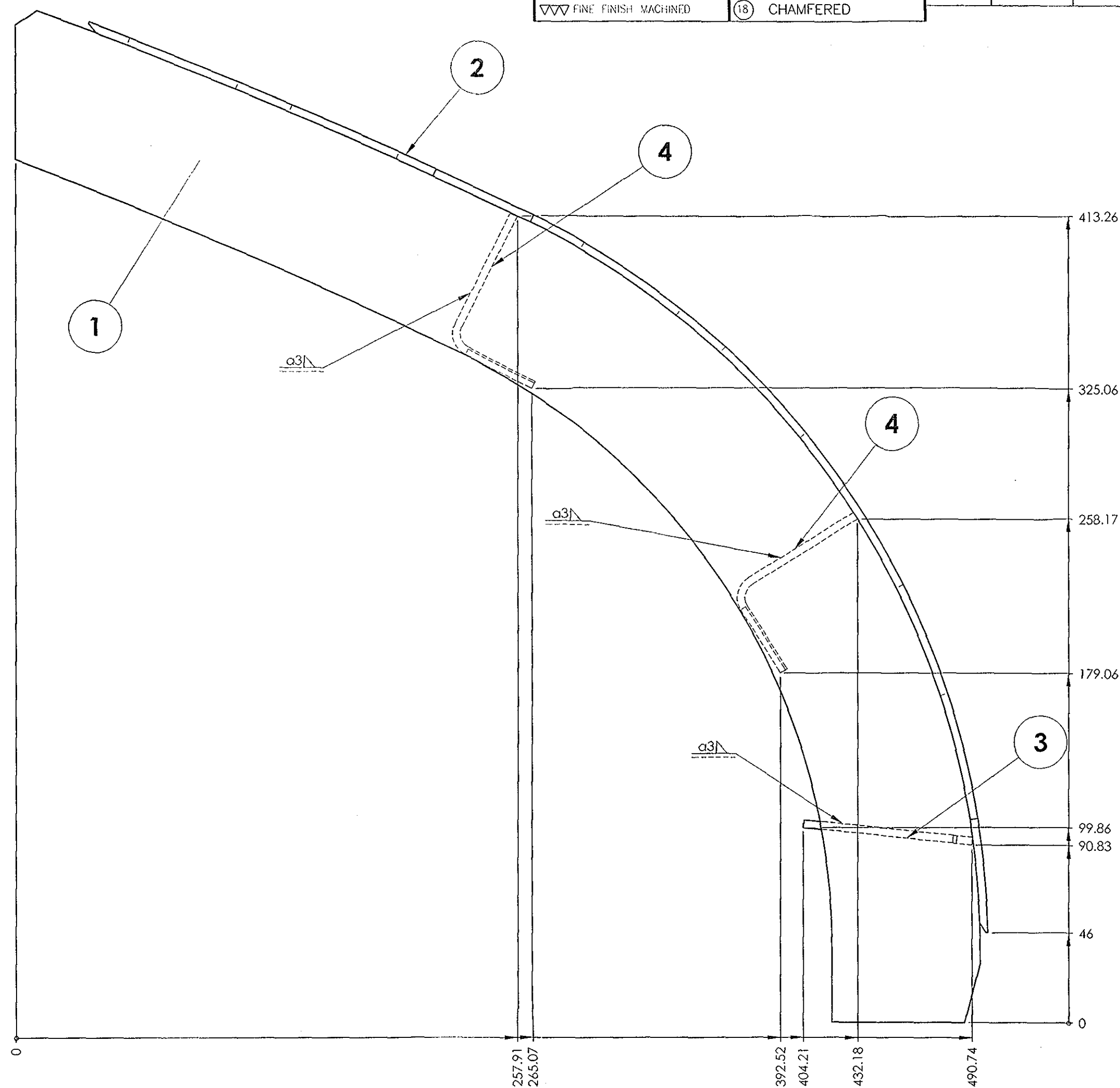
REVISIONS			
ALT.	ZONE	DESCRIPTION	APPROVED & DATE



SECTION A-A
SCALE 1 : 2

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. ALL WELDINGS SHALL BE TIG WELDING UNLESS OTHERWISE SPECIFIED.
6. ALL BUTT WELDINGS TO BE DONE AT COACH OUTSIDE AND ROUGH GRINDING TO BE DONE ON THE SAME SIDE. PENETRATION SHOULD NOT BE GROUND.



2	STIFFENING ANGLE		4	AAA16940		0.322	
1	WEB		3	AAA16939		0.236	
1	FLANGE		2	AAA16938		1.864	
2	ROOF ARCH		1	AAA16937		1.758	
QTY.	DESCRIPTION	DIMENSIONS	ITEM NO.	REF.DRGS.	MATL	WT/UNIT IN KGS	REMARKS

GROUP: 1-6 ROOF ASSEMBLY		SURFACE AREA IN Sq.m.: 0.420		WT/ASSY IN Kgs: 6.260	
ROOF ARCH COMPLETE				SCALE 1:5	SSE/D CHD
				ALT	ALTD
				DRN	K.Sriram

INDIAN RAILWAY STANDARDS
INTEGRAL COACH FACTORY, CHENNAI - 600038

SHEET
1 OF 1

59316018

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 IS:813-1986.

REF.DRG.NO.2 10113.0.20.210.006

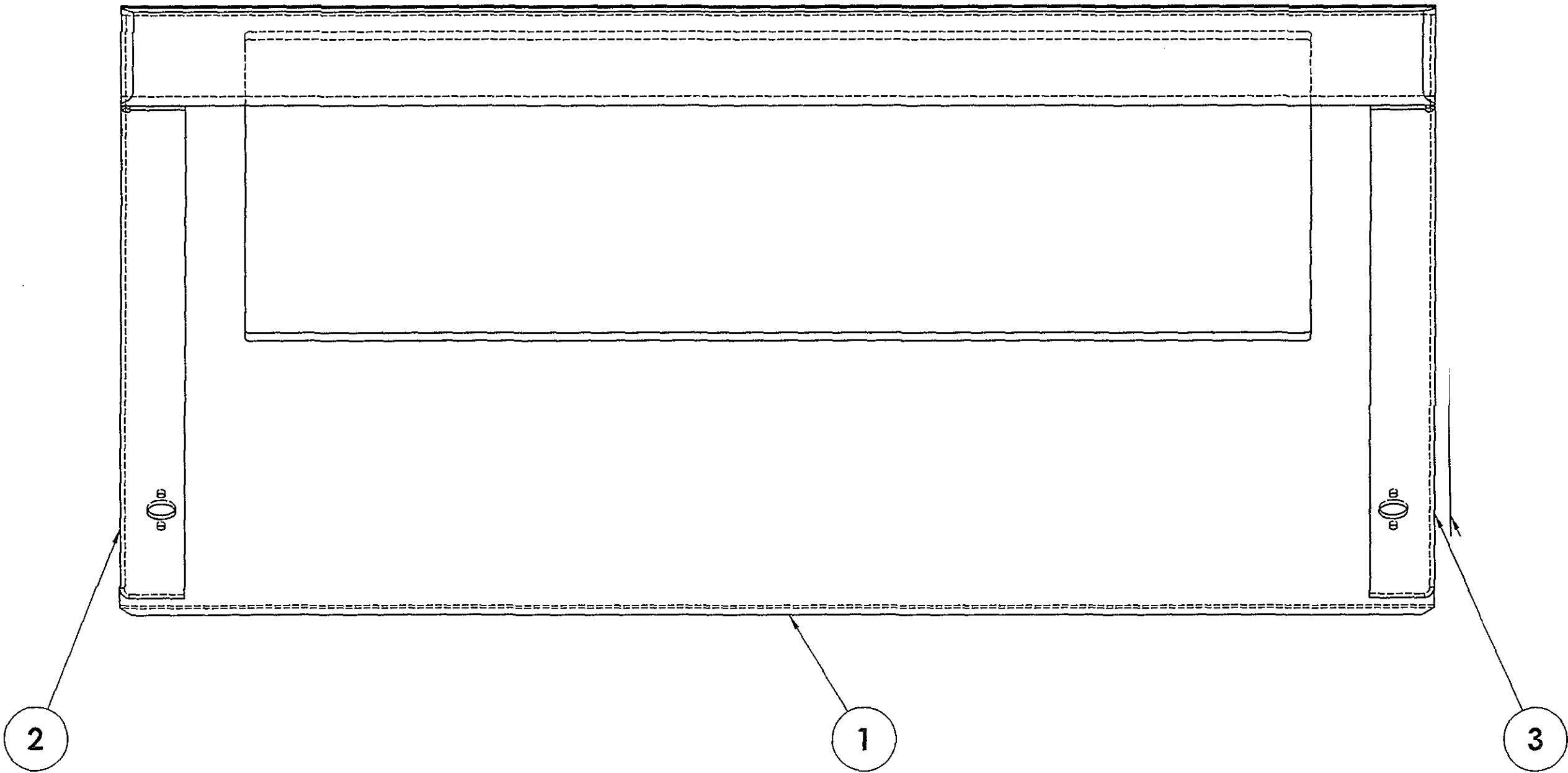
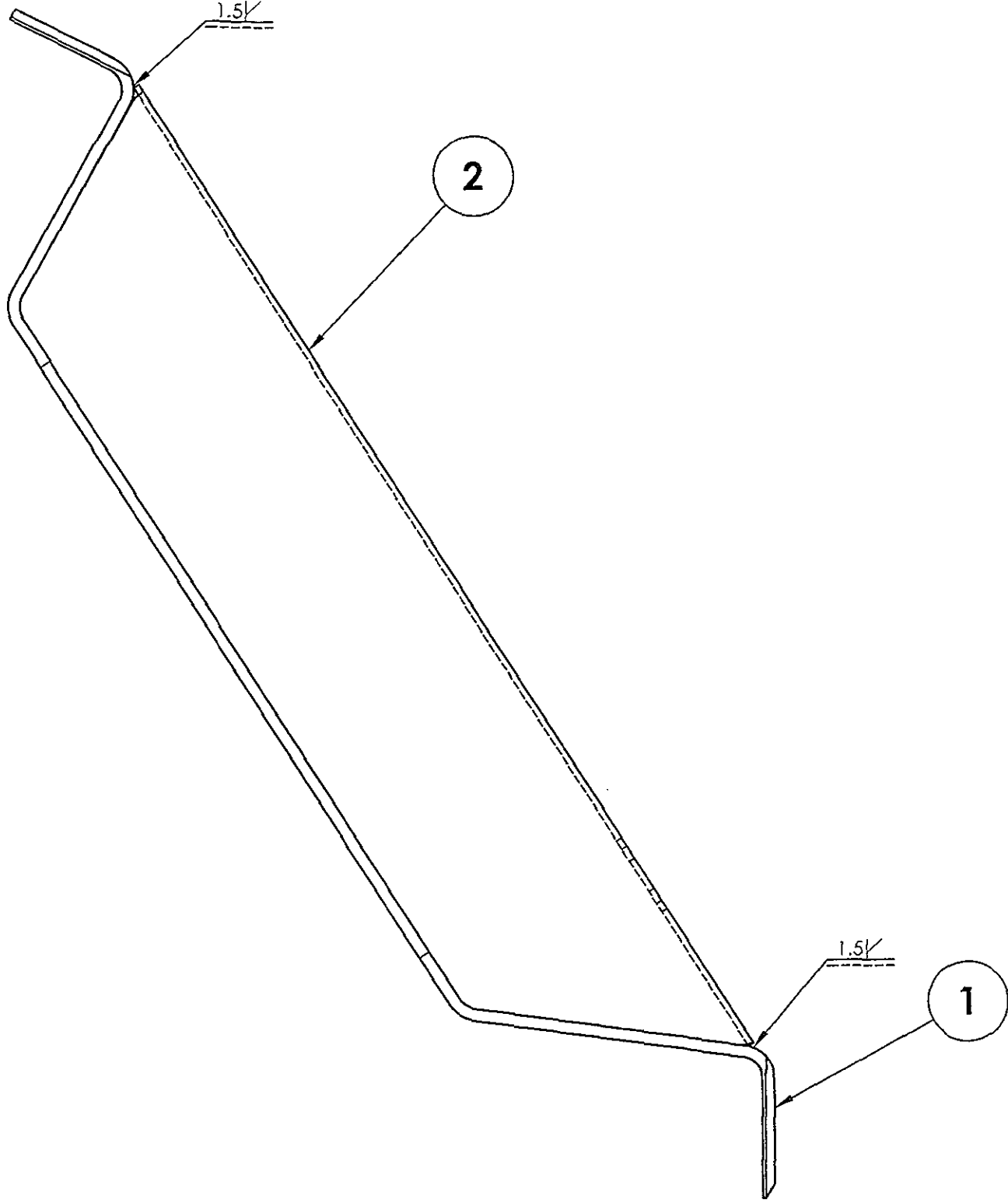
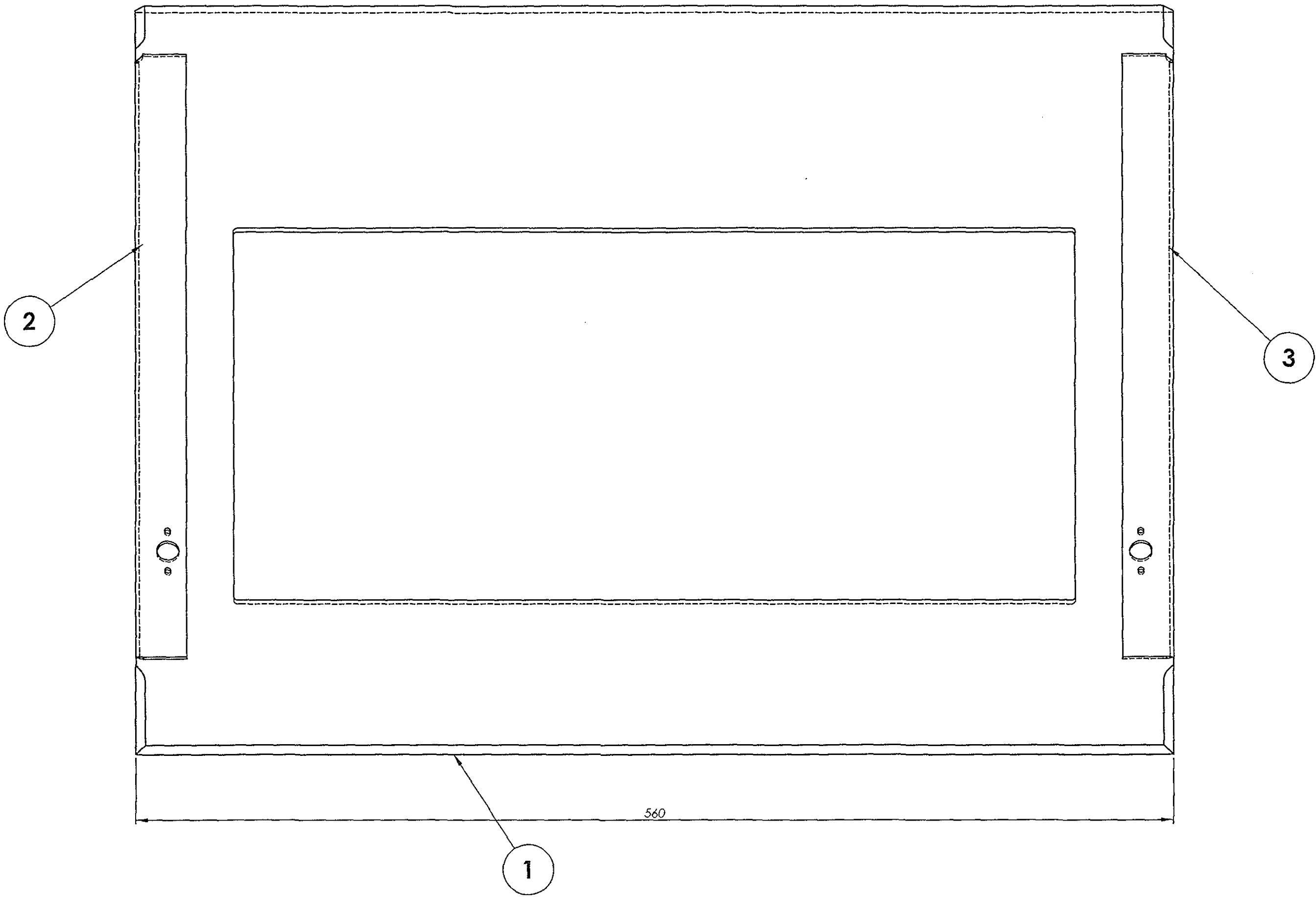
DATE OF LATEST ALT.	22-03-2013	DATE OF FIRST ISSUE	10-03-2013	AMU/SME
---------------------	------------	---------------------	------------	---------

