

centor ARCHITECTURAL

E3 bifolding door hardware system for panels to 80kg

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creating systems for windows & doors

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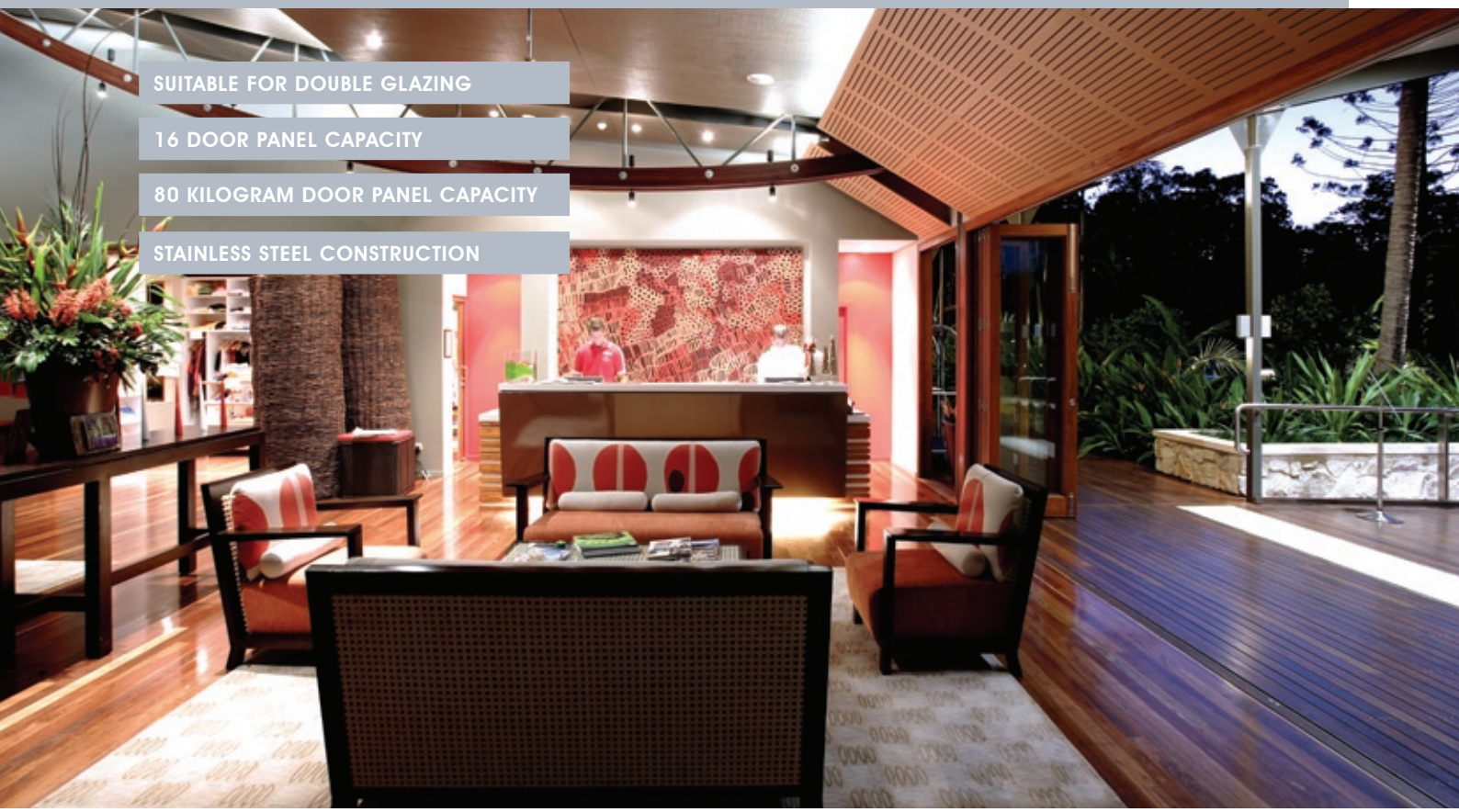
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Creating Seamless Transitions

Centor E3 is a medium-heavy bifolding door hardware system for door panels to 80 kilograms – Centor Architectural's latest solution to the challenge of creating truly seamless transitions between indoor and outdoor spaces. E3 is suitable for a range of residential and commercial applications which exceed the capacity of the medium E2 system but do not demand the substantial heavy door capacity of Centor E4.



Allowing for the extra weight of double-glazing, E3-based doors promise unprecedented insulation against noise and temperature variation when doors are closed. Likewise the ability to utilise even sturdier door construction and materials enhances security and resistance to the elements in the most exposed of applications. Centor's reputation for effortless operation remains intact even as maximum panel weight increases, making E3 the perfect way to utilise bifold technology in even the toughest conditions.

E3 Specifications	
max opening	16000mm
max panel weight	80kg
max panel height	3000mm
max panel width	1000mm
min panel thickness	35mm
max number of panels	16 (8 each direction)

Note> Specifications are intended as a guide only. Calculated weight check should be performed to ensure doors built to maximum height and width do not exceed maximum weight.



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Imagine The Possibilities

Business or pleasure, E3 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.



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 or posts. E3 can be relied upon to add flair and flexibility to the widest range of applications, from private residences to the most ambitious store front, restaurant or commercial project. The considerable weight-bearing capacity of the elegant, precisely functioning E3 ensures that possible applications for Centor's bifold range are limited only by the imaginations of the world's most progressive architects and designers.

Engineered to withstand the most severe weather, E3 is just as suited to interior use where the ability to visually and physically connect spaces can be just as beneficial and the sound-proofing effect of double-glazing just as important. The benefits to the end-user in flexibly managing interior or exterior space to suit lifestyle or business are literally changing the face of contemporary building design.

CREATING SPACE



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High Performance System

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.

UNCOMPROMISED INTERNAL ENVIRONMENT

E3 is truly a system for all seasons and all locations. Teamed with quality door panels, E3 hardware ensures a formidable barrier against the elements when closed. The integrity of the required internal environment is never compromised.

Rain and Wind

Centor hardware was utilised in the first tracked bifolding door system to be certified under Australian Standard AS2047, which specifies the weather performance required of external windows and sliding doors. 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 E3, 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 E3 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 E3 effectively resist air infiltration to a level up to 50 times better than a sliding door.

Noise and Temperature

With double glazing allowed for by E3's impressive panel weight capacity, unprecedented levels of insulation against noise and temperature variation are possible.



EFFORTLESS OPERATION

While E3'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

E3 carriers, guides and pivots use high grade stainless steel bearings custom machined to extremely fine tolerances on state-of-the-art German and Swiss machinery – a minimum of five 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!

Assembly and Installation

With quick-fix surface-mounted fittings assembly and installation couldn't be easier. Comprehensive instructions are included and drill jigs are available to ensure precise placement of fittings.

Adjustment

While E3 is designed to operate flawlessly well into the future, built-in adjustment mechanisms make the system tolerant of an imperfect world. Surelock™, Centor's patented carrier pin locking system ensures that once heights are set they stay set. However should door panels swell or a newly built structure settle over time, the end-user can easily make vertical and lateral adjustments simply using a screwdriver.

COLLABORATIVE DESIGN PROCESS

E3's thoughtful design doesn't achieve the highest performance in all categories on its own. It's in its element teamed 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 door sets incorporating the E3 system to ensure that the highest criteria for completed and installed doors are met even in the most unusual applications.

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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 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 extensive weather testing as part of complete door systems, all individual E3 components have been extensively laboratory tested, 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. E3 has been tested in excess of 50,000 cycles with many parts rated to over 100,000 cycles.

Corrosion Testing

Stainless steel, PVD brass, anodised aluminium and engineering-grade plastics are used throughout the E3 system and are carefully selected to maximise performance in any environment. Centor conducts regular, thorough corrosion testing in a salt spray chamber, fixing hardware to various substrates to ensure that E3 will perform admirably even in the most exposed of coastal applications.

Structural Testing

Structural proof load tests up to 3300 Pa (68 psf) have been achieved by maximum size doors using E3 system. E3 hardware components have been load tested to 3KN in accordance with AS/NZS1170.0.

Finite Element Analysis

Finite Element Analysis (FEA) is a computerised 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 structural wind load testing over some 9000 cycles (4500 positive, 4500 negative). Taking nearly eight hours this process thoroughly examines door system integrity. Small and large missile impact testing was also performed along with exacting testing for wind, water and air infiltration as part of the single toughest testing process anywhere in the world. Utilising the same technology and based on the same functional geometry as the E4 system, E3 will take the most extreme conditions in its stride.

