



Life's Just Better Here

WINDOWS, DOORS AND SHUTTERS

This checklist is designed to expedite permit application processing by ensuring that all required documentation is submitted with your application.

REQUIRED PERMIT APPLICATIONS

- Building

MINIMUM ONLINE PLAN SUBMITTAL

- One (1) copy of product approvals.
- One (1) copy of design wind pressures as per ASCE-7-Chart for building under 3 stories, otherwise designer of record must supply the wind pressures.
- One (1) copy of the energy calculations. (Only on new residential homes.)
- One (1) completed window/door/shutter schedules.
- Owner/Builder Affidavit if demolition is to be completed by Owner. This is to be signed in person at the Community Development Services Department.
- One (1) copy of Homeowner's Association Approval, if required.

SPECIFIC REQUIREMENTS

- Windows and Doors must be impact resistant unless shuttered (If not impact windows a shutter permit will be required for each opening).
- Windows in bedrooms must meet emergency egress requirements as per FRC-310 (new construction only).

INSPECTIONS

Inspections must be submitted online prior to **4:30 PM** for the next business day.

REVIEW STOPS

- Building
- Zoning (if commercial)

*Please note that this checklist is not intended to be all-inclusive. Due to changes in codes, regulations, and ordinances, other requirements may apply.



BROWARD COUNTY

Board of Rules & Appeals

1 North University Drive, Suite 3500B, Plantation, Florida 33324

To: Members of the Broward County Board of Rules and Appeals.
From: Michael Guerasio, Chief Structural Code Compliance Officer.
Ted Fowler, Chief Structural Code Compliance Officer.
Date: January 9th, 2020.
Re: The Board to consider adopting policy 20-01, in reference to retrofit window & door replacements. To be in effect, mandatory, on July 1st, 2020.

RECOMMENDATION:

It is recommended that the Broward County Board of Rules and Appeals consider and approve by vote, policy 20-01 "Broward County Uniform Retrofit Window & Door Schedule" to be in effect, mandatory, on July 1st, 2020. An informational packet was developed which includes application instructions and the Broward County Uniform Retrofit Window & Door Schedule to be utilized throughout Broward County.

REASONS:

At the June 13th, 2019 Board of Rules and Appeals regular meeting, Mr. David Rosenof, President of Big Dog Construction Services Inc, representing the Broward League of Cities suggested the possibilities of developing a uniform schedule for retrofit window & door replacements. After discussion, the Board directed the structural committee to meet and present recommendations to this request. On August 13th, 2019 the structural committee met to discuss and present recommendations to the Board whether a uniform schedule should be developed. The committee discussed this item and directed staff to develop the document and present it to the Board with no further structural committee meetings necessary by a unanimous vote. Attached you will find the new proposed retrofit window & door informational packet, including instructions and a uniform retrofit window & door schedule to be utilized throughout Broward County.

ADDITIONAL INFORMATION

By approving this packet and uniform schedule, it will provide uniformity in obtaining a permit to change out window and door openings throughout Broward County. It will also provide the property owners and contractors, guidance as to what information, at a minimum, is required to be submitted to the building department to obtain a permit to change out these fenestrations.

Respectfully submitted,

A blue ink signature of Michael Guerasio, consisting of stylized initials and a surname, written over a horizontal line.

Michael Guerasio, Chief Structural Code Compliance Officer.

A blue ink signature of Ted Fowler, written in a cursive style over a horizontal line.

Ted Fowler, Chief Structural Code Compliance Officer

Board of Rules & Appeals Policy 20-01

Effective July 1, 2020

Subject: "Broward County Uniform Retrofit Window & Door Schedule"

