

GUIDE SPECIFICATION

Manufacturer:
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SECTION 07314

STONE COATED METAL ROOF SHINGLE PLUS

This guide specification has been prepared by DECRA Roofing Systems, in printed and electronic media, as an aid to specifiers in preparing written construction documents for stone coated metal Shingle Plus.

Edit entire master to suit project requirements. **Modify or add items as necessary. Delete items which are not applicable.** Words and sentences within brackets [_____] reflect a choice to be made regarding inclusion or exclusion of a particular item or statement. This section may include performance, proprietary and descriptive type specifications. Edit to avoid conflicting requirements. Editor notes to guide the specifier are included between lines of asterisks to assist in choices to be made. **Remove these notes before final printing of specification.**

This guide specification is written around the Construction Specifications Institute (CSI), Section Format standards references to section names and numbers are based on **MasterFormat 95**.

For specification assistance on specific product applications, please contact our local product representatives throughout North America at 800-795-0776.

DECRA Roofing Systems reserves the right to modify these guide specifications at any time. Updates to this guide specification will be posted to the manufacturer's web site and/or in printed matter as they occur. DECRA Roofing Systems makes no expressed or implied warranties regarding content, errors, or omissions in the information presented.

PART 1 - GENERAL

1.1 SUMMARY

- A. Related Documents: Provisions established within General and Supplementary Conditions of the Contract, Division 1 – General Requirements, and the Drawings are collectively applicable to this Section.
- B. Section Includes: Formed metal roofing panels with colored stone chip finish.
- C. Battens and nailers.
- D. Associated metal flashings.

 Edit the Related Sections paragraph below to suit project requirements; delete sections that will not be used, or add sections as required.

- E. Related Sections:
 - 1. Division 6 Section "Rough Carpentry" for framing and sheathing.
 - 2. Division 7 Section "Sheet Metal Flashing and Trim" for metal flashing, gutters, and downspouts.
 - 3. Division 7 Section "Roof Accessories" for roof ventilators.
 - 4. Division 7 Section "Joint Sealants" for field-applied sealants.
 - 5. Division 9 Section "Painting" for painting of roof accessories.
- F. Alternates.

 If work of this section will affect alternate bids, retain the following subparagraph.

- 1. Refer to Section 01230 for alternatives involving work of this Section.

1.2 SUBMITTALS

 Include submittal requirements below, which are consistent with the scope of the project and extent of work of this section - only request submittals, which are necessary for review of design intent.

Do not request submittals if drawings sufficiently describe the products of this section or if proprietary specifying techniques are used. The review of submittals increases the possibility of unintended variations to drawings.

Insert the appropriate reference to the Division 1 section.

- A. Submit under provisions of Section 01300 [____].
- B. Product Data: Include construction details, material descriptions, dimensions of individual components and profiles, finishes, fasteners, accessories, and manufacturers written installation instructions.
- C. Shop Drawings: Include roof plans and elevations; sections at hips, ridges, gables, valleys, and eaves; and details of components, accessories, and attachments to other work.
- D. Samples for Initial Selection: Manufacturer's color charts and samples consisting of units or sections of units showing the full range of colors, textures, and patterns available for each type DECRA Shingle Plus indicated.

1.3 QUALITY ASSURANCE

- A. Regulatory Requirements:
 - 1. Conform to applicable building code for roof assembly fire hazard requirements.
 - 2. Conform to building code for minimum wind uplift resistance.

1.4 REFERENCES

- A. Fire-Test-Response Characteristics: Provide DECRA Shingle Plus with fire-test-response characteristics indicated, as determined per test method ASTM E 108 – Test For Fire Resistance of Roof Covering Materials, for application and slopes indicated.
 - 1. Fire-Test Exposure: Class A.
- B. ASTM A792/A792M: Sheet Steel, Aluminum-Zinc Alloy Coated by the Hot Dip Process, Structural (physical) Quality.
- C. UL 1897 and UL 580: Wind Uplift Resistance of Roof Assemblies.
- D. ASTM C920: Specification for Elastomeric Joint Sealants.
- E. Impact Resistance: UL 2218, Class 4.
- F. Appraisal Certificates:
 - 1. International Code Council (ICC), Whittier California, Report Nos. ESR-1753 (IBC) Installed on battens, ESR-1754 (IBC) Installed direct to deck.
 - 2. Underwriters Laboratories, Inc., Northbrook, Illinois, USA File No. R14710.
 - 3. Canadian Construction Materials Center, Ottawa, Ontario, CCMC#10241-R, Issued 1983 re-evaluated 2002-06-21.

Retain the following paragraph if the specific project requires this rating. Otherwise, delete the following paragraph.

- G. [Dade County, Florida Acceptance No. 07-1129.04.]
- H. [Florida Approval No. 9759.1 Installed on battens.]
- I. [Florida Approval No. 9759.2 Installed direct to deck.]
- J. [Florida Approval No. 9759.3 Installed on steel battens.]
- K. [Florida Approval No. 9759.4 Installed on counter battens and battens.]

