

PART 1 – GENERAL

1) DESCRIPTION

- a) CertainTeed Symphony™ composite slate is an innovative roofing product that simulates the appearance, texture, and contours of traditional natural slate. It is a carefully engineered polymer composite roofing product that is formulated for beauty, durability, and handling. Symphony is easy to install, with a contractor-friendly design but at a fraction of the weight and installed cost of natural slate.
- b) Install Symphony in strict accordance with the written installation instructions provided by CertainTeed.
- c) Related Work
 - i) Ventilation should meet or exceed current HUD standards. Suggestions for ridge vents include continuous metal ridge vents or products such as Shingle Vent II (9” or 12” widths).
 - ii) Metals used for flashing and valleys must be a minimum of 16-oz copper or 26-gauge corrosion resistant metal such as stainless steel, painted galvanized steel, color clad steel, or color clad aluminum. Use same metal type cleats or fasteners as valley metal. CertainTeed advises that the installation of metal flashing should be to industry standards (SMACNA) to prevent the metal from pulling free or buckling.
 - iii) The use of snow guards is highly recommended with Symphony. The installation contractor should refer to local building codes and requirements for the use of snow guards and should follow the snow guard manufacturer’s installation instructions for correct spacing and application.

2) QUALITY ASSURANCE

- a) There shall be no deviation made from this specification without written approval from CertainTeed prior to the start of the roofing project.
- b) It is the roofing applicator’s responsibility to adhere to all applicable building codes (local and national) and to have or acquire the appropriate licenses and permits for the roofing system installation requirements and limitations in their local areas applicable at the time of the bid.
- c) Code Compliance
 - i) Fire Resistance – ASTM E108, Class A (When using CertainTeed fiber glass All Weather/Empire™ Base Sheet).
 - ii) Wind Resistance – ASTM D3161, Class F at 6” through 8” exposure
 - iii) Impact Resistance – UL2218 Class 4
- d) Job Conditions
 - i) Do not apply Symphony at temperatures below 15 degrees Fahrenheit.
 - ii) Tear off of existing roofing material is required prior to application. (i.e. “roof-overs” are not permitted)
 - iii) Apply Symphony to a clean, dry deck following installation of the appropriate underlayment.

PART 2 – PRODUCTS

1) TILES

- a) Symphony comes in nominal 6” wide x 18” tall, 9” wide x 18” tall, and 12” wide x 18” tall dimensions including side-to-side spacing nibs.

- b) Symphony comes pre-packaged in color and width blends. There is no need to mix Symphony at the job site. Currently Symphony is available in the following three color blends: Colonial Gray, Capital Blend, and Evergreen. Within these color blends, customers may choose between widths of 12” only or multiple widths comprising of a mix of 6”, 9”, and 12” wide tiles.
- c) Packaging details for the two width options at each allowable exposure are as follows (* indicates typical values):

i) 12” blends

Exposure*	Shingles/Bundle	Lbs/Bundle*	Shingles/Sq	Bundles/Sq*	Lbs/Sq*	Sq/Pallet
8.0"	25	37.5	150	6.0	225	6.0
7.5"	25	37.5	160	6.4	240	5.6
7.0"	25	37.5	172	6.9	258	5.2
6.5"	25	37.5	185	7.4	277	4.9
6.0"	25	37.5	200	8.0	300	4.5

ii) Multi-width blends

Exposure*	Shingles/Bundle	Lbs/Bundle*	Shingles/Sq	Bundles/Sq*	Lbs/Sq*	Sq/Pallet
8.0"	36	37.5	216	6.0	225	5.0
7.5"	36	37.5	230	6.4	240	4.7
7.0"	36	37.5	248	6.9	258	4.3
6.5"	36	37.5	266	7.4	277	4.1
6.0"	36	37.5	288	8.0	300	3.8

2) ACCESSORIES

a) Hip and ridge

- i) Symphony offers a pre-formed hip and ridge product with a nominal 12” wide x 18” tall dimension and has exposure options of 6.0”, 6.5”, 7.0”, 7.5”, and 8.0”. It is available in all 3 color blends and in two different pitch profiles; a shallow angle profile for hips and roof pitches less than 7:12, and a sharper angle for pitches 7:12 and higher.
- ii) Symphony hip and ridge is packaged 15 pieces to a bundle, covering 10 linear feet at an 8.0” exposure. One bundle of hip and ridge weighs 18.75 lbs (typical value).

b) Rake accessory

- i) Symphony offers its 6” wide tiles in bundles of 15 to be used as a rake accessory.
- ii) These tiles can be used as the first piece on alternating courses of 12 inch width blends, eliminating the need to cut a 12” wide tile in half. Colors available are Gray and Green.

3) RELATED MATERIALS

a) Underlayment

- i) To attain the Class A fire classification, apply CertainTeed All Weather Empire Base Sheet over the entire deck.
- ii) To attain the Class C fire classification, apply a minimum 30# organic felt meeting ASTM D226 Type I or equivalent over the entire deck.
- iii) For roof pitches of 3:12 to 5:12, apply CertainTeed WinterGuard or equivalent ice and water shield over the entire deck.
- iv) For all applications, apply CertainTeed WinterGuard or equivalent ice and water shield in the valleys, along rakes and eaves, around chimneys, skylights, and all roof penetrations.

b) Fasteners

- i) Recommended fasteners (nails or screws) must penetrate at least $\frac{3}{4}$ " into wood decking or at least $\frac{1}{8}$ " through plywood or OSB sheathing, but in no case shall the fastener be less than $1\frac{1}{2}$ " in length.
- ii) Fasteners must be corrosion resistant, and higher quality fasteners such as electro galvanized (for non-coastal areas), stainless steel, hot dipped galvanized, solid copper, brass or aluminum are recommended in order to comply with the full warranty duration for Symphony. Fasteners such as 11-gauge nails with $\frac{3}{8}$ " (10mm) head, No. 8 or No. 9 brass flathead Phillips, square drive screws or similarly sized stainless steel screws are acceptable. Where additional holding power is desired, use screws or ring shank fasteners. Do not over or under drive fasteners.
- iii) Symphony has a dimpled nail pocket location for correct positioning of fasteners and ease of hand-nailing. Two fasteners per shingle are required, one placed in each of the nail pockets or within 1" of a cut edge in a non-exposed location.
- iv) A fastener length of 2" is recommended for application of preformed hip and ridge pieces.

