

## FLEETWOOD GLAZING COMPARATIVE ANALYSIS

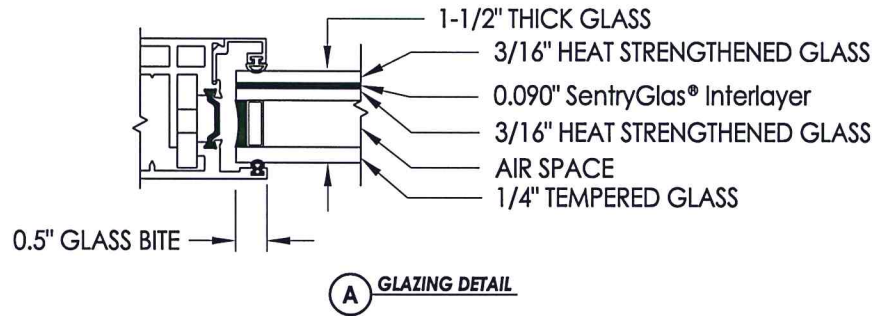
3900-T Aluminum Side Hinged Door

TEST REPORT: TEL 01991315

			MAX. DLO (in.)	ASTM E1300 LOAD RESISTANCE (psf)
Door	TESTED GLAZING	A	29.0 x 108.0	> 209
	COMPARABLE GLAZING	A1	29.0 x 108.0	> 209
Sidelite	TESTED GLAZING	A	57.0 x 117.0	124
	COMPARABLE GLAZING	A1	57.0 x 117.0	165
Sidelite	TESTED GLAZING	A	47.0 x 108.0	156
	COMPARABLE GLAZING	A1	47.0 x 108.0	182

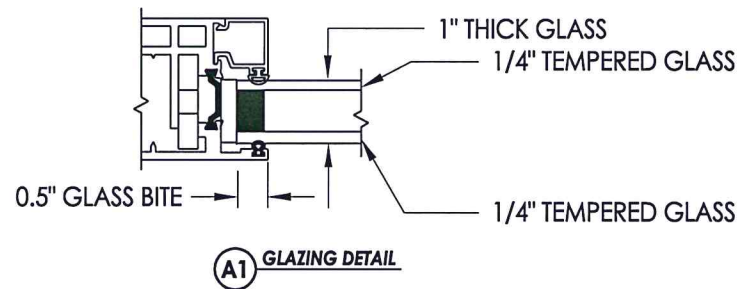
# TESTED IMPACT GLAZING

TEST REPORT: TEL 01991315



# NON-IMPACT GLAZING

VERIFIED PER ASTM E1300



PRODUCT:		FLEETWOOD SIDE HINGE DOOR	
PART OR ASSEMBLY:		GLAZING DETAILS	
NO.	DATE	REVISIONS	BY
<div style="border: 1px solid black; padding: 5px; text-align: center;"> <b>RW</b> BUILDING CONSULTANTS, INC. 813.659.9197 </div>			
DATE: 9-2-15			
SCALE: N.T.S.			
DWG. BY: JK			
CHK. BY: LFS			
DRAWING NO.: NA			
SHEET <u>1</u> OF <u>1</u>			

# Glass Load Resistance Report -- FLEETWOOD NON-IMPACT GLASS COMPARISON

## Glazing Information

Edge Supports: 4 Sides  
Glazing Angle: 90°  
Lite Dimensions:  
Width: 29.0 in.  
Height: 108 in.

## Project Details

Project Name: FLEETWOOD NON-IMPACT GLASS COMPARISON  
Location: FLEETWOOD SIDE HINGED DOOR  
Comments: TESTED IMPACT GLASS  
"A" GLAZING (DOOR)

## Glass Construction (Rectangular)

Double Glazed Insulating Unit	Air Space: 0.5 in.
Outboard Lite: { Fully Tempered }	Inboard Lite: { Heat Strengthened }
Nominal Thickness: 1/4 in.	Interlayer Type: SentryGlas® Plus
	Outboard Ply Thickness: 3/16 in.
	Interlayer Thickness: 0.09 in.
	Inboard Ply Thickness: 3/16 in.
	Nominal Thickness: 3/8 in.

## Short Load Duration, Resistance, and Deflection Data

Load (~ 3 sec.):	65.0 psf
Load Resistance:	> 209 psf
Approximate center of glass deflection:	0.08 in.

## Conclusion

**Based on your design information, the load resistance is greater than or equal to the specified loading.**

## Statement of Compliance

Procedures followed in determining the resistance of this window glass are in accordance with ASTM E1300-04.

