



## 4.5. General Requirements for Exterior Façade Systems

### 4.5.1. Coatings on primary substrate

- 4.5.1.1. Bitumen, bituminous products and flammable agents as anti-corrosion or water-proofing coatings shall not be applied on primary substrates, either on metals or concrete. Bitumen has fire point of 175°C and propagates building envelope fires.

### 4.5.2. Building Fire Rating

- 4.5.2.1. Façade materials, exterior wall systems, claddings and insulation installed on any building shall not reduce the fire resistance rating of the exterior wall where required by other sections of this Chapter.

### 4.5.3. Thermal Barrier

- 4.5.3.1. Façade Cladding Materials such as MCM and ACP shall be completely separated from the building interior and plenum by a thermal barrier, complying to test standards of **Section 7.1.11.** of this chapter.
- 4.5.3.2. Required thermal barriers shall not be installed on the walls or frames with adhesives alone. Thermal barriers shall be fixed mechanically on primary substrate, structural frame or the wall or on rails as appropriate.
- 4.5.3.3. Thermal barrier is not mandatory only when MCM or ACP or cladding materials are used on balconies and minor architectural appendages on exterior wall.
- 4.5.3.4. In all cases the Building Exterior Base wall must be imperforate and provide a nominal 15 minutes fire resistance ( Insulation and integrity).

### 4.5.4. Cavity Fire Barrier

- 4.5.4.1. Cavity Fire Barriers shall be incorporated into façade designs, including architectural features with uninterrupted vertical columns (e.g. High Rise 'Fins'), at every floor horizontally around window openings on all sides to limit fire breakout from a room into the adjacent cavity. This cavity barrier shall not be a thermal bridge.
- 4.5.4.2. Cavity Fire Barriers shall be incorporated into façade design at every floor vertically to restrict flame within continuous cavities or where cavities bridge the perimeter firestopping. Perimeter Firestopping systems shall be installed as per **Section 3** of this chapter.
- 4.5.4.3. Cavity fire barrier shall be of Non combustible material, in accordance with **Section 7.1.45.** of this chapter.
- 4.5.4.4. The cavity fire barrier shall be 100 mm high and, where the thermal insulation is not of equivalent fire resistance to the cavity barrier, shall run through insulation horizontally at each floor level and vertically on each face of façade as required by **Section 4.5.4.2.**