

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

### 07631 GUTTERS AND DOWNSPOUTS

#### PART 1 – GENERAL

##### 1.1 WORK

- A. Provide everything required to complete the work as listed on the **Scope** and specified herein.
- B. When removing or disturbing painted gutters and downspouts, work shall comply with [Section 02050 Demolition](#) and [Section 1810 Lead Dust Hazards](#).
- C. Where additional instruction is required, work shall be as directed by the **Inspector**.

##### 1.2 QUALITY STANDARDS

- A. Provide skilled, trained, experienced and competent workers to complete the work as specified.
- B. When necessary, provide a certified lead abatement supervisor and certified lead abatement workers to perform gutter and downspout demolition, including clean up and debris removal per [Section 01810 Lead Dust Hazards](#).
- C. All work shall be completed in accordance with state and local building codes and manufacturer's instructions.

##### 1.3 SUBMITTALS

- A. **Contractor** shall notify the Milwaukee Health Department (MHD) – Lead Section (414-286-5033) **at least 24 hours prior to starting any work that involves disturbance of painted or otherwise coated surfaces**. MHD will assign a Lead Risk Assessor to monitor the work to document lead safe rehabilitation procedures were followed.

##### 1.4 MATERIALS HANDLING AND STORAGE

- A. Provide all materials required to complete the work as listed on the **Scope** and as specified herein.
  - Return any damaged or unsatisfactory materials and products.
  - Replace any materials damaged during installation.

##### 1.5 PRECONSTRUCTION AND PREPARATION

- A. Examine and verify that job conditions are satisfactory for speedy and acceptable work.
  - Confirm that there are no conflicts between this work and work by others.
  - If gutters or gutter flashing mounts directly to the roof deck, coordinate the installation with roofer and carpenter.

#### PART 2 – MATERIALS

##### 2.1 GUTTERS AND DOWNSPOUTS

- A. Gutter size and type shall be as listed on the **Scope** and as specified herein:
  - Aluminum gutters: "K-Type" (also called Ogee), 5 or 6 inch, shall be seamless, a minimum of .027 gauge aluminum, color as selected by **Owner**. See Owner's Selection Sheet (Appendix A).
  - Galvanized gutters: "K-Type" (also called Ogee), 5 or 6 inch, shall be seamless, minimum of 26 gauge galvanized metal.
  - Galvanized gutters: "Half Round", 5 or 6 inch, shall be seamless, minimum of 26 gauge galvanized metal.
- B. Downspout size and type shall be as listed on the **Scope** and as specified herein:
  - Aluminum downspouts: 3 or 4 inch round corrugated, minimum of .024 gauge aluminum, color as selected by **Owner**. See Owner's Selection Sheet (Appendix A).
  - Aluminum downspouts: 3 or 4 inch square corrugated, minimum of .024 gauge aluminum, color as selected by **Owner**. See Owner's Selection Sheet (Appendix A).
  - Galvanized downspouts: 3 or 4 inch round corrugated, minimum of 26 gauge galvanized steel.

- Galvanized downspouts: 3 or 4 inch square corrugated, minimum of 26 gauge galvanized steel.
- C. Vinyl, plastic, or PVC materials shall not be used in place of metal gutter or downspout materials.
- D. Fasteners:
  - Gutters and downspouts shall be mounted with manufacturer's approved fasteners.
  - Nails, screws, etc shall be corrosion resistant per manufacturer's instructions and as specified herein.
- E. Only use sealant that is specifically recommended for gutter and downspout use. Sealant shall be UV resistant and installed per manufacturer's instructions.
- F. Gutter flashing shall be non-corrosive sheet metal or aluminum.
  - Minimum of 24 gauge hot-dip galvanized steel sheet.
  - Minimum of .032 inch aluminum sheet.
- G. Connectors:
  - Provide gags or other code approved adapters at all downspout connections to the storm water leader or storm water conductor.
  - Do not make downspout connections by installing concrete at the storm water leader or storm water conductor.
- H. Install precast concrete or plastic splash blocks when listed in the **Scope** or specified herein.

## PART 3 – INSTALLATION

### 3.1 GUTTERS AND DOWNSPOUTS

- A. Follow manufacturer's installation instructions:
  - Provide manufacturer's standard matching accessories as required for a complete installation.
  - Take adequate precaution to protect gutters and downspouts from damage during installation process.
- B. Install to provide ample support and proper drainage as follows:
  - Use hangers and straps adequate in size and spacing to support loads.
  - Seal all gutter joints, screws, rivets, etc. with approved sealant.
  - Support every separate section.
  - Do not mount gutter straps over top of shingles.
  - Construct gutters with positive slopes, to prevent accumulation of standing water.
  - Set gutter height to prevent possible overshoot of water.
  - Install downspouts that are visually plumb and that match specified tolerances.
  - Lap joints to match drainage flow.
  - Provide movement slip joints on downspouts.
  - Provide downspout extensions as necessary to adequately divert water away from building.
  - Protect building surfaces from damage from hanger and strap connections.
  - Keep downspouts and gutters separated from wall surfaces to avoid staining and corrosion.
  - Splash blocks shall be pitched to direct water runoff away from the building.
  - Splash blocks shall be placed to adequately catch the discharge from the downspout.

### 3.2 INSPECTION AND CLEAN-UP

- A. After system is complete, fully test system with flowing water to assure proper runoff. Adjust and retest as required.
- B. At completion of work, **Contractor** is responsible for completely removing from the property, at **Contractor's** expense, all debris generated from removal and installation of gutter materials.
  - When clean up of work involves painted gutters and downspouts, clean up shall comply with [Section 01810 Lead Dust Hazards](#).
  - Leave gutters and downspouts clear and clean of debris.
- C. Repair or replace defective work as directed by the **Inspector**.

END OF SECTION – 07631 GUTTERS AND DOWNSPOUTS