# **Evaluation Report**

Title:	Evaluation of Commercial Hardware
Report #:	IR2013-001
Manufacturer:	Ingersoll-Rand Company Security Technologies 6810 Hillsdale Court Indianapolis, IN 46250
Technical Contact	Jim Donlan Product Compliance Engineer
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Date:	June 16, 2013

#### I. Introduction/ Scope

Based on wind load and impact/cyclic testing for commercial hardware, the following report will review the wind load and impact requirements for a series of Schlage, Dexter and Broadway hardware.

All hardware testing from CTL was conducted per TAS 201-94 (Impact Test Procedures), TAS 202-94 (Uniform Static Air Pressure) and TAS 203-94 (Criteria for Testing Products Subject to Cyclic Wind Pressure Loading).

## II. Reference Documents

The following documents were referenced in the creation of the evaluation report:

- 1. Certified Testing Laboratories Report No. CTLA-992W, Dated January 2, 2003
- Dade County NOA 12-0305.08, IR Series "Schlage/Broadway/Dexter, Cobra Keypad" Passage Locks w/ Deadbolts, Expiration 11/28/2013
- Dade County NOA 08-0908.19, IR Series "Schlage/Broadway/Dexter, Cobra Keypad" Passage Locks w/ Deadbolts, Expiration 11/28/2013
- 4. IR Dwg S-2303, Schlage Lock Hardware, Sheets 1 of 12, Rev H, Dated 5/17/2013
- 5. Florida Product Approval, FL 3265-R3

## III. Product Evaluation

The following table summarizes the hardware configurations that have been tested and evaluated to Florida Building Code test protocols.

Item	IR Brand (s)	Hardware	Design	Impact	Approval	Engineering	Notes
		Family	Pressure		Method	Drawing	
1	Schlage	Cylindrical	+/- 67 psf	Yes	Test CTLA-992W	S-2303	
	F Series	Deadbolt					
2	Schlage	Passage	+/-67 psf	Yes	Test CTLA-992W	S-2303	
	F Series	Deadbolt					
3	Schlage	Latch	+/-67 psf	Yes	Test CTLA-992W	S-2303	
	Dexter	Deadbolt					
	Broadway	Keypad					
4	Schlage	Latch	+/-67 psf	Yes	Test CTLA-992W	S-2303	
	Dexter	Deadbolt					
	Broadway	Plus Keypad					
5	Schlage	Entrance	+/-55 psf	Yes	Test CTLA-992W	S-2303	
	S200	Deadbolt					
6	Dexter	Cylindrical	+/-67 psf	Yes	Test CTLA-992W	S-2303	
		Deadbolt					
7	Broadway	Cylindrical	+/-67 psf	Yes	Test CTLA-992W	S-2303	
		Deadbolt					
8	Schlage	Entrance	+/-67 psf	Yes	Test CTLA-992W	S-2303	
	S200	Deadbolt					

#### **IV. Limitations of Use**

The drawings referenced above provide the primary details for the limitations of use. The door hardware details are contained in the IR drawings listed above. This includes details on strike plates, throw, deadbolt and screws types/sizes.

I have concluded that the configurations shown above comply with the structural requirements for the wind load and large missile impact requirements of the 2010 Florida Building Code.

Maximum Door width Maximum Door Height Mounting Maximum Wind Load Hardware Details Impact Rating

3'-0" 8'-0" Inswing or outswing +/-67 psf Reference drawings listed above Rated for TAS 201 impact rating and for HVHZ

6/22/13

#### Certification of Independence Of Evaluation Entity

I hereby certify that (1) I have no Financial interest in Ingersoll Rand Security Technologies; (2) I am an Independent licensed Professional Engineer in the State of Florida and; (3) I comply with the criteria of independence as stated in 9B-72.110 (3), F.A.C. and (b-72-110(4), F.A.C.