
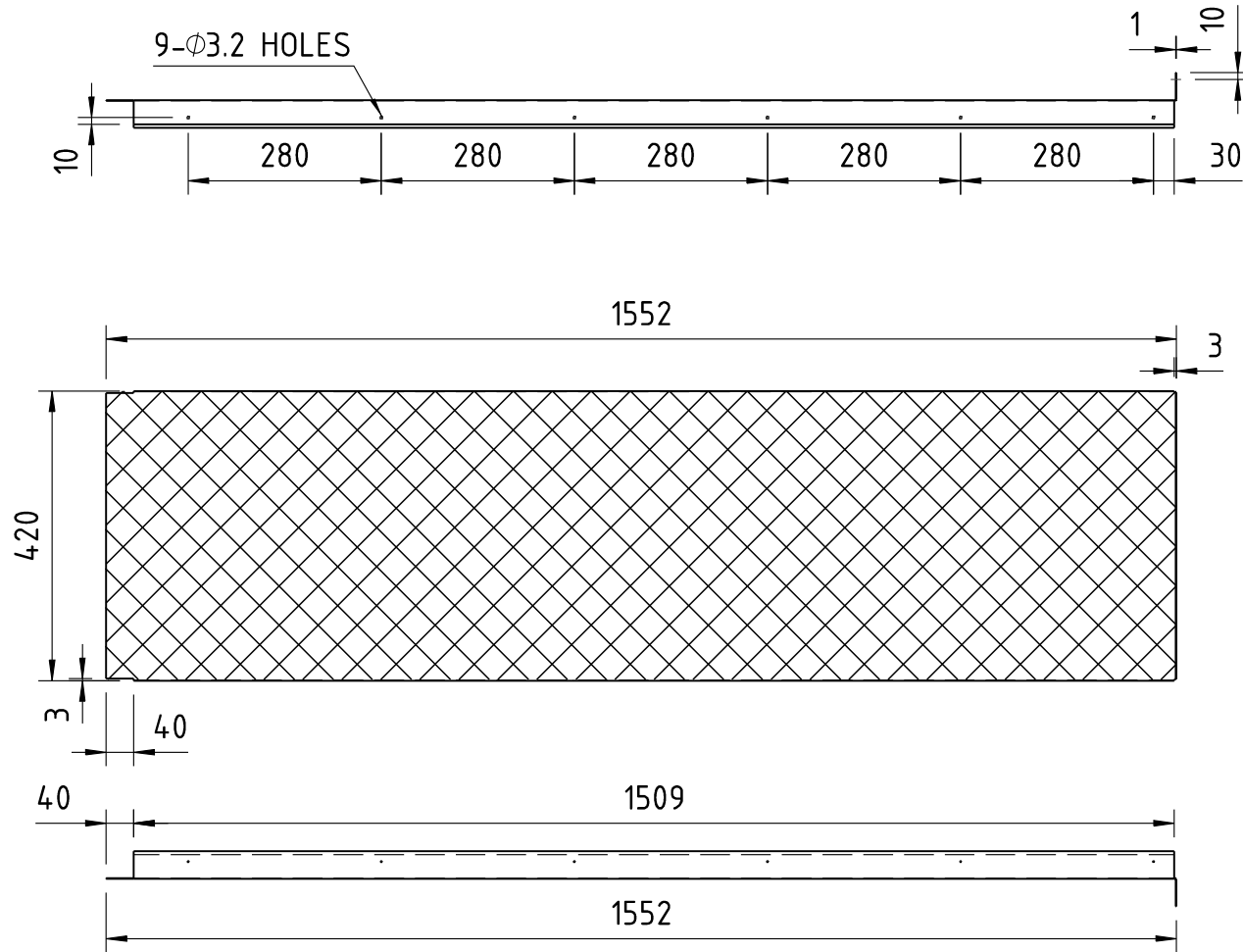
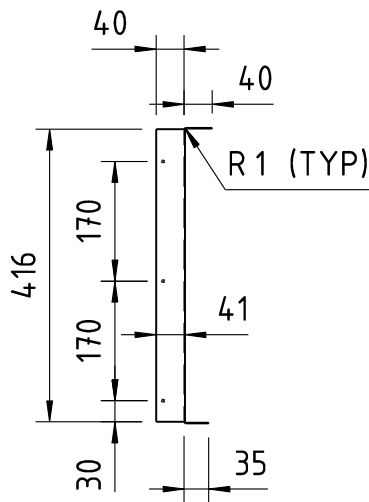


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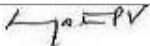

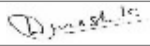


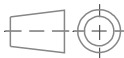


GRADE No.	N1	N2	N3	N4	N5	N6	N7	N8	N9	N10	N11	N12	VALUE	SYMBOL
	0.025	0.05	0.1	0.2	0.4	0.8	1.6	3.2	6.3	12.5	25	50		
SURFACE														
ROUGHNESS														



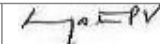
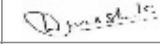

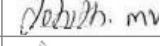
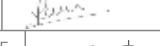

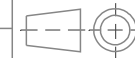


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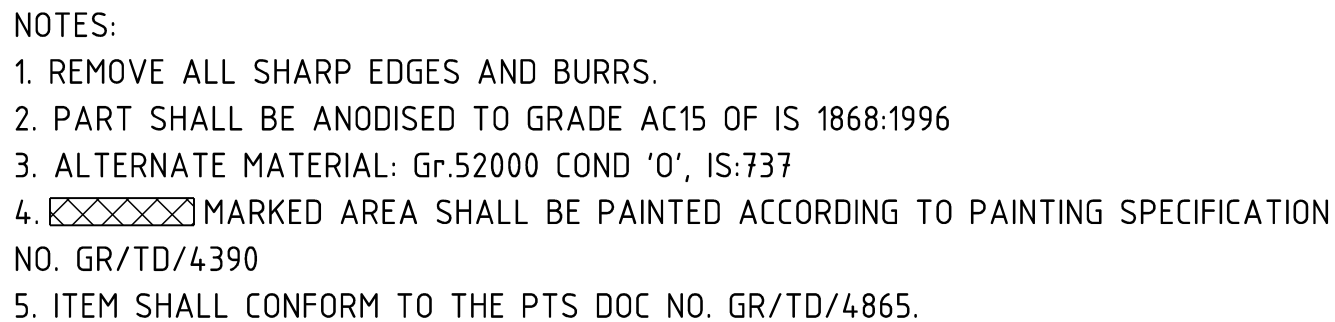
1. REMOVE ALL SHARP EDGES AND BURRS.
2. PART SHALL BE ANODISED TO GRADE AC15 OF IS 1868:1996
3. ALTERNATE MATERIAL: Gr.52000 COND 'O', IS:737
4.  MARKED AREA SHALL BE PAINTED ACCORDING TO PAINTING SPECIFICATION NO. GR/TD/4390.
5. ITEM SHALL CONFORM TO THE PTS DOC NO GR/TD/4865.



UN CONTROLLED

						1591x491x1THK				
SL.No.	QTY	PART / STOCK No.				DESCRIPTION	SIZE (mm)	COMPANY STD./I.S	Wt. (Kg)	
								MATERIAL		
						PRODUCT	MUMBAI METRO CARS L2 & L7			
						REF DRG	---			
						MATERIAL	A5052P			
						HEAT TREAT.	---	APPD		31.10.2019
						SURFACE TREAT.	---	REVD		31.10.2019
						TITLE	PANEL END, UPPER-			
						A				
						B				
						SCALE			SHEET	Wt.
						1:10		1 OF 1	2.06	
						DRG No.				ALT
						525-22102				
ALT.NO.	ECN NO/CHANGES					DATE	BY	CHKD	APPD	
						 BEML LIMITED <small>NEW PRINTERS. NEW DREAMS</small>				

							1224x75x1THK				
SL.No.	QTY	PART / STOCK No.				DESCRIPTION	SIZE (mm)		COMPANY STD./I.S	Wt. (Kg)	
									MATERIAL		
						PRODUCT	MUMBAI METRO CARS L2 & L7				
						REF DRG	---				
						MATERIAL	A5052P				
						HEAT TREAT.	---	APPD		18.12.19	
						SURFACE TREAT.	---	REVD		18.12.19	
						TITLE	BOTTOM PANEL	CHKD		18.12.19	
								DRWN		18.12.19	
								SCALE		SHEET	Wt.
								1:10	1 OF 1	-	
								DRG No.		ALT	
ALT.NO.	ECN NO/CHANGES				DATE	BY	CHKD	APPD	525-22155		
 <b>BEM LIMITED</b> <small>NEW PRINTERS. NEW DREAMS</small>											

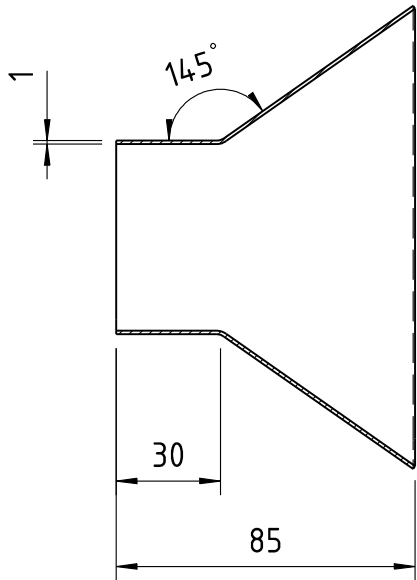
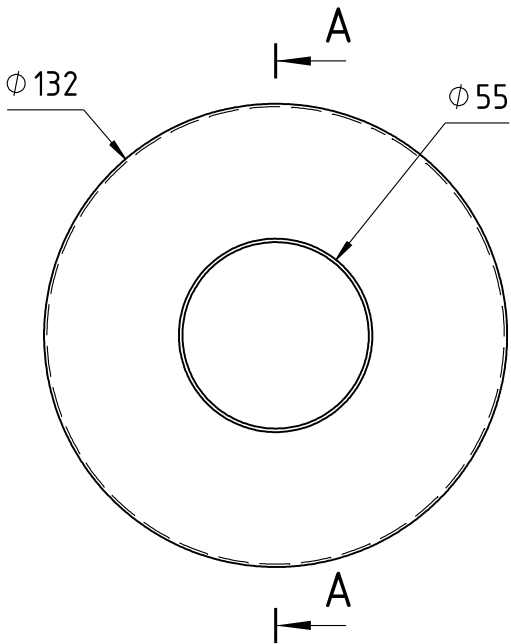


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GRADE No.	VALUE	SYMBOL
N1	0.025	▽
N2	0.05	▽
N3	0.1	▽
N4	0.2	▽
N5	0.4	▽
N6	0.8	▽
N7	1.6	▽
N8	3.2	▽
N9	6.3	▽
N10	12.5	▽
N11	25	▽
N12	50	▽
SURFACE ROUGHNESS		



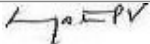

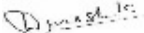
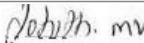


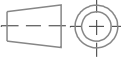


NOTES:

- 1.REMOVE ALL SHARP EDGES AND BURRS.
- 2.PART SHALL BE ANODISED TO GRADE AC15 OF IS 1868:1996
- 3.ALTERNATE MATERIAL: Gr.52000 COND 'O', IS:737
4. ITEM SHALL CONFORM TO THE PTS DOC NO. GR/TD/4865.



SECTION A-A

UN CONTROLLED

						415x126x1THK				
SL.No.	QTY	PART / STOCK No.			DESCRIPTION	SIZE (mm)	COMPANY STD./I.S		Wt. (Kg)	
							MATERIAL			
					PRODUCT	MUMBAI METRO CARS - L2 & L7				
					REF DRG					
					MATERIAL	A5052P				
					HEAT TREAT.		APPD		19.12.2019	
					SURFACE TREAT.		REVD		19.12.2019	
					TREAT.		CHKD		19.12.2019	
					TITLE	DUCT FUNNEL		DRWN		19.12.2019
							SCALE		SHEET	Wt.
						1:2		1 OF 1	-	
 <b>BEM</b> BEML LIMITED <small>NEW FRONTIERS. NEW DREAMS</small>						DRG No.				ALT
						525-22151				
ALT.No.	ECN NO/CHANGES		DATE	BY	CHKD	APPD				



BEML LIMITED

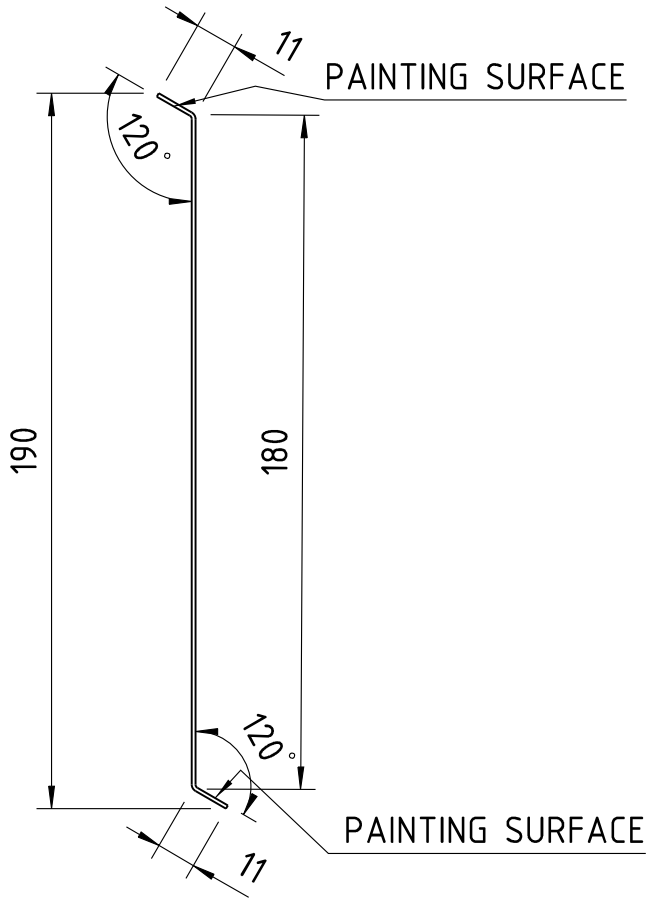
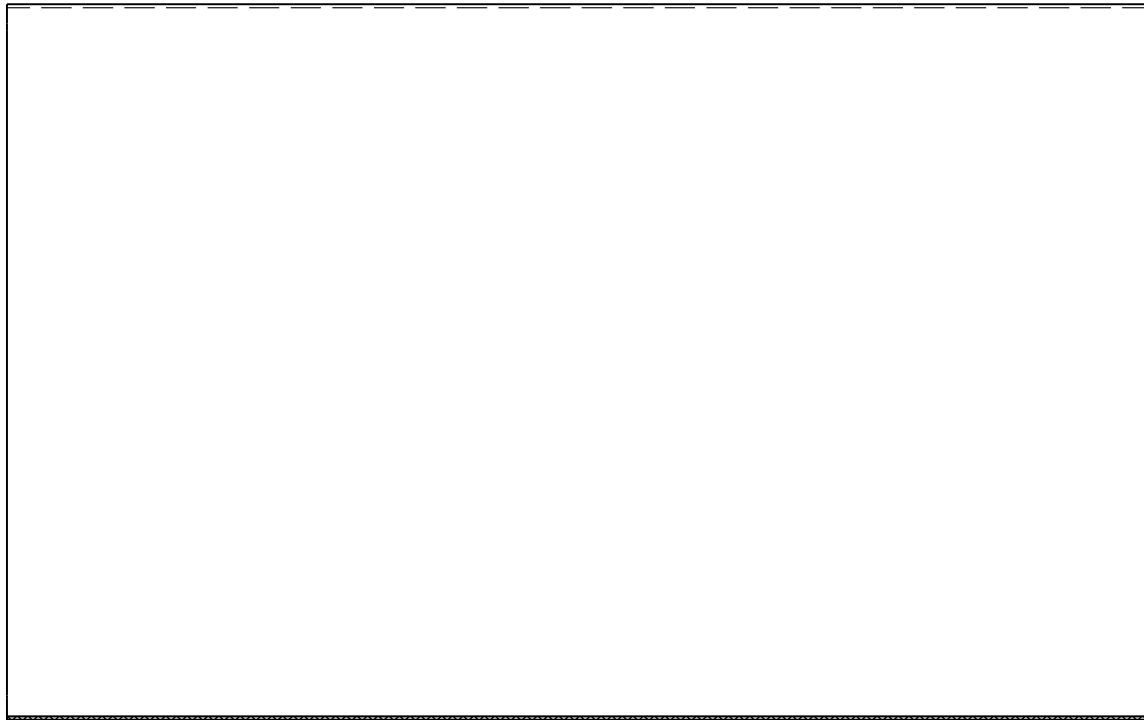
525-22151

0

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GRADE No.	N12	N11	N10	N9	N8	N7	N6	N5	N4	N3	N2	N1
VALUE	50	25	12.5	6.3	3.2	1.6	0.8	0.4	0.2	0.1	0.05	0.025
SYMBOL												



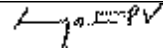
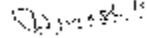

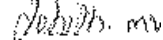


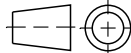


MACHINING DEVIATIONS FOR LINEAR DIMENSIONS	RANGE	0 - 6	6 - 30	30 - 120	120 - 315	315-1000	1000-2000	2000-4000	ABOVE 4000	RA
	TOLERANCE	±0.1	±0.2	±0.3	±0.5	±0.8	±1.2	±2	±3	~
FOR DIMENSIONAL TOLERANCES OF SHEET METAL PARTS AND WELDED STRUCTURES, REFER STD. RD-227										
UNSPECIFIED TOLERANCE FOR LINEAR AND ANGULAR DIMENSIONS REF. IS 2102 (PT-1) (MEDIUM)							QUALITY OF WELD JOINTS REF. RD 230 MEDIUM			
VALUES OF SURFACE TEXTURE SHALL BE AS PER COMPANY STD DS. 1012.C.						STATUS:	MOCKUP/PROTO/PRODUCTION			
WELDING SHALL BE CARRIED OUT AS PER IS: 9595-96										















**UN CONTROLLED**



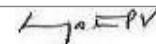

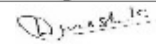
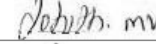


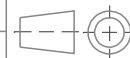


NOTES:

- 1.REMOVE ALL SHARP EDGES AND BURRS.
- 2.PART SHALL BE ANODISED TO GRADE AC15 OF IS 1868:1996
- 3.ALTERNATE MATERIAL: Gr.52000 COND 'O', IS:737
- 4. MARKED AREA SHALL BE PAINTED ACCORDING TO PAINTING SPECIFICATION DOC NO. GR/TD/4390
5. ITEM SHALL CONFORM TO THE PTS DOC NO. GR/TD/4865.

							2190x200x1THK				
SL.No.	QTY	PART / STOCK No.	DESCRIPTION				SIZE (mm)	COMPANY STD./I.S		Wt. (Kg)	
								MATERIAL			
							PRODUCT	MUMBAI METRO CARS - L2 & L7			
							REF DRG				
							MATERIAL	A5052P			
							HEAT TREAT.		APPD		17.12.2019
							SURFACE TREAT.		REVD		17.12.2019
							TITLE		CHKD		17.12.2019
							SIDE SUPPORT		DRWN		17.12.2019
								SCALE		SHEET	Wt.
								1:2		1 OF 1	1.143
ALT.NO.	ECN NO/CHANGES	DATE	BY	CHKD	APPD	 <b>BEM LIMITED</b> <small>NEW FRONTIERS. NEW DREAMS</small>		DRG No.		525-22150	ALT 



GRADE No.	N12	N11	N10	N9	N8	N7	N6	N5	N4	N3	N2	N1
VALUE	50	25	12.5	6.3	3.2	1.6	0.8	0.4	0.2	0.1	0.05	0.025
SYMBOL												

									359x172x1.5THK			
SL.No.	QTY	PART / STOCK No.	DESCRIPTION				SIZE (mm)	COMPANY STD./I.S		Wt. (Kg)		
								MATERIAL				
							PRODUCT	MUMBAI METRO CARS - L2 & L7				
							REF DRG					
							MATERIAL	A5052P				
							HEAT TREAT.		APPD		17.12.2019	
							SURFACE TREAT.		REVD		17.12.2019	
							TITLE	PARTITION PLATE		CHKD		17.12.2019
									DRWN		17.12.2019	
									SCALE		SHEET	Wt.
									1:2	1 OF 1	0.405	
									DRG No.	ALT		
ALT.NO.	ECN NO/CHANGES	DATE	BY	CHKD	APPD	 <b>BEM LIMITED</b> <small>NEW FRONTIERS. NEW DREAMS</small>		525-22149				



NOTES:

- 1.REMOVE ALL SHARP EDGES AND BURRS.
- 2.PART SHALL BE ANODISED TO GRADE AC15 OF IS 1868:1996
- 3.ALTERNATE MATERIAL: Gr.52000 COND 'O', IS:737
- 4.ITEM SHALL CONFORM TO THE PTS DOC NO. GR/TD/4865.

