CITY OF SAINT PAUL
HERITAGE PRESERVATION COMMISSION STAFF REPORT

FILE NAME: 809 Portland Avenue
DATE OF APPLICATION: January 29, 2014 (complete – February 12th, 2014)
APPLICANT: Kevin Haugtvedt, A Plus Windows
OWNER: Pergola Properties
DATE OF PUBLIC HEARING: February 27th, 2014
HPC SITE/DISTRICT: Hill Heritage Preservation District
CATEGORY: Contributing
CLASSIFICATION: After-The-Fact Building Permit
STAFF INVESTIGATION AND REPORT: John Beaty, Christine Boulware
DATE: February 20, 2014

A. SITE DESCRIPTION: The apartment building at 809 Portland Avenue is a rectangular two-story masonry building with a flat roof behind a small parapet. A two-story, inset front entry has a recently-added, awning between the stories. The rear also has a two-story inset porch with stairs that serve as an entry to the rear apartments. The front windows have soldier brick lintels and rowlock brick sills. The secondary elevation windows have segmental header brick arches for wide openings, and hidden lintels for narrow openings. The historic windows are a mix of double-hung, in-swing casement, fixed, and awning windows in the basement. The primary elevation has uneven 12-over-one, grouped, double-hung windows: triples in the front, doubles in the first side bays, and doubles in the third side bays. The piano windows on the side elevations (second bay) were originally uneven 16-light fixed with matching divided-light storm windows, but three of four are now wood, in-swing casements. The triple windows at the landing in the second story of the inset front porch are a narrow, uneven, nine-over-ones, and the sixth side bays have triple, even 12-over-ones. All other windows are one-over-ones, except for the vertical, three-light, awning basement windows. The primary entrance had a wood glazed door and wooden sidelights and a full width-transom.

B. PROPOSED CHANGES: The applicant is proposing to replace the windows in the building with Anderson series 100 windows. These windows fit into the existing frame, and have a patterned grille in between the glass and are six-over-one.

C. CHANGES COMPLETED AND BACKGROUND:

On **December 18, 2013**, work commenced 809 Portland Avenue and 26 windows were replaced without a building permit application or HPC review. The applicant was notified by DSI staff of the building's historic designation when he was applying for a building permit. The applicant then contacted HPC staff.

On **January 29, 2014**, the applicant submitted an HPC application, and scheduled a site visit.

On **February 12th**, HPC staff met the contractor at 809 Portland Avenue and noted other recent alterations to the primary entrance of the building not performed by the contractor. The front door, sidelights and transom have recently been replaced and an awning was installed over the door. The door work and awning were done without HPC approval and without a permit from DSI.

D. GUIDELINE CITATIONS:

Historic Hill District Design Review Guidelines
Sec. 74.64. - Restoration and rehabilitation.
(a)General Principles:

1. *Every reasonable effort shall be made to provide a compatible use for a property which requires minimal alteration of the building, structure, or site and its environment, or to use a property for its originally intended purpose.*
2. *The distinguishing original qualities or character of a building, structure, or site and its*

environment shall not be destroyed. The removal or alteration of any historic material or distinctive architectural features should be avoided when possible.

3. *All buildings, structures, and sites shall be recognized as products of their own time. Alterations that have no historical basis and which seek to create an earlier appearance shall be discouraged.*
4. *Changes which may have taken place in the course of time are evidence of the history and development of a building, structure, or site and its environment. Theses changes may have acquired significance in their own right, and this significance shall be recognized and respected.*
5. *Distinctive stylistic features or examples of skilled craftsmanship which characterize a building, structure, or site shall be treated with sensitivity.*
6. *Deteriorated architectural features shall be repaired rather than replaced, whenever possible. In the event replacement is necessary, the new material should match the material being replaced in composition, design, color, texture, and other visual qualities. Repair or replacement of missing architectural features should be based on accurate duplications of features, substantiated by historic, physical, or pictorial evidence rather than on conjectural designs or the availability of different architectural elements from other buildings or structures.*
7. *The surface cleaning of structures shall be undertaken with the gentlest means possible. Sandblasting and other cleaning methods that will damage the historic building materials shall not be undertaken.*
8. *Every reasonable effort shall be made to protect and preserve archaeological resources affected by, or adjacent to any project.*
9. *Contemporary design for alterations and additions to existing properties shall not be discouraged when such alterations and additions do not destroy significant historical, architectural or cultural material, and such design is compatible with the size, scale, color, material, and character of the property, neighborhood, or environment.*
10. *Wherever possible, new additions or alterations to structures shall be done in such a manner that if such alterations were to be removed in the future, the essential form and integrity of the structure would be unimpaired.*

(e) Windows and Doors:

(1) *Existing window and door openings should be retained. New window and door openings should not be introduced into principal elevations. Enlarging or reducing window or door openings to fit stock window sash or new stock door sizes should not be done. The size of window panes or sash should not be altered. Such changes destroy the scale and proportion of the building.*

(2) *Window sash, glass, lintels, sills, architraves, doors, pediments, hoods, steps and all hardware should be retained. Discarding original doors and door hardware, when they can be repaired and reused in place, should be avoided.*

(3) *The stylistic period(s) a building represents should be respected. If replacement of window sash or doors is necessary, the replacement should duplicate the material, design and hardware of the older window sash or door. Inappropriate new window and door features such as aluminum storm and screen window combinations, plastic or metal strip awnings, or fake shutters that disturb the character and appearance of the building should not be used. Combination storm windows should have wood frames or be painted to match trim colors.*

(f) Porches and Exterior Architectural Features:

(1) *Porches and steps which are appropriate to the building and its development should be retained. Porches and additions reflecting later styles of architecture are often important to*

the building's historical integrity and, whenever possible, should be retained. Porches and steps removed from the building should be reconstructed, using photographic documentation and historical research, to be compatible in design and detail with the period and style of the building. In replacing porch railings, it is important to maintain the original spacing, section and profile of the balustrades.

(2) *Decorative architectural features such as cornices, brackets, railings, and those around front doors and windows should be preserved. New material used to repair or replace, where necessary, deteriorated architectural features of wood, iron, cast iron, terracotta, tile and brick should match the original as closely as possible.*

(3) *Shutters should not be used on buildings not designed for them. If used, they should be large enough to cover the entire window area, should be functional and operable, and should not look as if they were simply flat-mounted on the wall.*

(4) *Deck and firestair additions may be acceptable in some cases, but should be kept to the rear of buildings where they will be the most inconspicuous and detract the least from the historical context. The detailing of decks and exterior stairs should be compatible with the period and style of the building.*

E. FINDINGS:

1. On April 2, 1991, the Historic Hill Heritage Preservation District was established under Ordinance No. 17815, § 3(II). The Heritage Preservation Commission shall protect the architectural character of heritage preservation sites through review and approval or denial of applications for city permits for exterior work within designated heritage preservation sites §73.04.(4).

