

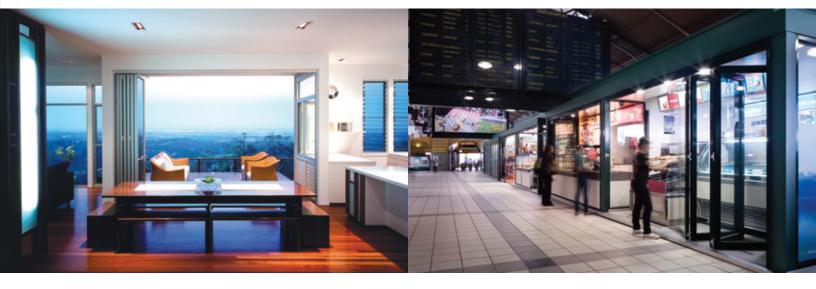
F3 Bottom-Rolling Folding Hardware for Panels to 176lb



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Centor revolutionized the way folding windows and doors move



Making Impressions

Centor opened a world of opportunity in building design when they revolutionized the way folding windows and doors move.

Delivering life-long durability and one touch movement, Centor guided folding windows and doors are making memorable impressions in homes, offices, restaurants and commercial premises all over the world.

The window of opportunity to use this technology has just become a whole lot wider as the company that revolutionized bifold movement brings the technology to a much wider audience.





F3 Specifications	
maximum opening	52' (16000mm)
maximum panel weight	176lbs (80kg) each
maximum panel width	39" (1000mm)
maximum panel height	9'10" (3000mm)
door thickness	1 3/4" (45mm)
maximum number of doors	8 each direction

Bottom-Rolling Freedom

The new Centor F3 bottom-rolling system for folding doors is the industry's first comprehensive bottom-rolling hardware technology, putting folding doors and windows into any existing building space without major structural changes.

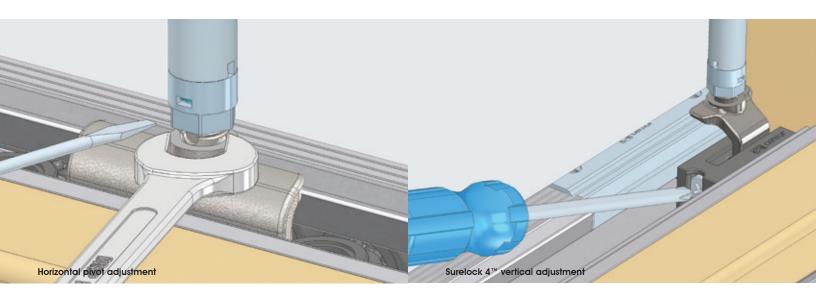
Bottom-rolling systems allow the weight of the door to be transferred away from the top of the opening, eliminating the need for a strong and often restricting upper beam – freeing up more design space.

bottom-rolling technology eliminates the need for strong upper beams



Centor F3 allows for the cost-effective remodel or retrofit of any opening that previously had a sliding door. Now everyone can enjoy the benefits of folding doors, combining the pleasures of a seamless indoor/outdoor lifestyle with fingertip operation. Folding doors provide vistas, natural light, fresh air and larger living space particularly when entertaining, and unlike sliding doors, require no fixed glass panels or posts.

Centor F3 is based on simple but sophisticated technology using a range of strategically placed bearings to allow the bottom of the door to carry the weight, while remaining easy to manoeuvre. Unlike other bottom-rolling systems, Centor controlled windows and doors glide through tracks, not rails, with movement controlled by articulated carriers, appropriately-sized wheels and side thrust bearings. With Centor's new bottom-rolling technology, quality folding doors and windows are within reach of every existing building and to every door and window manufacturer. The patented system installs with simple hand and power tools and requires no structural changes to the building.



Centor-Grade Performance

Internal environment, operational function, durability; painstaking attention to detail and an unerring commitment to quality mean 'Centor-grade' performance, whatever the category. The result is a degree of control and comfort for the end-user that matches the easy flexibility of modern design.

Rain and Wind

Doors using the Centor E3 and E4 systems have been certified to stringent Miami-Dade County hurricane standards, the toughest testing anywhere in the world. With similar technology built into F3, impressive water performance ratings are achievable from both outward and inward opening doors. Driving rain and howling gales can be shut out.

Air Infiltration

The F3 system achieves its superior rain and wind resistance in part from the way it allows the folding doors to close snugly against weatherseals. In the same way, doors using F3 effectively resist air infiltration to a level up to 50 times better than a sliding door.

All individual F3 components have been extensively laboratory tested, ensuring years of trouble-free use from hardware which ages with grace.

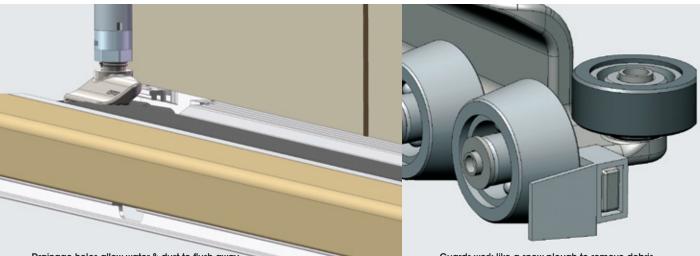
Cyclic Testing

F3 has undergone Centor's minimum requirement of cyclic testing to a grueling 50,000 cycles without failure at maximum configuration, however many individual components are rated to over 100,000 cycles.

