

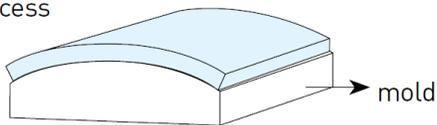
One of the many possibilities with Staron® Solid surfaces is that it can be thermoformed to create various shapes to fit your needs. Thermoforming is the process of heating and bending flat sections of Staron® sheets to create curved tops and down stands. This process involves placing Staron® materials into an industrial oven, designed specifically for this purpose, at a temperatures generally between 293°F ~347°F. The formability of Staron® allows the material to be crafted in to sculptures, artistic vanities, innovative furniture, and various other interior applications where curves and shapes are desired.

Thermoforming is a learned technique that requires practice and experience in order to achieve optimal results. Oven preparation and calibration is the most crucial skill in thermoforming – Heating temperature and dwell time will vary depending upon the thickness and color group of Staron® products to be formed.

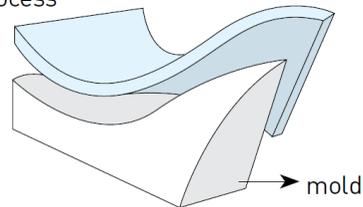
**Recommended oven temperature / dwell time and minimum radius allowance are listed below**

Thickness	Recommended Oven Temp. & Time	Recommended Minimum Radius	Color Group
1/4" (6 mm)	302°F (150°C) 30~60 min	1" (25 mm)	Solid, Sanded
		4" (102 mm)	Aspen, Pebble
1/2" (12 mm)	302°F (150°C) 45~80min	3" (76mm)	Solid, Sanded
		5" (127 mm)	Aspen, Pebble

2D process



3D process



Temperature and dwell time may vary depending on oven design and the size of the piece to be formed. It is highly recommended to test a scrap piece to find the best temperature/dwell time for the oven. Staron® does not express or imply any warranty or suitability of equipment that may be used in the thermoforming process. Failure to comply with the above recommendations may result in popped chips or cracks.

Quarry and Tempest color group are not recommended for thermoforming due to its unique properties.

**Samsung Staron® does not warrant the condition of Staron® Solid surfaces while being thermoformed or such material that is unsuccessfully thermoformed. However, when the material is successfully thermoformed and subsequently incorporated into a finished assembly, it carries the same warranty as other Staron® Solid Surface products.**

*This Technical Bulletin is intended to provide guidelines for optimal fabrication, installation, and performance of LOTTE ADVANCED MATERIALS products mentioned. Though the information contained herein is deemed reliable, none of the contents--including but not limited to the instructions, techniques, graphics, and recommendations--is to be understood as implying legal liability of fitness for a specific purpose, any other type of warranty, or being complete or absolute in its range and nature of information.*

*Depending on the user's particular application, all necessary measures must be taken to verify and test the adequacy for such needs or application. Any information or recommendation herein is strictly for purposes of reference and as such, LOTTE ADVANCED MATERIALS assumes no responsibility for its suitability or accuracy or the use of such information for products other than LOTTE ADVANCED MATERIALS Staron® solid surfaces & Radianz® quartz surfaces.*