WINDOWS / DOORS – REPLACEMENT

NOTE: Alteration Permit is REQUIRED for Location or Size changes

Please submit/upload plans in PDF format

Please indicate items submitted with a checkmark (√)

Please upload **this Checklist and any Required Forms** in **.pdf format** to the appropriate category **<Survey> <Building Plans> <Supporting Docs> <NOA>** following the TOJ Naming Convention found in Help Documents

Create online as: **Commercial Window/Door/Garage Door**
Residential Window/Door/Garage Door

1. **Plans <Building Plans>**
   a. Floor Plan/Map with location of openings _____
   b. State on plans that the replacement is, **"LIKE for LIKE,"** or check here _____
   c. Mark the location of the bedroom emergency egress windows _____

2. **Supporting Documents <Supporting Docs>**
   a. Owner/Builder Affidavit, if applicable. _____
   b. Window & Door Schedule, provided in the permit package. _____
   c. Wind Design Pressure Chart, provided in the permit package. _____
   d. Wind Load & Host Structure Details: _____
   Please mark the Documents provided in the permit package, to indicate the *Design Pressure, Mean Roof Height, Wind Exposure, and the Wall Zones for each of the openings.*
   **OR, you can provide calculations from a licensed Engineer or Architect, with the structural details and the wind load design pressure requirements.*

3. **Product Approval <NOA>**
   a. Product approvals shall be current, dated, and stamped by the Engineer _____
      - **MUST** be on site for all inspections
   b. Provide Product Approvals as required:
      - State of Florida Product Approval with installation instructions. _____
      - Be sure to mark the **EXACT** product number. _____
      - Miami-Dade Notice of Acceptance (NOA) with installation instructions. _____
      - Engineer signed/sealed plans and calculations for a custom design. _____
   c. Information that is required from the product approval:
      - **ALL** project-specific details shall be Identified/Marked/Circled on product Approval Installation Instructions _____
      - Engineered plans with Actual Design Pressures, anchor details, types of fasteners, construction details of the host structure, types and thickness of glazing _____
   d. Indicate Actual Design Pressures by marking the Product Approval &/or provide a Window & Door Schedule. _____

WINDOWS / DOORS – REPLACEMENT

Please take note of the following important information:

- **Window and Door Replacement permits are "Like for Like," without change to the existing opening dimensions.**
  *** If the opening size needs to be changed, please apply for an "Alteration" permit.**
- **Buildings within 600 feet of the beach are in the "Sea Turtle Protection Zone." Tinted "Turtle Glass" is required, with a Visible Light Transmittance (VLT) of 45% or less. As specified in Article 14 of the PBC ULDC.**
- **Three inspections are required for window and door replacements in existing buildings, Buck Inspection, In-Progress Inspection, and the Final Inspection.**
- **Engineer Letters, Affidavits, and Photography will NOT be accepted in lieu of Physical Inspections.**
- **For residences located within a deed-restricted community, please contact the Association for approval. The TOJ Building Department cannot enforce Home Owner Association regulations.**
- **Do Not remove the product labels or stickers until the final inspection has been approved. These product labels are required for all inspections to verify the product information. Inspections may not be approved if the labels have been removed.**
- **For Buildings greater than 60 feet in height, it is required to provide documentation of site-specific wind load calculations, signed and sealed by a Florida-licensed Engineer or Architect.**

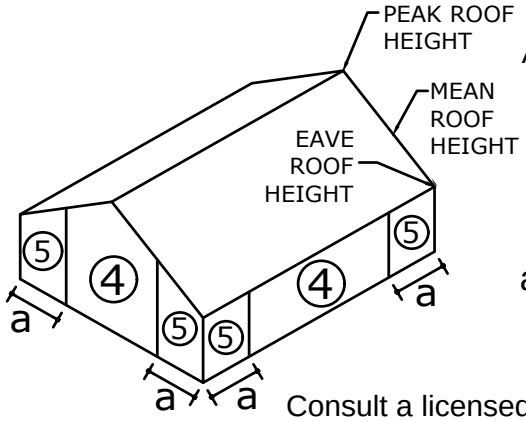
Use the provided Wind Design Pressure Chart, or Calculate the Required Design Pressure in buildings less than 60 feet tall.

