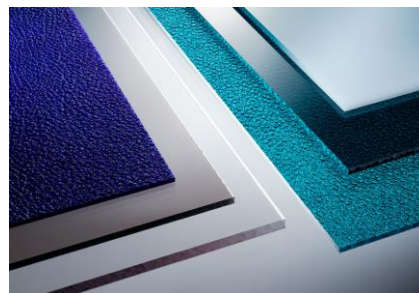


marlon fs

Edge Finish



After fabrication cut edges of Marlon FS/FSX can be polished to improve the finish and aesthetical properties. There are different techniques used in polishing the edge including: mechanical, diamond, solvent and flame polishing.

Grinding/Sanding

MARLON FS/FSX should only be wet ground using fine grain 400 to 600 grit. Grinding can be done by hand or with a block using circular movements. Mechanical grinding is possible with orbital, disc or belt sanders (belt speed approximately 10m/s). Only light pressure should be used and the piece should be kept moving to prevent frictional heat build-up which may result in stress.

Notches adversely affect the mechanical properties of polycarbonate and should be avoided.

Polishing

This can be carried out on felt polishing bands (20m/s) or buffing wheels (20-40m/s) using polishing paste (car body polish can work effectively).

Diamond Polishing

On suitable parts diamond polishing can remove the need for prior grinding or sanding and leaves a polished edge. The spindle and feed speeds need to be adjusted to minimise overheating and prevent gumming.

Flame polishing

A standard propane - or butane torch could be used to flame polish the edge of Marlon FS/FSX. It is very important to control the distance between the sheet and the heat source as surface whitening or material flow might occur. An electrical hot air device at around 400-550 °C can be used. Flame polishing sheet can cause long-term edge cracking.

Solvent polishing

- Sand edge smooth
- Clean any dirt and dust from edge
- Dip cloth in Methylene Chloride
- Wipe edges CAREFULLY
- Alternatively heat the Methylene Chloride to 40°C
- Direct resulting vapour using a hose and polish

Do not allow solvent to drip onto face of sheet as discolouration WILL occur. Adequate ventilation is essential. Always refer to solvent manufacturer's Material Safety Data Sheet.

Annealing is advised after edge polishing as localised heating due to the process can impart stress into the part.

Only the edge of Marlon FSX/FS hard sheet should be ground or polished as the protective UV layer or anti-abrasion coating can be damaged if the surface is machined.



Brett Martin Ltd. pursues a policy of continuous product development and reserves the right to amend specifications without notice.

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REF. CODE:
PFS_Fab_Edge_Finishing
28.10.2016