Background

Section 1705.1.1 Required Special Inspections and Tests – Special Cases provides the building official the authority to require special inspections and tests for proposed work that is, in the opinion of the building official, unusual in its nature, such as materials and systems required to be installed and tested in accordance with additional manufacturer’s instructions that prescribe requirements not contained in this code or in standards referenced by this code.

Special Inspection and Testing Requirements for Exterior Walls in High-rise Buildings

Special inspection and tests are required for exterior architectural wall panels and the anchoring of veneers designed for installation on high-rise buildings. Special inspection and tests of masonry veneer on such structures shall be in accordance with Section 1705.4.

Under section 1705.17, fire-resistant penetrations and joints require a special inspection of the fire-resistant joint systems installed to protect the void at the intersection of a floor/ceiling assembly and an exterior curtain wall assembly.

Combustible materials are prohibited within and on the exterior face of a high-rise building’s exterior walls unless otherwise allowed by the provisions of Section 603 Combustible Material in Types I and II Construction.

Exceptions: Special inspections of wall panels, curtain walls and veneers are not required for the following:

1. Repairs and replacement in kind of gaskets or seals or
2. Re-glazing, other than four-sided structural silicone glazing.

Special Inspector Responsibilities for Special Inspection of Exterior Walls in High-rise Buildings

1. The special inspector shall become familiar with and retain a copy of the approved construction documents, and the following items, as applicable, approved by the registered design professional of record:
   A. Shop drawings,
   B. Instructions for the sequence of component installation and required testing,
   C. Additional manufacturers’ instructions and requirements, and
   D. Samples and/or mock-ups, if supplied.

2. The special inspector shall field check the site conditions at the time the structure is prepared for component installation, and periodically during component installation, to verify the following work is performed in compliance with the approved construction documents:
   A. The supporting structure for components being installed is aligned and within specified tolerances required for the components;
   B. Required inserts are installed;
   C. Framing components are installed and aligned as specified, and without structural defects or weakness;
   D. Anchors are placed, welded, bolted and finished as specified, as applicable;
   E. Weeps, flashings and tubes are installed as specified and functioning;
   F. Joinery and end dams are sealed as specified;
G. Sealing materials with specified adhesive and movement capabilities are installed;
H. Gaskets, tapes, seals, insulation, flashing and other materials that are barriers to air and water movement, vapor drive, and heat loss are installed as specified;
I. Joint filler materials that accommodate specified horizontal and vertical movement are installed in accordance with the manufacturers’ instructions; and
J. Any other inspections and tests pertinent to safety of performance of the wall system.

3. The special inspector shall keep records of special inspections and tests. The special inspector shall submit reports of special inspections and tests to the building official and to the registered design professional in responsible charge. Reports shall indicate that work inspected or tested was or was not completed in conformance to approved construction documents. Discrepancies shall be brought to the immediate attention of the contractor for correction. If they are not corrected, the discrepancies shall be brought to the attention of the building official and to the registered design professional in responsible charge prior to the completion of that phase of the work.

A final report documenting required special inspections and tests, and correction of any discrepancies noted in the inspections or tests, shall be submitted at a point in time agreed upon prior to the start of work by the owner or the owner’s authorized agent to the building official.

END OF DOCUMENT