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E3 Up Close

Even a casual glance at the E3 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 E3 looks even better up close!

Materials and Finishes

E3 carriers, guides, pivots and hinges are available in brushed stainless steel for a modern industrial look, a PVD brass finish over stainless steel should a more traditional finish be required, or custom powdercoated in a range of colours. Head tracks and sills are produced in extruded aluminium with the option of satin or gold anodised or custom powdercoated finishes. The sills have an option with timber trims. Floor guide channels are produced in aluminium in various finishes with black polypropylene liner.

Panel Size and Materials

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

Design Features

A floating wall pivot is used to control door stile deflection and bowing on tall doors caused by wind loads or climatic conditions. Offset floor guides and floor pivots allow the guide channel to be concealed under the doors when they are closed. Straight guide option is also available. Top-rolling function means performance is never compromised by refuse in tracks.

Dropbolts

Easily installed with a dedicated router bit available from Centor, DF and DO dropbolts are available in a range of lengths and finishes to suit every E3 application. Available keyed and non-keyed, the clean-lined DF and DO dropbolts anchor doors firmly in the closed position and, together with the weather seals, eliminate rattling in strong winds.



> Centor's E3 Intermediate Carrier
Up close the attention to detail and commitment to quality are obvious.

SCREENING

E3 is fully compatible with the ES3 insect Door Screen, Centor's superbly effective, world-first integrated screening solution for bifold scale openings.

E3 Specifications	
max opening	16000mm
max panel weight	80kg
max panel height	3000mm
max panel width	1000mm
min panel thickness	35mm
max number of panels	16 (8 each direction)

Note> Specifications are intended as a guide only. Calculated weight check should be performed to ensure doors built to maximum height and width do not exceed maximum weight.

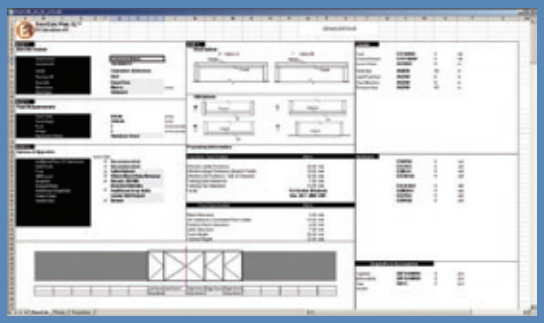


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E3 Assurance

If success in modern design can be measured by the degree of comfort and ease afforded to the end-user, then Centor E3 again rates highly. E3's superior function and performance goes a long way to creating a relaxed setting, while a range of other measures allow the system to be utilised with complete confidence.





Free Specification And Ordering Software
Doorcalc, Centor's free specification and ordering software simplifies component selection and assists with calculating size and number of door panels. Doorcalc can be downloaded from www.centor.com.au It features intuitive drop-down 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 E3 system responds to an increasingly security conscious market place with measures designed to ensure unwanted visitors are excluded – as well as the elements.

Concealed Fittings
When doors utilising E3 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 E3 system incorporates locking screw technology which ensures the E3 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 E3 hardware.

For full details refer to the current Centor Architectural Catalogue, or view information on line at www.centor.com.au

HARDWARE SELECTION

E3 is a fully integrated system suitable for applications up to 80 kilograms per panel in timber, aluminium, PVC or fibreglass. Architects and specifiers should feel comfortable simply specifying 'Centor E3' and leaving detailed component selection to the builder, joiner or fabricator.



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4 CREATING CHOICE

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 four metre high walls of glass which fold away in seconds, Centor bifold systems create a formidable barrier against the elements, yet glide open with finger-tip ease.

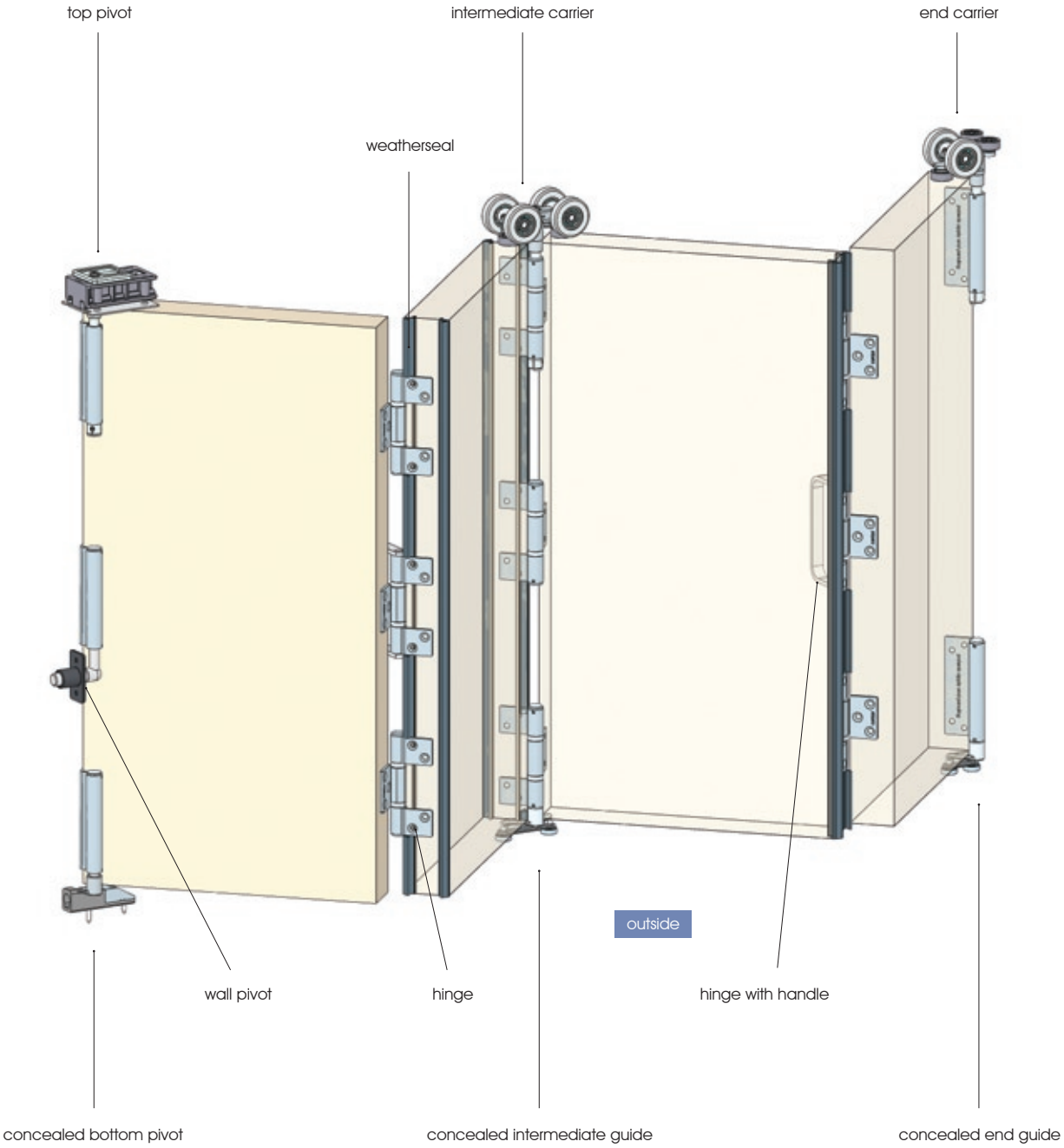


EW and E2 are the mainstays of this flexible product range. Developed first and constantly upgraded since their inception they remain the perfect choice for the private residence or lighter commercial application. E3 and E4 are Centor's responses to the demands of architects and consumers wishing to expand the potential of bifold innovation into heavier-duty residential and commercial applications. The medium-heavy E3 doubles the panel weight capacity of the E2 system, making even sturdier panel materials and double glazing possible. The heavy E4 system takes it even further. A massive panel weight capacity (120kg) and substantially increased height, width and overall measurement specifications ensures that Centor bifold systems remain the perfect choice for every project.



