



Friction Stays

Hardware By Professionals | For Professionals

Friction Stays Contents & Selection

	Page No.	Type	
		Standard	Egress
Ideal Sinidex Friction Stay	19	■	
Ideal Egress Stay	21		■
Ideal Egress Easy Clean Stay	23		■
Sinidex Restricted Friction Stay	25		
EZ Egress Friction Stay	27		■
Trinity Friction Stay	29	■	
Trinity Egress Friction Stay	31		■
Defender & Defender Highline Friction Stays	33	■	
Defender Restricted Friction Stay	35		
Defender Egress Friction Stay	37		■
HD 10, HD 16, HD 22 Friction Stays	39		
SC Casement Hinge Protector	40		
Ideal Hinge Protector	43		
Non-Rout Casement Hinge Protector	45		
Fearless Casement Hinge Protector	47		

The aim of this section is to help you identify the correct type of hardware for your application. The steps to follow when selecting friction stays are:

1. Friction Stay Stack Height Required:

The friction stay stack height required will usually be dictated by the profile system being fabricated - consult your profile system manual for details of their recommended stack height. Alternatively contact the Mila Technical department on: 01327 707300.

To measure the stack height of an existing friction stay measure from the bottom of the stay to the top arm. The standard stack heights for friction stays are 13 and 17mm

2. The Type of Friction Stay Required:

Different types of friction stays are available for different purposes, the main types are:

Standard: standard stays for use on side hung and top hung casement windows.

Egress: friction stays with a wide opening angle for emergency egress. Allow casement windows to satisfy the emergency egress requirements of Approved Document B of the Building Regulations.

Egress Easy Clean: as above but also incorporating an easy-clean position for safe cleaning of the glass from inside.

Type			Application			Accreditations	
Easy Clean	Restricted	Heavy Duty	Top Hung	Side Hung	Security Enhancement	Secured By Design	BBA Approved
			■	■		■	■
			■	■			
■				■			
	■		■	■		■	■
■				■			
			■	■			■
				■			
			■	■			■
	■		■	■			■
		■	■	■			■
					■	■	
					■	■	
					■	■	
					■	■	



Restricted: friction stays with a built-in restrictor to restrict opening to a maximum of 100mm for child safety.

Heavy Duty: friction stays designed for use on larger casement windows.

3. Maximum Sash Weight:

When selecting friction stays note their recommended maximum sash sizes and weights – these should not be exceeded. You should also consult your profile system manual for details of their recommended maximum sash sizes and weights.

4. Ferritic or Austenitic Stainless Steel:

Friction stays are usually manufactured from one of two types of stainless steel:

Ferritic: stays manufactured from type 430 Stainless Steel which is corrosion resistant in most atmospheric conditions.

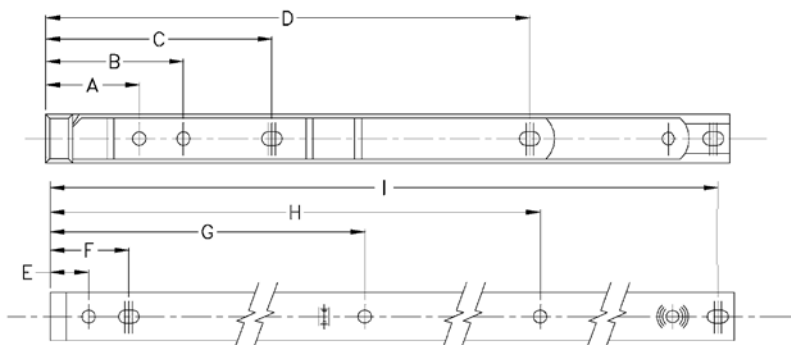
Austenitic: For coastal installations or applications subject to any form of chemical contamination, it is recommended that higher-grade austenitic stainless steel stays are fitted.

to place your order simply call our sales team direct on 01327 312 400

Technical Data

Application	Side & top hung
Stack Height (mm)	13, 17
Size (inches)	8,10,12,16,20,24
Max. Sash Weight (kg)	Top hung = 50, side hung = 24
Material Specification:	
Stainless steel	Type 430 to BS EN 10088-2 (BS 1449) or type 304 to BS EN 10259.1.4.016
End cap	Acetal / tenac 4520
Slider	Acetal / tenac 4010
Box Quantity	Top hung 8" & 10" = 50, side hung 12" & 16" = 25, top hung 12" to 24" = 25

Technical Drawings



Fixing Hole Details

Description	A(mm)	B(mm)	C(mm)	D(mm)	E(mm)	F(mm)	G(mm)	H(mm)	I(mm)
Top Hung 8"	36.2	53.0	-	150.8	15.5	30.5	159.5	-	203.9
Top Hung 10"	36.2	53.0	86.7	184.7	15.5	30.5	181.9	-	254.8
Top Hung 12"	36.2	53.0	112.1	210.1	15.5	30.5	226.2	-	306.0
Top Hung 16"	36.2	53.0	166.4	260.4	15.5	30.5	226.2	-	407.2
Top Hung 20"	36.2	53.0	217.2	311.2	15.5	30.5	217.8	-	508.7
Top Hung 24"	36.2	53.0	268.0	362.0	15.5	30.5	217.5	405.3	610.4
Side Hung 12"	32.6	-	114.8	212.7	279.3	15.5	30.5	226.6	305.7
Side Hung 16"	36.2	53.0	165.5	314.3	380.9	15.5	30.5	226.2	407.0

Ideal Sinidex Friction Stay

The Ideal Sinidex friction stay provides quality, smooth operation, reliability and strength whilst offering excellent value-for-money. Our Ideal Sinidex friction stay offers improved security and weathersealing through the use of a nylon, reduced friction, end cap and has been designed to offer smooth closure and high performance for window applications of all sizes.

