

Architectural Specifications

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1. GENERAL

1.1 Description

- Furnish and install *Authentic Roof*[™] slates as specified in contract documents as per plans supplied.
- Supply and install *Authentic Roof*[™] slates in strict accordance with the specified installation instructions supplied by Crowe Building Products Ltd. (CBP)
- Related work
Metal flashing work is not covered by this specification, as CBP does **not** supply or warrant flashing materials. CBP advises that all flashing materials used be to industry standards, and have an equal or greater life expectancy than *Authentic Roof*[™]. If metal flashings are used, a minimum of 26 gauge (0.4 mm) painted galvanized is required. Copper or other materials known to have an exceptional life expectancy are also acceptable. A W-flashing for valleys is recommended to stop horizontal water from penetrating in under the adjacent slates opposite the valley.

Venting products are not covered by this specification, as CBP does **not** supply or warrant venting materials. CBP advises that all roofing is to be adequately vented to prevent heat buildup in the roof cavity and that an equal amount of air intake to air exhaust be maintained over the entire roof. It is recommended a minimum of 1 ft² (0.1 m²) of free vent area for each 150 ft² (14 m²) of attic floor - with vents placed proportionately at the eaves (i.e., soffits) and at or near the ridge. Refer to CBP installation instructions.

1.2 Quality Assurance

- There shall be no deviations made from this specification without the written consent from CBP, prior to initiation of the project.
- A licensed, qualified and insured roofing contractor will oversee the installation of the project.
- It is the responsibility of the roofing contractor to adhere to all applicable building codes (local and national) and to acquire the appropriate licenses or permits for completing the job.

1.3 Submittals

- CBP warrants only the product *Authentic Roof*[™] to be free of defects and does **not** warrant the installation of any contractor.
- When an *Authentic Roof*[™] warranty is required, CBP must be contacted prior to the project bid as specific information regarding high wind areas, slope requirements for roof seal, or snow guards may be required.

- Any questions regarding supplied material must be accompanied by the supplier's name, address and phone number, as well as purchase order numbers and the *Authentic Roof*™ order number for tracing.

1.4 Delivery, Storage and Handling

- Materials are to be delivered to the job site in unopened bundles with 25 slates.
- Two (2) installation instructions are packaged on every pallet of material that is shipped from CBP.
- We recommend that slates be stored in a clean dry area at temperatures above freezing and less than 100°F (38°C).
- Materials damaged in shipping should not be used but returned for credit and must be reported on immediate receipt of delivery.
- Used materials and material which are not clean cannot be returned for credit.

1.5 Job Conditions

- When installing *Authentic Roof*™ slates, the ambient temperature should be above freezing.
- Do **not** install *Authentic Roof*™ slates over existing roofing systems, no matter what material was used. Also ensure any debris is removed and on re-roof projects make sure that any necessary boards are replaced. (see Installation Guide)
- Under **no** circumstances should a nail gun be used to install *Authentic Roof*™. It has several engineered advantages in its product that ensures its performance and the use of a nail gun directly counteracts these advantages.
- In the case of cathedral ceilings, adjustments have to be made for the unobstructed airflow under the roof deck from the eaves to the ridge. If there are intersecting gables the rafters must be strapped, before the sheeting is applied to allow for cross flow ventilation of valley rafter spaces.

2. PRODUCTS

1.6 General

- *Authentic Roof*™ slates are made of a proprietary thermo-polymer olefin compound, developed by CBP for the exclusive use in synthetic roofing slates. The weight per square will be determined by the exposure used, the slate dimensions are 12" (30.5 cm) wide, 18" (45.75 cm) long and weigh 1.65 lbs. (750 g) each.
- Exposures quoted on field slates are:

Imperial: 6" exposure = 200 slates per roofing square (100 ft²) = 330 lbs
6.5" exposure = 185 slates per roofing square (100 ft²) = 305 lbs
7" exposure = 172 slates per roofing square (100 ft²) = 284 lbs
Metric: 15 cm exposure = 20 slates per m² = 15.0 kg
16.5 cm exposure = 19 slates per m² = 14.3 kg
18 cm exposure = 18 slates per m² = 13.5 kg

- Hip and Ridge Slates are full slates with a special channel down the back to allow the slate to be folded to the desired angle. A paint heat strip gun should be used to slightly warm up the material increasing its flexibility. Fold the slate past the desired angle and cool; this will ensure that the capping will hug the hip or ridge tightly. Hip and Ridge slates are figured for quoting purposes at the same exposure as field slates.
- All slates including colors are shipped in bundles of 25 for easy counting.

