













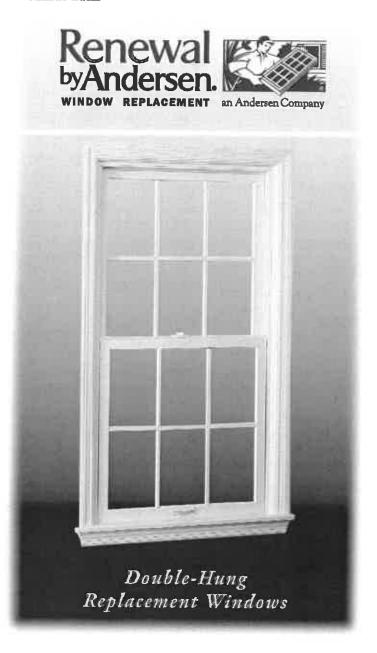




DOUBLE-HUNG WINDOW

ADVANTAGES AND APPLICATIONS

A double-hung window consists of two vertically sliding sash in a single frame. Both sash are counterbalanced by a spring-powered block-and-tackle balance mounted on the side of each sash. Tilt latches for each sash allow inward tilting for easy cleaning. Upper and lower sash are securely closed by use of a cam-type sash lock. An insect screen is installed into the outside track.



ADVANTAGES

- Both sash can be operated for ventilation at top and bottom of window.
- Both sash can be tilted inward for easy cleaning.
- Patented Fibrex® material is stronger than vinyl, providing greater durability.
- Fibrex material with low-maintenance capstock gives a rich, low-luster finish to sash and frame, similar to painted wood.
- Smooth radius surfaces on the frame and sash are pleasing to the eye and easier to clean.
- Mortise-and-tenon appearance on the interior and exterior sash corners gives a traditional, hand-crafted look.
- Full-perimeter weatherstrip provides superior weathertightness while still allowing easy sash operation.
- Sash are counterbalanced by a spring-powered block-and-tackle balance mounted on the side and matched to the weight of each individual sash.

APPLICATIONS

- Excellent choice for homes and condominiums where traditional styling is important; appropriate for many restoration projects.
- Suitable in areas facing walkways, decks and other traffic areas because sash do not project outward.
- Convenient in areas where the sash need to be cleaned from the interior.
- Visually compatible with other Renewal by Andersen® products.

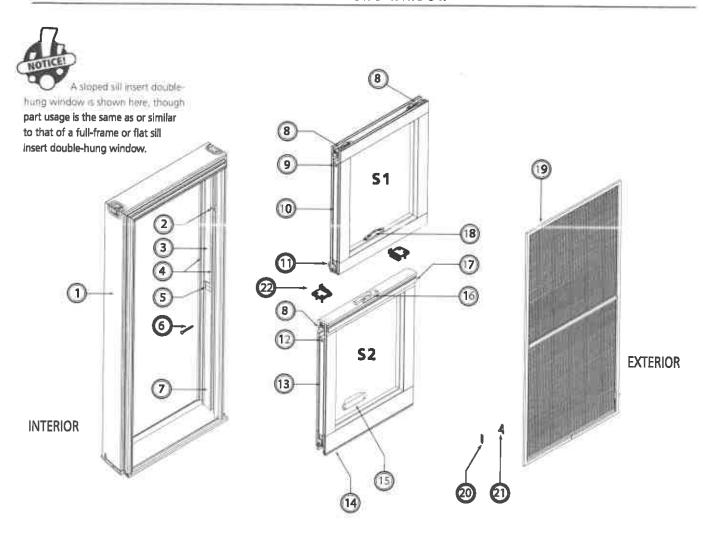
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EXPLODED VIEW

DOUBLE-HUNG WINDOW



DOUBLE-HUNG COMPONENTS

- 1. Frame (insert)
- 2. Wash assist
- 3. Side Jamb liner weatherstrip (upper)
- 4. Side jamb liner (interior and exterior sash tracks)
- 5. Side cover check rail weatherstrip
- 6. Balance end clip screw
- 7. Side jamb liner weatherstrip (lower) with integrated fin pile