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.

fully adjustable compensating for less than perfect openings



Drainage holes allow water & dust to flush away

Guards work like a snow plough to remove debris

F3 Up Close

Even a casual glance at the F3 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 F3 looks even better up close.

Materials And Finishes

F3 carriers, guides, pivots and hinges are available in brushed stainless steel, PVD brass or PVD bronze finish over stainless steel. Head tracks are produced in extruded aluminum.

Panel Size And Materials

Centor's innovative hinge system enables the use of uniform width door panels regardless of the door configuration, ensuring maximum efficiency in door manufacture. Easily installed hardware can be teamed with door panels in wood, aluminum, PVC or fibreglass.

Adjustment

F3 folding doors can be adjusted both vertically and horizontally. Once door heights are set and locked, the mechanism will not self adjust or loosen over time, meaning doors will not drop. Further adjustments can be made at any time with a screwdriver.

Design Features

Openings fitted with Centor controlled folding windows and doors include protective features not available with other systems. These include:

- the original Centor weathersealed technology
- floating rollers allow for smooth action even with sill
 bow or twist
- sill covers to avoid dirt collecting in the tracks
- guards which work like a snow plough to remove
 any debris
- tapered rollers and sloping track facilitate debris removal
- · drainage holes to flush away water and dust

solves challenges previously associated with bottom-rolling



F3 Assurance

Delivering life-long durability and fingertip operation, the F3's breakthrough technology and comprehensive feature set solves the many challenges previously associated with bottom-rolling hardware systems.

Unparalleled Security

The new slimmer frames fit unobtrusively beneath glazed panels with fixed and irremovable adjustment pins providing maximum strength and security.

Specifying F3

For detailed component selection, including calculating size and number of door panels, specifiers can use Doorcalc, Centor's free specification and ordering software. Doorcalc is available from www.centorusa.com

Architects and designers can feel comfortable simply specifying 'Centor F3' and leave detailed component selection to the builder, joiner or fabricator.

Warranty

Centor F3 bottom-rolling folding doors and windows can continue to open and close as new, long past their 10 year guarantee.

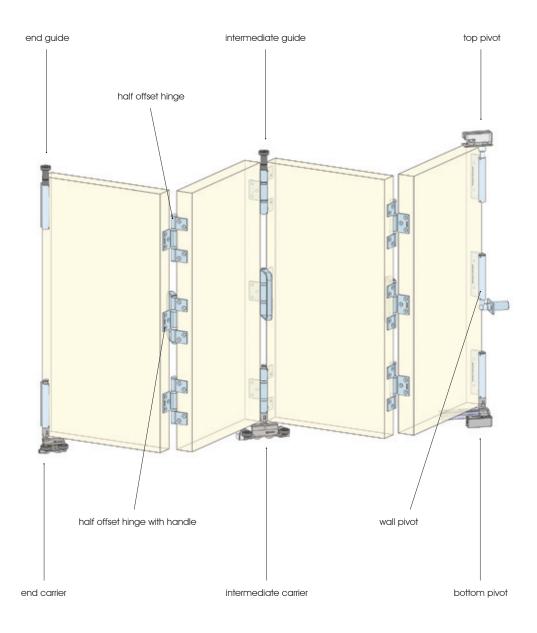




F3 Product Details

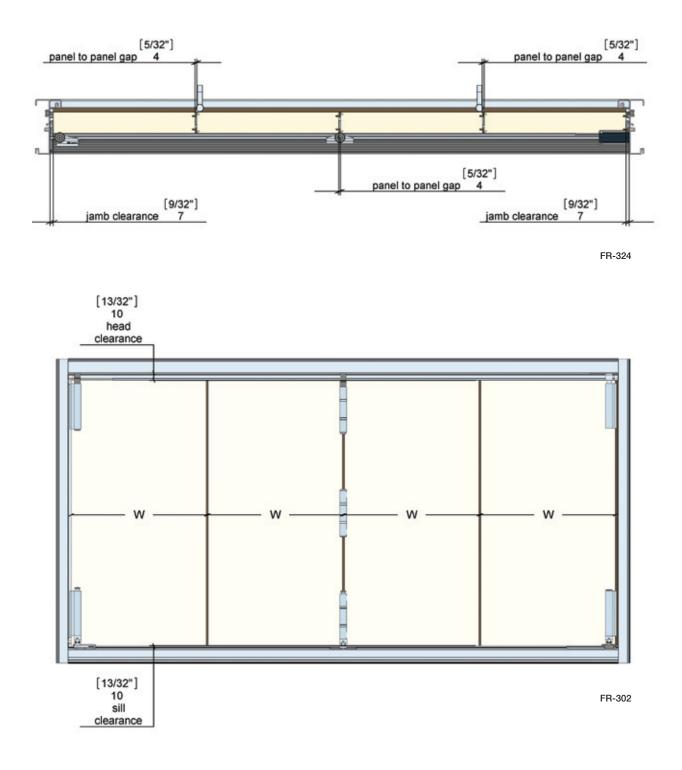
Downloadable DXF, DWG and PDF files ready for use in your own documentation are a convenient resource for architects and specifiers wishing to use Centor systems.

