MIAMI-DADE COUNTY
PRODUCT CONTROL SECTION
11805 SW 26 Street, Room 208
Miami, Florida 33175-2474
T (786) 315-2590 F (786) 315-2599
www.miamidade.gov/building

DEPARTMENT OF REGULATORY AND ECONOMIC RESOURCES (RER)
BOARD AND CODE ADMINISTRATION DIVISION

NOTICE OF ACCEPTANCE (NOA)

CGI Windows and Doors, Inc.
3780 W 104th Street
Hialeah, FL 33018

SCOPE:

This NOA is being issued under the applicable rules and regulations governing the use of construction materials. The documentation submitted has been reviewed and accepted by Miami-Dade County RER - Product Control Section to be used in Miami Dade County and other areas where allowed by the Authority Having Jurisdiction (AHJ).

This NOA shall not be valid after the expiration date stated below. The Miami-Dade County Product Control Section (In Miami Dade County) and/or the AHJ (in areas other than Miami Dade County) reserve the right to have this product or material tested for quality assurance purposes. If this product or material fails to perform in the accepted manner, the manufacturer will incur the expense of such testing and the AHJ may immediately revoke, modify, or suspend the use of such product or material within their jurisdiction. RER reserves the right to revoke this acceptance if it is determined by Miami-Dade County Product Control Section that this product or material fails to meet the requirements of the applicable building code.

This product is approved as described herein and has been designed to comply with the Florida Building Code, including the High Velocity Hurricane Zone.

DESCRIPTION: Series "360" Aluminum Single Hung Window – S.M.I.

APPROVAL DOCUMENT: Drawing No. **SH360SM-NOA**, titled "SH360 Alum. Single Hung Window (SMI)", sheets 1 through 10 of 10, dated 02/07/20, with revision A dated 07/01/20, prepared by manufacturer, signed and sealed by Anthony Lynn Miller, P.E., bearing the Miami-Dade County Product Control Revision stamp with the Notice of Acceptance number and expiration date by the Miami-Dade County Product Control Section.

MISSILE IMPACT RATING: Small Missile Impact Resistant.

LABELING: Each unit shall bear a permanent label with the manufacturer's name or logo, city, state, model/series, and following statement: "Miami-Dade County Product Control Approved", unless otherwise noted herein.

RENEWAL of this NOA shall be considered after a renewal application has been filed and there has been no change in the applicable building code negatively affecting the performance of this product.

TERMINATION of this NOA will occur after the expiration date or if there has been a revision or change in the materials, use, and/or manufacture of the product or process. Misuse of this NOA as an endorsement of any product, for sales, advertising or any other purposes shall automatically terminate this NOA. Failure to comply with any section of this NOA shall be cause for termination and removal of NOA.

ADVERTISEMENT: The NOA number preceded by the words Miami-Dade County, Florida, and followed by the expiration date may be displayed in advertising literature. If any portion of the NOA is displayed, then it shall be done in its entirety.

INSPECTION: A copy of this entire NOA shall be provided to the user by the manufacturer or its distributors and shall be available for inspection at the job site at the request of the Building Official.

This NOA **revises NOA# 20-0213.02** and consists of this page 1 and evidence pages E-1, E-2, E-3, E-4 and E-5, as well as approval document mentioned above.

The submitted documentation was reviewed by **Manuel Perez, P.E.**

MIAMI-DADE COUNTY APPROVED

9/30/20

NOA No. 20-0722.12
Expiration Date: May 05, 2025
Approval Date: October 08, 2020

CGI Windows and Doors, Inc.

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

1. EVIDENCE SUBMITTED UNDER PREVIOUS NOA's

A. DRAWINGS

1. Manufacturer's die drawings and sections.
(Submitted under NOA No.05-0215.02)

2. Drawing No **SH360SM-NOA**, titled "Series '360' Alum Single Hung Wdw (SMI)", sheets 1 through 10 of 10, dated 02/07/20, prepared by manufacturer, signed and sealed by Anthony Lynn Miller, P.E.
(Submitted under NOA No.20-0213.02)

B. TESTS

1. Test reports on: 1) Uniform Static Air Pressure Test, Loading per FBC TAS 202-94
2) Large Missile Impact Test per FBC, TAS 201-94
3) Cyclic Wind Pressure Loading per FBC, TAS 203-94
along with marked-up drawings and installation diagram of a series 7500 PVC fixed window, to qualify DuPont "Butacite" PVB interlayer, Duraseal® and Super Spacer® insulating glass spacer, prepared by Certified Test Laboratories, Test Report No. **CTLA–3056 WA**, dated 03/03/15, signed and sealed by Ramesh C. Patel, P.E.
(Submitted under NOA No.15-0512.08)

2. Test reports on: 1) Uniform Static Air Pressure Test, Loading per FBC TAS 202-94
2) Large Missile Impact Test per FBC, TAS 201-94
3) Cyclic Wind Pressure Loading per FBC, TAS 203-94
along with marked-up drawings and installation diagram of a series 7400 PVC project out window, to qualify DuPont "Butacite" PVB interlayer, Duraseal® and Super Spacer® insulating glass spacer, prepared by Certified Test Laboratories, Test Report No. **CTLA–3056 WB**, dated 03/03/15, signed and sealed by Ramesh C. Patel, P.E.
(Submitted under NOA No.15-0512.08)

3. Test reports on: 1) Uniform Static Air Pressure Test, Loading per FBC TAS 202-94
2) Large Missile Impact Test per FBC, TAS 201-94
3) Cyclic Wind Pressure Loading per FBC, TAS 203-94
along with marked-up drawings and installation diagram of a series 238 aluminum fixed window, to qualify DuPont "Butacite" PVB interlayer, Duraseal® and Super Spacer® insulating glass spacer, prepared by Certified Test Laboratories, Test Report No. **CTLA–3056 WC**, dated 04/16/15, signed and sealed by Ramesh C. Patel, P.E.
(Submitted under NOA No.15-0512.08)

Manuel Perez

Manuel Perez, P.E.
Product Control Examiner
NOA No. 20-0722.12
Expiration Date: May 05, 2025
Approval Date: October 08, 2020

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

1. EVIDENCE SUBMITTED UNDER PREVIOUS NOA's (CONTINUED)

B. TESTS (CONTINUED)

4. Test reports on: 1) Air Infiltration Test, per FBC, TAS 202-94
2) Uniform Static Air Pressure Test, Loading per FBC TAS 202-94
3) Water Resistance Test, per FBC, TAS 202-94
4) Large Missile Impact Test per FBC, TAS 201-94
5) Cyclic Wind Pressure Loading per FBC, TAS 203-94
6) Forced Entry Test, per FBC 2411.3.2.1, TAS 202-94
along with marked-up drawings and installation diagram of an aluminum single hung window, prepared by Hurricane Test Laboratory, LLC, Test Report No. **HTL-0080-0402-08**, **specimens 1, 2, 3** and **4**, dated 04/03/08 to 07/22/08, signed and sealed by Vinu J. Abraham, P.E.
(Submitted under NOA No. 08-1208.05)

5. Test reports on: 1) Air Infiltration Test, per FBC, TAS 202-94
2) Uniform Static Air Pressure Test, Loading per FBC TAS 202-94
3) Water Resistance Test, per FBC, TAS 202-94
4) Large Missile Impact Test per FBC, TAS 201-94
5) Cyclic Wind Pressure Loading per FBC, TAS 203-94
6) Forced Entry Test, per FBC 2411.3.2.1, TAS 202-94
along with marked-up drawings and installation diagram of an aluminum single hung window, prepared by Hurricane Test Laboratory, LLC, Test Report No. **HTL-0080-0323-04**, **specimens 1, 2, 3, 4, 5, 6, 7** and **9**, dated 03/29/04 to 04/02/04, signed and sealed by Vinu J. Abraham, P.E.
(Submitted under NOA No. 05-0215.02)

C. CALCULATIONS

1. Anchor verification calculations and structural analysis, complying with **FBC 5th Edition (2014)**, dated 07/08/14, prepared by Al-Farooq Corporation, signed and sealed by Javad Ahmad, P.E.
(Submitted under NOA No.14-0822.10)

2. Glazing complies with **ASTM E1300-09**

D. QUALITY ASSURANCE

1. Miami-Dade Department of Regulatory and Economic Resources (RER).

Manuel Perez, P.E.
Product Control Examiner
NOA No. 20-0722.12
Expiration Date: May 05, 2025
Approval Date: October 08, 2020

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

1. EVIDENCE SUBMITTED UNDER PREVIOUS NOA's (CONTINUED)

E. MATERIAL CERTIFICATIONS

1. Notice of Acceptance No. **19-0305.02** issued to **Kuraray America, Inc.** for their "**Trosifol® Ultraclear, Clear and Color PVB Glass Interlayers**" dated 05/09/19, expiring on 07/08/24.

2. Notice of Acceptance No. **17-0712.05** issued to **Eastman Chemical Company (MA)** for their "**Saflex Clear and Color Glass Interlayers"** dated 09/07/17, expiring on 05/21/21.

F. STATEMENTS

1. Statement letter of conformance, complying with **FBC 6th Edition (2017)** and of no financial interest, dated February 10, 2020, issued by manufacturer, signed and sealed by Anthony Lynn Miller, P.E.
(Submitted under NOA No. 20-0213.02)

2. Notification of Successor Engineer for manufacturer's NOA document per **Section 61G15-27.001** of the **Florida Administrative Code**, notifying original engineer that the successor engineer is assuming full professional and legal responsibility for all engineering documents pertaining to this NOA, dated February 10, 2020, signed and sealed by Anthony Lynn Miller, P.E.
(Submitted under NOA No.20-0213.02)

3. Laboratory compliance letter for Test Report No. **HTL-0080-0402-08**, **specimens 1, 2, 3** and **4**, issued by Hurricane Test Laboratory, LLC, dated July 22, 2008, signed and sealed by Vinu J. Abraham, P.E.
(Submitted under NOA No.08-1208.05)

4. Test Proposal for the qualification of ***Butacite®*** PVB glass interlayer by DuPont as well as ***Duraseal®*** and ***Super Spacer® Standard*** warm-edge flexible insulating glass spacers, dated December 16, 2014, issued by RER, Product Control Section, signed by Jaime Gascon, Supervisor.
(Submitted under NOA No.15-0512.08)

5. Private Labeling Agreement document between CGI Windows and Doors, Inc. and WinDoor, Inc. in conformance to Product Control guidelines, dated 09/05/18, signed by Dean M. Ruark, P.E.
(Submitted under NOA No. 18-1001.18)

G. OTHERS

1. Notice of Acceptance No. **17-1018.04**, issued to CGI Windows & Doors for their Series "360" Aluminum Single Hung Window - S.M.I., approved on 01/11/18 and expiring on 05/05/20.

Manuel Perez, P.E.
Product Control Examiner
NOA No. 20-0722.12
Expiration Date: May 05, 2025
Approval Date: October 08, 2020

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

2. NEW EVIDENCE SUBMITTED

A. DRAWINGS

1. Drawing No **SH360SM-NOA**, titled "SH360 Alum Single Hung Window (SMI)", sheets 1 through 10 of 10, dated 02/07/20, with revision A dated 07/01/20, prepared by manufacturer, signed and sealed by Anthony Lynn Miller, P.E.

B. TESTS

1. Test reports on: 1) Air Infiltration Test, per FBC, TAS 202-94
2) Uniform Static Air Pressure Test, Loading per FBC, TAS 202-94
3) Water Resistance Test, per FBC, TAS 202-94
4) Large Missile Impact Test per FBC, TAS 201-94
5) Cyclic Wind Pressure Loading per FBC, TAS 203-94
6) Forced Entry Test, per ASTM F588 and TAS 202-94

along with marked-up drawings and installation diagram of all PGT Industries, Inc. CGI Windows and Doors, Inc., representative units listed below and tested to qualify **Dowsil 791** and **Dowsil 983** silicones, per Proposal #**19-1155TP**, prepared by Fenestration Testing Laboratory, Inc., Test Reports No.:

PGT Industries, Inc. test specimens:

FTL-7897, PGT PW5520 PVC Fixed Window (unit 6 in proposal), dated 09/03/14
FTL-20-2107.1, PGT SGD780 Aluminum Sliding Glass Door (unit 7 in proposal)
FTL-20-2107.2, PGT CA740 Alum. Outswing Casement Window (unit 8 in proposal)
FTL-20-2107.3, PGT PW7620A Aluminum Fixed Window (unit 9 in proposal) and
FTL-20-2107.4, PGT PW7620A Aluminum Fixed Window (unit 10 in proposal)
all dated 07/13/20 and signed and sealed by Idalmis Ortega, P.E.

