

PRODUCT SPECIFICATION – MASTER

Owens Corning Roofing & Asphalt herein referred to as “Owens Corning”

Section 07311 Fiber glass-based Asphalt Shingles.

PART 1 – GENERAL

1.1 RELATED SECTIONS

- A. Rough Carpentry Section 06100.
- B. Roof and Deck Insulation Section 07240 for insulation placed over roof decking.
Notes to Specifier:
 - 1. Underlayment and shingles installed directly over roof insulation or similar type decks is not approved.
 - 2. Roof deck must be dry, minimum 25/32” thick, maximum 6” wide boards, or APA rated sheathing (exposure 1): minimum 3/8” plywood, minimum 7/16” oriented strand board or waferboard. Consult your Owens Corning representative for other approved constructions.
 - 3. Ventilation under roof deck must meet FHA Minimum Property Standards.
- C. Flashing and Sheet Metal: Section 07600. For snow guards, metal flashing and drip edges, including step-type flashing installed with shingles.
- D. Roofing Essentials™ Accessories Section 07800.
 - 1. RAFT-R-MATE® UL® Listed
 - 2. Soffits or Intake Ventilation
 - 3. VentSure® Ventilation Products
 - 4. Hip & Ridge Shingles
 - 5. WeatherLock® Ice and Water Barrier Products
 - 6. Fiberglas™ Reinforced Felt Underlayment
 - 7. Deck Defense™ High Performance Roof Underlayment

1.2 REFERENCES

Standards and Building Codes:

- A. ASTM D 224 -Standard Specification for Smooth-Surfaced Asphalt Roll Roofing.
- B. ASTM D 226 – Standard Specification for Asphalt-Saturated Organic Felt used in Roofing and Waterproofing.
- C. ASTM D 1970 – Standard Specification for Self-Adhering Polymer Modified Bituminous Sheet Materials Used as Steep Roofing Underlayment for Ice Dam Protection.
- D. ASTM D 3018 – Standard Specification for Class A Shingles Surfaced with Mineral Granules.
- E. ASTM D 3161 – Standard Test Method for Wind-Resistance of Asphalt Shingles (Fan-Induced Method).
- F. ASTM D 7158 – Standard Test Method for Wind Resistance of Sealed Asphalt Shingles (Uplift Force/Uplift Resistance Method)
- G. UL 2390 – Test Method for Wind Resistant Asphalt Shingles with Sealed Tabs
- H. ASTM D 3462 – Standard Specification for Asphalt Shingles Made from Glass felt and Surfaced with Mineral Granules.

1.2 REFERENCES (continued)

Standards and Building Codes:

- I.** ASTM D 4586 – Standard Specification for Asphalt Roof Cement, Asbestos –Free.
- J.** ASTM D 4869 – Standard Specification for Asphalt –Saturated Organic Felt Shingle Underlayment Used in roofing.
- K.** ASTM E 108 – Standard Test Methods for Fire Tests of Roof Coverings.
- L.** ASTM C 1549 – Standard Test Method for Determination of Solar Reflectance Near Ambient Temperature using a Portable Solar Reflector.
- M.** ASTM C 1371 – Standard Test Method for Determination of Emittance of Materials Near Room Temperature using Portable Emissionmeters.
- N.** ASTM D 6757 – Standard Specification for Underlayment Felt Containing Inorganic Fibers.
- O.** CSA A123.5 – Asphalt Shingles Made from Glass Felt and Surfaced with Mineral Granules.
- P.** UL 2218 - Impact Resistance of Prepared Roof Covering Materials.
- Q.** UL 790 – Standard Test Methods for Fire Test of Roof Coverings.
- R.** ASTM D3018 – Standard Specification for Class A Asphalt Shingles Surfaced with Mineral Granules
- S.** ASTM E 903 – Standard Test Method for Absorptance Reflectance, and Transmission of Materials Using Integrating Spheres.

1.3 SUBMITTALS

Submit copies of Owens Corning product data sheets, detail drawings and samples for each type of roofing product.

