

Docket Item # 2
BAR CASE # 2011-0360

BAR Meeting
January 18, 2012

ISSUE: Window Replacement
APPLICANT: Robert J. Almassy by Chris Sullivan
LOCATION: 316 North Pitt Street
ZONE: RM Residential

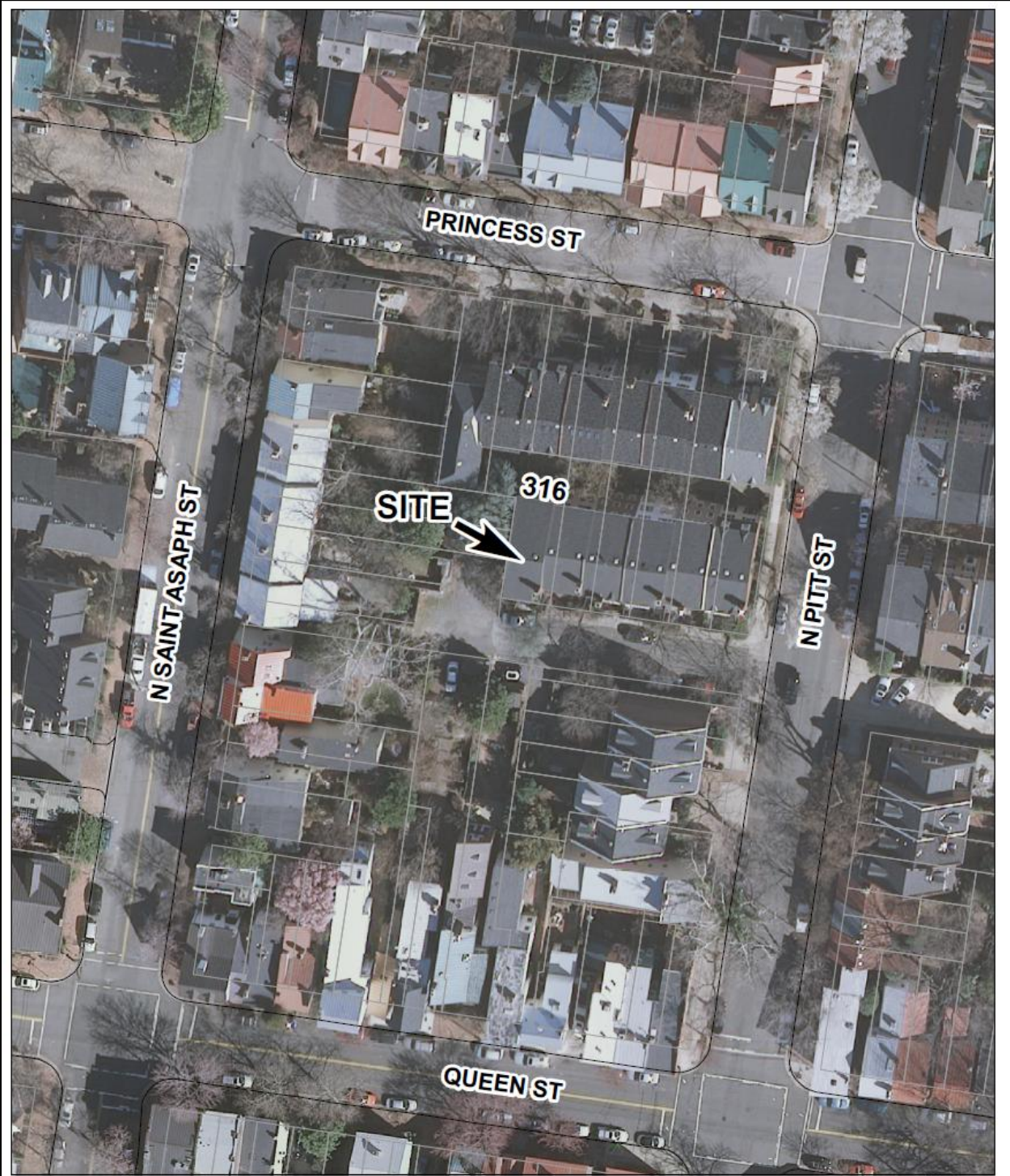
STAFF RECOMMENDATION:

Staff recommends that the Board approve the Certificate of Appropriateness application, as submitted.