CGI Windows and Doors Inc. test specimens:

FTL-20-2108.1, CGI SH360 Aluminum Single Hung Window (unit 1 in proposal)
FTL-20-2108.2, CGI CA238 Alum. Outswing Casement Window (unit 2 in proposal)
FTL-20-2108.3, CGI SGD560 Aluminum Sliding Glass Door (unit 3 in proposal)
FTL-20-2108.4, CGI PW410 Aluminum Fixed Window (unit 4 in proposal) and
FTL-20-2108.5, CGI SH360 Aluminum Single Hung Window (unit 5 in proposal)
all dated 08/24/20 and signed and sealed by Idalmis Ortega, P.E

C. CALCULATIONS

1. Anchor verification calculations and structural analysis, complying with **FBC 7th Edition (2020)**, dated 07/01/20, prepared by manufacturer, signed and sealed by Anthony Lynn Miller, P.E.

Manuel Perez

Manuel Perez, P.E.
Product Control Examiner
NOA No. 20-0722.12
Expiration Date: May 05, 2025
Approval Date: October 08, 2020

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

2. NEW EVIDENCE SUBMITTED (CONTINUED)

D. QUALITY ASSURANCE

1. Miami-Dade Department of Regulatory and Economic Resources (RER)

E. MATERIAL CERTIFICATIONS

1. Notice of Acceptance No. **19-0305.02** issued to **Kuraray America, Inc.** for their "**Trosifol® Ultraclear, Clear and Color PVB Glass Interlayers**" dated 05/09/19, expiring on 07/08/24.

2. Notice of Acceptance No. **20-0622.01** issued to **Eastman Chemical Company (MA)** for their "**Saflex PVB Clear and Color Glass Interlayers**" dated 08/06/20, expiring on 05/21/21.

F. STATEMENTS

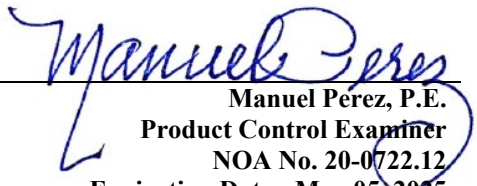
1. Statement letter of conformance, complying with **FBC 6th Edition (2017)** and the **FBC 7th Edition (2020)**, dated July 01, 2020, issued by manufacturer, signed and sealed by Anthony Lynn Miller, P.E.

2. Statement letter of no financial interest, dated July 01, 2020, issued by manufacturer, signed and sealed by Anthony Lynn Miller, P.E.

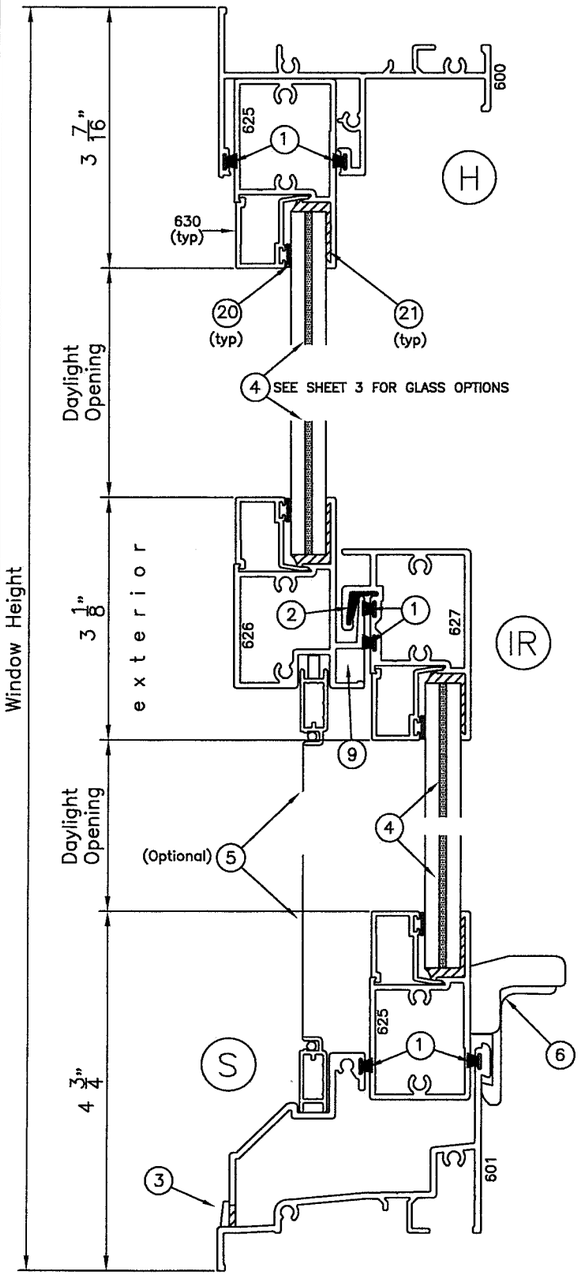
3. Proposal No. **19-1155 TP** issued by the Product Control Section, dated January 10, 2020, signed by Ishaq Chanda, P.E.

G. OTHERS

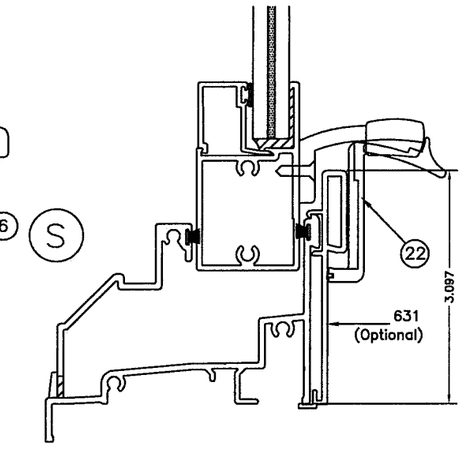
1. Notice of Acceptance No. **20-0213.02**, issued to CGI Windows & Doors, Inc. for their Series "360" Aluminum Single Hung Window - S.M.I., approved on 03/05/20 and expiring on 05/05/25.



Manuel Perez, P.E.
Product Control Examiner
NOA No. 20-0722.12
Expiration Date: May 05, 2025
Approval Date: October 08, 2020

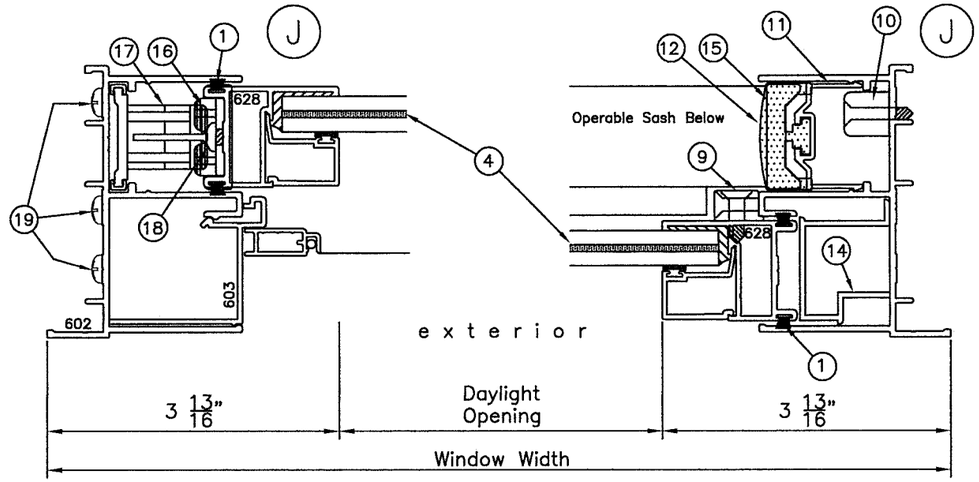


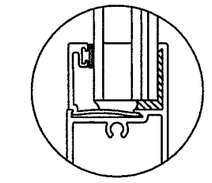
Standard 12 Psf Sill



Optional 15 PSF Water Bar Adaptor

Can not be used with lock type ⑥





Glazing at Glass Type "6"

INSTRUCTIONS FOR USING CAPACITY CHARTS:

STEP 1 DETERMINE THE REQUIRED DESIGN PRESSURES FOR A GIVEN WINDOW OPENING.

STEP 2 DETERMINE THE CAPACITY OF THE WINDOW SIZE/CONFIGURATION/GLASS TYPE FROM CHARTS ON SHEETS 3 AND 4.

STEP 3 DETERMINE THE ANCHOR CAPACITY FROM SHEET 7 FOR SINGLE OPENINGS, APPLICABLE TO ANCHORS TYPE A, B OR C SHOWN ON SHEETS 5 AND 6.

STEP 4 IF ALUMINUM BUCKS ARE USED, VERIFY THE BUCK INSTALLATION CAPACITY FROM SHEET 9.

STEP 5 FOR UNCLIPPED MULLED WINDOWS DETERMINE MULLION/MULLION ANCHORS CAPACITY FOR 1X4 TUBE MULLION FROM CHARTS ON SHEET 8.

STEP 6 IF ALUMINUM BUCKS ARE USED DETERMINE BUCK ANCHORING REQUIREMENTS FROM CHARTS ON SHEET 10.

THE LOWEST SELECTED VALUE APPLY TO THE INSTALLATION AND MUST EQUAL OR EXCEED THE REQUIRED DESIGN PRESSURES OBTAINED FROM STEP 1.

SERIES '360' ALUMINUM SINGLE HUNG WINDOW

APPROVAL APPLIES TO SINGLE UNITS OR SIDE BY SIDE COMBINATIONS OF S.H./S.H. OR SINGLE HUNG WITH OTHER MIAMI–DADE COUNTY APPROVED WINDOWS USING MIAMI–DADE COUNTY APPROVED MULLIONS IN BETWEEN.
LOWER DESIGN PRESSURE FROM WINDOWS OR MULLION APPROVAL WILL APPLY TO ENTIRE SYSTEM.

THIS PRODUCT HAS BEEN DESIGNED AND TESTED TO COMPLY WITH THE REQUIREMENTS OF THE 2017 (6TH EDITION)/2020 (7TH EDITION) FLORIDA BUILDING CODE INCLUDING HIGH VELOCITY HURRICANE ZONE (HVHZ).

1BY OR 2BY WOOD BUCKS & BUCK FASTENERS BY OTHERS, MUST BE DESIGNED AND INSTALLED ADEQUATELY TO TRANSFER APPLIED PRODUCT LOADS TO THE BUILDING STRUCTURE

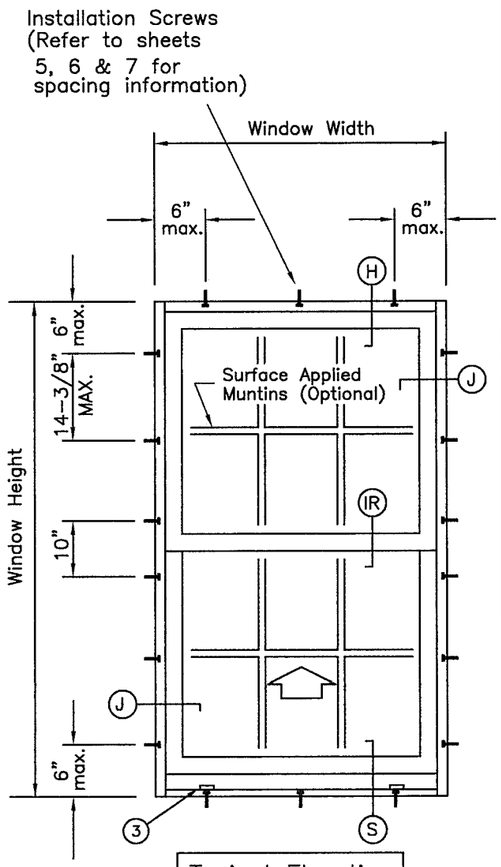
ANCHORS SHALL BE CORROSION RESISTANT, SPACED AS SHOWN ON DETAILS AND INSTALLED PER MANUF'S INSTRUCTIONS. SPECIFIED EMBEDMENT TO BASE MATERIAL SHALL BE BEYOND WALL DRESSING OR STUCCO.

A LOAD DURATION INCREASE IS USED IN DESIGN OF ANCHORS INTO WOOD ONLY.

ALL SHIMS TO BE HIGH IMPACT, NON–METALLIC AND NON–COMPRESSIBLE.

MATERIALS INCLUDING BUT NOT LIMITED TO STEEL/METAL SCREWS, THAT COME INTO CONTACT WITH OTHER DISSIMILAR MATERIALS SHALL MEET THE REQUIREMENTS OF THE 2017/2020 FLORIDA BLDG. CODE & ADOPTED STANDARDS.

THIS PRODUCT APPROVAL IS GENERIC AND DOES NOT PROVIDE INFORMATION FOR A SITE SPECIFIC PROJECT, i.e. LIFE SAFETY OF THIS PRODUCT, ADEQUACY OF STRUCTURE RECEIVING THIS PRODUCT AND SEALING AROUND OPENING FOR WATER INFILTRATION RESISTANCE ETC.
CONDITIONS NOT SHOWN IN THIS DRAWING ARE TO BE ANALYZED SEPARATELY, AND TO BE REVIEWED BY BUILDING OFFICIAL



Typical Elevation

THESE WINDOWS ARE RATED FOR SMALL MISSILE IMPACT. MIAMI–DADE COUNTY APPROVED IMPACT RESISTANT SHUTTERS REQUIRED FOR INSTALLATIONS UP TO 30 FT. OF GRADE. SHUTTERS NOT REQD. FOR INSTALLATIONS ABOVE 30 FT. OF GRADE.

