

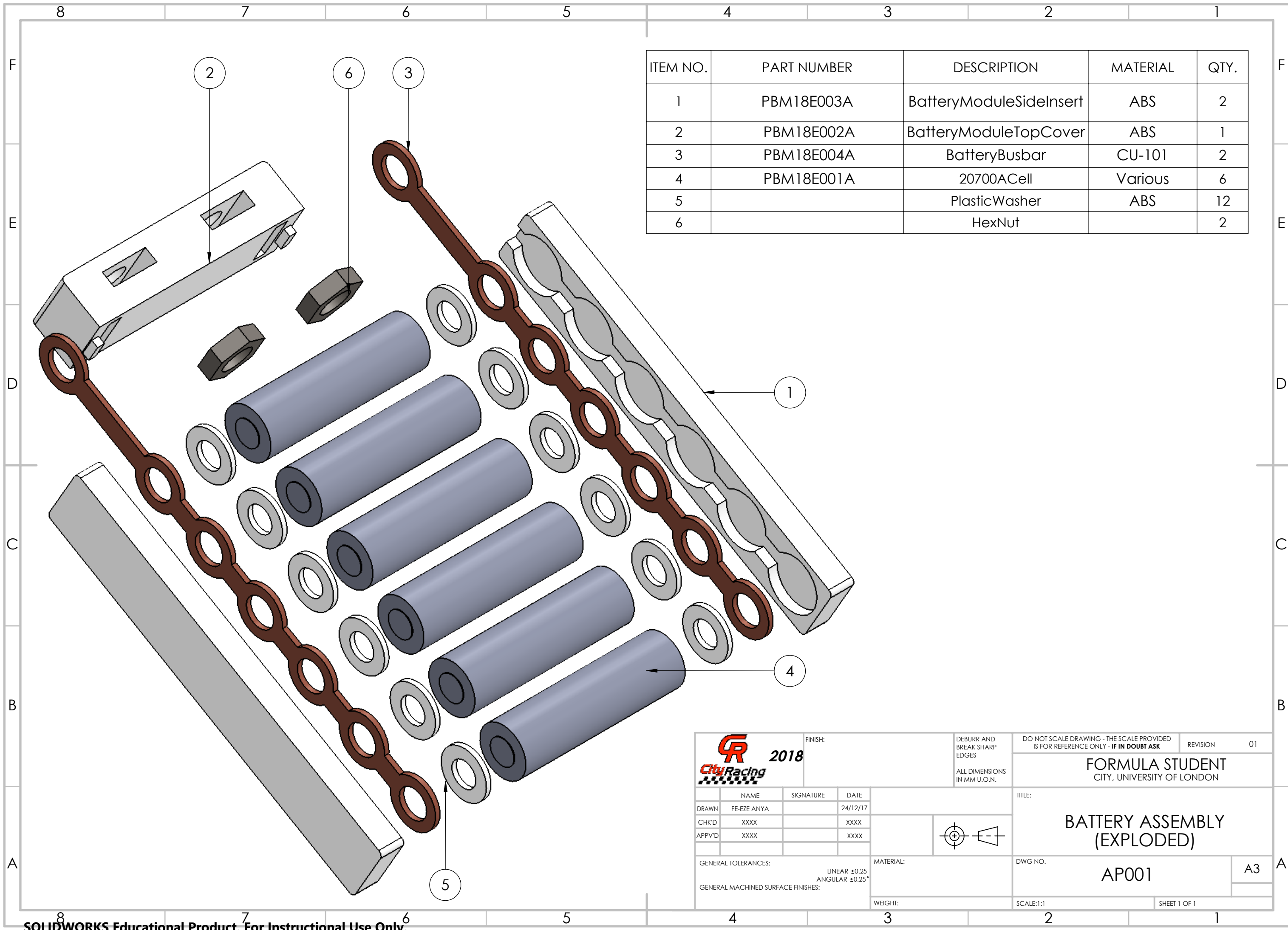
Design IV – Design Drawings

Manufacturing Plan

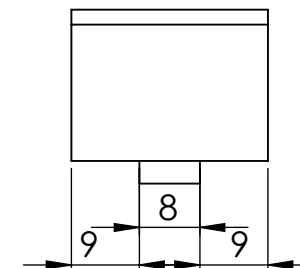
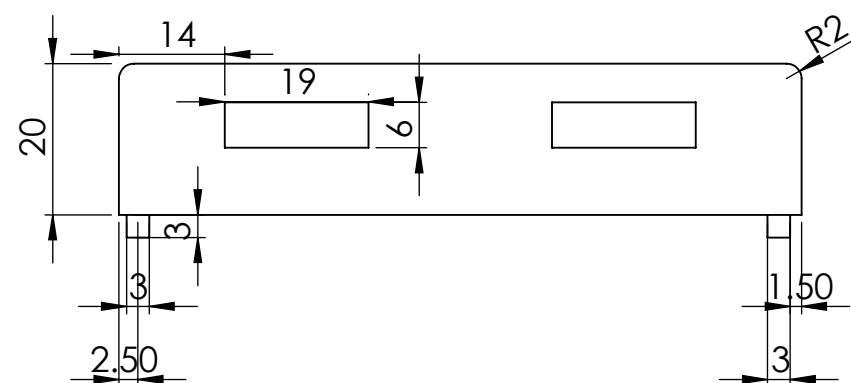
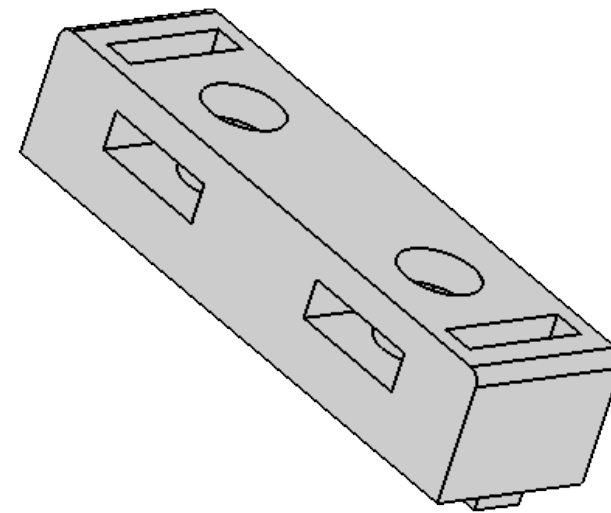
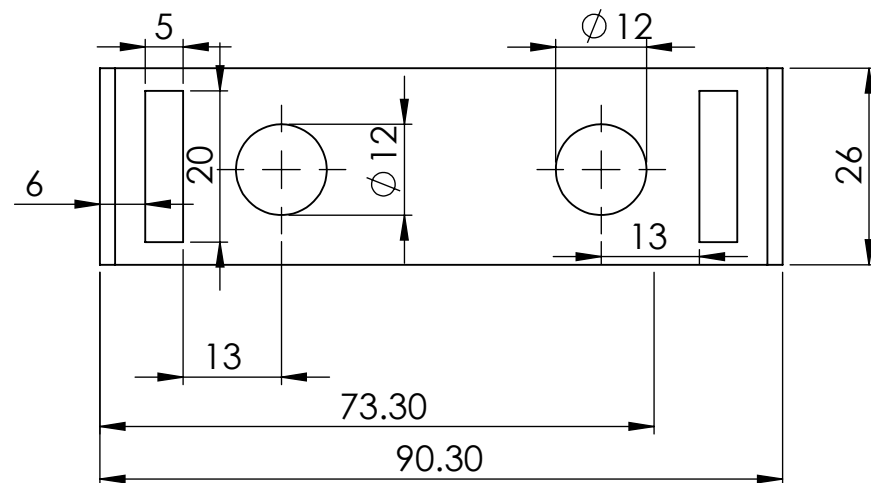
3D printing can be used for the rapid prototyping and testing stage. However, because of the cost of 3D printing $90 \times 2 = 180$ side inserts, it is more economical to use injection moulding when the full pack is ready to be produced. The cost of the moulding tool and the will be cheaper than 3D printing all the Plastic parts and if we want to make a standby battery box (to implement the proposed fast change battery feature), the presence of the moulding tool makes it astronomically cheaper the second time around (this shall be explored further in the Cost Report)


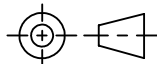
The copper busbars will be cut from 2mm thick rectangular Copper bars using water jets.