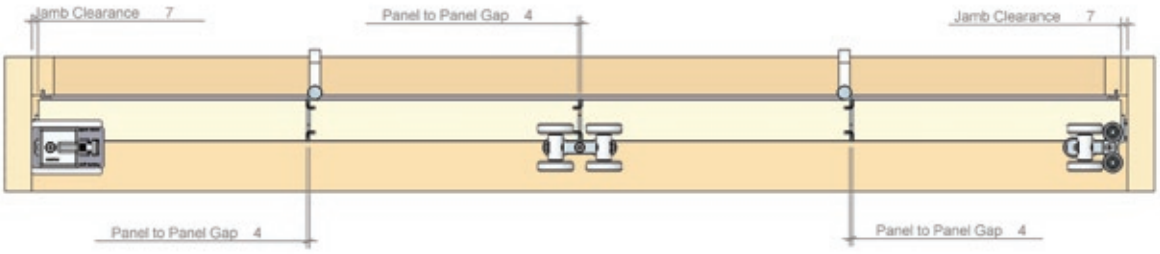
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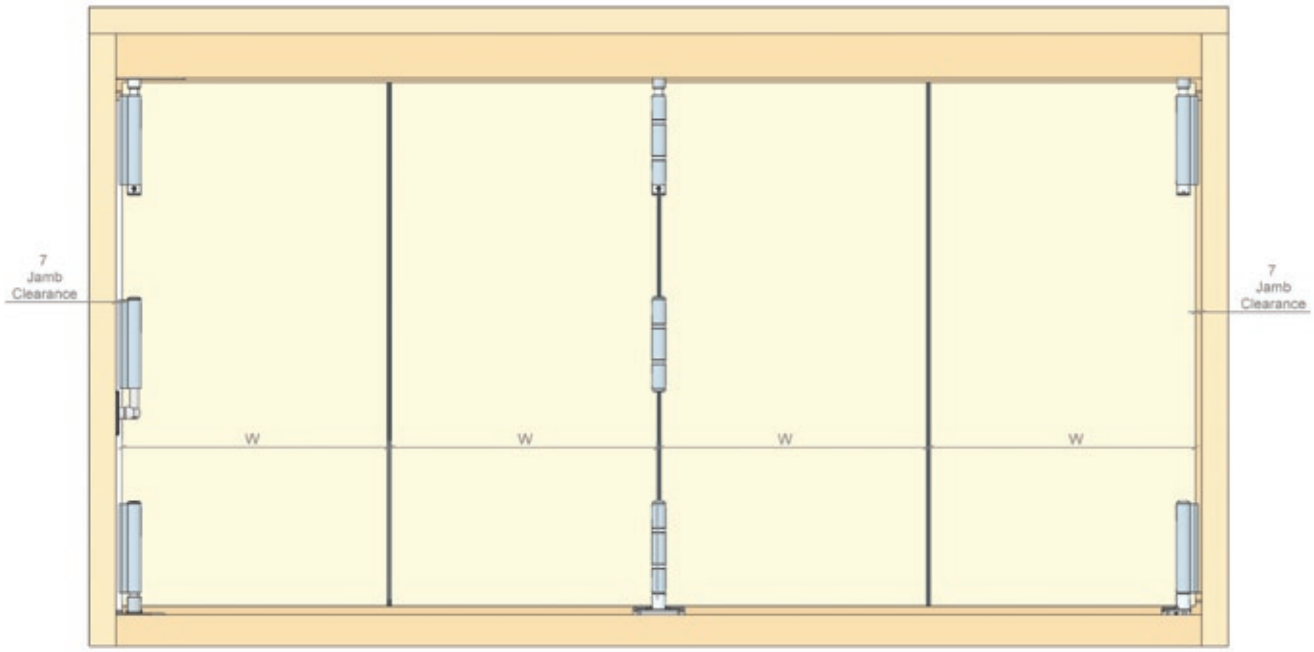
E3 Product Details



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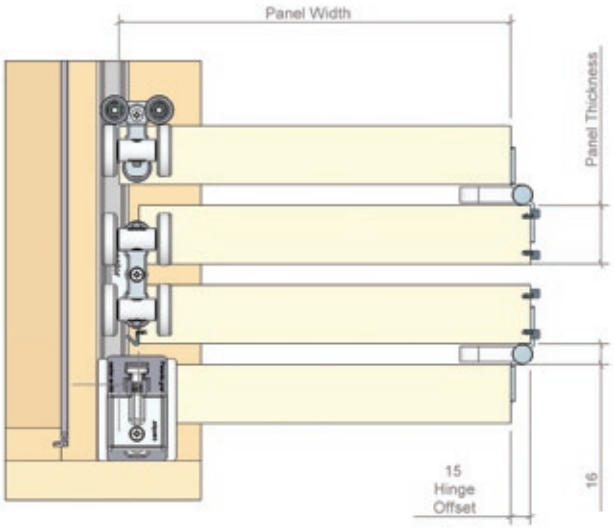
Architectural Detail