PRODUCT REVISED
as complying with the Florida Building Code
NOA–No. 20-0722.12
Expiration Date: 05/05/2025
By: Manuel Perez
Miami–Dade Product Control

Revision:
A) UPDATED TO FBC 2020.
AK - 07/01/20

PREPARED BY A. LYNN MILLER
1070 TECHNOLOGY DRIVE
N. VENICE, FL 34275
(941) 480-1600
REGISTRATION #29296

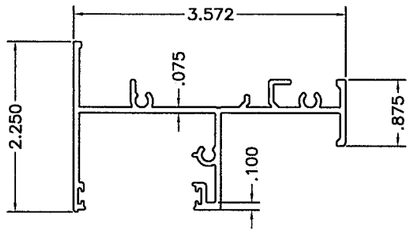
Impact Resistant Windows & Doors WE'RE STRONGER™
CGI WINDOWS AND DOORS, INC.
3780 W 104TH STREET
HIALEAH, FL 33018
(305) 593-6590

Title	Desc.	Sheet
SH360 ALUM SINGLE HUNG WINDOW (SMI)	SECTIONS/INSTRUCTIONS	1 OF 10

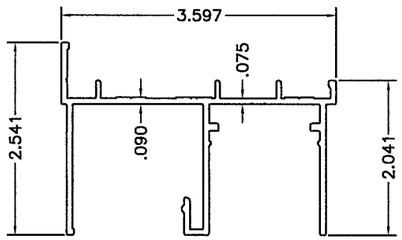
Date	Drawn By	DWG No.	Rev.
2/7/2020	ALAN KINNE	SH360SM-NOA	A

Series: 360 "ESTATE"

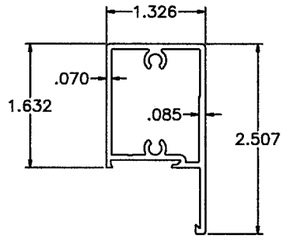
ANTHONY LYNN MILLER LICENSE No. 58705 STATE OF FLORIDA PROFESSIONAL ENGINEER
7/1/20
A. LYNN MILLER, P.E.
P.E.# 58705



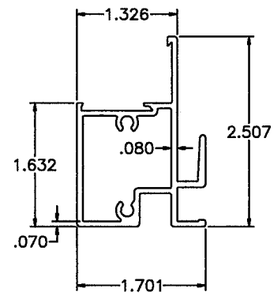
600–Frame Head
6063–T6



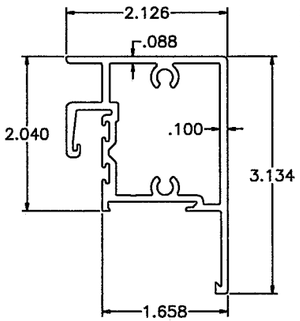
602–Frame Jamb
6063–T6



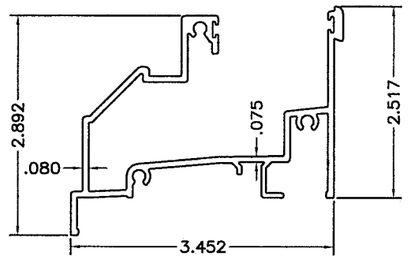
625–Horiz. Rail
6063–T6



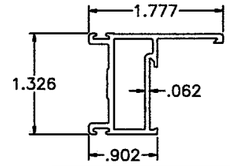
626–Fixed Intlck.
6063–T6



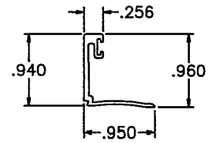
627–Moving Intlck.
6063–T6



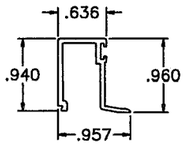
601–Frame Sill
6063–T6



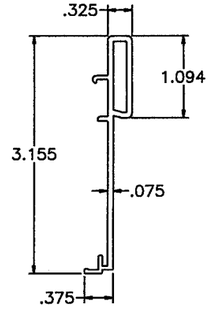
628–Side Rail
6063–T6



629–Glzg. Bead
6063–T6
For Glass Type 6



630–Glzg. Bead
6063–T6
For Glass Type 5



631–Waterbar
6063–T5

ITEM	PART #	QUANTITY	DESCRIPTION	MATERIAL	MANF./SUPPLIER	REMARKS
1	W23201NG	AS REQD.	WOOL PILE WITH CENTER SOFT FIN (GRAY)	PILE	ULTRAFAB/SCHLEGEL	
2	CGI–612P	AS REQD.	PLASTIC BUMPER GUIDE	PVC	PROTOTYPE PLASTIC EXTRUSIONS	CONTINUOUS AT INTERLOCK
3	#146–4	2	WEEP HOLE COVER	NYLON	BUILDERS PLASTIC COMPANY	
4	N/A	AS REQD.	GLAZING	GLASS	VARIES	
5	N/A	1	COMPLETE SCREEN	ALUM/MESH		
6	CGI–615C & 616C	1 OR 2	COMBINATION EGRESS LOCK AND LIFT/PULL ATTACHED W/(2) #8 X 5/8" FH SMS	ZINC	CUSTOM CASTING	1 @ WDWS. 28" WIDE & SMALLER 2 @ WDWS. OVER 28" WIDE
9	CGI–614C	2	TIE DOWN BLOCK	ZINC	CUSTOM CASTING	
10	VARIES	2	BALANCES (B&T OR SPIRAL)	VARIES	VARIES	BOTH BALANCES CAN BE USED
11	CGI–617P	2	BALANCE COVER	PVC	PROTOTYPE PLASTIC EXTRUSIONS	LOCATED AT TOP HALF OF EACH JAMB
12	CGI–618P	2	VENT STOP	PVC	PROTOTYPE PLASTIC EXTRUSIONS	LOCATED AT TOP OF JAMBS
14	CGI–613P	2	FIXED VENT SHIM	PVC	PROTOTYPE PLASTIC EXTRUSIONS	LOCATED AT TOP OF FIXED VENT
15	CGI–619P	2	TOP GUIDE AT OPERABLE VENT	NYLON	CUSTOM CASTING	
16	CGI–622N	2	BOTTOM GUIDE/CLIP AT OPERABLE VENT	NYLON	CUSTOM CASTING	
17	CGI–620C & 621N	2	CARRIER SYSTEM	ZINC	CUSTOM CASTING	OPTIONAL – BALANCE ATTACHES TO IT
18	N/A	16	VENT ASSEMBLY SCREWS	S/S	VARIES	#10 X 1 1/4" PH SMS (2 PER CORNER)
19	N/A	12	FRAME ASSEMBLY SCREWS	S/S	VARIES	#10 X 1 1/4" PH SMS (2 PER CORNER)
20	CGI–382V	AS REQD.	VINYL BULB	PVC	PROTOTYPE PLASTIC EXTRUSIONS	
21	VARIES	AS REQD.	STUCTURAL SILICONE	SILICONE	3 SILICONES	GE–1200, GE–2000, & DOW 995
22	CGI–632	1 OR 2	COMBINATION EGRESS WB LOCK & LIFT/PULL ATTACHED W/(2) #8 X 5/8" FH SMS	ZINC	CUSTOM CASTING (FOR USE WITH WATERBAR)	1 @ WDWS. 28" WIDE & SMALLER 2 @ WDWS. OVER 28" WIDE
23	–	2/ LITE	SETTING BLOCKS	EPDM	–	DUROMETER 85±5 SHORE A

PRODUCT REVISED
as complying with the Florida Building Code
NOA–No. 20-0722.12
Expiration Date: 05/05/2025
By: Manuel Perez
Miami–Dade Product Control

Revision:
A) NO CHANGES THIS SHEET.
AK - 07/01/20

PREPARED BY A. LYNN MILLER
1070 TECHNOLOGY DRIVE
N. VENICE, FL 34275
(941) 480-1600
REGISTRATION #29296

Impact Resistant Windows & Doors
WERE STRONGER™
CGI WINDOWS AND DOORS, INC.
3780 W 104TH STREET
HIALEAH, FL 33018
(305) 593-6590

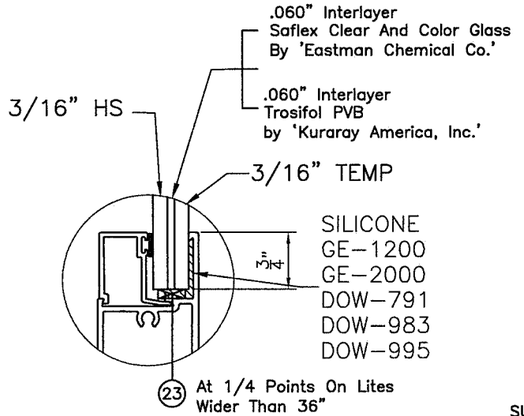
Series	Desc. / Title	Sheet	DWG No.	Drawn By	Date	Rev.
360 "ESTATE"	SH360 ALUM SINGLE HUNG WINDOW (SMI) BILL OF MATERIALS/EXTRUSIONS	2 OF 10	SH360SM-NOA	ALAN KINNE	2/7/2020	A

ANTHONY LYNN MILLER
LICENSE
No. 58705
STATE OF FLORIDA
PROFESSIONAL ENGINEER
7/1/20

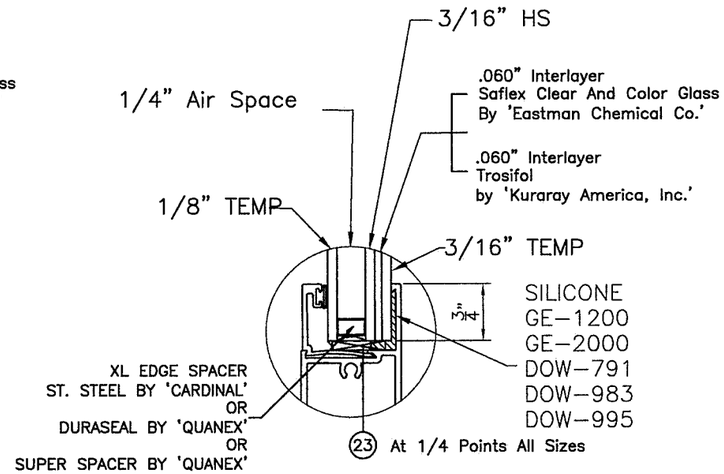
A. LYNN MILLER, P.E.
P.E.# 58705

NOTE:
GLASS CAPACITIES ON THIS SHEET ARE BASED ON ASTM E1300–09 (3 SEC. GUSTS) AND FLORIDA BUILDING COMMISSION DECLARATORY STATEMENT DCA05–DEC–219

EQUAL LITES WINDOWS					
DESIGN LOAD CAPACITY – PSF					
WINDOW DIMS.		GLASS TYPE '5'		GLASS TYPE '6'	
WIDTH	HEIGHT	EXT.(+)	INT.(–)	EXT.(+)	INT.(–)
24"	48"	100.0	200.0	100.0	200.0
30"		100.0	200.0	100.0	200.0
32"		100.0	200.0	100.0	200.0
36"		100.0	200.0	100.0	200.0
42"		100.0	200.0	100.0	200.0
48"		100.0	200.0	100.0	200.0
54"		100.0	171.4	100.0	171.4
24"	60"	100.0	200.0	100.0	200.0
30"		100.0	200.0	100.0	200.0
32"		100.0	200.0	100.0	200.0
36"		100.0	200.0	100.0	200.0
42"		100.0	200.0	100.0	200.0
48"		100.0	174.5	100.0	174.5
54"		100.0	147.7	100.0	147.7
24"	72"	100.0	200.0	100.0	200.0
30"		100.0	200.0	100.0	200.0
32"		100.0	200.0	100.0	200.0
36"		100.0	200.0	100.0	200.0
42"		100.0	200.0	100.0	200.0
48"		100.0	160.0	100.0	160.0
54"		100.0	133.3	100.0	133.3
24"	84"	100.0	200.0	100.0	200.0
30"		100.0	200.0	100.0	200.0
32"		100.0	200.0	100.0	200.0
36"		100.0	200.0	100.0	200.0
42"		100.0	195.9	100.0	195.9
48"		100.0	152.4	100.0	152.4
54"		100.0	124.7	100.0	124.7
24"	96"	100.0	200.0	100.0	200.0
30"		100.0	200.0	100.0	200.0
32"		100.0	200.0	100.0	200.0
36"		100.0	200.0	100.0	200.0
42"		100.0	195.9	100.0	195.9
48"		100.0	150.0	100.0	150.0
54"		100.0	120.0	100.0	120.0
24"	108"	100.0	200.0	100.0	200.0
30"		100.0	200.0	100.0	200.0
32"		100.0	200.0	100.0	200.0
36"		100.0	200.0	100.0	200.0
42"		100.0	195.9	100.0	195.9
48"		100.0	150.0	100.0	150.0
24"	120"	100.0	200.0	100.0	200.0
30"		100.0	200.0	100.0	200.0
32"		100.0	200.0	100.0	200.0
36"		100.0	200.0	100.0	200.0
42"		100.0	195.9	100.0	195.9