- 8. Tilt latch
- 9. Upper balance screw
- 10. Balance (upper sash)
- 11. Exterior sash interlock (upper sash)
- 12. Lower balance screw
- 13. Balance (lower sash)
- 14. Bottom rail weatherstrip
- 15. Sash lift (optional)

- 16. Sash lock
- 17. Interior sash interlock (lower sash)
- 18. Sash keeper
- 19. Insect screen
- 20. Universal insect screen latch retainer
- 21. Insect screen latch
- 22. Child safety opening control device (optional)

STANDARD FEATURES

DOUBLE-HUNG WINDOW



A sloped sill insert double-hung window corner section is shown here, though standard features are the same as for flat sill insert or full-frame double-hung windows.

Described below are features that contribute to the double-hung window's low maintenance, energy efficiency, ease of operation, and pleasing appearance.

 Frame – Made of rigid Fibrex® material a unique structural composite of wood fibers and a special thermoplastic polymer. Developed by Andersen®, Fibrex material combines the strength and stability of wood with the low-maintenance features of our time-tested Perma-Shield® cladding.

 Sash – Constructed of Fibrex material. Corner keys provide durable, watertight corners.
 The mortise and tenon joinery complements the frame. A high-performance silicone sealant provides a watertight seal between the glass and sash.

Glazing – High-Performance™ LoE⁴®*
glass with an inert, energy-efficient
gas, is standard for every window. See
Options on page 3-6 for other glass choices.

*LoE4 is a registered trademark of Cardinal IG Company.

 Glass spacer – The patented low-conductivity spacer is made of stainless steel and resists heat transfer four to five times better than aluminum spacers used by many other manufacturers.

STANDARD FEATURES, cont.

DOUBLE-HUNG WINDOW

- Removable protective film Packaging features a clear protective film that is factory applied to both the interior and exterior glass surfaces to help protect the glass from shipping and installation damage.
- Weatherstrip A dual system of a foam-filled bulb applied to the sash frame and a constant-force low-friction weatherstrip applied to the frame provide a tight seal.

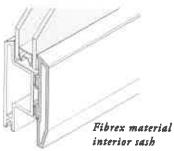




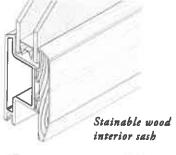
Sash Lock and Keeper - The zinc die cast dual cam-type sash lock, mounted at center of the meeting rail on the interior sash, engages easily into the keeper mounted on the center of the meeting rail on the exterior sash. The Doublehung Window Component Color Combination Chart on page 3-11 shows the hardware color for each window color combination.

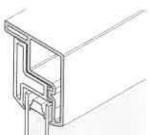
OPTIONS

DOUBLE-HUNG WINDOW









The following options are available for all Renewal by Andersen® double-hung windows:

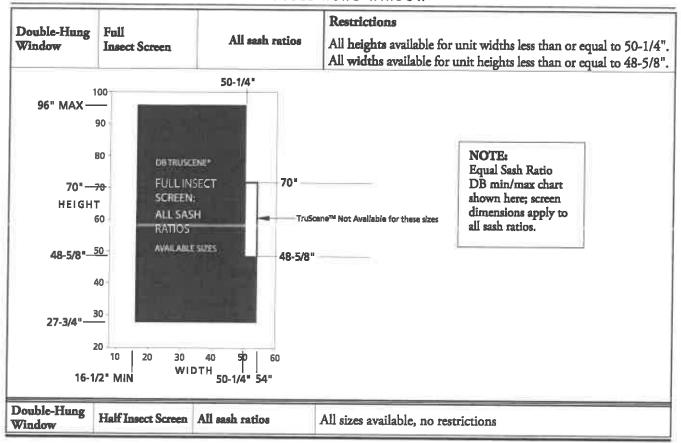
- Dual-Colors and Stainable Wood Interior Veneers Dual-color windows are available that have different interior and exterior colors. Stainable wood interior veneers are also available in oak, maple, and engineered pine. The Double-Hung Window Component Color Combination Chart on page 3-11 shows available color combinations and the default color of individual components for these combinations. Alternative component (e.g., insect screens, grilles, hardware, side jambs) color combinations are available upon request.
 - Painting and staining guidelines for Fibrex® material and stainable wood interiors are available in this manual, the Product Installation Manual and in the Care and Maintenance Guide.
- Traditional Square Check Rail Optional square-shaped check rail available in oak, maple, engineered pine veneer and Fibrex material interior finishes offers a classic flat surface appearance. These classic lines create the old world look, using the advanced technology of today. This option can be used with any other double-hung lock components or grille accessories.
- Rounded Contemporary Check Rail Original rounded contemporary check rail is still available (as an option) in same color and wood species.
- TruScene® Insect Screen Micro-fine stainless steel mesh (25 x 25 per inch mesh) that provides over 50% more clarity than standard Andersen insect screens.

