centor ARCHITECTURAL

E2 bifolding door hardware system for panels to 130lb

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creating systems for windows & doors

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Creating Seamless Transitions

E2 is a medium bifolding door hardware system for panels to 130lb (60kg) – Centor Architectural's original elegant solution to the challenge increasingly being put to the window and door industry – how to create truly seamless transitions between indoor and outdoor spaces. E2 is suitable for a range of residential and light commercial applications which do not require the extra capacity of the medium-heavy E3 or the substantial E4 heavy-duty door system.

E2 Specifications
max panel weight 130lbs (60kg) each
max panel width 3' 7" (1100mm)
max panel height 9' 10" (3000mm)
door thickness a) 1 3/4" (44.45) when using E2 sill system b) 1 3/8" to 2 1/4" (34.9 to 57.15mm) when using floor channel
maximum number of doors 8 each direction (52ft opening)

Note> When using maximum door width and height 3' 7" x 9' 10" (1100mm to 3000mm) door may exceed maximum door weight of 130lbs (60 kg). Calculated weight check should be done.

Imagine The Possibilities

Business or pleasure, E2 means entertainment without the interruption of conventional sliding or hinged doors, views which become vistas, breezes when you please! Over the past decade Centor Architectural's groundbreaking exterior bifolding window and door technology has caused a worldwide revolution in window and door installation.

POTENTIAL APPLICATIONS FOR E2 ARE LIMITED ONLY BY THE IMAGINATIONS OF THE WORLDS MOST PROGRESSIVE ARCHITECTS AND DESIGNERS

E2 adds flair and flexibility to the widest range of applications, from private residences to store front, restaurant and commercial projects. One moment bifolding doors are acting as an effective, secure barrier from rain, wind and noise. The next they're effortlessly moved aside to reveal wide open space – with no fixed glass panels, mullions or posts and no obtrusive door sill, just a recessed track in the floor. Engineered to withstand the most severe weather E2 can be just as suited to indoor use, or where exterior doors are needed between a sun room and the main structure – a major advance in visually and physically connecting spaces. The benefits to the end-user in managing their space to suit lifestyle or business have created an overwhelming demand for Centor's bifold systems – literally changing the face of contemporary design.

CREATING SPACE

High Performance System

Environment, operational function, durability; painstaking attention to detail and unerring commitment to quality mean Centor's bifolding systems achieve 'Centor-grade' performance – whatever the category. Now an integral part of progressive construction and renovation E2 provides a degree of control and comfort for the end-user which matches the easy flexibility of modern design.

UNCOMPROMISED INTERNAL ENVIRONMENT

E2 is truly a system for all seasons and all locations. E2 hardware, teamed with quality door panels, creates a formidable barrier against the elements when closed. The integrity of the required internal environment is never compromised.

Rain and Wind

A door using Centor's bifold system was the first tracked bifolding door system to be successfully certified against Australian Standard AS2047, which specifies the performance required of external windows and sliding doors, in particular for resistance to rain and wind. Many door manufacturing clients in Australia, Canada and the United States have tested doors using Centor's systems to their relevant local standards. Doors utilising the heavier E4 system have since been certified to stringent **Miami Dade County** hurricane standards, the toughest testing anywhere in the world. With the same technology built into E2, impressive water performance ratings are achievable from both outward and inward opening doors. Driving rain and howling gales can be shut out completely.

Air Infiltration

The system achieves its superior rain and wind resistance in part from the way it allows the folding doors to close snugly against weather seals. In the same way doors using the E2 system effectively resist air infiltration to a level up to 50 times better than a sliding door.

EFFORTLESS OPERATION

While E2's outstanding performance as part of a secure, weatherproof barrier is crucial, it's not until the doors are opened that the space-transforming benefits of the system truly come into play. For maximum enjoyment and use of the system every effort has been made to ensure that doors glide open and slide shut with the minimum of effort – and that they continue to do so.

Quality Manufacture, Clever Design

E2 carriers, guides and pivots use the highest grade stainless steel bearings custom machined to extremely fine tolerances on state-of-the-art Swiss and Japanese machinery – a minimum of four bearings to each carrier. Machined wheels are individually precision ground to an ultra-fine hone. Clever carrier design prevents scraping on the inside of the overhead track. A polypropylene floor channel lining adds to the smooth, almost silent rolling action which brings a smile to the face of the user!

Installation and Adjustment

With a choice of quick-fix surface-mounted fittings or mortise hinged components for more traditional wooden joinery, installation couldn't be easier. Comprehensive instructions are included and drill jigs are available for precise placement of fittings.

USED EXTERNALLY OR INTERNALLY E2 ADDS FLAIR AND FLEXIBILITY WHATEVER THE PROJECT

With architectural grade performance guaranteed for ten years E2 will operate flawlessly for an indefinite period. Even so the built-in Surelock™ mechanism means the system is tolerant of an imperfect world. If, for example, a newly built structure settles over time the end-user can easily make vertical and lateral adjustments with one hand, simply using a screwdriver!

Collaborative Process

Centor bifold system's don't achieve the highest performance in all categories all on their own. They're in their element teamed up with the quality products created by Centor's many manufacturing and custom fabricating clients. The Centor technical department can assist in the design process for doors incorporating the E2 system to ensure that the highest criteria for completed and installed doors are met.

Proven Durability

As much as Centor Architectural enjoys its reputation for innovation, ensuring products meet and exceed the highest standards for durability is just as much of a passion. This means a significant investment in repeatedly testing systems under the toughest of conditions – then testing them again!

ATTENTION TO DETAIL IN DESIGN, TESTING AND MANUFACTURE CREATES 'CENTOR-GRADE' PERFORMANCE

CREATING LONGEVITY

LABORATORY TESTING

In addition to the extensive weather testing undergone by doors using Centor's bifold systems, all individual E2 components have undergone extensive laboratory testing, ensuring years of trouble-free enjoyment from hardware which ages with grace.

Cyclic Testing

Centor's minimum requirement of cyclic testing for any released product is a grueling 50,000 cycles without a single failure at maximum configuration, meaning years of trouble free operation from the E2 system.

Structural Testing

Structural proof load tests up to 3600 Pa (74 psf) have been achieved by doors using the E2 system.

Finite Element Analysis

Finite Element Analysis (FEA) is a computerized simulation technique where products are exposed to virtual operating environments and accurate predictions made in terms of load and deflection. Centor undertakes FEA in the design process to ensure the best balance of performance, cost and materials in every system.

HURRICANE TESTING

In the course of obtaining approval under the stringent **Miami Dade County** testing regime, doors based on the larger E4 system were subjected to hurricane strength wind loads, flexing the doors in and out five thousand times without component failure. Small and large missile impact testing was also performed as part of the single toughest testing process anywhere in the world.

E2 Up Close

Even a casual glance at the E2 system gives a strong impression of Centor's commitment to quality, but it's only upon closer inspection that the attention to detail really becomes apparent. Stacked with standard features and with an abundance of options to choose from, Centor E2 looks even better up close!

MATERIALS AND FINISHES

E2 carriers, guides, pivots and hinges are available in brushed stainless steel for a modern industrial look, Oil Rubbed Bronze powdercoat or a PVD brass finish over stainless steel should a more traditional finish be required. Head tracks, sills and floor guide channels are produced in extruded aluminum with the option of bronze and satin anodized. Both sills and channels have black polypropylene liner.

PANEL SIZE AND MATERIALS

Centor's innovative hinge system enables all door panels to be made the same size regardless of the door configuration (eg 3L2R or 1L4R). The easily installed hardware can be teamed with ordinary 'book end' door panels in wood, aluminum, PVC or fiberglass.

WALL PIVOT

A floating wall pivot is used to control door stile deflection and bowing on tall doors caused by wind loads or climatic conditions. When using tall doors (over 7'4" high), use of four hinges at each junction is recommended, instead of the standard three.

DROPBOLTS

The E2 system is matched with the clean-lined DY and DO ranges of dropbolts to anchor the doors firmly in the closed position. They resist wind and together with the weather seals eliminate rattling in strong winds.