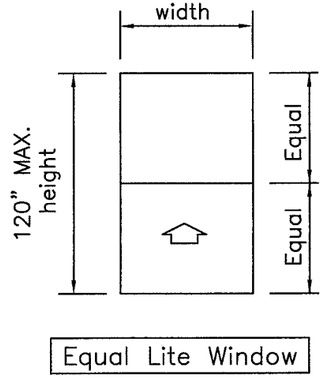


Glass Type "5"



Glass Type "6"

EQUAL LITES WINDOWS					
DESIGN LOAD CAPACITY – PSF					
WINDOW DIMS.		GLASS TYPE '5'		GLASS TYPE '6'	
WIDTH	HEIGHT	EXT.(+)	INT.(–)	EXT.(+)	INT.(–)
19–1/8"	26"	100.0	200.0	100.0	200.0
26–1/2"		100.0	200.0	100.0	200.0
37"		100.0	200.0	100.0	200.0
53–1/8"		100.0	200.0	100.0	200.0
19–1/8"	38–3/8"	100.0	200.0	100.0	200.0
26–1/2"		100.0	200.0	100.0	200.0
37"		100.0	200.0	100.0	200.0
53–1/8"		100.0	200.0	100.0	200.0
19–1/8"	50–5/8"	100.0	200.0	100.0	200.0
26–1/2"		100.0	200.0	100.0	200.0
37"		100.0	200.0	100.0	200.0
53–1/8"		100.0	168.7	100.0	168.7
19–1/8"	63"	100.0	200.0	100.0	200.0
26–1/2"		100.0	200.0	100.0	200.0
37"		100.0	200.0	100.0	200.0
53–1/8"		100.0	146.8	100.0	146.8
19–1/8"	72"	100.0	200.0	100.0	200.0
26–1/2"		100.0	200.0	100.0	200.0
37"		100.0	200.0	100.0	200.0
53–1/8"		100.0	136.7	100.0	136.7
19–1/8"	76"	100.0	200.0	100.0	200.0
26–1/2"		100.0	200.0	100.0	200.0
37"		100.0	200.0	100.0	200.0
53–1/8"		100.0	133.3	100.0	133.3



Equal Lite Window

All values shown are Design PSF (Pounds per Square Foot)

VALUES FOR EXTERIOR LOADS(+) SHOWN ARE
FOR SILL WITH WATERBAR ADAPTER
FOR WINDOWS WITHOUT WATERBAR ADAPTER
LIMIT EXTERIOR(+) LOADS TO 80.0 PSF

PRODUCT REVISED
as complying with the Florida Building Code
NOA–No. 20-0722.12
Expiration Date: 05/05/2025
By: Manuel Perez
Miami–Dade Product Control

Revision:
A) ADDED BACKBEDDING.
AK - 07/01/20

PREPARED BY A. LYNN MILLER
1070 TECHNOLOGY DRIVE
N. VENICE, FL 34275
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REGISTRATION #29296

Impact Resistant Windows & Doors
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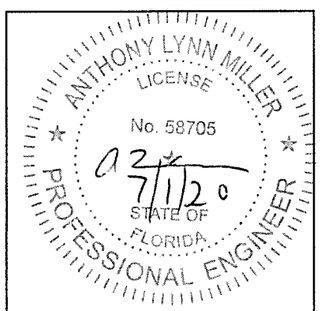
CGI WINDOWS AND DOORS, INC.
3780 W 104TH STREET
HIALEAH, FL 33018
(305) 593-6590

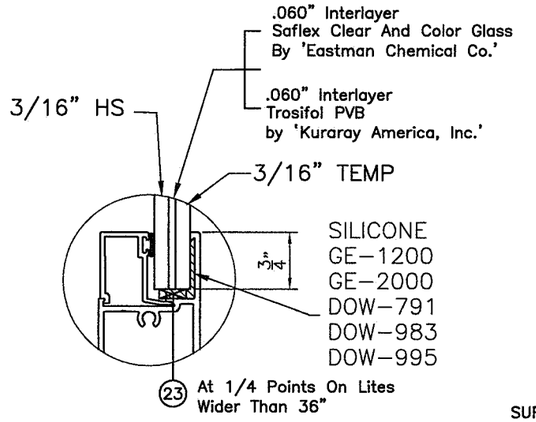
Series	Title	Desc.	Drawn By	Date	Rev.
SH360SM-NOA	SH360 ALUM SINGLE HUNG WINDOW (SMI)	DESIGN LOAD TABLES/GLASS	ALAN KINNE	2/7/2020	A

DWG No.	Sheet
360 "ESTATE"	3 OF 10

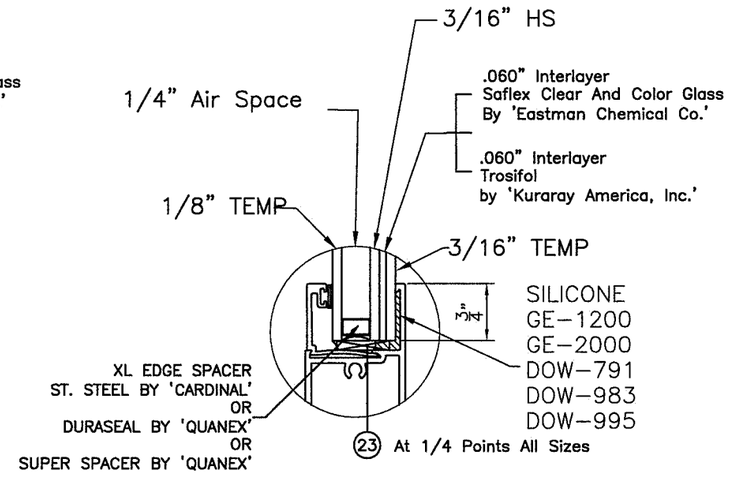


A. LYNN MILLER, P.E.
P.E.# 58705

NOTE:
GLASS CAPACITIES ON THIS SHEET ARE
BASED ON ASTM E1300–09 (3 SEC. GUSTS)
AND FLORIDA BUILDING COMMISSION
DECLARATORY STATEMENT DCA05–DEC–219



Glass Type "5"



Glass Type "6"

UNEQUAL LITES WINDOWS (ORIEL)

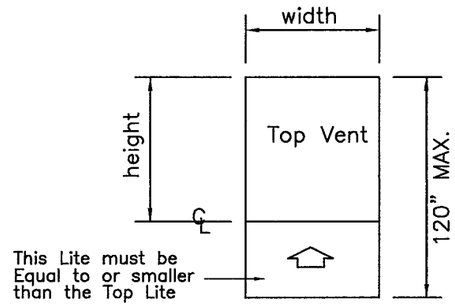
DESIGN LOAD CAPACITY – PSF

WINDOW DIMS.		TOP VENT	GLASS TYPE '5'		GLASS TYPE '6'	
WIDTH	HEIGHT	HEIGHT	EXT.(+)	INT.(–)	EXT.(+)	INT.(–)
24"	96" (MAX.)	48"	100.0	200.0	100.0	200.0
30"			100.0	200.0	100.0	200.0
32"			100.0	200.0	100.0	200.0
36"			100.0	200.0	100.0	200.0
42"			100.0	195.9	100.0	195.9
48"			100.0	150.0	100.0	150.0
54"			100.0	120.0	100.0	120.0
24"	108" (MAX.)	54"	100.0	200.0	100.0	200.0
30"			100.0	200.0	100.0	200.0
32"			100.0	200.0	100.0	200.0
36"			100.0	200.0	100.0	200.0
42"			100.0	195.9	100.0	195.9
48"			100.0	150.0	100.0	150.0
24"	120" (MAX.)	60"	100.0	200.0	100.0	200.0
30"			100.0	200.0	100.0	200.0
32"			100.0	200.0	100.0	200.0
36"			100.0	200.0	100.0	200.0
42"			100.0	195.9	100.0	195.9
24"	120" (MAX.)	66"	100.0	200.0	100.0	200.0
30"			100.0	200.0	100.0	200.0
32"			100.0	200.0	100.0	200.0
36"			100.0	200.0	100.0	200.0
24"	120" (MAX.)	72"	100.0	200.0	100.0	200.0
30"			100.0	200.0	100.0	200.0
32"			100.0	200.0	100.0	200.0
36"			100.0	200.0	100.0	200.0
24"	120" (MAX.)	78"	100.0	200.0	100.0	200.0
30"			100.0	200.0	100.0	200.0
24"	120" (MAX.)	84"	100.0	200.0	100.0	200.0
30"			100.0	200.0	100.0	200.0

UNEQUAL LITES WINDOWS (ORIEL)

DESIGN LOAD CAPACITY – PSF

WINDOW DIMS.		TOP VENT	GLASS TYPE '5'		GLASS TYPE '6'	
WIDTH	HEIGHT	HEIGHT	EXT.(+)	INT.(–)	EXT.(+)	INT.(–)
19–1/8"	96" (MAX.)	48"	100.0	200.0	100.0	200.0
26–1/2"			100.0	200.0	100.0	200.0
37"			100.0	200.0	100.0	200.0
53–1/8"			100.0	123.6	100.0	123.6
19–1/8"	108" (MAX.)	54"	100.0	200.0	100.0	200.0
26–1/2"			100.0	200.0	100.0	200.0
37"			100.0	200.0	100.0	200.0
19–1/8"	120" (MAX.)	60"	100.0	200.0	100.0	200.0
26–1/2"			100.0	200.0	100.0	200.0
37"			100.0	200.0	100.0	200.0
19–1/8"	120" (MAX.)	66"	100.0	200.0	100.0	200.0
26–1/2"			100.0	200.0	100.0	200.0
37"			100.0	200.0	100.0	200.0
19–1/8"	120" (MAX.)	72"	100.0	200.0	100.0	200.0
26–1/2"			100.0	200.0	100.0	200.0
19–1/8"	120" (MAX.)	78"	100.0	200.0	100.0	200.0
26–1/2"			100.0	200.0	100.0	200.0
19–1/8"	120" (MAX.)	84"	100.0	200.0	100.0	200.0
26–1/2"			100.0	200.0	100.0	200.0



Unequal Lite Window

All values shown are Design PSF (Pounds per Square Foot)

VALUES FOR EXTERIOR LOADS(+) SHOWN ARE
FOR SILL WITH WATERBAR ADAPTER
FOR WINDOWS WITHOUT WATERBAR ADAPTER
LIMIT EXTERIOR(+) LOADS TO 80.0 PSF

PRODUCT REVISED
as complying with the Florida Building Code
NOA–No. 20-0722.12
Expiration Date: 05/05/2025
By: Manuel Perez
Miami–Dade Product Control

Revision:
A) ADDED BACKBEDDING.
AK - 07/01/20

PREPARED BY A. LYNN MILLER
1070 TECHNOLOGY DRIVE
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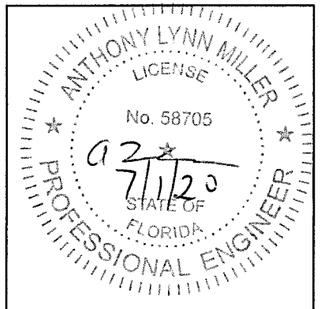
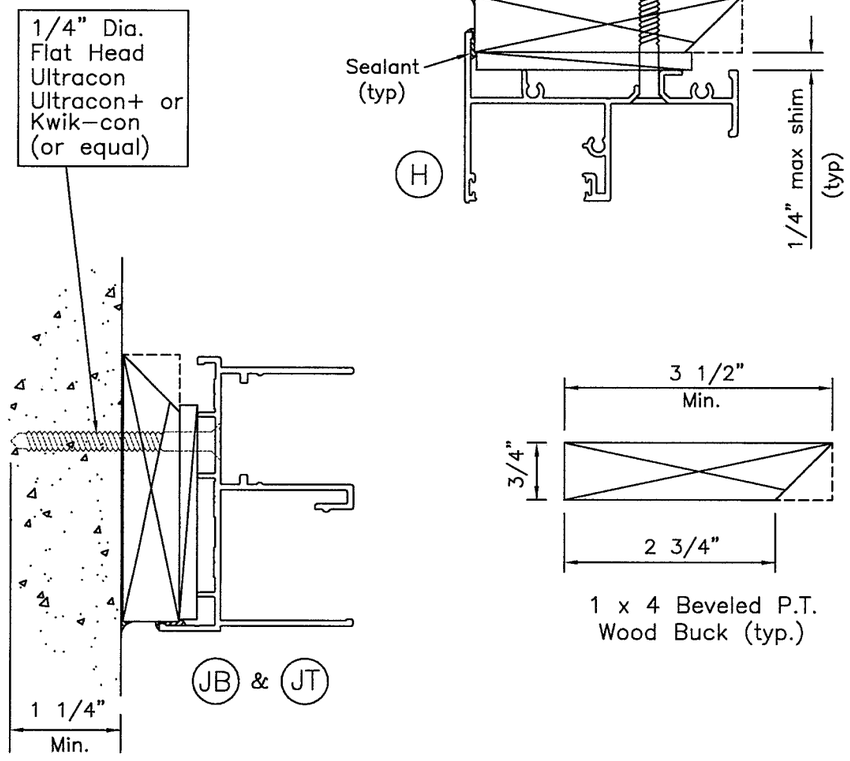
Title: SH360 ALUM SINGLE HUNG WINDOW (SMI)
Desc.: DESIGN LOAD TABLES/GLASS
Series: 360 "ESTATE"
Sheet: 4 OF 10
DWG No.: SH360SM-NOA
Rev.: A
Date: 2/7/2020
Drawn By: ALAN KINNE



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

Installation Type "A"

w/ 1 x 4 Beveled P.T. Wood Buck



IMPORTANT NOTE:

Wood Bucks must sustain loads imposed by glazing system and transfer them to the building structure.

