

# Cline DOORS

Series 100BE - Half Glass Bottom Louver



Series 500SE - Full Louver



Series 400SE - Heavy-Duty Screen



Series 200BE - Classroom Vision Lite



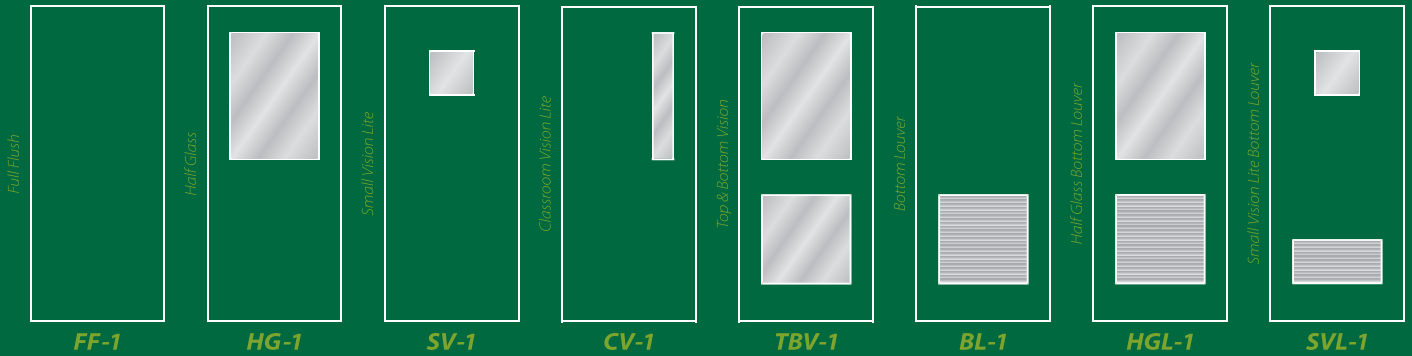
CLINE DOORS CERTIFIED  
**EnviroGreen**  
Sustainable and Recyclable Building Materials

see us at  
**Sweets.com**



**NGA**  
National Glass Association

## Standard Door Elevations



## Aluminum and FRP Doors

Custom Doors and Frames Since 1961

# Custom Aluminum Doors and Frames Since 1961



*With years of experience* in the commercial aluminum flush door business, Cline Doors has set the industry standard with the Series 100BE Aluminum Flush Door. We have expanded our product line to include the Series 200BE FRP Flush Door, the Series 400SE Heavy-Duty Screen Door, and the Series 500SE Stile and Rail Door to meet or exceed the ever changing demands from architects, owners and contractors. Cline Doors are the perfect fit for your commercial, governmental, educational, industrial, recreational and transportation applications.

## Aluminum Flush Doors *Specify the Power of 5-Ply*

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

**Specifications:** Aluminum heavy-duty doors shall be Cline Series 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 glass-reinforced polypropylene backer. Core shall be an organic based marine grade honeycomb core with high compression strength of 98.4 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 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 0.375-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 0.050-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.



Half Glass  
Bottom Louver

## FRP Flush Doors *Tomorrow's School Door is Here Today*

Schools | Colleges & University Campuses | Exposure to Heavy Traffic, Abuse, Vandalism, or Adverse Environmental Conditions

**Specifications:** Aluminum-member heavy-duty FRP doors shall be Cline Series 200BE FRP Doors with a minimum thickness of 1.75-inches (44.45mm) and a minimum 3-ply with a FRP skin thickness of 0.120-inch (3.18mm). Door facing shall be a composite, UV inhibited, glass fiber laminate (FRP) with a pebble-like embossed pattern. Reinforced polyester plastic panels shall be or exceed allowances per ASTM D3841. FRP face sheets shall be a Class C Flame Spread and Smoke Developed Rating (ASTM E 84), and have a flame spread of 120 and a smoke development of 290 for both interior and exterior faces of interior and exterior doors. 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 in width, 1.375-inches in depth with a wall thickness of 0.125-inches. Internal framing members shall be mechanically joined with #10 stainless steel threaded fasteners and cross laminated. [Option: Internal framing members shall be mechanically joined top and bottom, 0.375-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 aluminum reglets of 6063-T5 alloy on perimeter edges. Lock stiles shall have aluminum bevel-edge and integral wool-pile weather stripping. Hinge stile to be prepared for standard template 4.5-inch x 4.5-inch butt hinge. [Option: Hinge stile to be smooth to accept standard geared hinges.] Beads and trim wall thickness shall be minimum thickness of 0.050-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 on pairs, 0.250-inch (6.35mm); at top rails, 0.125-inch (3.18mm); between door bottom and threshold, 0.125-inch (3.18mm). Bonding agents shall meet EPA requirements.



Classroom  
Vision Lite



## Screen Doors

*Free Flowing Ventilation  
Surrounded by Tubular Strength*

Commercial Kitchens | Green Houses  
Food Processing Plants | Commissaries

**Specifications:** Heavy-duty screen doors shall be Cline Series 400SE. Doors shall be constructed as a tubular, stile and rail door with the stile and rail tubes of 6063-T5 extruded aluminum alloy having a depth of 1.75-inches (44.45mm), a width of 4-inches (101.6mm) and a 0.095-inch (2.41mm) minimum wall thickness. Top, bottom and center rails shall be joined to the hinge and lock stiles with 0.375-inch plated steel tie rods secured with stainless steel nylock nuts. 5-inch mid-rail tube to be located at Cline standard lock height. The bottom 10-inch kick-panel shall consist of double stacked extruded aluminum tubes. All exposed fasteners shall be 18-8 stainless steel. Doors to be fabricated from nominal door sizes using Cline standard clearances. Standard finishes to be 4-mil clear anodize.



