

Capstone® With Formula FLX™

Specification Sheet

Updated: 6/06



*Quality You Can Trust Since 1886...
From North America's Largest Roofing Manufacturer™*



Capstone® with Formula FLX™

ROOFING PRODUCTS SPECIFICATIONS



CAPSTONE® SHINGLE

Capstone® with Formula FLX™

Product size _____	Extra Dimension 12 1/8" x 39 1/2" (308mm x 1003.3mm)
Exposure _____	5" (127mm)
Pieces/Bundle _____	18
Bundles/Square Ft _____	4/98.75
Squares/Pallet _____	13
Limited Warranty _____	40 years
Umbrella Coverage _____	Non-prorated coverage for shingles and labor with prorated coverage during the initial 10 years, plus an option for transferability*
Wind Coverage _____	5 yrs, up to 110 mph**

Seal-A-Ridge® w/FLX™

Size: 12"x 12"
Exposure: 6 7/8"
Pieces/Bundle: 45
Coverage: 4 Bundles = 100 linear feet

Elk Starter Strip

52 Bundles/Pallet
18 Pallets/Truck
936 Bundles/Truck
19 Pieces/Bundle
1 Bundle = 120.33 linear feet

* Subject to the provisions of the limited warranty, which is available free upon request from the distributor or by writing Elk.

** For a Limited Wind Warranty up to 110 MPH for Capstone, at least six (6) properly placed NAILS and Elk Starter Strip shingles are required.

Available colors: Moss Rose, Fossil Grey, and Granite

Check for availability with built-in StainGuard® treatment to inhibit discoloration of roofing granules caused by growth of algae.

Capstone shingles meet UL wind resistant (UL 997) and Class "A" fire ratings (UL 790) and ASTM specifications: D 3462, D 3018, Type-1, D 3161, Type-1; E 108. Florida Building Code Statewide Approval #FL728. Miami-Dade County, Florida Acceptance #01-0523.01 and CAN/CSA-A123.5-M90

SPECIFICATIONS

SCOPE: Work includes furnishing all labor, materials and equipment necessary to complete installation of CAPSTONE shingles specified herein, hip and ridge shingles type to be Elk Seal-A-Ridge ridge hip and ridge. Color shall be ___(name of color)__. All exposed metal surfaces (flashing, vents, etc.) to be painted with matching Elk roof accessory paint.

PREPARATION OF ROOF DECK: Roof deck to be dry, well-seasoned 1" x 6" (25.4 x 152.4mm) boards; exterior grade plywood (exposure 1 rated sheathing) at least 3/8" (9.525mm) thick conforming to the specifications of the American Plywood Association; 7/16" (11.074mm) oriented

strandboard; or chipboard. Fire-retardant plywood decking is not an approved substrate for shingles. For non-standard decks, please contact the Elk location nearest you.

MATERIALS: Underlayment for standard roof slopes, 4" per foot (101.6/304.8mm) or greater: apply non-perforated number 15 or number 30-pound asphalt-saturated felt underlayment. For low slopes [4" per foot (101.6/304.8mm) to a minimum of 2" per foot (50.8/304.8mm)], use two plies of underlayment overlapped a minimum of 19" (482.6mm). Fasteners shall be of sufficient length and holding power as required on a shingle wrapper for securing material.

For areas where discoloration of roofing granules caused by the growth of algae is a problem, shingles shall be CAPSTONE with StainGuard treatment as manufactured by Elk. Hip and ridge shingle type to be Seal-A-Ridge ridge hip and ridge with StainGuard treatment.

Complete installation instructions are published by Elk and printed on the back of every shingle bundle. All warranties are contingent upon the correct installation as shown on the instructions.

For specifications in CSI format, call 800.354.SPEC (7732) or e-mail specinfo@elkcorp.com.

REGIONAL OFFICES

WEST OFFICE
800.791.8545

SOUTHWEST OFFICE
888.355.5882

NORTH OFFICE
800.944.4344

MIDWEST OFFICE
800.226.6111

CORPORATE HEADQUARTERS
800.354.7732

PLANT LOCATION
800.945.5545

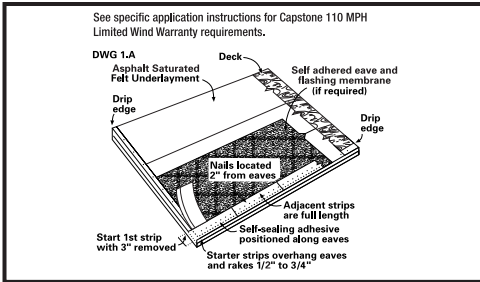


DIRECTIONS FOR APPLICATION

THESE APPLICATION INSTRUCTIONS ARE THE MINIMUM REQUIRED TO MEET ELK'S APPLICATION REQUIREMENTS. FAILURE TO USE THESE INSTRUCTIONS MAY VOID THE PRODUCT WARRANTY. IN SOME AREAS, THE BUILDING CODES MAY REQUIRE ADDITIONAL APPLICATION TECHNIQUES OR METHODS BEYOND OUR INSTRUCTIONS. IN THESE CASES THE LOCAL CODE MUST BE FOLLOWED. UNDER NO CIRCUMSTANCES WILL ELK ACCEPT APPLICATION REQUIREMENTS THAT ARE LESS THAN THOSE PRINTED HERE. SHINGLES SHOULD NOT BE JAMMED TIGHTLY TOGETHER. ALL ATTICS SHOULD BE PROPERLY VENTILATED.