TYPICAL ANCHORS: SEE ELEV. FOR SPACING

1/4" DIA. ULTRACON BY 'ELCO' (Fu=177 KSI, Fy=155 KSI)

1/4" DIA. ULTRACON+ BY 'DEWALT' (Fu=164 KSI, Fy=148 KSI)

1/4" DIA. HILTI KWIK–CON II (Fu=163 KSI, Fy=157 KSI)

INTO 2BY WOOD BUCKS OR WOOD STRUCTURES
1–1/2" MIN. PENETRATION INTO WOOD

THRU 1BY BUCKS INTO CONC. OR BUCKS
1–1/4" MIN. EMBED INTO CONCRETE (HEAD/SILL/JAMBS)
1–1/4" MIN. EMBED INTO BLOCKS (JAMBS)

DIRECTLY INTO CONCRETE OR BLOCKS
1–3/4" MIN. EMBED INTO CONCRETE (HEAD/SILL/JAMBS)
1–3/4" MIN. EMBED INTO FILLED BLOCKS (JAMBS)

1/4" DIA. TEKS OR SELF DRILLING SCREWS (GRADE 5 CRS)

INTO METAL STRUCTURES (HEAD/SILL/JAMBS)
(3) THREADS MIN. TO EXTEND BEYOND METAL THICKNESS
ALUMINUM : 1/8" THK. MIN. (6063–T5 MIN.)
STEEL : 1/8" THK. MIN. (Fy = 36 KSI MIN.)
(STEEL IN CONTACT WITH ALUMINUM TO BE PLATED OR PAINTED)

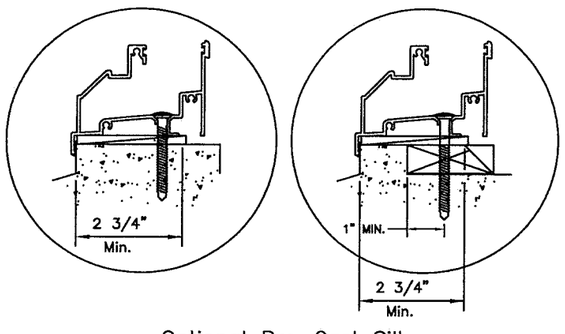
#14 SMS (GRADE 2 CRS)

INTO MIAMI–DADE COUNTY APPROVED MULLIONS
(3) THREADS MIN. TO EXTEND BEYOND METAL THICKNESS
ALUMINUM: 1/8" THK. MIN. (6063–T5 MIN.) (NO SHIMS)
STEEL: 1/8" THK. MIN. (Fy = 36 KSI MIN.)
(STEEL IN CONTACT WITH ALUMINUM TO BE PLATED OR PAINTED)

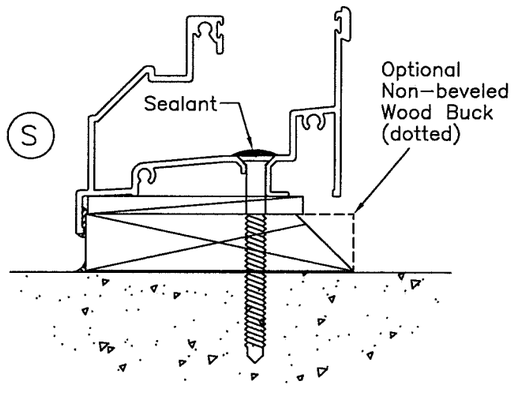
TYPICAL EDGE DISTANCE

INTO CONCRETE AND MASONRY = 2–1/2" MIN.
INTO WOOD STRUCTURE = 1" MIN.
INTO METAL STRUCTURE = 3/4" MIN.

WOOD AT HEAD, SILL OR JAMBS SG = 0.55 MIN.
CONCRETE AT HEAD, SILL OR JAMBS f'c = 3000 PSI MIN.
C–90 FILLED BLOCK AT JAMBS f'm = 2000 PSI MIN.



Optional Pre–Cast Sill



Values for Installation Type "A" apply to the following installation types, with maximum shim space 1/4":

1– Using 1by P.T. wood bucks, min. 3/4" thick,

2– Directly into masonry, without the use of wood bucks.

3– Directly into a steel or aluminum structure
Min. 1/8" thick and using #14 Teks or Self drilling screws.
Structure must be designed by others to sustain the loads imposed by the window.

PRODUCT REVISED
as complying with the Florida Building Code
NOA–No. 20-0722.12
Expiration Date: 05/05/2025
By: Manuel Perez
Miami–Dade Product Control

Revision:
A) ADDED ULTRACON+ ANCHORS.
AK - 07/01/20

PREPARED BY A. LYNN MILLER
1070 TECHNOLOGY DRIVE
N. VENICE, FL 34275
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REGISTRATION #29296

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HIALEAH, FL 33018
(305) 593-6590

Rev.	Date	Drawn By	DWG No.	Sheet
A	2/7/2020	ALAN KINNE	SH360SM-NOA	5 OF 10

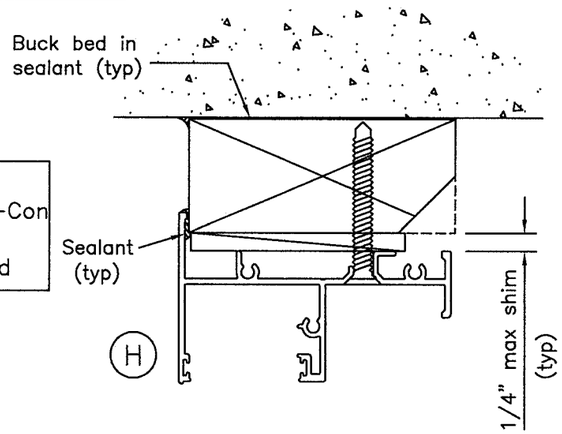
Series	Desc. / Title
360 "ESTATE"	SH360 ALUM SINGLE HUNG WINDOW (SMI) / ANCHORS

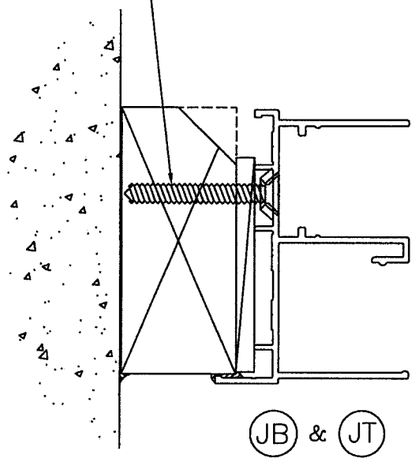
ANTHONY LYNN MILLER LICENSE No. 58705 STATE OF FLORIDA PROFESSIONAL ENGINEER
7/1/20

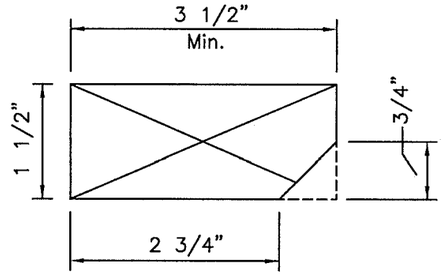
A. LYNN MILLER, P.E.
P.E.# 58705

Installation Type "B"

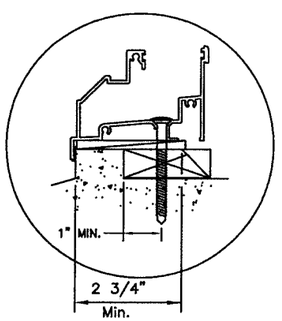
w/ 2 x 4 Beveled P.T. Wood Buck



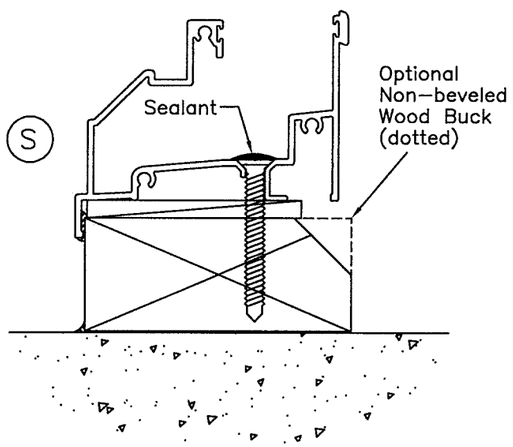




2 x 4 Beveled P.T. Wood Buck (typ.)

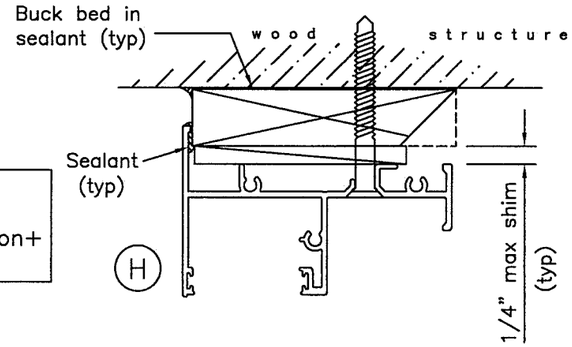


Optional Pre–Cast Sill

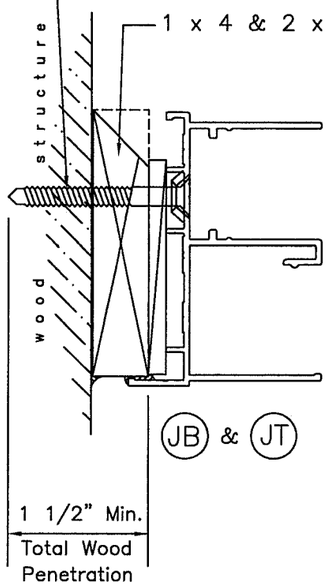


Installation Type "C"

based on wood penetration only using 1 x 4 or 2 x 4 wood bucks



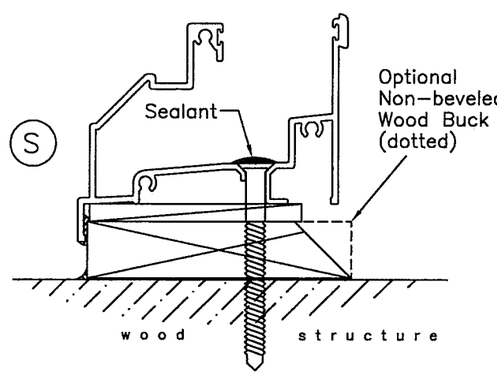
1/4" Dia. Flat Head Teks Or 1/4" Dia. Ultracon/Ultracon+ / Kwik–Con Fasteners



See Installation Types "A" & "B" for 1 x 4 & 2 x 4 P.T. Wood Buck Styles

IMPORTANT NOTE:

Wood Bucks must sustain loads imposed by glazing system and transfer them to the building structure.