E2 Specifications
max panel weight 130lbs (60kg) each
max panel width 3' 7" (1100mm)
max panel height 9' 10" (3000mm)
door thickness a) 1 3/4" (44.45) when using E2 sill system b) 1 3/8" to 2 1/4" (34.9 to 57.15mm) when using floor channel
maximum number of doors 8 each direction (52ft opening)

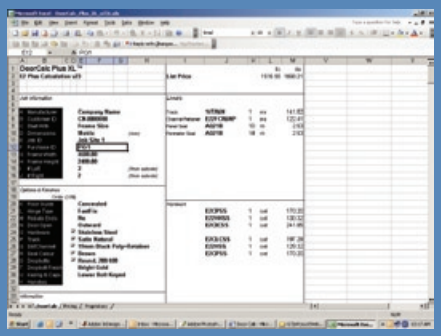
Note> When using maximum door width and height 3' 7" x 9' 10" (1100mm to 3000mm) door may exceed maximum door weight of 90lbs (60 kg). Calculated weight check should be done.

Aluminum door system specifications may vary from the specifications on the left. Consult your aluminum door supplier for details. Minimum panel thickness of 1 3/8" (35mm) allows for weather seal seating on panels correctly. Panels which exceed 2 ¼" (57mm) in thickness or which are below 24" (600mm) in width require special consideration in construction.

There are a number of materials such as soft timbers which are not suited to production of large, weighty doors. Panel construction materials should be of sufficient strength that screws cannot pull out. Concerns about material choice should be referred to a joiner experienced with the Centor's bifold systems.

E2 Assurance

Modern design is all about allowing the end-user to feel relaxed and comfortable in their surroundings. E2's superior functioning and performance goes much of the way towards meeting this goal and Centor takes care of the rest with a range of measures to ensure the system can be used with complete confidence.



Free specification and ordering software

Centor's free specification and ordering software – E2 Doorcalc™ – can be downloaded from www.centorarchitectural.com. E2 Doorcalc™ runs on Microsoft Excel® software and enables the user to specify all of the Centor hardware required for any door opening as well as calculate door panel sizes and number based upon a manufacturer's proprietary manufacturing details. The program features intuitive dropdown menus to assist the inexperienced Excel® user and allows for identification of each job and automatic generation of an accurate, costed hardware list, including barcodes, ready to forward to Centor!

CREATING CONFIDENCE

UNPARALLELED SECURITY

The E2 system responds to an increasingly security conscious market place with measures designed to ensure unwanted visitors are excluded along with the elements.

Concealed Fittings

When doors utilizing E2 are closed there are no externally accessible parts that can be removed or damaged. Screw fixings are concealed and hinge caps are retained by hidden fasteners.

Locking Screw Technology

The E2 system incorporates locking screw technology which ensures the hardware can not be removed from the track when the doors are closed.

WARRANTY

In line with a commitment to the highest possible quality Centor offers a 10-year warranty on all E2 hardware.

For full details view information on line at www.centorhardware.com

HARDWARE SELECTION

E2 is a fully integrated system suitable for applications up to 90lb per panel in wood, aluminum, PVC or fiberglass. Architects and specifiers can feel confident simply specifying "Centor E2" and leaving detailed component selection to the builder, joiner or fabricator. For more detailed selection refer to Component Selection on page 16.

Centor's Bifold Options

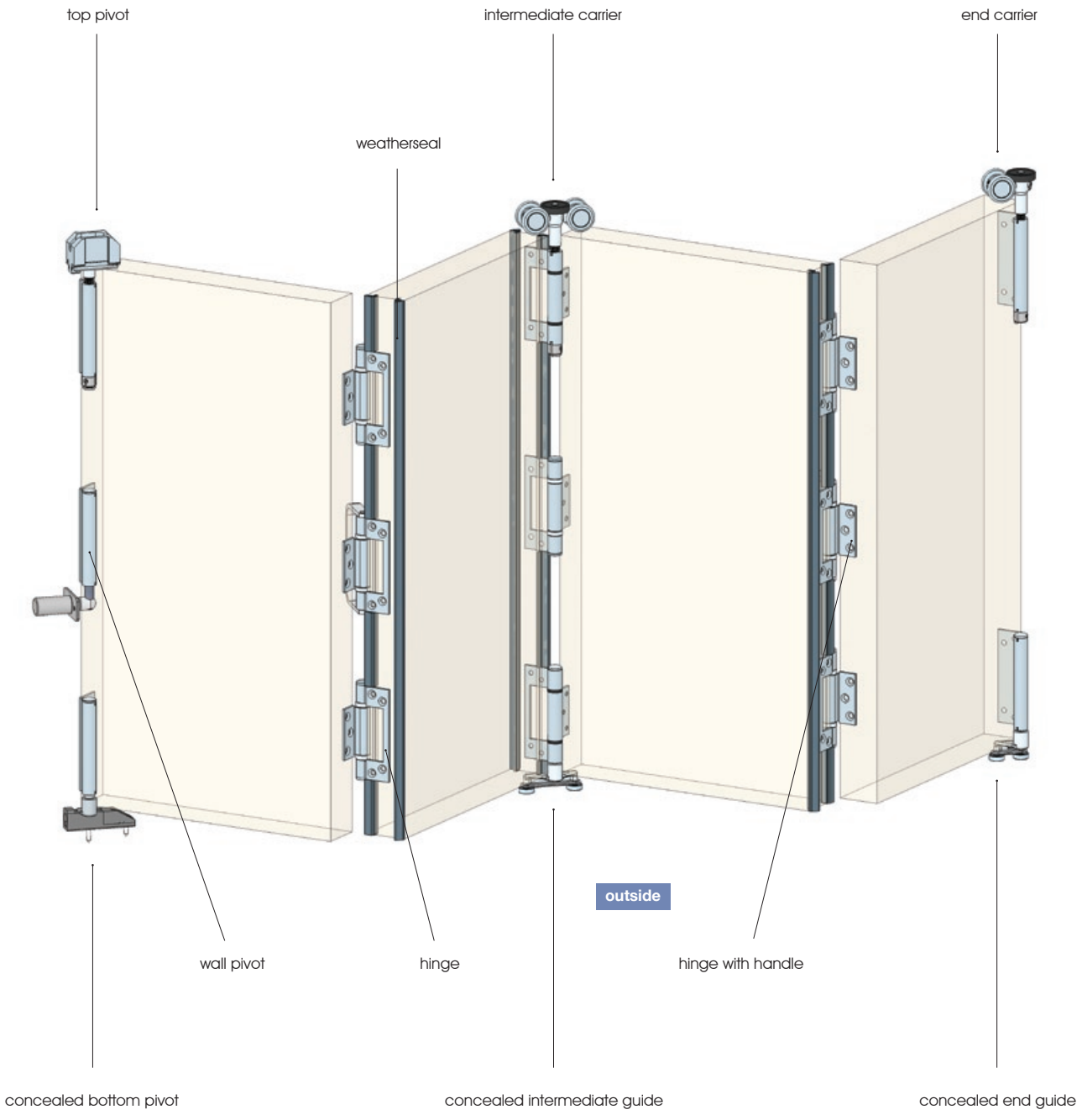
Based on the same functional geometry but with distinctive capacity and features, Centor's external bifold range offers an alternative for every application. From the smallest folding window to thirteen feet high walls of framed glass panels which fold away in seconds, Centor bifold systems create a formidable barrier against the elements, yet glide open with finger-tip ease.

NOTHING SAYS 'WELCOME' LIKE DOORS FLUNG WIDE OPEN

EW and E2 are the mainstays of Centor's flexible range of bifolding window and door hardware systems. Developed first and constantly upgraded since their inception they boast a considerable range of colors and finishes and remain the perfect choice for the private residence or lighter commercial application. EW is also the first folding window system to offer a fully integrated insect screen.

E3 and E4 are Centor's responses to the demands of architects and consumers wishing to extend the potential of Centor bifold innovation into heavier-duty residential and commercial applications. The medium-heavy E3 doubles the panel weight capacity of the medium E2 system, making the use of even sturdier panel materials and double-glazing possible. E4 takes it even further with a massive panel weight capacity and substantially increased height, width and overall measurement specifications. Applications are limited only by the imagination.