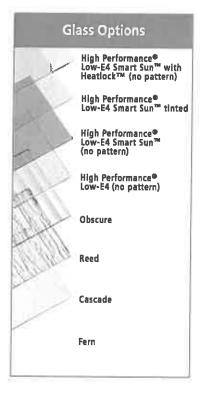
Traditional Fibrex Material Square Check Rail

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OPTIONS, cont.

DOUBLE-HUNG WINDOW





- Aluminum Insect Screen Cloth Durable aluminum screen cloth (18 x 16 per inch mesh) in a glare-resistant charcoal gray.
- Half Insect Screen A half insect screen is available that only covers the lower sash. The half screen does not impede the operation of the upper sash.
- Decorative Glass Patterns Standard windows have no textured glass pattern whatsoever. Optional textured patterns are as follows:
 - Obscure (not available on double-hung windows taller than 86")
 - Reed
 - Cascade
 - Fern (not available on double-hung windows wider than 50-5/16")
- Glass Coating High-Performance™ Low-E4™ coating is standard with all windows. Optional glazings are as follows:
 - Clear (no coating)
 - SmartSun™
 - High-Performance Low-E4 Smart Sun™ tinted coating
 - High Performance[®] Low-E4 Smart Sun™ with Heatlock™
 - * High Performance® Low-E4 Smart Sun™ with Heatlock™ not available with decorative glass patterns
- Tempered Glass Tempering is an option for all available glass options.
 Untempered glass is standard.

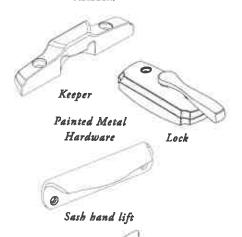
OPTIONS, cont

DOUBLE-HUNG WINDOW

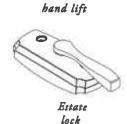
Pattern	on windows wider than	or windows tailer than
Reed®	56-7/8"	100-7/8"
Cascade*	56-7/8"	84-7/8
Fern	56:7/8	84-7/8
Obscure	56-7/8	84-7/8*



with no lifts. Finger lifts are then installed in the field after the window installation.

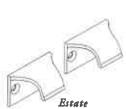


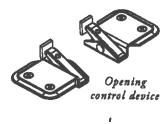
- Glass Breather Tubes Breather tubes are available for glass intended for high-altitude installations. It is important to note that breather tubes will decrease the thermal performance of the unit. Refer to the Technical Data (Section 8) in this Spec and Tech Manual for altitude specifics.
- Sash Lock A single zinc-cast metal lock is available in White, Stone and Canvas colors. Units narrower than 22-13/16" have a single lock. For units 22-13/16" wide or wider, a second lock is available as an option. For units wider than 45-9/16", a second lock is required.
- Sash Lift One or two sash lifts may be mounted to the bottom rail of the lower sash. Can be specified, available in White, Stone, or Canvas colors or EstateTM finishes.
- Estate Finish Hardware Estate finish hardware is available for all operating windows and is available in high performance bright brass, antique brass, high performance satin nickle, distressed nickel, brushed chrome, polished chrome, distressed bronze, oil-rubbed bronze and dark bronze. Hardware in each of the finishes is electroplated and/or modified to obtain the desired look. The Estate hardware components for doublehung windows are listed below:
 - Lock and Keeper The zinc cast, plated lock and keeper provide elegant Estate styling that beautifully complements not only the window, but matches any Estate hardware found on Andersen® patio doors.
 - Hand Lift Similar to the standard lift, the Estate hand lift provides an easy gripping surface with which to operate the window.
 - Finger Lifts These smaller, more traditional looking lifts provide a different aesthetic option for a grasp to operate the window. These lifts are typically used in pairs.
 - Opening Control Device Field-applied device restricts sash opening to 4 inches. This device will allow full sash opening when disengaged and will re-engage when sash is closed.



