Engineering Evaluation Report # GW9994G-9994.3-061625

Prepared by:
A. Lynn Miller, P.E.
1070 Technology Dr.
N. Venice, FL 34275
(941) 480-1600
Registration Number: #29296

Manufacturer:
WinDoor LLC
104 Triple Diamond Blvd
N Venice, FL 34275

Product Description:
Series GW9994G Impact-resistant, Aluminum Window System, 1-1/8" Glazing, (LM & SM), FL #15709

Compliance:
The product mentioned above has been evaluated for compliance with the requirements of the Florida Department of Business and Professional Regulation for Statewide Acceptance per Rule 61 G20-3.005 method 1(d). The product listed herein complies with the requirements of the current Florida Building Code.

This product has been evaluated and is in compliance with the current Florida Building Code, including the "High Velocity Hurricane Zone" (HVHZ).

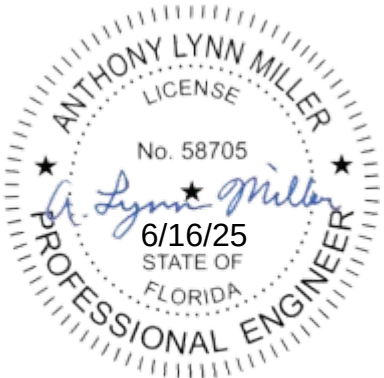
Supporting Technical Documentation:
1. Approval document: drawing number 9994.3-FPA, signed and sealed by A. Lynn Miller, P.E.

2. Test Report Nos. QAI NOK-0098, signed and sealed by Idalmis Ortega, P.E; QAI, N. Venice, FL 34275
   Testing Standards: TAS 201-94, TAS 202-94 & TAS 203-94

3. Calculations, signed and sealed by A. Lynn Miller, P.E., dated 4/15/25.

4. Miami-Dade RER Product Control Section NOA's; SentryGlas Interlayer by Kuraray America, Inc.

Limitations and Conditions of Use:
• Units must be glazed per ASTM E1300-09, refer to the approval document for glazing details.
• This product is rated to be used in the HVHZ.
• This product is impact-resistant and does not require impact protection in wind-borne debris regions.
• Frame material to be extruded aluminum.
• Units must be installed in accordance with approval document, 9994.3-FPA.



FLORIDA PRODUCT APPROVAL #15709

SERIES GW9994G IMPACT RESISTANT, STRAIGHT, OUTSIDE & INSIDE CORNER WINDOW SYSTEM, 1-1/8" GLAZING

DESIGN PRESSURE RATING	IMPACT RATING
+60.0 / -70.0 PSF	RATED FOR LARGE & SMALL MISSILE IMPACT RESISTANCE

1) THIS PRODUCT HAS BEEN DESIGNED & TESTED TO COMPLY WITH THE REQUIREMENTS OF THE CURRENT FLORIDA BUILDING CODE, INCLUDING THE HIGH VELOCITY HURRICANE ZONE (HVHZ).

2) SHUTTERS ARE NOT REQUIRED WHEN USED IN WIND-BORNE DEBRIS REGIONS.

3) ALL WOOD BUCKS LESS THAN 1-1/2" THICK ARE TO BE CONSIDERED 1X INSTALLATIONS. 1X WOOD BUCKS ARE OPTIONAL IF UNIT IS INSTALLED DIRECTLY TO SUBSTRATE. WOOD BUCKS DEPICTED AS 2X ARE 1-1/2" THICK OR GREATER. 1X AND 2X BUCKS (WHEN USED) SHALL BE DESIGNED TO PROPERLY TRANSFER LOADS TO THE STRUCTURE. WOOD BUCK DESIGN AND INSTALLATION IS THE RESPONSIBILITY OF THE ENGINEER OR ARCHITECT OF RECORD.

4) ANCHOR EMBEDMENT TO BASE MATERIAL SHALL BE BEYOND WALL DRESSING OR STUCCO. USE ANCHORS OF SUFFICIENT LENGTH. OVERALL SEALING/FLASHING STRATEGY FOR WATER RESISTANCE OF INSTALLATION SHALL BE DONE BY OTHERS AND IS BEYOND THE SCOPE OF THESE INSTRUCTIONS.

