



# Product Evaluation

WIN1997 | 0915

Engineering Services Program

*The following product has been evaluated for compliance with the wind loads specified in the International Residential Code (IRC) and the International Building Code (IBC).*

*This product evaluation is not an endorsement of this product or a recommendation that this product be used. The Texas Department of Insurance has not authorized the use of any information contained in the product evaluation for advertising, or other commercial or promotional purpose.*

*This product evaluation is intended for use by those individuals who are following the design wind load criteria in Chapter 3 of the IRC and Section 1609 of the IBC. The design loads determined for the building or structure shall not exceed the design load rating specified for the products shown in the limitations section of this product evaluation. This product evaluation does not relieve a Texas licensed engineer of his responsibilities as outlined in the Texas Insurance Code, the Texas Administrative Code, and the Texas Engineering Practice Act.*

*For more information, contact TDI Engineering Services Program at (800) 248-6032.*

**Evaluation ID:** WIN-1997

**Effective Date:** September 1, 2015

**Re-evaluation Date:** April 2016

**Product Name:** Series 65/265 Vinyl Double-Hung Windows, New and Replacement Construction, Individual and Field Mullled, Impact Resistant

**Manufacturer:** Atrium Windows & Doors  
9001 Ambassador Row  
Dallas, TX 75247  
(214) 637-2696

## General Description:

System	Description	Label Rating	Design Pressure Rating
1	Series 65/265 Vinyl, Double-Hung Windows; (FIN) Impact, New Construction; X/X	LC-PG50 (36 X 74) H AAMA 506 Missile Level D	+50 / -50 psf
2	Series 65/265 Vinyl, Double-Hung Windows; (FINLESS) Impact; Replacement Construction; X/X	LC-PG50 (36 X 74) H AAMA 506 Missile Level D	+50 / -50 psf
3	Series 65/265 Vinyl, Double-Hung Windows; (FIN) Impact, Triples, Field Mullled; New Construction; X/X.X/X.X/X	LC-PG50 (109 X 74) H AAMA 506 Missile Level D	+50 / -50 psf
4	Series 65/265 Vinyl, Double-Hung Windows; (FINLESS) Impact, Triples, Field Mullled; Replacement Construction; X/X.X/X.X/X	LC-PG50 (109 X 74) H AAMA 506 Missile Level D	+50 / -50 psf
5	Series 65/265 Vinyl, Double-Hung Windows; (FIN) Impact, Doubles with Transom, Field Mullled, New Construction; (O/X/X.X/X	LC-PG50 (72 X 108) H AAMA 506 Missile Level D	+50 / -50 psf

**General Description (continued):**

System	Description	Label Rating	Design Pressure Rating
6	Series 65/265 Vinyl, Double-Hung Windows, (FINLESS) Impact, Doubles with Transom, Field Mullled, Replacement Construction; O/X/XX/X	LC-PG50 (72 X 108) H AAMA 506 Missile Level D	+50 / -50 psf

**Product Dimensions:**

System	Overall Size	Exterior Sash Size	Interior Sash Size	Transom Window Size
1, 2	36" x 74"	31-3/8" x 35-1/2"	32-5/16" x 36-7/16"	N.A.
3, 4	109" x 74"	31-5/16" x 35-1/2"	32-5/16" x 36-3/8"	N.A.
5, 6	72" x 108"	31-1/8" x 34-3/4"	32-1/8" x 35-5/8"	72" x 36"

**Product Identification (Certification Label on Window):**

System		
1-6	Certification Agency	AAMA
	Manufacturer's Name or Code Name	ADW-8
	Product Name	<ul style="list-style-type: none"> <li>• Sys. 1-2: Series 65/265 IMPACT DH (Model E31)</li> <li>• Sys. 3: Series 65/265 Double Hung Triple (FIN)</li> <li>• Sys. 4: Series 65/265 Double Hung Triple (FINLESS)</li> <li>• Sys. 5: Series 65/265 Double Hung Twin w/ Transom (Fin)</li> <li>• Sys. 6: Series 65/265 Double Hung Twin w/ Transom (Finless)</li> </ul>
	Test Standards	AAMA/WDMA/CSA 101/I.S.2/A440-08 AAMA 506 Missile Level D

**Impact Resistance:**

System	Impact Resistant	Requirement
1-6	Yes	These products satisfy TDI's criteria for protection from windborne debris in the <b>Inland I</b> and <b>Seaward</b> zone. Install the assemblies at a height on the structure that does not exceed the design pressure rating for the assemblies.