1.4 QUALITY ASSURANCE

- A.** Manufacturer Qualifications: Provide all primary roofing products, including shingles, underlayment, leak barrier, and ventilation, by a single manufacturer.
- B.** Installer Qualifications:
 - 1. Installer must follow Owens Corning published installation instructions
 - 2. Installer must be an Preferred Contractor as defined and certified by Owens Corning
 - 3. Installer must be a Platinum Preferred Contractor as defined and certified by Owens Corning

1.5 REGULATORY REQUIREMENTS

- A.** Provide a roofing system achieving an Underwriters Laboratories (UL) Class A fire classification.
- B.** Provide a roofing system achieving an ENERGY STAR® rating. Install all roofing products in accordance with all federal, state and local building codes.
- C.** Provide a roofing system achieving a COOL ROOF RATING COUNCIL (CRRC) Install all roofing products in accordance with all federal, state and local building codes.
- D.** All work shall be performed in a manner consistent with current OSHA guidelines.

1.6 DELIVERY, STORAGE, AND HANDLING

- A. Store all products in manufacturer's unopened, labeled packaging until they are ready for installation.
- B. Store products in a covered, ventilated area, at temperature not more than 110 degrees F (43 degrees C); do not store near steam pipes, radiators, or in direct sunlight.
- C. Store bundles on a flat surface. Maximum stacking height shall not exceed Owens Corning's recommendations. Store all rolls on end.
- D. Store and dispose of solvent-based materials in accordance with all federal, state and local regulations.

1.7 WEATHER CONDITIONS

Proceed with work only when existing and forecasted weather conditions will permit work to be performed in accordance with Owens Corning's recommendations.

1.8 WARRANTY

- 1. Provide to the owner prorated standard warranty coverage for materials in the event of a material defect for limited lifetime, including 10 years Tru Protection[®] coverage.
- B. 1.** Provide to the owner extended warranty coverage labor and materials in the event of a material defect for Limited Lifetime.
 - 1. System Advantage[™] Roofing Limited Warranty includes up to 50 years of Tru Protection[®] (non-prorated) coverage on installed Owens Corning Roofing System products and labor. The length of the Tru Protection[®] protection is based upon the shingle product installed on the field of the roof. Coverage can only be provided by an Owens Corning designated Preferred or Platinum Preferred Contractor.
 - 2. System Advantage[™] Preferred Roofing Limited Warranty includes up to 50 years of Tru Protection[®] (non-prorated) coverage on installed Owens Corning Roofing System products and labor. The length of the Tru Protection[®] protection is based upon the shingle product installed on the field of the roof. This warranty will also cover workmanship defects by the installer. Coverage can only be provided by an Owens Corning designated Preferred or Platinum Preferred Contractor.
 - 3. System Advantage[™] Platinum Roofing Limited Warranty includes up to 50 years of Tru Protection[®] (non-prorated) coverage on installed Owens Corning Roofing System products and labor. The length of the Tru Protection[®] protection is based upon the shingle product installed on the field of the roof. This warranty will also cover workmanship defects by the installer. Coverage can only be provided by an Owens Corning designated Platinum Preferred Contractor.

PART 2: PRODUCTS

2.1 MANUFACTURERS

- A. Acceptable Manufacturer:

Owens Corning Roofing & Asphalt LLC

**One Owens Corning Pkwy
Toledo, OH 43659**

B. Requests for substitutions will be considered in accordance with provisions of Section 01600

2.2 QUALITY ASSURANCE

- A. Shingles shall carry Underwriters Laboratories Labels:
 - 1. UL 790, Class A Fire Resistance
 - 2. ASTM D 3161 Wind Resistance
 - 3. ASTM D 3462 Asphalt Shingle Specification
 - 4. CSA A123.5 Canadian Fiberglass Shingle Standard
 - 5. ASTM D 7158 (UL2390/ASTMD6381) Wind Resistance
 - 6. UL 2218 Impact Resistance
- B. Install shingles to meet requirements of published Owens Corning instructions.

2.3 ASPHALT SHINGLES

Owens Corning fiber glass-based asphalt shingles complying with ASTM specifications E 108 Class A or UL 790 Class A, D 3462, D 3161 Class “F”, D3161 Class “A” D 7158 (UL2390/D6381) Class H, D 3018 Type 1, D 3018, CSA A123.5, UL 2218, Cool Roof Rating Council (CRRC), Energy Star, Florida Building Code (FBC), Miami-Dade County Approved and International Code Council (ICC) Evaluation Report.