5) SHIMS ARE REQUIRED AT EACH ANCHOR LOCATION WHERE THE PRODUCT IS NOT FLUSH TO THE SUBSTRATE. USE SHIMS CAPABLE OF TRANSFERRING APPLIED LOADS. WOOD BUCKS, BY OTHERS, MUST BE SUFFICIENTLY ANCHORED TO RESIST LOADS IMPOSED ON THEM BY WINDOW.

6) THE ANCHORAGE METHODS SHOWN HAVE BEEN DESIGNED TO RESIST THE WIND LOADS CORRESPONDING TO THE REQUIRED DESIGN PRESSURE. THE 33-1/3% STRESS INCREASE HAS NOT BEEN USED IN THE DESIGN OF THIS PRODUCT. THE 1.6 LOAD DURATION FACTOR WAS USED FOR THE EVALUATION OF ANCHORS INTO WOOD. ANCHORS THAT COME INTO CONTACT WITH OTHER DISSIMILAR MATERIALS SHALL MEET THE REQUIREMENTS OF THE FLORIDA BUILDING CODE FOR CORROSION RESISTANCE.

TABLE 1:

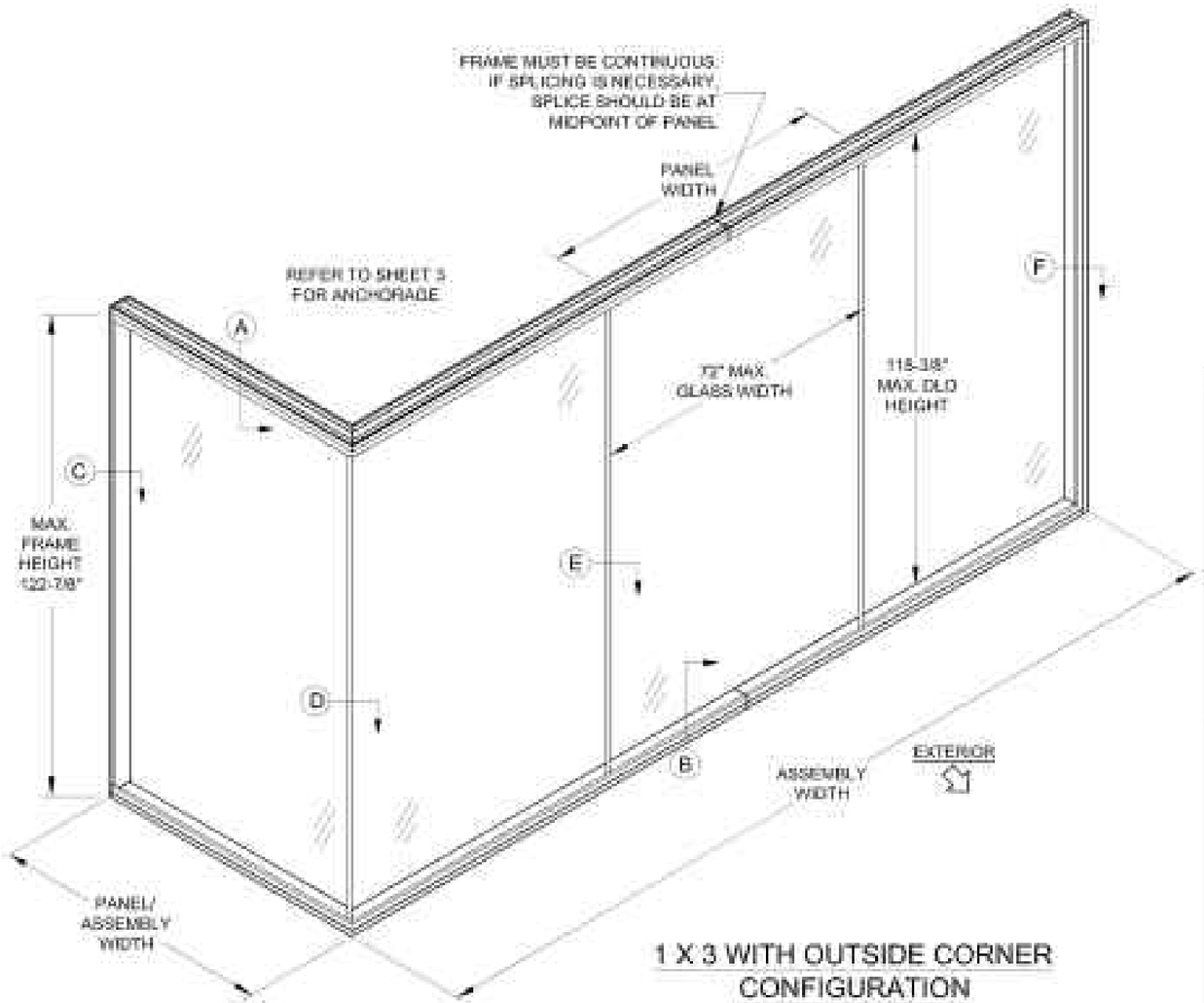
Anchor Type	Substrate	Min. Edge Distance	Max. O.C. Distance	Min. Embedment or Metal Thickness
#12 Steel SMS, G5	Southern Pine (SG = 0.55)	9/16"	9"	1-3/8"
	6063-T5 Aluminum	3/8"	9"	0.093"
	A36 Steel	3/8"	9"	0.050"
	Steel Stud, Gr. 33	3/8"	9"	0.057", 16 Ga.
#14 Steel SMS, G5	Southern Pine (SG = 0.55)	5/8"	9"	1-3/8"
	6063-T5 Aluminum	3/8"	9"	0.093"
	A36 Steel	3/8"	9"	0.050"
	Steel Stud, Gr. 33	3/8"	9"	0.057", 16 Ga.
#14 410 Stainless Steel SMS, G5	Southern Pine (SG = 0.55)	5/8"	9"	1-3/8"
	6063-T5 Aluminum	3/8"	9"	0.093"
	A36 Steel	3/8"	9"	0.050"
	Steel Stud, Gr. 33	3/8"	9"	0.057", 16 Ga.
1/4" DeWalt UltraCon+	Concrete (min. 23.00 ksi)	2-1/2"	9"	1-3/8"
1/4" Elco Cretefix	Concrete (min. 2.85 ksi)	1-3/4"	9"	1-3/4"