F3 DXF, DWG or PDF files can be downloaded from www.centorusa.com

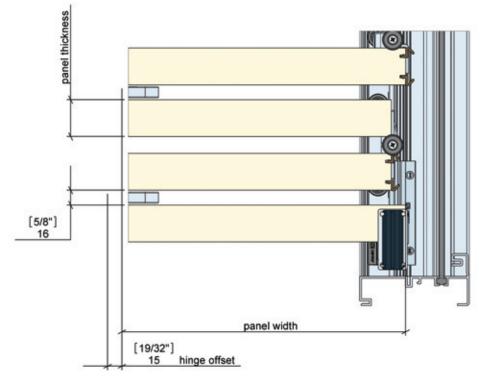


F3-000

Architectural Detail

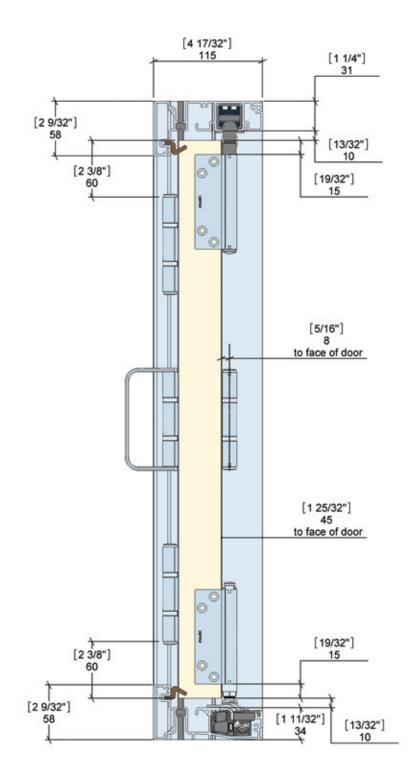


Architectural Detail



FR-327

Architectural Detail



FR-326

F3 is specified with five separate groups:

- 1 Head
- 2 Sill
- 3 Hardware
- 4 Weathersealing
- 5 Locking

Components are required from all five groups to build an F3 folding door system.

Poly Channel

PART	PRODUCT CODE	DESCRIPTION
	FRTPCS28P FRTPCS38P FRTPCS57P	9° 3″ (2819mm) straight top poly channel, punched 12° 3″ (3734mm) straight top poly channel, punched 18° 6″ (5639mm) straight top poly channel, punched
	FRTPCS74P	24' 6" (7468mm) straight top poly channel, punched

Head With Poly Channel

PART	PRODUCT CODE	DESCRIPTION
	FRUHS28N	9' 3" (2819mm) straight head track with poly channel, natural anodized
	FRUHS28R	9' 3" (2819mm) straight head track with poly channel, bronze anodized
	FRUHS38N	12' 3" (3734mm) straight head track with poly channel, natural anodized
1.1	FRUHS38R	12' 3" (3734mm) straight head track with poly channel, bronze anodized
	FRUHS57N	18' 6" (5639mm) straight head track with poly channel, natural anodized
	FRUHS57R	18' 6" (5639mm) straight head track with poly channel, bronze anodized
	FRUHS74N	24' 6" (7468mm) straight head track with poly channel, natural anodized
	FRUHS74R	24' 6" (7468mm) straight head track with poly channel, bronze anodized

Sill With Seal

PART	PRODUCT CODE	DESCRIPTION
	FRUSS28N	9' 3" (2819mm) simple sill with seal, natural anodized
The second s	FRUSS28R	9' 3" (2819mm) simple sill with seal, bronze anodized
	FRUSS38N	12' 3" (3734mm) simple sill with seal, natural anodized
	FRUSS38R	12' 3" (3734mmn) simple sill with seal, bronze anodized
	FRUSS57N	18' 6" (5639mm) simple sill with seal, natural anodized
	FRUSS57R	18' 6" (5639mm) simple sill with seal, bronze anodized
	FRUSS74N	24' 6" (7468mm) simple sill with seal, natural anodized
	FRUSS74R	24' 6" (7468mm) simple sill with seal, bronze anodized

Sill – Basic

PART	PRODUCT CODE	DESCRIPTION
	FRSBM28N	9' 3" (2819mm) basic sill, machined, natural anodized
	FRSBM28R	9' 3" (2819mm) basic sill, machined, bronze anodized
IN CI	FRSBM38N	12' 3" (3734mm) basic sill, machined, natural anodized
L S	FRSBM38R	12' 3" (3734mm) basic sill, machined, bronze anodized
	FRSBM56N	18' 6" (5639mm) basic sill, machined, natural anodized
	FRSBM56R	18' 6" (5639mm) basic sill, machined, bronze anodized
	FRSBM65N	24' 6" (6500mm) basic sill, machined, natural anodized
	FRSBM65R	24' 6" (6500mm) basic sill, machined, bronze anodized

