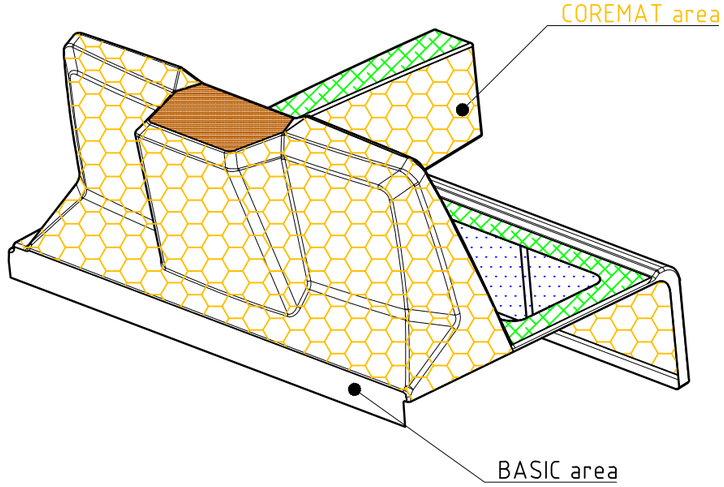
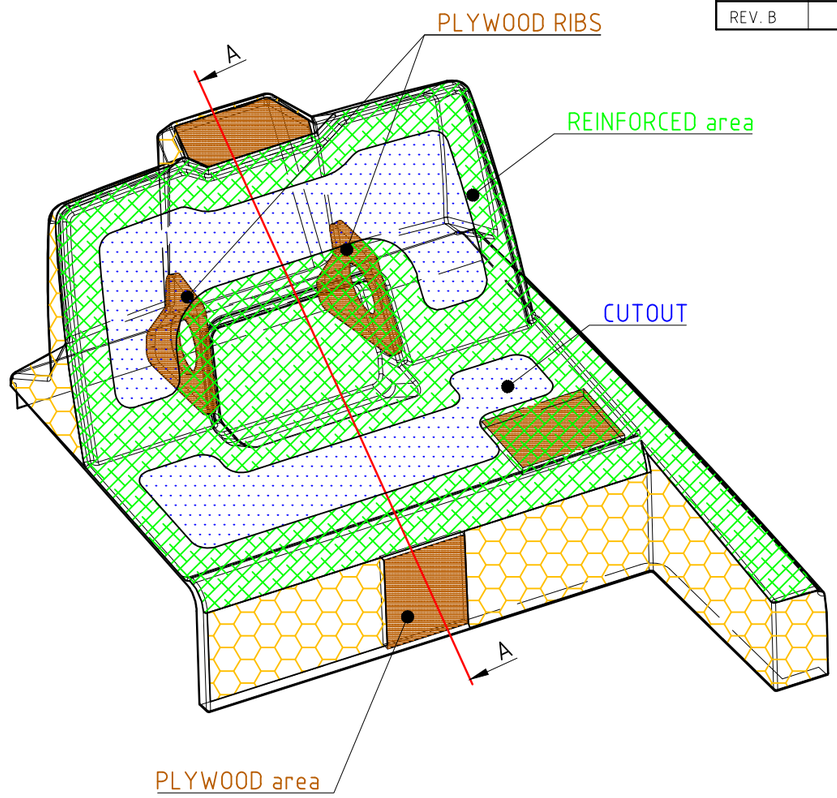
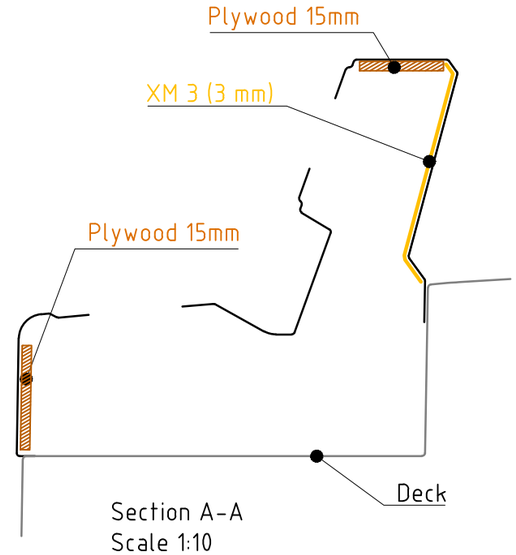
REV. NO.	REVISION NOTE	DATE	NAME	CHECK
REV. B	ADDED CUTOUTS	13.05.2016	E.Bugrova	J&J







