

WS-T-9827/9927 WS-T-9857/9957

Multi-Point Exit Devices:
Certified to ICC-500 (2020)

Overview

The Von Duprin® 98/99 Series exit device is designed to withstand the toughest of environments. In accordance with ICC 500 (2020) standard for wind and storm shelters required by the 2021 International Building Code (IBC 2021), Von Duprin offers a Windstorm Tornado (WS-T) option on multi-point exit devices for single doors or door pairs. The two-point WS-T 98/9927 exit device for door pairs and three-point WS-T 98/9957 exit devices for single doors incorporate reinforced components to help ensure the building and its occupants are kept safe from wind and projectile debris. These devices are third party tested to comply with ICC-500 (2020) standards and FEMA P-361 (2021) guidelines when installed on Steelcraft listed and labeled Tornado Resistant Assemblies.

The ICC500 (2020) standard requires outside levers to be locked and rigid during storm events and unlocked outside levers to have inside lock status indicators. While active L-trim is not available with the WS-T option, mixed-use shelters or safe rooms, such as classrooms, auditoriums, and cafeterias, can utilize Von Duprin security indication options to allow occupants to remain on the secure side of the door while maintaining free egress. Windstorm exit devices can be ordered with double cylinder with security indicator (-2SI), Emergency Secure Lockdown (ESL), and Cylinder Dogging Security Indicator (CDSI) to facilitate ease of the outside lever lockdown from the inside.

Since pioneering the first exit device in 1908, Von Duprin life safety products have provided unparalleled quality, performance and flexibility for schools, hospitals, stadiums and public buildings. These products come with the support and customer care only offered by Von Duprin, providing the confidence and peace of mind at critical moments of life safety.

Features & Benefits

- Designed to endure tornado force winds and flying debris
- Uniquely designed center case
- Reinforced top and bottom latch housing with strengthening strap
- Stamped end cap mounting bracket
- Top soffit latch with reinforced ratchet release bracket
- Cast latch covers
- Stronger latch mounting screws
- Thru-bolted attachment points
- Lockdown security indicator options provide peace of mind and timely lockdown of the outside lever during a storm

WS-T-9827/9927 Windstorm Ratings

- Flush door pair applications:
Minimum 6'0" x 6'8" and maximum 8'0" x 8'0" flush Steelcraft Tornado Resistant Pair Assemblies (swinging same direction)
- ICC500 (2020), FEMA P-361 (2021) and International Building Code (IBC 2021) Compliant:
 - Listed and labeled for ICC500 (2020) Standard for the Design and Construction of Storm Shelters.
 - Design pressure +/- 243 PSF
 - 15 pound 2 x 4 at 100 mph
 - Listed for Panic and Fire-Rated Exit Hardware
 - Fire exit hardware listed for 90-minute UL10C for door pairs (swinging same direction)
 - Panic Hardware UL305 listed
 - ANSI/BHMA A156.3 Grade 1
- WS-T-9827/9927 is suitable for use in Enhanced Hurricane Protection Areas. See Allegion-Schlage Lock Company, LLC. Florida product approval FL41734.

Specifications	
Device functions	Device ships EO (Exit only) DT, L-DT, L-BE-2, L-KC
Device lengths	3': 2' 4" to 3' (71mm to 914mm) door size 4': 2' 10" to 4' (864mm to 1219mm) door size
Strikes	Bottom – 304L unfinished
Mechanical options	-2SI - Double cylinder with security indicator CD - Cylinder dogging* CDSI - Cylinder dogging, security indicator LD - Less dogging <small>*WS-T devices with CD/CDSI option must utilize a thumbturn cylinder. A dogging key is not permitted.</small>
Electrical options	LX - Latchbolt monitor switch RX - Push pad monitor switch RX-2 - Double push pad monitor switch SS - Signal switch QEL/ESL - Quiet Electric Latch/Emergency Secure Lockdown
Fasteners & sex bolts (SNB)	Includes 1-3/4" (44mm) metal doors SNB furnished for top & bottom latches and device (required)
Device centerline from finished floor	39-1/2" (1003mm)
Door undercut	1/4" (7mm)
Center case dimensions	8" x 2-3/4" x 2-3/8"
Mechanism case dimensions	2-1/4" x 2-1/4" (57mm x 57mm)
Top & bottom latch case	4-1/2" x 2-1/2" x 1-7/8" (114mm x 64mm x 48mm)
Vertical rods	1/2" (13mm) round tubing, standard rods accommodate 7' (2134mm) doors Top rod length is 36-1/4" (921mm) Bottom rod length is 31-3/4" (806mm)
Projection	Pushbar neutral – 3-13/16" (97mm) Pushbar depressed – 3-1/16" (78mm)
Finishes	US3, US4, US10, US26, US26D, US28, 313, 315 and US32D* <small>*Available on WS-T-9827 and WS-T-9857 devices only</small>

