ICC 500-2020 CUSTOMER GUIDE

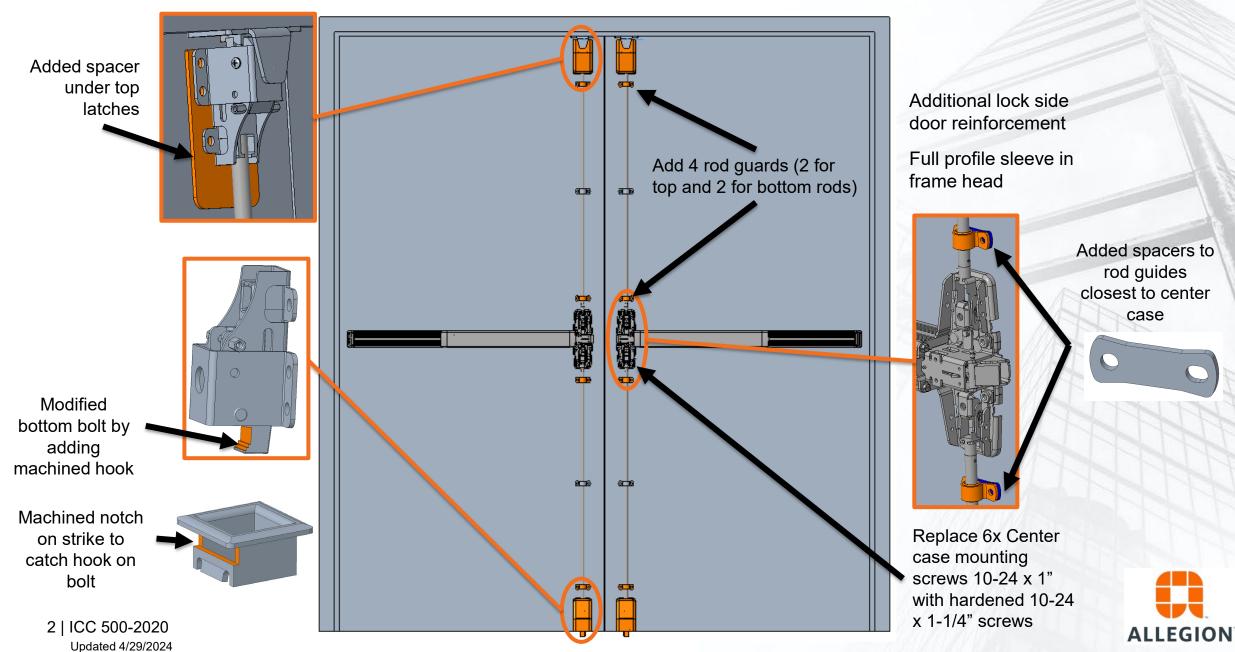
Guide to support customer orders and understanding of product changes to our Tornado Resistant Systems while official literature is being processed.

All hollow metal tornado orders default to 2020 as of April 29, 2024. 2014 labels are only available by commenting and upon approval after review.

Updated April 29, 2024



Changes from WS98/9927 Exit Device to WS-T-98/9927 (WS-T-98/9957 uses same construction as 2014)

