

19 Byfield Street, Product Info & Photos

Roofing – GAF Shingle Products

Specifications

(All Dimensions Are Nominal)

Pieces/Square	79
Bundles/Square	3
Nails/Square ¹	316
Exposure	5" (127 mm)
Dimensions	12"x 36" (English); 13 1/4"x 39 3/8" (Metric)

Applicable Standards & Protocols

- Fire - UL Listed to ANSI/UL 790 Class A
- Wind - ASTM D7158, Class H
- Wind - ASTM D3161, Class F
- National - ASTM D3018, Type 1
- National - ASTM D3462**
- National - Classified in accordance with ICC-ES AC438
- Regional - Miami-Dade County Product Control Approved***
- Regional - State of Florida Approved
- Regional - Texas Department of Insurance Listed
- Regional - ICC-ES ESR- 1475****
- Regional - ICC-ES ESR- 3267

Royal Sovereign

Weathered Gray

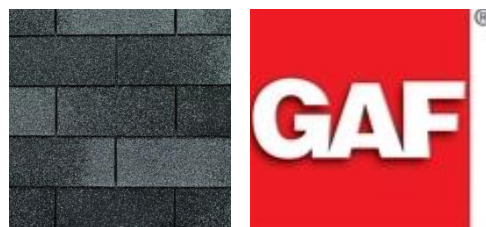


PRODUCT INFORMATION SHEET

Royal Sovereign® Shingles

English: (12" X 36" Shingles)

Beauty And Performance Meet Affordability



PRODUCT INFORMATION

"Professional contractors depend on Royal Sovereign® Shingles"

Royal Sovereign® Shingles Offer You These Great Benefits:

- **Proven Quality** . . . Over 10 billion Royal Sovereign® Shingles have been installed in North America—enough to circle the Earth more than 200 times if they were laid end to end!
- **Advanced Protection® Shingle Technology** . . . Reduces the use of precious natural resources while providing excellent protection for your home (visit gaf.com/aps to learn more)
- **Looks Great** . . . Color Lock™ Ceramic Firing (granules) helps maintain the true shingle color
- **Excellent Wind Performance** Meets ASTM D3161, Class F and ASTM 7158, Class H — the highest wind ratings possible under these test methods
- **Excellent Performance** . . . Extra-strong Micro Weave™ Core provides long life and durability
- **Highest Fire Rating** . . . Class A fire rating from Underwriters Laboratories
- **Great For Resale** . . . A new roof may increase your home's resale value
- **Peace Of Mind** . . . 25-year ltd. transferable warranty with SmartChoice® Protection (non-prorated material and installation labor coverage) for the first five years¹

¹See *GAF Shingle & Accessory Ltd. Warranty* for complete coverage and restrictions.

COLORS/AVAILABILITY

- **COLORS:** Ash Brown, Autumn Brown, Charcoal, Cypress Tan, Golden Cedar, Nickel Gray, Russet Red, Sandrift, Silver Lining, Slate, Summer Sage, Weathered Gray, and White
- **REGIONAL AVAILABILITY:**² Northeast, Southeast, Southwest, and Central Areas

²See http://www.gaf.com/Roofing/Residential/Products/Shingles/3_Tab/Royal_Sovereign for color availability in your area

APPLICABLE STANDARDS & PROTOCOLS

- UL 790, Class A
- Miami-Dade County Product Control Approved 12-1127.03
- Florida Building Code Approved FL10124-R12
- UL 997 modified to 110 mph
- ASTM D7158, Class H
- ASTM D3161, Class F
- ASTM D3018, Type 1
- ASTM D3462
- ICC ESR-1475, ESR-3267*
- Texas Department of Insurance

Effective 7/1/08, existing NYC MEA's may be used but are no longer required.

*Obtained ESR 3267 evaluation from ICC Evaluation Services based on compliance with the requirements of AC438, an acceptance criteria established by ICC Evaluation Services to evaluate asphalt shingles that contains performance tests in addition to those required by the building code. (ICC Evaluation Services provides technical evaluations of building products that directly address the issue of code compliance. Building inspectors use these evaluation reports to help determine code compliance and enforce building regulations.)

