All 6HT SHINGLES

Business & Professional Regulation

Business Professional Regulation

License efficiency. Regulatory sanity.

Product Approval
USER: Public User

FL #	FL10124-R15
Application Type	Revision
Code Version	2014
Application Status	*Approved*
Comments	
Archived	
Product Manufacturer	GAF
Address/Phone/Email	1 Campus Drive Parisppany, NJ 07054 (973) 872-4421 lindarelth@trinityerd.com
Authorized Signature	Beth McSorley lindarelth@trinityerd.com
Technical Representative	Beth McSorley (current)
Address/Phone/Email	1 Campus Drive Parsippany, NJ 07054 (973) 872-4421 bmcsorley@gaf.com
Quality Assurance Representative	
Address/Phone/Email	
Category	Roofing
Subcategory	Asphalt Shingles
Compliance Method	Evaluation Report from a Florida Registered Architect or a Licensed Florida Professional Engineer ✓ Evaluation Report - Hardcopy Received
Florida Engineer or Architect Name who developed the Evaluation Report	Robert Nieminen
Florida License	PE-59166
Quality Assurance Entity	UL LLC
Quality Assurance Contract Expiration Date	11/21/2016
Validated By	John W. Knezevich, PE ✓ Validation Checklist - Hardcopy Received
Certificate of Independence	FL10124_R15_COI_2015_01_COI_Nieminen.pdf

Referenced Standard and Year (of Standard)

Standard	Year
ASTM D3161	2009
ASTM D3462	2009
ASTM D7158	2008
TAS 107	1995

Equivalence of Product Standards Certified By

Sections from the Code

Product Approval Method	Method 1 Option D
Date Submitted	03/31/2015
Date Validated	04/08/2015
Date Pending FBC Approval	04/12/2015
Date Approved	06/23/2015

Summary of Products

FL #	Model, Number or Name	Description
10124.1	GAF Asphalt Roof Shingles	Fiberglass reinforced 3-tab, laminated, 5-tab and hip/ridge asphalt shingles
Limits of Use **Approved for use in HVHZ:** No **Approved for use outside HVHZ:** Yes **Impact Resistant:** N/A **Design Pressure:** N/A **Other:** Refer to ER, Section 5.		**Installation Instructions** FL10124_R15_II_2015_03_FINAL_ER_GAF_Asphalt Shingles_FL10124-R15.pdf Verified By: Robert Nieminen PE-59166 Created by Independent Third Party: Yes **Evaluation Reports** FL10124_R15_AE_2015_03_FINAL_ER_GAF_Asphalt Shingles_FL10124-R15.pdf Created by Independent Third Party: Yes

Back Next

TRINITY ERD

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EVALUATION REPORT

GAF
1 Campus Drive
Parsippany, NJ 07054

Evaluation Report 01506.01.08-R17
FL10124-R15
Date of Issuance: 01/03/2008
Revision 17: 03/31/2015

SCOPE:
This Evaluation Report is issued under Rule 61G20-3 and the applicable rules and regulations governing the use of construction materials in the State of Florida. The documentation submitted has been reviewed by Robert Nieminen, P.E. for use of the product under the Florida Building Code and Florida Building Code, Residential Volume. The products described herein have been evaluated for compliance with the 5th Edition (2014) Florida Building Code sections noted herein.

DESCRIPTION: GAF Asphalt Roof Shingles

LABELING: Labeling shall be in accordance with the requirements the Accredited Quality Assurance Agency noted herein.

CONTINUED COMPLIANCE: This Evaluation Report is valid until such time as the named product(s) changes, the referenced Quality Assurance documentation changes, or provisions of the Code that relate to the product change. Acceptance of this Evaluation Report by the named client constitutes agreement to notify Robert Nieminen, P.E. if the product changes or the referenced Quality Assurance documentation changes. Trinity|ERD requires a complete review of this Evaluation Report relative to updated Code requirements with each Code Cycle.

ADVERTISEMENT: The Evaluation Report number preceded by the words "Trinity|ERD Evaluated" may be displayed in advertising literature. If any portion of the Evaluation Report is displayed, then it shall be done in its entirety.

INSPECTION: Upon request, a copy of this entire Evaluation Report shall be provided to the user by the manufacturer or its distributors and shall be available for inspection at the job site at the request of the Building Official.

This Evaluation Report consists of pages 1 through 5.

Prepared by:

Robert J.M. Nieminen, P.E.
Florida Registration No. 59166, Florida DCA ANE1983

The facsimile seal appearing was authorized by Robert Nieminen, P.E. on 03/31/2015. This does not serve as an electronically signed document. Signed, sealed hardcopies have been transmitted to the Product Approval Administrator and to the named client

CERTIFICATION OF INDEPENDENCE:

1. Trinity|ERD does not have, nor does it intend to acquire or will it acquire, a financial interest in any company manufacturing or distributing products it evaluates.
2. Trinity|ERD is not owned, operated or controlled by any company manufacturing or distributing products it evaluates.
3. Robert Nieminen, P.E. does not have nor will acquire, a financial interest in any company manufacturing or distributing products for which the evaluation reports are being issued.
4. Robert Nieminen, P.E. does not have, nor will acquire, a financial interest in any other entity involved in the approval process of the product.
5. This is a building code evaluation. Neither Trinity|ERD nor Robert Nieminen, P.E. are, in any way, the Designer of Record for any project on which this Evaluation Report, or previous versions thereof, is/was used for permitting or design guidance unless retained specifically for that purpose.

ROOFING SYSTEMS EVALUATION:

1. **SCOPE:**

Product Category: Roofing
Sub-Category: Asphalt Shingles
Compliance Statement: GAF Asphalt Roof Shingles, as produced by GAF, have demonstrated compliance with the following sections of the Florida Building Code and Florida Building Code, Residential Volume through testing in accordance with the following Standards. Compliance is subject to the Installation Requirements and Limitations / Conditions of Use set forth herein.

2. **STANDARDS:**

Section	Property	Standard	Year
1507.2.5, R905.2.4	Physical Properties	ASTM D3462	2009
1507.2.7.1, R905.2.6.1	Wind Resistance	ASTM D3161	2009
1507.2.7.1, R905.2.6.1	Wind Resistance	ASTM D7158	2008
1507.2.7.1, R905.2.6.1	Wind Resistance	TAS 107	1995

