

Residential Garage Doors | Miami-Dade Hurricane Ready

**RAYNOR**  
GARAGE DOORS



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GARAGE DOORS

Miami-Dade Hurricane Ready™  
Residential Garage Doors



## Hurricane Ready Residential Garage Doors Determine Your Requirements



### Step 1:

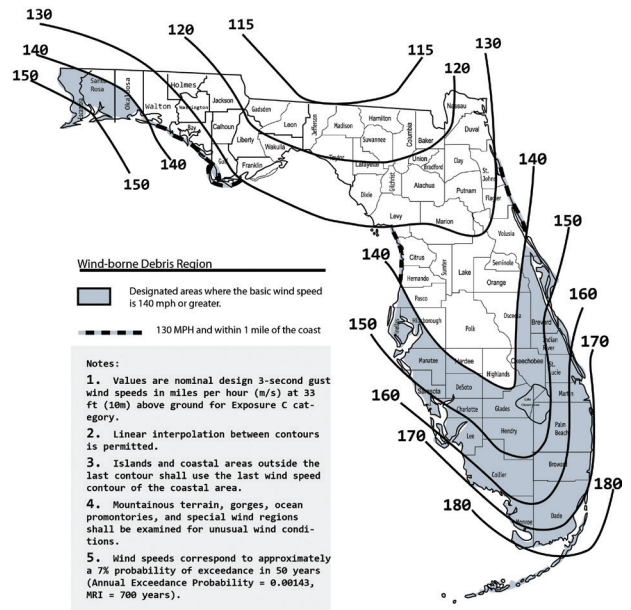
Determine the minimum wind speed (MPH) your door must meet or exceed from the map below, or go to [www.atcouncil.org/windspeed](http://www.atcouncil.org/windspeed). Determine if wind borne debris is applicable. See map below.

#### Wind Borne Debris

The wind borne debris region is also known as those areas that require the large missile impact rated door and/or windows. In Florida, being farther south and closer to the shoreline, it is more likely a home or building will be in the wind borne debris region or HVHZ (High Velocity Hurricane Zone - Dade and Broward counties).

Miami-Dade and Broward Counties require all garage doors meet the large missile impact rating, regardless if the garage door has windows or not.

Insurance companies sometimes give discounts for garage doors and other exterior building products that exceed the local building code, including meeting wind borne debris requirements not mandated. This means that installing a new garage door with the large missile impact rating may reduce your insurance premiums. Please check with your insurance agent for details.



### Step 2:

Determine if your home is in an Exposure B, Exposure C or Exposure D region.

#### Exposure B

Urban and suburban areas, wooded areas or other terrain with numerous closely spaced obstructions.

#### Exposure C

Open terrain with scattered obstructions, including flat open ground and grasslands. All of Miami-Dade and Broward Counties is Exposure C, unless it meets Exposure D definition.

#### Exposure D

Within 600 ft. of the ocean front or other large body of water, measuring at least 5,000 ft. across. Contact building code official or DASMA Technical Data Sheet #155t for design pressures.

### Step 3:

Determine the structural type of your home: one story or two story.

### Step 4:

Using wind speed (MPH), exposure and structural type, find your required design pressure. See chart on opposite page.

**Design Pressures**

The design wind load pressure rating of a door as expressed in PSF (pounds per square foot). The design pressure of the door must equal or exceed the design pressure for the garage door opening in which a door is to be installed. Design pressure has positive and negative values.

Garage Door Wind Load Guide - Values in PSF											
Mean Roof Height	Door Size	Based on the 2010 and 2014 Florida Building Code & ASCE7-10, Exposure B, 115 - 200 MPH Ultimate Design Wind Speed, MPH (V <sub>ult</sub> )									
Ultimate Wind Speed →		115 MPH	120 MPH	130 MPH	140 MPH	150 MPH	160 MPH	170 MPH	180 MPH	190 MPH	200 MPH
Less Than 30 Feet	Single 9' x 7'	12.5 -14.2	13.7 -15.5	16.1 -18.2	18.5 -20.9	21.3 -24.1	24.3 -27.5	27.6 -31.2	30.6 -34.6	34.2 -38.6	38.0 -43.0
	Double 16' x 7'	12.0 -13.4	13.1 -14.6	15.5 -17.2	17.7 -19.7	20.4 -22.7	23.3 -26.0	26.4 -29.4	29.3 -32.6	32.7 -36.5	36.4 -40.6