POLICY

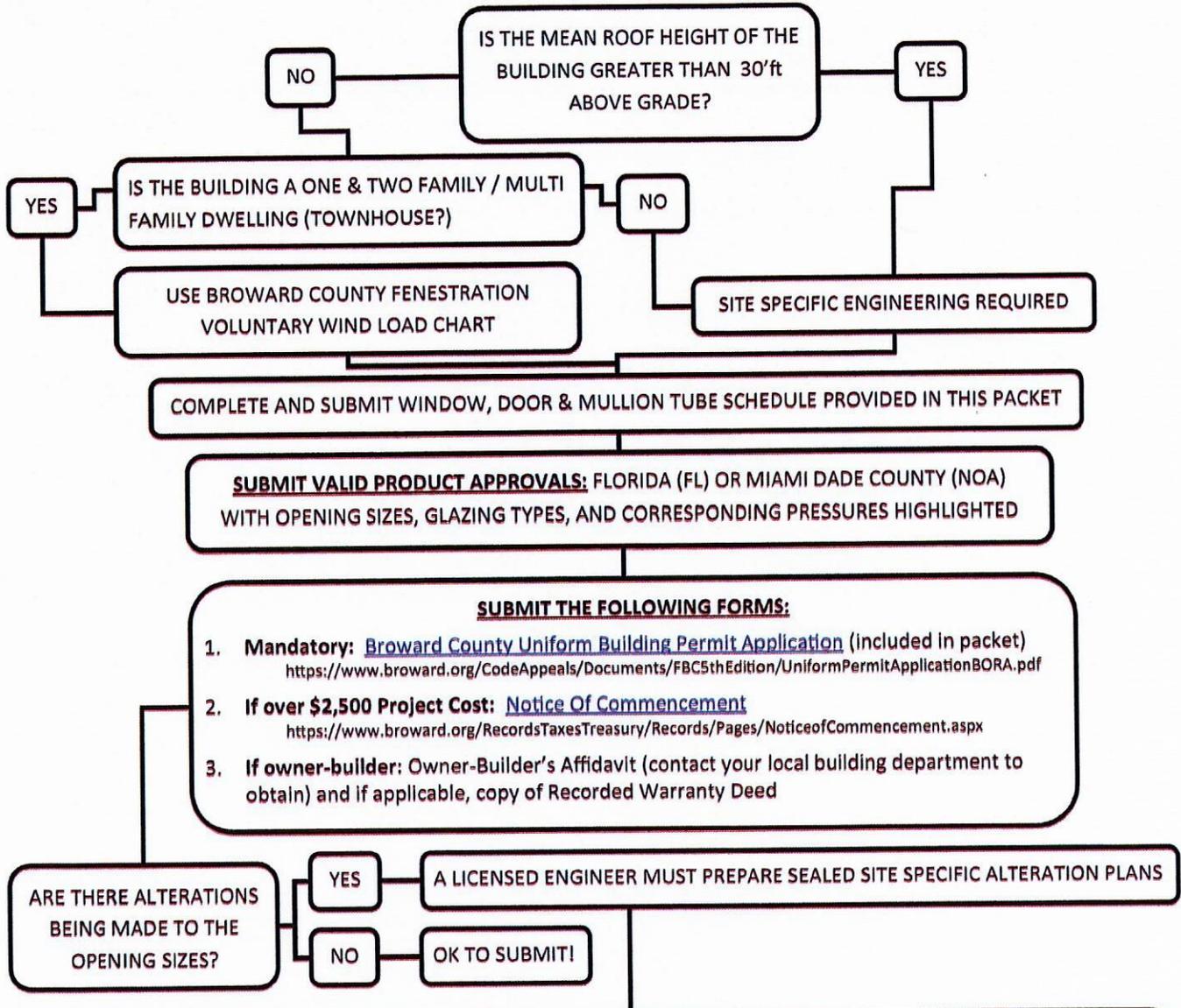
Each permit application for a window and door replacement "retrofit", shall be submitted to all jurisdictions in Broward County using the attached "*Broward County Uniform Retrofit Window & Door Schedule*"

This form does not relieve the permit holder, building owner or contractor from complying with all and any applicable local regulations or ordinances related to zoning, building, fire prevention, etc.; or prohibits a Broward County jurisdiction from requiring additional information to be provided in relation to applicable local regulations or ordinances related to zoning, building, fire prevention, etc.

Use of the "*Broward County Uniform Retrofit Window & Door Schedule*" is mandatory countywide starting July 1, 2020.

Uniform Retrofit Window & Door Schedule attached.

