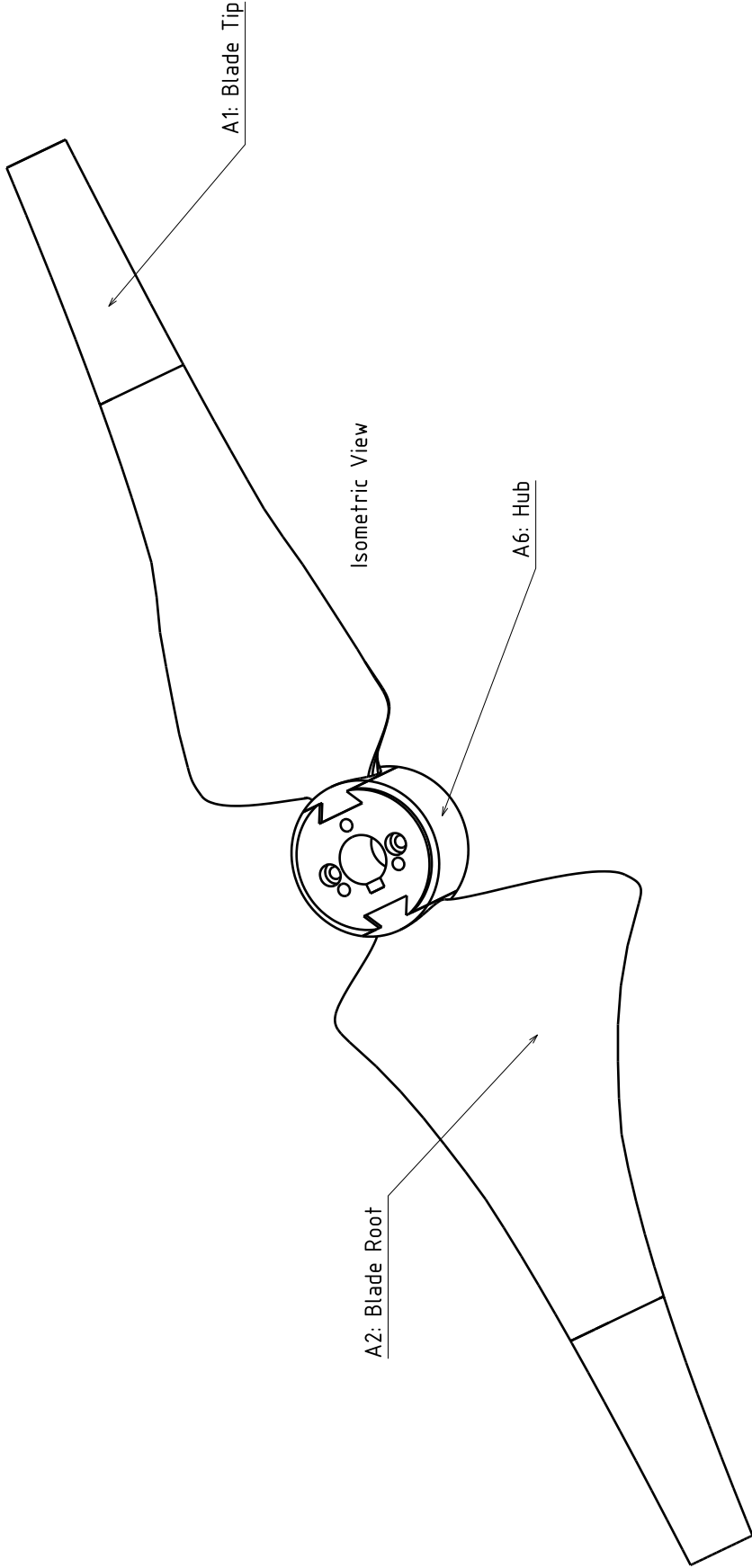
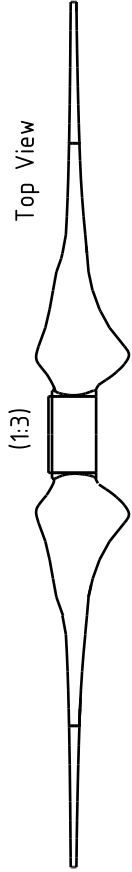