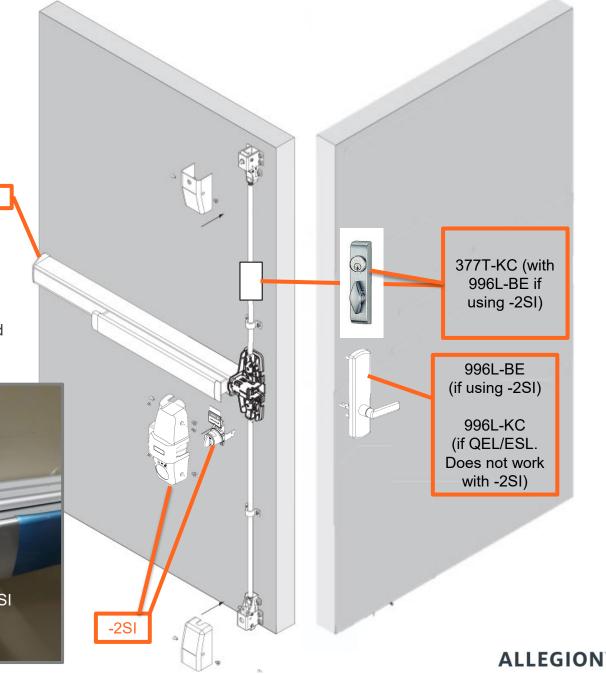


Von Duprin Exit Device function changes

Driven by ICC 500-2020, Section 507

Solution Layout – Auditorium Function facilitates lockdown of outside lever from inside to allow the outside lever to remain unlocked during the day

- WS-T-98/9927 2pt Exit Pairs (N/A as single prep)
- WS-T-98/9957 3pt Exit Singles
- Auditorium Functions
 - -2SI -- is unlocked with 996L-BE Trim x 377T-KC Key Capture control which will lock again when the key is removed
 - QEL / ESL (not shown) and card reader access -- is unlocked with 996L-KC when in lockdown mode
 - CDSI (note shown) mechanical dogging (non-fire rated only) is unlocked with 996L-KC when in lockdown mode (only available with thumbturn)
- Thumbturns and key cylinders are ordered from Schlage:
 - Standard thumbturn cylinder XB11-979
 - ADA thumbturn cylinder XB13-379
 - *Schlage RIM cylinder 20-021
- *Currently key cylinders in place of the
 Thumbturn may require tethering to the door per
 ICC 500-2020 Section 507. To avoid tethering, use
 thumbturns instead, or use key with proper
 approvals from your AHJ prior to ordering if
 selecting 2020 labels. (currently under review to
 allow key without tethering on inside of shelter door)



Von Duprin Auditorium Functions (lockdown)

Driven by ICC 500-2020, Section 507

-2SI Double Cylinder with Security Indicator mechanical lockdown solution





Click for youtube video of -2 (shows -2SI without indicator on non-tornado opening)

-or-



Electronic dogging/undogging thumbturn is acquired from Schlage. May allow Key cylinder with approval from AHJ.



ESL - Data Sheet









Schlage Lock function changes

Driven by ICC 500-2020, Section 507

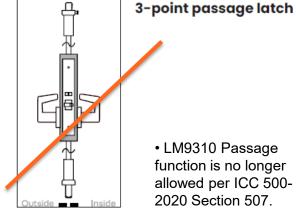
*LM9371 interior key may require tethering to the door per ICC 500-2020 Section 507. To avoid tethering, use LM9350 Office function with thumbturns. or gain proper approvals from your AHJ prior to ordering if selecting 2020 labels. (currently under review to allow key without tethering on inside of shelter door)



Locked Indicators

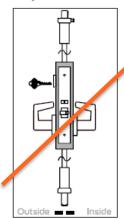
Schlage

LM9310



• LM9310 Passage function is no longer allowed per ICC 500-2020 Section 507.

Schlage LM/LMV9370



3-point classroom lock, exterior lockdown only

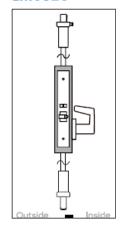
> • LM9370 not offered due to exterior locking only (PASS safe schools guidance), forcing teachers to go outside the room to lock.

LM9300 Changes – Uses LM9325, LM9350, *LM9371, LM9380

- If outside is left unlocked, the lock requires an inside locked indicator
- LM9300 pair inactive leaf assemblies use SB360-WS-OUTSWING or -INSWING, now always mounted on the inside

Schlage

LM9325

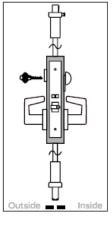


3-point exit lock

• LM9325 Exit only does not require an inside indicator (outside always locked), although best practice adds inside signage to communicate that the outside is always locked so that occupants do not go outside to verify.

Schlage

LM/LMV9350



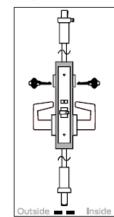
3-point entrance/ office lock



 LM9350 Office function requires inside lock indicators and clear signage supplied by GC.

