**SUBJECT:** RESIDENTIAL PATIO AND PORCH ENCLOSURES, AND SUNROOMS (As Defined Below)

**AUTHORITY:**
Florida Building Code (Currently Adopted Edition); National Electrical Code (Currently Adopted Edition); Palm Beach County Amendments to the Florida Building Code (Currently Adopted Edition); Rule 61G20-3, Florida Administrative Code; Palm Beach County Uniform Land Development Code (ULDC); AAMA/NPEA/NSA 2100: Voluntary Specifications for Sunrooms

**PURPOSE:**
This PPM is intended to clarify applicable code requirements and provisions for the installation of patio and porch enclosures and sunrooms in one and two family and multiple family dwellings.

**POLICY:**
Contractors shall adhere to the policy and procedures described in this Policy Procedure Memorandum.

**PROCEDURE:**
Building Permit applications for the installation of patio and porch enclosures and sunrooms shall be reviewed in accordance with the following procedures.

**DEFINITIONS:**

<table>
<thead>
<tr>
<th>Term</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conditioned Area</td>
<td>The area within a building with a heating and/or cooling system, or has a fixed opening directly adjacent to a conditioned area.</td>
</tr>
<tr>
<td>Exterior Space</td>
<td>For purposes of <strong>PBO-089</strong>, for determining thermal barrier, electric, and impact fee requirements, it is the area enclosed by screened walls or removable vinyl or acrylic insert panels.</td>
</tr>
<tr>
<td>Habitable Space</td>
<td>The area designed to afford living space by virtue of its weather tight construction and environmental control.</td>
</tr>
<tr>
<td>Interior Space</td>
<td>For purposes of <strong>PBO-089</strong>, it is an area enclosed by exterior walls containing glass or other prime glazing, and which meets the requirements for wind, forced entry, air leakage, and water penetration resistance. Spaces meeting this definition may be habitable or non-habitable.</td>
</tr>
</tbody>
</table>
Non-Habitable: Area designed for seasonal use by virtue of its lack of environmental or temperature control systems and separation from the dwelling by exterior doors.

Patio/Porch Enclosure: A habitable or non-habitable space created by enclosing a covered patio or porch under an existing roof. The percentage of openings in the exterior walls complies with the Sunroom definition below.

Post-FIRM Building: Buildings with permit application date on or after 2/1/79, the date of the earliest adopted Flood Insurance Rate Map in Palm Beach County.

Pre-FIRM Building: Buildings with permit application date prior to 2/1/79, the date of the earliest adopted Flood Insurance Rate Map in Palm Beach County.

Prime Glazing System/Fenestration: Windows, glazed doors, skylights or other glazing intended to allow or control the passage of air, water, light, and/or people and which complies with requirements for wind, forced entry, air leakage, and water resistance. When used to create habitable space, must also comply with thermal performance requirements.

Removable Vinyl or Acrylic Panels: Removable translucent vinyl or acrylic glazing panels designed to provide weather protection from insects and light winds but not tested for air leakage, forced entry, water or wind resistance. When used in enclosures, panels must be removed at wind speeds exceeding 75 mph. The manufacturer's specs shall identify the product’s limitation of use and a visible label notifying occupants of the limitation must be affixed to panels when installed.

Screen Enclosure: A building or part thereof, in whole or in part self-supporting, and having walls of insect screening with or without removable vinyl or acrylic wind break panels and a roof of insect screening, plastic, aluminum or similar lightweight material.

Substantial Improvement: Any combination of repairs, reconstruction, rehabilitation, addition, or other improvements to a building, the cost of which equals or exceeds 50 percent of the market value of the structure before the 'start of construction of the improvement. This term includes structures that have incurred 'substantial damage', regardless of the actual repair work performed.

Sunroom: A structure added to an existing dwelling or space enclosed under an existing covered porch or patio and meeting one of the definitions below. Sunrooms are classified as Category 1 through 5 in accordance with Chapter 20 Florida Building Code (FBC)-Building or Chapter 3 FBC-Residential (structures not meeting these definitions or the Patio/Porch Enclosure definition above are not covered by this policy and are subject to the requirements of the Florida Building Code):
1. A room with roof panels which includes sloped glazing with an open or glazed area in excess of 40 percent of the gross area of the sunroom structure's exterior walls and roof.

