

MODEL 4900 FRP (FIBERGLASS REINFORCED POLYESTER) COMMERCIAL SPECIALTY ALUMINUM DOOR



SCAN



Engineered for Enduring Performance in Demanding Environments

This specialty door system provides a prefinished, impact-resistant solution that outlasts traditional hollow metal and wood, excelling in high humidity and abusive settings such as educational facilities, industrial plants, wastewater treatment centers, and public buildings.

Prioritizing security, the 4900 FRP effectively safeguards public assets and personnel while its low-maintenance design delivers significant lifecycle cost savings and minimizes operational downtime.

Tailor the door to your requirements with our multiple finish, configuration, and door hardware options.

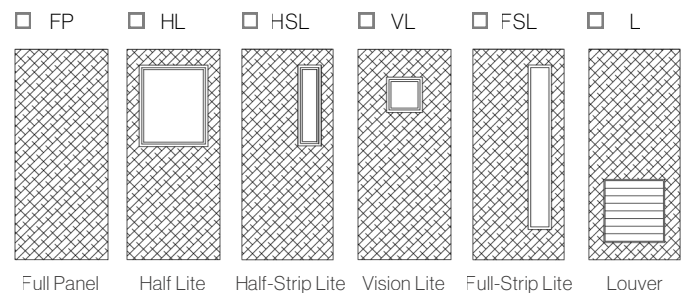
Warranty Protection

We stand behind the quality of our products with comprehensive warranties. Our focus on reliability and longevity help minimize contractor callback and ensure long-term customer satisfaction.

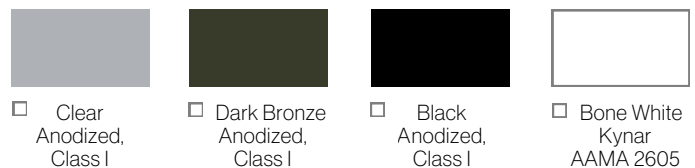


- FRP Doors - 5 years
- Anodize - 5 years
- Kynar 2605 - 10 years

Standard Door Configurations



Door Cap Finish Color Selections*



Door Face Sheet Color Selections*



* Custom color selections available upon request.

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SECURITY, DURABILITY, + AESTHETICS

Capitol 4900 FRP doors are engineered to endure harsh environments and maintain their performance. Constructed with durable materials and advanced technology, these doors resist corrosion, impact, and extreme temperatures.



Corrosion Resistance

FRP doors are inherently resistant to rust and corrosion, ensuring a long-lasting and attractive appearance, even in harsh environments.



Impact Resistance

Engineered to withstand heavy traffic and accidental impacts, FRP doors provide durability and protection.



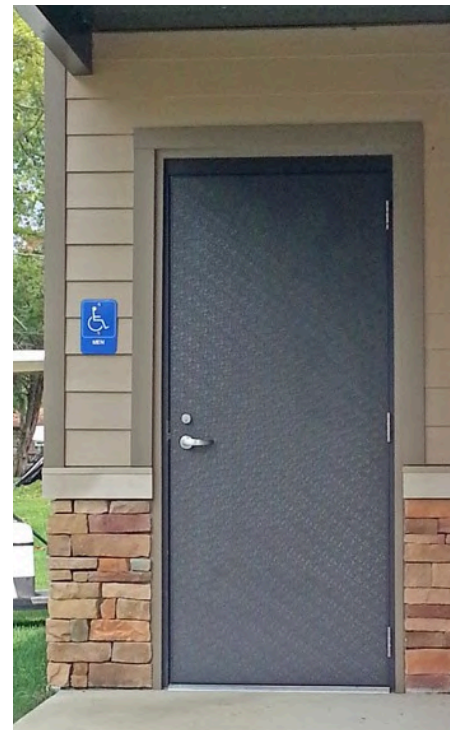
Low Maintenance

Pre-finished, requiring minimal upkeep. While FRP has a higher upfront cost than hollow metal, its extended lifespan and lower maintenance requirements lead to significant cost savings over time.



Enhanced Security

FRP doors can be equipped with a variety of door hardware, and compatible with access control systems.



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TECHNICAL SPECS + HIGHLIGHTS

INTERNAL STILE AND RAIL

Fully extruded tubular frame, 0.125" wall thickness minimum. Standard 5" head and bottom rails with 4-1/2" vertical stiles, an overall 1-3/4" depth. 6063-T5 alloy and temper material standard.

MECHANICAL JOINTS

Features extruded aluminum gussets with rugged concealed 5/16" tie-rod corner construction for added durability and stability.

