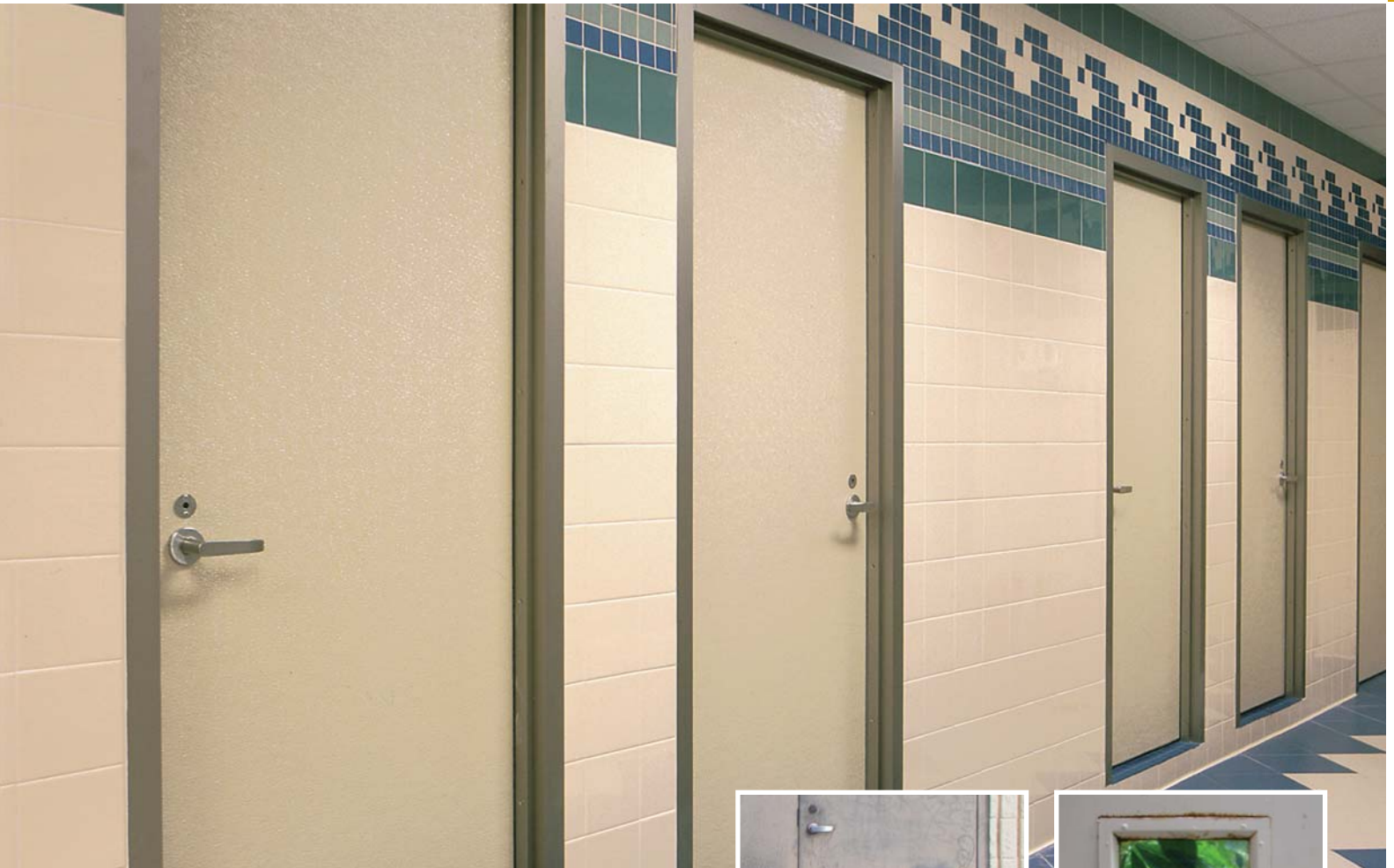


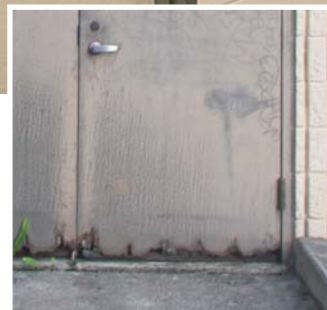
# Doors for Corrosive Environments



**S**pecial-Lite® Doors simply stand up to corrosive environments better than others. They're engineered with a combination of better materials and better design to resist long-term exposure to corrosive agents and atmospheres.

On the surface, it seems like a door made from a material like stainless steel would be a natural choice in environments like wastewater treatment, industrial plants, and pool facilities. After all, stainless steel is commonly used in process piping to carry acids and other corrosive materials. But the truth is, there's a world of difference between a corrosion-resistant *material* and a corrosion-resistant *door*.

Hollow metal doors fabricated from stainless or galvanized steel are subject to corrosive attack from a variety of substances commonly present in industrial and municipal facilities. Gaseous hydrogen sulfide, common to wastewater,



Hollow metal doors are not appropriate for corrosive environments.

pulp and paper, and petrochemical plants, is highly corrosive to steel, even stainless. The combination of airborne salt and high humidity in coastal locations wreaks havoc on even well-maintained steel doors. Attack can take the form of surface rust, galvanic corrosion, pitting, crevice corrosion, and stress corrosion cracking. Corrosion can start in hidden areas like joints, overlaps, fastener penetrations, and interiors, where it can't be stopped. Fortunately, there's a better way to build doors for corrosive environments.