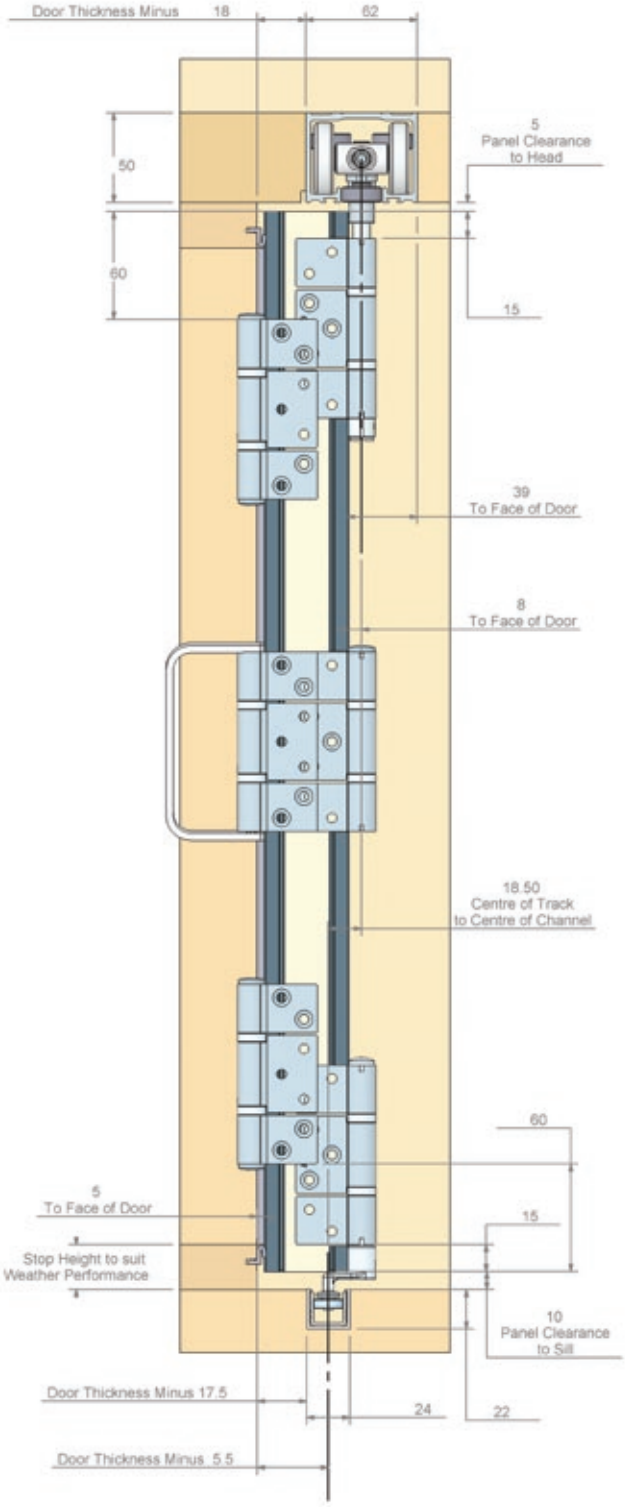




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Architectural Detail



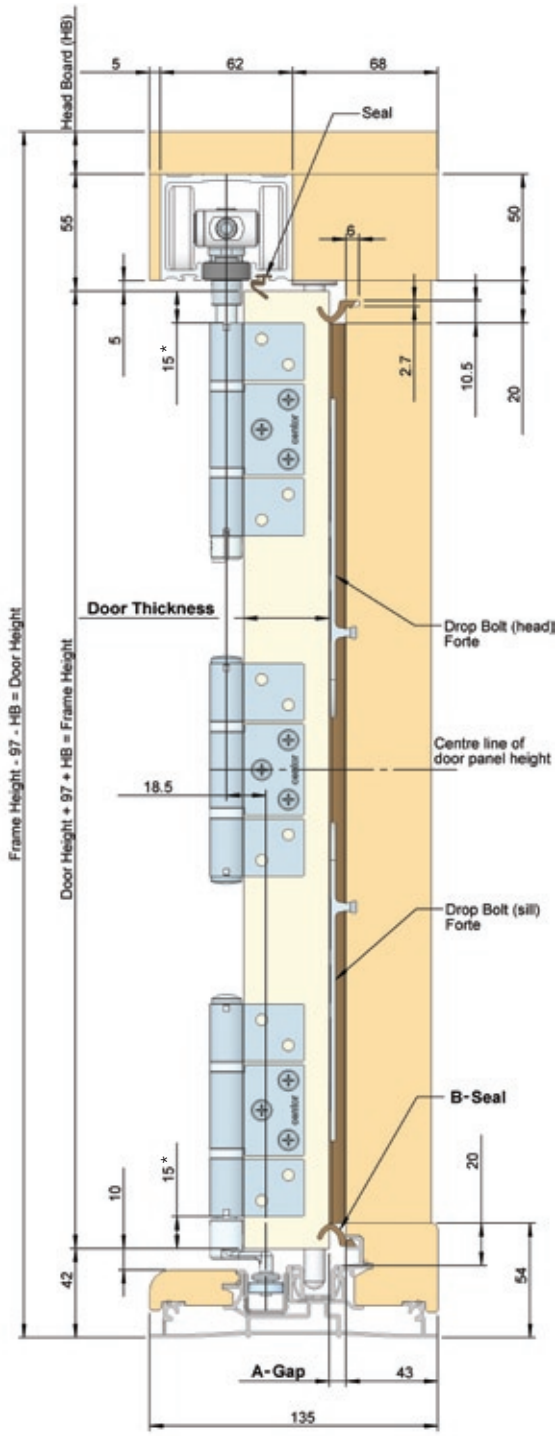


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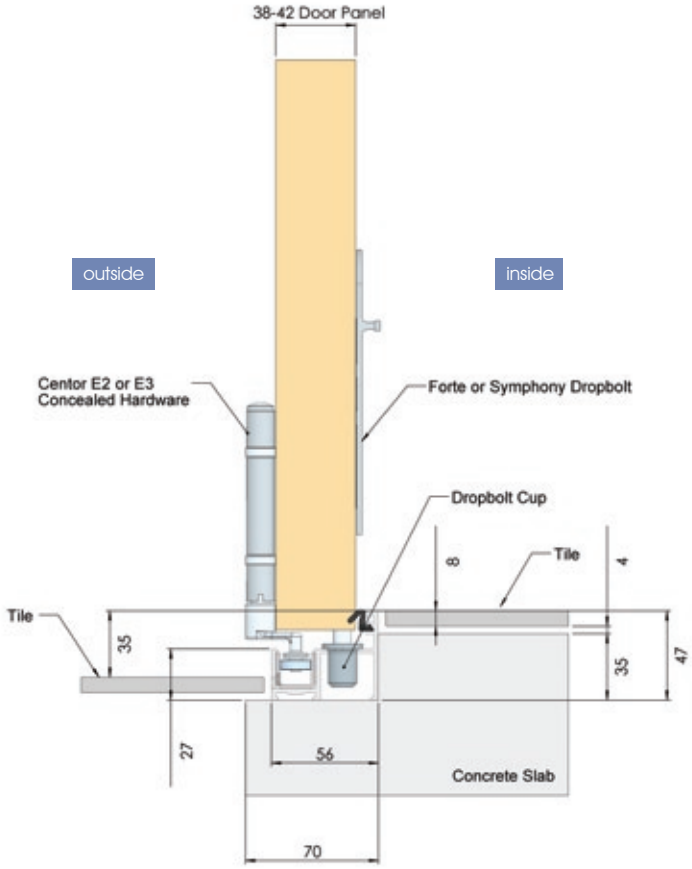
E3 CONCEALED INSTALLATION DETAILS

(outward with 40mm door panel shown)



* 15mm for pivot, intermediate and left-hand and right-hand carrier sets.
60mm for hinge and half offset hinges.

E2/E3 CONCEALED NARROW SILL





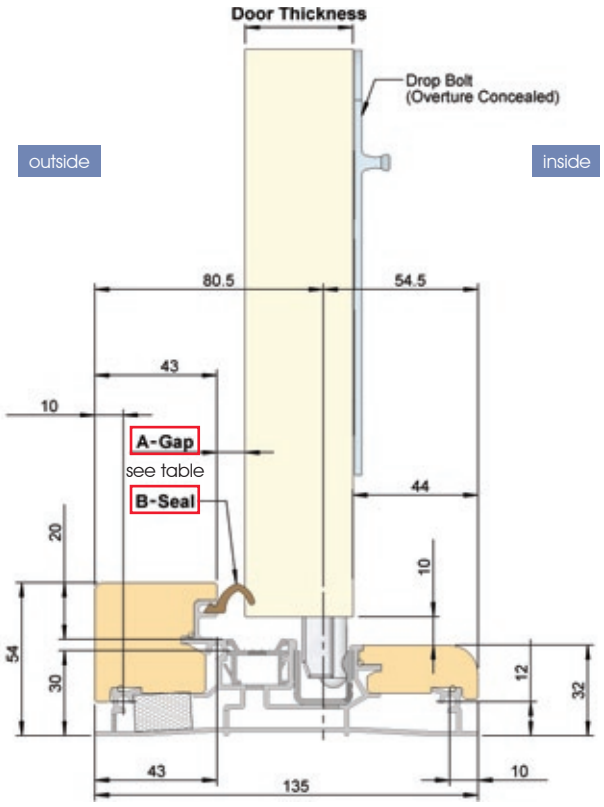
READY-MADE STYLE!

Centor Architectural's ready-made Door Sill systems dramatically simplify the installation of bifold doors in exposed applications and ensure a stylish, effective result. Integrating Centor floor guide channels provision for straightforward dropbolt placement and ingenious solutions to the issue of floor-channel drainage, Centor Door Sills fit neatly into place between door jambs with the minimum of fuss.

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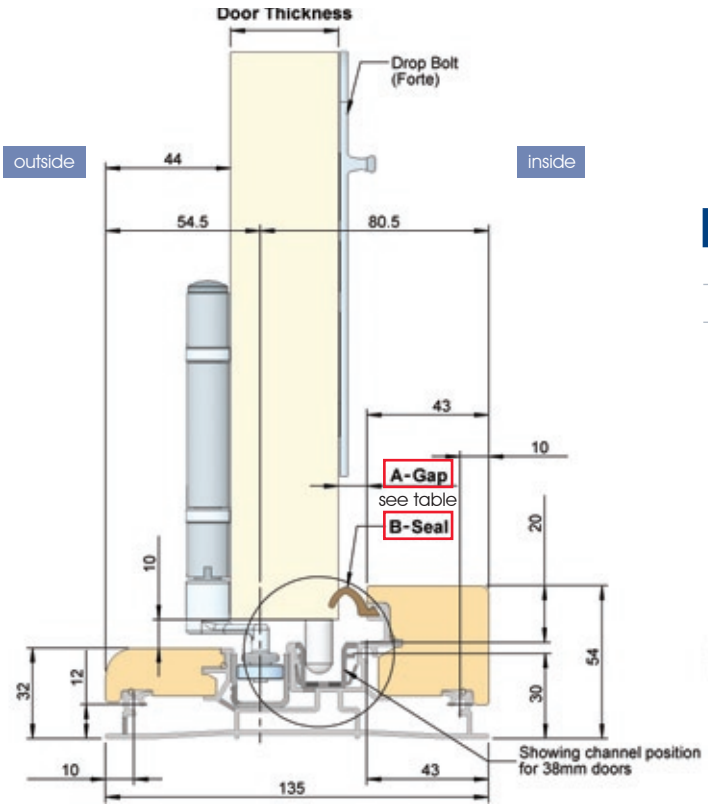
Architectural Detail

E2/E3 CONCEALED INWARD SILL DETAILS

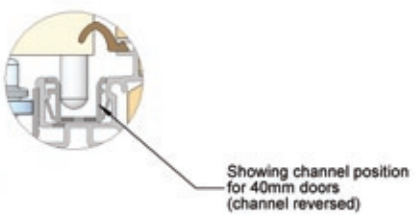


DOOR THICKNESS	A – GAP	B – SEAL
38mm door thickness	10mm	E4QLS
40mm door thickness	8mm	E4QLS
42mm door thickness	6mm	AQ21

E2/E3 CONCEALED OUTWARD SILL DETAILS



DOOR THICKNESS	A – GAP	B – SEAL
38mm door thickness	10mm	E4QLS
40mm door thickness	8mm	E4QLS



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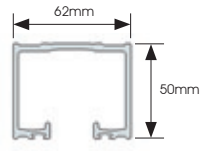
Component Selection

E3 is specified with 5 separate groups:

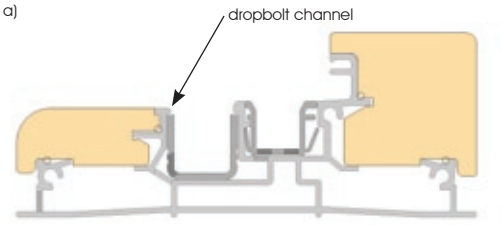
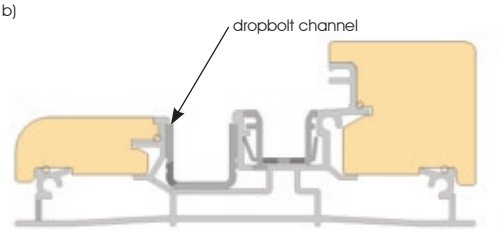
1 **track**
2 **sill with channel**
3 **hardware**
4 **weathersealing**
5 **dropbolts**

Components are required from all 5 groups to build an E3 folding door system.

