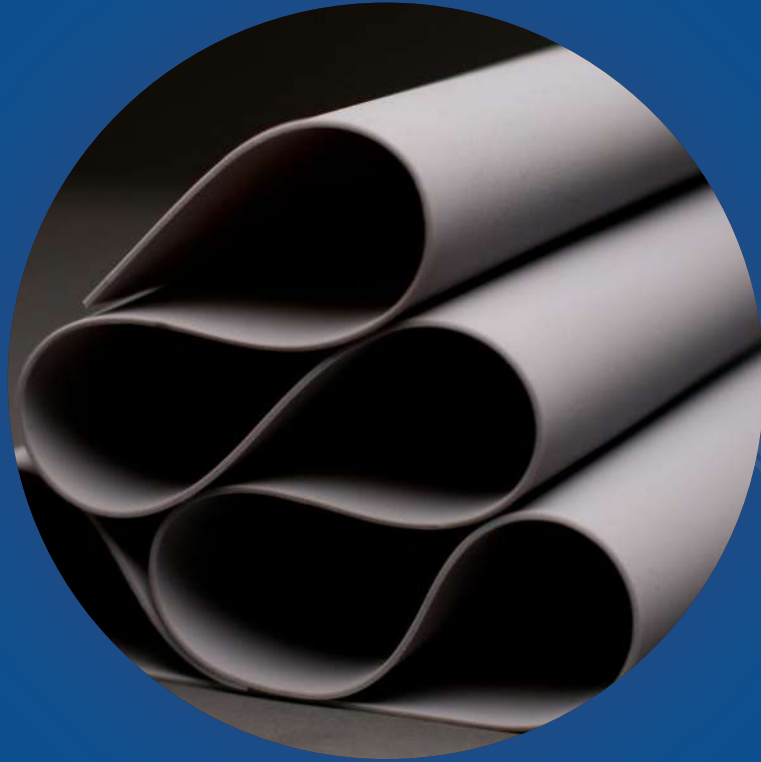




Designed To Fit Your Needs. Exactly.

FenForm Processing Guidelines



Storage and Handling Guidelines

To maximise the shelf life of our FenForm products we recommend that uncured Silicone materials are stored below 25°C with a relative humidity of less than 70%. Prolonged exposure to sources heat, radiation, Ozone and direct sunlight should also be avoided.

The expected shelf life under these conditions is 6 months from the date of manufacture.

Fabrication and Curing

Preparation:

FenForm can be formed and moulded on a variety of tool types ranging from basic metal mandrels to complex moulds. To achieve the best results the following guidelines should be followed.

- ✱ Tools should be cleaned and degreased using Isopropyl Alcohol or other suitable cleaning solvents.
- ✱ The tool surface should then be evenly coated with a Non-Silicone based release coating such as PTFE or a dilute detergent solution.
Note: Using Silicone based release agent will result in FenForm adhering to the mould and fouling the surface. If this happened a suitable Silicone digester should be used to clean the surface.



Lay up:

- ✱ Any rolls that have been kept refrigerated should be removed from storage and allowed to reach room temperature before use.
- ✱ With the polythene layer still attached cut the uncured Silicone sheet to size and lay on the tool, product side down. By hand, gently work the sheet in to place ensuring to remove any air entrapments as you go.
- ✱ Any joints and seams should be overlapped by 2 – 3mm to ensure good bond. Overlaps can be chamfered using a blade to reduce any stepping.
- ✱ Additional layers of Silicone can be added to any extreme contours and undercuts to prevent thinning.
- ✱ Any bonded valves or inserts should be primed using a suitable bonding agent such as Cilbond 36 or Momentive A174 prior to lay up. For detailed instructions on the surface preparation of bonded parts please refer to the manufacturers data sheets.

Consolidation:

- ✱ For simple positively moulded parts the layup should be wrapped in Melanex tape to consolidate the rubber.
- ✱ For negatively moulded parts the mould can either be vacuum bagged or, in the case of a closed mould a release layer added, and the internal cavity pressurised with an inert gas such as Nitrogen.

Curing:

- ✱ Place the tool in an autoclave or pre-heated oven and cure for 30 minutes at 150°C. For sections over 4mm thick add an additional 5 minutes per 1mm to the curing time.
- ✱ Allow the tool to fully cool before removing the membrane. Any thin or damaged areas can be repaired by adding additional layers of uncured Silicone and repeating the curing cycle.
- ✱ Once the cycle is complete the membrane is ready for use. No post-cure cycle is required.

Speak to one of our FenForm engineers today:

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