# PARTITION PLATE



**beml** BEML LIMITED  
NEW FRONTIERS. NEW DREAMS

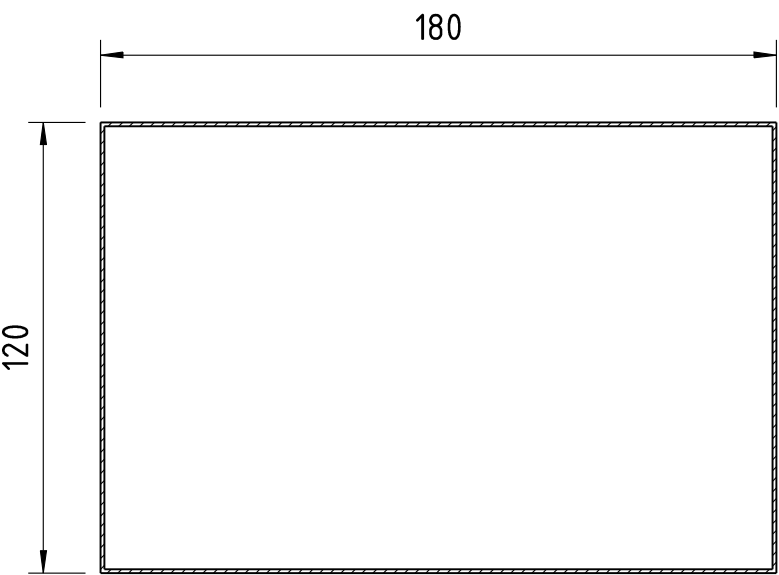
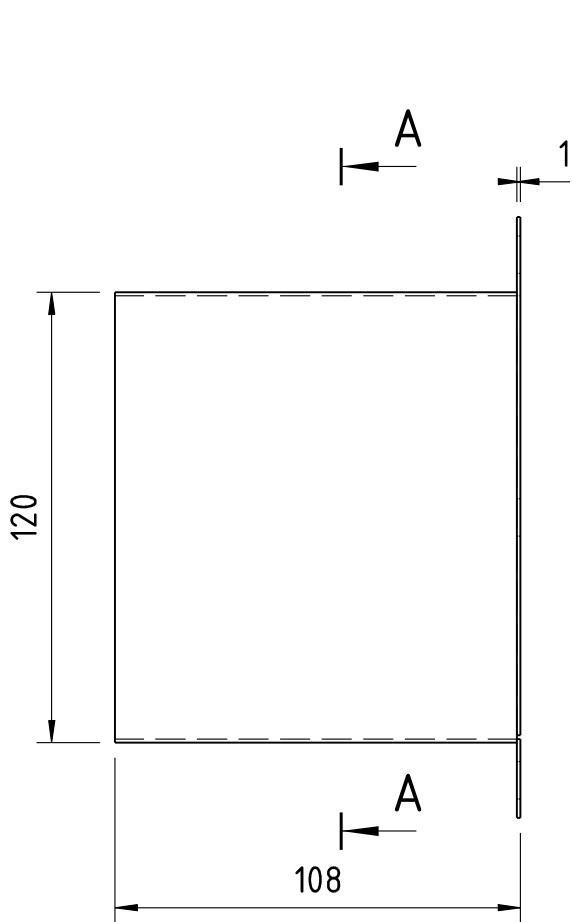
525-22149



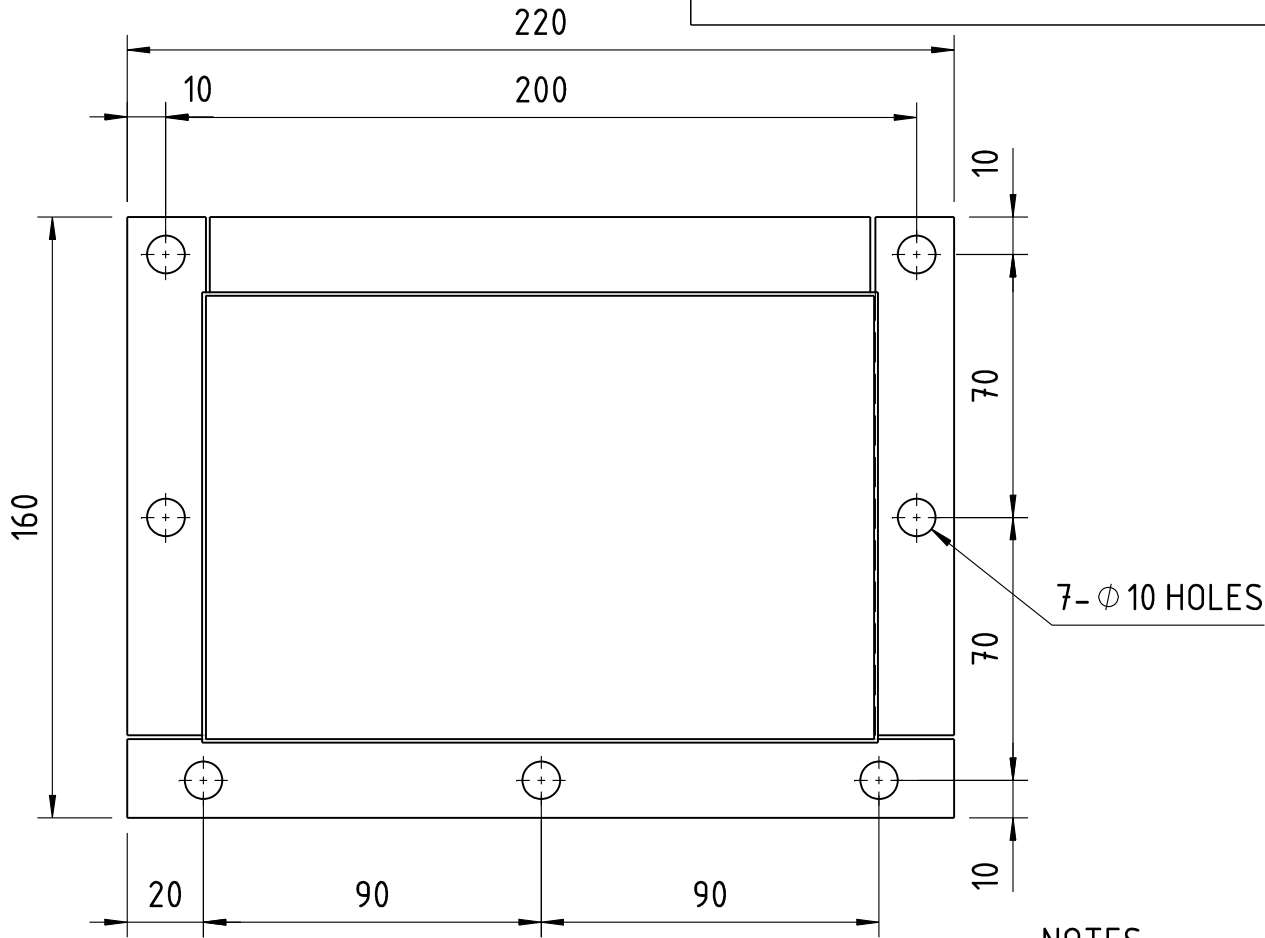
A3

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GRADE No.	N1	N2	N3	N4	N5	N6	N7	N8	N9	N10	N11	N12
VALUE	0.025	0.05	0.1	0.2	0.4	0.8	1.6	3.2	6.3	12.5	25	50
SYMBOL												
SURFACE ROUGHNESS												



SECTION A-A



- NOTES:
1. REMOVE ALL SHARP EDGES AND BURRS.
  2. PART SHALL BE ANODISED TO GRADE AC15 OF IS 1868:1996
  3. ALTERNATE MATERIAL: Gr.52000 COND 'O', IS:737
  4. ITEM SHALL CONFORM TO THE PTS DOC NO. GR/TD/4865.

UN CONTROLLED

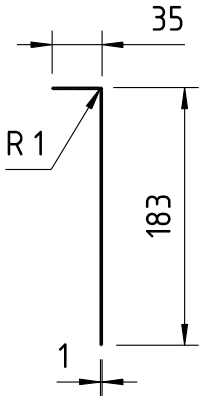
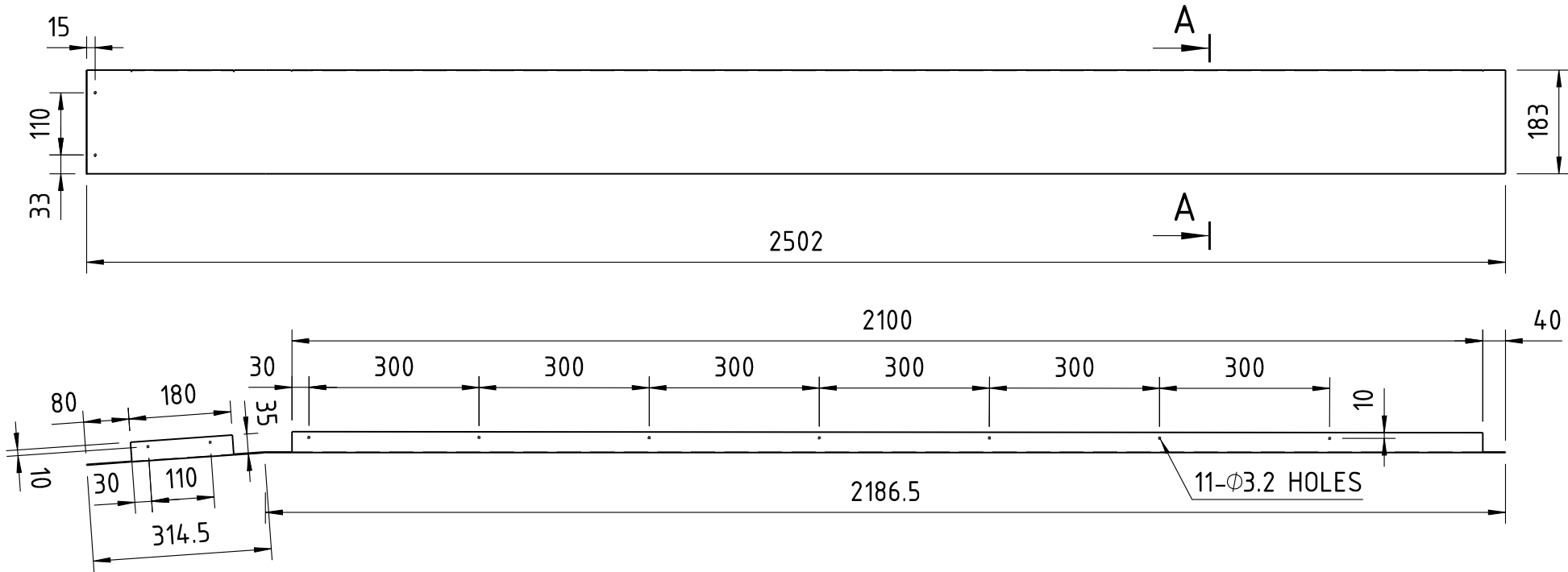
SL.No.	QTY	PART / STOCK No.	DESCRIPTION	SIZE (mm)	COMPANY STD./I.S	Wt. (Kg)
				592x127x1THK		
					MATERIAL	
			PRODUCT	MUMBAI METRO CARS L2 & L7		
			REF DRG	---		
			MATERIAL	A5052P		
			HEAT TREAT.	---	APPD	17.12.2019
			SURFACE TREAT.	---	REVD	17.12.2019
			TITLE	PANEL CAB		
				CHKD	17.12.2019	
				DRWN	17.12.2019	
				SCALE	SHEET	Wt.
				1:2	1 OF 1	0.183
ALT.NO.	ECN NO/CHANGES	DATE	BY	CHKO	DRG No.	ALT
					525-22147	0

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GRADE No.	N1	N2	N3	N4	N5	N6	N7	N8	N9	N10	N11	N12
VALUE	0.025	0.05	0.1	0.2	0.4	0.8	1.6	3.2	6.3	12.5	25	50
SYMBOL												
SURFACE												
ROUGHNESS												

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SECTION A-A

- NOTES:
- 1.REMOVE ALL SHARP EDGES AND BURRS.
  - 2.PART SHALL BE ANODISED TO GRADE AC15 OF IS 1868:1996
  - 3.ALTERNATE MATERIAL: Gr.52000 COND 'O', IS:737
  - 4.ITEM SHALL CONFORM TO THE PTS DOC NO. GR/TD/4865.

UN CONTROLLED

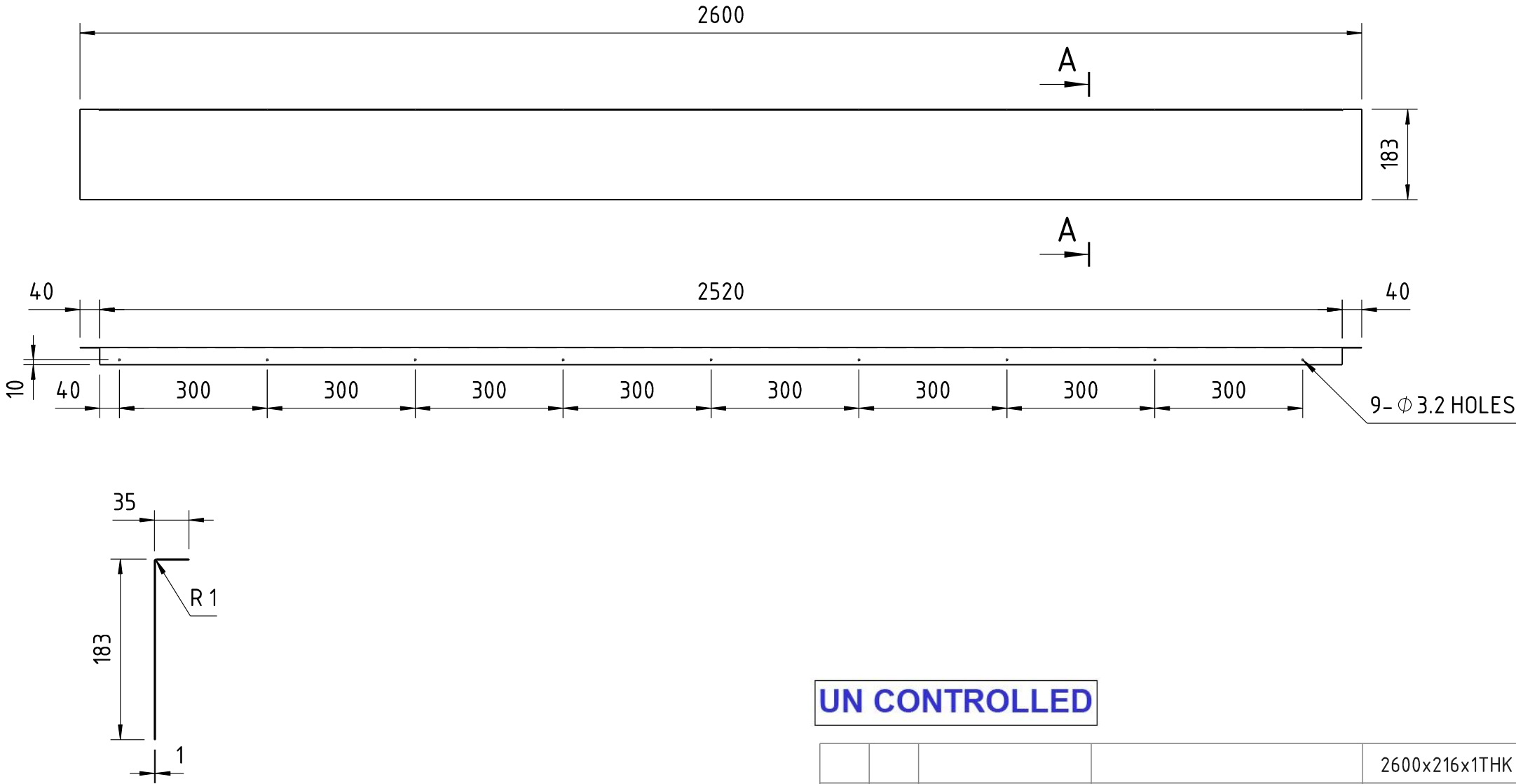
				2504x216x1THK			
SL.No.	QTY	PART / STOCK No.		DESCRIPTION	SIZE (mm)	COMPANY STD./I.S	Wt. (Kg)
				MATERIAL			
				PRODUCT	MUMBAI METRO CARS - L2 & L7		
				REF DRG			
				MATERIAL			
				HEAT TREAT.	APPD	02.11.19	02.11.19
				SURFACE TREAT.	REV D	02.11.19	02.11.19
				TITLE	CHKD	02.11.19	02.11.19
				PANEL SPLIT-D		DRWN	02.11.19
				SCALE	1:5	SHEET 1 OF 1	Wt. -
				DRG No.	525-22139		ALT 0
ALT.No.	ECN NO/CHANGES		DATE	BY	CHKD	APPD	



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DRAWING RELEASED FROM PLM, PHYSICAL SIGNATURE NOT REQUIRED

GRADE No.	N1	N2	N3	N4	N5	N6	N7	N8	N9	N10	N11	N12	VALUE	SYMBOL
	0.025	0.05	0.1	0.2	0.4	0.8	1.6	3.2	6.3	12.5	25	50		
SURFACE														
ROUGHNESS														



SECTION A-A

- NOTES:
- 1.REMOVE ALL SHARP EDGES AND BURRS.
  - 2.PART SHALL BE ANODISED TO GRADE AC15 OF IS 1868:1996
  - 3.ALTERNATE MATERIAL: Gr.52000 COND 'O', IS:737
  - 4.ITEM SHALL CONFORM TO THE PTS DOC NO. GR/TD/4865.

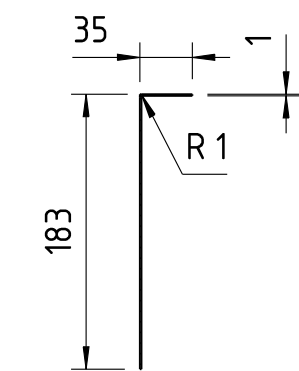
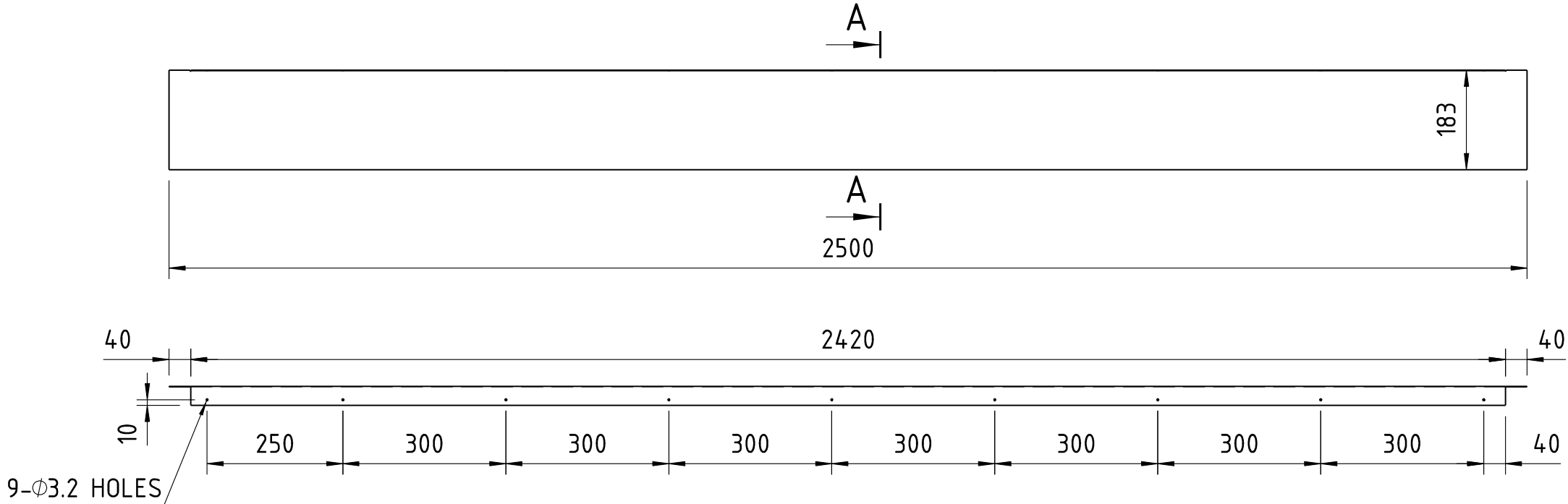
UN CONTROLLED

				2600x216x1THK			
SL.No.	QTY	PART / STOCK No.		DESCRIPTION	SIZE (mm)	COMPANY STD./I.S	Wt. (Kg)
				MATERIAL			
				PRODUCT	MUMBAI METRO CARS - L2 & L7		
				REF DRG			
				MATERIAL	A5052P		
				HEAT TREAT.		APPD	16.12.19
				SURFACE TREAT.		REVD	16.12.19
				TITLE	PANEL SPLIT-C		
						CHKD	16.12.19
						DRWN	16.12.19
						SCALE	Wt.
						1:10	1 OF 1
						DRG No.	ALT
						525-22138	0

**BEML LIMITED**  
NEW FRONTIERS. NEW DREAMS

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GRADE No.	N1	N2	N3	N4	N5	N6	N7	N8	N9	N10	N11	N12	
VALUE	0.025	0.05	0.1	0.2	0.4	0.8	1.6	3.2	6.3	12.5	25	50	
SYMBOL													
SURFACE ROUGHNESS													





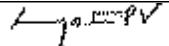
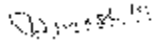

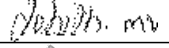


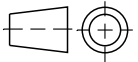


SECTION A-A

NOTES:

- 1.REMOVE ALL SHARP EDGES AND BURRS.
- 2.PART SHALL BE ANODISED TO GRADE AC15 OF IS 1868:1996
- 3.ALTERNATE MATERIAL: Gr.52000 COND 'O', IS:737
- 4.ITEM SHALL CONFORM TO THE PTS DOC NO. GR/TD/4865.

