



BROWARD COUNTY BOARD OF RULES AND APPEALS

FBC 8TH EDITION (2023) FORMAL INTERPRETATION (#24)

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Vice-Chair Ron Burr,
Swimming Pool Contractor

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Architect

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S.T.S.2., Structural Engineer

VACANT,
Roofing Contractor

Board Attorney
Charles M. Kramer, Esq.

Board Administrative Director
Dr. Ana Barbosa

— Established 1971 —

DATE: October 12, 2023
TO: All Building Officials
FROM: Dr. Ana Barbosa, Administrative Director 
SUBJECT: Retrofit of Windows, Doors, Garage Doors,
and Shutters FBC Existing Building, Alteration Level

At its meeting on October 12, 2023, the Board approved an interpretation of Retrofit of Windows, Doors, Garage Doors, and Shutters for detached one- and two-family dwellings and multiple single-family dwellings (townhouses) with common roof height < 30 feet.

1. A Florida Professional Engineer or Architect may modify the buck or fasteners as specified in a Notice of Acceptance. Such modification must be documented with a signed and sealed letter or drawing.
2. To obtain the required design pressure for a specific opening at a specific site, an individual must utilize one of the following and submit documentation as indicated.
 - a) A site-specific plan (signed and sealed) by a Florida Professional Engineer or Architect indicating the location of all retro openings and the required design pressures.
 - b) A site-specific plan (not sealed) indicating the location of all retro openings accompanied by a worst-case design pressure chart (signed and sealed) prepared by a Florida P.E. or Architect.
 - c) A site-specific plan (not sealed) indicating the location of all openings and indicating the required design pressures based on the Broward County Fenestration Voluntary Wind Load Chart. (See attached chart).
3. Buildings with a (height) > 30 feet or more shall have a site-specific design (signed and sealed) by a Florida Professional Engineer or Architect, indicating the location of all retro openings and the required design pressures for each opening.

NOTE: Generic charts, graphs alone, etc., are not acceptable for buildings above 30 feet.

EFFECTIVE DATE: September 12, 2012

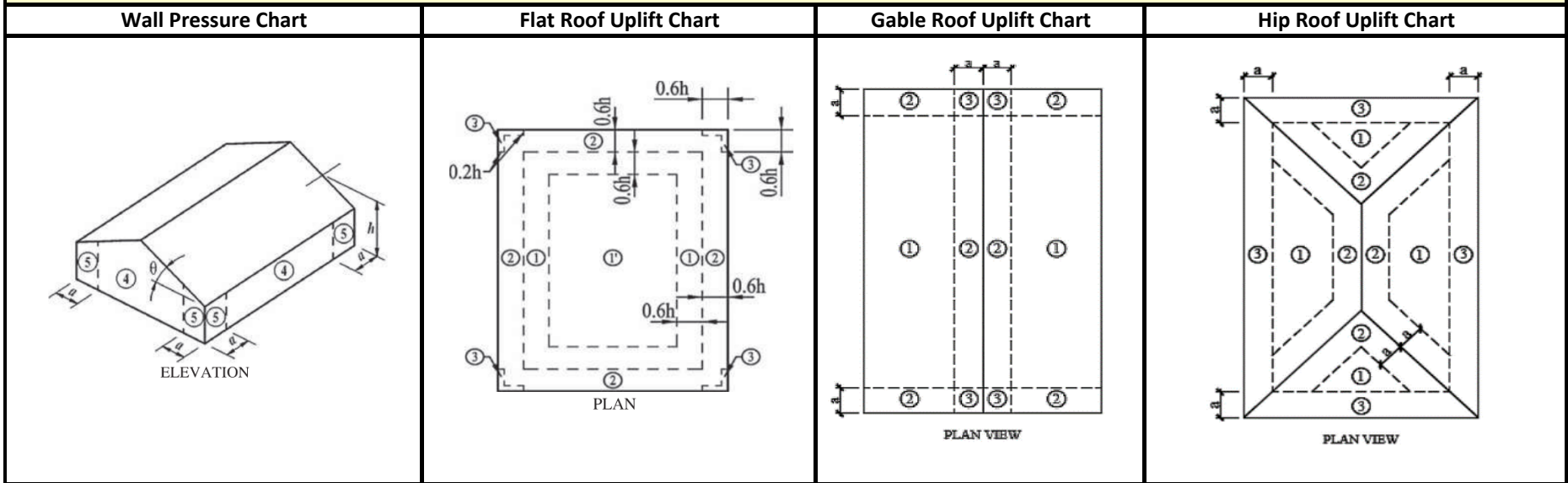
EFFECTIVE DATE: December 31, 2023

***** PLEASE POST AT YOUR PERMIT COUNTER *****

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ASCE 7-22

Roof and Wall Zone Chart Diagrams



Instructions on how to use these Charts: Determine Mean Roof Height, h , which is top of roof for flat roofs or the mean roof height for pitched roofs. Find your least horizontal dimension for your building, not including a overhang if it occurs. Calculate the value of, a , = 10% of least horizontal dimension or $0.4 \cdot h$, whichever is smaller, but not less than either 4% of least horizontal dimension or 3 feet. If your roof height is less than 30 feet, but not exactly 15, 20, or 25 feet, you will need to go to the next higher roof height. If your Mean Roof Height is higher than 30 feet, these charts do not apply. Review the diagram which illustrate the wall and roof zones and determine the wind zone in which the component is located. Determine the tributary area of the component. If the tributary area falls in between values, use the value of the smaller tributary area. Select the positive and negative wind pressures corresponding to the wall or roof zone where your component is located. Door pressures shown are for the most common door sizes and are worst case for heights ≤ 30 Feet.