Mean Roof Height	Door Size	Based on the 2010 and 2014 Florida Building Code & ASCE7-10, Exposure C, 115-200 MPH Ultimate Design Wind Speed, MPH (V <sub>ult</sub> )										
Ultimate Wind Speed →		115 MPH	120 MPH	130 MPH	140 MPH	150 MPH	160 MPH	170 MPH	175 MPH	180 MPH	190 MPH	200 MPH
15 Feet Single Story	Single 9'x7'	15.2 -17.2	16.6 -18.8	19.6 -22.2	22.4 -25.3	25.9 -29.2	29.5 -33.4	33.5 -37.8	35.3 -39.9	37.1 -42.0	41.5 -46.9	46.2 -52.2
	Double 16' x 7'	14.6 -16.2	15.9 -17.7	18.8 -20.9	21.5 -23.9	24.8 -27.6	28.3 -31.5	32.1 -35.7	33.8 -37.7	35.5 -39.6	39.8 -44.3	44.2 -49.3
25 Feet Double Story	Single 9'x7'	16.8 -19.0	18.4 -20.8	21.7 -24.5	24.8 -28.0	28.6 -32.3	32.7 -36.9	37.0 -41.8	39.0 -44.1	41.1 -46.4	45.9 -51.9	51.1 -57.7
	Double 16'x7'	16.1 -18.0	17.6 -19.6	20.8 -23.1	23.7 -26.5	27.4 -30.5	31.3 -34.9	35.5 -39.5	37.4 -41.7	39.3 -43.8	44.0 -49.0	48.9 -54.5

\*Broward County is 170 MPH, Exposure C for most residential buildings.

\*\*Miami-Dade county is 175 MPH, Exposure C for most residential buildings.

The design pressures listed are the minimum required. Recommended wind load levels meet or exceed the required design pressures.

MPH=miles per hour PSF= pounds per square foot

Mean Roof Height	Door Size	Based on the 2010 and 2014 Florida Building Code & ASCE7-10, Exposure D, 115-200 MPH Ultimate Design Wind Speed, MPH (V <sub>ult</sub> )										
Ultimate Wind Speed →		115 MPH	120 MPH	130 MPH	140 MPH	150 MPH	160 MPH	170 MPH	175 MPH	180 MPH	190 MPH	200 MPH
15 Feet Single Story	Single 9'x7'	18.4 -20.8	20.1 -22.8	23.8 -26.8	27.2 -30.7	31.3 -35.4	35.8 -40.5	40.6 -45.9	42.7 -48.3	45.0 -50.8	50.3 -56.9	55.9 -63.2
	Double 16' x 7'	17.7 -19.7	19.3 -21.5	22.7 -25.4	26.0 -29.0	30.0 -33.4	34.3 -38.2	38.8 -43.3	40.9 -45.6	43.1 -48.0	48.2 -53.7	53.6 -59.7
25 Feet Double Story	Single 9'x7'	20.1 -22.7	21.9 -24.7	25.8 -29.2	29.5 -33.4	34.1 -38.5	38.9 -44.0	44.1 -49.9	46.5 -52.5	48.9 -55.3	54.7 -61.8	60.8 -68.7
	Double 16'x7'	19.2 -21.4	21.0 -23.4	24.7 -27.6	28.3 -31.5	32.6 -36.4	37.3 -41.6	42.2 -47.1	44.5 -49.6	46.8 -52.2	52.4 -58.4	58.2 -64.9



## Hurricane Ready™ Reinforcing System

### Horizontal Trussing



Raynor Hurricane Ready reinforcing systems utilize horizontal trussing, made from high-tensile steel box struts or u-bars, to create a door system built to withstand hurricane force winds.



Single or double end stiles are provided depending on wind load specifications. Both feature Raynor's heavy-duty diamond hinges.



Raynor's patented box strut design features a yellow cap at each end for safety and visibility.

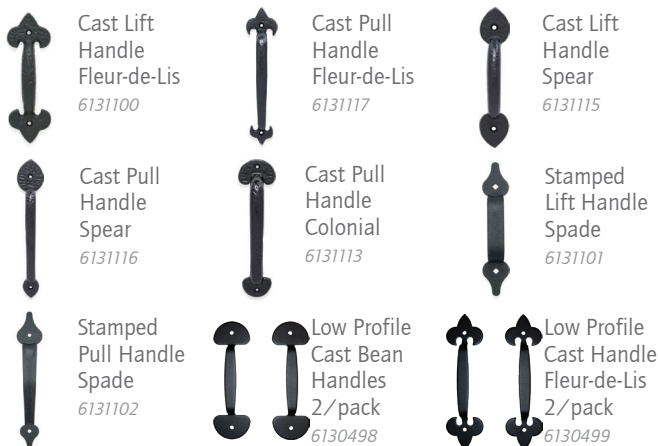


Raynor's high-strength rollers are designed and tested to withstand hurricane force winds.