Schlage

*LM/LMV9371

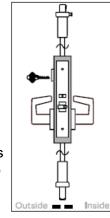


3-point classroom security lock, interior/ exterior lockdown



• LM9371 double cylinder requires inside lock indicators and is recommended for safe schools. Gain proper approvals from your AHJ to avoid tethering.

Schlage LM/LMV9380



3-point storeroom lock

 LM9380 Storeroom function does not require an inside indicator (outside always locked when key is removed), but should include GC supplied signage to communicate always locked to occupants.

5 | ICC 500-2020 Updated 4/29/2024

1-Page Summary of Tornado Latching Hardware updates for ICC 500-2020

Panic Exits: <u>WS98/9957</u> and -27 changes to WS-T-98/9957 and -27 – *T designates Tornado exits (not used for hurricane/other)*Multipoint Locks: <u>LM9300</u> – *Removes LM9310 passage set. LM9370 no longer for classroom entrance (not ICC driven).*

Inactive leaf surface bolts now always on inside/safe side of opening.

ICC 500-2020 Section 507 requires outside trim be locked and rigid during a storm event

Exit Auditorium function converts active lever to rigid lever in storm/lockdown with thumbturn on exit device side

- -2SI or ESL on exit device creates lock down or unlocked state
 - New -2SI (double cylinder lockdown with security indicator) uses thumb turn to make outside lever trim active or rigid
 - ESL electronic locking or dogging with QEL:





Inside Indicators WS-T-98/9927, -57 and LM9300 must use indicators if exterior/storm side is ever left unlocked. GC must provide signage to lock during storm event. If always locked, best practice adds signage to communicate always locked from storm side.

Exit with
-2SI or ESL
(emergency
secure
lockdown)
with indicator

Emergency
Secure
Lockdown | Von
Duprin (link)



LM9300 Multipoint

- LM9310 Passage Set no longer allowed
- LM9370 not allowed (school safety)
- LM9371 must tether or get approval from AHJ - under review to remove disclaimer
- No indicator on LM9325 EO, LM9380 Storeroom
- Indicator on LM9350 Office

Signage: GC to post clear signage on safe side

example:

MUST SET TO LOCKED DURING STORM

Best practice signage example if exit only:

OUTSIDE ALWAYS LOCKED

MUST USE KEY TO ENTER

377T-KC

Enter from outside during lockdown

377T-KC overrides -2SI to enter from outside in locked state

Lever trim options

- 377T-KC with 996L-BE
 - Turn key to activate thumb turn control to unlatch
- 996L-DT and 990DT can be used with ESL but not with -2SI.

To enter if no unlocked lever needed

- Use 996L-KC alone or 377T-KC x 996L-KC
- May also use DT with QEL/ESL and card access

Thumbturn Engages rods, with 377T lever control activated by KC key capture 996L-BE 996L-BE

Entering on trim side during -2SI or ESL lockdown

WS-T-98/9957 (3pt) singles, WS-T-98/9927 (2pt) pairs

ANSI Function #: 1, 2, 9, 12, 14

PREFIX: WS-T- ("T" is new, signifying "Tornado" for ICC 500-2020)

SERIES: 98, 99 TYPE: 27 (pairs), 57 (singles) RATING: F, P

STRIKE: 499F used with WS-T-98/9957 3-point

ACC: CD, CDSI, LD, QEL / ESL

ELECTRONIC OPTIONS: LX, RX, RX-2, ALK, SS

SUFFIX: -2SI

TRIM (a): EO/990EO/996EO/990DT (no/field prep), 990DT x 377T-KC, 996L-DT, 996L-DT x 377T-KC, 996L-BE x 377T-KC,

996L-BE x 377T-KC x -2/-2SI, 996L-KC Key Capture

TRIM (b): 377T-KC Key Capture

Entrance with -2SI (Secure Indicator provides quick visual indicator to be sure door is locked in a storm)

- -2SI unlocked: Lever is active and can be turned to retract bolts and enter.
- -2SI locked: Lever is rigid. Bolts are engaged.
- Enter the -2SI door in lockdown mode with 377T-KC x 996L-BE. Bolts reengage when key is removed (sim to NL).

