CHECKLIST #0295 FOR THE APPROVAL OF: WINDOWS AND PASS-THROUGH DEVICES

- ❑ Basic Requirements Checklist.

- ❑ One set of the manufacturer's 'approval document' including:
  a. Typical cross-section of mullions, extrusions, etc. including dimensions,
  b. Assembly drawing indicating reinforcements,
  c. Fastener diagram indicating type, size, embedment & location corresponding with type used during testing,
  d. Hardware description, manufacturer brand name, grade and their corresponding strike plate,
  e. Installation details,
  f. Elevation details, and
  g. Listing from approved agency. (Required for electrical components if used.)

- ❑ Calculations verifying the anchoring method used in the test.

- ❑ One set of manufacturer's design drawings marked and verified by the testing laboratory.

The following current laboratory tests and test reports in compliance with protocol TAS 301.

- ❑ Impact & Cyclic tests per TAS201 & TAS203. (if impact resistant)

- ❑ Air infiltration test per TAS202.

- ❑ Uniform static air test per TAS202.

- ❑ Water resistance test per TAS202.

- ❑ Force entry resistance test, required on operable windows per AAMA 1302.05 and chapter 17 of FBC.

- ❑ Thermal Transmittance (U-factor) per checklist G.8 (See note 3)

- ❑ Solar Heat Gain Coefficient (SHGC) per checklist G.9 (See note 3)

Notes:
1. If window has plastic as a component, add plastic checklist to this requirement.
2. The following equation may be used to calculate the allowable cycle time for specimens larger than 75 ft^2 and with a width of more than 20 ft. and/or height of more than 8 ft.
   Maximum allowable cycle time for
   specimens over 75 ft^2 = (area of specimen – 75) x (0.06) +3 seconds
   Maximum allowable cycle time for this equation is not to exceed 10 seconds.
3. Refer to checklist G.0 - *GSA Basic Submittal Requirements* for use of this checklist and applicable *GSA Template.*

CHECKLIST FOR: Approved Drawings for Windows and Doors

Drawing submitted for approval must comply with the following requirements:

1. **GENERAL**
   - ☐ Drawing format shall be prepared on 11" x 17" maximum paper size.
   - ☐ Drawing shall reflect the maximum size tested and all other size qualified and for which approval being sought. Include all options of different glass, hardware, etc. qualified .Drawing shall contain all the components, fasteners, hardware etc. Must agree with the test report.
   - ☐ Leave two 2" x 2" blank spaces at bottom right hand corner of drawing for our approval and renewal stamps.
   - ☐ Minimum text size shall be 3/32" high.
   - ☐ No reference shall be made to Codes other than the Florida Building Code.
   - ☐ No proprietary notes, such as forbidding copies of this drawing, are accepted.
   - ☐ Revision to drawing shall be identified by item number and brief description of revision.
   - ☐ Statement in General Notes specifying if the Short Term Increase Factor is used or not.
   - ☐ Drawing shall be signed and sealed by a Professional Engineer registered in State of Florida (Cannot be the same engineer witnessing the test).Print engineer name and license number.

2. **TITLE BLOCK**
   - ☐ Company name, street address, phone and fax number and email address.
   - ☐ Drawing number and drawing title: Description of model/ product e.g.; Model 700/ 600 Series Out swing Commercial Steel Door with Vision light. (same number and title for the entire set).
   - ☐ Sheet numbering format: each sheet number followed by the total number of sheets, i.e. Sheet 1 of 3.
   - ☐ Drawing date (only one original drawing date).
   - ☐ Revision number, date and description of revision (when applicable).

3. **ELEVATIONS**
   - ☐ First sheet should include front view from the exterior of entire assembly (showing maximum size tested). Include the other size qualified or approval sought. Show both pair and single door assembly, if applicable. Show typical anchor locations and spacing. Show swing or sliding direction of the door or window panel.
   - ☐ Call out the horizontal, vertical and intermediate cross sections of the entire assembly with all hardware in place and installation to wall and floor.
   - ☐ When an option affects the elevation view, such as different hardware (i.e. dead bolt, locks, panic bar etc.), include a separate elevation view for each different set of hardware qualified. Show necessary interior view or alternately show as a hidden view of the component included, in the front exterior view. Elevation view can be a partial view with hardware &its location relative to a datum.
   - ☐ First sheet shall include any option that involves different configurations. Include a separate elevation view for each configuration qualified.
   - ☐ Design Pressure Rating : When there are no restrictions to the design pressure qualified, insert in the first sheet the table stating the pressure qualified:

Design Pressure Rating	Impact Rating
+/- 60 PSF	**None or Small Missile Impact or Large and Small Missile Impact**