Duration® Premium Shingle Product Specification

Nominal Size:	13 1/4" x 39 3/8"
Exposure:	5 5/8"
Shingles per Square:	64
Bundles per Square:	4 bundles of 16 shingles
Coverage per Square:	98.4 sq. ft.

Color: As selected from manufacturer's full range.

Duration® Premium Cool Shingle Product Specification

Nominal Size:	13 1/4" x 39 3/8"
Exposure:	5 5/8"
Shingles per Square:	64
Bundles per Square:	4 bundles of 16 shingles
Coverage per Square:	98.4 sq. ft.

Color: As selected from manufacturer's full range.

Duration® Shingle Product Specification

Nominal Size:	13 1/4" x 39 3/8"
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Exposure:	5 ⁵ / ₈ "
Shingles per Square:	64
Bundles per Square:	3 bundles of 20 or 22 shingles
Coverage per Square:	98.4 sq. ft.

Color: As selected from manufacturer's full range.

TruDefinition® Duration® Shingle Product Specification

Nominal Size:	13 ¹ / ₄ " x 39 ³ / ₈ "
Exposure:	5 ⁵ / ₈ "
Shingles per Square:	64
Bundles per Square:	3 bundles of 20 or 22 shingles
Coverage per Square:	98.4 sq. ft.

Color: As selected from manufacturer's full range.

TruDefinition® Duration STORM® Shingle Product Specification

Nominal Size:	13 ¹ / ₄ " x 39 ³ / ₈ "
Exposure:	5 ⁵ / ₈ "
Shingles per Square:	64
Bundles per Square:	3 bundles of 20 or 22 shingles
Coverage per Square:	98.4 sq. ft.

Color: As selected from manufacturer's full range.

TruDefinition® Duration MAX™ Shingle Product Specification

Nominal Size:	13 ¹ / ₄ " x 39 ³ / ₈ "
Exposure:	5 ⁵ / ₈ "
Shingles per Square:	64
Bundles per Square:	4 bundles of 16 shingles
Coverage per Square:	98.4 sq. ft.

Color: As selected from manufacturer's full range.

Oakridge® Shingle Product Specification

Nominal Size:	13 ¹ / ₄ " x 39 ³ / ₈ "
Exposure:	5 ⁵ / ₈ "
Shingles per Square:	64
Bundles per Square:	3 bundles of 20 or 22 shingles
Coverage per Square:	98.4 sq. ft.

Color: As selected from manufacturer's full range.

Berkshire® Shingle Product Specification

Nominal Size:	18 ³ / ₄ " x 38"
Exposure:	8 ³ / ₈ "
Shingles per Square:	45
Bundles per Square:	5 bundles of 9 shingles
Coverage per Square:	99.5 sq. ft.

Color: As selected from manufacturer's full range.

WeatherGuard® HP Shingle Product Specification

Nominal Size:	13 ¹ / ₄ " x 39 ³ / ₈ "
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Exposure:	5 ⁵ / ₈ "
Shingles per Square:	64
Bundles per Square:	4 bundles of 16 shingles
Coverage per Square:	98.4 sq. ft.

Color: As selected from manufacturer's full range.

Woodmoor® Shingle Product Specification

Nominal Size:	14 1/4" x 40"
Exposure:	4"
Shingles per Square:	90
Bundles per Square:	6 bundles of 15 shingles
Coverage per Square:	100.0 sq. ft.

Color: As selected from manufacturer's full range.

Woodcrest® Shingle Product Specification

Nominal Size:	14 1/4" x 40"
Exposure:	4"
Shingles per Square:	90
Bundles per Square:	6 bundles of 15 shingles
Coverage per Square:	100.0 sq. ft.

Color: As selected from manufacturer's full range.

Supreme® (Imperial) Shingle Product Specification

Nominal Size:	12" x 36"
Exposure:	5"
Shingles per Square:	80
Bundles per Square:	3 bundles of 26, 27, 27 shingles
Coverage per Square:	100.0 sq. ft.

