

## **Scott A. Brown, Professional Engineer**

Evaluation reports are the opinion of the evaluation entity, based on the findings, and in no way constitute or imply approval by a local building authority. I, Scott A. Brown have reviewed the data submitted by Raynor Garage Doors and in my opinion, the product, material, system, or method of construction specifically identified in this report, conforms with or is a suitable alternate to that specified in the 8<sup>th</sup> Edition (2023) Florida Building Code, subject to the limitations in this report.

**Report No.:** 36-D

**Submitted:** 08/08/17

Revised: 09/11/20

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Revised: 09/22/23

**Category:** Exterior Doors

### **Submitted By:**

Raynor Garage Doors  
1101 East River Road  
Dixon, IL 61021

### **Evaluation Entity:**

Scott Brown P.E.  
698 Timber Creek Road  
Dixon, IL 61021

### **Evaluation Test Standards:**

ANSI/DASMA 108-17  
ANSI/DASMA 115-17

## **1. Product Trade Name**

### **1.1 Sandwich Doors**

#### **1.2.1 RockeCreeke**

## **2. Scope of Evaluation**

### **2.1 Structural:** Transverse Wind and Impact/Cyclic loads

## **3. Uses**

**3.1** Raynor garage doors are used as garage doors with specified allowable transverse wind pressures.

## 4. Models

**4.1 RockCreeke:** Sandwich-style, 1 3/8" thick insulated base door panels with .014" thick galvanized steel exterior skin and .013" thick galvanized steel interior skin. The doors are insulated with a foamed in place polyurethane foam that is chemically bonded to the interior and exterior steel skins. The exterior of the door is trimmed with decorative composite boards to create different door designs. Decorative boards are 5/8" thick giving an overall section thickness of 2".

## 5. Reinforcing

**5.1 General:** Raynor garage doors sections listed in this report shall be reinforced horizontally with roll-formed galvanized steel U-bars and/or box struts.

**5.1.1 U-bar:** Horizontal reinforcing U-shaped sections, 2-5/8" deep x 2" wide x 18 ga. (.049" minimum) or 20 ga. (.035" minimum) galvanized steel, 80 KSI minimum tensile.

**5.1.2 Box Strut:** Horizontal reinforcing U-shaped sections, 4-1/2" deep x 5" wide x 20 ga. (.035" minimum) galvanized steel, 80 KSI minimum tensile.

## 6. Installation

**6.1 General:** Raynor garage doors are to be installed in accordance with the manufacturer's published installation instructions, engineering drawings and this report. The manufacturer's published installation instructions and this report shall be strictly adhered to and a copy of these instructions shall be available at all times on the job site during installation. The information within this report governs if there are any conflicts between the manufacturer's instructions and this report.

## 7. Allowable Wind Loads:

**7.1 General:** The doors shown in Table 1 were tested to ANSI/DASMA 108 for static air pressure and doors shown in Table 2 were tested for ANSI/DASMA 108 for static air pressure and ANSI/DAMSA 115 for large missile impact resistance.

**Table 1**

Door Model(s)	Maximum Door Width	Drawing Number	Design Loads		Large Missile Impact Resistant	Test Report Number	Test Date
RockCreeke	10' - 0"	P-2346-A	27.6	-31.2	No	1761	3/10/2017
	10' - 0"	P-2437-A	29.7	-33.0	No	1764	4/5/2017
	16' - 0"		18.3	-20.4		1765	4/7/2017

**Table 2**

Door Model(s)	Maximum Door Width	Drawing Number	Design Loads		Large Missile Impact Resistant	Test Report Number	Test Date
RockCreeke	10' - 0"	P-3340-A	52.4	-57.0	Yes	1768	5/23/2017
						1769	5/23/2017
	16' - 0"		32.7	-39.4		1766	4/26/2017
						1767	4/26/2017
	18' - 0"		25.9	-31.1		1770	5/31/2017
						1771	6/1/2017
	6' - 0"	P-3351-A	51.0	-57.7	Yes	1963	7/16/2020
						2008	5/24/2021
						1961	7/6/2020
						2007	5/18/2021
						2005	5/7/2021
						2006	5/12/2021
						2001	4/7/2021
						2002	4/9/2021
	12' - 0"	41.5	-46.9	32.7	-36.5	2003	4/27/2021
						2004	4/29/2021
16' - 0"	32.7	-36.5	26.4	-29.4			
18' - 0"	26.4	-29.4					

## 8. Substantiating Data

**8.1 Test Reports:** Testing for doors shown in Table 1 and Table 2 were done at Raynor Garage Doors test lab in Dixon, Illinois which was accredited by ANSI National Accreditation Board (ANAB) at the time of testing, scope of accreditation can be found at <http://www.anab.org>. Testing was witnessed by an independent third party Florida Registered Professional Engineer, Scott A. Brown P.E. Test reports were prepared by the test lab and signed and sealed by the witnessing Florida P.E. See Table 1 and Table 2 for report numbers and test dates.

**8.2 Engineering Drawings:** Drawings were prepared by Raynor Garage Doors under the direction of Scott Brown and then reviewed, signed, sealed and dated by Scott A. Brown P.E. See Table 1 and Table 2 for drawing numbers.

**8.3 Calculations:** Calculations on jamb attachment, the results are shown on drawings listed in this report.

## 9. Limitations

**9.1** The doors shall be installed in accordance with the manufacturer's published installation instructions in this report and the manufacturer's published installation instructions, engineering drawings and this report.

**9.2** The structural elements supporting the door track brackets shall be designed by a registered professional engineer for the wind loads shown on the drawings listed in this evaluation.

**9.3** The doors shall not be installed in areas where the transverse wind loads exceed the allowable loads shown in Table 1 and Table 2.

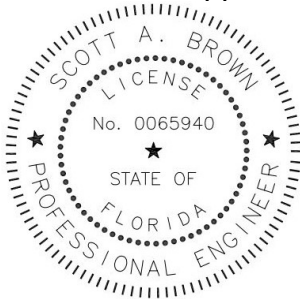
**9.4** Doors listed in this report do not address the requirements of the High Velocity Hurricane Zone (HVHZ).

## 10. Identification

**10.1** Each Raynor Garage Door covered by this report shall be labeled with the manufacturer's name, drawing number and Florida approval number for field identification.

## 11. Further Information

**11.1** Scott A. Brown F.P.E. #65940 does not have, nor intend to acquire a financial interest in Raynor Mfg. or any other company manufacturing or distributing products for which this report is being issued; Scott A. Brown F.P.E. #65940 is not controlled by Raynor Mfg. or any other company manufacturing or distributing any portion of the product being tested, evaluated or approved by this report.



Scott A. Brown, P.E. Lic. No. 65940  
Willett, Hofmann & Associates, Inc.  
809 E. 2nd Street, Dixon, IL 61021  
FBPE CA Lic. No. 35415  
Structural Adequacy for Wind Load

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