The following modifications were Approved as Modified by the Structural TAC at the October 8, 2025 Meeting:

Mod 12128 – Florida Building Code, Residential WBDR: Approved as Modified by the Structural TAC

WIND-BORNE DEBRIS REGION. Areas within hurricane-prone regions located ~~in accordance with one of the following:~~ where the ultimate design wind speed, V_{ult}, is 130 mph (58 m/s) or greater.

~~1. Within 3,000 ft (0.94 km) of the mean high-water line where an Exposure D condition exists upwind at the waterline and the ultimate design wind speed,~~ ~~V_{ult}~~~~, is 130 mph (58 m/s) or greater; or~~

~~2. In areas where the ultimate design wind speed,~~ ~~V_{ult}~~~~, is 140 mph (63.6 m/s) or greater; or Hawaii.~~

R301.2.1.2 Protection of openings. Exterior glazed openings in buildings located in windborne debris regions shall be protected from windborne debris. Glazed opening protection for windborne debris shall meet the requirements of the Large Missile Test of ASTM E1996 and ASTM E1886 as modified in Section 301.2.1.2.1, TAS 201, 202 and 203, or AAMA 506, as applicable. Garage door glazed opening protection for windborne debris shall meet the requirements of an approved impact-resisting standard or ANSI/DASMA 115.

1. Openings in sunrooms, balconies or enclosed porches constructed under existing roofs or decks are not required to be protected provided the spaces are separated from the building interior by a wall and all openings in the separating wall are protected in accordance with this section. Such space shall be permitted to be designed as either partially enclosed or enclosed structures.

2. Storage sheds that are not designed for human habitation and that have a floor area of 720 square feet (67 m^2) or less are not required to comply with the mandatory wind-borne debris impact standard of this code.

3. Buildings located more than 1 mile from the coastal mean high water line where the ultimate design wind speed, V_{ult}, is less than 140 mph (63.6 m/s) are permitted to be designed as partially enclosed in accordance with ASCE 7 in lieu of protecting exterior glazed openings from wind-borne debris.

Exception: (*no change*)

Mod 12109 – Florida Building Code, Building WBDR: Approved as Modified by the Structural TAC

WIND-BORNE DEBRIS REGION. Areas within hurricane-prone regions located ~~in accordance with one of the following:~~ where the ultimate design wind speed, V_{ult}, is 130 mph (58 m/s) or greater.

~~1. Within 3,000 ft (0.94 km) of the mean high-water line where an Exposure D condition exists upwind at the waterline and the ultimate design wind speed, V_{ult}, is 130 mph (58 m/s) or greater; or~~

~~2. In areas where the ultimate design wind speed, V_{ult}, is 140 mph (63.6 m/s) or greater; or Hawaii.~~

1609.1.2 Protection of openings. In wind-borne debris regions, glazed openings in buildings shall be impact resistant or protected with an impact-resistant covering meeting the requirements of ANSI/DASMA 115 (for garage doors and rolling doors) or TAS 201, 202 and 203, AAMA 506, ASTM E1996 and ASTM E1886 referenced herein, or an approved impact-resistant standard as follows:

1. Glazed openings located within 30 feet (9144 mm) of grade shall meet the requirements of the large missile test of ASTM E1996.

2. Glazed openings located more than 30 feet (9144 mm) above grade shall meet the provisions of the small missile test of ASTM E1996.

3. Storage sheds that are not designed for human habitation and that have a floor area of 720 square feet (67 m^2) or less are not required to comply with the mandatory windborne debris impact standards of this code.

4. Openings in sunrooms, balconies or enclosed porches constructed under existing roofs or decks are not required to be protected provided the spaces are separated from the building interior by a wall and all openings in the separating wall are protected in accordance with Section 1609.1.2 above. Such spaces shall be permitted to be designed as either partially enclosed or enclosed structures.

5. Buildings located more than 1 mile from the coastal mean high water line where the ultimate design wind speed, V_{ult}, is less than 140 mph (63.6 m/s) are permitted to be designed as partially enclosed in accordance with ASCE 7 in lieu of protecting exterior glazed openings from wind-borne debris.

