CERTIFICATE OF APPROPRIATENESS

ADMINISTRATIVE APPROVAL

Michele Gelfman,
President

The Historic Preservation Commission of South Bend and St. Joseph County has approved the following work:

Removing four layers of shingles (top layer 3-tab). Replace with architectural shingle. New plywood and backing, ice-shield and vapor barrier. Remove/re-hang existing gutter system.

GEAN ROOFING, Contractor
for the following location:

310 LAMONTE TER
South Bend, IN, 46616
Chapin Park
Application No. 2019-0610

in the County of St. Joseph; State of Indiana; which is:

☒ **Located in a Local Historic District** Ord No. 9574-05

☐ **A Local Historic Landmark** Chapin Park

and found this application to be appropriate according to the Standards pertaining to Local Historic Landmarks and/or Local Historic Districts. Regulations pertaining to the Historic Preservation Commission are found in Chapter 21 (Zoning), South Bend Municipal Code and Chapter 26 of the St. Joseph County Code.

The issuance of this certificate does NOT in any manner, release the recipient from the responsibility of complying with the requirements of the zoning ordinances, building codes, safety codes, ADA or other requirements of the City of South Bend, the County of St. Joseph, the State of Indiana, or the United States Federal Government.

This certificate is good for one year from the date of issuance and is effective from the date entered herein. Plans are on file and open for public inspection at the office of the Historic Preservation Commission of South Bend and St. Joseph County, 227 West Jefferson Blvd., Suite 1400 S, South Bend, Indiana, during normal business hours.

HISTORIC PRESERVATION COMMISSION OF SOUTH BEND AND ST. JOSEPH COUNTY

Phone: (574) 235-9371
E-mail: SBSJCHPC@southbendin.gov

THIS CERTIFICATE IS NOT TRANSFERABLE

NAME OF APPLICANT: **Barbara Halton**

DATE CERTIFICATE TAKES FORCE: **6/10/2019**

DATE CERTIFICATE EXPIRES: **6/10/2020**

CERTIFICATE ISSUED BY:
Adam Toering
Historic Preservation Specialist

ELICIA FEASEL

Historic Preservation Administrator

POST IN A CONSPICUOUS PLACE ON THE STREET SIDE OF THE PROJECT UNTIL COMPLETION OF ALL WORK.

JUN 10 2019 MA

Rec 757970

HISTORIC PRESERVATION COMMISSION
OF SOUTH BEND AND ST. JOSEPH COUNTY

County—City Building, South Bend, IN 46601
http://www.southbendin.gov/government/department/community-investment
Phone: 574/235.9371 Fax: 574/235.9021
Email: **hpcsbsjc@southbendin.gov**

A Certified Local Government of the National Park Service

Elicia Feasel, Historic Preservation Administrator

APPLICATION FOR A — CERTIFICATE OF APPROPRIATENESS

*OFFICE USE ONLY>>>>>>***DO NOT COMPLETE ANY ENTRIES CONTAINED IN THIS BOX**<<<<<<*OFFICE USE ONLY***

Date Received: 6/10/2019 **Application Number:** 2019 – 0610

Past Reviews: ☐ **YES** *(Date of Last Review)* _____ ☐ **NO**

Staff Approval authorized by: Adam Toering **Title:** H. P. Specialist

Historic Preservation Commission Review Date: _____

☐ **Local Landmark** ☑ **Local Historic District** *(Name)* Chapin Park

☐ **National Landmark** ☐ **National Register District** *(Name)* Chapin Park

Certificate Of Appropriateness:
☐ **Denied** ☐ **Tabled** ☐ **Sent To Committee** ☑ **Approved and issued:** 6/10/2019

Address of Property for proposed work: 310 Lamonte Terrace South Bend, IN 46616
(Street Number—Street Name—City—Zip)

Name of Property Owner(s): Barbara Halton **Phone #:** 574-303-4038

Address of Property Owner(s): 310 Lamonte Terrace South Bend, IN 46616
(Street Number—Street Name—City—Zip)

Name of Contractor(s): Jason Gean **Phone #:** 574-656-3106

Contractor Company Name: Gean Roofing

Address of Contractor Company: 405 W. South St. PO Box 789 North Liberty, IN 46554
(Street Number—Street Name—City—Zip)

Current Use of Building: Single Family
(Single Family—Multi-Family—Commercial—Government—Industrial—Vacant—etc.)

Type of Building Construction: _____
(Wood Frame—Brick—Stone—Steel—Concrete—Other)

Proposed Work: *(more than one box may be checked)* ☐ **Landscape** ☐ **New** ☒ **Replacement** *(not in-kind)* ☐ **Demolition**

Description of Proposed Work: Roof Replacement

Owner e-mail: office.geanroofing@gmail.com **and/or Contractor e-mail:** _____

X _____ **and/or** X _____
Signature of Owner **Signature of Contractor**

By signing this application I agree to abide by all local regulations related to project and to obtain a Building Department Permit, if applicable.

APPLICATION REQUIREMENTS ARE LISTED ON REVERSE SIDE

APPLICATION FEE

The following schedule of fees shall apply to any ***Application for a Certificate Of Appropriateness***:

Routine Maintenance Exclusion (Staff Approval)	**$ 20.00**
or	
Commission Review	**$ 20.00**

Payment must accompany the application at the time of submission. For electronically submitted application, payment must reach the HPC office within 48-hours following transmission.

REQUIRED DOCUMENTATION AND SITE PLANS

The Historic Preservation Commission of South Bend and St. Joseph County cannot render judgment nor process an Application without specific documentation. Comprehensive documentation protects both the owner of the property submitting the Application as well as providing a complete understanding of the project for the commissioners and staff when rendering a decision. Problems often occur during a project review or during the execution of the project when one or both parties are unclear as to the specifics. ***Applications will NOT be processed without all required fees and documentation.***

When an Application has been scheduled for any meeting where a review and decision are to be rendered, the owner and any architect or contractor (s) retained for the project *must* attend such meetings. ***Failure by the owner, architect, or contractor to attend such meetings may result in denial of the Application due to insufficient presentation.***

Documentation shall include: detailed written description of the project including materials to be used, scale, dimensions, construction methods, finished, manufacturers' brochures and specifications and photographs of the area (s) which the project will affect.

Photographs may be submitted in digital format, or in photographic print. When a project involves blueprints and/or site plans, one (1) set shall be submitted with the Application. Any documentation submitted to this office cannot be returned to the applicant.

INSPECTION AUTHORITY

All projects will be inspected during and following execution, for compliance with the decision (s) rendered by the Historic Preservation Commission of South Bend and St. Joseph County.

Owner acknowledges that while the Historic Preservation Commission only considers Certificates of Appropriateness for exterior features, under certain circumstances it may be necessary for the Commission Staff to have access to the interior of the building in order to accurately assess the condition of the exterior feature and that the lack of access to the interior may prevent the Commission Staff from making a favorable recommendation.

Any work performed on a historic landmark or in an historic district which does not conform to the Certificate of Appropriateness certificate, shall be immediately halted by the Historic Preservation Commission and the Building Department of South Bend and St. Joseph County.

INTERGOVERNMENTAL DISCLOSURE

Certificates Of Appropriateness will be filed with the Building Department of South Bend and St. Joseph County when the applicant also is required to obtain a building permit or other such permit issued by that department. ***(The applicant may pick up their Certificate at that location).*** When no building or other permits are required from the Building Department, the Certificate will be mailed directly to the applicant.

TO ENSURE YOUR APPLICATION CAN BE PROCESSED IN A TIMELY MATTER WITHOUT DELAY, PLEASE INCLUDE THE FOLLOWING DOCUMENTATION WHEN APPROPRIATE:

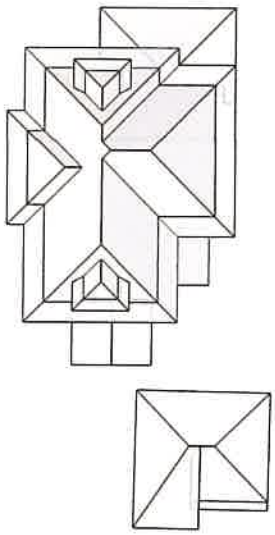
- ☐ **Certificate of Appropriateness application**
- ☐ **Written description** of the project (materials to be used, scale, dimensions, construction methods, alterations, etc.)
- ☐ **Materials to be used** (Supplemented with manufactures' brochures and specifications)
- ☐ **Site Plan** showing existing buildings & structures and proposed project (for new construction, additions, paths, terraces, patios, fences)
- ☐ **Photographs**
- ☐ **Blueprints/Drawings**
- ☐ **Application fee** - $20.00

eagleview™

Premium Report

3/25/2019

310 Lamonte Ter, South Bend, IN 46616-1315 Report: 27492993



In this 3D model, facets appear as semi-transparent to reveal overhangs.

PREPARED FOR

Contact:	Jason Gean
Company:	Gean Roofing
Address:	405 W. South St. North Liberty, IN 46554
Phone:	574-656-3106

TABLE OF CONTENTS

Images 1
Length Diagram 4
Pitch Diagram 5
Area Diagram 6
Notes Diagram 7
Report Summary 8

MEASUREMENTS

Total Roof Area =3,359 sq ft
Total Roof Facets =47
Predominant Pitch =12/12
Number of Stories >1
Total Ridges/Hips =360 ft
Total Valleys =109 ft
Total Rakes =39 ft
Total Eaves =383 ft

Measurements provided by www.eagleview.com

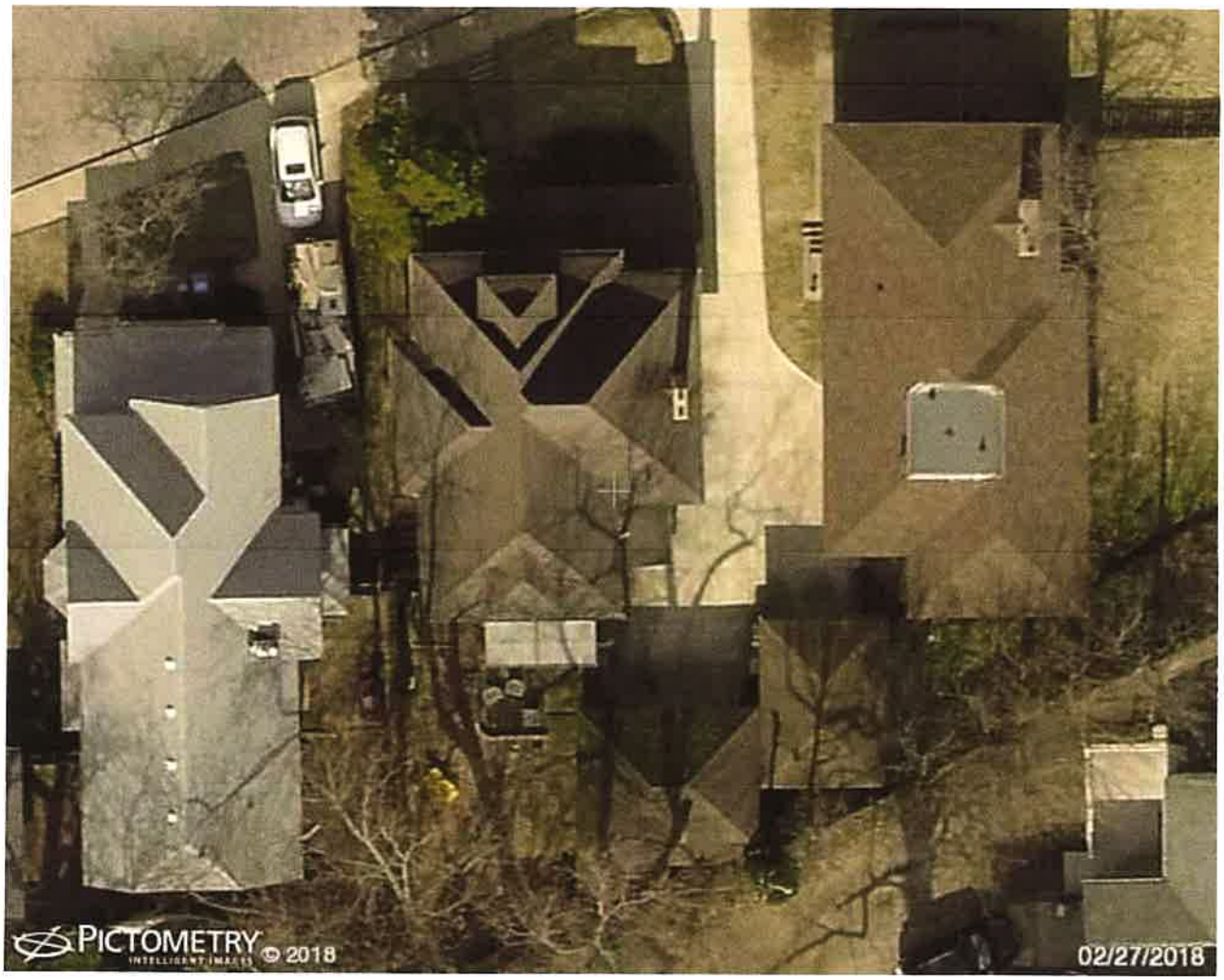
Certified Accurate

www.eagleview.com/Guarantee.aspx

IMAGES

The following aerial images show different angles of this structure for your reference.

Top View



IMAGES

North Side

South Side

IMAGES

East Side

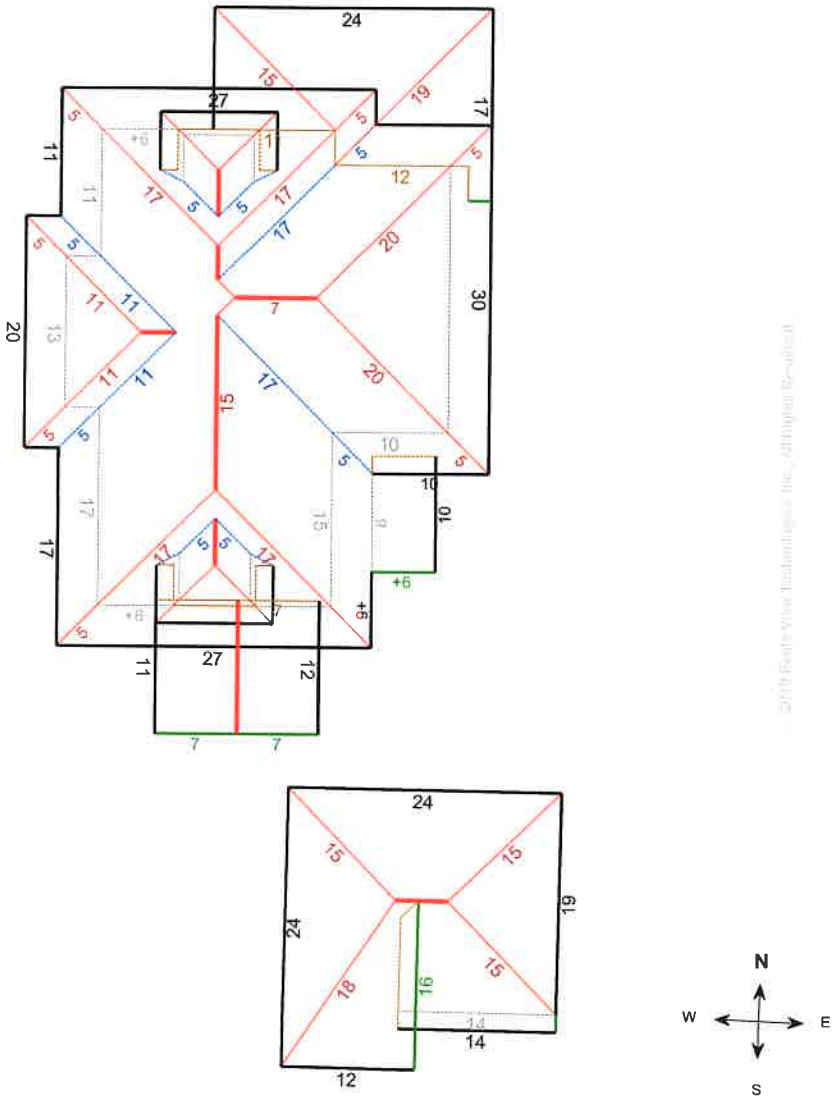
West Side

LENGTH DIAGRAM

Total Line Lengths:
Ridges = 52 ft
Hips = 308 ft

Valleys = 109 ft
Rakes = 39 ft
Eaves = 383 ft

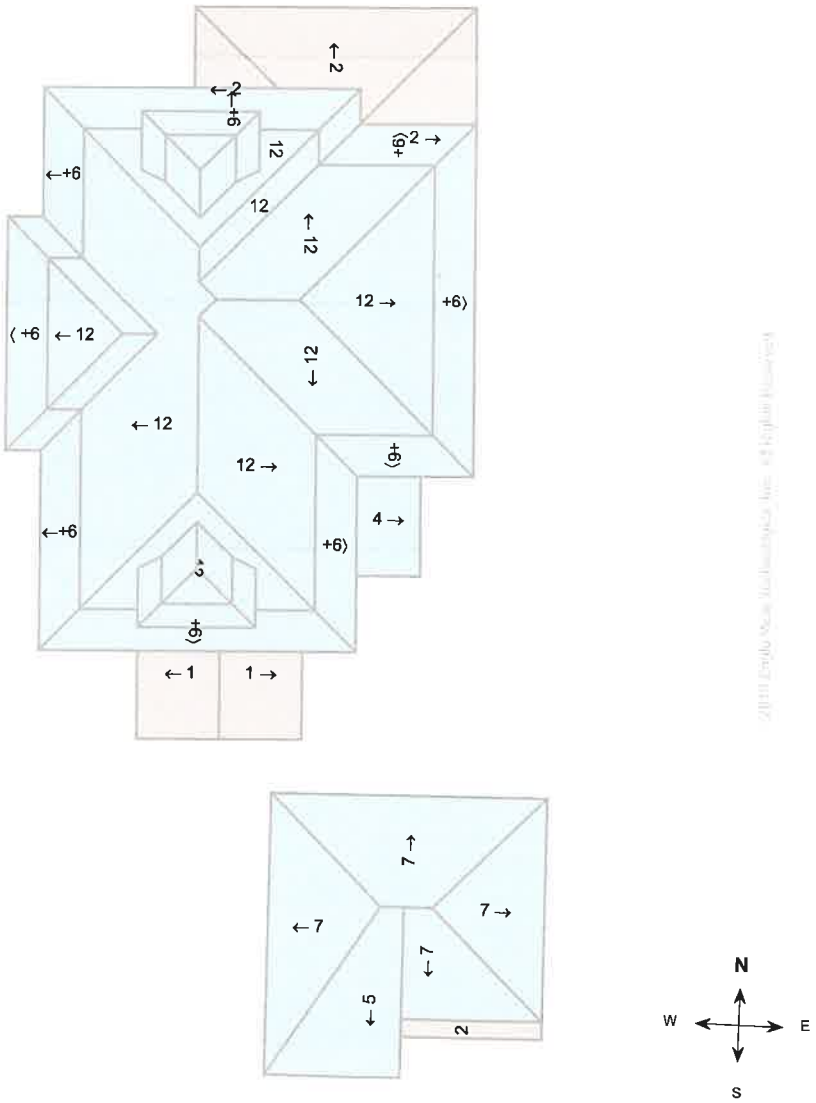
Flashing = 25 ft
Step flashing = 78 ft
Parapets = 0 ft



Note: This diagram contains segment lengths (rounded to the nearest whole number) over 5.0 Feet. In some cases, segment labels have been removed for readability. Plus signs preface some numbers to avoid confusion when rotated (e.g. +6 and +9).