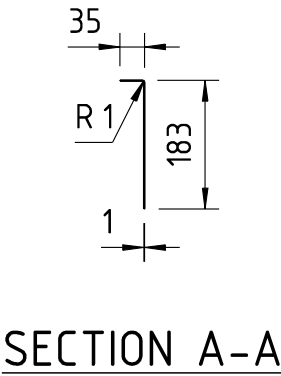
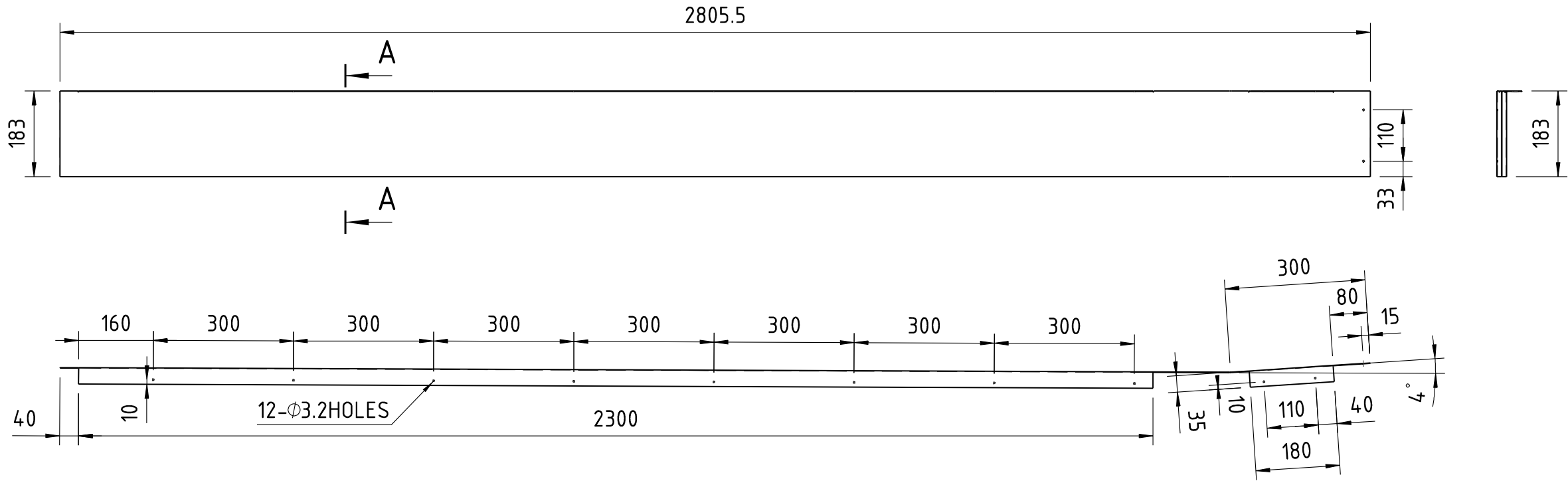
MACHINING DEVIATIONS FOR LINEAR DIMENSIONS	RANGE	0 – 6	6 – 30	30 – 120	120 – 315	315–1000	1000–2000	2000–4000	ABOVE 4000	RA
	TOLERANCE	±0.1	±0.2	±0.3	±0.5	±0.8	±1.2	±2	±3	~
FOR DIMENSIONAL TOLERANCES OF SHEET METAL PARTS AND WELDED STRUCTURES, REFER STD. RD-227										
UNSPECIFIED TOLERANCE FOR LINEAR AND ANGULAR DIMENSIONS REF. IS 2102 (PT-1) (MEDIUM)							QUALITY OF WELD JOINTS REF, RD 230 MEDIUM			
VALUES OF SURFACE TEXTURE SHALL BE AS PER COMPANY STD DS. 1012.C.						STATUS:	MOCKUP/PROTO/PRODUCTION			
WELDING SHALL BE CARRIED OUT AS PER IS: 9595-96										

UN CONTROLLED

							2300x216x1THK				
SL.No.	QTY	PART / STOCK No.				DESCRIPTION		SIZE (mm)	COMPANY STD./I.S		Wt. (Kg)
									MATERIAL		
						PRODUCT	MUMBAI METRO CARS - L2 & L7				
						REF DRG					
						MATERIAL	A5052P				
						HEAT TREAT.		APPD		16.12.19	
						SURFACE TREAT.		REVD		16.12.19	
						TITLE	SPLIT PANEL - B	CHKD		16.12.19	
						DRWN			16.12.19		
						SCALE			SHEET	Wt.	
						1:10			1 OF 1	-	
ALT.NO.	ECN NO/CHANGES				DATE	BY	CHKD	APPD	DRG No.		ALT
								BEML LIMITED		525-22137	

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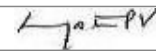

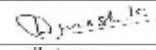

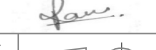
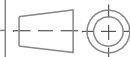


GRADE No.	N1	N2	N3	N4	N5	N6	N7	N8	N9	N10	N11	N12	GRADE No.
VALUE	0.025	0.05	0.1	0.2	0.4	0.8	1.6	3.2	6.3	12.5	25	50	VALUE
SYMBOL													SYMBOL
SURFACE													SURFACE
ROUGHNESS													ROUGHNESS



- NOTES:
- 1.REMOVE ALL SHARP EDGES AND BURRS.
  - 2.PART SHALL BE ANODISED TO GRADE AC15 OF IS 1868:1996
  - 3.ALTERNATE MATERIAL: Gr.52000 COND 'O', IS:737
  - 4.ITEM SHALL CONFORM TO THE PTS DOC NO. GR/TD/4865.

MACHINING DEVIATIONS FOR LINEAR DIMENSIONS	RANGE	0 - 6	6 - 30	30 - 120	120 - 315	315-1000	1000-2000	2000-4000	ABOVE 4000	RA
	TOLERANCE	±0.1	±0.2	±0.3	±0.5	±0.8	±1.2	±2	±3	~
FOR DIMENSIONAL TOLERANCES OF SHEET METAL PARTS AND WELDED STRUCTURES, REFER STD. RD-227										
UNSPECIFIED TOLERANCE FOR LINEAR AND ANGULAR DIMENSIONS REF. IS 2102 (PT-1) (MEDIUM)							QUALITY OF WELD JOINTS REF, RD 230 MEDIUM			
VALUES OF SURFACE TEXTURE SHALL BE AS PER COMPANY STD DS. 1012.C.							STATUS:	MOCKUP/PROTO/PRODUCTION		
WELDING SHALL BE CARRIED OUT AS PER IS: 9595-96										

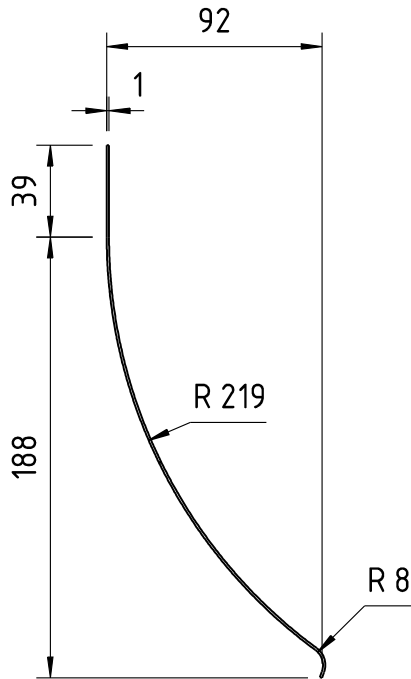
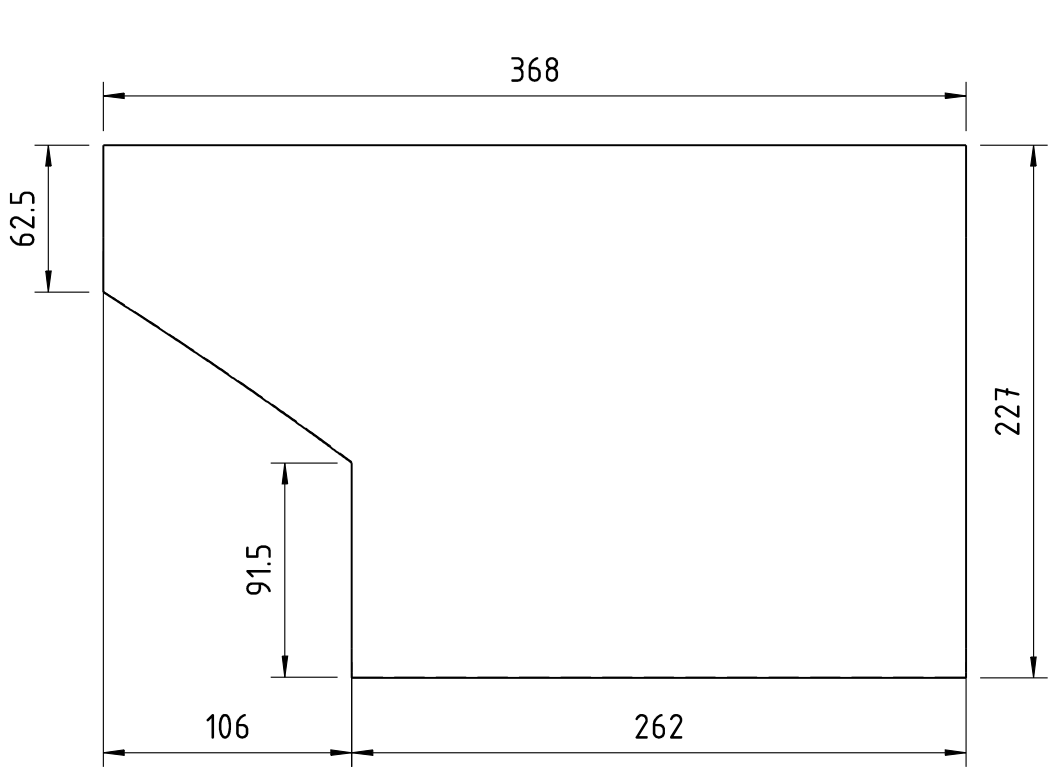
UN CONTROLLED

						2807x216x1THK				
SL.No.	QTY	PART / STOCK No.	DESCRIPTION			SIZE (mm)	COMPANY STD./I.S	Wt. (Kg)		
							MATERIAL			
						PRODUCT	MUMBAI METRO CARS - L2 & L7			
						REF DRG				
						MATERIAL	A5052P			
						HEAT TREAT.		APPD		16.12.19
						SURFACE TREAT.		REV D		16.12.19
						TITLE	SPLIT PANEL - A			CHKD
							DRWN		16.12.19	
						SCALE		SHEET	Wt.	
						1:10		1 OF 1	-	
						DRG No.		525-22136		
ALT.No.	ECN NO/CHANGES		DATE	BY	CHKD	APPD	 BEML LIMITED		ALT	
										

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DRAWING RELEASED FROM PLM, PHYSICAL SIGNATURE NOT REQUIRED

GRADE No.	N1	N2	N3	N4	N5	N6	N7	N8	N9	N10	N11	N12
VALUE	0.025	0.05	0.1	0.2	0.4	0.8	1.6	3.2	6.3	12.5	25	50
SYMBOL												
SURFACE ROUGHNESS												

- NOTES:
- 1.REMOVE ALL SHARP EDGES AND BURRS.
  - 2.PART SHALL BE ANODISED TO GRADE AC15 OF IS 1868:1996
  - 3.ALTERNATE MATERIAL: Gr.52000 COND 'O', IS:737
  4. MARKED AREA SHALL BE PAINTED ACCORDING TO PAINTING SPECIFICATION DOC NO. GR/TD/4390
  - 5.ITEM SHALL CONFORM TO THE PTS DOC NO. GR/TD/4865.



UN CONTROLLED

						368x257x1THK				
SL.No.	QTY	PART / STOCK No.				DESCRIPTION		SIZE (mm)	COMPANY STD./I.S	Wt. (Kg)
									MATERIAL	
						PRODUCT	MUMBAI METRO CARS - L2 & L7			
						REF DRG				
						MATERIAL	A5052P			
						HEAT TREAT.		APPD		16.12.19
						SURFACE TREAT.		REVD		16.12.19
						TITLE		CHKD		16.12.19
						PANEL SUPPLY -C		DRWN		16.12.19
								SCALE		SHEET
								1:3	1 OF 1	-
								DRG No.		ALT
						<b>BEM</b> LIMITED		525-22135		
						NEW FRONTIERS. NEW DREAMS				
ALT.No.	ECN NO/CHANGES				DATE	BY	CHKD	APPD		

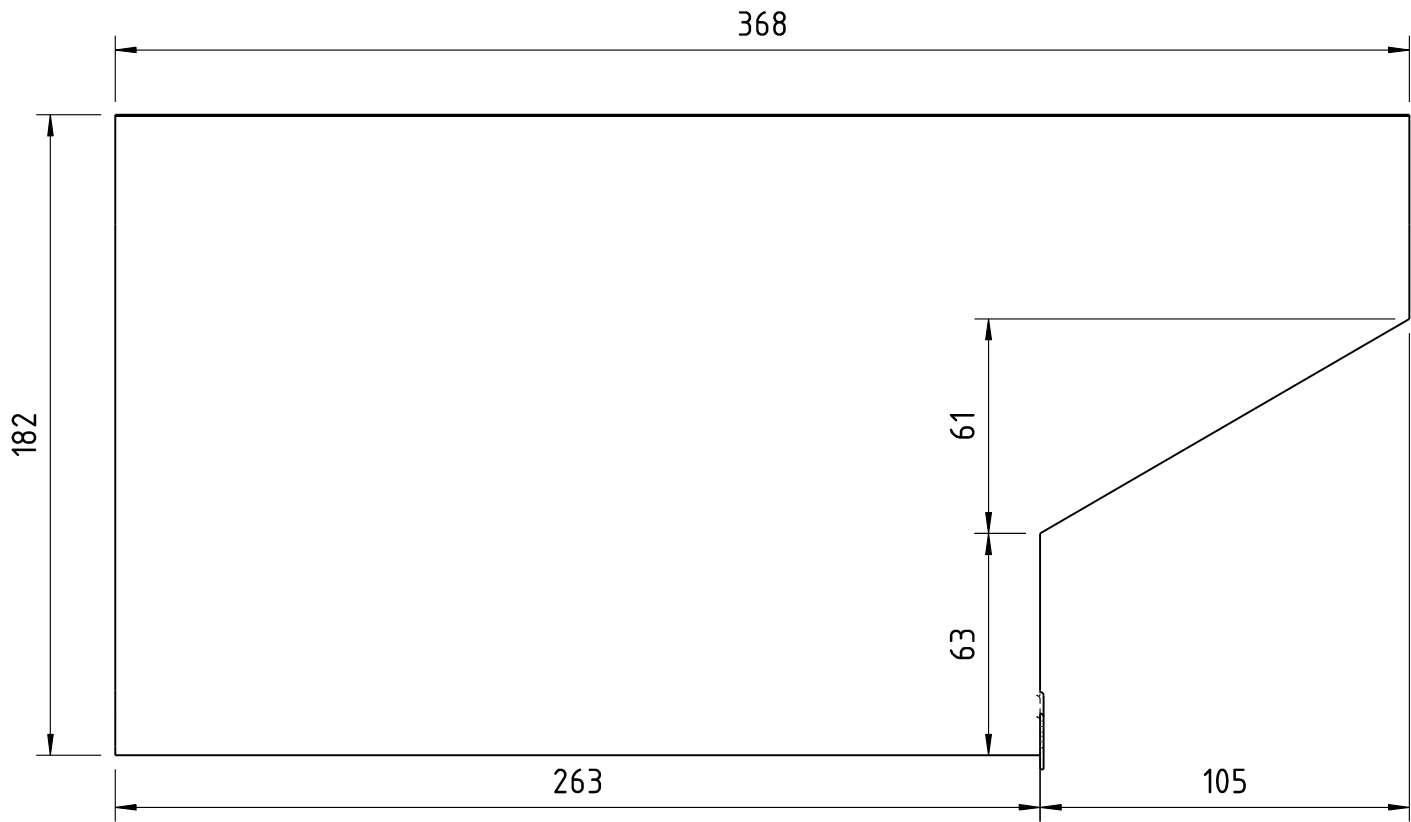


BEML LIMITED

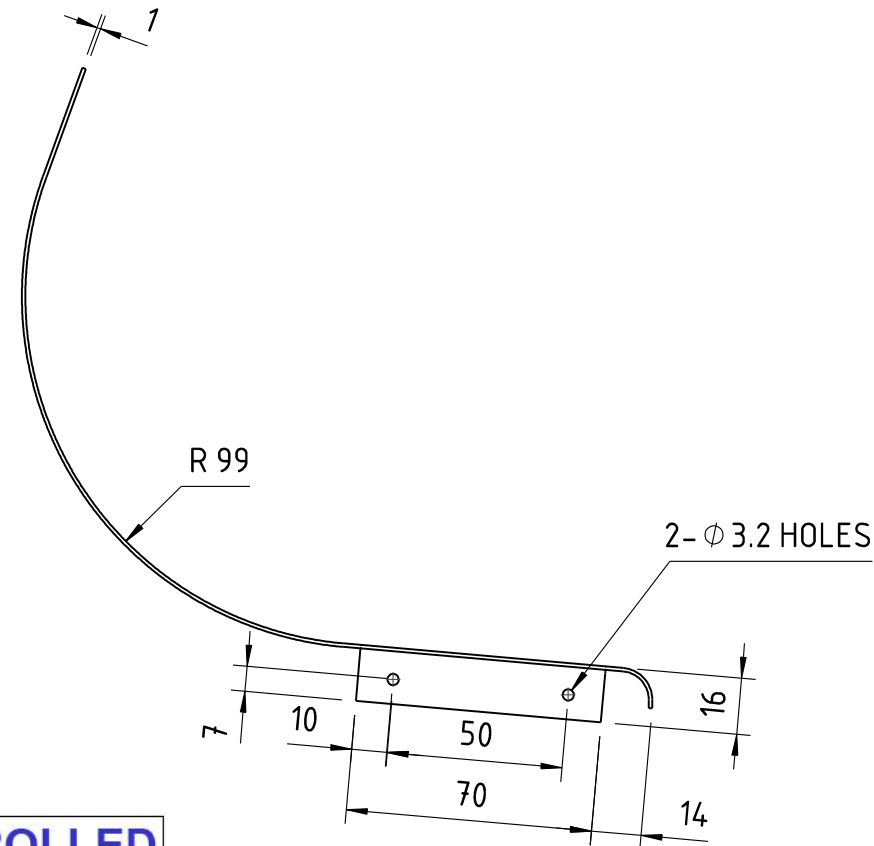


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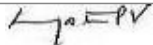

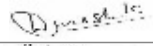
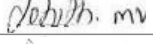


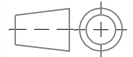


GRADE No.	VALUE	SYMBOL	N1	N2	N3	N4	N5	N6	N7	N8	N9	N10	N11	N12
			0.025	0.05	0.1	0.2	0.4	0.8	1.6	3.2	6.3	12.5	25	50
SURFACE														
ROUGHNESS														



UN CONTROLLED



- NOTES:
1. REMOVE ALL SHARP EDGES AND BURRS.
  2. PART SHALL BE ANODISED TO GRADE AC15 OF IS 1868:1996
  3. ALTERNATE MATERIAL: Gr.52000 COND 'O', IS:737
  4. ITEM SHALL CONFORM TO THE PTS DOC NO. GR/TD/4865.

						368x266x1THK											
SL.No.	QTY	PART / STOCK No.	DESCRIPTION			SIZE (mm)	COMPANY STD./I.S		Wt. (Kg)								
							MATERIAL										
						PRODUCT				MUMBAI METRO CARS L2 & L7							
						REF DRG		---									
						MATERIAL		A5052P									
						HEAT TREAT.		---		APPD				16.12.19			
						SURFACE TREAT.		---		REVD				16.12.19			
						TITLE		PANEL SUPPLY - B				CHKD				16.12.19	
										DRWN				16.12.19			
								SCALE				SHEET		Wt.			
						1:10				1 OF 1		-					
						DRG No.						ALT					
						 <b>BEML LIMITED</b> <small>NEW FRONTIERS. NEW DREAMS</small>						525-22134					
ALT.No.		ECN NO/CHANGES		DATE		BY		CHKD		APPD				0			


 **BEML LIMITED**  
NEW PRINTERS - NEW DREAMS



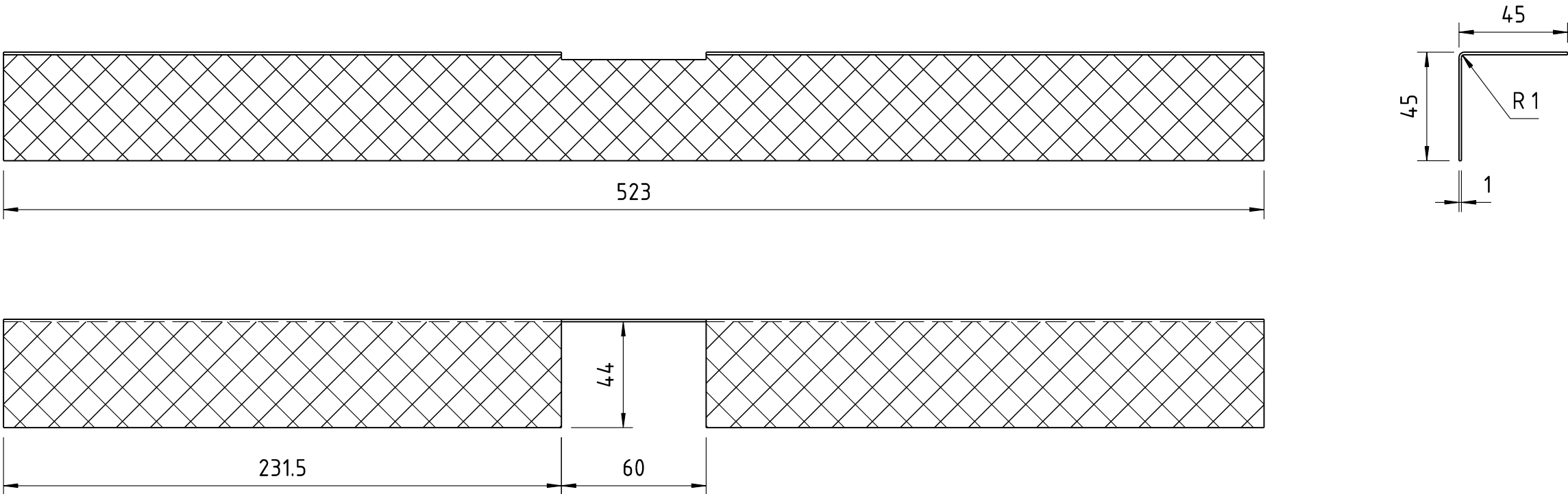
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DRAWING RELEASED FROM PLM, PHYSICAL SIGNATURE NOT REQUIRED

GRADE No.	VALUE	SYMBOL
N1	0.025	▽
N2	0.05	▽
N3	0.1	▽
N4	0.2	▽
N5	0.4	▽
N6	0.8	▽
N7	1.6	▽
N8	3.2	▽
N9	6.3	▽
N10	12.5	▽
N11	25	▽
N12	50	▽
ROUGHNESS		




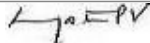
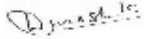

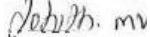


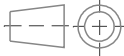


NOTES:

- 1.REMOVE ALL SHARP EDGES AND BURRS.
- 2.PART SHALL BE ANODISED TO GRADE AC15 OF IS 1868:1996
- 3.ALTERNATE MATERIAL: Gr.52000 COND 'O', IS:737
4.  MARKED AREA SHALL BE PAINTED ACCORDING TO PAINTING SPECIFICATION DOC NO. GR/TD/4390
- 5.ITEM SHALL CONFORM TO THE PTS DOC NO. GR/TD/4865.