Wind Loads, Design Pressure, Component & Cladding, as specified by ASCE 7, and the Florida Building Code

1. **Wind Speed:** The wind speed is **170** mph in the T.O.J. for residential, Risk Category II structures.
   (Engineering is required for Risk Categories III and IV structures.)
2. **Wind Exposure**: Exposures **B**, **C**, and **D** as defined by the Florida Building Code. (choose the worst-case scenario)
3. **Mean Roof Height**: The average between the roof ridge height and the roof eave height.
4. **Wall Zone 4 and 5**: Typically wall zone 5 is within four feet from the corner of the building.
5. **Effective Wind Area**: Each opening size dimensions, are calculated in square footage. (This factor may be different for each of the openings.)

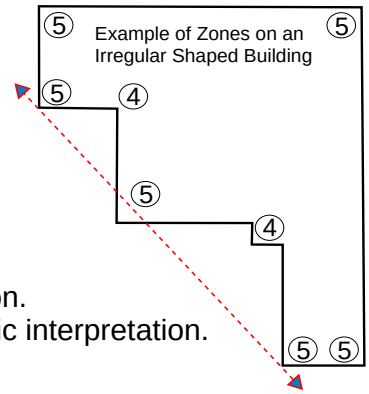
Once these factors have been established, the required design pressure can be calculated as per ASCE 7, FBC R301.2(2) The "Design Pressure Chart" tables have been included in the T.O.J. permit package for convenience.

INTERIOR ZONE 4, EXTERIOR ZONE 5 & MEAN ROOF HEIGHT EXPLAINED



"MEAN ROOF HEIGHT" (MRH) is defined as the Average between the Peak roof height and the Eave roof height.

a = 4 feet, as specified by FBC R301.2(7)



Use Exterior Zone 5 if at all in Question.
Consult a licensed Engineer or Architect for a more specific interpretation.

TOWN OF JUPITER BUILDING DEPARTMENT

"BUCK" AND "IN PROGRESS" WINDOW AND DOOR INSPECTIONS

The purpose of these inspections is to ensure the proper installation of windows and doors. The bucks, shims, and anchors, as specified per the Florida Building Code, (FBC) and in the manufacturer product approval, also called the Notice of Acceptance, (NOA.) The manufacturer's product identification stickers must remain on the product and the NOA's must be on-site with the permit for all inspections. Commercial window and door shop drawings must be on-site for all structural inspections. Access must be provided to all windows & doors. The Town of Jupiter does not accept photography in lieu of physical inspections.

Florida Building Code sections; FBC 1710.2 – 1710.4 & FBC-R 609.7.1 – 609.7.2

Bucks are defined as pressure-treated lumber being either a 1x or 2x, pronounced as, "one by (1x), or two by (2x)." The 1x lumber may not be less than ¾ inch thickness, and the 2x lumber may not be less than 1 ½ inch thickness. Bucks must be properly fastened and sealed to the structure to transfer imposed loads. Per Product Approval / NOA, it is acceptable to use high-strength concrete, only with concrete structures for the window sill and door threshold support.

Unless otherwise tested and engineer-approved, bucks shall extend beyond the interior face of the window or door frame such that it fully supports the window or door frame. The bucks shall be installed per the FBC &/or the NOA and also found in the Wood Frame Construction Manual, (WFCM.). Window and door frames must be fully supported by the buck, or the building's substrate. The space between the buck and frame shall not be greater than a quarter inch ¼" or as specified by the product approval/NOA.

If the existing buck fails to match requirements, the existing buck shall be removed and a new buck installed. Stacking additional wood to extend the width or depth of the existing buck is not permissible. Tapered bucks are not allowed.