Estate"







OPTIONS, cont.

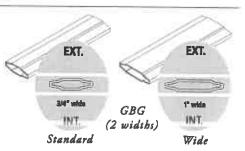
DOUBLE-HUNG WINDOW

Available Grille Types

Three grille types are available. The interior and exterior sides of the grilles are color-coordinated with each side of the window frame. Consult the color combination charts in each window product section for detailed color information.

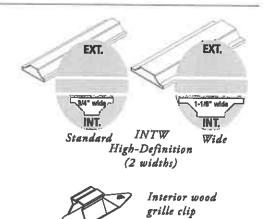
Grille-Between-the-Glass (GBG)

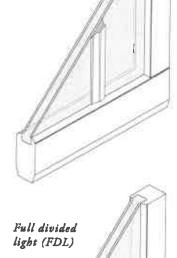
Sculpted aluminum grille members are manufactured between the glass panes, and are available in two widths. Enamel finish replicates interior and exterior face of window. If wood interior, interior facing surface will be gray.



Interior Wood Grille (INTW)

With the option of hardwood maple or oak, these grilles snap into clips placed around the interior side of the sash and may be removed to clean the glass. These high-definition interior wood grilles are available in two different widths.





Interior wood grille

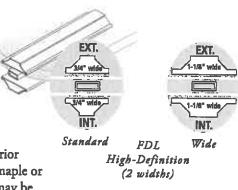
(INTW)

Grille-between-

the-glass (GBG)

Full Divided Light (FDL) Grille

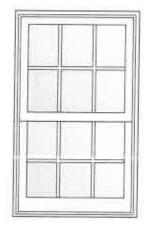
FDL grilles provide the classic look of a true divided light window. The high-definition exterior grille is made from Fibrex* material and is available in two different widths. Between the glass panes, an aluminum spacer stands slightly away from each pane to maintain thermal performance. The high-definition interior wood grille is available in hardwood, maple or oak and in two different widths, and may be permanently applied or removable.

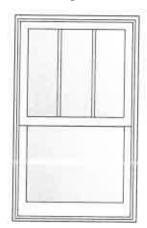


OPTIONS, cont.

DOUBLE-HUNG WINDOW

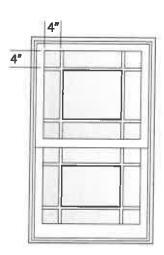
Available Grille Patterns – Grille pattern options include colonial, prairie, and modified prairie.

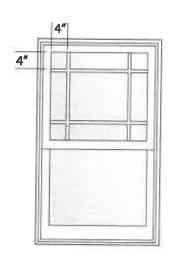




COLONIAL

Refer to colonial pattern grilles by pattern name and "grille lites wide by grille lites high" for each sash. For the examples shown, the left window would be "colonial pattern, 3 by 2, upper and lower sash". For the example to the right, "colonial pattern, 3 by 1 on the upper sash, no grille on the lower sash".

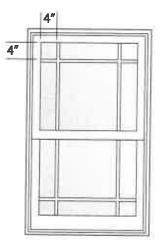




PRAIRIE

Regardless of sash size, all prairie grilles intersect to form 4" squares of visible glass in the corners of the sash. Prairie grilles are available on one or both sash.

The prairie grille pattern is not available on double-hung windows narrower than 20".



MODIFIED PRAIRIE

Regardless of sash size, all modified prairie grilles intersect to form 4" squares of visible glass. Modified prairie grilles are available for one or both sash.

The modified prairie grille pattern is not available on double-hung windows narrower than 20".