**When installed properly, this product will help reduce energy costs. Actual savings will vary based on geographic location and individual building characteristics. For more information, contact GAF Technical Services at 1-800-ROOF-411, visit gaf.com, or call 1-888-STAR-YES.

PRODUCT/SYSTEM SPECIFICS†

- Fiberglass Asphalt Construction
- Dimensions (approx.): 12" x 36"
- Exposure: 5"
- Bundles/Square: 3
- Pieces/Square: 79
- Nails/Square: 316 (474 where 6 nails per shingle is required)††
- StainGuard® Protection: Yes (Location dependent; contact Technical Services at 800.766.3411)
- Ridge Cap: Royal Sovereign® Shingle
- Starter: Pro-Start®; WeatherBlocker™

†Refer to complete published installation instructions.

††Required by some local codes.

INSTALLATION

Detailed installation instructions are provided on the inside of each bundle wrapper of Royal Sovereign® Shingles. Installation instructions may also be obtained at www.gaf.com.

Unit Features

Elevate Double Hung: ELDH

Elevate Double Hung Picture: ELDH P

Elevate Double Hung Transom: ELDH TR

Elevate Double Hung IZ3: ELDH IZ3

Elevate Double Hung Picture IZ3: ELDH P IZ3

For applicable certification and code information, refer to the Introduction and Product Performance chapter.

Frame and Sash:

- The frame and sash exteriors are made of Ultrex® and meets all the requirements of AAMA 624-10.
- Exterior colors: Stone White, Pebble Gray, Bronze, Cashmere, Gunmetal, or Ebony. Frame and sash color may be selected independently.
- The interior is non finger-jointed pine, kiln dried to a moisture content of 6-12% at time of fabrication. Water-repellent, preservative treated.
- Interior wood is available as Pine bare wood or factory-applied white, clear, and designer black interior finish. Frame and sash color may be selected independently.

Frame:

- Composite frame thickness is 1 9/16", (40). Frame width is 4 9/16", (116). Flat bottom sill with 13 degree bevel. Non finger-jointed pine interior frame liner is applied to all units. Ultrex is .075" (2) thick.

Sash:

- Composite sash thickness is 1 17/32" (39). Ultrex is .070" (2) thick.

Jamb Extension:

- Extension Thickness: 9/16" (14)
- Multiple depths available from 1/8" (3), 1/4"(6), and depths varying between 1/2"(13) and 4"(102) at 1/16" (2) increments
- Maximum jamb depth is 8 9/16". (217)
- 6 13/16" (173) or 6 13/16" (173) jamb extension - factory-applied
- All other jamb depth options are available shipped loose.
- Material: Bare Pine
- Option: factory applied white, designer black and clear lacquer interior finish

Hardware:

- The balance system is a coil spring block and tackle system, with nylon cord and zinc locking shoe.
- Both sash tilt into the room for cleaning or removal for painting without removing the screen.
- High-pressure zinc die cast check rail lock and keeper.
- Lock employs a cam-lock mechanism.
 - Color: Almond Frost, White, or Matte Black. Optional Bright Brass, Oil Rubbed Bronze, and Satin Nickel.
- Each sash employs spring loaded tilt latches to allow for easy tilting or sash.
- On IZ3 units CN32 widths and wider, two locks are mounted.
- Optional factory applied Window Opening Control Device is available on all sizes. A system consisting of an acetal lever housed in an acetal shell on each stile of the top sash. This device works in accordance to ASTM F2090-10 standard specification for window fall prevention devices with emergency escape.
 - Color: White, Beige, and Black.

Installation:

- Factory applied folding nailing fin and drip cap system
 - Optional installation brackets for masonry available
 - Optional through jamb installation method with brackets
 - Factory supplied field mulling kits are available for standard assemblies, or 30° and 45° Bay assemblies.
- Recommended method for IZ3 glazed units is installation clips and nailing fin.

Unit Features Continued

Glazing:

- Dual-pane units are manufactured with an 11/16" (17) IG with Low E1, E2, E3, or E3/ERS coatings including argon gas or air fill. Clear (uncoated) glass available with air fill only.
 - Tripane not available.
- Tempered glass and/or obscure glass, and California Fire glass (annealed exterior and tempered interior glazing configuration) are available as an option.
- The glazing seal is a silicone bedding on both interior and exterior surfaces utilized in a sandwich style sash.
- STC/OITC values are available for standard 3.1 mm glass thickness.
 - Optional 3.1/4.7 STC/OITC Upgrade glass is available. See the Product Performance chapter for STC and OITC ratings.
- Decorative glass options include glue chip, rain, reed, narrow reed, frost, and tinted (bronze, gray, or green). Decorative glass is not available with Low E1, Low E3/ERS or STC/OITC Upgrade options.