1.7 Related Materials

- **Underlay**
 - "Ice & Water Shield ®" by W.R. Grace & Co. or equivalent should be used over the eaves area to prevent roof **wrought from ice damming**. It should also be installed under valley flashings, around sky lights and minimum of ½ strip up the rake of an open gable end.
 - The balance of the roof deck should be covered with G2 fiberglass base sheet. Since Authentic Roof is a "stand-alone" Class A fire rated material, no special fire rated underlay is required. Step lapping of the underlay is a good practice for every 3 to 4 courses.
- **Fasteners**

Minimum of 1 ½" (38 mm) large head hot dipped galvanized roofing nails should be used to install **Authentic Roof™** so that the nail points penetrate the inner side of the roof sheathing. Stainless steel or copper nails are also acceptable provided the nail heads are a minimum of 3/8" (10mm) in diameter. For coastal areas the use of copper nails is recommended. **Do not use coil nails, the use of nail guns is strictly prohibited.** Fastening products are not covered by this specification, as CBP does NOT supply or warrant fastening materials.
- **Flashings**
 - Metal flashing work is not covered by this specification, as CBP does NOT supply or warrant flashing materials. (see Related Work)
 - A metal starter strip (drip edge) is required to stop water from penetrating in beneath the slates.
- **Venting**
 - All roofing must be thoroughly vented to allow heat buildup and moisture to escape the attic space. Venting products are not covered by this specification, as CBP does not supply or warrant venting materials (see Related Work).

3. EXECUTION

1.1 Substrate

- *Authentic Roof*™ slates are to be installed on a sloped roof structure of no less than 3/12 pitch (14°). On a 3/12 - 4/12 pitch (<14° - <18°) it is recommended that “Ice & Water Shield®” or comparable be installed on the entire roof deck.
- Preferred installation on a ½” (13 mm) plywood deck or equivalent.
- *Authentic Roof*™ slates may be installed on 1” (25 mm) material provided it is in good condition and provides a solid base for nailing. The roof deck must be a smooth, clean surface to ensure a smooth finished roof.
- When *Authentic Roof*™ is installed on skip sheathing or on open rafters with slats, ensure that the spacing between slats does not exceed 3 ½” (90 mm) for support. It is recommended that a heavier underlay is used, i.e. 40 lbs (18 kg).
- If stress skin panels are used, the panel must be strapped and cross-flow ventilation incorporated to allow for venting of the roof deck and then sheathed.

1.2 Installation practices

- After the underlay and flashings have been installed, begin by starting with the starter slates, cut the top six inches off and discard, this is to prevent a kick on the third course as it steps down to the roof deck. Install these 12” x 12” (30.5 x 30.5 cm) slates in a straight line along the edge of the roof leaving 3/16” (4.75 mm) spacing between them. Then install the full size slate on the top of this row, shifting over one half of a slate. From the eaves looking up at the roof it will appear there are two layers of slates. This is required to fill in the slots between the roofing slates.
- Optimum installation temperature is above freezing.
- Starter slates are always full face slates and are required to be installed along all eaves.
- Due to recycled material content, *Authentic Roof*™ does fluctuate slightly in shading colors. It is recommended that the slates be evenly distributed over the entire roof area to avoid color blotching and minimize any drastic color fluctuation. When applying, select one bundle from each pallet and one slate from each bundle creating mixed bundles. This will mechanically and deliberately spread any possible color variation evenly throughout the roof.
- Nails are to be installed into the divots located on the slates, two (2) immediate nails per slate; two (2) secondary nails will be installed from the next row of slates that overlap.
- To insure a straight and proper appearance, chalk lines should be snapped horizontally and vertically.
- If a closed valley is desired, cut the slates to fit straight down the valley keeping back ¼” (6 mm) from the “W”.

- Spacing beside each slate of 3/16" (5 mm) is to be maintained, the engineered spacer tabs located on the sides of the slates ensure proper spacing. These tabs also allow for expansion/contraction of the roof deck and roofing materials.
- *Authentic Roof*™ is slippery when wet and CBP cautions the use of roof jacks and toe boards; approved safety equipment should be used at all times.
- Care should be taken to reduce tracking of mud on the roof as it will cause undesirable appearance esthetics that may have to be washed off with a mild detergent and/or a pressure washer.
- Please follow the installation instructions.

Questions regarding installation and product specifications should be forwarded to one of our technical support representatives at 1-888-533-3358 or email techsupport@authenticroof.com.