2. The property at 809 Portland Avenue is categorized as contributing to the character of the Historic Hill Heritage Preservation District.

3. Approximately twenty-six windows were replaced without HPC review and approval or a building permit. The Legislative Code Sec. 74.64.(a)(2) states, *"The distinguishing original qualities or character of a building, structure, or site and its environment shall not be destroyed. The removal or alteration of any historic material or distinctive architectural features should be avoided when possible.* The original windows have a distinguishing quality and are a character defining feature that contributes to the significance of the building and the surrounding historic district. The removal and replacement of the windows does not comply with the guideline.

4. The front entry was replaced without HPC review and approval or a building permit. The removal of the original materials, details and configuration of the front entry resulted in the loss of distinguishing original qualities and architectural character of the building and does not comply with Legislative Code Sec. 74.64.(a)(2) or Sec. 74.64.(e)(2) as "*Discarding original doors and door hardware, when they can be repaired and reused in place, should be avoided."*

5. An awning was installed over the front entry without HPC review and approval or a permit. There is not any evidence that an awning ever existed at the property. Legislative Code Sec. 74.64.(a)(9) states, "*Contemporary design for alterations and additions to existing properties shall not be discouraged when such alterations and additions do not destroy significant historical, architectural or cultural material, and such design is compatible with the size, scale, color, material, and character of the property, neighborhood, or environment.* The design of the awning does not have a traditional loose valance, but the size of the awning is proportional with the bay and the material appears to be canvas-like and traditionally appropriate. Attachment into mortar joints is recommended so as not to damage brick; it is not known how the awning was attached and removal of the awning at this time may result in damage to the facade. It does not appear that any decorative architectural features were removed for the installation of the awning [Sec. 74.64(f)(2)].

6. The windows that were installed are of a different material, size, profile and design than the

original, wood, divided-light windows the replaced. These new windows do not comply with Sec. 74.64.(e)(3) of the Legislative Code which states, *"The stylistic period(s) a building represents should be respected. If replacement of window sash or doors is necessary, the replacement should duplicate the material, design and hardware of the older window sash or door."*

7. Sec. 74.64.(e)(3) of the Legislative Code which states "*The size of window panes or sash should not be altered. Such changes destroy the scale and proportion of the building.*" The new window frames were installed into existing frames, thus reducing the size of the sash and the opening. This does not comply with the guideline.
8. At the site visit on February 12, 2014, HPC staff observed the condition of the windows at the property and advised the applicant that the remaining historic and early double-hung, wood windows with divided-lights and in-swing casements were in a condition that could be repaired as well as the one remaining divided-light storm window; repair of these windows would comply with Sec. 74.64.(e)(2). The one-over-one double-hung windows that were replaced at some point in the past 20-30 years as well as the majority of the original one-over-one double-hung windows were in a condition that replacement was justified.
9. Violation: The building at 809 Portland Avenue is located in the Historic Hill Heritage Preservation District and is subject to St. Paul Legislative Code Chapter 73 and the Hill Heritage Preservation District Design Review Guidelines. As such, a permit must be obtained prior to any exterior work, construction, or demolition. The exterior of 809 Portland Avenue was altered without a permit, as windows were replaced, the front entry was replaced and an awning was installed at the front entry. The alterations do not comply with Historic Hill Heritage Preservation District Design Guidelines and were performed in violation of St. Paul Legislative Code Chapter 73.
10. Violation: St. Paul Legislative Code section 73.07 states that persons who violate Legislative Code Chapter 73, or assist in the commission of violation of Chapter 73, are guilty of a misdemeanor. Section 73.07 further states that a historic preservation site on which there exists any remodeling, repairing or construction in violation of chapter 73 constitutes a nuisance.
11. The proposal to replace the windows at 809 Portland, as proposed, will adversely affect the Program for the Preservation and architectural control of the Historic Hill Heritage Preservation District (Leg. Code §73.06 (e)). The window replacement and repair could be approved at the property so long as the conditions are met.
12. The replacement of the entrance at 809 Portland adversely affects the Program for the Preservation and architectural control of the Historic Hill Heritage Preservation District (Leg. Code §73.06 (e)).

F. STAFF RECOMMENDATIONS:

Based on the findings staff recommends approval of the building permit application provided the following condition(s) are met:

1. The original and early wood windows shall be retained and repaired.
2. The one-over-one double hung windows on the north, east, and west elevations may be replaced to match the existing in size, profile, style and detail.
3. The basement windows that were replaced by the applicant may remain; the basement windows that were not replaced shall be repaired.
4. New windows approved for installation at the property shall have either full-frame, flush-mount screens with a horizontal bar that lines up with the meeting rail installed that the same plane as

the historic screen/storm windows or shall have no screens/storms shall be installed.

5. There shall be no wrapping or panning of brick mold, trim or window sills.
6. The awning that was installed may remain.

Based on the findings staff recommends denial of aluminum entry system that was installed at the front elevation. The entry door, sidelights, and transom that were replaced without review and approval shall be restored to their historic size, profile, material and detail.

Saint Paul Heritage Preservation Commission
Department of Planning and Economic Development
25 Fourth Street West, Suite 1400
Saint Paul, MN 55102
Phone: (651) 266-9078

HERITAGE PRESERVATION COMMISSION
DESIGN REVIEW APPLICATION

This application must be completed in addition to the appropriate city permit application if the affected property is an individually designated landmark or located within an historic district. For applications that must be reviewed by the Heritage Preservation Commission refer to the HPC Meeting schedule for meeting dates and deadlines.

1. CATEGORY

Please check the category that best describes the proposed work

- ☐ Repair/Rehabilitation
- ☐ Moving
- ☐ Demolition
- ☐ Sign/Awning
- ☐ Fence/Retaining Wall
- ☑ Other windows
- ☐ New Construction/Addition/ Alteration
- ☐ Pre-Application Review Only

2. PROJECT ADDRESS

Street and number: 809 Portland Zip Code: _____

3. APPLICANT INFORMATION

Name of contact person: Kevin Haugtvedt

Company: A Plus windows

Street and number: 6900 W 151 st. # 300

City: Apple Valley State: Mn. Zip Code: 55124

Phone number: (612) 860-8432 e-mail: aplus windows 1 @ yahoo.com

4. PROPERTY OWNER(S) INFORMATION (If different from applicant)

Name: Pergola Properties

Street and number: 201 Weston Ave N.

