

# CORROSION

PITTING  
SURFACE RUST  
CREVICE CORROSION

Corrosive Resistant Solutions  
for Today's Buildings

*“Special-Lite’s superior door materials,  
combined with traditional craftsmanship  
and state of the art engineering, substantially  
extends the lifecycle of your entrances.”*

– Henry L. Upjohn II, CEO  
Special-Lite, Inc.



# Better Materials & Better Design

The Special-Lite approach to producing entrance systems is unique in the industry.

We combine the best aspects of traditional hands-on craftsmanship, materials, innovative design, and advanced technology to make the toughest, longest-lasting doors in the industry.

The high quality of our doors and framing is the result of top notch materials, individual craftsmanship, attention to detail, and a personal commitment to quality.

100% USA Manufactured

## Entrances don't stand a chance!

Attacks 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 solve deteriorating entrance problems.



Corner of hollow metal door – rusted away.

## Engineered and built with materials that resist corrosion.

Special-Lite® Doors and Frames offer a way to combat corrosive environments by using materials that hold up to moisture, corrosive gases and liquids.

Since fiberglass cannot corrode, rot, or rust, our products are ideal for corrosive environments that quickly destroy even stainless steel doors. These include industrial facilities where regular sanitization is required, such as clean rooms, pharmaceutical manufacturing, and food processing, as well as locations that by their nature are inherently corrosive to steel doors, such as petrochemical plants, pulp and paper mills, wastewater treatment facilities, and marine applications.



## Environments Prone to Corrosion:

Water Treatment Plants	Pools/Shower Areas
Industrial Plants	Boiler Rooms
Food Processing Plants	Pump Houses
Animal Holding Facilities	Aquatic Parks
Coastal Areas	



## Corrosion Catalysts:

Atmospheric gaseous agents  
Direct fluid contact  
Rain, fog, snow, sea spray  
High humidity, condensation  
Soil, dust and dirt  
Pollution chemicals  
Deicers

## How to prevent?

- Sealed core with closed cell technology to avoid moisture penetration and condensation on internal surfaces.
- Core material that is immune to moisture and decay.
- Minimize moisture-trapping crevices and overlapping seams.
- Avoid unprotected contact between dissimilar metals.
- Surface treatments resistant to UV light and corrosive agents.
- Seamless, monolithic doors that repel mold and decay.



# All-Fiberglass Doors and Frames

## Engineered for Corrosive Environments

### Get It Right the First Time!

When using hollow metal doors and steel framing, rusting and deterioration are inevitable. *Why not do it right the first time?*

It is much easier and cost effective to start with Special-Lite® All-Fiberglass Framing, than to install steel framing that will rust and degrade, resulting in endless repairs and replacement. Special-Lite All-Fiberglass Frames are available in all the standard frame profiles you are accustomed to, and will provide a long life.

Remember, the total investment of an entrance extends beyond your initial cost. The life cycle cost equals the cost of the product, all the maintenance (painting, sanding, repairs), and deconstruction costs that are involved with an entrance.

Avoid future "money pit" scenarios. *Do it right the first time and use Special-Lite® All-Fiberglass Doors & Frames!*



AF-100 Door

#### AF-100 Door

- Smooth surface pultruded All-Fiberglass Door
- Optional flush bottom available
- Hermetically sealed - Easy to clean and sanitize
- Better glass content to resin ratios: Door = 47%
- High density, 6 lb./cu. ft., closed-cell, polyurethane foam core
- Finish is 2-part polyurethane coating



AF-217 Door

#### AF-200 Series Door

- Face sheet available in through-color AF-217 - pebble grain AF-220 - sandstone-textured
- 3 core choices;
  - 5lb./cu. ft. poured-in-place urethane
  - EPS (expanded polystyrene)
  - polypropylene honeycomb
- Pultruded FRP stile and rail construction
- Chemically welded face sheet



AF-150 Framing

#### All-Fiberglass Framing and Accessories

- Pultruded All-Fiberglass 1/4" Frames
- Better glass content to resin ratios: Frame = 55% - 65%
- FRP Pultruded Accessories:
  - Fixed or Removable Center Posts
  - Removable Rim Mullions
  - Saddle or Bumper Thresholds

#### AF-150 Framing

- Depths = 5-3/4", 6-3/4", 7-3/4", 8-3/4", 4-1/2" - 12" (adjustable)
- Corner Brackets are 4" x 4" x 3/8" FRP angle reinforced with 1/4" "L" brackets in 2" or 4" heads

#### AF-250 Framing

- 2" or 4" (head) x 5-3/4" (depth) - immediate door frame only
- Corner Bracket is 2" x 2" x 1/4" FRP angle