59316019

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

① ROUGH CLEANED
①① BURRS REMOVED
①① CHAMFERED

REVISIONS			APPROVED & DATE		
ALT.	ZONE	DESCRIPTION			



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. ALL WELDINGS SHALL BE TIG WELDING UNLESS OTHERWISE SPECIFIED.
6. ALL BUTT WELDINGS TO BE DONE AT COACH OUTSIDE AND ROUGH GRINDING TO BE DONE ON THE SAME SIDE. PENETRATION SHOULD NOT BE GROUND.

1			3	AAA16943		0.069	
1	CLOSING ANGLE		2	AAA16942		0.556	
1	TERMINAL FRAME		1	AAA16941		6.658	
QTY.	DESCRIPTION	DIMENSIONS	ITEM NO.	REF.DRGs.	MATL	WT/UNIT IN KGS	REMARKS
GROUP: 1-6 ROOF ASSEMBLY			SURFACE AREA IN Sq.m.: 0.575		WT/ASSY IN Kgs: 7.769		
LOCATION FRAME COMPLETE				SCALE 1:2	SSE/D	CHD	
				ALT.	ALTD	DRN	
						K.Sriram	
						LWSCWAC/EOG	
INDIAN RAILWAY STANDARDS INTEGRAL COACH FACTORY, CHENNAI - 600038					SHEET 1 OF 1	59316019	A1

ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE SPECIFIED. FOR UNTOLERANCED DIMENSIONS AND ROUGHNESS VALUES, REFER DRAWING NO ICF/STD-9-Q-001. ANY MANUAL ALTERATION SHALL AUTOMATICALLY RENDER THIS DRAWING INVALID. WELDING SYMBOLS ARE AS PER IS813:1986.

REF.DRG.NO.3 10113.0.20.200.129

22-03-2013	AME/SME
DATE OF LATEST ALT.	DATE OF FIRST ISSUE

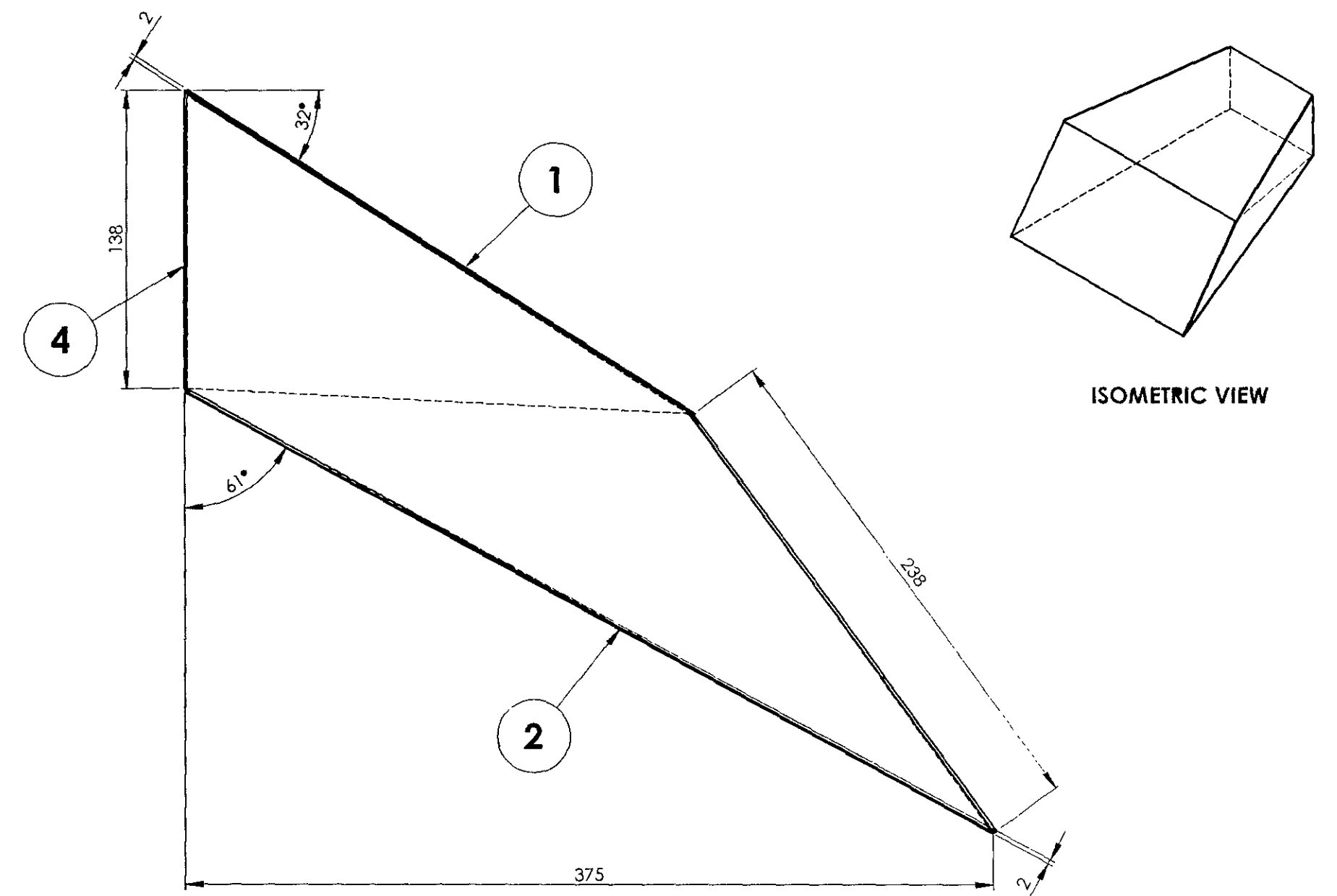
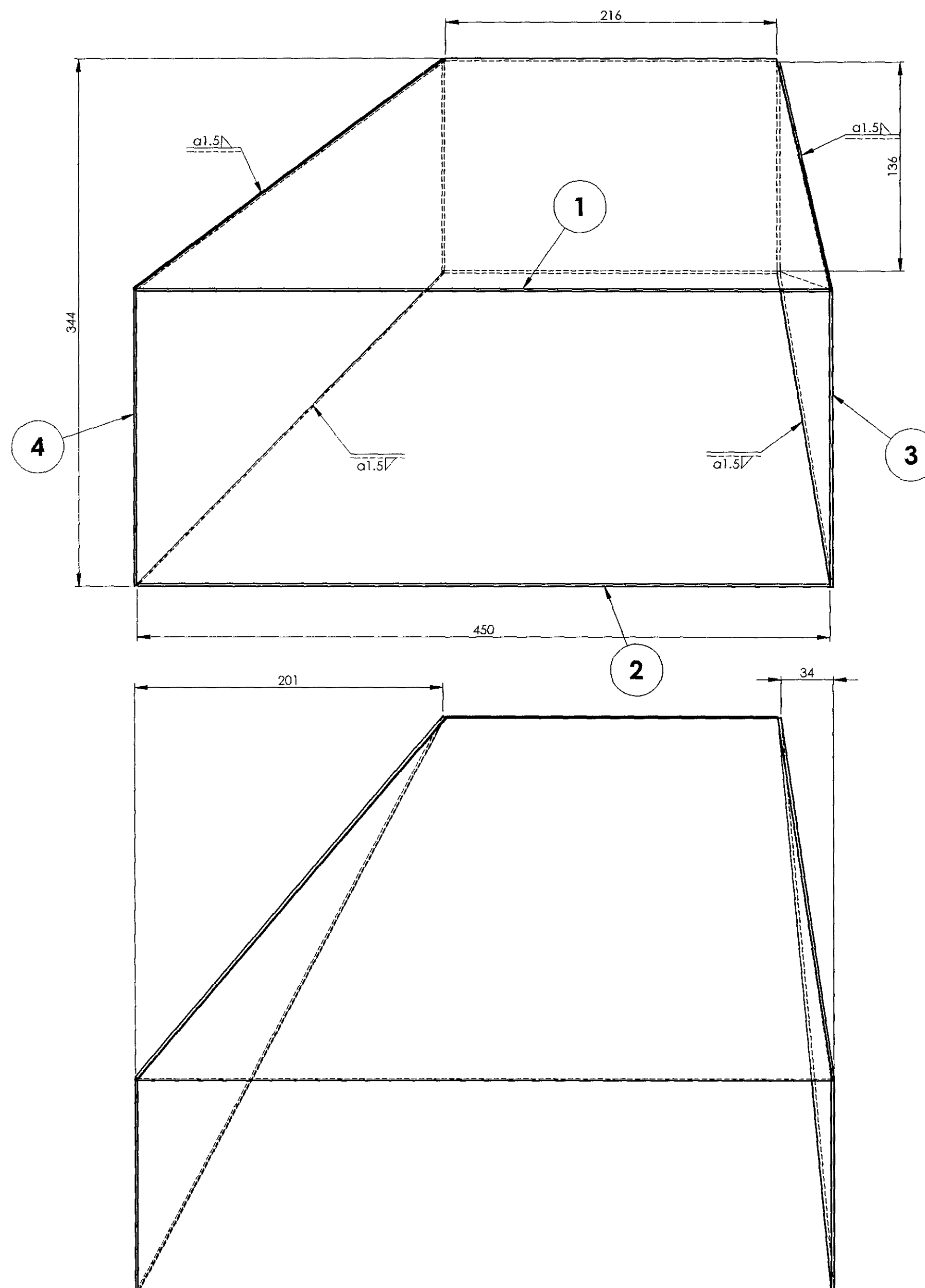
59316056

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

① ROUGH CLEANED
② BURRS REMOVED
③ CHAMFERED

REVISIONS

ALT.	ZONE	DESCRIPTION	APPROVED & DATE
a		SUCTION PIPE MODIFIED AND VIEWS UPDATED.	V. 14/6/24



ISOMETRIC VIEW

NOTE:-

1. STAINLESS STEEL ELECTRODE OF SAME COMPOSITION AS PER TABLE-3 OF RDSO/SPEC. CK-201 SHALL BE USED FOR WELDING.
2. ALL WELD SPATTERS SHALL BE GROUND.
3. ALL SHARP CORNERS SHALL BE ROUNDED OFF.
4. ALL WELDED JOINTS SHALL BE PICKLED AND PASSIVATED BEFORE SURFACE TREATMENT.
5. ALL WELDING SHALL BE OF TIG UNLESS OTHERWISE SPECIFIED.
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.