2. A structure without sloped glazing or enclosure of space under an existing solid roof. The walls may have any configuration, provided the open (glazed) area of the longer exterior wall and, where there is more than one exterior wall, at least one additional wall is equal to at least 65 percent of the area below 6 feet 8 inches of each wall, measured from the floor.

**IMPACT FEE REQUIREMENTS:**

Additional Impact Fee assessment may be required for new patio/porch enclosures constructed of window walls, sliding and patio glass doors, or other prime glazing systems. The determination will be based on the total square footage of the existing and the new interior space.

**ZONING REQUIREMENTS ON ZERO LOT LINE (ZLL) SOLID ROOF ENCLOSURES:**

Dwellings require a minimum 8’ high solid privacy wall on the zero lot line for the entire length of the enclosure. The required wall shall be constructed of the same material used to construct the adjoining ZLL wall of the home, or any approved, structurally sound, opaque, and permanent material with an exterior finish that matches the style, color, and surface texture of the exterior of the adjoining ZLL wall.

Solid roof enclosures that are 4’ or more from the ZLL for the entire length of the enclosure do not require an 8’ wall, or an extension of the existing 5’ wall.

**FOUNDATIONS:**

Floor slabs and foundations shall meet the requirements for new construction. Existing slabs may be exempt from footing/foundation requirements if documentation from a previously permitted plan meeting the design requirements is provided, or a design professional demonstrates through rational analysis that the existing slab is of sufficient strength to support the proposed structure, and the slab elevation meets the other requirements in this policy.

**TERMITE PROTECTION:**

Termite protection is required for all new construction and within one foot of the primary structure walls on new patio slabs or slab extensions.

**FLOOR ELEVATION, FLOOD ZONE REQUIREMENTS:**

**NON-HABITABLE ENCLOSURES/SUNROOMS:**

- Floor Elevation—minimum 4" above finish grade or sufficient to provide minimum clearance to grade for non-treated wood framing and siding or foam unless using curbs.
• **Exception:** Non-Habitable enclosures with screen walls or removable vinyl or acrylic panels are exempt from the requirements for raising the floor elevation except as applicable for providing siding and wood framing or foam clearance to grade.

• **Flood Zone Consideration:** For existing buildings in Special Flood Hazard Areas (post-FIRM), minimum floor elevation for additions shall meet the minimum in effect when building was constructed.

► **HABITABLE ENCLOSURES/SUNROOMS:**

• **Floor elevation** shall be raised to meet the existing floor of the dwelling, or provide documentation that verifies the existing slab elevation is at or above the minimum required for the dwelling. In no case shall the finish floor be less than 4" above finished grade and shall be of sufficient height to provide minimum clearance to grade for non-treated wood framing, siding or foam construction.

• **Flood Zone Consideration** - Habitable patio/porch enclosures are typically not substantial improvements, however in a FEMA flood hazard zone, the finish floor must be at or above the Base Flood Elevation in effect when the building was built. Pre-FIRM buildings (built prior to Feb 1979 in PB Co), are exempt. Enclosures which are part of a substantial improvement shall comply with the following:

  ✓ **Substantial Improvements in a FEMA Special Flood Hazard Area (SFHA)** - Finish floor elevation shall be at or above the minimum specified in Article 18 of the Unified Land Development Code, or obtain a variance from this requirement.

  ✓ **Substantial Improvements NOT in a FEMA Special Flood Hazard Areas** - Finish floor elevation shall be in accordance with an approved Master Drainage Plan, if property has one. When no Master Drainage Plan exists, floor elevation must be minimum 18" above the lowest adjacent road crown.

**REMOVABLE VINYL AND ACRYLIC PANELS:**

Removable panels, when used, shall be identified as removable by a decal that states, "Removable panel SHALL be removed when the wind speed exceeds 75mph". These decals shall be readily visible from the interior when the panel is installed.

