Metal-Era September 2024

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Guide Specification

Specifier Notes: This guide specification is written in Construction Specifications Institute (CSI) 3-Part Format in accordance with *The CSI Construction Specifications Practice Guide,* *MasterFormat, SectionFormat,* and *PageFormat.*

This Section must be carefully reviewed and edited by the Architect to meet the requirements of the Project and local building code. Coordinate this Section with Conditions of the Contract, Division 01, other specification sections, and the Drawings. Delete all Specifier Notes after editing this Section.

Section numbers and titles are based on *MasterFormat 2018 Edition.*

1. 07 71 23

MANUFACTURED GUTTERS

Specifier Notes: This Section covers Metal-Era wind-resistant gutters. Consult Metal-Era for assistance in editing this Section as required for the Project.

Optional information is identified in blue font below. Select appropriate options and delete other information as needed. [delete this paragraph]

Consult Metal-Era for information regarding custom gutters.

* 1. GENERAL
		1. SECTION INCLUDES
			1. Furnish and install premanufactured water control components per the drawings and specifications, including all clips, sealant, fasteners, and joining to make weathertight and watertight. Components and accessories shall be factory-fabricated and supplied by a specified Manufacturer.
			2. Components specified in this section include but are not limited to [Wind Resistant Gutters] [Downspouts] and [Scuppers and Conductor Heads].
			3. Contractor shall utilize Manufacturer's technical representative to perform field measuring, takeoff, shop drawing development and order processing for all gutter components specified in this section.
		2. RELATED REQUIREMENTS

Specifier Notes: Edit the following list of related sections as required for the Project. Limit the list to sections with specific information that the reader might expect to find in this Section, but is specified elsewhere.

* + - 1. Section 07\_\_\_\_\_\_\_ – \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Roofing
			2. Section 07 92 00 – Joint Sealants: Non-curing sealants.
		1. REFERENCE STANDARDS

Specifier Notes: List reference standards used elsewhere in this Section, complete with designations and titles. Delete reference standards from the following list not used in the edited Section.

* + - 1. FM Global (www.fmglobal.com).
			2. SPRI (Single Ply Roofing Industry) ([www.spri.org](http://www.spri.org)):
				1. ANSI/SPRI GT-1 – Test Standard for Gutter Systems.
		1. PREINSTALLATION MEETINGS

Specifier Notes: Edit the Preinstallation Meetings article as required for the Project. Delete this article if not required.

* + - 1. Convene preinstallation meeting [1 week] [2 weeks] before start of installation of gutters.
			2. Require attendance of parties directly affecting Work of this Section, including Contractor, Architect, installer, and manufacturer’s representative.
			3. Review the Following:
				1. Materials.
				2. Examination of roof edge areas.
				3. Installation.
				4. Cleaning.
				5. Protection.
				6. Coordination with other Work, including membrane roofing installation.
		1. SUBMITTALS

Specifier Notes: Edit the Submittals article as required for the Project. Delete submittals not required.

* + - 1. Comply with Division 01.
			2. Gutters shall be manufactured in specified manufacturer’s facilities. Gutters fabricated by installer or other fabricator will not be acceptable unless fabricator can demonstrate to Architect’s satisfaction that Gutters have been tested for resistance in accordance with ANSI/SPRI GT-1.
			3. Product Data: Submit manufacturer’s product data, including installation instructions.
			4. Shop Drawings: Submit manufacturer’s shop drawings, including plans, elevations, sections, and details, indicating dimensions, materials, components, fasteners, finish, and accessories.
			5. Samples: Submit manufacturer’s sample of gutters.
				1. Sample Size: Minimum 5.5” long.
			6. Color Samples: Submit manufacturer’s color samples of gutters, consisting of complete set of metal color chips representing manufacturer’s full range of available colors.
			7. Manufacturer’s Certification: Submit manufacturer’s certification that materials comply with specified requirements and are suitable for intended application.
			8. Manufacturer’s Project References: Submit manufacturer’s list of 10 successfully completed gutter projects of similar size and scope to this Project, including project name and location, name of architect, and type and quantity of gutters furnished.
			9. Warranty Documentation: Submit manufacturer’s standard warranty.
		1. QUALITY ASSURANCE
			1. Manufacturer’s Qualifications: Manufacturer regularly engaged in the manufacturing of gutters of similar type to that specified for a minimum of 5 years.
			2. Installer's Qualifications:
				1. Installer regularly engaged in installation of gutters of similar type to that specified for a minimum of 5 years.
				2. Use persons trained for installation of gutters.
		2. DELIVERY, STORAGE, AND HANDLING
			1. Delivery Requirements: Deliver materials to site in manufacturer’s original, unopened containers and packaging, with labels clearly identifying product name and manufacturer.
			2. Storage and Handling Requirements:
				1. Store and handle materials in accordance with manufacturer’s instructions.
				2. Keep materials in manufacturer’s original, unopened containers and packaging until installation.
				3. Store materials in clean, dry area indoors.
				4. Do not store materials directly on floor or ground.
				5. Protect materials and finish during storage, handling, and installation to prevent damage.
		3. WARRANTY