1) ANCHOR MUST EXTEND A MINIMUM OF 3 THREADS BEYOND ANY METAL SUBSTRATE.
2) ANY HEAD TYPE ALLOWABLE.

TABLE 2:

Glass Type	Description (Listed from Exterior to Interior)
1	1/2" T - 0.14"SG - 1/2" T

T = TEMPERED
SG = SENTRYGLAS INTERLAYER BY KURARAY AMERICA, INC.



1 X 3 WITH OUTSIDE CORNER CONFIGURATION

ADDITIONAL PANELS, INSIDE CORNER OR STRAIGHT CONFIGURATION ALSO ALLOWED

A | 6/18/25 | NO CHANGES THIS SHEET

PREPARED BY: A. LYNN MILLER
1070 TECHNOLOGY DRIVE
N. VENICE, FL 34275
(941) 408-1000
REGISTRATION #27039
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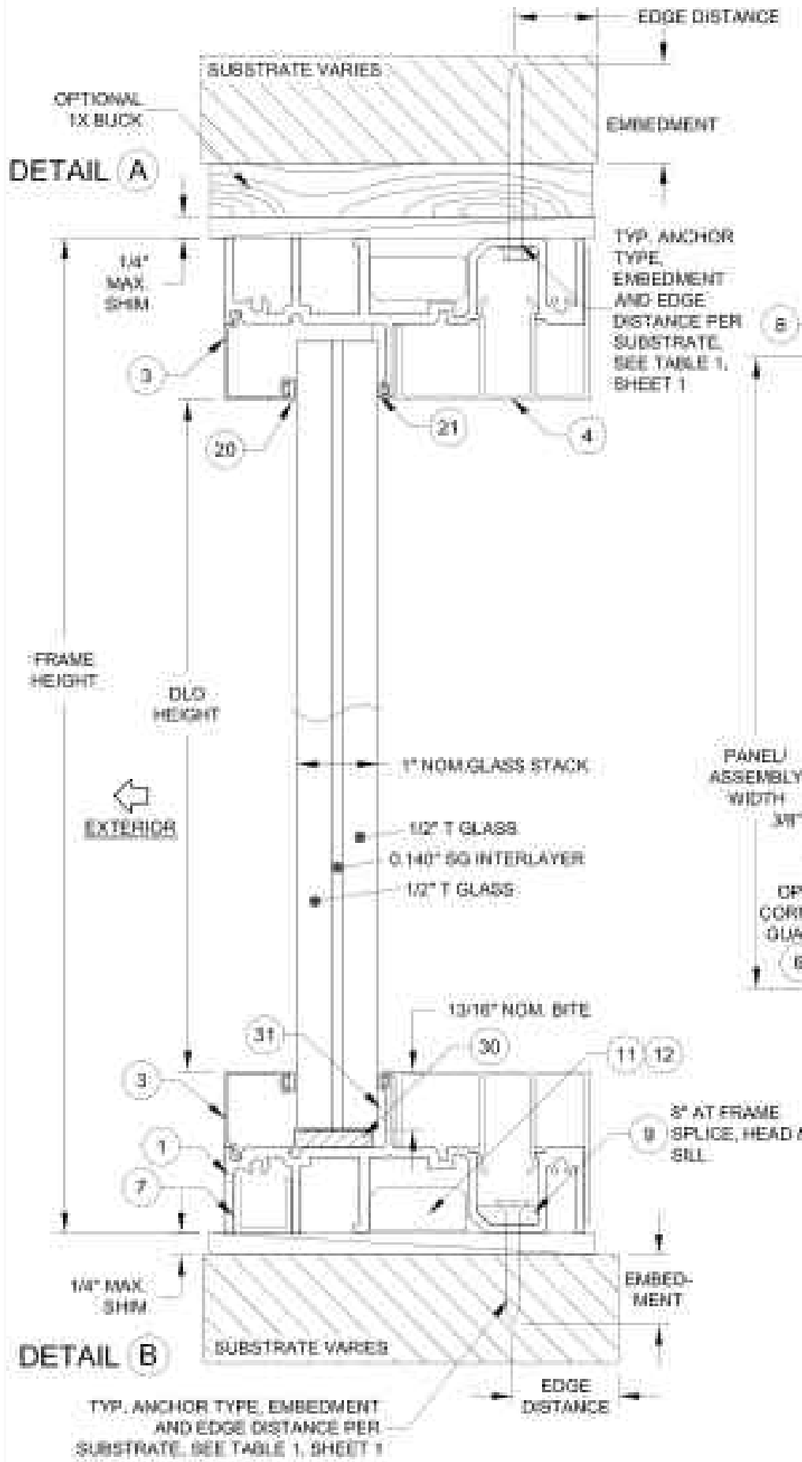
WINDOOR, LLC
104 TRIPLE DIAMOND BLVD
N VENICE, FL 34275
(833) 964-3432

WINDOW SYSTEM, 1-1/8" GLAZING

ELEVATION, NOTES & ANCHORS

DATE	DRAWN	CHECKED	SCALE	SHEET	DRAWING NO.	REVISION