INSTRUCTION FLOWCHART



DESIGN CRITERIA REQUIREMENTS FOR PLANS

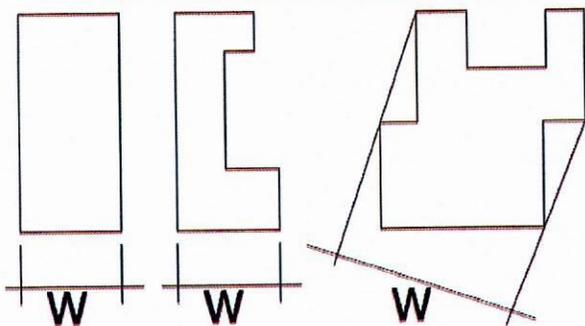
1. Unit sketch, generally to scale illustrating the unit and overall building (if multi-family).
2. Broward requires ASCE 7 calculations using Peak wind velocity $V_{ult}(min) = 170\text{mph}$
3. Either Exposure C (inland) or D (coastal - see description next page)
4. Mean (average) Roof height (see page 3)
5. Overall Building Width & Length (lessor dimension is used to determine width of zone 5)
6. Label each opening dimensions, wind zone (4 or 5) on the layout as shown in example on page 3
7. Each opening shall have a corresponding "mark" which ties into the window, door & mullion schedule provided within this packet

OK TO SUBMIT!

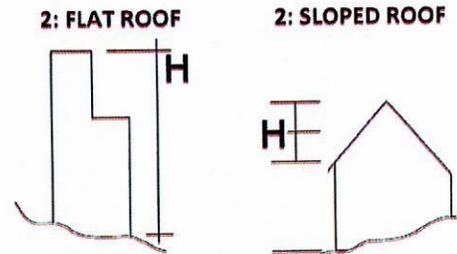
Explanation of Terms

- 1: **Exposure C:** All of Broward County. The "Broward County Fenestration Voluntary Wind Load Chart" included within this packet can be used for all detached one & two story dwellings and multiple single-family dwellings (townhomes).
- 2: **Exposure D:** A structure that's within 600' or 20X building height of a flat area/body of water that's a mile long. Generally all areas east of the Intercoastal Waterway. Wind load pressures must be completed by a licensed design professional for all structures.
- 3: **Mean Roof Height ("h"):** Average between the lowest and the highest roof point of a sloped roof, also the highest point of a flat roof (also see page 3).
- 4: **Minimum Building Width:** 10% of least horizontal dimension (W) or 0.4h, whichever is smaller, but not less than either 4% of least horizontal dimension or 3'ft minimum.

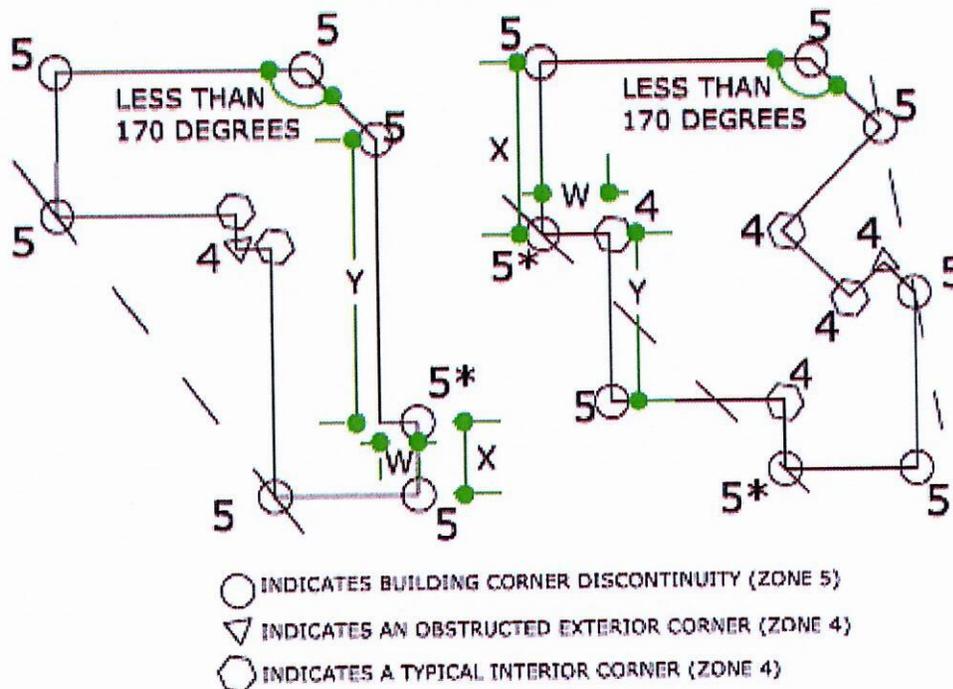
MIN. BUILDING WIDTH EXAMPLES (PLAN VIEW):