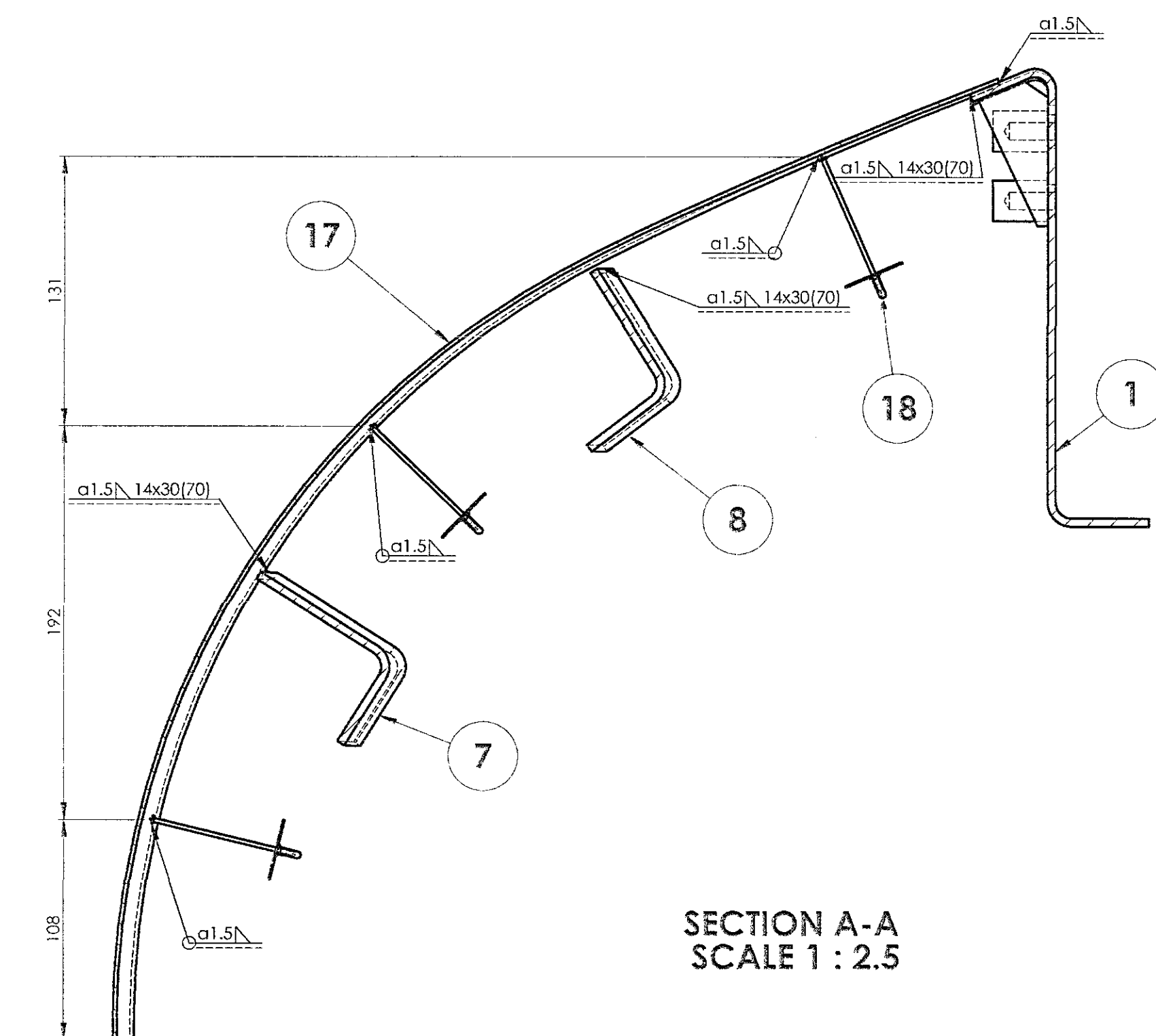
1	SIDE SHEET		4	AAE16686		0.845	
1	SIDE SHEET		3	AAE16687		0.613	
1	BOTTOM SHEET		2	AAE16688		2.269	
1	TOP SHEET		1	AAE16689		1.492	
QTY.	DESCRIPTION	DIMENSIONS	ITEM NO.	REF.DRGS.	MATL	WT/UNIT IN KGS	REMARKS
GROUP: I-6 Roof Construction				SURFACE AREA IN Sq.m.: 0.665		WT/ASSY IN Kgs: 5.239	
SUCTION PIPE COMPLETE				SCALE 1:2.5	SSE/D	A. Pankarajee	
				CHD	CHD		
				ALT	ALT	E.SATHISH KUMAR	
				DRN	DRN	E.SATHISH KUMAR	
INDIAN RAILWAY STANDARDS				SHEET 1 OF 1		59316056	
INTEGRAL COACH FACTORY, CHENNAI - 600038						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 IS:813-1986.

