



ICC500-2020 Tornado and FBC EHPA Severe Weather Solutions

Updated 9/2/2025

The International Code Council (ICC) published a standard for the design and construction of storm shelters in 2020. This standard, the *ICC 500-2020*, is referenced in the 2021 International Building Code. The prior version of the ICC 500 standard was dated 2014 (*ICC 500-2014*).

The *ICC 500-2020* standard requires:

- System to meet robust testing criteria against wind and debris conditions
- Outside levers to be rigid or locked during a storm event
 - Levers that are not always locked must be locked during a storm event and must be able to be quickly locked from the inside.
 - Signage provided by the General Contractor instructs users on lockdown. Von Duprin WS-T exits and Schlage LM9300 locks support this signage with locked / unlocked indicators on the inside / non-threat side one when the selected trim allows external unlocking.

Allegion's ICC 500 Offering

In Q2 2024, Allegion began offering select assemblies that are certified and labeled in compliance with the *ICC 500-2020* standard. These assemblies include Steelcraft Paladin doors and frames and a secure locking device from Schlage or Von Duprin with listed approved accessory hardware.

Some noteworthy hardware requirements based on *ICC 500-2020* guidelines and 3rd party testing interpretations, and internal expertise are:

- WS-T exit and LM9300 Multi-point lock options as part of the Paladin approved assembly must be used in configurations for tornado and FBC EHPA.
 - WS options with Steelcraft H doors remain for Level E Hurricane applications

Paladin™ Series door systems are specifically designed and tested, certified by UL or Intertek, and labeled showing compliance with ICC 500-2020, FEMA P-320 (2021), and FEMA P-361 (2021), as required by the International Building Code, providing security and safety for tornado shelters and severe storm areas of refuge.

Paladin ICC 500-2020 assembly listings with approved hardware can be found here:

- UL Product iQ (free registration/login required for access):
 - [UL.ZHLA.79 Listing for WS-T Exit hardware](#)
 - [UL.ZHLA.87 Listing for LM9300 Multi-point hardware](#)
- Intertek:
 - [ITS 64895 Listing for WS-T Singles and LM9300 Singles and outswing pairs](#)
- Check [Offering with Latching Hardware](#) and [Approved Hardware](#) for current availability
- See www.Steelcraft.com > Products > Doors > Paladin PW Series > [Downloads](#) for Installation Instructions, drawings, tech support, anchoring, and more

Steelcraft Paladin Doors and FP Frames

Paladin doors are specifically designed for tornadoes and have a specially designed steel-stiffened core and reinforced construction for maximum duty usage. When paired with the FP14 frame and WS-T exit devices or LM9300 series locks, the assembly withstands tornado conditions.

Von Duprin WS-T98/9927 and WS-T-98/9957 Exit Devices

The Von Duprin 98/99 series has a WS-T option for 27 surface mounted vertical rods with two-point latching for pairs and 57 surface vertical rod with three-point latching for singles. This WS-T option differs from a design perspective from the previous WS option, and these enhancements enable it to meet ICC 500-2020 requirements.

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, but typical usage only requires ingress by authorized personnel at start of day.

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 a 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.

Schlage LM9300 Multi-Point Locks

Schlage LM9300 Multi-Point locks secure the door at three points: top, bottom, and the traditional center latch location.

Option 1: Exit

Option	Outside	Inside
LM9325	No outside trim	Lever only

Option 2: Entrance/Office (include Gen 2 Indicator on inside only)

Option	Outside	Inside
LM9350	Key cylinder & Lever	Thumbturn & Lever

Option 3: Classroom Security (include Gen 2 Indicator on inside only)

Option	Outside	Inside
LM9371	Key cylinder & Lever	Key cylinder & Lever

Option 4: Storeroom

Option	Outside	Inside
LM9380	Key cylinder & Lever	Lever only

Note: For the LM9300 pair inactive leaf inswing and outswing pairs, use SB360-WS inside mounted.