3. **REFERENCES:**

Entity	Examination	Reference	Date
GAF (PDM 1915)	Letter of Equivalency	Seal-A-Ridge Impact Resistant IR	01/13/2012
PRI (TST 5878)	ASTM D3462	GAF-059-02-01	09/02/2004
PRI (TST 5878)	ASTM D3462	GAF-080-02-01	05/25/2005
PRI (TST 5878)	Wind Driven Rain	GAF-407-02-01	01/21/2013
UL (TST 1740)	*ASTM D3462*	*93NK6295*	*11/29/1993*
UL (TST 1740)	ASTM D3462	99NK43835	01/12/2000
UL (TST 1740)	TAS 107	94NK9632	03/29/2000
UL (TST 1740)	ASTM D3462	01NK06632	02/02/2001
UL (TST 1740)	ASTM D3161, TAS 107	01NK9226	05/21/2001
UL (TST 1740)	ASTM D3161	01NK37122	12/18/2001
UL (TST 1740)	ASTM D3462	01NK37122	12/19/2001
UL (TST 1740)	ASTM D3161, TAS 107	02NK12980	04/10/2002
UL (TST 1740)	ASTM D3161, TAS 107	02NK30871	09/09/2002
UL (TST 1740)	ASTM D3161	03CA5367	03/11/2003
UL (TST 1740)	ASTM D3462	03NK26444	10/17/2003
UL (TST 1740)	ASTM D3462	04NK13850	06/07/2004
UL (TST 1740)	ASTM D3161	04NK13850	06/23/2004
UL (TST 1740)	ASTM D3161	04NK30546	03/10/2005
UL (TST 1740)	ASTM D3462	04NK22009	05/06/2005
UL (TST 1740)	ASTM D3161	04NK22009	05/09/2005
UL (TST 1740)	ASTM D3462	05NK27924	02/10/2006
UL (TST 1740)	ASTM D3161	05NK27924	02/11/2006
UL (TST 1740)	ASTM D3161, D3462	06CA18077	06/05/2006
UL (TST 1740)	ASTM D3161, D3462	06CA18074	06/16/2006
UL (TST 1740)	ASTM D3161, D3462	06CA35251	10/18/2006
UL (TST 1740)	ASTM D3462	06CA31603	12/01/2006
UL (TST 1740)	ASTM D3161, D3462	06CA41095	12/27/2006
UL (TST 1740)	ASTM D3161	07NK05228	03/13/2007
UL (TST 1740)	ASTM D3161	06CA31611	04/04/2007
UL (TST 1740)	ASTM D3161	06CA61148	04/09/2007
UL (TST 1740)	ASTM D3161, D3462	07CA31742	11/08/2007
UL (TST 1740)	ASTM D3161, D7158, D3462	08CA06100	03/13/2008
UL (TST 1740)	ASTM D3161, D3462	07CA55908	04/01/2008
UL (TST 1740)	ASTM D3161, D3462	09CA10592	03/26/2009
UL (TST 1740)	ASTM D3161, D3462	09CA06856	05/15/2009
UL (TST 1740)	ASTM D3161, D7158, D3462	09NK06647	08/01/2009
UL (TST 1740)	ASTM D3161, D7158, D3462	09CA27281	08/27/2009
UL (TST 1740)	ASTM D3161, D7158, D3462	10CA35554	03/05/2010
UL (TST 1740)	ASTM D3161, D7158, D3462	10CA13686	05/15/2010
UL (TST 1740)	ASTM D3462	10CA07264	05/27/2010
UL (TST 1740)	ASTM D3462	10CA11953	10/29/2010
UL (TST 1740)	ASTM D3161, D7158, D3462	10NK11951	10/30/2010
UL (TST 1740)	ASTM D3161, D7158, D3462	10NK12070	11/04/2010
UL (TST 1740)	ASTM D3161, D7158, D3462	08CA06100	01/30/2010

Entity	Examination	Reference	Date
UL (TST 1740)	ASTM D3161, D7158, D3462	10CA53934	03/31/2011
UL (TST 1740)	ASTM D3161, D7158, D3462	11CA48924	10/22/2011
UL (TST 1740)	ASTM D3161, D7158, D3462	11CA47919	12/03/2011
UL (TST 1740)	ASTM D3161, D7158, D3462	11CA48408	12/08/2011
UL (TST 1740)	ASTM D3161, D7158, D3462	11CA48725	12/09/2011
UL, LLC. (TST 9628)	ASTM D3462	12CA34891	10/12/2012
UL, LLC. (TST 9628)	ASTM D3161, D7158, D3462	12CA58151	02/15/2013
UL, LLC. (TST 9628)	ASTM D3161	12CA38083	02/26/2013
UL, LLC. (TST 9628)	ASTM D3161	13CA32332	06/18/2013
UL, LLC. (TST 9628)	ASTM D3161	13CA37934	08/02/2013
UL, LLC. (QUA 9625)	Quality Control	Inspection Report, R21, Mobile, AL	11/21/2014
UL, LLC. (QUA 9625)	Quality Control	Inspection Report, R21, Myerstown, PA	02/06/2015
UL, LLC. (QUA 9625)	Quality Control	Inspection Report, R21, Tuscaloosa, AL	02/20/2015
UL, LLC. (QUA 9625)	Quality Control	Inspection Report, R21, Michigan Cty, IN	02/19/2015
UL, LLC. (QUA 9625)	Quality Control	Inspection Report, R21, Shafter, CA	01/05/2015
UL, LLC. (QUA 9625)	Quality Control	Inspection Report, R21, Savannah, GA	02/23/2015
UL, LLC. (QUA 9625)	Quality Control	Inspection Report, R21, Minneapolis, MN	02/16/2015
UL, LLC. (QUA 9625)	Quality Control	Inspection Report, R21, Mt. Vernon, IN	02/10/2015
UL, LLC. (QUA 9625)	Quality Control	Inspection Report, R21, Baltimore, MD	02/11/2015
UL, LLC. (QUA 9625)	Quality Control	Inspection Report, R21, Tampa, FL	03/05/2015
UL, LLC. (QUA 9625)	Quality Control	Inspection Report, R21, Dallas, TX	02/25/2015
UL, LLC. (QUA 9625)	Quality Control	Inspection Report, R21, Ennis, TX	03/07/2015
UL, LLC. (QUA 9625)	Quality Control	Inspection Report, R21, Fontana, CA	03/02/2015

4. PRODUCT DESCRIPTION:

4.1 Asphalt Shingles:

4.1.1 Marquis® WeatherMax®, Royal Sovereign® and Sentinel® are a fiberglass reinforced 3-tab asphalt roof shingles.

4.1.2 Camelot®, Camelot® II, Country Mansion® II, Grand Canyon®, Grand Sequoia®, Grand Sequoia® IR, Monaco®, Sienna®, Timberline American Harvest®, Timberline® ArmorShield™ II, Timberline® Natural Shadow®, Timberline HD®, Timberline® Cool Series, Timberline Ultra HD® and Woodland® are fiberglass reinforced, laminated asphalt roof shingles.

4.1.3 Slateline® is a fiberglass reinforced 5-tab asphalt roof shingle.

4.2 Hip & Ridge Shingles:

4.2.1 Seal-A-Ridge® Ridge Cap Shingles, Seal-A-Ridge® IR Impact-Resistant Ridge Cap Shingles and Timbertex® Premium Ridge Cap Shingles are fiberglass reinforced, hip and ridge asphalt roof shingles.

4.3 Starter Strips:

4.3.1 Pro-Start® Starter Strip Shingles and WeatherBlocker™ Premium Eave/Rake Starter Strip are starter strips for asphalt roof shingles.

5. LIMITATIONS:

5.1 This is a building code evaluation. Neither Trinity|ERD nor Robert Nieminen, P.E. are, in any way, the Designer of Record for any project on which this Evaluation Report, or previous versions thereof, is/was used for permitting or design guidance unless retained specifically for that purpose.

5.2 This Evaluation Report is not for use in the HVHZ.

5.3 Fire Classification is not part of this Evaluation Report; refer to current Approved Roofing Materials Directory for fire ratings of this product.

