

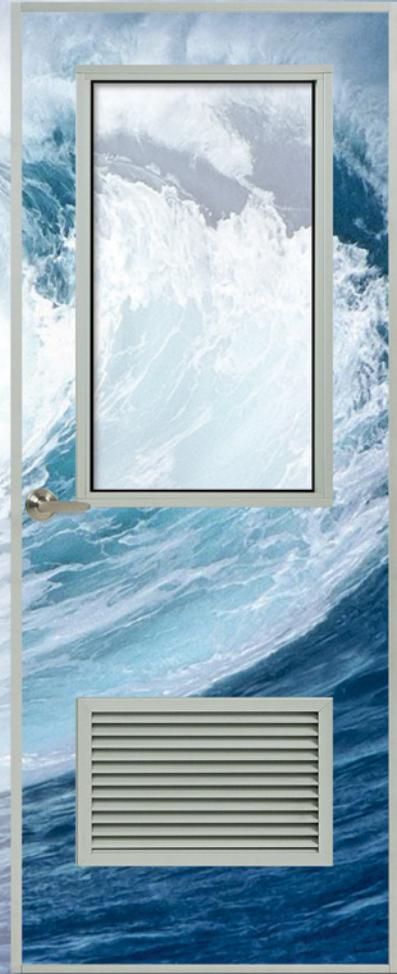
Cline DOORS

Series 100BE

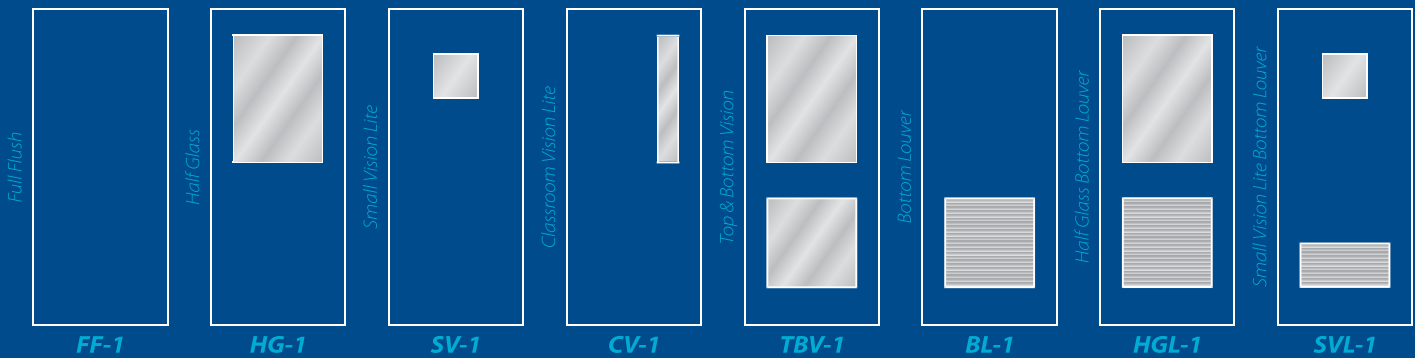


Water Treatment Plants ■ Offshore Oil Rigs ■ Animal Control Facilities
Military Housing ■ Government Buildings ■ Hospitals

CLINE DOORS CERTIFIED
EnviroGreen
Sustainable and Recyclable Building Materials



Standard Door Elevations



Aluminum Flush Doors

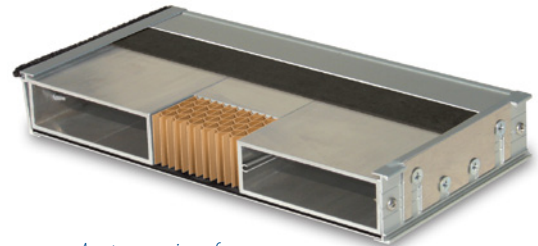
Custom Aluminum Doors and Frames Since 1961

Put the Power of 5-ply in Your Flush Door Specifications




Custom Aluminum Doors
and Frames Since 1961

Cline's Series 100BE Aluminum Flush Doors are the perfect entry solution for a variety of specialized applications, including: water and wastewater treatment plants; offshore oil rigs; animal control facilities; military housing; government buildings and hospitals. With nearly 50 years of manufacturing experience in the commercial aluminum door industry, Cline has set the standard for Aluminum Flush Doors. Our products are custom fabricated to meet or exceed the ever changing demands of architects, engineers and environments. State-of-the-art engineering, advanced technology, and superior materials combine to produce the definitive full flush aluminum door.



A cut-away view of our Series 100BE reveals the 5-ply construction which includes full perimeter aluminum frame, high compression honeycomb core, and aluminum facing with tempered organic backing (on both exterior and interior door surfaces).