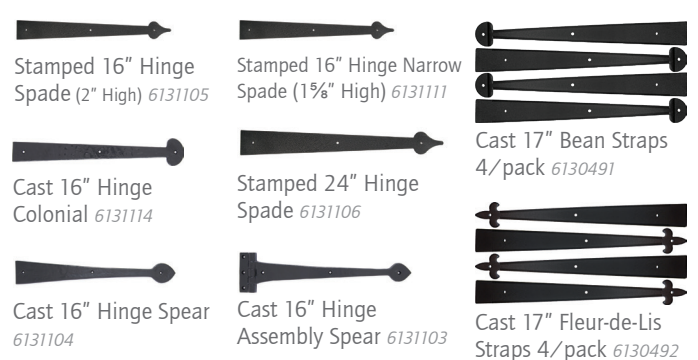
### Optional Window & Decorative Hardware

Raynor's many window and decorative hardware options add the finishing touches to your door. These small details customize the door to your home and increase curb appeal.

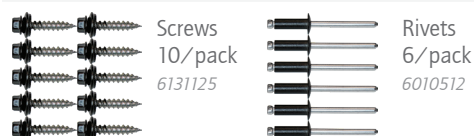
#### Handles



#### Straps



#### Misc







## Door Sections\*

"For As Long As You Own Your Home," against rust. Certain restrictions apply to corrosive airborne substances.

## Hardware/Springs\*

Hardware: 6 years  
Springs: 3 years

## R-value

6.6 with optional insulation

\*See [www.raynor.com/products](http://www.raynor.com/products) for complete Limited Warranty details.

# TradeMark™


The combination of durable, 24-gauge steel, defined raised panel styling and authentic woodgrain texture gives your home curb appeal with TradeMark steel garage doors. Add charm with colonial or ranch panels, or for a distinctive look on your home, choose the carriage house option. Optional polystyrene insulation can be added to provide additional comfort and help keep your garage quieter. TradeMark doors are available in both post and strut designs.

## Colors

### Solid Color Options



### Optional Post Paint Finish

 Raynor's ColorWave™ features Sherwin-Williams® next generation post paint system for your garage door. With 1,500 colors to choose from, home and business owners can couple this elite paint system with state of the art Raynor manufacturing to craft the perfect look for their home or project.

## Panel Options\*

### Colonial



### Flush



### Ranch



### Carriage House (Grooved)

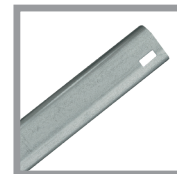


\*Many other options available. Contact your Raynor dealer for further details.

## Hardware

### Galvanized Steel Hardware

Galvanized hardware comes standard on ShowCase™ and TradeMark™ doors.



### 2010 AND 2014 FLORIDA BUILDING CODE DESIGN LOADS FOR CATEGORY II OCCUPANCY

Wind speed in Miles Per Hour (MPH) is for reference purposes only; reference the wind speed conversion charts for exact Design Loads or local Authority Having Jurisdiction (AHJ) to insure the door being specified meets the required Design Loads.

Wind speeds in the charts are Ultimate Design Wind Speeds for 2010 and 2014 Florida Building Code (FBC) Exposure B. Doors are rated by Design Loads, not Miles Per Hour. Design pressures may vary between door line. Refer to drawings for exact design load pressures.

	200+
<b>9' WIDE</b>	<b>F, IR, D</b> P-3307 (65.0/-75.0)
<b>10' WIDE</b>	<b>F, IR, D</b> P-3307 (56.4/-65.1)
<b>16' WIDE</b>	<b>F, IR, D</b> P-3307 (45.0/-52.0)
	<b>F, IR, D</b> P-3308 (43.5/-50.0)
<b>18' WIDE</b>	<b>F, IR, D</b> P-3308 (43.5/-50.0)

**F** Florida Approved **IR** Impact Rated **D** Dade Co. Approved

\*P-xxxx = Drawing Number



# Traditions Series™ | Masterpiece™

## Door Sections\*

"For As Long As You Own Your Home," against rust. Certain restrictions apply to corrosive airborne substances.

