

Cline DOORS

**Aluminum and FRP
Doors and Frames**

Series 1008E – Half Glass Bottom Louver



Series 5005E – Full Louver



Series 4005E – Heavy-Duty Screen



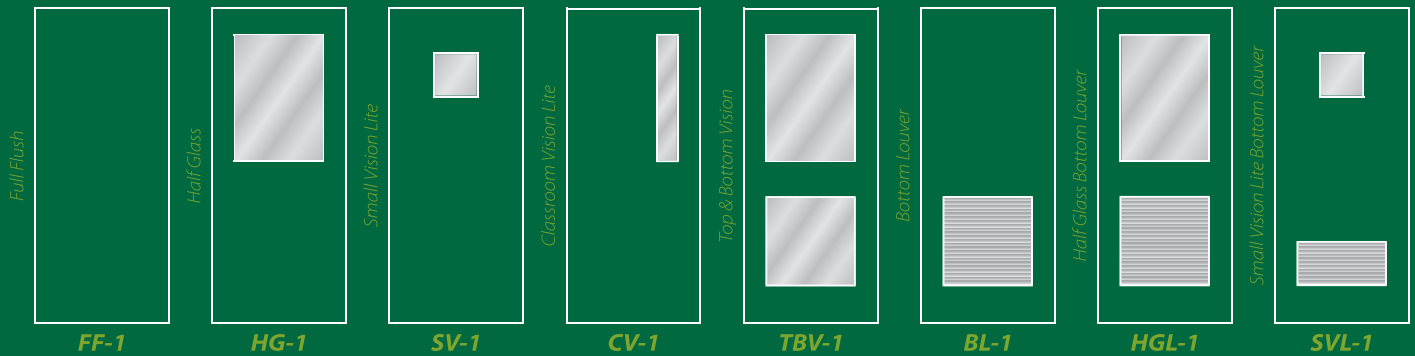
Series 2008E – Classroom Vision Lite



CLINE DOORS CERTIFIED
EnviroGreen
Sustainable and Recyclable Building Materials



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 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 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.



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. Doors shall be a minimum thickness of 1.75-inches (44.45mm) and a minimum 3-ply with a FRP composite 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.



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 and bottom rails shall be joined to the hinge and lock stiles with 0.375" (9.525mm) plated steel tie rods and mechanically fastened extruded aluminum twist plates. 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. Top and bottom rails shall be joined to the hinge and lock stiles with 0.375" (9.525mm) plated steel tie rods and mechanically fastened extruded aluminum twist plates. 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.

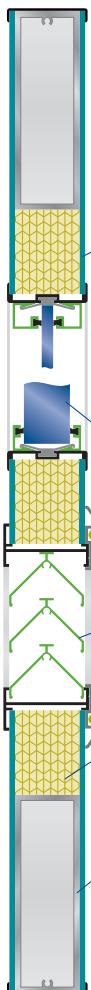


Full Louver
Door

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
- Oil-Tempered Hardboard Backer

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

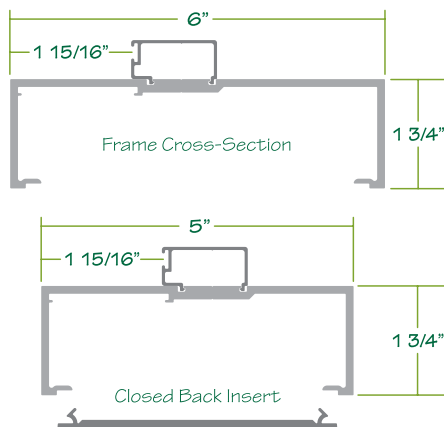
Aluminum heavy-duty frames shall be Cline 5-inch (127mm) frames. Frames shall be constructed from extruded aluminum 6063-T5 alloy with a minimum wall thickness of 0.125-inch (3.18mm). Corners shall be cut square and fastened using concealed stainless steel screws. Snap-in door stop to receive replaceable 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.

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 I 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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