- Manufactured from high grade Austenitic (304) and Ferritic (430) stainless steel
- Available in 8", 10", 12", 16", 20" and 24" top hung applications
- Available in 12" or 16" for side hung applications
- Secured By Design licensed product
- BBA approved product



Recommended Maximum Sash

Description	Size (")	Width (mm)	Height (mm)	Weight (kg)	Opening (°)
Top Hung	8	1200	300	10	62°
Top Hung	10	1200	450	16	56°
Top Hung	12	1200	600	21	64°
Top Hung	16	1200	750	22	51°
Top Hung	20	1200	900	24	42°
Top Hung	24	1200	1500	50	38°
Side Hung	12	650	1250	20	64°
Side Hung	16	700	1300	24	52°

Part Numbers

Description	Size (")	13mm	17mm
		Stack Height	Stack Height
Top Hung	8	022908	022958
Top Hung	10	022910	022960
Top Hung	12	022912	022962
Top Hung	16	022916	022966
Top Hung	20	022920	022970
Top Hung	24	022924	022974
Side Hung	12	022930	022980
Side Hung	16	022932	022982

Guarantees & Accreditations

Mechanical Guarantee	10 years	BBA Approved	Yes
Labour Guarantee	2 years	SBD Product	Yes



to place your order simply call our sales team direct on 01327 312 400

Technical Data

Application	Egress, side hung
Stack Height (mm)	13, 17
Size (inches)	10, 16
Max. Sash Weight (kg)	21
Material Specification:	
Stainless steel	Type 430 to BS EN 10088-2 (BS 1449) or type 304 to BS EN 10259.1.4.016
End cap	Acetal / tenac 4520
Slider	Acetal / tenac 4010
Box Quantity	50

Ideal Egress Friction Stay

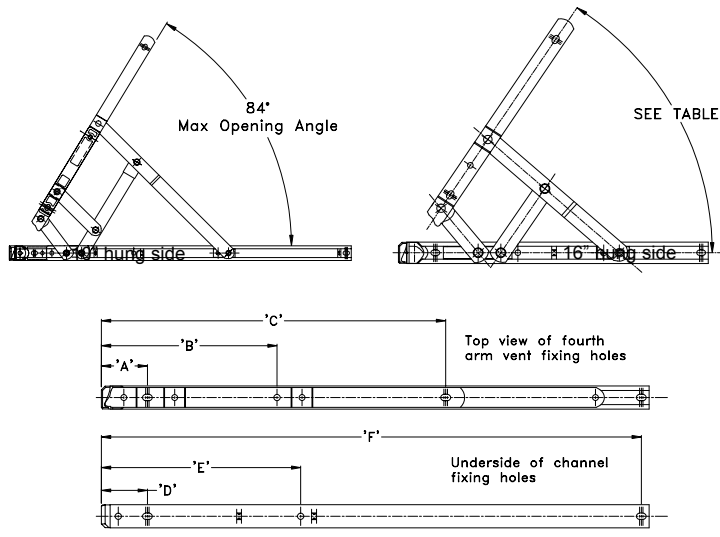
The Ideal range of egress friction stays allow casement windows to satisfy the emergency egress requirements of Approved Document B of the Building Regulations:

“For emergency egress any window should have an unobstructed openable area that is at least 0.33m square and at least 450mm high and 450mm wide”

- Emergency egress function only
- Available in 10” and 16” for side hung applications
- Available in both 13mm and 17mm stack heights



Technical Drawings



Recommended Maximum Sash

Description	Size (")	Width (mm)	Height (mm)	Weight (kg)	Opening (°)
Side Hung	10"	600	1200	16	80°
Side Hung	16"	600	1200	21	84°

Part Numbers

Description	Size (")	13mm Stack Height	17mm Stack Height
Side Hung	10"	022926	022976
Side Hung	16"	022928	022978

Fixing Hole Details

Description	A(mm)	B(mm)	C(mm)	D(mm)	E(mm)	F(mm)
Side Hung 10"	34.7	62.1	192.4	31.0	100.5	254.8
Side Hung 16"	34.5	137.5	271.4	36.3	157.3	407.1

