

Specifications

SECTION 08 39 80

HURRICANE RESISTANT DOORS

Hurricane (Impact) Resistant Balcony/Terrace Doors

• Series BAL-350

NOA: 10-1102.01 Out-Swing

SERIES	FACE WIDTH	DEPTH	GLAZING INFILL	GLAZING METHOD
BAL-350	3-3/4" (95.3)	2" (50.8)	9/16" (14)	Factory Pre-Glazed

I. GENERAL DESCRIPTION

Work Included: The glazing contractor shall furnish all necessary materials, labor, and equipment for the complete installation of aluminum terrace doors and framing as detailed on the drawings and specified herein.

Work Not Included: A Structural support of the framing system, wood framing, structural steel, masonry, interior trim, and final cleaning.

QUALITY ASSURANCE

For purposes of designating type and quality for work in this section, drawings and specifications are based on U.S. Aluminum, Series BAL-350 Balcony/Terrace Door, 3-3/4" (95.3) vertical face dimension and 2" (50.8) depth. A 1" x 5" (25.4 x 127) or 1-3/4" x 5" (44.5 x 127) frame is available for moderate traffic applications. When substitute products are to be considered, supporting technical literature, samples, and drawings must be submitted 10 days prior to bid date in order to make a valid comparison of the products involved.

PERFORMANCE REQUIREMENTS

Meets all Miami-Dade County, Florida air, water, structural, and impact requirements.

Air Infiltration: When closed and locked, the test specimen shall be tested in accordance with ASTM E 283 and shall not exceed 0.27 cfm/sq. ft. at a test pressure differential of 6.24 PSF.

Water Resistance: When closed and locked, the test specimen shall be tested in accordance with ASTM E 331 and ASTM E 547 there shall be no uncontrolled leakage as defined in the test method at a static air pressure differential of 18 PSF. (single doors)
Large and Small Missile Impact Test: Maximum design pressure of +100 psf +0/-100 psf (large missile impact) and +120 psf/-120 psf (small missile impact).

Forced Entry Resistance - 300 pound concentrated load.

II. PRODUCTS/MATERIALS

Door members shall be extruded architectural aluminum 6063-T6 alloy and temper. Major portions of all door sections, shall be nominal .125" (3.2). Wall thickness of frame members shall be nominal .125" (3.2). Screws, nuts, washers, bolts, rivets, and other fastening devices shall be aluminum, stainless steel or other non-corrosive materials.

DOOR AND FRAME CONSTRUCTION

Door corners are to be accurately joined using "Secure Bolt" construction. The weather seals shall be open cell urethane foam core bonded to a U.V. stabilized polyurethane liner. Doors shall have non-removable interior glass stops with custom E.P.D.M. spacer by Tremco, DOW 995 Structural Silicone, and E.P.D.M. Wedge by Tremco. No exposed screws shall be permitted except for anchoring.

HARDWARE

Four-point locking hardware shall be as recommended by manufacturer. Finishes available are: Polished Brass, Brushed Brass, Matte Aluminum, Polished Chrome, Brushed Aluminum, White, and Black. Door leaves shall have a pair and a half (minimum) of heavy-duty mortised 4" x 4-1/2" (101.6 x 114.3) long butt hinges with non-removable stainless steel pins. If hardware is to be furnished by others, templates and physical hardware must be submitted prior to any fabrication being started.

FINISH

All exposed framing surfaces shall be free of scratches and other serious blemishes. Standard aluminum extrusions shall be given a Kynar 500 AAMA 2605 paint.

(Specify one of the following):

- Bone White
- Statuary Bronze
- Kynar 500 (Special Order) with the requirements of AAMA 2605. Color shall be (specify).
- Class 1 anodized extrusions shall be given a caustic etch followed by a anodic oxide treatment to obtain...
 - Clear Anodize
 - Bronze Anodize

III. EXECUTION INSTALLATION

All items under this heading shall be set by a qualified installer in their correct locations as shown in the details and shall be level, square, plumb, and at proper elevation and in alignment with other work in accordance with the manufacturer's installation instructions and approved shop drawings. All joints between entrance framing and the building structure shall be sealed in order to secure a watertight installation. Upon completion of the installation of the entrances, it shall be the contractor's responsibility to make all necessary final adjustments to attain normal operation of each door and its mechanical hardware.

PROTECTION AND CLEANING

After installation the General Contractor shall adequately protect exposed portions of the aluminum entrance work from damage by grinding and polishing compounds, plaster, lime, acid, cement or other contaminants. The General Contractor shall be responsible for final cleaning.