### Disclaimer:

This software can be used to determine the load resistance of specified glass types exposed to uniform lateral loads of short or long duration subject to the following conditions:

- The glass is free of edge and surface damage and has been properly glazed in the opening in conformance with the manufacturer's recommendations.
- Procedures exist to determine load resistance for rectangular glass assemblies that are:
  - a. Continuously supported along all four edges,
  - b. Continuously supported along three edges,
  - c. Continuously supported along two parallel edges, and
  - d. Continuously supported along one edge.
- The software user has the responsibility of selecting the correct procedures for the required application from the software.
- The stiffness of members supporting any glass edge shall be sufficient that under design load, edge deflections shall not exceed  $L/175$ , where  $L$  denotes that length of the supported edge.
- The manufacturer states that the Safety Plus II 0.090 Polyurethane Large Missile Resistant interlayer is comparable to the PVB interlayer.
- The non-factored load values for laminated glass are representative of test data and calculations performed for an interlayer at a temperature of 50° C (122° F).

For other limiting conditions that may apply, refer to Section 5 of ASTM E1300 and local building codes.

Neither SDG nor GANA guarantees and each disclaims any responsibility for any particular results relating to the use of the Window Glass Design 2004 Software Program. SDG and GANA disclaim any liability for any personal injury or any loss or damage of any kind, including all indirect, special, or consequential damages and lost profits, arising out of or relating to the use of the Window Glass Design 2004 Software Program.

Prepared by: LFS on 9/2/2015  
LFS

# Glass Load Resistance Report -- FLEETWOOD NON-IMPACT GLASS COMPARISON

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## Glazing Information

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Edge Supports: 4 Sides  
Glazing Angle: 90°  
Lite Dimensions:  
Width: 29.0 in.  
Height: 108 in.

## Project Details

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Project Name: FLEETWOOD NON-IMPACT GLASS COMPARISON  
Location: FLEETWOOD SIDE HINGED DOOR  
Comments: NON-IMPACT COMPARABLE GLASS  
1/4" TEMPERED "A1" GLAZING (DOOR)

## Glass Construction (Rectangular)

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Double Glazed Insulating Unit	Air Space: 0.5 in.
Outboard Lite: { Fully Tempered }	Inboard Lite: { Fully Tempered }
Nominal Thickness: 1/4 in.	Nominal Thickness: 1/4 in.

## Short Load Duration, Resistance, and Deflection Data

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Load (~ 3 sec.):	65.0 psf
Load Resistance:	> 209 psf
Approximate center of glass deflection:	0.21 in.

## Conclusion

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**Based on your design information, the load resistance is greater than or equal to the specified loading.**

## Statement of Compliance

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Procedures followed in determining the resistance of this window glass are in accordance with ASTM E1300-04.


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  - c. Continuously supported along two parallel edges, and
  - d. Continuously supported along one edge.
- The software user has the responsibility of selecting the correct procedures for the required application from the software.
- The stiffness of members supporting any glass edge shall be sufficient that under design load, edge deflections shall not exceed  $L/175$ , where L denotes that length of the supported edge.
- The manufacturer states that the Safety Plus II 0.090 Polyurethane Large Missile Resistant interlayer is comparable to the PVB interlayer.

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Prepared by:  on 9/2/2015  
LFS



# Glass Load Resistance Report -- FLEETWOOD NON-IMPACT GLASS COMPARISON

## Glazing Information

Edge Supports: 4 Sides  
Glazing Angle: 90°  
Lite Dimensions:  
Width: 57.0 in.  
Height: 117 in.

## Project Details

Project Name: FLEETWOOD NON-IMPACT GLASS COMPARISON  
Location: FLEETWOOD SIDE HINGED DOOR  
Comments: TESTED IMPACT GLASS  
"A" GLAZING (SIDELITE)

## Glass Construction (Rectangular)

Double Glazed Insulating Unit	Air Space: 0.5 in.
Outboard Lite: { Fully Tempered }	Inboard Lite: { Heat Strengthened }
Nominal Thickness: 1/4 in.	Interlayer Type: SentryGlas® Plus
	Outboard Ply Thickness: 3/16 in.
	Interlayer Thickness: 0.09 in.
	Inboard Ply Thickness: 3/16 in.
	Nominal Thickness: 3/8 in.

## Short Load Duration, Resistance, and Deflection Data

Load (~ 3 sec.):	65.0 psf
Load Resistance:	N/A
Approximate center of glass deflection:	N/A

## Conclusion

**Calculations have not been performed.**

## Statement of Compliance

Procedures followed in determining the resistance of this window glass are in accordance with ASTM E1300-04.

