

APPLICABILITY:

PROTECTION OF THE JUNCTION IN BETWEEN AND AT THE PERIMETER OF FIRE BARRIERS OR, THE JUNCTION WHERE FIRE BARRIERS MEET OTHER FIRE BARRIERS...THE FLOOR OR ROOF DECK ABOVE...OR THE OUTSIDE WALLS

The following methods of protection will not apply to any static or dynamic joints – *defined as the linear opening in or between adjacent fire-resistance-rated assemblies that are designed to allow independent movement of the building in any plane caused by thermal, wind or any other loading* – as these joints shall be protected in accordance with the provisions of Florida Fire Prevention Code (FFPC), 2007 edition, Section 101: 8.3.6 and the Florida Building Code, Section 713.

In cases where a junction does not meet the definition of “joint” (as stated above) but the “junction” in between and at the perimeter of fire barriers still exists, such a “junction” shall be protected in the manner described below, as these methods of protection are deemed acceptable to both the Fire Code Official’s Office and the Office of the Building Code Official:

Union Scenario	Location	Protection
With movement capabilities	All	Approved and listed joint system or engineering analysis
Little or no movement capabilities	All	Approved and listed joint system <u>or</u> engineering analysis <u>or</u> alternative as listed below
ALTERNATIVE PROTECTION FOR LOCATIONS WITH LITTLE OR NO MOVEMENT CAPABILITIES		
Wall	Fire rated gypsum board wall assembly abuts another gypsum board wall assembly (in same plane)	Gap at the union shall not exceed ¼” and the void shall be protected with tape and mud/joint compound or an elastomeric or an intumescent or an acoustical caulk evaluated for use in an approved and listed joint system.
Wall	Fire rated gypsum board wall assembly abuts another gypsum board wall assembly (at an angle)	Gap at the union shall not exceed ¼” and the void shall be protected with tape and mud/joint compound or an elastomeric or an intumescent or an acoustical caulk evaluated for use in an approved and listed joint system, and the framing details of the angled “union” shall be provided.
Wall	Fire rated gypsum board wall assembly abuts a CBS/CMU assembly (in same plane)	Gap at the union shall not exceed ¼” and the void shall be protected with an elastomeric or an intumescent or an acoustical caulk evaluated for use in an approved and listed joint system.
Wall	Fire rated gypsum board wall assembly abuts a CBS/CMU assembly (at an angle)	Gap at the union shall not exceed ¼” and the void shall be protected with an elastomeric or an intumescent or an acoustical caulk evaluated for use in an approved and listed joint system, and the framing details of the angled “union” shall be provided.

Union Scenario	Location	Protection
Wall	Fire rated gypsum board wall assembly abuts non-rated glass	Gap at the union shall not exceed ¼” and the void shall be protected with an elastomeric or an intumescent or an acoustical caulk evaluated for use in an approved and listed joint system.
Wall	Fire rated CBS/CMU wall assembly abuts another CBS/CMU assembly (in same plane or at an angle)	An approved and listed Wall-to-Wall joint system shall be utilized; however, in the absence of an available Wall-to-Wall joint system, an engineering analysis is permitted. <i>EXCEPTION: when wall-to-wall junctions are constructed with interlocked blocks or poured concrete.</i>
Head of wall	Fire rated gypsum board wall assembly abuts a rated gypsum board floor/roof/ceiling assembly	Gap at the union shall not exceed ¼” and the void shall be protected with an elastomeric or an intumescent or an acoustical caulk evaluated for use in an approved and listed joint system.
Head of wall	Fire rated gypsum board wall assembly abuts a rated concrete floor/roof/ceiling assembly	An approved and listed Head-of-Wall joint system shall be utilized; however, in the absence of an available Head-of-Wall joint system, an engineering analysis is permitted.
Head of wall	Fire rated CBS/CMU wall assembly abuts a fire rated gypsum board floor/roof/ceiling assembly	An approved and listed Head-of-Wall joint system shall be utilized; however, in the absence of an available Head-of-Wall joint system, the gap at the union shall not exceed ¼” and the void shall be protected with an elastomeric or an intumescent or an acoustical caulk evaluated for use in an approved and listed joint system.
Head of wall	Fire rated CBS/CMU wall assembly abuts a rated concrete floor/roof/ceiling assembly	An approved and listed Head-of-Wall joint system shall be utilized; however, in the absence of an available Head-of-Wall joint system, an engineering analysis is permitted. <i>EXCEPTION: when head-of-wall junctions are constructed with CMU cells of the wall that are filled with poured concrete at the same time the lintel or beam or other floor/roof/ceiling component is being poured.</i>
Floors	Fire rated gypsum board floor assembly abuts a non-rated gypsum board or CBS/CMU or concrete exterior wall	Gap at the union shall not exceed ¼” and the void shall be protected with an elastomeric or an intumescent or an acoustical caulk evaluated for use in an approved and listed joint system.
Floors	Fire rated concrete floor assembly abuts a gypsum board	Gap at the union shall not exceed ¼” and the void shall be protected with an elastomeric or an intumescent or an acoustical caulk evaluated for use in an approved and listed joint system.
Floors	Fire rated concrete floor assembly abuts a non-rated CBS/CMU or concrete exterior wall	An approved and listed Floor-to-Wall joint system shall be utilized; however, in the absence of an available Floor-to-Wall joint system, the gap at the union shall not exceed ¼” and the void shall be protected with an elastomeric or an intumescent or an acoustical caulk evaluated for use in an approved and listed joint system.

Union Scenario	Location	Protection
Floors	Fire rated concrete floor assembly abuts a rated CBS/CMU or concrete exterior wall or curtain wall assembly	An approved and <u>listed Floor-to-Wall joint system</u> shall be utilized; however, in the absence of an available Floor-to-Wall joint system, an engineering analysis is permitted.

NOTE REGARDING AN ENGINEERING ANALYSIS: An **engineering analysis** shall be performed by either a Florida-licensed engineer or architect. The analysis shall demonstrate a comparison of building element designs having fire-resistance ratings as determined by the test procedures set forth in ASTM E 1966 *Standard Test Method for Fire-Resistive Joint Systems*, or UL 2079, *Standard for Tests for Fire Resistance of Building Joint Systems*. The engineering analysis shall include a justification of similarity between a joint system(s) and the proposed protection system being compared. The tests used for comparison shall be provided and the Florida-licensed engineer or architect shall assume full responsibility for the protection system proposed. The Florida-licensed engineer or architect shall also provide all details for the proposed protection system(s) including, but not limited to, framing, anchoring, screw pattern and spacing details. Lack of information or code reference may delay the review process. Let it be understood that these requirements in no way diminishes or negates the authority of the Fire Code Official or the Building Code Official to evaluate the proposed engineering analysis for compliance with the provisions of the Florida Fire Prevention Code or the Florida Building Code. Additionally, as with all equivalencies or alternative methods that may impact both the Fire Codes and Building Codes, there will be deliberation between the Fire Code Official’s Office plan review staff and the Collier County Building Department’s plan review staff prior to approval of any engineering analysis.