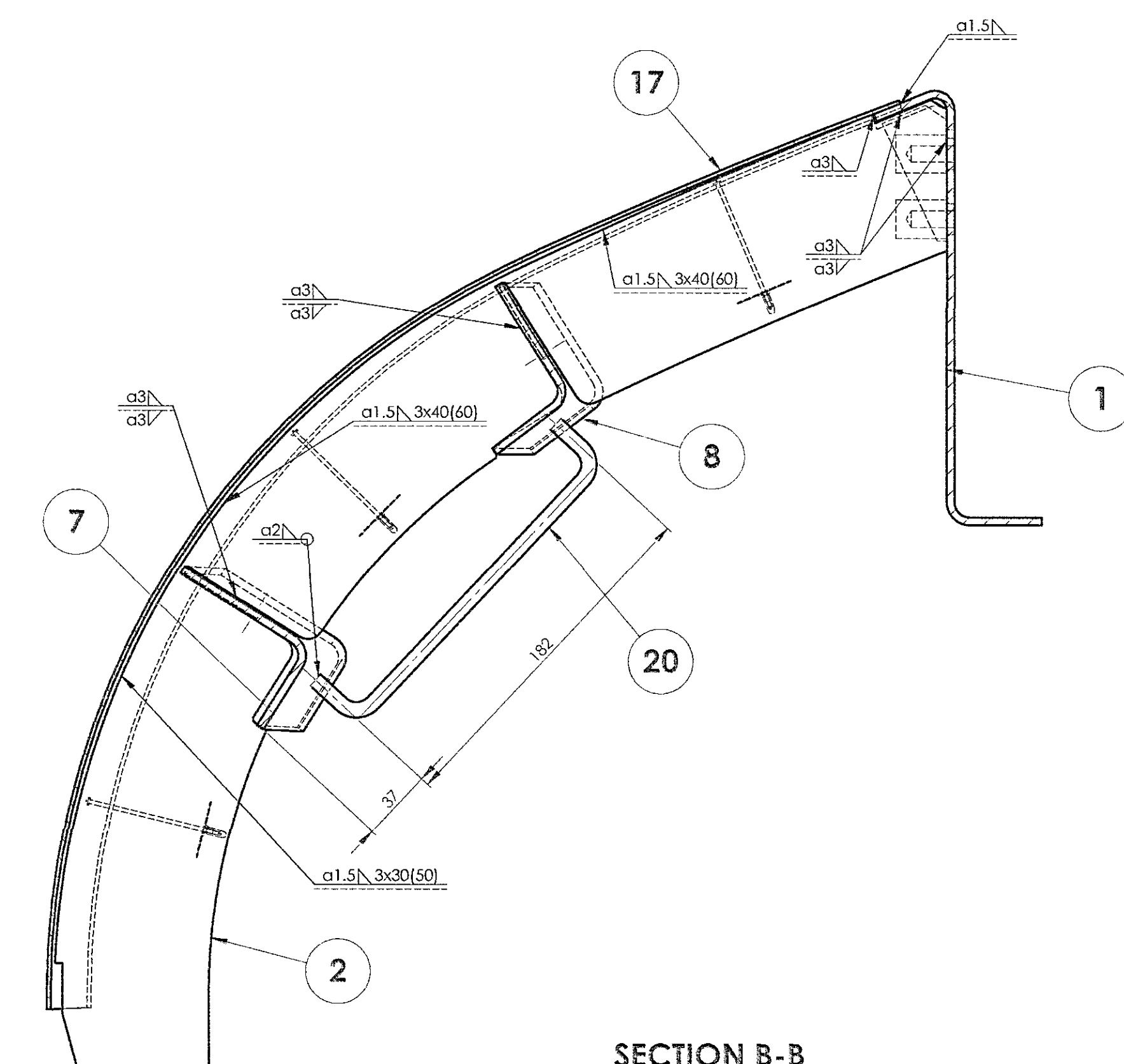
REF.DRG.NO.2 10113.0.20.200.007

15-03-24	07-06-23	V. 14/6/24
DATE OF LATEST ALT	DATE OF FIRST ISSUE	AME/SME

12	13
▽ ROUGH MACHINED	① ROUGH CLEANED
▽▽ FINISH MACHINED	② BURRS REMOVED
▽▽▽ FINE FINISH MACHINED	③ CHAMFERED




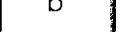
SECTION A-A
SCALE 1 : 2.5



SECTION B-B
SCALE 1 : 2.5

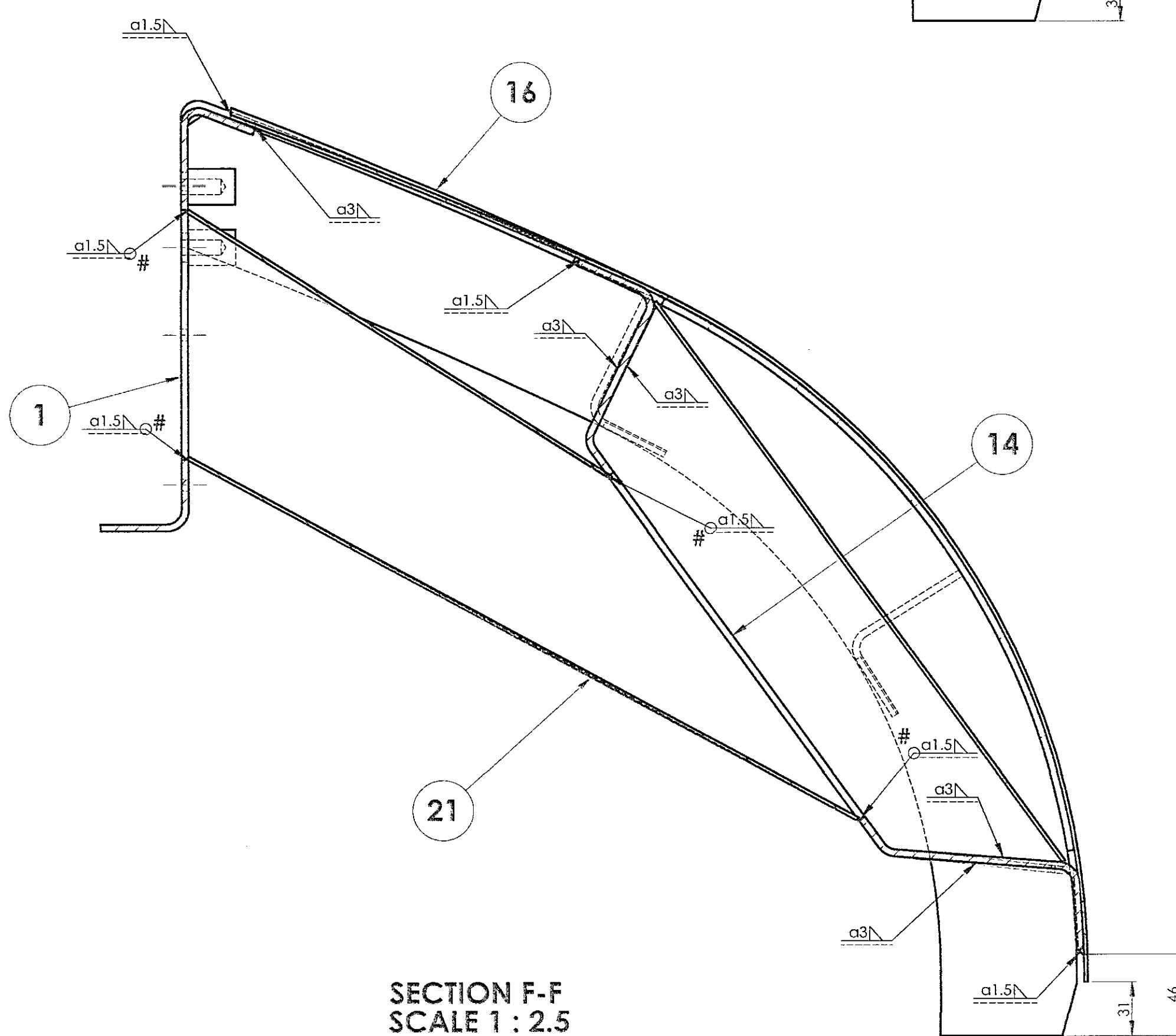
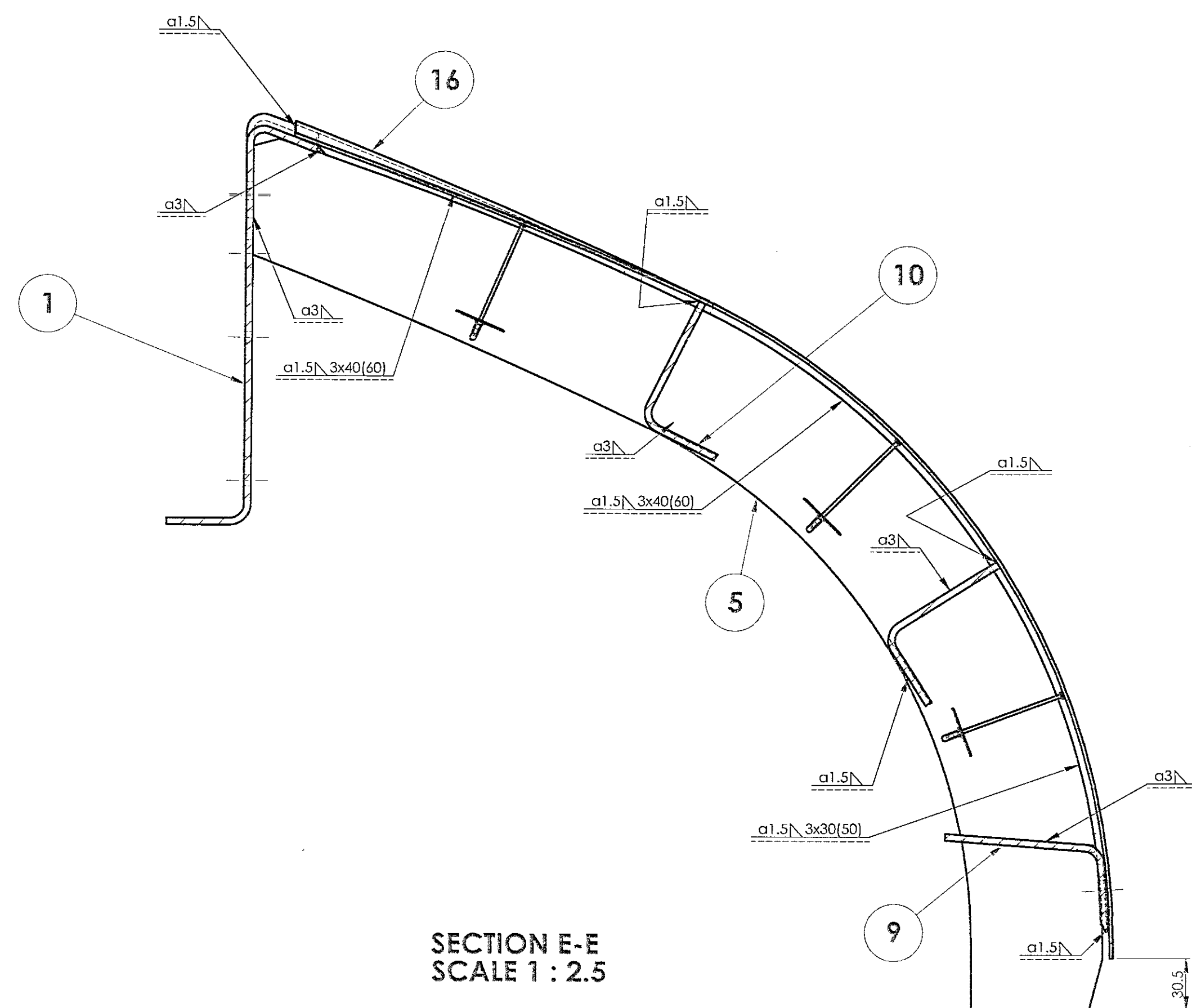
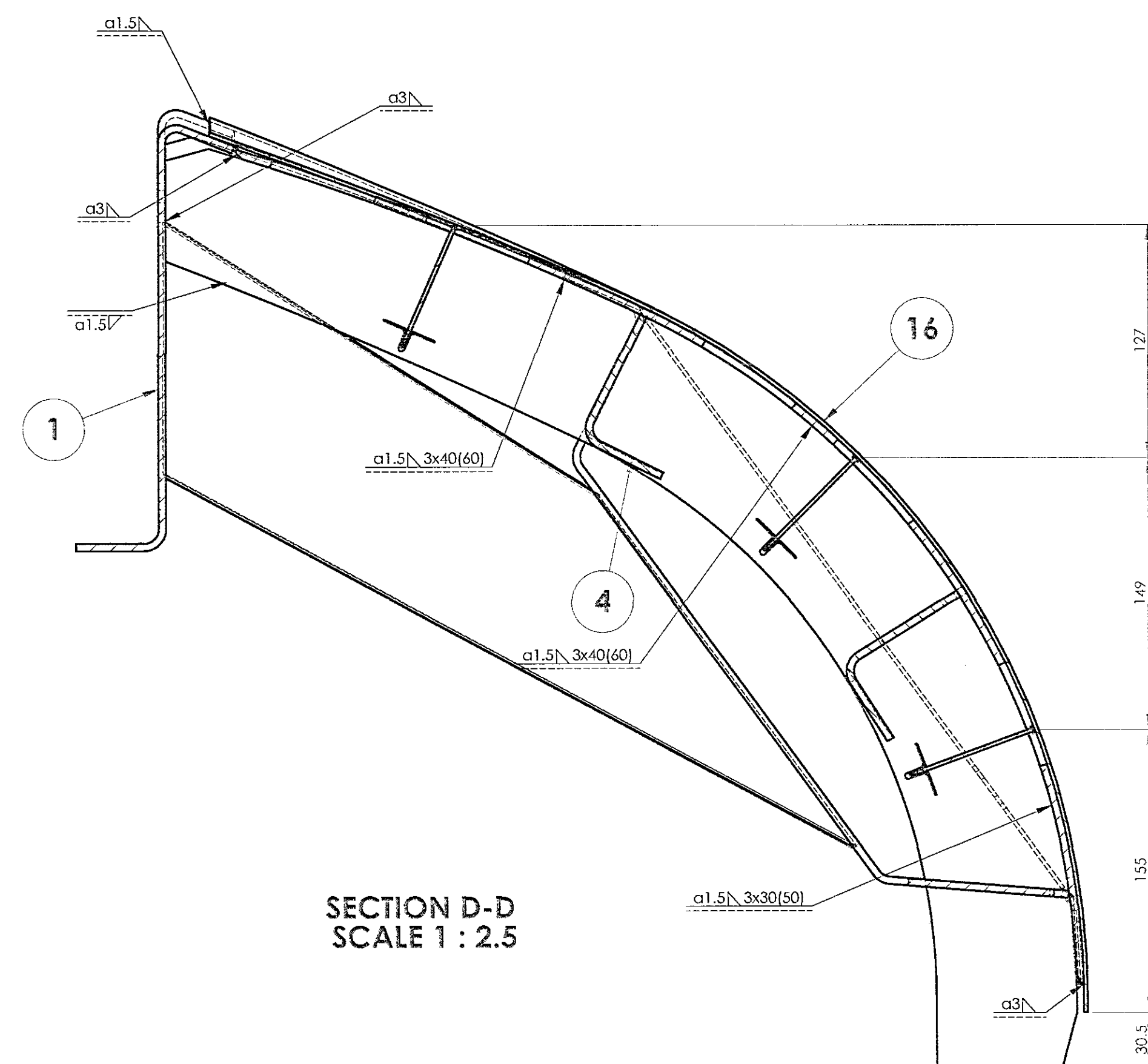
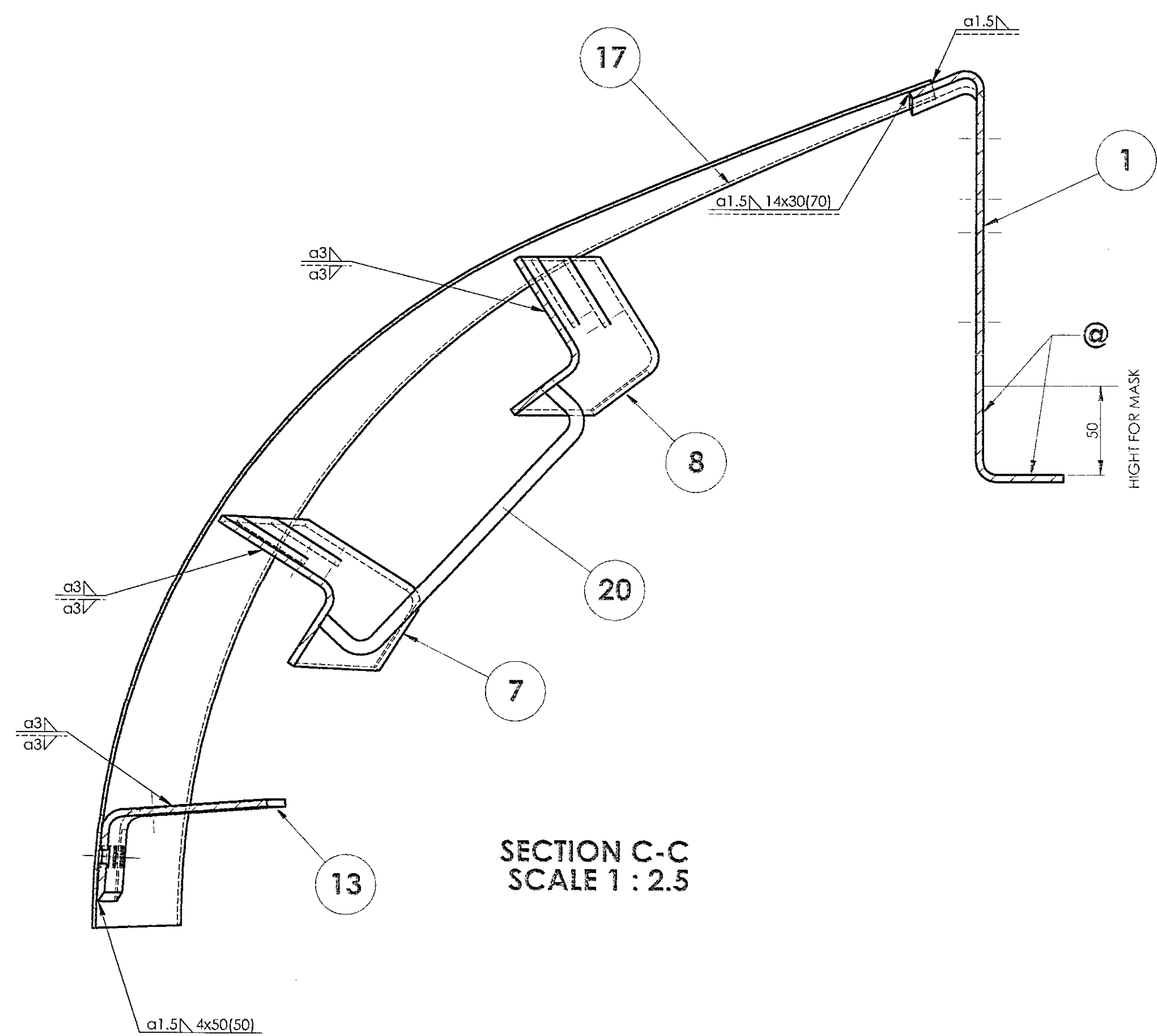
REF.DRG.NO.1 10113.0.20.200.000