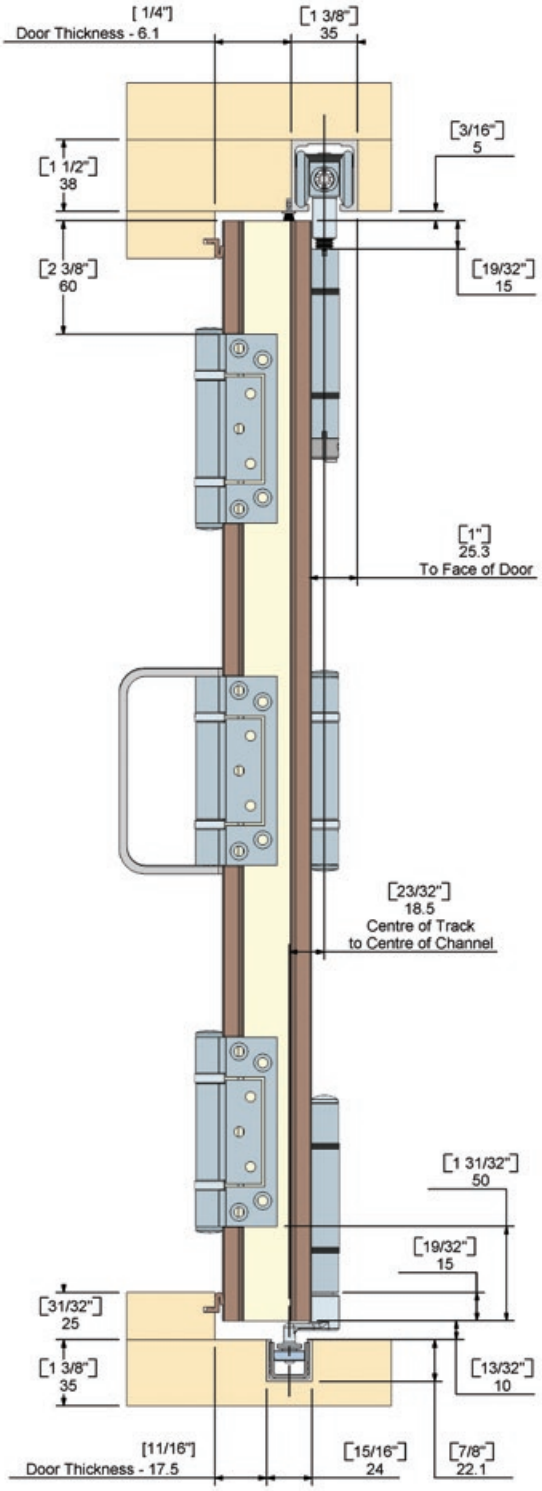
E2 Product Details



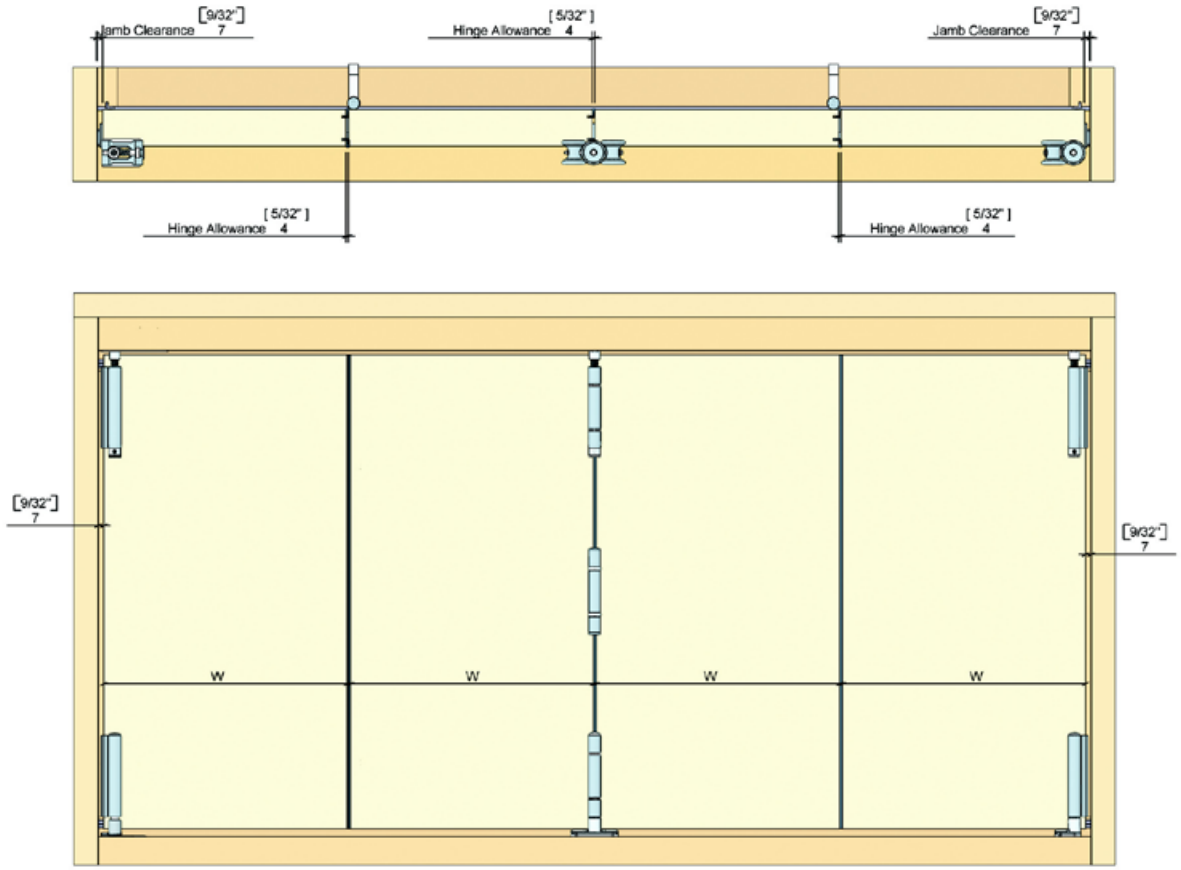
US Patents Granted
US 6618900 B2
US 6834703 B2