**Also Available Fire-Rated**

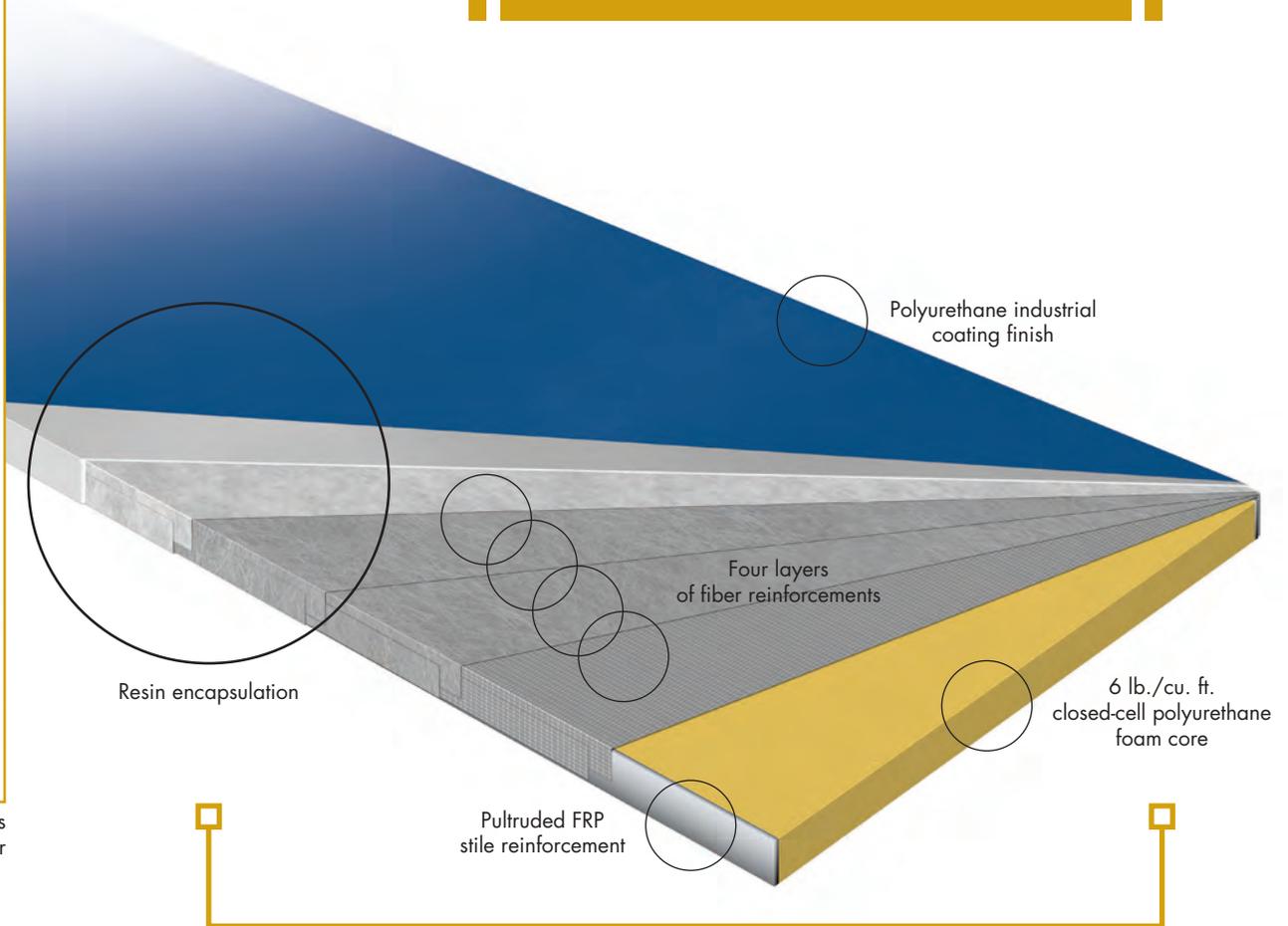
**Fiberglass cannot corrode, rust or rot.**



**Lifetime Warranty Against Corrosion**



AF-100 All-Fiberglass  
Flush Door



Graphic shows key aspects of AF-100 door construction and unique features.

<b>Tested and Proven Tough</b>	<b>AF-100</b>	<b>AF-200</b>
AAMA 92011 Cycle Test/ANSI A250 Swinging Door Cycle	▲	▲
AAMA 1304 Forced Entry	▲	▲
Thermal Performance - U Value/R Value	.13U/7.42R	.18U/5.54R (poly value)
ASTM D 6670-01 Indoor Air (Greenguard Cert)	▲	▲
ASTM E 330 Uniform Static Load	▲	▲
ASTM E 331 Water Resistance	▲	▲
ASTM E 84 Surface Burning	▲	▲
ASTM F 1642-04, Blast Test	▲	



AF-100 & AF-200 Series are FDA/USDA Compliant  
Refer to website, [www.speciallite.com](http://www.speciallite.com), for information on all Special-Lite products.