Specifier Notes: In addition to the limited 30-year finish warranty, other finish warranty periods are available. Consult Metal-Era for warranty period information for custom post-coated Kynar 500 colors and for anodized finishes.

* + - 1. Wind Warranty Period: Warranted in wind conditions up to 160 mph with a 30 Year wind warranty. Warranty specified for individual products below. (Gutter Only)
			2. Warranty Period, Product: 5-year workmanship warranty covering replacement or repair of products that are defective in material or workmanship. (All Products)
			3. Warranty Period, Finish: Limited 30-year warranty for prefinished coil-coated steel and aluminum coated with Kynar 500 standard colors covering fade, chalk, and film integrity.
	1. PRODUCTS
		1. MANUFACTURERS
			1. Manufacturer: Metal-Era, LLC, 1600 Airport Road, Waukesha, Wisconsin 53188. Phone 800-558-2162. [www.metalera.com](http://www.metalera.com). info@metalera.com.

Specifier Notes: Specify if substitutions will be permitted.

* + - 1. Substitutions: [Not permitted] [Comply with Division 01].
			2. Single Source: Provide materials from single manufacturer.
		1. GUTTERS

Specifier Notes: Use the following to specify **"Seal-Tite WR"** gutter system.

**  **

 **Offset Chamfer Box**

[Metal-Era Website](https://www.metalera.com/Products/Details/Metal-Era/Seal-Tite/Seal-Tite-WR-Gutter)

**Wind Warranty:** 30 years, 160 MPH

**Face:** MIN 5.25"/ MAX 7.75”
**Bottom**: MIN 5.25"/ MAX 7.75”
**Back:** MIN 6.25"/ MAX 8.75”

**Available Gutter Material (Modify gutter material selection accordingly):** .040” aluminum, .050" aluminum, .063" aluminum, 24 ga. galvanized steel, 22 ga. galvanized steel

* + - 1. **Gutter: “Seal-Tite WR”**
				1. Profile: [Box] [Chamfer] [Offset]
				2. Approvals:

ANSI/SPRI GT-1-24 ga./.040" - and 223 psf horizontal, 136 psf vertical, and 270 psf downward, for 22 ga./.050”/.063” - 223 psf horizontal, 108 psf vertical, and and 270 psf downward.

FM Approved.

Miami-Dade County Approval.

Florida Product Approval.

Specifier Notes: Gutter is available in standard sizes as indicated below. Delete sizes that do not apply.

* + - * 1. Gutter Size:

[Face: 5.25” | Bottom: 5.25” | Back: 6.25”]

[Face: 5.75” | Bottom: 5.75” | Back: 6.75”]

[Face: 6.25” | Bottom: 6.25” | Back: 7.25”]

[Face: 6.75” | Bottom: 6.75” | Back: 7.75”]

[Face: 7.25” | Bottom: 7.25” | Back: 8.25”]

[Face: 7.75” | Bottom: 7.75” | Back: 8.75”]

[Indicated on the Drawings].

* + - * 1. Formed Lengths: 12’-0”.
				2. Fastener Holes: Pre-punched.
				3. Internal Brackets: 2-piece adjustable size.

Material: Extruded Aluminum.

Finish: Mill.

Width: 1”.

Spacing: 24” O.C.

* + - * 1. Concealed Splice Plates

Material: Same as gutters.

Finish and Color: Same as gutters.

Width: 6”.

Specifier Notes: Use the following to specify **"Seal-Tite XL"** gutter system.

 ****

[Metal-Era Website](https://www.metalera.com/Products/Details/Metal-Era/Seal-Tite/Seal-Tite-XL-Gutter)

**Wind Warranty:** 30 years, 160 MPH

**Front Height:** Will be the same size as the bottom width
**Bottom Width**: MIN 8"/ MAX 14”
**Back Height:** Will be 1” more than front height

**Available Gutter Material (Modify gutter material selection accordingly):** .050" aluminum, .063" aluminum, 22 ga. galvanized steel

* + - 1. **Gutter: “Seal-Tite XL”**
				1. Profile: Box
				2. Approvals:

 ANSI/SPRI GT-1: up to 266 psf horizontal, 291 psf vertical, and 175 plf downward.

