

SECTION 07000 - THERMAL AND MOISTURE PROTECTION

PART 1 - GENERAL

1.1 SCOPE OF SECTION:

This section contains the requirements relating to thermal and moisture protection; including waterproofing, damp proofing, air barriers, insulation, exterior insulation and finish systems, fireproofing, and firestopping.

1.2 WATERPROOFING:

- A. Exterior surfaces of walls constructed below finish grade shall be waterproofed, not damp proofed. Walls with stone or brick veneer constructed below grade shall have the cavities grouted to a line approximately 12-inches above finish grade. Flashing and weeps shall be installed approximately 12-inches above finish grade. Attention should be paid to termination of below grade waterproofing and its incorporation into the building envelope.
- B. Bentonite panel waterproofing and accessory products should be used for positive side below grade applications like elevator pits.
- C. Modified bituminous sheet waterproofing shall be used for above grade applications.

1.3 DAMP PROOFING

- A. Above grade wall surfaces that are concealed by masonry wall panels or brick veneer shall be damp proofed or water proofed to resist water intrusion.

1.4 FLASHING

- A. Flashing shall be fabricated and installed so that all water is collected and discharged to the exterior of the building. Membrane or sheet metal flashing systems shall be used.
- B. For cavity wall construction like brick masonry veneer, through wall flashing shall be specified and detailed at drainage plane interruptions including heads and sills of openings like doors, windows and louvers and below stone coping. Provide end dams at vertical terminations of flashing. Refer to section 04000.
- C. Unsealed penetrations through flashing materials are prohibited.

1.5 WALL JOINT SEALANT

- A. Silicone based joint sealant shall be used for exterior joints that do not receive a coating, i. e., brick masonry, stone cladding, metal panel systems, curtain wall panels systems, etc.
- B. Urethane based joint sealant shall be used for exterior applications that receive a coating material, i. e., portland cement plaster with a painted surface.
- C. Sealant joints shall be constructed with properly sized foam backer rod.
- D. Substrate materials may need to be primed to achieve proper adhesion. Field adhesion tests may be required to verify joint construction and adhesion.

1.6 BUILDING INSULATION:

- A. Insulation materials shall comply with the Florida Building Code and ASHRAE 90.1. Additional insulation or improved thermal performance materials and systems may be required to achieve energy efficiency goals associated with LEED certification requirements.

1.7 AIR AND VAPOR BARRIERS:

- A. Air and vapor barriers shall be detailed, specified and installed so that condensation will not occur within the wall assembly.
- B. Air barrier system performance standards shall be consistent with those established by the Air Barrier Association of America (ABAA), www.airbarrier.org

1.8 EXTERIOR INSULATION AND FINISH SYSTEMS:

The use of Exterior Insulated and Finish Systems (EIFS) shall not be used as components of exterior walls. EIFS materials may only be used to repair existing EIFS systems.

1.9 FIREPROOFING MATERIAL:

Fireproofing material shall be cementitious rather than fiber-based.

1.10 FIRESTOPPING:

Firestopping materials shall have Underwriters Laboratory (UL) ratings consistent with the rating of the wall or floor system. Comply with ASTM E-814, "Standard Method of Fire Tests of Through Penetration Fire Stops". Penetration details shall be approved by UL or other approval agency and shown on drawings. Expandable polyurethane foam is not acceptable for sealing penetrations through rated assemblies.

1.11 METAL WALL PANEL SYSTEM

Metal wall panel systems shall be detailed and specified continuous vapor barrier systems, flashing and weeps so that water will not accumulate within the wall system. Details shall indicate fastening systems and joint details where the metal panel systems are adjacent to other wall cladding systems such as brick masonry, curtain wall or storefront systems.

END OF SECTION