City: St. Paul State: Mn Zip Code: 55102

Phone number: (651) 602-9150 e-mail: brian@pergolaonline.com

5. PROJECT ARCHITECT (If applicable)

Contact person: _____

Company: _____

Street and number: _____

City: _____ State: _____ Zip Code: _____

Phone number: (____)_____ e-mail: _____

6. PROJECT DESCRIPTION

Completely describe ALL exterior changes being proposed for the property. Include changes to architectural details such as windows, doors, siding, railings, steps, trim, roof, foundation or porches. Attach specifications for doors, windows, lighting and other features, if applicable, including color and material samples.

To remove windows + install anderson series 100 Replacement windows - Color Bronze exterior / white interior
26 windows were replaced
4 Total of (84) windows To be replaced
TOTAL

Attach additional sheets if necessary

7. ATTACHMENTS

Refer to the *Design Review Process sheet* for required information or attachments.
****INCOMPLETE APPLICATIONS WILL BE RETURNED****

ARE THE NECESSARY ATTACHMENTS AND INFORMATION INCLUDED?

☐ **YES**

Will any federal money be used in this project? **YES** ____ **NO** X
Are you applying for the Investment Tax Credits? **YES** ____ **NO** X

I, the undersigned, understand that the Design Review Application is limited to the aforementioned work to the affected property. I further understand that any additional exterior work to be done under my ownership must be submitted by application to the St. Paul Heritage Preservation Commission. Any unauthorized work will be required to be removed.

Signature of applicant: _____ **Date:** 1-29-14

Signature of owner: _____ **Date:** 1/29/14

FOR HPC OFFICE USE ONLY

Date received: 1/29/14 - incomplete **FILE NO.** _____

District:_____/Individual Site:_____

Contributing/Non-contributing/Pivotal/Supportive/:

Type of work: Minor/Moderate/Major

AFTER-THE-FACT

____ Requires staff review

Supporting data: **YES** **NO**
Complete application: **YES** **NO**

The following condition(s) must be met in order for application to conform to preservation program:

It has been determined that the work to be performed pursuant to the application does not adversely affect the program for preservation and architectural control of the heritage preservation district or site (Ch.73.06).

_____
HPC staff approval

Date _____

____ Requires Commission review

Submitted:
- ❑ 3 Sets of Plans
- ❑ 15 Sets of Plans reduced to 8 ½" by 11" or 11" by 17"
- ❑ Photographs
- ❑ City Permit Application
- ❑ Complete HPC Design Review application

Hearing Date set for: _____

City Permit # ____ - _____

Boulware, Christine (CI-StPaul)

From: Boulware, Christine (CI-StPaul)
Sent: Tuesday, January 21, 2014 11:47 AM
To: 'Kevin Haugtvedt'
Cc: Eggers, Ken (CI-StPaul)
Subject: RE: 809 Portland
Attachments: HPC Design Review Application.doc; HPC Design Review Checklist.doc

Kevin,
Thank you for your email.
I appreciate your summary of the events to-date.
809 Portland Avenue is located in the Hill Historic District and window replacement does require Heritage Preservation review.
Generally, the design review guidelines stated that original windows should be repaired rather than replaced.
In the situation that replacement is justified, the new windows should match he original in material, size, style and detail.
Please complete the HPC design review application (attached) and submit photos of the property, the historic windows (photos should show details and condition) and specs for the Anderson 100 windows.
How many windows were replaced?
How many windows are you proposing to replace (total)?
Are their existing storms or screens on the openings?

This information would be a good start to getting a complete application together.
Once I understand the conditions of the property and the scope, I will be better able to assist you.

Sincerely,
Christine

From: Kevin Haugtvedt [mailto:apluswindows1@yahoo.com]
Sent: Wednesday, January 15, 2014 7:45 AM
To: Boulware, Christine (CI-StPaul)
Subject: 809 Portland

Hi Christine
My name is Kevin Haugtvedt with A Plus Windows.
I would like to set up a meeting with you to discuss this project. When we sold the job I asked the owner if it was in the historic district. He told us no so we ordered the Anderson 100 windows for the project. My real problem started when I went to get the permit. My crews showed up and started taking out windows. As soon as I found out it was it your district I shut the job down. I need your guidance as to how we proceed with this so we can make it right. If we can use the windows we have or if we need to do something different.