Other US Patents Pending
10/913279

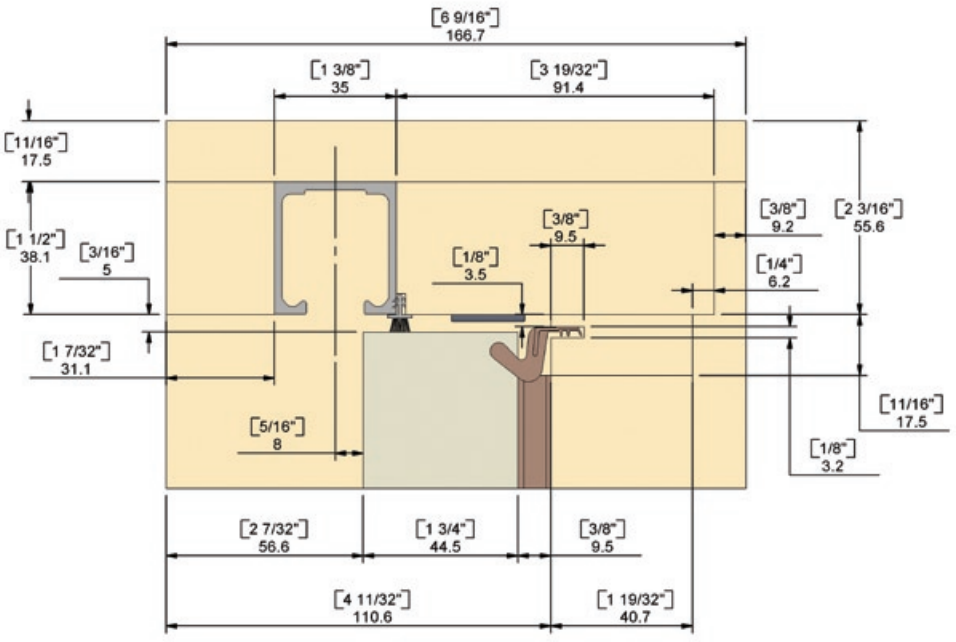
Architectural Detail



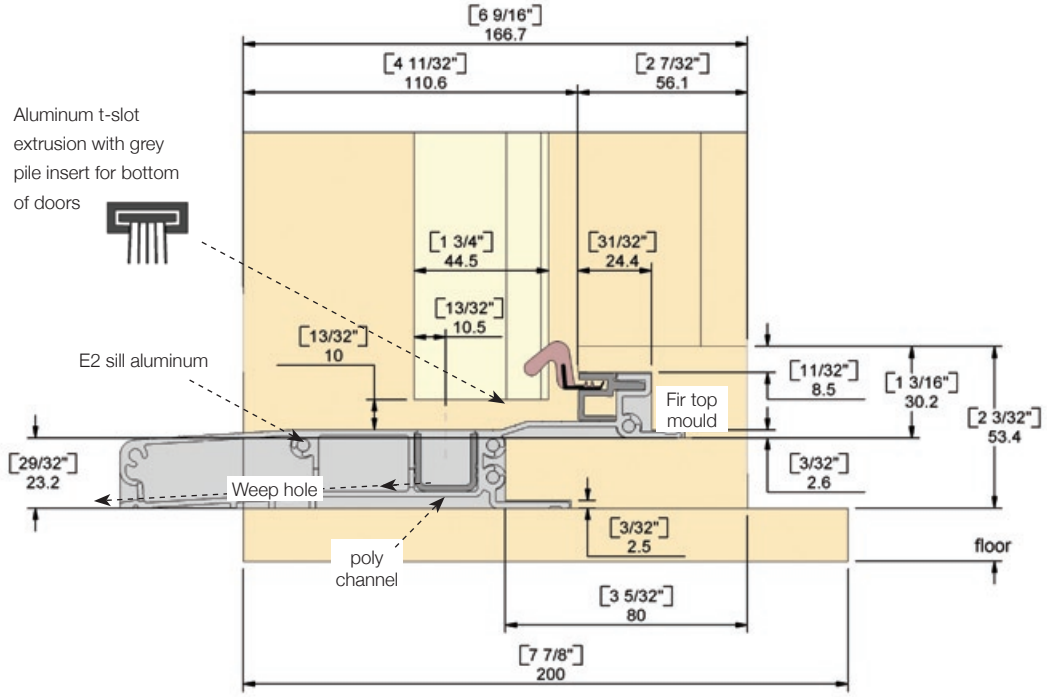
Architectural Detail



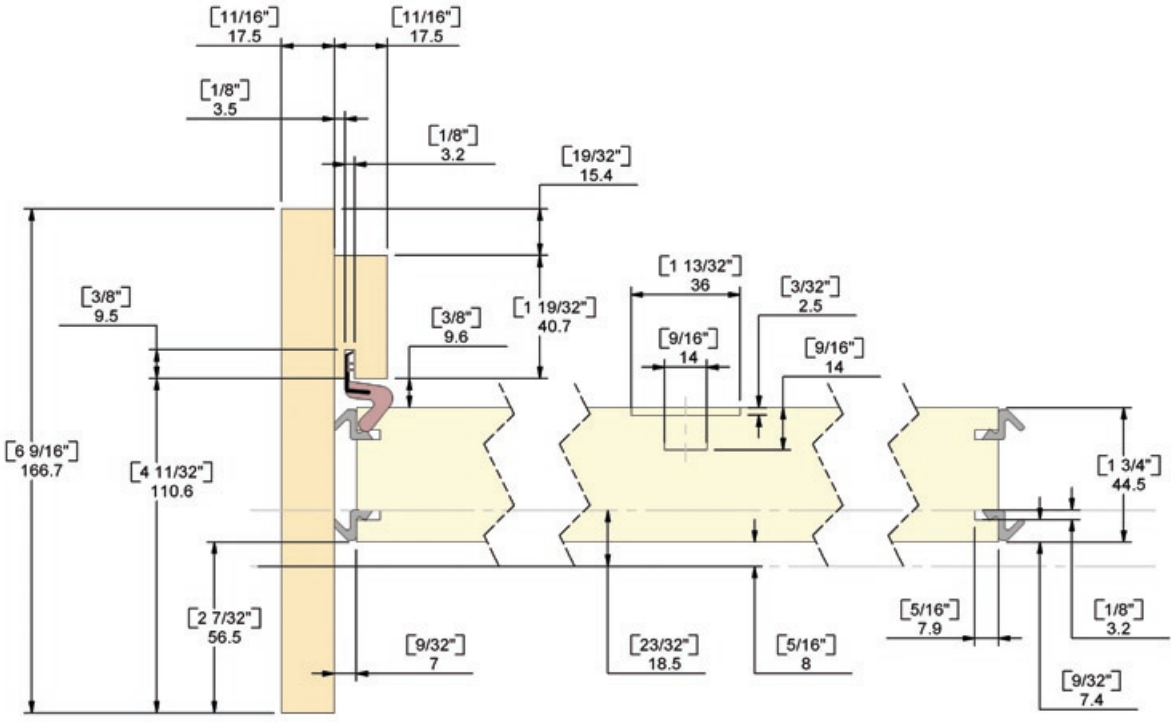
E2 HEADER FOR 1-3/4" (44.5MM) DOOR THICKNESS



E2 SILL SYSTEM FOR 1-3/4" (44.5MM) DOOR THICKNESS



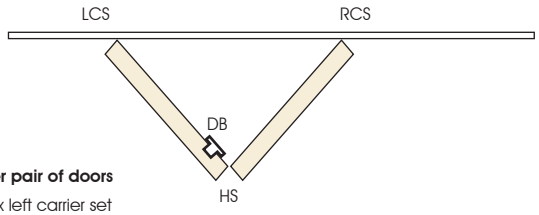
E2 JAMB FOR 1-3/4" (44.5MM) DOOR THICKNESS



Common Panel Layouts

HARDWARE LEGEND	
PS	pivot set
WPS	wall pivot set
ICS	intermediate carrier set
LCS	left carrier set
RCS	right carrier set
HHS	half offset hinge set
HS	hinge set (flat)
DB	dropbolt

FLOATING DOOR PAIRS



Per pair of doors

1 x left carrier set

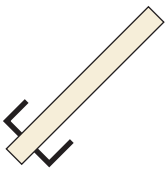
1 x right carrier set

1 x hinge set

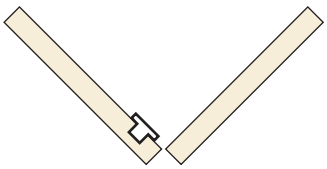
2 x dropbolt

LEGEND

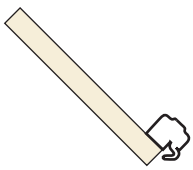
Passage set / lock by other



Dropbolts top and bottom

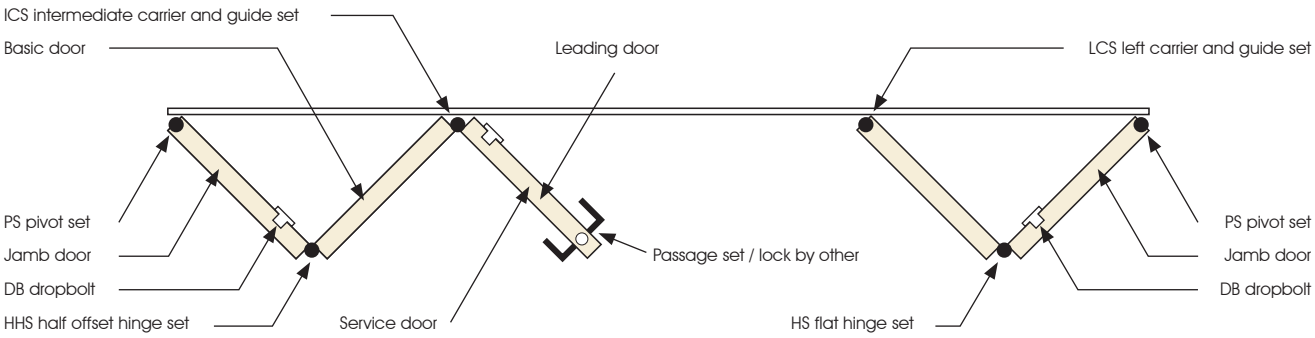


Astragal

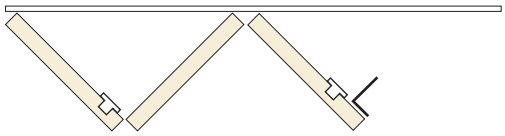


Note> Wall pivot set recommended for doors over 7'4" (2250mm) in height.

HARDWARE APPLICATION (3L2R)



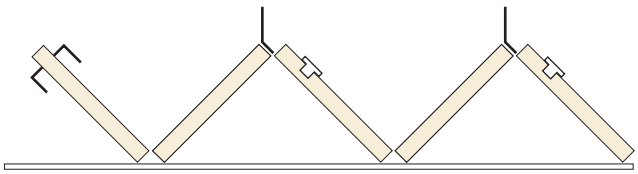
OUTSWING APPLICATION EXTERIOR HANDLE OPTION



Use one exterior handle on exit door (outswing system) where passage set / lock not required. Use dropbolts top and bottom to lock door from the inside only.

