

# Defender Restricted

A friction hinge designed specifically for occupant safety.

## Features

- Improved weather sealing and draught proofing performance from extended enclosed end cap and asymmetrical vent arm form when tested to BS 6375-1
- Unique robust cam friction device eliminates any risk of friction screw misuse
- Available in ferritic 430 as standard or austenitic 304 stainless steel for enhanced corrosion resistance
- Built-in quick release lever allows the window to be fully opened for easy cleaning and total ventilation
- Asymmetric location system for reliable and accurate closure
- Restrictor automatically relocates and resets when the window is closed
- Slot-hole-slot vent fixing configuration for ease of adjustment and guaranteed fixing into reinforcement on PVC-u window frames
- Available as highline variants for profiles with cavities between 16mm and 18mm

## Specification

- Compliant with BS EN 13126-6 Hardware for windows and door height windows. Requirements and test methods
- Tested to BS EN 1670 - Ferritic Grade 3 corrosion resistance 96 hours, Austenitic Grade 4 corrosion resistance 240 hours
- Compliant with BS EN 13126-5 – Hardware for windows and door height windows and requirements and test methods
- Endurance tested to 30,000 cycles
- 10 or 12 year mechanical guarantee\*



## Defender Restricted Top Hung

| Defender Restricted Top Hung | Hinge Size (mm) | Stack Height (mm) | Max Vent Weight (kg) | Min Vent Height (mm) | Max Vent Height (mm) | Opening Angle (+/-2.5°) |
|------------------------------|-----------------|-------------------|----------------------|----------------------|----------------------|-------------------------|
| EDTR12-EXP                   | 310             | 13                | 20                   | 350                  | 550                  | 65°                     |
| EDTR16-EXP                   | 412             | 13                | 21                   | 500                  | 780                  | 59°                     |
| EDTR20-EXP                   | 513             | 13                | 26                   | 700                  | 1100                 | 50°                     |
| EDTR24-EXP                   | 615             | 13                | 40                   | 850                  | 1300                 | 37.5°                   |
| EDTR24H6-EXP                 | 615             | 16                | 40                   | 850                  | 1300                 | 37.5°                   |
| EDTR24H7-EXP                 | 615             | 17                | 40                   | 850                  | 1300                 | 37.5°                   |

## Defender Restricted Side Hung

| Defender Restricted Side Hung | Hinge Size (mm) | Stack Height (mm) | Max Vent Weight (kg) | Min Vent Height (mm) | Max Vent Height (mm) | Opening Angle (+/- 2.5°) |
|-------------------------------|-----------------|-------------------|----------------------|----------------------|----------------------|--------------------------|
| EDSR12-EXP                    | 310             | 13                | 22                   | 300                  | 600                  | 58°                      |
| EDSR16-EXP                    | 412             | 13                | 24                   | 400                  | 700                  | 58°                      |

- Add H6 for 16" (For example EDTR24H6-EXP)
- Add H7 for 17" (For example EDTR24H7-EXP)
- For austenitic variants add 'A' to end of part code
- For timber variants add 'TV' to end of part code (13mm stack height only)
- Side hung restricted hinges are sold with an opposite hand standard non-restricted hinge; as only one side hung restricted hinge is required and must be fitted as a bottom hinge - PL = Left Hand hinge is restricted, -PR = Right Hand hinge is restricted
- Top hung restricted hinges are sold and must be fitted in pairs

\*10 Year Mechanical Guarantee for Standard Ferritic and 12 Year Mechanical Guarantee for Austenitic Stainless Steel

**Note:** As with all types of friction hinges, friction cannot be provided until the slider moves, therefore when opening top hung. Vents to angles of 10° or less a separate device may be required to prevent the window from closing.

Restricted gap is controlled by:

- System profile depth
- Vent size