TRACK

PART	TRACK	PRODUCT CODE	DESCRIPTION
	Aluminium track, machined	E3TAM4N	4000mm machined track, natural anodised
		E3TAM4G	4000mm machined track, gold anodised
		E3TAM6N	6000mm machined track, natural anodised
		E3TAM6G	6000mm machined track, gold anodised

SILL / OUTWARD E2/E3 SILL WITH TIMBER

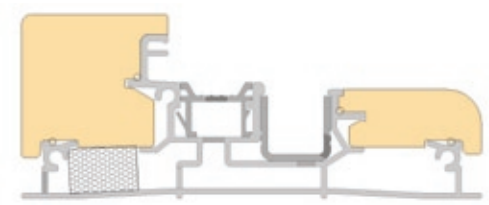
PARTS	PRODUCT CODE	DESCRIPTION
a) 	E2CS30NKWL	3000mm concealed sill with timber, natural anodised with kwila
	E2CS30RKWL	3000mm concealed sill with timber, bronze anodised with kwila
	E2CS42NKWL	4200mm concealed sill with timber, natural anodised with kwila
	E2CS42RKWL	4200mm concealed sill with timber, bronze anodised with kwila
b) 	E2CS48NKWL	4800mm concealed sill with timber, natural anodised with kwila
	E2CS48RKWL	4800mm concealed sill with timber, bronze anodised with kwila
	E2CS57NKWL	5700mm concealed sill with timber, natural anodised with kwila
	E2CS57RKWL	5700mm concealed sill with timber, bronze anodised with kwila

a) assembly for 38mm doors
b) assembly for 40mm doors (dropbolt channel reversed)

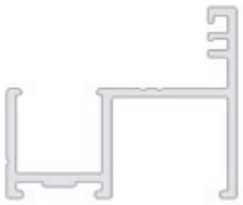
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Component Selection

SILL / INWARD E2/E3 SILL WITH TIMBER

PARTS	PRODUCT CODE	DESCRIPTION
	E2CIS57NKWL	E2/E3 5700mm concealed externall inward sill, natural anodised with kwila

SILL / E2/E3 CONCEALED NARROW SILL

PARTS	PRODUCT CODE	DESCRIPTION
	E2CNS4N	E2/E3 4000mm concealed narrow sil, natural anodised
	E2CNS6N	E2/E3 6000mm concealed narrow sil, natural anodised

CHANNEL

PARTS	CHANNEL	PRODUCT CODE	DESCRIPTION
	Concealed channel 21mm, poly channel	E22FCP4	4000mm floor channel, polypropylene
		E22FCP6	6000mm floor channel, polypropylene
Replacement polypropylene channel fits inside aluminium channel			
	Concealed channel 24mm, retainer	E22FCR4N	4000mm floor channel retainer, natural anodised
		E22FCR6N	6000mm floor channel retainer, natural anodised
		E22FCR4G	4000mm floor channel retainer, gold anodised
		E22FCR6G	6000mm floor channel retainer, gold anodised
		E22FCR4R	4000mm floor channel retainer, bronze anodised
		E22FCR6R	6000mm floor channel retainer, bronze anodised
Aluminium channel			

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Component Selection

CHANNEL WITH POLY INSERT

PARTS	CHANNEL	PRODUCT CODE	DESCRIPTION
	Concealed channel 24mm, retainer and poly channel	E22FCR4NP	4000mm floor channel retainer, natural anodised with poly channel
		E22FCR4GP	4000mm floor channel retainer, gold anodised with poly channel
		E22FCR6NP	6000mm floor channel retainer, natural anodised with poly channel
		E22FCR6GP	6000mm floor channel retainer, gold anodised with poly channel
Aluminium channel with insert			

WEATHERSEAL

PART	PRODUCT CODE	PART DESCRIPTION
Perimeter 	AQ21B	Aquamac 21 Schlegel Kerf seal, brown
	AQ21L	Aquamac 21 Schlegel Kerf seal, black
	AQ21W	Aquamac 21 Schlegel Kerf seal, white
Panel to panel 	AQ63B	Aquamac 63 Schlegel Kerf seal, brown
	AQ63L	Aquamac 63 Schlegel Kerf seal, black
	AQ63W	Aquamac 63 Schlegel Kerf seal, white
Access panel 	AQ109B	Aquamac 109 Schlegel Kerf seal, brown
	AQ109L	Aquamac 109 Schlegel Kerf seal, black
	AQ109W	Aquamac 109 Schlegel Kerf seal, white
Perimeter 	E4QLSB	Schlegel Q-lon perimeter weatherseal for 38 and 40mm doors, brown
	E4QLSW	Schlegel Q-lon perimeter weatherseal for 38 and 40mm doors, white

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Hardware Selection

RIGHT CARRIER SET

PARTS	PARTS ON PANELS	PRODUCT CODE	DESCRIPTION
		E3CRCSS	concealed right hand carrier set, stainless steel
		E3CRCSTG	concealed right hand carrier set, PVD brass
		E3CRCSQ	concealed right hand carrier set, oil rubbed bronze powdercoat
		E3CRCSPC*	concealed right hand carrier set, custom powdercoat

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

LEFT CARRIER SET

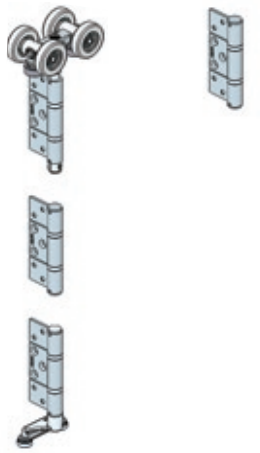
PARTS	PARTS ON PANELS	PRODUCT CODE	DESCRIPTION
		E3CLCSS	concealed left hand carrier set, stainless steel
		E3CLCSTG	concealed left hand carrier set, PVD brass
		E3CLCSQ	concealed left hand carrier set, oil rubbed bronze powdercoat
		E3CLCSPC*	concealed left hand carrier set, custom powdercoat

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

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Hardware Selection

INTERMEDIATE CARRIER SET (FOURTH HINGE RECOMMENDED FOR DOORS OVER 2250MM)

PARTS	PARTS ON PANELS	PRODUCT CODE	DESCRIPTION
a) b) 	a)  b) 	E3CICSS	concealed intermediate set, stainless steel
		E3CICSTG	concealed intermediate set, PVD brass
		E3CICSQ	concealed intermediate set, oil rubbed bronze powdercoat
		E3CICSPC*	concealed intermediate set, custom powdercoat
		E3HNHS	single straight hinge, stainless steel
		E3HNHTG	single straight hinge, PVD brass
		E3HNHQ	single straight hinge, oil rubbed bronze powdercoat
		E3HNHPC*	single straight hinge, custom powdercoat

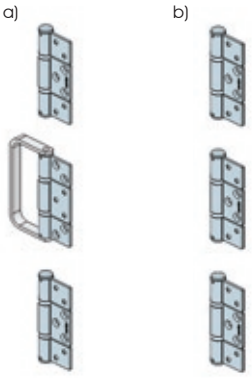
a) intermediate carrier set with concealed bottom guide
b) fourth hinge recommended for doors over 2250mm

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

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Hardware Selection

HINGE SET

PARTS	PARTS ON PANELS	PRODUCT CODE	DESCRIPTION
a) b) 	a)  b) 	E3HSS	hinge set with handle, stainless steel
		E3HSTG	hinge set with handle, PVD brass
		E3HSQ	hinge set with handle, oil rubbed bronze powdercoat
		E3HSPC*	hinge set with handle, custom powdercoat
		E3HNHSS	hinge set no handle, stainless steel
		E3HNHSTG	hinge set no handle, PVD brass
		E3HNHSQ	hinge set no handle, oil rubbed bronze powdercoat
		E3HNHSPC*	hinge set no handle, custom powdercoat

a) hinge set with handle for outward doors
b) hinge set no handle for inward doors