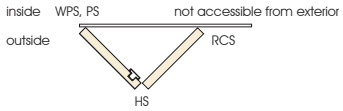
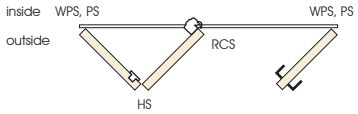
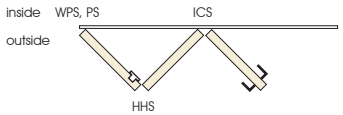
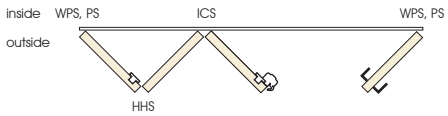
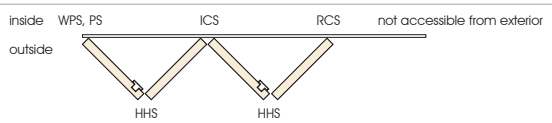
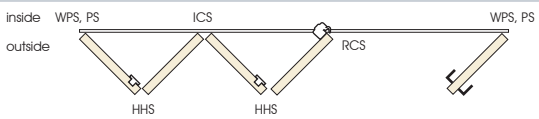
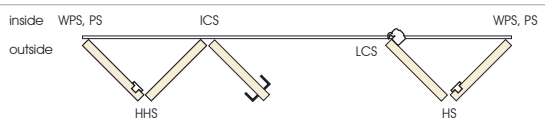
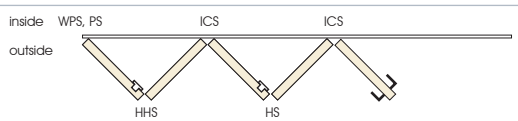
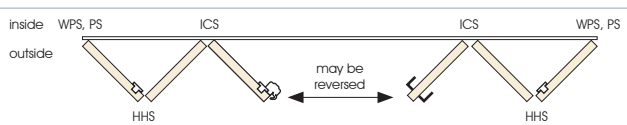
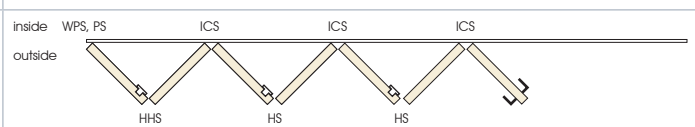
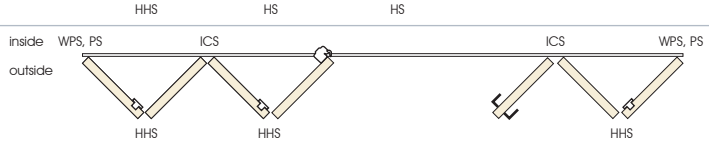
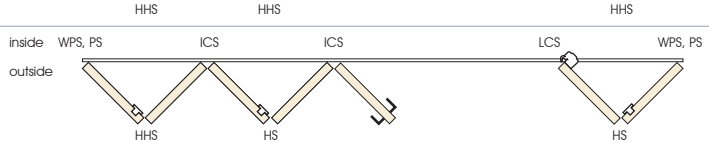
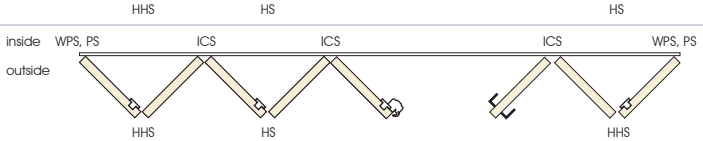
Note> Exit door not accessible from exterior in this application.

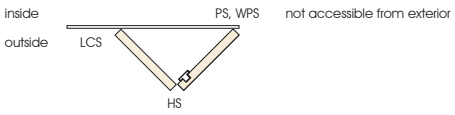
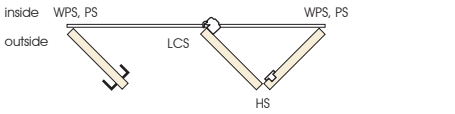
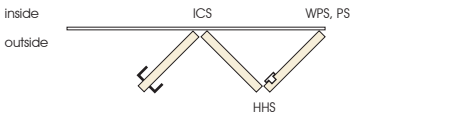
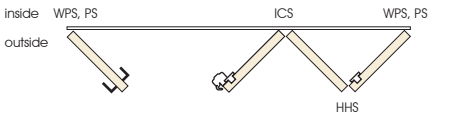
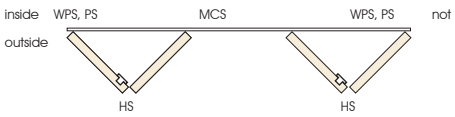
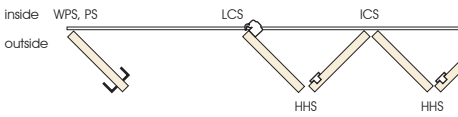
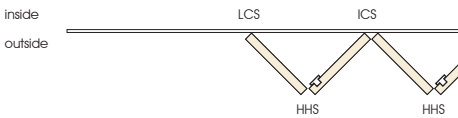
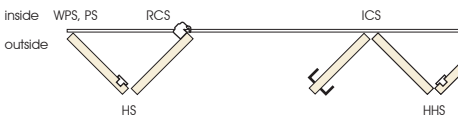
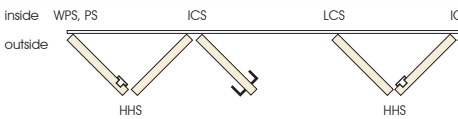
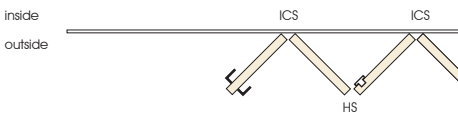
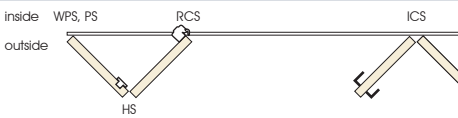
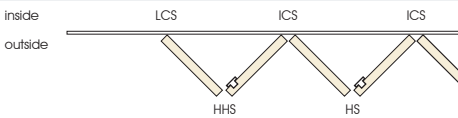
INSWING APPLICATION EXTERIOR HANDLE OPTION



Use one exterior handle on each pair of doors (inswing system) to pull open and close doors.

Common Panel Layouts (outswing)

CODE	OPENING CONFIGURATION	HARDWARE
2L		1 x pivot set 1 x right carrier set 1 x hinge set 2 x dropbolt
2L1R		2 x pivot set 1 x right carrier set 1 x hinge set 2 x dropbolt
3L		1 x pivot set 1 x intermediate carrier set 1 x half offset hinge set 2 x dropbolt
3L1R		2 x pivot set 1 x intermediate carrier set 1 x half offset hinge set 4 x dropbolt
4L		1 x pivot set 1 x intermediate carrier set 1 x right carrier set 2 x half offset hinge set 4 x dropbolt
4L1R		2 x pivot set 1 x intermediate carrier set 1 x right carrier set 2 x half offset hinge set 4 x dropbolt
3L2R		2 x pivot set 1 x intermediate carrier set 1 x left carrier set 1 x hinge set 1 x half offset hinge set 4 x dropbolt
5L		1 x pivot set 2 x intermediate carrier set 1 x hinge set 1 x half offset hinge set 4 x dropbolt
3L3R		2 x pivot set 2 x intermediate carrier set 2 x half offset hinge set 6 x dropbolt
7L		1 x pivot set 3 x intermediate carrier set 2 x hinge set 1 x half offset hinge set 6 x dropbolt
4L3R		2 x pivot set 2 x intermediate carrier set 1 x right carrier set 3 x half offset hinge set 6 x dropbolt
5L2R		2 x pivot set 2 x intermediate carrier set 1 x left carrier set 2 x hinge set 1 x half offset hinge set 6 x dropbolt
5L3R		2 x pivot set 3 x intermediate carrier set 1 x hinge set 2 x half offset hinge set 8 x dropbolt

CODE	OPENING CONFIGURATION	HARDWARE
2R		1 x pivot set 1 x left carrier set 1 x hinge set 2 x dropbolt
1L2R		2 x pivot set 1 x left carrier set 1 x hinge set 2 x dropbolt
3R		1 x pivot set 1 x intermediate carrier set 1 x half offset hinge set 2 x dropbolt
1L3R		2 x pivot set 1 x intermediate carrier set 1 x half offset hinge set 4 x dropbolt
2L2R		2 x pivot set 1 x meeting carrier set 2 x hinge set 4 x dropbolt
1L4R		2 x pivot set 1 x intermediate carrier set 1 x left carrier set 2 x half offset hinge set 4 x dropbolt
4R		1 x pivot set 1 x intermediate carrier set 1 x left carrier set 2 x half offset hinge set 4 x dropbolt
2L3R		1 x pivot set 2 x intermediate carrier set 1 x right carrier set 1 x hinge set 1 x half offset hinge set 4 x dropbolt
5R		1 x pivot set 2 x intermediate carrier set 1 x hinge set 1 x half offset hinge set 4 x dropbolt
3L4R		2 x pivot set 2 x intermediate carrier set 1 x left carrier set 3 x half offset hinge set 6 x dropbolt
7R		2 x pivot set 3 x intermediate carrier set 2 x hinge set 1 x half offset hinge set 6 x dropbolt
2L5R		2 x pivot set 2 x intermediate carrier set 1 x right carrier set 2 x hinge set 1 x half offset hinge set 6 x dropbolt
8R		1 x pivot set 3 x intermediate carrier set 1 x left carrier set 2 x hinge set 8 x dropbolt

Component Selection

E2 is specified with 5 separate groups:

1 track
2 sill with channel
3 hardware
4 weathersealing
5 dropbolts

Components are required from all 5 groups to build an E2 bifolding door system.