Exception: (*no change*)

Rationale (for comments on Mods 12109 and 12128): This comment reflects a compromise between the original proposal and the current Wind-borne Debris Region (WBDR) in the FBC. Even with the reduced applicability of the WBDR adjacent to Exposure D conditions (3000 ft vs 1 mile specified in ASCE 7-22) in the original proposal, the practical limitations of enforcement and understanding the specific location of the WBDR remain where wind speeds are between 130 mph and 140 mph.

Additionally, the original proposal as written would reduce the WBDR from current requirements in coastal areas of the 130 mph to 140 mph range by changing the applicability from 1 mile to 3000 feet. The coastal areas are the most likely to be affected by wind-borne debris from hurricanes.

If approved, this comment would change the WBDR to apply in all areas where the wind speed is 130 mph. It would maintain current areas where protection is required ($V \geq 140$ mph; and within one mile of the coastal mean high water line where $V \geq 130$). However, in regions where the wind speed is between 130 mph and 140 mph "and" located more than 1 mile from the coastal mean high water line, buildings would be permitted to be designed as partially enclosed in accordance with ASCE 7 as an alternative to protecting glazed openings. See attached figure for a visual representation for Risk Category II.

This proposal would represent a significant improvement in the wind resistance of buildings in this region with little added cost. It provides the option for homeowners and building owners to protect glazed openings or design the building as partially enclosed. Designing a building as partially enclosed will result in minimal cost increase but will increase the design pressures on every part of the building – roof-to-wall connections, windows, siding, roof decking, most roof coverings, etc.

We believe this to be a better path forward.

This comment is requesting that Mods 12128 and 12109 be further modified to provide an exception for replacement windows and doors:

Further modify the Florida Building Code, Existing Building as follows:

707.4 Replacement of windows and doors. The replacement of garage doors, exterior doors, skylights, and operative and inoperative windows shall be designed and constructed to comply with Chapter 16 of the Florida Building Code, Building.

Exceptions:

1. Opening protection exception: For one- and two family dwellings constructed under codes other than the Florida Building Code and located in windborne debris regions, the replacement of garage doors and exterior doors with glazing, sliding glass doors, glass patio doors, skylights, and operable and inoperable windows within any 12-month period shall not be required to have opening protection but shall be designed for wind pressures for enclosed buildings, provided the aggregate area of the glazing in the replaced components does not exceed 25 percent of the aggregate area of the glazed openings in the dwelling or dwelling unit.

2. Opening protection exception for High-Velocity Hurricane Zones: For one- and two-family dwellings constructed under codes prior to September 1, 1994 the replacement of exterior doors with glazing, sliding glass doors, glass patio doors, skylights, and operable and inoperable windows within any 12 month period shall not be required to have opening protection provided the aggregate area of the glazing in the replaced components does not exceed 25 per cent of the aggregate area of the glazed openings in the dwelling or dwelling unit.

<u>3. For buildings in the Wind-borne Debris Region but located more than 1 mile from the coastal mean high water line where the ultimate design wind speed, V_{ult}, is less than 140 mph (63.6 m/s), the replacement of garage doors and exterior doors with glazing, sliding glass doors, glass patio doors, skylights, and operable and inoperable windows shall not be required to have opening protection.</u>

Rationale: This comment provides an exception for replacement windows and doors in the Florida Building Code, Existing Building for regions that would be affected by Mods 12109 and 12128. Mods 12109 and 12128 were Approved as Modified by the Structural TAC. This modification results in an expansion of the Wind-borne Debris Region. But in the expanded area, two options are provided: 1. Provide impact protection for glazed openings; or 2. Design the building as Partially Enclosed in accordance with ASCE 7. For existing buildings undergoing window/door replacement, altering the building to comply with a partially enclosed enclosure classification or verifying the building currently meets the partially enclosed design condition is not feasible. Without this comment, this would have the effect of requiring impact protection for existing buildings. New construction would have the option to provide impact protection or design as partially enclosed. This additional comment removes that discrepancy.