# FRP/All-Aluminum Hybrid & All-Aluminum

Engineered for Corrosive Environments

**Decades of experience in a wide range of corrosive applications.**

Special-Lite® Flush 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.

Special-Lite's exclusive SpecLite3® FRP face sheets are scratch, scuff, and fade resistant. Compare that to the maintenance requirements of hollow metal doors, where you have to paint them before you even hang them, and periodically forever after.

Not only do the face sheets and 6063-T6 aluminum alloy stiles and rails offer excellent resistance to rust on the exterior of the door, but the foam core locks out all moisture so corrosion cannot attack from the inside out.



SL-20 Door

## Special-Lite® FRP/Aluminum Hybrid Doors SL-17, SL-20, SL-18 & SL-19 Doors

- Face sheets are .120" thick
- SL-17 (pebble grain) & SL-20 (sandstone-textured) are available in through-color face sheets
- SL-18 & SL-19 doors provide a wood grain option
- Stiles & rails are extruded 6063-T6 aluminum alloy
- Mitered corner joints secured by angle blocks
- Full width 3/8" galvanized steel tie rods
- Poured-in-place urethane core with a minimum five pounds per cubic foot density



SL-16 Door

## Special-Lite® All-Aluminum SL-16 Door

- Face sheets are .062" thick 5005 aluminum alloy
- Available in Class I anodized or Kynar® painted face sheets
- Stiles & rails are extruded 6063-T6 aluminum alloy
- Mitered corner joints secured by angle blocks
- Full width 3/8" galvanized steel tie rods
- Poured-in-place urethane core with a minimum five pounds per cubic foot density
- Special 1/8" thick aluminum face sheet available



Aluminum Tube Frame

## Special-Lite® All-Aluminum Framing

- Frame extrusions are 6063-T6 aluminum alloy with Class I architectural grade (.7 mil) anodized or Kynar® painted finish
- Corner joints secured with heavy-duty internal joint anchors
- Internally reinforced with aluminum bar stock at the closer, mullion, and locking strike attachment points
- Applied stop or flush glazed framing options



**Also Available Fire-Rated**

**Extend the lifecycle of your entrances.**



Monorail Cutout

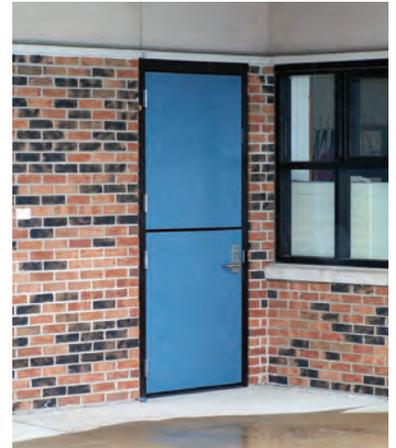
## Custom is NO Problem!

Special-Lite® specializes in unique configurations such as arched doors and transoms, odd sizes, unequal pairs, monorail cutouts, dutch or bi-fold doors and custom lites.

Custom Applications 



Oversized Doors



Dutch Doors



Unequal Pair Doors

<b>Tested and Proven Tough</b>	<b>SL-17/20</b>	<b>SL-16</b>
AAMA 92011 Cycle Test/ANSI A250 Swinging Door Cycle	▲	
AAMA 1304 Forced Entry	▲	
Thermal Performance - U Value/R Value	.29U/3.45R	.42U/2.4R (w/frame)
ASTM D 6670-01 Indoor Air (Greenguard Cert)	▲	▲
ASTM E 330 Uniform Static Load	▲	▲
ASTM E 331 Water Resistance	▲	▲
ASTM E 84 Surface Burning	▲	
ASTM F 1642-04, Blast Test	▲	

Refer to website, [www.special-lite.com](http://www.special-lite.com), for information on all Special-Lite products.

# Simplify Your Life –

with entrance systems from Special-Lite.



## Special-Lite Warranty

We stand behind our products with a 10-year, 100% parts and labor warranty. Plus, an additional limited lifetime warranty.

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.*

Warranty  
**10**  
YEAR  
**100**  
%

## Discover entrance systems with more life!

Whether you need an All-Fiberglass, completely encapsulated door to allow for easy cleaning and sterilization, a FRP/Aluminum Hybrid Door with poured-in-place core and through-color face sheets to combat scratches, or an All-Aluminum Door that stands up to challenging environmental conditions such as high humidity or corrosive chemicals, *contact your local Special-Lite Representative for a personalized solution for your maintenance issues.*



### Special-Lite, Inc.

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10M 12/14 RRP