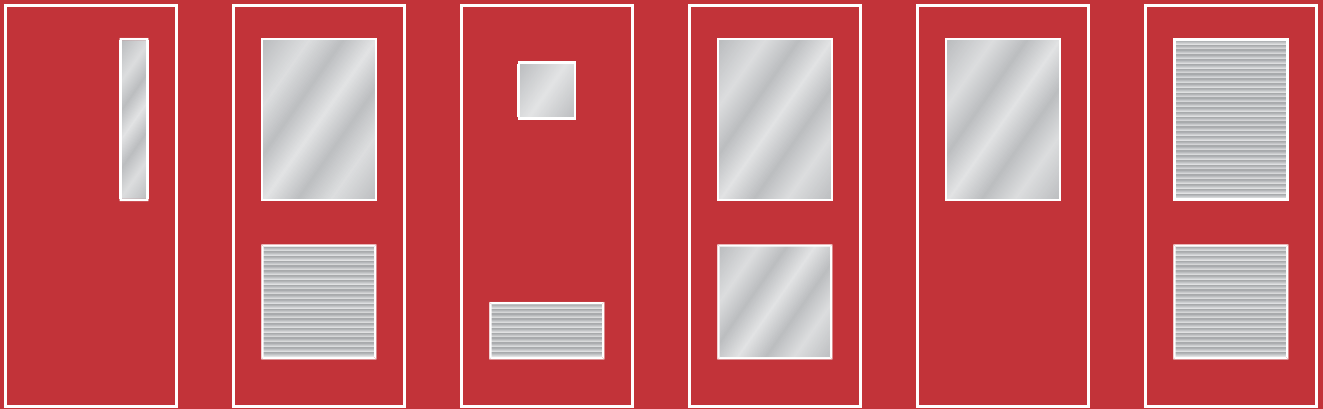




Cline

DOORS



FRP SCHOOL DOORS

Custom Aluminum Doors and Frames Since 1961

SERIES 200BE FRP FLUSH DOORS

Tomorrow's School Door is Here Today!

Cline Doors has gone back to the drawing board to design a flush door to meet the changing requirements of today's educational system infrastructure. Code changes, environmental changes, structural changes, and the basic needs of our public school systems have changed to the degree that no existing flush panel door addresses all of these issues. This includes steel, wood, aluminum, and FRP-type flush panel doors. In recent years, there have been a few companies offering an alternative to the old standards of steel and wood flush doors. These are the FRP (Fiber Reinforced Polyester) flush panel doors. Along with low maintenance and a long life, the FRP flush door answered some of the needs for a public school environment, but these doors still do not meet today or tomorrow's requirements.

Cline Doors has taken the lead in creating what we feel is the ultimate school door of tomorrow and building it today. Basing the new design on over forty-five years of manufacturing experience in the industrial aluminum flush panel door market, and fifteen years in producing a commercial FRP flush door, we have incorporated advanced technologies to create the ultimate FRP school door. Hence, the Cline Series 200BE FRP flush panel school door was born.



Series 200BE cut-away shows the layered construction and quality materials featured in our FRP Flush Doors.

STANDARD FEATURES

5-Ply Laminate Construction – Multiple laminated layers of structural materials have always proven to be substantially stronger than a single monolithic structure.

FRP Skin – Kal-Lite[®], a division of Kalwall the leading manufacturer of exterior FRP roof and wall panels, has developed a specially formulated FRP outer panel exclusively for Cline Doors, per Cline's specifications. The Series 200BE FRP door skins, interior and exterior surfaces, have a "Class A" fire rating and are still UV inhibited.

Aluminum Core Liner – In accordance to IBC Section 2603.4.1.7.

Replaceable Door Rims – The hinge and lock styles of the 200BE FRP flush door is mechanically fastened and is replaceable if damaged during shipping, installation, attempted forced entry or through normal usage.

Tenon Corners – Mechanically fastened tenon corners.

Louvers – No exposed fasteners on louvers.

Glazing – No exposed fasteners on glazing.

Hardware Reinforcement – No special hardware reinforcing required.

Weather Stripping – Replaceable weather-stripped lock stile.

Custom Colors – Cline offers minimal quantity custom color runs, with a small set-up charge.

Standard Quotes – Quick turn-around for standard quotes.

Lead Time – Short lead time on deliveries.

Individual Wood Crated Packaging – Cline has developed a lightweight crating system that eliminates the majority of normal freight damage associated with common carriers.