5.4 Wind Classification:

5.4.1 The GAF asphalt shingles noted in Section 4.1 are Classified in accordance with FBC Tables 1507.2.7.1 and R905.2.6.1 to ASTM D3161, Class F and/or ASTM D7158, Class H, indicating the shingles are acceptable for us in all wind zones up to V_{asd} = 150 mph (V_{ult} = 194 mph). Refer to Section 6 for installation requirements to meet this wind rating.

5.4.2 The GAF hip & ridge shingles noted in Section 4.2 are Classified in accordance with FBC Tables 1507.2.7.1 and R905.2.6.1 to ASTM D3161, Class F, indicating the shingles are acceptable for us in all wind zones up to V_{asd} = 150 mph (V_{ult} = 194 mph). Refer to Section 6 for installation requirements to meet this wind rating.

GAF

Quality You Can Trust...From North America's Largest Roofing Manufacturer®

TIMBERLINE®

LIFETIME HIGH DEFINITION® SHINGLES

INSTALLATION INSTRUCTIONS

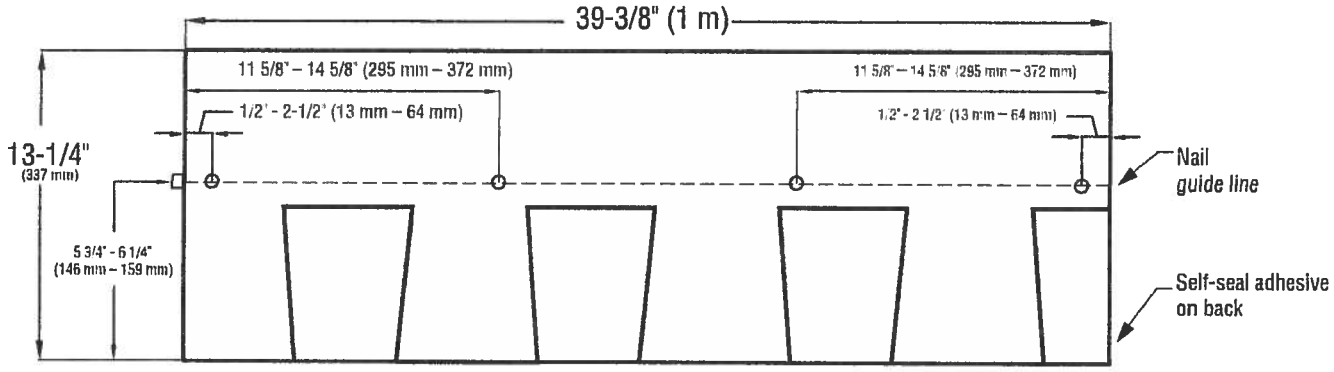
Timberline® Shingles
North America's #1-Selling Shingle!

GENERAL INSTRUCTIONS

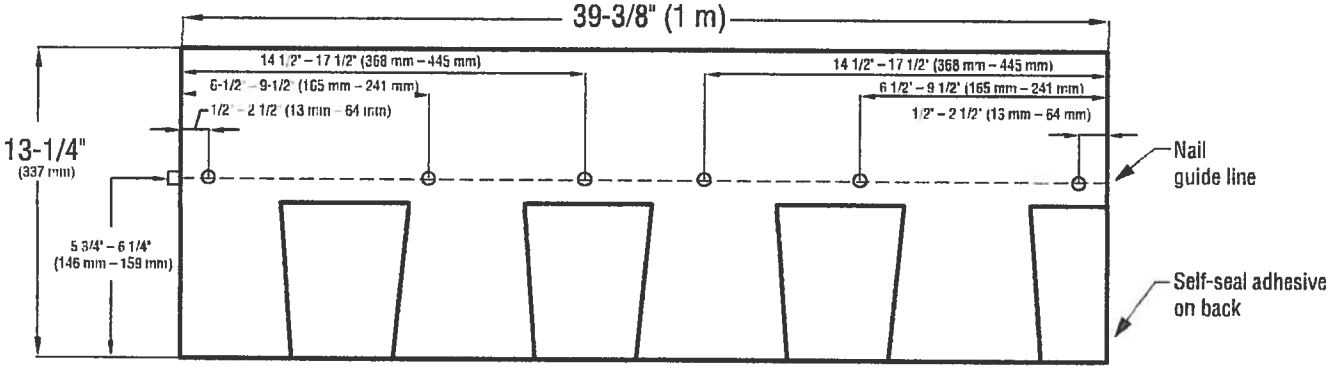
- **MATERIAL SAFETY DATA SHEETS:** When using GAF products, e.g., shingles, underlayments, plastic cement, etc., please refer to the applicable MSDS. The most current versions are available at www.gaf.com. GAF does not provide safety data sheets or installation instructions for products not manufactured by GAF. Please consult the material manufacturer for their MSDS and installation instructions where appropriate.
- **ROOF DECKS:** Use minimum 3/8" (10 mm) plywood or OSB decking as recommended by APA-The Engineered Wood Assn. Wood decks must be well-seasoned and supported having a maximum 1/8" (3 mm) spacing, using minimum nominal 1" (25 mm) thick lumber, a maximum 6" (152 mm) width, having adequate nail-holding capacity and a smooth surface. Do NOT fasten shingles directly to insulation or insulated deck unless authorized in writing by GAF. Roof decks and existing surfacing material must be dry prior to application of shingles.
- **UNDERLAYMENT (LEAK BARRIER):** Install GAF Leak Barrier at the eaves in localities where leaks may be caused by water backing up behind ice or debris dams.
- **UNDERLAYMENT (ROOF DECK PROTECTION):** Underlayment beneath shingles has many benefits, including helping to prevent wind-driven rain from reaching the interior of the building and to prevent sap in some wood decking from reacting with asphalt shingles. Underlayment is also required by many code bodies and is required to maintain the shingles' UL Class A fire rating. When an underlayment is installed, use a breather-type underlayment, such as GAF Shingle-Mate® or Deck-Armor™ Underlayments. GAF Tiger Paw™ Underlayment, with its moisture control design, can also be used. Always have a design professional review ventilation requirements when using a moisture control design underlayment.
- **FASTENERS:** Use only zinc-coated steel or aluminum, 10-12 gauge, barbed, deformed, or smooth shank roofing nails with heads 3/8" (10 mm) to 7/16" (12 mm) in diameter. Fasteners should be long enough to penetrate at least 3/4" (19 mm) into wood decks or just through the plywood decks. Fasteners must be driven flush with the surface of the shingle. Overdriving will damage the shingle. Raised fasteners will interfere with the sealing of the shingles and can back out.
- **ASPHALT PLASTIC CEMENT:** Use asphalt plastic cement conforming to ASTM D4586 Type I or II.
- **WIND RESISTANCE/HAND SEALING:** These shingles have a special thermal sealant that firmly bonds the shingles together after application when exposed to sun and warm temperatures. Shingles installed in fall or winter may not seal until the following spring. If shingles are damaged by winds before sealing or are not exposed to adequate surface temperatures, or if the self-sealant gets dirty, the shingles may never seal. Failure to seal under these circumstances results from the nature of self-sealing shingles, and is not a manufacturing defect. If shingles are to be applied during PROLONGED COLD periods or in areas where airborne dust or sand can be expected before sealing occurs, the shingles MUST be hand sealed. See Nailing Instructions / Hand Sealing.
- **MANSARD AND STEEP SLOPE APPLICATIONS:** For roof slopes greater than 21" per foot (1750 mm/m), shingle must be hand sealed. DO NOT use on vertical side walls.
- **RELEASE FILM:** Plastic film strips are present either on the back or face of each shingle. The film strips are to prevent shingles from sticking together while in the bundle. Do not remove the film strip before or during the application.
- **THROUGH VENTILATION:** For optimal shingle life and to help prevent mold growth, all roof structures must have through ventilation to prevent entrapment of moisture-laden air behind roof sheathing. Ventilation must be designed to meet or exceed current F.H.A., H.U.D., or local code minimum requirements. Note: Minimum net free ventilation area of 1 sq. foot per 150 sq. feet (1 sq. meter per 150 sq. meters) of ceiling area is required. When vents are located at the eaves and near the roof's peak (balanced) for maximum air flow, ventilation may be reduced to 1 sq. foot per 300 sq. feet (1 sq. meter per 300 sq. meters).
- **EXPOSED METAL:** Paint all exposed metal surfaces (flashing, vents, etc.) with matching GAF ShingleMatch™ Roof Accessory Paint for best appearance.
- **NOTE:** All drawings not drawn to scale.

