

# SHUTTERS / IMPACT PROTECTION

## 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: **Residential Shutter (1 or 2 family dwelling or townhouse)**  
**Commercial Shutter (Multi-Family dwelling or commercial building)**

### DEFINITION:

**Impact Protection Systems: Such as panel shutters, rolling shutters, grid panels, etc. Are designed to meet the wind loads and impact resistant standards as specified in Chapter 16, Florida Building Code. Their purpose is to protect wall openings from high winds and windborne debris.**

#### 1. Plans [<Building Plans>](#)

- a. Provide plan/layout identifying shutter locations, sizes, and emergency egress \_\_\_\_\_
- b. Identify details of support structure construction at window and door openings \_\_\_\_\_

#### 2. Supporting Documents [<Supporting Docs>](#)

- a. Wind load information:
  - Required design pressures \_\_\_\_\_
  - Mean roof height \_\_\_\_\_
  - Wind exposure category and zones \_\_\_\_\_  
(Appropriately mark tables included)
- b. Owner/Builder Affidavit, if applicable \_\_\_\_\_

#### 3. Product Approval [<NOA>](#)

- a. Provide Product Approvals (one of the following)
  - State of Florida Product Approval with installation instructions engineered plans  
Be sure to mark the **EXACT** product number \_\_\_\_\_
  - Miami-Dade Notice of Acceptance (NOA) with installation instructions \_\_\_\_\_
  - Engineer signed/sealed plans and calculations for custom design \_\_\_\_\_
- b. Information required from product approval:
  - **ALL** project specific details shall be Identified/Marked/Circled on the Product Approval Installation Instructions \_\_\_\_\_
  - Engineered plans shall include actual design pressures, anchor details, building height, span, fastener type, support structure construction, etc. \_\_\_\_\_

# **SHUTTERS / IMPACT PROTECTION**

## **NOTE:**

- **Indicate Design Pressures from the Product Approval vs the Required Design Pressures (this may be accomplished in a schedule)**
- **Residential/Commercial buildings under construction do not require separate permits for impact protections systems. Submit as a revision to the building permit.**
- **An Electrical permit will be required for motor driven shutters**

# Wind Exposure B

## Zone 4

		Building Height									
		15	20	25	30	35	40	45	50	55	60
<b>Area</b>	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
<b>Area</b>	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
<b>Area</b>	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
<b>Area</b>	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
<b>Area</b>	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
<b>Area</b>	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)