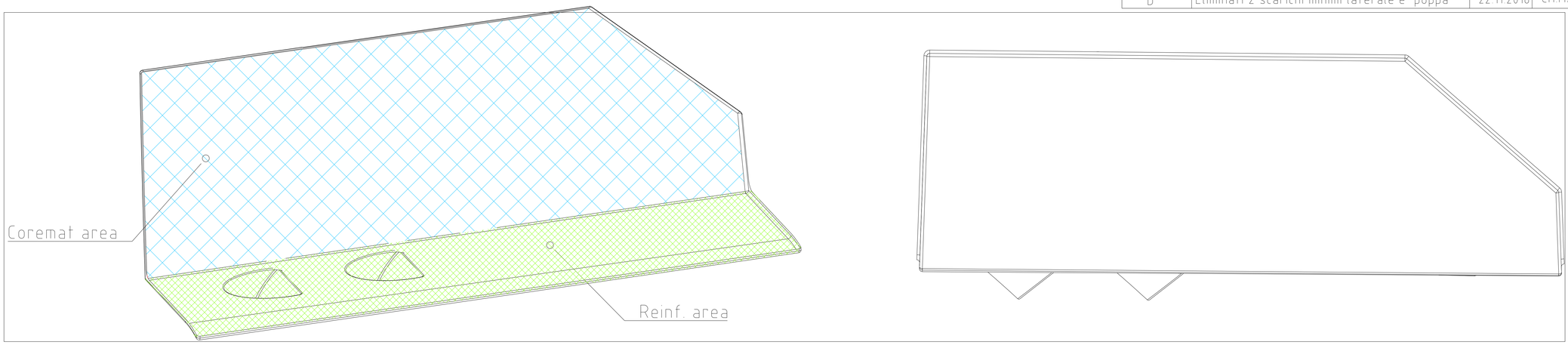
REV. NO.	REVISION NOTE	DATE	NAME	CHECK
C	Corrugated GRP and E plates were aded	13.6.2016	U.Mirjanic	
D	Eliminati 2 scarichi minimi laterale e poppa	22.11.2016	CH.MAO	



J&J COMPOSITE CALCULATOR V6

Project name:	F450_EXH. INSERTS	J&J Jakopin
Lamination:	Open mould [WET]	
	Simple surface	
Part weight:	6,7 kg	14,8 lb
Part area:	0,8 m²	1,0 yd²
Average:	8,4 kg/m²	15,5 lb/yd²
Nominal fibre content by mass according to EN ISO 12215		

Area		0,4 m2	0,4 m2	0,13 m2	0,07 m2
	Ply	COREMAT area	REINFORCED area	Corrugated GRP area	E-Plate area
Skin	1	GC (type II)	GC (type II)		
	2	CSM 300	CSM 300		
	3	CSM 300	CSM 300		
	4	CSM 450	CSM 450		
	5	XM 2 (2 mm)			
	6	EBX 600 M225	EBX 600 M225		
	7		EBX 600 M225		
	8			Corrugated GRP	E-Plate
	9			EBX 600 M225	EBX 600 M225
	10			EBX 600 M225	EBX 600 M225
EU	Total dry fibre:	3.017 g/m2	3.752 g/m2	+2.862 g/m2	+2.862 g/m2
	Total with resin:	7.096 g/m2	7.460 g/m2	+5.320 g/m2	+5.320 g/m2
	Thickness:	6,2 mm	5,2 mm	+16,9 mm	+22,5 mm
USA	Total w/dry:	89,0 oz/yd2	110,7 oz/yd2	+84,4 oz/yd2	+ 84,4 oz/yd2
	Total w/resin:	209,3 oz/yd2	220,0 oz/yd2	+156,9 oz/yd2	+156,9 oz/yd2
	Thickness:	0,24 in	0,20 in	+0,67 in	+ 0,88 in

Note:
- Port and STB Hull exhaust inserts are symmetrical
-Table calculation stands for one piece

Note:
Gli inserti vanno prodotti e consegnati non montati sul carter

INSTALLED material:	Weight:		Area:		Marg. [%]:
	[kg]	[lb]	[m²]	[yd²]	
GC (type II)	0,8	1,7	0,8	0,9	0
CSM 300	0,5	1,1	1,6	1,9	5
EBX 600 M225	1,4	3,0	1,6	2,0	5
CSM 450	0,4	0,8	0,8	1,0	5
XM 2 (2 mm)	0,035	0,1	0,4	0,4	0
Corrugated GRP	0,2	0,3	0,1	0,2	0
E-Plate	0,1	0,2	0,1	0,1	0
POLYESTER (resin)	3,4	7,4			0
POLYESTER (hardener)	0,07	0,15			0
Total:	**6,7 kg**	**14,8 lb**	**5,4 m2**	**6,4 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
EBX 600 M225	[+45/-45 deg]	629	1,39	Double biaxial + matt
CSM 450	RANDOM	1050	2,31	Chopped strands matt
XM 2 (2 mm)	Core material	1000	2,20	Core material&Print through barrier (OPEN MOULD process)
Corrugated GRP	[+45/-45/90/0 deg]	1200	2,65	Quadriaxial
E-Plate	[+45/-45/90/0 deg]	1200	2,65	Quadriaxial
POLYESTER (resin)	0			Resin
POLYESTER (hardener)	0			Hardener