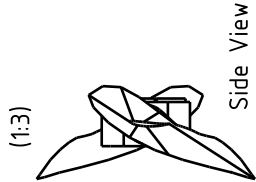
Item No.	Quantity	Title	Description	Material
A1	2	Blade - tip	Blade part 1 - tip	3D printed - PLA
A2	2	Blade - root	Blade part 2 - root	Plywood
A3	2	Aluminium Wire 1	Spoke 1	Aluminium
A4	2	Aluminium Wire 2	Spoke 2	Aluminium
A5	2	Carbon Fibre plate	Carbon Fibre Reinforcement	Carbon Fibre
A6	1	Hub	Turbine Hub	Manufacturing Standard Material



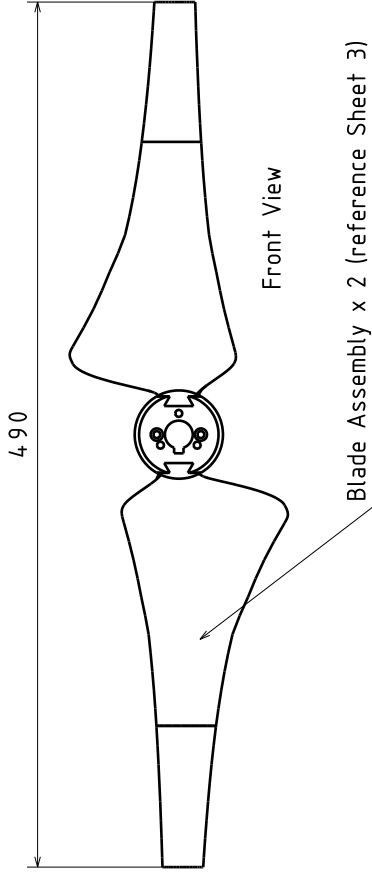
TOLERANCE		THIRD ANGLE PROJECTION	MATERIAL:		TITLE:	Imperial College London
			Wood/PLA/Aluminium DO NOT SCALE DRAWING			
x=±0.5 x.x=±0.1 x.xx=±0.02	ANGULAR ±1°		ALL DIMENSIONS ARE IN MILLIMETERS		Total Assembly	DEPARTMENT OF AERONAUTICS
	NAME	DATE	A3 Scale 2:3		DRAWING NUMBER:	
DRAWN	GROUP 20	31/05/2024			001	SHEET 1 OF 5
CHECKED	Group 20	31/05/2024				
APPROVED						REVISION A