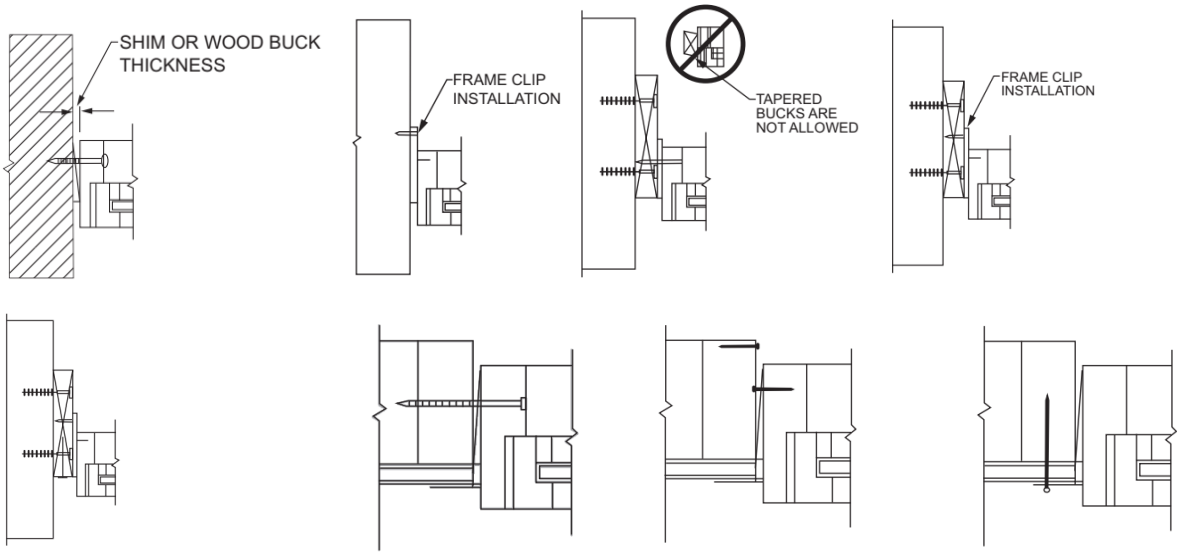
BUCKS LESS THAN 1½ inches, (1x bucks) Window and door assemblies shall be anchored through the buck, and embedded into the structure as required and detailed in the FBC and the Product Approval / NOA, notated as "minimum embedment."

BUCKS GREATER THAN 1 ½, (2x bucks) The buck shall be securely fastened to transfer loads to the structure. Window & door frame assemblies may be anchored into the buck only, as required and detailed in the FBC and the Product Approval / NOA, notated as "minimum embedment."

Shims shall be made from materials capable of sustaining imposed loads, as specified in the Product Approval / NOA.

Anchors/Fasteners must have the shear strength to transfer the imposed loads to the structure. The type of anchor/fastener is substrate-specific, the size, minimum embedment depth, and edge distance shall be as specified in the Product Approval / NOA.

Diagrams found in the Residential Florida Building Code 609.7



WINDOW & DOOR SCHEDULE

Mean Roof Height: _____ SITE ADDRESS: _____ Wind Exposure Category: _____ PAGE ____ OF____

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											
						X											
						X											

WINDOW & DOOR SCHEDULE

Mean Roof Height: _____ SITE ADDRESS: _____ Wind Exposure Category: _____ PAGE ____ OF____

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											
						X											

WINDOW & DOOR SCHEDULE

Mean Roof Height: _____ SITE ADDRESS: _____ Wind Exposure Category: _____ PAGE ____ OF____

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											
						X											

Wind Exposure B

Zone 4

		Building Height									
		15	20	25	30	35	40	45	50	55	60
Area	10+/-	+25.6	+27.8	+29.3	+31.2	+32.8	+34.0	+34.9	+36.2	+37.1	+38.0
		-27.7	-30.0	-31.7	-33.8	-35.5	-36.8	-37.9	-39.2	-40.2	-41.2
	20+/-	+24.4	+26.5	+28.0	+29.8	+31.3	+32.5	+33.4	+34.6	+35.5	+36.4
		-26.5	-28.8	-30.5	-32.4	-34.0	-35.3	-36.3	-37.6	-38.6	-39.5
	50+/-	+22.9	+24.8	+26.2	+27.9	+29.3	+30.4	+31.2	+32.4	+33.2	+34.0
		-25.0	-27.2	-28.8	-30.6	-32.1	-33.4	-34.3	-35.5	-36.4	-37.3
	100+/-	+21.7	+23.6	+24.9	+26.5	+27.8	+28.9	+29.7	+30.7	+31.5	+32.3
		-24.0	-26.0	-27.4	-29.2	-30.7	-31.8	-32.7	-33.9	-34.7	-35.6
	500+/-	+19.1	+20.7	+21.9	+23.3	+24.5	+25.4	+26.1	+27.0	+27.7	+28.4
		-21.2	-23.0	-24.3	-25.9	-27.2	-28.2	-29.0	-30.0	-30.8	-31.6