FM Approved.

Specifier Notes: Gutter is available in standard sizes as indicated below. Delete sizes that do not apply.

* + - * 1. Gutter With Pre-Attached Cleat Size:

[Front: 8” | Bottom: 8” | Back: 9”]

[Front: 9” | Bottom: 9” | Back: 10”]

[Front: 10” | Bottom: 10” | Back: 11”]

[Front: 11” | Bottom: 11” | Back: 12”]

[Front: 12” | Bottom: 12” | Back: 13”]

[Front: 13” | Bottom: 13” | Back: 14”]

[Front: 14” | Bottom: 14” | Back: 15”]

[Indicated on the Drawings].

* + - * 1. Formed Lengths: 12’-0”.
				2. Fastener Holes: Pre-punched.
				3. Pre-Assembled Z-Bracket:

Material: .125” Aluminum

Finish: Mill.

Width: 2”.

Spacing: 32” O.C.

* + - * 1. Lower Mounting Hanger:

Material: Same as gutters.

Finish: Same as gutters.

Formed Lengths: 12’-0”.

Fastener Holes: Pre-punched

* + - * 1. Concealed Splice Plates

Material: Same as gutters.

Finish and Color: Same as gutters.

Width: 6”.

Specifier Notes: Specify gutter material. See specifier notes above for available materials for each gutter. Delete material not required.

* + - * 1. Material: [0.040” aluminum] [0.050” aluminum] [0.063” aluminum]
				[24 ga. galvanized steel] [22 ga. galvanized steel] [\_\_\_\_\_\_\_\_\_\_\_\_].

Specifier Notes: Specify gutter finish. Delete finishes not required.

* + - * 1. Finish: [Mill finish] [Prefinished Kynar] [Post-finished Kynar] [Prefinished anodize]

 [Post finished anodize] [\_\_\_\_\_\_\_\_\_\_\_\_].

Specifier Notes: Specify gutter color.

* + - * 1. Color: \_\_\_\_\_\_\_\_\_\_\_\_.

Specifier Notes: Specify factory-fabricated accessories as required for the Project.

Specify Welded or Quicklock fabrication of accessories. For welded, must use .050” aluminum or thicker.

Delete accessories not required. Consult Metal-Era for accessory details.

* + - 1. Factory-Fabricated Accessories: [Welded] [Quicklock].
				1. Miters.
				2. End caps.
				3. Expansion joints.
				4. Special corners.
				5. Material, Finish, and Color: Same as gutters.
			2. Fasteners:
				1. Suitable for intended substrate.
				2. Provided by gutter manufacturer.
		1. DOWNSPOUTS

Specifier Notes: Use the following to specify **"Industrial Downspout"** downspout system.

Delete downspouts if not required. Consult Metal-Era for custom capabilities.

 

**Closed Open-Face**

**Metal-Era Website:**

[Closed Version](https://www.metalera.com/Products/Details/Metal-Era/Seal-Tite/Industrial-Downspout-Closed-face)

[Open-Face Version](https://www.metalera.com/Products/Details/Metal-Era/Seal-Tite/Industrial-Downspout-Open-Face)

**Specify style of attachment straps.**

Style 1: Wrapped around the front (includes spacers when style 1 used with open-faced downspout)

Style 2: U-shaped placed between wall and downspout and secured to the sides.

* + - 1. **Downspouts: [“Industrial Downspout-Closed”] [“Industrial Downspout-Open Face”].**
				1. Material: [24 ga. galvanized steel] [22 ga. galvanized steel] [0.040” aluminum] [0.050” aluminum] [0.063” aluminum] [\_\_\_\_\_\_\_\_\_\_\_\_].
				2. Formed Lengths: 12’-0”.
				3. Seams: Double Seam Lock.
				4. Attachment Straps: [Style 1] [Style 2].

Width: 2”.

Straps per 12-Foot Downspout Length: 3.

* + - * 1. Standard Elbows: [Style A] [Style B].

Material: Match downspouts.

Finish: Match downspouts.

Color: Match downspouts.

* + - * 1. Offset Elbows: [Wall condition] [Eave condition].

Material: 0.050” aluminum.

Finish: Match downspouts.

Color: Match downspouts.

* + - * 1. Outlets: 0.040” aluminum.
				2. Downspout Transitions:

Material: Match downspouts.