Card Reader - Use ESL so that it may be put into lockdown mode (ESL requires QEL and vice versa)

- ESL unlocked mode: card credential is presented to the card reader to retract latch bolts.
- ESL (Emergency Secure Lockdown) mode: card credential will not retract latch bolts.
- Enter the door in lockdown mode with 996L-KC (key capture). When key is removed, bolts reengage (sim to NL).
- Less common, you may also enter using the 377T-KC (key capture) x 996L-BE, 996L-DT or 990DT.

<u>CDSI – Mechanical Dogging (non-rated) uses same methods as ESL to enter from outside when locked</u>

The inactive leaf is typically EO, uses 996L-DT to match trim on the active leaf, or will match active leaf function.

Catalog Order numbers for ICC 500-2020 approved Allegion latching hardware

CATALOG ORDER NUMBER EXAMPLES				Auditorium Functions			Entrance into locked -2SI or ESL	Entrance into locked ESL only; no 996L-KC if -2SI	
DESCRIPTION	VON DUPRIN EXITS (WS-T-98/9957 shown for singles; use WS-T-98/9927 for pairs)		,	<u>-2SI</u>	ESL	CDSI	996L-BE x 377T-KC		
-2SI with temp outside entrance with thumbturn and L-BE	WS-T-9957-F-3'x7'-996L-BE-06 <u>-2SI</u> -377T-KC-LHR	х		Х			х		
-2SI without temp entrance, used with all but 1 in bank of doors	WS-T-9957-F-3'x7'-996L-BE-06 <u>-2SI</u> -LHR (enter locked door with 377T-KC)	х		Х			х		
ESL without temp entrance, used with all but 1 in bank of doors	<u>QEL</u> -WS-T-9957-F-3'x7'-996L-DT-06- <u>ESL</u> -LHR (enter locked down with 996L-KC)	х			Х				х
ESL with temp outside entrance	QEL-WS-T-9957-F-3'x7'-996L-KC-06- <u>ESL</u> -LHR (if F then LD automatically provided)	х			Х			х	
ESL (electronic dogging), enter with L-KC or card (CON)	LX-RX- <u>QEL</u> -WS-T-9957-F-3'x7'-996L-KC-06- <u>ESL</u> -CON-SNB-24VDC-LHR	х			х			х	
ESL (elect dogging), enter with 377T-KC Thumbturn or card (CON) LX-RX-QEL-WS-T-9957-F-3'x7'-996L-BE-06-377T-KC-ESL-CON-SNB-24VDC-LHR		х			Х		х		
ESL with 377T-KC and 990DT instead of lever (If -2SI must use 996L-BE) LX-RX-QEL-WS-T-9957-3'x7'-990DT-377T-KC-ESL-CON-SNB-24VDC		х			Х				X
CDSI (mechanical dogging) with temp outside entrance using L-KC	DSI (mechanical dogging) with temp outside entrance using L-KC CDSI-WS-T-9957-3'x7'-996L-KC-06-LHR (not allowed in fire rated opening)					х		х	
Exit only (single; also typical for inactive leaf on a pair) LX-RS-WS-T-9957EO-3'x7'-LHR			х						
Exit with temp entrance using thumb turn and DT pull LX-RS-WS-T-9957EO-990DT-377T-KC-3'x7'-LHR			х					х	x
Exit with QEL and temp entrance using 996L-KC (key capture) LD-LX-RX-QEL-WS-T-9957-F-3'x7'-996L-KC-CON-SNB-24VDC-LHR			х					х	
SCHLAGE LM9300 MULTIPOINT LOCKS									
Exit only, no outside trim	LM9325 06		x						
Office function thumbturn with locked/unlocked indicator x key	LM9350 06 L583-363 OS-LOC IS-LOC								
Classroom Security double cylinder with locked/unlocked indicator	ssroom Security double cylinder with locked/unlocked indicator *LM9371 06 OS-LOC IS-LOC								
Exit with outside key turned 280° unlocks; remove key to re-lock LM9380 06			х						