Kevin Haugtvedt
A Plus Windows
612-860-8432

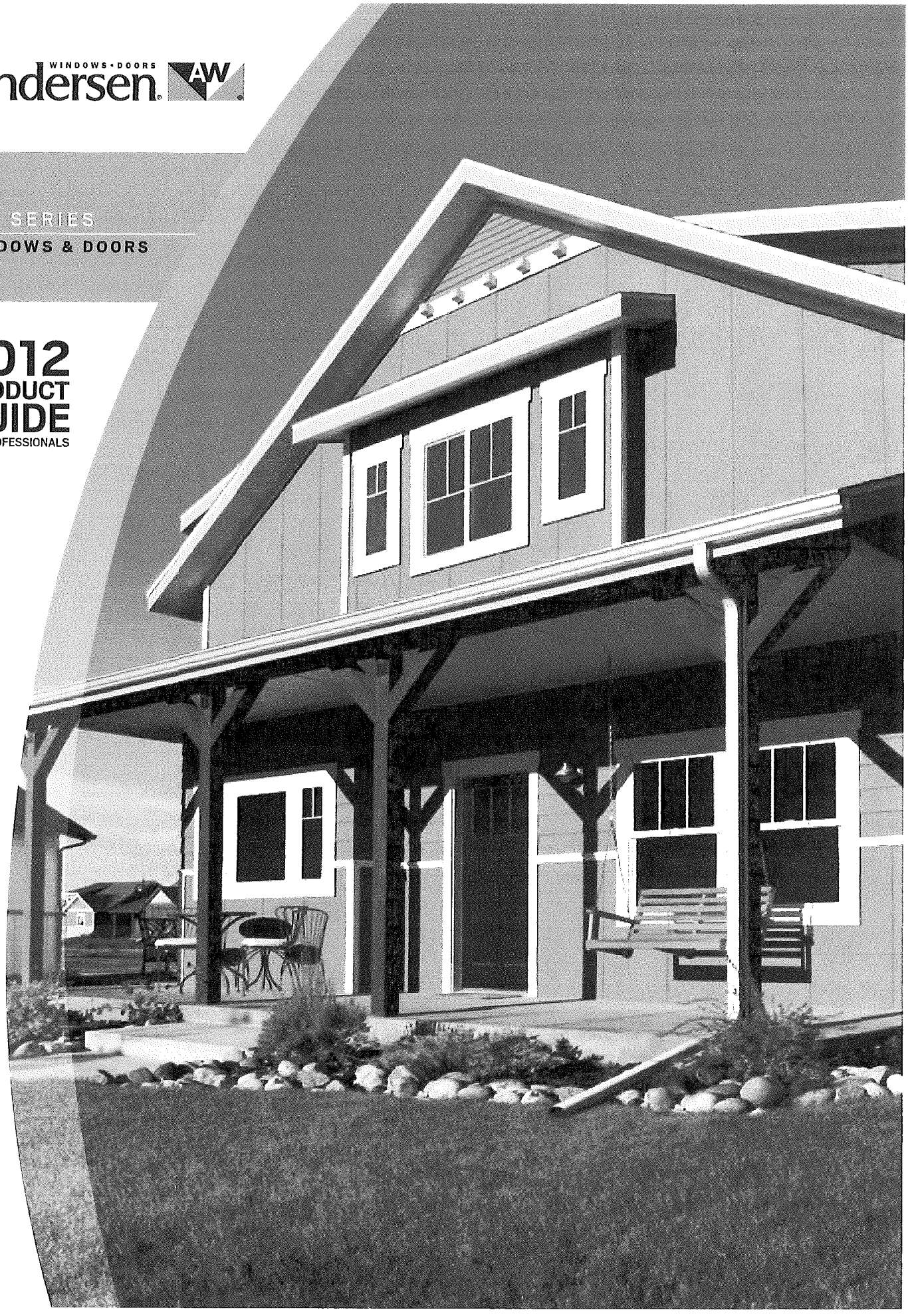
Andersen WINDOWS • DOORS

100 SERIES

WINDOWS & DOORS

2012 PRODUCT GUIDE

FOR PROFESSIONALS

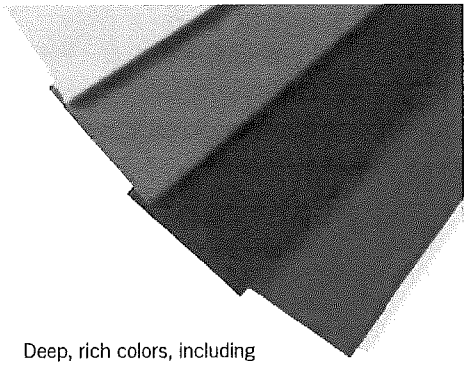


ALL THE FEATURES YOU WANT. INCLUDING THE PRICE.

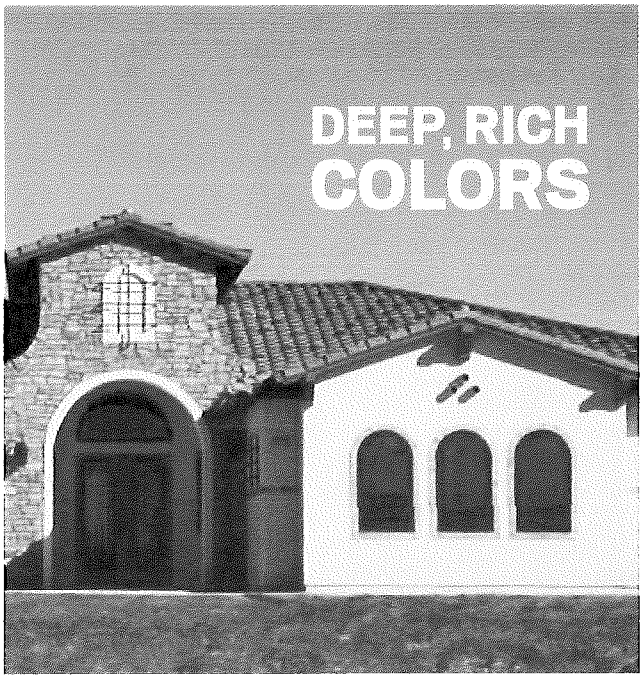
Whether you're replacing, remodeling or building, now you can bring Andersen beauty, craftsmanship and time-tested performance into a home for less than you may expect. Andersen® 100 Series windows and patio doors are made with our patented, revolutionary Fibrex® composite material, which allows us to offer an uncommon value others can't. It's environmentally responsible and energy efficient, and it comes in durable, deep, rich colors you can't get with vinyl.

Durable Andersen® 100 Series products come with factory-finished interiors and exteriors that never need painting and won't fade, flake, blister, chalk or peel.*

*See the limited warranty for details.



Deep, rich colors, including Dark Bronze, complement virtually any architectural style.

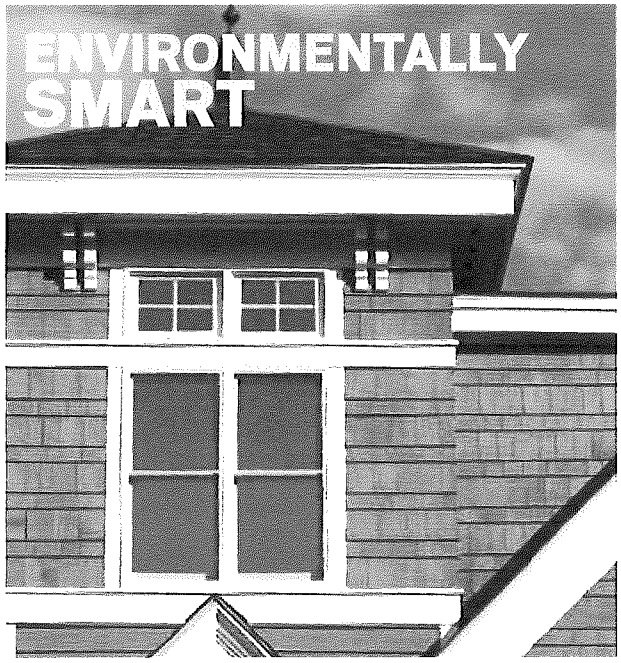


Andersen® 100 Series windows come in beautiful, dark colors that can set a home apart.

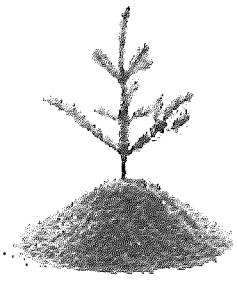
MADE POSSIBLE BY OUR EXCLUSIVE FIBREX® MATERIAL

Fibrex® material is more than just environmentally responsible. It's also durable and beautiful. Here's what helps make Fibrex® material so revolutionary:

- Fibrex® material is **twice as strong as vinyl,** so weathertight seals stay weathertight.
- Our unique fabrication process **blends the color with the Fibrex® material** for long-lasting* beauty.
- It blocks thermal transfer nearly 700 times better than aluminum to help **reduce heating and cooling bills.**
- For **exceptional durability,** Fibrex® material retains its stability and rigidity in all climates.