Head – Thermal Break

PART	PRODUCT CODE	DESCRIPTION
	FRUTBHA28B	9' 3" (2819mm) thermal break head assembly, bronze powdercoat
	FRUTBHA28W	9' 3" (2819mm) thermal break head assembly, white powdercoat
N []]	FRUTBHA28PC	9' 3" (2819mm) thermal break head assembly, custom powdercoat
	FRUTBHA38B	12′ 3″ (3734mm) thermal break head assembly, bronze powdercoat
1 A	FRUTBHA38W	12' 3" (3734mm) thermal break head assembly, white powdercoat
	FRUTBHA38PC	12' 3" (3734mm) thermal break head assembly, custom powdercoat
	FRUTBHA55B	18' 6" (5639mm) thermal break head assembly, bronze powdercoat
	FRUTBHA55W	18' 6" (5639mm) thermal break head assembly, white powdercoat
	FRUTBHA55PC	18' 6" (5639mm) thermal break head assembly, custom powdercoat
	FRUTBHA74B	24' 6" (7468mm) thermal break head assembly, bronze powdercoat
	FRUTBHA74W	24' 6" (7468mm) thermal break head assembly, white powdercoat
	FRUTBHA74PC	24' 6" (7468mm) thermal break head assembly, custom powdercoat

Sill – Thermal Break

PART	PRODUCT CODE	DESCRIPTION
	FRUTBSA28B	9′ 3″ (2819mm) thermal break sill assembly, bronze powdercoat
(V)	FRUTBSA28W	9' 3" (2819mm) thermal break sill assembly, white powdercoat
	FRUTBSA28PC	9' 3" (2819mm) thermal break sill assembly, custom powdercoat
Composition of	FRUTBSA38B	12' 3" (3734mm) thermal break sill assembly, bronze powdercoat
	FRUTBSA38W	12' 3" (3734mm) thermal break sill assembly, white powdercoat
	FRUTBSA38PC	12' 3" (3734mm) thermal break sill assembly, custom powdercoat
	FRUTBSA55B	18' 6" (5639mm) thermal break sill assembly, bronze powdercoat
	FRUTBSA55W	18' 6" (5639mm) thermal break sill assembly, white powdercoat
	FRUTBSA55PC	18' 6" (5639mm) thermal break sill assembly, custom powdercoat
	FRUTBSA74B	24' 6" (7468mm) thermal break sill assembly, bronze powdercoat
	FRUTBSA74W	24' 6" (7468mm) thermal break sill assembly, white powdercoat
	FRUTBSA74PC	24' 6" (7468mm) thermal break sill assembly, custom powdercoat

Jamb – Thermal Break

PART	PRODUCT CODE	DESCRIPTION
	FRUTBJM21B	7' (2133mm) thermal break jamb, machined, bronze powdercoat
e e	FRUTBJM21W	7' (2133mm) thermal break jamb, machined, white powdercoat
	FRUTBJM21PC	7' (2133mm) thermal break jamb, machined, custom powdercoat
	FRUTBJM24B	8' (2438mm) thermal break jamb, machined, bronze powdercoat
5	FRUTBJM24W	8' (2438mm) thermal break jamb, machined, white powdercoat
	FRUTBJM24PC	8' (2438mm) thermal break jamb, machined, custom powdercoat
	FRUTBJM30B	10' (3048mm) thermal break jamb, machined, white powdercoat
	FRUTBJM30W	10' (3048mm) thermal break jamb, machined, bronze powdercoat
	FRUTBJM30PC	10' (3048mm) thermal break jamb, machined, custom powdercoat

Sill Cover

PARTS	PRODUCT CODE	DESCRIPTION
	FRBTS	100m roll bottom track seal

Weatherseal

PART	PRODUCT CODE	PART DESCRIPTION
	426	White or brown weatherseal for between doors
	427	White or brown weatherseal for sill, jamb and header (perimeter)
	P108-35	For door with astragal.
*	P108-50	Kerf Pile insert for door bottom

Right Carrier Set

PARTS	PARTS ON PANELS	PRODUCT CODE	DESCRIPTION
		F3RCSS F3RCSOL F3RCSTG*	right hand carrier set, stainless steel right hand carrier set, PVD bronze right hand carrier set, PVD brass

* Longer lead times apply. Please contact Centor for details.

Left Carrier Set

PARTS	PARTS ON PANELS	PRODUCT CODE	DESCRIPTION
۹		F3LCSS	left hand carrier set, stainless steel
		F3LCSOL	left hand carrier set, PVD bronze
6 1 555	E	F3LCSTG*	left hand carrier set, PVD brass

 \star Longer lead times apply. Please contact Centor for details.

Intermediate Carrier Set

PARTS	PARTS ON PANELS	PRODUCT CODE	DESCRIPTION
	Aus are are	F3ICSS F3ICSOL F3ICSTG*	intermediate carrier set, stainless steel intermediate carrier set, PVD bronze intermediate carrier set, PVD brass
Fourth hinge recommended for doors over 7′ 4″ (2250mm). Use either E3HNH* or E3H*			

 * Longer lead times apply. Please contact Centor for details.