Heavy-Duty  
Screen

## Stile and Rail

*Flexibility Through Design,  
Security and High Airflow*

Generator Rooms | Electrical Rooms  
Computer Equipment Facilities

**Specifications:** Aluminum heavy-duty stile and rail doors shall be Cline Series 500SE. Doors shall have a thickness of 1.75-inches (44.45mm) x 5-inch (127mm) 6063-T5 aluminum alloy with 0.125-inch (3.18mm) minimum wall thickness and shall be fabricated with 0.375-inch (9.53mm) plated steel through-bolts in rails. Lock stile shall have integral weather strip receiver with a field replaceable wool pile weather strip seal. All exposed fasteners shall be 18-8 stainless steel. Doors to be fabricated from nominal door sizes using Cline standard clearances. Standard finishes to be 4-mil clear anodize, optional finishes available.

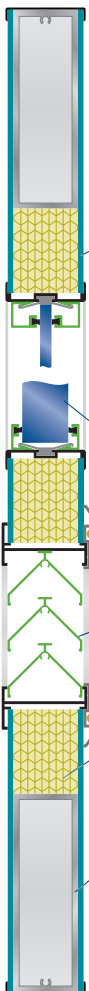


Full Louver  
Door

CLINE DOORS CERTIFIED  
**EnviroGreen**  
Sustainable and Recyclable Building Materials



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 low maintenance and service longevity also reduce Life-Cycle Costs.



### Surface Skins

#### Series 100BE

- 0.040" Aluminum
- Polypropylene Liner (Glass Reinforced)

#### Series 200BE

- 0.120" FRP

### Vision Lites

- 1/4" Glazing
- 9/16" Glazing
- 1" Glazing

### Louvers

- 2" Y-Style Blades
- Insect Screen

### Honeycomb Core

- Marine Grade
- Organic Based

### Tubular Frame

- Full Perimeter
- 4-1/4" Width (≥)
- 1-3/8" Depth
- 1/8" Wall Thickness

## Cline Doors Exclusive Features and Materials



**Honeycomb Core** Core contains organic materials with a compression strength of 94.8 psi.

**Hardware Reinforcement** Aluminum backup tubes contiguous for full perimeter of the door.

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

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

**Vision Lites** Glazing is tempered glass with snap-in, non-removable stops and no exposed fasteners. Standard glazing thickness: 1/4-inch, 9/16-inch or 1-inch.

**Louvers** Aluminum alloy blades and frames, with a minimum of 50 percent free airflow. Exposed fasteners are stainless steel.

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



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



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

## Aluminum Framing Specifications

### Construction

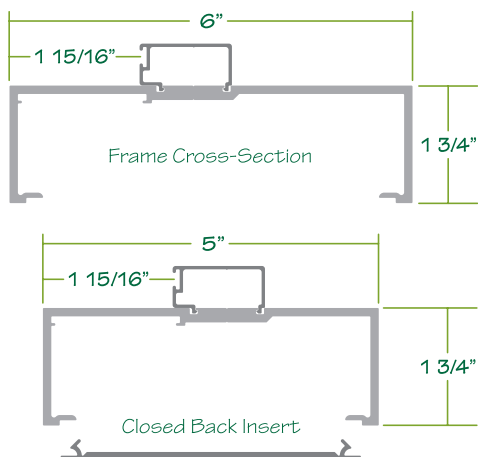
Aluminum heavy-duty frames shall be Cline 5-inch OBS. Frames shall be constructed of 5-inch (127mm) extruded aluminum 6063-T5 alloy with a minimum wall thickness of 0.125-inch (3.18mm). Corners shall be cut square and fastened using concealed stainless steel screws. Snap-in doors stop shall be 0.1875-inch (4.76mm) extruded aluminum bar stock. **[Option:** Frame shall be Cline 6-inch (152.39mm)]

### Hardware Preparation

Hinge and strike plates shall be fully mortised in frame. Hinges shall be prepped for standard weight 4.5-inch x 4.5-inch (114.3mm) template hinge. Lock strikes shall be 4.875-inch (123.84mm) in accordance with ANSI Standards A115.1 or A115.2. All surface hardware shall be drilled and tapped in the field by installer. Special hardware preparation available.

### Finish

Frames shall be anodized in accordance with Aluminum Association Class II AAM12C22A31, Clear 0.4 mil (0.01mm) minimum thickness. Class 1 or other distinctive finishes available.



## Anodized Finishes

Series 100BE/200BE/500SE

### 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

## Standard Project Quotes

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
- 4.5-inch x 4.5-inch template butt hinge preparation in door and frame
- Cylindrical lock
- Mortise lock edge preparation

## Cline Doors Warranty Information

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.



**Specify Cline – Call today for your project quote!**

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**[www.ClineDoors.com](http://www.ClineDoors.com)**

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**Custom Aluminum Doors and Frames Since 1961**