load chamber at its Technical Center



that has been designed to perform testing according

to national standards. Clopay's wind load chamber is capable of testing garage doors in many sizes, from the lowest pressures to over 100 PSF! Several hundred certified wind load tests have been performed at Clopay's wind load chamber over the past decade. All Clopay Building Products Company certified wind load tests are witnessed by an independent, licensed Professional Engineer to ensure that the wind load testing is performed to the test standards. In addition, Clopay WINDCODE doors are designed by a staff headed by a licensed Professional Engineer employed at our Technical Center. Clopay's engineering team has dozens of years of cumulative wind load design experience. As required, supplemental certified wind load testing is performed at outside laboratories, including windborne debris testing per the Florida Building Code.

Wind Load: The force transferred to the surface area of the door by wind. Usually measured in PSF (pounds per square foot). Wind speed is measured in 3-second gusts.

ASCE7: Design standard developed by the American Society of Civil Engineers titled "Minimum Design Loads for Buildings and Other Structures". Section 6 of this standard deals with wind loads. ASCE7 is the basis for wind load calculations used in most building codes.

International Building Code: Model building code developed by the International Code Council. Most of the U.S. has adopted this building code (sometimes with slight, locally adopted variations).

Design Load: The design pressure rating of a door. Design pressure has positive and negative values.

Mean Roof Height: The distance above ground level of the midpoint of the roof.

FBC: The Florida Building Code which is valid for the entire state of Florida.

Test Load: Clopay doors are tested to a safety factor of 150% of the design pressure.

Deale	r Im	print



Good Housekeeping

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RSDR-WCBR-99_REV1006



WINDCODE Garage Doors



Clopay's WindCode® garage doors are designed to help withstand high winds resulting from tropical storms and other strong wind-related weather events. This user-friendly system assists you in selecting the right garage door for your area and building structure and helps provide peace of mind for your home, family and contents.

Beauty Design Options

Clopay's WindCode product offering has the widest range of panel styles, colors and window designs available today. Accent your home's design while providing the protection you need against strong winds. Choose from Traditional, Elegant or Flush panel designs and Designer or Decorative windows for that extra curb appeal.



Designed and Tested to Withstand Strong Winds

All Clopay WindCode doors have been designed and tested to meet many different code requirements. Additional interior horizontal steel reinforcement along with increased hardware and springing components are installed so your door is ready when a storm hits. No posts or pins are required to secure your door if you are not there. Just lock your door.

How to Select the Right WINDCODE Door

Your Clopay WindCode garage door choice will depend on the following factors:

1. Local building code.

Contact your local building code official for specific wind code requirements for your area.

- 2. Wind speed in miles per hour (MPH). Obtain from your building code official.
- 3. Structure exposure, B or C.

Exposure B is defined as urban and suburban areas, wooded areas or other terrain with numerous closely spaced obstructions. Exposure B is assumed unless the building site meets the definition of another exposure.

Exposure C is defined as open terrain with scattered obstructions including flat open ground, grasslands and shorelines in hurricane prone regions. All of Miami-Dade and Broward Counties in Florida are Exposure C.

4. Mean roof height.

Up to 15' high, one-story structure.

16' to 25' high, two-story structure.

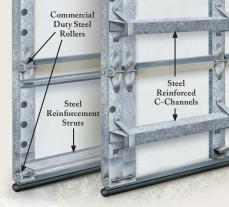
5. Use the above information and the Clopay WINDCODE and Model Selection Charts on the following page to identify the right door for your home.

The garage doors are identified by "W" designations. The higher the "W" designation, the higher the pressure rating of the door.

Not all colors, sizes, and window options are available on all WINDCODE models. Consult your Clopay dealer for specifics.

Clopay WINDCODE products include standard model features (see individual product sell sheets) plus:

- Horizontal steel reinforcement struts for increased support to withstand increased wind pressures and building code requirements.
- Upgraded springs, track, rollers and other hardware components to ensure maximum, long-lasting performance.



The charts below are intended as a reference only.

Please refer to the specific wind load guides and engineering drawings to match your application with a specific door and confirm the pressure rating with the building code authority.

International Building Code or Florida Building Code (ASCE7) - (Exposure B)

Mean Roof Height	90 MPH	100 MPH	110 MPH	120 MPH	130 MPH	140 MPH	150 MPH
15' One-story	W1	W2/W3	W3	W4	W5	W6	W7
25' Two-story	W1	W2/W3	W3	W4	W5	W6	W7

International Building Code or Florida Building Code (ASCE7) - (Exposure C)

Mean Roof Height	90 MPH	100 MPH	110 MPH	120 MPH	130 MPH	140 MPH*	146 MPH*	150 MPH
15' One-story	W2/W3	W3/W4	W4	W5	W6	W7	W7	W8
25' Two-story	W3/W4	W4	W5	W6	W7	W7	W8/W9	W8/W9

^{*} Broward County, Florida is 140 MPH and Miami-Dade County, Florida is 146 MPH, exposure C only.

WINDCODE Design Pressure Reference Chart

Clopay "W" Category	W1	W2	W3	W4	W5	W6	W7	W8	W9
Design Pressure Minimum	+12 PSF	+15 PSF	+19 PSF	+23 PSF	+28 PSF	+37 PSF	+40 PSF	+46 PSF	+54 PSF
Test Pressure Minimums	+19 PSF	+23 PSF	+29 PSF	+34 PSF	+42 PSF	+55 PSF	+60 PSF	+69 PSF	+81 PSF

WINDCODE Model Selection Guide

WINDCODE "W" Rating	Models Available in "W" Rating*
W1	73, 76, 94, 1000, 1001, 1100, 1500, 4050, 4051, 4053, 4300, 4301, 4310, 4400, 4401, Gallery Coachman, Semi-Custom Reserve, Avante
W2	73, 94, 1500
W3	73, 94, 1000, 1001, 1500, 4050, 4051, 4053
W4	73, 76, 94, 1500, 4300, 4301, 4310, 4400, 4401, Gallery, Coachman
W5	73, 76, 94, 1000 , 1001 , 1500, 4050 , 4051 , Gallery, Coachman, Coachman Premium, Semi-Custom Reserve, Avante
W6	73, 94, 4050 , 4051 , 4053 , 4300, 4301, 4310, 4400, 4401, Gallery, Coachman Premium, Custom Reserve
W7	73, 94
W8	73, 94, 94D1, 4300, 4301, 4310, 4400, 4401, Coachman Premium
W9	94

^{*}All models are not available in all sizes.

¹Designates Dade County special steel requirement

Brown designates Extended Height (8' 3" - 12' High) doors available.