

## **DIVISION 7 – THERMAL AND MOISTURE PROTECTION**

### **07 40 00 – METAL ROOF PANELS**

#### **Introduction**

Specify a complete roofing system, making the materials manufacturer responsible for the roofing and flashing system. Require the materials manufacturer to make periodic inspections of the work in progress to ensure that the completed work will qualify for the required warranties.

This is a section where the designer should use a “performance specification” or a “basis-of-design specification” with at least 3 manufacturers allowed. If providing a performance specification do not specify proprietary manufacturer’s names or materials, and do not restrict vendors to a limited list.

Coordinate specification requirements with roofing, flashing, and parapet wall details.

#### **Part 1 - General**

- A. Require that materials manufacturer(s) and installer(s) demonstrate 5 years of successful installations of similar systems.
- B. Require submittal of:
  - 1. Manufacturer's literature describing the system
  - 2. Shop drawings showing panel layout, and all edge, transition, and penetration details
  - 3. Samples of proposed metal panels
  - 4. Mock-up for unique conditions.
- C. Require a pre-installation conference, scheduled after the substrates are complete, and including the Contractor, Architect, Owner, materials manufacturer, and installing subcontractor(s).
- D. Metal roofing is a finish material, not a staging platform for further construction work. Include the following provisions:
  - 1. Require the Contractor to install a "temporary roof" if he desires to "dry-in" the building to allow interior construction to begin or to provide a platform for further exterior construction
  - 2. Describe this requirement as a "Contractor's Option", that is, if he wants to dry-in, he must do so only with a temporary roof reference the National Roofing Contractor's Association (NRCA) requirements for temporary roofs, including "sacrificial" insulation on metal decks
  - 3. Specifically prohibit "phased roofing"
  - 4. Specifically prohibit all traffic from the finished roof
- E. Specify expanded warranties as follows:
  - 1. 5-year warranty from the installer covering defects in installation
  - 2. 30-year warranty from the materials manufacturer including defects in materials and installation, and guaranteeing to maintain the system in a waterproof condition for the life of the warranty
  - 3. Renewal option for an additional 10 years from the materials manufacturer
  - 4. Full replacement value without proration
  - 5. Include all components of the roof assembly, from the deck up
  - 6. Include sealing of all perimeters, joints, and penetrations
  - 7. Both furnished on the CNM Special Warranty Form
- F. Provide Roof Maintenance Program for the duration of the specified Complete System Roof Warranty. Maintenance Program to include the following services:

1. Contractor will perform visual roof inspections during the warranty period
  - a. A detailed inspection every spring and every fall and after any severe weather event or other observed issue.
2. Contractor will provide photographic and written documentation of the roof conditions after completion of installation and after every inspection.
3. Contractor will provide quotes for recommended work if warranty period is over.
4. Contractor will repair all issues that are due to faulty installation and other deficient conditions if under the warranty period.
5. During the warranty period, the contractor will provide routine maintenance as needed.

**Part 2 - Products**

- A. Require that all primary and secondary materials be supplied by a single manufacturer, or approved by the primary materials manufacturer, to ensure single-point responsibility for the installation and warranty.
- B. Specify a manufacturer's standard preformed metal roofing system as follows:
  1. UL Classification per code and location.
  2. Factory formed panels, steel, aluminum, or copper
  3. Concealed fastener installation
  4. Factory applied finish, or natural metal finish intended for exposure to the elements
- C. Other System Requirements
  1. Metal sign with vinyl lettering to be provided on all Roofing Systems containing the following information and similar format:

**CAUTION**

This roof is under warranty until (insert year) with (insert manufacturer). All access is to be restricted without facilities manager's permission & log entry. Repair work if necessary should be performed only by an authorized applicator. For leak repairs, contact (insert manufacturer) @ (insert manufacturer warranty claim department phone number) and provide them with warranty number. Questions regarding this roof or any potential work pertaining to this roof, please contact CNM @ xxx-xxx-xxxx.

Warranty #:	Roofing Contractor:
Warranty Type:	Contractor Telephone #:
Installation Date:	Contractor Address:
Manufacturer's Address:	Roof Membrane Type:

These signs are to be installed next to all roof access points inside a building as permit able, preferably next to the roof hatch ladder. Signs are to have rounded corners and with no sharp protrusions or edges. Signs are to be a minimum thickness of 20 gauge or greater, and no larger than 10" X 14" landscape setting.

**Part 3 - Execution**

- A. Specifically require the roof to be installed in accordance with the manufacturer's recommendations.
- B. Refer to and describe the appropriate SMCNA details for each edge and penetration condition.

- C. Require the roofing installer to receive, accept, and install, all sheet metal flashings.
- D. Specifically prohibit:
  - 1. Pitch pans or sealant pockets.
  - 2. Guy wires fastened directly to the deck
- E. Specify (or detail) 3/4" plywood nailers at all parapet walls.

**End of Section 07 40 00**