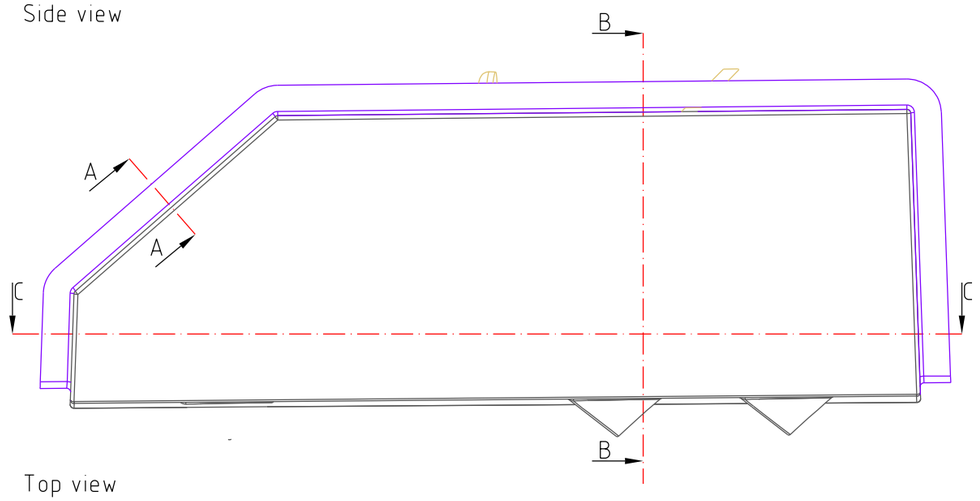
portant:
during the lamination process environment temperature and humidity needs to be checked and recorded with temperature and humidity logger and comply with technical data sheets from suppliers
resin/hardener ratio needs to be correct for ambient temperature
all built in materials MUST have CE or 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 location

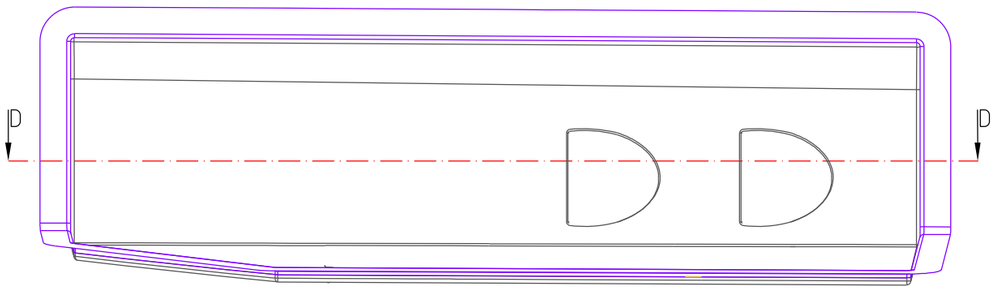
	Drawing name: Cutting lines	Scale: 1:8	Date:	Drawn by:	Page: 1 / 1
	Subject: F-450				Page format: A3
File name: F450-00-00-ST-06-T00-ST-STD-3EU-D-Laminazione deflettore scarichi motore-Engines exhaust covers lamination					Approved: J&J

REV. NO.	REVISION NOTE	DATE	NAME	CHECK

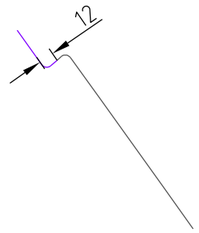
Side view



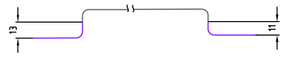
Top view



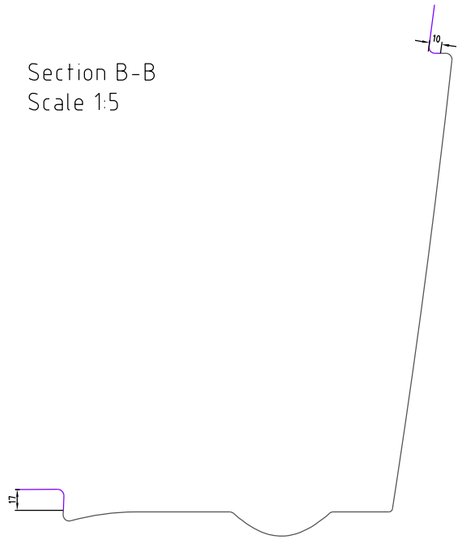
Section A-A
Scale 1:5



Section C-C
Scale 1:5



Section B-B
Scale 1:5



Section D-D
Scale 1:5

Note:
- Port and STB Hull exhaust inserts are symmetrical

	Drawing name: Cutting lines	Scale: 1:8	Date:	Drawn by:	Page: 1 // 1
	Subject: F-450				Page format: A3
File name: F450-00-00-ST-06-T00-ST-STD-3EU-D-Laminazione deflettore scarichi motore-Engines exhaust covers lamination					Approved: J& J

Drawing declaration