20-02-2026	13-11-2021	
DATE OF LATEST AIT	DATE OF FIRST ISSUE	AME/SM

GROUP: 1-6 Roof Construction		SURFACE AREA IN Sq.m.: 8.222		WT/ASSY IN Kgs:	
FINAL ROOF ELEMENT COMPLETE (FOR METAL RMPU TROUGH)				SCALE	SSE/D
				1:5	CHD
				ALT.	ALTD
				b	DRN
				AMAL GEORGE	
				Amal George	
INDIAN RAILWAY STANDARDS				SHEET	
INTEGRAL COACH FACTORY, CHENNAI - 600088				1 OF 3	
				 LRAAC	
				83416016	
				A1	

83416016

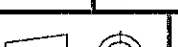
▽ ROUGH MACHINED	(01) ROUGH CLEANED
▽▽ FINISH MACHINED	(02) BURRS REMOVED
▽▽▽ FINE FINISH MACHINED	(03) CHAMFERED



ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE SPECIFIED. FOR UNTOOLERANCED DIMENSIONS AND ROUGHNESS VALUES, REFER DRAWING NO. ICF/STD-90-001.
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.1 10113.0.20.200.002

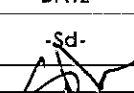
20-02-2026	13-11-2021	AME/SME
DATE OF LATEST ALT.	DATE OF FIRST ISSUE	AME/SME

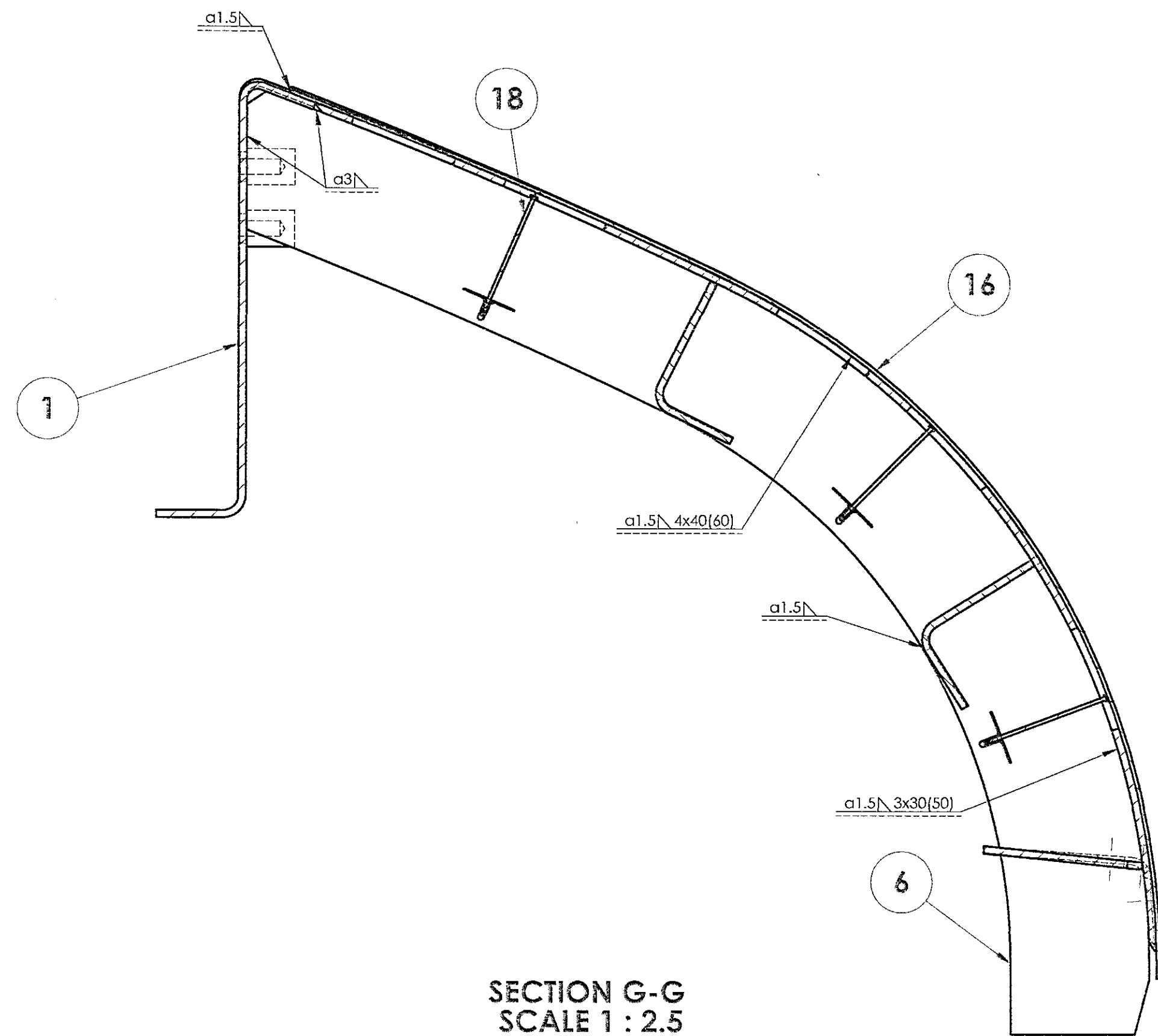
GROUP: 1-6 Roof Construction		SURFACE AREA IN Sq.m.: 8.222		WT/ASSY IN Kgs:	
FINAL ROOF ELEMENT COMPLETE (FOR METAL RMPU TROUGH)	SCALE 1:5	SSE/D	B. L. L.		
		CHD			
		ALT.	ALTID	AMAL GEORGE	
		b	DRN	Amal George	
				LRAAC	
INDIAN RAILWAY STANDARDS INTEGRAL COACH FACTORY, CHENNAI - 600088		SHEET 2 OF 3		83416016	
				A1	

83416016

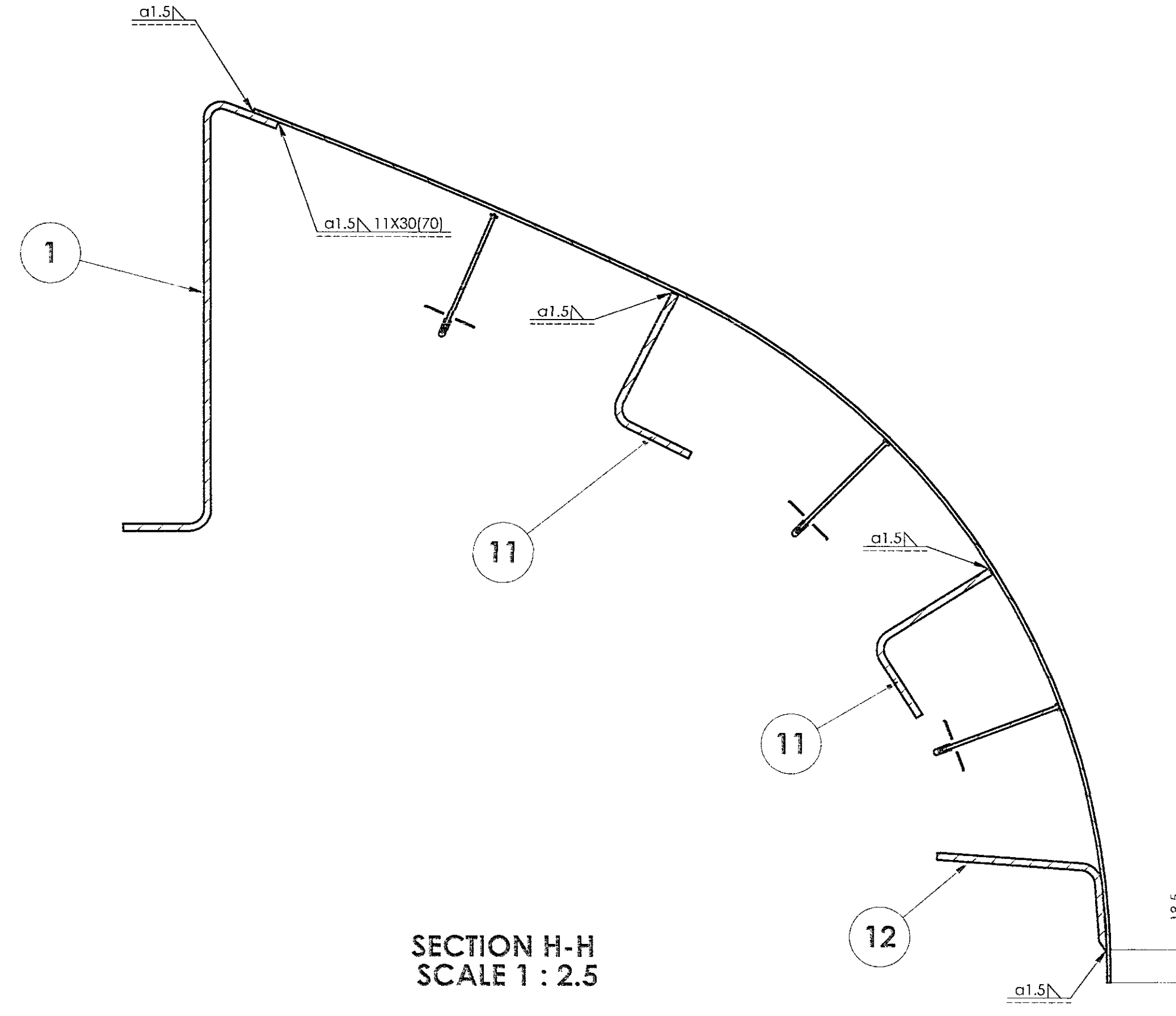
▽ ROUGH MACHINED
▽▽ FINISH MACHINED
▽▽▽ FINE FINISH MACHINED

① ROUGH CLEANED
⑥ BURRS REMOVED
⑧ CHAMFERED

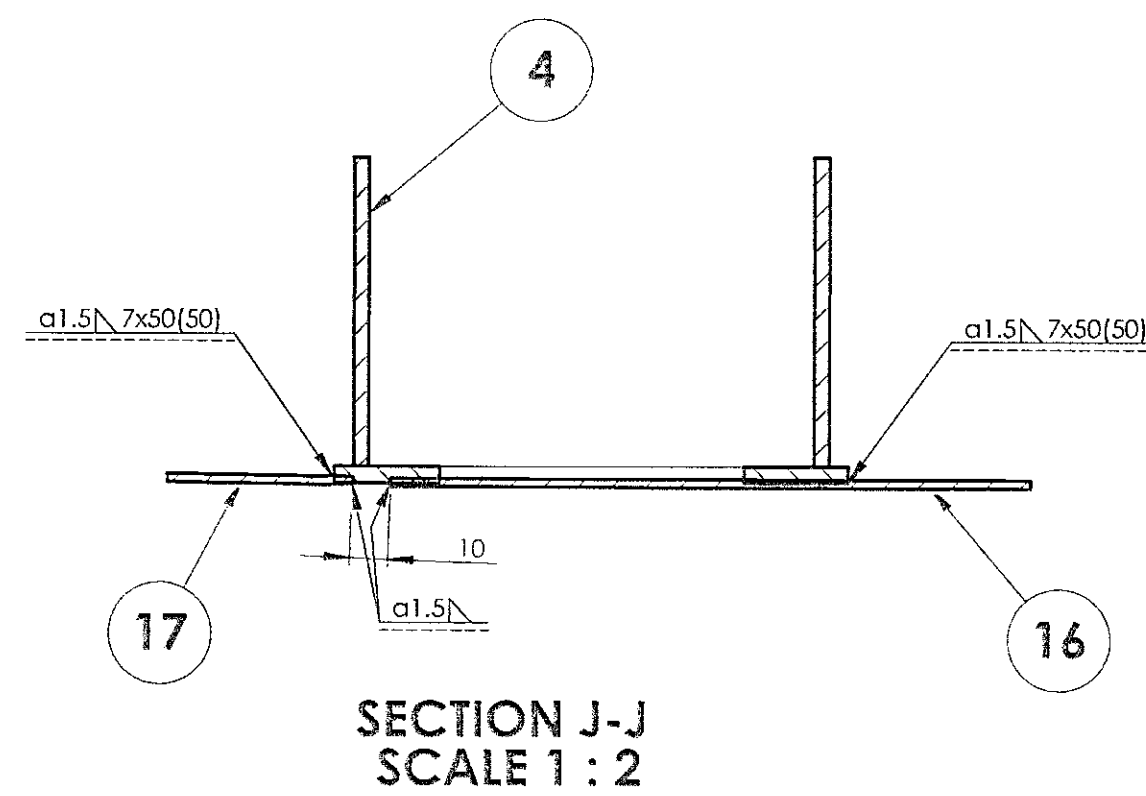
REVISIONS			
ALT.	ZONE	DESCRIPTION	APPROVED & DATE
a		ITEM-21 & NOTES 14,15 ADDED. ITEM-15 & NOTE-6 DELETED. SECTION F-F REVISED. VIEWS UPDATED.	Sd- 
b		VIEWS UPDATED AS PER CHANGE IN THE DESIGN OF ITEM-16.	