WS-T-9857/9957 Windstorm Ratings

- Flush single door applications:
Minimum 3'0" x 6'8" and maximum 4'0" x 8'0" flush Steelcraft Tornado Resistant Single Door Assemblies
Flush single door applications:
Minimum 3'0" x 6'8" and maximum 4'0" x 8'0" Flush Steelcraft Tornado Resistant Single Door Assemblies
- ICC500 (2020), FEMA P-361 (2021) and International Building Code (IBC 2021) Compliant:
 - Listed and labeled for ICC500 (2020) Standard for the Design and Construction of Storm Shelters.
 - Design pressure +/- 252 PSF
 - 15 pound 2 x 4 at 100 mph

- Listed for panic and fire-rated exit hardware
 - Fire exit hardware listed for 3 hour UL10C (single doors)
 - Panic Hardware UL305 listed
- ANSI/BHMA A156.3 Grade 1WS-T-9857/9957
- WS-T-9857/9957 is suitable for use in Enhanced Hurricane Protection Areas. See Allegion-Schlage Lock Company, LLC. Florida product approval FL41734.

Note: The Von Duprin WS-T exit device options must be installed on Steelcraft Tornado Resistant Assemblies that are tested to ICC500 and FEMA standards. Tornado assembly components are approved and certified as an assembly and cannot be mixed and matched. These components include the frame, door, hinges, anchors, and latching hardware. Proper installation of tornado doors is critical. It is recommended to have a pre-installation meeting with the contractor, specifier, door supplier, and installer to discuss the installation. Steelcraft Tornado Resistant Assemblies that include glass lights and continuous hinges tested for ICC500 (2020) with WS-T 98/9927 pairs are currently not available. View the Steelcraft Tech Data Manual for the most up-to-date testing and assembly information.

Trim Guide



Trim Function	Exit Only (EO)	Dummy Trim (DT)	Dummy Trim, Less Control (DT)	Lever - Key Capture (L-KC)	Lever - Blank Escutcheon (L-BE)-2/-2SI option	Lever - Dummy Trim (L-DT)	Lever - Dummy Trim (L-DT) Less Control
Product Description	WS-T-9927-EO WS-T-9827-EO WS-T-9957-EO WS-T-9857-EO	WS-T-9927-DT WS-T-9827-DT WS-T-9957-DT WS-T-9857-DT	WS-T-9927-DT-less control WS-T-9827-DT-less control WS-T-9957-DT-less control WS-T-9857-DT-less control	WS-T-9927-L-KC WS-T-9827-L-KC WS-T-9957-L-KC WS-T-9857-L-KC	WS-T-9927-L-BE-2SI WS-T-9827-L-BE-2SI WS-T-9957-L-BE-2SI WS-T-9857-L-BE-2SI	WS-T-9927-L-DT WS-T-9827-L-DT WS-T-9957-L-DT WS-T-9857-L-DT	WS-T-9927-L-DT-less control WS-T-9827-L-DT-less control WS-T-9957-L-DT-less control WS-T-9857-L-DT-less control
Supplied Trim	None	377T-KC x 990DT	990DT	996L-KC	377T-KC x 996-2	377T-KC x 996L-DT	996L-DT
Projection		2" (51 mm)	2" (51 mm)	2 7/8" (73mm)	2 7/8" (73mm)	2 7/8" (73mm)	2 7/8" (73mm)
ANSI Function	1	12	2	9	12, 14	12	2
Cylinder Type		1 1/4" (32mm) mortise		Rim			
Notes					12/14 changes ansi function based on the -2SI setting. "12" if "locked" state and "14" if unlocked state	NL-DT will not have a key cylinder hole in this application	L-DT will not have a key cylinder hole in this application

Compliant WS-T Trim Choices

ICC 500 - 2020 requires the exterior lever to be locked or rigid during a storm. The 996L-Trim option is not available with the WS-T option due to this requirement.

The following three Von Duprin trim options allow for day-to-day unlocked outside trim and enable a lockdown functionality with indication, providing ICC 500 - 2020 compliance.

Option 1: You require an exterior lever that remains unlocked/active until lockdown and always latches

Option	Inside Cylinder	Trim	Function
Double Cylinder with Security Indicator (-2SI)	Keyed or thumbturn	996	L-BE
		and	
		377	T-KC

In a storm event, a user can see the lock's status via the indicator to quickly determine if the door needs to be locked, which is done via thumbturn or key. A key can be used to enter from the outside during lockdown. The door returns to a locked state as soon as the key is removed.

