

Hurricane Rated Exit Devices and Mullions

Resource Guide for Quick Reference of the Solutions and How to Order with New Prefixes

Hurricane resistant openings are designed to withstand storm conditions for long periods of time while maintaining the structural and functional integrity of the opening. The primary purpose is to not only prevent debris and wind from penetrating the assembly but also to maintain functionality after the storm.

Hurricane Codes and Applications

Florida was the first state to develop hurricane codes. As a result, the requirements set by the Florida Building Code (FBC) may be adopted by jurisdictions in other states where hurricane protection is a necessity. The appropriate hurricane solution depends on the specific requirements for the application. Contact your local Allegion representative for the specific requirements in your state.

Hurricane Rated Devices

Wind and Impact

**FBC TAS 201, 202, 203 (Wind and Impact zone [HVHZ])
ASTM E1886, ASTM E1996, ASTM E330)**

Exterior door assemblies certified for installation within the Florida High Velocity Hurricane Zone (coastal region of the state) are subject to specific tests for both wind speed and flying debris called out in the TAS protocols of the Florida Building Code. Impact, structural, and cyclic tests must be conducted on full assemblies (e.g., exit device and door) as part of the standard.

Wind-Only

ANSI-ASTM E330 (Wind-Only [non-impact zone])

Exterior door assemblies certified for installation in non-impact regions (typically inland regions) are tested for structural integrity in accordance with ASTM E330 for wind-only applications. These doors are subject to a structural test load equal to 1.5 times their actual design pressure rating, and they must remain operable with no breakage of glazing panels.

To order, specify:

1. Use prefix "HH" for wind and impact or "HW" for wind-only. If application is unknown, specify HH device, which will satisfy both applications.
2. Model number and description
3. Door mode: SGL (single) or PR (pair)
Example: CD HH99NL 3' 626 PR

Note: Many hurricane rated devices use standard device components. Devices will be furnished with the proper strikes and components if HH or HW is specified. All HH devices will include through bolts. Pricing will be adjusted accordingly. See Von Duprin price book for details.

Hurricane Rated Mullions

Wind and Impact

- Designed for use with these HH (wind and impact) rated devices:
 - HH78 (specify devices with 299F or 499F strikes)
 - HH98/99 (specify devices with 499F strikes)
 - HH98/9957 (specify devices with 499F strikes)
 - HH-XP98/99 (specify devices with 909 or 954 strikes)
 - HH88-F (specify devices with 468 strikes)
- Steel mullion
- Furnished for 8' doors; cut in field as needed
- KR option available for 9964
- Furnished blank (no strike prep)
- Mullion tube and fittings are unique from are not interchangeable with 9954

Panic and Fire-rated Applications

- HH9954, HH9964, KRHH9964

To order, specify:

- KR prefix if desired
- HH for storm rating
- Model number (9954 or 9964)
- Height (9954 only available in 8')
- Finish

Wind-Only

- Designed for use with HW (wind-only) rated devices
- Identical to standard mullions, except for hurricane rated bottom fitting mounting hardware

Panic Applications:

- Steel - 1654, 4954, 4954-XP
- Aluminum - 5654, 5654-XP, 5754

Fire-Rated Applications:

- 9954, 9954-XP

To order, specify:

1. Use KR if keyed removable option is desired
2. HW
3. Model number
4. Height of opening
5. Finish
6. Strikes, when required, should be ordered with device
Example: KR-HW9954 7' 689

22 Series				
Application	Model	Single Door	Double Door	
		Standard Strike	Mullion	Standard Strike
HW (wind-only)	22	299	4954 or KR4954	299
			1654 or KR1654	1606
			5654	299
			5754	1408
	22-F	299F	9954 or KR9954	499F
	2227	Top: 299 Bottom: 304L	-	Top: 299 Bottom: 304L
	2227-F	-	-	Top: 299F Bottom: 304L