Zone 5

		Building Height									
		15	20	25	30	35	40	45	50	55	60
Area	10+/-	+25.6	+27.8	+29.3	+31.2	+32.8	+34.0	+34.9	+36.2	+37.1	+38.1
		-34.3	-37.2	-39.3	-41.8	-43.9	-45.6	-46.8	-48.5	-49.7	-51.0
	20+/-	+24.4	+26.5	+28.0	+29.8	+31.3	+32.5	+33.4	+34.6	+35.5	+36.4
		-31.9	-34.6	-36.6	-38.9	-40.8	-42.4	-43.6	-45.1	-46.3	-47.5
	50+/-	+22.9	+24.8	+26.2	+27.9	+29.3	+30.4	+31.2	+32.4	+33.2	+34.0
		-28.9	-31.4	-33.2	-35.3	-37.1	-38.5	-39.5	-40.9	-42.0	-43.1
	100+/-	+21.7	+23.6	+24.9	+26.5	+27.8	+28.9	+29.7	+30.7	+31.5	+32.3
		-26.6	-28.8	-30.5	-32.4	-34.0	-35.3	-36.3	-37.6	-38.6	-39.5
	500+/-	+19.1	+20.7	+21.9	+23.3	+24.5	+25.4	+26.1	+27.0	+27.7	+28.4
		-21.2	-23.0	-24.3	-25.9	-27.2	-28.2	-29.0	-30.0	-30.8	-31.6

Town of Jupiter

Wind Design Pressure Chart

For structures subject to Florida Residential Code 170mph Exposure B

Wall component and Cladding pressures from Table R302.2(2)
modified by adjustment factors from R301.2(3)

Wind Exposure C

Zone 4

		Building Height									
		15	20	25	30	35	40	45	50	55	60
Area	10+/-	+37.8	+40.2	+42.1	+43.7	+45.2	+46.5	+47.7	+48.7	+49.6	+50.5
		-40.9	-43.6	-45.6	-47.3	-49.0	-50.4	-51.7	-52.7	-53.7	-54.8
	20+/-	+36.0	+38.4	+40.2	+41.7	+43.2	+44.4	+45.6	+46.5	+47.4	+48.3
		-39.2	-41.8	-43.7	-45.4	-47.0	-48.3	-49.6	-50.5	-51.5	-52.5
	50+/-	+33.8	+36.0	+37.7	+39.1	+40.5	+41.6	+42.7	+43.5	+44.4	+45.2
		-37.0	-39.5	-41.3	-42.8	-44.4	-45.6	-46.8	-47.7	-48.7	-49.6
	100+/-	+32.1	+34.2	+35.8	+37.1	+38.4	+39.5	+40.5	+41.3	+42.1	+42.9
		-35.3	-37.7	-39.4	-40.9	-42.3	-43.5	-44.7	-45.6	-46.4	-47.3
	500+/-	+28.2	+30.1	+31.5	+32.6	+33.8	+34.7	+35.6	+36.3	+37.0	+37.7
		-31.3	-33.4	-35.0	-36.3	-37.6	-38.6	-39.6	-40.4	-41.2	-42.0