MACHINING DEVIATIONS FOR LINEAR DIMENSIONS	RANGE	0 – 6	6 – 30	30 – 120	120 – 315	315-1000	1000-2000	2000-4000	ABOVE 4000	RA
	TOLERANCE	±0.1	±0.2	±0.3	±0.5	±0.8	±1.2	±2	±3	~
FOR DIMENSIONAL TOLERANCES OF SHEET METAL PARTS AND WELDED STRUCTURES, REFER STD. RD-227										
UNSPECIFIED TOLERANCE FOR LINEAR AND ANGULAR DIMENSIONS REF. IS 2102 (PT-1) (MEDIUM)							QUALITY OF WELD JOINTS REF, RD 230 MEDIUM			
VALUES OF SURFACE TEXTURE SHALL BE AS PER COMPANY STD DS. 1012.C.						STATUS:	MOCKUP/PROTO/PRODUCTION			
WELDING SHALL BE CARRIED OUT AS PER IS: 9595-96										



UN CONTROLLED

							523x88x1THK			
SL.No.	QTY	PART / STOCK No.	DESCRIPTION				SIZE (mm)	COMPANY STD./I.S	Wt. (Kg)	
								MATERIAL		
						PRODUCT	MUMBAI METRO CARS - L2 & L7			
						REF DRG				
						MATERIAL	A5052P			
						HEAT TREAT. SURFACE TREAT. TITLE				
						PANEL RETURN -G	APPD			05.11.19
							REVD			05.11.19
							CHKD			05.11.19
							DRWN			05.11.19
							SCALE		SHEET	Wt.
							1:2		1 OF 1	-
ALT.No.	ECN NO/CHANGES	DATE	BY	CHKD	APPD	DRG No.				ALT
						 <b>BEM</b> LIMITED				525-22132
						NEW PRINTERS. NEW ORANS				
										

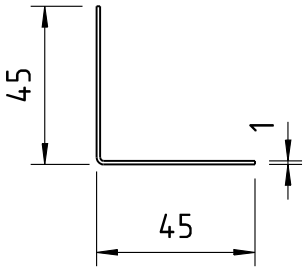
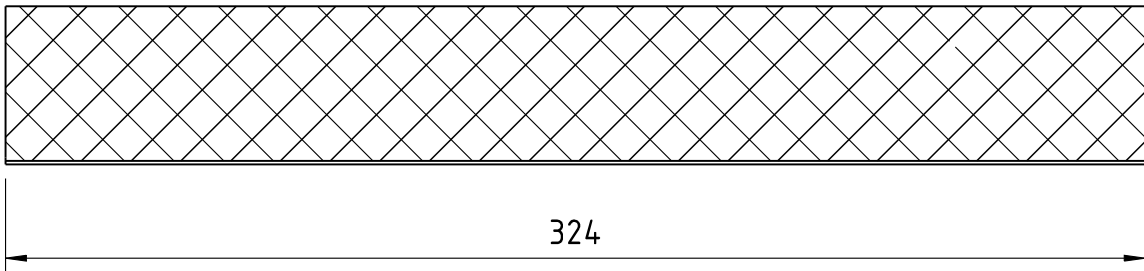
 **BEML LIMITED**  
NEW PRINTERS - NEW DREAMS

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GRADE No.	N1	N2	N3	N4	N5	N6	N7	N8	N9	N10	N11	N12
VALUE	0.025	0.05	0.1	0.2	0.4	0.8	1.6	3.2	6.3	12.5	25	50
SYMBOL												
SURFACE ROUGHNESS												

NOTES:

- 1.REMOVE ALL SHARP EDGES AND BURRS.
- 2.PART SHALL BE ANODISED TO GRADE AC15 OF IS 1868:1996
- 3.ALTERNATE MATERIAL: Gr.52000 COND 'O', IS:737
4. MARKED AREA SHALL BE PAINTED ACCORDING TO PAINTING SPECIFICATION DOC NO. GR/TD/4390
5. ITEM SHALL CONFORM TO THE PTS DOC NO. GR/TD/4865.



UN CONTROLLED

SL.No.	QTY	PART / STOCK No.	DESCRIPTION	SIZE (mm)	COMPANY STD./I.S	Wt. (Kg)
				324x88x1THK		
					MATERIAL	
			PRODUCT	MUMBAI METRO CARS - L2 & L7		
			REF DRG			
			MATERIAL	A5052P		
			HEAT TREAT.	APPD		16.12.19
			SURFACE TREAT.	REVD		16.12.19
			TITLE	CHKD		16.12.19
				DRWN		16.12.19
				SCALE		Wt.
				1:2	1 OF 1	-
ALT.No.	ECN NO/CHANGES	DATE	BY	CHKD	APPD	ALT
						0

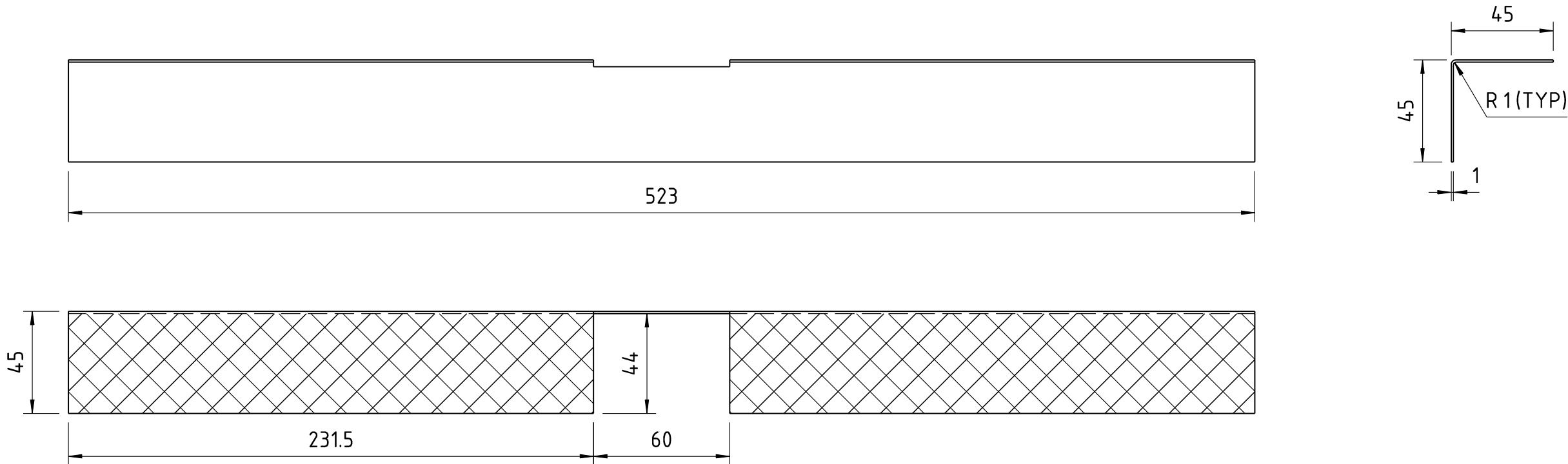
**BEML LIMITED**  
NEW FRONTIERS. NEW DREAMS

525-22131

A3

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DRAWING RELEASED FROM PLM, PHYSICAL SIGNATURE NOT REQUIRED

GRADE No.	N1	N2	N3	N4	N5	N6	N7	N8	N9	N10	N11	N12	VALUE	SYMBOL
	0.025	0.05	0.1	0.2	0.4	0.8	1.6	3.2	6.3	12.5	25	50		
SURFACE ROUGHNESS														



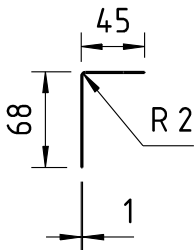
- NOTES:
- 1.REMOVE ALL SHARP EDGES AND BURRS.
  - 2.PART SHALL BE ANODISED TO GRADE AC15 OF IS 1868:1996
  - 3.ALTERNATE MATERIAL: Gr.52000 COND 'O', IS:737
  4. MARKED AREA SHALL BE PAINTED ACCORDING TO PAINTING SPECIFICATION DOC NO. GR/TD/4390
  5. ITEM SHALL CONFORM TO THE PTS DOC NO. GR/TD/4865.

UN CONTROLLED

							523x88x1THK				
SL.No.	QTY	PART / STOCK No.		DESCRIPTION				SIZE (mm)	COMPANY STD./I.S	Wt. (Kg)	
									MATERIAL		
					PRODUCT	MUMBAI METRO CARS - L2 & L7					
					REF DRG						
					MATERIAL	A5052P					
					HEAT TREAT.		APPD		16.12.19		
					SURFACE TREAT.		REVD		16.12.19		
					TITLE	PANEL RETURN -E			CHKD		16.12.19
									DRWN		16.12.19
						SCALE		SHEET	Wt.		
						1:2		1 OF 1	-		
ALT.No.	ECN NO/CHANGES		DATE	BY	CHKO	APPD	DRG No.		ALT		
							525-22130				
						 BEM LIMITED					
						NEW FRONTIERS. NEW DREAMS					

**BEML LIMITED**  
NEW FRONTIERS. NEW DREAMS

GRADE No.	N12	N11	N10	N9	N8	N7	N6	N5	N4	N3	N2	N1
VALUE	50	25	12.5	6.3	3.2	1.6	0.8	0.4	0.2	0.1	0.05	0.025
SYMBOL												




Technical drawing of a corner. The vertical leg has a dimension of 68. The horizontal leg has a dimension of 45. The corner is rounded with a radius of R 2. A dimension of 1 is shown for the horizontal leg's thickness.

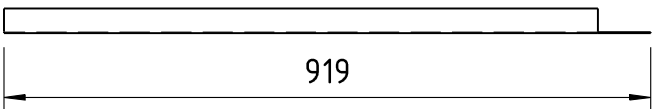
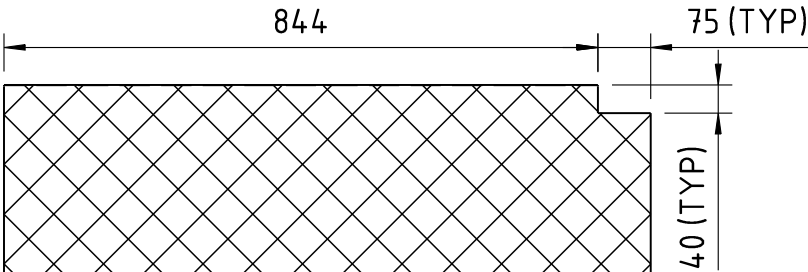
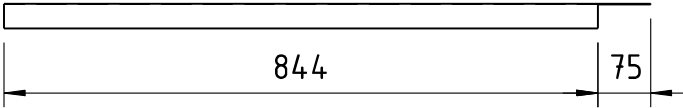
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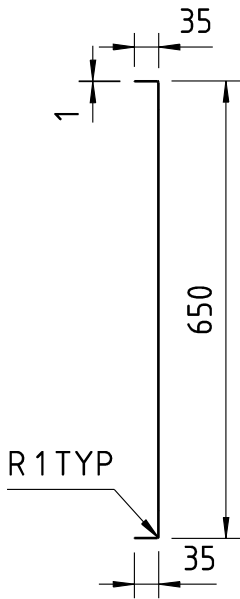
GRADE No.	VALUE	SYMBOL
N1	0.025	▽
N2	0.05	▽
N3	0.1	▽
N4	0.2	▽
N5	0.4	▽
N6	0.8	▽
N7	1.6	▽
N8	3.2	▽
N9	6.3	▽
N10	12.5	▽
N11	25	▽
N12	50	▽
ROUGHNESS		

NOTES:






- 1.REMOVE ALL SHARP EDGES AND BURRS.
- 2.PART SHALL BE ANODISED TO GRADE AC15 OF IS 1868:1996
- 3.ALTERNATE MATERIAL: Gr.52000 COND 'O', IS:737
4.  MARKED AREA SHALL BE PAINTED ACCORDING TO PAINTING SPECIFICATION DOC NO. GR/TD/4390
5. ITEM SHALL CONFORM TO THE PTS DOC NO. GR/TD/4865.



MACHINING DEVIATIONS FOR LINEAR DIMENSIONS	RANGE	0 – 6	6 – 30	30 – 120	120 – 315	315-1000	1000-2000	2000-4000	ABOVE 4000	RA
	TOLERANCE	±0.1	±0.2	±0.3	±0.5	±0.8	±1.2	±2	±3	~
FOR DIMENSIONAL TOLERANCES OF SHEET METAL PARTS AND WELDED STRUCTURES, REFER STD. RD-227										
UNSPECIFIED TOLERANCE FOR LINEAR AND ANGULAR DIMENSIONS REF. IS 2102 (PT-1) (MEDIUM)							QUALITY OF WELD JOINTS REF. RD 230 MEDIUM			
VALUES OF SURFACE TEXTURE SHALL BE AS PER COMPANY STD DS. 1012.C.						STATUS:	MOCKUP/PROTO/PRODUCTION			
WELDING SHALL BE CARRIED OUT AS PER IS: 9595-96										



UN CONTROLLED

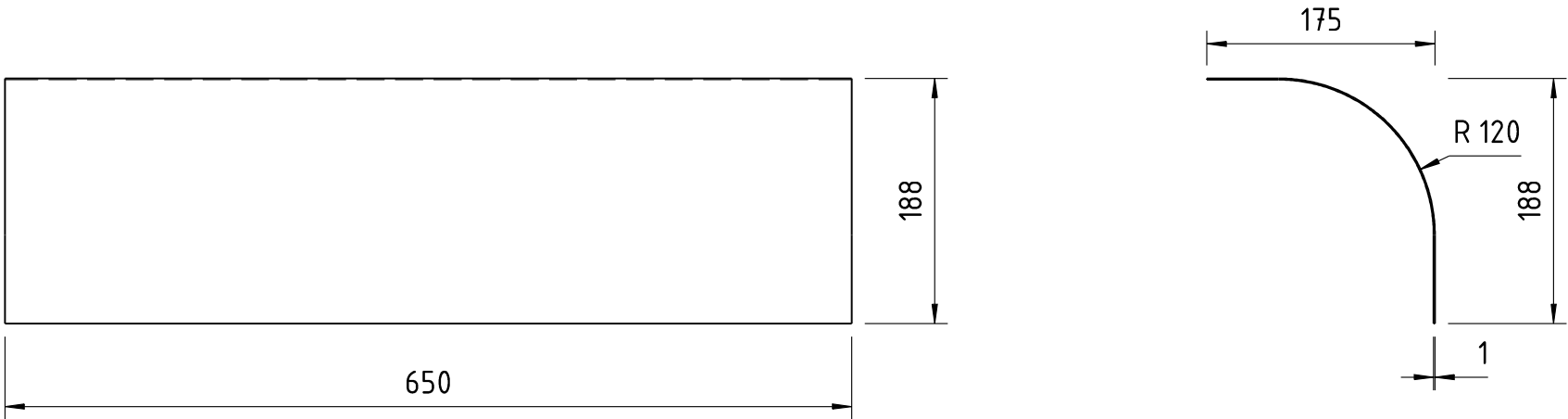
				919x716x1THK			
SL.No.	QTY	PART / STOCK No.		DESCRIPTION	SIZE (mm)	COMPANY STD./I.S	Wt. (Kg)
				PRODUCT	MUMBAI METRO CARS - L2 & L7		
				REF DRG			
				MATERIAL	A5052P		
				HEAT TREAT. SURFACE TREAT. TITLE			
				PANEL RETURN - C		APPD	16.12.2019
						REVD	16.12.2019
						CHKD	16.12.2019
						DRWN	16.12.2019
						SCALE	Wt.
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ALT.NO.	ECN NO/CHANGES	DATE	BY	CHKD	APPD	DRG No.	ALT
BEML LIMITED						525-22128	0





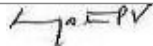

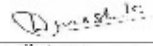
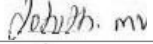


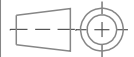


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GRADE No.	N1	N2	N3	N4	N5	N6	N7	N8	N9	N10	N11	N12	VALUE	SYMBOL
	0.025	0.05	0.1	0.2	0.4	0.8	1.6	3.2	6.3	12.5	25	50		
SURFACE														
ROUGHNESS														

- NOTES:
1. REMOVE ALL SHARP EDGES AND BURRS.
  2. PART SHALL BE ANODISED TO GRADE AC15 OF IS 1868:1996
  3. ALTERNATE MATERIAL: Gr.52000 COND 'O', IS:737
  4. ITEM SHALL CONFORM TO THE PTS DOC NO GR/TD/4865.



UN CONTROLLED


										650x310x1THK					
SL.No.	QTY	PART / STOCK No.	DESCRIPTION				SIZE (mm)	COMPANY STD./I.S		Wt. (Kg)					
								MATERIAL							
						PRODUCT	MUMBAI METRO CARS L2 & L7								
						REF DRG	---								
						MATERIAL	A5052P								
						HEAT TREAT.	---	APPD		16.12.19					
						SURFACE TREAT.	---	REVD		16.12.19					
						TITLE	PANEL RETURN - B						CHKD		16.12.19
												DRWN		16.12.19	
												SCALE		SHEET	Wt.
						1:5		1 OF 1		-					
						DRG No.						ALT			
						525-22127									
ALT.No.	ECN NO/CHANGES		DATE	BY	CHKD	APPD	 <b>BEM</b> LIMITED <small>NEW FRONTIERS. NEW DREAMS</small>								

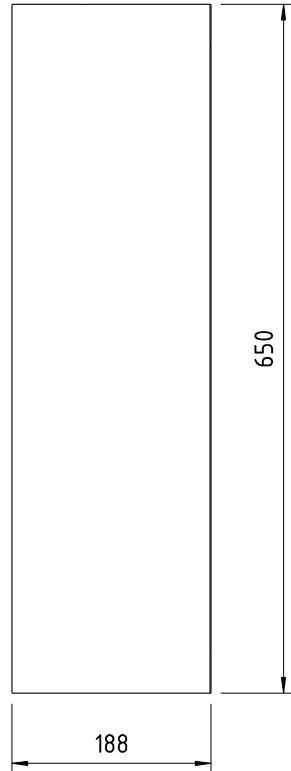
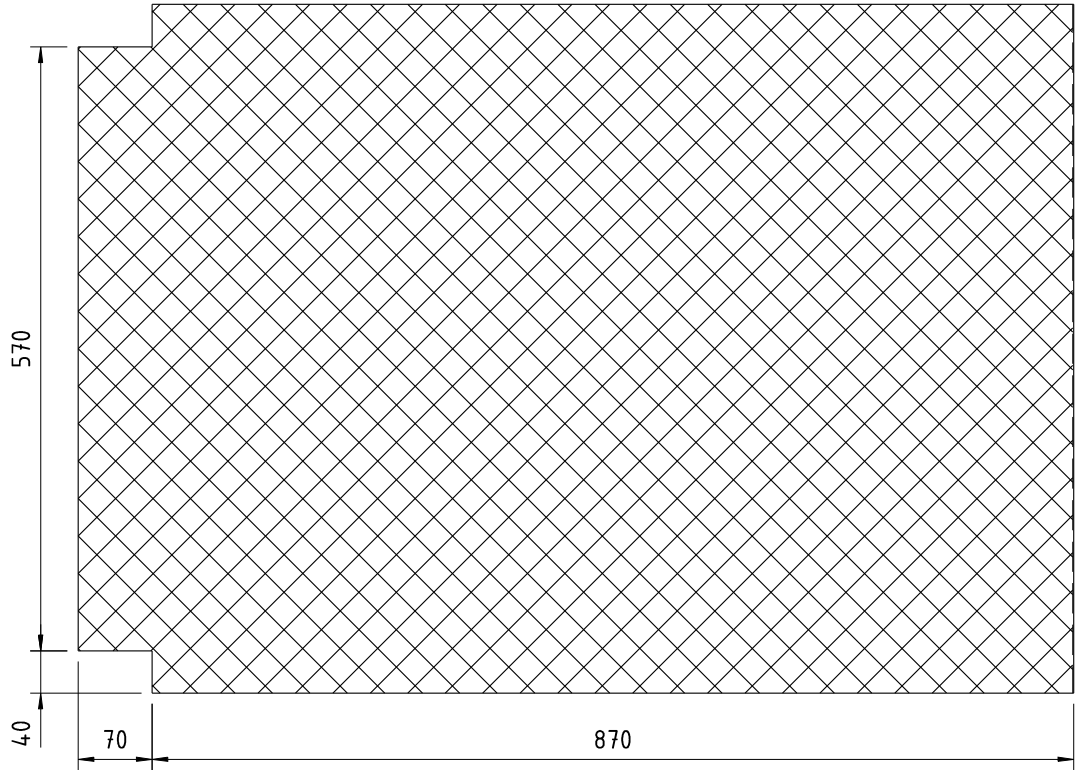
**BEML LIMITED**  
NEW PRINTERS. NEW DREAMS

A3



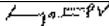







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GRADE No.	VALUE	SYMBOL
SURFACE ROUGHNESS		

- 1.REMOVE ALL SHARP EDGES AND BURRS.
- 2.PART SHALL BE ANODISED TO GRADE AC15 OF IS 1868:1996
- 3.ALTERNATE MATERIAL: Gr.52000 COND 'O', IS:737
4.  MARKED AREA SHALL BE PAINTED ACCORDING TO PAINTING SPECIFICATION DOC NO. GR/TD/4390
- 5.ITEM SHALL CONFORM TO THE PTS DOC NO GR/TD/4865.