33A/35A Series				
Application	Model	Single Door	Double Door	
		Standard Strike	Mullion	Standard Strike
HH (wind and impact rated) All impact rated devices require mounting with through bolts. Through bolts are furnished standard with all 33/35 series devices.	HH3347A/3547A*	Top: 338 Bottom: 304L	-	Top: 338 Bottom: 304L
	3347A-F/3547A-F	-	-	Top: 338 Bottom: 304L
	3349A/3549A	Top: 249 Bottom: 349	-	Top: 249 Bottom: 349
	3349A-F/3549A-F	-	-	Top: 249 Bottom: 349
HW (wind-only)	33A/35A	299	4954 or KR4954	299
			1654 or KR1654	1606
			5654	299
			5754	1408
	33A-F/35A-F	299F	9954 or KR9954	499F
	3327A/3527A	Top: 299 Bottom: 304L	-	Top: 299 Bottom: 304L
	3327A-F/3527A-F	-	-	Top: 299F Bottom: 304L
	3347A/3547A	Top: 338 Bottom: 304L	-	Top: 338 Bottom: 304L
	3347A-F/3547A-F	-	-	Top: 338 Bottom: 304L
3349A/3549A	Top: 249 Bottom: 349	-	Top: 249 Bottom: 349	
	3349A-F/3549A-F	-	-	Top: 249 Bottom: 349

* HH33/3547A is furnished with double latch brackets and requires template #10057.

55 Series

Application	Model	Single Door	Double Door	
		Standard Strike	Mullion	Standard Strike
HW (wind-only)	55	299	5754	1408
	5547	Top: 471U Bottom: 304L	-	Top: 471U Bottom: 304L

88 Series

Application	Model	Single Door	Double Door	
		Standard Strike	Mullion	Standard Strike
HH (wind and impact rated) All impact rated devices require mounting with through bolts	88-F	268	HH9954 HH9964, KRHH9964	468
	8875	575	-	-
	8875-F	575	-	-
HW (wind-only)	88	299	4954 or KR4954	299
			1654 or KR1654	1606
			5654	299
	88-F	268	9954 or KR9954	268
	8827	Top: 299 Bottom: 304L	-	Top: 299 Bottom: 304L
	8875	575	-	-
	8875-F	575	-	-

94/95 Series

Application	Model	Single Door	Double Door	
		Standard Strike	Standard Strike	
HW (wind-only)	9447/9547	Top: 338 Bottom: 304L	Top: 338 Bottom: 304L	
	9447-F/9547-F	-	Top: 338 Bottom: 304L	
	9475/9575	575	-	
	9475-F/9575-F	575	-	

2670 Guard-X

Application	Model	Single Door	Double Door	
		Standard Strike	Mullion	Standard Strike
HH (wind and impact rated) All impact rated devices require mounting with through bolts	2670	267	-	-
HW (wind-only)	2670	267	-	-

98/99 Series

Application	Model	Single Door	Double Door	Standard Strike
		Standard Strike	Mullion	
HH (wind and impact rated) All impact rated devices require mounting with through bolts	98/99	299F	HH9954, HH9964, KRHH9964	499F
	98-F/99-F	299F	HH9954, HH9964, KRHH9964	499F
	XP98/99	909	HH9954, HH9964, KRHH9964	909
	XP98-F/99-F	909	HH9954, HH9964, KRHH9964	954
	9827/9927	Top: 299F Bottom: 304L	-	Top: 299F Bottom: 304L
	9827-F/9927-F	-	-	Top: 299F Bottom: 304L
	WS9827/9927	Top: Soffit latch Bottom: 304L	-	Top: Soffit latch Bottom: 304L
	WS9827-F/9927-F	-	-	Top: Soffit Latch Bottom: 304L
	HH9847/9947*	Top: 338 Bottom: 304L	-	Top: 338 Bottom: 304L
	9847-F/9947-F	-	-	Top: 338 Bottom: 304L
	9849/9949	Top: 249 Bottom: 349	-	Top: 249 Bottom: 349
	9849-F/9949-F	-	-	Top: 249 Bottom: 349
	9857/9957	Top: 299F Middle: 299F Bottom: 304L	HH9954, HH9964, KRHH9964	Top: 299F Middle: 499F Bottom: 304L
	9857-F/9957-F	Top: 299F Middle: 299F Bottom: 304L	HH9954, HH9964, KRHH9964	Top: 299F Middle: 499F Bottom: 304L
	9875/9975	575	-	-
9875-F/9975-F	575	-	-	
HW (wind-only)	98/99	299	4954 or KR4954	299
			1654 or KR1654	1606
			5654	299
			5754	1408
	98-F/99-F	299F	9954 or KR9954	499F
	XP98/99	909	4954XP or KR4954XP	909
			5654XP	909
	XP98-F/99-F	909	9954XP or KR9954XP	954
	9827/9927	Top: 299 Bottom: 304L	-	Top: 299 Bottom: 304L
	9827-F/9927-F	-	-	Top: 299F Bottom: 304L
9847/9947	Top: 338 Bottom: 304L	-	Top: 338 Bottom: 304L	
9847-F/9947-F	-	-	Top: 338 Bottom: 304L	