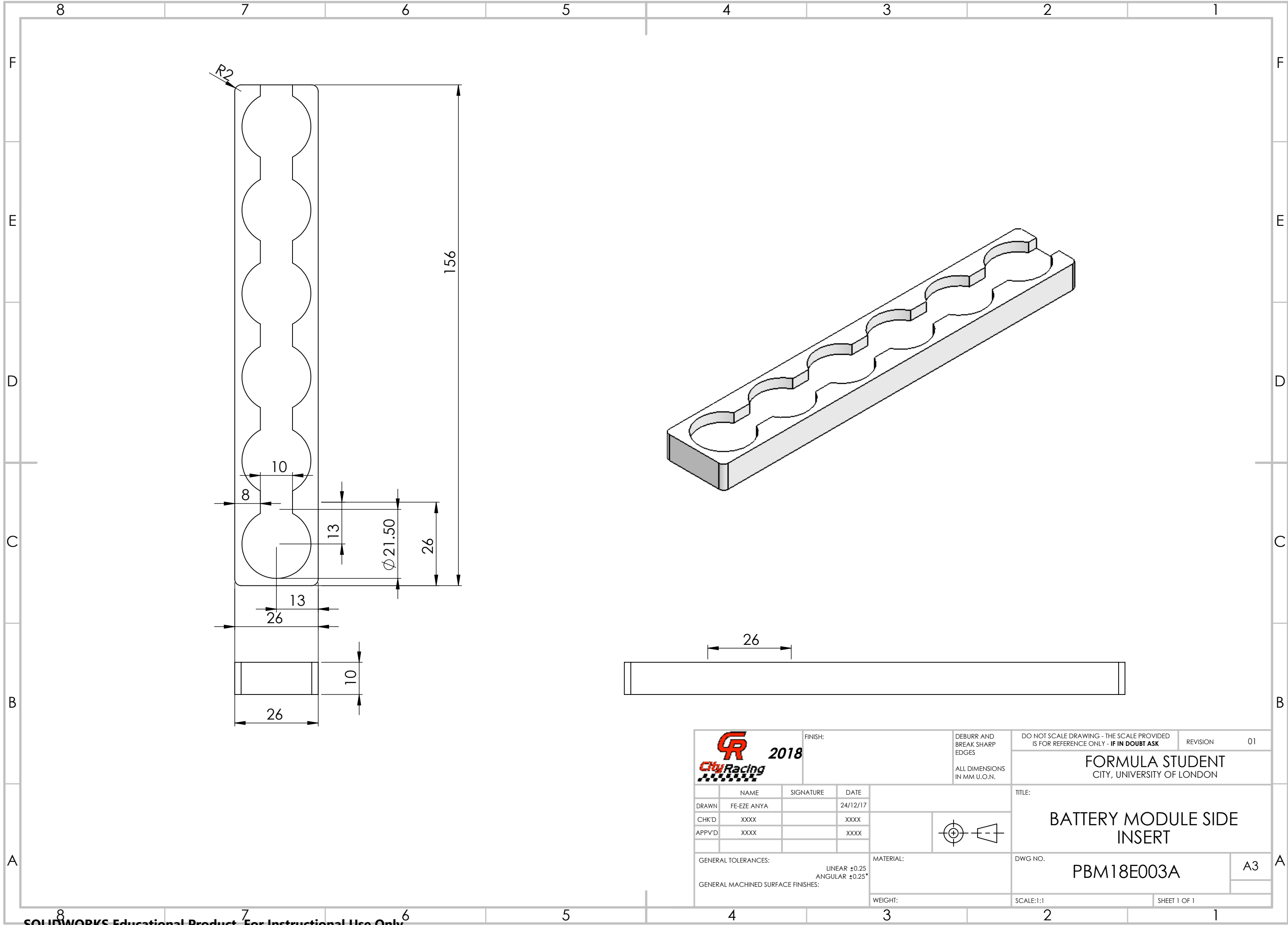
The battery box will be made from 6061 Aluminium sheet metal

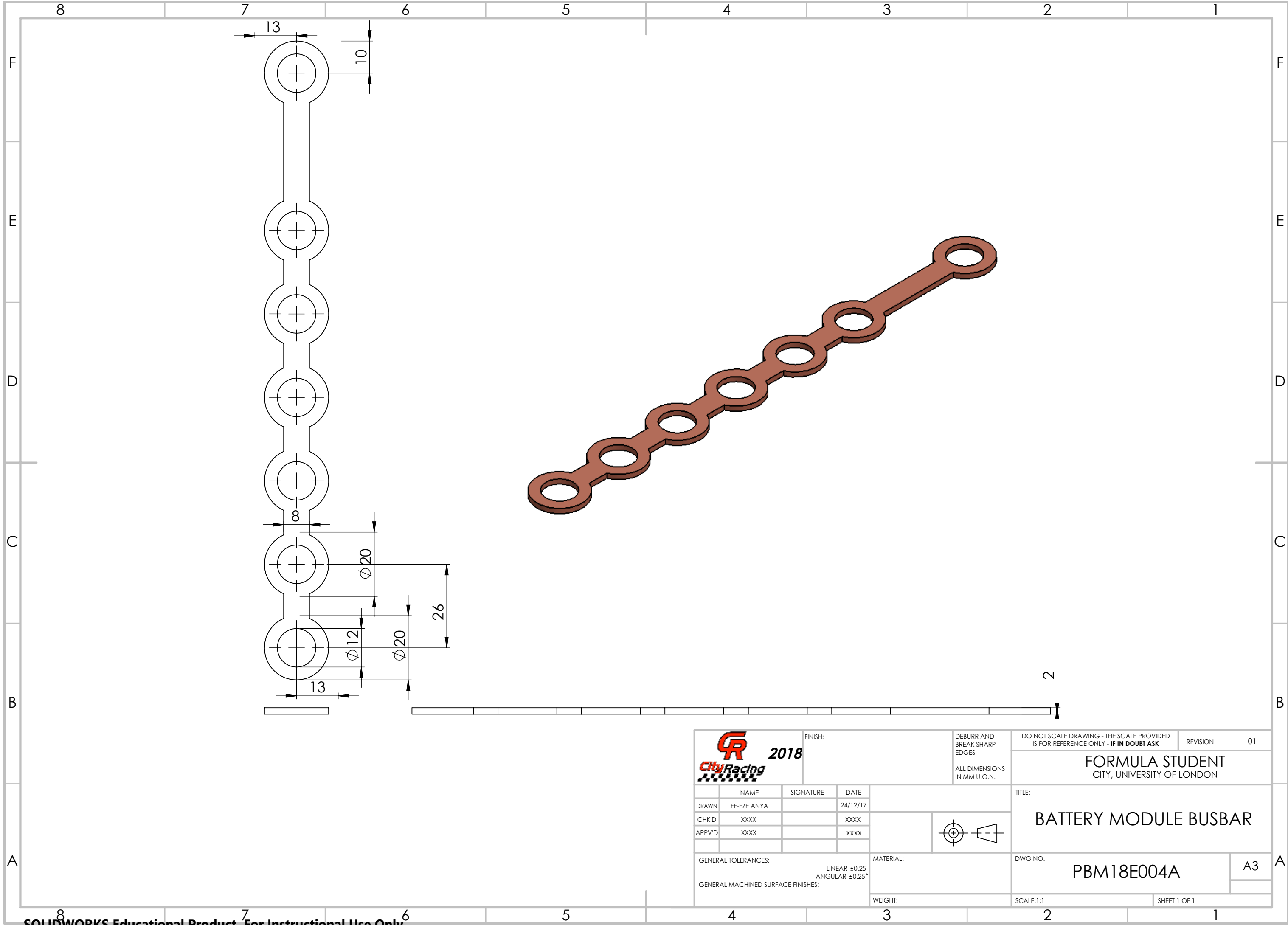



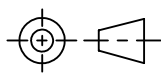
		FINISH:		DEBURR AND BREAK SHARP EDGES		DO NOT SCALE DRAWING - THE SCALE PROVIDED IS FOR REFERENCE ONLY - IF IN DOUBT ASK		REVISION 01	
NAME		SIGNATURE		DATE				TITLE: BATTERY ASSEMBLY (EXPLODED)	
DRAWN FE-EZE ANYA				24/12/17					
CHK'D XXXX				XXXX					
APPV'D XXXX				XXXX					