Zone 5

		Building Height									
		15	20	25	30	35	40	45	50	55	60
Area	10+/-	+37.8	+40.2	+42.1	+43.7	+45.2	+46.5	+47.7	+48.7	+49.6	+50.5
		-50.6	-54.0	-56.4	-58.5	-60.6	-62.3	-64.0	-65.2	-66.5	-67.7
	20+/-	+36.0	+38.4	+40.2	+41.7	+43.2	+44.4	+45.6	+46.5	+47.4	+48.3
		-47.0	-50.2	-52.5	-54.5	-56.4	-58.0	-59.5	-60.7	-61.9	-63.0
	50+/-	+33.8	+36.0	+37.7	+39.1	+40.5	+41.6	+42.7	+43.5	+44.4	+45.2
		-42.7	-45.5	-47.7	-49.4	-51.2	-52.6	-54.0	-55.1	-56.1	-57.2
	100+/-	+32.1	+34.2	+35.8	+37.1	+38.4	+39.5	+40.5	+41.3	+42.1	+42.9
		-39.2	-41.8	-43.8	-45.3	-47.0	-48.3	-49.6	-50.5	-51.5	-52.5
	500+/-	+28.2	+30.0	+31.5	+32.6	+33.8	+34.7	+35.6	+36.3	+37.0	+37.7
		-31.3	-33.4	-35.0	-36.3	-37.6	-38.6	-39.6	-40.4	-41.2	-42.0

Town of Jupiter

Wind Design Pressure Chart

For structures subject to Florida Residential Code 170mph Exposure C

Wall component and Cladding pressures from Table R302.2(2)
modified by adjustment factors from R301.2(3)

Wind Exposure D

Zone 4

		Building Height									
		15	20	25	30	35	40	45	50	55	60
Area	10+/-	+45.9	+48.4	+50.2	+51.8	+53.0	+54.3	+55.5	+56.5	+57.4	+58.3
		-49.7	-52.4	-54.4	-56.1	-57.5	-58.8	-60.2	-61.2	-62.2	-63.2
	20+/-	+43.8	+46.2	+48.0	+49.5	+50.7	+51.9	+53.0	+54.0	+54.8	+55.7
		-47.6	-50.2	-52.2	-53.8	-55.1	-56.4	-57.7	-58.6	-59.6	-60.6
	50+/-	+41.0	+43.2	+45.0	+46.3	+47.4	+48.5	+49.7	+50.5	+51.3	+52.2
		-45.0	-47.4	-49.3	-50.8	-52.0	-53.2	-54.5	-55.4	-56.3	-57.2
	100+/-	+39.0	+41.1	+42.7	+44.0	+45.0	+46.1	+47.2	+48.0	+48.8	+49.6
		-42.9	-45.3	-47.0	-48.5	-49.6	-50.8	-52.0	-52.9	-53.7	-54.6
	500+/-	+34.3	+36.1	+37.5	+38.7	+39.6	+40.5	+41.5	+42.2	+42.9	+43.6
		-38.1	-40.2	-41.7	-43.0	-44.0	-45.1	-46.1	-46.9	-47.7	-48.3

Zone 5

		Building Height									
		15	20	25	30	35	40	45	50	55	60
Area	10+/-	+45.9	+48.4	+50.2	+51.8	+53.0	+54.3	+55.5	+56.5	+57.4	+58.3
		-61.4	-64.8	-67.3	-69.4	-71.1	-72.7	-74.4	-75.7	-76.9	-78.2
	20+/-	+43.8	+46.2	+48.0	+49.5	+50.1	+51.9	+53.0	+54.0	+54.8	+55.7
		-57.2	-60.3	-62.6	-64.6	-66.1	-67.7	-69.2	-70.4	-71.6	-72.7
	50+/-	+41.0	+43.2	+45.0	+46.3	+47.4	+48.5	+49.7	+50.5	+51.3	+52.2
		-51.9	-54.7	-56.8	-58.6	-60.0	-61.4	-6.8	-63.9	-65.0	-66.0
	100+/-	+39.0	+41.1	+42.7	+44.0	+45.0	+46.1	+47.2	+48.0	+48.8	+49.6
		-47.6	-50.2	-52.2	-53.8	-55.0	-56.4	-57.7	-58.6	-59.6	-60.6
	500+/-	+34.3	+36.1	+37.5	+38.7	+39.6	+40.5	+41.5	+42.2	+42.9	+43.6
		-38.1	-40.1	-41.7	-43.0	-44.0	-45.1	-46.1	-46.9	-47.7	-48.4

Town of Jupiter

Wind Design Pressure Chart

For structures subject to Florida Residential Code 170mph Exposure D

Wall component and Cladding pressures from Table R302.2(2)
modified by adjustment factors from R301.2(3)