TRACK SELECTION

Track lengths up to 27ft (8.22m). Cut to length on application.

PART	TRACK	PRODUCT CODE	DESCRIPTION
	Aluminium track, machined	14TAM2N	6' 7" (2000mm) aluminium track, machined, natural anodized
		14TAM3N	9' 10" (3000mm) aluminium track, machined, natural anodized
		14TAM4N	13' 1" (4000mm) aluminium track, machined, natural anodized
		14TAM6N	19' 8" (6000mm) aluminium track, machined, natural anodized
		14TAM2R	6' 7" (2000mm) aluminium track, machined, bronze anodized
		14TAM3R	9' 10" (3000mm) aluminium track, machined, bronze anodized
		14TAM4R	13' 1" (4000mm) aluminium track, machined, bronze anodized
		14TAM6R	19' 8" (6000mm) aluminium track, machined, bronze anodized

CHANNEL SELECTION

Channel Lengths up to 27ft (8.22m). Cut to length on application.

PARTS	CHANNEL	PRODUCT CODE	DESCRIPTION
	Concealed channel 13/16" (21mm), poly channel	E22FCP4	13' 1" (4000mm) floor channel, polypropylene
		E22FCP6	19' 8" (6000mm) floor channel, polypropylene
Replacement polypropylene channel fits inside aluminum channel			
	Concealed channel 15/16" (24mm), retainer	E22FCR4N	13' 1" (4000mm) floor channel retainer, natural anodized
		E22FCR6N	19' 8" (6000mm) floor channel retainer, natural anodized
		E22FCR4R	13' 1" (4000mm) floor channel retainer, bronze anodized
		E22FCR6R	19' 8" (6000mm) floor channel retainer, bronze anodized
Aluminum channel			

CHANNEL WITH POLY INSERT

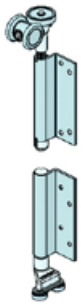
Channel Lengths up to 27ft (8.22m). Cut to length on application.

PARTS	CHANNEL	PRODUCT CODE	DESCRIPTION
	Concealed channel 15/16" (24mm), retainer and poly channel	E22FCR4NP E22FCR6NP	13' 1" (4000mm) floor channel retainer, natural anodized with poly channel 19' 8" (6000mm) floor channel retainer, natural anodized with poly channel

Aluminum channel with insert

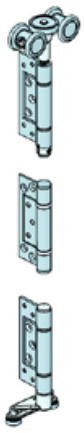
HARDWARE SELECTION

Left / Right Carrier Set

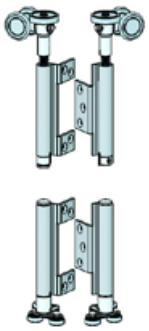
PARTS	PARTS ON PANELS	PRODUCT CODE	DESCRIPTION
a)  b) 	a)  b) 	E2CLCSS E2CLCSQ E2CLCSTG E2CRCSS E2CRCSQ E2CRCSTG	concealed left hand carrier set, stainless steel concealed left hand carrier set, oil rubbed bronze powdercoat concealed left hand carrier set, PVD brass concealed right hand carrier set, stainless steel concealed right hand carrier set, oil rubbed bronze powdercoat concealed right hand carrier set, PVD brass

a) left hand carrier set with concealed bottom guide
b) right hand carrier set with concealed bottom guide

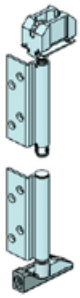
INTERMEDIATE CARRIER SET

PARTS	PARTS ON PANELS	PRODUCT CODE	DESCRIPTION
		E2CICSS E2CICSQ E2CICSTG	concealed intermediate carrier set, stainless steel concealed intermediate carrier set, oil rubbed bronze powdercoat concealed intermediate carrier set, PVD brass

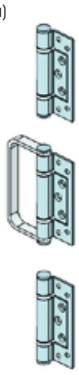
MEETING CARRIER SETS

PARTS	PARTS ON PANELS	PRODUCT CODE	DESCRIPTION
		E2CMCSS	concealed meeting carrier set, stainless steel
		E2CMCSQ	concealed meeting carrier set, oil rubbed bronze powdercoat
		E2CMCSTG	concealed meeting carrier set, PVD brass

PIVOT SETS

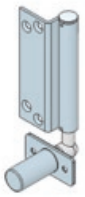
PARTS	PARTS ON PANELS	PRODUCT CODE	DESCRIPTION
		E2CPSS	concealed pivot set, stainless steel
		E2CPSQ	concealed pivot set, oil rubbed bronze powdercoat
		E2CPSTG	concealed pivot set, PVD brass

HALF OFFSET HINGE SETS

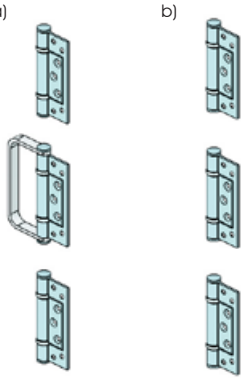
PARTS	PARTS ON PANELS	PRODUCT CODE	DESCRIPTION
a)  b) 	a)  b) 	E22HHSS	half offset hinge set, stainless steel
		E22HHSQ	half offset hinge set, oil rubbed bronze powdercoat
		E22HHSTG	half offset hinge set, PVD brass
		E22HHNHSS	no handle half offset hinge set, stainless steel
		E22HHNHSQ	no handle half offset hinge set, oil rubbed bronze powdercoat
		E22HHNHSTG	no handle half offset hinge set, PVD brass

a) half offset hinge set with handle for outswing doors
b) half offset hinge set with no handle for inswing doors

WALL PIVOT SET

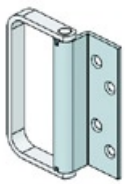
PARTS	PARTS ON PANELS	PRODUCT CODE	DESCRIPTION
		E22WPSS	wall pivot set, stainless steel
		E22WPSQ	wall pivot set, oil rubbed bronze powdercoat
		E22WPSTG	wall pivot set, PVD brass

HINGE SETS

PARTS	PARTS ON PANELS	PRODUCT CODE	DESCRIPTION
a) b) 	a)  b) 	E22HSS	hinge set, stainless steel
		E22HSQ	hinge set, oil rubbed bronze powdercoat
		E22HSTG	hinge set, PVD brass
		E22HNHSS	no handle hinge set, stainless steel
		E22HNHSQ	no handle hinge set, oil rubbed bronze powdercoat
		E22HNHSTG	no handle hinge set, PVD brass

a) hinge set with handle for outswing doors
b) hinge set with no handle for inswing doors

EXTERNAL HANDLE

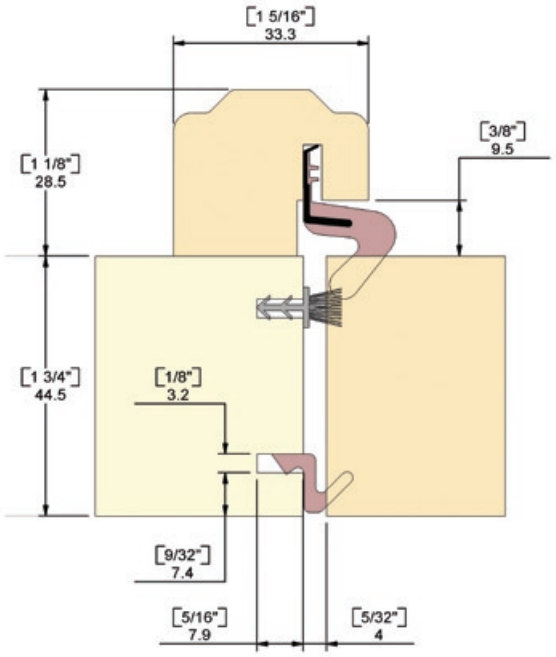
PARTS	PARTS ON PANELS	PRODUCT CODE	DESCRIPTION
		E22EHS	external handle, stainless
		E22EHQ	external handle, oil rubbed bronze powdercoat
		E22EHTG	external handle, PVD brass

single hinge with handle for outswing and inswing application (please refer to Common Panel Layouts page 13 fore more details)