GENERAL TOLERANCES:				LINEAR ± 0.25 ANGULAR $\pm 0.25^\circ$		MATERIAL:		DWG NO. AP001	
GENERAL MACHINED SURFACE FINISHES:						WEIGHT:		SCALE: 1:1	
								SHEET 1 OF 1	

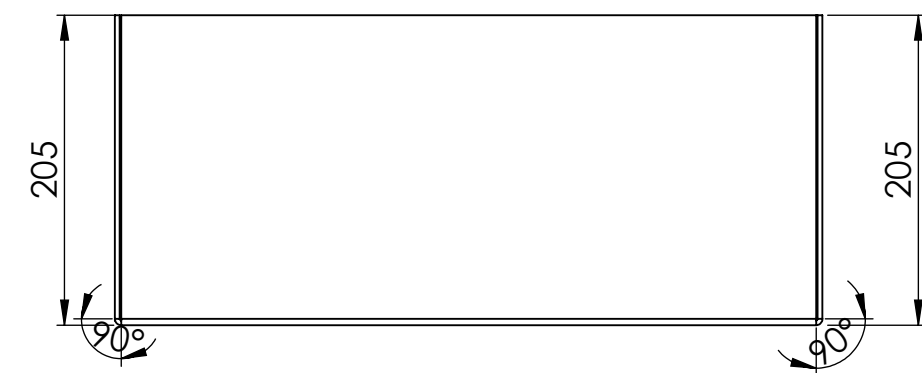
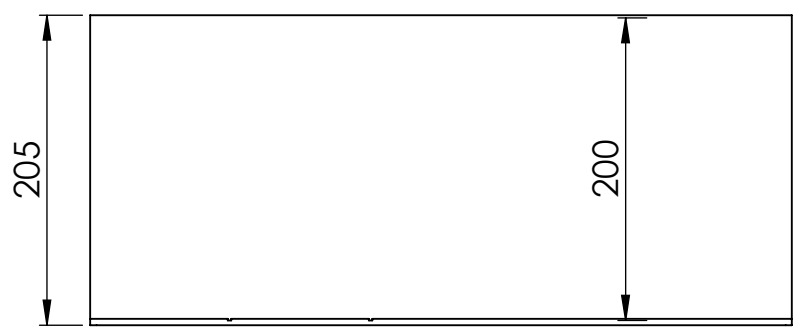
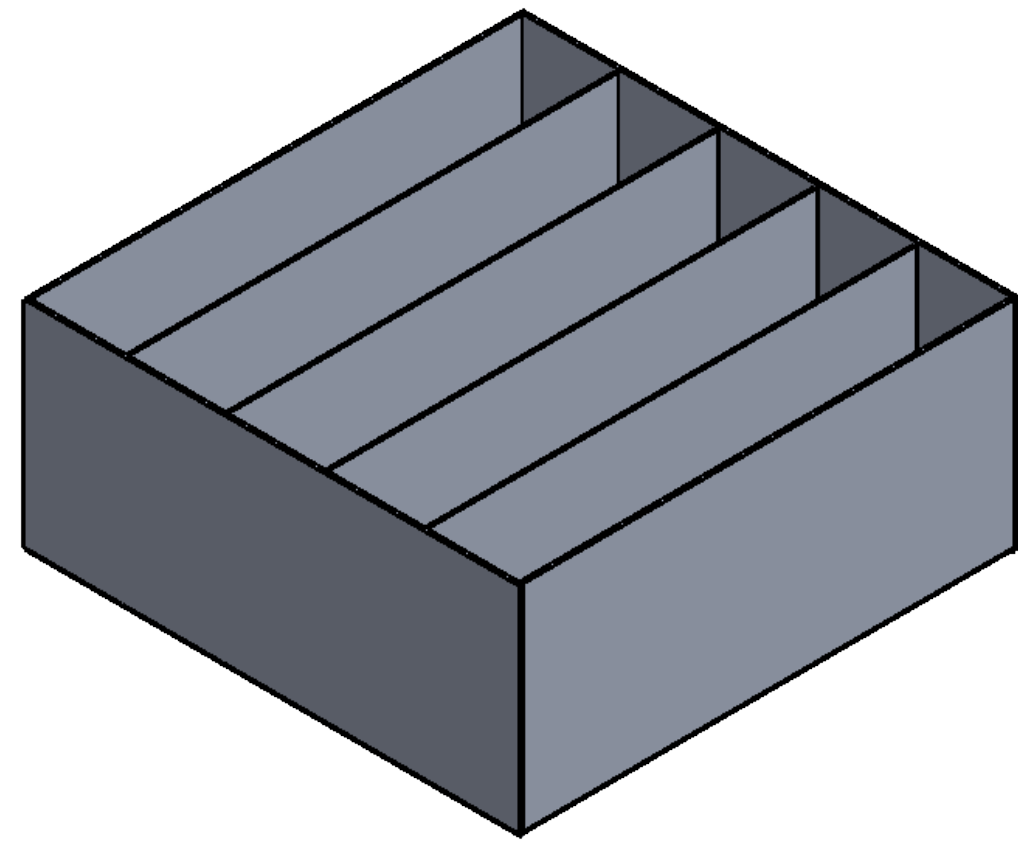
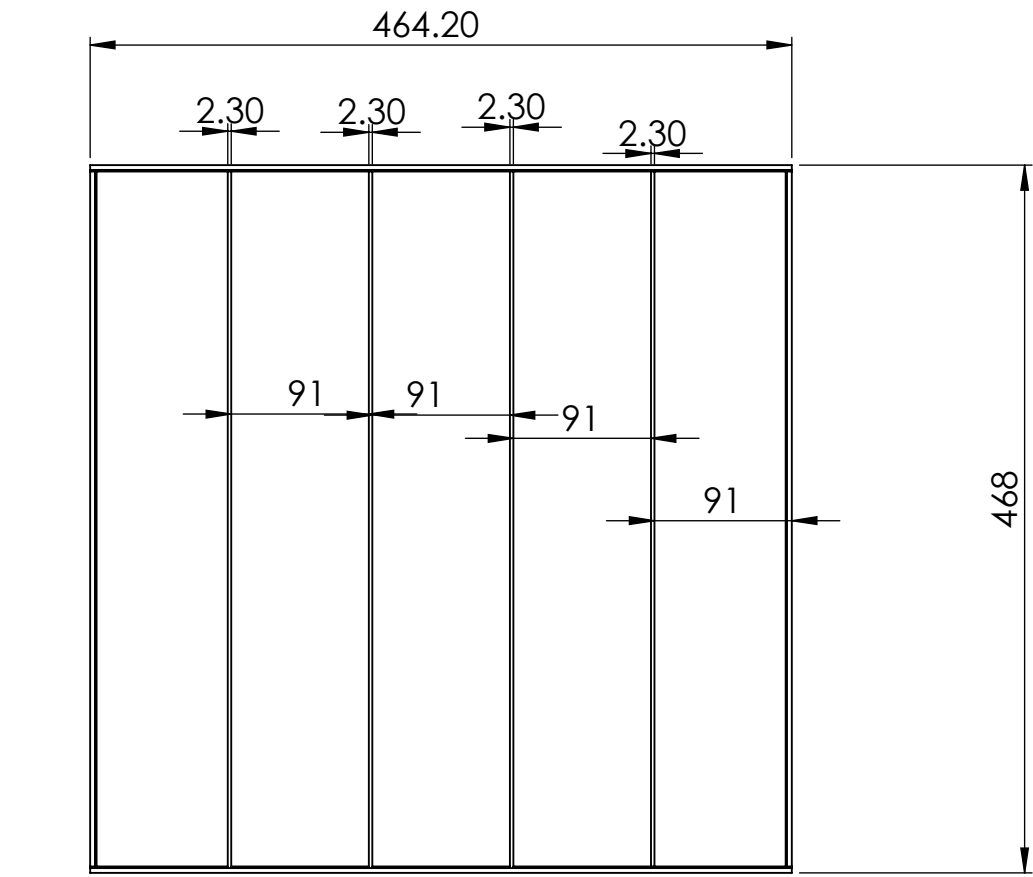


		FINISH:		DEBURR AND BREAK SHARP EDGES ALL DIMENSIONS IN MM U.O.N.		DO NOT SCALE DRAWING - THE SCALE PROVIDED IS FOR REFERENCE ONLY - IF IN DOUBT ASK		REVISION 01	