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- The stiffness of members supporting any glass edge shall be sufficient that under design load, edge deflections shall not exceed  $L/175$ , where L denotes that length of the supported edge.
- The manufacturer states that the Safety Plus II 0.090 Polyurethane Large Missile Resistant interlayer is comparable to the PVB interlayer.
- The non-factored load values for laminated glass are representative of test data and calculations performed for an interlayer at a temperature of 50° C (122° F).

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# Glass Load Resistance Report -- FLEETWOOD NON-IMPACT GLASS COMPARISON

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## Glazing Information

---

Edge Supports: 4 Sides  
Glazing Angle: 90°  
Lite Dimensions:  
Width: 57.0 in.  
Height: 117 in.

## Project Details

---

Project Name: FLEETWOOD NON-IMPACT GLASS COMPARISON  
Location: FLEETWOOD SIDE HINGED DOOR  
Comments: NON-IMPACT COMPARABLE GLASS  
1/4" TEMPERED "A1" GLAZING (SIDELITE)

## Glass Construction (Rectangular)

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Double Glazed Insulating Unit	Air Space: 0.5 in.
Outboard Lite: { Fully Tempered }	Inboard Lite: { Fully Tempered }
Nominal Thickness: 1/4 in.	Nominal Thickness: 1/4 in.

## Short Load Duration, Resistance, and Deflection Data

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Load (~ 3 sec.):	65.0 psf
Load Resistance:	N/A
Approximate center of glass deflection:	N/A

## Conclusion

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**Calculations have not been performed.**

## Statement of Compliance

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Procedures followed in determining the resistance of this window glass are in accordance with ASTM E1300-04.


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Prepared by:  on 9/2/2015  
LFS

# Glass Load Resistance Report -- FLEETWOOD NON-IMPACT GLASS COMPARISON

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## Glazing Information

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Edge Supports: 4 Sides  
Glazing Angle: 90°  
Lite Dimensions:  
Width: 47.0 in.  
Height: 108 in.

## Project Details

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Project Name: FLEETWOOD NON-IMPACT GLASS COMPARISON  
Location: FLEETWOOD SIDE HINGED DOOR  
Comments: TESTED IMPACT GLASS  
"A" GLAZING (SIDELITE)

## Glass Construction (Rectangular)

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Double Glazed Insulating Unit	Air Space: 0.5 in.
Outboard Lite: { Fully Tempered }	Inboard Lite: { Heat Strengthened }
Nominal Thickness: 1/4 in.	Interlayer Type: SentryGlas® Plus
	Outboard Ply Thickness: 3/16 in.
	Interlayer Thickness: 0.09 in.
	Inboard Ply Thickness: 3/16 in.
	Nominal Thickness: 3/8 in.

## Short Load Duration, Resistance, and Deflection Data

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Load (~ 3 sec.):	65.0 psf
Load Resistance:	156 psf
Approximate center of glass deflection:	0.41 in.

## Conclusion

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**Based on your design information, the load resistance is greater than or equal to the specified loading.**

## Statement of Compliance

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Procedures followed in determining the resistance of this window glass are in accordance with ASTM E1300-04.


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Prepared by:  on 9/3/2015  
LFS



# Glass Load Resistance Report -- FLEETWOOD NON-IMPACT GLASS COMPARISON

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## Glazing Information

Edge Supports: 4 Sides  
Glazing Angle: 90°  
Lite Dimensions:  
Width: 47.0 in.  
Height: 108 in.

## Project Details

Project Name: FLEETWOOD NON-IMPACT GLASS COMPARISON  
Location: FLEETWOOD SIDE HINGED DOOR  
Comments: NON-IMPACT COMPARABLE GLASS  
1/4" TEMPERED "A1" GLAZING (SIDELITE)

## Glass Construction (Rectangular)

Double Glazed Insulating Unit	Air Space: 0.5 in.
Outboard Lite: { Fully Tempered }	Inboard Lite: { Fully Tempered }
Nominal Thickness: 1/4 in.	Nominal Thickness: 1/4 in.

## Short Load Duration, Resistance, and Deflection Data

Load (~ 3 sec.):	65.0 psf
Load Resistance:	182 psf
Approximate center of glass deflection:	0.8 in.

## Conclusion

**Based on your design information, the load resistance is greater than or equal to the specified loading.**

## Statement of Compliance

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LFS