PITCH DIAGRAM

Pitch values are shown in inches per foot, and arrows indicate slope direction. The predominant pitch on this roof is 12/12

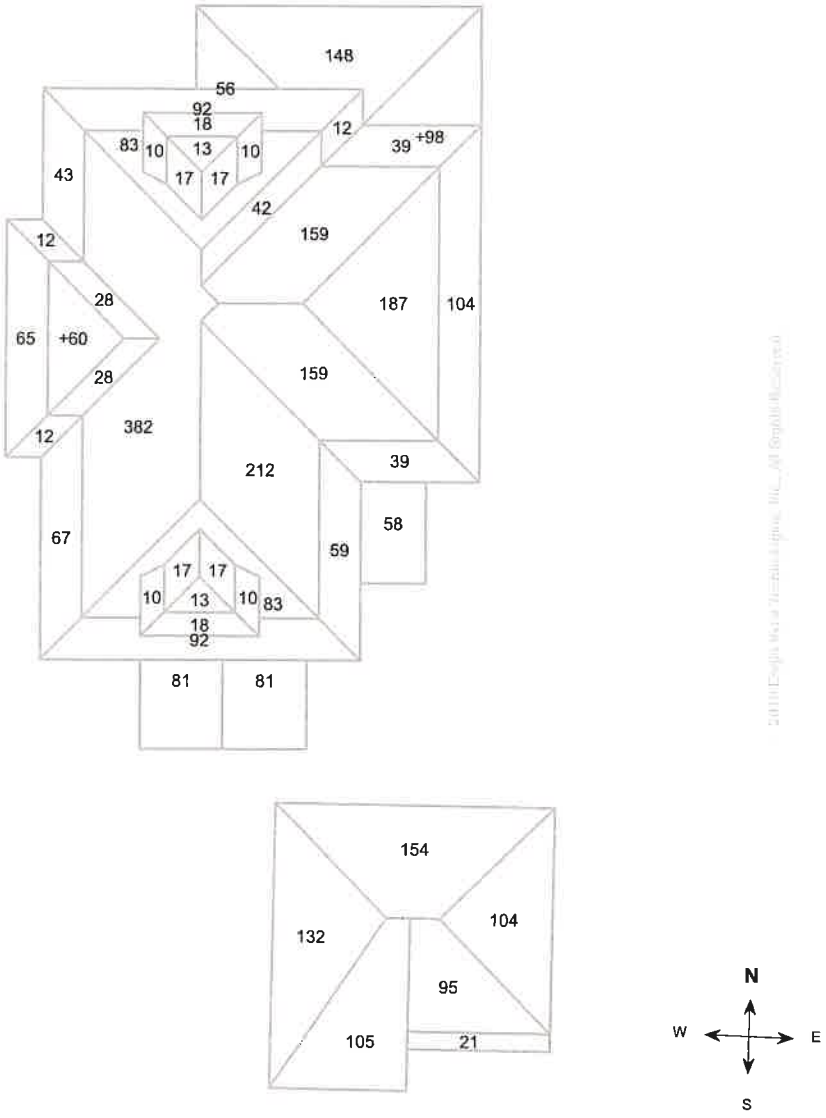


Note: This diagram contains labeled pitches for facet areas larger than 20.0 square feet. In some cases, pitch labels have been removed for readability. Blue shading indicates a pitch of 3/12 and greater. Gray shading indicates flat, 1/12 or 2/12 pitches.

310 Lamonte Ter, South Bend, IN 46616-1315 Report: 27492993

AREA DIAGRAM

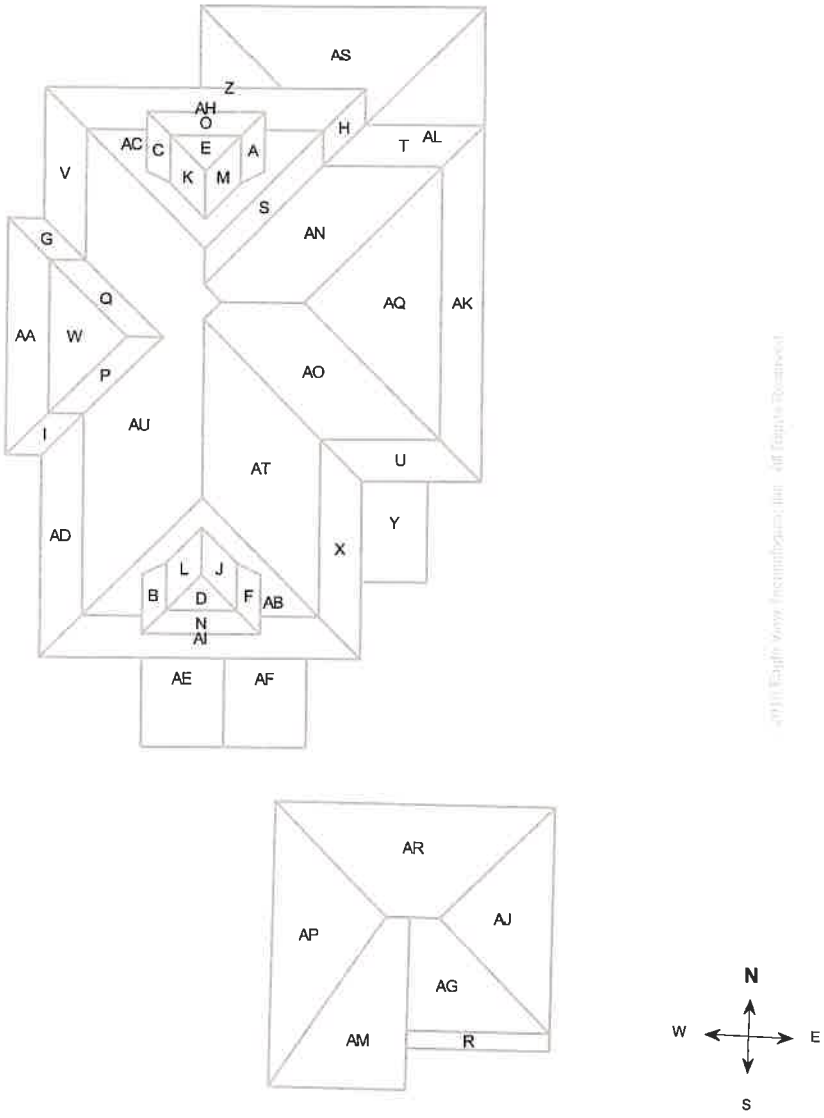
Total Area = 3,359 sq ft, with 47 facets.



Note: This diagram shows the square feet of each roof facet (rounded to the nearest Foot). The total area in square feet, at the top of this page, is based on the non-rounded values of each roof facet (rounded to the nearest square foot after being totaled).

NOTES DIAGRAM

Roof facets are labeled from smallest to largest (A to Z) for easy reference.



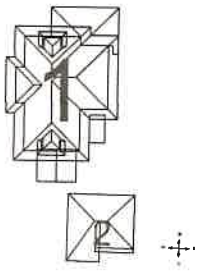
REPORT SUMMARY

Areas per Pitch							
Roof Pitches	1/12	2/12	4/12	5/12	6/12	7/12	12/12
Area (sq ft)	161.6	323.2	58.0	105.0	710.0	485.5	1516.1
% of Roof	4.8%	9.6%	1.7%	3.1%	21.1%	14.5%	45.1%

The table above lists each pitch on this roof and the total area and percent (both rounded) of the roof with that pitch.

Waste Calculation Table							
Waste %	**0%**	**10%**	**12%**	**15%**	**17%**	**20%**	**22%**
Area (sq ft)	3,359	3,695	3,762	3,863	3,930	4,031	4,098
Squares	33.6	36.9	37.6	38.6	39.3	40.3	41.0

This table shows the total roof area and squares (rounded up to the nearest decimal) based upon different waste percentages. The waste factor is subject to the complexity of the roof, individual roofing techniques and your experience. Please consider this when calculating appropriate waste percentages. Note that only roof area is included in these waste calculations. Additional materials needed for ridge, hip, valley, and starter lengths are not included.



Total Roof Facets = 47

Lengths, Areas and Pitches

Ridges = 52 ft (9 Ridges)
Hips = 308 ft (32 Hips).
Valleys = 109 ft (16 Valleys)
Rakes* = 39 ft (6 Rakes)
Eaves/Starter** = 383 ft (29 Eaves)
Drip Edge (Eaves + Rakes) = 422 ft (35 Lengths)
Parapet Walls = 0 (0 Lengths).
Flashing = 25 ft (8 Lengths)
Step flashing = 78 ft (13 Lengths)
Total Area = 3,359 sq ft
Predominant Pitch = 12/12

Property Location

Longitude = -86.2544673
Latitude = 41.6844088

Notes

This was ordered as a residential property. There were no changes to the structure in the past four years.

Measurements by Structure									
Structure	**Area (sq ft)**	**Ridges (ft)**	**Hips (ft)**	**Valleys (ft)**	**Rakes (ft)**	**Eaves (ft)**	**Flashing (ft)**	**Step Flashing (ft)**	**Parapets (ft)**
1	2748	48	246	109	22	292	25	65	0
2	611	5	62	0	18	92	0	14	0

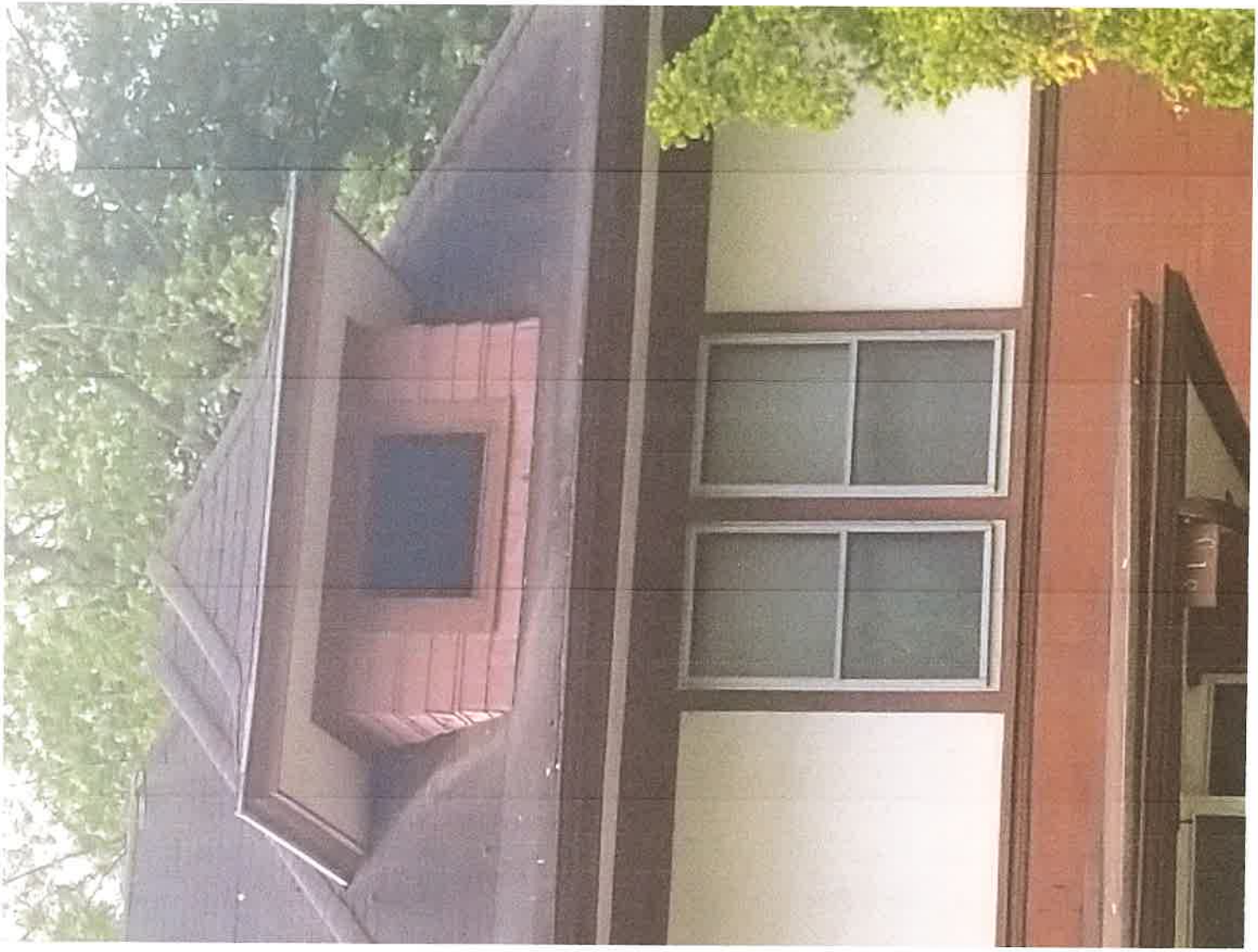
* Rakes are defined as roof edges that are sloped (not level).
** Eaves are defined as roof edges that are not sloped and level.

All values in this table are rounded up to the nearest Foot for each separate structure. Measurement totals displayed elsewhere in this report are added together before rounding which may cause totals to differ.

The table above lists each pitch on this roof and the total area and percent (both rounded) of the roof with that pitch.

Online Maps

Online map of property
http://maps.google.com/maps?f=g&source=s_q&hl=en&geocode=&q=310+Lamonte+Ter,South+Bend,IN,46616-1315
Directions from Gean Roofing to this property
http://maps.google.com/maps?f=d&source=s_d&saddr=405+W.+South+St.,North+Liberty,IN,46554&daddr=310+Lamonte+Ter,South+Bend,IN,46616-1315



TECHNICAL INFORMATION

Technical Characteristics (nominal values)

Property (Unit)	Value
Warranty	Limited Lifetime
Wind Resistance	130 MPH
Algae Resistance	10 Years
Nominal Size	13 1/4" x 39 3/8"
Exposure	5 5/8"
Shingles Per Square	64
Bundles Per Square	3
Coverage Per Square	98.4 sq. ft.

Applicable Standards

- ASTM D228
- ASTM D3018 (Type 1)
- ASTM D3161 (Class F Wind Resistance)
- ASTM D3462
- ASTM D7158 (Class H Wind Resistance)
- ASTM E108 (Class A Fire Resistance)
- ICC-ES AC438
- UL 790 (Class A Fire Resistance)
- UL ER2453-01

Technical Documents

Data Sheet PDF | 5.11 MB

Install Instructions PDF | 6.02 MB

UL Evaluation Report

LEED Certification - Roofing Shingles PDF | 270.02 KB

3-part spec (pdf)

3-part spec (word)

Duration® Series Shingles
Installation Instructions

Instrucciones Para La Instalación De Tejas Duration® Series

Duration® Premium Cool Shingles

TruDefinition® Duration® COOL Shingles

TruDefinition® Duration® Designer Colors Collection Shingles

TruDefinition® Duration® Shingles

CAUTION: Do not mix bundles with different plant locations. See side of bundle.

Application Instructions

Before installing this product, check local building codes for roofing requirements.

These shingles are designed for new or reroofing work over any properly built and supported wood roof deck having adequate nail holding capacity and a smooth surface. Must comply with local building codes.

Precautionary Note:

The manufacturer will not be responsible for problems resulting from any deviation from the application instructions and the following precautions:

Roof Top Loading: Lay shingle bundles flat. Do not bend over the ridge.

Roof Deck: Minimum 6 inch roof deck boards, minimum ⅜ inch plywood, minimum 7/16 inch OSB, sheathing placed minimum ⅛ inch and maximum ¼ inch.

Regardless of deck type used, the roofing installer must:

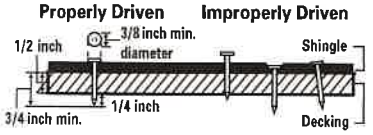
1. Install the deck material in strict compliance with the deck manufacturer's instructions.
2. Prevent the wood deck from getting wet before, during and after installation.

Ventilation: Must comply with local building codes.

Handling: Use extra care in handling shingles when the temperature is below 40°F.

Storage: Store in a covered ventilated area at a maximum temperature of 110°F. Bundles should be stacked flat. Protect shingles from weather when stored at the job site. Do not store near steam pipes, radiators, etc.

Fastener requirement: Use galvanized steel, stainless steel, or aluminum nails minimum 12 gauge shank with ⅜ inch diameter head. Owens Corning Roofing recommends that fasteners comply with ASTM F1667. Must comply with local building codes.



All Fasteners must penetrate at least ¾ inch into the wood deck or completely through the deck by a minimum of ¼ inch.

Notice: Owens Corning Roofing requires the use of nails as the preferred method of attaching shingles to wood decking.