NAILING INSTRUCTIONS / HAND-SEALING

These shingles MUST be nailed a nominal 6" (152 mm) from bottom of shingle, above the cut-outs, as shown. Nails must not be exposed. To hand-seal shingles and to insure immediate sealing, apply 4 quarter-sized dabs of shingle tab adhesive on the back of the shingle 1" (25 mm) and 13" (330 mm) in from each side and 1" (25 mm) up from bottom of the shingle. Press shingle firmly into the adhesive. **CAUTION:** Apply ONLY a thin uniform layer of asphalt plastic cement less than 1/8" (3 mm) thick. Excess amounts can cause blistering of the shingles and may soften the asphalt in underlayments and leak barriers, resulting in the asphalt dripping and staining.



STANDARD NAILING PATTERN - four nails per shingle



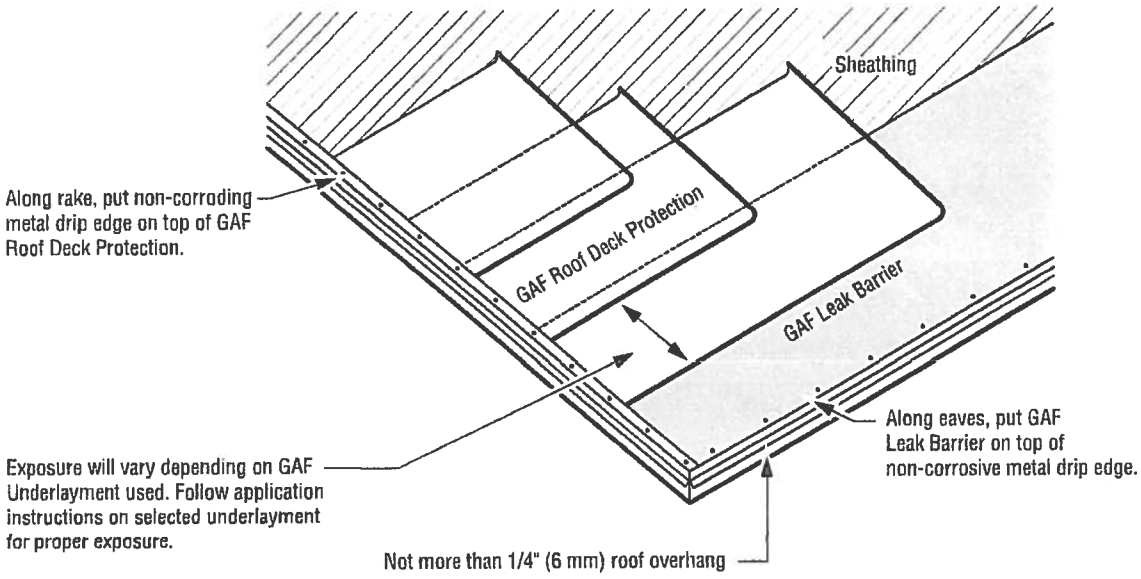
ENHANCED NAILING PATTERN - six nails per shingle*

* required by some local codes and required for enhanced wind coverage on certain products. See limited warranty for details.

INSTALLING UNDERLAYMENT

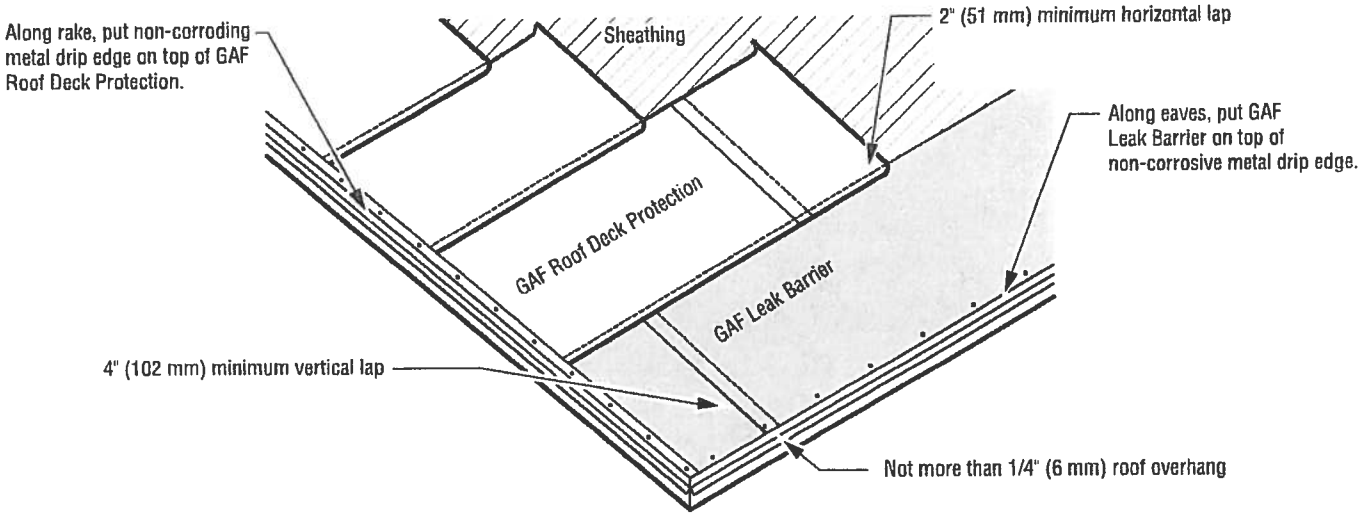
UNDERLAYMENT: FOR ROOF SLOPES 2:12 TO LESS THAN 4:12

Application of eave flashing: At eaves and where ice dams can be expected, use one layer of GAF Leak Barrier. Eave flashing must not overhang the eave edge by more than 1/4" (6 mm) and should extend 24" (610 mm) beyond the inside wall line. Where ice dams or debris dams are not expected, install 2 plies of GAF Roof Deck Protection. **Application of underlayment:** Completely cover the deck with two layers of GAF Roof Deck Protection as shown. Use only enough nails to hold underlayment in place until covered by shingles.