* HH98/9947 is furnished with double latch brackets and requires template #10319.

98/99 Series

Application	Model	Single Door	Double Door	
		Standard Strike	Mullion	Standard Strike
	9849/9949	Top: 249 Bottom: 349	-	Top: 249 Bottom: 349
HW (wind-only)	9849-F/9949-F	-	-	Top: 249 Bottom: 349
	9857/9957	Top: 299 Middle: 299 Bottom: 304L	4954 or KR4954	Top: 299 Middle: 299 Bottom: 304L
			1654 or KR1654	Top: 299 Middle: 1606 Bottom: 304L
			5654	Top: 299 Middle: 299 Bottom: 304L
			5754	Top: 299 Middle: 1408 Bottom: 304L
	9857-F/9957-F	Top: 299F Middle: 499F Bottom: 304L	9954 or KR9954	Top: 299F Middle: 499F Bottom: 304L
	9875/9975	575	-	-
9875-F/9975-F	575	-	-	

78/75 Series

Application	Model	Single Door	Double Door	
		Standard Strike	Mullion	Standard Strike
HH (wind and impact rated) All impact rated devices require mounting with through bolts	78	499F	HH9954	499F
			HH9964 or KRHH9964	499F
	78-F	499F	HH9954	499F
			HH9964 or KRHH9964	499F
	7827	Top: 299F or 499F Bottom: 304L		Top: 299F or 499F Bottom: 304L
	7827-F	Top: 299F or 499F Bottom: 304L		Top: 299F or 499F Bottom: 304L
	7847	Top: 388 Bottom: 304L		Top: 388 Bottom: 304L
	7847-F	Top: 388 Bottom: 304L		Top: 388 Bottom: 304L
7547	Top: 388 Bottom: 304L		Top: 388 Bottom: 304L	
7547-F	Top: 388 Bottom: 304L		Top: 388 Bottom: 304L	
HW (wind-only)	78	299 or 299F	4954 or KR4954	299 or 299F
			9954 or KR 9954	299, 299F, 499F
			1654 or KRI654	1606
			5654	299 or 299F
	78F	299 or 299F	4954 or KR4954	299 or 299F
			9954 or KR 9954	299, 299F, 499F
			1654 or KRI654	1606
			5654	299 or 299F
	7827	Top: 299F or 499F Bottom: 304L		Top: 299F or 499F Bottom: 304L
	7827-F	Top: 299F or 499F Bottom: 304L		Top: 299F or 499F Bottom: 304L
7847	Top: 388 Bottom: 304L		Top: 388 Bottom: 304L	
7847-F	Top: 388 Bottom: 304L		Top: 388 Bottom: 304L	
7547	Top: 388 Bottom: 304L		Top: 388 Bottom: 304L	
7547-F	Top: 388 Bottom: 304L		Top: 388 Bottom: 304L	