

**ALTERNATIVE REINFORCEMENTS FOR LTM10, LTM12 AND LTM16 TOOLING PREPREGS**

As a result of the worldwide capacity shortage for production of high strength 3k carbon fibres, ACG has evaluated and approved the following alternatives to CF0300 (199gsm twill fabric) prepregs and CF0100 (283gsm twill fabric) for composite tool manufacture.

These alternatives may be used only as balancing plies on the bag side of the lay-up – they must not be used as surface plies against the master model.

**Prepreg Data**

For use with LTM10 Series:

Fabric Designation	Fabric Description	Dry Fabric Weight (gm/m <sup>2</sup> )	Fibre Type	Yarns per cm warp/weft	Nominal Moulded Thickness (mm)	Nominal Fibre Content % Volume	Mean Resin Content % Weight
<b>48193</b>	PW Carbon Fabric	193	T700S(12K) Spread yarn	1.2 /1.2	0.24	44	46
<b>48194</b>	2/2 Twill Carbon Fabric	193	T700S(12K) Spread yarn	1.2 /1.2	0.24	44	46

For use with LTM210 Series:

Fabric Designation	Fabric Description	Dry Fabric Weight (gm/m <sup>2</sup> )	Fibre Type	Yarns per cm warp/weft	Nominal Moulded Thickness (mm)	Nominal Fibre Content % Volume	Mean Resin Content % Weight
<b>CF2900</b>	2/2 Twill Carbon Fabric	283	Standard (12K) high strength carbon	1.8 / 1.8	0.30	52.5	38

### Lay-up Sequence

Operation No	Ply Orientation	Material / Operation	Signed	Check
1		Master model dried		
2		Master model vacuum integrity check		
3		Release agent applied and baked		
4	0°	CF0300T/LTM10 Series or CF0100T/LTM210 Series		
5		Vacuum debulk at RT, minimum 25in Hg - 15mins		
6	0°	CF0700T / LTM 10 and 210 series		
7	+ 45°	CF0700T / LTM 10 and 210 series		
8	- 45°	CF0700T / LTM 10 and 210 series		
9	90°	CF0700T / LTM 10 and 210 series		
10		Vacuum debulk at RT, minimum 25in Hg - 15mins		
11	90°	CF0700T / LTM 10 and 210 series		
12	- 45°	CF0700T / LTM 10 and 210 series		
13	+ 45°	CF0700T / LTM 10 and 210 series		
14	0°	CF0700T / LTM 10 and 210 series		
15	0°	<b>CF0300 or 48194 or 48193 / LTM 10 Series</b> or <b>CF2900 / LTM 210 Series</b>		
16		Final bag and debulk at RT, minimum 25in Hg- 15mins		
17		Vacuum leak check		
18		Cure 90 psi/6 Bar in autoclave <b>or</b> Cure under minimum 28in Hg vacuum		
19		Postcure		
20		Attach backing structure as per instructions		
21		Release Prime		