UNDERLAYMENT: FOR ROOF SLOPES 4:12 OR MORE

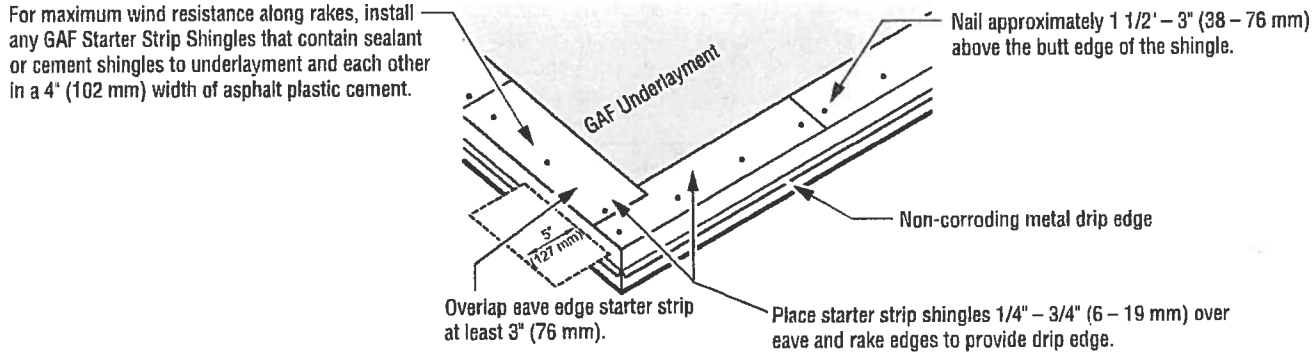
Application of eave flashing: At eaves and where ice dams can be expected, use one layer of GAF Leak Barrier. Eave flashing must extend 24" (610 mm) beyond the inside wall line. **Application of underlayment:** Cover deck with one layer of GAF Roof Deck Protection installed without wrinkles. Use only enough nails to hold underlayment in place until covered by shingles.



INSTALLING STARTER STRIP SHINGLES

STARTER COURSE

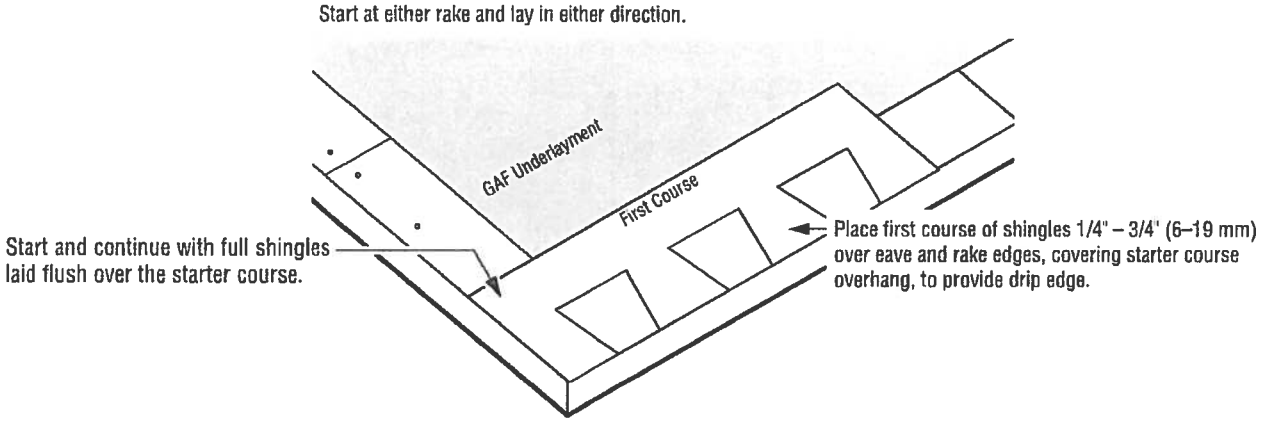
Use GAF Starter Strip Shingles along the eaves and rake. Apply as shown. **NOTE:** GAF Starter Strip Shingles are recommended at the rakes for best performance and required for enhanced warranty coverage on certain products (see limited warranties for details). Refer to application instructions for the selected starter strip shingles.



INSTALLING SHINGLES

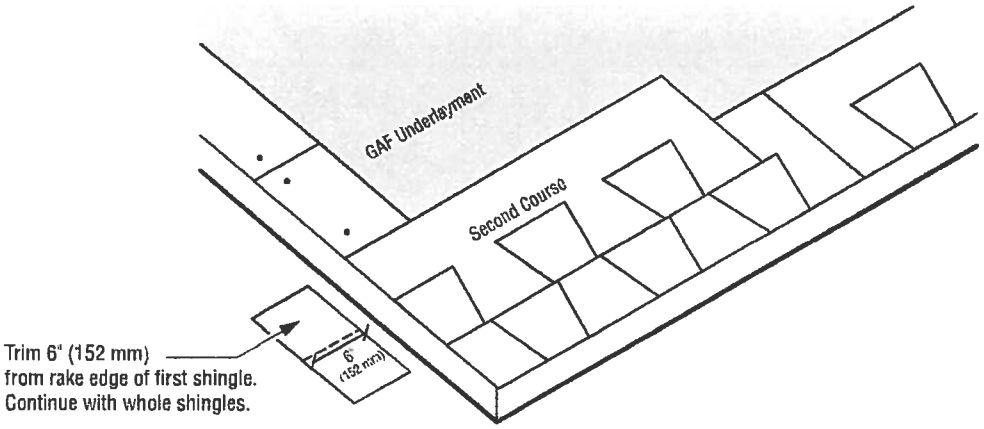
FIRST COURSE

Shingle exposure should be 5 5/8" (143 mm).



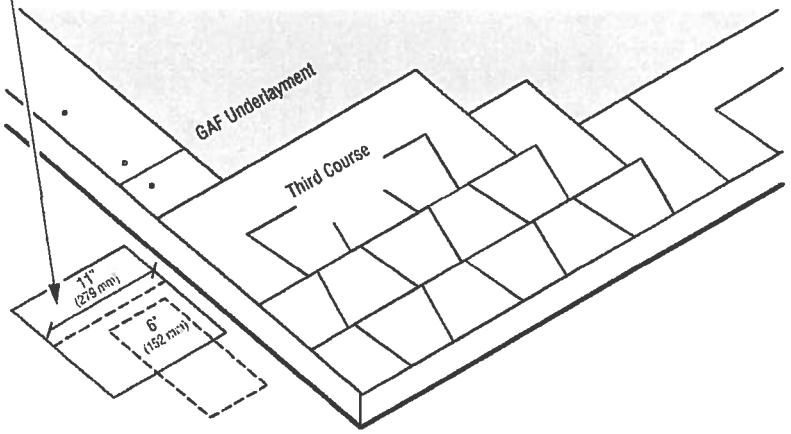
SECOND COURSE

Position the shingles in the second and subsequent courses flush with the tops of the wide cut-outs. This results in a 5 5/8" (143 mm) exposure.