Hinge Set

PARTS	PARTS ON PANELS	PRODUCT CODE	DESCRIPTION
a) with handle		E3HSS	hinge set with handle, stainless steel
the second second		E3HSOL E3HSTG*	hinge set with handle, PVD brass
b) without handle		E3HNHSS	hinge set no handle, stainless steel
المعالية المحالية		E3HNHSOL E3HNHSTG*	hinge set no handle, PVD bronze hinge set no handle, PVD brass
a) hinge set with handle for outw b) hinge set no handle for inwar			

* Longer lead times apply. Please contact Centor for details.

Single Hinge

PARTS	PRODUCT CODE	DESCRIPTION
	E3HNHS	single straight hinge, stainless steel
The second se	E3HNHOL	single straight hinge, PVD bronze
and and	E3HNHTG*	single straight hinge, PVD brass
J.		

 \star Longer lead times apply. Please contact Centor for details.

Half Offset Hinge Set

PARTS	PARTS ON PANELS	PRODUCT CODE	DESCRIPTION
a) with handle		E3HHSS E3HHSOL E3HHSTG*	half offset hinge set with handle, stainless steel half offset hinge set with handle, PVD bronze half offset hinge set with handle, PVD brass
b) without handle		E3HHNHSS E3HHNHSOL E3HHNHSTG*	half offset hinge set no handle, stainless steel half offset hinge set no handle, PVD bronze half offset hinge set no handle, PVD brass
a) half offset hinge set with handle for outward doors b) half offset hinge set with no handle for inward doors			

* Longer lead times apply. Please contact Centor for details.

Single Half Offset Hinge

PARTS	PRODUCT CODE	DESCRIPTION
the state of the s	E3HHNHS E3HHNHOL E3HHNHTG*	single half offset hinge, stainless steel single half offset hinge, PVD bronze single half offset hinge, PVD brass

 \star Longer lead times apply. Please contact Centor for details.

Pivot Set – Wall Pivot

PARTS	PARTS ON PANELS	PRODUCT CODE	DESCRIPTION
		F3PSS F3PSOL F3PSTG*	pivot set, stainless steel pivot set, PVD braze pivot set, PVD brass

* Longer lead times apply. Please contact Centor for details.

Wall Pivot

PARTS	PARTS ON PANELS	PRODUCT CODE	DESCRIPTION
	And the same	F3WPSS F3WPSOL F3WPSTG*	F3 wall pivot set, stainless steel F3 wall pivot set, PVD bronze F3 wall pivot set, PVD brass
Jamb mounted middle wall pivot recommended for doors over 4' 11" (1500mm) high and required for doors over 7' 4" (2250mm)			

 * Longer lead times apply. Please contact Centor for details.

External Handle

PARTS	PARTS ON PANELS	PRODUCT CODE	DESCRIPTION
the second		E3EHS E3EHOL E3EHTG*	external handle, stainless steel external handle, PVD bronze external handle, PVD brass
single hinge with handle for outward and inward application			

* Longer lead times apply. Please contact Centor for details.

Door Catch

PART	PRODUCT CODE	DESCRIPTION
	DCAS DCAOL DCATG*	door catch, brushed stainless steel door catch, PVD bronze door catch, PVD brass

 \star Longer lead times apply. Please contact Centor for details.



Specifications	
door thickness	1 1/2" (38mm) and up
handle height	36" (914mm) or custom
max door height	13' (4000mm)
security	keyed, non-kyed
throw length	1" (25mm)
uses	folding, French & some sliding
LT	Wood doors
LA	Aluminum doors

Twinpoint Lock

The award-winning Centor Twinpoint locking system is the first folding door-specific lock for multi-panel door systems up to 13' tall.

The locking mechanisms are rebated into the edge of the door panel. Combined with a low-profile handle, the system provides an elegant and discreet appearance.

The Centor Twinpoint is an easily operated and secure alternative to dropbolts. The low-profile, single-action handle disguises a robust mechanism with the unique strength required for folding doors.

Systems for wood and aluminum doors are available.

Finishes and materials

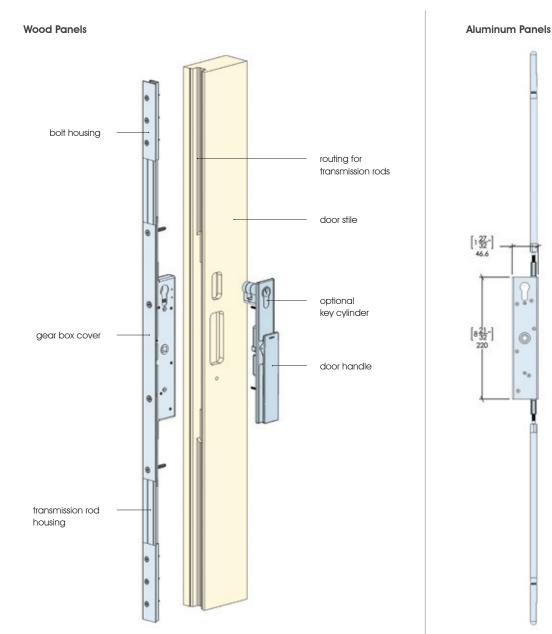
Centor LT and LA Twinpoint locks are made from durable, corrosion-resistant material. The stainless steel door handle is available in brushed stainless steel, PVD brass or PVD bronze. Aluminum door handles are available in satin metallic, bronze, white, black or custom powdercoat finishes.

