

DOCUMENT PURPOSE

This document offers general information about thermoforming. Use this as a general overview about surface behavior, thermoforming techniques, and preparation suggestions. Actual result may vary due to variations in designs, equipment, material behaviors, fabrication techniques and experience, and more. Thermoforming is considered an advanced fabrication trade. Having proper training, right equipment and certain amount of experience are highly recommended for thermoforming projects.

A SAMPLE GUIDE TO OVEN SETTING & BENDING INNER RADIUS

Series	NO.	Direct Heat Double Plate Oven	Indirect Heat Conventional Fan Oven	Common Radius
Solid	0XX	150-160°C, 10-15 Mins	150-160°C, 10-20 Mins	≥ 70mm
Solid	033T	150-160°C, 10-15 Mins	150-160°C, 10-20 Mins	≥ 15mm
Mist	1XX	150-160°C, 10-15 Mins	150-160°C, 10-20 Mins	≥ 70mm
	2XX	150-160°C, 10-15 Mins	150-160°C, 10-20 Mins	≥ 70mm
	3XX	150-160°C, 10-15 Mins	150-160°C, 10-20 Mins	≥ 70mm
Stone	5XX	150-160°C, 10-15 Mins	150-160°C, 10-20 Mins	≥ 100mm
Granite	6XX	150-160°C, 10-15 Mins	150-160°C, 10-20 Mins	≥ 135mm
	7XX	150-160°C, 10-15 Mins	150-160°C, 10-20 Mins	≥ 135mm
Boulder	8XX	150-160°C, 10-15 Mins	150-160°C, 10-20 Mins	≥ 150mm
Breccia	9XX	150-160°C, 10-15 Mins	150-160°C, 10-20 Mins	≥ 150mm
All B-Series	Ending in B	Not Recommended	Not Recommended	Not Recommended
Shell	4XX	Not Recommended	Not Recommended	Not Recommended
Movement	M005 M007 M009	150-160°C, 10-15 Mins	150-160°C, 10-20 Mins	≥ 135mm
Movement	Other Colors	Not Recommended	Not Recommended	Not Recommended

MEGANITE®

TECHNICAL BULLETINS

GENERAL THERMOFORMING INFORMATION

Notes:

- Heating temperature higher than 190°C is not recommended.
- Heating time longer than 30 min is not recommended.
- Every oven is different. Results can vary. Discoloration is possible.
- For better performance, please contact with your Meganite sales.

LEARN YOUR OVEN & DO A SAMPLE TEST BEFORE STARTING ANY PROJECT



Solid Color

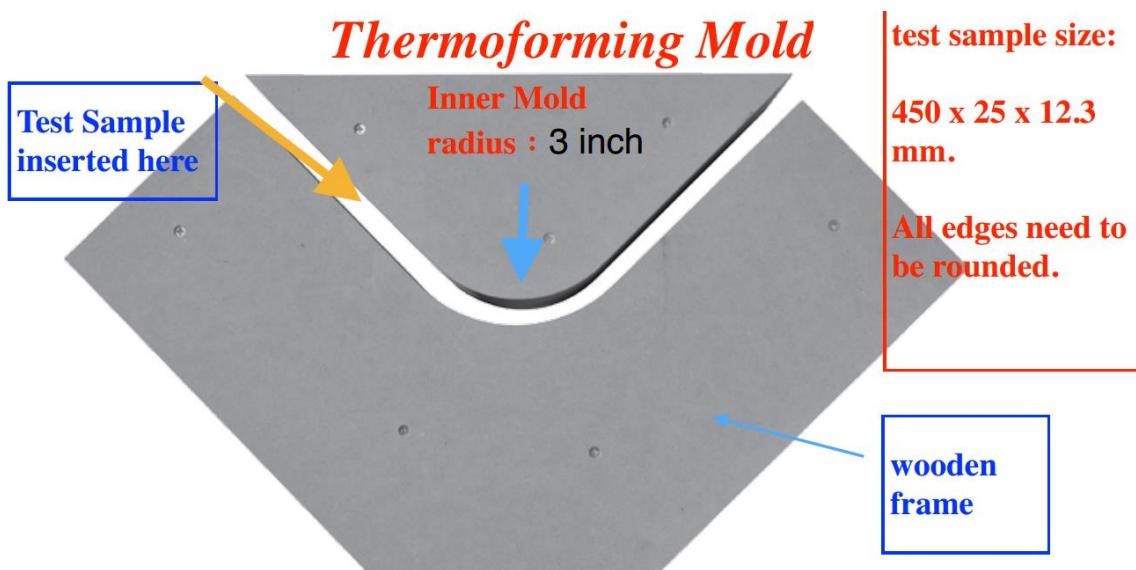


Large Chip Color



033T Flexy White

SEE THE THERMOFORMING TESTING MOLD, WHICH IS MADE WITH MDF OR PLYWOOD.



We highly recommend you spend some time to learn how your oven performs. Not all ovens are designed the same. The two most common designs are direct heat and indirect heat. A direct heat oven is generally double stainless steel plated and the material is sandwiched between the two plates. An indirect heat oven is similar to a conventional oven with a fan. In general, a direct heat oven heats the material faster and more even. Indirect heat oven is more common due to the cost of the oven.

We recommend you to learn how MEGANITE materials can be heated with a small test strip. The strip can be 100 x 300 x 12 mm or similar. First, preheat your oven to the desired temperature. Then, put the solid surface strip flat in the oven until it is soft throughout. Lastly, bend the material into shapes in above photo. If the material is hard to bend, generally it is because it has not been soften all the way through. Thus, more heat or more heating time could be needed. Follow and repeat above steps until you find the desired bending time and temperature combination. It is extremely important to check the heated and non-heated material for discoloration. Simply place a heated and a non-heated material next to see each other. Sand them at the same time to the desired finish (generally matte or gloss). After sanding, if you can visually tell a difference under normal indoor lighting, then adjustments on heat, duration, heat source distances, and/or other technique is needed.

Darker Colors and Bright Colors

Please be aware when darker colors and bright colors with and without chips can have more visible white stretch marks. This is not a material bending issue. It is generally because the material is bent too fast or not heat through enough.

IF YOU HAVE QUESTIONS, PLEASE CONTACT MEGANITE SOLID SURFACE REPRESENTATIVES, AUTHORIZED FABRICATORS, DISTRIBUTORS OR EMAIL US AT INFO@MEGANITE.COM.

ALL TECHNICAL BULLETINS CAN BE FOUND @ WWW.MEGANITE.COM