

*See UM Consultant Procedures and Design Guidelines. All design guidelines posted are applicable. Information below supplements and supersedes information provided in Division 07 of those documents.*

## **07 0500 Membrane Roofing**

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1. Refer to the current version of the [UM Consultant Procedures and Design Guidelines](#) for Roofing Systems selection and approval process, design standards, and related requirements.
2. Preferred roofing systems are PVC and Modified Bitumen cold applied utilizing zero or low VOC products.
  - Address snow and ice conditions above entrances and walkways.
  - Extended roofing system warranties shall be considered based on the scope of the project and use of the facility.
  - Walkway pads shall be installed from roof access to and around all rooftop mounted equipment.
  - Walk paths should be placed so that the worker is as far as practical from the roof's edge but never within 6' of the edge.
  - When specifying PVC membrane
    - Consider membrane color selection when transitioning from interior to exterior roof areas to allow for vision to adjust/adapt.
    - Consider areas that will receive foot traffic; membranes can be slick when wet.
    - Consider membrane color selection when roofs are visible from interior spaces; light colors can appear dirty or soiled.
  - Verify the need for window washing davits or anchors on roof.
  - Include MUHC Safety & Emergency Management on the discussion to utilize any form of fall protection anchor.

Division 07 – Thermal and Moisture Protection

- For low slope roofs, MUHC applies OSHA standards to assess
  - ⊖ areas 6’ feet from edge of roof to be “fall protection required” zones. Consultant shall apply passive fall protection to the maximum extent possible or, at a minimum, the 6’ fall protection zone shall be marked with contrasting roof color to denote to workers that they are in the 6’ fall protection required zone.
- See Division 11 for further detail.
- Fall protection for roofs not fitting OSHA’s low slope designation shall be coordinated on a case-by-case basis with MUHC Safety & Emergency Management.

**07 8400 Fire Stopping**

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1. Refer to the current version of the *UM Consultant Procedures and Design Guidelines* for Fire resistant penetrations, joint systems, and curtain wall to floor intersections.
  - Fire walls, fire barriers, fire partitions, smoke barriers and smoke partitions shall be effectively identified with signs or stenciling in concealed spaces per Code requirements.
  - Such identification shall:
    - Be located within 15’ of end of each wall and at intervals not exceeding 30’ measured horizontally along the wall partition.
    - Include lettering not less than 3” in height with a minimum 3/8” stroke in contrasting color incorporating wording identifying the barrier designation and fire resistance rating.
2. MUHC Barrier Management Program
  - Permits to work in spaces above ceilings (including field verification in design or construction) and/or penetrating fire/smoke walls are required. Permits may be requested from MUHC Engineering Services office as part of an overall risk assessment process.
  - Cable pathways shall be installed in wall and floor assemblies in lieu of

sleeves and openings through barrier penetrations.

- Corridor Wall – At least one smoke and acoustical pathway shall be installed above each door at the room to corridor connection. Additional pathways may be required to facilitate necessary quantities of cabling serving the room.
- Smoke Barrier – UL listed fire-rated pathway(s) with a minimum fire resistance of 1-hour shall be installed at all through penetrations of smoke barrier wall assemblies.
- Fire Barrier – UL listed fire rated pathway(s) with a fire rating to or greater than the barrier rating shall be installed through all penetrations of the fire barrier floor/wall assembly.
- Acceptable Manufacturers for cable penetrations, or approved equal:
  - STI – EZ Path Fire Rated Series 22, 33 or 44. EZ Path Smoke and Acoustical NEZ33
  - Hilti – Speed Sleeve CP 653
  - Sleeve Kit CFS-SL SK, Smoke and Acoustical Sleeve CS-SL-SA

### **07 9513 Expansion Joint Cover Assemblies**

1. All specified expansion joint cover assembly specifications shall meet the manufacturer requirements for installation.
  - Sliding feet to be anchored to only to one side of the joint.
  - Doors shall have sufficient clearance to not get hindered, as well as meet requirements of Life Safety code.
  - Floating of floor surface provide insufficient base for fasteners.
2. Smooth transition from one side of the assembly to the other.
3. Flexible fill-in of joint, with sufficient strength to sustain a portable X-ray

END OF SECTION