LM9310 Passage Set and **LM9370** Classroom are not approved for use in our ICC 500-2020 solutions.

How to Order

Orders may be submitted to Steelcraft via OEW, email at Steelcraft_Order_Entry@allegion.com, or fax at 800.356.7178.

Von Duprin WS-T and Schlage LM9300 available Trim Configurations

WS-T-98/9927 - Tornado and FBC EHPA PAIR Trim selections

Function	Device Description (3ft)	Lever	Trim and Cylinder Control	Finish
EO	WS-T-98/9927 - EO	06 (Rhodes) example	None	626
DT x less control	WS-T-98/9927 - DT x Less Control		990DT	626
DT	WS-T-98/9927 - DT		990DT x 377T-KC	626
L-DT x less control	WS-T-98/9927 - L-DT x Less Control		996L-DT	626
L-DT	WS-T-98/9927 - L-DT		996L-DT x 377T-KC	626
L-BE -2SI x less control	WS-T-98/9927 - L-BE -2SI x Less Control		996L-BE -2SI	626
L-BE -2SI	WS-T-98/9927 - L-BE -2SI		996L-BE -2SI x 377T-KC	626
L-KC	WS-T-98/9927-L-KC		996L-KC	626

WS-T-98/9957 - Tornado and FBC EHPA SINGLES

Function	Device Description (3ft)	Lever	Trim and Cylinder Control	Finish
EO	WS-T-98/9957 - EO	06 (Rhodes) example	None	626
DT x less control	WS-T-98/9957 - DT x Less Control		990DT	626
DT	WS-T-98/9957 - DT		990DT x 377T-KC	626
L-DT x less control	WS-T-98/9957 - L-DT x Less Control		996L-DT	626
L-DT	WS-T-98/9957 - L-DT		996L-DT x 377T-KC	626
L-BE -2SI x less control	WS-T-98/9957 - L-BE -2SI x Less Control		996L-BE -2SI	626
L-BE -2SI	WS-T-98/9957 - L-BE -2SI		996L-BE -2SI x 377T-KC	626
L-KC	WS-T-98/9957 L-KC		996L-KC	626

WS-T-98/9927 - PAIRS

Function	Device Description (3ft)	Lever	Trim and Cylinder Control	Finish example
EO	WS-T-98/9927 - EO	06 (Rhodes)	None	626
DT x less control	WS-T-98/9927 - DT x Less Control		990DT	626
DT	WS-T-98/9927 - DT		990DT x 377T-KC	626
L-DT x less control	WS-T-98/9927 - L-DT x Less Control		996L-DT	626
L-DT	WS-T-98/9927 - L-DT		996L-DT x 377T-KC	626
L-BE -2SI	WS-T-98/9927 - L-BE -2SI		996L-BE -2SI x 377T-KC	626
L-KC	WS-T-98/9927-L-KC		996L-KC	626

Support and Resources

Paladin Webpage Download Links

[ICC 500-2020 and Product Ordering Information](#)

[Offering with Latching Hardware](#)

[Approved Hardware](#)

[WS-T Data Sheet](#)

[LM9300 Cut Sheet](#)

[Steelcraft Technical Data Manual](#)

[Installation Instructions with Links](#)

[Tornado II Drawing Flush](#)

[Tornado II Drawings Glazed](#)

[PER10146 Grout Filled Shim Space](#)

[Installing WS Strikes](#)

[Standard Anchor Locations](#)

[Anchor Lookup Tool \(Excel\)](#)

[Tornado Specification](#)

[Hardware Sets](#)

[Hardware Sets - Numbering System](#)

[Field Inspection Form](#)

- Learn more about ICC 500 from the [ICC](#), [FEMA](#) or [idighardware](#) websites
- Utilize the [Allegion 360 Portal](#) the Overtur Estimate & Order tool in and the Interactive Pricing tool for specific available hardware configurations.

Reach out to Steelcraft_Order_Entry@allegion.com with questions.