

TEXAS DEPARTMENT OF INSURANCE

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PRODUCT EVALUATION WIN-452

Effective June 1, 2005

*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 shall be subject to reevaluation 3 years after the effective date.*

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.

Series 5100, 5200, 5400, and 5500 Vinyl Mulled Windows, Non-impact Resistant, manufactured by:

The Don Young Company
8181 Ambassador Row
Dallas, TX 75247
(214) 630-0934

will be acceptable in designated catastrophe areas along the Texas Gulf Coast when installed in accordance with the manufacturer's installation instructions and this product evaluation.

PRODUCT DESCRIPTION

The Series 5100, 5200, 5400, and 5500 windows are vinyl windows. The vinyl windows evaluated in this report are mulled, non-impact resistant windows. **This evaluation report contains mulled windows using the following individual window products that are currently listed in Texas Department of Insurance product evaluation reports:**

Series 5100 Vinyl Horizontal Slider Windows
Series 5200 Vinyl Single Hung Windows
Series 5400 Vinyl Double Hung Windows
Series 5500 Vinyl Fixed Windows

This product evaluation report includes the following configurations:

Two Series 5500 Fixed Windows Mulled along Jambs
Two Series 5500 Fixed Windows Stacked
One Series 5200 Single Hung Window Mulled with a Series 5500 Fixed Window
One Series 5400 Double Hung Window Mulled with a Series 5500 Fixed Window
Two Series 5200 Single Hung Window Mulled with a Series 5500 Fixed Window
Two Series 5400 Double Hung Window Mulled with a Series 5500 Fixed Window
One Series 5500 Fixed Window Stacked Over a Series 5100 Horizontal Slider Window
Series 5200 Single Hung Windows Mulled Together (Maximum of Three Units)
Series 5400 Double Hung Windows Mulled Together (Maximum of Three Units)
One Series 5500 Fixed Window Stacked Over a Series 5200 Single Hung Window
One Series 5500 Fixed Window Stacked Over a Series 5400 Double Hung Window

This product evaluation report is for the following vinyl mulled window assemblies:

General Description:

System	Description	Label Rating
1	Two Series 5500 Fixed Windows (Mulled Along Jambs)	F-C30 96 x 60
2	Two Series 5500 Fixed Windows (Mulled Along Jambs)	F-C40 72 x 60
3	Two Series 5500 Fixed Windows (Stacked)	F-C30 96 x 60
4	Two Series 5500 Fixed Windows (Stacked)	F-C40 72 x 60
5	A Series 5200 Single Hung Window Mulled With a Series 5500 Fixed Window	H-R35 44 x 60 (Single Hung) F-C40 72 x 60 (Fixed)
6	A Series 5400 Double Hung Window Mulled With a Series 5500 Fixed Window	H-R40 43 x 59 (Double Hung) F-C40 72 x 60 (Fixed)
7	Two Series 5200 Single Hung Windows Mulled With a Series 5500 Fixed Window	H-R35 44 x 60 (Single Hung) F-C40 72 x 60 (Fixed)
8	Two Series 5400 Double Hung Windows Mulled With a Series 5500 Fixed Window	H-R40 43 x 59 (Double Hung) F-C40 72 x 60 (Fixed)
9	Series 5500 Fixed Window Stacked Over a Series 5100 Horizontal Slider Window	HS-R35 72 x 48 (Horizontal Slider) F-C40 72 x 60 (Fixed)
10	Series 5200 Single Hung Windows (Maximum of Three Units)	H-R35 44 x 60
11	Series 5400 Double Hung Windows (Maximum of Three Units)	H-R40 43 x 59
12	Series 5400 Double Hung Windows (Maximum of Three Units)	H-LC25 52 x 84
13	Series 5500 Fixed Window Stacked Over a Series 5200 Single Hung Window	H-R35 44 x 60 (Single Hung) F-C40 72 x 60 (Fixed)
14	Series 5500 Fixed Window Stacked Over a Series 5400 Double Hung Window	H-LC25 52 x 84 (Double Hung) F-C30 96 x 60 (Fixed)
15	Series 5500 Fixed Window Stacked Over a Series 5400 Double Hung Window	H-R40 43 x 59 (Double Hung) F-C40 72 x 60 (Fixed)

Product Dimensions (Dimensions of Individual Units in Mulled Assembly):

System	Maximum Width of Individual Units	Maximum Height of Individual Units
1	Fixed Windows: 38 ½"	Fixed Windows: 77"
2	Fixed Windows: 38 ½"	Fixed Windows: 72"
3	Fixed Windows: 77"	Fixed Windows: 38 ½"
4	Fixed Windows: 72"	Fixed Windows: 38 ½"
5	Single Hung Window: 36" Fixed Window: 52"	Single Hung Window: 60" Fixed Window: 60"
6	Double Hung Window: 36" Fixed Window: 52"	Double Hung Window: 59" Fixed Window: 59"
7	Single Hung Windows: 36" Fixed Window: 52"	Single Hung Windows: 60" Fixed Window: 60"
8	Double Hung Windows: 36" Fixed Window: 52"	Double Hung Windows: 59" Fixed Window: 59"