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

SINGLE HINGE

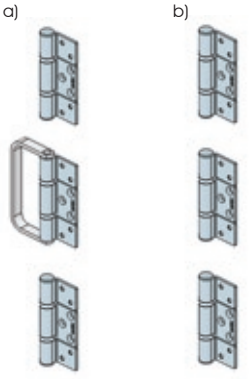
PARTS	PRODUCT CODE	DESCRIPTION
a) 	E3HNHS	single straight hinge, stainless steel
	E3HNHTG	single straight hinge, PVD brass
	E3HNHQ	single straight hinge, oil rubbed bronze powdercoat
	E3HNHPC*	single straight hinge, custom powdercoat

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

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Hardware Selection

HALF OFFSET HINGE SET

PARTS	PARTS ON PANELS	PRODUCT CODE	DESCRIPTION
a) b) 	a)  b) 	E3HHSS	half offset hinge set with handle, stainless steel
		E3HHSTG	half offset hinge set with handle, PVD brass
		E3HHSQ	half offset hinge set with handle, oil rubbed bronze powdercoat
		E3HHSPC*	half offset hinge set with handle, custom powdercoat
		E3HHNHSS	half offset hinge set no handle, stainless steel
		E3HHNHSTG	half offset hinge set no handle, PVD brass
		E3HHNHSQ	half offset hinge set no handle, oil rubbed bronze powdercoat
		E3HHNHSPC*	half offset hinge set no handle, custom powdercoat

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 Architectural for details.

SINGLE HALF OFFSET HINGE

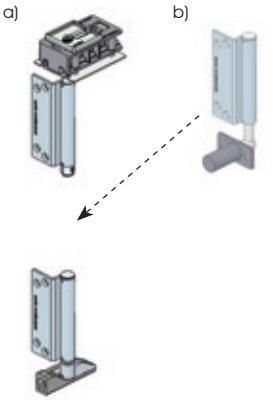
PARTS	PRODUCT CODE	DESCRIPTION
a) 	E3HHNHS	single half offset hinge, stainless steel
	E3HHNHTG	single half offset hinge, PVD brass
	E3HHNHQ	single half offset hinge, oil rubbed bronze powdercoat
	E3HHNHPC*	single half offset hinge, custom powdercoat

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

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Hardware Selection

PIVOT SET / WALL PIVOT

PARTS	PARTS ON PANELS	PRODUCT CODE	DESCRIPTION
a) b) 	a)  b) 	E3CPSS	concealed pivot set, stainless steel
		E3CPSTG	concealed pivot set, PVD brass
		E3CPSQ	concealed pivot set, oil rubbed bronze powdercoat
		E3CPSPC*	concealed pivot set, custom powdercoat
		E3WPSS	wall pivot set, stainless steel
		E3WPSTG	wall pivot set, PVD brass
		E3WPSQ	wall pivot set, oil rubbed bronze powdercoat
		E3WPSPC*	wall pivot set, custom powdercoat

a) pivot set
b) jamb mounted middle wall pivot recommended for doors over 2250mm to central deflection and bowing

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

EXTERNAL HANDLE

PARTS	PARTS ON PANELS	PRODUCT CODE	DESCRIPTION
		E3EHS	external handle, stainless steel
		E3EHTG	external handle, PVD brass
		E3EHQ	external handle, oil rubbed bronze powdercoat
		E3EHPC*	external handle, custom powdercoat

single hinge with handle for outward and inward application (please refer to Common Panel Layouts page 25 fore more details)

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

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Hardware Selection

Centor's stylish, flush-mounting dropbolts are the ideal solution for fastening or securing bifold doors based on the E3 system. Easily installed with a dedicated router bit available from Centor, DF and DO dropbolts are available in a range of lengths and finishes to suit every application. Available keyed and non-keyed, DF and DO dropbolts can be keyed alike and re-keyed by a locksmith.



CENTOR DF

Rated to resist the most extreme wind conditions (up to 450kg in certain timbers) DF dropbolts feature rounded styling and are suited to use with outward opening bifold doors. Available in 200mm, 400mm, 600mm and 1000mm lengths with a 20mm throw they come in natural and gold anodised, chrome, brushed metallic and custom powdercoated finishes. Keyed DF dropbolts feature a unique bifold damage-proofing mechanism which prevents the bolt being operated while the key remains in the lock.

CENTOR DO

Offering all the style, security and choice of DF, but with varying degrees of offset in the bolt shaft, DO dropbolts suit inward opening doors based on the E3 Concealed system. DO is installed at the top of the door panel while DO Concealed locks into the floor channel of the bifold system, meaning no extra holes or slots to drill or machine in the floor surface or door-sill.

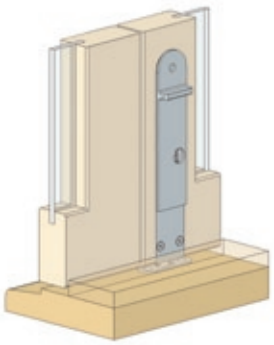


Centor DF dropbolt

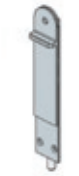
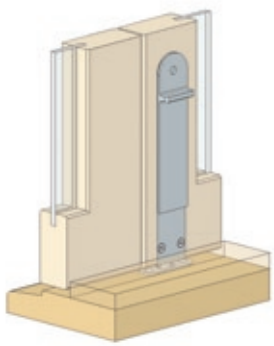
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Dropbolts (outward opening)

DF / KEYED

PARTS	ARCHITECTURAL DETAIL	PRODUCT CODE	DESCRIPTION
		DBFO200KRC	200mm dropbolt, keyed, chrome
		DBFO200KRG	200mm dropbolt, keyed, gold anodised
		DBFO200KRN	200mm dropbolt, keyed, natural anodised
		DBFO200KRPC	200mm dropbolt, keyed, custom powdercoat
		DBFO200KRX	200mm dropbolt, keyed, brushed metallic
		DBFO400KRC	400mm dropbolt, keyed, chrome
		DBFO400KRG	400mm dropbolt, keyed, gold anodised
		DBFO400KRN	400mm dropbolt, keyed, natural anodised
		DBFO400KRPC	400mm dropbolt, keyed, custom powdercoat
		DBFO400KRX	400mm dropbolt, keyed, brushed metallic
		DBFO600KRG	600mm dropbolt, keyed, gold anodised
		DBFO600KRN	600mm dropbolt, keyed, natural anodised
		DBFO600KRX	600mm dropbolt, keyed, brushed metallic

DF / NON-KEYED

PARTS	ARCHITECTURAL DETAIL	PRODUCT CODE	DESCRIPTION
		DBFO200NRC	200mm dropbolt, non-keyed, chrome
		DBFO200NRG	200mm dropbolt, non-keyed, gold anodised
		DBFO200NRN	200mm dropbolt, non-keyed, natural anodised
		DBFO200NRPC	200mm dropbolt, non-keyed, custom powdercoat
		DBFO200NRX	200mm dropbolt, non-keyed, brushed metallic
		DBFO400NRC	400mm dropbolt, non-keyed, chrome
		DBFO400NRG	400mm dropbolt, non-keyed, gold anodised
		DBFO400NRN	400mm dropbolt, non-keyed, natural anodised
		DBFO400NRPC	400mm dropbolt, non-keyed, custom powdercoat
		DBFO400NRX	400mm dropbolt, non-keyed, brushed metallic
		DBFO600NRC	600mm dropbolt, non-keyed, chrome
		DBFO600NRG	600mm dropbolt, non-keyed, gold anodised
		DBFO600NRN	600mm dropbolt, non-keyed, natural anodised
		DBFO600NRPC	600mm dropbolt, non-keyed, custom powdercoat
		DBFO600NRX	600mm dropbolt, non-keyed, brushed metallic
		DBFO1000NRN	1000mm dropbolt, non-keyed, natural anodised
		DBFO1000NRPC	1000mm dropbolt, non-keyed, custom powdercoat
		DBFO1000NRX	1000mm dropbolt, non-keyed, brushed metallic

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Dropbolts (inward opening)

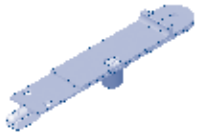
DO / KEYED (TOP OF DOORS)