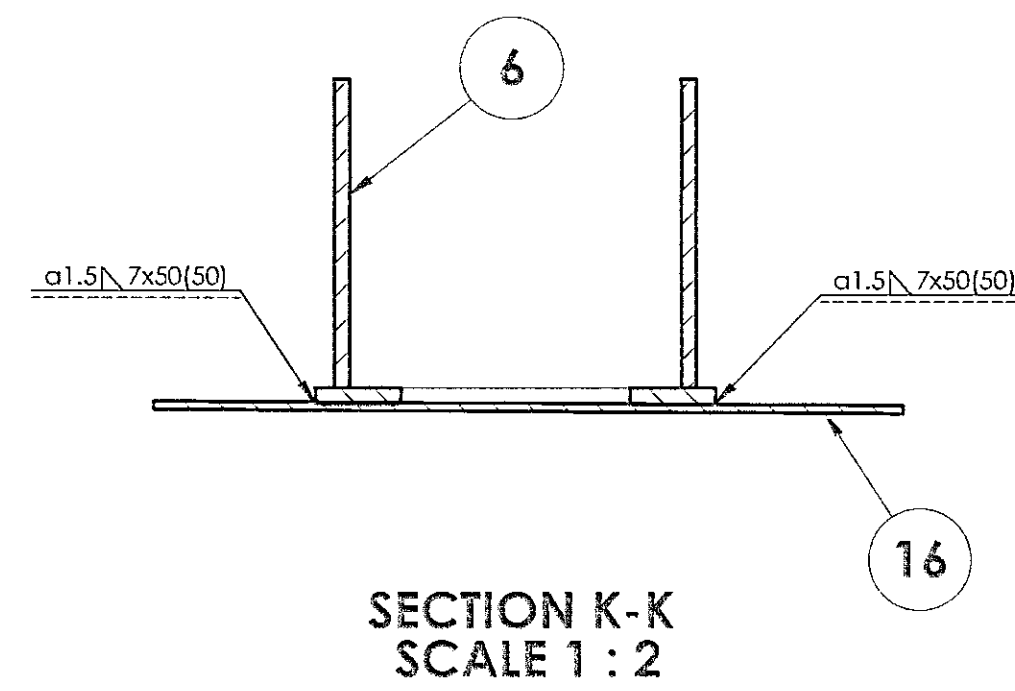
SECTION G-G
SCALE 1 : 2.5



SECTION H-H
SCALE 1 : 2.5



SECTION J-J
SCALE 1 : 2

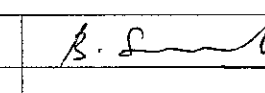


SECTION K-K
SCALE 1 : 2

NOTE:

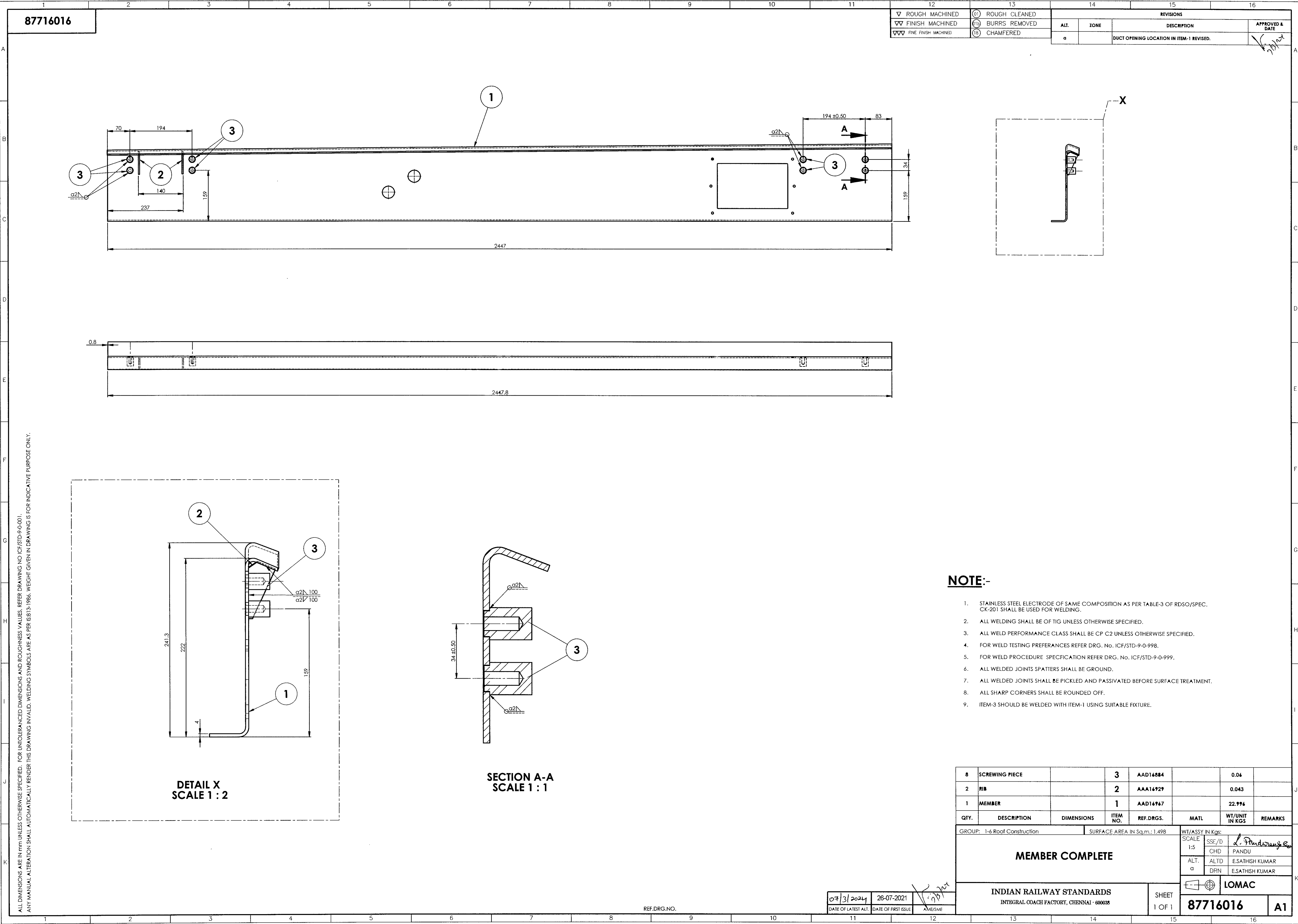
1. STAINLESS STEEL ELECTRODE OF SAME COMPOSITION AS PER TABLE-3 OF RDSO/SPEC C-K201 SHALL BE USED FOR WELDING.
 2. ALL WELD SPATTERS SHALL BE GROUND.
 3. ALL WELDED JOINTS SHALL BE PICKLED AND PASSIVATED BEFORE SURFACE TREATMENT.
 4. ALL SHARP CORNERS SHALL BE ROUNDED OFF.
 5. ALL WELDINGS SHALL BE TIG WELDING UNLESS OTHERWISE SPECIFIED.
 6. ALL BUTT WELDINGS TO BE DONE AT COACH OUTSIDE AND ROUGH GRINDING TO BE DONE ON THE SAME SIDE. PENETRATION SHOULD NOT BE GROUND.
 7. FINISHED ASSEMBLY SHALL BE SUPPLIED WITHOUT PAINTING. THE SAME SHALL BE APPLIED WITH (AIRLESS SPRAY) ECO FRIENDLY WATER BASED MODIFIED EPOXY ZINC PHOSPHATE ETCH PRIMER TO ICF/MD/SPEC-231 AFTER BODY SHELL ASSEMBLY STAGE AT ICF.
 8. ITEM-19 (NAME PLATE) SHALL BE WELDED OR RIVETTED AT SUITABLE LOCATION AS SHOWN IN THE DRAWING IF PROCURED FROM TRADE.
 9. BEFORE APPLYING PRIMER, SUITABLE MASKING TO BE DONE AT PLACES MARKED THUS @ AND TO BE REMOVED ONLY AT THE TIME OF FIXING THE FRP TROUGH ASSEMBLY.
 10. ALL THE THREADED HOLES SHALL BE PROVIDED WITH SUITABLE DUMMY BOLTS TO SAFEGUARD THE THREADS.
 11. ALL WELD PERFORMANCE CLASS SHALL BE AS PER CP C2 UNLESS SPECIFIED OTHERWISE.
 12. FOR WELD TESTING PREFERENCES REFER DRG. No. ICF/STD-9-0-998.
 13. FOR WELD PROCEDURE SPECIFICATION REFER DRG. No. ICF/STD-9-0-999.
 14. SCHEDULE OF TECHNICAL REQUIREMENTS OF MANUFACTURE OF SIDEWALL / ROOF ASSEMBLY SHALL COMPLY TO ICF/M/D/SPEC-200 LATEST REVISION.
- #15. LEAK PROOF WELDING SHALL BE ENSURED.

1	SUCTION PIPE COMPLETE	21	59316056	5.239	
3	TIE ROD	20	AA016738	0.09	
1	NAME PLATE FOR SUPPLIER IDENTIFICATION	19	AAA51072	0.063	
30	WELDING PIN ASSEMBLY	18	49516008	0.005	
1	ROOF SHEET	17	AAA16918	15.180	
1	ROOF SHEET	16	AAA16917	8.879	
4	SUCTION PIPE COMPLETE	15	59316020	5.446	
1	LOCATION FRAME COMPLETE	14	59316019	7.283	
1	STIFFENING ANGLE	13	AAA16920	1.838	
1	STIFFENING ANGLE	12	AAA16927	0.573	
2	STIFFENING ANGLE	11	AAA16926	0.544	
2	STIFFENING ANGLE	10	AAA16924	0.644	
1	STIFFENING ANGLE	9	AAA16923	0.631	
1	STIFFENING ANGLE	8	AAA16922	4.841	
1	STIFFENING ANGLE	7	AAA16921	5.224	
1	ROOF ARCH COMPLETE	6	59316018	6.260	
1	ROOF ARCH COMPLETE	5	59316017	2.835	
1	ROOF ARCH COMPLETE	4	59316016	6.998	
1	ROOF ARCH	3	AAA16919	1.758	
1	ROOF ARCH	2	AAA16925	1.713	
1	MEMBER COMPLETE	1	87716016	23.576	

Default	DESCRIPTION	DIMENSIONS	ITEM NO.	REF. DRGS.	MATL	WT./UNIT IN KGS	REMARKS
GROUP: 1-6 Roof Construction		SURFACE AREA IN Sq.m.: 8.222		WT./ASSY IN Kgs:			
FINAL ROOF ELEMENT COMPLETE (FOR METAL RMPU TROUGH)		SCALE	1:5	SSE/D	CHD		
		ALT.	b	ALTD	AMAL GEORGE	LRAAC	
		DRN		DRN	Amal George		
		INDIAN RAILWAY STANDARDS INTEGRAL COACH FACTORY, CHENNAI - 600088		SHEET 3 OF 3		83416016	A1

REF.DRG.NO.1 10113.0.20.200.002

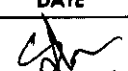
20-02-2026 13-11-2021
DATE OF LATEST ALT. DATE OF FIRST ISSUE
AME/SME

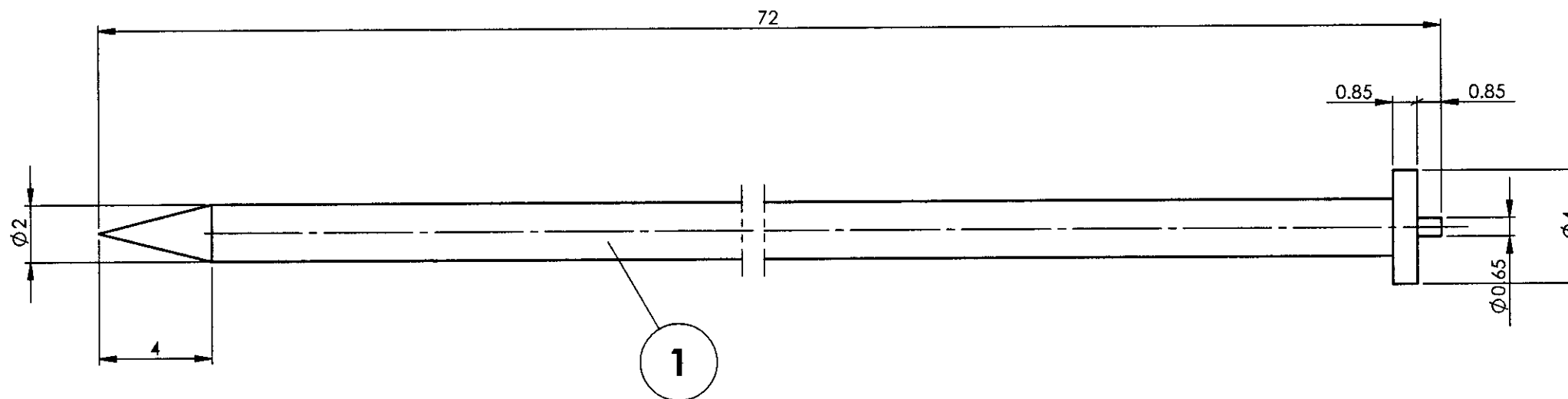


ALL DIMENSIONS ARE IN MM UNLESS OTHERWISE SPECIFIED. FOR UNTOLERANCED DIMENSIONS AND ROUGHNESS VALUES, REFER DRAWING NO ICF/STD-9-0-001. ANY MANUAL ALTERATION SHALL AUTOMATICALLY RENDER THIS DRAWING INVALID. WELDING SYMBOLS ARE AS PER IS:813-1986. WEIGHT GIVEN IN DRAWING IS FOR INDICATIVE PURPOSE ONLY.

