

Notes -

Binding Interpretation - Petition #318 petitioned by Jared Blount

Petitioner:

Beach Colony is a 20-story condominium building located at 13601 Perdido Key Drive in Pensacola, Florida. The building is classified as a residential occupancy, Group R-2.

The Petitioner is a Florida-licensed Professional Engineer employed by Applied Technical Services and is directly involved in providing engineering services related to the subject project. The local building official's interpretation that the proposed scope of work requires Special Inspection under the Florida Building Code affects the Petitioner's professional obligations and scope of services.

The local building official has determined **that replacement of windows within the subject building requires Special Inspection in accordance with Florida Building Code Section 110.8.1.** This interpretation was communicated verbally during discussions with the project contractor and was later confirmed through written correspondence.

The building official stated that revisions to Section 110.8.1 addressing repair and restoration projects had the effect of bringing window and door replacement projects within the scope of the threshold inspection requirements.

Florida Building Code Section 110.8 requires Special Inspection for threshold buildings only where the permitted scope of work includes structural alterations or structural repairs that may affect the structural integrity of the building.

Windows and doors are not classified as structural members under the Florida Building Code. The replacement of windows within non-load-bearing infill wall assemblies, where no structural members are modified, does not constitute work that affects the structural integrity of the building. Accordingly, this scope of work does not require Special Inspection pursuant to Florida Building Code Section 110.8.1.

The project consists of a **reinforced concrete structural frame with non-load-bearing metal stud infill walls. The work within these infill wall assemblies is limited to stucco repairs and window replacement.** No alterations or repairs are proposed to the structural concrete elements comprising the building's main wind force-resisting system. Existing window openings will remain unchanged in size, location, and configuration.

The scope of this project includes the replacement of five windows on the first floor of the east elevation as a "mock-up" for a future, full window replacement project anticipated along the same elevation. The Board elected to proceed with a mock-up phase rather than immediately undertaking the full east elevation window replacement in order to allow the design team to observe actual construction details and as-built conditions. This approach was intended to

reduce unknowns and minimize the potential for unforeseen conditions and change orders associated with the larger project.

The overall scope of the mock-up project includes the removal and replacement of five first-floor windows, removal and replacement of stucco down to the infill metal stud walls, replacement of insulation, and restoration of interior finishes. The replacement windows will be like-for-like in size and configuration and will comply with the glazing requirements of the current Florida Building Code.

The petitioner is the Engineer of Record for the project and did not prepare a structural inspection plan pursuant to Section 110.8.1 of the 2023 Florida Building Code. Section 110.8.1 requires a structural inspection plan only for new construction, repair, or restoration projects in which the structural system or structural loading of the building is modified. As discussed in the petition, the building's main wind force-resisting system is not being modified, as the scope of work is limited to non-load-bearing infill metal stud wall assemblies.

Building Official:

In my opinion, the original intent of the requirement did not include windows and doors at all. Language was added to 110.8.1 a few years ago including repair and restoration projects. As a result, door and window replacement projects, a structural system that's part of an enclosed building design, are included in threshold plans. This and discussions at Florida Building Commission meetings about the subject sparked those requirements. Be advised that I do not consider stucco work part of a threshold requirements at this time.

8th Edition (2023) Florida Building Code, Building

110.8 Threshold building.

110.8.1 During new construction or **during repair or restoration projects in which the structural system or structural loading of a building is being modified**, the enforcing agency shall require a **special inspector to perform structural inspections on a threshold building pursuant to a structural inspection plan prepared by the engineer or architect of record**. The structural inspection plan must be submitted to the enforcing agency prior to the issuance of a building permit for the construction of a threshold building. The purpose of the structural inspection plans is to provide specific inspection procedures and schedules so that the building can be adequately inspected for compliance with the permitted documents. The special inspector may not serve as a surrogate in carrying out the responsibilities of the building official, the architect, or the engineer of record. The contractor's contractual or statutory obligations are not relieved by any action of the special inspector.

CHAPTER 2 DEFINITIONS

ALTERATION. Any construction or renovation to an existing structure other than repair or addition

THRESHOLD BUILDING. In accordance with Florida Statute, any building which is greater than 3 stories or 50 feet in height, or which has an assembly occupancy classification that exceeds 5,000 square feet in area and an occupant content of greater than 500 persons.

STRUCTURE. That which is built or constructed.

8th Edition (2023) Florida Building Code, Existing Building

CHAPTER 2 DEFINITIONS

ALTERATION. Any construction or renovation to an existing structure other than a repair or addition. Alterations are classified as Level 1, Level 2 and Level 3.

REPAIR. The reconstruction or renewal of any part of an existing building for the purpose of its maintenance or to correct damage.

CHAPTER 16 STRUCTURAL DESIGN

1601.1 Scope. The provisions of this chapter shall govern the structural design of buildings, structures and portions thereof regulated by this code.

SECTION 1605

LOAD COMBINATIONS

1605.1 General. Buildings and other structures and portions thereof shall be designed to resist the strength **load combinations** specified in ASCE 7, Section 2.3, the allowable stress design load combinations specified in ASCE 7, Section 2.4, or the alternative allowable stress design load combinations of Section 1605.2.

SECTION 1606

DEAD LOADS

1606.1 General. Dead loads are those loads defined in Chapter 2 of this code. Dead loads shall be considered permanent loads.

SECTION 1607

LIVE LOADS

1607.1 General. Live loads are those loads defined in Chapter 2 of this code.

SECTION 1609 WIND LOADS

1609.1 Applications. Buildings, structures and parts thereof shall be designed to withstand the minimum wind loads prescribed herein. Decreases in wind loads shall not be made for the effect of shielding by other structures. All exterior wall coverings and soffits shall be capable of resisting the design pressures specified for walls for components and cladding loads in accordance with Section 1609.1.1. Manufactured soffits shall be labeled in accordance with Section 1709.10 of this code.

1609.1.1 Determination of wind loads. Wind loads on every building or structure shall be determined in accordance with Chapters 26 to 30 of ASCE 7. Wind shall be assumed to come from any horizontal direction and wind pressures shall be assumed to act normal to the surface considered.

ASCE 7-22 Minimum Design Loads and Associated Criteria for Buildings and Other Structures

Chapter 26 Wind Loads: General Requirements

26.1.1 Scope Buildings and other structures, including the **main wind force resisting system (MWFRS) and components and cladding (C&C)** thereof, shall be designed and constructed to **resist the wind loads determined in accordance** with Chapter 26 through 31.

Main Wind Force Resisting System (MWFRS): An assemblage of structural elements assigned to provide support and stability for the overall building or other structure. The system generally receives wind loading from more than one surface.

Building Envelope: Cladding, roofing, exterior walls, gazing, door assemblies, window assemblies, skylight assemblies, and other components enclosing the building.

Components and Cladding (C&C): Elements of the building envelope or elements of the building appurtenances and rooftop structures and equipment that do not qualify as part of the MWFRS.

Staff Analysis

Question:

Is replacement of windows considered a modification to the building's structural system and therefore required to meet the requirements of Section 110.8.1 of the Florida Building Code, Building, 8th Edition (2023)?

Answer:

The answer to the Petitioner's question is yes. The replacement of windows constitutes a modification of the building's structural system. Accordingly, this work is required to comply with Section 110.8.1 of the Florida Building Code, Building, 8th Edition (2023).