Product Dimensions (Dimensions of Individual Units in Mullled Assembly):

System	Maximum Width of Individual Units	Maximum Height of Individual Units
9	Horizontal Slider Window: 72" Fixed Window: 72"	Horizontal Slider Window: 36" Fixed Window: 60"
10	Single Hung Windows: 44"	Single Hung Windows: 60"
11	Double Hung Windows: 43"	Double Hung Windows: 59"
12	Double Hung Windows: 44"	Double Hung Windows: 72"
13	Single Hung Windows: 44" Fixed Windows: 44"	Single Hung Windows: 60" Fixed Windows: 36"
14	Double Hung Windows: 52" Fixed Windows: 52"	Double Hung Windows: 60" Fixed Windows: 36"
15	Double Hung Windows: 43" Fixed Windows: 43"	Double Hung Windows: 59" Fixed Windows: 37"

Glazing Description: The glass construction and the glazing method for each type of individual window unit that makes up the mullled assemblies shall be as specified in the Texas Department of Insurance evaluation reports for those individual window units.

Frame Construction: The frame and sash construction members are manufactured from extruded vinyl (PVC). The frame corners are mitered and thermally welded construction.

Sash Construction: The frame and sash construction members are manufactured from extruded vinyl (PVC). The frame corners are mitered and thermally welded construction.

Hardware: The hardware for single hung windows, double hung windows and horizontal slider windows that make up the mullled assemblies shall be as specified in the Texas Department of Insurance evaluation reports for those individual window units.

Reinforcement:

Individual Window Units: Each individual window unit that makes up the mullled assembly shall be reinforced as specified in the Texas Department of Insurance evaluation reports for those individual window units.

Mullion: The mullions contain a custom shaped extruded 6063-T5 aluminum reinforcement. The reinforcement is inserted between the jambs of windows for side-by-side mullled configurations. The reinforcement is inserted between the sill of one window and the head of another window for stacked configurations. The extruded aluminum extends the length of the mullion. The extruded aluminum reinforcement is required in all mullions.

Product Identification: A certification program label will be affixed to each individual window of the mullled assembly. The certification program label includes the manufacturer's name, performance characteristics and approved inspection agency to indicate compliance with the requirements of AAMA/NWWDA 101/I.S.2. **Note:** The certification program label is for the performance characteristics of the individual window in the mullled assembly. The design pressure rating for the mullled assembly is as specified in the Limitations Section of this evaluation report.

LIMITATIONS

Design pressures:

System	Overall Maximum Width (in.)	Overall Maximum Height (in.)	Design Pressures (psf)
1	77"	77"	± 30
2	77"	72"	± 35
3	77"	77"	± 30
4	72"	77"	± 35
5	88"	60"	± 35
6	88"	59"	± 35
7	124"	60"	± 35
8	124"	59"	± 35
9	72"	96"	± 35
10	Two Single Hung Windows: 88" Three Single Hung Windows: 132"	60"	± 35
11	Two Double Hung Windows: 86" Three Double Hung Windows: 129"	59"	± 35
12	Two Double Hung Windows: 88" Three Double Hung Windows: 132"	72"	± 25
13	44"	96"	± 35
14	52"	96"	± 25
14	43"	96"	± 35

Impact Resistance: These window assemblies do not satisfy the Texas Department of Insurance's criteria for protection from windborne debris. These window assemblies will need to be protected with an impact protective system when installed in areas where windborne debris is required.

Acceptance of Smaller Assemblies: Window assemblies with dimensions equal to or smaller than those specified above are acceptable within the limitations specified in this report.

Mulled Assemblies: Each individual window unit in the mulled assembly shall bear a certification program label. The design pressure rating for the mulled assembly shall not exceed the values specified in the table above.

INSTALLATION INSTRUCTIONS

General: The window assembly shall be installed in accordance with the manufacturer's installation instructions. The wood wall framing members shall be minimum Southern Yellow Pine lumber.

Installation: The window shall be mounted to the wood wall framing members using the nailing fin of the window with minimum No. 8 screws. The fasteners shall be spaced a maximum of 2 inches from each corner and a maximum of 6 inches on center along the perimeter of the window frame. The fasteners shall be long enough to penetrate a minimum of 1 ½" into the wall framing members.

Note: The manufacturer's installation instructions shall be available on the job site during installation. All fasteners shall be corrosion resistant as specified in the International Residential Code (IRC) and the International Building Code (IBC) and the Texas Revisions.