



**4.3.9.** Thus the whole mechanism involved in façade flame spread, after the initial ignition, can be pin pointed to the following factors.

- a. Readily Combustible Core of the façade material (Insulation/Sealants/Panels)
- b. Inferior Façade Panel integrity (Poor Panel make and skin bonding)
- c. Non tested and Non listed Façade, Sealants and Fire stopping systems
- d. Poor installation of Façade and Fire stopping Systems
- e. Lack of Thermal barriers and Cavity fire barriers

**4.3.10.** The initial ignition of the fire can be attributed to human behavior as well. **See Chapter 18., Section 2.21. Responsibilities of Residents.**

## 4.4. Façade Approval from Civil Defence

### 4.4.1. Ten Point Approach to mitigate Façade Fires

Following 10 approaches have been adopted by UAE Civil Defence to tackle the causes of Façade flame spread, pointed out in **Section 4.3.9.**

- 4.4.1.1.** Core of the Façade material shall be tested in exposed form as per test requirements of this code.
- 4.4.1.2.** Façade panel as a product shall be tested as per test requirements of this code.
- 4.4.1.3.** Façade system as wall assembly shall be tested or listed as per test requirements of this code.
- 4.4.1.4.** Curtainwall, Perimeter joints and fire stopping shall be a listed system.
- 4.4.1.5.** Cavity Fire Barrier bands shall be provided in concealed cavities between façade and primary substrate, at every slab.
- 4.4.1.6.** Fire Breaks shall be provided vertically on exterior façade.
- 4.4.1.7.** Exterior Sprinklers should be considered for the balconies having combustible facade. Interior window sprinklers should be considered for the glazing. **See Chapter 9.**
- 4.4.1.8.** Consultants shall have competent and qualified façade specialists in-house or shall hire Civil Defence approved house of expertise who have experience and expertise in façade consultancy for Façade design, system selection and supervision of the façade contractor.
- 4.4.1.9.** Façade contractor and fabricator shall be approved by Civil Defence, with valid Civil Defence License.
- 4.4.1.10.** Façade installation shall be inspected throughout installation process and certified by Consultant or Civil Defence approved House of Expertise.