Finish: Match downspouts.

Color: Match downspouts.

Seams: [Quicklock] [Welded].

* + 1. SCUPPERS AND CONDUCTOR HEADS

Specifier Notes: Specify Metal-Era **scuppers and conductor heads** as required for the Project. Delete scuppers and conductor heads not required.

  

**Thru-Wall Scupper Thru-Wall Scupper Conductor Head
With Conductor Head**

[Metal-Era Website](https://www.metalera.com/Products/Details/Metal-Era/Accessories/Scuppers-and-Collector-Boxes)

Specify material for the specified scuppers and conductor heads. Delete materials not required. Consult Metal-Era for information regarding other materials.

* + - 1. **Thru-Wall Scuppers: Pop-riveted, no conductor head.**
				1. Material: [24 ga. galvanized steel] [22 ga. galvanized steel] [0.040” aluminum] [0.050” aluminum] [\_\_\_\_\_\_\_\_\_\_\_\_].
				2. Picture Frames: Front and back, 3” wide.
			2. **Thru-Wall Scuppers: Welded, no conductor head.**
				1. Material: 0.063” aluminum
				2. Picture Frames: Front and back, 3” wide.
			3. **Thru-Wall Scuppers: Pop-riveted, dropped conductor head, style 1.**
				1. Material: [24 ga. galvanized steel] [22 ga. galvanized steel] [0.040” aluminum] [0.050” aluminum] [\_\_\_\_\_\_\_\_\_\_\_\_].
				2. Picture Frames: Front, 2” wide; back, 3” wide.
			4. **Thru-Wall Scuppers: Pop-riveted, raised conductor head, style 1.**
				1. Material: [24 ga. galvanized steel] [22 ga. galvanized steel] [0.040” aluminum] [0.050” aluminum] [\_\_\_\_\_\_\_\_\_\_\_\_].
				2. Picture Frames: Front, 2” wide; back, 3” wide.
			5. **Thru-Wall Scuppers: Welded, dropped conductor head, style 1.**
				1. Material: 0.063” aluminum
				2. Picture Frames: Front, 2” wide; back, 3” wide.
			6. **Thru-Wall Scuppers: Welded, raised conductor head, style 1.**
				1. Material: 0.063” aluminum
				2. Picture Frames: Front, 2” wide; back, 3” wide.
			7. **Thru-Wall Scuppers: Welded, dropped conductor head, style 3.**
				1. Material: 0.063” aluminum
				2. Picture Frames: Front, 2” wide; back, 3” wide.
			8. **Conductor Heads: Pop-riveted, style 1.**
				1. Material: [24 ga. galvanized steel] [22 ga. galvanized steel] [0.040” aluminum] [0.050” aluminum] [\_\_\_\_\_\_\_\_\_\_\_\_].
				2. Flange: Fasten to wall, 2” wide.
			9. **Conductor Heads: Welded, style 1.**
				1. Material: 0.063” aluminum
				2. Flange: Fasten to wall, 2” wide.
			10. **Conductor Heads: Welded, style 2.**
				1. Material: 0.063” aluminum
				2. Flange: Fasten to wall, 2” wide.
			11. **Conductor Heads: Welded, style 3.**
				1. Material: 0.063” aluminum
				2. Flange: Fasten to wall, 2” wide.
	1. EXECUTION
		1. EXAMINATION
			1. Examine areas to receive gutters.
			2. Verify surfaces to support gutters are clean, dry, secure, and of proper dimensions.
			3. Verify roof edge is level and wood nailers are straight.
			4. Notify Architect of conditions that would adversely affect installation.
			5. Do not begin installation until unacceptable conditions are corrected.
		2. INSTALLATION
			1. Install products in accordance with manufacturer’s instructions at locations indicated on the Drawings.
			2. Install products to allow water to drain from edge of roof.
			3. Install products to allow for thermal movement.
			4. Joint Sealants: Apply joint sealants in accordance with manufacturer’s instructions.
			5. Review lengths of straight pieces before cutting to avoid creating relatively short sections adjacent to full-length sections.
			6. Isolate products from ACQ treated wood blocking or other galvanically incompatible material with appropriate membrane material.
		3. CLEANING
			1. Clean products promptly after installation in accordance with manufacturer’s instructions.
			2. Remove clear protective vinyl film.
			3. Do not use harsh cleaning materials or methods that could damage finish.
		4. PROTECTION
			1. Protect installed products to ensure that, except for normal weathering, products will be without damage or deterioration at time of Substantial Completion.

END OF SECTION