PRECAUCIÓN: No mezcle paquetes que provengan de diferentes plantas. Consulte la parte lateral del paquete.

Instrucciones para la instalación

Antes de instalar este producto, verifique los códigos de construcción locales para saber cuáles son los requisitos del techo.

Estas tejas están diseñadas para trabajos de techado nuevo o para la reconstrucción de un techo antiguo que posea una plataforma de madera adecuada, con capacidad para sostener clavos y con una superficie lisa.

Consulte los códigos de construcción locales.

Nota de precaución:

El fabricante no se hará responsable por los problemas que puedan resultar de cualquier desviación de las instrucciones para la instalación de las tejas y de las siguientes notas de precaución:

Carga en los techos: Coloque los paquetes de tejas planos. No los doble sobre la cumbrera.

Estructura base del techo: Placas de mínimo 6 pulg., madera contrachapada de mínimo ⅜ pulg., paneles de fibra orientada (OSB) de mínimo 7/16 pulg., revestimiento colocado de mínimo ⅛ pulg. y máximo ¼ pulg.

Cualquiera sea el tipo de estructura base utilizada, el instalador del techo debe:

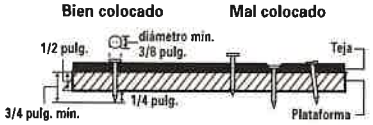
1. Instalar el material de la estructura base del techo de manera que cumpla con las instrucciones de instalación de techos del fabricante.
2. Asegurarse de que la estructura base de madera no se moje antes, durante y después de la instalación.

Ventilación: Debe cumplir con la normativa local de construcción.

Manipulación: Tenga cuidado especial con la manipulación de las tejas cuando la temperatura sea inferior a 40°F.

Almacenamiento: Conserve en un área cubierta y ventilada a una temperatura máxima de 110 °F. Los paquetes deben estar apilados sobre sus caras. Proteja las tejas del clima cuando las almacene en el lugar de trabajo. No las almacene cerca de tuberías de vapor, radiadores, etc.

Requisito de los sujetadores: Use clavos de acero galvanizado, acero inoxidable o aluminio, de calibre 12 como mínimo y diámetro de cabeza de ⅜ pulg. Owens Corning Roofing recomienda que los sujetadores cumplan con la norma ASTM F1667. Debe cumplir con la normativa local de construcción.



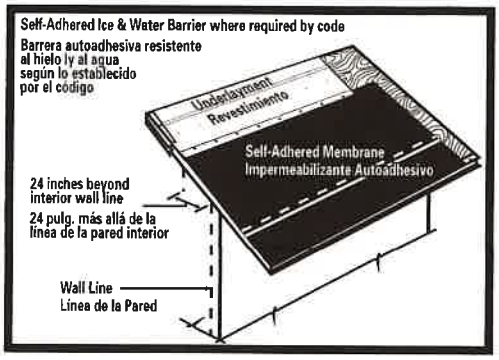
Todos los sujetadores en penetrar al menos ¾ pulg. en la estructura de madera o atravesarla completamente un mínimo de ¼ pulg.

Aviso: Owens Corning Roofing exige el uso de clavos como método preferido para fijar tejas a plataformas de madera.

1 Self-Adhered Ice & Water Barrier:

Use an Owens Corning® Self-Adhered Ice & Water Barrier on the eaves in all regions of the county where roofs have had a history of ice and water backup. Apply starting at the eave edge and extend upslope a minimum of 24 inches from the interior wall line. *See Fig. 1.*

Fig. 1 Self-Adhered Ice & Water Barrier
Barrera autoadhesiva resistente al hielo y al agua



1 Barrera autoadhesiva resistente al hielo y al agua:

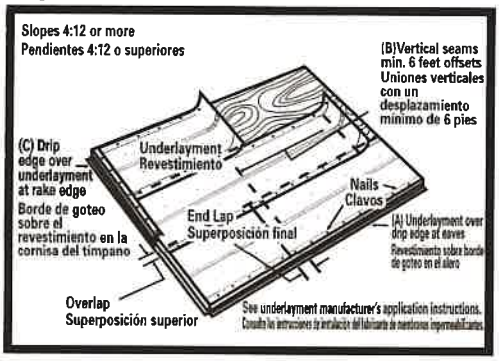
Utilice la barrera autoadhesiva resistente al hielo y al agua de Owens Corning® en los aleros de todas las regiones del país en las que los techos estén expuestos a filtraciones por causa de la acumulación de agua y hielo. Para la instalación, comience en el borde del alero y extienda hacia arriba un mínimo de 24 pulgadas desde la línea de la pared interior. *Ver la Fig. 1.*

2 Synthetic Underlayment:

Standard Slopes 4:12 and Greater

Use an Owens Corning® Synthetic Underlayment or equivalent underlayment meeting ASTM D226, D4869 or D6757. Follow underlayment manufacturer's application instructions and local building codes. *See Fig. 2.*

Fig. 2 Synthetic Underlayment Standard Slope
Membrana impermeabilizante sintética – Pendiente estándar



2 Contrapiso sintético:

Pendientes estándar de 4:12 y mayores

Use un contrapiso sintético Owens Corning® o un contrapiso equivalente que cumpla con las normas ASTM D226, D4869 o D6757. Siga las instrucciones de aplicación del fabricante del contrapiso y la normativa local de construcción. *Ver fig. 2.*

3 Synthetic Underlayment:

Low Slope 2:12 to Less than 4:12

Use an Owens Corning® Synthetic Underlayment or equivalent underlayment meeting ASTM D226, D4869 or D6757. Underlayment must be installed per the manufacturer's application instructions and local building codes. Each underlayment course must be overlapped a minimum of ½ the width of the underlayment plus 1 inch. *See Fig. 3.*

Or Owens Corning® Self-Adhered Ice & Water Barrier or equivalent with a standard overlap of 3 inches and metal drip edge. *See Fig. 3A.*

Note: See Technical Bulletin for felt application.

Fig. 3 Synthetic Underlayment Low Slope
Membrana impermeabilizante sintética – Pendiente baja

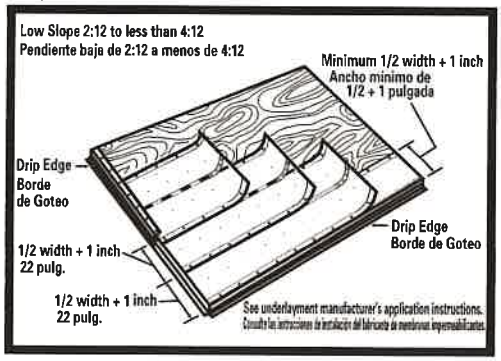
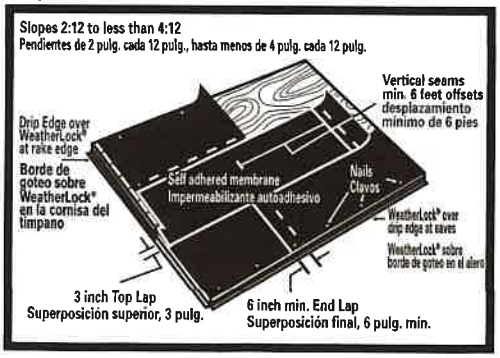


Fig. 3A WeatherLock® Underlayment Low Slope
Membrana impermeabilizante WeatherLock® – Pendiente baja



3 Contrapiso sintético:

Pendientes poco pronunciadas de 2:12 a menos de 4:12

Use un contrapiso sintético Owens Corning® o un contrapiso equivalente que cumpla con las normas ASTM D226, D4869 o D6757. El contrapiso debe instalarse según las instrucciones de aplicación del fabricante y la normativa local de construcción. Cada capa de contrapiso debe solaparse un mínimo de la ½ del ancho del contrapiso más 1 pulgada (2,5 cm). *Ver fig. 3.*

O barrera autoadherente contra agua y hielo de Owens Corning® o equivalente con un solapamiento estándar de 3 pulgadas (7,6 cm) y borde de goteo metálico. *Ver fig. 3A.*

Nota: para la aplicación de fieltro, consulte el Boletín técnico.

4 Shingle Fastening Pattern:

Place fasteners 6⅛ inch up from bottom edge of each shingle and 1 inch from each end.

Standard Fastening Pattern

Use four fasteners. *See Fig. 4.*

Six Nail Fastening Pattern

For 6 nail fastening pattern. *See Fig. 4A.*

Mansard or Steep Slope Fastening Pattern

Place fasteners 6⅛ inches from bottom edge to secure both layers of the shingle. Fasteners need to be located 6⅛ inch above the butt edge of the shingle, regardless of whether they are in the granules or the SureNail® Technology fastening area. *See Fig. 4B.*

REQUIRED: For slopes exceeding 60 degrees or 21 inches per foot, use six fasteners and four spots of asphalt roof cement per shingle. Apply immediately; one 1 inch diameter spot of asphalt roof cement under each shingle tab. Center asphalt roof cement 2 inches up from bottom edge of shingle tab. *See Fig. 4B.*

Asphalt Roof Cement where required must meet ASTM D4586 Type I or II (Asbestos Free). **Note: Please be aware that excessive amounts of asphalt roof cement could blister the shingle.**

Six nail fastening pattern is required for maximum wind warranty. In addition, Owens Corning® Starter Shingles are required along the eaves and rake. See Starter Shingle instructions for details.

Fig. 4 Standard Fastening Pattern
Esquema de instalación estándar

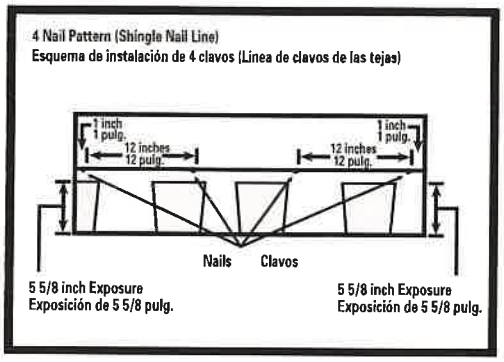


Fig. 4A Six Nail Fastening Pattern
Esquema de instalación con seis clavos

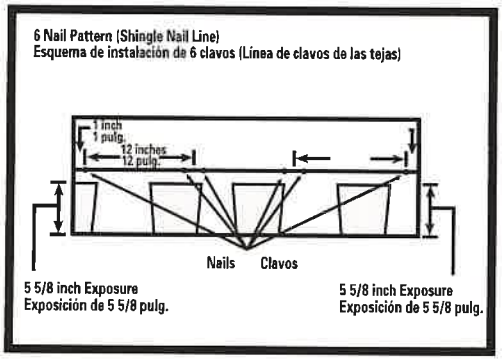
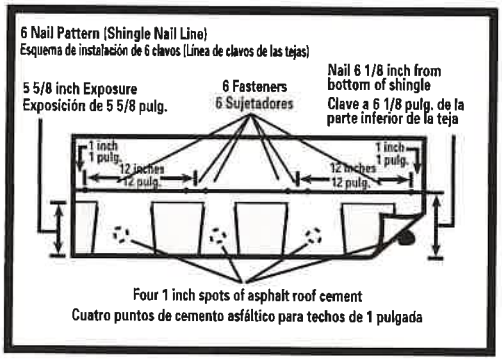


Fig. 4B Mansard or Steep Slope Fastening Pattern
Esquema de instalación en pendientes pronunciadas o mansardas



4 Patrón de fijación de tejas:

Coloque sujetadores a 6⅛ pulgadas del borde inferior de cada teja y a 1 pulgada de cada extremo.

Patrón de fijación estándar

Utilice cuatro sujetadores. *Ver la Fig. 4.*

Patrón de fijación con seis clavos

Para un patrón de fijación con seis clavos. *Ver fig. 4A.*

Patrón de fijación para buhardilla o pendiente pronunciada

Coloque las piezas de fijación a 6 ⅛ pulgadas (15,55 cm) del borde inferior para fijar las dos capas de la teja. Es imprescindible que las piezas de fijación se encuentren 6⅛ pulgadas (15,55 cm) por encima del borde inferior de la teja, aunque queden sobre los gránulos o en el área de fijación de la tecnología SureNail®. *Ver fig. 4B.*

REQUISITOS: En el caso de las pendientes que superen los 60 grados o 21 pulgadas por pie, utilice seis sujetadores y cuatro puntos de cemento asfáltico para techos por teja. Aplique inmediatamente un punto de cemento asfáltico para techos de 1 pulgada de diámetro debajo de cada lengüeta de las tejas. Coloque el cemento asfáltico para techos a 2 pulgadas del borde inferior de la lengüeta de la teja. *Ver la Fig. 4B.*

En los casos en que se requiera, el cemento para techos debe cumplir con la norma ASTM D4586 Tipo I o II (libre de asbesto).

El esquema de fijación de seis clavos es obligatorio para la máxima arantía contra vientos. Además, es necesario instalar las tejas para la hilera inicial de Owens Corning® a lo largo de los aleros y las cornisas. Para obtener más información, consulte las instrucciones de instalación de las tejas para la hilera inicial.

5 Shingle Application:

These shingles are applied with a 6½ inch offset, with 5⅝ inch exposure, over prepared roof deck, starting at the bottom of the roof and working across and up. This will blend shingles from one bundle into the next and minimize any normal shade variation. Application with offsets of 4 inches or 8 inches are also acceptable.

Caution must be exercised to assure that end joints are no closer than 2 inches from fastener in the shingle below and that side laps are no less than 4 inches in succeeding courses. Refer to course application steps for specific instructions.

(continued on next page)

5 Instalación de tejas:

Estas tejas se instalan con un desplazamiento de 6½ pulgadas y un área expuesta de 5⅝ pulgadas, sobre estructuras base de techos preparados, comenzando en la parte inferior del techo y realizando la aplicación de forma transversal y hacia arriba. De esta manera, las tejas de un paquete se mezclarán con las del siguiente y se reducirán al mínimo las variaciones normales de tonalidad. Las aplicaciones con desplazamientos de 4 u 8 pulgadas también son aceptables.

Es necesario tener cuidado para garantizar que las uniones de los extremos no queden a menos de 2 pulgadas del sujetador de la siguiente teja y que las superposiciones laterales no sean de menos de 4 pulgadas en las hileras siguientes. Consulte las instrucciones específicas para la aplicación de hileras.

(continúa en la página siguiente)

5 Shingle Application (cont.):

Starter Course:

Use an Owens Corning® Starter product. Trim 6 ½ inches off the rake of the starter course shingle and flush with the drip edge along the rake and eaves edge, and continue across the roof. Use 5 fasteners for each shingle, placed 2 to 3 inches up from eaves edge. *See Fig. 5.* **If no drip edge is used, shingles must extend a minimum of ½ inch and no more than 1 inch from rake and eaves edge.**

First Course:

Apply first course starting with the full shingle even with the starter course. *See Fig. 5A.*

Fasten securely according to fastening instructions. *See Fig. 4.*

Second Course:

Remove 6½ inches from the left end of this shingle and apply the remaining piece over and above the first course shingle and flush with edge of the first course with 5⅝ inch exposure. *See Fig. 5B.*

Fasten securely according to fastening instructions. *See Fig. 4.*

Third Course:

Remove 13 inches from the left end of this shingle and apply the remaining piece over and above the second course shingle flush with edge of the second course with 5⅝ inch exposure. *See Fig. 5C.*

Fasten securely according to fastening instructions. *See Fig. 4.*

(continued on next page)

Fig. 5 Starter Strip Shingle Eaves Application
Aplicación de las tejas para la hilera inicial en el alero

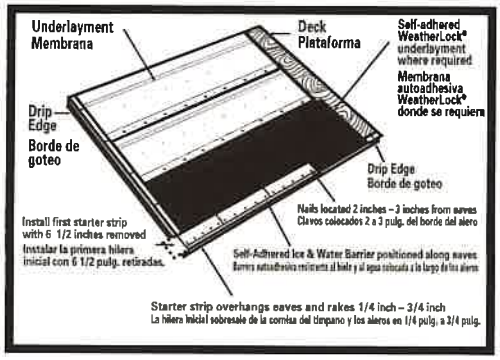


Fig. 5A Shingle Application
Instalación de tejas

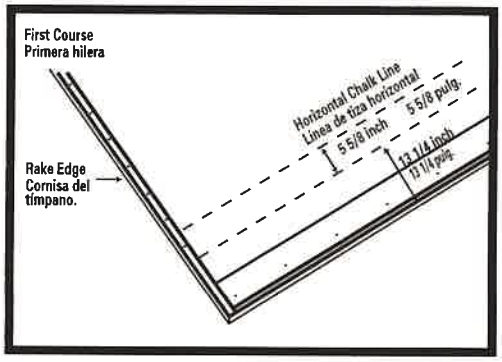


Fig. 5B Shingle Application
Instalación de tejas

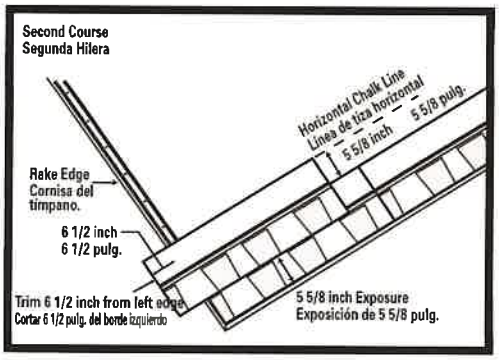
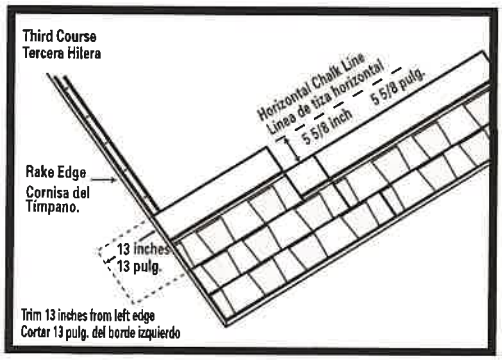


Fig. 5C Shingle Application
Instalación de tejas



5 Instalación de tejas: (cont.):

Hilera inicial:

Utilice un producto de hilera inicial para techos de Owens Corning®. Recorte 6½ pulgadas desde la cornisa del tímpano en la teja de la hilera inicial y nivele con el borde de goteo a lo largo de la cornisa y el borde del alero, y continúe a través del techo. Utilice 5 sujetadores para cada teja, colocados a una distancia de 2 a 3 pulgadas arriba del borde del alero. *Ver la Fig. 5.* **Si no utiliza un borde de goteo, las tejas deberán extenderse un mínimo de ½ pulgada y un máximo de 1 pulgada desde la cornisa y el borde del alero.**

Primera hilera:

Con una teja completa, nivelada con la hilera inicial. *Ver la Fig. 5A.*

Sujete firmemente de acuerdo con las instrucciones de sujeción. *Ver la Fig. 4.*

Segunda hilera:

Quite 6½ pulgadas del extremo izquierdo de esta teja y aplique la pieza restante sobre y por encima de la teja de la primera hilera, nivelando con el borde de la primera hilera con un área expuesta de 5⅝ pulgadas. *Ver la Fig. 5B.*

Sujete firmemente de acuerdo con las instrucciones de sujeción. *Ver la Fig. 4.*

Tercera hilera:

Quite 13 pulgadas del extremo izquierdo de esta teja y aplique la pieza restante sobre y por encima de la teja de la segunda hilera, nivelando con el borde de la segunda hilera con un área expuesta de 5⅝ pulgadas. *Ver la Fig. 5C.*

Sujete firmemente de acuerdo con las instrucciones de sujeción. *Ver la Fig. 4.*

(continúa en la página siguiente)

5 Shingle Application (cont.):

Fourth Course:

Remove 19½ inches from the left end of this shingle and apply the remaining piece over and above the third course shingle and flush with edge of the third course with 5⅝ inch exposure. *See Fig. 5D.*

Fasten securely according to fastening instructions. *See Fig. 4.*

Fifth Course:

Remove 26 inches from the left end of this shingle and apply the remaining piece over and above the fourth course shingle and flush with edge of the fourth course with 5⅝ inch exposure. *See Fig. 5E.*

Fasten securely according to fastening instructions. *See Fig. 4.*

Sixth Course:

Remove 32½ inches from the left end of this shingle and apply the remaining piece over and above the fifth course shingle and flush with edge of the fifth course with 5⅝ inch exposure. *See Fig. 5F.*

Fasten securely according to fastening instructions. *See Fig. 4.*

Succeeding Courses:

For succeeding courses, repeat first through sixth course. *See Fig. 5G.*

Fig. 5D Shingle Application
Instalación de tejas

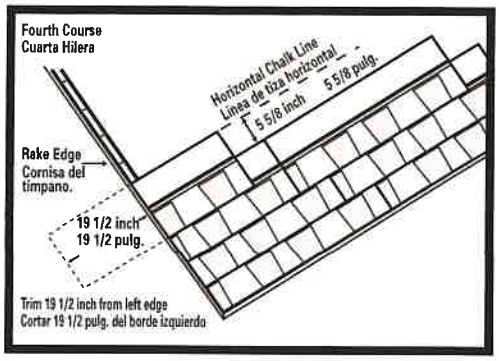


Fig. 5E Shingle Application
Instalación de tejas

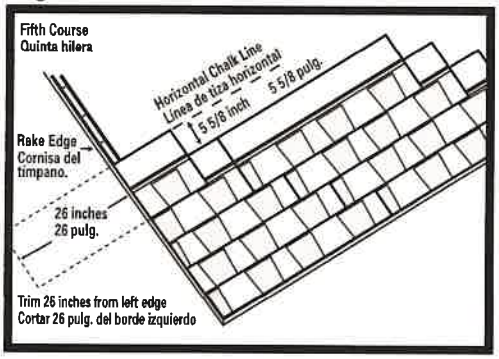


Fig. 5F Shingle Application
Instalación de tejas

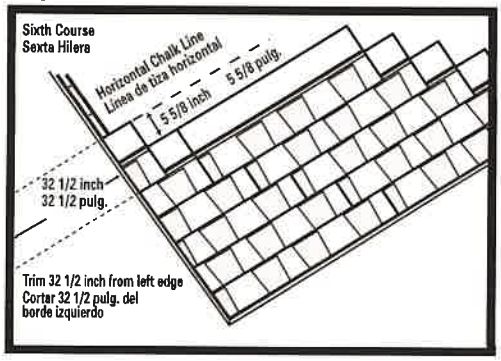
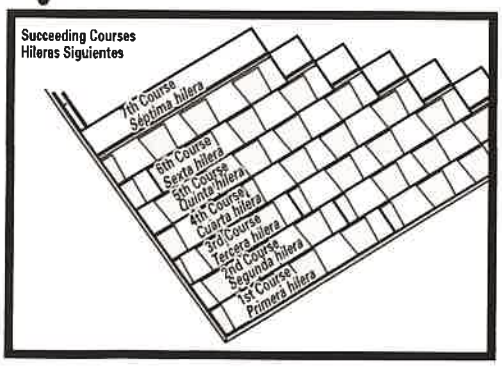


Fig. 5G Shingle Application
Instalación de tejas



5 Aplicación de las tejas (cont.):

Cuarta hilera:

Quite 19½ pulgadas del extremo izquierdo de esta teja y aplique la pieza restante sobre y por encima de la teja de la tercera hilera, nivelando con el borde de la tercera hilera con un área expuesta de 5⅝ pulgadas. *Ver la Fig. 5D.*

Sujete firmemente de acuerdo con las instrucciones de sujeción. *Ver la Fig. 4.*

Quinta hilera:

Quite 26 pulgadas del extremo izquierdo de esta teja y aplique la pieza restante sobre y por encima de la teja de la cuarta hilera, nivelando con el borde de la cuarta hilera con un área expuesta de 5 ⅝ pulgadas. *Ver la Fig. 5E.*

Sujete firmemente de acuerdo con las instrucciones de sujeción. *Ver la Fig. 4.*

Sexta hilera:

Quite 32½ pulgadas del extremo izquierdo de esta teja y aplique la pieza restante sobre y por encima de la teja de la quinta hilera, nivelando con el borde de la quinta hilera con un área expuesta de 5⅝ pulgadas. *Ver la Fig. 5F.*

Sujete firmemente de acuerdo con las instrucciones de sujeción. *Ver la Fig. 4.*

Hileras siguientes:

Para las hileras siguientes, repita los pasos de la primera a la sexta hilera. *Ver la Fig. 5G.*

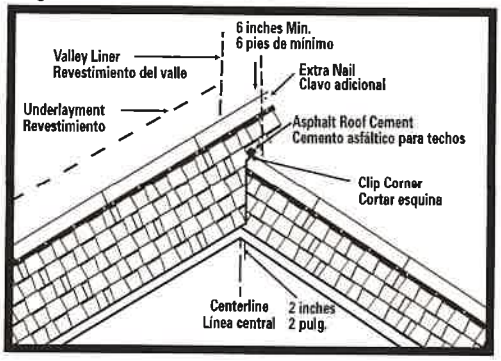
6 Valley Construction:

Closed-Cut Valley *See Fig. 6.*

A closed-cut valley can be used as an alternative to woven and open valley and is applied as follows: Lay a 36 inch wide valley liner of self adhered membrane underlayment or equivalent. A 36 inch wide minimum 50 lb. smooth surface roll roofing can also be used as a valley liner. Lay all shingles on one side of valley and across center line of valley a minimum of 12 inches. Fasten a minimum of 6 inches away from center line on each side of valley. Strike a chalk line 2 inches from the center line of the unshingled side. Apply shingles on the unshingled side up to the chalk line and trim, taking care not to cut the underlying shingles. Clip upper corners of these shingles, cement and fasten. Both woven and metal valleys are acceptable alternatives.

For California-Cut Valley, see Technical Bulletin at www.owenscorning.com.

Fig. 6 Closed-Cut Valley Construction
Construcción del valle con corte cerrado



6 Construcción de limahoyas:

Limahoya cubierta *Ver la Fig. 6.*

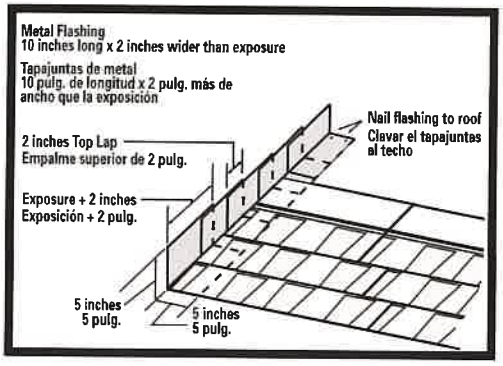
Es posible usar como alternativa una limahoya cubierta en lugar de una limahoya entramada o descubierta, y se aplica de la siguiente manera: Coloque un revestimiento de limahoya de 36 pulgadas de ancho de impermeabilizante autoadhesivo o su equivalente. También es posible utilizar como revestimiento de limahoyas un rollo para techos de superficie lisa de 50 libras con un ancho mínimo de 36 pulgadas. Coloque todas las tejas en un lado de la limahoya y atravesando la línea central de la limahoya un mínimo de 12 pulgadas. Sujete a una distancia mínima de 6 pulgadas de la línea central a cada lado de la limahoya. Con una tiza, trace una línea a 2 pulgadas de la línea central del lado que no tenga tejas. Coloque las tejas sobre el lado que no tenga tejas hasta llegar a la línea de tiza y haga un recorte cuidando de no cortar las tejas que se encuentran por debajo. Recorte las esquinas superiores de estas tejas, colóqueles adhesivo y sujételas. Es aceptable utilizar tanto limahoyas metálicas como tejidas.

Para una limahoya California, consulte el Boletín técnico en www.owenscorning.com.

7 Step Flashing:

Use 10 inches long and 2 inches wider than expected exposure corrosion-resistant metal where roof planes butt against vertical sidewalls or chimneys. Check local building codes. For additional flashing details, go to www.owenscorning.com. *See Fig. 7.*

Fig. 7 Step Flashing
Tapajuntas escalonado



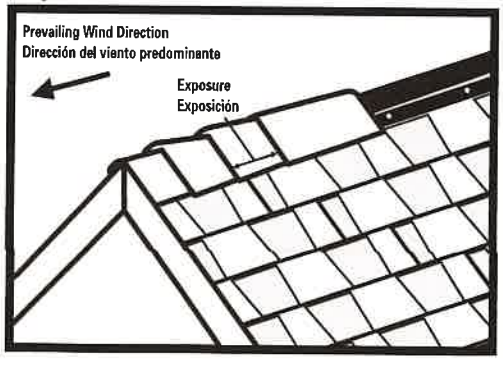
7 Tapajuntas escalonado:

Utilice metal resistente a la corrosión con una exposición de 10 pulgadas de longitud y de 2 pulgadas más de ancho que la exposición esperada en los puntos en los que los planos del techo se unen a las paredes laterales verticales o a chimeneas. Consulte los códigos de construcción locales. Para obtener más información sobre tapajuntas, visite www.owenscorning.com. *Ver la Fig. 7.*

8 Hip & Ridge Application:

Use corresponding Owens Corning® Hip & Ridge shingles to best complement shingle color. Follow specific application instructions as printed on the Hip & Ridge shingle package. *See Fig. 8.*

Fig. 8 Hip & Ridge Application
Instalación de caballetes y cumbreras



8 Aplicación para limatesa y cumbrera:

Use las tejas de limatesa y cumbrera Owens Corning® apropiadas para complementar el color de las tejas. Siga las instrucciones específicas de aplicación que se indican en el paquete de tejas de limatesa y cumbrera. *Ver la Fig. 8.*

For more information on Owens Corning® roofing products, or any of our wide range of building products and systems, it's easy to reach us:

1-800-GET-PINK® | www.owenscorning.com/roofing

OWENS CORNING ROOFING AND ASPHALT, LLC
ONE OWENS CORNING PARKWAY
TOLEDO, OHIO, USA 43659

1-800-GET-PINK®
www.owenscorning.com/roofing

Pub. No. 10014283-E. Printed in U.S.A. August 2018.

Fiberglass-Based Asphalt Shingles & Accessories

Guide Specifications

PROJECT ARCHITECT RESPONSIBILITY: This is a general specification guide, intended to be used by experienced construction professionals, in conjunction with good construction practice and professional judgment. This guide is to aid in the creation of a complete building specification that is to be fully reviewed and edited by the architect of record (specifier). Sections of this guide should be included, edited, or omitted based on the requirements of a specific project. It is the responsibility of both the specifier and the purchaser to determine if a product or system is suitable for its intended use within their projects respective zip code. Neither Owens Corning, nor any of its subsidiary or affiliated companies, assume any responsibility for the content of this specification guide relative to actual projects and specifically disclaim any and all liability for any errors or omissions in design, detail, structural capability, attachment details, shop drawings or other construction related details, whether based upon the information provided by Owens Corning or otherwise.

SECTION 07 31 13.13 - FIBERGLASS-BASED ASPHALT SHINGLES & ACCESSORIES

PART 1 GENERAL

1.1 SECTION INCLUDES

A. Roof shingles and accessories including the following:
   1. Fiberglass-based asphalt shingles.
   2. Hip and ridge shingles.
   3. Starter shingles.
   4. Self-adhering ice and water barrier.
   5. Shingle underlayment.
   6. Attic ventilation.
   7. Fasteners.
   8. Metal flashing and trim.

1.2 RELATED SECTIONS

NOTE TO SPECIFIER Delete and/or add other sections as required.

A. Section 061000 - Rough Carpentry.

B. Section 071300 – Sheet Waterproofing.

C. Section 072200 - Roof and Deck Insulation; for insulation placed over roof decking.

D. Section 076000 - Flashing and Sheet Metal; for snow guards, metal flashing and drip edges, including step-type flashing installed with shingles.

E. Section 077100 – Roof Specialties: Manufactured Gutters and Downspouts.

F. Section 077200 - Roof Accessories.

G. Section 086000 – Roof Windows and Skylights.

NOTE TO SPECIFIER Delete references from the list below that are not required.

1.3 REFERENCES

A. American Society of Civil Engineers (ACSE):
   1. ASCE 7 – Minimum Design Loads for Buildings and Other Structures.

B. Asphalt Roofing Manufacturers Association (ARMA).

Guide Specifications

C. ASTM International (ASTM):
1. ASTM A653/A653M - Standard Specification for Steel Sheet, Zinc Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process.
2. ASTM B209 - Standard Specification for Aluminum and Aluminum-Alloy Sheet and Plate.
3. ASTM B370 – Standard Specification for Copper Sheet and Strip for Building Construction.
4. ASTM D226 - Standard Specification for Asphalt-Saturated Organic Felt Used in Roofing and Waterproofing.
5. ASTM D228 - Standard Test Method for Sampling, Testing, and Analysis of Asphalt Roll Roofing, Cap Sheets, and Shingles Used in Roofing and Waterproofing.
6. ASTM D1079 – Standard Terminology Relating to Roofing and Waterproofing.
7. ASTM D1970 - Standard Specification for Self-Adhering Polymer Modified Bituminous Sheet Materials Used as Steep Roofing Underlayment for Ice Dam Protection.
8. ASTM D3018 - Standard Specification for Class A Asphalt Shingles Surfaced with Mineral Granules.
9. ASTM D3161 - Standard Test Method for Wind-Resistance of Asphalt Shingles (Fan-Induced Method).
10. ASTM D3462 - Standard Specification for Asphalt Shingles Made from Glass felt and Surfaced with Mineral Granules
11. ASTM D4586 - Standard Specification for Asphalt Roof Cement, Asbestos-Free.
12. ASTM D4869 - Standard Specification for Asphalt-Saturated Organic Felt Underlayment Used in Steep Slope Roofing.
13. ASTM D6381 - Standard Test Method for Measurement of Asphalt Shingle Mechanical Uplift Resistance.
14. ASTM D6757 - Standard Specification for Underlayment Felt Containing Inorganic Fibers Used in Steep-Slope Roofing.
15. ASTM D7158 - Standard Test Method for Wind Resistance of Sealed Asphalt Shingles (Uplift Force/Uplift Resistance Method).
16. ASTM E108 - Standard Test Methods for Fire Tests of Roof Coverings.
17. ASTM F1667 - Standard Specification for Driven Fasteners: Nails, Spikes, and Staples.
18. ASTM D6163 – Standard Specification for Styrene Butadiene Styrene (SBS) Modified Bituminous Sheet Materials Using Glass Fiber Reinforcements
19. ASTM D6164 – Standard Specification for Styrene Butadiene Styrene (SBS) Modified Bituminous Sheet Materials Using Polyester Reinforcements

D. Cool Roof Rating Council (CRRC): Product Rating Program.

E. Canadian Standards Association (CSA): CSA A123.5 - Asphalt Shingles Made from Glass Felt and Surfaced with Mineral Granules. Note: Applicable only to products sold for use in Canada.

F. California Building Standards Commission (CBSC):
1. California Building Code, California Code of Regulations Title 24.

G. FM Approvals
1. FM 4474 - American National Standard for Evaluating the Simulated Wind Uplift Resistance of Roof Assemblies Using Static Positive and/or Negative Differential Pressures.

H. Florida Building Commission (FBC):
1. Florida Building Code.
2. Florida Product Approvals.

I. Environmental Protection Agency (EPA): ENERGY STAR Rating System.

J. International Code Council (ICC):
1. International Residential Code (IRC).

2. International Building Code (IBC).

K. International Code Council Evaluation Service (ICC-ES)
1. ICC-ES Evaluation Reports.
2. ICC-ES Acceptance Criteria.

L. Intertek
1. Intertek Code Compliance Research Report (CCRR)

M. Miami-Dade County Department of Regulatory and Economic Resources (RER), Product Control Section:
1. Miami-Dade County Notice of Acceptance (NOA).