Guarantees & Accreditations

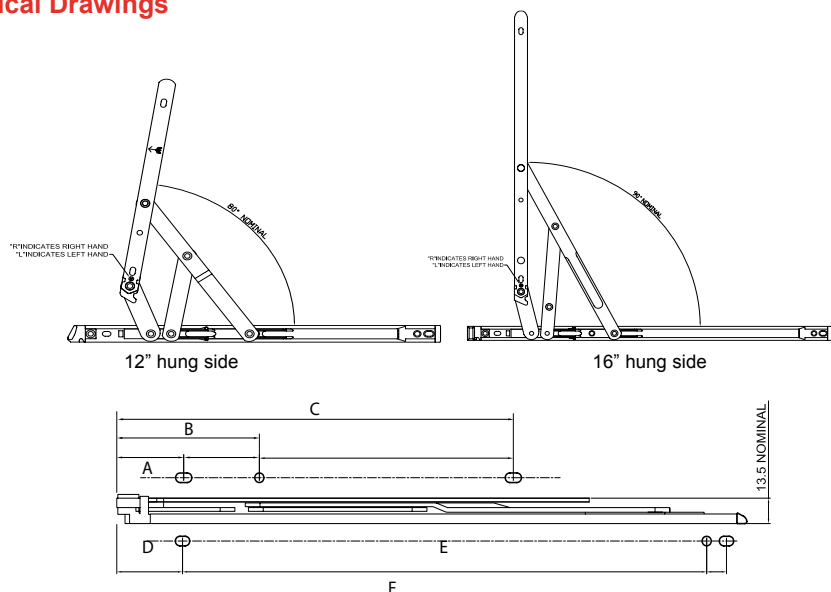
Mechanical Guarantee	10 years
Labour Guarantee	2 years

to place your order simply call our sales team direct on 01327 312 400

Technical Data

Application	Side hung
Stack Height (mm)	13, 17
Size (inches)	12,16
Max. Sash Weight (kg)	21
Material Specification:	
Tracks	304 or 430 stainless steel
Links	304 or 430 stainless steel
Rivets	302 stainless steel
End Moulding	Zinc die cast
End Spacer	Nylon 6
Box Quantity	25

Technical Drawings



Fixing Hole Details

Description	A(mm)	B(mm)	C(mm)	D(mm)	E(mm)	F(mm)
Side Hung 12"	37.2	79.2	220.2	36.5	291	338.5
Side Hung 16"	37.2	142.7	355.2	36.5	385.45	432.95

Ideal Egress Easy-Clean Friction Stay

The Ideal egress easy-clean stay combines emergency egress with an easy-clean facility. It offers improved security and weathersealing through the use of a colour coded, handed, nylon, end-cap and has been designed to offer smooth closure and high performance.

- Almost 90° opening for easy egress
- Allows casement windows (dependent upon size) to satisfy the egress requirements of Document B of the Building Regulations, ie:

"For emergency egress any window should have an unobstructed openable area that is at least 0.33m square and at least 450mm high and 450mm wide "

- Available in 12" and 16" for side hung egress applications
- Available in both 13mm & 17mm stack heights to suit most common casement profiles



Recommended Maximum Sash

Description	Size (")	Width (mm)	Height (mm)	Weight (kg)	Opening (°)
Side Hung	12	600	1200	18	80°
Side Hung	16	600	1200	21	90°

Part Numbers

Description	Size (")	13mm	17mm
		Stack Height	Stack Height
Side Hung	12	023438C	023488C
Side Hung	16	023440C	023490C

Guarantees & Accreditations

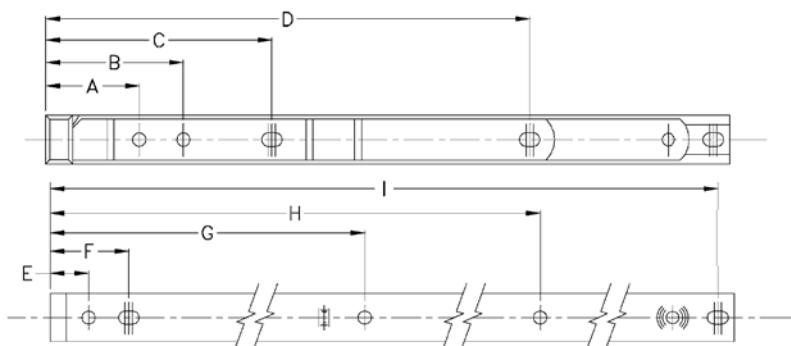
Mechanical Guarantee	10 years
Labour Guarantee	2 years

to place your order simply call our sales team direct on 01327 312 400

Technical Data

Application	Restricted, side & top hung
Stack Height (mm)	13, 17
Size (inches)	12, 16, 20, 24
Max. Sash Weight (kg)	Top hung = 32, side hung = 20
Material Specification:	
Stainless steel	Type 430 to BS EN 10088-2 (BS 1449) or type 304 to BS EN 10259.1.4.016
End cap	Acetal / tenac 4520
Slider	Acetal / tenac 4010
Box Quantity	HSR201-12" & HSR24-24" = 25 HSR216-16" & HSR20-20" = 50

Technical Drawings



Fixing Hole Details

Description	A(mm)	B(mm)	C(mm)	D(mm)	E(mm)	F(mm)	G(mm)	H(mm)	I(mm)
Top Hung 16"	36.2	53.0	166.4	260.4	15.5	30.5	226.2	-	407.2
Top Hung 20"	36.2	53.0	217.2	311.2	15.5	30.5	217.8	-	508.7
Top Hung 24"	36.2	53.0	268.0	362.0	15.5	30.5	217.5	405.3	610.4
Side Hung 12"	32.6	-	114.8	212.7	279.3	15.5	30.5	226.6	305.7
Side Hung 16"	36.2	53.0	165.5	314.3	380.9	15.5	30.5	226.2	407.0

Sinidex Restricted Friction Stay

The Sinidex restricted friction stay offers improved security and weather sealing through the use of a nylon, reduced friction, end-cap. It has been designed to offer smooth closure and high performance for window applications of all sizes.

