

1. Release Master Model with ACG RA815 wax
 - 3 coats minimum buffing between coats.
 - Bake final coat at 30°C (86°F) for 30 minutes (higher temperatures are acceptable depending on master model construction/capability).

2. Prepare Materials
To optimise out-life of material, cut material into kits of plies and freeze down individual plies not immediately required. (Refer to LTM20 datasheet for thawing out parameters).

3. Depending on surface finish requirements and processing parameters, ACG GC360 clear gel coat can be used to obtain improved surface properties in the following circumstances:
 - Vacuum integrity of master model is suspect and thus applying and maintaining a full vacuum 880 mbar (26in Hg) is difficult / may cause problems.
 - When a pit free surface finish is necessary and the master model is unsuitable for autoclave processing.

4. Apply ACG GC360 gel coat, if required, mix ratio as per the data sheet and in line with the following parameters:
 - Film thickness approx. 0.25mm thick (mix ratio 100pbw resin : 40pbw hardener).
 - Allow to tackify to sellotape dry condition (approx. 3-4 hours at 20°C).
 - Apply thin uniform coupling coat of GC360 mixed as per the gel coat and immediately proceed with lay-up of LTM20 prepreg reinforcement.

5. If no gel coat is required proceed with lay-up of surface ply LTM20 prepreg:
 - LTM20/CF0300 or LTM20/CF0100 should be utilised as a surface ply to give an acceptable surface finish.
 - Remove 1 kit of pre-prepared materials from the freezer allowing sufficient time to fully thaw prior to use. This should then apply to all subsequent kits.
 - A vacuum debulk at RT for 15 minutes, 880 mbar (26in Hg), is recommended after ply 1 to ensure all detail etc is formed.

6. To aid simulation of representative panel thickness the following information can be used as a guide:
- GC360 (when used) – 0.25mm/ply
 - LTM20/CF0100 (48% RW, 43%Vf) – 0.36mm/ply
 - LTM20/CF0300 (48%RW, 43%Vf) – 0.25mm/ply
 - LTM20/CF0700 (42%RW, 48%Vf) – 0.77mm/ply
 - 84gsm Peel Ply (1616) – -0.06mm/ply

A combination of reinforcements can be used to achieve the desired panel thickness. (The above calculations are based on the standard recommended resin content for each reinforcement).

NB: a Peel Ply finish is recommended on the non-moulded surface. This is shown as a negative thickness value as it will effectively remove resin from the laminate and slightly reduce the thickness.

7. Parameters for applying vacuum:
Debulks – P3 Halar, 125gsm Breather

Final Cure – Peel Ply (non-impregnated), P3 Halar, 125gsm Breather,
880 mbar (26in Hg)

Typical Cure Parameters:

Minimum	20°C (68°F)	-	48 hours
	30°C (86°F)	-	12 hours
	50°C (122°F)	-	3 hours
	70°C (158°F)	-	1 hour
Optimum	20°C (68°F)	-	72 hours
	30°C (86°F)	-	16 hours
	50°C (122°F)	-	4 hours
	70°C (158°F)	-	1.5 hours

8. If required the non-moulded surface can be lightly rubbed down and resin wiped to enhance aesthetics.