Additionally, Staff recommends that the Board amend its *Window Policy* and allow Anderson Fibrex windows or similar quality, paintable wood composite windows to be installed within the Old and Historic Alexandria District on buildings constructed after **1975**. Fibrex or wood composite windows must also comply with the existing *Alexandria Replacement Window Performance Specifications*, as adopted 10/20/2010. The existing brickmould, casing, sills or window trim may be replaced with a painted, aluminum or paintable, solid through-the-core wood composite material. The material must match the existing in size and profile.

****EXPIRATION OF APPROVALS NOTE:** In accordance with Sections 10-106(B) and 10-206(B) of the Zoning Ordinance, any official Board of Architectural Review approval will expire 12 months from the date of final approval if the work is not commenced and diligently and substantially pursued by the end of that 12-month period.

****BUILDING PERMIT NOTE:** Most projects approved by the Board of Architectural Review require the issuance of one or more construction permits by Building and Fire Code Administration (including siding or roofing over 100 square feet, windows and signs). The applicant is responsible for obtaining all necessary construction permits after receiving Board of Architectural Review approval. Contact Code Administration, Room 4200, City Hall, 703-746-4200 for further information.



BAR CASE #2011-0360



I. ISSUE:

The applicant is requesting approval of a Certificate of Appropriateness for the replacement of 14 windows on the north, south and west elevations at 316 North Pitt Street. The existing multi-light, 5/8" muntin, single-glazed, true-divided light (TDL) wood and storm windows will be replaced with new, double-glazed, SDL replacement sash packs. The sash packs will be fabricated with Fibrex, a wood composite, manufactured by Anderson Windows and will contain a 3/4" muntin with putty glazed profile. The applicant is also proposing to clad the exterior wood, brickmould and sills with an extruded, painted aluminum to match the existing profiles.

II. HISTORY:

The three-story, brick veneer townhouse at 316 North Pitt Street is part of the Carriage Square development constructed in **1974**. This end unit townhouse is oriented toward the courtyard with its entrance on the (west) side elevation and a rear one-car garage on the lower level accessible through the private alley off of North Pitt Street. The subject property is minimally visible from North Pitt Street.

III. ANALYSIS:

The proposed alterations comply with zoning ordinance requirements.

When considering replacement materials on any building, the Board should evaluate the potential loss of an architectural feature (compatibility), the loss of a material texture (material analysis), and the overall impact to the district (policies).

Compatibility

The *Design Guidelines* are clear that "windows are one of the principal character-defining features of a building and serve both functional and aesthetic purposes." Changes to windows and their trimwork or surrounds can have a dramatic impact on the appearance of a building. It is important on historic and modern buildings that the size, location, type, trim, and if applicable muntin size, of the windows are consistent with the prevailing architectural style of the building.

Utilizing the approved *Alexandria Replacement Window Performance Specifications*, Staff analyzed the Anderson Fibrex Window for compatibility. Based on the information provided, the proposed window meets all the required *Specifications*, except for the required material. The simulated-divided light (SDL), double-hung window sash kit will closely match the exterior appearance of the existing double-hung windows by having a completely paintable exterior surface, a 3/4" fixed interior and exterior muntin with a putty profile and a spacer bar between the glass, low-E glazing, and a 90 degree mitered corner.

It should be noted that the Board has already approved wood composite materials for use on buildings constructed after **1975** in their *Minor Architectural Elements Policy*. A revision to the *Window Policy* to allow the use of Fibrex, or other wood composite windows on buildings constructed after **1975** would be consistent with this current policy.

