



DESIGN GUIDE

Molded Fiber Manufacturing Method Type 3

Design, Materials, Performance, and Sustainability

This design guide provides general technical information to be considered when designing a product to be produced on this method.

WHAT IS TYPE 3 MOLDED FIBER MANUFACTURING METHOD?

Type 3 method (sometimes referred to as “Precision or Thermoformed”) is used to produce molded fiber products for applications requiring higher surface quality, sharper detail, and lighter weight than what can be produced on method Types 1 and 2. This method is commonly used to produce consumer, retail, and food-service packaging products, where both form and function matter.

DESIGN & DIMENSIONAL TOLERANCE

Wall Thickness	0.02–0.6in (0.5–1.5mm)
Part Depth	0.06–6in (1.5–150mm)
Draft Angle	2–12°
Rib Width	0.12–0.24in (3–6mm)
Tolerance	±0.01in (±0.25mm)
Surface Finish	Smooth, high detail



MATERIAL COMPOSITION

Raw Material: Cellulose Fiber
Typical Fiber Type: Virgin Fiber for Food Contact & Specialty Applications. Recycled Fiber for Other Applications

Typical Additives: Sizing



PRODUCTION PROCESS & TOOLING

Forming Method: Wet Mold Forming with the Drying/Curing of Product within Drying/Curing Mold(s).

Tooling: Aluminum or steel

Cycle Time: 15–45 sec



FUNCTIONAL PERFORMANCE

Structural Strength: Medium

Water & Grease/Oil Resistance:

Medium/High Depending on Application & Additives Used

Nestability: Excellent

Fiber Weight Per Part: 0.4–1.6oz (11–45g)



IDEAL PRODUCT WEIGHT (RANGE)

0–3lbs (0–1.3kg)

**can be more for certain applications*