- Manufactured from high grade Austenitic (304) and Ferritic (430) stainless steel
- Enhanced security friction stay for top hung & side hung casement windows
- Available in 16", 20" and 24" for top hung applications
- Available in 12" for side hung applications
- Secured By Design licensed product



Recommended Maximum Sash

Description	Size (")	Width (mm)	Height (mm)	Weight (kg)	Opening (°)
Top hung	16	700	1300	24	50°
Top hung	20	900	1200	24	42°
Top hung	24	1200	1200	32	47°
Side hung	12	650	1250	20	59°

Part Numbers

Description	Hand	Size (")	Austenitic		Ferritic	
			13mm SH	17mm SH	13mm SH	17mm SH
Top Hung	Right	16	023529A	023589A	023529C	023589C
Top Hung	Left	16	023533A	023593A	023533C	023593C
Top Hung	Right	20	023530A	023590A	023530C	023590C
Top Hung	Left	20	023534A	023594A	023534C	023594C
Top Hung	Right	24	023531A	023591A	023531C	023591C
Top Hung	Left	24	023535A	023595A	023535C	023595C
Top Hung	Right	12	023528A	023588A	023528C	023588C
Top Hung	Left	12	023532A	023592A	023532C	023592C
Side Hung	Right	16	023529A	023589A	023529C	023589C
Side Hung	Left	16	023533A	023593A	023533C	023593C

* when using as a side hung stay, use restricted hinge on the bottom and a standard Sinidex on the top

Guarantees & Accreditations

Mechanical Guarantee	10 years	BBA Approved	Yes
Labour Guarantee	2 years	SBD Product	Yes

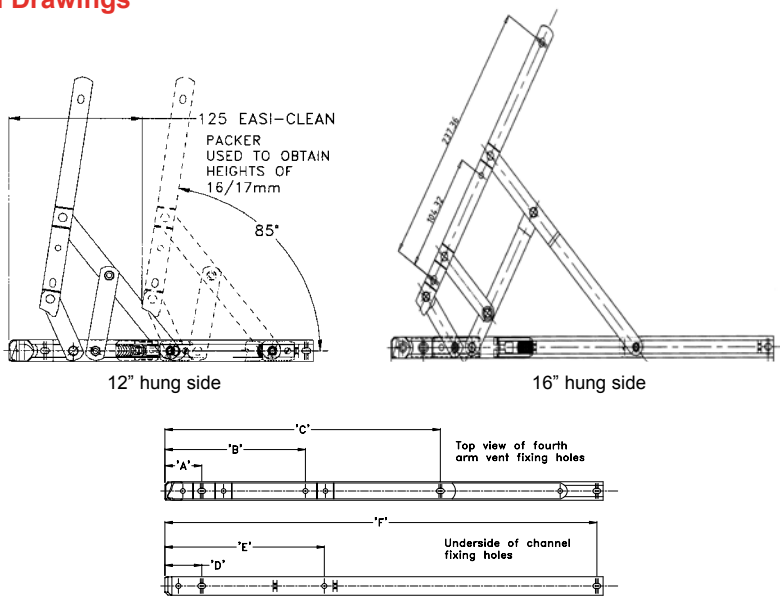


to place your order simply call our sales team direct on 01327 312 400

Technical Data

Application	Egress, side hung
Stack Height (mm)	13, 17
Size (inches)	12 & 16
Max. Sash Weight (kg)	21
Material Specification:	
Stainless Steel	Type 430 to BS EN 10088-2 (BS 1449) or type 304 to BS EN 10259.1.4.016
End Cap	Acetal / Tenac 4520
Slider	Acetal / Tenac 4010
Box Quantity	50

Technical Drawings



Fixing Hole Details

Description	A(mm)	B(mm)	C(mm)	D(mm)	E(mm)	F(mm)
Side Hung 12"	34.2	61.8	208.3	31.4	41.4	305.7
Side Hung 16"	34.4	138.4	271.4	31.3	41.3	407.2

EZ Egress Friction Stay

The EZ friction stay offers an egress function, for side hung casement windows, without the need for any special tools or reset kits.

- Allows casement windows to open to a full 90° for emergency exit

- Allows casement windows (dependent upon size) to satisfy the requirements of Document B of the Building Regulations, ie:

" For emergency egress any window should have an unobstructed openable area that is at least 0.33m square and at least 450mm high and 450mm wide "

- Option of easy clean facility

- Easy clean position meets the requirements of BS 8213 (minimum 95mm gap between casement and frame)

- Suitable for side hung casement windows



Recommended Maximum Sash

Description	Size (")	Width (mm)	Height (mm)	Weight (kg)	Opening (°)
Side Hung	12	600	1200	18	85°
Side Hung	16	600	1200	21	89°