Material Analysis

Fibrex

The Board’s policy requires that any modern material utilized within the historic districts be of the highest quality to ensure longevity and performance. Fibrex is a synthetic made of 40% reclaimed wood fiber combined with a polymer. It is a paintable product that has a stiffness that is more stable and rigid than vinyl but is less rigid than wood. Additionally, Anderson Fibrex windows have previously been approved by the BAR within the Historic District for use at the Potowmack Crossing (built 1940s, and replicating metal casements) and the St. Asaph Square condominiums (built 1980s, replacing 1/1 DH and single light casements), though they have not yet been installed in either location. Finding that the windows have been previously determined acceptable by the BAR as a high quality modern material and that this 1970s dwelling will utilize the product for 6/6 wood, double-hung units with 5/8” muntins and will be barely visible from a public right-of-way (see photos page 10-11), Staff believes that Fibrex would be an appropriate and compatible material for buildings within the historic district constructed after **1975**.

Aluminum Cladding

Staff was originally concerned with the utilization of aluminum cladding as a modern material option for sash pack replacement windows. As shown below, the thin aluminum cladding is able to be molded and affixed to the existing wood brickmould and sill without causing a significant change to the profile or the reveal. Staff recommends that Board support an amendment to the *Window Policy* for buildings constructed after **1975** which allows the option to clad the existing brickmould, casing, sills or window trim with a painted, aluminum or paintable, solid through-the-core wood composite material – requiring the material to match the existing in size and profile.



Aluminum-clad brickmould



Existing wood brickmould

Procedures/ Policies

The BAR has specific procedures and policies for the use of modern materials within the historic district. The BAR’s policies regarding the utilization of modern materials within the districts were first evaluated during the creation of the *Design Guidelines* in 1992. To continue its study of modern and sustainable materials, the Boards formed the Modern and Sustainable Materials Ad Hoc Work Group in early 2010. With guidance from this work group, the Boards adopted the *Minor Architectural Elements, Roofing and Window Policies*, which clarified the policies created by the *Design Guidelines*, streamlined current practices and procedures, and encouraged

the use of readily available modern and environmentally sustainable materials, where appropriate. In general, the Board supports the use of a modern material on any portion of a building constructed after that material became commercially available.

The Board's current *Window Policy* allows for a building constructed after **1969** to replace their current wood, single-pane, TDL, multi-pane windows with aluminum-clad wood, double-glazed, SDL, multi-pane windows either utilizing a full-frame replacement windows or sash replacement kits. Additionally, the *Minor Architectural Elements Policy* allows for the use of some substitute materials, such as fiber cement siding and synthetic/composite trim on buildings and additions constructed after **1975**. These materials must have a smooth finish without a wood grain texture. The *Policy* permits Staff to administratively approve the installation of these materials within these limited parameters.

Although the BAR recently reviewed and updated its *Window Policy*, Staff suggests that the Board could amend the *Policy* further, if they find that the proposed Anderson Fibrex wood composite material, or another similar quality paintable wood composite window, is appropriate and compatible within the historic district. While the Anderson Fibrex brand windows have only been on the market since 1991, the paintable composite materials noted above have been widely available since 1975. Staff still does not support hollow vinyl windows anywhere in the historic districts. The Board has long held that replacement materials should be high quality so that they will last, as the constant replacement of windows or siding has a cumulative adverse effect on a historic resource. Late 20th century vinyl windows have not shown themselves to be durable, their sash and frames typically do not reflect historic profiles and they are generally not paintable, limiting historically appropriate color palates.

Finally, the current *Policy* has a set of *Performance Specifications* which requires among others that the "dimensions and proportions of the window rails, stiles, muntins, frame, sill and exterior trim match the historically appropriate window proportions." If the *Policy* is amended to include Fibrex and other wood composite windows, these windows will be required to comply with these *Specifications* in order to be approved administratively by BAR staff.