IZ3 Glazing:

- Optional IZ3 available on selected sizes.
 - IZ3 for winds up to 140 miles per hour.
- Glass is laminated insulated Low E2 or E3 Argon, consisting of annealed or tempered glass exterior and laminated glass interior.
- The laminated glass is comprised of two pieces of glass with either a SGP or PVB laminate layer between.
 - Interior and exterior glazing compound is silicone, in a sandwich style glazing system.

Weather Strip:

- All units are dual weather stripped.
- All weather strip is beige, black, or white in color.
- Jamb weather strip is a robust foam weather strip that is inserted into a rigid vinyl jamb carrier and used to seal sash to jambs. An additional jamb weather strip is inserted into Ultrex/wood and seals bottom sash to jamb.
- Parting stop is vinyl with a flexible leaf to seal between the header and the upper sash.
- Check rail weather strip is a hollow bulb weather strip attached to bottom of sash.
- Flat foam gasket is used between the jamb and sill.
- Picture and transom units is a hollow bulb weather strip that is inserted into rigid vinyl jamb carrier and head jamb carrier to seal sash. Operator units have a hollow-bulb bottom rail weather strip that seals against the sill.

Screen:

- Full screen is standard. Half-screen option is available.
- Screen Frame: Aluminum Screen Frame. Option: None
 - Color to match exterior frame color
- Marvin BrightView™, Options: None.
- Spring loaded pins for installation.
- A screen cross bar will be added when Frame OM (height) is equal to or greater than 47 1/2" (1207).

Interior Jamb Cap:

- Units with Designer Black or White interior finishes are assembled with Interior Jamb Caps and use Jamb Liners with kerfs on the jambs and head jamb.
- Interior Jamb Caps are color matched to the interior finish.

Unit Features Continued**Interior / Exterior Simulated Divided Lites (SDL):**

- Interior bar: 7/8" (22) wide bars
 - Pine bare wood with optional white, clear, or designer black interior finish
- Exterior bar: 7/8" (22) wide bars Ultrex, finish to match exterior
 - Patterns available: Rectangle, Cottage style cut, 9 lite Prairie cut or 6 lite Prairie for top sash, bottom sash, or both.
- ELDHP Only: Simulated check rail option: 2 11/32" (60).
 - Patterns available: simulated rail in standard center or customer specified location with 7/8" (22) patterns above, below or both in patterns of rectangular equal lite or prairie lite cut.
- SDL is unavailable with rain, reed, and narrow reed decorative glass patterns. Glue chip pattern requires tempered glass. Available for tinted glass without spacer bars only.

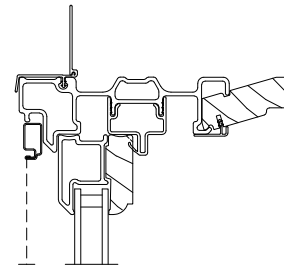
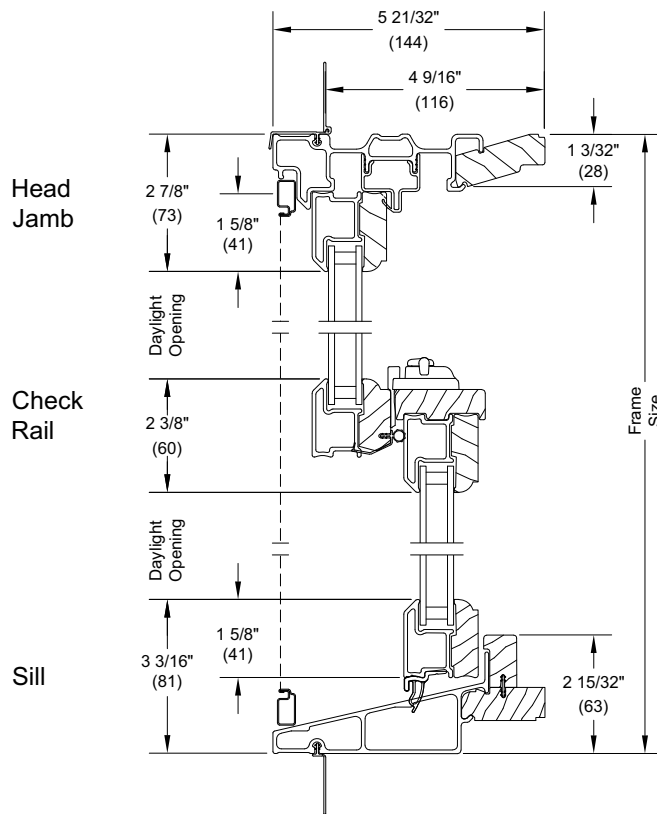
Grilles-Between-The-Glass (GBG):