AAA16493

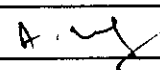
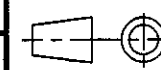
▽ ROUGH MACHINED	① ROUGH CLEANED
▽▽ FINISH MACHINED	② BURRS REMOVED
▽▽▽ FINE FINISH MACHINED	③ CHAMFERED

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




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

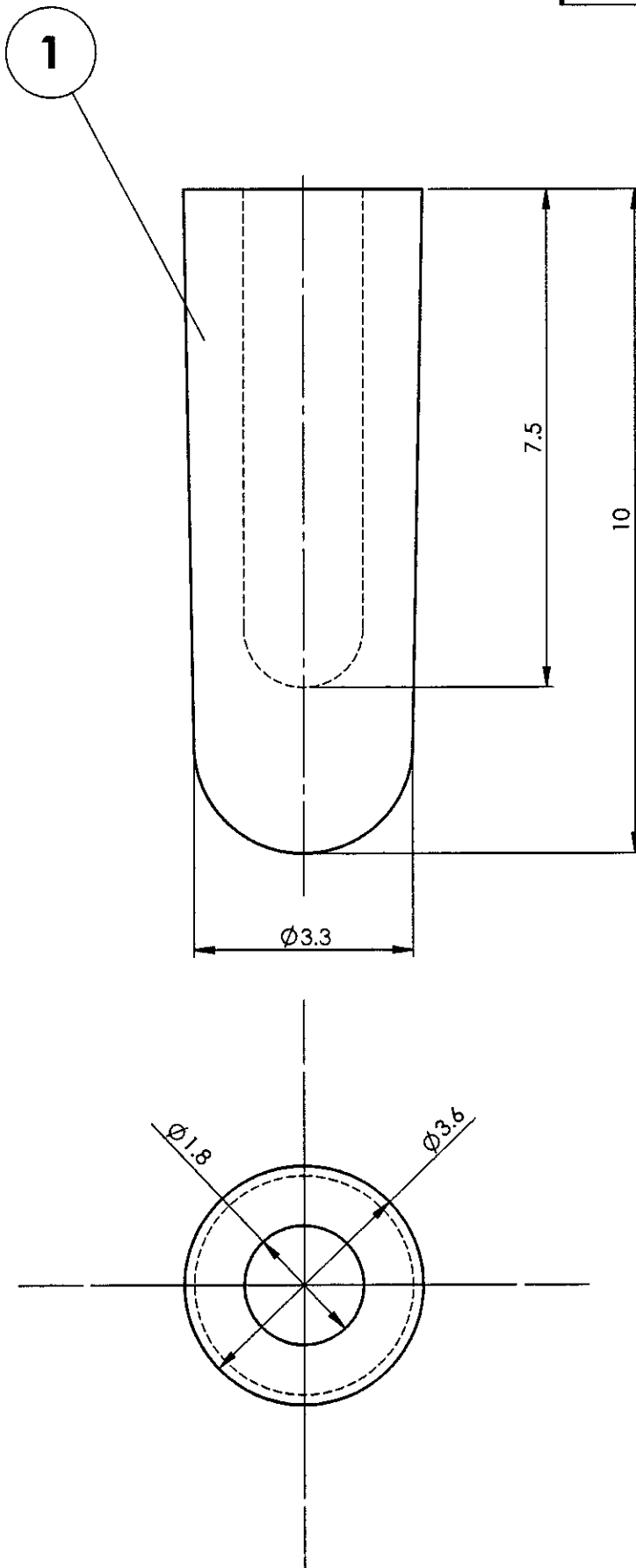
REF.DRG.NO.mi001576, ITEM-1


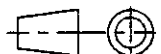
1	WELDING PIN	Ø 4 x 72	1		IS:6528 X04Cr18Ni10	0.002	
Default	DESCRIPTION	DIMENSIONS	ITEM NO.	REF. DRGS	MATL.SPEC.	WT/UNIT IN KGS	REMARKS
GROUP: 1-6 ROOF CONSTRUCTION		SURFACE AREA IN Sq.m.: 0.000			WT/ASSY IN Kgs:		
WELDING PIN					SCALE	SSE/D	
					5:1	CHD	
					ALT. a	ALTD	A.Palanichamy
						DRN	3D:A.Palanichamy 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			
ALT.	ZONE	DESCRIPTION	APPROVED & DATE
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	A3

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


REF.DRG.NO.mi001576, ITEM-2

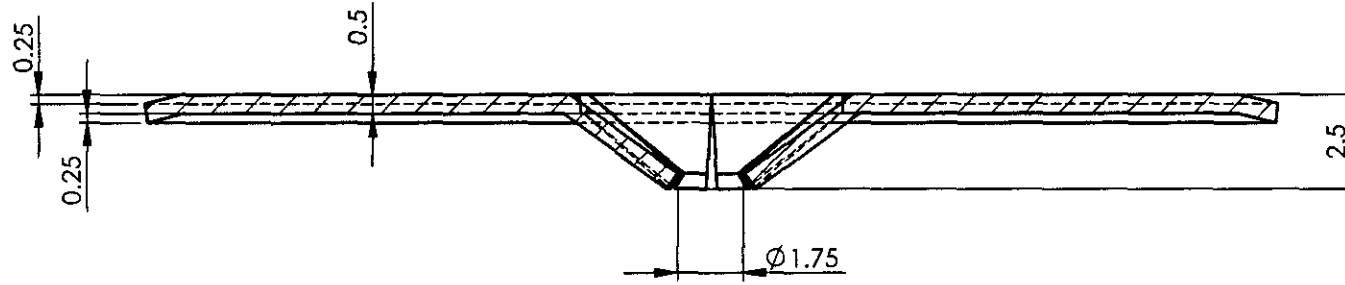
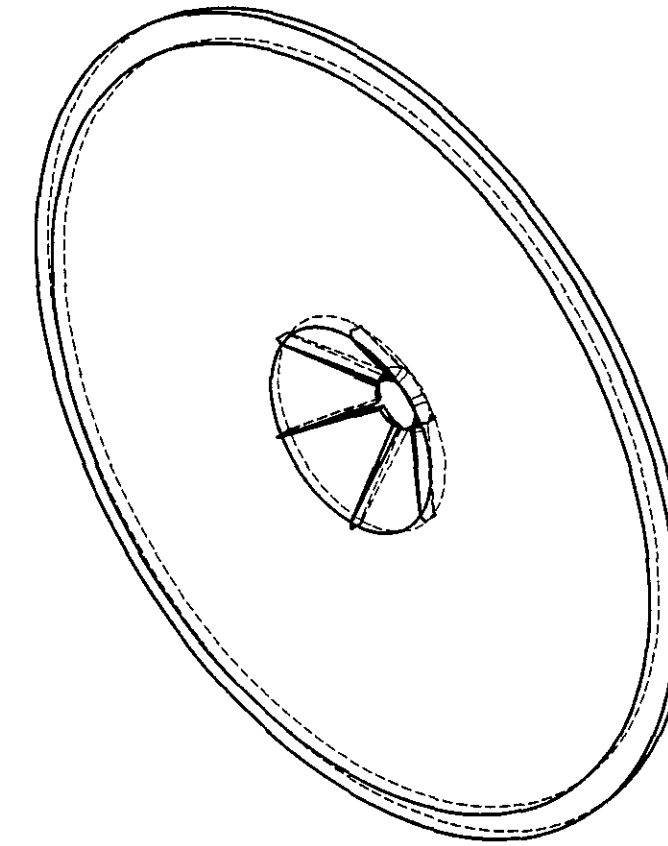
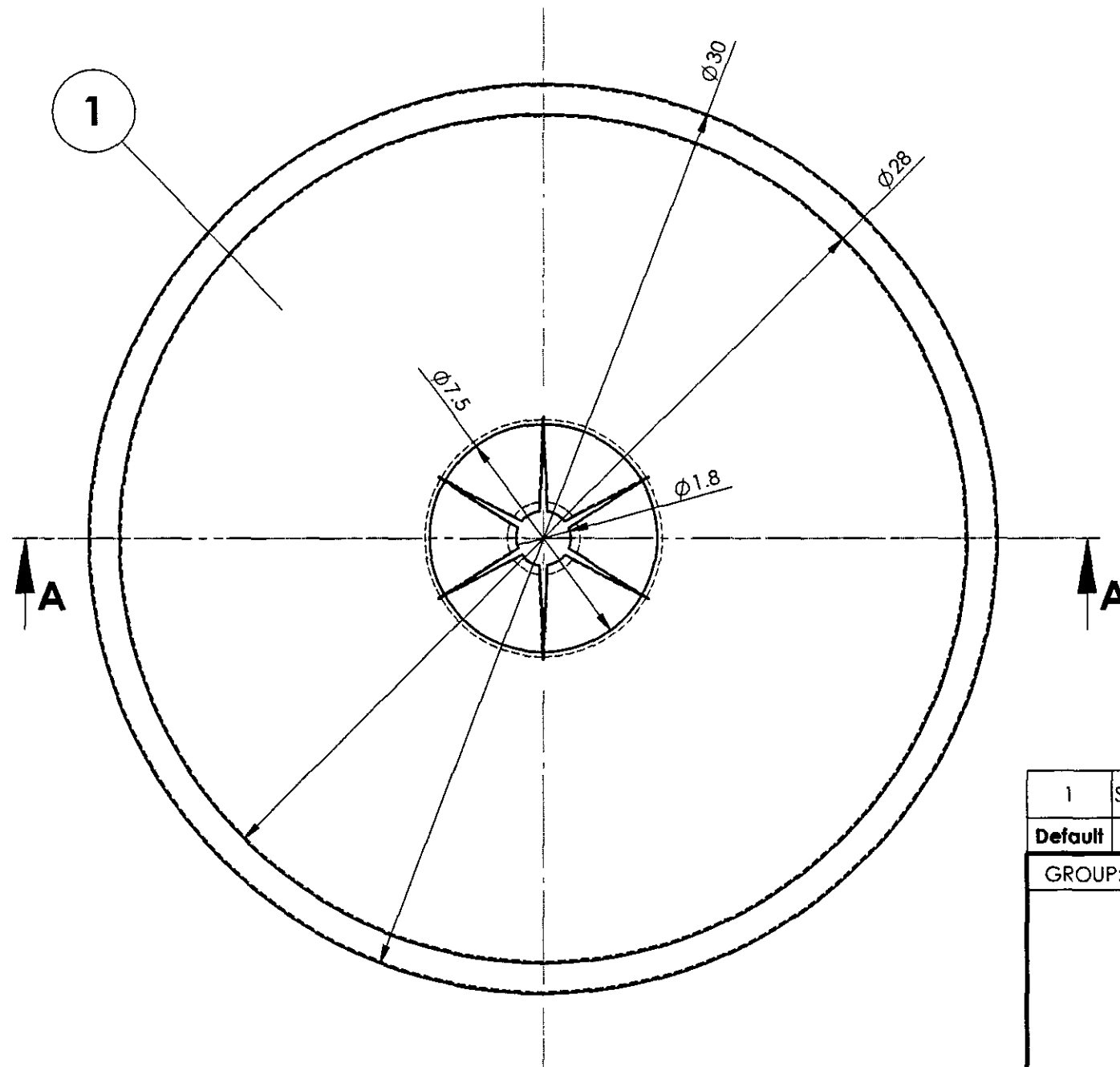
ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE SPECIFIED. FOR UNTOLERANCED DIMENSIONS AND ROUGHNESS VALUES, REFER DRAWING NO ICF/STD-9-0-001. ANY MANUAL ALTERATION SHALL AUTOMATICALLY RENDER THIS DRAWING INVALID. WELDING SYMBOLS ARE AS PER EN ISO 2553. WEIGHT GIVEN IN DRAWING IS FOR INDICATIVE PURPOSE ONLY

AAA16495

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

REVISIONS

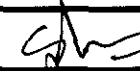
ALT.	ZONE	DESCRIPTION	APPROVED & DATE
a		DRAWING REVISED.	