The Centor Twinpoint is available for both wood (LT) and aluminum (LA) panels. To construct the Centor Twinpoint, select from the following options:

- 1 Gearbox non-locking or locking
- 2 Transmission Rods max panel height 7' (2100mm), 8' (2400mm), 9' (2700), 10' (3000) or 13' (4000mm) or custom handle height Anodized Finishes - brushed metallic, gold or black

Separate types for non-locking or locking

- 3 Door Handle stainless steel: brushed, PVD brass or PVD bronze
 - aluminum: satin metallic, bronze, white, black or custom powdercoat
- 4 Cylinder (Optional) 3 pin 53/64" (21mm) or 5 pin 1 3/16" (30mm)
 - Finishes: brushed nickel, PVD bronze or polished brass





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available in a range of lengths and finishes

Centor Dropbotls

Centor's stylish, flush-mounting dropbolts are the ideal solution for fastening or securing folding doors based on the F3 system. Easily installed with a dedicated router bit available from Centor, DT dropbolts are available in a range of lengths and finishes. Available keyed and non-keyed, DF dropbolts can be keyed alike and re-keyed by a locksmith.

Rated to resist the most extreme wind conditions (up to 992lbs (450kg) force in certain wood) DT dropbolts feature rounded styling and are suited to use with outward opening folding doors. Available in 7 7/8" (200mm), 1' 3 3/4" (400mm), 1' 11 5/8" (600mm) and 3' 3 3/8" (1000mm) lengths with a 25mm throw they come in natural and gold anodized, brushed metallic and white and bronze powdercoated finishes. Keyed DT dropbolts feature a unique damage-proofing mechanism which prevents the bolt being operated while the key remains in the lock.



Dropbolt Selection

DT – NON-KEYED

PARTS	ARCHITECTURAL DETAIL	PRODUCT CODE	DESCRIPTION
		DBOT200NRTG*	7 7/8" (200mm) dropbolt, non-keyed, PVD brass
0		DBOT200NRN	7 7/8" (200mm) dropbolt, non-keyed, natural anodized
		DBOT200NRQ	7 7/8" (200mm) dropbolt, non-keyed, bronze powdercoat
		DBOT200NRW	7 7/8" (200mm) dropbolt, non-keyed, white powdercoat
		DBOT200NRX	7 7/8" (200mm) dropbolt, non-keyed, brushed metallic
0,		DBOT400NRTG*	1' 3 3/4" (400mm) dropbolt, non-keyed, PVD brass
	30 0	DBOT400NRN	1' 3 1/4" (400mm) dropbolt, non-keyed, natural anodized
		DBOT400NRQ	1' 3 3/4" (400mm) dropbolt, non-keyed, bronze powdercoat
		DBOT400NRW	1' 3 3/4" (400mm) dropbolt, non-keyed, white powdercoat
		DBOT400NRX	1' 3 3/4" (400mm) dropbolt, non-keyed, brushed metallic
		DBOT600NRTG*	1' 11 5/8" (600mm) dropbolt, non-keyed, PVD brass
		DBOT600NRN	1' 11 5/8" (600mm) dropbolt, non-keyed, natural anodized
		DBOT600NRQ	1' 11 5/8" (600mm) dropbolt, non-keyed, bronze powdercoat
		DBOT600NRW	1' 11 5/8" (600mm) dropbolt, non-keyed, white powdercoat
		DBOT600NRX	1' 11 5/8" (600mm) dropbolt, non-keyed, brushed metallic
		DBOT1000NRTG*	3' 3 3/8" (1000mm) dropbolt, non-keyed, PVD brass
		DBOT1000NRN	3' 3 3/8" (1000mm) dropbolt, non-keyed, natural anodized
		DBOT1000NRQ	3' 3 3/8" (1000mm) dropbolt, non-keyed, bronze powdercoat
		DBOT1000NRW	3' 3 3/8" (1000mm) dropbolt, non-keyed, white powdercoat
		DBOT1000NRX	3' 3 3/8" (1000mm) dropbolt, non-keyed, brushed metallic

* Longer lead times apply. Please contact Centor for details.

Door Size Calculator

To calculate the dimensions of the doors or openings we strongly recommend using Centor's "Doorcalc" program, which is a Microsoft Excel spreadsheet. To manually calculate door sizing for an opening, follow these steps:

- 1 Prepare a basic sketch of your door opening (see worked example), to visualise clearances and check sizes.
- 2 The calculation is based on all panels being equal width, using half-offset hinges (Patent Pending). Note that the allowance between each panel is 4mm although hinge thickness is less - this allowance has been determined by consultation with fabricators as the best approximation for calculation. Clearance between hinges and hinge pins, coupled with the pressure from compression seals accounts for the allowance being larger than the nominal hinge flap thickness.
- 3 Recommended clearances are as follows;

		Ν
	Panel width is:	$W = L - 2 \times JP - (PP \times (N - 1)) **$
	Total number of panels	Ν
	Opening width	L
4	Panel width	W
	Bottom of panel to sill	13/32" (10mm)
	Top of panel to head	13/32" (10mm)
	Panel to panel (door closed)	PP – 5/32" (4mm)
	Jamb to panel (door closed)	JP – 9/32" (7mm)

Worked Examples

Clear opening size 7' 11 1/2" high x 13' 9 11/32" wide (L), and a 3L x 2R arrangement.