4/15/25	COLTON KEMPF			1 OF 3	GW9994G	9994.3-FPA

ANTHONY LYNN MILLER
LICENSE
No. 58705
6/16/25
STATE OF FLORIDA
PROFESSIONAL ENGINEER
A. LYNN MILLER, P.E.
P.E.# 58705



NOTES:

1) USE ONLY SUBSTRATE APPROPRIATE ANCHORS LISTED IN TABLE 1. FOLLOW EMBEDMENT, EDGE DISTANCE AND SUBSTRATE REQUIREMENTS PER TABLE 1, SHEET 1. ANY INSTALLATION OPTION SHOWN MAY BE USED ON ANY FRAME MEMBER.

2) ALL WOOD BUCKS LESS THAN 1-1/2" THICK ARE TO BE CONSIDERED 1X INSTALLATIONS. 1X WOOD BUCKS ARE OPTIONAL IF UNIT IS INSTALLED DIRECTLY TO SUBSTRATE. WOOD BUCKS DEPICTED AS 2X ARE 1-1/2" THICK OR GREATER. 1X AND 2X BUCKS (WHEN USED) SHALL BE DESIGNED TO PROPERLY TRANSFER LOADS TO THE STRUCTURE. WOOD BUCK DESIGN AND INSTALLATION IS THE RESPONSIBILITY OF THE ENGINEER OR ARCHITECT OF RECORD.