FACE SHEET

Standard Class A 0.120" FRP is a low flame and smoke material that meets code requirements for ASTM E84 flame spread and smoke developed ratings. The door face sheet fits into the extruded aluminum perimeter cap. The FRP surface provides excellent resistance to fumes, chemicals, and otherwise harmful environments more effectively than many other materials – making it ideal in both industrial, medical, and institutional environments.

CORE LINER

0.040" aluminum sheet is located between the core and interior FRP face sheet. Per IBC 2603.4.1.7, doors designated for interior use shall be designated to receive an additional core liner located between the core and exterior FRP face sheet.

FOAM CORE

The door core features a 6.0 lb/ft³ high-performance polyisocyanurate (polyiso) foam that delivers outstanding physical properties and a wide service temperature range (-297°F to +300°F). Polyiso foam is similar to polyurethane foam but offers greater dimensional stability over a wider service temperature range. It's an environmentally conscious choice, manufactured without ozone-depleting chemicals, and complies with all major industry standards and technical guidelines put forth by ASTM International, Underwriters Laboratories, and the US Departments of Transportation and Defense.

PERIMETER CAP

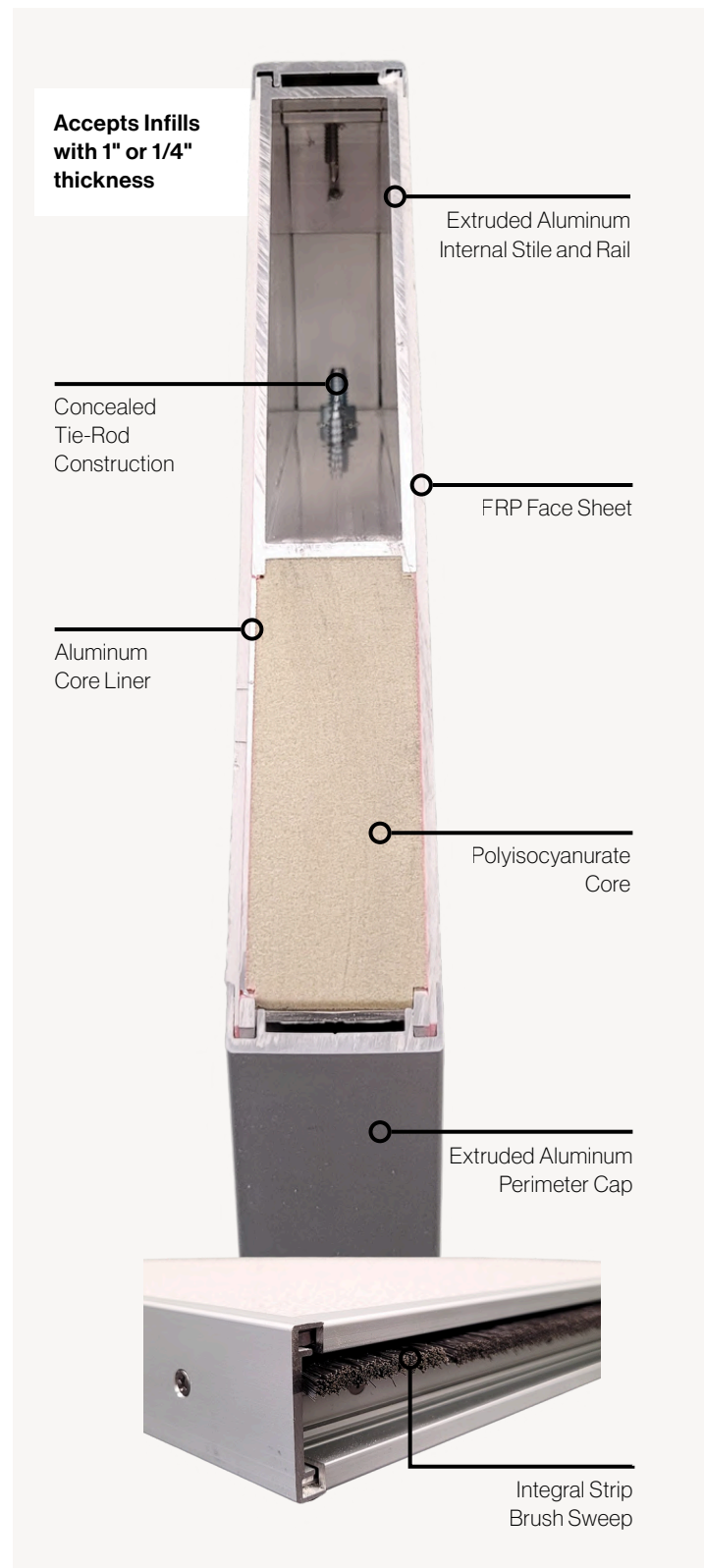
Extruded aluminum perimeter caps are secured to stiles and rails. The bottom perimeter cap features a built-in integral strip brush door sweep.