THIRD COURSE

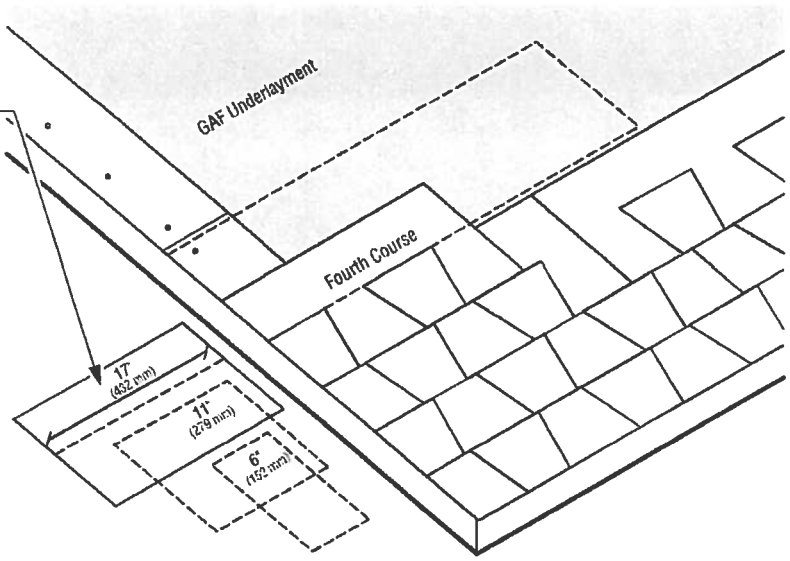
Trim 11" (279 mm) from rake end of first shingle.



4TH COURSE AND REMAINING

Strike a chalk line about every 6 courses to check parallel alignment with eaves.

Trim 17" (432 mm) from rake end of first shingle. Continue with whole shingles. Repeat the 1st – 4th course instructions on the remaining courses, starting the fifth course with a full shingle.



INSTALLING ROOF ACCESSORIES AND DETAILS

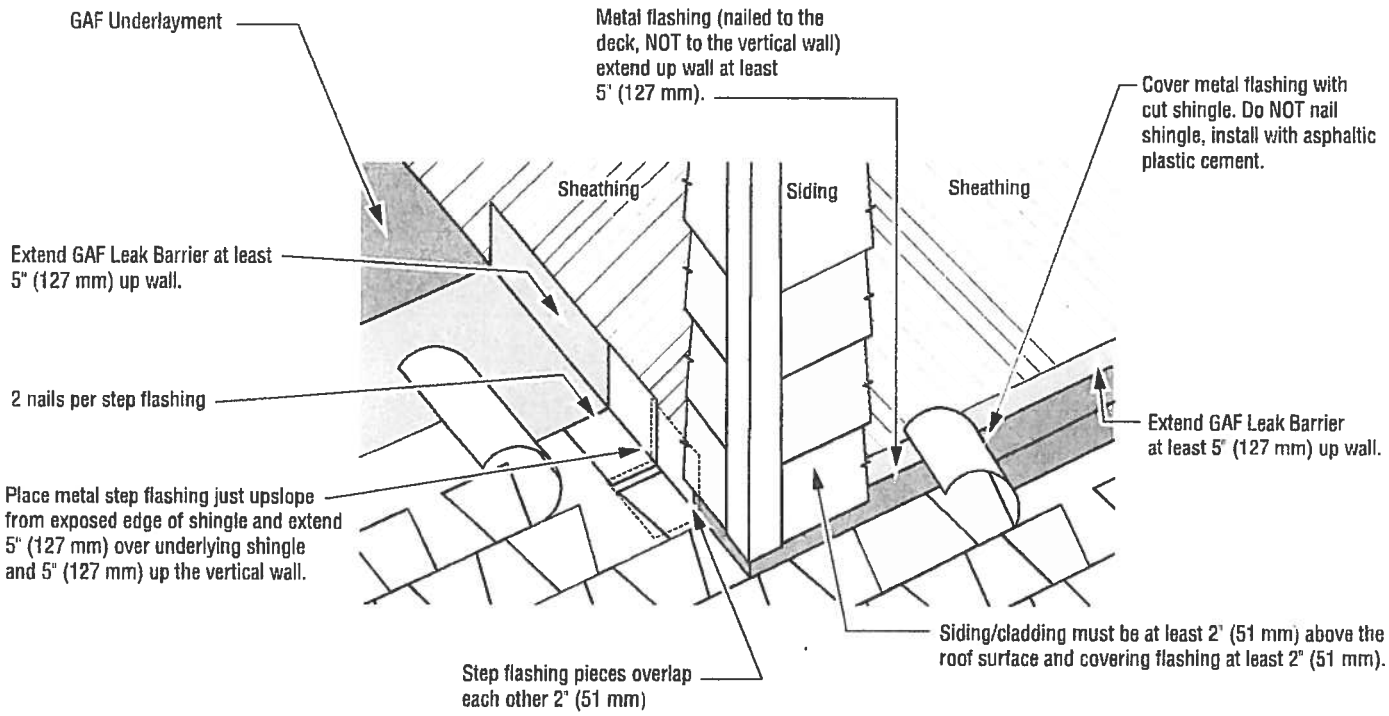
VENTILATION

Install GAF ventilation products for optimal shingle life. See General Instructions and the "Through Ventilation" section. Follow the application instructions for the selected ventilation products.

RIDGE CAP SHINGLES

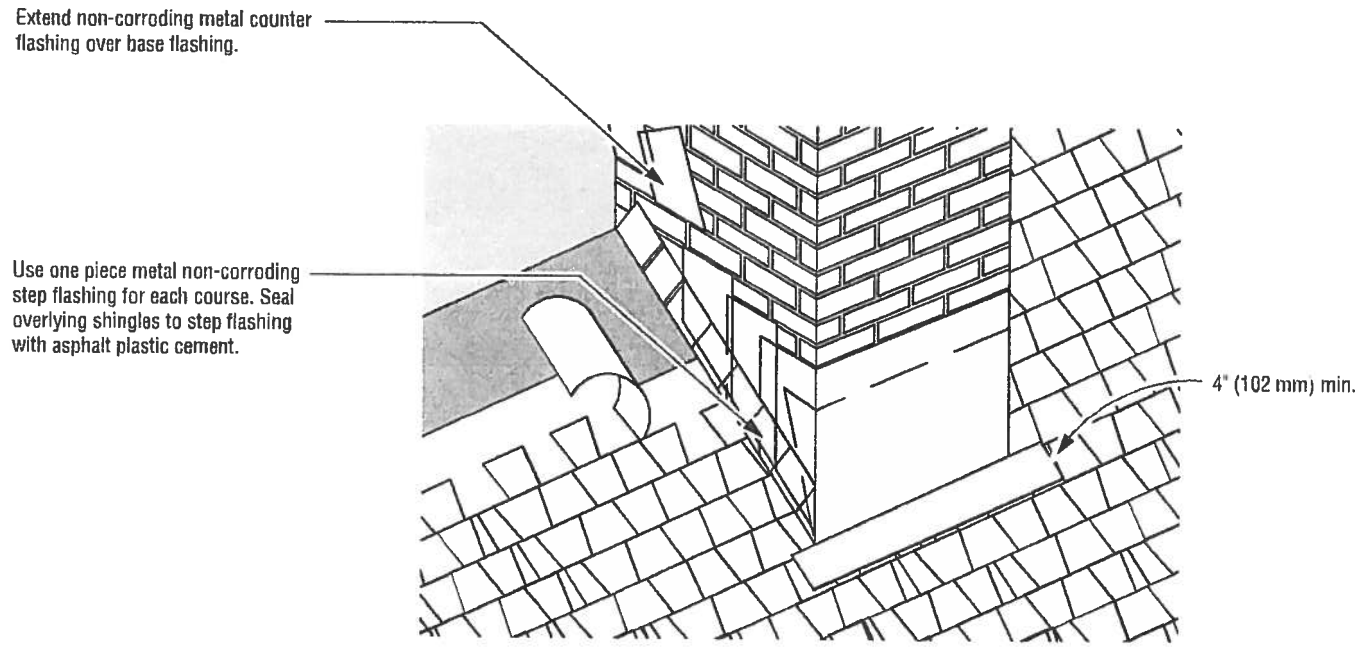
Install GAF Ridge Cap Shingles following the application instructions shown on the GAF Ridge Cap Shingle wrapper. Position laps away from prevailing wind direction.