**EMERGENCY ESCAPE AND RESCUE OPENING (EERO) REQUIREMENTS**

Enclosures installed under new or existing solid roof or balcony decks covering existing Emergency Escape and Rescue Openings from sleeping rooms shall comply with the following requirements:

► A minimum 2'4" wide door shall replace an existing EERO window in the common wall between a bedroom and the enclosed patio/porch. The door shall be non-lockable from the bedroom side or equipped with an "unlock-release", which operates by a single hand motion. If the EERO is a sliding glass door, the locking hardware must be replaced with a non-locking type.
A hard wired smoke detector shall be installed inside the newly installed enclosure unless the building is equipped with an automatic sprinkler system. **Exception:** Battery powered smoke detectors may be used in enclosures with removable vinyl or acrylic panels.

**Ground Floor** Patio/Porch Enclosures/Sunrooms: A minimum 2’4” wide door shall be installed in the exterior wall of the enclosure and be located not more than 16 ft. from the bedroom EERO door. The EERO door from the bedroom shall be non-lockable from the bedroom side or be equipped with an "unlock-release" which operates by a single hand motion. EERO doors shall have a permanently affixed label stating “EMERGENCY Escape and Rescue Opening” located on the vertical frame of the door directly above the handle on the interior. The word “EMERGENCY” shall have letters a minimum of ½ inch in height (refer to examples in Appendix A). Sliding glass doors installed inside an existing screen wall on a ground floor unit shall have corresponding EERO door to the outside in the screen wall located in line with the sliding glass door and complying with the other requirements above.

**Second and Third Floor** Porch Enclosures: A code-complying EERO to the building exterior shall be located not more than 16 ft. from the required bedroom EERO door. The EERO door shall have a permanently affixed label that states ”EMERGENCY Escape and Rescue Opening” located on the vertical frame of the opening on the interior and exterior. The word “EMERGENCY” shall have letters with a minimum of ½ inch in height (refer to examples in Appendix A).

A new glass enclosure wall installed inside an existing screen wall shall have a removable EERO section of screen wall corresponding with the EERO unit clear opening.

**Exception1 to egress requirements above:** R-2 and R-4 buildings equipped with an NFPA 13 or 13R automatic sprinkler system. System shall be extended into enclosure if not existing.

**Exception 2 to egress requirements above:** Enclosures with screen walls only that are open to the atmosphere. Note: Screen walls shall have a minimum screened area of 65% of the wall area to be considered “open to the atmosphere”.

**GUARDS FOR WINDOWS AND SLIDING GLASS DOORS:**

Windows installed as part of an exterior wall enclosure shall have guards complying with Chapter 3 FBC-Residential or Chapter 14 FBC-Building for Window Sills where the opening of the sill portion of an operable window is more than 72 inches above the finish grade and the lowest part of the clear opening of the window is less than 24” above the finished floor surface of the enclosure.

Sliding glass doors installed as part of the exterior wall enclosure located more than 30” above finish grade shall have a guard complying with Chapter 10 FBC-Building.
THERMAL BARRIER REQUIREMENTS:

Foam plastic roof and wall panels shall be separated from the “interior space” by an approved thermal barrier or comply with the exceptions in Chapter 26 of the FBC-Building or Chapter 3 of the FBC-Residential. Enclosures and sunrooms enclosed with prime windows or doors are considered to be “interior space”, whether designated as habitable or non-habitable on the plan.

**Exception 1:** Foam panels meeting exception in Chapter 26 FBC-Building or Chapter 3 in FBC-Residential.

**Exception 2:** Enclosures with removable vinyl or acrylic panels.

FIRE RESISTANCE REQUIREMENTS:

Enclosures installed in multi-family dwellings under new or existing solid roof or balcony decks shall comply with ‘Fire Resistance’ requirements for the construction type of the existing building in accordance with Tables 601 and 602 FBC-Building.

Enclosures which involve townhouse or tenant separation walls shall comply with separation requirements in the code based on the legal classification of the property and construction type of the existing building.

A minimum 36" vertical separation of openings consisting of a flame barrier with a 1 hr fire rating in accordance with Chapter 7 FBC-Building is required for enclosures with glass or other prime glazing systems in multi-family buildings over 3 stories. For new enclosures with no permitted enclosures in the units immediately above or below or within 5 ft horizontally, a 24" high, 1 hr rated exterior wall must be provided at the base of the opening and a 12" high, 1 hr rated header wall provided at the top of the opening. Where existing permitted enclosures exist in the units immediately above and below or within 5 ft horizontally, the proposed enclosure shall provide the necessary flame barrier to assure the required 36" vertical separation.