PART 3 – EXECUTION

1) DECKING AND UNDERLAYMENT

- a) Install Symphony over a solid wood substrate. Plywood and oriented strand board (OSB) decking must comply with specifications outlined by the APA-Engineered Wood Association. Acceptable wood decking materials are $\frac{3}{8}$ " thick plywood, $\frac{7}{16}$ " OSB, 1" nominal tongue and groove wood planks, or 1" nominal thickness wood decking no wider than 6".
- b) Tear off the existing roofing material prior to installing Symphony. Apply Symphony to a clean and dry deck following installation of the appropriate underlayment.
- c) Install the appropriate underlayment depending on roof pitch and desired fire classification.

2) VALLEYS AND FLASHING

- a) Use open or closed valley systems. Whether installing an open or closed valley, valley metal is required and must be no less than 24" wide. Valley and flashing metal must be a minimum of 16-oz copper or 26-gauge corrosion resistant metal such as stainless steel, painted galvanized steel, color clad steel, or color clad aluminum. Use same metal type cleats or fasteners as valley metal.
- b) For open metal valleys, either a "W" valley or a double "W" valley with hemmed outside slater's edge is acceptable. Apply Symphony 2" or more from the valley centerline. Cut 2" off the top valley side corner of a Symphony shingle at a 45-degree angle to help divert water back into the valley. A double "W" valley has metal bent in the centerline direction to look like a "V" with a "W" diverter on either side, 2" from the centerline. Cut pieces should be laid against the "W" diverters on either roof side edge.
- c) For closed metal valleys, use a "W" valley, a standing seam center crimp design, or a classic "V" bend metal valley design. Apply cut Symphony to within $\frac{1}{4}$ " of the center diverters or the centerline.

- d) Always fasten Symphony 6" or more from the valley centerline. Always overlap valley metal at joints by at least 4".
 - e) Metal step-flashing size minimums are 4" up a side wall, 4" across the headlap portion of an applied shingle course and 14" up on the roof slope (4"x4"x14").
- 3) GENERAL TILE APPLICATION
- a) Snap horizontal chalk lines to ensure that Symphony is applied uniformly on the roof (do not use red chalk). Each shingle has reference marks to ensure that the exposure dimension chosen is from 6" to 8" in half-inch increments. Align the chosen marks to the top edge of the piece below.
 - b) If desired (not required), apply standard drip edge or flared gable metal to eaves and rakes.
 - c) For starter pieces, invert a 12" wide x 10" tall piece cut from the headlap of a field tile. The remaining 12" x 8" shingle can be used for the uppermost roof course. As an alternative, you may install CertainTeed's high performance 10" asphalt starter as the starter course for Symphony. It is recommended that the side and lowest edges of Symphony extend 1" \pm 1/4" beyond the fascia trim at the rake and eaves.
 - d) Symphony can be fastened by hand nailing or by pneumatic nail gun. Additionally, Symphony may be fastened with screws.
 - e) Symphony is best cut with a table saw, jigsaw, or small handheld portable circular saw. A fine toothed or carbide toothed blade will produce acceptable cuts. A utility knife will not cut the product easily.
 - f) If the roof pitch is less than 3:12, do not apply Symphony. If the roof pitch is 3:12 to 5:12, apply Symphony at a 6" exposure and over a deck completely covered with WinterGuard or equivalent ice and water shield. If the roof pitch is greater than 5:12, apply Symphony at any exposure between 6" and 8". Ice and water shield over the entire deck is not required for roof pitches above 5:12.
 - g) Symphony can be applied like traditional quarried slates with a straight or staggered bottom edge application, and with a half-piece offset (6"), or 5" or 4" offset with textured headlap show-through. It is recommended that side-edge to side-edge offset, regardless of shingle width, should not be less than 3".
 - h) WinterGuard or equivalent ice and water shield may be used in place of traditional hidden hip and ridge metal flashing. It can be applied either as a continuous length, centered 8"-10" wide strip on the hip or ridge line and under the hip and ridge pieces or in place of individual flashing pieces. Overlap WinterGuard joints 4"-6" along the ridge line.
- 4) HIP AND RIDGE APPLICATION
- a) Symphony can be complemented with an available pre-formed full piece 12" x 18" hip and ridge product, available in 2 different pitch profiles; a shallow angled profile for hips and roof pitches less than 7:12 and a sharper angle for pitches 7:12 and higher.
 - b) Hip and ridge can also be applied using one of the traditional half-piece application techniques that are typical for real slate applications, such as the saddle, comb, or mitered, with flashing covering the unexposed portion. Symphony 6" x 18" rake accessory shingles are ideal for this application. These

pieces can be used as right-handed and left-handed sides, applied on either side of the hip or ridge line. Minimum two fasteners per piece.

- c) Alternative hip and ridge applications – including a minimum 16-oz. copper or metal lineal of 26-gauge corrosion resistant metal such as stainless steel, color clad steel, color clad aluminum, or metal ridge vent in a complementary color – are also acceptable for hips and ridges. Metal joint overlap should not be less than 4”.