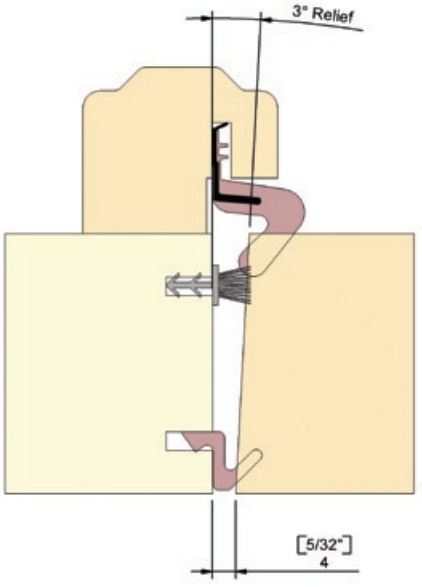
WEATHERSEALS AND ASTRAGAL SELECTION

PARTS	PRODUCT CODE	DESCRIPTION
	369	Aluminum t-slot extrusion with grey pile insert for bottom of doors.
	426	White or brown weatherseal for between doors.
	427	White or brown weatherseal for sill, jamb and header (perimeter).
	428	White or brown adhesive backed weatherseal for between doors. Use on clad doors instead of kerf.
	190	Astragal (FIR). May be stained or painted.
	P108-35	For door with astragal.

ASTRAGAL DETAIL – TRIPLE SEAL FOR SUPERIOR SEALING PERFORMANCE FOR 'MEETING' DOOR PANELS



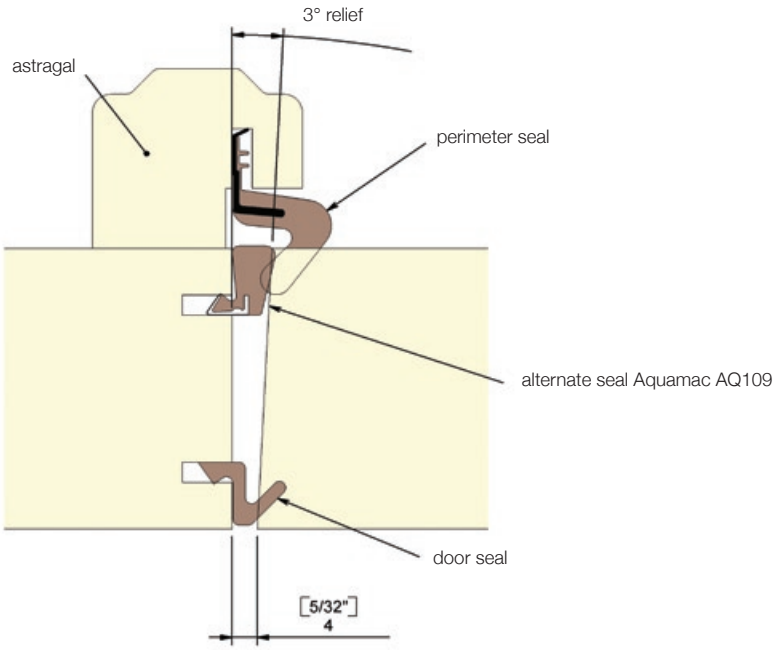
Option A



Option B

WEATHERSEAL ALTERNATE SELECTION

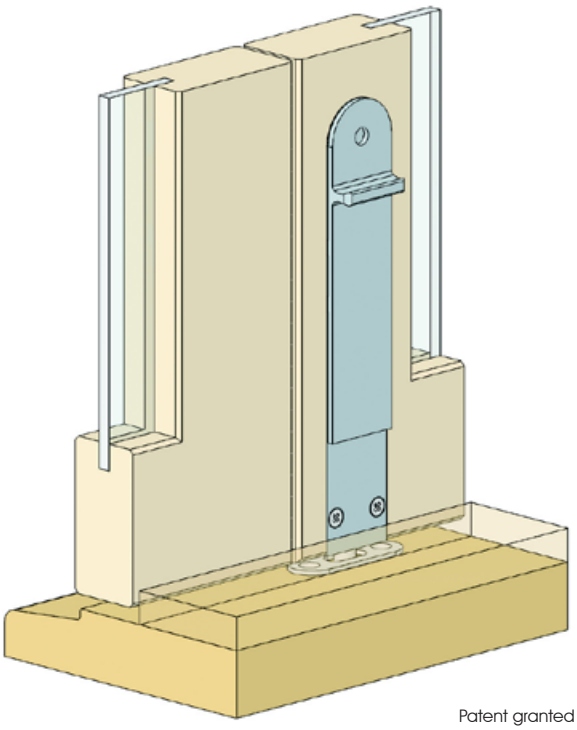
PART	PRODUCT CODE	PART DESCRIPTION
	AQ63B	Aquamac 63 Schlegel Kerf seal, brown for between doors
	AQ63L	Aquamac 63 Schlegel Kerf seal, black for between doors
	AQ63W	Aquamac 63 Schlegel Kerf seal, white for between doors
	AQ109B	Aquamac 109 Schlegel Kerf seal, brown for access panel and astragal
	AQ109L	Aquamac 109 Schlegel Kerf seal, black for access panel and astragal
	AQ109W	Aquamac 109 Schlegel Kerf seal, white for access panel and astragal



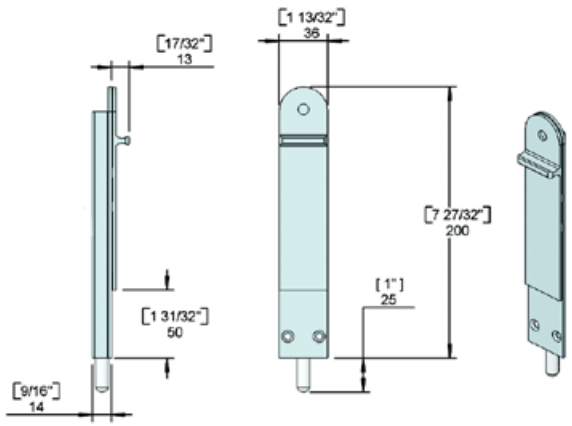
DROPBOLTS / DY

This flush-mounted dropbolt with 1" (25mm) throw is designed for use with sliding and folding doors. Centor's DY will resist high winds and is rated to resist a 550lb (250kg) load in Western Red Cedar and 990lb (450kg) in Amora. We can test your actual door section and provide a test certificate stating the rating achieved. The bolts are easily installed with a dedicated router bit and are available in three finishes.

DY Specifications
maximum wind load 990lb (450kg) force
minimum door thickness 1 3/4' (44.45mm)
bolt lengths 8" (200mm),16" (400mm), 24" (600mm), 39" (1000mm)
throw length 1" (25mm)
finishes Brushed metallic to match stainless steel hardware, Oil rubbed bronze powdercoat to match same finish hardware, Gold anodized to match PVD brass hardware.