**Exceptions:**
1) Enclosures with automatic fire sprinkler system.
2) Enclosures with removable vinyl or acrylic glazing panels.

ENERGY CODE REQUIREMENTS:

A completed Energy Code Form is required for Patio/Porch Enclosures and Sunrooms when the plans indicate habitable, conditioned space is being created. When the enclosure is specified as non-habitable, and therefore exempt from the Florida Energy Code, the enclosure shall be fully separated from the conditioned dwelling by walls or doors and the plans must clearly specify the enclosure is “unconditioned, non-habitable space”.

IMPACT PROTECTION:

All new glazing is required to have impact protection from wind-borne debris. The only exception is for enclosures under an existing roof or deck provided the new space is separated from the building interior by a wall which has all openings properly protected and with permit documentation.
PRODUCT APPROVALS:

Two copies of State of Florida or Miami-Dade Approvals are required at permitting for the eight categories of products in Rule 61G20-3. They are: Panel Walls, Exterior Doors, Roofing Products, Skylights, Windows, Shutters, Structural Components and New Technology. All applicable details and attachments must be clearly identified on the Product Approval drawings. Details and attachments not specifically covered in the Product Approvals will need site-specific engineering.

ELECTRICAL REQUIREMENTS:

Patio/Porch Enclosure and Sunroom receptacles and lighting shall conform to the National Electrical Code (NEC) and the following:

► NON-HABITABLE ENCLOSURES/SUNROOMS:

- **Receptacles (Interior Space)** - A minimum of one duplex receptacle and one switched light or two duplex receptacles (one switched) are required in enclosures with prime glazing system. Receptacles in these spaces are not required to be GFCI protected as it is interior space.

- **Receptacles (Exterior Space)** - A separate exterior GFCI receptacle shall be installed if the existing receptacle falls within the new enclosure. This requirement does not apply to ground floor multi-family dwellings if there is a separate exterior receptacle. Existing porches enclosed with removable panels are not required to add receptacles.

- **Lighting** - A wall-switch controlled or automatic interior lighting outlet shall be provided. A wall-switch controlled or automatic exterior light shall be provided at exterior doors in ground floor enclosures. 
  
  *Exception:* Enclosures with screen or removable vinyl or acrylic panels.

► HABITABLE ENCLOSURES/SUNROOMS:

- **Receptacles (Interior)** - Receptacles shall comply with NEC requirements for dwellings.

- **Receptacles (Exterior)** - A separate exterior GFCI receptacle shall be installed if the existing exterior receptacle falls within the new enclosure. This requirement does not apply to ground floor multi-family dwellings if there is a separate exterior receptacle serving the unit.

- **Lighting** - A wall-switch controlled or automatic interior lighting outlet shall be provided. At least one wall switch-controlled or automatic exterior light shall be provided at exterior doors in ground floor units.
INSPECTIONS REQUIREMENTS:

The Inspector may require pictures of all hidden connections, as well as engineering certification, for final approval of the enclosure.

Supersession History
1. PPM# PBO-089, issued 08/13/93
2. PPM# PBO-089, effective 08/16/93
3. PPM# PBO-089, issued 11/26/07
4. PPM# PBO-089, issued 04/30/12
5. PPM# PBO-089, effective 06/15/12
6. PPM# PBO-089, issued 06/01/12
7. PPM# PBO-089, effective 09/15/12

Richard Salhuck
Interim Director
**PBO-089 REQUIREMENTS FOR PATIO-PORCH ENCLOSURES & SUNROOMS**