- 23/32" (18) contoured aluminum bar placed between two panes of glass
- Pattern: Standard rectangular pattern, 6 or 9 lite Prairie cut, or Cottage style cut
 - Exterior colors: Stone White, Pebble Gray, Bronze, Cashmere, Gunmetal, or Ebony
 - Interior Colors: White, Bronze or Black
- GBGs are not available on IZ3 units or tinted glass.

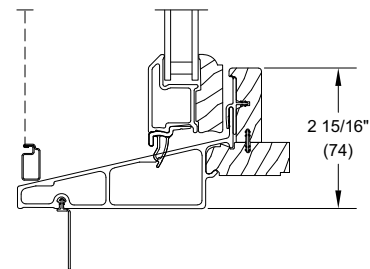
*NOTE: Direct Glaze Round Top with GBG or SDL will only align with the default lite cut of the unit it is intended to be milled with.
NFRC values are now located on www.marvin.com.*

Section Details: Operating - Double Hung (4 9/16" Jambs)

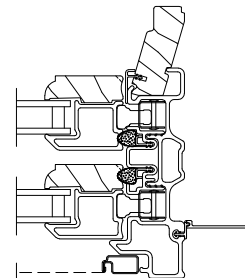
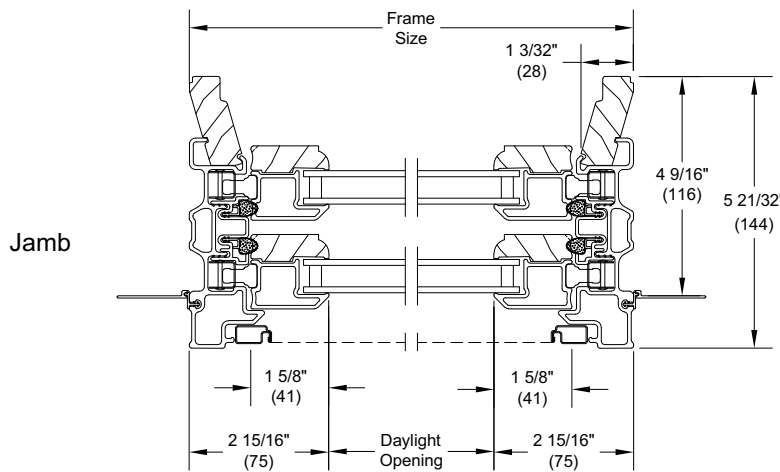
Scale: 3" = 1' 0"