PARTS	PRODUCT CODE	DESCRIPTION
	DBOE200KRG	200mm, keyed, gold anodised
	DBOE200KRX	200mm, keyed, brushed metallic
	DBOE400KRG	400mm, keyed, gold anodised
	DBOE400KRX	400mm, keyed, brushed metallic
	DBOE600KRG	600mm, keyed, gold anodised
	DBOE600KRX	600mm, keyed, brushed metallic

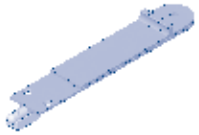
DO / NON-KEYED (TOP OF DOORS)

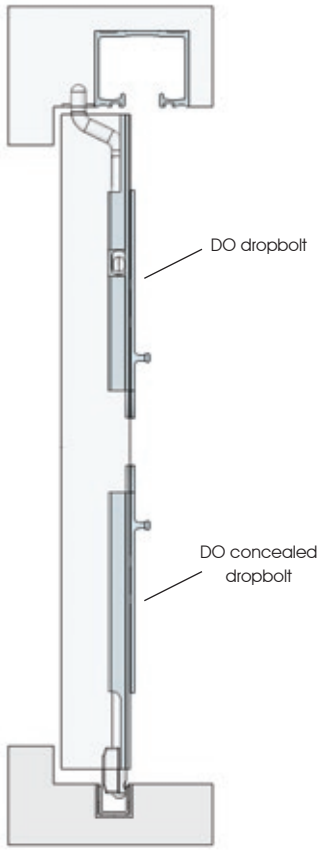
PARTS	PRODUCT CODE	DESCRIPTION
	DBOE200NRG	200mm, non-keyed, gold anodised
	DBOE200NRX	200mm, non-keyed, brushed metallic
	DBOE400NRG	400mm, non-keyed, gold anodised
	DBOE400NRX	400mm, non-keyed, brushed metallic
	DBOE600NRG	600mm, non-keyed, gold anodised
	DBOE600NRX	600mm, non-keyed, brushed metallic
	DBOE1000NRG	1000mm, non-keyed, gold anodised
	DBOE1000NRX	1000mm, non-keyed, brushed metallic

DO / KEYED (BOTTOM OF DOORS, FOR CONCEALED FLOOR CHANNEL)

PARTS	PRODUCT CODE	DESCRIPTION
	DBOC200KRC	200mm, concealed, keyed, chrome
	DBOC200KRG	200mm, concealed, keyed, gold anodised
	DBOC200KRN	200mm, concealed, keyed, natural anodised
	DBOC200KRPC	200mm, concealed, keyed, custom powdercoat
	DBOC200KRX	200mm, concealed, keyed, brushed metallic

DO / NON-KEYED (BOTTOM OF DOORS, FOR CONCEALED FLOOR CHANNEL)

PARTS	PRODUCT CODE	DESCRIPTION
	DBOC200NRC	200mm, concealed, non-keyed, chrome
	DBOC200NRG	200mm, concealed, non-keyed, gold anodised
	DBOC200NRN	200mm, concealed, non-keyed, natural anodised
	DBOC200NRPC	200mm, concealed, non-keyed, custom powdercoat
	DBOC200NRX	200mm concealed dropbolt, non-keyed, brushed metallic



Inward Opening
Concealed Guide

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Door Size Calculation

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 the following steps:

1 Prepare a basic sketch of your door opening (see worked example), to visualize 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;

- Jamb to panel (door closed) 7 mm
- Panel to panel (door closed) 4 mm
- Top of panel to head 5 mm
- Bottom of panel to sill 10.0mm for concealed guides

4 Panel width W

Opening width L

Total number of panels N

Panel width is:

$$W = \frac{L - 14 - (4 \times (N - 1))}{N} \text{ **}$$

WORKED EXAMPLES

Clear opening size 2425 high x 4200 wide (L), and a 3L x 2R arrangement.

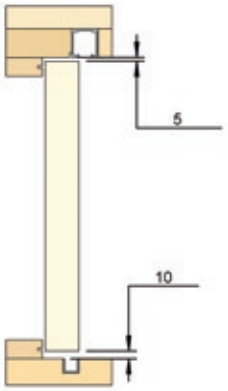
$$W = \frac{4200 - 14 - (4 \times (5 - 1))}{5}$$

$$W = 834 \text{ mm}$$

Check against your door layout:

$$L = 2(7.0) + 4(4) + 5(834) = 4200 \text{ (OK)}$$

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



** Note: for even sets, eg 2L2R or 4L2R, the meeting gap would be larger – double seals are used to close the gap.

$$W = \frac{L - 14 - (4 \times N)}{N}$$

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Common Panel Layouts

HARDWARE LEGEND

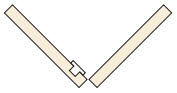
PS	pivot set	**HHS**	half offset hinge set
WPS	wall pivot set	**HS**	hinge set (flat)
ICS	intermediate carrier set	**EH**	external handle
LCS	left carrier set	**DB**	dropbolt
RCS	right carrier set		

LEGEND

Passage set
Handles / Lock sets refer to Centor Door
Furniture at www.centor.com.au

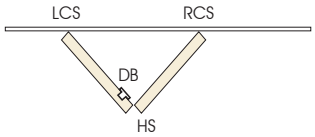


Dropbolts top and bottom



Note> Wall Pivot Set recommended for doors over 2250mm in height.

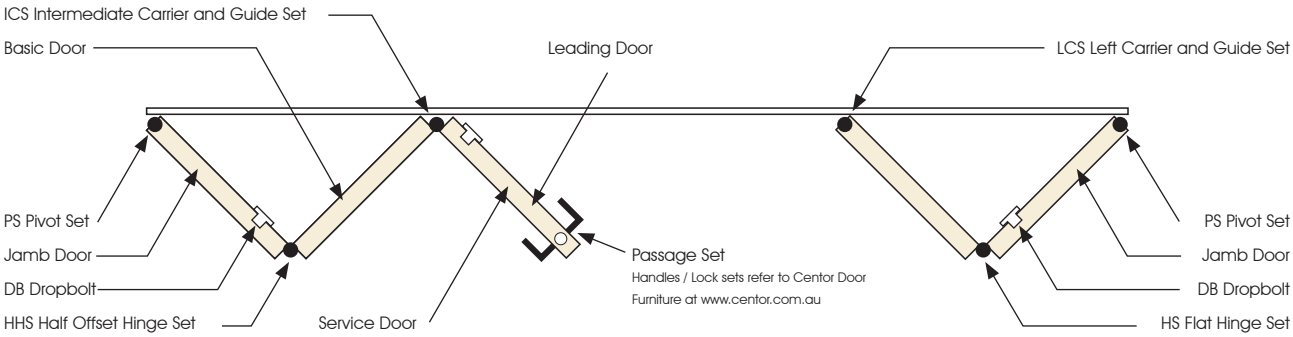
FLOATING DOOR PAIRS



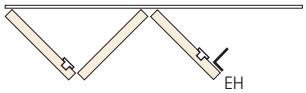
Per pair of doors

1 x left carrier set
1 x right carrier set
1 x hinge set
2 x dropbolt

HARDWARE APPLICATION (3L2R)



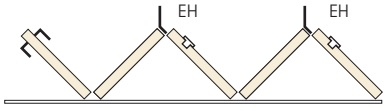
OUTWARD APPLICATION EXTERIOR HANDLE OPTION



Use one exterior 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.