Summary

Staff finds the proposed Anderson Fibrex option to be an appropriate replacement window which is consistent with the Board's modern materials policy. Based on the above analysis, Staff recommends that the Board amend its *Window Policy* and allow Anderson Fibrex windows or similar quality, paintable wood composite windows to be installed within the Old and Historic Alexandria District on buildings constructed after **1975**. Additionally, the windows must comply with the existing *Alexandria Replacement Window Performance Specifications*, as adopted 10/20/2010. Furthermore, if the trim, sills or casings are to be replaced with painted aluminum or a paintable, solid through-the-core wood composite material, the material must match the existing material in size and profile.

STAFF:

Michele Oaks, Historic Preservation Planner, Planning & Zoning
Al Cox, FAIA, Historic Preservation Manager, Planning & Zoning

IV. CITY DEPARTMENT COMMENTS

Legend: C - code requirement R - recommendation S - suggestion F- finding

Zoning Section

Proposed replacement windows comply with zoning.

Code Administration:

- F-1 The review by Code Administration is a preliminary review only. Once the applicant has filed for a building permit, code requirements will be based upon the building permit plans. If there are any questions, the applicant may contact Ken Granata, Acting Plan Review Supervisor at ken.granata@alexandriava.gov or 703-746-4193. (Code)
- C-1 Alterations to the existing structure must comply with the current edition of the Uniform Statewide Building Code (USBC).
- C-2 A building permits is required for this project. Five sets of *construction documents* including new window specifications, window size and location.

Transportation and Environmental Services (T & ES):

No comments received.

V. IMAGES



Figure 1: Existing Conditions - North Façade (Faces Courtyard)



Figure 2: Existing Conditions - South Elevation (Faces Private Alley)



Figure 3: Existing Conditions - West (Side) Elevation (Entrance)