Color: As selected from manufacturer's full range.

Supreme® (Metric) Shingle Product Specification

Nominal Size:	13 1/4" x 39 3/8"
Exposure:	5 ⁵ / ₈ "
Shingles per Square:	65
Bundles per Square:	3 bundles of 21, 22, 22 shingles
Coverage per Square:	100.0 sq. ft.

Color: As selected from manufacturer's full range.

Mineral Surface Roll Product Specification

Nominal Size:	36" x 36'3"
Exposure:	34"
Rolls per Square:	1
Coverage per Square:	100.0 sq. ft.

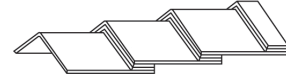
2.4 HIP AND RIDGE SHINGLES

THIS AREA WILL VARY BASED UPON SERVICE AREA OFFERING.

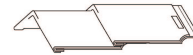
- A. Owens Corning Hip and Ridge shingles color formulated to complement field of roof.

RIZERidge® Hip & Ridge Shingles with Sealant
Foldable design provides multi-layered dimension along hips & ridges.
Nominal size 12" x 36"; Piece size 12" x 12" with 6" exposure

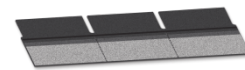
High Ridge Hip & Ridge Shingles with Sealant
Layered construction adds performance and dimension to the hip and ridge.
Nominal size 12" x 12" with 8" exposure



DecoRidge® Hip & Ridge Shingles with Sealant
Durable, heavyweight laminate construction with SBS-modified asphalt provides maximum dimension and style to the hip and ridge. **Nominal size 11½" x 8" and 11 ½" x 10" with 8" exposure**



ProEdge™ Hip & Ridge Shingles
Perforated 3-tab shingles designed for fast and easy installation.
Nominal size 12" x 36"; Piece size 12" x 12" with 6" exposure



Perforated Hip & Ridge Shingles with Sealant (Standard)
Perforated 3-tab shingles shingles designed for fast and easy installation.
Nominal size 12" x 36"; Piece size 12" x 12" with 5" exposure



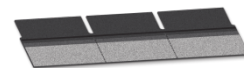
Perforated Hip & Ridge Shingles with Sealant (Metric)
Perforated 4-tab shingles designed for fast and easy installation.
Nominal size 13 ¼" x 39 3/8"; Piece size 13 ¼" x 9 27/32" with 5 5/8" exposure



Berkshire® Hip & Ridge Shingles
Layered construction adds performance and dimension to the hip and ridge.
Nominal size 12" x 12" with 8" exposure



ProEdge STORM™ Hip & Ridge Impact Resistant Shingles
Perforated design for easy installation offering Class IV protection.
Nominal size 12" x 36"; Piece size 12" x 12" with 6" exposure



WeatherGuard® Hip & Ridge Impact Resistant Shingles
Perforated design for easy installation offering Class IV protection.
Nominal size 12" x 36"; Piece size 12" x 12" with 5" exposure



2.5 STARTER SHINGLES

- A. **Starter Shingle Roll**, by Owens Corning- Self-adhering, starter course. Each strip measures 7.2" tall by 33.4' wide.
- B. **Starter Strip Shingle**, by Owens Corning-Nail applied starter course. When separated, each starter shingle is 6 5/8" X 39 3/8"

- C. **Starter Strip PLUS**, by Owens Corning-Nail applied starter course. When separated each starter shingle is 7 3/4"X 39 3/8"

2.6 WEATHERLOCK SELF-SEALING ICE & WATER BARRIER

- A. **WeatherLock® Mat** by Owens Corning - ASTM D1970 approved, UL Listed, Mat-faced skid resistant surface, self-adhering, self sealing, bituminous ice and water barrier. Each roll is 36" wide.
- B. **WeatherLock® G**, by Owens Corning- ASTM D1970 approved, UL Listed, granule skid resistant surface, self-adhering, self sealing, bituminous ice and water barrier. Each roll is 36" wide
- C. **WeatherLock® Cold Climate**, by Owens Corning - ASTM D1970 approved, UL Listed, granule skid resistant surface, self-adhering, self sealing, bituminous ice and water barrier. Designed for low temperature adhesion. Each roll is 36" wide
- D. **WeatherLock® Flex**, by Owens Corning - ASTM D1970 approved, UL Listed, Cross laminated poly surface with skid resistant traction surface, self-adhering, self sealing, bituminous ice and water barrier. Each roll is 36" wide
- E. **WeatherLock® Specialty Tile and Metal**, by Owens Corning - ASTM D1970 approved, UL Listed, Polyester surface with skid resistant traction surface, self-adhering, self sealing, bituminous ice and water barrier. Thermally stable in high temperatures up to 260°. Designed for all Tile, Metal, and shingle applications including mechanically fastened tile, foam adhesive set tile and all metals roof systems. Each roll is 36" wide.