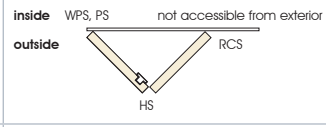
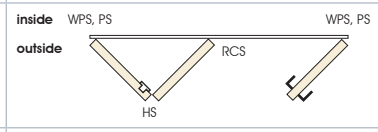
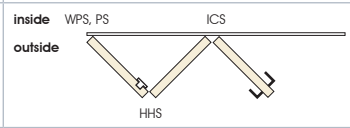
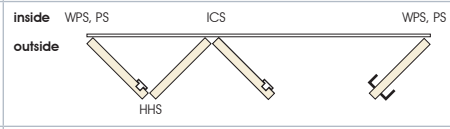
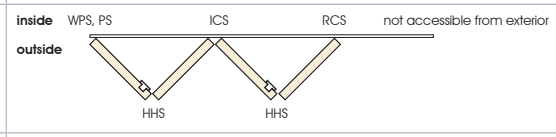
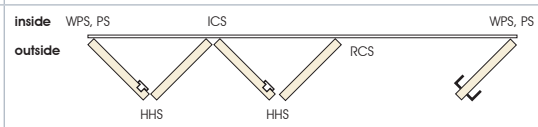
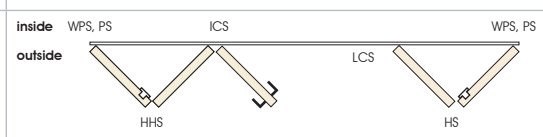
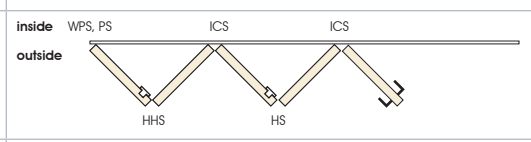
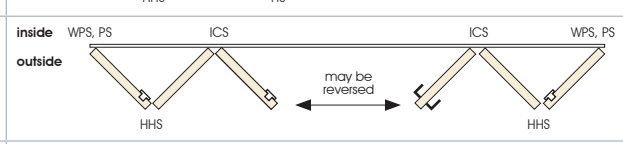
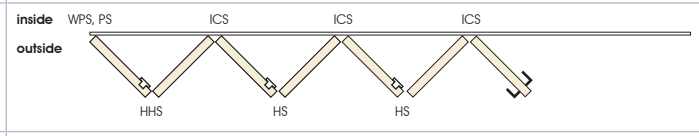
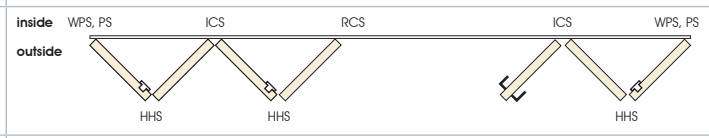
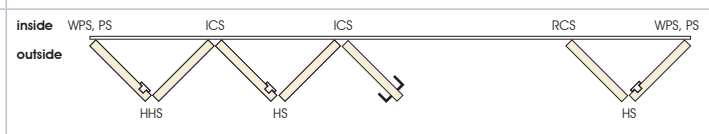
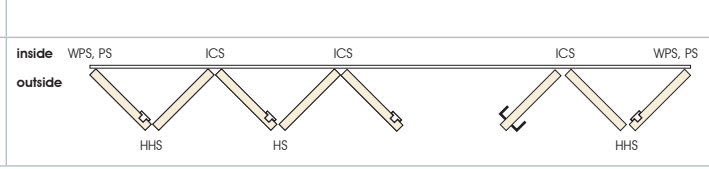
INWARD APPLICATION EXTERIOR HANDLE OPTION



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

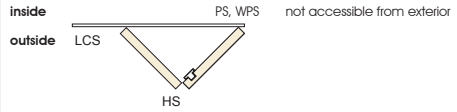
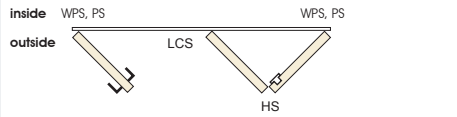
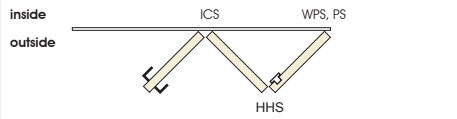
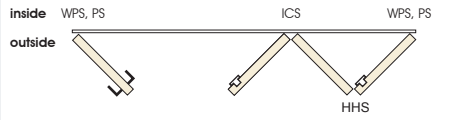
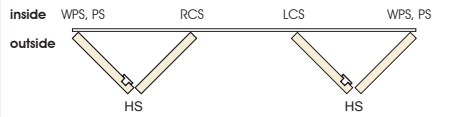
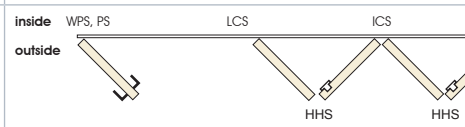
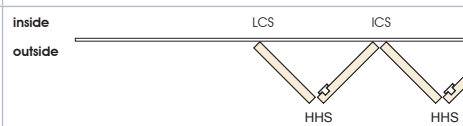
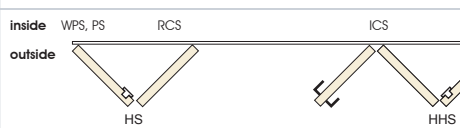
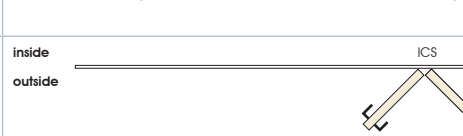
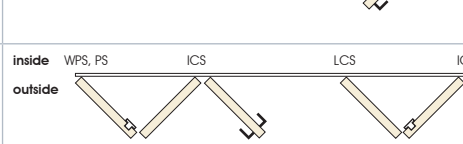
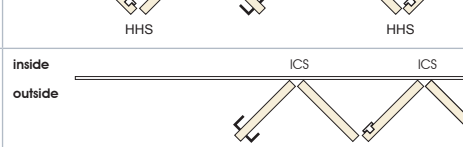
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Common Panel Layouts (outward)

CODE	OPENING CONFIGURATION	HARDWARE
2L		1 x pivot set 1 x wall pivot set* 1 x right carrier set 1 x hinge set 2 x dropbolt
2L1R		2 x pivot set 2 x wall pivot set* 1 x right carrier set 1 x hinge set 2 x dropbolt
3L		1 x pivot set 1 x wall pivot set* 1 x intermediate carrier set 1 x half offset hinge set 2 x dropbolt
3L1R		2 x pivot set 2 x wall pivot set* 1 x intermediate carrier set 1 x half offset hinge set 4 x dropbolt
4L		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
4L1R		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
3L2R		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
5L		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
3L3R		2 x pivot set 2 x wall pivot set* 2 x intermediate carrier set 2 x half offset hinge set 6 x dropbolt
7L		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
4L3R		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
5L2R		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
5L3R		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 Sets required for doors over 2250mm

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

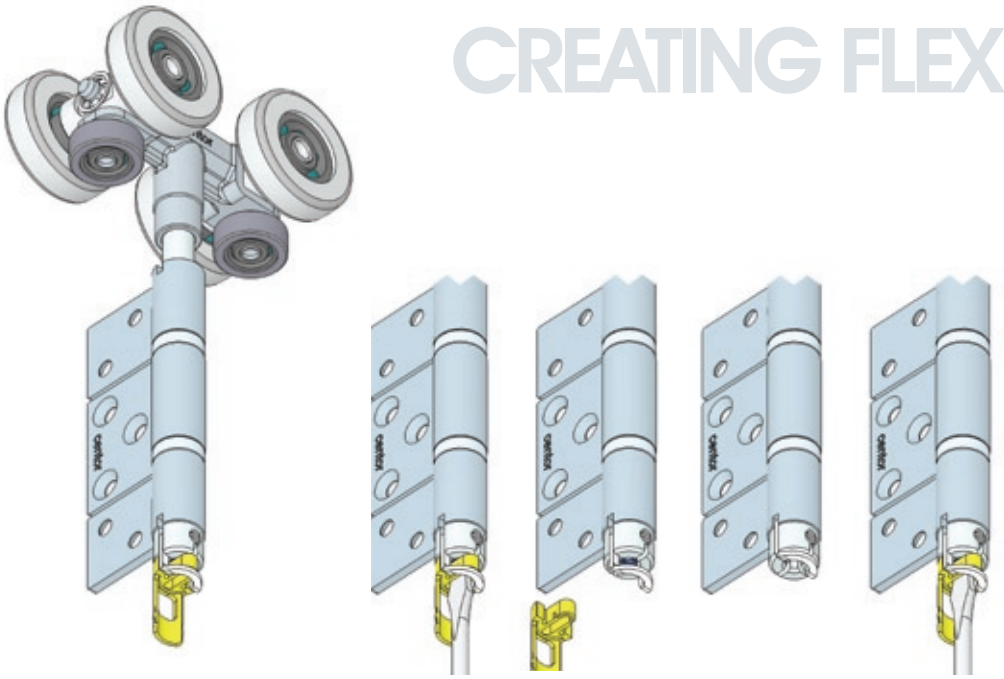
* Wall Pivot Sets required for doors over 2250mm

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Surelock™ Adjustment

Surelock™ 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!

CREATING FLEXIBILITY



1 2 3 4 5

USING SURELOCK™ IS SIMPLE

1 Components come supplied with a plastic shipping clip installed.

2 Insert a flat-bladed screwdriver into the slot and rotate the pin.

3 When correct adjustment is reached remove the shipping clip.

4 Surelock™ will snap into place when the blade and slot are aligned.

5 To readjust pull the blade down to disengage it from the slot, replace the shipping clip and rotate the pin.

Remove shipping clip after final installation adjustment.

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