

# Securistyle Defender

## Friction hinge

### For use on PVCu, timber or aluminium windows

Securistyle Defender friction hinge is suitable for domestic applications on side or top hung windows. All versions of the Defender friction hinge are available in both ferritic and

austenitic stainless steel in a variety of sizes and stack heights. Restricted, non restricted, easy clean and easy clean egress versions are available.



Defender



Defender egress position



Defender easy clean position

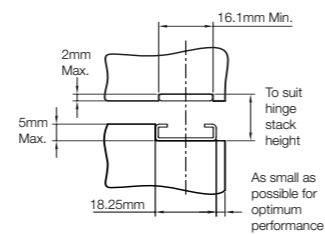
### Features and Benefits

- Defender hinges suitable for domestic applications
- Adjustable and controlled friction for smooth operation
- Efficient locating system by means of a patented asymmetrical end cap
- Extended enclosed end cap for enhanced weather sealing
- 13mm stack height as standard
- Austenitic stainless steel versions available for high corrosion resistance
- Can be supplied with built-in restrictor
- Easy Clean and Fire Egress versions available
- Vector Excluder Security device available to improve security
- Defender Plus version offers increased carrying capacity

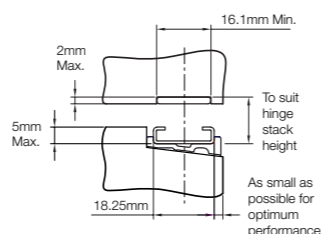


Defender Restricted

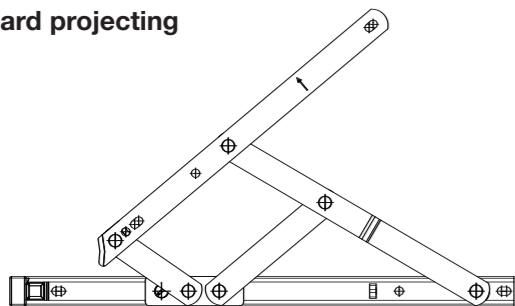
### Defender section details



### Defender with bottom hinge packer section details



### Standard projecting



### Details

Defender Side Hung	Hinge Size mm	Max Sash Weight Kg	Max Sash Width mm	Min Sash Width mm	Hinge Projection mm	Opening Angle (+ / - 2.5°)
ED8	209	18 kg	400	200	119	65°
EDS12	310	22 kg	600	300	172	60°
EDS16	412	24 kg	700	400	170	60°
EDSH16A (Defender Plus)*	412	40 kg	1000	400	-	60°

\*Item only available in Austenitic.

Defender Top Hung	Hinge Size mm	Max Sash Weight Kg	Max Sash Height mm	Min Sash Height mm	Hinge Projection mm	Opening Angle (+ / - 2.5°)
EDT6	159	10 kg	300	150	63	50°
ED8	209	12 kg	350	200	119	65°
EDT10	259	16 kg	400	275	131	80°
EDT12	310	20 kg	550	350	164	80°
EDT16	412	21 kg	780	500	239	80°
EDT20	513	26 kg	1100	700	215	50°
EDT24	615	40 kg	1300	850	156	37.5°
EDTH24A (Defender Plus)*	615	50 kg	1500	850	156	27°

Defender Egress Easy Clean	Hinge Size mm	Max Sash Weight Kg	Max Sash Width mm	Min Sash Width mm	Initial Hinge Projection mm	Easy Clean Projection mm	Opening Angle (+ / - 2.5°)
EDSE12	310	22	600	300	54	163	80°
EDSE16	413	24	700	400	57	268	90°

Defender Side Hung Restricted	Hinge Size mm	Max Sash Weight Kg	Max Sash Width mm	Min Sash Width mm	Restricted Opening Angle	Opening Angle (+ / - 2.5°)
EDS12R Unrestricted	310	22	600	300	13°	58°
EDSR12L Restricted						
EDS12L Unrestricted	310	22	600	300	13°	58°
EDSR12R Restricted						
EDS16R Unrestricted	412	24	700	400	11°	58°
EDSR16L Restricted						
EDS16L Unrestricted	412	24	700	400	11°	58°
EDSR16R Restricted						

Restricted Side Hung Hinges required on bottom of window only.

Defender Top Hung Restricted	Hinge Size mm	Max Sash Weight Kg	Max Sash Height mm	Min Sash Height mm	Restricted Opening Angle	Opening Angle (+ / - 2.5°)
EDTR12	310	20	550	350	14°	65°
EDTR16	413	21	780	500	10°	59°
EDTR20	513	26	1100	700	7°	50°
EDTR24	615	40	1300	850	6°	37.5°

Restricted Top Hung hinges provided in pairs. Other stack heights available on request

Description	Product Code
Bottom Hinge Packer 6-7 degrees	305mm long TY212
Bottom Hinge Packer 6-7 degrees	408mm long TY216
Vector Excluder Security Device (13mm stack height)	Zinc Passivated Finish (4 per set) ASD1

### Manufactured from

Defender Ferritic - 1.4016 grade stainless steel, components – nylon and acetal  
 Defender Austenitic - 1.4301 High Grade stainless steel, components – nylon and acetal

### Recommended screws

Stainless steel No.8 or equivalent

### Performance

Tested in accordance with DD CEN/TS 13126-6:2004

### Finishes

Suffix product code with /368 (Ferritic), /369 (Austenitic)

### More information

enquiries@titon.co.uk / 01206 713801