

Division 7

07 100 WATERPROOFING/DAMPPROOFING

- A. Below-grade foundation walls and all masonry work shall be dampproofed and/or waterproofed to meet design requirements and site conditions.
- B. Slabs above grade in potentially wet areas shall receive a waterproofing membrane system. Sleeves and openings in the slab shall be properly flashed. This protection is required over occupied spaces and under docks or penthouse floor slabs. Penthouse floors, especially under large air handlers have been troublesome. These areas need special attention.
- C. All suspended interior floor areas where restrooms, toilets, showers, and similar type water-use facilities are located shall utilize a waterproofing membrane.
- D. Exterior slabs and/or deck areas, which allow weather exposure to building interior, are not permitted.
- E. All horizontal areas should be tested by flooding after the waterproofing membrane system has been applied.
- F. A five-year guarantee is required for all waterproofing work.
- G. Generally, water repellents shall not be used on exterior brick or masonry walls. Architect/Engineer shall obtain University approval in writing for any proposed use.

07 250 INSULATION

- A. Provide rigid insulation at exterior below grade and cavity walls with a minimum R factor of 10 to be acceptable. Minimum slab on grade perimeter insulation depth below grade is 4 feet and another 4 feet slanted horizontally.

07 420 EXTERIOR INSULATION AND FINISH SYSTEMS (EIFS)

- A. It is preferred that such systems are not used. Architect/Engineer shall obtain University approval in writing for any proposed use. Where approved for use, only the "hardcoat" systems defined as Class PM, Type A, polymer modified protective finish coating, externally reinforced as developed by the Exterior Insulation Manufacturers Association (EIMA) may be used. Such systems require mechanical fastening of extruded polystyrene insulation and reinforcing mesh, and rigid acrylic modified cement plaster finish. Walls must have a R factor of a minimum 19.

07 500 ROOFING

- A. Flat roofs with no slope are prohibited. Minimum slope on roofs must be 1/4" per foot. Lightweight fill is unacceptable as a means to provide positive slope to drains.

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1. Vegetable or cane fiber type board insulation is unacceptable for roofing insulation.
 2. Roof drains shall be installed at low points, or mid-span and not at column locations.
- B. Pitch pockets generally will not be permitted. Architect/Engineer shall obtain University approval in writing for any proposed use.
- C. All roof penetrations shall have a minimum 12" clear between penetrations, and all roof penetrations shall have a minimum 12" clear between penetrations and perimeter of roof.
- D. Roofing systems shall be provided with a 15-year minimum system warranty signed by the General Construction Contractor, roofing subcontractor and the manufacturer of the roofing system. Warranty shall cover both material and labor for defects, which occur. Roofs shall also be Factory Mutual approved.
- E. All roofing systems shall have a class "A" rating as listed by Underwriters Laboratory, Inc., for fire resistance.
- F. All wood nailers shall be preservative-treated in accordance with Section 06100, Rough Carpentry.
- G. All sheet metal work shall be lead-coated copper.
- H. Roof flashing shall be designed to extend a minimum of 12 inches above the top of the roofing.
- I. Built-up Roofing: In general, a 4-ply built-up asphalt roofing system shall be used.
- J. Asphalt Shingles: Asphalt shingles shall be "architectural", 30-year shingles.
- K. Slate Shingles: Architect/Engineer shall obtain University approval in writing for any proposed use of slate shingles, unless being used as an infill on an existing roof. Slate roofing systems shall be provided with a 20-year minimum warranty.
- L. Foamed-In-Place Roofing: It is preferred that foamed-in-place roofing systems are not used. Architect/Engineer shall obtain University approval in writing for any proposed use.
- M. Single-Ply Membrane Roofing: It is preferred that single-ply roofing systems are not used. Architect/Engineer shall obtain University approval in writing for any proposed use.
- N. Specifier should consider specifying a deck replacement allowance for any project which includes some portion of deck replacement. Review this option with the Project Coordinator.

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07 700 ROOF SPECIALTIES AND ACCESSORIES

- A. Access to the roof from both the interior and exterior of a building shall be restricted. If interior roof hatches are used, they must be padlocked and located in a janitor's closet or mechanical equipment room or other space, which is always locked. Roof hatches shall be accessible from a permanent ladder, which meets OSHA requirements.

07 810 SPRAY APPLIED FIREPROOFING

- A. If a structure under design is determined/assumed to be thermally unrestrained (the more conservative position), no licensed professional will be required to prepare a report of engineering judgment for the construction/contract documents, however thermally unrestrained shall be clearly identified in the project specifications.
- B. If a determination of thermal restraint is made for a structure under design, this determination will require a design professional's written "engineering judgment" as outlined in paragraph X3.5, section X3, of ASTM E119. This engineering judgment is to include documentation that the restrained evaluation has been determined in accordance with all aspects/requirements of E119 and shall remain part of the contract/ construction/project documents.

07 900 JOINT SEALERS

- A. All joints between dissimilar materials (i.e., brick to metal, wood to brick) shall be sealed.
- B. The use of one-part polysulfide, one-part polyurethane or silicone-synthetic rubber type sealants is preferable.