No additional charges for the following:

- Cline standard shop drawings
- Cline standard flush bolt preparation on pairs
- Standard 4.5" x 4.5" template butt hinge preparation door and frame
- Cline standard cylindrical lock preparation
- Cline standard mortise lock edge preparation

American Society for Testing Materials (ASTM)

Standard	Year
101/I.S.2-NAFS	2002
Accepted Engineering Practice	2004
ASTM E1300 – Load Resistance of Glass in Building	2002
ASTM E1886 – Impact Test Procedures (Inclusive of Large Missile Impact)	2002
ASTM E1996 – Wind Load Test	2002
ASTM E330 – Structural Load Test	2002

Florida Building Code Compliant

Florida Building Code #FL6336

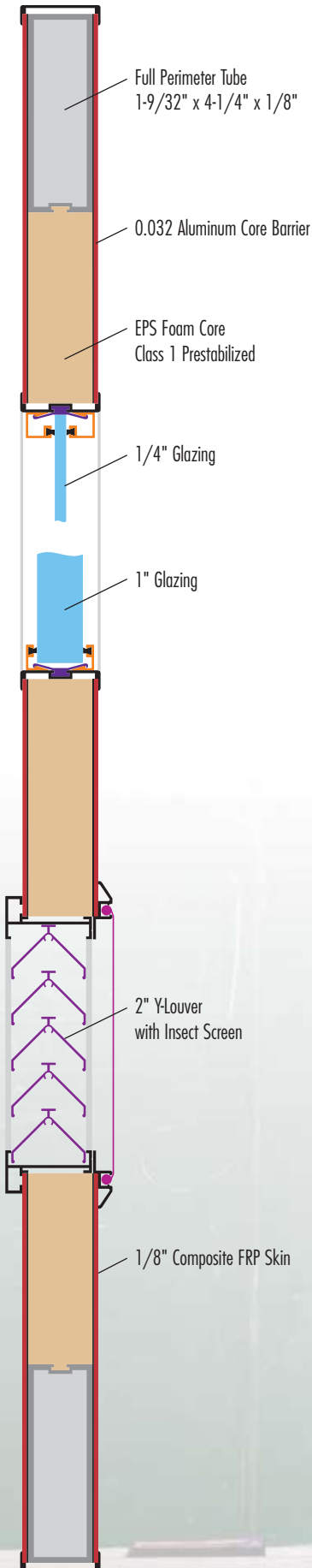
Website address: www.floridabuilding.org

Note: When used in wind-borne debris regions this product complies with section 1609.1.4 of the Florida Building Code as an impact resistant product and does not require the use of external impact resistant covering. This product meets the requirements for enhanced protection of essential facilities (missile level "E", wind zone 4) as defined in ASTM E1996.

International Building Code Compliant (Replaces BOCA Code)

SECTION 2603.4.1.7 – Doors not required to have a fire protection rating. Foam core has a "Class A" rating covered with 0.032 aluminum skins. Outer FRP skin also carries a "Class A" rating for flame spread and smoke development.

SERIES 200BE FRP FLUSH DOORS



CONSTRUCTION SPECIFICATIONS

Aluminum-member heavy-duty FRP doors shall be Cline Series 200BE-FRP. Doors shall be a minimum thickness of 1.75-inches (44.45mm) and a minimum 5-ply construction with a FRP composite skin thickness of 0.125-inch (3.18mm). Door facing shall be a composite, UV inhibited, glass fiber laminate (FRP) with a pebble-like, white embossed pattern. Reinforced polyester plastic panels shall meet or exceed allowances per ASTM D3841. FRP face sheets shall have a Class-A fire rating with a smoke generation of no greater than 450 and a flame spread of no greater than 25. Core shall be a minimum 5-pound EPS Foam, Class 1 prestabilized, free of chlorofluorocarbons (CFC)/Hydro Chlorofluorocarbons (HCFC), bilaterally bonded to composite structure facings. Internal hardware backup shall be a full perimeter aluminum tube, 4.25-inches (107.95mm) in width with 0.125-inch (3.18mm) minimum wall thickness. Internal framing members shall be mechanically joined with an extruded aluminum tenon corner bracket. Door edges and face sheets shall be flush in appearance; face sheets shall be locked into replaceable extruded aluminum reglets of 6063-T5 alloy on perimeter edges. Lock stile shall have aluminum beveled edge and wool pile weather-stripping. Beads and trim wall thickness shall be minimum thickness of 0.050-inch (1.27mm). Bonding agents shall meet EPA requirements. Nominal door sizes shall be provided. Standard clearances shall be: hinge and lock stile, 0.125-inch (3.18mm); between meeting stiles on pairs, 0.250-inch (6.35mm); at top rails, 0.125-inch (3.18mm); and between door bottom and threshold, 0.125-inch (3.18mm).