2.7 SHINGLE UNDERLAYMENT

- A. **Fiberglas™ Reinforced Felt Underlayment**, by Owens Corning—wrinkle resistant, Water resistant, breather type cellulose/glass fiber composite roofing underlayment. Each roll is 36" wide by 144', covering 4 roof squares.
- B. **Deck Defense™ High Performance Roof Underlayment**, by Owens Corning – weather-shedding synthetic tri-layer polyolefin barrier. Material offered in 48" wide by 250' rolls, each covering 10 roof squares.

2.8 ATTIC VENTILATION

- A. Flexible ridge ventilator designed to allow the passage of air from attics, while prohibiting snow infiltration. Provides 12.5" NFVA per lineal foot. Owens Corning **VentSure® Rigid Roll**.
- B. Rigid plastic ridge ventilator designed to allow the passage of hot air from attics For use in conjunction with eave/ soffit intake ventilation products. Provides 20 sq in NFVA per lineal foot. Each package contains 40 lineal feet of vent. Owens Corning **VentSure® 4-foot Strip Heat and Moisture Ridge Vents 12 inch width** .

- C. Rigid plastic ridge ventilator designed to allow the passage of hot air from attics For use in conjunction with eave/ soffit intake ventilation products. Provides 18 sq in NFVA per lineal foot. Each package contains 40 lineal feet of vent. Owens Corning **VentSure® 4-foot Strip Heat and Moisture Ridge Vents 8 & 10 inch width** .
- D. Rooftop mounted, slant-back designed, metal exhaust ventilator designed to evacuate hot air from attics. Each vent provides 51 sq in NFVA. Owens Corning **VentSure® Metal Slant Back Roof Vent**.
- E. Rooftop mounted, slant-back designed, high-impact resin exhaust ventilator designed to evacuate hot air from attics. Each vent provides 55 sq in NFVA. Owens Corning **VentSure® Plastic Slant Back Roof Vent**.
- F. Rooftop mounted, square-top designed, metal exhaust ventilator designed to evacuate hot air from attics. Each vent provides 51 sq in NFVA. . Owens Corning **VentSure® Square Top Roof Vent** .
- G. Rooftop mounted, low-profile, slant back metal exhaust ventilator designed to evacuate hot air from attics. Each vent provides 72 sq in NFVA. Owens Corning **VentSure® Low Profile Slant Back Roof Vent with Exterior Louver**.
- H. Rooftop mounted, dome,, metal exhaust ventilator designed to evacuate hot air from attics, while prohibiting snow infiltration. Each vent provides 144 sq in NFVA. Owens Corning **VentSure® Metal Dome with Screen**.
- I. Rooftop mounted, Turbine designed, metal exhaust ventilator designed to evacuate hot air from attics. Owens Corning **VentSure® Internally Braced Premium Turbine Vent**.
- J. Rooftop mounted, Turbine designed, metal exhaust ventilator designed to evacuate hot air from attics. Owens Corning **VentSure® Externally Braced Premium Turbine Vent** .