**Installation:**

System		
1 (FIN)	Type of Installation	New Construction – Wood Frame
	Wall Framing	Spruce-Pine-Fir Dimension lumber
	Fasteners (Nail Fin)	Minimum No. 8 x 1-5/8" pan head screws
	Fasteners (Window Frame)	Minimum No. 10 x 2-1/2" wood screws
	Fastener Location/Spacing	Refer to the accompanying drawings for detailed installation instructions. Drive fasteners through the nail fin perimeter at 2" from each corner centerline and then every 8" thereafter. Drive one fastener through the window head at the midpoint of the head.
	Fastener Penetration	Minimum 1-1/2" into the wall framing
2 (NO FIN)	Type of Installation	Replacement Construction – Wood Frame
	Wall Framing	Spruce-Pine-Fir Dimension lumber
	Fasteners (Window Frame)	Minimum No. 10 x 2-1/2" wood screws
	Fastener Location/Spacing	Refer to the accompanying drawings for detailed installation instructions. Drive one fastener through the window head at the midpoint of the head. Drive two fasteners through each window jamb at 4" from each window frame corner. Thereafter, drive fasteners through the jamb at 20" on center (maximum).
		Fastener Penetration

**Installation (continued):**

System		
3 (FIN)  Triple  Field Mulled	Type of Installation	New Construction – Wood Frame
	Wall Framing	Spruce-Pine-Fir Dimension Lumber
	Fasteners (Nail Fin)	<ul style="list-style-type: none"> <li>• To fasten the PVC window frame jambs, nail fin, and the mullion clips to the wood framing, use minimum No. 10 x 2-1/2" wood screws.</li> <li>• To fasten the PVC window frame to the vertical mullion, use minimum No. 8 x 2-1/2" grade 5 self-tapping screws.</li> <li>• To fasten the mullion straps to the PVC window frame, use minimum No. 8 x 3/8" grade 5 self-tapping screws.</li> </ul>
	Fastener Location/Spacing	<p><b>Refer to the accompanying drawings for detailed installation instructions.</b></p> <p><b>PVC Window Frame To Wood Frame</b></p> <ul style="list-style-type: none"> <li>• Drive fasteners through the nail fins at 2" from each window frame corner. Thereafter, drive fasteners through the jamb at 8" on center (maximum).</li> <li>• Drive fasteners through each window jamb at 4" from each window frame corner. Thereafter, drive fasteners through the jamb at 20" on center (maximum).</li> </ul> <p><b>PVC Window Frame To Vertical Mullion</b></p> <ul style="list-style-type: none"> <li>• Drive fasteners (minimum No. 8 x 2-1/2" grade 5 self-tapping screws) through the two window jambs at 2", 16" and 20" from the bottom corners.</li> </ul> <p><b>Vertical Mullion To Wood Frame</b></p> <ul style="list-style-type: none"> <li>• Set the two mullion clips at the top and bottom of the mullion. Attach each mullion clip to the rough framing with two screws.</li> </ul> <p><b>Mullion Strap To PVC Window Frame</b></p> <ul style="list-style-type: none"> <li>• Set a 12" x 1-1/4" x 1/16" steel strap at each mullion clip. Attach each strap with six screws.</li> </ul>
Fastener Penetration	Minimum 1-1/2" into the wall framing	

## Installation (continued):

System	Type of Installation	Replacement Construction – Wood Frame
4 (NO FIN)  Triple  Field Mullied	Wall Framing	Spruce-Pine-Fir Dimension Lumber
	Fasteners	<ul style="list-style-type: none"> <li>To fasten the PVC window frame and the mullion clips to the wood framing, use minimum No. 10 x 2-1/2" wood screws.</li> <li>To fasten the PVC window frame to the vertical mullion, use minimum No. 8 x 2-1/2" grade 5 self-tapping screws.</li> <li>To fasten the mullion straps to the PVC window frame, use minimum No. 8 x 3/8" grade 5 self-tapping screws.</li> </ul>
	Fastener Location/Spacing	<p><b>Refer to the accompanying drawings for detailed installation instructions.</b></p> <p><b>PVC Window Frame To Wood Frame</b></p> <ul style="list-style-type: none"> <li>Drive one fastener through each window head at the midpoint of the head.</li> <li>Drive fasteners through each window jamb at 4" from each window frame corner. Thereafter, drive fasteners through the jamb at 16 1/2" on center (maximum).</li> </ul> <p><b>PVC Window Frame To Vertical Mullion</b></p> <ul style="list-style-type: none"> <li>Drive fasteners (minimum No. 8 x 2-1/2" grade 5 self-tapping screws) through the two window jambs at 2", 16" and 20" from the bottom corners.</li> </ul> <p><b>Vertical Mullion To Wood Frame</b></p> <ul style="list-style-type: none"> <li>Set the two mullion clips at the top and bottom of the mullion. Attach each mullion clip to the rough framing with two screws.</li> </ul> <p><b>Mullion Strap To PVC Window Frame</b></p> <ul style="list-style-type: none"> <li>Set a 12" x 1-1/4" x 1/16" steel strap at each mullion clip. Attach each strap with six screws.</li> </ul>
	Fastener Penetration	Minimum 1-1/2" into the wall framing