Head Jamb
Interior Painted
Units Only



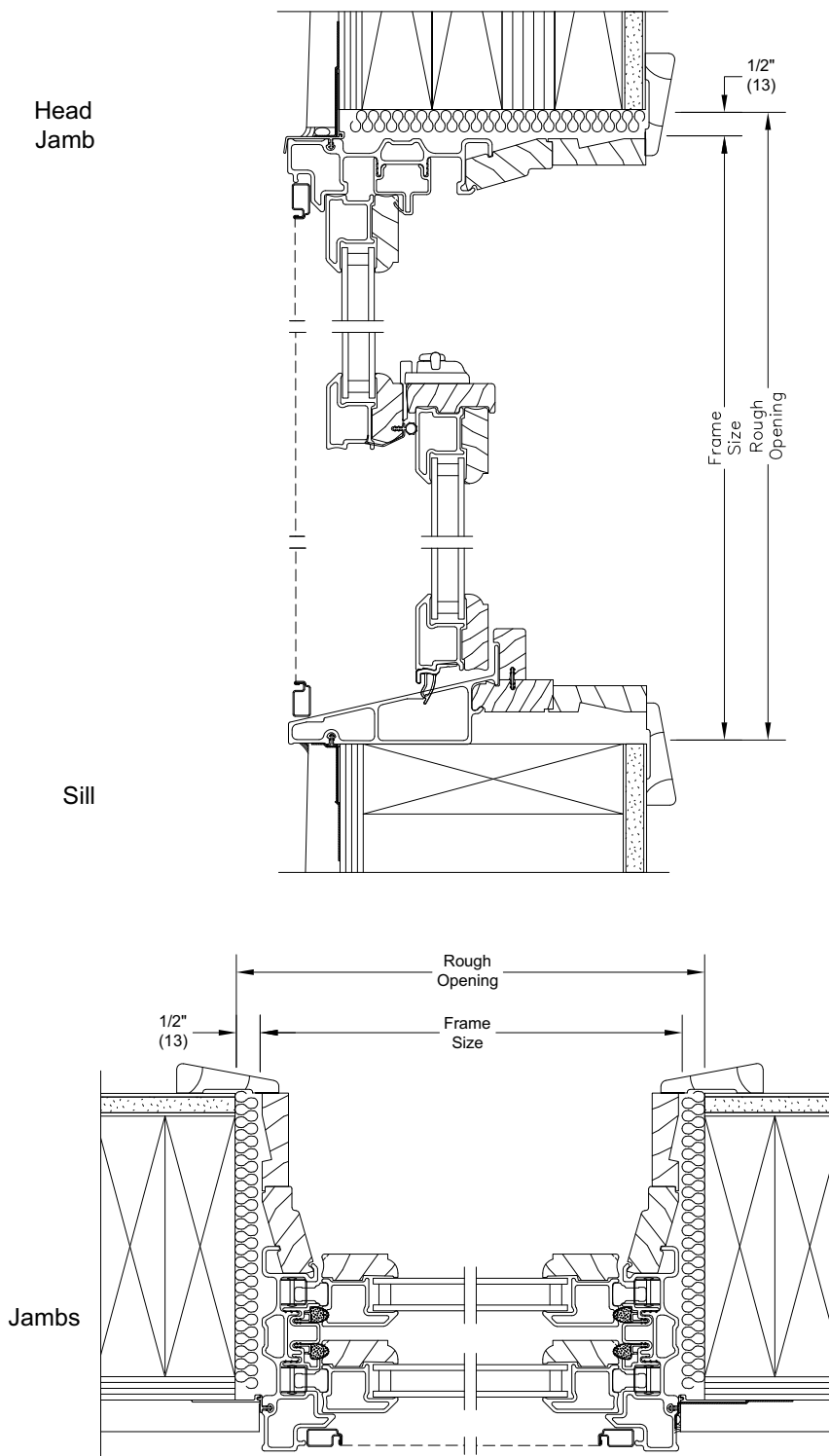
High
Performance
Sill



Jamb
Interior Painted
Units Only

Section Details: Installation Suggestion - Wood Siding With 2x6 Frame Construction

Scale: 1 1/2" = 1' 0"


NOTES:

- The above wall sections represent typical wall conditions, these details are not intended as installation instructions. Please refer to the installation instructions provided with the purchased units.
- Picture unit installation similar. Picture units may require both nailing fin and installation brackets.
- Double Hung unit shown with jamb extension.

Trim & Details – Accoya Wood

Pine Wood (Painted White)





Accoya® wood

DATA SHEET

Accoya is a modified wood that sets the benchmark for wood performance, finish and sustainability. Through extensive testing and use in applications worldwide, it's proven to outperform the competition.

Key features

Accoya wood is produced from sustainably sourced, fast growing wood and manufactured using Accsys' proprietary patented acetylation process from surface to core.



HIGHLY STABLE



HIGHLY DURABLE



IDEAL FOR COATING



EXCELLENT MACHINABILITY



BAREFOOT FRIENDLY



NON TOXIC



UP TO 50 YEAR WARRANTY



INSECT RESISTANT



LOW MAINTENANCE



SUSTAINABLY SOURCED



NATURAL WOOD



100% RECYCLABLE

Approved Manufacturer Training Program

Accsys provides a training program for manufacturers of Accoya products. We strongly encourage all manufacturers using Accoya to participate. Contact your local Accoya representative for more information.