NOTES:

-2SI, ESL, and CDSI thumbturns and key cylinders ordered separately from Schlage

- Standard thumbturn cylinder XB11-979
- ADA thumbturn cylinder XB13-379
- Schlage RIM cylinder 20-021

All levers can be ordered with vandelgard option allowing outside lever to rotate freely down while locked 06 shown as default trim style

EXAMPLES OF ORDER CONVERSIONS FROM 2014 TO 2020

ICC 500-2014	ICC 500-2020	Lockdown Type				
	WS-T-9927-996L-BE-2SI-377T-KC	Mechanical (non-dogging function)2SI				
WS-98/9927-L	-or-					
	WS-T-9927-996L-KC	No lockdown function always locked				
QELA-WS-98/9927-L	QELA-WS-T-9927-996L-DT-377T-KC-ESL	Electronic dogging QEL/ESL				
	-or-					
	QELA-WS-T-9927-996L-KC-ESL	Electronic dogging QEL/ESL				
		Mechanical dogging CDSI				
CD-WS-98/9927-L	CDSI-WS-T-9927-996L-KC	(cylindrical dogging with security				
		indicator, not allowed with Fire rating)				



^{*}LM9371 interior key may require tethering to the door per ICC 500-2020 Section 507. Avoid tethering the inside key by gaining proper approvals from your AHJ prior to ordering if selecting 2020 labels. (currently under review to allow without disclaimer)

If using key cylinders with -2SI or ESL instead of thumbturn, avoid tethering the inside key by gaining proper approvals from your AHJ prior to ordering if selecting 2020 labels. (currently under review to allow without disclaimer)

CDSI is thumbturn only.

OEW Latching Hardware Selections

VON DUPRIN									
Manufacturer:	Hardware Type	ID	Trim	Strike					
VON DUPRIN	LATCH, THREE POINT	WS-T-9857	EO	499F					
VON DUPRIN	LATCH, THREE POINT		990DT-377T-KC	499F					
VON DUPRIN	LATCH, THREE POINT		996L-DT	499F					
VON DUPRIN	LATCH, THREE POINT		996L-DT-377T-KC	499F					
VON DUPRIN	LATCH, THREE POINT		996L-BE-377T-KC-2SI	499F					
VON DUPRIN	LATCH, THREE POINT		996L-KC	499F					
VON DUPRIN	LATCH, THREE POINT	WS-T-9957	EO	499F					
VON DUPRIN	LATCH, THREE POINT		990DT-377T-KC	499F					
VON DUPRIN	LATCH, THREE POINT		996L-DT	499F					
VON DUPRIN	LATCH, THREE POINT		996L-DT-377T-KC	499F					
VON DUPRIN	LATCH, THREE POINT		996L-BE-377T-KC-2SI	499F					
VON DUPRIN	LATCH, THREE POINT		996L-KC	499F					
VON DUPRIN	EXIT DEVICE, SVR	WS-T-9827	EO						
VON DUPRIN	EXIT DEVICE, SVR		990DT-377T-KC						
VON DUPRIN	EXIT DEVICE, SVR		996L-DT						
VON DUPRIN	EXIT DEVICE, SVR		996L-DT-377T-KC						
VON DUPRIN	EXIT DEVICE, SVR		996L-BE-377T-KC-2SI						
VON DUPRIN	EXIT DEVICE, SVR		996L-KC						
VON DUPRIN	EXIT DEVICE, SVR	WS-T-9927	EO						
VON DUPRIN	EXIT DEVICE, SVR		990DT-377T-KC						
VON DUPRIN	EXIT DEVICE, SVR		996L-DT						
VON DUPRIN	EXIT DEVICE, SVR		996L-DT-377T-KC						
VON DUPRIN	EXIT DEVICE, SVR		996L-BE-377T-KC-2SI						
VON DUPRIN	EXIT DEVICE, SVR		996L-KC						