Part Numbers

Description	Size (")	Austenitic 13mm Stack Height	Austenitic 17mm Stack Height	Ferritic 13mm Stack Height	Ferritic 17mm Stack Height
Side Hung	12	023224A*	023225A*	023224	023225
Side Hung	16	023226A*	-	023226	023227

* When using as a side hung stay, use restricted hinge on the bottom and a standard Sinindex on the top

Guarantees & Accreditations

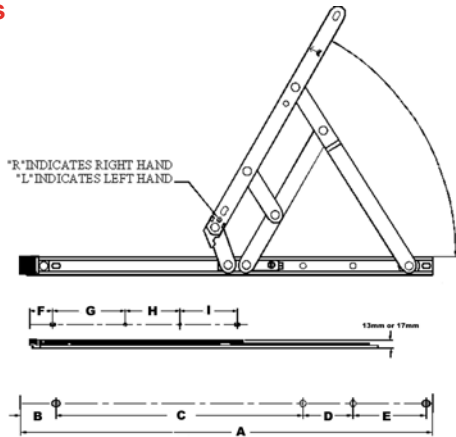
Mechanical Guarantee	10 years
Labour Guarantee	2 years

to place your order simply call our sales team direct on 01327 312 400

Technical Data

Application	Side & top hung
Stack Height (mm)	13 & 17
Size (inches)	Top hung = 8,10,12,16,20,24, side hung = 12, 16
Max. Sash Weight (kg)	Contact the Mila technical team on 01327 707 300
Material Specification:	
Tracks	430 stainless steel
Links	430 stainless steel
Rivets	302 stainless steel
End Moulding	Zinc die cast
End Spacer	Nylon 6
Box Quantity	25

Technical Drawings



Fixing Hole Details

Description	A(mm)	B(mm)	C(mm)	D(mm)	E(mm)	F(mm)	G(mm)	H(mm)	I(mm)
Top hung 8"	205.3	34.8	131	-	33	41	10.3	-	122
Top hung 10"	255.3	34.8	176.5	-	38	41	28.33	-	126
Top hung 12"	305.3	34.8	206.5	-	58	41	50.3	-	126
Top hung 16"	404.6	34.8	242.8	49	72	41	121	-	99
Top hung 20"	504.4	34.8	210.6	116	137	41	171	-	99
Top hung 24"	604.4	34.8	210.6	166	187	41	125.9	95.1	92
Side hung 12"	317.5	36.5	90	174.5	11	37.2	42	-	141
Side hung 16"	418.5	36.5	90	275.5	11	37.2	105.5	-	212.5

Trinity Friction Stay

The Trinity range of stainless steel friction stays is suitable for both top hung and side hung applications.

- Handed nylon end-cap for smooth operation & accurate location
- 13mm & 17mm stack height to suit most common casement profiles
- 8", 10", 12", 16" 20" & 24" top hung
- 12" & 16" side hung
- Egress friction stays available



Recommended Maximum Sash

Description	Size (")	Width (mm)	Height (mm)	Opening (°)
Top hung	8	1200	350	85°
Top hung	10	1200	400	85°
Top hung	12	1200	550	85°
Top hung	16	1200	800	45°
Top hung	20	1200	900	45°
Top hung	24	1200	1200	45°
Side hung	12	600	300	90°
Side hung	16	700	400	90°

Part Numbers

Description	Size (")	13mm	17mm
		Stack Height	Stack Height
Top hung	8	023408C	023458C
Top hung	10	023410C	023460C
Top hung	12	023412C	023462C
Top hung	16	023416C	023466C
Top hung	20	023420C	023470C
Top hung	24	023424C	023474C
Side hung	12	023444C	023493C
Side hung	16	023448C	023495C

Guarantees & Accreditations

Mechanical Guarantee	10 years	BBA Approved	Yes
Labour Guarantee	2 years		

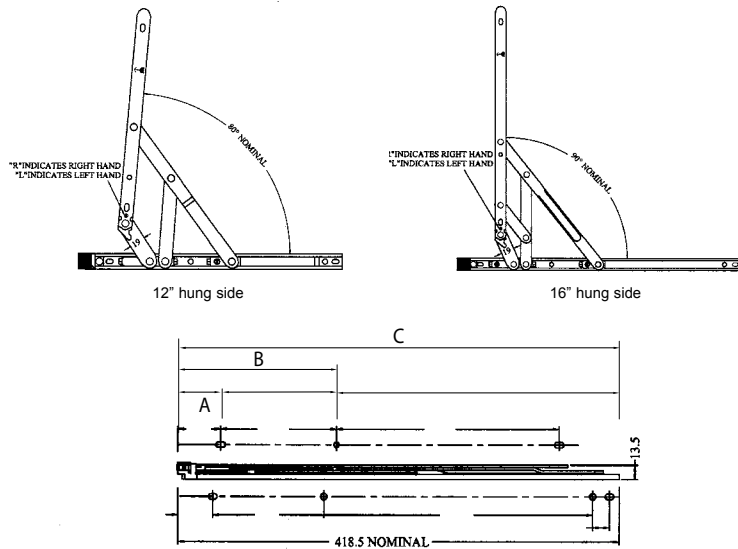


to place your order simply call our sales team direct on 01327 312 400

Technical Data

Application	Egress, side hung
Stack Height (mm)	13 & 17
Size (inches)	12 & 16
Max. Sash Weight (kg)	Contact the Mila technical team on 01327 707 300
Material Specification:	
Tracks	430 stainless steel
Links	430 stainless steel
Rivets	302 stainless steel
End Moulding	Zinc die cast
End Spacer	Nylon 6
Box Quantity	25

Technical Drawings



Fixing Hole Details

Description	A(mm)	B(mm)	C(mm)
Side Hung 12"	37.2	79.2	220.2
Side Hung 16"	37.2	142.7	355.2

Trinity Egress Friction Stay

The Trinity egress stay opens to almost 90° for emergency egress.