Section A-A
Scale 1:10

Project name:	F450 HELM STATION	J&J Jakopin
Lamination:	Open mould [WET]	
	Simple surface	
Part weight:	13.3 kg	29.3 lb
Part area:	1.7 m²	2.0 yd²
Average:	7.8 kg/m²	14.4 lb/yd²
Nominal fibre content by mass according to EN ISO 12215		

	Area		0.19 m2	0.74 m2	0.70 m2	0.14 m2
		Ply	BASIC area	REINFORCED area	COREMAT area	PLYWOOD area
	Skin	1	GC (type II)	GC (type II)	GC (type I)	GC (type II)
		2	CSM 300	CSM 300	CSM 300	CSM 300
		3	CSM 300	CSM 300	CSM 300	CSM 300
		4	CSM 450	CSM 450	CSM 450	CSM 450
		5			XM 3 (3 mm)	Plywood 15mm
		6	EBX 600 M225	EBX 600 M225	EBX 600 M225	EBX 600 M225
		7		EBX 600 M225		
EU	Total dry fibre:		2,921 g/m2	3,752 g/m2	3,049 g/m2	10,721 g/m2
EU	Total with resin:		6,000 g/m2	7,460 g/m2	7,628 g/m2	14,300 g/m2
EU	Thickness:		4.2 mm	5.2 mm	7.4 mm	19.2 mm
USA	Total w/dry:		86.2 oz/yd2	110.7 oz/yd2	89.9 oz/yd2	316.2 oz/yd2
USA	Total w/resin:		177.0 oz/yd2	220.0 oz/yd2	225.0 oz/yd2	421.8 oz/yd2
USA	Thickness:		0.17 in	0.20 in	0.29 in	0.76 in

INSTALLED material:	Weight:		Area:		Marg. [%]:
	[kg]	[lb]	[m²]	[yd²]	
GC (type II)	1.1	2.4	1.1	1.3	0
CSM 300	1.1	2.4	3.7	4.4	5
CSM 450	0.8	1.8	1.8	2.2	5
EBX 600 M225	2.2	4.8	2.6	3.1	5
XM 3 (3 mm)	0.089	0.2	0.7	0.8	0
Plywood 15mm	1.1	2.3	0.1	0.2	0
POLYESTER (resin)	6.8	15.0			0
POLYESTER (hardener)	0.14	0.31			0
Total:	13.3 kg	29.3 lb	10.0 m2	12.0 yd2	

NEEDED material:	Weight:		Area:		Marg. [%]:
	[kg]	[lb]	[m²]	[yd²]	
GC (type II)	1.21	2.66	1.16	1.39	10
CSM 300	1.21	2.67	4.04	4.83	10
CSM 450	0.91	2.01	2.02	2.42	10
EBX 600 M225	2.39	5.26	2.87	3.43	10
XM 3 (3 mm)	0.10	0.22	0.76	0.91	10
Plywood 15mm	1.16	2.55	0.15	0.18	10
POLYESTER (resin)	7.5	16.5			10
POLYESTER (hardener)	0.15	0.34			10
Total:	14.6 kg	32.2 lb	11.0 m2	13.2 yd2	

Material:	Fibre orientation:	Resin uptake [g]:	Resin uptake [lb]:	Material description:
GC (type II)	SPRY application	0	0.00	GelCoat
CSM 300	RANDOM	700	1.54	Chopped strands matt
CSM 450	RANDOM	1050	2.31	Chopped strands matt
EBX 600 M225	(+45/-45 deg)	629	1.39	Double biaxial + matt
XM 3 (3 mm)	Core material	1500	3.31	Core material&Print through barrier (OPEN MOULD process)
Plywood 15mm	Solid (5 layers)	500	1.10	Marine Plywood
POLYESTER (resin)	0			Resin
POLYESTER (hardener)	0			Hardener

Important:
- during the lamination process environment temperature and humidity needs to be checked and recorded with temperature and humidity logger and comply with technical data sheets from suppliers
- resin/hardener ratio needs to be correct for ambient temperature
- all built in materials MUST have CE or similar certification
- before secondary bonding or lamination surface must be sanded with GRIT 60 paper
- Core must be sealed when hole is cut in to sandwich laminate or hole must be drilled to single skin area

Drawing name: Helm station lamination	Scale: 1:10	Date: 5.4.2016	Drawn by: E.Bugrova	Page: 1 / 1
Subject: F-450				Page format: A3
File name: F450-00-00-ST-29-T00-ST-STD-3EU-B-Laminazione controplancia-Helm station lamination.dwg				Approved: J&J