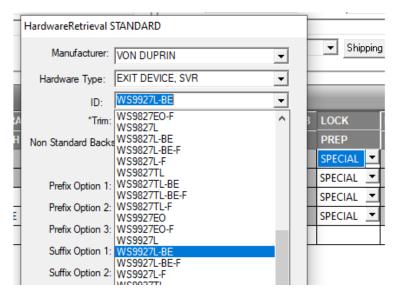
EO represents: EO/990EO/996EO/990DT (no/field prep)

SCHLAGE									
Manufacturer:	Hardware Type	ID	Trim	Strike					
SCHLAGE	MULTIPOINT LATCH	LM9325	Sectional Trim:L806	ASA					
SCHLAGE	MULTIPOINT LATCH	LM9325	Escutcheon Trim:L855	ASA					
SCHLAGE	MULTIPOINT LATCH	LM9350	Sectional Trim:L897	ASA					
SCHLAGE	MULTIPOINT LATCH	LM9350	Escutcheon Trim:L827	ASA					
SCHLAGE	MULTIPOINT LATCH	LM9350	Sectional Inside Indicator:LG208	ASA					
SCHLAGE	MULTIPOINT LATCH	LM9350	Escutcheon Inside Indicator:LG216	ASA					
SCHLAGE	MULTIPOINT LATCH	LM9371	Sectional Trim:L817	ASA					
SCHLAGE	MULTIPOINT LATCH	LM9371	Escutcheon Trim:L829	ASA					
SCHLAGE	MULTIPOINT LATCH	LM9371	Sectional Inside Indicator:LG208	ASA					
SCHLAGE	MULTIPOINT LATCH	LM9371	Escutcheon Inside Indicator:LG216	ASA					
SCHLAGE	MULTIPOINT LATCH	LM9380	Sectional Trim:L906	ASA					
SCHLAGE	MULTIPOINT LATCH	LM9380	Escutcheon Trim:L908	ASA					

SECURITECH								
Manufacturer:	Hardware Type	ID	Trim	Strike				
SECURITECH	MULTIPOINT LATCH	blank; cus	stomer fill in order code; send form,te	mplate				

Above shows Simplified OEW 2020 Hardware selections affecting hollow metal preps

Old selections >>





Approved Latching Hardware

- ICC 500-2020 labeled PW/FP Series product is provided by default from Steelcraft.
- For a period of time, 2014 labels are available upon request, reviewed for approval when commenting "ICC 500-2014" through Comments in OEW or on emailed or faxed Order Forms

ICC 500-2020
ALLEGION Approved
Latching Hardware
Current and Future Offering

KEY: Current and future offering / check weekly lead time bulletins

ITS 2020 Orderable with ICC 500-2020 label

UL 2020

Orderable with ICC 500-2020 UL label -- Target orders in June (call for availability)

Special order may be necessary when ordering hardware -- use new nomenclature ordering 2020

ICC FOO 2020 Allasian assembly	Latching hardware		Singles		Pairs						
ICC 500-2020 Allegion assembly approved tornado hardware			Out-	In-	Out-	In-	Active x	Active x	Inactive uses	Astragal type	
approved torridad nardware	Lever/Exit	Rod	Latch	swing	swing	swing	swing	Active	Inactive	SB360-WS	required
Schlage LM9300 MultiPoint	Lever	CVR	3-point				n/a	n/a		SB360-WS-OUT	Z on inactive leaf
Schlage Livissoo Widitir Ollit	Level					n/a		11/4		SB360-WS-INS	Flatbar on active
Schlage LM9300 for SHUTTERS	Lever	CVR	3-point			*	n/a		SB360-WS-OUT	Z on inactive leaf	
Schlage Livis 300 for Shorters	Level					n/a	*	n/a		*SB360-WS-INS	Flatbar on active
Securitech 52xx-V	Lever	IHD = CVR	2-point		n/a		n/a		n/a	n/a	n/a
Securitech 53xx/54xx	Lever	IHD = CVR	3/4-point		n/a		n/a	n/a	n/a	n/a	n/a
Securitech 7L, 83/84L	Lever	IHD = CVR	3/4-point		n/a		n/a	n/a	n/a	n/a	n/a
Securitech Medeco and Schlage ND	Lover	CVR	Standard	2/2		n/a	2/2	10 010	2/2	2/2	2/2
/ Falcon T (FEMA 320,<16 occ)	Lever		+ 3 DB's n/a		n/a	n/a	n/a	n/a	n/a	n/a	
ATAR has been discontinued	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Von Duprin WS-T-98/9927(F)exit	Panic exit	SVR	2-point	no 2020	n/a		n/a		n/a	n/a	n/a
Von Duprin WS-T-98/9957(F)exit	Panic exit	SVR	3-point		n/a	n/a	n/a	n/a	n/a	n/a	n/a
Securitech 7T/7C	Panic exit	IHD = CVR	3/4-point		n/a	n/a	n/a	n/a	n/a	n/a	n/a
Securitech 83/84T/C (pair 83T)	Panic exit	IHD = CVR	3/4-point		n/a		n/a	n/a		SB360-WS-OUT	Z on inactive leaf
Notable Accessory delays for UL'20	Glass lights and Continuous hinges for WS-T-98/9927 Pairs and LM9300 Inswing Pairs (UL)						irs (UL)				