DECK PREPARATION

Roof decks should be dry, 1" x 6" boards, exterior grade plywood at least 3/8" thick and conform to the specifications of the American Plywood Association, 7/16" oriented strandboard, or 7/16" chipboard. Most fire retardant plywood decking is NOT an approved substrate for Capstone shingles.



UNDERLAYMENT

Use non-perforated #15 or #30 asphalt saturated felt. Elk VersaShield® or self adhering underlayment is also acceptable.

Underlayment is required on new construction and recommended for re-roofing.

STANDARD SLOPE: 4/12 up to 21/12. Use one layer of underlayment, as shown in Drawing 1.A.

LOW SLOPE: 2/12 up to 4/12. Completely cover the deck with one layer of self-adhering membrane or two plies of felt underlayment overlapping a minimum of 19 inches. Begin by fastening an 19-inch-wide strip of underlayment along the eaves. Next, apply a full 36-inch-wide sheet horizontally along the eaves and completely overlapping the 19-inch-wide sheet. Succeeding courses will be 36 inches wide and overlap the preceding course by 19 inches.

EAVE FLASHING (ICE DAMS)

Eave flashing MUST be installed in localities where leaks may result by a water backup near an ice dam.

STANDARD SLOPE: 4/12 up to 21/12. Use coated roll roofing of not less than 50 pounds over the felt underlayment extending from the eave edge to a point at least 24 inches beyond the inside wall, or one layer of self adhering underlayment.

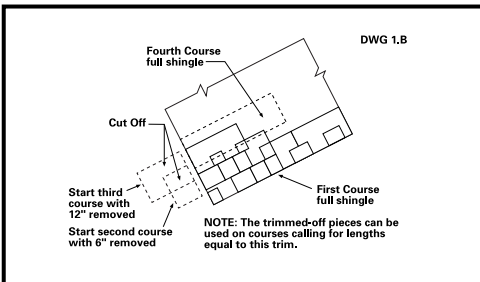
LOW SLOPE: 2/12 up to 4/12. Use a continuous layer of asphalt plastic cement between the two plies of underlayment from the eave edge up roof to a point at least 24 inches beyond the inside wall line, or one layer of self adhering underlayment.

METAL DRIP EDGES

Metal drip edges are recommended along rake and eave edges of all decks.

Contact Elk Technical Support at 888.899.8503 for application specifications over other decks and other slopes.

SHINGLE APPLICATION



STARTER SHINGLE COURSE

Use an Elk starter strip or the headlap of a strip shingle with the adhesive strip positioned at the eaves edge. With at least 3" trimmed from the end of the first strip shingle, start at the rake edge overhanging the eave 1/2" to 3/4". Fasten 2" from the lower edge and 1" from each side (see Drawing 1.A.).

FIRST COURSE

Start with full shingles laid flush with the starter course. Refer to Drawing 1.B.

SECOND COURSE

Offset the second course of shingles with respect to the first by approximately 6". Other offsets are approved if greater than 4".

THIRD COURSE

Offset by approximately 6" with respect to the second course, or consistent with the original offset.

FOURTH COURSE

Continue with full shingles across the roof, maintaining the original offset.

FIFTH AND SUCCEEDING COURSES

Repeat application as shown for second, third and fourth courses. Offsets may be adjusted around valleys and penetrations. Do not rack shingles straight up the roof.

VALLEY CONSTRUCTION

Open, woven and closed cut valleys are acceptable when applied by ARMA recommended procedures. For metal valleys, use 36" wide vertical underlayment prior to applying metal flashing.

EXPOSURE: Five inches (5").

IMPORTANT: Do not remove tape on back of shingle.

SHINGLE DIMENSIONS: 12-1/8" x 39-1/2"

CAUTION: By careless and improper storage or handling, fiberglass shingles can be harmed. Keep these shingles completely covered, dry, reasonably cool, and protected from the weather. Do not store near steam pipes, radiators, furnaces, or other sources of heat. Do not store in direct sunlight until applied. **DO NOT DOUBLE STACK PALLETS.** Systematically rotate all stock so the material stored the longest will be the first to be moved out.

FASTENERS

While nailing is the preferred fastening method for Capstone shingles, Elk will accept fastening methods according to the following instructions. Nails or staples must be placed between and/or in the sealant dots and through the double thickness area of the shingle.