IV. OPTIONS

- Concealed Overhead Closers
- Exposed Heavy-Duty Closers
- Standard 1" (25.4) Round Push/Pull Sets
- Three Point Locking System With Exterior Cylinder and Interior Thumbturn

STORM FRONT™

Technical Data

Hurricane (Impact) Resistant Balcony/Terrace Doors

- Series BAL-350

The BAL-350 Hurricane (Impact) Resistant Balcony/Terrace Door is elegantly designed for high rise applications such as hotels, condominiums, and office buildings. Being tested for both small and large missile impact resistance, as well as its high performance for water resistance, makes the BAL-350 meet and exceed all commercial and high-rise condominium developer requirements with the highest level of quality. With the growing need for a commercial impact resistant product in the residential market, the BAL-350 by U.S. Aluminum has topped the list for single terrace and balcony doors.



Series BAL-350 Impact Resistant
Out-Swing Balcony/Terrace Door
(Exterior View)

Standard Features:

- Factory Pre-Glazed With Structural Silicone
- Maximum Panel Size: 42" x 108" (1067 x 2743)
- Heavy Commercial Grade
- Maximum Frame Height 120" (3048), Including Transom
- 4-7/16" (112.7) Top Rail and 8" (203.2) Bottom Rail
- 3" (76.2) High Water Threshold
- Heavy-Duty Internal Corner Clips
- 1" x 5" (25 x 127) or 1-3/4" x 5" (44.5 x 127) Door Frame
- 0.125 (3.2) Nominal Wall Thickness, Door and Frame
- 1-1/2 Pair of 4" x 4-1/2" (101.6 x 114.3) Mortised Aluminum Butt Hinges With Non-Removable Stainless Steel Hinge Pins for Door Opening Heights Up to 84" (2137)
- Two Pairs of 4" x 4-1/2" (101.6 x 114.3) Mortised Aluminum Butt Hinges With Non-Removable Stainless Steel Hinge Pins for Door Opening Heights Greater Than 84" (2137)
- Double Rows of Weather Seals
- Stainless Steel Four-Point Locking System Including Latch Lock, Deadbolt Lock With Shoot-Bolts Top and Bottom
- Solid Brass Lever Handle by Ashland
- Non-Removable Interior Glass Stops
- Wet Glazing Method

Options:

- Custom Finishes: AAMA 2605 Compliant Painted Finishes
- Concealed Overhead Closers
- Surface Mounted Heavy-Duty Closers
- Large Missile 9/16" (14) VS Laminated Impact Glass
Laminated Glass Composition:
1/4" (6) Heat Strengthened Laminated Glass
0.075" VS02 Interlayer
1/4" (6) Heat Strengthened Glass
- Small Missile 9/16" (14) PVB Laminated Impact Glass
Laminated Glass Composition:
1/4" (6) Heat Strengthened Glass
0.90" PVB Interlayer
1/4" (6) Heat Strengthened Glass
- Glass Tint Available as Selected by the Architect/Owner
- Designer Latch Lock Hardware Finishes Available: Black, Brushed Aluminum, Brushed Brass, Matte Aluminum, Polished Brass, Polished Chrome, and White.
- Open for Glazing by Customer