N. National Roofing Contractors Association (NRCA).

O. Sheet Metal and Air Conditioning Contractors National Association, 1nc. (SMACNA) – Architectural Sheet Metal Manual.

P. Texas Department of Insurance (TDI): Product Listing.

Q. Underwriters Laboratories (UL):
1. UL 790 - Standard Test Methods for Fire Test of Roof Coverings.
2. UL 997 – Wind Resistance of Prepared Roof Covering Materials.
3. UL 2218 - Impact Resistance of Prepared Roof Covering Materials.
4. UL 2390 - Test Method for Wind Resistant Asphalt Shingles with Sealed Tabs.
5. UL 1897 – Uplift Tests for Roof Covering Systems

R. Underwriters Laboratories Evaluation Services (UL-ES):
1. UL-ER Evaluation Reports.

S. US Green Building Council (USGBC): Leadership in Energy and Environmental Design (LEED).

1.4 REGULATORY REQUIREMENTS AND CERTIFICATIONS

A. Provide a roofing system having an Underwriters Laboratories (UL) Class A fire resistance classification.

B. When applicable provide a roofing system that will help to qualify points for LEED certification:
1. Sustainable Site credit – Heat Island Reduction.
2. Materials and Resource credit – Building Product Disclosure and Optimization - Environmental Product Declaration (manufacturer specific Environmental Product Declarations).
3. Materials and Resource credit – Building Product Disclosure and Optimization – Sourcing of Raw Materials.
4. Materials and Resources credit – Construction and Demolition Waste Management.

C. When applicable provide a roofing system achieving ENERGY STAR certification.

D. Install all roofing products in accordance with all federal, state and local building codes.

E. All work shall be performed in a manner consistent with current OSHA guidelines.

NOTE TO SPECIFIER Delete as required.

1.5 PRODUCT ATTRIBUTES

Guide Specifications

A. When applicable, provide fiberglass-based asphalt shingle with SureNail® Technology, a woven fabric reinforcing strip in the nailing zone on the shingle's top surface.

1.6 SUBMITTALS

A. Submit under provisions of Section 013300 - Submittal Procedures.

B. Submit printed copies of Owens Corning product data sheets indicating product characteristics, product information, installation instructions (including required preparation and installation procedures) and product limitations and color samples.

C. Certificate of Compliance: Provide Certificate of Compliance from independent laboratory indicating that Owens Corning asphalt shingles made in normal production meet or exceed the requirements of the following:
1. ASTM D3462.
2. ASTM D3161/D7158 – Indicating a Class of Wind Resistance.
3. ASTM E108/UL790 – Indicating Class A Fire Resistance.

D. LEED submittal: When appropriate provide a LEED submittal and coordinate with provisions in Section 013563 – Sustainability Certification Project Requirements and Section 013566 – Sustainability Certification Project Procedures.

E. Shop Drawings: Indicate specially configured metal flashing, jointing methods and locations, fastening methods and locations, and installation details as required by project conditions.

F. Copy of Warranty: For warranty specified in Section 1.9.

NOTE TO SPECIFIER Delete selection samples if colors have already been selected.

G. Selection Samples: Two complete sets of samples, representing manufacturer's full range of available products and colors.

H. Verification Samples: For each product and finish specified, two samples representing actual products and colors.

1.7 PRE-INSTALLATION MEETING

A. For all projects, a pre-installation meeting is strongly recommended. Conduct a pre-installation meeting at the site prior to commencing work in this section. Require attendance of entities directly concerned with roof installation.

Topics to be discussed:
1. Safety procedures.
2. Installation procedures/method (including substrate preparation), sequencing of materials, and coordination with installation of other/adjacent work.
3. Roofing material availability, storage and handling.
4. Additional roof covering and roof accessory materials.
5. Through roof penetrations and other roof details.
6. Product compliance – Verify that products comply with requirements specified by local Authority Having Jurisdiction (AHJ)
7. All other items related to successful execution/completion of work.

B. Submit printed copies of Owens Corning product data sheets indicating product characteristics, product information, installation instructions (including required preparation and installation procedures), product limitations and color samples.

Guide Specifications

1.8 QUALITY ASSURANCE

A. Manufacturer Qualifications: Provide all primary roofing products, including shingles, underlayment, ice and water barrier, and ventilation, by a single manufacturer.

B. Installer Qualifications: Installer shall be licensed or otherwise authorized by all federal, state and local authorities to install all products specified in this section. Installer shall follow Owens Corning published installation instructions.

NOTE TO SPECIFIER Delete one of two options below. Select option based on desired warranty.

1. Installer shall be an Owens Corning Roofing Platinum Preferred Contractor as defined and certified by Owens Corning.
2. Installer shall be an Owens Corning Roofing Preferred Contractor as defined and certified by manufacturer.

1.9 DELIVERY, STORAGE, AND HANDLING

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

B. Store all products in manufacturer's unopened, labeled packaging until they are ready for installation.

C. Store all products in accordance with Owens Corning recommendations.

D. Do not install underlayment or shingles on wet surfaces.

E. Store and dispose of solvent-based materials in accordance with all federal, state and local regulations.

F. For rooftop loading, lay shingle bundles flat. Do not bend over the ridge.

1.10 PROJECT CONDITIONS

A. Do not install systems under environmental conditions outside Owens Corning recommended limits. Proceed with work only when existing and forecasted weather conditions will permit work to be performed within Owens Corning recommended limits.

1.11 WARRANTY

A. Standard Limited Warranty: Provide to the Owner Corning standard prorated warranty coverage for materials in the event of a material defect, including up to 10 years Tru Protection® coverage. Refer to actual warranty for complete details, limitations and requirements.

B. Manufacturer's Extended Limited Warranty: Provide to the Owner Owens Corning standard extended warranty coverage labor and materials in the event of a material defect. Refer to actual warranty for complete details, limitations and requirements.

NOTE TO SPECIFIER Delete one of two options below. Select option based on desired warranty.

1. Owens Corning System Protection Roofing Limited Warranty including extended Tru Protection® (non-prorated) coverage on installed Owens Corning Roofing System products. The length of the Tru Protection® coverage is based upon the shingle product installed on the field of the roof. Coverage can only be provided by a designated Owens Corning Roofing Preferred or Platinum Preferred Contractor.
2. Owens Corning Preferred Protection Roofing System Limited Warranty includes Tru Protection® (non-prorated) coverage on installed Owens Corning Roofing System products. The length of the Tru Protection® coverage 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 a designated Owens Corning Roofing Preferred or Platinum Preferred Contractor.

3. Owens Corning Platinum Protection Roofing System Limited Warranty includes Tru Protection® (non-prorated) coverage on installed Owens Corning Roofing System products. The length of the Tru Protection® coverage 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 a designated Owens Corning Roofing Platinum Preferred Contractor.

PART 2 PRODUCTS

2.1 MANUFACTURERS

A. Acceptable Manufacturer: Owens Corning Roofing and Asphalt, LLC. One Owens Corning Pkwy. Toledo, OH 43659. Toll Free: 1-800-ROOFING. Email: ocbuildingspec@owenscorning.com. Web: www.owenscorning.com.

B. Requests for substitutions will be considered in accordance with provisions of Section 016000.

2.2 ASPHALT SHINGLES

NOTE TO SPECIFIER Delete roof shingle products from the list below that are not required.
NOTE TO SPECIFIER Verify with the manufacturer regional product availability.

A. Duration® Premium (Algae Resistant) Shingles: As manufactured by Owens Corning Roofing and Asphalt, LLC.
   1. **Product Attributes: Includes SureNail® Technology, a woven fabric reinforcing strip in the nailing zone on the shingle's top surface.**
   2. Nominal Size: 13-1/4 in (337 mm) by 39-3/8 in (1000 mm).
   3. Exposure: 5-5/8 in (143 mm).
   4. Shingles per Square: 64.
   5. Bundles per Square: 4 bundles of 16 shingles.
   6. Coverage per Square: 98.4 sq ft (9.1 sq m).
   7. Color: As selected from manufacturer's full range.
   8. Standards/Qualifications: ASTM D228, ASTM D3018 (Type 1), ASTM D3161 (Class F Wind Resistance), ASTM D3462, ASTM D7158 (Class H Wind Resistance), ASTM E108/UL 790 (Class A Fire Resistance), ICC-ES AC438, UL ER2453-01, and UL ER2453-02.

B. Duration® Premium (Non Algae Resistant) Shingles: As manufactured by Owens Corning Roofing and Asphalt, LLC.
   1. **Product Attributes: Includes SureNail® Technology, a woven fabric reinforcing strip in the nailing zone on the shingle's top surface.**
   2. Nominal Size: 13-1/4 in (337 mm) by 39-3/8 in (1000 mm).
   3. Exposure: 5-5/8 in (143 mm).
   4. Shingles per Square: 64.
   5. Bundles per Square: 4 bundles of 16 shingles.
   6. Coverage per Square: 98.4 sq ft (9.1 sq m).
   7. Color: As selected from manufacturer's full range.
   8. Standards/Qualifications: ASTM D228, ASTM D3018 (Type 1), ASTM D3161 (Class F Wind Resistance), ASTM D3462, ASTM D7158 (Class H Wind Resistance), ASTM E108/UL 790 (Class A Fire Resistance), ICC-ES AC438, UL ER2453-01, and UL ER2453-02.

C. Duration® Premium Cool (Non-Algae Resistant) Shingles: As manufactured by Owens Corning Roofing and Asphalt, LLC.
   1. **Product Attributes: Includes SureNail® Technology, a woven fabric reinforcing strip in the nailing zone on the shingle's top surface.**
   2. Nominal Size: 13-1/4 in (337 mm) by 39-3/8 in (1000 mm).
   3. Exposure: 5-5/8 in (143 mm).

4. Shingles per Square: 64.
5. Bundles per Square: 4 bundles of 16 shingles.
6. Coverage per Square: 98.4 sq ft (9.1 sq m).
7. Color: As selected from manufacturer's full range.
8. Standards/Qualifications: ASTM D228, ASTM D3018 (Type 1), ASTM D3161 (Class F Wind Resistance), ASTM D3462, ASTM D7158 (Class H Wind Resistance), ASTM E108/UL 790 (Class A Fire Resistance), meets the ENERGY STAR® requirements for initial solar reflectance of 0.25 and 3-year aged solar reflectance of 0.15, 2010 California Building Energy Efficiency Standards, Title 24, Part 6 requirements, Listed by the Cool Roof Rating Council (CRRC), ICC-ES AC438, UL ER2453-01, and UL ER2453-02, and Florida Product Approval.

D. TruDefinition® Duration® (Algae Resistant) Shingles: As manufactured by Owens Corning Roofing and Asphalt, LLC.
   1. **Product Attributes: Includes SureNail® Technology, a woven fabric reinforcing strip in the nailing zone on the shingle's top surface.**
   2. Nominal Size: 13-1/4 in (337 mm) by 39-3/8 in (1000 mm).
   3. Exposure: 5-5/8 in (143 mm).
   4. Shingles per Square: 64.
   5. Bundles per Square: 3 bundles of 20 or 22 shingles.
   6. Coverage per Square: 98.4 sq ft (9.1 sq m).
   7. Color: As selected from manufacturer's full range.
   8. Standards/Qualifications: ASTM D228, ASTM D3018 (Type 1), ASTM D3161 (Class F Wind Resistance), ASTM D3462, ASTM D7158 (Class H Wind Resistance), ASTM E108/UL 790 (Class A Fire Resistance), CSA A123.5, ICC-ES AC438, UL ER2453-01, and UL ER2453-02. Florida Product Approval, and Miami-Dade County Product Approval.

E. TruDefinition® Duration® (Non-Algae Resistant) Shingles: As manufactured by Owens Corning Roofing and Asphalt, LLC.
   1. **Product Attributes: Includes SureNail® Technology, a woven fabric reinforcing strip in the nailing zone on the shingle's top surface.**
   2. Nominal Size: 13-1/4 in (337 mm) by 39-3/8 in (1000 mm).
   3. Exposure: 5-5/8 in (143 mm).
   4. Shingles per Square: 64.
   5. Bundles per Square: 3 bundles of 20 or 22 shingles.
   6. Coverage per Square: 98.4 sq ft (9.1 sq m).
   7. Color: As selected from manufacturer's full range.
   8. Standards/Qualifications: ASTM D228, ASTM D3018 (Type 1), ASTM D3161 (Class F Wind Resistance), ASTM D3462, ASTM D7158 (Class H Wind Resistance), ASTM E108/UL 790 (Class A Fire Resistance), ICC-ES AC438, UL ER2453-01, UL ER2453-02, Florida Product Approval, and Miami-Dade County Product Approval.

F. TruDefinition® Duration® Cool (Non-Algae Resistant) Shingles: As manufactured by Owens Corning Roofing and Asphalt, LLC.
   1. **Product Attributes: Includes SureNail® Technology, a woven fabric reinforcing strip in the nailing zone on the shingle's top surface.**
   2. Nominal Size: 13-1/4 in (337 mm) by 39-3/8 in (1000 mm).
   3. Exposure: 5-5/8 in (143 mm).
   4. Shingles per Square: 64.
   5. Bundles per Square: 3 bundles of 20 or 22 shingles.
   6. Coverage per Square: 98.4 sq ft (9.1 sq m).
   7. Color: As selected from manufacturer's full range.

Guide Specifications

8. Standards/Qualifications: ASTM D228, ASTM D3018 (Type 1), ASTM D3161 (Class F Wind Resistance), ASTM D3462, ASTM D7158 (Class H Wind Resistance), ASTM E108/UL 790 (Class A Fire Resistance), Listed by the Cool Roof Rating Council (CRRC), ICC-ES AC438, UL ER2453-01, and UL ER2453-02, Florida Product Approval, and Miami-Dade County Product Approval.

G. TruDefinition® Duration® Designer Color Collection (Algae Resistant) Shingles: As manufactured by Owens Corning Roofing and Asphalt, LLC.
1. **Product Attributes: Includes SureNail® Technology, a woven fabric reinforcing strip in the nailing zone on the shingle's top surface.**
2. Nominal Size: 13-1/4 in (337 mm) by 39-3/8 in (1000 mm).
3. Exposure: 5-5/8 in (143 mm).
4. Shingles per Square: 64.
5. Bundles per Square: 3 bundles of 20 or 22 shingles.
6. Coverage per Square: 98.4 sq ft (9.1 sq m).
7. Color: As selected from manufacturer's full range.
8. Standards/Qualifications: ASTM D228, ASTM D3018 (Type 1), ASTM D3161 (Class F Wind Resistance), ASTM D3462, ASTM D7158 (Class H Wind Resistance), ASTM E108/UL790 (Class A Fire Resistance), CSA A123.5, Florida Product Approval, Miami-Dade County Product Approval, ICC-ES AC438, UL ER2453-01, and UL ER2453-02.

H. TruDefinition® Duration® Designer Color Collection (Non Algae Resistant) Shingles: As manufactured by Owens Corning Roofing and Asphalt, LLC.
1. **Product Attributes: Includes SureNail® Technology, a woven fabric reinforcing strip in the nailing zone on the shingle's top surface.**
2. Nominal Size: 13-1/4 in (337 mm) by 39-3/8 in (1000 mm).
3. Exposure: 5-5/8 in (143 mm).
4. Shingles per Square: 64.
5. Bundles per Square: 3 bundles of 20 or 22 shingles.
6. Coverage per Square: 98.4 sq ft (9.1 sq m).
7. Color: As selected from manufacturer's full range.
8. Standards/Qualifications: ASTM D228, ASTM D3018 (Type 1), ASTM D3161 (Class F Wind Resistance), ASTM D3462, ASTM D7158 (Class H Wind Resistance), ASTM E108/UL790 (Class A Fire Resistance), Florida Product Approval, Miami-Dade County Product Approval, ICC-ES AC438, UL ER2453-01, and UL ER2453-02.

I. TruDefinition® Duration MAX® (Non Algae Resistant) Shingles: As manufactured by Owens Corning Roofing and Asphalt, LLC.
1. **Product Attributes: Includes SureNail® Technology, a woven fabric reinforcing strip in the nailing zone on the shingle's top surface.**
2. Nominal Size: 13-1/4 in (337 mm) by 39-3/8 in (1000 mm).
3. Exposure: 5-5/8 in (143 mm).
4. Shingles per Square: 64.
5. Bundles per Square: 4 bundles of 16 shingles.
6. Coverage per Square: 98.4 sq ft (9.1 sq m).
7. Color: As selected from manufacturer's full range.
8. Standards/Qualifications: ASTM D228, ASTM D3018 (Type 1), ASTM D3161 (Class F Wind Resistance), ASTM D3462, ASTM D7158 (Class H Wind Resistance), ASTM E108/UL 790 (Class A Fire Resistance), ICC-ES AC438, UL ER2453-01, and UL ER2453-02.

J. TruDefinition® Duration STORM® Impact Resistant (Algae Resistant) Shingles: As manufactured by Owens Corning Roofing and Asphalt, LLC.

Guide Specifications

1. **Product Attributes: Includes SureNail® Technology, a woven fabric reinforcing strip in the nailing zone on the shingle's top surface; and UL 2218 Class 4 impact resistance.**
2. Nominal Size: 13-1/4 in (337 mm) by 39-3/8 in (1000 mm).
3. Exposure: 5-5/8 in (143 mm).
4. Shingles per Square: 64.
5. Bundles per Square: 3 bundles of 20 or 22 shingles.
6. Coverage per Square: 98.4 sq ft (9.1 sq m).
7. Color: As selected from manufacturer's full range.
8. Standards/Qualifications: ASTM D228, ASTM D3018 (Type 1), ASTM D3161 (Class F Wind Resistance), ASTM D3462, ASTM D7158 (Class H Wind Resistance), ASTM E108/UL 790 (Class A Fire Resistance), UL 2218 (Class 4 Impact Resistance), CSA A123.5, ICC-ES AC438, UL ER2453-01, and UL ER2453-02.

K. TruDefinition® Duration Flex® Impact Resistant (Algae Resistant) Shingles: As manufactured by Owens Corning Roofing and Asphalt, LLC.
1. **Product Attributes: Includes SureNail® Technology, a woven fabric reinforcing strip in the nailing zone on the shingle's top surface; and UL 2218 Class 4 impact resistance.**
2. Nominal Size: 13-1/4 in (337 mm) by 39-3/8 in (1000 mm).
3. Exposure: 5-5/8 in (143 mm).
4. Shingles per Square: 64.
5. Bundles per Square: 3 bundles of 20 or 22 shingles.
6. Coverage per Square: 98.4 sq ft (9.1 sq m).
7. Color: As selected from manufacturer's full range.
8. Standards/Qualifications: ASTM D228, ASTM D3018 (Type 1), ASTM D3161 (Class F Wind Resistance), ASTM D3462, ASTM D7158 (Class H Wind Resistance), ASTM E108/UL 790 (Class A Fire Resistance), UL 2218 (Class 4 Impact Resistance), and UL ER2453-01.