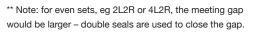
W = 2' 8 27/32"

Check against your door layout:

L = 2 (9/32") + 4 (5/32") + 5 (2' 8 27/32") = 13' 9 11/32" (OK)

The panel height is the opening height less the nominal top and bottom clearances:

Panel Height H = 7' 11 1/2" - 13/32" - 13/32" = 7' 10 7/8"



 $W = L - 2 \times JP - (PP \times N)$

Ν



Common Panel Layouts

HAR	HARDWARE LEGEND				
PS	pivot set	HHS	half offset hinge set		
WPS	wall pivot set	HS	hinge set (flat)		
ICS	intermediate carrier set	EH	external handle		
LCS	left carrier set	DB	dropbolt / TL twinpoint lock		
RCS	right carrier set	IP	internal pull handle		

LEGEND

Passage set Handles / lock sets

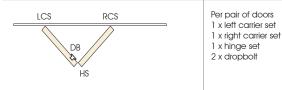
Twinpoint lock

Dropbolts top and bottom or

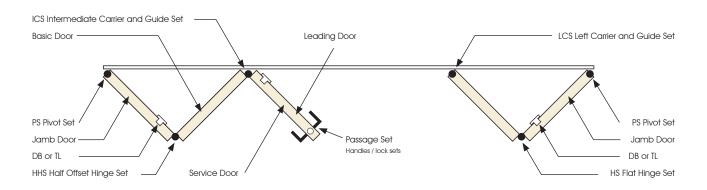


Note> Wall Pivot Set required for doors over 7' 4" (2250mm) in height.

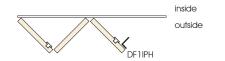
FLOATING DOOR PAIRS



HARDWARE APPLICATION (3L2R)



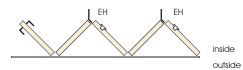
OUTWARD APPLICATION INTERNAL HANDLE OPTIOI



Use one internal pull handle on exit door (outward 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.

INWARD APPLICATION EXTERIOR HANDLE OPTION



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

CODE	OPENING CONFIGURATION	HARDWARE
2L	WPS, PS not accessible from exterior RCS HS	1 x pivot set 1 x wall pivot set* 1 x right carrier set 1 x hinge set 2 x dropbolt or 1 x twinpoint lock
2L1R	WPS, PS WPS, PS	2 x pivot set 2 x wall pivot set* 1 x right carrier set 1 x hinge set 2 x dropbolt or 1 x twinpoint lock
3L	WPS, PS ICS	1 x pivot set 1 x wall pivot set* 1 x intermediate carrier set 1 x half offset hinge set 2 x dropbolt or 1 x twinpoint lock
3L1R	WPS, PS ICS WPS, PS	2 x pivot set 2 x wall pivot set* 1 x intermediate carrier set 1 x half offset hinge set 4 x dropbolt
4L	WPS, PS ICS RCS not accessible from exterior	1 x pivot set 1 x wall pivot set* 1 x intermediate carrier set 1 x right carrier set 2 x half offset hinge set 4 x dropbolt or 2 x twinpoint lock
4L1R	WPS, PS ICS WPS, PS HHS HHS CS	2 x pivot set 2 x wall pivot set* 1 x intermediate carrier set 1 x right carrier set 2 x half offset hinge set 4 x dropbolt or 2 x twinpoint lock
3L2R	WPS, PS ICS WPS, PS LCS WPS, PS HHS	2 x pivot set 2 x wall 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 or 2 x twinpoint lock
5L	WPS, PS ICS ICS	1 x pivot set 1 x wall pivot set* 2 x intermediate carrier set 1 x hinge set 1 x haif offset hinge set 4 x dropbolt or 2 x twinpoint lock
3L3R	WPS, PS ICS may be reversed ICS WPS, PS HHS HHS	2 x pivot set 2 x wall pivot set* 2 x intermediate carrier set 2 x half offset hinge set 6 x dropbolt
7L	WPS, PS ICS ICS ICS	1 x pivot set 1 x wall pivot set* 3 x intermediate carrier set 2 x hinge set 1 x half offset hinge set 6 x dropbolt or 3 x twinpoint lock
4L3R	WPS, PS ICS RCS ICS WPS, PS HHS HHS HHS	2 x pivot set 2 x wall pivot set* 2 x intermediate carrier set 1 x right carrier set 3 x half offset hinge set 6 x dropbolt or 3 x twinpoint lock
5L2R	WPS, PS ICS ICS LCS WPS, PS HHS HS HS HS	2 x pivot set 2 x wall 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 or 3 x twinpoint lock
5L3R	WPS, PS ICS ICS ICS WPS, PS HHS HS HS HS HS	2 x pivot set 2 x wall pivot set* 3 x intermediate carrier set 1 x hinge set 2 x half offset hinge set 8 x dropbolt