Andersen® 100 Series products are made with our Fibrex® composite material. It's composed of 40% reclaimed wood fiber by weight, most of which is created during the manufacture of Andersen® wood windows.



40% reclaimed wood fiber by weight.

*See the limited warranty for details.

WHY ANDERSEN®
100 SERIES WINDOWS & DOORS
ARE AN EASY CHOICE.

All Andersen® 100 Series windows and patio doors feature the performance, durability and ease of use you've come to expect from Andersen. They not only provide energy efficiency, beauty and reliability today, but they'll also continue to add value to a home tomorrow and for years* to come.

*See the limited warranty for details.

ENERGY EFFICIENCY

It pays to understand performance.

Look for the National Fenestration Rating Council® (NFRC) performance information. It's your assurance you're getting accurate energy performance ratings from a nonpartisan, nonprofit organization. Here's what the numbers mean:

U-Factor measures the window's insulating capability. The lower the value, the less heat is lost through the entire product.

Visible Transmittance refers to how much visible light comes through a product. The higher the number, the better.

Solar Heat Gain Coefficient (SHGC) measures how well a product blocks heat from the sun. The lower the number, the more it helps reduce air conditioning bills.

Visit **andersenwindows.com/100series** for details. Click on "Windows" or "Doors" underneath the Andersen logo, then click on the NFRC link on the right-hand side.

CUSTOM SIZES

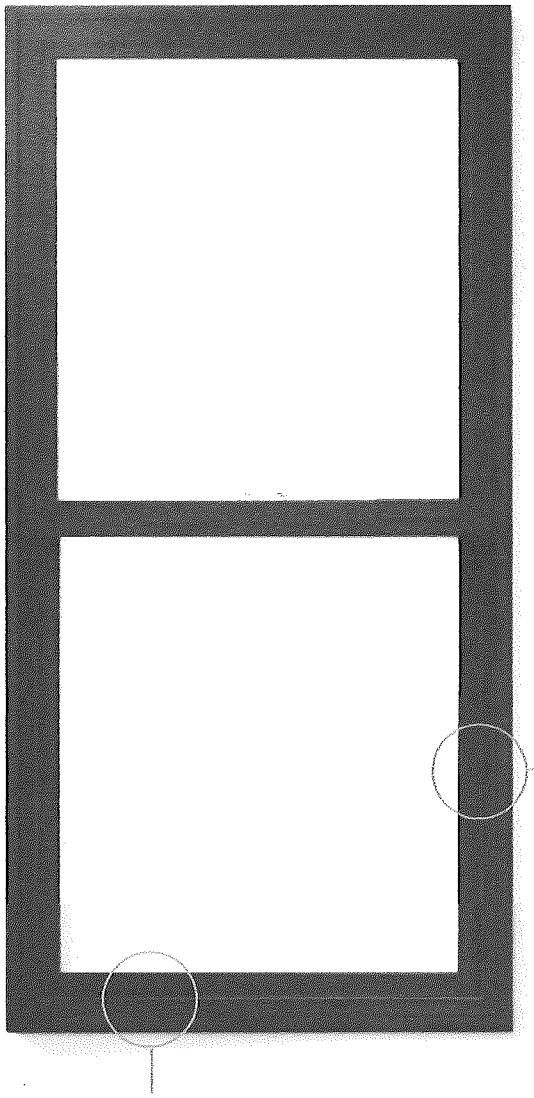
Custom sizes for a weathertight fit.

Andersen® 100 Series windows and patio doors are available in custom sizes, which helps provide a more weathertight fit for any replacement project.

ENERGY STAR AWARD 2012
SUSTAINED EXCELLENCE

Save money by saving energy.

Energy-efficient Andersen® 100 Series products with optional SmartSun™ glass† meet ENERGY STAR® qualifications throughout the United States to help **lower heating and cooling bills.** What's more, the Fibrex® material used for Andersen® 100 Series frames and sash blocks thermal transfer nearly 700 times better than aluminum.



RELIABILITY

Easy operation for years† to come.

All Andersen® 100 Series products are **tested to the extreme** to deliver years* of smooth, reliable operation.

Take comfort in superior weather resistance.

Our weather-resistant construction **seals out drafts, wind and water** so well, you can relax in comfort whatever the weather. We carefully select weatherstripping to match each style of window and door to make sure you enjoy superior comfort and reliability.

owner2owner®
LIMITED WARRANTY

Quality so solid, the warranty is transferable.†

Most other window and door warranties end when a home is sold, but Andersen® 100 Series products' 10-year coverage transfers from each homeowner to the next. And, because it's not prorated, the coverage offers **full benefits, year after year, owner after owner.**

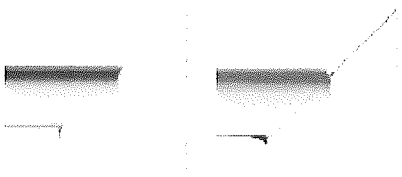
Never needs painting.

Andersen® 100 Series windows and doors **won't fade, flake, blister, chalk or peel,*** no matter what the climate.

BEAUTY

Virtually seamless corners.

To give your windows, patio doors and your home a beautiful, clean look, Andersen® 100 Series products feature virtually seamless corners.



100 Series corner seam **Vinyl corner seam**

Five colors for beautiful curb appeal.

From White and Sandtone to deep, rich Cocoa Bean, Dark Bronze and Terratone® colors, 100 Series windows and doors complement any home.

Improve your view with TruScene® insect screens.

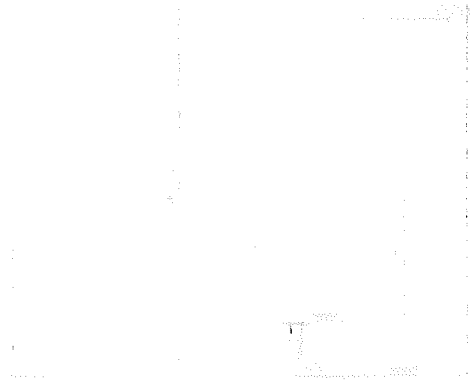
With **over 50% more clarity** than conventional insect screens, optional TruScene® insect screens for windows give you beautifully unobstructed views. They let more sunlight and fresh air into the home while keeping some of the smallest insects out.**

*See the limited warranty for details. **All comparisons made to conventional Andersen® insect screens. †Excludes units with capillary breather tubes. See your Andersen supplier for details.

CHOOSE THE WINDOWS, DOORS & OPTIONS THAT ARE RIGHT FOR YOU.

WINDOW & DOOR TYPES

Building an energy-efficient home doesn't mean you have to compromise. Andersen® 100 Series windows and doors come in styles, shapes and even custom sizes to create the look you want.