- Stainless steel friction stays for side hung egress applications
- Almost 90° opening for easy egress
- Allows casement windows (dependent upon size) to satisfy the egress requirements of Document B of the Building Regulations, ie:

“ For emergency egress any window should have an unobstructed openable area that is at least 0.33m square and at least 450mm high and 450mm wide ”
- Handed nylon end-cap for smooth operation and accurate location
- Available in both 13mm & 17mm stack heights to suit most common casement profiles
- Both 12" and 16" sizes available



Recommended Maximum Sash

Description	Size (")	Width (mm)	Height (mm)	Opening (°)
Side Hung	12	600	300 min	80°
Side Hung	16	700	400 min	90°

Part Numbers

Description	Size (")	13mm Stack Height	17mm Stack Height
Side Hung	12	023432C	023482C
Side Hung	16	023436C	023486C

Guarantees & Accreditations

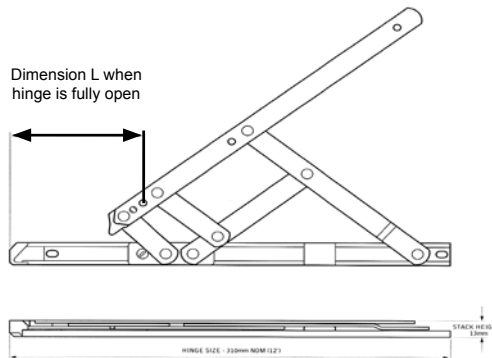
Mechanical Guarantee	10 years
Labour Guarantee	2 years

to place your order simply call our sales team direct on 01327 312 400

Technical Data

Application	Top & side hung
Stack Height (mm)	Standard = 13, highline = 16, 17
Size (inches)	6, 8, 10, 12, 16, 20, 24
Max. Sash Weight (kg)	Top hung = 40, side hung = 24
Material Specification:	
Links & Tracks - Ferritic	Stainless steel to BS 10088/2 Grade 1.4016
Rivets - Ferritic	Stainless steel to BS 10263/5 Grade 1.4016
Links & Tracks - Austenitic	Stainless steel to BS 10088/2 Grade 1.4301
Rivets - Austenitic	Stainless steel to BS 10263/5 Grade 1.4567
End Caps & Points	Nylon 66
Friction Cam	Zinc alloy BS EN 1774:ZL0410, zinc & gold passivate finish
Box Quantity	Top hung 6", 8", 10", 12" = 50 top hung 16", 20", 24", side hung 16" = 25 side hung 12" = 50, side hung 16" = 25

Technical Drawings



Fixing Hole Details

Description	L(mm)
Top hung 6"	63
Top hung 8"	83
Top hung 10"	131
Top hung 12"	164
Top hung 16"	239
Top hung 20"	215
Top hung 24"	156
Side hung 12"	172
Side hung 16"	170

Defender & Friction Stay

General purpose friction stay for use on both top hung and side hung casement windows.

- Patented lipped slider for enhanced smooth operation
- Easy friction adjustment without metal to metal contact
- Asymmetric location system for reliable weather-sealing
- Standard Defender in 13mm stack height
- Defender Highline in 16 and 17mm stack height
- BBA approved product



Recommended Maximum Sash

Description	Size (")	Width (mm)	Height (mm)	Weight (kg)	Opening (°)
Top Hung	6	150	300	10	50°
Top Hung	8	200	350	12	50°
Top Hung	10	275	400	16	80°
Top Hung	12	350	550	20	80°
Top Hung	16	500	780	21	80°
Top Hung	20	700	1100	26	50°
Top Hung	24	850	1300	40	37.5°
Side Hung	12	300	600	22	60°
Side Hung	16	400	700	24	60°

Part Numbers

Description	Size (")	13mm	16mm	17mm
		Stack Height	Stack Height	Stack Height
Top Hung	6	028000	-	-
Top Hung	8	028002T	028022T	028042T
Top Hung	10	028004	028024	028044
Top Hung	12	028006	028026	028046
Top Hung	16	028008	028028	028048
Top Hung	20	028010	028030	028050
Top Hung	24	028012	028032	028052
Side Hung	12	028014	028034	028054
Side Hung	16	028016	028036	028056