For 2020 exits WS-T-98/9927 is no longer available for singles

- Order Singles as WS-T-98/9957
- Order Pairs as WS-T-98/9927

NOTES:

- *Shutter pairs for outswing applications are currently restricted to same minimum as 3-sided doors, and Inswing shutter pairs are not currently available.
- Securitech orders must include a copy of the hardware order and up to date templates. The hardware order # should be typed into the OEW ID field.



(Updated 4/29/24)

Customer Bulletin

Date: April 5, 2024

Steelcraft and Republic ICC 500-2020 Tornado Assemblies

Beginning April 29, 2024, our systems will officially switch to offering ICC 500-2020 labels for Tornado doors and frames, replacing our current ICC 500-2014 labeled tornado offering. Allegion's tornado assemblies will be certified and labeled showing compliance to ICC 500-2020, FEMA P-320 (2021), and FEMA P-361 (2021), as required by the 2021 International Building Code (IBC 2021). Products will maintain compliance with previous versions of the code. Orders may be submitted by email or fax, as well as OEW for Steelcraft.

If your project requires compliance to ICC 500-2020 and you wish to order ICC 500-2020 doors and frames prior to April 29th, please comment "ICC 500-2020" to my attention on your order. These orders will be reviewed and may require changes prior to processing based on our updated offering and new compliant hardware nomenclature and functions. ICC 500-2020, Section 507, requires outside levers to be locked and rigid during storm events, and has led to product changes. Notable hardware changes include the following:

- Unlocked outside levers require inside lock status indicators. The LM9380 function does not require an inside indicator (outside always locked). The LM9370 should not be used due to exterior locking only. LM9310 passage sets are not compliant to ICC 500-2020.
- LM9300 pair inactive leaf assemblies use SB360-WS-OUTSWING or -INSWING, always mounted on the inside.
- Von Duprin exits with unlocked levers <u>require</u> -2SI or ESL to lock from the inside (auditorium function). Entry into these locked exits is available using 996L-BE with 377T-KC.
- Von Duprin exit order nomenclature adds -T- for WS-T-98/9927 and WS-T-98/9957.
- A complete list of available functions and accessories will be made available later in April.

The following ICC 500-2020 labeled systems will be delayed for ordering with availability in June:

- · Schlage LM9300 inswing (straight handed) pairs and inswing shutter pairs.
- Von Duprin exit pairs and LM9300 inswing pairs if they include glass lights, continuous hinges (limited offering), or some less popular hardware accessories.

Please note ICC 500-2014 door and frame construction is no longer available for our exit pairs; existing orders and new orders prepped for our exit pairs will be constructed to meet ICC 500-2020 requirements. These tornado preps will not be available for order processing until April 29th when our system is updated. Prior to this, upon request we will continue to hold your orders, but we prefer that you wait to submit on April 29th when our systems will be updated for processing.