Exclusive Features

 **Honeycomb Core** – Organic materials used to form core with high compression strength of 94.8 pounds per square inch.

Hardware Reinforcement – Hardware backup tubes are a minimum of 4.25-inches wide and 1.375-inches deep, with a wall thickness of 0.125-inches. Contiguous for the full perimeter of the door.


Door Trim – Lock and hinge stile trim are mechanically fastened to the backup tube to help protect the flush door edges and allow field replacement. Lock stile beveled edge with integral weather stripping.


Trim Pieces – Finished with a minimum of Class-I anodized finish.

Vision Lites – Glazed with snap-in, non-removable extruded aluminum stops and no exposed fasteners.

Louvers – Aluminum alloy frames and blades, allowing a minimum of 50 percent free air flow. All exposed fasteners are stainless steel.

Skins – Cross laminate seams for corner strength and laminated the full length of the door.

 **Aluminum** – Contains pre- and post-consumer recyclable content.

 **Adhesives** – Water soluble, non-toxic with no VOCs (volatile organic compounds).



Green since 1961, Cline Doors are made of recyclable aluminum materials, and designed to withstand even the harshest of chemicals or environments. Cline Doors pre- and post-consumer recycle content can contribute to your Sustainable Design and Green Building requirements, while our doors' low maintenance and service longevity also reduce your Life-Cycle Costs.



American Society for Testing Materials (ASTM)

Production Standards

101/I.S.2-NAFS – Standards and Specifications

Accepted Engineering Practice

ASTM E1300 – Load Resistance of Glass in Building

ASTM E1886 – Impact Test Procedures (Includes Large Missile Impact)

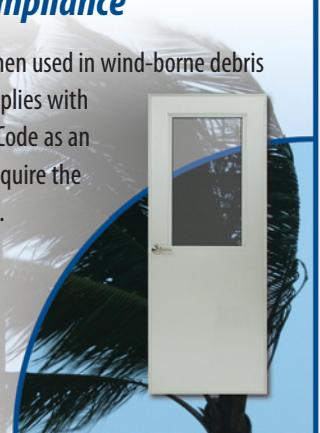
ASTM E1996 – Wind Load Test

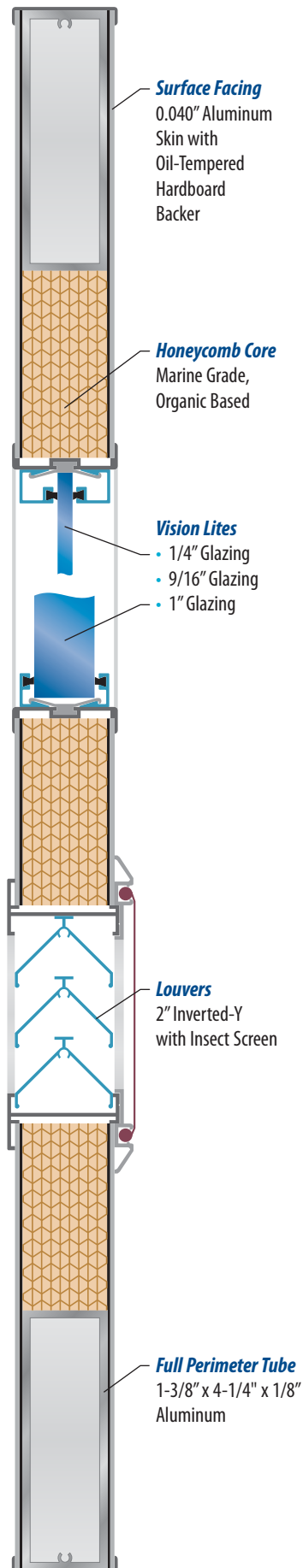
ASTM E330 – Structural Load Test

Impact and Wind Code Compliance

Florida Building Code #FL6336 – When used in wind-borne debris regions our Series 100BE Flush Door 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.

The Series 100BE Flush Doors meet the requirements for enhanced protection of essential facilities (missile level "E", wind zone 4) as defined in ASTM E1996.