Top View




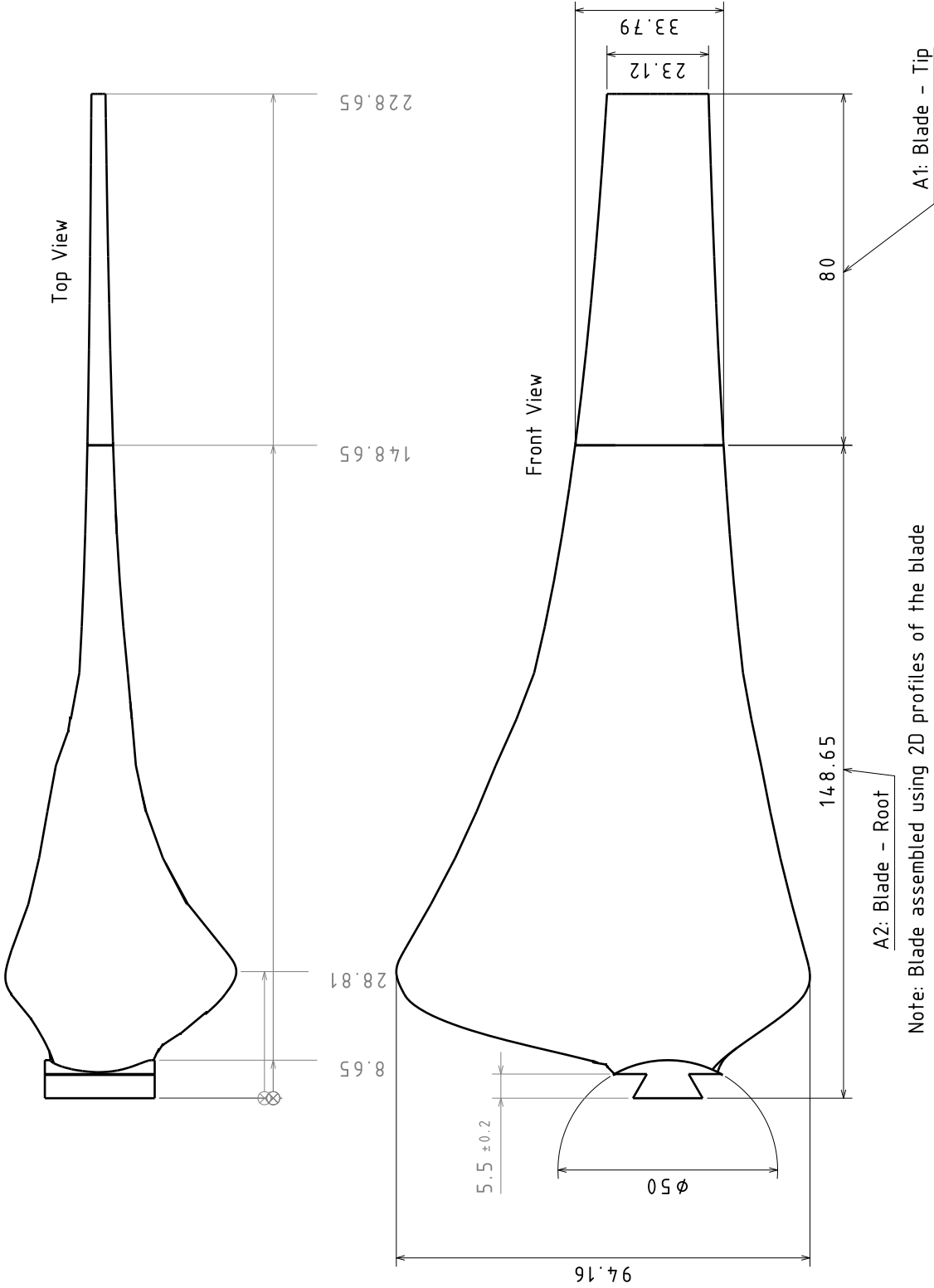
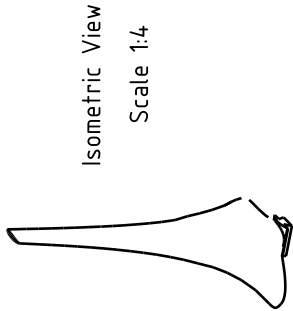
Side View



