



# Division 070000

## Thermal and Moisture Protection

### DESIGN GUIDE

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## 070500 General

### 1 General

#### 1.1 General

- A. All roofing material(s) and finish(es) must be manufacturers' standards.
- B. Confirm design roof loads with the Project Manager.
- C. Protective roof guardrails or, parapets, and/or fall protection (5000lb anchor points) shall be provided where required by WAC 296-24-87019. Provide fall restraint anchor points per OSHA requirements.
- D. Snow and snow fall simulation(s) must be considered and documented during Schematic Design.
- E. All roofs shall be designed to avoid the use of gutters. Applied gutters must be avoided:
- F. Entries and doorways must be protected from falling snow, ice and water. Heat tape must be avoided.



- G. All roofs must have utility outlets located no farther than two hundred feet (200') apart. Whenever possible provide a freeze-protected hose bib with hot and cold water on each roof.

## **071000 Damproofing and Waterproofing**

### **1 General**

#### **1.1 General**

- A. All spaces below grade, slabs below grade, and foundations with crawl space(s) must be waterproofed and provided with a perimeter drain connecting or draining to an approved storm system or drainage area. Drainage lines must be easily accessible and have accessible cleanouts.
- B. All masonry must have twenty (20) year breathable sealing.
- C. All exterior building envelope systems shall be designed to eliminate moisture and water infiltration and shall have all moisture stops, waterproofing, vapor barriers and flashings sufficiently detailed so as there are no questions as to how it is to be constructed.
- D. Provide breathable seal damproofing between masonry and veneers in all cavity walls.

## **072600 Vapor Barriers**

### **1 General**

#### **1.1 General**

- A. Full vapor barriers must be provided in all enveloping building materials and systems.



# 075000 Roofing Systems

## 1 General

### 1.1 General

- A. Low-slope roofing to be single ply EPDM by Carlisle or Firestone, fully adhered or ballasted.
- B. High slope roofing to be standing seam metal roofing system with a twenty (20) year finish and manufacturer's standard colors.
- C. Positive drainage is required in all low-slope roofs. Minimum slope to be: one eighth of an inch per foot (1/8":1'); one quarter inch per foot (1/4":1') is preferred.
- D. Lessen the insulation thickness at interior roof drains, rain water leaders, and built-in gutters.
- E. Provide overflow scuppers in addition to roof drains.
- F. Provide concealed fasteners in all flashing.
- G. All precast concrete or stone parapet caps must be mechanically fastened over continuous flashing or roofing membrane.
- H. All sealants and caulking material(s) and application(s) must be specified.
- I. All roofing must be inspected for insects and birds nesting. Provide bird control spikes as required. All openings must be thoroughly sealed prior to roofing acceptance.

### 1.2 Warranties

- A. Roofing Warranties:
  - 1. All roofing must have a manufacturer's twenty (20) year material(s), five (5) year water tightness, no-dollar limit, warranty. This warranty shall cover all items from the roof deck upwards.
  - 2. The roofing manufacturer (or authorized representative) is required to inspect the system's installation and certify in writing that the installation was done in accordance with its recommendations. The



roofing contractor must provide a two (2) year workmanship/installation warranty.

## **077000 Roofing Specialties**

### **1 General**

#### **1.1 General**

- A. Particular attention shall be paid to roof edges as they meet parapets and/or vertical surfaces.
- B. All roofing shall have deck pads from determined roof access point(s) to all serviceable rooftop mounted units. Roof plans for the 50% and 100% Construction Documents submittals must clearly show these traffic pads location, including width and length. Deck pads location shall not encumber roof drainage. Enlarge roof pads area at roof access points for equipment staging.
- C. Provide roof access to different height roofs and over demising wall parapets.
- D. All roof drains covers shall be metal.

## **078000 Skylights**

### **1 General**

#### **1.1 General**

- A. Skylights should be avoided in all CWU facilities. If skylights are approved, provide a freeze-proof hydrant at the roof for cleaning.



# 078400 Fire Stopping

## 1 General

### 1.1 General

- A. Refer to specific sections of these guidelines for firestopping requirements.
- B. All installers to be manufacturer-certified.
- C. Installers must certify that installation meets the manufacturer's specifications and UL assembly requirements.
- D. Only one (1) manufacturer shall be specified for all firestopping applications throughout the project.
- E. Provide removal warning label at all firestopping installations.

## 2 Materials

### 2.1 Reserved for Future

- A. Reserved for future.

## 3 Execution

### 3.1 Reserved for Future

- A. Reserved for future.

## 4 Appendix

### 4.1 Reserved for Future

- A. Reserved for future.