ATTIC SIZE IN SQ. FT. Tamaño de desvan en pies cuadrado	TURBINES REQUIRED Turbinas requeridas		REQUIRED SQ. IN. INTAKE VENTS Abertura recomendada en pulgadas cuadrdo
	12"	14"	
1000	2	2	240
1500	3	2	360
2000	4	3	480
2500	5	4	600
3000	6	5	720
4000	8	6	960

- K. Rooftop mounted, 1400 CFM, metal exhaust ventilator designed to evacuate hot air from attics. Each vent provides ideal ventilation for 2000 square foot attic. . Owens Corning **VentSure® 1400 CFM Powered Roof Vent**.
- L. Rooftop mounted, 1080 CFM, metal exhaust ventilator designed to evacuate hot air from attics. Each vent provides ideal ventilation for 1600 square foot attic. . Owens Corning **VentSure® 1080 CFM Powered Roof Vent**.
- M. Rooftop mounted, 1000 CFM solar powered, metal exhaust ventilator designed to evacuate hot air from attics. Each vent provides ideal ventilation for 1550 square foot attic. . Owens Corning **VentSure® 1000 CFM Solar Powered Roof Vent**.

- N. Rectangular Aluminum intake vents designed to introduce fresh, dry air into the attic. Available in three dimensions which are designed to work collectively with exhaust vents to provide ideal ventilation to roof structures. VentSure® Aluminum Undereave Intake Vents by Owens Corning.

Dimension	Net Free Vent Area
4" X 16"	16.34 Square Inches
6" X 16"	27.23 Square Inches
8" X 16"	38.12 Square Inches

- O. 8-foot continuous Aluminum soffit vent. Available in 2-inch widths, which are designed to work collectively with exhaust vents to provide ideal ventilation to roof structures. VentSure® 8-foot Continuous Soffit Vent by Owens Corning.

- P. Round miniature aluminum soffit vents designed to introduce fresh, dry air into the attic. Available in three sizes which are designed to work collectively with exhaust vents to provide ideal ventilation to roof structures. VentSure® Round Mini Soffit Vents by Owens Corning

Size	Net Free Vent Area
2"	.637 Square Inches
3"	1.36 Square Inches
4"	2.43 Square Inches

2.9 FASTENERS

- A. **Fastener requirement:** Use galvanized steel, stainless steel, or aluminum nails minimum 12 gauge shank with 3/8" diameter head. Owens Corning™ recommends that fasteners comply with ASTM F 1667. Check local building codes.
- B. All fasteners must be driven flush with the shingle surface and penetrate at least 3/4" into the wood deck. Where the deck is less than 3/4" thick, the fastener should be long enough to penetrate fully and extend at least 1/8" through APA rated roof sheathing.
- C. Owens Corning recommends the use of nails as the preferred method of attaching shingles to wood decking or other nailable substrates. If staples are used they must be, corrosion resistant, zinc-coated, 16-gauge minimum with minimum 15/16" crown width. Staples must be long enough to penetrate at least 3/4" into solid decking, or extend a minimum of 1/8" through the APA-rated sheathing.

2.10 METAL FLASHING

- A. .24 gauge hot-dip galvanized steel sheet, complying with ASTM A 653/A 653M, G90/Z275.
- B. 16-oz/sq ft (0.56 mm) copper sheet, complying with ASTM B 370.
- C. 0.032-inch (0.8 mm) aluminum sheet, complying with ASTM B 209.

PART 3: EXECUTION

3.1 EXAMINATION

- A. Prior to starting work, examine all roof decks on which work is to be applied for defects in materials and workmanship which may be detrimental to the proper installation or long-term performance of the shingles.
- B. Do not begin installation until the roof deck has been properly prepared.

3.2 PREPARATION

- A. Remove all existing roofing down to the roof deck. Recommended roof decks are 6" maximum width, 25/32" minimum thickness wood sheathing, 3/8" minimum thickness Exposure 1 grade plywood sheathing or 7/16" minimum thickness non-veneer structural panels (oriented strand board panels or waferboard panels). Deck spacing cannot exceed 1/4" between roof boards or between plywood or OSB sheathing. Use plywood decking and non-veneer structural panels recommended by the American Plywood Association, and local building codes.
- B. Verify that the deck is dry, sound, clean and smooth. It shall be free of any depressions, waves, and projections. Cover with sheet metal, all holes over 1 inch (25 mm) in diameter, cracks over 1/2 inch (12 mm) in width, loose knots and excessively resinous areas.
- C. Replace damaged deck with new materials.
- D. Clean deck surfaces thoroughly prior to installation of eaves protection membrane and underlayment.
- E. Install crickets on the upslope side of all chimneys in the north, any chimney wider than 24", and on all roofs steeper than 6/12.
- F. Verify that the deck is structurally sound and free of deteriorated decking. All deteriorated decking shall be removed and replaced with new materials.
- G. Verify that the existing shingles are dry, sound, clean and smooth. All curled, buckled or loose tabs shall be nailed down or removed.