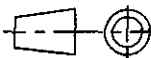
SECTION A-A
SCALE 5 : 1

ISOMETRIC VIEW

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

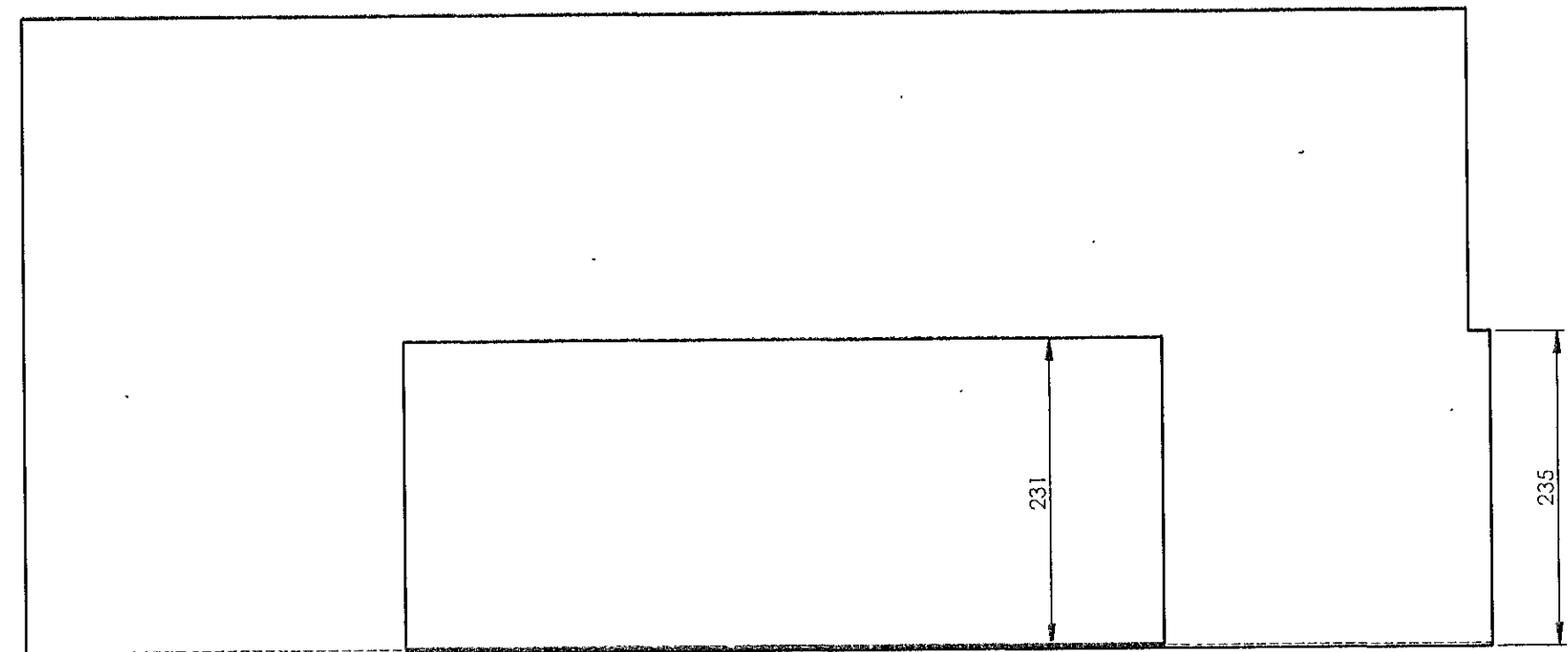
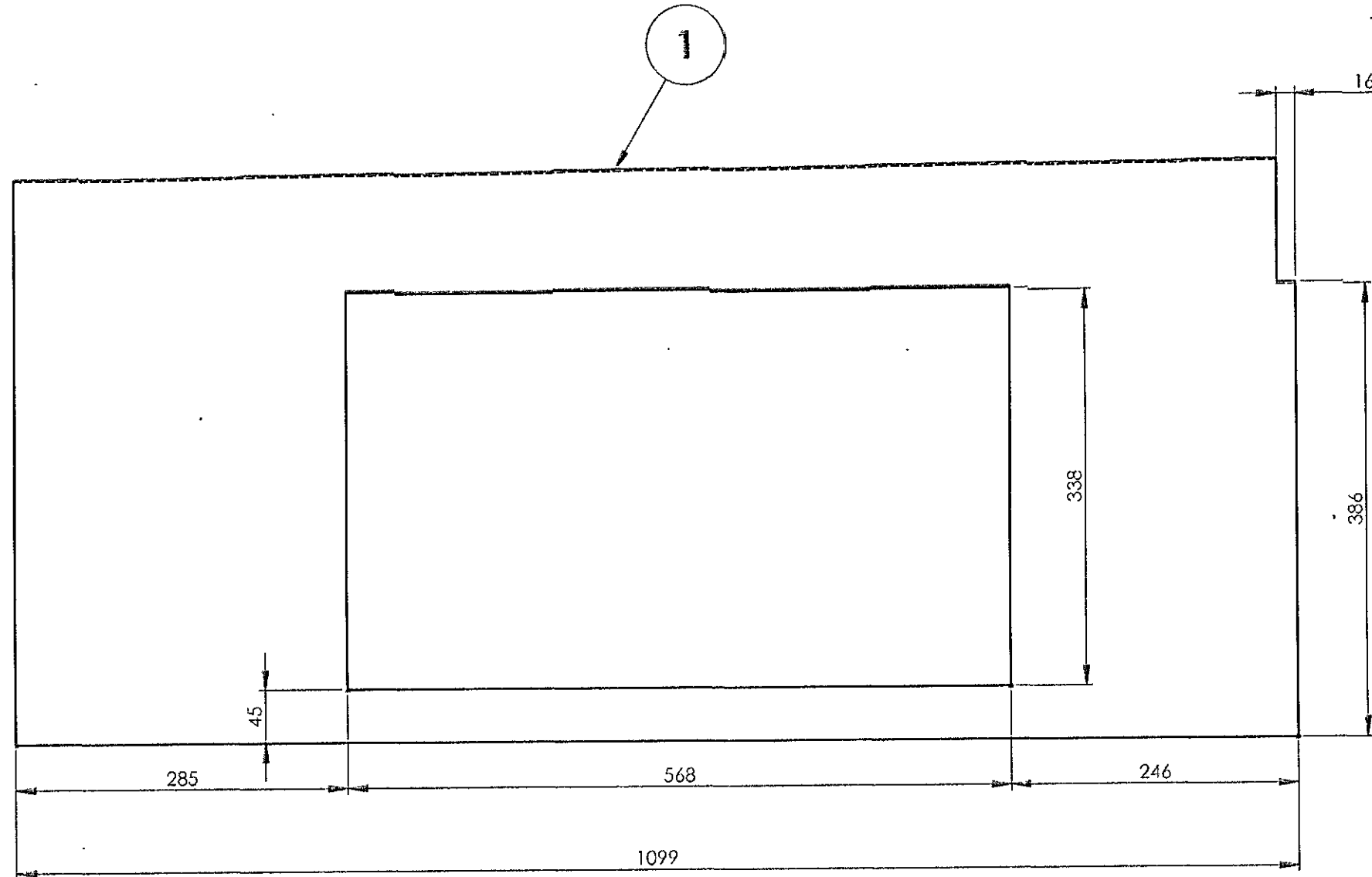
REF.DRG.NO.mi001576, ITEM-3

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


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	SSE/D	
					2:1	CHD	
					ALT.	ALTD	A.Palanichamy
					a	DRN	3D:A.Palanichamy 2D:P.Murugan
INDIAN RAILWAY STANDARDS							
INTEGRAL COACH FACTORY, CHENNAI - 600038				SHEET 1 OF 1	AAA16495		A3

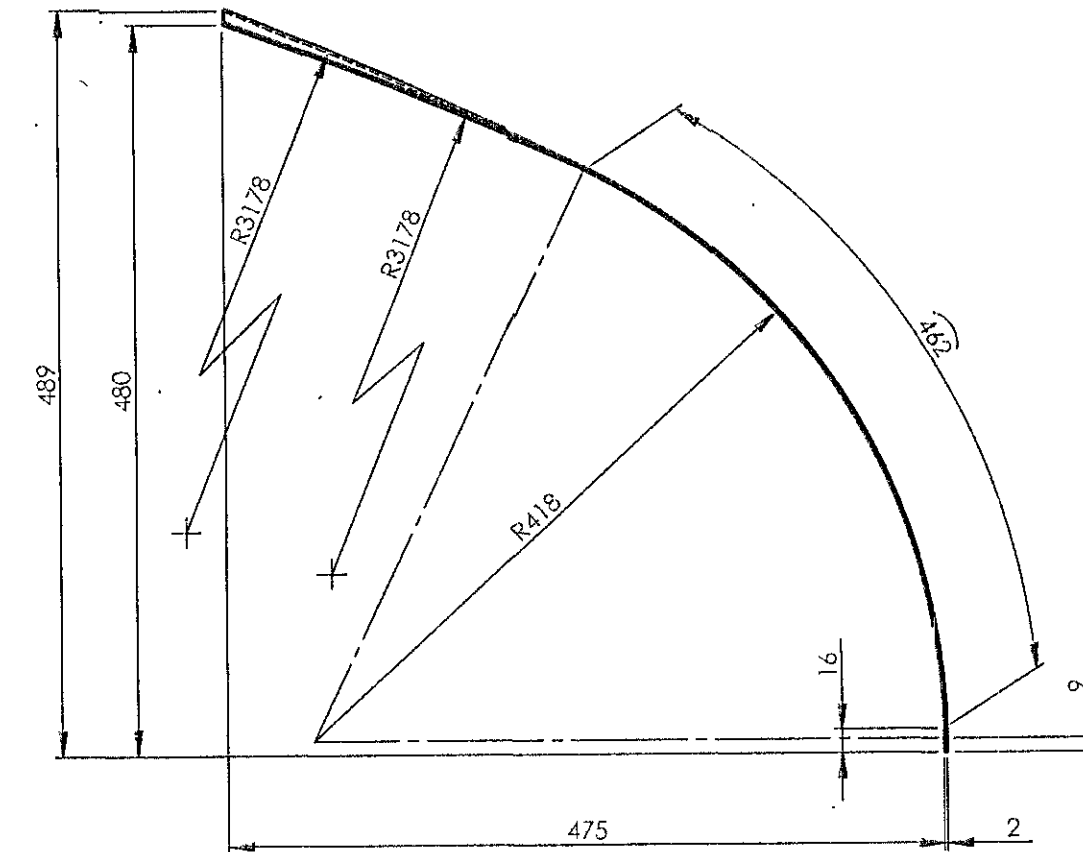
AAA16917


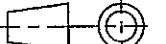
ALL DIMENSIONS ARE IN mm UNLESS OTHERWISE SPECIFIED. FOR UNTOLERANCED DIMENSIONS AND ROUGHNESS VALUES, REFER DRAWING NO ICF/STD-9-0-001.
ANY MANUAL ALTERATION SHALL AUTOMATICALLY RENDER THIS DRAWING INVALID. WELDING SYMBOLS ARE AS PER IS:813-1986.



▽ ROUGH MACHINED	⑧1 ROUGH CLEANED
▽▽ FINISH MACHINED	⑧1b BURRS REMOVED
▽▽▽ FINE FINISH MACHINED	⑧18 CHAMFERED

REVISIONS			
ALT.	ZONE	DESCRIPTION	APPROVED & DATE
a		ITEM-1 CUTAWAY REVISED. VIEWS UPDATED.	



1	ROOF SHEET	2 x 740 x 1099	1		RDSO/SPEC C- K201 X2CrNi12	8.879		
Default	DESCRIPTION	DIMENSIONS	ITEM NO.	REF. DRGS	MATL.SPEC.	WT/UNIT IN KGS	REMARKS	
GROUP: 1-6 ROOF ASSEMBLY			SURFACE AREA IN Sq.m : 1.137			WT/ASSY IN Kgs:8.879		
ROOF SHEET					SCALE 1:5	SSE/D		
						CHD		
					ALTA	ALTD	E.SATHISH KUMAR	
						DRN	K.Sriram	
INDIAN RAILWAY STANDARDS INTEGRAL COACH FACTORY, CHENNAI - 600038								
					SHEET 1 OF 1	AAA16917	A2	

12/2/26	21-03-2013	
DATE OF LATEST ALT	DATE OF FIRST ISSUE	A.M.E/S.M.E

REF.DRG.NO.1 10113.20.220.101