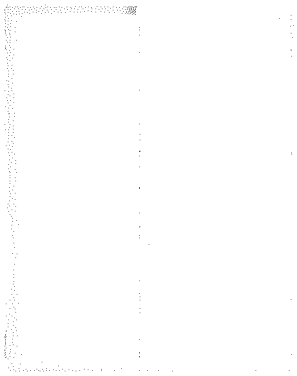


SINGLE-HUNG WINDOWS

This style features a stationary upper sash that is also available with an arched top.

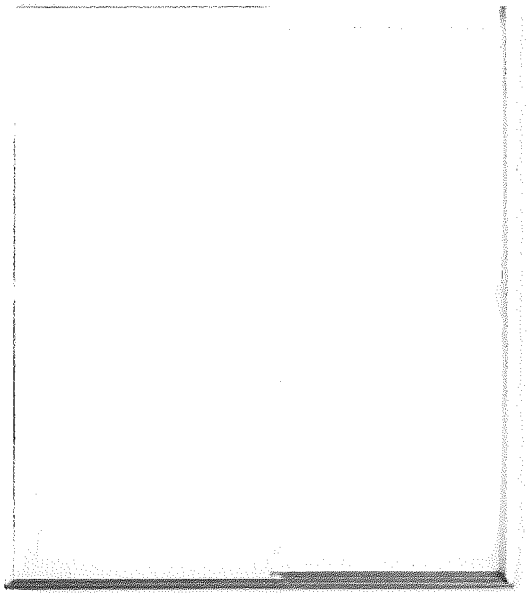
CASEMENT & AWNING WINDOWS

Both styles open with a simple turn of a handle and can also be ordered as stationary windows.



GLIDING WINDOWS

These units have one stationary sash and one that opens. A three-sash configuration, where two sash glide past a fixed center sash, is also available.



GLIDING PATIO DOORS

Patio doors feature one stationary panel and one that glides smoothly on adjustable rollers. They feature a multi-point locking system for enhanced security, and an optional exterior keyed lock for convenience. Sidelight and transom windows are also available.

SPECIALTY WINDOWS

Arch, Springline,** half circle, quarter circle, full circle, rectangle and other geometric shapes are available to complement a home's architecture. Curved specialty windows are not available in custom sizes.

CUSTOM SIZES

Available in custom sizes to fit all projects, including replacement.

GLASS

Choose the right glass to maximize performance.

SMARTSUN™ GLASS

SmartSun™ Low-E glass is the most energy-efficient glass we have ever offered. It rejects unwanted solar heat to help reduce cooling costs and blocks 95% of UV rays that can cause your home furnishings to fade — all while providing a clear view.

LOW-E GLASS

Energy-efficient Low-E glass is available in all Andersen® 100 Series products, and can help reduce energy bills in any climate.

DUAL-PANE GLASS

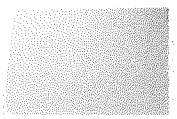
Dual-pane glass is available for projects where codes allow its use.*

PERFORMANCE COMPARISON OF ANDERSEN® 100 SERIES GLASS OPTIONS**
SEE PAGE 34 FOR MORE DETAILS

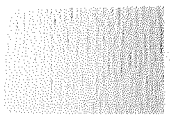
	SmartSun™	Low-E	Dual Pane
U-Factor (Lower is better)	0.28	0.29	0.41
Solar Heat Gain Coefficient (Lower is better)	0.19	0.28	0.32
Visible Light Transmittance (Higher is better)	0.43	0.47	0.74
UV Rays Blocked by Glass (Higher is better)	97%	84%	42%

PATTERNED GLASS

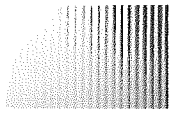
Our patterned glass is ideal in bathrooms, entryways, offices and other areas where you want to let light into the home while obscuring the vision of people outside. It delivers all the benefits of Low-E glass and can also be ordered with SmartSun™ Low-E glass.



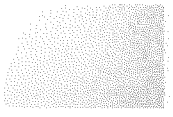
Obscure



Cascade



Reed



Fern

*See local code official for requirements in your area. **Numbers for visible light transmission and UV (ultraviolet) rays blocked are based on center-of-glass values. U-Factor and SHGC are total unit performance values. Calculations were developed based on a 100 Series casement window 23.6" wide by 59" tall, argon fill, 3 mm glass thickness and no grilles. Energy performance ratings labeled on the product represent total unit performance as certified by the National Fenestration Rating Council and will differ from center-of-glass properties and by product type.

HARDWARE

You get attractive hardware that performs reliably for years.*

WINDOW HARDWARE

All window hardware is white to match the interior of your windows.

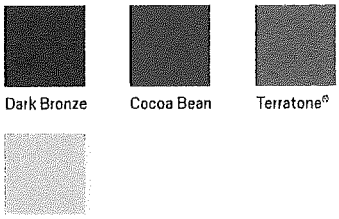
Casement and **awning** hardware folds down so it doesn't interfere with window treatments.

Single-hung and **gliding windows** feature hardware that automatically locks when windows are closed. A Window Opening Control Device is available, which limits raising the sash to less than 4" when the window is first opened.

Optional single-hung lift/gliding window handle

COLOR

Choose the right color to enhance the beauty of your home.



Dark Bronze | Cocoa Bean | Terratone® | Sandtone | White

EXTERIOR COLORS

Andersen® 100 Series products come in five exterior colors, including Dark Bronze and Cocoa Bean — colors that are darker and richer than most vinyl windows.

WHITE INTERIORS

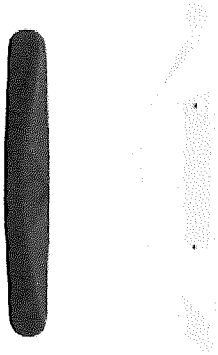
Andersen® 100 Series windows and doors feature an attractive matte white finish inside. This gives you the ability to select the exterior color without compromising options for interior decoration.

Printing limitations prevent exact color duplication. See your Andersen dealer for actual color samples.

PATIO DOOR HARDWARE

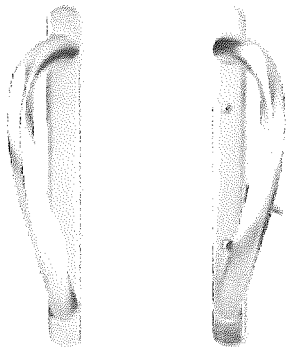
Tulsa and Afton hardware options are available. Tulsa hardware exterior handles match the door's exterior color, while interior handles are white to match the interior. Afton hardware has the same finish inside and out, and is available in Bright Brass, Antique Brass, Satin Nickel and Black finishes. Also available, an optional auxiliary foot lock that secures the gliding panel in the track. It provides an extra measure of security when the door is in a locked position.