UN CONTROLLED

										1075x650x1THK			
SL.No.	QTY	PART / STOCK No.				DESCRIPTION				SIZE	COMPANY STD./I/S		Wt. (Kg)
											MATERIAL		
						PRODUCT	MUMBAI METRO CARS L2 & L7						
						REF DRG							
						MATERIAL	A5052P						
						HEAT TREAT.		APPD			16.12.19		
						SURFACE TREAT.		REVD			16.12.19		
						TITLE		CHKD			16.12.19		
						PANEL RETURN -A		DRWN			16.12.19		
							SCALE		SHEET		Wt.		
							1:5		1 OF 1		-		
								DRG No.					
ALT.NO.	ECN NO/CHANGES	DATE	BY	CHKD	APPD	 <b>BEM</b> BEML LIMITED <small>BEAR ENGINEERING &amp; MANUFACTURING</small>					525-22126		

A2

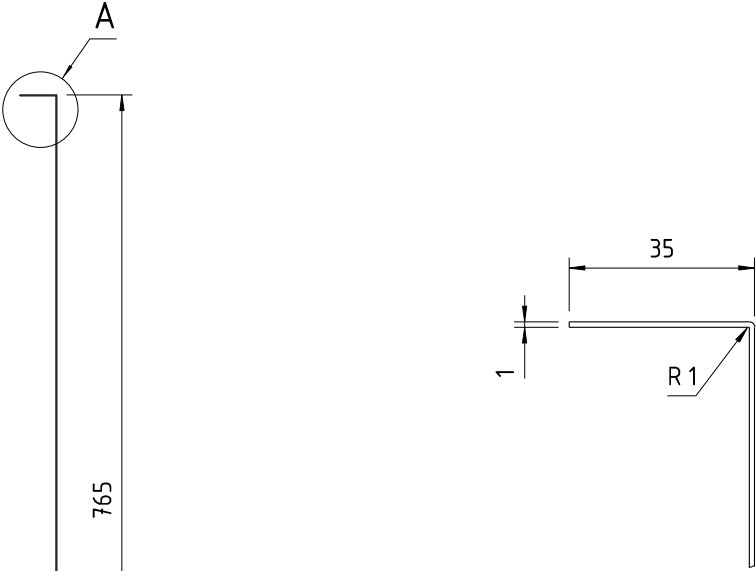
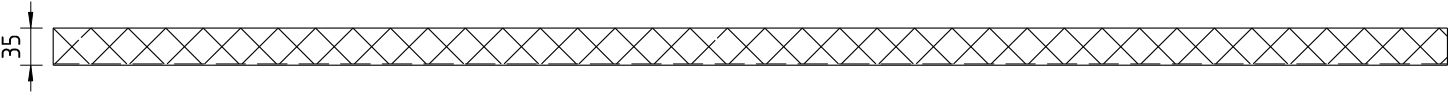
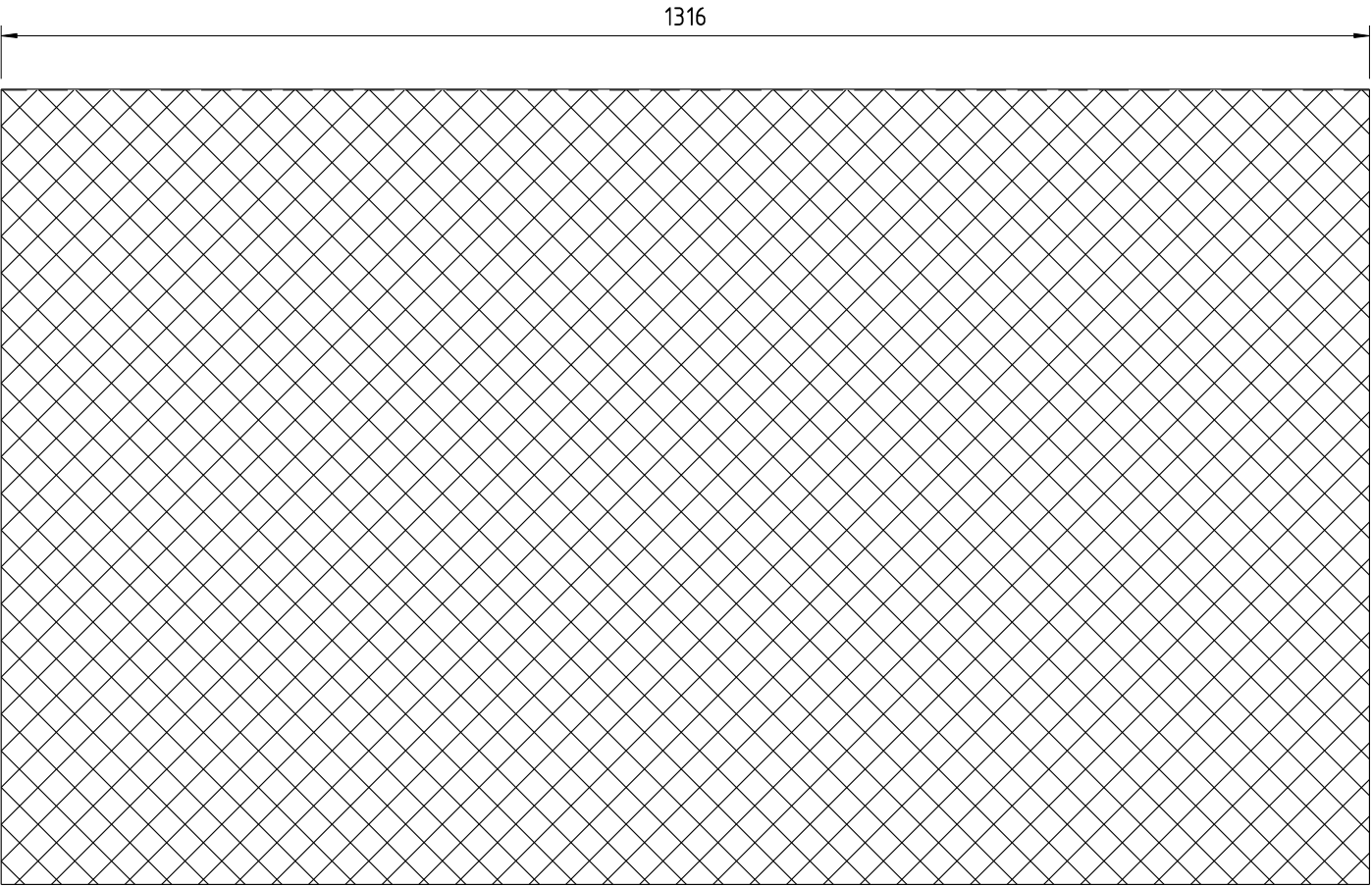
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GRADE No.	N1	N2	N3	N4	N5	N6	N7	N8	N9	N10	N11	N12
VALUE	0.025	0.05	0.1	0.2	0.4	0.8	1.6	3.2	6.3	12.5	25	50
SYMBOL												
SURFACE ROUGHNESS												

NOTES:





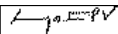

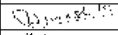

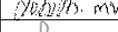

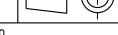



- REMOVE ALL SHARP EDGES AND BURRS.
- PART SHALL BE ANODISED TO GRADE AC15 OF IS 1868:1996
- ALTERNATE MATERIAL: Gr.52000 COND 'O', IS:737
- MARKED AREA SHALL BE PAINTED ACCORDING TO PAINTING SPECIFICATION DOC NO. GR/TD/4390
- ITEM SHALL CONFORM TO THE PTS DOC NO GR/TD/4865.

MACHINING DEVIATIONS FOR LINEAR DIMENSIONS	RANGE	0 - 6	6 - 30	30 - 120	120 - 315	315-1000	1000-2000	2000-4000	ABOVE 4000	RA
	TOLERANCE	±0.1	±0.2	±0.3	±0.5	±0.8	±1.2	±2	±3	~
FOR DIMENSIONAL TOLERANCES OF SHEET METAL PARTS AND WELDED STRUCTURES, REFER STD. RD-227										
UNSPECIFIED TOLERANCE FOR LINEAR AND ANGULAR DIMENSIONS REF. IS 2102 (PT-1) (MEDIUM)							QUALITY OF WELD JOINTS REF. RD 230 MEDIUM			
VALUES OF SURFACE TEXTURE SHALL BE AS PER COMPANY STD DS. 1012.C.							STATUS:	MOCKUP/PROTO/PRODUCTION		
WELDING SHALL BE CARRIED OUT AS PER IS: 9595-96										



DETAIL -A

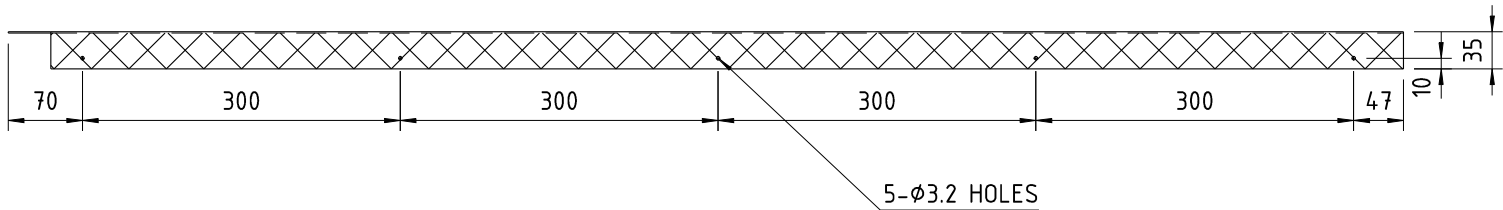
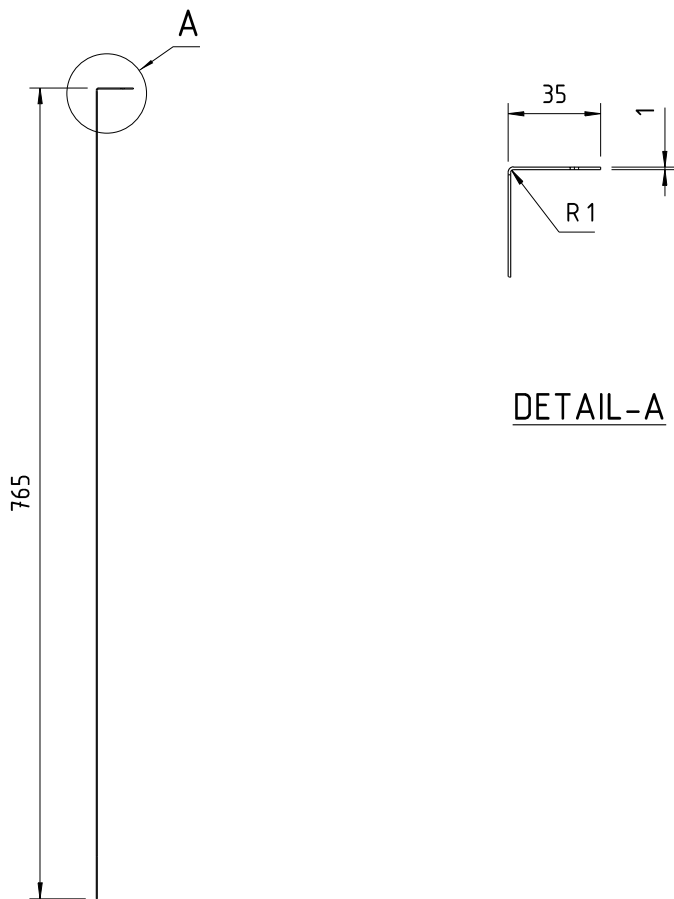
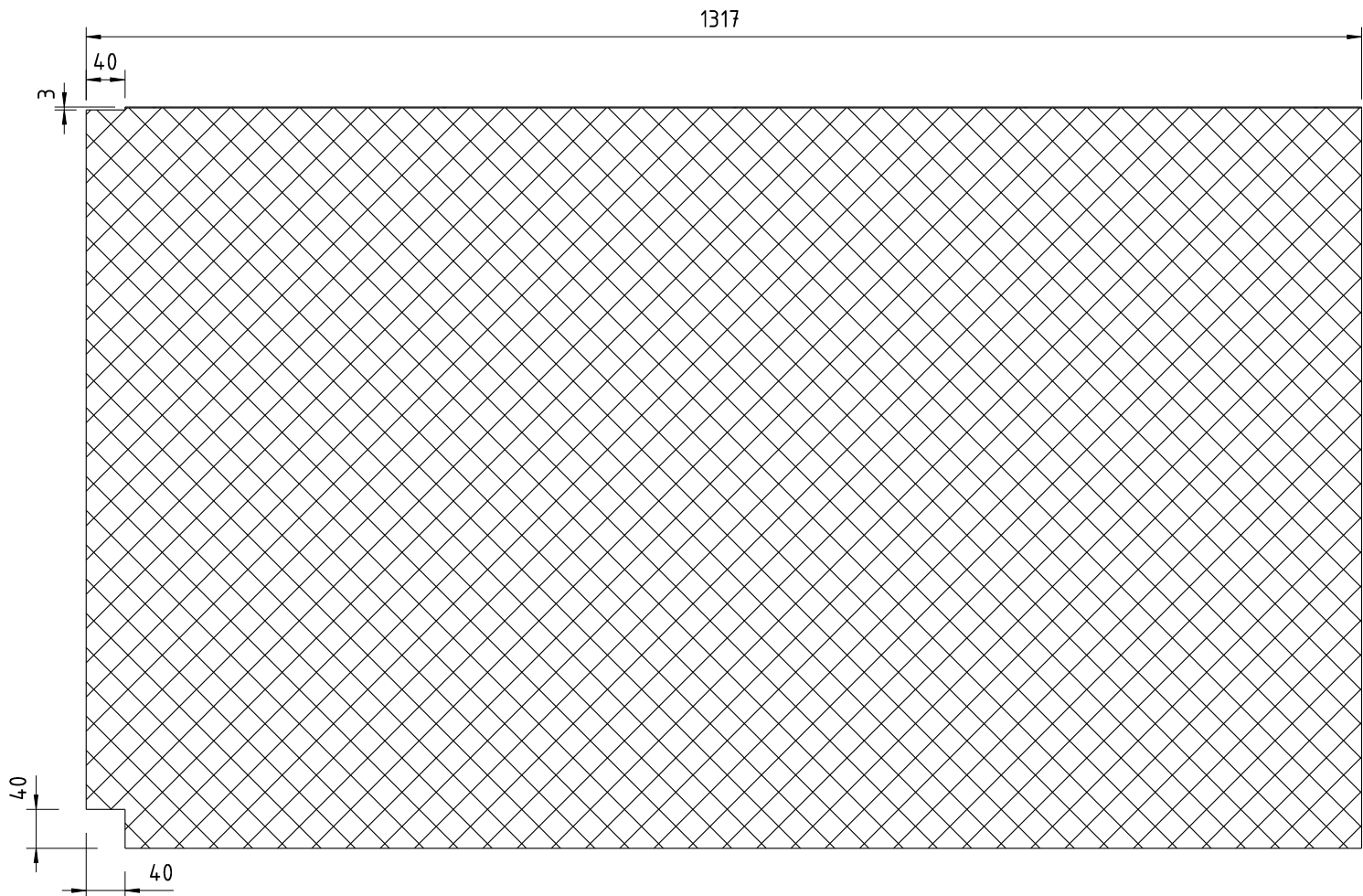
UN CONTROLLED

										1316x798x1THK		
SL.No.	QTY	PART / STOCK No.				DESCRIPTION	SIZE	COMPANY STD./I.S		Wt. (Kg)	MATERIAL	
						PRODUCT	MUMBAI METRO CARS L2 & L7					
						REF DRG						
						MATERIAL	A5052P					
						HEAT TREAT.		APPD			02.11.19	
						SURFACE TREAT.		REVD			02.11.19	
						TITLE	PANEL MIDDLE, UPPER-H	CHKO			02.11.19	
								DRWN			02.11.19	
								SCALE		SHEET	Wt.	
							1:5			1 OF 1	-	
ALT.No.	ECN NO/CHANGES				DATE	BY	CHKO	APPD	DRG No.		ALT	
									 BEML LIMITED			
									525-22125			


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GRADE No.	VALUE	SYMBOL
SURFACE ROUGHNESS		

MACHINING DEVIATIONS FOR LINEAR DIMENSIONS	RANGE	0 - 6	6 - 30	30 - 120	120 - 315	315-1000	1000-2000	2000-4000	ABOVE 4000	RA
	TOLERANCE	±0.1	±0.2	±0.3	±0.5	±0.8	±1.2	±2	±3	~
FOR DIMENSIONAL TOLERANCES OF SHEET METAL PARTS AND WELDED STRUCTURES, REFER STD. RD-227										
UNSPECIFIED TOLERANCE FOR LINEAR AND ANGULAR DIMENSIONS REF. IS 2102 (PT-1) (MEDIUM)							QUALITY OF WELD JOINTS REF. RD 230 (MEDIUM)			
VALUES OF SURFACE TEXTURE SHALL BE AS PER COMPANY STD DS. 1012.C.							STATUS:	MOCKUP/PROTO/PRODUCTION		
WELDING SHALL BE CARRIED OUT AS PER IS: 9595-96										



NOTES:

- 1.REMOVE ALL SHARP EDGES AND BURRS.
- 2.PART SHALL BE ANODISED TO GRADE AC15 OF IS 1868:1996
- 3.ALTERNATE MATERIAL: Gr.52000 COND 'O', IS:737
- 4. MARKED AREA SHALL BE PAINTED ACCORDING TO PAINTING SPECIFICATION DOC NO. GR/TD/4390
5. ITEM SHALL CONFORM TO THE PTS DOC NO GR/TD/4865.

UN CONTROLLED

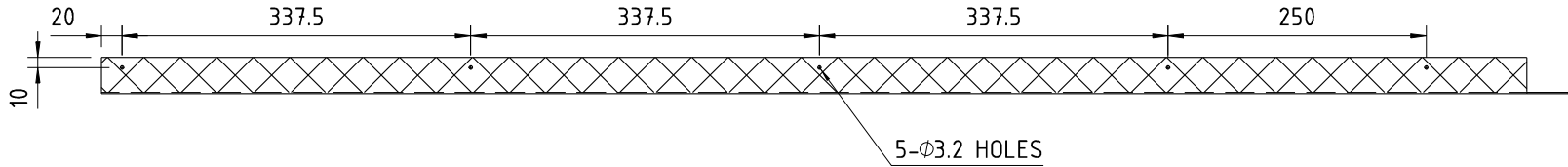
[illegible]

A2

COPY RIGHT & CONFIDENTIAL


RO	SU	GRADE No.
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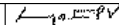
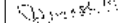
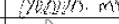





MACHINING DEVIATIONS FOR LINEAR DIMENSIONS	RANGE	0 - 6	6 - 30	30 - 120	120 - 315	315-1000	1000-2000	2000-4000	ABOVE 4000	RA
	TOLERANCE	±0.1	±0.2	±0.3	±0.5	±0.8	±1.2	±2	±3	~
FOR DIMENSIONAL TOLERANCES OF SHEET METAL PARTS AND WELDED STRUCTURES, REFER STD. RD-227										
UNSPECIFIED TOLERANCE FOR LINEAR AND ANGULAR DIMENSIONS REF. IS 2102 (PT-1) (MEDIUM)							QUALITY OF WELD JOINTS REF. RD 230 MEDIUM			
VALUES OF SURFACE TEXTURE SHALL BE AS PER COMPANY STD DS. 1012.C.							STATUS:	MOCKUP/PROTO/PRODUCTION		
WELDING SHALL BE CARRIED OUT AS PER IS: 9595-96										



DETAIL -A

# UN CONTROLLED





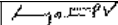







- 1.REMOVE ALL SHARP EDGES AND BURRS.
- 2.PART SHALL BE ANODISED TO GRADE AC15 OF IS 1868:1996
- 3.ALTERNATE MATERIAL: Gr.52000 COND 'O', IS:737
- 4. MARKED AREA SHALL BE PAINTED ACCORDING TO PAINTING SPECIFICATION DOC NO. GR/TD/4390
5. ITEM SHALL CONFORM TO THE PTS DOC NO GR/TD/4865.