| Wall Pressure For All Roof Types | | | | | | | | | | | | Garage/Door Pressures | | | | |
|----------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-----------------------|---------------------|--------|----------|----------|
| Mean Roof Height | 15 Ft | | | | | | 20 Ft | | | | | | ≤ 30 Ft | | | |
| Tributary Area | 10 | 20 | 35 | 50 | 100 | 500 | 10 | 20 | 35 | 50 | 100 | 500 | Effective Wind Area | | Positive | Negative |
| Wall Positive Pressure | 38.1 | 36.3 | 35.0 | 34.1 | 32.4 | 28.4 | 40.4 | 38.5 | 37.1 | 36.1 | 34.3 | 30.1 | Width | Height | | |
| Zone 4 Negative Pressure | -41.4 | -39.6 | -38.2 | -37.3 | -35.6 | -31.6 | -43.8 | -42.0 | -40.5 | -39.6 | -37.7 | -33.5 | 8 | 8 | 38.6 | -48.2 |
| Zone 5 Negative Pressure | -51.0 | -47.5 | -44.8 | -43.0 | -39.6 | -31.6 | -54.0 | -50.4 | -47.5 | -45.6 | -42.0 | -33.5 | 10 | 10 | 37.4 | -45.7 |
| Mean Roof Height | 25 Ft | | | | | | 30 Ft | | | | | | 14 | 14 | 35.4 | -41.8 |
| Tributary Area | 10 | 20 | 35 | 50 | 100 | 500 | 10 | 20 | 35 | 50 | 100 | 500 | 9 | 7 | 38.7 | -48.3 |
| Wall Positive Pressure | 42.2 | 40.3 | 38.8 | 37.8 | 35.9 | 31.5 | 43.9 | 41.9 | 40.3 | 39.3 | 37.3 | 32.8 | 16 | 7 | 37.0 | -45.0 |
| Zone 4 Negative Pressure | -45.8 | -43.9 | -42.4 | -41.4 | -39.5 | -35.1 | -47.6 | -45.7 | -44.1 | -43.1 | -41.1 | -36.5 | 3 | 7 | 41.8 | -54.6 |
| Zone 5 Negative Pressure | -56.6 | -52.8 | -49.7 | -47.8 | -43.9 | -35.1 | -58.8 | -54.7 | -51.7 | -49.6 | -45.7 | -36.5 | 6 | 7 | 39.8 | -50.6 |

NAME: _____ SITE ADDRESS: _____ CONTACT #: _____

| 1 | 2 | 3 | | 4 | | 5 | | 6 | | 7 | | 8 | | 9 | | 10 | |
|---------------------|---------------------------|----------------------------------|---------|--------------------------|---------|--------------------------|-----------------|---------------|-------|----------------|----|-------------------------------|----|-----------------------|----|------------------------|----|
| OPENING LOCATION ID | PRODUCT ACCEPTANCE NUMBER | PRODUCT APPROVAL PRESSURE RATING | | REQUIRED DESIGN PRESSURE | | OPENING SIZES | | ZONE LOCATION | | Impact Glazing | | OPENING HAS EXISTING SHUTTERS | | NEW SHUTTERS REQUIRED | | MULLION TUBES REQUIRED | |
| | | (+) PSF | (-) PSF | (+) PSF | (-) PSF | WIDTH X HEIGHT IN INCHES | AREA IN SQ FEET | 4 INTER | 5 END | YES | NO | YES | NO | YES | NO | YES | NO |
| | | | | | | X | | | | | | | | | | | |
| | | | | | | X | | | | | | | | | | | |
| | | | | | | X | | | | | | | | | | | |
| | | | | | | X | | | | | | | | | | | |
| | | | | | | X | | | | | | | | | | | |
| | | | | | | X | | | | | | | | | | | |
| | | | | | | X | | | | | | | | | | | |
| | | | | | | X | | | | | | | | | | | |
| | | | | | | X | | | | | | | | | | | |
| | | | | | | X | | | | | | | | | | | |

IDENTIFY OPENINGS ALPHABETICALLY OR NUMERICALLY ON ELEVATION SHEETS.

IDENTIFY VERTICALLY STACKED GLASS IN THE SAME OPENINGS FROM BOTTOM TO TOP WITH SUB NUMBERS (Example: A, A1, A2, ETC.).