



## ToughSIL Classic

### Solar Module Lamination Diaphragm

ToughSIL seamless diaphragms are specifically designed for the solar module lamination process.

## Tips for Proper Installation

For peak performance, preheating and tightly stretching the diaphragm is recommended prior to installation and clamping.

Whether you are using a fixed clamping laminator or a self-adjusting tension clamping laminator:

- Heat at 140 – 150 °C for **60 minutes**
- Apply strong pressure to all four sides of the sheet immediately prior to clamping

Extensive tests show that preheating the diaphragm for 60 minutes will result in the best performance and the longest lifetime of the diaphragm.

### Caution:

- If heated for 30 minutes or less, the diaphragm at the corners of the frame may be more easily damaged

## How to Spot Problems?

What causes a diaphragm to tear or deteriorate:

- Repeated stress caused by direct contact with heating plate
- Cyclical stretching – repeated bending and flattening
- EVA by-products – chemicals from EVA curing such as peroxides, HF, etc.

It is time to replace a diaphragm when:

- The sheet around the corner of the frame becomes thin or cracked
- The sheet becomes less elastic