Figure 4: Existing Conditions – Courtyard View from N. Pitt Street





Figure 5: Existing Conditions – Alley View from N. Pitt Street



Location of Photo

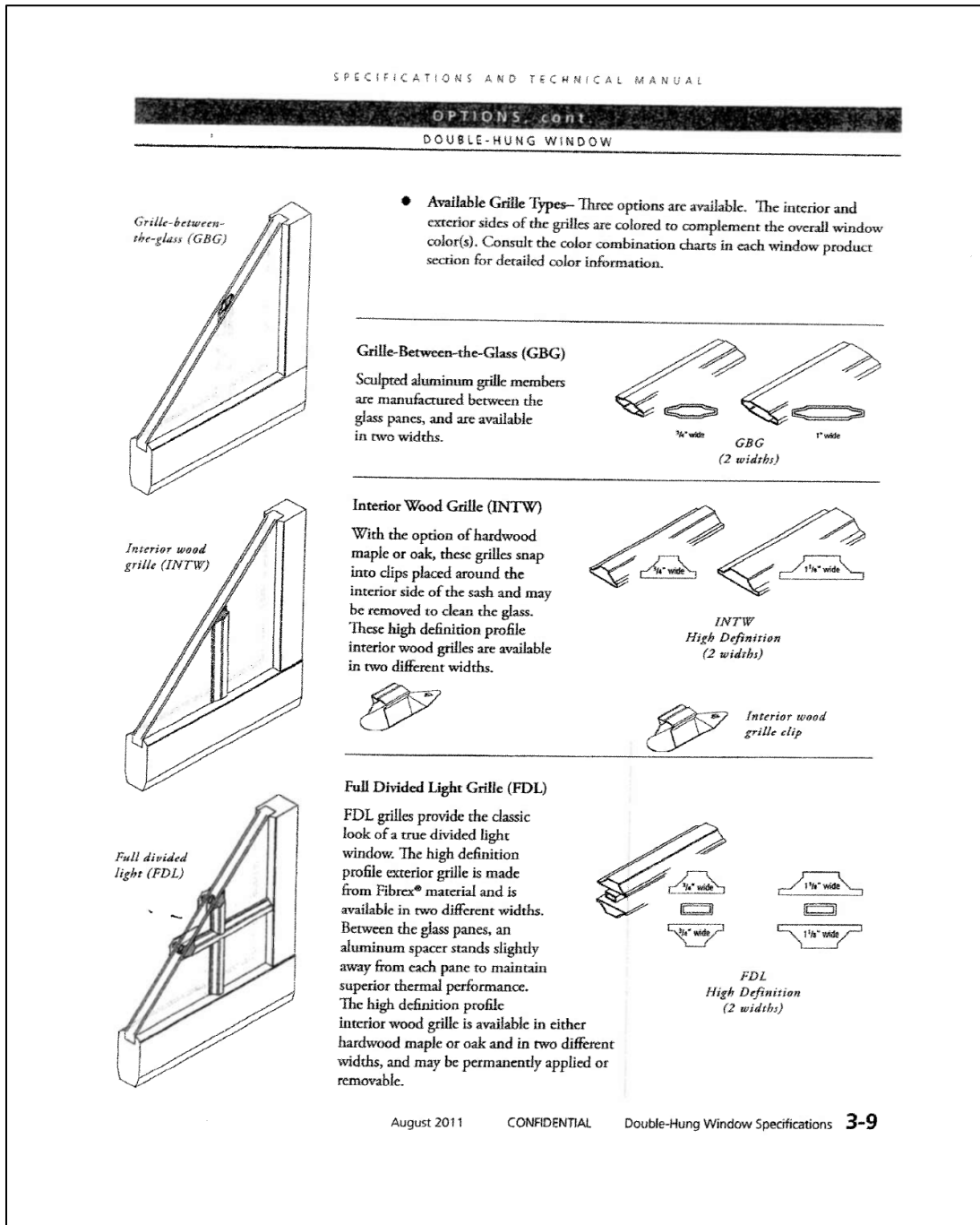


Figure 6: Window Specifications

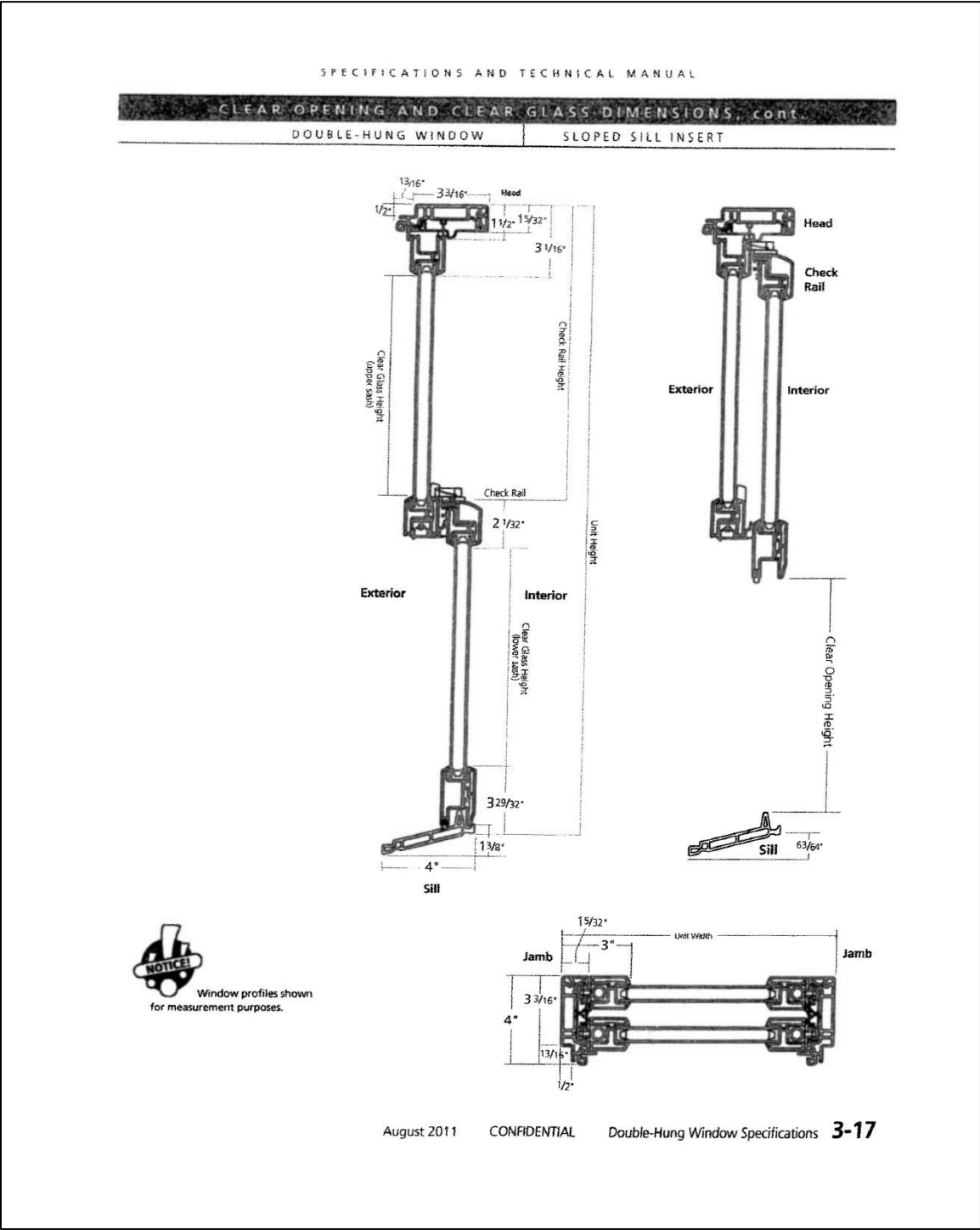


Figure 7: Window Specifications

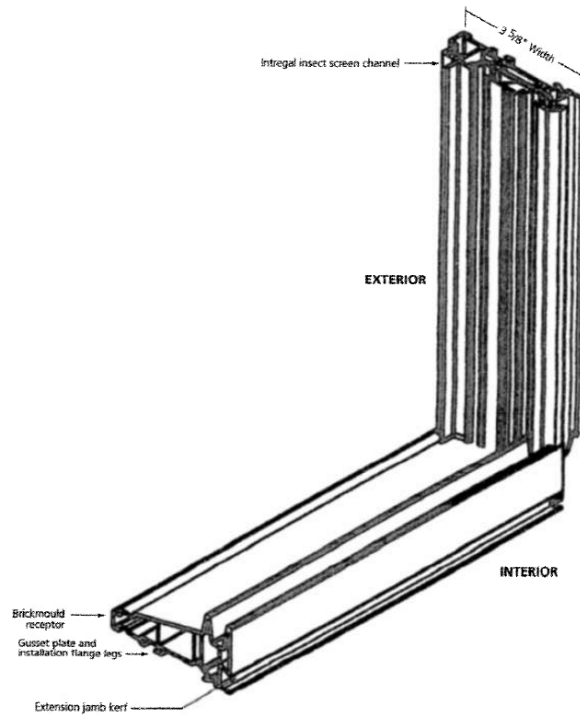
FLAT SILL INSERT DOUBLE-HUNG WINDOW

The flat sill insert double-hung window frame option is recommended when replacing aluminum-framed windows, when specifying an insert window frame that needs to have a flat sill to seat correctly in the opening, or when mulling multiple double-hung insert windows in an opening. It is also the window used in angle bay frames. The $3 \frac{3}{16}$ " frame width is also consistent with other insert windows to fit in a $3 \frac{1}{4}$ " pocket.

Existing window pockets must be flat. If they are not, materials must be added so that the pocket offers full support of the window frame.

As with other flat sill insert windows, the flat sill design of the insert frame double-hung window features an exterior trim kerf on all four sides of the frame, allowing for exterior Fibrex® material trim or aluminum coil stock to return to the window frame. This also facilitates mulling to other flat sill insert windows.

For measuring information, please see the Technical Measurement Manual. For installation methods, please see the Product Installation Manual.



3-18 Double-Hung Window Specifications CONFIDENTIAL August 2011

Figure 8: Window Specifications