TULSA HARDWARE

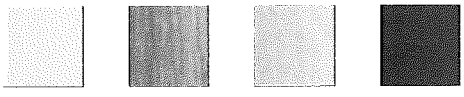


Exterior Handle (Shown in Dark Bronze) | Interior Handle

AFTON HARDWARE



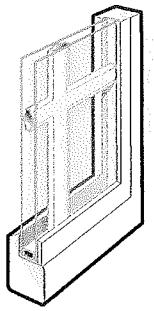
Exterior Handle | Interior Handle (Shown in Satin Nickel)



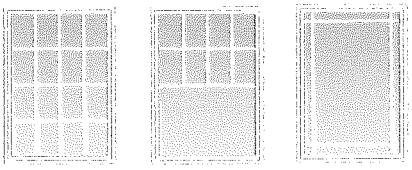
Bright Brass | Antique Brass | Satin Nickel | Black

GRILLES

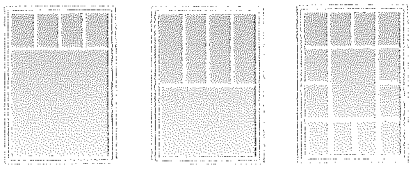
Customize the look of your windows and doors with Andersen® grilles.



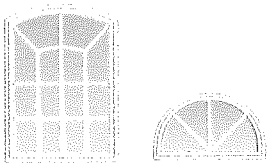
Andersen® 100 Series products are available with **Finelight™** grilles-between-the-glass that make window and patio door glass easy to clean. They have an elegant, sculpted profile, plus they offer a **two-sided color scheme,** allowing you to have grilles that match not only the white interior but also your exterior color choice.



Colonial | Modified Colonial | Prairie A

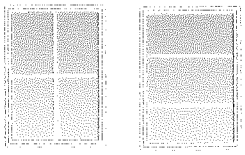


Short Fractional | Tall Fractional | Victorian



Renaissance | Sunburst

SPECIFIED EQUAL LIGHT
Any number of same-size rectangles across or down. Some limitations apply.



(2 x 2) | (1 x 3)

INSECT SCREENS

Insect screens for windows and patio doors have a fiberglass screen cloth. Optional **TruScene®** insect screens for windows are made with a micro-fine stainless steel mesh providing **50% more clarity** than our conventional insect screens.

*See the limited warranty for details.

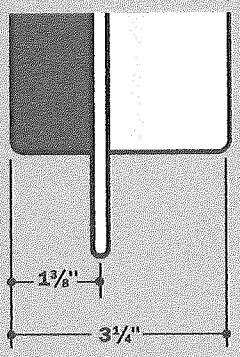
What professionals need.

Wherever you work and whatever style of home you're building or remodeling, you'll find a window or door to match in the Andersen® 100 Series product line. Enjoy easy installation on the jobsite, along with superior product performance and unbeatable service after the job is done. All 100 Series windows feature a 3-1/4" total width, which provides plenty of space for easy drywall returns.

Drawings depict window dimensions.
Patio doors feature a 5-1/8" frame width.

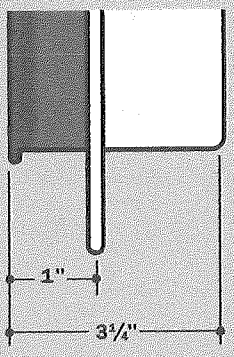
4-3/8" Flange Setback

This popular style offers the greatest flexibility and looks great with any siding or trim.



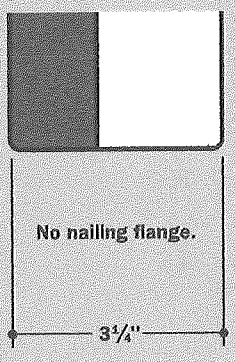
1" Flange Setback with Stucco Key

Hide normal shrinkage around the frame to easily create a perfect stucco finish.



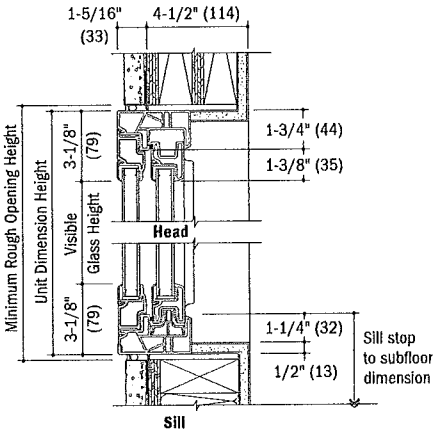
Replacement Configuration

Order 100 Series products without a nailing flange for replacement projects.

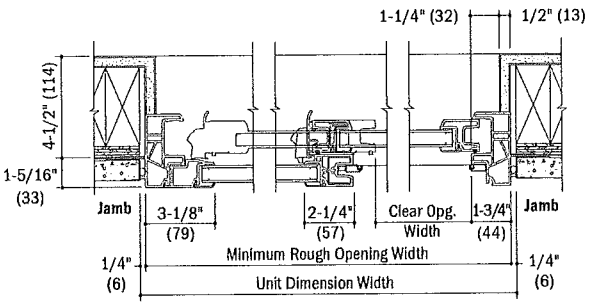


100 Series Unit and Rough Opening Details

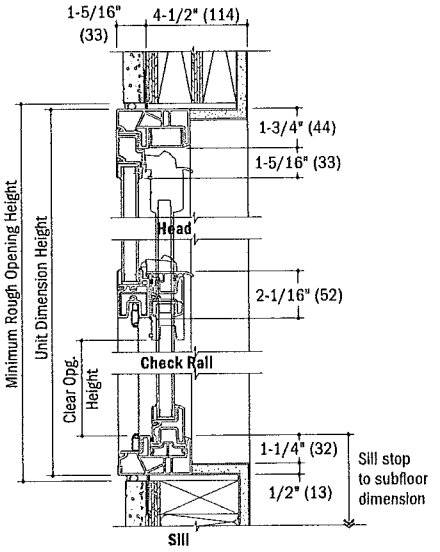
Basic Unit and Rough Opening Details Scale 1-1/2" = 1'-0" (1:8)



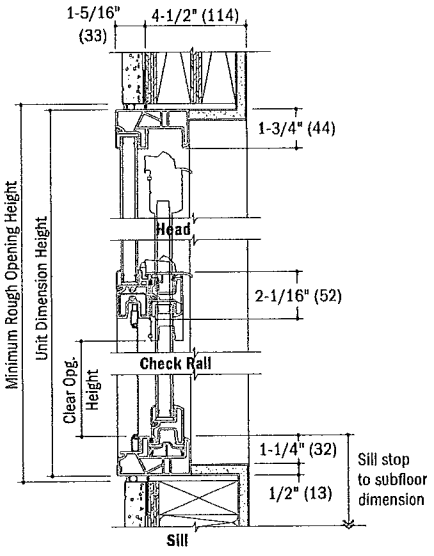
Vertical Section Gliding Window
(1-3/8" flange setback)