						1220x798x1THK				
SL.No.	QTY	PART / STOCK No.				DESCRIPTION	SIZE	COMPANY STD./I.S	Wt. (Kg)	
								MATERIAL		
						PRODUCT	MUMBAI METRO CARS L2 & L7			
						REF DRG				
						MATERIAL	A5052P			
						HEAT TREAT.		APPD		16.12.2019
						SURFACE TREAT.		REVD		16.12.2019
						TITLE	PANEL MIDDLE, UPPER-F	CHKD		16.12.2019
								DRWN		16.12.2019
						SCALE		SHEET	Wt.	
						1:5		1 OF 1	2.63	
ALT.NO.	ECN NO/CHANGES	DATE	BY	CHKD	APPD	 BEML LIMITED <small>BEARINGS - ROLLERS - RAILS</small>		DRG No.		ALT
								525-22123		

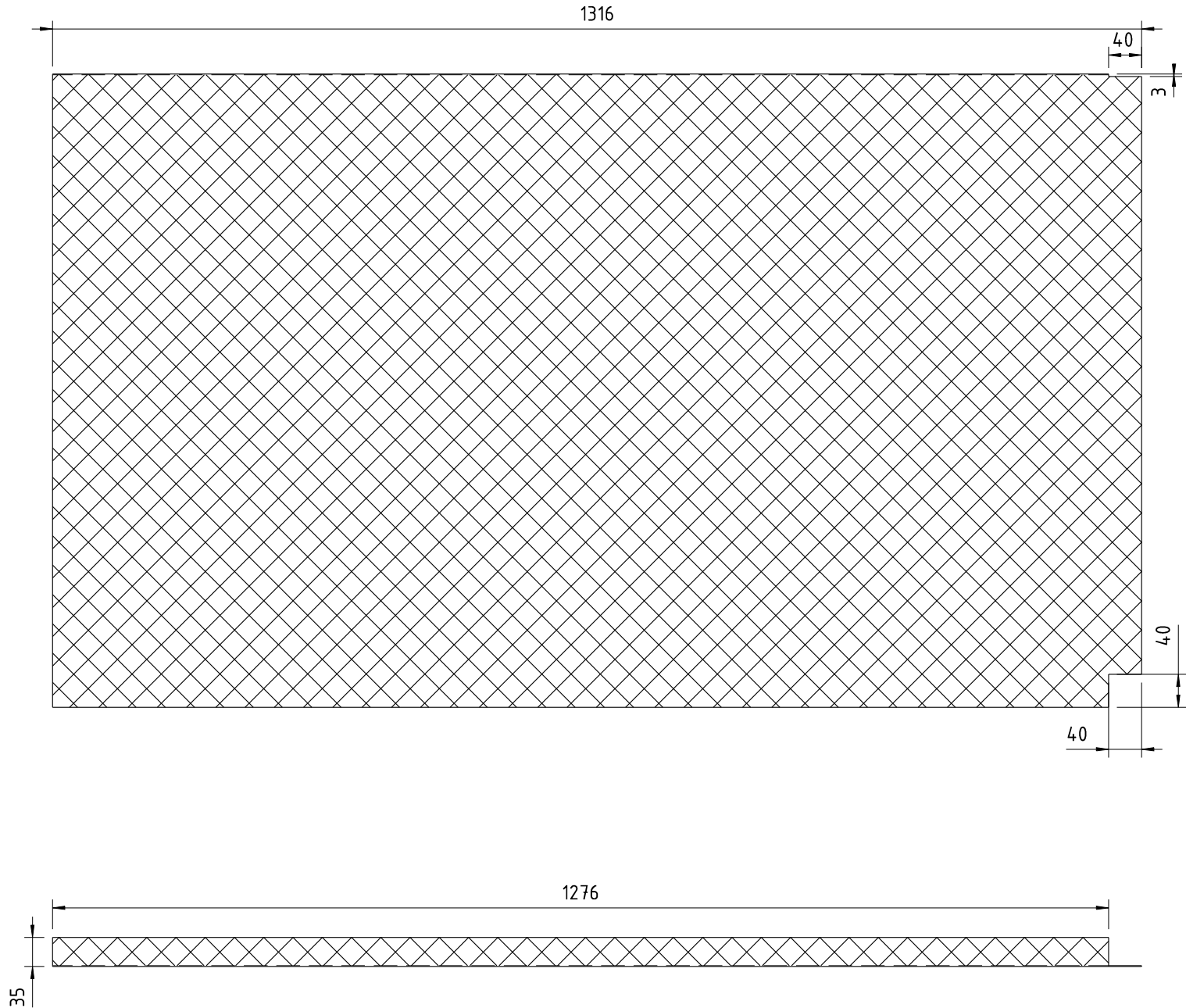
GRADE No.	N12	N11	N10	N9	N8	N7	N6	N5	N4	N3	N2	N1
SURFACE VALUE	50	25	12.5	6.3	3.2	1.6	0.8	0.4	0.2	0.1	0.05	0.025
ROUGHNESS SYMBOL												

Technical drawing showing a vertical plate with a detail view. The main view is a vertical line with a dimension of 765. A circle at the top left corner indicates the location of detail view A. Detail view A shows a corner with a horizontal dimension of 35, a vertical dimension of 1, and a radius of R 1.



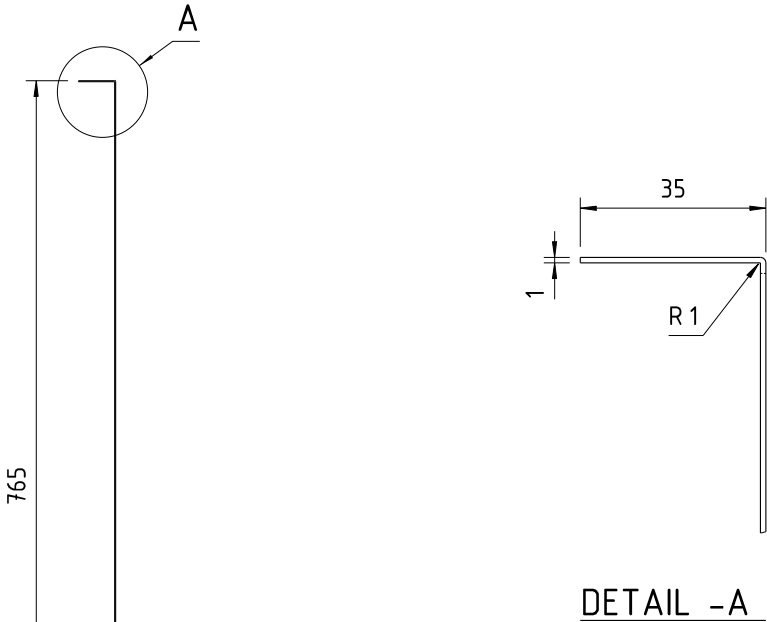
- |   |                |                  |    |      |      | 1220x798x1THK   |                           |                  |   |   |
|---|----------------|------------------|----|------|------|---|---------------------------|------------------|---|---|
| SL.No.  | QTY            | PART / STOCK No. |    |      |      | DESCRIPTION   | SIZE                      | COMPANY STD./I.S | Wt. (Kg)  |   |
|   |                |                  |    |      |      |   |                           | MATERIAL         |   |   |
|  |                |                  |    |      |      | PRODUCT   | MUMBAI METRO CARS L2 & L7 |                  |   |   |
|  |                |                  |    |      |      | REF DRG   |                           |                  |   |   |
|  |                |                  |    |      |      | MATERIAL  | A5052P                    |                  |   |   |
|  |                |                  |    |      |      | HEAT TREAT.   |                           | APPD             |  | 16.12.2019  |
|  |                |                  |    |      |      | SURFACE TREAT.  |                           | REVD             |  | 16.12.2019  |
|   |                |                  |    |      |      | TITLE   | PANEL MIDDLE,<br>UPPER-E  | CHKD             |  | 16.12.2019  |
|   |                |                  |    |      |      |   |                           | DRWN             |  | 16.12.2019  |
|   |                |                  |    |      |      |   |                           | SCALE            |  | SHEET   |
| ALT.NO.   | ECN NO/CHANGES | DATE             | BY | CHKD | APPD |   |                           | 1:5              | 1 OF 1  | 2.64kg  |
|   |                |                  |    |      |      |  <b>BEM</b> BEML LIMITED<br><small>WE PROTECT YOU. YOU PROTECT US.</small> |                           | 525-22122        |   |  |





- NOTES:
- 1.REMOVE ALL SHARP EDGES AND BURRS.
  - 2.PART SHALL BE ANODISED TO GRADE AC15 OF IS 1868:1996
  - 3.ALTERNATE MATERIAL: Gr.52000 COND 'O', IS:737
  4. MARKED AREA SHALL BE PAINTED ACCORDING TO PAINTING SPECIFICATION DOC NO. GR/TD/4390
  5. ITEM SHALL CONFORM TO THE PTS DOC NO GR/TD/4865.

MACHINING DEVIATIONS FOR LINEAR DIMENSIONS	RANGE	0 – 6	6 – 30	30 – 120	120 – 315	315–1000	1000–2000	2000–4000	ABOVE 4000	RA
	TOLERANCE	±0.1	±0.2	±0.3	±0.5	±0.8	±1.2	±2	±3	~
FOR DIMENSIONAL TOLERANCES OF SHEET METAL PARTS AND WELDED STRUCTURES, REFER STD. RD-227										
UNSPECIFIED TOLERANCE FOR LINEAR AND ANGULAR DIMENSIONS REF. IS 2102 (PT-1) (MEDIUM)							QUALITY OF WELD JOINTS REF. RD 230 MEDIUM			
VALUES OF SURFACE TEXTURE SHALL BE AS PER COMPANY STD DS. 1012.C.							STATUS:	MOCKUP/PROTO/PRODUCTION		
WELDING SHALL BE CARRIED OUT AS PER IS: 9595-96										

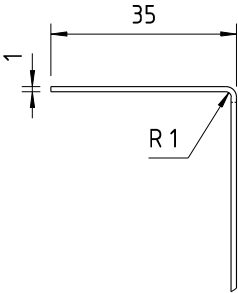


UN CONTROLLED

						1316x798x1THK					
SL.No.	QTY	PART / STOCK No.		DESCRIPTION		SIZE	COMPANY STD./I.S		Wt. (Kg)		
							MATERIAL				
					PRODUCT	MUMBAI METRO CARS L2 & L7					
					REF DRG						
					MATERIAL	A5052P					
					HEAT TREAT.		APPD			16.12.2019	
					SURFACE TREAT.		REVD			16.12.2019	
					TITLE	PANEL MIDDLE, UPPER-D	CHKD			16.12.2019	
							DRWN		16.12.2019		
							SCALE		SHEET	Wt.	
							1:5		1 OF 1	2.84 kg	
						DRG No.				ALT	
ALT.No.	ECN NO/CHANGES		DATE	BY	CHKD	APPD	BEML LIMITED		525-22121		




GRADE No	VALUE	SYMBOL
SURFACE ROUGHNESS		

[illegible]

DETAIL -A

**UN CONTROLLED**

**NOTES:**

- 1.REMOVE ALL SHARP EDGES AND BURRS.
- 2.PART SHALL BE ANODISED TO GRADE AC15 OF IS 1868:1996
- 3.ALTERNATE MATERIAL: Gr.52000 COND 'O', IS:737
- 4. MARKED AREA SHALL BE PAINTED ACCORDING TO PAINTING SPECIFICATION DOC NO. GR/TD/4390
5. ITEM SHALL CONFORM TO THE PTS DOC NO GR/TD/4865.

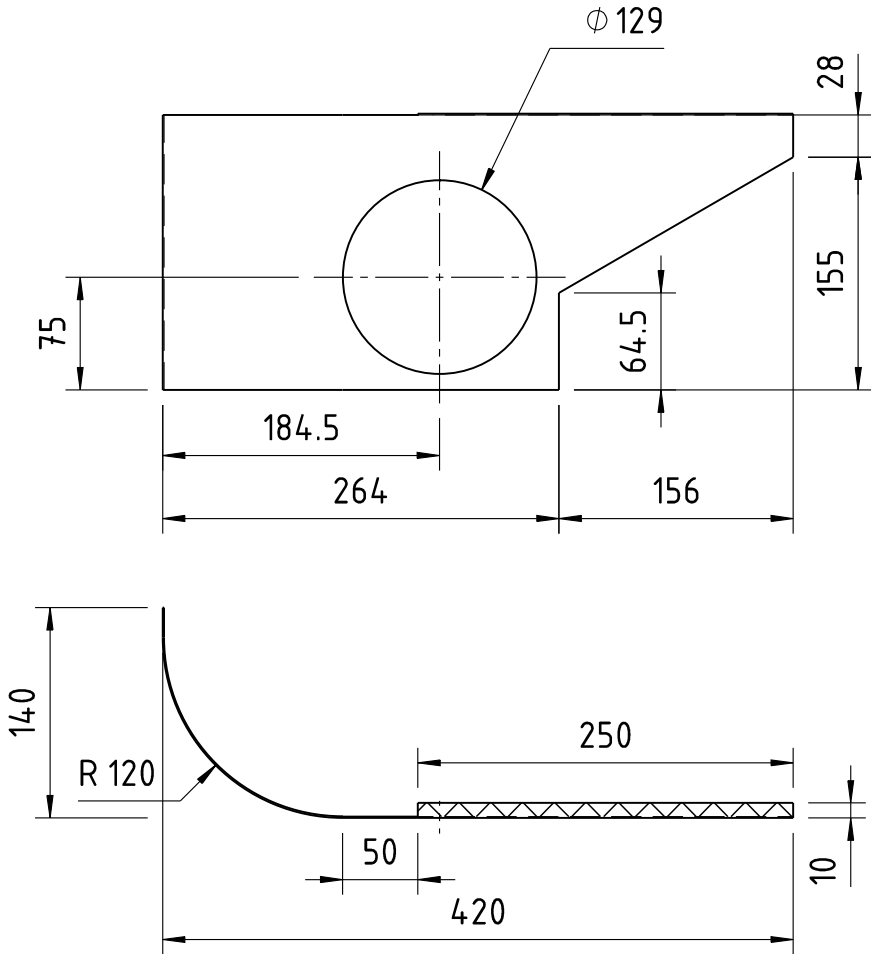






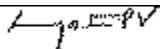

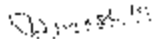
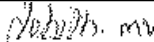

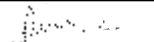




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GRADE No.	N1	N2	N3	N4	N5	N6	N7	N8	N9	N10	N11	N12
VALUE	0.025	0.05	0.1	0.2	0.4	0.8	1.6	3.2	6.3	12.5	25	50
SYMBOL												
SURFACE ROUGHNESS												

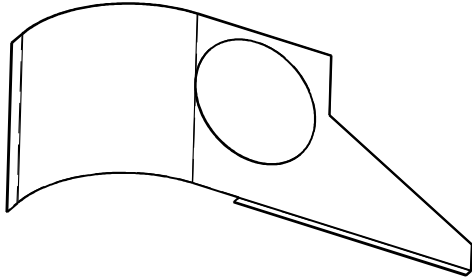
- NOTES:
1. REMOVE ALL SHARP EDGES AND BURRS.
  2. PART SHALL BE ANODISED TO GRADE AC15 OF IS 1868:1996
  3. ALTERNATE MATERIAL: Gr.52000 COND 'O', IS:737
  4. MARKED AREA SHALL BE PAINTED ACCORDING TO PAINTING SPECIFICATION NO. GR/TD/4390.
  5. ITEM SHALL CONFORM TO THE PTS DOC NO GR/TD/4865.



UN CONTROLLED

						507x193x1THK						
SL.No.	QTY	PART / STOCK No.				DESCRIPTION	SIZE (mm)	COMPANY STD./I.S		Wt. (Kg)		
								MATERIAL				
						PRODUCT	MUMBAI METRO CARS L2 & L7					
						REF DRG	---					
						MATERIAL	A5052P					
						HEAT TREAT.	---		APPD		18.12.2019	
						SURFACE TREAT.	---		REVD		18.12.2019	
						TITLE	PANEL END, SPLIT-E		CHKD		18.12.2019	
									DRWN			18.12.2019
						SCALE			SHEET	Wt.		
							1:5		1 OF 1	-		
						DRG No.					525-22115	
ALT.NO.	ECN NO/CHANGES		DATE	BY	CHKD	APPD	 <b>BEM LIMITED</b> <small>NEW FRONTIERS- NEW DREAMS</small>					
												

		2					1			
MACHINING DEVIATIONS FOR LINEAR DIMENSIONS	RANGE	0 – 6	6 – 30	30 – 120	120 – 315	315-1000	1000-2000	2000-4000	ABOVE 4000	RA
	TOLERANCE	±0.1	±0.2	±0.3	±0.5	±0.8	±1.2	±2	±3	~
FOR DIMENSIONAL TOLERANCES OF SHEET METAL PARTS AND WELDED STRUCTURES, REFER STD. RD-227										
UNSPECIFIED TOLERANCE FOR LINEAR AND ANGULAR DIMENSIONS REF. IS 2102 (PT-1) (MEDIUM)							QUALITY OF WELD JOINTS REF, RD 230 MEDIUM			
VALUES OF SURFACE TEXTURE SHALL BE AS PER COMPANY STD DS. 1012.C.							STATUS:	MOCKUP/PROTO/PRODUCTION		
WELDING SHALL BE CARRIED OUT AS PER IS: 9595-96										

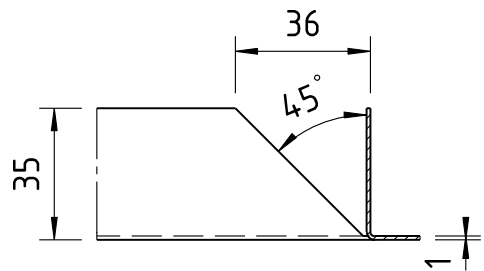
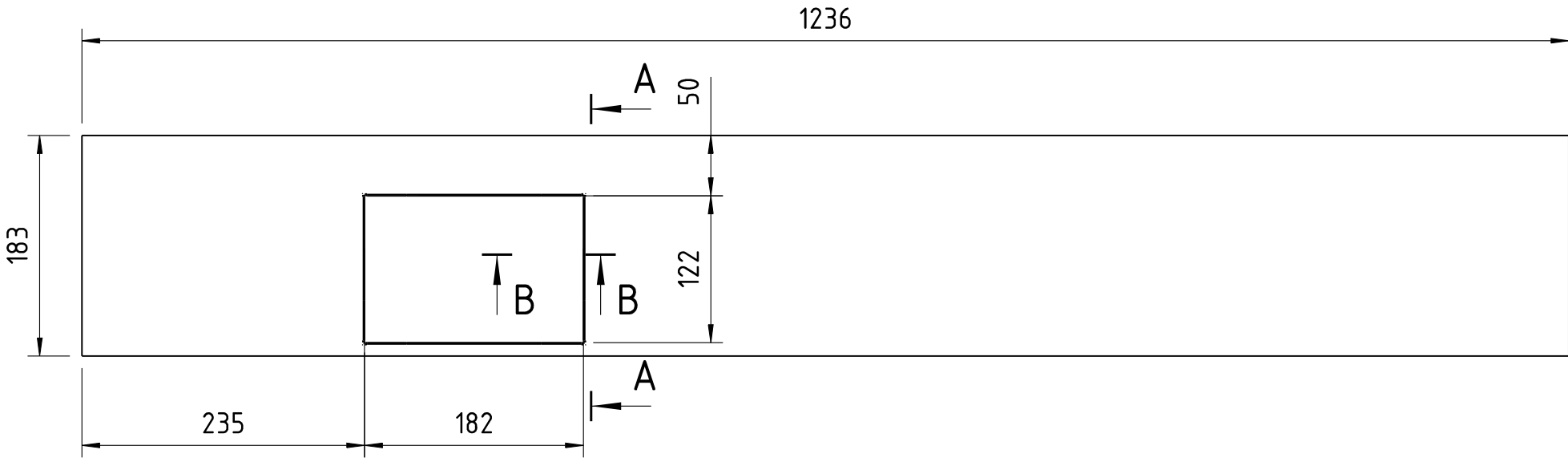


PART NO	REMARK
525-22115-300	AS DRAWN
525-22115-301	OPP HAND DRAWN

**BEML LIMITED**  
NEW FRONTIERS - NEW DREAMS

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GRADE No.	N1	N2	N3	N4	N5	N6	N7	N8	N9	N10	N11	N12	SYMBOL
VALUE	0.025	0.05	0.1	0.2	0.4	0.8	1.6	3.2	6.3	12.5	25	50	
ROUGHNESS													



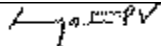

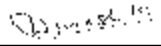
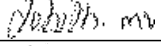

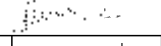
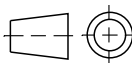




SECTION B-B

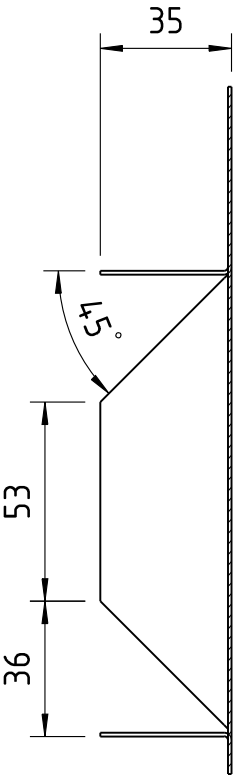
- NOTES:
- 1. REMOVE ALL SHARP EDGES AND BURRS.
  - 2. PART SHALL BE ANODISED TO GRADE AC15 OF IS 1868:1996
  - 3. ALTERNATE MATERIAL: Gr.52000 COND 'O', IS:737
  - 4. ITEM SHALL CONFORM TO THE PTS DOC NO GR/TD/4865.