1.5 DELIVERY, STORAGE, AND HANDLING

- A. Store and handle roofing materials to ensure dryness. Store in a dry, well-ventilated, weather tight place. Protect from corrosion, staining and traffic and wind damage.

1.6 WARRANTY

- A. Manufacturing Warranty: Written, transferable, limited warranty provided by DECRA Roofing Systems, covering manufacturing defects.
 - 1. Warranty Period: 50 years from date of Substantial Completion.

PART 2 - PRODUCTS

2.1 MANUFACTURER

- A. DECRA Roofing Systems, 1230 Railroad Street, Corona, CA 92882 (951-272-8180), (951-272-4476 FAX).

2.2 MATERIALS

- A. Metal Shingle Plus: DECRA Shingle Plus interlocking panels resembling heavy roofing dimensional roofing shingles.
 - 1. Material: Pre-corrugated, pressure formed, Aluminum-Zinc Alloy Coated Steel with multiple vertical ribs forming two flat steps, each of which shall have raised and lowered pan sections.
 - 2. Finish: Ceramic coated, colored stone chip finish.
 - 3. Thickness: 26 Gauge, .0179 inches (.455 mm).
 - 4. Size: 16-1/2" wide by 52" long (419 by 1321 mm).
 - 5. Exposure: 14-1/2" wide by 50" long (368 by 1270 mm).

6. Weight: 150 pounds per square.

Make color selection from the choices below and delete the colors not required for the project.

- 7. Color: [Canyon Brown] [Fawn Grey] [Midnight Eclipse] [Vintage Slate] [Woodland Green].
- 8. [Meets requirements of Dade County, Florida Acceptance No. 07-1129.04.]
- 9. [Florida Approval No. 9759.1 Installed on battens.]
- 10. [Florida Approval No. 9759.2 Installed direct to deck.]
- 11. [Florida Approval No. 9759.3 Installed on steel battens.]
- 12. [Florida Approval No. 9759.4 Installed on counter battens and battens.]

B. Flashing:

- 1. [DECRA Valley: 26 Gauge, .0179 inches (.455 mm) Aluminum-Zinc Alloy coated Steel sheet, ASTM A792/A792M. Finish: Ceramic coated, colored stone chip finish to match roofing material.]
- 1. [Valley: 26 Gauge, .0179 inches (.455 mm) Aluminum-Zinc Alloy Coated Steel sheet, ASTM A792/A792M.]

Select the appropriate flashing for the project type.

- 2. [DECRA Side Flashing: Aluminum-Zinc Alloy Coated Steel sheet, 26 Gauge, .0179 inches (.455 mm), pressure formed to flash vertical roof surface transitions. Finish: Ceramic coated, colored stone chip finish to match roofing material.]
- 2. [Roof to Wall Flashing: Aluminum-Zinc Alloy Coated Steel sheet, 26 Gauge, .0179 inches (.455 mm), pressure formed to flash vertical roof surface transitions. Finish: Match color to exterior finish.]
- 3. Pipe Jack Flashing: 26 Gauge, .0179 inches (.455 mm) galvanized or Aluminum-Zinc Alloy Coated Steel, clean, prime and paint to match roof material.
- 4. Underpans – DECRA Shingle Plus: Aluminum-Zinc Alloy Coated Steel sheet, 26 Gauge, .0179 inches (.455 mm), pressure formed to counterflash roof penetrations matching Shingle Plus material profile.

C. Hip & Ridge: Ridge and hip covers, fascias, drips, rakes and other trim required, matching Shingle Plus material, color, and finish.

- 1. Hips / Ridges and Rakes – DECRA Shingle Plus: Shingle Plus Hip & Ridge.

Include the following for re-roofing applications. Select the appropriate fascia metal for the project type.

- 2. [[3.5"] or [5"] Fascia Metal: Aluminum-Zinc Alloy Coated Steel sheet, [3.5 inches] or [5 inches] (89 mm or 127 mm), 26 Gauge, .0179 inches (.455 mm), pressure formed angle installed at first batten to cover build up. Finish: Paint to match exterior finish.]
- 2. [[3.5"] or [5"] DECRA Fascia Metal: Aluminum-Zinc Alloy Coated Steel sheet, [3.5 inches] or [5 inches] (89 mm or 127 mm), 26 Gauge, .0179 inches (.455 mm), pressure formed angle installed at first batten to cover build up. Finish: Ceramic coated, colored stone chip finish to match roofing material.]

2.3 ACCESSORIES

Select the appropriate battens, if needed, for the project type. Shingle Plus can be installed using battens and/or counter battens, or direct to deck.

- A. [Timber Battens: [Nominal 1 by 4 inch standard grade counter battens, as needed, for re-roof applications.] [Nominal 2 by 2 inch standard grade.]
 - 1. Fasteners: Common: 16d, smooth, 3-1/4 inch (83 mm) long.]
- A. [Steel Battens: Minimum 25 Gauge, ASTM A 653 galvanized steel, hat channels.
 - 2. Fasteners: Screws: No. 10, 1 inch (25 mm) long, hot dip galvanized.]