L. TruDefinition® Oakridge® (Algae Resistant) Shingles: As manufactured by Owens Corning Roofing and Asphalt, LLC.
1. Nominal Size: 13-1/4 in (337 mm) by 39-3/8 in (1000 mm).
2. Exposure: 5-5/8 in (143 mm).
3. Shingles per Square: 64.
4. Bundles per Square: 3.
5. Coverage per Square: 98.4 sq ft (9.1 sq m).
6. Color: As selected from manufacturer.
7. Standards/Qualifications: ASTM D228, ASTM D3018 (Type 1), ASTM D3161 (Class F Wind Resistance), ASTM D3462, ASTM D7158 (Class H Wind Resistance), ASTM E108/UL 790 (Class A Fire Resistance), , ICC-ES AC438, UL ER2453-01, UL ER2453-02, Florida Product Approval, Miami-Dade County Product Approval

M. TruDefinition® WeatherGuard® (Algae Resistant) Shingles: As manufactured by Owens Corning Roofing and Asphalt, LLC.
1. Nominal Size: 13-1/4 in (337 mm) by 39-3/8 in (1000 mm).
2. Exposure: 5-5/8 in (143 mm).
3. Shingles per Square: 64.
4. Bundles per Square: 4.
5. Coverage per Square: 98.4 sq ft (9.1 sq m).
6. Color: As selected from manufacturer's full range.
7. Standards/Qualifications: ASTM D228, ASTM D3018 (Type 1), ASTM D3161 (Class F Wind Resistance), ASTM D3462, ASTM D7158 (Class H Wind Resistance), ASTM E108/UL 790 (Class A Fire Resistance), UL 2218 (Class 4 Impact Resistance), ICC-ES AC438, UL ER2453-01, and UL ER2453-02.

N. Oakridge® (Non Algae Resistant) Shingles: As manufactured by Owens Corning Roofing and Asphalt, LLC.

Guide Specifications

1. Nominal Size: 13-1/4 in (337 mm) by 39-3/8 in (1000 mm).
2. Exposure: 5-5/8 in (143 mm).
3. Shingles per Square: 64.
4. Bundles per Square: 3 bundles of 20 or 22 shingles.
5. Coverage per Square: 98.4 sq ft (9.1 sq m).
6. Color: As selected from manufacturer's full range.
7. Standards/Qualifications: ASTM D228, ASTM D3018 (Type 1), ASTM D3161 (Class F Wind Resistance), ASTM D3462, ASTM D7158 (Class H Wind Resistance), ASTM E108/UL 790 (Class A Fire Resistance), Florida Product Approval, Miami-Dade County Product Approval, CSA A123.5, ICC-ES AC438, UL ER2453-01, and UL ER2453-02.. Shasta White Color meets ENERGY STAR requirements for initial solar reflectance of 0.25 and 3-year aged solar reflectance of 0.15.

O. Oakridge® (Algae Resistant) Shingles: As manufactured by Owens Corning Roofing and Asphalt, LLC.
1. Nominal Size: 13-1/4 in (337 mm) by 39-3/8 in (1000 mm).
2. Exposure: 5-5/8 in (143 mm).
3. Shingles per Square: 64.
4. Bundles per Square: 3 bundles of 20 or 22 shingles.
5. Coverage per Square: 98.4 sq ft (9.1 sq m).
6. Color: As selected from manufacturer's full range.
7. Standards/Qualifications: ASTM D228, ASTM D3018 (Type 1), ASTM D3161 (Class F Wind Resistance), ASTM D3462, ASTM D7158 (Class H Wind Resistance), ASTM E108/UL 790 (Class A Fire Resistance), CSA A123.5, ICC-ES AC438, UL ER2453-01, UL ER2453-02, Florida Product Approval, and Miami-Dade County Product Approval. Shasta White Color meets ENERGY STAR requirements for initial solar reflectance of 0.25 and 3-year aged solar reflectance of 0.15.

P. Berkshire® (Algae Resistant) Shingles: As manufactured by Owens Corning Roofing and Asphalt, LLC.
1. Nominal Size: 18-3/4 in (476 mm) by 38 in (965 mm).
2. Exposure: 8-3/8 in. (213 mm).
3. Shingles per Square: 45.
4. Bundles per Square: 5 bundles of 9 shingles.
5. Coverage per Square: 99.5 sq ft (9.2 sq m).
6. Color: As selected from manufacturer's full range.
7. Standards/Qualifications: ASTM D228, ASTM D3018 (Type 1), ASTM D3161 (Class F Wind Resistance), ASTM D3462, ASTM D7158 (Class H Wind Resistance), ASTM E108/UL 790 (Class A Fire Resistance), ICC-ES AC438, UL ER2453-01, UL ER2453-02, Florida Product Approval, and Miami-Dade County Product Approval.

Q. Woodmoor® (Algae Resistant) Shingles: As manufactured by Owens Corning Roofing and Asphalt, LLC.
1. Nominal Size: 14-1/4 in (362 mm) by 40 in (1016 mm).
2. Exposure: 4 in (102 mm).
3. Shingles per Square: 90.
4. Bundles per Square: 6 bundles of 15 shingles.
5. Coverage per Square: 100.0 sq ft (9.3 sq m).
6. Color: As selected from manufacturer's full range.
7. Standards/Qualifications: ASTM D228, ASTM D3018 (Type 1), ASTM D3161 (Class F Wind Resistance), ASTM D3462, ASTM D7158 (Class H Wind Resistance), ASTM E108/UL 790 (Class A Fire Resistance), CSA A123.5, ICC-ES AC438, UL ER2453-01, and UL ER2453-02.

R. Woodcrest® (Algae Resistant) Shingles: As manufactured by Owens Corning Roofing and Asphalt, LLC.
1. Nominal Size: 14-1/4 in (362 mm) by 40 in (1016 mm).

Guide Specifications

2. Exposure: 4 in (102 mm).
3. Shingles per Square: 90.
4. Bundles per Square: 6 bundles of 15 shingles.
5. Coverage per Square: 100.0 sq ft (9.3 sq m).
6. Color: As selected from manufacturer's full range.
7. Standards/Qualifications: ASTM D228, ASTM D3018 (Type 1), ASTM D3161 (Class F Wind Resistance), ASTM D3462, ASTM D7158 (Class H Wind Resistance), ASTM E108/UL 790 (Class A Fire Resistance), CSA A123.5, ICC-ES AC438, UL ER2453-01, and UL ER2453-02.

S. Supreme® (Algae Resistant) Shingles: As manufactured by Owens Corning Roofing and Asphalt, LLC.
1. Nominal Size: 12 in (305 mm) by 36 in (914 mm).
2. Exposure: 5 in (127 mm).
3. Shingles per Square: 80.
4. Bundles per Square: 3 bundles of 26, 27, 27 shingles.
5. Coverage per Square: 100.0 sq ft (9.3 sq m).
6. Color: As selected from manufacturer's full range.
7. Standards/Qualifications: ASTM D228, ASTM D3018 (Type 1), ASTM D3161 (Class F Wind Resistance), ASTM D3462, ASTM D7158 (Class H Wind Resistance), ASTM E108/UL 790 (Class A Fire Resistance), ICC-ES AC438, UL ER2453-01, UL ER2453-02. Florida Product Approval, and Miami-Dade County Product Approval.

T. Supreme® (Non Algae Resistant) Shingles: As manufactured by Owens Corning Roofing and Asphalt, LLC.
1. Nominal Size: 12 in (305 mm) by 36 in (914 mm).
2. Exposure: 5 in (127 mm).
3. Shingles per Square: 80.
4. Bundles per Square: 3 bundles of 26, 27, 27 shingles.
5. Coverage per Square: 100.0 sq ft (9.3 sq m).
6. Color: As selected from manufacturer's full range.
7. Standards/Qualifications: ASTM D228, ASTM D3018 (Type 1), ASTM D3161 (Class F Wind Resistance), ASTM D3462, ASTM D7158 (Class H Wind Resistance), ASTM E108/UL 790 (Class A Fire Resistance), ICC-ES AC438, UL ER2453-01, UL ER2453-02, and Florida Product Approval.

U. Supreme® (Algae Resistant) (Metric) Shingles: As manufactured by Owens Corning Roofing and Asphalt, LLC.
1. Nominal Size: 13-1/4 in (337 mm) by 39-3/8 in (1000 mm).
2. Exposure: 5-5/8 in (143 mm).
3. Shingles per Square: 65.
4. Bundles per Square: 3 bundles of 21, 22, 22 shingles.
5. Coverage per Square: 100.0 sq ft (9.3 sq m).
6. Color: As selected from manufacturer's full range.
7. Standards/Qualifications: ASTM D228, ASTM D3018 (Type 1), ASTM D3161 (Class F Wind Resistance), ASTM D3462, ASTM D7158 (Class H Wind Resistance), ASTM E108/UL 790 (Class A Fire Resistance), CSA A123.5, ICC-ES AC438, UL ER2453-01, and UL ER2453-02

V. Supreme® (Non Algae Resistant) (Metric) Shingles: As manufactured by Owens Corning Roofing and Asphalt, LLC.
1. Nominal Size: 13-1/4 in (337 mm) by 39-3/8 in (1000 mm).
2. Exposure: 5-5/8 in (143 mm).
3. Shingles per Square: 65.
4. Bundles per Square: 3 bundles of 21, 22, 22 shingles.
5. Coverage per Square: 100.0 sq ft (9.3 sq m).
6. Color: As selected from manufacturer's full range.

7. Standards/Qualifications: ASTM D228, ASTM D3018 (Type 1), ASTM D3161 (Class F Wind Resistance), ASTM D3462, ASTM D7158 (Class H Wind Resistance), ASTM E108/UL 790 (Class A Fire Resistance), ICC-ES AC438, UL ER2453-01, and UL ER2453-02.

W. Classic® (Non Algae Resistant) Shingles: As manufactured by Owens Corning Roofing and Asphalt, LLC.
1. Nominal Size: 12 in (305 mm) by 36 in (914 mm).
2. Exposure: 5 in (127 mm).
3. Shingles per Square: 80.
4. Bundles per Square: 3 bundles of 26, 27, 27 shingles.
5. Coverage per Square: 100.0 sq ft (9.3 sq m).
6. Color: As selected from manufacturer's full range.
7. Standards/Qualifications: ASTM D228, ASTM D3018 (Type 1), ASTM D3161 (Class F Wind Resistance), ASTM D3462, ASTM D7158 (Class H Wind Resistance), ASTM E108/UL 790 (Class A Fire Resistance), ICC-ES AC438, UL ER2453-01, UL ER2453-02, and Florida Product Approval.

X. Mineral Surface Roll (Non Algae Resistant): As manufactured by Owens Corning Roofing and Asphalt, LLC.
1. Nominal Size: 36 in (914 m) by 36 in (914 mm).
2. Exposure: 34 in (864 mm).
3. Rolls per Square: 1.
4. Coverage per Square: 100.0 sq ft (9.3 sq m).
5. Standards/Qualifications: ASTM E108/UL 790 (Class C Fire Resistance), and Florida Product Approval.

2.3 HIP AND RIDGE SHINGLES

Provide hip and ridge shingles color formulated to complement field of roof.

NOTE TO SPECIFIER Delete hip and ridge shingle products from the list below that are not required.
NOTE TO SPECIFIER Verify with the manufacturer regional product availability.

A. DuraRidge® Hip and Ridge (Algae Resistant) Shingles with Sealant: As manufactured by Owens Corning Roofing and Asphalt, LLC.
1. **High profile design features patented SureNail® Technology providing long-lasting durability and dimension**
2. Nominal Size: 12 in (305 mm) by 10 ⅝ in (270 mm) with 8 in (203 mm) exposure
3. Standards/Qualifications: ASTM D3018 (Type 1), ASTM D3161 (Class F Wind Resistance), ASTM D3462, ASTM E108/UL790 (Class A Fire Resistance), ICC-ES AC438, UL ER2453-01, UL ER2453-02, Florida Product Approval, Miami-Dade County Product Approval, and CSA A123.5.

B. LongRidge™ Extended Hip & Ridge (Algae Resistant) Shingles with Sealant: As manufactured by Owens Corning Roofing & Asphalt, LLC.
1. Extended 10" exposure provides an attractive, clean and consistent roof line for enhanced curb appeal.
2. Nominal Size: 13 ¼ (337 mm) by 36 in (914 mm) with 10 in (254 mm) exposure.
3. Piece Size: 13 ¼ (337 mm) by 12 in (305 mm)
4. Standards/Qualifications: ASTM D3018 (Type 1), ASTM D3161 (Class F Wind Resistance), ASTM D3462, ASTM E108/UL 790 (Class A Fire Resistance), ICC-ES AC438, UL ER2453-01, UL ER2453-02.

C. RIZERidge® Hip and Ridge (Algae Resistant) Shingles with Sealant: As manufactured by Owens Corning Roofing and Asphalt, LLC.
1. Foldable design provides multi-layered dimension along hips and ridges.

Guide Specifications

2. Nominal Size: 12 in (305 mm) by 36 in (914 mm) with 6 in (152 mm) exposure.
3. Piece Size: 12 in (305 mm) by 12 in (305 mm).
4. Standards/Qualifications: ASTM D3018 (Type 1), ASTM D3161 (Class F Wind Resistance), ASTM D3462, ASTM E108/UL 790 (Class A Fire Resistance), ICC-ES AC438, UL ER2453-01, UL ER2453-02, and Florida Product Approval.

D. DecoRidge® Hip and Ridge (Non Algae Resistant) Shingles with Sealant
1. Durable, heavyweight laminate construction with SBS-modified asphalt provides maximum dimension and style to the hip and ridge.
2. Nominal Size: 11-1/2 in (292 mm) by 8 in (203 mm) and 11-1/2 in (292 mm) by 10 in (254 mm) with 8 in (203 mm) exposure.
3. Standards/Qualifications: ASTM D3018 (Type 1), ASTM D3161 (Class F Wind Resistance), ASTM D3462, ASTM E108/UL 790 (Class A Fire Resistance), and CSA A123.5.

E. ProEdge® Hip and Ridge (Algae Resistant) Shingles: As manufactured by Owens Corning Roofing and Asphalt, LLC.
1. Perforated shingles with factory installed cutouts designed for fast and easy installation.
2. Nominal Size: 12 in (305 mm) by 36 in (914 mm) with 6 in (152 mm) exposure.
3. Piece Size: 12 in (305 mm) by 12 in (305 mm).
4. Standards/Qualifications: ASTM D3018 (Type 1), ASTM D3161 (Class F Wind Resistance), ASTM D3462, ASTM E108/UL 790 (Class A Fire Resistance), CSA A123.5, ICC-ES AC438, UL ER2453-01, UL ER2453-02, Florida Product Approval, and Miami-Dade County Product Approval.

F. ProEdge® Hip and Ridge (Non Algae Resistant) Shingles: As manufactured by Owens Corning Roofing and Asphalt, LLC.
1. Perforated shingles with factory installed cutouts designed for fast and easy installation.
2. Nominal Size: 12 in (305 mm) by 36 in (914 mm) with 6 in (152 mm) exposure.
3. Piece Size: 12 in (305 mm) by 12 in (305 mm).
4. Standards/Qualifications: ASTM D3018 (Type 1), ASTM D3161 (Class F Wind Resistance), ASTM D3462, ASTM E108/UL 790 (Class A Fire Resistance), ICC-ES AC438, UL ER2453-01, UL ER2453-02, and Florida Product Approval.

G. ProEdge® Hip and Ridge (Algae Resistant) (Metric) Shingles: As manufactured by Owens Corning Roofing and Asphalt, LLC.
1. Perforated shingles with factory installed cutouts designed for fast and easy installation.
2. Nominal Size: 13-1/4 in (337 mm) by 39-3/8 in (1000 mm) with 6-5/8 in (168 mm) exposure.
3. Piece Size: 9-27/32 in (250 mm) by 13-1/4 in (337 mm).
4. Standards/Qualifications: ASTM D3018 (Type 1), ASTM D3161 (Class F Wind Resistance), ASTM D3462, ASTM E108/UL 790 (Class A Fire Resistance), CSA A123.5, ICC-ES AC438, UL ER2453-01, and UL ER2453-02.

H. ProEdge STORM® Hip and Ridge Impact Resistant (Algae Resistant) Shingles: As manufactured by Owens Corning Roofing and Asphalt, LLC.
1. Perforated design for easy installation offering Class 4 impact resistance.
2. Nominal Size: 12 in (305 mm) by 36 in (914 mm) with 6 in (152 mm) exposure.
3. Piece Size: 12 in (305 mm) by 12 in (305 mm).
4. Standards/Qualifications: ASTM D3018 (Type 1), ASTM D3161 (Class F Wind Resistance), ASTM D3462, ASTM E108/UL 790 (Class A Fire Resistance), UL 2218 (Class 4 Impact Resistance), CSA A123.5, ICC-ES AC438, UL ER2453-01, and UL ER2453-02.

I. ProEdge Flex® Hip and Ridge Impact Resistant (Algae Resistant) Shingles: As manufactured by Owens Corning Roofing and Asphalt, LLC.
1. Perforated design for easy installation offering Class 4 impact resistance.
2. Nominal Size: 12 in (305 mm) by 36 in (914 mm) with 6 in (152 mm) exposure.

3. Piece Size: 12 in (305 mm) by 12 in (305 mm).
4. Standards/Qualifications: ASTM D3018 (Type 1), ASTM D3161 (Class F Wind Resistance), ASTM D3462, ASTM E108/UL 790 (Class A Fire Resistance), UL 2218 (Class 4 Impact Resistance), and UL ER2453-01.

J. Berkshire® Hip and Ridge (Algae Resistant) Shingles: (Algae Resistant) Shingles with Sealant: As manufactured by Owens Corning Roofing and Asphalt, LLC.
1. **High profile design features patented SureNail® Technology providing long-lasting durability and dimension**
2. Nominal Size: 12 in (305 mm) by 10 ⅝ in (270 mm) with 8 in (203 mm) exposure
3. Standards/Qualifications: ASTM D3018 (Type 1), ASTM D3161 (Class F Wind Resistance), ASTM D3462, ASTM E108/UL790 (Class A Fire Resistance), ICC-ES AC438, UL ER2453-01, UL ER2453-02, Florida Product Approval, Miami-Dade County Product Approval, and CSA A123.5.