PRODUCT REVISED
as complying with the Florida Building Code
NOA–No. 20-0722.12
Expiration Date: 05/05/2025
By: Manuel Perez
Miami–Dade Product Control

Revision:
A) ADDED ULTRACON+ ANCHORS.
AK - 07/01/20

PREPARED BY A. LYNN MILLER
1070 TECHNOLOGY DRIVE
N. VENICE, FL 34275
(941) 480-1600
REGISTRATION #29296

Impact Resistant Windows & Doors WERE STRONGER™
CGI WINDOWS AND DOORS, INC.
3780 W 104TH STREET
HIALEAH, FL 33018
(305) 593-6590

Series	Title	Sheet	DWG No.	Rev.
SH360 ALUM SINGLE HUNG WINDOW (SMI)	ANCHORS	6 OF 10	360 "ESTATE"	SH360SM-NOA A

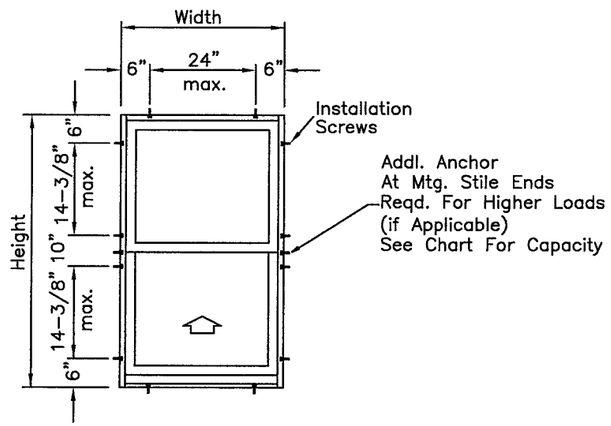
Drawn By: ALAN KINNE
Date: 2/7/2020

ANTHONY LYNN MILLER LICENSE No. 58705 STATE OF FLORIDA PROFESSIONAL ENGINEER
7/1/20
A. LYNN MILLER, P.E.
P.E.# 58705

ANCHORS				
DESIGN LOAD CAPACITY – PSF				
WINDOW DIMS.		NO. OF ANCHORS	STD. HOLE PATTERN W/O ADDL. ANCHOR	STD. HOLE PATTERN WITH ADDL. ANCHOR
WIDTH	HEIGHT	AT JAMB	EXT.(+) & INT.(–)	EXT.(+) & INT.(–)
24"	48"	4	200.0	200.0
30"			200.0	200.0
32"			200.0	200.0
36"			196.0	200.0
42"			174.2	200.0
48"			151.7	196.0
54"			127.1	178.2
24"	60"	6	200.0	200.0
30"			200.0	200.0
32"			200.0	200.0
36"			200.0	200.0
42"			171.1	200.0
48"			134.4	200.0
54"			110.7	166.0
24"	72"	8	200.0	200.0
30"			200.0	200.0
32"			200.0	200.0
36"			200.0	200.0
42"			165.1	200.0
48"			125.4	188.2
54"			101.2	151.7
24"	84"	8	200.0	200.0
30"			200.0	200.0
32"			200.0	200.0
36"			190.1	200.0
42"			164.9	192.0
48"			122.2	175.3
54"			96.0	144.0
24"	96"	8	200.0	200.0
30"			185.8	200.0
32"			176.4	198.5
36"			160.8	180.9
42"			143.4	161.3
48"			122.1	147.0
54"			94.1	135.7
24"	108"	10	200.0	200.0
30"			200.0	200.0
32"			191.7	200.0
36"			174.2	191.6
42"			154.5	169.9
48"			122.1	154.0
24"	120"	10	200.0	200.0
30"			179.2	197.1
32"			169.6	186.6
36"			153.7	169.1
42"			135.8	149.3

ANCHORS				
DESIGN LOAD CAPACITY – PSF				
WINDOW DIMS.		NO. OF ANCHORS	STD. HOLE PATTERN W/O ADDL. ANCHOR	STD. HOLE PATTERN WITH ADDL. ANCHOR
WIDTH	HEIGHT	AT JAMB	EXT.(+) & INT.(–)	EXT.(+) & INT.(–)
19–1/8"	26"	4	200.0	200.0
26–1/2"			200.0	200.0
37"			200.0	200.0
53–1/8"			200.0	200.0
19–1/8"	38–3/8"	4	200.0	200.0
26–1/2"			200.0	200.0
37"			200.0	200.0
53–1/8"			152.7	200.0
19–1/8"	50–5/8"	4	200.0	200.0
26–1/2"			200.0	200.0
37"			179.6	200.0
53–1/8"			125.7	169.5
19–1/8"	63"	6	200.0	200.0
26–1/2"			200.0	200.0
37"			200.0	200.0
53–1/8"			110.7	166.1
19–1/8"	72"	8	200.0	200.0
26–1/2"			200.0	200.0
37"			200.0	200.0
53–1/8"			104.1	156.1
19–1/8"	76"	8	200.0	200.0
26–1/2"			200.0	200.0
37"			200.1	200.0
53–1/8"			102.1	153.1

LOADS APPLY TO INSTALLATION TYPES A, B & C AND INTO ALUMINUM BUCKS FOR ALUMINUM BUCK INSTALLATION SEE SHEETS 9 AND 10.



CGI Standard Hole Pattern

Refer to sheets 5 & 6 of 10 for description of installation types A – B – C

PRODUCT REVISED
as complying with the Florida Building Code
NOA–No. 20-0722.12
Expiration Date: 05/05/2025
By: Manuel Perez
Miami–Dade Product Control

Revision:
A) NO CHANGES THIS SHEET.
AK - 07/01/20

PREPARED BY A. LYNN MILLER
1070 TECHNOLOGY DRIVE
N. VENICE, FL 34275
(941) 480-1600
REGISTRATION #29296

Impact Resistant Windows & Doors WERE STRONGER™
CGI WINDOWS AND DOORS, INC.
3780 W 104TH STREET
HIALEAH, FL 33018
(305) 593-6590

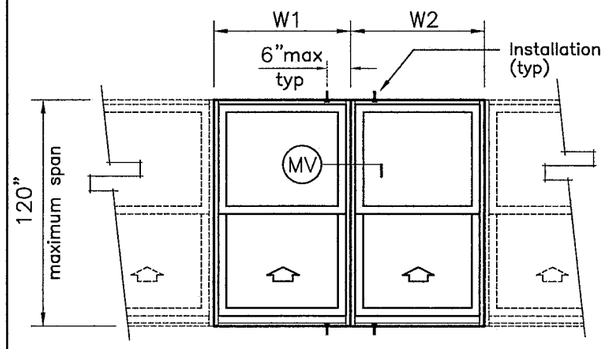
Title: SH360 ALUM SINGLE HUNG WINDOW (SMI)
Desc.: DESIGN LOAD TABLES
Series: 360 "ESTATE"
Sheet: 7 OF 10
DWG No.: SH360SM-NOA
Drawn By: ALAN KINNE
Date: 2/7/2020
Rev.: A

ANTHONY LYNN MILLER LICENSE No. 58705 STATE OF FLORIDA PROFESSIONAL ENGINEER
7/1/20
A. LYNN MILLER, P.E.
P.E.# 58705

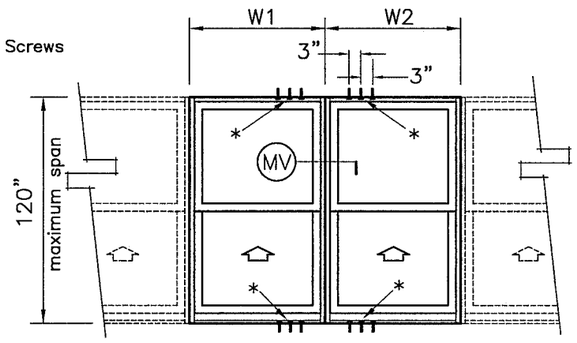
Vertical Mullion Performance

$$\text{Tributary Width} = \frac{W1 + W2}{2}$$

For Window Performance, refer to sheets 3 or 4



Multiple Opening
(2 or more windows)
w/ 1 screw on each side of mullion
Standard Installation

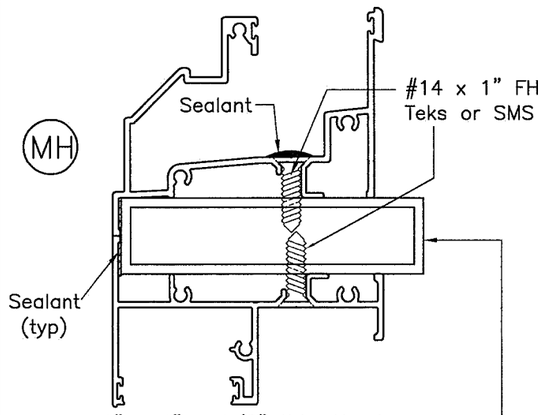


Multiple Opening
(2 or more windows)
w/ 2 or 3 screws on each side of mullion
High Load Installation

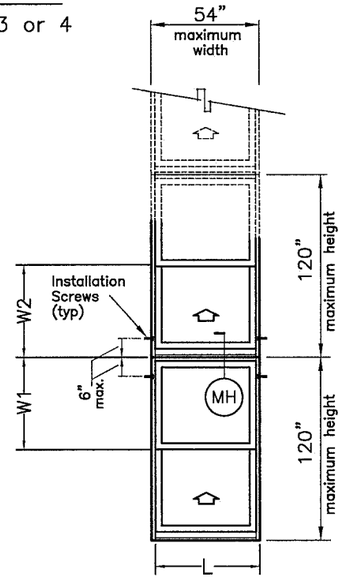
(* = additional holes to be drilled by installer)

Horizontal Mullion Performance

For Window Performance, refer to sheets 3 or 4



1" x 4" x 1/8" thk. Aluminum
Tube Mullion (unclipped at ends)
(Mull length = Wdw Width – 1")



MULLION DESIGN LOAD CAPACITY – PSF				
WINDOW DIMS.		ONE ANCHOR EACH SIDE	TWO ANCHORS EACH SIDE	THREE ANCHORS EACH SIDE
WIDTH	HEIGHT	EXT.(+) & INT.(–)	EXT.(+) & INT.(–)	EXT.(+) & INT.(–)
24"	48"	150.0	200.0	200.0
30"		130.9	200.0	200.0
32"		126.6	200.0	200.0
36"		120.0	200.0	200.0
42"		114.5	200.0	200.0
48"		112.5	200.0	200.0
54"		112.5	200.0	200.0
24"	60"	112.5	200.0	200.0
30"		96.0	192.0	200.0
32"		92.0	184.1	200.0
36"		85.7	171.4	200.0
42"		79.1	158.2	200.0
48"		75.0	150.0	200.0
54"		72.1	145.5	200.0
24"	72"	90.0	180.0	200.0
30"		75.8	151.6	200.0
32"		72.3	144.6	200.0
36"		66.7	133.3	197.9
42"		60.5	121.0	175.4
48"		56.3	112.5	159.8
54"		53.3	106.7	149.0
24"	84"	75.0	150.0	200.0
30"		62.6	125.2	164.2
32"		59.6	119.1	154.8
36"		54.5	109.1	139.5
42"		49.0	98.0	122.4
48"		45.0	90.0	110.1
54"		42.1	84.2	101.2

MULLION DESIGN LOAD CAPACITY – PSF				
WINDOW DIMS.		ONE ANCHOR EACH SIDE	TWO ANCHORS EACH SIDE	THREE ANCHORS EACH SIDE
WIDTH	HEIGHT	EXT.(+) & INT.(–)	EXT.(+) & INT.(–)	EXT.(+) & INT.(–)
24"	96"	64.3	128.6	142.1
30"		53.3	106.7	115.3
32"		50.6	101.2	108.7
36"		46.2	92.3	97.8
42"		41.1	82.3	85.6
48"		37.5	75.0	76.8
54"		34.8	69.6	70.3
24"	108"	56.3	99.3	99.3
30"		46.5	80.3	80.3
32"		44.0	75.6	75.6
36"		40.0	67.8	67.8
42"		35.5	59.1	59.1
48"		32.1	52.8	52.8
24"	120"	50.0	72.1	72.1
30"		41.1	58.2	58.2
32"		38.9	54.7	54.7
36"		35.3	49.0	49.0
42"		31.2	42.6	42.6

MULLION DESIGN LOAD CAPACITY – PSF				
WINDOW DIMS.		ONE ANCHOR EACH SIDE	TWO ANCHORS EACH SIDE	THREE ANCHORS EACH SIDE
WIDTH	HEIGHT	EXT.(+) & INT.(–)	EXT.(+) & INT.(–)	EXT.(+) & INT.(–)
53–1/8"	26"	200.0	200.0	200.0
19–1/8"	38–3/8"	200.0	200.0	200.0
26–1/2"		194.6	200.0	200.0
37"		176.2	200.0	200.0
53–1/8"		176.0	200.0	200.0
19–1/8"	50–5/8"	165.0	200.0	200.0
26–1/2"		130.9	200.0	200.0
37"		109.0	200.0	200.0
53–1/8"		101.1	200.0	200.0
19–1/8"	63"	126.8	200.0	200.0
26–1/2"		98.3	196.6	200.0
37"		78.7	157.4	200.0
53–1/8"		67.0	133.9	200.0
19–1/8"	72"	108.5	200.0	200.0
26–1/2"		83.2	166.5	200.0
37"		65.5	130.9	193.5
53–1/8"		53.7	107.4	150.3
19–1/8"	76"	102.0	200.0	200.0
26–1/2"		77.9	155.9	200.0
37"		60.9	121.8	170.9
53–1/8"		49.3	98.7	131.1

PRODUCT REVISED
as complying with the Florida Building Code
NOA–No. 20-0722.12
Expiration Date: 05/05/2025
By: Manuel Perez
Miami–Dade Product Control

Revision:
A) NO CHANGES THIS SHEET.
AK - 07/01/20

PREPARED BY A. LYNN MILLER
1070 TECHNOLOGY DRIVE
N. VENICE, FL 34275
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REGISTRATION #29296