Designer Latch Lock

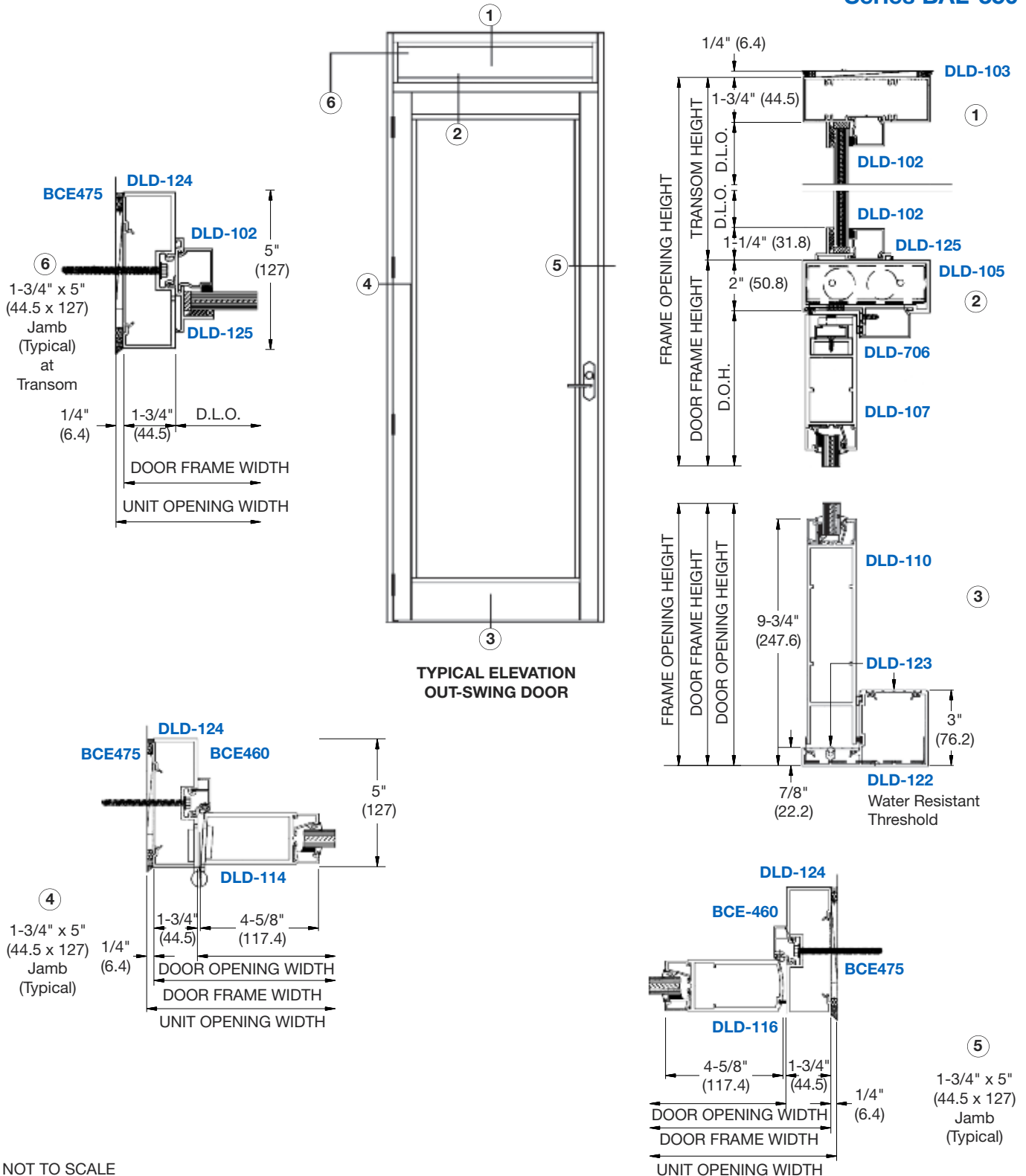
Online usalum.com By Phone (800) 262-5151 Ext. 5305
Online crlaurence.com By Phone (800) 421-6144 Ext. 5305

STORM FRONT™

Typical Details

Hurricane (Impact) Resistant Balcony/Terrace Doors • Series BAL-350

OUT-SWING DOORS AND FRAMES

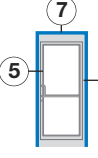


NOT TO SCALE

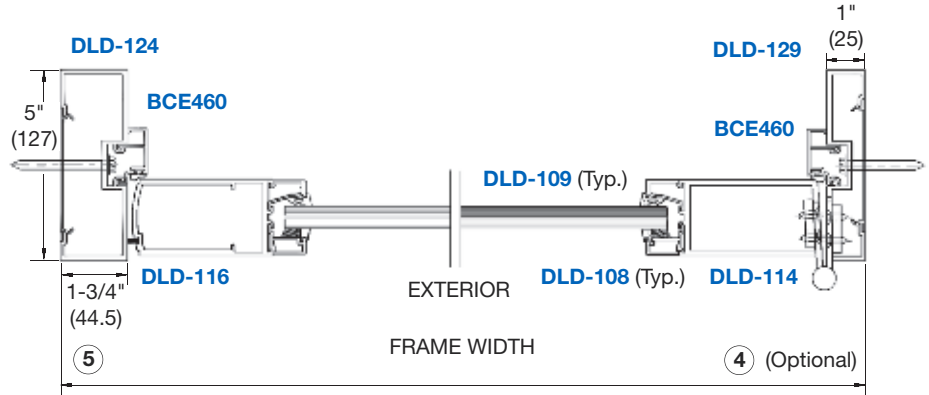
STORM FRONT™

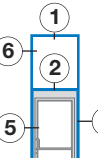
OUT-SWING DOOR FRAMES

Hurricane (Impact) Resistant Balcony/Terrace Doors • Series BAL-350

UP/OVER FRAME FOR SINGLE DOOR	HARDWARE	PART NO.*
	3 Butt Hinges 36" x 84" D.O.	BAL350W10FN
Frame without Transom 39-1/2" x 86" or 39-1/2" x 98"	4 Butt Hinges 36" x 96" D.O.	BAL350W11FN

* Specify Right or Left Hand when ordering.