K. WeatherGuard® HP Hip and Ridge Impact Resistant (Algae Resistant) Shingles: As manufactured by Owens Corning Roofing and Asphalt, LLC.
1. Perforated design for easy installation offering Class 4 impact resistance.
2. Nominal Size: 12 in (305 mm) by 36 in (914 mm) with 6 in (152 mm) exposure.
3. Piece Size: 12 in (305 mm) by 12 in (305 mm).
4. Standards/Qualifications: ASTM D3018 (Type 1), ASTM D3161 (Class F Wind Resistance), ASTM D3462, ASTM E108/UL 790 (Class A Fire Resistance), UL 2218 (Class 4 Impact Resistance), UL ER2453-01, UL ER2453-02, and Florida Product Approval.

2.4 STARTER SHINGLES

NOTE TO SPECIFIER Delete starter shingle products from the list below that are not required.
NOTE TO SPECIFIER Verify with the manufacturer regional product availability.

A. Starter Shingle Roll: As manufactured by Owens Corning Roofing and Asphalt, LLC.
1. Self-adhering, starter course. Each strip measures 7-1/5 in (191 mm) tall by 33-2/5 ft (10.1 m) wide.
2. Standards/Qualifications: Florida Product Approval.

B. Starter Strip Shingle: As manufactured by Owens Corning Roofing and Asphalt, LLC.
1. Nail applied starter course. Individual starter shingle is 6-5/8 in (168 mm) by 39-3/8 in (1000 mm).
2. Standards/Qualifications: ASTM D3462, ASTM D3161 (Class F Wind Resistance), ASTM E108/UL 790 (Class A Fire Resistance), CSA A123.5, ICC-ES AC438, UL ER2453-01

C. Starter Strip PLUS: As manufactured by Owens Corning Roofing and Asphalt, LLC.
1. Nail applied starter course. Individual starter shingle is 7-3/4 in (197 mm) by 39-3/8 in (1000 mm).
2. Standards/Qualifications: ASTM D3462, ASTM D3161 (Class F Wind Resistance), ASTM E108/UL 790 (Class A Fire Resistance), ICC-ES AC438, UL ER2453-01, Florida Product Approval, and Miami-Dade County Product Approval.

D. WoodStart® Starter Shingle: As manufactured by Owens Corning Roofing and Asphalt, LLC.
1. Nail applied starter course. Nominal Size is 13-3/8 in (340 mm) by 40 in (1016 mm).
2. Standards/Qualifications: ASTM D3462, ASTM D3161 (Class F Wind Resistance), ASTM E108/UL 790 (Class A Fire Resistance), ICC-ES AC438, and UL ER2453-01.

2.5 SELF-ADHERING UNDERLAYMENTS

NOTE TO SPECIFIER Delete self-adhering ice and water barrier products from the list below that are not required.

Fiberglass-Based Asphalt Shingles & Accessories

Guide Specifications

NOTE TO SPECIFIER Verify with the manufacturer regional product availability.

A. WeatherLock® Mat: As manufactured by Owens Corning Roofing and Asphalt, LLC.
   1. Mat-faced skid resistant surface, self-adhering, self sealing, bituminous ice and water barrier.
   2. Roll Width: 36 in (914 mm).
   3. Selvage: 3 in (76 mm).
   4. Standards/Qualifications: ASTM D1970, ASTM E108/UL 790 (Class A Fire Resistance[1]), UL ER19380-01, Florida Product Approval, and Miami-Dade County Product Approval.

B. WeatherLock® G: As manufactured by Owens Corning Roofing and Asphalt, LLC.
   1. Granule skid resistant surface, self-adhering, self sealing, bituminous ice and water barrier.
   2. Roll Width: 36 in (914 mm).
   3. Selvage: 3 in (76 mm).
   4. Standards/Qualifications: ASTM D1970, ASTM E108/UL 790 (Class A Fire Resistance[1]), UL ER19380-01, Florida Product Approval, and Miami-Dade County Approval.

C. WeatherLock® Cold Climate: As manufactured by Owens Corning Roofing and Asphalt, LLC.
   1. Granule skid resistant surface, self-adhering, self sealing, bituminous ice and water barrier. Designed for low temperature adhesion.
   2. Roll Width: 36 in (914 mm).
   3. Selvage: 3 in (76 mm).
   4. Standards/Qualifications: ASTM D1970, ASTM E108/UL 790 (Class A Fire Resistance[1]),

D. WeatherLock® Flex: As manufactured by Owens Corning Roofing and Asphalt, LLC.
   1. Cross laminated poly surface with skid resistant traction surface, self-adhering, self sealing, bituminous ice and water barrier.
   2. Roll Width: 36 in (914 mm).
   3. Selvage: 3 in (76 mm).
   4. Standards/Qualifications: ASTM D1970, ASTM E108/UL 790 (Class A Fire Resistance[1]), UL ER19380-01.

E. WeatherLock® Specialty Tile and Metal: As manufactured by Owens Corning Roofing and Asphalt, LLC.
   1. Polyester surface with skid resistant traction surface, self-adhering, self sealing, bituminous ice and water barrier.
   2. Thermally stable in high temperatures up to 260 degrees Fahrenheit (126 degrees Celsius).
   3. Designed for use with mechanically fastened tile systems.
   4. Roll Width: 36 in (914 mm).
   5. Selvage: 3 in (76 mm).
   6. Standards/Qualification: ASTM D1970, ASTM E108/UL 790 (Class A/Class C Fire Resistance[2]), UL 1897, UL ER19380-01, Florida Product Approval, and Miami-Dade County Product Approval.

F. RhinoRoof® GRN: As manufactured by Owens Corning Roofing and Asphalt, LLC.
   1. Granule skid resistant surface, self-adhering, self sealing, bituminous ice and water barrier.
   2. Roll Width: 36 in (914 mm).
   3. Selvage: 3 in (76 mm).
   4. Standards/Qualifications: ASTM D1970, ASTM E108/UL 790 (Class A Fire Resistance[1]), and Florida Product Approval.

G. RhinoRoof® MTL: As manufactured by Owens Corning Roofing and Asphalt, LLC.
   1. Cavitated film surface, self-adhering, self sealing, bituminous ice and water barrier.
   2. Roll Width: 36 in (914 mm).
   3. Selvage: 3 in (76 mm).
   4. Standards/Qualifications: ASTM D1970, ASTM E108/UL 790 (Class A Fire Resistance[1]), and Florida Product Approval.

[1] Class A fire resistance limited to use under asphalt shingles and quarry slate.
[2] Class A fire resistance limited to use under asphalt shingles, clay and concrete tile, and quarry slate. Class C fire resistance under metal panels and shingles.

2.6 MECHANICALLY FASTENED UNDERLAYMENTS

NOTE TO SPECIFIER Delete shingle underlayment products from the list below that are not required.
NOTE TO SPECIFIER Verify with the manufacturer regional product availability.

A. Fiberglas™ Reinforced Felt Underlayment.
   1. Wrinkle resistant, water resistant, breather type cellulose/glass fiber composite roofing underlayment.
   2. Roll Width: 36 in (91.4 cm).
   3. Roll Length: 141.5 ft (43.1 m).
   4. Coverage Per Roll: 4 roof squares.
   5. Standards/Qualifications: ASTM D226 (Type II), ASTM D4869 (Type IV), ASTM D6757, ASTM E108/UL 790 (Class A Fire Resistance[1]), and Florida Product Approval.

B. ProArmor® Synthetic Roof Underlayment.
   1. Weather-shedding synthetic polyolefin barrier.
   2. Roll Width: 42 in (106.7 cm).
   3. Roll Length: 286 ft (87.2 m).
   4. Coverage Per Roll: 9.29 roof squares.
   5. Standards/Qualification: ASTM D226, ASTM D4869, , ASTM E108/UL 790 (Class A Fire Resistance[1]), ICC-ES AC188, CCRR-1068, Florida Product Approval, and Miami-Dade County Product Approval.

C. Deck Defense® High Performance Roof Underlayment.
   1. Weather-shedding synthetic polyolefin barrier.
   2. Roll Width: 48 in (122 cm).
   3. Roll Length: 125 ft (38.1 m) and 250 ft (76.2 m).
   4. Coverage Per Roll: 5 and 10 roof squares.
   5. Standards/Qualification: ASTM D226, , ASTM E108/UL 790 (Class A Fire Resistance[1]), Florida Product Approval, and Miami-Dade County Product Approval.

D. RhinoRoof® U20 Roof Underlayment.
   1. Weather-shedding synthetic polypropylene barrier.
   2. Roll Width: 42 in (110 cm).
   3. Roll Length: 286 ft (87m)
   4. Coverage Per Roll: 10 roof squares.
   5. Standards/Qualification: ASTM D226, , ASTM E108/UL 790 (Class A Fire Resistance[1]), ICC-ES AC188, CCRR-1015, Florida Product Approval, and Miami-Dade County Product Approval.

E. Titaniumf® UDL25 Roof Underlayment.
   1. Weather-shedding synthetic polypropylene barrier.
   2. Roll Width: 48 in (122 cm).
   3. Roll Length: 250 ft (76.2m)
   4. Coverage Per Roll: 10 roof squares.
   5. Standards/Qualification: ASTM D226, , ASTM E108/UL 790 (Class A Fire Resistance[1]), ICC-ES AC188, CCRR-1024, Florida Product Approval, and Miami-Dade County Product Approval.

F. Titaniumf® UDL30 Roof Underlayment.
   1. Weather-shedding synthetic polypropylene barrier.
   2. Roll Width: 48 in (122 cm).
   3. Roll Length: 250 ft (76.2m)

4. Coverage Per Roll: 10 roof squares.
5. Standards/Qualification: ASTM D226, , ASTM E108/UL 790 (Class A Fire Resistance[1]), ICC-ES AC188, CCRR-1024, Florida Product Approval, and Miami-Dade County Product Approval.

G. Titaniumf® UDL50 Roof Underlayment.
1. Weather-shedding synthetic polypropylene barrier.
2. Roll Width: 48 in (122 cm).
3. Roll Length: 250 ft (76.2m)
4. Coverage Per Roll: 10 roof squares.
5. Standards/Qualification: ASTM D226, , ASTM E108/UL 790 (Class A Fire Resistance[1]), ICC-ES AC188, CCRR-1024, Florida Product Approval, and Miami-Dade County Product Approval.

[1] Class A fire resistance limited to use under asphalt shingles.

2.7 LOW SLOPE MODIFIED BITUMEN ROOFING SYSTEMS

NOTE TO SPECIFIER Delete products from the list below that are not required.
NOTE TO SPECIFIER Verify with the manufacturer regional product availability.

A. DeckSeal Roofing System.
1. A system comprised of component SBS modified bitumen membranes which, used in combination and according to instructions, creates a waterproof low slope roofing system.
2. A Dual Compound Formulation to meet performance needs of different layers: top coat compound provides excellent granule adhesion (cap sheet), back coat compound provides aggressive adhesion to the substrate.
3. Granule free adhesive selvedge on both the sides and end laps (cap sheet).
4. The DeckSeal™ System is designed for use on ¼:12 to 2:12 roof slopes.
5. The DeckSeal™ components include:
   a) DeckSeal™ SBS SA Cap Sheet - self-adhered granulated cap sheet
   b) DeckSeal™ SBS SA Base/Ply Sheet - A self-adhered base/ply sheet
   c) DeckSeal™ MA Nailbase - A nailable base sheet - where a nailable base sheet or self-adhered base/play is used as a base layer for the granulated cap sheet for a minimum recommended 2 ply system, and where a self-adhered base/ply can be used as a 2nd layer in a 3-ply system.
6. Attractive colors that complement popular shingle offerings.
7. Roll Dimensions:
   a) 32 ft. 10 in. by 39-3/8 in. – Cap sheet
   b) 65 ft. 8 in. by 39-3/8 in. – Nailable base or self-adhered base
8. Standards/Qualifications: UL 790/ASTM E108 fire resistance[1]; FM 4474 wind uplift resistance[2]; ASTM D6163 (base/ply sheet), ASTM D6164 (cap sheet); Florida Product Approval for use in HVHZ and Non-HVHZ areas; and Miami-Dade Product Approval.

[1] Class A, B, or C fire resistance based on system used and slope of roof. Consult the UL Online Classification Directory for fire resistance classifications for specific systems.
[2] Check local building codes for wind uplift requirements and DeckSeal™ literature for wind uplift resistance information.

2.8 ROOF VENTILATION

NOTE TO SPECIFIER Delete attic ventilation products from the list below that are not required.
NOTE TO SPECIFIER Verify with the manufacturer regional product availability.

A. VentSure® RidgeCat® Rolled Ridge Vent.

Guide Specifications

1. Shingle-over, low profile ridge vent with nylon entangled-net structure allows the passage of hot and/or moisture-laden air from attics, while prohibiting wind-driven rain.
2. Provides 15 sq in (9677 sq mm) NFVA per lineal foot.
3. Available in 20 ft (6.1 m) rolls in three different widths (regional availability):11 in (279 mm), 7 in (178 mm), and 9 in (229 mm) widths.
4. Suitable on roofs with a pitch from 2:12 to 18:12.
5. Standards/Qualifications: Passes Wind-Driven Rain with 8.8 in (224 mm) of rain/hr at 110 mph (177 km/h), ICC-ES AC132, UL ER21292-01, Florida Product Approval.

B. VentSure® Rigid Roll Ridge Vent with Weather PROtector® Moisture Barrier.
1. Shingle-over, low profile ridge vents with Weather PROtector® Moisture Barrier allows the passage of hot and/or moisture-laden air from attics, while prohibiting snow infiltration.
2. Provides 12.5 sq in (8200 sq mm) NFVA per lineal foot.
3. Available in 20 ft (6.1 m) rolls in three different widths (regional availability): 7 in (178 mm), 9 in (229 mm), and 11-1/4 in (286 mm).
4. Suitable on roofs with a pitch from 2:12 to 20:12.
5. Standards/Qualifications: ICC-ESR 2664, Passes Wind-Driven Rain with 8.8 in (224 mm) of rain/hr at 110 mph (177 km/h), and Snow Infiltration at 35 mph (56 km/h) and 70 mph (112 km/h) Tests, UL ER21292-01, Florida Product Approval, and Miami-Dade County Product Approval.

C. VentSure® 4 ft (1.2 m) Strip Heat and Moisture Ridge Vent, 12 in width
1. Shingle-over, polypropylene ridge ventilator designed to work with eave/soffit intake ventilation to maximize the flow of cool, fresh air through the roof and attic structure.
2. Patented corrugated ridge design and interlocking feature for additional flexibility and strength
3. Provides 20 sq in (12900 sq mm) NFVA per lineal foot.
4. Optional Weather PROtector® filter provides added protection against wind-driven rain and snow infiltration.
5. 15 in (381 mm) wide and 1 in (25 mm) high, with a shingle-over width of 12 in (305 mm).
6. Suitable on roofs with a pitch from 3:12 to 6:12.
7. Standards/Qualifications: Passes Wind-Driven Rain with 8.8 in (224 mm) of rain/hr at 110 mph (177 km/h), UL ER21292-01, Florida Product Approval, Miami-Dade County Product Approval, and TDI listed for usage in Texas Coastal Regions (RV-47).

D. VentSure® 4 ft (1.2 m) Strip Heat and Moisture Ridge Vent, 8 in (203 mm) and 10 in (254 mm) width.
1. Shingle-over, polypropylene ridge ventilator designed to work with eave/soffit intake ventilation to maximize the flow of cool, fresh air through the roof and attic structure.
2. Patented corrugated ridge design and interlocking feature for additional flexibility and strength.
3. Provides 18 sq in (11600 sq mm) NFVA per lineal foot.
4. Optional Weather PROtector® filter provides added protection against wind-driven rain and snow infiltration.
5. Available in 8 in (203 mm) and 10 in (254 mm) shingle-over widths that are 1 in (25 mm) high and overall product width is 11.43 in (290 mm) and 13.28 in (337 mm), respectively.
6. Suitable on roofs with a pitch from 3:12 to 16:12.
7. Standards/Qualifications: Passes Wind-Driven Rain with 8.8 in (224 mm) of rain/hr at 110 mph (177 km/h), UL ER21292-01, Florida Product Approval, Miami-Dade County Product Approval, and TDI listed for usage in Texas Coastal Regions (RV-47).

E. VentSure® SkyRunner LTE™ Rolled Ridge Vent
1. Shingle-over, polypropylene ridge ventilator designed to work with eave/soffit intake ventilation to maximize the flow of cool, fresh air through the roof and attic structure.
2. Provides 12 sq in (7742 sq mm) NFVA per lineal foot.
3. Available in 30 ft (9.1 m) rolls in 14-$^1/_2$ in (368 mm) width.
4. Suitable on roofs with a pitch from 2:12 to 16:12.

Guide Specifications

5. Standards/Qualifications: Passes Wind-Driven Rain with 8.8 in (224 mm) of rain/hr at 110 mph (177 km/h), ICC-ES AC132, UL ER21292-01, Florida Product Approval.

F. VentSure® Metal Slant Back Roof Vent
1. Rooftop mounted, slant-back designed, metal exhaust ventilator designed to evacuate hot and/or moisture-laden air from attics.
2. Each vent provides 51 sq in (32900 sq mm) NFVA.
3. Aluminum and galvanized steel available in Weathered Grey, Brown, Black, or Mill Finish.
4. 16 in (406 mm) by 20 in (508 mm) base, 8 in (203 mm) diameter opening.
5. Suitable on roofs with a pitch up to 12:12.
6. Standards/Qualifications: TDI listed for usage in Texas Coastal Region (RV-20)

G. Plastic Slant Back Roof Vent
1. Rooftop mounted, slant-back design with full screen, high-impact resin exhaust ventilator designed to evacuate hot and/or moisture-laden air from attics.
2. Each vent provides 55 sq in (35500 sq mm) NFVA.
3. Available in Weathered Grey, Brown, Black, Cedar, or White finish.
4. 17 in (432 mm) by 18 in (457 mm) base, 9 in (229 mm) by 9 in (229 mm) opening.
5. Standards/Qualifications: TDI listed for usage in Texas Coastal Regions (RV-20).