Front View

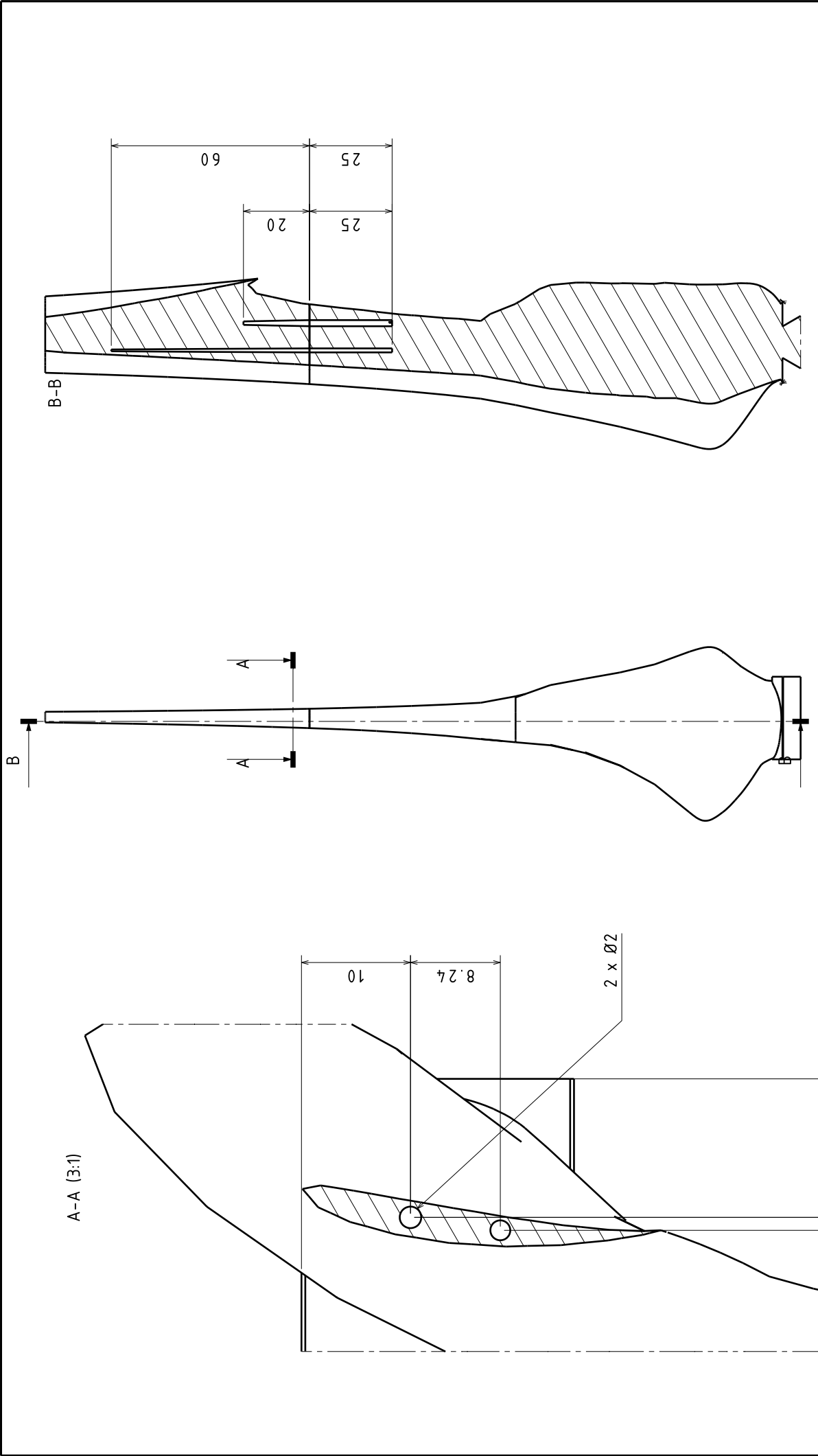
Position	Aerofoil	Chord (m)	Twist (degree)
0.05	NREL S823	0.10104031	25.69
0.06	NREL S823	0.088461317	21.05
0.07	NREL S823	0.078313692	17.46
0.08	NREL S823	0.070058847	12.35
0.12	SG6043	0.045954419	11.02
0.13	SG6043	0.042646017	9.88
0.14	SG6043	0.039769216	8.89
0.15	SG6043	0.037246933	8.02
0.16	SG6043	0.035018921	7.27
0.17	SG6043	0.033037539	6.59
0.18	SG6043	0.031264704	5.99
0.19	SG6043	0.029669649	5.45
0.20	SG6043	0.028227286	4.96
0.21	SG6043	0.026916968	4.52
0.22	SG6043	0.025721565	4.12
0.23	SG6043	0.024626754	3.75
0.24	SG6043	0.023620473	3.41
0.25	SG6043	0.022692495	3.09