3) JAMBS MAY BE EITHER PART #2, PART #8 OR A COMBINATION OF BOTH, AS SHOWN. VERTICAL GAPS TO BE FIELD-GLAZED WITH PART #31.

4) ALL JOINT SEALANTS MUST BE COMPATIBLE WITH ALL ADJACENT MATERIALS AND MUST HAVE MINIMUM 25% EXTENSION MOVEMENT CAPABILITY.

A	6/16/25	ADDED BUTT CORNER DETAIL - DK

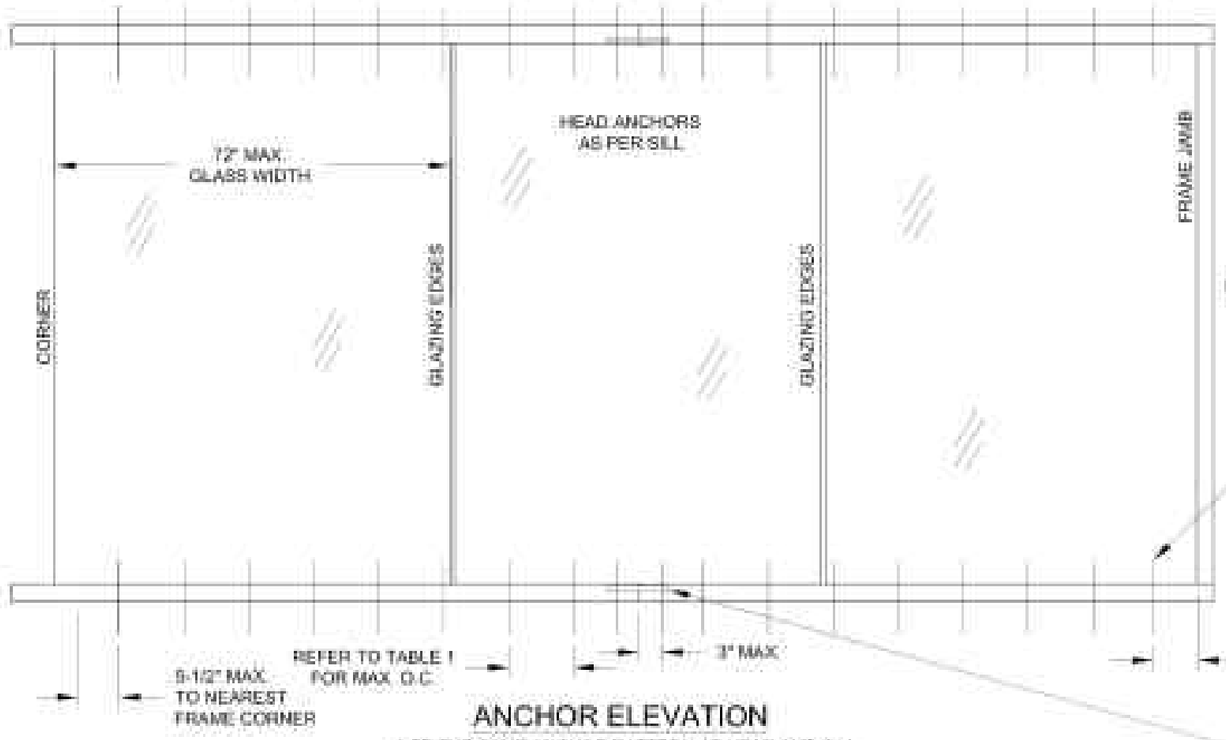
PREPARED BY A. LYNN MILLER
1070 TECHNOLOGY DRIVE
N. VENICE, FL 34275
(941) 480-1600

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DATE	4/15/25
DRAWN BY	COLTON KEMPF
PROJECT	9994.3-FPA
WINDOW SYSTEM, 1-1/8" GLAZING	
SECTION DETAILS	
GW9994G	2 OF 3