TRANSOM FRAME	HARDWARE	PART NO.*
	3 Butt Hinges 36" x 84" D.O.	BAL350W10FT
Frame with Transom 39-1/2" x 120"	4 Butt Hinges 36" x 96" D.O.	BAL350W11FT

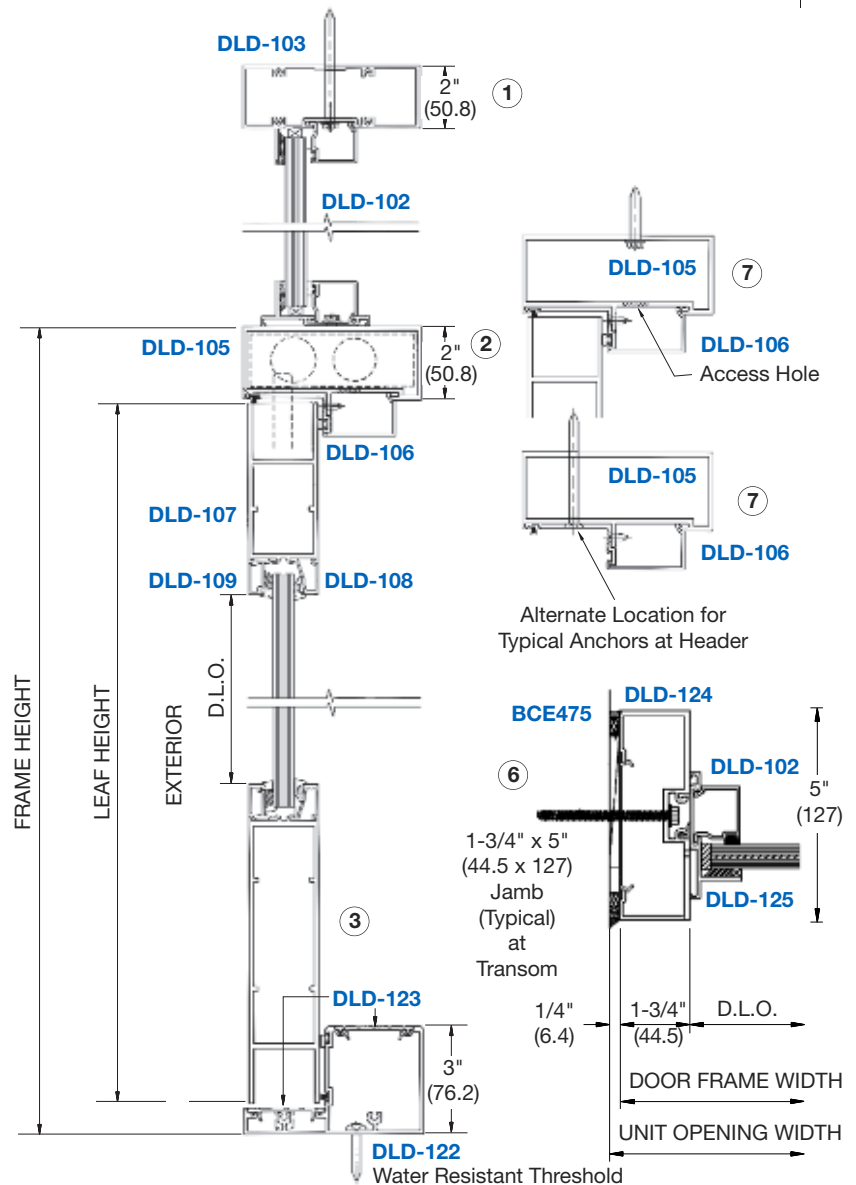
* Specify Right or Left Hand when ordering.
Maximum door frame size 39-1/2" x 10' (1003 x 3048) with Transom; 39-1/2" x 9' 2" (1003 x 2794) without Transom

BAL-350 Balcony Door Frame Standard Features:

- Factory Assembled
- 1-3/4" x 5" (44.5 x 127) Door Jamb
- Stainless Steel Butt Hinges With Aluminum Back-Up Plates
- 3" (76.2) Water Resistant Threshold
- Pre-Drilled for Anchors
- Stainless Steel Water Resistant Keeper
- Silicone Sealed Corner Joinery

BAL-350 Balcony Door Frame Options:

- 1" (25) Door Jamb



Online usalum.com By Phone (800) 262-5151 Ext. 5305
Online crlaurence.com By Phone (800) 421-6144 Ext. 5305