



DESIGN GUIDE

Molded Fiber Manufacturing Method Type 1

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 1 MOLDED FIBER MANUFACTURING METHOD?

Type 1 method, also known as a method to produce thick-wall molded fiber, is used to produce packaging for industrial and heavy consumer applications. The products produced via this method tend to be valued for their durability, strength, and recyclability, making them an eco-friendly alternative to plastics or foams.

DESIGN & DIMENSIONAL TOLERANCE

Wall Thickness	0.24–0.6in (6–15mm)
Part Depth	4–18in (102–457mm)
Draft Angle	9–15°
Rib Width	0.24–0.6in (6–15mm)
Tolerance	±0.06in (±1.5mm)
Surface Finish	Smooth front, rough back

MATERIAL COMPOSITION



Raw Material: Cellulose Fiber

Typical Fiber Type: Recycled/
Reclaimed Fiber

Typical Additives: Sizing

PRODUCTION PROCESS & TOOLING



Forming Method: Wet Form
Mold Only

Tooling: Steel, Composite, or
3D Printed

Cycle Time: 60–180 sec

FUNCTIONAL PERFORMANCE



Structural Strength: High

Water Resistance: Medium
(Chemistry in Slurry)

Nestability: Moderate

Fiber Weight Per Part: 6–96oz
(170–2721g)

IDEAL PRODUCT WEIGHT (RANGE)



15-80 lbs (7-36kg)

**can be more for certain applications*