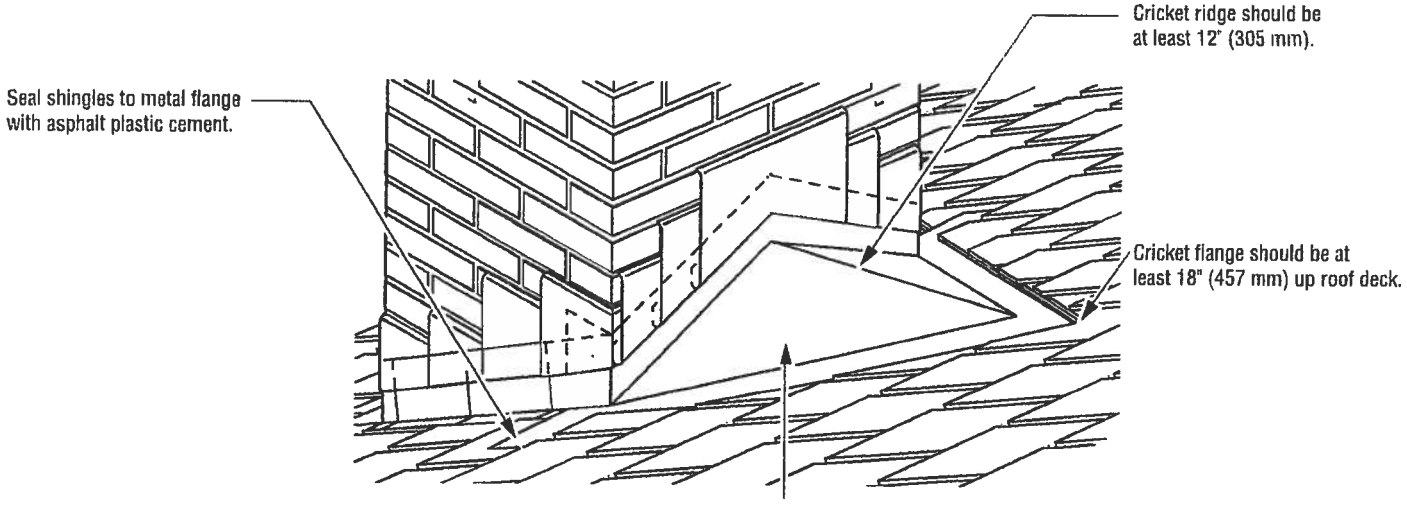
WALL FLASHING (Sloped Roof to Wall)



CHIMNEY FLASHING AND CRICKETS

Cover deck around chimney and over wood crickets with GAF Roof Deck Protection. DO NOT run GAF Roof Deck Protection up sides of chimney. Install leak barrier over GAF Roof Deck Protection and up sides of chimney at least 5" (127 mm). Install shop fabricated metal cricket flashings (shown) after underlayments are installed. Seal shingles to the metal flanges (see drawing below). Treat large wooden crickets like a separate roof and install valleys, shingles, hip and ridge shingles, and step flashing.