Mean Roof Height



ZONE EXAMPLES (PLAN VIEW)



NOTE: The corner designated by an * would not be considered a corner if dimension **W** is less than half the width of the corner zone and dimension **X** and **Y** are greater than the width of a corner zone

170 degree:

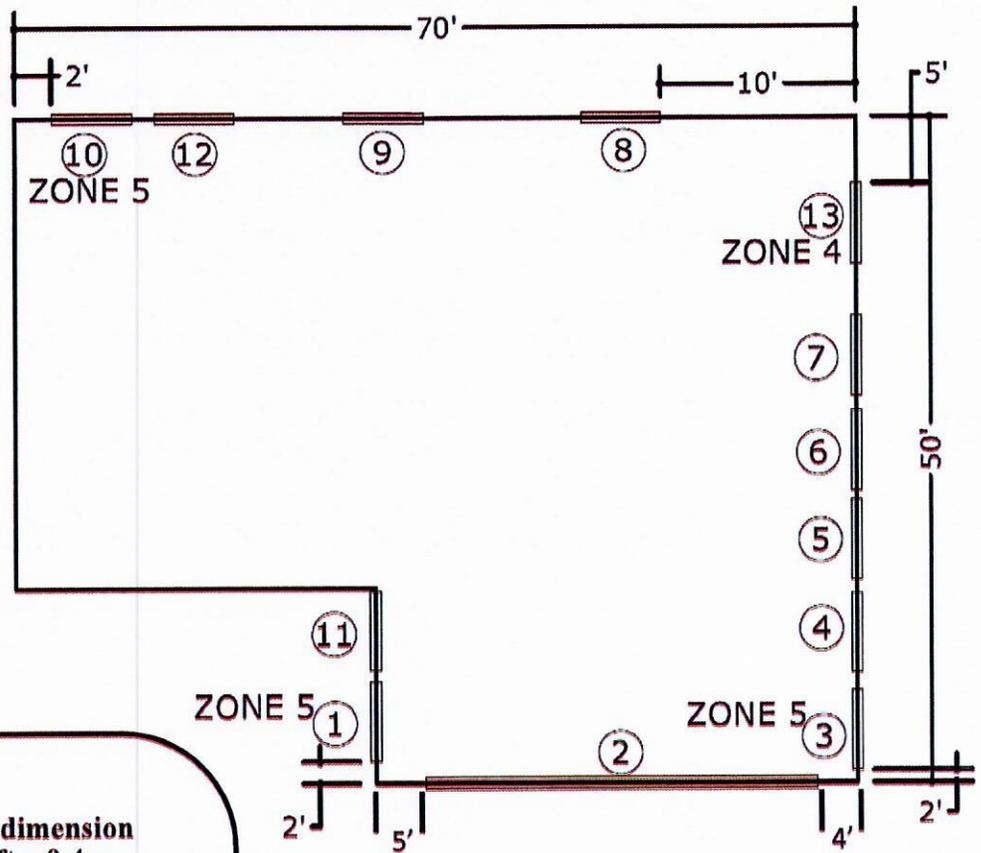
An unobstructed exterior corner with an interior angle of less than 170 degree would be considered a corner zone

See page 3 for example on how to calculate the zone dimensions of a building

Minimum Sketch Requirement

Zone determinations:

1. Zone 5 (corner zone) in this example is calculated as 5'ft in width, any opening within 5'ft of an outside unobstructed corner would be considered in zone 5.
2. In this example, openings 1, 2, 3 & 10 are located in a zone 5 (corner zone).
3. All other opening would be considered zone 4 (interior zone).

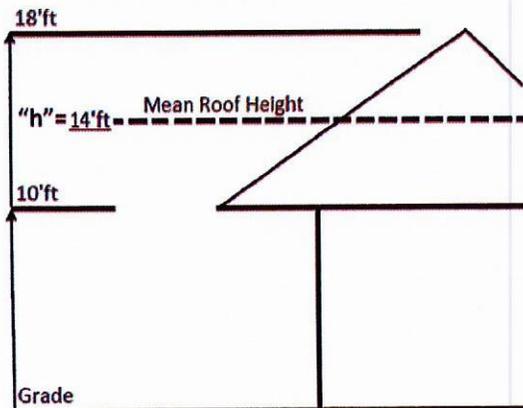


ZONE CALCULATIONS:

Zone 5 = .10 x least horizontal dimension (50ft x .10 = 5ft) or .4 x "h" (14ft x 0.4 = 5.6ft) whichever is smaller, but not less than either 4% of the least horizontal dimension (50ft x 4% = 2ft), or 3ft.