Impact Resistant Windows & Doors WE'RE STRONGER™
CGI WINDOWS AND DOORS, INC.
3780 W 104TH STREET
HIALEAH, FL 33018
(305) 593-6590

Series	Desc.	Title
SH360SM-NOA	ALAN KINNE	2/7/2020
A		

SH360 ALUM SINGLE HUNG WINDOW (SMI)
DESIGN LOAD TABLES/MULLIONS
360 "ESTATE"
8 OF 10

ANTHONY LYNN MILLER
LICENSE
No. 58705
STATE OF FLORIDA
PROFESSIONAL ENGINEER
7/1/20

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

PERFORMANCE VALUES OF ALUMINUM BUCK INSTALLATION ANCHORS

EXT.(+) & INT.(–)

WINDOW DIMS.		ANCHOR SPACING INTO CONC.		ANCHOR SPACING INTO HOLLOW BLOCK		ANCHOR SPACING INTO WOOD	
WIDTH	HEIGHT	16" O.C.	8" O.C.	16" O.C.	8" O.C.	16" O.C.	8" O.C.
24"	48"	200.0	200.0	178.7	200.0	200.0	200.0
30"		200.0	200.0	155.9	200.0	200.0	200.0
32"		200.0	200.0	150.8	200.0	200.0	200.0
36"		200.0	200.0	142.9	200.0	200.0	200.0
42"		200.0	200.0	131.3	200.0	176.3	200.0
48"		200.0	200.0	131.3	200.0	180.0	200.0
54"		168.0	200.0	107.2	187.6	144.0	200.0
24"	60"	200.0	200.0	134.0	200.0	200.0	200.0
30"		179.2	200.0	114.3	200.0	200.0	200.0
32"		171.8	200.0	109.6	191.9	200.0	200.0
36"		160.0	200.0	102.1	178.7	200.0	200.0
42"		147.7	200.0	94.2	164.9	176.3	200.0
48"		140.0	200.0	89.3	156.3	180.0	200.0
54"		135.8	200.0	86.6	151.6	142.2	200.0
24"	72"	200.0	200.0	134.0	200.0	200.0	200.0
30"		176.8	200.0	112.8	200.0	200.0	200.0
32"		168.8	200.0	107.7	193.8	200.0	200.0
36"		155.6	200.0	99.3	178.7	200.0	200.0
42"		141.2	200.0	90.1	162.2	176.3	200.0
48"		131.3	200.0	83.8	150.8	180.0	200.0
54"		124.4	200.0	79.4	142.9	142.2	200.0
24"	84"	200.0	200.0	134.0	200.0	200.0	200.0
30"		175.3	200.0	111.9	186.4	200.0	200.0
32"		166.8	200.0	106.4	177.4	200.0	200.0
36"		152.7	200.0	97.5	162.4	200.0	200.0
42"		137.1	200.0	87.5	145.9	176.3	200.0
48"		126.0	200.0	80.4	134.0	180.0	200.0
54"		117.9	196.5	75.2	125.4	142.2	200.0
24"	96"	200.0	200.0	134.0	200.0	200.0	200.0
30"		174.2	200.0	111.2	190.6	200.0	200.0
32"		165.4	200.0	105.5	180.9	200.0	200.0
36"		150.8	200.0	96.2	164.9	200.0	200.0
42"		134.4	200.0	85.8	147.0	176.3	200.0
48"		122.5	200.0	78.2	134.0	180.0	200.0
54"		113.6	194.8	72.5	124.3	142.2	200.0
24"	108"	183.8	200.0	117.3	200.0	200.0	200.0
30"		151.7	200.0	96.8	179.8	200.0	200.0
32"		143.8	200.0	91.8	170.4	200.0	200.0
36"		130.7	200.0	83.4	154.8	200.0	200.0
42"		115.9	200.0	73.9	137.3	176.3	200.0
48"		105.0	195.0	67.0	124.4	180.0	200.0
24"	120"	186.7	200.0	119.1	200.0	200.0	200.0
30"		153.6	200.0	98.0	183.8	200.0	200.0
32"		145.4	200.0	92.8	173.9	200.0	200.0
36"		131.8	200.0	84.1	157.6	200.0	200.0
42"		116.4	200.0	74.3	139.2	176.3	200.0

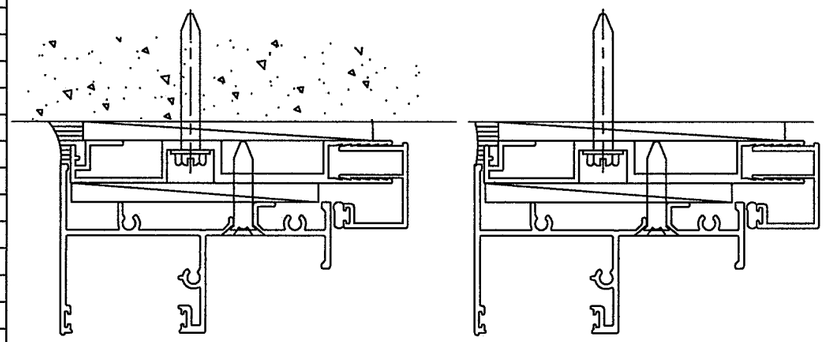
PERFORMANCE VALUES OF ALUMINUM BUCK INSTALLATION ANCHORS

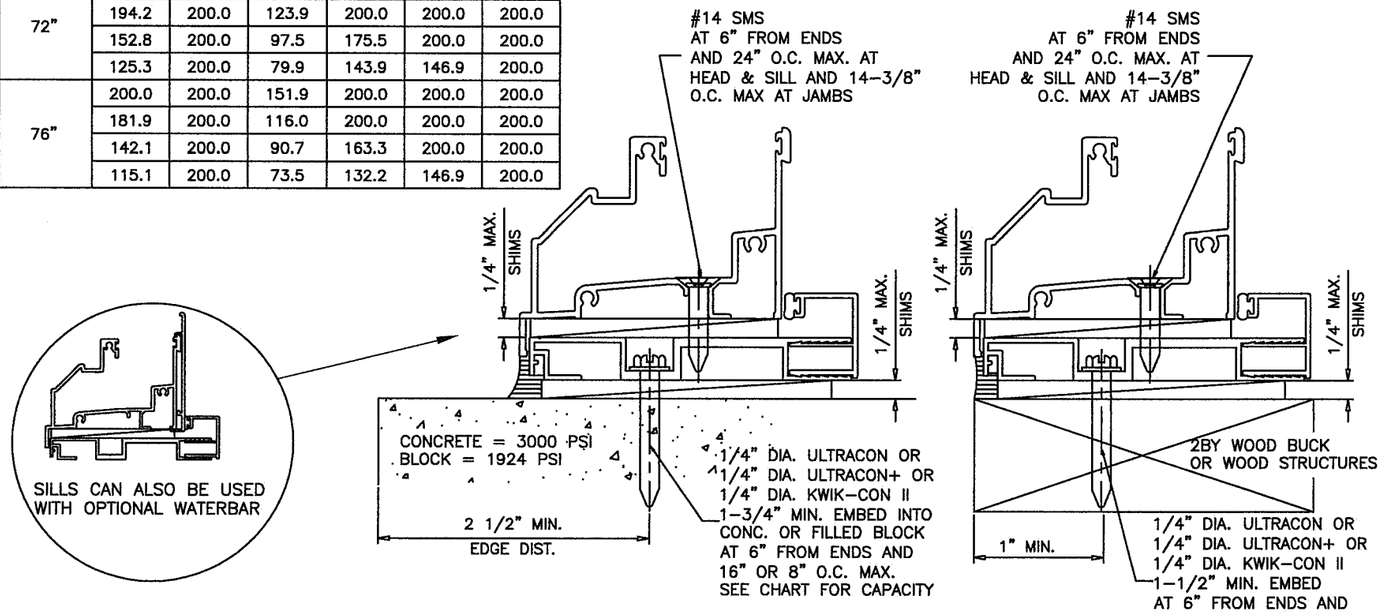
EXT.(+) & INT.(–)

WINDOW DIMS.		ANCHOR SPACING INTO CONC.		ANCHOR SPACING INTO HOLLOW BLOCK		ANCHOR SPACING INTO WOOD	
WIDTH	HEIGHT	16" O.C.	8" O.C.	16" O.C.	8" O.C.	16" O.C.	8" O.C.
19–1/8"	26"	200.0	200.0	200.0	200.0	200.0	200.0
26–1/2"		200.0	200.0	200.0	200.0	200.0	200.0
37"		200.0	200.0	185.5	200.0	200.0	200.0
53–1/8"		200.0	200.0	148.0	200.0	198.8	200.0
19–1/8"	38–3/8"	200.0	200.0	200.0	200.0	200.0	200.0
26–1/2"		200.0	200.0	173.9	200.0	200.0	200.0
37"		200.0	200.0	157.4	200.0	200.0	200.0
53–1/8"		185.8	200.0	118.5	200.0	159.2	200.0
19–1/8"	50–5/8"	200.0	200.0	196.6	200.0	200.0	200.0
26–1/2"		200.0	200.0	155.9	200.0	200.0	200.0
37"		200.0	200.0	129.9	194.8	200.0	200.0
53–1/8"		171.8	200.0	109.6	180.7	147.3	200.0
19–1/8"	63"	200.0	200.0	188.8	200.0	200.0	200.0
26–1/2"		200.0	200.0	146.4	200.0	200.0	200.0
37"		183.7	200.0	117.2	187.5	200.0	200.0
53–1/8"		156.2	200.0	99.7	159.5	146.9	200.0
19–1/8"	72"	200.0	200.0	161.6	200.0	200.0	200.0
26–1/2"		194.2	200.0	123.9	200.0	200.0	200.0
37"		152.8	200.0	97.5	175.5	200.0	200.0
53–1/8"		125.3	200.0	79.9	143.9	146.9	200.0
19–1/8"	76"	200.0	200.0	151.9	200.0	200.0	200.0
26–1/2"		181.9	200.0	116.0	200.0	200.0	200.0
37"		142.1	200.0	90.7	163.3	200.0	200.0
53–1/8"		115.1	200.0	73.5	132.2	146.9	200.0

ALUMINUM BUCK FRAMING DETAILS

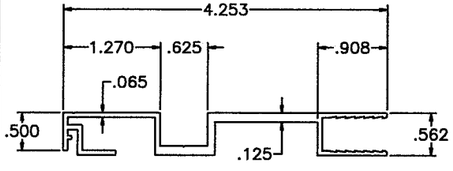
REFER TO SHEETS 3 THRU 9 FOR WINDOW CAPACITIES
USE LOWER APPLICABLE VALUES.



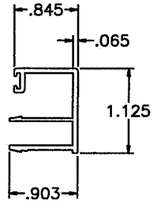


SILLS CAN ALSO BE USED WITH OPTIONAL WATERBAR

TYPICAL INSTALLATION DETAIL
ON ALL FOUR SIDES/USING ALUMINUM BUCK SYSTEM



ALUMINUM BUCK
6063–T6



OPTIONAL COVER
6063–T6

PRODUCT REVISED
as complying with the Florida Building Code
NOA–No. 20-0722.12
Expiration Date: 05/05/2025
By: Manuel Perez
Miami–Dade Product Control

Revision:
A) ADDED ULTRACON+ ANCHORS.
AK - 07/01/20

PREPARED BY A. LYNN MILLER
1070 TECHNOLOGY DRIVE
N. VENICE, FL 34275
(941) 480-1600
REGISTRATION #29296

Impact Resistant Windows & Doors WE'RE STRONGER™
CGI WINDOWS AND DOORS, INC.
3780 W 104TH STREET
HIALEAH, FL 33018
(305) 593-6590

Series	Title	Sheet	DWG No.	Drawn By	Date	Rev.
SH360 ALUM SINGLE HUNG WINDOW (SMI)	ALUMINUM BUCK	9 OF 10	SH360SM-NOA	ALAN KINNE	2/7/2020	A
360 "ESTATE"						

ANTHONY LYNN MILLER LICENSE No. 58705 STATE OF FLORIDA PROFESSIONAL ENGINEER
7/1/20
A. LYNN MILLER, P.E.
P.E.# 58705

PERFORMANCE VALUES OF ALUMINUM BUCK INSTALLATION ANCHORS

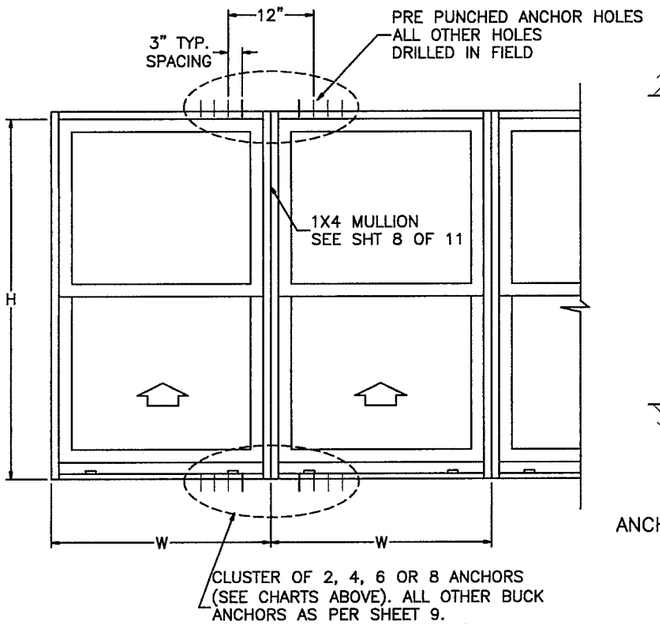
EXT.(+) & INT.(–)

