Gap Closures for Fire Rated Walls

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When using Gordon, Inc. Mullion Mate® Systems as a gap closure between an Exterior Curtain Wall and a Fire Rated Barrier/Wall, please refer to IBC 2021 International Building Code, Chapter 7.

The IBC 2022 International Building Code, Chapter 7 (Fire and Smoke Protection Features), Section 707.9 addresses voids (gaps) between a fire-rated barrier and an exterior wall that is not fire-resistance rated. It states: **"The void need only be filled with an approved material that is securely installed and capable of retarding the passage of fire and hot gasses."**

In this standard, there is no specific test that the gap closure is held, it only requires that the material must retard the passage of fire and hot gases. For these conditions, **Gordon, Inc. Mullion Mate® Systems use non-combustible materials and will satisfy Section 707.9, because the assembly uses 4 PCF density mineral wool batt insulation and vertical joints at the curtain wall and the rated interior fire barrier assembly are sealed with an acoustical sealant.**

NOTE: Although most State and Local Building Codes follow the above IBC 2021 International Building Code for Partition Gap Closures used between Exterior Curtain Wall and Fire Rated Barriers, the Installing Contractor should review their State and Local Building Codes to ensure compliance for their specific project.

For the state of Florida please refer to the 2020 Florida Building Code, Building, 7th Edition, sections 715.4, 715.4.1, and 715.4.2.

715.4 Exterior curtain wall/floor intersection.

Where fire resistance-rated floor or floor/ceiling assemblies are required, voids created at the intersection of the exterior curtain wall assemblies and such floor assemblies shall be sealed with an *approved* system to prevent the interior spread of fire. Such systems shall be securely installed and tested in accordance with ASTM E2307 to provide an *F rating* for a time period not less than the *fire-resistance rating* of the floor assembly. Height and fire-resistance requirements for curtain wall spandrels shall comply with Section 705.8.5.

> **Exception:** Voids created at the intersection of the exterior curtain wall assemblies and such floor assemblies where the vision glass extends to the finished floor level shall be permitted to be sealed with an approved material to prevent the interior spread of fire. Such material shall be securely installed and capable of preventing the passage of flame and hot gases sufficient to ignite cotton waste where subjected to ASTM E119 time-temperature fire conditions under a minimum

positive pressure differential of 0.01 inch (0.254 mm) of water column (2.5 Pa) for the time period not less than the *fire-resistance rating* of the floor assembly.

715.4.1 Exterior curtain wall/non-fire resistance-rated floor assembly intersections.

Voids created at the intersection of exterior curtain wall assemblies and non-fire-resistance-rated floor, or floor/ceiling assemblies shall be sealed with an *approved* material or system to retard the interior spread of fire and hot gases between *stories*.

715.4.2 Exterior curtain wall/vertical fire barrier intersections.

Voids created at the intersection of non-fire-resistance-rated exterior curtain wall assemblies and *fire barriers* shall be filled. An approved material or system shall be used to fill the void and shall be securely installed in or on the intersection for its entire length so as not to dislodge, loosen or otherwise impair its ability to accommodate expected building movements and to retard the passage of fire and hot gases.

GORDON®
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5023 Hazel Jones Road
Bossier City, LA 71111
800-747-8954

www.gordon-inc.com
sales@mullionmate.com