Guarantees & Accreditations

Mechanical Guarantee
Labour Guarantee

10 years
2 years

BBA Approved Yes

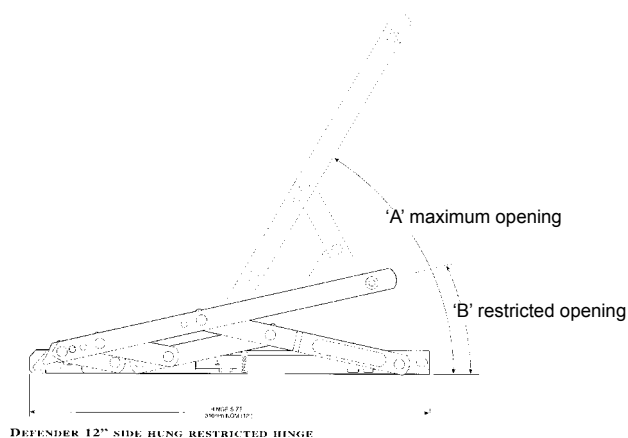


to place your order simply call our sales team direct on 01327 312 400

Technical Data

Application	Top & side hung, restricted
Stack Height (mm)	13, 16, 17
Size (inches)	Top hung = 12, 16, 20, 24, side hung = 12, 16
Max. Sash Weight (kgs)	Top hung = 35, side hung = 24
Material Specification	
Links & Track - Ferritic	Stainless steel to BS 10088/2 grade 1.4016
Rivets - Ferritic	Stainless steel to BS 10263/5 grade 1.4016
Links & Tracks - Austenitic	Stainless steel to BS 10088/2 grade 1.4301
Rivets - Austenitic	Stainless steel to BS 10263/5 grade 1.4567
End Caps & Points	Nylon 66
Friction Cam	Zinc alloy BS EN 1774:ZL0410, zinc & gold passivate finish
Restricted Lever	Zinc alloy BS EN 1774:ZL0410, bright copper nickel plate
Box Quantity	Top hung 12" = 50, top hung 16", 20", 24" = 25 side hung 12" = 50, side hung 16" = 25

Technical Drawing



Fixing Hole Details

Description	A (Degrees)	B (Degrees)
Top hung 12"	65°	15°
Top hung 16"	60°	10°
Top hung 20"	50°	8°
Top hung 24"	37.5°	7°
Side hung 12"	60°	13°
Side hung 16"	60°	12°

Defender Restricted Friction Stay

The Defender, with built-in restrictor, combines a child resistant lever to limit window opening for maximum safety and a quick release function to allow window to be fully opened for easy cleaning or emergency escape.

- Restricts window opening to a maximum of 100mm
- Quick release lever, for cleaning and ventilation, with automatic relocation
- Complies with child safety requirements of BS 6375 Part 2 (600 Newtons)
- Integral restrictor removes the need for additional devices
- Available in 13, 16 and 17mm stack height
- Suitable for top hung and side hung casement windows
- BBA approved product



Recommended Maximum Sash

Description	Size (")	Width (mm)	Height (mm)	Weight (kg)	Opening (°)
Top Hung	12	550	350	20	15°
Top Hung	16	780	500	21	10°
Top Hung	20	1100	700	24	8°
Top Hung	24	1300	850	35	7°
Side Hung	12	600	300	22	13°
Side Hung	16	700	400	24	12°

Part Numbers

Description	Size (")	13mm	16mm	17mm
		Stack Height	Stack Height	Stack Height
Top Hung	12	028160	028180*	028200
Top Hung	16	028162	028182*	028202
Top Hung	20	028164	028184	028204
Top Hung	24	028166	028186	028206
Side Hung Left Hand	12	028168	028188	028208
Side Hung Right Hand	12	028169	028189	028209
Side Hung Left Hand	16	028170	028190*	028210
Side Hung Right Hand	16	028171	028191*	028211

* Special order only

Guarantees & Accreditations

Mechanical Guarantee	10 years	BBA Approved	Yes
Labour Guarantee	2 years		



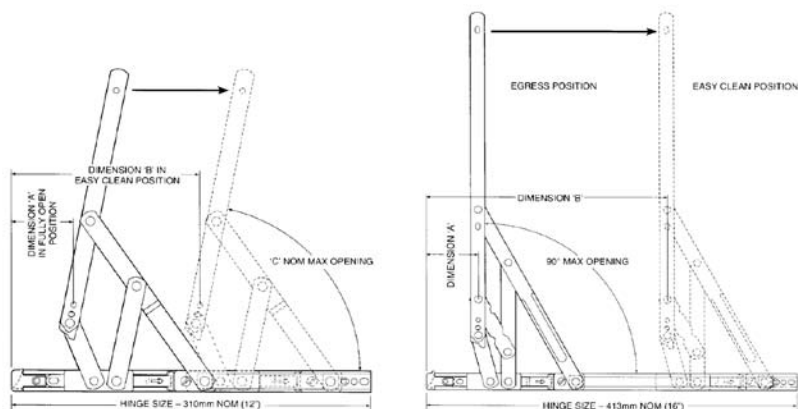
Report No. 1227

to place your order simply call our sales team direct on 01327 312 400

Technical Data

Application	Side hung, egress
Stack Height (mm)	13, 16, 17
Size (inches)	12, 16
Max. Sash Weight (kg)	24
Material Specification	
Links & Track - Ferritic	Stainless steel to BS 10088/2 grade 1.4016
Rivets - Ferritic	Stainless steel to BS 10263/5 grade 1.4016
Links & Tracks - Austenitic	Stainless steel to BS 10088/2 grade 1.4301
Rivets - Austenitic	Stainless steel to BS 10263/5 grade 1.4567
End Caps & Points	Nylon 66
Friction Cam	Zinc alloy BS EN 1774:ZL0410, zinc & gold passivate finish
Restricted Lever	Zinc alloy BS EN 1774:ZL0410, bright copper nickel plate
Box Quantity	25

Technical Drawings



Fixing Hole Details

	A (mm)	B (mm)	D (Degrees)
Top hung 12"	54	163	80°
Top hung 16"	57	268	90°

Defender Egress Friction Stay

The Defender egress friction stay allows casement windows to open to a full 90° for emergency exit combined with an easy clean facility.