H. VentSure® Metal Square Top Roof Vent
1. Rooftop mounted, square-top designed, metal exhaust ventilator designed to evacuate hot and/or moisture-laden air from attics.
2. Each vent provides 51 sq in (32900 sq m) NFVA.
3. Aluminum and galvanized steel available in Weathered Grey, Brown, Black, or Mill finish.
4. 16-1/2 in (419 mm) by 17-1/2 in (445 mm) base, 8 in (203 mm) by 8 in (203 mm) opening.
5. Suitable on roofs with a pitch up to 12:12.

I. VentSure® Low Profile Slant Back Roof Vent with Exterior Louver
1. Rooftop mounted, low-profile, slant back metal exhaust ventilator designed to evacuate hot and/or moisture-laden air from attics.
2. Each vent provides 72 sq in (46500 sq mm) NFVA.
3. Galvanized steel available in Black, White Brown, Light Grey, Dark Gray, or Mill finish.
4. 32 in (813 mm) by 23 in (584 mm) base, 11 in (279 mm) by 11 in (279 mm) opening. Available with extended flange 36 in (914 mm) by 28 in (711 mm).
5. Suitable on roofs with a 3:12 pitch or greater.
6. Standards/Qualifications: Miami-Dade County Product Approval.

J. VentSure® Metal Dome with Screen
1. Rooftop mounted, dome, metal exhaust ventilator designed to evacuate hot and/or moisture-laden air from attics, while prohibiting snow infiltration.
2. Each vent provides 144 sq in (92900 sq mm) NFVA.
3. Galvanized steel available in Weathered Grey, Brown, Black, or Mill finish.
4. 25 in (635 mm) by 25 in (635 mm) base, 15 in (381 mm) diameter opening.
5. Suitable on roofs with a pitch up to 8:12.

K. VentSure® Internally Braced Premium Turbine Vent
1. Rooftop mounted, turbine designed, metal exhaust ventilator designed to evacuate hot and/or moisture-laden air from attics with sealed and lubricated stainless steel ball bearings.
2. Aluminum and galvanized steel available in Weathered Grey, Brown, Black, or Mill finish.
3. Available with 12 in (305 mm) diameter opening and 16 in (406 mm) base or 14 in (356 mm) diameter opening with 18 in (457 mm) base.

L. VentSure® Internally Braced Standard Turbine Vent

Guide Specifications

1. Rooftop mounted, turbine designed, metal exhaust ventilator designed to evacuate hot and/or moisture-laden air from attics.
2. Aluminum and galvanized steel available with a 12 in (305 mm) or 14 in (356 mm) opening.
3. 12 in (305 mm) opening with 16 in (406 mm) base available in Brown, Black, or Mill finish.
4. 14 in (356 mm) opening with 16 in (406 mm) base available in Mill finish.

M. VentSure® Externally Braced Premium Turbine Vent
1. Rooftop mounted, turbine designed, metal exhaust ventilator designed to evacuate hot and/or moisture-laden air from attics with sealed and lubricated stainless steel ball bearings.
2. Aluminum and galvanized steel available in Weathered Grey, Brown, Black, or Mill finish.
3. Available with 12 in (305 mm) opening and 16 in (406 mm) base.

N. VentSure® 1400 CFM Powered Roof Vent
1. Rooftop mounted, 1400 CFM (39.6 cu m/min), metal exhaust ventilator designed to evacuate hot and/or moisture-laden air from attics.
2. Each vent provides ventilation for 2000 sq ft (186 sq m) attic
3. Includes adjustable thermostat and humidistat and 4.5 Amp motor.
4. Aluminum and galvanized steel available in Weathered Grey, Brown, Black, or Mill finish.
5. 25 in (635 mm) by 25 in (635 mm) base with 15 in (381 mm) opening.
6. Suitable on roofs with a pitch up to 8:12.

O. VentSure® 1080 CFM Powered Roof Vent
1. Rooftop mounted, 1080 CFM (30.6 cu m/min), metal exhaust ventilator designed to evacuate hot air from attics.
2. Each vent provides ventilation for 1600 sq ft (149 sq m) attic.
3. Includes adjustable thermostat and humidistat and 2.6 Amp motor.
4. Aluminum and galvanized steel available in Weathered Grey, Brown, Black or Mill finish.
5. 25 in (635 mm) by 25 in (635 mm) base with 15 in (381 mm) opening.
6. Suitable on roofs with a pitch up to 8:12.

P. VentSure® Aluminum Undereave Intake Vent
1. Rectangular aluminum intake vents designed to introduce fresh, dry air into the attic. Pre-drilled holes for easy installation and fully screened for first line of defense against insects.
2. Available in Mill and White and three different dimensions designed to work collectively with exhaust vents to provide ventilation to roof structures.
3. 4 in (102 mm) by 16 in (406 mm) opening provides 16.34 sq in (10500 sq mm) NFVA, 6 in (152 mm) by 16 in (406 mm) opening provides 27.23 sq in (17600 sq mm) NFVA and 8 in (203 mm) by 16 in (406 mm) opening provides 38.12 sq in (24600 sq mm) NFVA.

Q. VentSure® 8 ft (2.4 m) Continuous Soffit Vent
1. 8 ft (2.4 m) continuous aluminum soffit vent offering 37.47 sq in (24200 sq mm) NVFA.
2. Available in 2 in (51 mm) widths, designed to work collectively with exhaust vents to provide ventilation to roof structures.

R. VentSure® Round Mini Soffit Vent
1. Round miniature aluminum soffit vents designed to introduce fresh, dry air into the attic.
2. Available in Mill finish and three sizes designed to work collectively with exhaust vents to provide ventilation to roof structures.
3. 2 in (51 mm) round opening provides 0.64 sq in (4100 sq mm) NFVA, 3 in (76 mm) round opening provides 1.36 sq in (8800 sq mm) NFVA, and 4 in (102 mm) round opening 2.43 sq in (15700 sq mm) NFVA.

S. VentSure® InFlow® Vent

Guide Specifications

1. Shingle-over, polypropylene intake vent solution for soffit-less and open-rafter homes, and homes with inadequate intake. Designed to work with exhaust ventilation to help achieve a balanced air ventilation system.
2. Patent-pending bottom intake design helps protect against wind-driven rain.
3. 4 ft (2.4 m) strip provides 10 sq in (6500 sq mm) NFVA per lineal foot, or 40 sq in (25800 sq mm) NFVA per vent
4. Weather PROtector® Moisture Barrier provides added protection against wind-driven rain and snow infiltration.
5. Roof Mount Unit dimensions: 48 in (1219 mm) length, 15 in (381 mm) width and 1 in (25 mm) height.
6. Suitable for use on roofs with a pitch from 4:12 to 16:12.
7. Standards/Qualifications: Passes Wind-Driven Rain with 8.8 in (224 mm) of rain/hr at 110 mph (177 km/h); ICC-ES AC132; TDI listed for usage in Texas Coastal Regions (RV-82) and Florida Product Approval.

T. VentSure® Solar Attic Exhaust Fan: Roof Mount Unit
1. 25-Watt solar-powered attic ventilator efficiently exhausts hot, humid air from the attic. Designed to work as part of a balanced air ventilation system in conjunction with Undereave/Soffit vents.
2. Electronic thermostat and humidistat for efficient operation.
3. Electric backup available for hookup for continued operation after dusk or when adequate solar power is not available.
4. Ventilates up to 3200 sq ft (297 sq m) attic space (under certain conditions, including adequate intake ventilation).
5. 38-volt DC Motor (variable speed) with external brushes.
6. 14 in (356 mm) 3-wing ultra quiet aluminum blades with pitch angle matched to motor/solar panel.
7. Black, powder-coated, 20 gauge, 0.0396 in (1.006 mm) galvanized steel flashing and housing.
8. Remote Attic Monitor (optional) displays attic temp, humidity, fan operation, and source of power via portable device from almost anywhere in the home.
9. Roof Mount Unit dimensions: 26 in (660 mm) length, 26 in (660 mm) width, 10-3/16 in (259 mm) height; Solar Panel Dimensions: 18-3/4 in (476 mm) length, 17-1/4 in (438 mm) width and 1 in (25 m) height; 36.0 lbs (16.3 kg) shipping weight.
10. Suitable for use on asphalt-shingled roof decks with a pitch from 3:12 to 16:12.
11. Standards/Qualifications: TDI listed for use in Texas Coastal Regions (RV-84); Florida Product Approval, and complies with UL 1703 impact resistance requirements.

U. VentSure® Solar Attic Exhaust Fan: Gable Mount Unit
1. 25-Watt solar-powered attic ventilator efficiently exhausts hot, humid air from the attic. Designed to work as part of a balanced air ventilation system in conjunction with Undereave/Soffit vents.
2. Only the solar panel is mounted on the roof with the Gable Mount Solar Attic. The fan is mounted in the attic and vents out the gable vents.
3. Electronic thermostat and humidistat for efficient operation.
4. Electric backup available for hookup for continued operation after dusk or when adequate solar power is not available.
5. Ventilates up to 4200 sq ft (390 sq m) attic space (under certain conditions, including adequate intake ventilation)
6. 38-volt DC Motor (variable speed) with external brushes.
7. 14 in (356 mm) 3-wing ultra quiet aluminum blades with pitch angle matched to motor/solar panel
8. Fan housing is electro-deposition, galvanized, powder coated with 3 mils to 5 mils (0.076 mm to 0.127 mm) thickness.
9. Remote Attic Monitor (optional) displays attic temp, humidity, fan operation, and source of power via portable device from almost anywhere in the home.

10. Gable-Mount Solar Fan Dimensions: 16 in (406 mm) length, 14 in (356 mm) width, and 8-1/2 in (216 mm) height; Solar Panel Dimensions: 18-3/4 in (476 mm) length, 17-1/4 in (438 mm) width and 1 in (25 mm) height; 25.7 lbs (11.6 kg) shipping weight.
11. Suitable for use on roofs with a pitch from 3:12 to 16:12.
12. Standards/Qualifications: Solar panel complies with UL 1703 impact resistance requirements.

2.9 FASTENERS

A. Fasteners: Galvanized steel, stainless steel, or aluminum nails complying with ASTM F1667, minimum 12-gauge, 0.0808 in (2.05 mm) shank with 3/8 in (9.5 mm) diameter head. Check local building code requirements.

2.10 METAL FLASHING

A. Flashing: Provide flashing as specified by Section 07600 - Metal Flashing and Sheet Metal.

PART 3 EXECUTION

3.1 EXAMINATION

A. Prior to starting work, examine all roof decks on which work will be applied for defects in materials and workmanship.

B. Do not begin installation until the roof deck has been properly prepared.

C. If another installer is responsible for roof deck preparation, notify the architect, designer-of-record on the project, or building owner of unsatisfactory preparation prior to proceeding with installation. Commencement of installation constitutes acceptance of conditions.

D. Underlayment and shingles installed directly over roof insulation or similar type decks is not approved.

1. Roof deck must be dry, minimum 3/4 in (19 mm) thick, minimum 6 in (152 mm) wide boards with maximum 1/4 in (6.4 mm) spaces, or APA rated sheathing (exposure 1): minimum 3/8 in (9.5 mm) plywood, minimum 7/16 in (11.1 mm) oriented strand board. Consult your manufacturer for other approved constructions.
2. Ventilation under the roof deck must meet local code requirements.

3.2 PREPARATION

A. Prepare surfaces using the methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions.

B. Remove all existing roofing down to the roof deck.

C. Verify that the deck is dry, structurally sound, clean and smooth. It shall be free of any depressions, waves, and projections. Cover ALL holes 1 in (25 mm) or less in diameter, cracks over 1/2 in (13 mm) in width, loose knots and excessively resinous areas with minimum 28 gauge; 0.0187 in (0.475 mm) galvanized steel, 0.0156 in (0.396 mm) stainless steel, or 0.0126 in (0.320 mm) aluminum sheet metal. Decking or deck boards with holes greater than 1 in (25 mm) in diameter shall be replaced.

D. Replace damaged deck with new materials.

E. Verify installed roof deck is acceptable to receive shingles. Acceptable roof decks include the following:
   1. Wood boards: 6 in (152 mm) minimum width, 3/4 in (19 mm) minimum thickness.
   2. Plywood sheathing: 3/8 in (9.5 mm) minimum thickness Exposure 1 grade plywood sheathing as recommended by APA and in compliance with local building code requirements.
   3. OSB panels: 7/16 in (11.1 mm) minimum thickness non-veneer structural panels as recommended by APA and in compliance with local building code requirements.
   4. Spacing between boards or panels shall not exceed 1/4 in (6.4 mm) between roof boards or 1/8 in (3.2 mm) between plywood or OSB sheathing panels.

3.3 UNDERLAYMENT INSTALLATION

A. Install Owens Corning™ underlayments using Owens Corning, installation instructions and in accordance with local building code requirements. When local codes and installation instructions are in conflict, the local building code requirements shall take precedence.
   1. Install self-adhering ice and water barrier from the eaves edge of roof up the slope a full 36 in (914 mm) but not less than 24 in (610 mm) beyond the interior edge of the exterior wall. Lap ends 6 in (152 mm) on roof decks sloped 5:12 and greater. On roofs with slopes from 2:12 up to 4:12, see application instructions printed on each package.

B. Drip Edge
   1. Drip edge shall be installed on all roof edges.
   2. Install drip edge on eaves first with underlayment installed over the drip edge, or install per local code requirements.
   3. Install drip edge on rakes after underlayment is installed, with the drip edge fastened over the underlayment.
   4. Joints in drip edge shall be lapped minimum 2 in (51 mm) with the upslope piece lapped over the down slope piece, or per local building code requirements
   5. Install fasteners 8 in to 10 in (203 mm to 254 m) on center, approximately 1-3/4 in (44 mm) to 3 in (76 mm) from the outside edge of the drip edge, or per local building code requirements.

C. Valleys
   1. Install self-adhering ice and water barrier at least 36 in (914 mm) wide and centered on the valley. Lap ends 6 in (152 mm) and seal.
   2. Where valleys are indicated to be "open valleys", install metal flashing over self-adhering ice and water barrier before roof deck underlayment is installed; DO NOT nail through the flashing. Secure the flashing by nailing at 18 in (457 mm) on center just beyond edge of flashing so that nail heads hold down the edge, or use valley metal with a formed edge and secure with clips.

D. Roof Deck
   1. On roofs with slope greater than 4:12, lap horizontal edges at least 2 inches (51 mm) and at least 2 inches (51 mm) over self-adhering ice and water barrier. Lap ends at least 4 inches (102 m). End laps in succeeding course should be located at least 6 ft (1.8 m) from end laps in the preceding course.
   2. On roofs with pitch between 2:12 to less than 4:12, see application instructions printed on each shingle wrapper, or follow local code requirements.
   3. Lap underlayment over valley protection at least 6 inches (152 mm).

E. Penetrations
   1. Vent pipes: Install a 24 in (610 mm) square piece of self-adhering ice and water barrier lapping over roof deck underlayment; seal tightly to pipe.
   2. Vertical walls: Install self-adhering ice and water barrier extending at least 3 in to 4 in (76 mm to 102 mm) up the wall and 12 in (305 mm) onto the roof surface. Lap the membrane over the roof deck underlayment.

3. Chimneys: Install self-adhering ice and water barrier around entire chimney extending at least 6 in (152 mm) up the wall and 12 in (305 mm) on to the roof surface. Lap the membrane over the roof deck underlayment.

3.4 SHINGLE INSTALLATION

A. Install Owens Corning™ shingles (including started shingles as well as hip and ridge shingles) in accordance with Owens Corning installation instructions and in accordance with local building code requirements.

B. Install starter course at lowest roof edge and along rake with edge of shingles extending 1/4 in (6.4 mm) over edge of roof. Sealant strip should be closest to roof edge.

C. Install first and successive courses of shingles stepping diagonally up and across roof deck with Owens Corning recommended offset at each succeeding course. Maintain uniform exposure of shingles at each succeeding course. Use of a chalk line every other course is recommended.

D. Fasten shingles to deck with number of roofing nails per shingle and type of nails specified by Owens Corning, or in accordance specified by local Authority Having Jurisdiction.

E. All fasteners must be driven flush with the shingle surface and penetrate at least 3/4 in (19.1 mm) into the wood deck. Where the deck is less than 3/4 in (19.1 mm) thick, the fastener should be long enough to penetrate fully and extend through the roof sheathing.

F. Install Owens Corning shingles at valleys, eaves, rakes, hips and ridges in accordance with Owens Corning installation instructions and local building code requirements.

3.5 LOW SLOPE ROOFING SYSTEM INSTALLATION

A. Install Owens Corning™ low slope roofing system in accordance with Owens Corning installation instructions and in accordance with local building code requirements.
B. Owens Corning™ low slope roofing system should only be installed on roofs with a slope of ¼:12 to 2:12.
C. Apply only when the weather is dry and the ambient temperature is 45°F (7°C) and rising. Do not install when water in any form (i.e. rain, dew, ice, frost, snow) exist.
D. Apply only over clean, dry, dust-free surfaces
E. Ensure installation of DeckSeal MA NailBase does not prevent or interfere with ventilation of the existing structure.

3.6 VENT INSTALLATION

A. Install Owens Corning™ vents in accordance with Owens Corning installation instructions and local building code requirements.

B. Ventilation at minimum must meet or exceed local building code requirements. Owens Corning recommends:
   1. Net Free Ventilating Area (NFVA) of 1:150 as a minimum.
   2. Balanced approach for most effective ventilation (balance between the lower and upper parts of the roof by providing 50% of NFVA at the soffit and 50% at the ridge).
   3. NFVA at the upper part of the roof should not exceed 50%.
   4. Where length of the roof ridge is sufficient provide continuous ridge vents for most effective ventilation approach.

3.7 PROTECTION

A. Protect installed products until completion of project.

B. Touch-up, repair or replace damaged products before Substantial Completion.

END OF SECTION