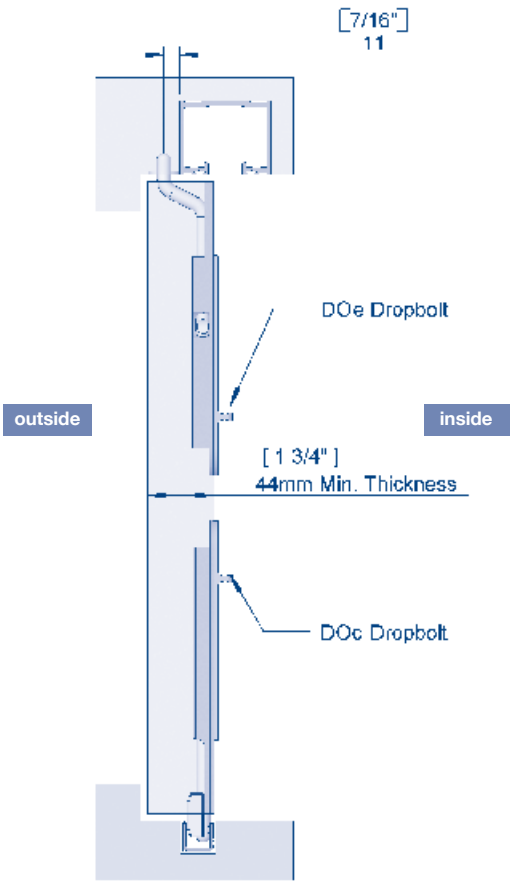


Patent granted

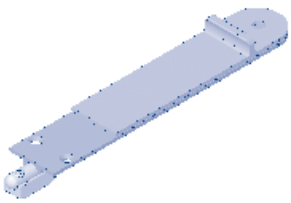
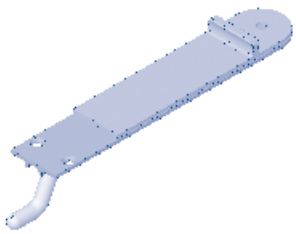
PART	PRODUCT CODE	DESCRIPTION
	KTDBSY200NRG	8" (200mm), gold anodized
	KTDBSY400NRG	16" (400mm), gold anodized
	KTDBSY600NRG	24" (600mm), gold anodized
	KTDBSY200NRQ	8" (200mm), powdercoat
	KTDBSY400NRQ	16" (400mm), powdercoat
	KTDBSY600NRQ	24" (600mm), powdercoat
	KTDBSY1000NRQ	39" (1000mm), powdercoat
	KTDBSY200NRX	8" (200mm), brushed metallic
	KTDBSY400NRX	16" (400mm), brushed metallic
	KTDBSY600NRX	24" (600mm), brushed metallic
	KTDBSY1000NRX	39" (1000mm), brushed metallic
	KTDBSY1000NRY	39" (1000mm), brushed metallic

DROPBOLTS / DO (FOR INSWING DOORS)

Centor's latest dropbolt, Overture Eclipse is specifically designed to complement Centor's E2 Plus, E3 and E4 bifolding hardware for inswing opening doors.

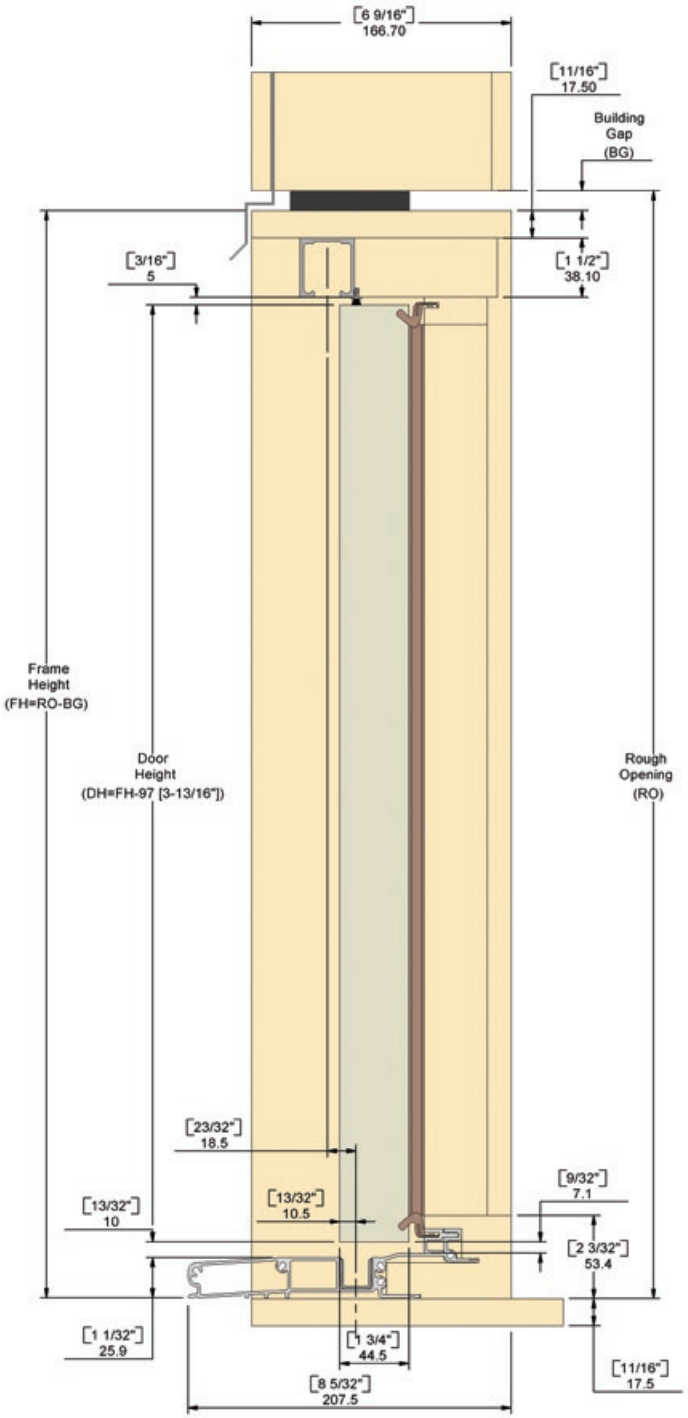


DO Specifications	
minimum door thickness	1 3/4' (44.45mm)
bolt lengths	8" (200mm), 16" (400mm), 24" (600mm), 39" (1000mm)
throw length	3/4" (20mm)
finishes	Brushed metallic to match stainless steel hardware, Oil rubbed bronze powdercoat to match same finish hardware, Gold anodized to match PVD brass hardware.

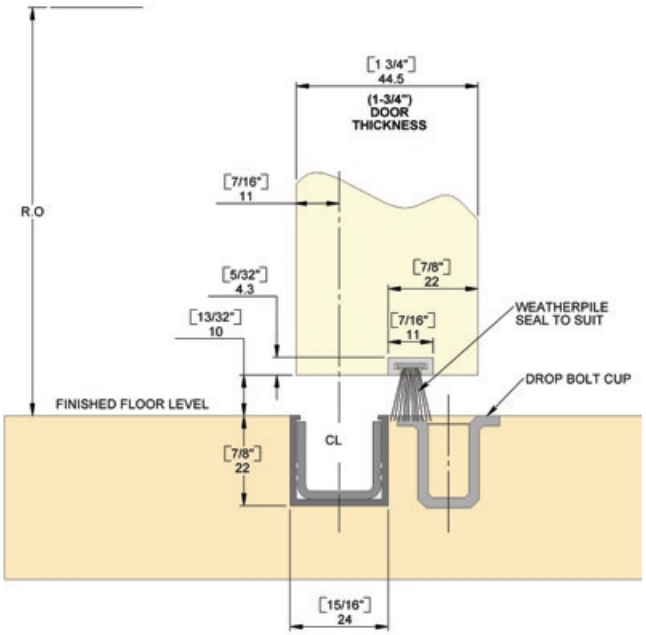
PART	PRODUCT CODE	DESCRIPTION
 DOc Dropbolt	DBOC200NRG	8" (200mm) concealed dropbolt, gold anodized
	DBOC200NRX	8" (200mm) concealed dropbolt, brushed metallic
	DBOC200NRQ	8" (200mm) concealed dropbolt, powdercoat
 DOe Dropbolt	DBOE200NRG	8" (200mm) dropbolt, gold anodized
	DBOE200NRX	8" (200mm) dropbolt, brushed metallic
	DBOE200NRQ	8" (200mm) dropbolt, powdercoat
	DBOE400NRG	16" (400mm) dropbolt, gold anodized
	DBOE400NRX	16" (400mm) dropbolt, brushed metallic
	DBOE400NRQ	16" (400mm) dropbolt, powdercoat
	DBOE600NRG	24" (600mm) dropbolt, gold anodized
	DBOE600NRX	24" (600mm) dropbolt, brushed metallic
	DBOE600NRQ	24" (600mm) dropbolt, powdercoat
	DBOE1000NRG	39" (1000mm) dropbolt, gold anodized
	DBOE1000NRX	39" (1000mm) dropbolt, brushed metallic
	DBOE1000NRQ	39" (1000mm) dropbolt, powdercoat

Installation Details

FULL OPENING WITH SELF DRAIN SILL OPTION



FLUSH WITH FLOOR CHANNEL SILL OPTION



CREATING

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