# Our FRP flush doors resist corrosion

with superior materials and engineered construction

**S**pecial-Lite® SL-17 FRP (fiberglass-reinforced polyester) Flush Doors avoid corrosion problems with the use of materials known for their exceptional corrosion resistance. These materials are combined with a proven, lightweight design that locks out corrosive agents and withstands hard use and abuse to provide long life even in the most corrosive installations.

## Built with materials that resist corrosion

FRP, due to its chemical resistance, is used to fabricate plant and processing equipment in direct contact with corrosive chemicals in a wide variety of industries. Special-Lite FRP Doors feature our exclusive Speclite3® pebble grain FRP face sheets that provide chemical resistance as well as excellent impact strength, scratch resistance, and UV resistance. The material is also colored throughout to eliminate the need for frequent repainting.

Aluminum is another popular material choice for corrosive environments. Our door stiles and rails are extruded 6063-T5 aluminum alloy, which has excellent atmospheric corrosion resistance and is not affected by sea spray or seawater immersion. It's immune to attack by hydrogen sulfide, and is not affected by chlorine at pool water concentration levels. We anodize our aluminum to Class 1 (.7 mil) standards for even greater corrosion resistance, and we use Kynar 500® coatings on our painted extrusions for durability.

## A lightweight structure that locks out corrosion

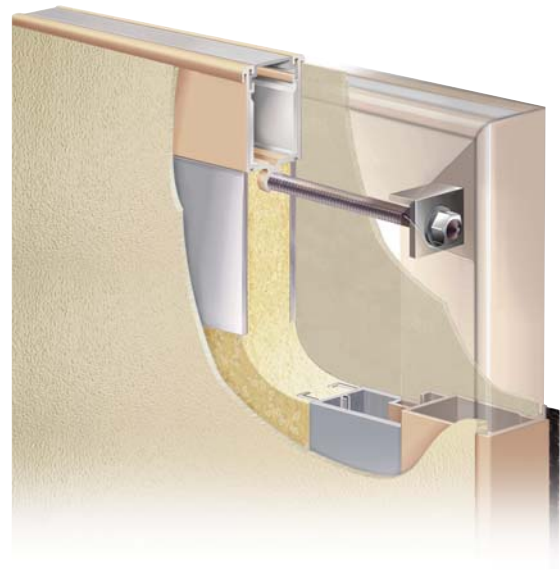
The FRP/aluminum hybrid construction of Special-Lite Flush Doors results in a lightweight structure with unmatched physical properties. Stiles and rails are joined with mitered corners and angle blocks secured by 3/8" diameter full-width galvanized steel tie rods. The tie rods run through integral





splines in the top and bottom rails, effectively making the tie rod a part of the rail. This method of construction provides the necessary flexibility to withstand abuses that cause mechanically-joined or welded corners to fail, or cause cracks in the gelcoat finish of molded FRP doors, thereby exposing the core to the elements, and the door to progressive damage and eventual failure.

We use a proprietary injection technology to completely fill the interiors of our doors with a strong, lightweight, closed-cell urethane foam core that vapors and liquids can't penetrate. The urethane bonds firmly to the rails, stiles, reinforcements and face sheets to transform the door into a solid, completely sealed unit with incredible impact resistance and flexural strength. The core material won't absorb or be damaged by water, and helps to make our FRP doors so light and well sealed that they actually float.



### **Custom fabrication to your specifications**

If you have unconventional requirements, we can meet them. We can supply oversized or odd sized designs, monorail cutouts, custom lites, curved doors, and many other options that are difficult or impossible with competing products like molded or extruded FRP doors. For example, we can make the Special-Lite SL-17 FRP door in sizes up to 80" wide by 216" tall, at a manageable weight.

Where security is important, our FRP Flush Doors can also be prepped for installation of low-profile proximity card readers inside the door, since the signal easily passes through the FRP. Internal mounting keeps the reader out of sight, out of the weather, and out of reach of vandals, improving security and protecting the card reader unit.

# Simplify your life —

with entrance solutions from Special-Lite

## Decades of experience in a wide range of corrosive applications

Special-Lite Doors have a long and proven history in corrosive applications. We've accumulated an impressive track record of reliability in the punishing environments of many industries, including:

- Water/wastewater treatment plants
- Industrial plants
- Food processing plants
- Animal holding facilities
- Coastal locations
- Pools, showers
- Theme parks, aquatic parks
- Boiler rooms, pump houses

## A complete entrance from a single source

Special-Lite manufactures complete entrance solutions—doors, frames, and panels. Enjoy the convenience, reliability, and performance advantages of having a complete, ready-to-install entrance supplied from a single source, delivered to the job site in a single, on-time shipment. Single-sourcing ensures proper door and frame fit, correct hardware operation, exact finish match, and longer entrance life. We can even ship doors with hardware and glazing installed, significantly reducing expensive job site labor and installation time, and preventing last-minute problems.

## A simple warranty that works

To help simplify your life we stand behind our products with an uncomplicated 10-year, 100% parts and labor warranty. Plus, we provide an additional Limited Lifetime Warranty on our flush door models, including our best-selling SL-17. Ask your sales representative for a copy of our warranty statement, and compare it to what other supplier warranties actually cover after all of their exclusions and limitations. You'll see that when you specify Special-Lite, you're really covered.



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