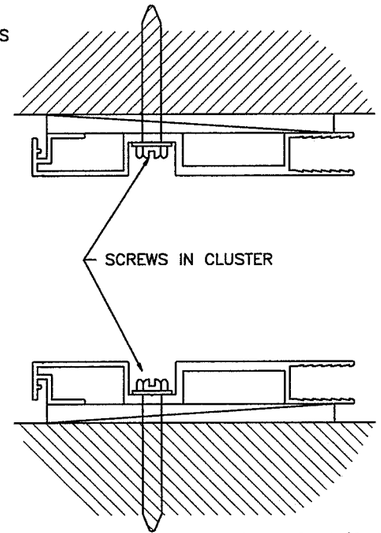
WINDOW DIMS.		ANCHORS INTO HOLLOW BLOCK				ANCHORS INTO CONC.				ANCHORS INTO WOOD			
WIDTH	HEIGHT	CLUSTER OF 2	CLUSTER OF 4	CLUSTER OF 6	CLUSTER OF 8	CLUSTER OF 2	CLUSTER OF 4	CLUSTER OF 6	CLUSTER OF 8	CLUSTER OF 2	CLUSTER OF 4	CLUSTER OF 6	CLUSTER OF 8
24"	48"	89.3	178.7	200.0	200.0	140.0	200.0	200.0	200.0	120.0	200.0	200.0	200.0
30"		78.0	155.9	200.0	200.0	122.2	200.0	200.0	200.0	104.7	200.0	200.0	200.0
32"		75.4	150.8	200.0	200.0	118.1	200.0	200.0	200.0	101.3	200.0	200.0	200.0
36"		71.5	142.9	200.0	200.0	112.0	200.0	200.0	200.0	96.0	192.0	200.0	200.0
42"		68.1	136.1	200.0	200.0	106.7	200.0	200.0	200.0	91.4	182.9	200.0	200.0
48"		67.0	134.0	200.0	200.0	105.0	200.0	200.0	200.0	90.0	180.0	200.0	200.0
54"		67.0	134.0	200.0	200.0	105.0	200.0	200.0	200.0	90.0	180.0	200.0	200.0
24"	60"	67.0	134.0	200.0	200.0	105.0	200.0	200.0	200.0	90.0	180.0	200.0	200.0
30"		57.2	114.3	171.5	200.0	89.6	179.2	200.0	200.0	76.8	153.6	200.0	200.0
32"		54.8	109.6	164.5	200.0	85.9	171.8	200.0	200.0	73.6	147.3	200.0	200.0
36"		51.0	102.1	153.1	200.0	80.0	160.0	200.0	200.0	68.6	137.1	200.0	200.0
42"		47.1	94.2	141.4	188.5	73.8	147.7	200.0	200.0	63.3	126.6	189.9	200.0
48"		44.7	89.3	134.0	178.7	70.0	140.0	200.0	200.0	60.0	120.0	180.0	200.0
54"		43.3	86.6	129.9	173.3	67.9	135.8	200.0	200.0	58.2	116.4	174.5	200.0
24"	72"	53.6	107.2	160.8	200.0	84.0	168.0	200.0	200.0	72.0	144.0	200.0	200.0
30"		45.1	90.3	135.4	180.5	70.7	141.5	200.0	200.0	60.6	121.3	181.9	200.0
32"		43.1	86.1	129.2	172.3	67.5	135.0	200.0	200.0	57.9	115.7	173.6	200.0
36"		39.7	79.4	119.1	158.8	62.2	124.4	186.7	200.0	53.3	106.7	160.0	200.0
42"		36.0	72.1	108.1	144.1	56.5	112.9	169.4	200.0	48.4	96.8	145.2	193.6
48"		33.5	67.0	100.5	134.0	52.5	105.0	157.5	200.0	45.0	90.0	135.0	180.0
54"		31.8	63.5	95.3	127.1	49.8	99.6	149.3	199.1	42.7	85.3	128.0	170.7
24"	84"	44.7	89.3	134.0	178.7	70.0	140.0	200.0	200.0	60.0	120.0	180.0	200.0
30"		37.3	74.6	111.9	149.1	58.4	116.9	175.3	200.0	50.1	100.2	150.3	200.0
32"		35.5	70.9	106.4	141.9	55.6	111.2	166.8	200.0	47.6	95.3	142.9	190.6
36"		32.5	65.0	97.5	129.9	50.9	101.8	152.7	200.0	43.6	87.3	130.9	174.5
42"		29.2	58.3	87.5	116.7	45.7	91.4	137.1	182.9	39.2	78.4	117.6	156.7
48"		26.8	53.6	80.4	107.2	42.0	84.0	126.0	168.0	36.0	72.0	108.0	144.0
54"		25.1	50.2	75.2	100.3	39.3	78.6	117.9	157.2	33.7	67.4	101.1	134.7
24"	96"	38.3	76.6	114.9	153.1	60.0	120.0	180.0	200.0	51.4	102.9	154.3	200.0
30"		31.8	63.5	95.3	127.1	49.8	99.6	149.3	199.1	42.7	85.3	128.0	170.7
32"		30.1	60.3	90.4	120.6	47.2	94.5	141.7	189.0	40.5	81.0	121.5	162.0
36"		27.5	55.0	82.5	109.9	43.1	86.2	129.2	172.3	36.9	73.8	110.8	147.7
42"		24.5	49.0	73.5	98.0	38.4	76.8	115.2	153.6	32.9	65.8	98.7	131.7
48"		22.3	44.7	67.0	89.3	35.0	70.0	105.0	140.0	30.0	60.0	90.0	120.0
54"		20.7	41.4	62.1	82.9	32.5	64.9	97.4	129.9	27.8	55.7	83.5	111.3
24"	108"	33.5	67.0	100.5	134.0	52.5	105.0	157.5	200.0	45.0	90.0	135.0	180.0
30"		27.7	55.3	83.0	110.7	43.4	86.7	130.1	173.4	37.2	74.3	111.5	148.6
32"		26.2	52.4	78.7	104.9	41.1	82.2	123.3	164.3	35.2	70.4	105.7	140.9
36"		23.8	47.6	71.5	95.3	37.3	74.7	112.0	149.3	32.0	64.0	96.0	128.0
42"		21.1	42.2	63.4	84.5	33.1	66.2	99.3	132.4	28.4	56.7	85.1	113.5
48"		19.1	38.3	57.4	76.6	30.0	60.0	90.0	120.0	25.7	51.4	77.1	102.9
24"	120"	29.8	59.6	89.3	119.1	46.7	93.3	140.0	186.7	40.0	80.0	120.0	160.0
30"		24.5	49.0	73.5	98.0	38.4	76.8	115.2	153.6	32.9	65.8	98.7	131.7
32"		23.2	46.4	69.6	92.8	36.3	72.7	109.0	145.4	31.2	62.3	93.5	124.6
36"		21.0	42.0	63.1	84.1	32.9	65.9	98.8	131.8	28.2	56.5	84.7	112.9
42"		18.6	37.1	55.7	74.3	29.1	58.2	87.3	116.4	24.9	49.9	74.8	99.7

PERFORMANCE VALUES OF ALUMINUM BUCK INSTALLATION ANCHORS

EXT.(+) & INT.(–)

WINDOW DIMS.		ANCHORS INTO HOLLOW BLOCK				ANCHORS INTO CONC.				ANCHORS INTO WOOD			
WIDTH	HEIGHT	CLUSTER OF 2	CLUSTER OF 4	CLUSTER OF 6	CLUSTER OF 8	CLUSTER OF 2	CLUSTER OF 4	CLUSTER OF 6	CLUSTER OF 8	CLUSTER OF 2	CLUSTER OF 4	CLUSTER OF 6	CLUSTER OF 8
19–1/8"	26"	200.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0
26–1/2"		200.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0
37"		200.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0
53–1/8"		200.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0	200.0
19–1/8"	38–3/8"	140.1	200.0	200.0	200.0	200.0	200.0	200.0	200.0	188.2	200.0	200.0	200.0
26–1/2"		115.9	200.0	200.0	200.0	181.7	200.0	200.0	200.0	155.7	200.0	200.0	200.0
37"		105.0	200.0	200.0	200.0	164.5	200.0	200.0	200.0	141.0	200.0	200.0	200.0
53–1/8"		104.8	200.0	200.0	200.0	164.3	200.0	200.0	200.0	140.8	200.0	200.0	200.0
19–1/8"	50–5/8"	98.3	196.6	200.0	200.0	154.0	200.0	200.0	200.0	132.0	200.0	200.0	200.0
26–1/2"		77.9	155.9	200.0	200.0	122.1	200.0	200.0	200.0	104.7	200.0	200.0	200.0
37"		64.9	129.9	194.8	200.0	101.8	200.0	200.0	200.0	87.2	174.5	200.0	200.0
53–1/8"		60.2	120.5	180.7	200.0	94.4	188.8	200.0	200.0	80.9	161.8	200.0	200.0
19–1/8"	63"	75.5	151.0	200.0	200.0	118.4	200.0	200.0	200.0	101.4	200.0	200.0	200.0
26–1/2"		58.5	117.1	175.6	200.0	91.7	183.5	200.0	200.0	78.6	157.3	200.0	200.0
37"		46.9	93.8	140.6	187.5	73.5	146.9	200.0	200.0	63.0	125.9	188.9	200.0
53–1/8"		39.9	79.7	119.6	159.5	62.5	125.0	187.5	200.0	53.6	107.1	160.7	200.0
19–1/8"	72"	64.6	129.3	193.9	200.0	101.3	200.0	200.0	200.0	86.8	173.7	200.0	200.0
26–1/2"		49.6	99.2	148.7	198.3	77.7	155.4	200.0	200.0	66.6	133.2	199.8	200.0
37"		39.0	78.0	117.0	156.0	61.1	122.2	183.3	200.0	52.4	104.8	157.1	200.0
53–1/8"		32.0	64.0	95.9	127.9	50.1	100.2	150.3	200.0	43.0	85.9	128.9	171.8
19–1/8"	76"	60.7	121.5	182.2	200.0	95.2	190.4	200.0	200.0	81.6	163.2	200.0	200.0
26–1/2"		46.4	92.8	139.2	185.7	72.7	145.5	200.0	200.0	62.3	124.7	187.0	200.0
37"		36.3	72.6	108.8	145.1	56.9	113.7	170.6	200.0	48.7	97.5	146.2	194.9
53–1/8"		29.4	58.8	88.2	117.6	46.1	92.1	138.2	184.2	39.5	79.0	118.4	157.9





ANCHORS MIN. EDGE DIST. = 2–1/2 IN.

ANCHORS AT ALUMINUM BUCK FRAMING (AT MULLION ENDS)

FOR WINDOW ANCHORING TO ALUMINUM BUCKS USE #14 SCREWS SPACED AS PER SHEETS 7 & 8.

NOTE: ALUMINUM BUCKS ARE SUPPLIED WITH CLUSTER OF 2 (1 SCREW HOLE PER SIDE) STANDARD. EXTRA HOLES MUST BE FIELD DRILLED IF REQUIRED.

PRODUCT REVISED
as complying with the Florida Building Code
NOA–No. 20-0722.12
Expiration Date: 05/05/2025
By: Manuel Perez
Miami–Dade Product Control

Revision:
A) NO CHANGES THIS SHEET.
AK - 07/01/20

PREPARED BY A. LYNN MILLER
1070 TECHNOLOGY DRIVE
N. VENICE, FL 34275
(941) 480-1600
REGISTRATION #29296

Impact Resistant Windows & Doors WERE STRONGER™
CGI WINDOWS AND DOORS, INC.
3780 W 104TH STREET
HIALEAH, FL 33018
(305) 593-6590

Rev.	Date	Drown By	DWG No.	Sheet
A	2/7/2020	ALAN KINNE	SH360SM-NOA	10 OF 10

Title: SH360 ALUM SINGLE HUNG WINDOW (SMI)
Desc.: ALUMINUM BUCKS
Series: 360 "ESTATE"

ANTHONY LYNN MILLER LICENSE No. 58705 STATE OF FLORIDA PROFESSIONAL ENGINEER
7/1/20
A. LYNN MILLER, P.E.
P.E.# 58705