Option 2: You require access control to retract the latch when a credential is presented until lockdown

Option	Inside Cylinder	Trim	Function
Quiet Electronic Latch retraction (QEL) with Emergency Secure Lockdown (ESL)	Keyed or thumbturn	996	L-KC
		or	
		377	T-KC

In a storm event, the user engages the thumbturn which prompts ESL to interrupt power to QEL motor, disabling card access and electronic dogging. A key can be used to enter from the outside during lockdown. The door returns to a locked state as soon as the key is removed.

Option 3: You require an exterior lever that is always locked but want the ability to mechanically undog the door until lockdown. (Opening must be non-fire rated.)

Option	Inside Cylinder	Trim	Function
Cylinder Dogging Security Indication (CDSI)	Thumbturn only	996	L-KC

In a storm event, the user can quickly see the latch's status via the indicator to see if the push pad is undogged or dogged. If undogged, the user twists the thumbturn to dog the door. A key can be used to enter from the outside during lockdown. The door returns to a locked state as soon as the key is removed.

Note: 377T-KC is not ADA compliant

The following Von Duprin trim options allow for fixed outside trim, providing ICC 500 - 2020 compliance:

Option 4: You require an exterior that is exit only

Option	Inside Cylinder	Trim	Function
Exit only	NA	NA	EO

There is no exterior lever, so no action is needed during storm event.

Option 5: You require trim that is always locked and requires key for entry

Option	Inside Cylinder	Trim	Function
Always locked	NA	996	L-KC

Exterior is always locked and can only be operated with use of mechanical key. No action is needed during storm event.

To support ADA compliance, extended latch guards for rods are recommended (WS-LGO-3 and WS-LGO-4) but they are not required for ICC 500 compliance.

Ordering Information

WS-T - 98 - 27 - L-BE - 06 - F - -2SI - 3' - US26 - LHR

Storm Rating	Series	Device Type	Trim Function	Lever Style	Rating	Suffix	Device Length	Finishes	Handing
1	2	2	4	5	6	7	8	9	10

Selections correspond with the numbers above.

1 Storm rating

WS-T	Windstorm Tornado
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2 Series

98	Series 98 - smooth
99	Series 99 - grooved

3 Device Type

27	Two point latch mounted vertical rod device
57	Three point latch mounted vertical rod device

4 Device Options (Prefix)

CD	Cylinder dogging
CDSI	Cylinder dogging security indicator
ESL	Emergency Secure Lockdown
LX	Latch bolt monitoring
LD	Less-dogging
RX	Request to exit
RX2	Double request to exit
SS	Signal Switch
QEL	Quiet Electric Latch retraction

5 Trim Function

EO	Exit only
DT	Dummy trim
L-DT	Lever, rigid - dummy trim
L-BE	Lever - blank escutchen*
L-KC	Lever - key capture trim
	*Specify for -2SI option

6 Lever Style

Decorative
Standard

7 Rating

F	Fire exit device
	Panic hardware

8 Suffix

-2SI	Double cylinder with security indicator
CON	Connectors
WH	Weep holes

9 Device Length

3'	Device (2'4" - 3' door size)
4'	Device (2'10" - 4' door size)

10 Finishes

710/313	Dark bronze
711/315	Black
605/US3	Brass, polished
606/US4	Brass, satin
612/US10	Bronze, satin
625/US26	Chrome, polished
626/US26D	Chrome, satin
628/US28	Anodized, aluminum
630/US32D*	Stainless steel, satin

*For the WS-T-9827 and WS-T-9857 devices only

11 Handing

LHR	Left hand reverse
RHR	Right hand reverse

Example Configurations

	Specify	Supplied Trim	Sample Allegion Catalog Number (ACN)
Device	9827/9927	NA	NA
Storm Rating	WS-T	NA	NA
Function	EO DT x less control DT L-DT x less control L-DT L-BE -2 or 2SI L-KC	None 990DT 990DT x 377T-KC 996L-DT 996L-DT x 377T-KC 996L-BE -2 x 377T-KC 996L-KC	WS-T-9827-EO WS-T-9827-DT-less control WS-T-9827-DT WS-T-9827-L-DT-less control WS-T-9827-L-DT WS-T-9827-L-BE-2SI WS-T-9827-L-KC
Options	CD CDSI LD QEL/ESL LX, RX,RX-2 CON (suffix)	NA	CD-WS-T-9827-EO-US26 CDSI-WS-T-9827-EO-US26 LD-WS-T-9827-EO-US26 QELA-ESL-WS-T-9827-L-DT-626