UN CONTROLLED

PART NO	REMARK
525-22114-300	AS DRAWN
525-22114-301	OPP HAND DRAWN

							1236x183x1THK				
SL.No.	QTY	PART / STOCK No.				DESCRIPTION	SIZE (mm)	COMPANY STD./I.S		Wt. (Kg)	
								MATERIAL			
						PRODUCT	MUMBAI METRO CARS L2 & L7				
						REF DRG	---				
						MATERIAL	A5052P				
						HEAT TREAT.	---	APPD		17.12.2019	
						SURFACE TREAT.	---	REVD		17.12.2019	
						TITLE	PANEL FRONT SPLIT-A		CHKD		17.12.2019
									DRWN		17.12.2019
						SCALE		SHEET	Wt.		
						1:5		1 OF 1		0.6	
						DRG No.				ALT	
ALT.NO.	ECN NO/CHANGES	DATE	BY	CHKD	APPD	 BEML LIMITED				525-22114	

MACHINING DEVIATIONS FOR LINEAR DIMENSIONS	RANGE	0 – 6	6 – 30	30 – 120	120 – 315	315-1000	1000-2000	2000-4000	ABOVE 4000	RA
	TOLERANCE	±0.1	±0.2	±0.3	±0.5	±0.8	±1.2	±2	±3	~
FOR DIMENSIONAL TOLERANCES OF SHEET METAL PARTS AND WELDED STRUCTURES, REFER STD. RD-227										
UNSPECIFIED TOLERANCE FOR LINEAR AND ANGULAR DIMENSIONS REF. IS 2102 (PT-1) (MEDIUM)							QUALITY OF WELD JOINTS REF, RD 230 MEDIUM			
VALUES OF SURFACE TEXTURE SHALL BE AS PER COMPANY STD DS. 1012.C.							STATUS:	MOCKUP/PROTO/PRODUCTION		
WELDING SHALL BE CARRIED OUT AS PER IS: 9595-96										

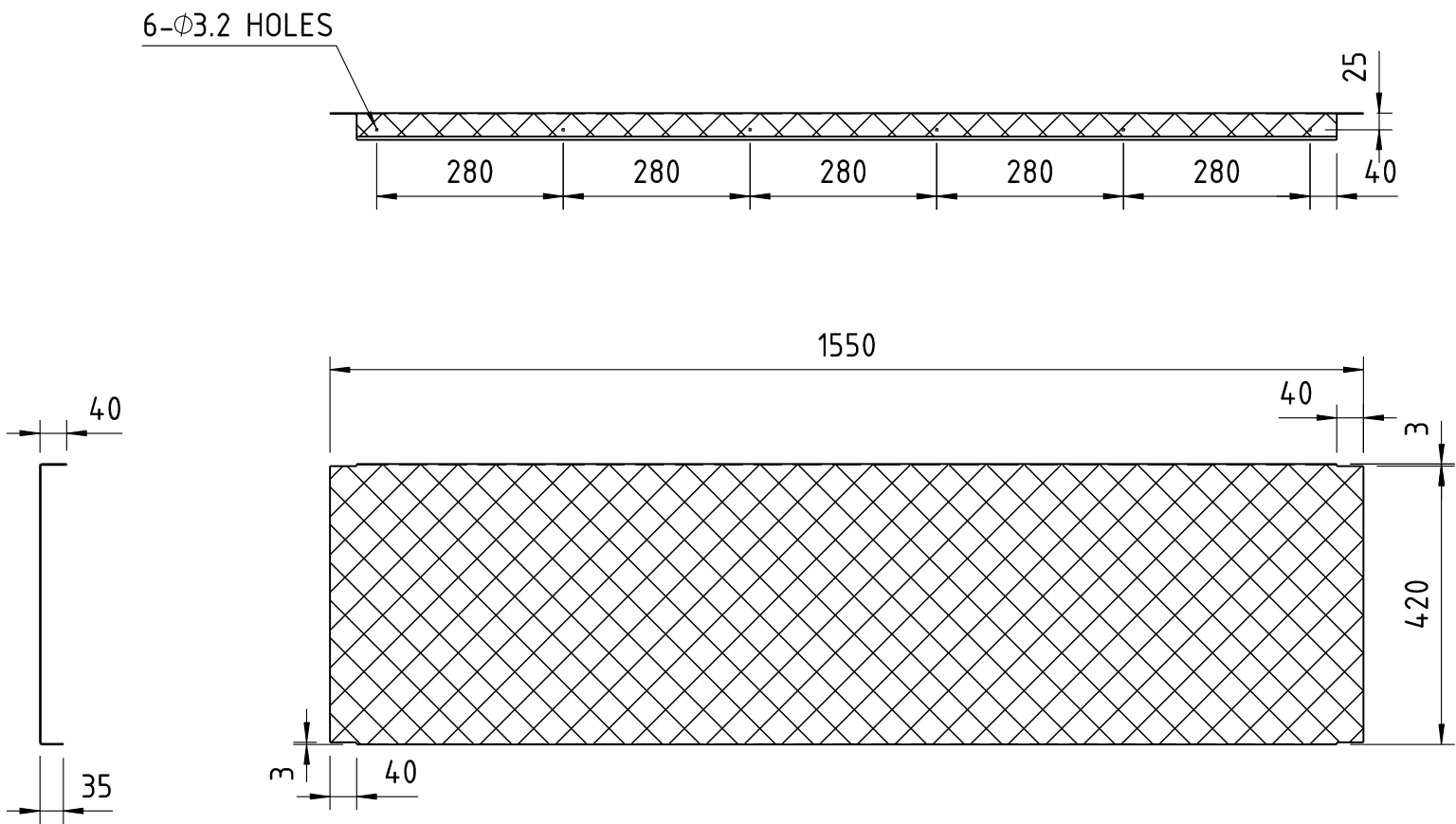


SECTION A-A

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DRAWING RELEASED FROM PLM, PHYSICAL SIGNATURE NOT REQUIRED

GRADE No.	N1	N2	N3	N4	N5	N6	N7	N8	N9	N10	N11	N12	VALUE	SYMBOL
	0.025	0.05	0.1	0.2	0.4	0.8	1.6	3.2	6.3	12.5	25	50		
SURFACE														
ROUGHNESS														


5		4		3		2		1			
MACHINING DEVIATIONS FOR LINEAR DIMENSIONS		RANGE	0 – 6	6 – 30	30 – 120	120 – 315	315-1000	1000-2000	2000-4000	ABOVE 4000	RA
		TOLERANCE	±0.1	±0.2	±0.3	±0.5	±0.8	±1.2	±2	±3	~
FOR DIMENSIONAL TOLERANCES OF SHEET METAL PARTS AND WELDED STRUCTURES, REFER STD. RD-227											
UNSPECIFIED TOLERANCE FOR LINEAR AND ANGULAR DIMENSIONS REF. IS 2102 (PT-1) (MEDIUM)									QUALITY OF WELD JOINTS REF, RD 230 MEDIUM		
VALUES OF SURFACE TEXTURE SHALL BE AS PER COMPANY STD DS. 1012.C.								STATUS:	MOCKUP/PROTO/PRODUCTION		
WELDING SHALL BE CARRIED OUT AS PER IS: 9595-96											



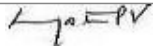

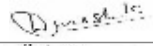
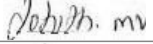


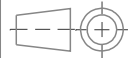




UN CONTROLLED

PART NO	REMARK
525-22113-300	AS DRAWN
525-22113-301	OPP HAND DRAWN

NOTES:

1. REMOVE ALL SHARP EDGES AND BURRS.
2. PART SHALL BE ANODISED TO GRADE AC15 OF IS 1868:1996
3. ALTERNATE MATERIAL: Gr.52000 COND 'O', IS:737
4.  MARKED AREA SHALL BE PAINTED ACCORDING TO PAINTING SPECIFICATION NO. GR/TD/4390
5. ITEM SHALL CONFORM TO THE PTS DOC NO GR/TD/4865.

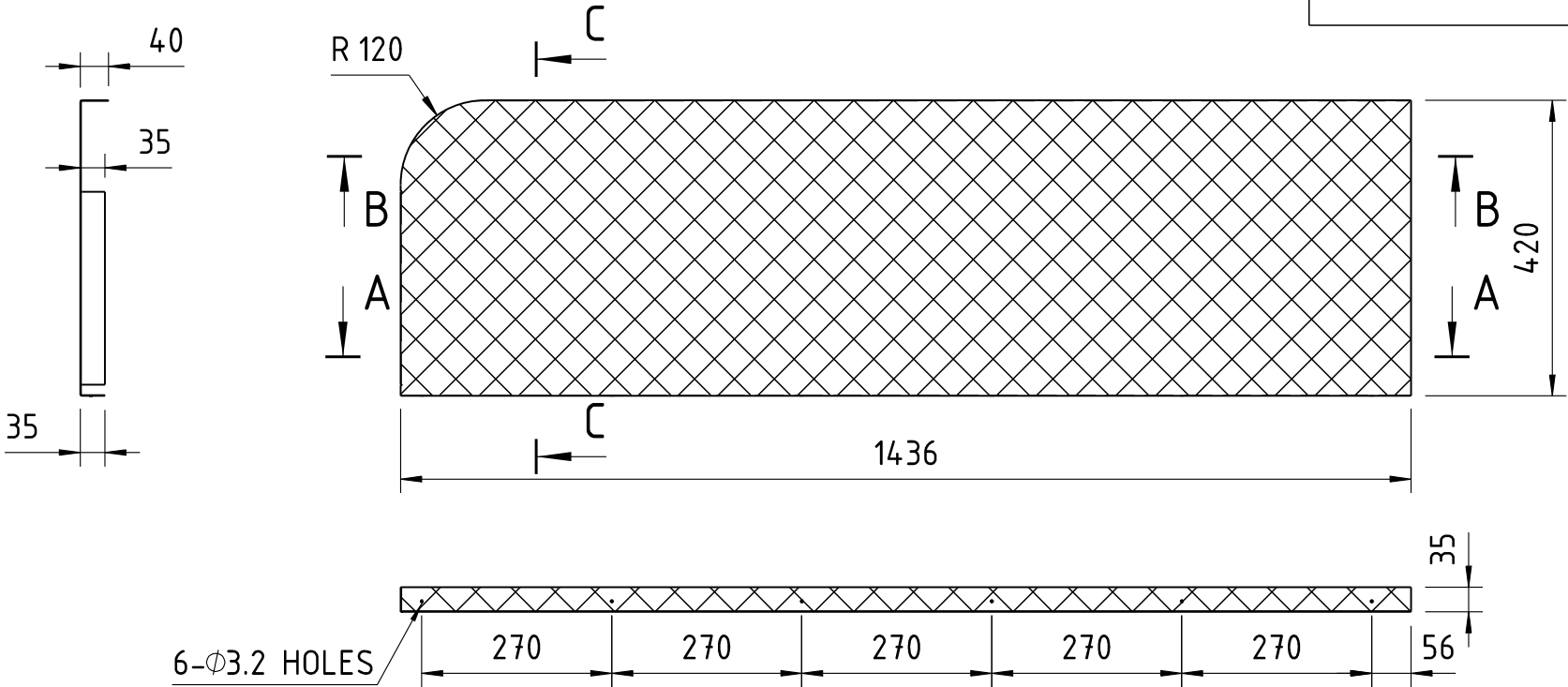
						1550x491x1THK					
SL.No.	QTY	PART / STOCK No.				DESCRIPTION		SIZE (mm)	COMPANY STD./I.S	Wt. (Kg)	
									MATERIAL		
						PRODUCT	MUMBAI METRO CARS L2 & L7				
						REF DRG	---				
						MATERIAL	A5052P				
						HEAT TREAT.	---		APPD		16.12.2019
						SURFACE TREAT.	---		REVD		16.12.2019
						TREAT. TITLE	PANEL FRONT, UPPER -B		CHKD		16.12.2019
						DRWN					16.12.2019
						SCALE			SHEET	Wt.	
						1:10	1 OF 1		2.04		
						DRG No.				ALT	
						525-22113					
ALT.No.	ECN NO/CHANGES				DATE	BY	CHKD	APPD	 <b>BEM</b> LIMITED <small>NEW FRONTIERS. NEW DREAMS</small>		

 **BEML LIMITED**  
NEW FRONTIERS. NEW DREAMS



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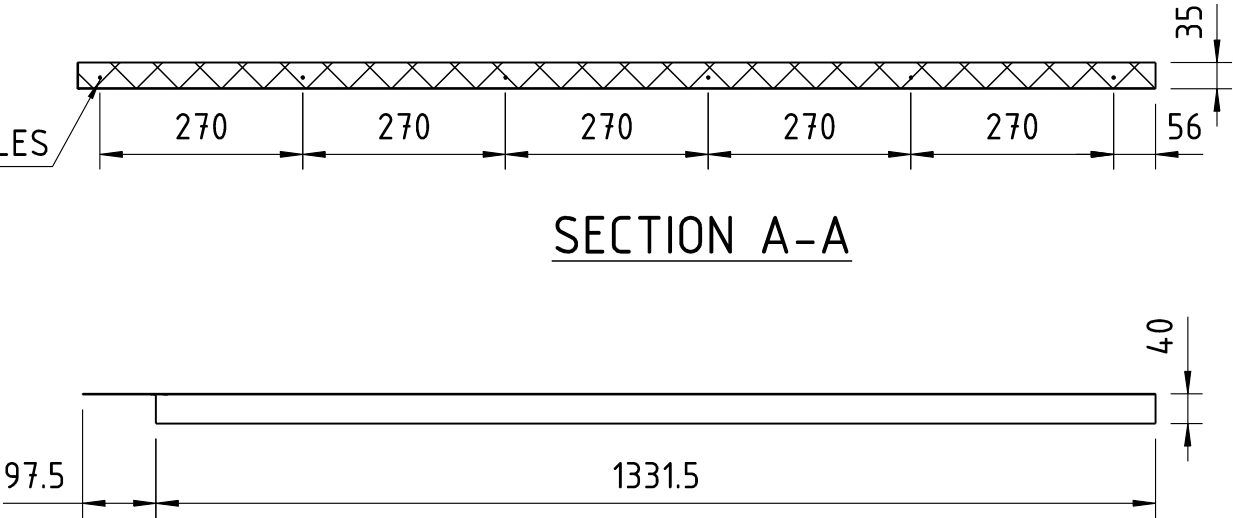
GRADE No.	VALUE	SYMBOL
N1	0.025	▽
N2	0.05	▽
N3	0.1	▽
N4	0.2	▽
N5	0.4	▽
N6	0.8	▽
N7	1.6	▽
N8	3.2	▽
N9	6.3	▽
N10	12.5	▽
N11	25	▽
N12	50	▽
ROUGHNESS		



SECTION A-A

SECTION C-C

UN CONTROLLED



SECTION B-B

PART NO	REMARK
525-22112-300	AS DRAWN
525-22112-301	OPP HAND DRAWN

NOTES:

- REMOVE ALL SHARP EDGES AND BURRS.
- PART SHALL BE ANODISED TO GRADE AC15 OF IS 1868:1996
- ALTERNATE MATERIAL: Gr.52000 COND 'O', IS:737
- XXXXXX MARKED AREA SHALL BE PAINTED ACCORDING TO PAINTING SPECIFICATION NO. GR/TD/4390
- ITEM SHALL CONFORM TO THE PTS DOC NO GR/TD/4865.

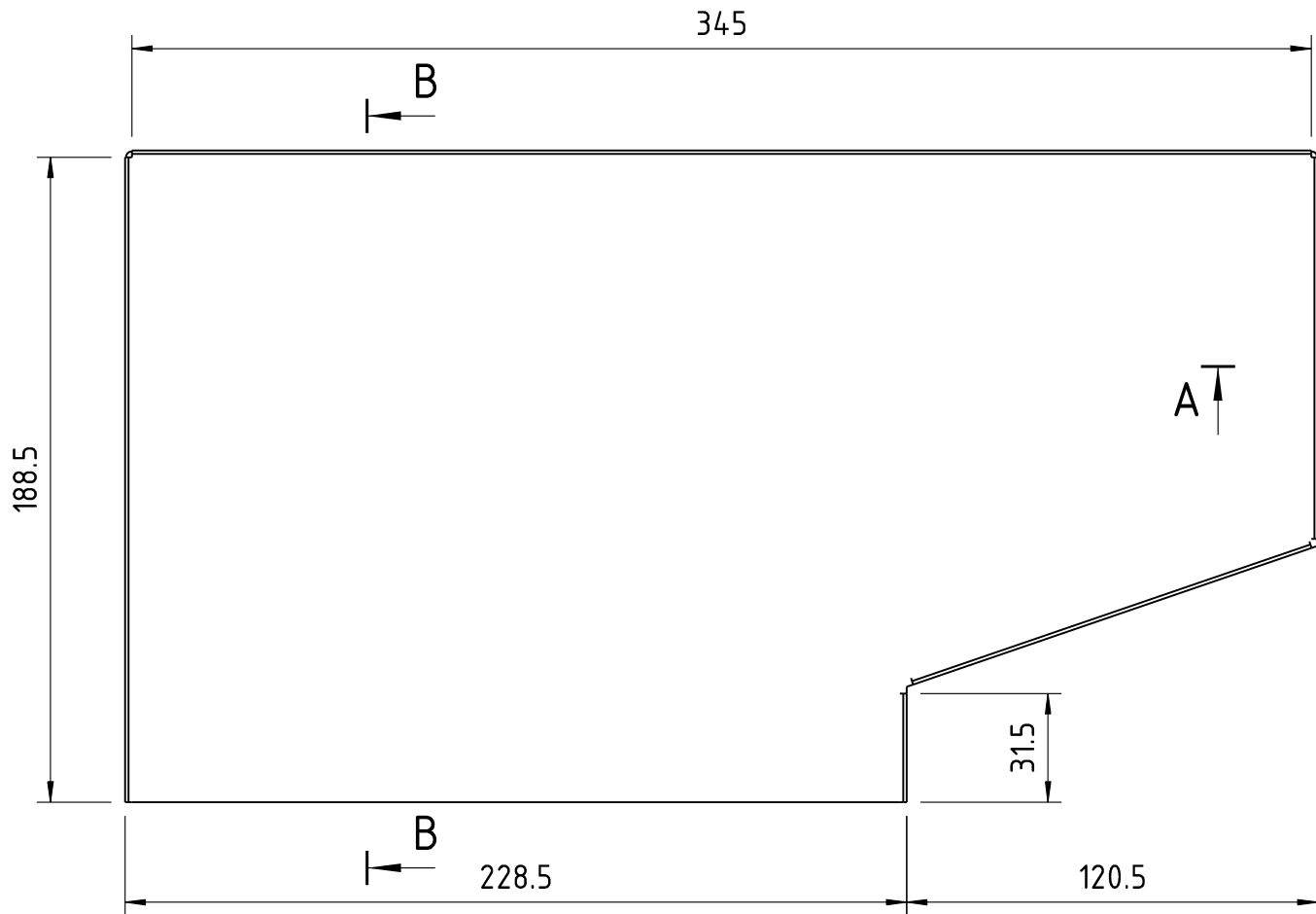
SL.No.	QTY	PART / STOCK No.	DESCRIPTION	SIZE (mm)	COMPANY STD./I.S	Wt. (Kg)
				1469x491x1THK		
					MATERIAL	
			PRODUCT	MUMBAI METRO CARS L2 & L7		
			REF DRG	---		
			MATERIAL	A5052P		
			HEAT TREAT.	---	APPD	16.12.2019
			SURFACE TREAT.	---	REVD	16.12.2019
			TITLE	PANEL FRONT, UPPER -A		
				CHKD	16.12.2019	
				DRWN	16.12.2019	
				SCALE	SHEET	Wt.
				1:10	1 OF 1	1.92
				DRG No.	ALT	
				525-22112		0

BEML LIMITED



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GRADE No.	N1	N2	N3	N4	N5	N6	N7	N8	N9	N10	N11	N12
VALUE	0.025	0.05	0.1	0.2	0.4	0.8	1.6	3.2	6.3	12.5	25	50
SYMBOL												
SURFACE ROUGHNESS												



SECTION A-A



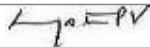

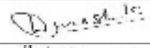
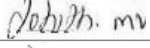


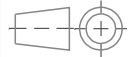


- NOTES:
1. REMOVE ALL SHARP EDGES AND BURRS.
  2. PART SHALL BE ANODISED TO GRADE AC15 OF IS 1868:1996
  3. ALTERNATE MATERIAL: Gr.52000 COND 'O', IS:737
  4. MARKED AREA SHALL BE PAINTED ACCORDING TO PAINTING SPECIFICATION NO. GR/TD/4390
  5. ITEM SHALL CONFORM TO THE PTS DOC NO GR/TD/4865.

PART NO	REMARK
525-22110-300	AS DRAWN
525-22110-301	OPP HAND DRAWN

MACHINING DEVIATIONS FOR LINEAR DIMENSIONS	RANGE	0 - 6	6 - 30	30 - 120	120 - 315	315-1000	1000-2000	2000-4000	ABOVE 4000	RA
	TOLERANCE	±0.1	±0.2	±0.3	±0.5	±0.8	±1.2	±2	±3	~
FOR DIMENSIONAL TOLERANCES OF SHEET METAL PARTS AND WELDED STRUCTURES, REFER STD. RD-227										
UNSPECIFIED TOLERANCE FOR LINEAR AND ANGULAR DIMENSIONS REF. IS 2102 (PT-1) (MEDIUM)							QUALITY OF WELD JOINTS REF. RD 230 MEDIUM			
VALUES OF SURFACE TEXTURE SHALL BE AS PER COMPANY STD DS. 1012.C.						STATUS:	MOCKUP /PROTO/PRODUCTION			
WELDING SHALL BE CARRIED OUT AS PER IS: 9595-96										

UN CONTROLLED

SECTION B-B

						421x228x1THK				
SL.No.	QTY	PART / STOCK No.	DESCRIPTION	SIZE (mm)	COMPANY STD./I.S		Wt. (Kg)			
					MATERIAL					
					PRODUCT	MUMBAI METRO CARS L2 & L7				
					REF DRG	---				
					MATERIAL	A5052P				
					HEAT TREAT.	---	APPD		19.12.2019	
					SURFACE TREAT.	---	REVD		19.12.2019	
					TREAT. TITLE	---	CHKD		19.12.2019	
					PANEL END, SPLIT E			DRWN		19.12.2019
								SCALE		SHEET
					BEML LIMITED			1:2	1 OF 1	0.25
								DRG No.	525-22110	
ALT.NO.	ECN NO/CHANGES	DATE	BY	CHKD	APPD	 NEW FRONTIERS. NEW DREAMS			ALT	



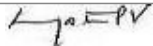

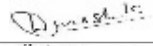
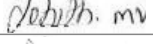

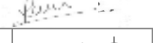
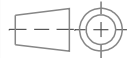


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GRADE No.	N1	N2	N3	N4	N5	N6	N7	N8	N9	N10	N11	N12
VALUE	0.025	0.05	0.1	0.2	0.4	0.8	1.6	3.2	6.3	12.5	25	50
SYMBOL												
SURFACE ROUGHNESS												

NOTES:

1. REMOVE ALL SHARP EDGES AND BURRS.
2. PART SHALL BE ANODISED TO GRADE AC15 OF IS 1868:1996
3. ALTERNATE MATERIAL: Gr.52000 COND 'O', IS:737
4. ITEM SHALL CONFORM TO THE PTS DOC NO GR/TD/4865.

