

# TECHNICAL BRIEF

The One-Source Solutions Provider  
DESIGN | FORMULATE | COMPOUND | MOLD | FINISH  
Thermoset Composites

## Outdoor Living

Mar-Bal provides materials engineering and compounding fully controlled by our in-house, state-of-the-art laboratory. Our engineered composite materials have excellent performance characteristics which makes them well suited for a wide variety of applications including Outdoor Living products like outdoor cooking – grilling.

Mar-Bal's material engineering team can customize a material to fit your application and meet your exact specifications.

Thermoset composites deliver:

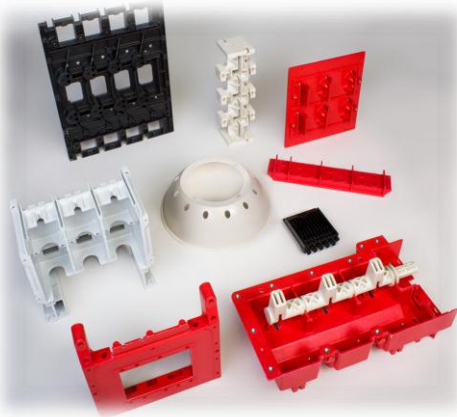
- UV Resistance
- Chemical Resistance
- Corrosion Resistance
- Heat and Fire Resistance

Mar-Bal's mechanical engineering team can design a custom part that can provide for parts consolidation and function with molded-in inserts and eliminate secondary processing. The designs will maximize molded dimensional accuracy and deliver:

- Molded-in Color
- Tight tolerances
- Low-post mold shrinkage
- Repeatable moldings



Grills Cooktops Warming Refrigeration Dishwashers Ventilation Ice Machines  
Doors Trays Handles Bezels Control Panels Knobs Vent Trims Side Trims Motor Housings Kick Plates



Mar-Bal has pioneered formulations considered industry benchmarks for aesthetics, molded-in gloss and high strength.

Achieving high retention levels of mechanical properties and color stability following aggressive heat and life cycling tests provide customers with the material of choice for demanding applications.

The selection of unique raw materials provide customers with high appearance, while delivering outstanding stain resistance and “cleanability” without chemically stress cracking to household cleaners.

Low post mold shrinkage technology provides part to part dimensional repeatability for ease of assembly and function.

Headquartered in Chagrin Falls, Ohio, Mar-Bal is a compounder and molder of thermoset composite products. Since 1970, Mar-Bal has engineered and manufactured quality, customized materials and parts. Mar-Bal serves the appliance, electrical and industrial marketplaces from its four facilities in North America and its Asia Sales Office located in Shanghai, China.

Mar-Bal, an ISO 9001:2008 registered company, has a portfolio of brands and proprietary products, and continues to develop innovative products while maintaining a commitment to client satisfaction and total value.

Contact Mar-Bal today and learn how thermoset composites can be a solution for you.

For more information about capabilities and innovative solutions including injection, compression and transfer molding of BMC, SMC, polyester, phenolics and epoxy, contact Mar-Bal.

**440-543-7526 mar-bal.com**

**Appliance | Electrical | HVAC**

**Lighting | Transportation | Industrial**



*Innovative chemistries allow for excellent UV and stain resistance, ease of cleaning and provides for long lasting elegance.*

**OHIO PLANT**

16930 Munn Road  
Chagrin Falls, OH 44023  
Phone: 440-543-7526  
Fax: 440-543-4374

**VIRGINIA PLANT**

5400 Reserve Way  
Dublin, VA 24084  
Phone: 540-674-5320  
Fax: 540-674-5328

**MISSOURI PLANT**

101 Commerce Drive  
Cuba, MO 65453  
Phone: 573-885-4064  
Fax: 573-885-4555

**R&D TECHNICAL CENTER**

10095 Queens Way  
Chagrin Falls, OH 44023  
Phone: 440-543-7526  
Fax: 440-543-4374

**ASIA SALES OFFICE**

No. 1050 Wuzhong Rd.  
Shanghai, China 201103  
Phone: 86 21 6406 1832  
Fax: 86 21 6406 1833



mar-bal.com