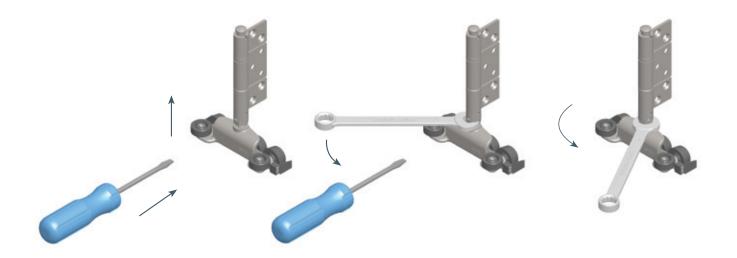
*Wall Pivot Set recommended for doors over 4' 11" (1500mm) high and required for doors over 7' 4" (2250mm)

CODE	OPENING CONFIGURATION	HARDWARE
2R	PS, WPS not accessible from exterior	1 x pivot set 1 x wall pivot set* 1 x left carrier set 1 x hinge set 2 x dropbolt or 1 x twinpoint lock
1L2R	WPS, PS WPS, PS	2 x pivot set 2 x wall pivot set* 1 x left carrier set 1 x hinge set 2 x dropbolt or 1 x twinpoint lock
3R	ICS WPS, PS	1 x pivot set 1 x wall pivot set* 1 x intermediate carrier set 1 x half offset hinge set 2 x dropbolt or 1 x twinpoint lock
1L3R	WPS, PS ICS WPS, PS	2 x pivot set 2 x wall pivot set* 1 x Intermediate carrier set 1 x half offset hinge set 4 x dropbolt
2L2R	WPS, PS RCS LCS WPS, PS not accessible from exterior	2 x pivot set 2 x wall pivot set* 1 x right carrier set 1 x left carrier set 2 x hinge set 4 x dropbolt or 2 x twinpoint lock
1L4R	WPS, PS LCS ICS WPS, PS	2 x pivot set 2 x wall pivot set* 1 x Intermediate carrier set 1 x left carrier set 2 x half offset hinge set 4 x dropbolt or 2 x twinpoint lock
4R	LCS ICS WPS, P5 not accessible from exterior	1 x pivot set 1 x wall pivot set* 1 x intermediate carrier set 1 x left carrier set 2 x half offset hinge set 4 x dropbolt or 2 x twinpoint lock
2L3R	WPS, PS RCS ICS WPS, PS	2 x pivot set 2 x wall pivot set* 1 x intermediate carrier set 1 x right carrier set 1 x hinge set 1 x half offset hinge set 4 x dropbolt or 2 x twinpoint lock
5R	ICS ICS WPS.PS	1 x pivot set 1 x wall pivot set* 2 x intermediate carrier set 1 x hinge set 1 x half offset hinge set 4 x dropbolt or 2 x twinpoint lock
3L4R	WPS, PS ICS LCS ICS WPS, PS HHS HHS HHS	2 x pivot set 2 x wall pivot set* 2 x intermediate carrier set 1 x left carrier set 3 x half offset hinge set 6 x dropbolt or 3 x twinpoint lock
7R	ICS ICS ICS WPS, PS	1 x pivot set 1 x wall pivot set* 3 x Intermediate carrier set 2 x hinge set 1 x half offset hinge set 6 x dropbolt or 3 x twinpoint lock
2L5R	WPS, PS RCS ICS ICS WPS, PS HS HS HHS	2 x pivot set 2 x wall 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 or 3 x twinpoint lock
98	LCS ICS ICS ICS WPS, PS not accessible from exterior	1 x pivot set 1 x wall pivot set* 3 x intermediate carrier set 1 x left carrier set 2 x hinge set 2 x half offset hinge set 8 x dropbolt or 4 x twinpoint lock

*Wall Pivot Set recommended for doors over 4' 11" (1500mm) high and required for doors over 7' 4" (2250mm)

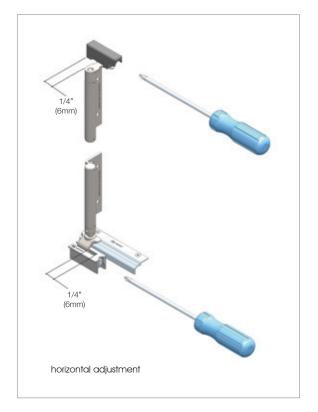
Surelock 4[™] Adjustment

Surelock 4^{TM} is Centor's patented carrier pin locking system which ensures that once door heights are set at the top pivots, intermediate and end carriers, they stay set!



Using Surelock 4[™] is simple

- 1 Insert a small flat blade screwdriver into slot and lift the slider.
- 2 With the slider lifted start the adjustment using a 9/16" (14mm) spanner on the adjustment nut.
- 3 Turn the adjustment nut a full revolution until it automatically locks back in place.
- 4 Repeat if necessary [maximum adjustment +/- 1/8" (4mm)].



While every effort has been made to ensure the accuracy of the information in this publication, Centor assume no responsibility for errors or omissions or any consequences of reliance solely on this publication.



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