## Hardware/ Springs\*

**Masterpiece:**  
"For As Long As You Own Your Home"

## R-value

10.25

\*See [www.raynor.com/products](http://www.raynor.com/products) for complete Limited Warranty details.

# Masterpiece™

The flagship of the Raynor Traditions Series, Raynor Masterpiece steel garage doors feature 2" thick sections, a continuous thermal break between sections, and expanded polystyrene insulation bonded between two steel skins for an outstanding 10.25 R-Value. Masterpiece features the EnduraCote™ Hardware System, while ShowCase uses galvanized hardware. Masterpiece and ShowCase doors are available in post, u-bar, and strut designs.

## Colors

### Solid Color Options



\*Features the Kynar® paint process, which provides extended UV protection against fading.

### Optional Post Paint Finish

**COLORWAVE™** Raynor's ColorWave™ features Sherwin-Williams® next generation post paint system for your garage door. With 1,500 colors to choose from, home and business owners can couple this elite paint system with state of the art Raynor manufacturing to craft the perfect look for their home or project.

## Hardware

### EnduraCote™ Hardware

The EnduraCote Hardware System comes standard on Masterpiece™ doors and features extended-life black powder coated torsion springs and white powder coated track and hinges. Heavy-duty nylon rollers also help to provide superior noise reduction.



## Panel Options\*

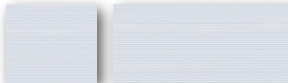
### Colonial



### Ranch



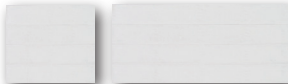
### Beadline



### Carriage House (Grooved)



### Flush



\*Many other options available. Contact your Raynor dealer for further details.

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	200+
<b>9' WIDE</b>	<b>F, IR, D</b> P-3312 (65.0/-75.0)
<b>10' WIDE</b>	<b>F, IR, D</b> P-3312 (56.4/-65.1)
<b>16' WIDE</b>	<b>F, IR, D</b> P-3312 (45.0/-52.0)
<b>18' WIDE</b>	<b>F, IR, D</b> P-3314 (43.5/-50.0)

**F** Florida Approved **IR** Impact Rated **D** Dade Co. Approved

\*P-XXXX = Drawing Number

## Door Sections\*

"For As Long As You Own Your Home," against rust. Certain restrictions apply to corrosive airborne substances.

## Hardware/Springs\*

**ShowCase:**  
Hardware: 6-years  
Spring: 3-years

## R-value

10.25

\*See [www.raynor.com/products](http://www.raynor.com/products) for complete Limited Warranty details.

# ShowCase™

The flagship of the Raynor Traditions Series, Raynor Masterpiece steel garage doors feature 2" thick sections, a continuous thermal break between sections, and expanded polystyrene insulation bonded between two steel skins for an outstanding 10.25 R-Value. Masterpiece features the EnduraCote™ Hardware System, while ShowCase uses galvanized hardware. Masterpiece and ShowCase doors are available in post, u-bar, and strut designs.

## Colors

### Solid Color Options



\*Features the Kynar® paint process, which provides extended UV protection against fading.

### Optional Post Paint Finish

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## Hardware

### Galvanized Steel Hardware

Galvanized hardware comes standard on ShowCase™ and TradeMark™ doors.



## Panel Options\*

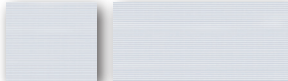
### Colonial



### Ranch



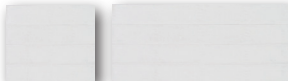
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### Carriage House (Grooved)



### Flush



\*Many other options available. Contact your Raynor dealer for further details.

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<b>18' WIDE</b>	<b>F, IR, D</b> P-3314 (43.5/-50.0)

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## Professional Installation and Service

### Depend on your Raynor Dealer

When you select Raynor, you're not just getting a superior garage door - you're also getting professional garage door installation and service expertise.

Every Raynor garage door is installed by a trained Raynor professional, and that means added benefits for you. First, you won't have to deal with it yourself. Second, because it's done right the first time, your door will deliver performance and reliability from the day it's installed. Your technician will check your door for everything from safety to performance and appearance. Trust your Raynor garage door to someone who knows it better than anyone else, your professional Raynor Dealer.

### Follow Us



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