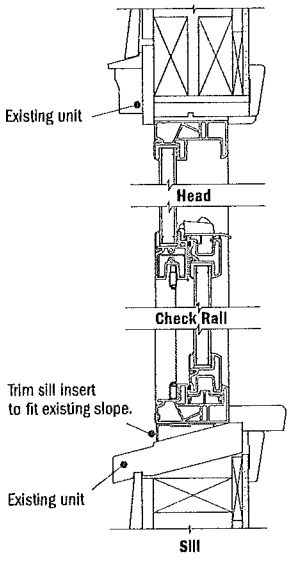
Horizontal Section Gliding Window
(1-3/8" flange setback)



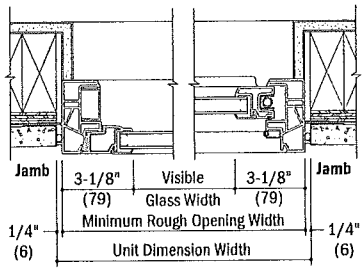
Vertical Section Single-Hung Window
(1-3/8" flange setback)



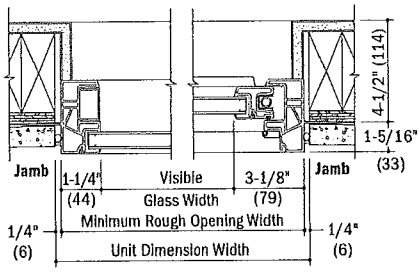
Vertical Section Arch Top Single-Hung Window
(1-3/8" flange setback)



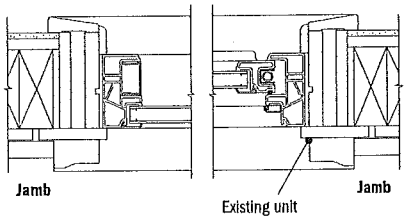
Vertical Section
Single-Hung Window Installed as an Insert
(no flange)



Horizontal Section Single-Hung Window
(1-3/8" flange setback)



Horizontal Section Arch Top Single-Hung Window
(1-3/8" flange setback)



Horizontal Section
Single-Hung Window Installed as an Insert
(no flange)

- Proper installation and maintenance of Andersen products is essential to attain optimum performance and operation. Written installation instructions which provide guidelines for proper installation are typically provided with Andersen products. They are also available from your local Andersen supplier or by visiting andersenwindows.com. Remember that every installation is different, and Andersen strongly recommends consultation with the local supplier or an experienced contractor, architect or structural engineer prior to the installation of any Andersen product. The method of attachment for Andersen products, fastener selection and code compliance is the responsibility of the architect, building owner, contractor, installer and/or consumer. For complete installation details, refer to "Product Installation Details" at andersenwindows.com or contact your Andersen supplier.

Performance Data

100 Series Unit Performance Data

							Low-E						SmartSun™ Low-E					
			Standard		STC Upgrade		Without Grilles			With Grilles			Without Grilles			With Grilles		
100 Series Product	Performance Rating	Typical Air Infiltration	Sound Transmittance Class (STC)	OITC	Sound Transmittance Class (STC)	OITC	U-Factor	SHGC	VT	U-Factor	SHGC	VT	U-Factor	SHGC	VT	U-Factor	SHGC	VT
Single-Hung	PG30	0.100 cfm/ft²	25	21	32	26	0.31	0.32	0.54	0.31	0.28	0.48	0.30	0.21	0.49	0.30	0.19	0.43
Gliding	PG30	0.080 cfm/ft²	25	21	32	26	0.31	0.32	0.54	0.31	0.28	0.48	0.30	0.21	0.49	0.30	0.19	0.43
Casement/Awning	PG30	<0.023 cfm/ft²	26	22	30	26	0.29	0.28	0.48	0.29	0.26	0.43	0.28	0.19	0.43	0.28	0.17	0.39
Fixed	PG30	<0.010 cfm/ft²	27	22	31	26	0.29	0.33	0.56	0.29	0.29	0.50	0.29	0.22	0.50	0.29	0.20	0.45
2-Panel Door	PG30	0.150 cfm/ft²	28	23	29	23	0.30	0.32	0.55	0.32	0.29	0.48	0.30	0.21	0.50	0.31	0.19	0.44
Sidelight/Transom	PG30	<0.010 cfm/ft²	29	24	31	25	0.30	0.25	0.43	0.30	0.23	0.38	0.30	0.17	0.39	0.30	0.15	0.35

100 Series Center of Glass Performance Data

					Fading				
	Visible Light	SC	SHGC	RHG	Tuv	Tdw	U-Factor	%RH@center	IGST
Low-E Glass									
Single Hung/Glider/Casement/Awning	73%	0.48	0.42	96.68	0.171	0.343	0.26	61%	55.0°F
Fixed	73%	0.48	0.42	98.25	0.171	0.343	0.26	61%	55.0°F
Smart Sun Glass									
Single Hung/Glider/Casement/Awning	65%	0.31	0.27	65.28	0.053	0.213	0.25	61%	55.8°F
Fixed	65%	0.31	0.27	64.89	0.053	0.213	0.26	61%	55.4°F

Altitude Limits

For recommendations on the use of breather tubes, go to www.andersenwindows.com/100series.

Window Combination Design

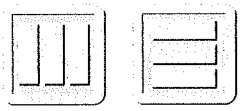
Joining Method: 1/2" Wood Non-Reinforced

Type of Combination: 1-Way (Ribbon or Stack)

Max. Number of Units Mulled together: 6W or 6H

Maximum size: 8' x 12' or 12' x 8'

2 Dimensional Mulls: Not recommended



2-way combinations are not recommended.

Combined Unit Dimension: For any two units with combined widths equal to or greater than 8', the mull joint cannot exceed 7'.
For any two units with combined heights equal to or greater than 8', the mull joint cannot exceed 7'.

Special Rules: No curved units side-by-side with any other unit
No units under single-hung or gliding window

Door Combination Design

Joining Method: 3/4" Wood Non-Reinforced

Type of Combination: 1-Way (Ribbon or Stack)

Max. Number of Units Mulled together: 3W or 3H

Maximum size: 16' x 8' or 8' x 12'

2 Dimensional Mulls: Not recommended

2-way combinations are not recommended.

Special Rules: 100 Series doors, sidelights, and transoms cannot be joined to 100 Series windows