

REACTION INJECTION MOLDING

- Large, sculpted parts can be molded economically.
- Variable thickness walls allow for greater design freedom.
- Closed molds produce accurately molded and structurally strong parts.
- Lower tooling cost and shorter tooling lead time.
- A wide variety of material properties including UL94VO.
- Electronic components can be encapsulated.
- Metal parts can be encapsulated.

RIM parts are lower cost than the same parts made from metal or fiberglass.

Composites - RIM parts can be reinforced with many materials.

Exothermic capabilities:

- **CAD Engineering Review**
- Mold Design
- Mold Manufacture
- Mold Repair/ Modification
- RIM Molding
- **Precision Painting**
- Silk Screening
- **■** Assembly

ISO 9002 Compliant

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Affordable Tooling, Along with the Combination of Light Weight Material and Significant Wall Strength, Make RIM the Only Feasible Choice

he makers of Tile-Redi Shower Modules had a revolutionary idea. This new concept in shower pan liners, an easy to install one-piece module, is a cost saving replacement for painstaking conventional felt/vinyl/mud installation for shower stalls. Tile-Redi allows contractors to save a great deal of money during the installation process by eliminating the need to spend time and labor forming the shower floor to a waterproof true pitch. The remarkably strong one-piece modules are instantly ready to accept ceramic tile or marble. An added advantage is a lifetime warranty against leaks.

When Tile-Redi decided to manufacture their new product, they turned to **Exothermic Molding** and the **RIM** process. The 37" x 37" one-piece module is ideally suited for **RIM**. The relatively large piece is very strong with wall thicknesses up to 1.25" (not possible with other processes), yet light weight with a material density of under 25 pounds per cubic foot. Thick, non-ribbed walls allow heavy loading capability without deflection. The PVC drain section of the module is encapsulated, allowing Tile-Redi to offer a lifetime warranty against leakage.

Half-inch nominal walls match up exactly with the waterproof wallboard used in construction, further simplifying the installation process. A fire retardant paint is applied by **Exothermic Molding** around the drain on the underside of the Redi-Tile module to pass flammability requirements. The part passes all domestic UL and Canadian building codes.

The hybrid cast aluminum mold, which combines both cast and machined surfaces, cost a modest \$15,000. By contrast, in thermoplastic structural foam the mold would cost a minimum of \$80,000, possibly much more. An injection mold could cost as much as \$150,000.

Three other sizes, a 37" x 37" corner unit, a 37" x 48" and 33" x 60", are under development.



Exothermic molding delivers large, lightweight RIM parts quickly ... at competitive prices.