3.3 INSTALLATION

- A. Installation shall be in accordance with the instructions published by Owens Corning and your local building codes.
- B. Product styles and colors change over time, for current selection of products and colors in your area please contact your Owens Corning representative.
- C. Owens Corning strives to accurately reproduce the images of shingles in this literature. However, due to manufacturing variances, the limitation of graphic reproduction and the variation in natural exterior lighting, actual shingle colors, and granule blends may vary from the images you see reproduced in this literature. For this reason, it is important to see an actual roofing sample or actual products installed on a home before making final color selection.

- D. *See actual warranty for complete details.

3.4 UNDERLAYMENT APPLICATION

General

- A. Install using methods recommended by OWENS CORNING in accordance with local building codes. When local codes and application instructions are in conflict, the more stringent requirements shall take precedence.

Eaves In areas where there has been a history of ice forming along the eaves causing a backup, an ice barrier must extend 24 inches inside the exterior wall line of the building

- A. In the north, and on all roofs between 2/12 and 4/12 (low slopes) install WeatherLock® eaves protection membrane up the slope from eaves edge a full 36 inches or to at least 24 inches (610 mm) beyond the interior “warm wall”. Lap ends 6 inches (150 mm).

Valleys

- A. Install **WeatherLock®** at least 36 inches wide and centered on the valley. Lap ends 6 inches (150 mm) and seal.
- B. Where valleys are indicated to be "open valleys", install metal flashing over eaves protection membrane before roof deck underlayment is installed; DO NOT nail through the flashing. Secure the flashing by nailing at 18 inches (457 mm) on center just beyond edge of flashing so that nail heads hold down the edge.

Roof Deck

- A. On roofs sloped at more than 4 in 12, lap horizontal edges at least 2 inches (5 mm) and at least 2 inches (5 mm) over eaves protection membrane. . Lap ends at least 4 inches (10 mm). End laps in succeeding course should be located at least 6' from end laps in the preceding course.
- B. On roofs sloped between 2 in 12 to under 4 in 12, see application instruction printed on each shingle wrapper.
- C. Lap underlayment over valley protection at least 6 inches (150 mm).

Penetrations

- A. Vent pipes: Install a 24 inch (610 mm) square piece of eaves protection membrane lapping over roof deck underlayment; seal tightly to pipe.
- B. Vertical walls: Install eaves protection membrane extending at least 3-4 inches (76-102 mm) up the wall and 12 inches (305 mm) on to the roof surface. Lap the membrane over the roof deck underlayment.
- C. Chimneys: Install eaves protection membrane around entire chimney extending at least 6 inches (150 mm) up the wall and 12 inches (305 mm) on to the roof surface. Lap the membrane over the roof deck underlayment.

3.5 SUBMITTALS

- A. Manufacturer color sample showing full range of colors available for specified products.
- B. Product literature and recommended installation procedures.
- C. Owens Corning Limited Warranty *

3.6 DELIVERY, STORAGE AND HANLING

- A. Deliver materials to site in manufacturer’s unopened bundles with labels intact and legible.

- B. Handle and store materials on site to prevent damage. Store in a covered ventilated area at a maximum temperature of 110°F.
- C. Do not stack product more than 2 pallets high. If stacking 2 pallets high, use separator boards to protect the shingles below.
- D. Roof Top Loading: Lay shingle bundles flat. Do not bend over the ridge.

3.7 PROJECT CONDITIONS

- A. Proceed with installing shingles only when weather is appropriate for a quality installation.
- B. Do not install underlayment or shingles on wet surfaces.

3.8 WARRANTY

- A. ADD MANUFACTURE STANDARD WARRANTY TO YOUR SPECIFICATION**

3.9 LIMITATION

Ventilation practices should be followed as outlined in section 2.8. Some exceptions may apply. Contact the manufacturer for details.

End of Section