WEATHER SEAL

Equipped with deep pile weatherstripping to minimize air and water infiltration. Dual Ultra Fin® weather seal and adjustable bullnose standard at meeting stiles of paired doors where no center post is provided.

UNIQUE DOOR SERIAL NUMBER

Every Capitol manufactured door has a unique serial number etched on the inside jamb. This marking allows for efficient tracing back to Capitol project drawings should questions or additional information be required.



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TEST RESULTS SUMMARY



= Structural Test



= Performance Test

Capitol Aluminum & Glass products are comprised of the best, tested & proven, products available on the commercial market. We use Class "A" Fire-Rated FRP which is an added feature of the already fume, chemical and other environmental elements, resistant material.

ARCHITECTURAL TESTING PERFORMED

ASTM E 283-04: Determines rate of airflow through exterior doors under specified pressure differences across the specimen.

ASTM E 330-02: Test method for structural performance of exterior doors by uniform static air pressure difference.

SUMMARY OF RESULTS	TEST METHOD
Air Infiltration 1.0 L/s/m ² (0.20 cfm/ft ²) 0.4 L/s/m (0.23 cfm/ft)	ASTM E283
Design Pressure +/- 3840 Pa (+/- 80.20 psf)	ASTM E330
Uniform Load Structural Test Pressure +/- 5760 Pa (+/- 120.30 psf)	ASTM E330

POLYISOCYANURATE CORE TECHNICAL DATA

PHYSICAL PROPERTIES	TEST METHOD
Density 6.0 lb/ft ³	ASTM D1622
Thermal Conductivity R-value per inch 5.5 (hr ft ² °F)/BTU	ASTM C518
Surface Burning Characteristics Flame Spread 25 Smoke Developed < 450 (thicknesses up to 4 in)	ASTM E84

CLASS A FRP DOOR FACE SHEET FIRE TEST PERFORMED

ASTM E-84: Subjects materials to limited fire conditions when tested in a horizontal ceiling application. Results yield flame spread and smoke density values for the test materials during a 10 minute fire exposure.

SUMMARY OF RESULTS	TEST METHOD
.120" FRP, Low Flame (FM Designation T117D) Flame Spread 15 Smoke Density 370	ASTM E84

CLASS A FRP DOOR FACE SHEET TECHNICAL DATA

PHYSICAL PROPERTIES	TEST METHOD
Flexural Strength 13.3 x 10 ³	ASTM D790
Flexural Modulus 14.0 x 10 ⁵	ASTM D790
Tensile Strength 6.3 x 10 ³	ASTM D638
Tensile Modulus 7.7 x 10 ⁵	ASTM D638
Barcol Hardness 50	ASTM D2583
IZOD Impact 12	ASTM D256
Coefficient of Linear Thermal Expansion 1.4 x 10 ⁻⁵	ASTM D696
Water Absorption .5	ASTM D570
Taber Abrasion Resistance 0.04% (CS - 17 wheels, 1000 g. wt., 25 cycles)	TABER TEST

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EXPLORE THE POSSIBILITIES



SCAN

Explore Our Website for Additional Capitol Manufactured Products!

SUITABLE APPLICATIONS FOR FRP DOORS!

Industrial Facilities

- Manufacturing plants
- Warehouses
- Processing areas

Water + Wastewater Treatment Plants

- Entryways
- Chemical storage areas
- Maintenance access points

Food Processing Plants

- Washdown areas
- Refrigerated zones
- Kitchen entrances

Healthcare Facilities

- Clean rooms
- Laboratories
- Pharmaceutical production

Public Buildings

- Restrooms
- Shower areas
- Pool areas
- Educational facilities
- Science Labs
- Gymnasiums
- High-traffic corridors
- Boiler room

AND MORE!



<https://www.capitol-windows.com>



WINDOWS

Discover quality and customization in our diverse range of window systems. Whether your project demands energy savings or unique aesthetics, our windows provide the perfect fit for the owner's specific architectural needs and long-term value.



ENTRANCES

Create impactful and secure entrances with Capitol's versatile door systems. Designed for diverse commercial applications, our doors offer a blend of style, durability, and security, backed by expert project support ensuring the best long-term solution for the building owner.



STOREFRONTS

Make a powerful first impression with Capitol's high-performance storefront solutions. Engineered for both stunning aesthetics and lasting durability, our systems seamlessly integrate with our window and door products, enhancing the building's appeal and long-term value for the owner.



CURTAIN WALLS

Unleash your design potential with our versatile and sustainable curtain wall systems. Designed for seamless integration and large-scale impact, our solutions offer exceptional thermal performance and weather protection, contributing to long-term energy savings and occupant comfort.