Zone 5 (corner zone) would be 5'ft wide.

All others would be zone 4.



Next Steps:

- Complete Window & Door Schedule included within this packet
- Submit all forms to your local building department according to their instructions.
- The local building department may require additional documentation

NAME: _____ SITE ADDRESS: _____ CONTACT #: _____

1 OPENING LOCATION ID	2 PRODUCT ACCEPTANCE NUMBER	3 PRODUCT APPROVAL PRESSURE RATING		4 REQUIRED DESIGN PRESSURE		5 OPENING SIZES		6 ZONE LOCATION		7 Impact Glazing		8 OPENING HAS EXISTING SHUTTERS		9 NEW SHUTTERS REQUIRED		10 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											
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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.).



BROWARD COUNTY BOARD OF RULES AND APPEALS

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

1 N. University Drive, Suite 3500B
Plantation, Florida 33324

Phone: 954-765-4500
Email: rulesboard@broward.org
www.broward.org/CodeAppeals

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Mechanical Contractor

Vice-Chair Ron Burr,
Swimming Pool Contractor

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Electrical Engineer

Mr. John Famularo,
Roofing Contractor

Mrs. Shalanda Giles Nelson,
General Contractor

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F.A.SCE, F.SEI, Structural Engineer

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Fire Service Professional

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Mr. John Sims,
Master Electrician

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Master Electrician

Mr. Derek A. Wassink, P.E., R.A., S.I.,
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.

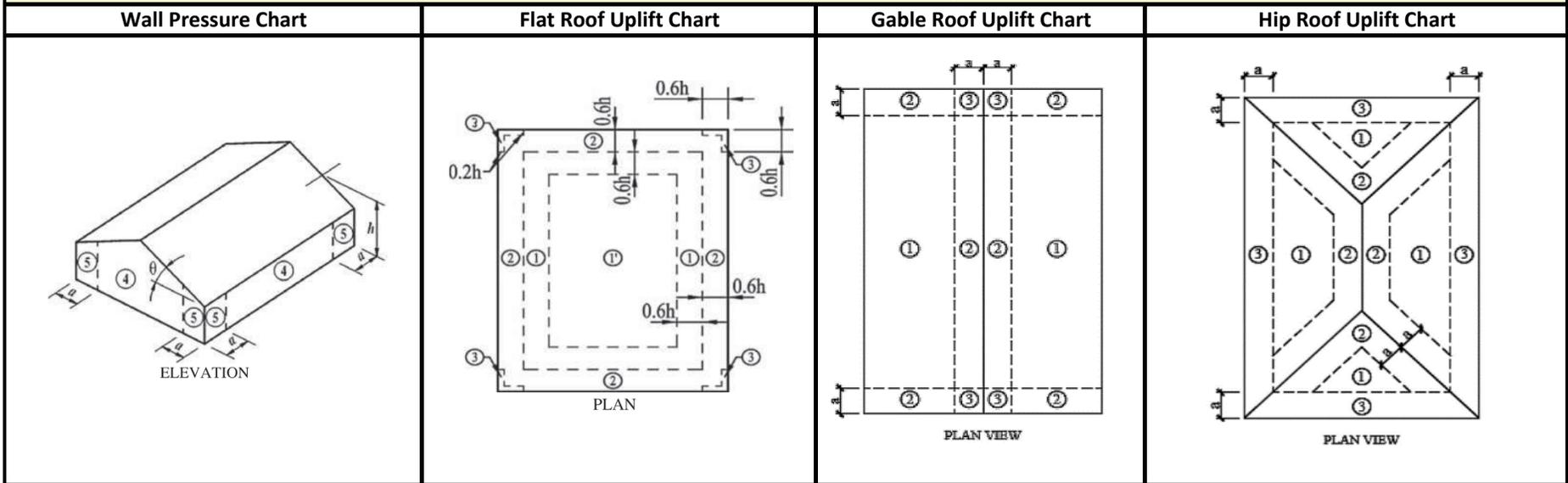
EFFECTIVE DATE: September 12, 2012

EFFECTIVE DATE: December 31, 2023

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

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