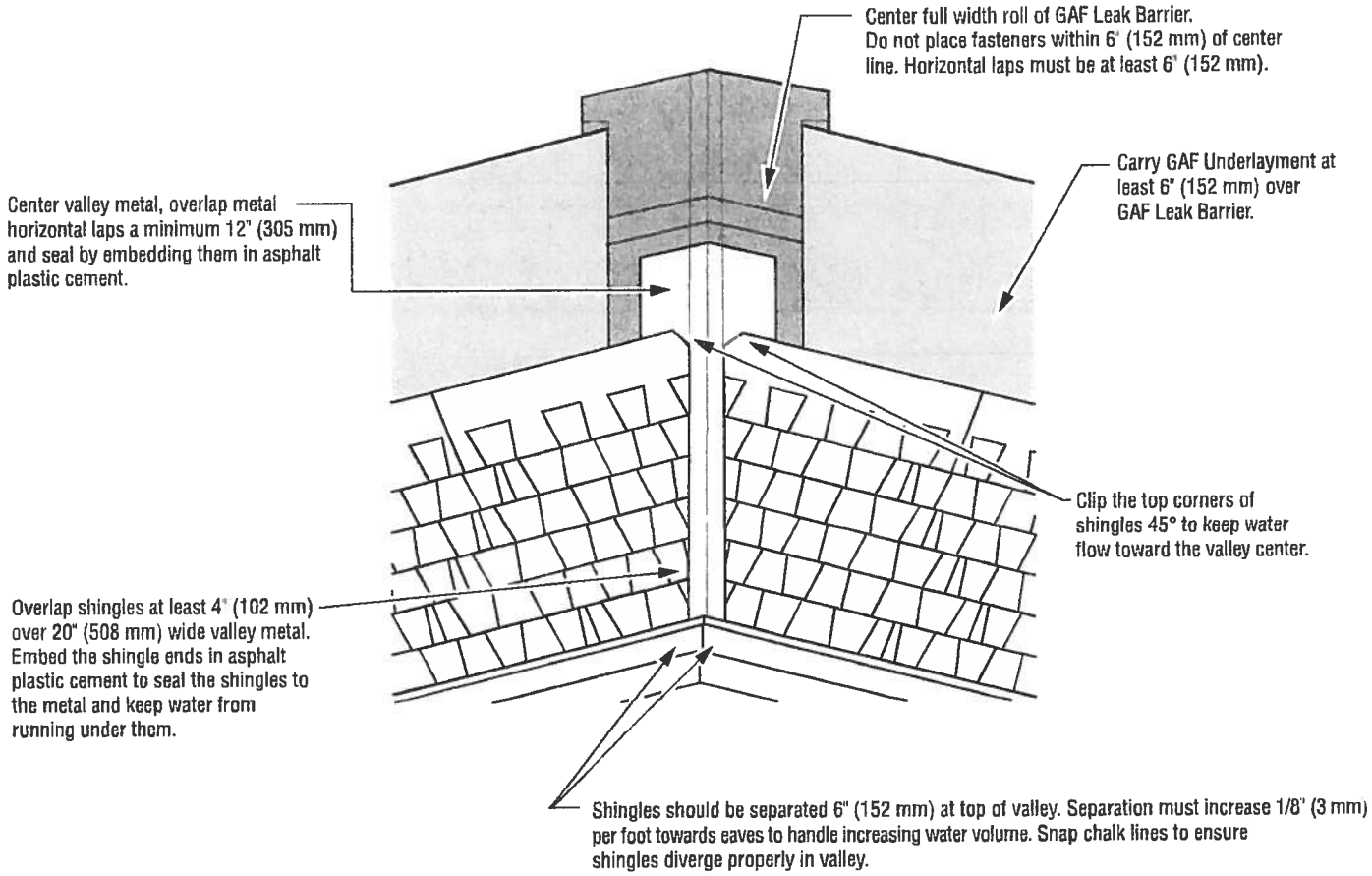




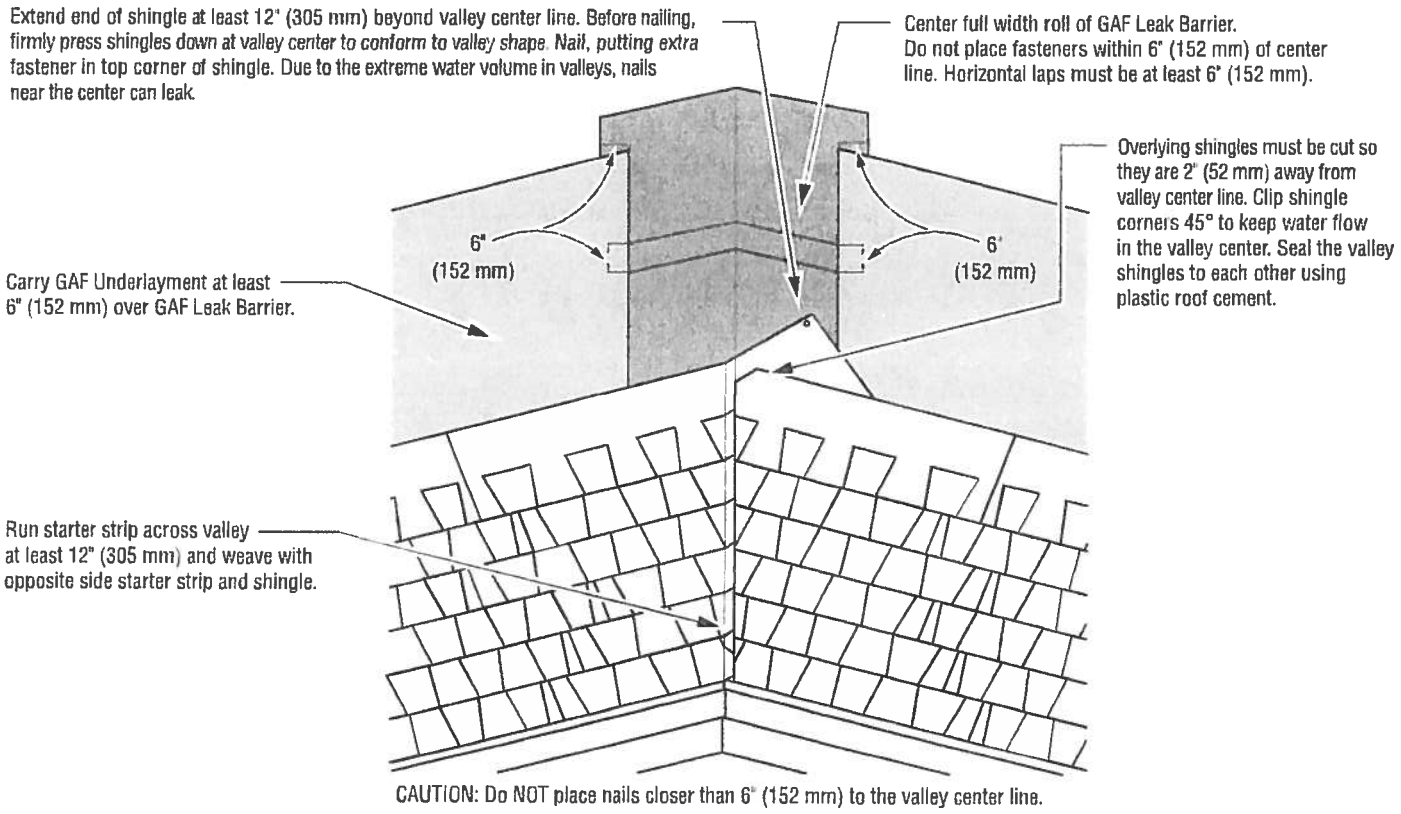
Crickets should extend at least 6" (152 mm) up the back of the chimney and extend at least 12" (305 mm) up the roof deck.

VALLEY CONSTRUCTION – OPEN

Use minimum 20" (508 mm) wide aluminum, galvanized steel, copper, or other non-corroding, non-staining metals (24 gauge minimum). Long valleys or local building codes may require wider metal. Nail the metal on the edges so the nail heads hold it in place. Do not puncture the metal. Nailing through the metal may cause leaking and buckling due to movement.



VALLEY CONSTRUCTION – CLOSED CUT



CAUTION: Do NOT place nails closer than 6" (152 mm) to the valley center line.

PRECAUTIONARY NOTES

1. These shingles are fiberglass, self-sealing asphalt shingles. Because of the natural characteristics of the high-quality waterproofing material used, these shingles will be stiff in cold weather and flexible in hot weather.
2. These shingles are particularly tough and may require additional effort to trim to fit on the roof. Curved blade utility knives are more effective than straight blade utility knives in cutting these shingles. Using a circular saw equipped with carbide-tipped blades is also effective.
3. Regardless of the tool used, always wear proper protective gear such as gloves, eye protection, etc. In situations where dust or fumes are generated, e.g., cutting shingles with a power saw, appropriate respiratory protection is recommended. Please refer to the MSDS for further information and follow all safety procedures. Use tools carefully to prevent personal injury when working with these products.
4. Handle carefully. Shingles can easily be broken in cold weather or their edges damaged in hot weather. Do not drop bundles on edge or on other bundles to separate shingles. Do not load bundles across a hip or ridge. Do not bend bundles over shoulder for carrying. Premium shingles with heavier weight may cause cracks at sharp bend points.
5. Store on flat surface in a covered, ventilated area-maximum temperature 110°F (43°C). Do not store near steam pipes, radiators, etc., or in sunlight.
6. Do not store double-stacked pallets on a long-term basis. If double stacking is required for short periods, use slip sheets of 1/2" (13 mm) plywood cut to the pallet size to minimize damage. Long-term double-stacked storage, especially in hot weather, can result in possible sticking, staining, and distortion of the shingles.

IMPORTANT: Repair leaks promptly to avoid adverse effects, including mold growth.

RE-ROOFING

If old asphalt shingles are to remain in place, nail down or cut away all loose, curled, or lifted shingles and replace with new; just before applying the new roofing, sweep the surface clean of all loose debris. Since any irregularities may show through the new shingles, be sure the underlying shingles provide a smooth surface. Fasteners must be long enough to penetrate the wood deck at least 3/4" (19 mm) or just through plywood. Follow above instructions for application.
NOTE: Shingles can be applied over wood shingles if the surface can be made smooth enough. This may include cutting back old shingles at eaves and rakes,installing new wood edging strips as needed, and the use of beveled wood strips. Install #30 underlayment to maintain Class A rating.

For technical support, call 1-800-766-3411 or visit our website at gaf.com.