<table>
<thead>
<tr>
<th>Plan Requirements</th>
<th>Existing Roof</th>
<th>New Roof</th>
</tr>
</thead>
<tbody>
<tr>
<td>Job name/address &amp; contractor name/address/ID number on plan. Also designer if other than contractor.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Occupancy (S-3): T/H, Condo, Other identified, N. of Stories &amp; Floor identified, Sprinklered or Non-sprinklered identified? If bldg sprinklered, specify whether porch also sprinklered.</td>
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<tr>
<td>Survey provided for additions with proposed layout. Proposed dimensions drawn at same scale as existing structure.</td>
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<tr>
<td>Proposed floor plan w/elec provided &amp; shows all areas bordering enclosure. Elevations, wall details, roof plan (if applicable) provided. Photos of exterior elevation showing porch and all adjacent units (4 story or higher bldgs).</td>
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<tr>
<td>Plan specifies whether enclosure is Non-habitable, Unconditioned or Habitable, Conditioned.</td>
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<td></td>
</tr>
<tr>
<td>Photos of exterior elevation provided on 4 story or higher bldgs showing porch and adjacent units on all sides</td>
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<tr>
<td>Floor area (existing and new sq ft) specified; Enclosures with glass or other prime glazing (Habitable or Non-habitable) reviewed for possible impact fee requirements.</td>
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<tr>
<td>Bldg code edit on and wind design criteria (wind speed, exposure category, component &amp; cladding pressures) specified. Pressures meet Exp C or evidence provided.</td>
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<tr>
<td>Floor elevation/Flood Prevention Reqs - Ht of floor above grade specified (4&quot; min req'd exc. remov panel). If Habitable, matches dwelling or documentation provided showing compliance w/flood regs.</td>
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<tr>
<td>Removable Vinyl or Acrylic Panels - &quot;Remove at 75 mph&quot; statement on mfr's specs and label on product.</td>
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<tr>
<td>Emergency Escape &amp; Rescue Openings (EERO) identified on plan. EERO window changed out to min 24&quot; egress door if opens to and; EERO to outside provided; Excep: If sprinklered; Appendix A if applicable.</td>
<td></td>
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</tr>
<tr>
<td>Hardwired smoke detector specified in glass and other prime enclosures if space adjoins sleeping room EERO. (Battery powered alarms allowed when using Removable Panels only)</td>
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<td></td>
</tr>
<tr>
<td>Fire Protection - Tenant sep. specified/maintained where applies; Ext wall complies w Fire Sep req'ts; Vert. sep. of openings provided bldgs over three stories if not sprinklered; Sprinklers extended if existing.</td>
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<tr>
<td>Product approved provided for windows, doors, siding, roof &amp; wall panels, impact protection. Products meet wind pressure requirements for components and cladding.</td>
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<tr>
<td>Site specific engineered details provided for foundations, structural framing and connection details not covered in product approvals. Details must include columns, headers and sill attachments.</td>
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</tr>
<tr>
<td>Impact protection provided for new glazing except removable vinyl/acrylic panels. Enc &amp; under existing roof may protect openings in host structure. Permit number req'd if using existing shutters.</td>
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</tr>
<tr>
<td>Thermal barrier specified over foam sandwich wall panels if &quot;interior space&quot; unless panels meet testing.</td>
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<tr>
<td>Guards provided for SGD's more than 30&quot; above finish grade. Windows have guards if bottom of opening more than 6 ft above grade and sill is less than 24&quot; above floor.</td>
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</tr>
<tr>
<td>Elect- Exist if req'd; One recep &amp; one switched light or two recep (one switched) provided for non-habit enc &amp;; Recep/light per 213-52 NEC for habit. enc; Ext switched or auto light at exit doors. Ext recep if reqd existing.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Energy Code form provided for conditioned space; Details shown on plans; Equip schedule and sizing cards for added a/c equipment.</td>
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</tbody>
</table>

**DEFINITIONS**

**Patio-Porch Enclosure** = A habitable or Non-habitable space created by enclosing a covered patio or porch under an existing roof. The percentage of openings in the exterior walls complies with the definition for Sunrooms.

**Sunroom** = A structure added to an existing dwelling or space enclosed under an existing patio or porch roof meeting one of the Sunroom categories in Chapter 3 of FBC-Res or Chapter 20 of the FBC-Bldg. Structures not meeting these requirements or the Patio-Porch definition above are not covered by this policy.

**Interior Space** = For purposes of this policy, an area enclosed by exterior walls containing glass windows and/or doors or other prime glazing and meets standards for wind, forced entry, air leakage, and water resistance. The space may be designated as habitable or non-habitable.