Exterior FRP face sheet option of Cline stocked FRP colors or custom colors and finishes to be specified.

GLAZING

Vision lites shall be glazed with 0.25-inch (6mm) thick glass with snap-in non-removable stops of extruded aluminum 6063-T5, minimum thickness 0.050-inch (1.27mm). Vinyl inserts shall be used for sealings. No exposed fasteners. Glazing option of 1-inch (25.4mm) and 0.5625-inch (14.29mm) thick tempered glass to be specified.

LOUVERS

Frames and blades of louvers shall be 6063-T5 aluminum alloy with a minimum 0.062-inch (1.58mm) thickness. Louver blades shall be inverted "Y" type with a minimum 50 percent free airflow. All exposed fasteners to be stainless steel. Insect screen shall be 18 x 16 mesh, 0.011-inch (0.28mm) diameter alclad aluminum set in a 0.050-inch (1.27mm) extruded frame.

HARDWARE PREPARATION

Standard preparation shall included 4.5-inch x 4.5-inch (114.3mm) template, full mortise hinge prep, single spindle lock prep, mortise lock edge prep only, and flushbolt prep for pairs. Surface applied hardware shall be drilled and tapped in field by installer. Additional hardware preparation to be specified. Concealed hardware and pivot hinges are not recommended or supported by manufacturer.

FINISH

Exposed aluminum surfaces shall be anodized in accordance with Aluminum Association AAM12C22A41, Class I, clear 0.7mil (0.02mm) minimum thickness.

Optional aluminum finishes to be specified.

TOUGH WITH A LASTING BEAUTY

Fiber Reinforced Polyester (FRP) panels provide attractive, pebble-embossed or textured face sheets. FRP surfaces resist impact, abrasion, graffiti and other physical abuse. Neither FRP nor aluminum will rust, rot, corrode, peel, tear or warp. Both are virtually impervious to salt air, chemicals and solvents. The FRP face panels have been UV inhibited for color stabilization.

FRP panels enable a wide range of color selection without increasing project costs. These resin-rich surfaces never need painting and contain no crevices in which dirt, bacteria or mold can hide. Mineral spirits or any general household cleaner applied with a clean cloth, then rinsed is all that is needed to remove oily residues or substances.

FRP STOCKED COLOR SELECTION

(Custom colors available.)



White



Beige



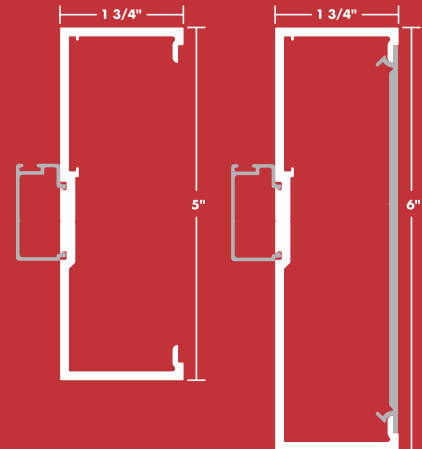
Gray



Dark Bronze

ALUMINUM FRAMING SPECIFICATIONS

Aluminum heavy-duty frames shall be Cline 5-inch (127mm) frames. Frames shall be constructed from extruded aluminum 6063-T5 alloy with a minimum wall thickness of 0.125-inch (3.18mm). Corners shall be cut square and fastened using concealed stainless steel screws. Snap-in door stop to receive replaceable wool pile weather-stripping. Hinge and strike mounting plates shall be of 0.1875-inch (4.76mm) extruded aluminum bar stock. Frame option of Cline 6-inch (152.39mm) frame to be specified.



ALUMINUM DOORS

Cline offers an extensive array of aluminum door configurations to suite your building requirements. Call for a quick-turn quote today and be sure to specify quality Cline Doors on your next project.



Series 100BE
Aluminum Flush Doors



Series 400SE
Screen Doors



Series 500SE
Stile and Rail Doors

Cline

DOORS

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