☐ Design Pressure Rating: Insert a table in the first sheet of approved drawing for the Pressure qualified,

Design Pressure Rating			Impact Rating
	Where water infiltration Requirement is needed	Where water infiltration Requirement is not needed	**None or Small Missile Impact or Large and Small Missile Impact**
Positive	**+53 PSF**	**+70 PSF**	
Negative	**-70 PSF**	**-70 PSF**	

based on design pressure and water Resistant limitation as below:

☐ Design Pressure Rating: Insert a table in the first sheet of approved drawing for a door not tested for water and qualified, based on design pressure and the limitation as below:

Design Pressure Rating	Impact Rating
+ / - 50 PSF	**None or Small Missile Impact or Large and Small Missile Impact**
Note : THIS SYSTEM WAS NOT TESTED FOR WATER INFILTRATION AND IS TO BE INSTALLED ONLY WHERE THE WATER REQUIREMENT IS NOT NEEDED.	

☐ If Comparative Analysis is the part of the system, insert comparative analysis table as described under section 6, in first sheet of the drawing if possible.

☐ When an option involves different slab models, include a separate elevation view for each slab model in a separate sheet.

☐ Show elevation rough opening / or preparation of typical wall installation for buck, concrete or buck/concrete or CMU as applicable.

4. CROSS SECTIONS

☐ Identify each part with an item number.

☐ Include horizontal and vertical cross-sections of entire assembly showing a typical installation detail and indicate interior and exterior side. Show active and inactive leaf in horizontal section, if applicable. Minimum scale for sections is ½ size.

☐ Show basic dimensions, such as overall frame, door opening, frame depth, panel thickness, threshold (height and width, material type, installation method) etc., to identify product. Must agree with the test report.

☐ Show hardware and weather-strip locations.

☐ Show minimum ¼" shim space between framing member and buck.

☐ Anchors: Show typical installation to 1x wood filler and to 2x wood buck separately, including anchor type, size, location, spacing and minimum embedment Anchors must agree with test report and anchor calculations prepared by engineer.

☐ Anchor at head, jambs and sill shall specify size, type, mfg., location , spacing: center to center and edge distance, as tested or specified by engineer. There shall be no reduction of numbers of anchors, size and spacing lesser the tested units, or based on calculation.

☐ Horizontal and vertical cross-sections showing a typical installation detail.

☐ Glazing: Show a glazing detail for each glazing option reflecting the information contained in Sections "Glazing Material" and "Glazing Method" of the test report, specifying glass type, overall unit thickness and individual glass lite and laminate thickness, glass bite and gaskets, sealants, spacers and other components. Include glass symbol, where applicable.

☐ Corner construction: Detail the frame and door/window panel corner construction method showing type of joint, sealants, fasteners, typical section door/window edge, at top & bottom of door, etc.

5. BILL OF MATERIALS

☐ Bill of Materials shall reflect all the items used in the entire assembly.

☐ List in table form, all item numbers called out in elevations and cross sections, using columns for:

- ☐ Part Number (where applicable).
- ☐ Quantity (when applicable, as in two flush bolts per inactive panel, one row of weather-strip at jamb, (4)-3/8 S.S. *Rawl Tapper* concrete screw at sill etc.).
- ☐ Description (including Manufacturer, series and model where applicable, e.g. *Sargent 8900* series lock etc.).
  Description for plastic and plastic foam should include type, brand, mfg., density etc.
- ☐ Material (including alloy and temper in case of aluminum e.g. Al 6063 T-5 ; grade and ASTM, AISI or SAE designation in case of steel, etc.).
- ☐ Basic dimensions: width x thickness (in case of bars, plates and jambs), overall face, depth dimensions and wall thickness (in case of extruded parts; etc.).
- ☐ Location (where applicable, as in lock or panic bar , 42" from bottom of door; reinforcing bar, one inside each meeting stile; etc.).

6. COMPARATIVE ANALYSIS RESULTS TABLE (WHERE APPLICABLE)

- ☐ When a comparative analysis is part of the documentation submitted, the results shall be summarized in a table format, listing in the first columns all the qualified door/window sizes, then in subsequent columns the corresponding positive and negative Design Pressure Ratings, as well as the number of anchors at head, sill and jamb. Also include numbers of anchors and typical spacing.
- ☐ When a comparative analysis is not part of the documentation, the positive and negative Design Pressure Rating shall be clearly stated in Sheet 1 and shall apply to doors/windows equal to or smaller than the door/windows tested.

7. ELECTRONIC COPY OF DRAWING

☐ Computer disk file extension *.dwg (AutoCad® format Rel. 2006).