Construction Specifications

Aluminum heavy-duty doors shall be Cline Doors 100BE. Doors shall have a thickness of 1.75-inches (44.45mm) and be of minimum 5-ply construction with composite skin thickness of 0.125-inch (3.18mm). Exterior door ply shall be one-piece 0.040-inch (1.02mm) smooth 5005-H14 stretcher-leveled aluminum alloy facing. **[Option:** Exterior door ply shall be one-piece 0.040-inch (1.02mm) vertical ribbed embossed 5005-H14 stretcher-leveled aluminum alloy facing.] Facings shall be commercially bonded edge-to-edge to one-piece oil-tempered hardboard backer. Core shall be an organic based marine grade honeycomb core with high compression strength of 94.8 psi (ASTM C365), and internal aluminum hardware backup tube. The hardware backup tube shall be a minimum of 4.25-inches (107.95mm) in width, 1.375-inches (34.93mm) in depth with a wall thickness of 0.125-inches (3.18mm). Internal framing members shall be mechanically joined with #10 stainless steel threaded fasteners and cross laminated. **[Option:** Internal framing members shall be mechanically joined with 3/8-inch plated steel tie rods secured with stainless steel nylock nuts.] Door edges and face sheets shall be flush in appearance; face sheets shall be trimmed with replaceable extruded aluminum reglets of 6063-T5 alloy on perimeter edges. Lock stile shall have aluminum beveled-edge and integral wool-pile weather stripping. Hinge stile to be prepared for standard template 4.5-inch x 4.5-inch butt hinges. **[Option:** Hinge stile to be smooth to accept standard geared hinges.] Beads and trim wall thickness shall be 0.05-inch (1.27mm). Nominal door sizes shall be provided. Standard clearances shall be: hinge and lock stiles, 0.125-inch (3.18mm); between meeting stiles, 0.250-inch (6.35mm); at top rails, 0.125-inch (3.18mm); and between door bottom and threshold, 0.125-inch (3.18mm). Bonding agents shall meet EPA requirements.

Glazing

Vision Lites shall be glazed with 0.25-inch (6.36mm) thick tempered glass with snap-in, non-removable stops of extruded aluminum alloy 6063-T5, minimum thickness of 0.050-inch (1.27mm). Vinyl inserts shall be used for sealing. No exposed fasteners. **[Options:** Glazing of 1-inch (25.4mm) thick insulating, tempered or 0.5625-inch (14.29mm) thick laminated glass can be specified.]

Door Louvers

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

Hardware Preparation

Standard preparation shall include 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

Face sheets shall be anodized Class-II, clear 0.4mil (0.01mm) minimum thickness AA-M12C22A31. Extruded aluminum trim shall be anodized in Class-I, clear 0.7mil (0.02mm) minimum thickness AA-M12C22A41. Optional aluminum finishes to be specified.

Cline Doors Warranty and Quality Assurance

Cline Aluminum Doors, Inc. warrants the workmanship and material in Cline Doors with standard hardware preparation, excluding special finishes and hardware, for a period of 10 years after purchase, when installed properly and used under normal conditions and reserves the right to repair or replace doors. Complete warranty available upon request.

Cline products are manufactured in the U.S.A., using only American components and labor.

Anodized Finishes

AAMA 611.92 – Integral color anodic finishes.

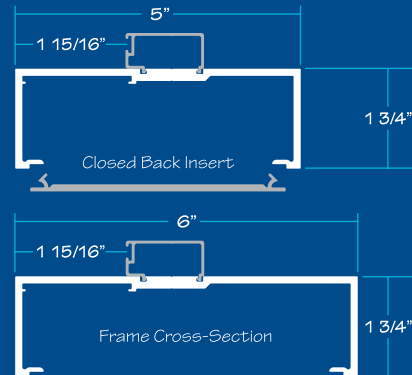
Architectural priorities for most commercial and industrial purposes are best served with anodized finishes which provide a durable, maintenance-free finish on aluminum products.

Cline Doors has selected Clear Class-II and Dark Bronze Class-I as finish standards based upon uniformity of color characteristics. Other available Aluminum Association finish designations are included in this chart.

Finish	Class-I Coating	Class-II Coating
Clear	AAM12C22A41 215	AAM12C22A31 204
Light Bronze	AAM12C22A44 442	AAM12C22A34 342
Medium Bronze	AAM12C22A44 443	AAM12C22A34 343
Dark Bronze	AAM12C22A44 444	AAM12C22A34 344
Black	AAM12C22A44 446	AAM12C22A34 346

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.



Customer satisfaction is our goal with Cline Doors quick turn-around on standard quotes, short lead times on deliveries and quality packaging for safe transport to your job site.

Services offered at no additional charge include:

- No charge for shop drawings
- Flush bolt preparation on pairs when specified
- Mortise lock edge preparation
- 4.5-inch x 4.5-inch template butt hinge preparation in door and frame
- Cylindrical lock preparation

ALL HARDWARE PREPARATIONS PER CLINE STANDARDS

Specify Cline – Call today for your project quote!

Be sure to inquire about our entire line of quality aluminum doors and frames.

DISTRIBUTED BY:



Series 100BE
Aluminum Flush Doors



Series 200BE
FRP School Doors



Series 400SE
Screen Doors



Series 500SE
Stile and Rail Doors

Custom Aluminum Doors and Frames Since 1961



112 32nd Avenue West
Bradenton, Florida 34205
Office: (941) 746-4104
Fax: (941) 746-5153
inquire@clinedoors.com
www.ClineDoors.com

1 (800) 648-6736