- B. Sheet Metal Materials: Aluminum-Zinc Alloy Coated Steel sheet: ASTM A 792/A 792M, Class AZ50 (AZ150) coating designation; minimum Grade 37 (Grade 255).

Do NOT use LEAD or COPPER with this aluminum-zinc alloy coated steel roofing system.

- C. Felt Underlayment: ASTM D 226, Type I, No. 15 or ASTM D 226, Type II, No. 30, unperforated, asphalt-saturated organic felt.
- D. Perimeter Underlayment: ASTM D 1970; self-adhering, polymer-modified, bituminous sheet underlayment; 40 mils (1 mm) thick. Provide primer when recommended by underlayment manufacturer.
- E. Sealant: One-part elastomeric polyurethane, sealant as recommended in writing by panel manufacturer. Where sealant will be exposed, provide in color to match panels.
 - 1. Standard: ASTM C920-86.

Batten and/or Counter Batten Installation. Choose fasteners in accordance with code requirements.

- F. Fasteners: Non-corrosive screws or nails.
 - 1. [Screws: Minimum No. 8, 1 inch (25 mm) long, or of sufficient length to penetrate substrate 1/2 inch (12.7 mm) minimum with either a black or color finish matching the panels.]
 - 1. [Nails: Full, flat head, 8d, 2-3/8 inches (60 mm), box nails, or 6d common nails tested per ASTM B117 for 1000 hours salt fog exposure with no deleterious effects. Finish color black.]

Direct to Deck Installation. Choose fasteners in accordance with code requirements.

- 1. [Screws: Minimum No. 8, 1 inch (25 mm) long, or of sufficient length to penetrate substrate 1/2 inch (12.7 mm) minimum with either a black or color finish matching the panels.]

PART 2 - EXECUTION

Include the following [noted] requirements for re-roofing applications when required by project requirements.

2.1 EXAMINATION

- A. Examine substrate and conditions for compliance with requirements for maximum moisture content, soundness of framing, and other conditions affecting performance of DECRA metal roofing. [Damaged, rotted or loose roofing materials shall be removed and the substrate corrected for re-roofing applications]. Proceed with installation only after unsatisfactory conditions have been corrected.

2.2 PREPARATION

- A. Inspect and verify roof framing spacing and installation is straight, true and ready for installation [of battens and] DECRA roof panels.
- B. Coordinate installation of metal panels with flashing and other adjoining work to ensure proper sequencing. Do not install roofing until vent stacks and other penetrations through roofing have been installed, are securely fastened and flashing is in place.
- C. Inspect and verify exterior stucco and EIFS wall enclosures are completed.

2.3 INSTALLATION

- A. General: Comply with manufacturers written instructions for products and applications indicated, unless more stringent requirements apply.
- B. [Battens: [Install 1 by 4 inch counter battens vertically over the roof rafters/trusses, on 24 inch centers (maximum). Stagger counter batten ends.] [Install 2 by 2 inch battens perpendicular to roof rafters/trusses at 14-1/2 inch centers DECRA Shingle Plus. Stagger batten ends.]
 - 1. [Fasten counter battens and battens with 16d common nails in accordance with manufacturer's written instructions.]
- C. Valleys: Install in accordance with manufacturers instructions with a minimum 6 inch overlap in direction of flow.
- D. Flashing: Install as indicated on approved submittals and in accordance with manufacturers written instructions.
- E. Shingle Plus Panels: Install DECRA Shingle Plus, accessories, flashing, and hip & ridge level and plumb. Use fasteners per above specifications.
 - 1. Install each DECRA Shingle Plus Panel using a random stagger in accordance with manufacturer's instructions.

Specify the appropriate number of fasteners per code requirements. Direct to Deck Installation requires minimum 8 fasteners; 4 in nose and 4 in backshelf. Choose information in [] for direct to deck.

- 2. Fasten each panel with minimum 4 fasteners [screws] minimum horizontally along the nosing of each panel at overlaps, and at two other intermediate points. [And 4 screws along the backshelf.]
- F. Cut DECRA panels into each side of valleys in accordance with the manufacturer's instructions straight and true to the line of the valley.
- G. Hip & Ridge: Install Hip & Ridge along hips, ridges and rakes as indicated on approved submittals and in accordance with manufacturers written instructions. Bend and fold exposed ends of hips ridges and neatly, cap with an end cap or a piece of similar material.

2.4 CLEANING AND PROTECTION

- A. Damaged Units: Replace panels and other components of the work that have been dented, damaged or have deteriorated beyond successful repair by finish touchup with acrylic coating and stone chip granules.
- B. Cleaning: After completing installation, remove any debris from the roof.
- C. Foot Traffic: Directly over 2 x 2 battens to prevent denting of panels. Or at nose when installing direct to deck. Avoid walking on sidelaps.

END OF SECTION 07314