Standard lengths & grades

8', 10', 12', 14', 16'

- › All A1 dimensions are actual rough sawn.
- › A1p is surfaced on 2 sides.
- › Companies processing Accoya can supply a wide range of standard and custom profiles from boards.
- › The sizes and grades produced at the Accoya production plant in Tennessee are summarized below:

Standard dimensions & grades

Thickness	Widths				Grades
	4"	5"	6"	8"	
7/8			✓	✓	A1p
4/4	✓	✓	✓	✓	A1
5/4			✓	✓	A1
6/4			✓	✓	A1
8/4	✓	✓	✓	✓	A1

Material	
100% Solid Accoya wood	
Durability	
AWPA E7 & E10, Average rating > 9. Accoya is an effective barrier against a broad spectrum of wood-destroying organisms. Rigorous testing in the lab as well as in prone settings like the Southeast US, Australia, Japan and New Zealand confirm this.	
Equilibrium Moisture Content	
3–5 % at 65% relative humidity, 68°F	
Density	
Average 32 pcf at 65% RH, 68°F, Range 27 to 37 pcf	
Shrinkage	
WET – 65% RH / 68°F*	WET – Oven Dry*
Radial – 0.4%	Radial – 0.7%
Tangential – 0.8%	Tangential – 1.5%
*Average Values	
Fire Rating	
Class C (ASTM E84). Additional requirements apply to siding on buildings in designated Wild Urban Interface (WUI) zones. Accoya siding wall constructions have been tested and demonstrated to meet WUI requirements. For more details click here.	
Thermal Conductivity	
ASTM C177, $\gamma = 0.102 \text{ W/m-}$	
Bending Strength	
ASTM D143, MOR = 13,144 psi	
Bending Stiffness	
ASTM D143, MOE = 1,297,492 psi	
Janka Hardness	
ASTM D143, Side = 922 LBF, End grain = 1484 LBF.	
Certification & Approval	
Forest Stewardship Council (FSC) Certified	
Cradle-to-Cradle: GOLD Overall; Platinum in Material Health	



Declare.

Insect barrier

Accoya wood is indigestible to a wide range of pests and an effective barrier to attack. Five year ground contact testing by independent laboratories in Florida USA, the Caribbean and Okinawa, Japan and has shown less termite damage on Accoya than on naturally durable species such as FEQ Burmese Teak.

Salt water contact and immersion

Accoya is not detrimentally affected by salt water contact or immersion. Field testing over 10 years immersion has shown minor attack on Accoya by marine organisms but less than that sustained on other durable woods in test.

Machinability

Processing does not affect the unique properties of Accoya wood, as it is modified to the core. It is relatively easy to process and comparable to a softwood or medium density hardwood such as Yellow Poplar (Tulip Wood). With the right training no special tools are required for cross cutting, ripping, planing, routing and drilling. Further details can be found in the Accoya Wood Information Guide.

Gluing

Both load bearing and non-load bearing applications have been tested using adhesive systems for laminating, finger jointing and frame corner joints. While good results can be achieved with most common adhesives, PU, EPI, epoxy and PRF give the best results. Results using polyvinyl acetate (PVAc) can vary greatly. MUF adhesives should be avoided. Contact your adhesive supplier for more information.

Finishing

A finish or coating does not need to be applied to Accoya to achieve longevity and dimensional stability. Details on natural weathering of uncoated Accoya can be found in the Wood Information Guide. Most commonly used coating systems can be used on Accoya wood. Testing has been performed with a full range of oil-based and water-based coating systems. Leading coating manufacturers have found that their film form coating systems last longer on Accoya. Contact your coating supplier for more information and check the Accoya Essential Coatings Guide.

Fastening

Stainless steel fasteners are highly recommended with Accoya. Grade 304 for inland conditions and grade 316 for coastal conditions. More information on other metals and alloys suitable for use with Accoya can be found in the Accoya Wood Information Guide.

For more information please refer to the Wood Information Guide at
www.accoya.com