NAILS: Corrosive resistant, 3/8" head, minimum 12-gauge roofing nails. Elk recommends 1-1/4" for new roofs and 1-1/2" for roof-overs. In cases where you are applying shingles to a roof that has an exposed overhang, 3/4" ring shank nails are allowed, 1" ring shank nails allowed for re-roof.

STAPLES: Corrosive resistant, 16-gauge minimum, crown width minimum of 15/16". Note: An improperly adjusted staple gun can result in raised staples that can cause a fish-mouthed appearance and can prevent sealing.

Fasteners should be long enough to obtain 3/4" deck penetration or penetration through deck. This product meets the requirements of the IRC 2003 code when fastened with 4 nails.

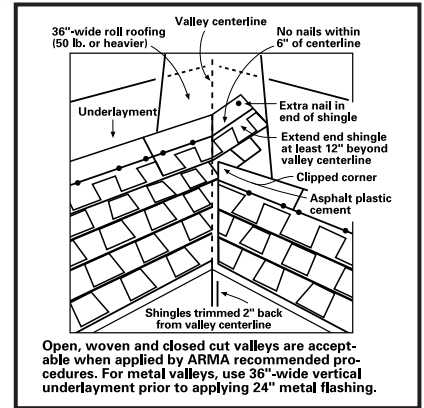
MANSARD APPLICATIONS

Correct fastening is critical to the performance of the roof. For slopes exceeding 60° (or 21/12) use 6 fasteners per shingle. Locate fasteners in the fastener area 1" from each side edge with the remaining four fasteners equally spaced along the length of the double thickness (laminated) area.

LIMITED WIND WARRANTY

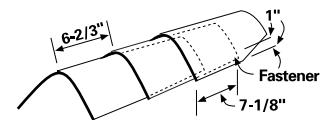
• For a Limited Wind Warranty up to 80 MPH, Capstone shingles must be applied with 4 properly placed fasteners per shingle, or in the case of mansard applications, 6 properly placed fasteners per shingle.

VALLEY CONSTRUCTION



HIP AND RIDGE SHINGLES

ELK RECOMMENDS CLASS "A" SEAL-A-RIDGE WITH FORMULA FLX HIP AND RIDGE SHINGLES



• For a Limited Wind Warranty up to 110 MPH, Capstone shingles must be applied with 6 properly placed NAILS per shingle. SHINGLES APPLIED WITH STAPLES WILL NOT QUALIFY FOR THIS ENHANCED LIMITED WIND WARRANTY. Also, Elk Starter Strip shingles must be applied at the eaves and rake edges to qualify Capstone shingles for this enhanced Limited Wind Warranty. Under no circumstances should the Elk Shingles or the Elk Starter Strip overhang the eaves or rake edge more than 3/4".

HELP STOP BLOW-OFFS AND CALL-BACKS

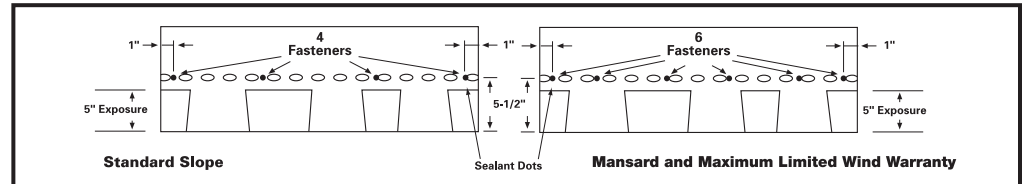
A minimum of 4 or 6 fasteners, as required by the above instructions, must be driven between and/or in the sealant dots and through the DOUBLE THICKNESS (laminated) area of the shingle.

CAUTION: DO NOT USE THE SEALANT DOTS FOR SHINGLE ALIGNMENT.

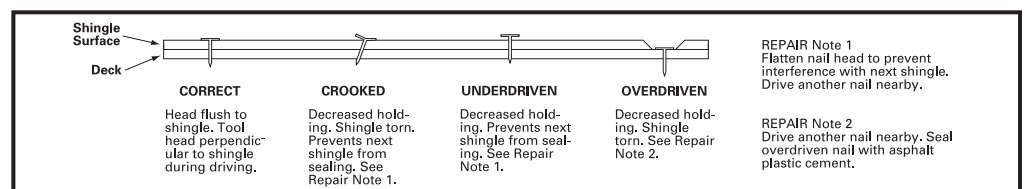
CAUTION TO WHOLESALE: Careless and improper storage or handling can harm fiberglass shingles. Keep these shingles completely covered, dry, reasonably cool, and protected from the weather. Do not store near various sources of heat. Do not store in direct sunlight until applied. **DO NOT DOUBLE STACK.** Systematically rotate all stock so that the material that has been stored the longest will be the first to be moved out.

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PROPER FASTENERS LOCATION



PROPERLY AND IMPROPERLY DRIVEN NAILS



REPAIR Note 1
Flatten nail head to prevent interference with next shingle. Drive another nail nearby.

REPAIR Note 2
Drive another nail nearby. Seal overdriven nail with asphalt plastic cement.