		FORMULA STUDENT CITY, UNIVERSITY OF LONDON							
	NAME	SIGNATURE	DATE			TITLE: BATTERY MODULE TOP COVER			
DRAWN	John Smith		24/12/17						
CHK'D	XXXX		XXXX						
APP'VD	XXXX		XXXX						
GENERAL TOLERANCES: LINEAR ± 0.25 ANGULAR $\pm 0.25^\circ$				MATERIAL:		DWG NO.		A3	
GENERAL MACHINED SURFACE FINISHES:				WEIGHT:		SCALE: 1:1		SHEET 1 OF 1	





			FINISH:		DEBURR AND BREAK SHARP EDGES ALL DIMENSIONS IN MM U.O.N.		DO NOT SCALE DRAWING - THE SCALE PROVIDED IS FOR REFERENCE ONLY - IF IN DOUBT ASK		REVISION		01	
							FORMULA STUDENT CITY, UNIVERSITY OF LONDON					
		NAME		SIGNATURE		DATE		TITLE:				
DRAWN		FE-EZE ANYA				24/12/17						
CHK'D		XXXX				XXXX						
APPV'D		XXXX				XXXX						
GENERAL TOLERANCES:							MATERIAL:		DWG NO. PBM18E004A A3			
LINEAR ±0.25 ANGULAR ±0.25*												
GENERAL MACHINED SURFACE FINISHES:							WEIGHT:		SCALE:1:1			
											SHEET 1 OF 1	



		FINISH:		DEBURR AND BREAK SHARP EDGES		DO NOT SCALE DRAWING - THE SCALE PROVIDED IS FOR REFERENCE ONLY - IF IN DOUBT ASK		REVISION 01	
								FORMULA STUDENT CITY, UNIVERSITY OF LONDON	
NAME		SIGNATURE		DATE				TITLE: BATTERY CASE MAIN	
DRAWN FE-EZE ANYA				24/12/17					
CHK'D XXXX				XXXX					
APPV'D XXXX				XXXX					
GENERAL TOLERANCES:				MATERIAL:		DWG NO.			
GENERAL MACHINED SURFACE FINISHES:						PBC18E001A			
				WEIGHT:		SCALE:1:5		SHEET 1 OF 1	