TOLERANCE		THIRD ANGLE PROJECTION		MATERIAL:		TITLE:	
x=±0.5 x.X=±0.1 x.XX=±0.02	ANGULAR ±1°			Wood/ PLA/ Aluminium		Total Assembly	
				DO NOT SCALE DRAWING			
NAME		DATE		ALL DIMENSIONS ARE IN MILLIMETERS			
DRAWN	Group 20					DRAWING NUMBER: 002	
CHECKED	Group 20						
APPROVED							
				A3		Scale 1:3	



Note: Blade assembled using 2D profiles of the blade sections of 1.6mm perpendicular to the blade length axis

TOLERANCE		THIRD ANGLE PROJECTION		MATERIAL:		TITLE:	
x=±0.5	ANGULAR ±1°		DATE	PLA/Wood/Aluminium		Blade Assembly	
x.x=±0.1				DO NOT SCALE DRAWING		DRAWING NUMBER:	
x.xx=±0.02				ALL DIMENSIONS ARE IN MILLIMETERS		003	
DRAWN	Group 20	NAME	24/05/2024	A3	Scale 1:1	DEPARTMENT OF AERONAUTICS	
CHECKED	Group 20	DATE	31/05/2024			SHEET 3 OF 5	
APPROVED						REVISION A	

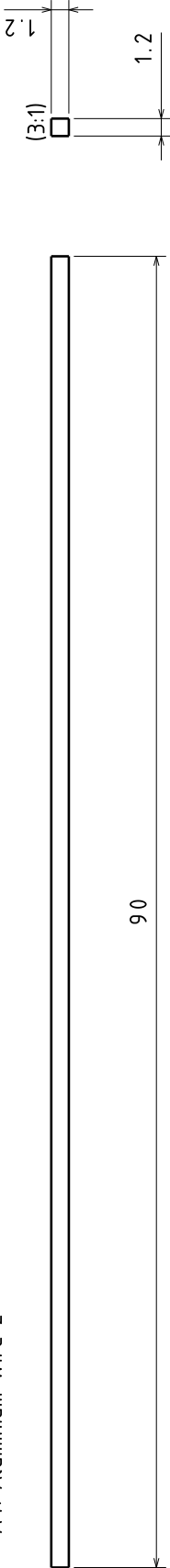


TOLERANCE		THIRD ANGLE PROJECTION		MATERIAL:		TITLE: Blade Cut-outs	DRAWING NUMBER: 004
x=±0.5 x X=±0.1 x XX=±0.02	ANGULAR ±1°			PLA / Wood DO NOT SCALE DRAWING			
	NAME		DATE	ALL DIMENSIONS ARE IN MILLIMETERS			
DRAWN	Group 20		24/05/2024				
CHECKED	Group 20		31/05/2024				
APPROVED							
				A3 Scale 1:1			

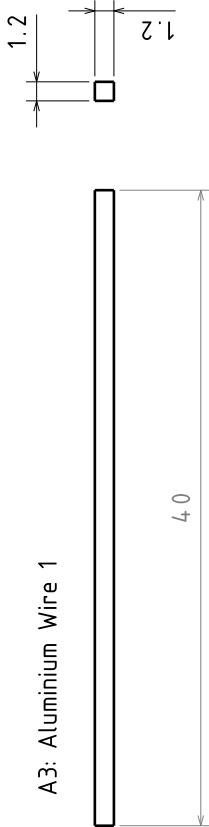
A5: Carbon Fibre Plate

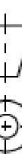



A4: Aluminium Wire 2



A3: Aluminium Wire 1



TOLERANCE		THIRD ANGLE PROJECTION		MATERIAL:		TITLE:	Imperial College London
x=±0.5 x.X=±0.1 x.XX=±0.02	ANGULAR ±1°			Aluminium	DO NOT SCALE DRAWING		
	NAME		DATE	ALL DIMENSIONS ARE IN MILLIMETERS		DRAWING NUMBER:	
DRAWN	Group 20		24/05/2024	A3 Scale 1:3			
CHECKED	Group 20		31/05/2024				
APPROVED							
						REVISION	
						SHEET 5 OF 5 A	
						DEPARTMENT OF AERONAUTICS	