UN CONTROLLED

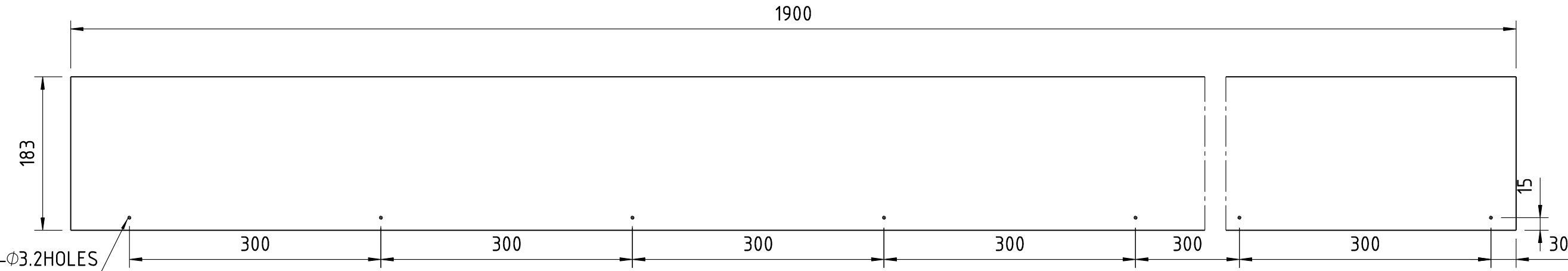
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SL.No.	QTY	PART / STOCK No.				DESCRIPTION				SIZE (mm)	COMPANY STD./I.S		Wt. (Kg)	
											MATERIAL			
						PRODUCT	MUMBAI METRO CARS L2 & L7							
						REF DRG	---							
						MATERIAL	A5052P							
						HEAT TREAT.	---				APPD		16.12.19	
						SURFACE TREAT.	---				REVD		16.12.19	
						TITLE	PANEL END, SPLIT-D				CHKD		16.12.19	
							D				DRWN		16.12.19	
											SCALE		SHEET	Wt.
											1:5	1 OF 1	0.287	
						DRG No.						ALT		
						525-22109								
ALT.No.	ECN NO/CHANGES				DATE	BY	CHKD	APPD	 <b>BEM</b> LIMITED <small>NEW FRONTIERS. NEW DREAMS</small>					

**BEML LIMITED**  
NEW PRINTERS. NEW DREAMS

A3

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GRADE No.	N1	N2	N3	N4	N5	N6	N7	N8	N9	N10	N11	N12
VALUE	0.025	0.05	0.1	0.2	0.4	0.8	1.6	3.2	6.3	12.5	25	50
SYMBOL												
SURFACE ROUGHNESS												



- NOTES:
1. REMOVE ALL SHARP EDGES AND BURRS.
  2. PART SHALL BE ANODISED TO GRADE AC15 OF IS 1868:1996
  3. ALTERNATE MATERIAL: Gr.52000 COND 'O', IS:737
  4. ITEM SHALL CONFORM TO THE PTS DOC NO GR/TD/4865.

UN CONTROLLED

SL.No.	QTY	PART / STOCK No.	DESCRIPTION	SIZE (mm)	COMPANY STD./I.S	Wt. (Kg)
				1900x183x1THK		
					MATERIAL	
			PRODUCT	MUMBAI METRO CARS L2 & L7		
			REF DRG	---		
			MATERIAL	A5052P		
			HEAT TREAT.	---	APPD	16.12.19
			SURFACE TREAT.	---	REVD	16.12.19
			TITLE	PANEL END, SPLIT-C		
				CHKD	16.12.19	
				DRWN	16.12.19	
				SCALE	1:5	Wt.
					1 OF 1	0.94
ALT.No.	ECN NO/CHANGES	DATE	BY	CHKD	APPD	ALT
						0



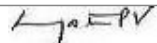

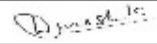
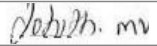

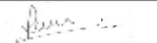
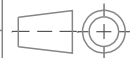




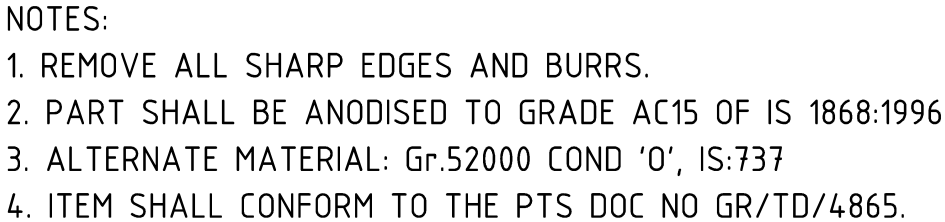
BEML LIMITED

525-22108

A3

GRADE No.	N12	N11	N10	N9	N8	N7	N6	N5	N4	N3	N2	N1
VALUE	50	25	12.5	6.3	3.2	1.6	0.8	0.4	0.2	0.1	0.05	0.025
SYMBOL												

									1640x183x1THK				
SL.No.	QTY	PART / STOCK No.	DESCRIPTION						SIZE (mm)	COMPANY STD./I.S	Wt. (Kg)		
										MATERIAL			
								PRODUCT	MUMBAI METRO CARS L2 & L7				
								REF DRG	---				
								MATERIAL	A5052P				
								HEAT TREAT.	---	APPD		16.12.2019	
								SURFACE TREAT.	---	REVD		16.12.2019	
								TITLE	PANEL END, SPLIT-B		CHKD		16.12.2019
									B		DRWN		16.12.2019
									SCALE		SHEET	Wt.	
									1:5		1 OF 1	0.81	
ALT.NO.	ECN NO/CHANGES		DATE	BY	CHKD	APPO	 <b>BEM</b> LIMITED <small>NEW FRONTIER - NEW DREAMS</small>		DRG No.		ALT		
									525-22107				



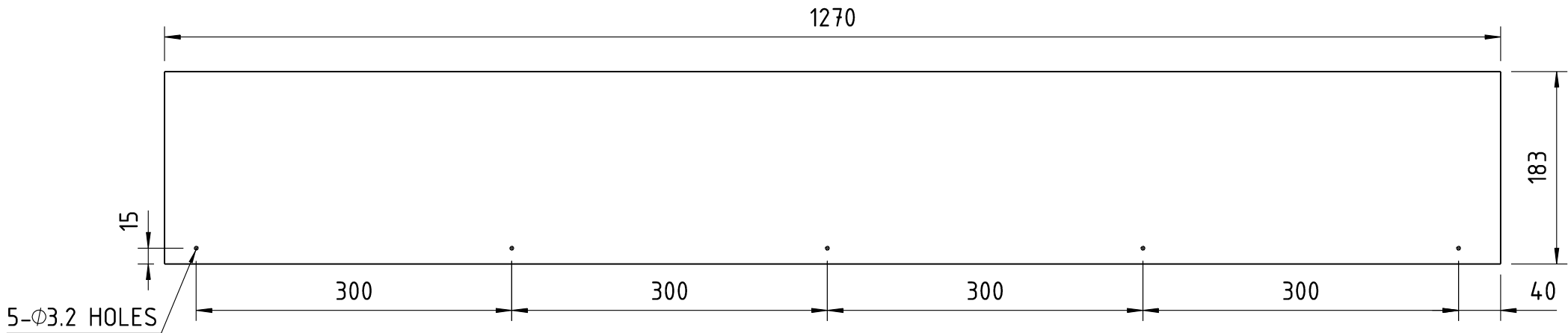
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GRADE No.	N1	N2	N3	N4	N5	N6	N7	N8	N9	N10	N11	N12
VALUE	0.025	0.05	0.1	0.2	0.4	0.8	1.6	3.2	6.3	12.5	25	50
SYMBOL												
SURFACE ROUGHNESS												

NOTES:

1. REMOVE ALL SHARP EDGES AND BURRS.
2. PART SHALL BE ANODISED TO GRADE AC15 OF IS 1868:1996
3. ALTERNATE MATERIAL: Gr.52000 COND 'O', IS:737
4. ITEM SHALL CONFORM TO THE PTS DOC NO GR/TD/4865.



UN CONTROLLED

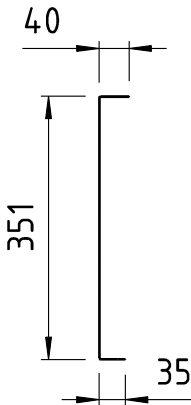
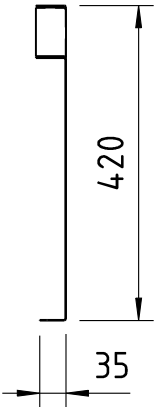
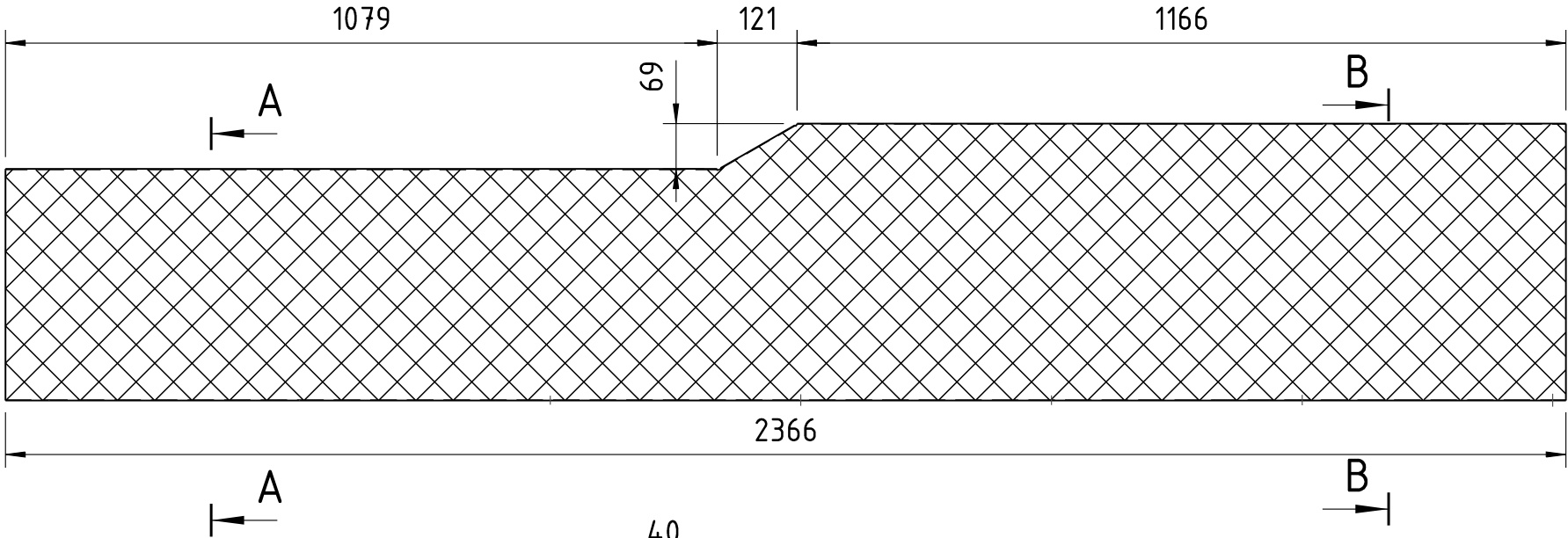
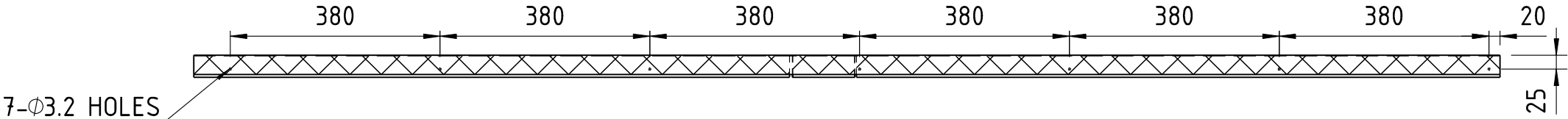
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SL.No.	QTY	PART / STOCK No.	DESCRIPTION				SIZE (mm)	COMPANY STD./I.S		Wt. (Kg)					
								MATERIAL							
							PRODUCT	MUMBAI METRO CARS L2 & L7							
							REF DRG	---							
							MATERIAL	A5052P							
							HEAT TREAT.	---		APPD		16.12.2019			
							SURFACE TREAT.	---		REVD		16.12.2019			
							TITLE	PANEL END, SPLIT-A							
							A								
							CHKD			16.12.2019					
							DRWN			16.12.2019					
							SCALE			SHEET	Wt.				
							1:5			1 OF 1	0.63				
ALT.No.							ECN NO/CHANGES		DATE	BY	CHKD	APPD	DRG No.		ALT
													525-22106		
															0

A3

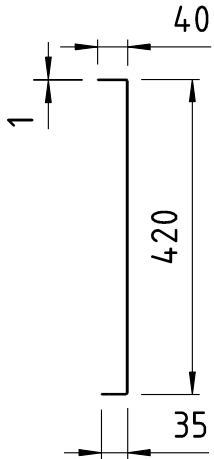
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GRADE No.	N1	N2	N3	N4	N5	N6	N7	N8	N9	N10	N11	N12
VALUE	0.025	0.05	0.1	0.2	0.4	0.8	1.6	3.2	6.3	12.5	25	50
SYMBOL												
SURFACE ROUGHNESS												

MACHINING DEVIATIONS FOR LINEAR DIMENSIONS	RANGE	0 – 6	6 – 30	30 – 120	120 – 315	315-1000	1000-2000	2000-4000	ABOVE 4000	RA
	TOLERANCE	±0.1	±0.2	±0.3	±0.5	±0.8	±1.2	±2	±3	~
FOR DIMENSIONAL TOLERANCES OF SHEET METAL PARTS AND WELDED STRUCTURES, REFER STD. RD-227										
UNSPECIFIED TOLERANCE FOR LINEAR AND ANGULAR DIMENSIONS REF. IS 2102 (PT-1) (MEDIUM)							QUALITY OF WELD JOINTS REF, RD 230 MEDIUM			
VALUES OF SURFACE TEXTURE SHALL BE AS PER COMPANY STD DS. 1012.C.							STATUS:	MOCKUP/PROTO/PRODUCTION		
WELDING SHALL BE CARRIED OUT AS PER IS: 9595-96										



SECTION A-A





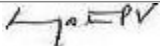
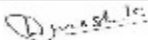

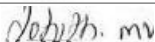


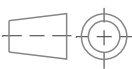
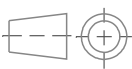


SECTION B-B

UN CONTROLLED

PART NO	REMARK
525-22105-300	AS DRAWN
525-22105-301	OPP HAND DRAWN

NOTES:

- 1.REMOVE ALL SHARP EDGES AND BURRS.
- 2.PART SHALL BE ANODISED TO GRADE AC15 OF IS 1868:1996
- 3.ALTERNATE MATERIAL: Gr.52000 COND 'O', IS:737
4. MARKED AREA SHALL BE PAINTED ACCORDING TO PAINTING SPECIFICATION DOC NO. GR/TD/4390
5. ITEM SHALL CONFORM TO THE PTS DOC NO GR/TD/4865.


							2366x491x1THK			
SL.No.	QTY	PART / STOCK No.	DESCRIPTION				SIZE (mm)	COMPANY STD./I.S	Wt. (Kg)	
								MATERIAL		
						PRODUCT	MUMBAI METRO CARS - L2 & L7			
						REF DRG				
						MATERIAL	A5052P			
						HEAT TREAT.	APPD		16.12.19	
SURFACE TREAT.	REVD		16.12.19							
						TITLE	CHKD		16.12.19	
						PANEL END, UPPER-D	DRWN		16.12.19	
							SCALE		SHEET	Wt.
						1:10		1 OF 1	-	
ALT.NO.	ECN NO/CHANGES	DATE	BY	CHKD	APPD	 <b>BEM</b> L LIMITED <small>NEW FRONTIERS. NEW DREAMS</small>	DRG No.	525-22105		ALT
										

GRADE No.	N12	N11	N10	N9	N8	N7	N6	N5	N4	N3	N2	N1
VALUE	50	25	12.5	6.3	3.2	1.6	0.8	0.4	0.2	0.1	0.05	0.025
SYMBOL												

									1550x491x1THK		
SL.No.	QTY	PART / STOCK No.							SIZE (mm)	COMPANY STD./I.S	Wt. (Kg)
										MATERIAL	
								PRODUCT	MUMBAI METRO CARS - L2 & L7		
								REF DRG			
								MATERIAL	A5052P		
								HEAT TREAT.		APPD	12.12.19
								SURFACE TREAT.		REVD	12.12.19
								TITLE	PANEL END, UPPER- C	CHKD	12.12.19
										DRWN	12.12.19
								SCALE		SHEET	Wt.
								1:10		1 OF 1	-
ALT.NO.	ECN NO/CHANGES		DATE	BY	CHKD	APPD	BEML LIMITED <small>NEW FRONTIERS, NEW DREAMS</small>			DRG No.	525-22104
										ALT	



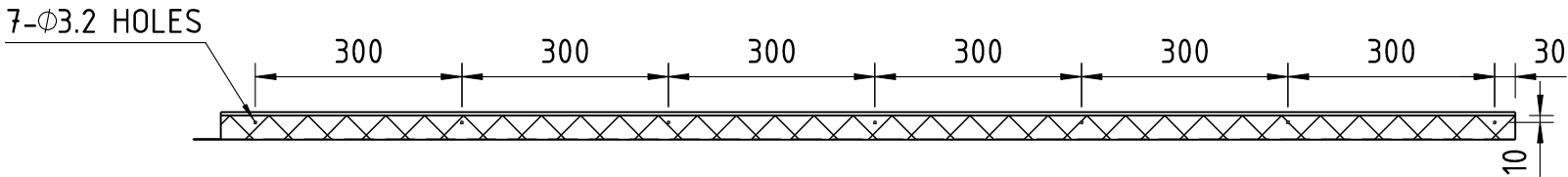
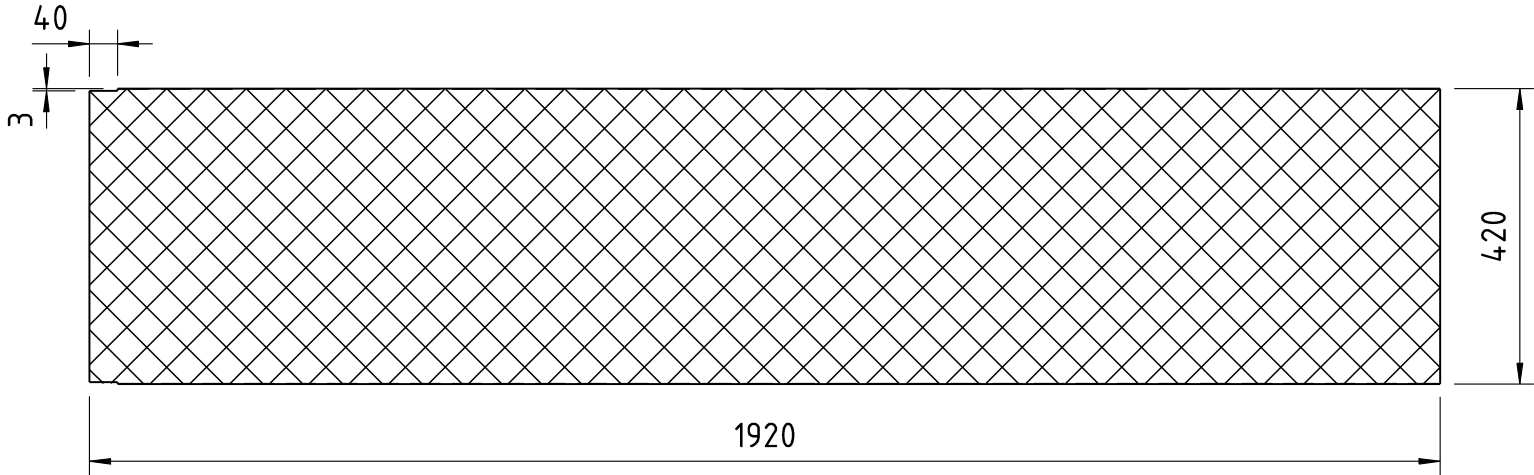
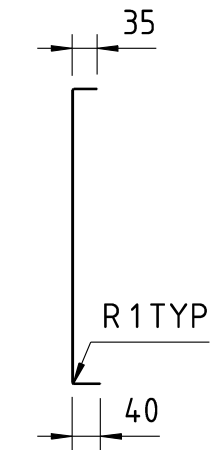
NOTES:

- 1.REMOVE ALL SHARP EDGES AND BURRS.
- 2.PART SHALL BE ANODISED TO GRADE AC15 OF IS 1868:1996
- 3.ALTERNATE MATERIAL: Gr.52000 COND 'O', IS:737
- 4. MARKED AREA SHALL BE PAINTED ACCORDING TO PAINTING SPECIFICATION DOC NO. GR/TD/4390
5. ITEM SHALL CONFORM TO THE PTS DOC NO GR/TD/4865.





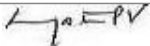
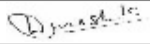

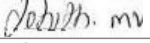


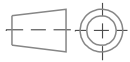


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GRADE No.	N1	N2	N3	N4	N5	N6	N7	N8	N9	N10	N11	N12	VALUE	SYMBOL
	0.025	0.05	0.1	0.2	0.4	0.8	1.6	3.2	6.3	12.5	25	50		
SURFACE														
ROUGHNESS														



- NOTES:
1. REMOVE ALL SHARP EDGES AND BURRS.
  2. PART SHALL BE ANODISED TO GRADE AC15 OF IS 1868:1996
  3. ALTERNATE MATERIAL: Gr.52000 COND 'O', IS:737
  4. MARKED AREA SHALL BE PAINTED ACCORDING TO PAINTING SPECIFICATION NO. GR/TD/4390
  5. ITEM SHALL CONFORM TO THE PTS DOC NO GR/TD/4865.

UN CONTROLLED

						1920x491x1THK								
SL.No.	QTY	PART / STOCK No.				DESCRIPTION				SIZE (mm)		COMPANY STD./I.S	Wt. (Kg)	
												MATERIAL		
						PRODUCT	MUMBAI METRO CARS L2 & L7							
						REF DRG	---							
						MATERIAL	A5052P							
						HEAT TREAT.	---	APPD				10.12.2019		
						SURFACE TREAT.	---	REVD				10.12.2019		
						TITLE	PANEL END, UPPER -			CHKD			10.12.2019	
							B			DRWN				10.12.2019
										SCALE		SHEET	Wt.	
										1:10		1 OF 1	2.55	
							DRG No.			525-22103				
							ALT							
ALT.NO.	ECN NO/CHANGES				DATE	BY	CHKD	APPO	 BEM LIMITED NEW FRONTIERS. NEW DREAMS					

ALT.No.	ECN NO/CHANGES	DATE	BY	CHKD	APPD	BEML LIMITED		525-22103		ALT