- Complies with British Standard BS 5588 Part 1: 1990 and Building Regulations Approved Document B for fire escape windows
- Easy clean facility
- Suitable for side hung casement windows
- Available in 13, 16 and 17mm stack height
- BBA approved product



Recommended Maximum Sash

Description	Size (")	Width (mm)	Height (mm)	Weight (kg)	Opening (°)
Side Hung	12	600	300	22	80°
Side Hung	16	780	400	24	90°

Part Numbers

Description	Size (")	13mm Stack Height	16mm Stack Height	17mm Stack Height
Side Hung	12	028284	028288	028292
Side Hung	16	028286	028290	028294

Guarantees & Accreditations

Mechanical Guarantee	5 years	BBA Approved	Yes
Labour Guarantee	2 years		



to place your order simply call our sales team direct on 01327 312 400

Technical Data

Application	Heavy duty, top hung
Stack Height (mm)	16
Size (inches)	10, 16, 22
Max. Sash Weight (kg)	73.6
Material Specification	
Stainless Steel	Type 430 to BS EN 10088-2 (BS 1449)
Slider	Acetal / tenac 4010
Box Quantity	25

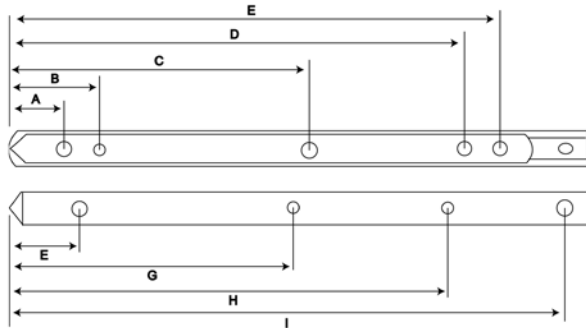
Heavy Duty Friction Stay

Heavy duty friction stay for use on large timber and PVC-U casement windows, as well as some large sectioned aluminium profiles.

- Composite steel/plastic slider for strength, durability and smooth operation
- 84° opening angle on HD 10
- 90° opening angle on HD 16 & HD 22
- HD 10 & HD 16 suitable for use on both top hung and side hung casement windows
- Easy to fit with adjustable friction mechanism



Technical Drawing



Recommended Maximum Sash

Description	Size (")	Width (mm)	Height (mm)	Weight (kg)	Opening (°)
Top Hung	10	1905	762	50	84°
Top Hung	16	1828	1117	70	90°
Top Hung	22	1626	1321	73.6	90°

Part Numbers

Description	Size (")	16mm Stack Height
Top Hung	10	023172*
Top Hung	16	023174
Top Hung	22	023176

* Special Order Only

Fixing Hole Details

	A(mm)	B(mm)	C(mm)	D(mm)	E(mm)	F(mm)	G(mm)	H(mm)	I(mm)
HD10-10"	41.1	55.8	-	212.2	236.4	33.1	208.1	252.1	-
HD16-16"	41.1	56.0	276.50	301.1	-	33.0	312.7	404.6	-
HD22-22"	41.3	56.1	186.1	341.9	366.3	32.9	405.5	512.9	556.9

Guarantees & Accreditations

Mechanical Guarantee	5 years
Labour Guarantee	2 years

to place your order simply call our sales team direct on 01327 312 400

SC Casement Hinge Protector

Enhanced security and compression device for use on the hinge side of casement windows.

- Strong, die-cast sash part and injection moulded frame part
- Supplied in a profile related kit
- No routing of sash, or outer frame, required
- Can be retro-fitted on-site to enhance hinge side security
- Secured By Design licensed product



Part Numbers

Profile	16mm Part No.
Spectus 70	023881*
WHS Esthetique	023883
WHS System 10	023884
HW 70	023885
Vinylock 1600	023901
Spectus Elite	023902
Synseal Shield	023903
Deceuninck	023904
Rehau Tritec	023904

* Special orders only

Guarantees & Accreditations

Mechanical Guarantee	5 years	SBD Product	Yes
Labour Guarantee	2 years		



Ideal Casement Hinge Protector

Enhanced security device for use on the hinge side of casement windows.

- Strong, die-cast sash and frame parts
- No routing of sash or outer frame required
- Can be retro-fitted on-site to enhance hinge side security
- Versions available to suit both 13mm and 17mm stack height friction stays
- Secured By Design licensed product



Part Numbers

Description
Ideal Casement Hinge Protector

13mm
023200

17mm
023201



Guarantees & Accreditations

Mechanical Guarantee	10 years	SBD Product	Yes
Labour Guarantee	2 years		



to place your order simply call our sales team direct on 01327 312 400