WINDOOR, LLC
104 TRIPLE DIAMOND BLVD
N. VENICE, FL 34275
(800) 554-5432

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A. LYNN MILLER, P.E.
P.E.# 58705



ANCHOR ELEVATION

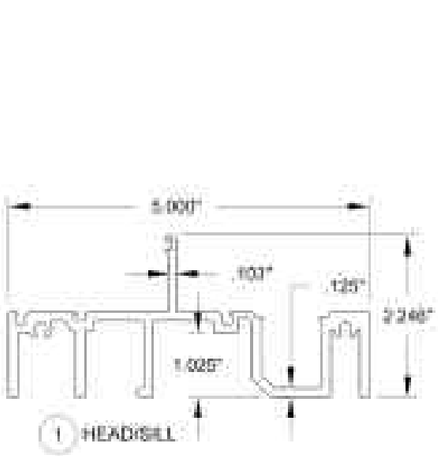
USE THE SAME ANCHOR PATTERN AT HEAD AND SILL



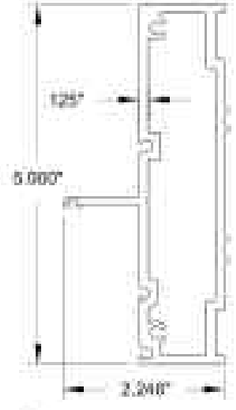
SILL ANCHOR PATTERN

USE THE SAME ANCHOR PATTERN AT HEAD.

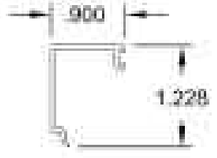
EXTERIOR



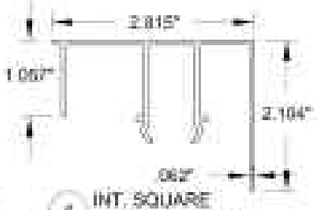
1 HEAD/SILL



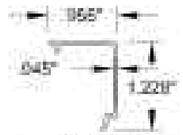
2 ANCHORLESS JAMB



3 7/8" EXT. SQUARE BEAD



4 INT. SQUARE HEAD/SILL BEAD



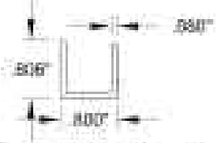
5 INT. SQUARE JAMB BEAD



8 3/8" AL FLAT BAR



6 OPT. 1-1/8" GLAZING CORNER GUARD



7 INSTALLATION CLIP



9 ANCHOR CHANNEL COUPLING

TABLE 3

Item	Part #	Description	Mat.
1	23045	Head/Sill	6063-T6
2	23046	Anchorless Jamb	6063-T5
3	21012	7/8" Ext. Square Beading	6063-T6
4	23066	Int. Square Head/Sill Beading	6063-T6
5	21013	Interior Square Jamb Beading	6063-T5
6	25101	1-1/8" Glazing Corner Guard	6063-T5
7	23075	Installation Clip	6063-T5
8	23074	3/8" x 5" Aluminum Bar	6063-T5
9	23067	Anchor Channel Coupling	6063-T6
10		#10 x 1-1/2" Panhead, Ph. SMS	SS
11	23070	90 Degree Corner Key	PVC
12	23071	135 Degree Corner Key	PVC
20	STP27K	Sealing Bulb Weatherstrip	Vinyl
21	21016	Glazing Leg Weatherstrip	Vinyl
30		Setting Block, 1" x 1/8" x 4", Durc. = 60	Neoprene
31	Backbedding	RGS-7700, Dow-791 or 993	Silicone
32	Joint Sealants	Any Compatible Sealant with 25% Minimum Movement Capability	Silicone

A	6/16/25
ADDED PART #6 - CK	

PREPARED BY A. LYNN MILLER
1670 TECHNOLOGY DRIVE
N. VENICE, FL 34275
(941) 480-1600

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DATE	4/15/25
DRAWN	COLTON KEMPF
JOB #	9994.3-FPA
SHEET	3 OF 3
DWG #	GW9994G

WINDOOR, LLC
704 TRIPLE DRIVING BLVD
N VENICE FL 34275
(800) 554-7432

WINDOW SYSTEM, 1-1/8" GLAZING

INSTALL DETAIL BOM, EXT.

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