## Installation (continued):

System	Type of Installation	New Construction – Wood Frame
5 (FIN)  Transom with Twin DH  Field Mulled	Wall Framing	Spruce-Pine-Fir Dimension Lumber
	Fasteners (Nail Fin)	<ul style="list-style-type: none"> <li>To fasten the PVC window frames nail fin, and the mullion clips to the wood framing, use minimum No. 10 x 2-1/2" wood screws.</li> <li>To fasten the PVC window frame to the horizontal and vertical mullions, use minimum No. 8 x 2-1/2" grade 5 self-tapping screws.</li> <li>To fasten the mullion straps to the PVC window frame, use minimum No. 8 x 3/8" grade 5 self-tapping screws.</li> </ul>
	Fastener Location/Spacing	<p><b>Refer to the accompanying drawings for detailed installation instructions.</b></p> <p><b>PVC Window Frame To Wood Frame</b></p> <ul style="list-style-type: none"> <li>Drive fasteners through the nail fins at 2" from each window frame corner. Thereafter, drive fasteners through the jamb at 8" on center (maximum).</li> <li><u>Double-hung windows</u>: Drive fasteners through each window jamb at 4" from the bottom corners. Thereafter, drive fasteners through the jambs at 20" on center (maximum).</li> <li><u>Transom</u>: Drive fasteners through the transom head at 4" from each corner and 20" on center thereafter. Drive fasteners through the transom jambs at the midpoint.</li> </ul> <p><b>PVC Window Frame To Horizontal Mullion</b></p> <ul style="list-style-type: none"> <li><u>Double-hung windows</u>: Drive fasteners (minimum No. 8 x 2-1/2" grade 5 self-tapping screws) through the two window heads at 3" from each corner.</li> <li><u>Transom</u>: Drive four fasteners (minimum No. 8 x 2-1/2" grade 5 self-tapping screws) through the transom sill at 3" from each corner and equally spaced thereafter.</li> </ul> <p><b>Mullions To Wood Frame</b></p> <ul style="list-style-type: none"> <li>Set two mullion clips at each side of the horizontal mullion. Set one mullion clip at the bottom of the vertical mullion. Attach each mullion clip to the rough framing with two screws.</li> </ul> <p><b>Mullion Strap To PVC Window Frame</b></p> <ul style="list-style-type: none"> <li>Set a 12" x 1-1/4" x 1/16" steel strap at each mullion clip. Attach each strap with six screws.</li> </ul>
	Fastener Penetration	Minimum 1-1/2" into the wall framing

**Installation (continued):**

System		
<p style="text-align: center;">6 (NO FIN)</p> <p>Transom with Twin DH</p> <p>Field Mulled</p>	Type of Installation	Replacement Construction – Wood Frame
	Wall Framing	Spruce-Pine-Fir Dimension lumber
	Fasteners	<ul style="list-style-type: none"> <li>• To fasten the PVC window frames and the mullion clips to the wood framing, use minimum No. 10 x 2-1/2" wood screws.</li> <li>• To fasten the PVC window frames to the horizontal and vertical mullions, use minimum No. 8 x 2-1/2" grade 5 self-tapping screws.</li> <li>• To fasten the mullion straps to the PVC window frame, use minimum No. 8 x 3/8" grade 5 self-tapping screws.</li> </ul>
	Fastener Location/Spacing	<p>Refer to the <u>accompanying drawings for detailed installation instructions.</u></p> <p><b>PVC Window Frame To Wood Frame</b></p> <ul style="list-style-type: none"> <li>• Drive one fastener through each window head at the midpoint of the head.</li> <li>• <u>Double-hung windows</u>: Drive fasteners through each window jamb at 4" from the bottom corners. Thereafter, drive fasteners through the jambs at 20" on center (maximum).</li> <li>• <u>Transom</u>: Drive fasteners through the transom head at 4" from each corner and 24" on center thereafter. Drive fasteners through the transom jambs at the midpoint.</li> </ul> <p><b>PVC Window Frame To Vertical Mullion</b></p> <ul style="list-style-type: none"> <li>• Drive four fasteners through the two window jambs at 2" from each corner and at 20" on center (maximum) thereafter.</li> </ul> <p><b>PVC Window Frame To Horizontal Mullion</b></p> <ul style="list-style-type: none"> <li>• <u>Double-hung windows</u>: Drive fasteners through the two window heads at 3" from each corner.</li> <li>• <u>Transom</u>: Drive four fasteners through the transom sill at 3" from each corner and equally spaced thereafter.</li> </ul> <p><b>Mullions To Wood Frame</b></p> <ul style="list-style-type: none"> <li>• Set two mullion clips at each side of the horizontal mullion. Set one mullion clip at the bottom of the vertical mullion. Attach each mullion clip to the rough framing with two screws.</li> </ul> <p><b>Mullion Strap To PVC Window Frame</b></p> <ul style="list-style-type: none"> <li>• Set a 12" x 1-1/4" x 1/16" steel strap at each mullion clip. Attach each strap with six screws.</li> </ul>
Fastener Penetration	Minimum 1-1/2" into the wall framing	

**Note:** Keep the manufacturer's installation instructions available on the job site during installation. Use corrosion resistant fasteners as specified in the IRC, the IBC, and the Texas Revisions.