



MIAMI-DADE COUNTY
BUILDING CODE COMPLIANCE OFFICE (BCCO)
PRODUCT CONTROL DIVISION

MIAMI-DADE COUNTY, FLORIDA
METRO-DADE FLAGLER BUILDING
140 WEST FLAGLER STREET, SUITE 1603
MIAMI, FLORIDA 33130-1563
(305) 375-2901 FAX (305) 375-2908

NOTICE OF ACCEPTANCE (NOA)

C. P. Loewen Enterprises
77 PTH, 52 West, box, 2260
Steinbach, Manitoba, Canada R5G 1B2

SCOPE:

This NOA is being issued under the applicable rules and regulations governing the use of construction materials. The documentation submitted has been reviewed by Miami-Dade County Product Control Division and accepted by the Board of Rules and Appeals (BORA) 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 Division (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. BORA reserves the right to revoke this acceptance, if it is determined by Miami-Dade County Product Control Division 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: Aluminum Clad Wood Awning Window - Impact

APPROVAL DOCUMENT: Drawing No. 1253, titled "Aluminum Clad Wood Impact Awning Window", sheets 1 through 4 of 4, dated 10/20/03, prepared by W.W. Schaefer Engineering & Consulting, P.A., signed and sealed by Warren W. Schaefer, P.E., bearing the Miami-Dade County Product Control Approval stamp with the Notice of Acceptance number and approval date by the Miami-Dade County Product Control Division.

MISSILE IMPACT RATING: Large and Small Missile Impact

LABELING: Each unit shall bear a permanent label with the manufacturer's name or logo, city, state 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 consists of this page 1 and evidence page E-1, as well as approval document mentioned above. The submitted documentation was reviewed by **Manuel Perez, P.E.**



NOA No 05-0103.02
Expiration Date: March 3, 2010
Approval Date: March 3, 2005
Page 1

C.P. Loewen Enterprises

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

A. DRAWINGS

1. Manufacturer's die drawings and sections.
2. Drawing No. **1253**, titled "Aluminum Clad Wood Impact Awning Window", sheets 1 through 4 of 4, dated 10/20/03, prepared by W.W. Schaefer Engineering & Consulting, P.A., signed and sealed by Warren W. Schaefer, 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 20294
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 and TAS 202-94
along with marked-up drawings and installation diagram of an aluminum clad window, prepared by ETC Laboratories, Test Report No. **ETC-04-959-15410.01**, dated 08/04-06/04, signed and sealed by Wendell W. Haney, P.E.

C. CALCULATIONS

1. Anchor Calculations, ASTM- E 1300, and structural analysis, prepared by W.W. Schaefer Engineering & Consulting, P.A., dated 10/24/03, signed and sealed by Warren W. Schaefer, P.E.

D. QUALITY ASSURANCE

1. Miami Dade Building Code Compliance Office (BCCO).

E. MATERIAL CERTIFICATIONS

1. Notice of Acceptance No. **03-0417.01** issued to Cardinal LG. for their "Laminated Glass Cardinal Sea-Storm Type B" dated 05/15/03, expiring on 12/30/07.

F. STATEMENTS

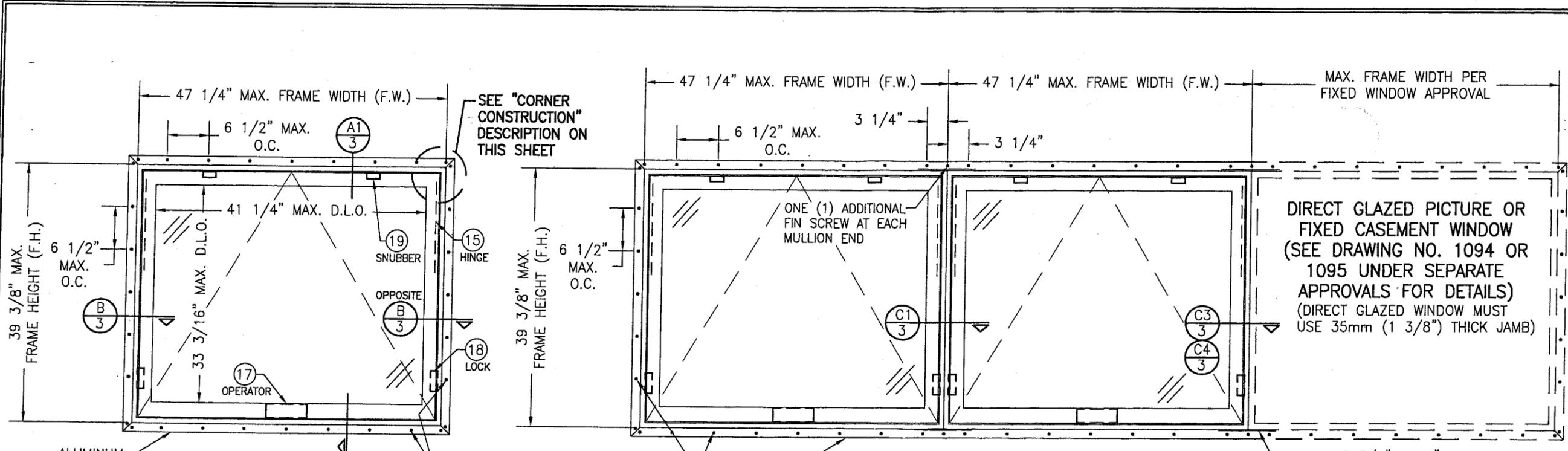
1. Statement letter of conformance, dated 12/20/04, signed and sealed by Warren W. Schaefer, P.E.
2. Statement letter of no financial interest dated 12/20/04, signed and sealed by Warren W. Schaefer, P.E.
3. Letter from Loewen dated 12/03/04, designating Warren W. Schaefer of W.W. Schaefer Engineering & Consulting, as the technical contact for this file.

G. OTHER

1. Letter from the consultant stating that the product is in compliance with the Florida Building Code (FBC)


Manuel Perez, P.E.
Product Control Examiner
NOA No 05-0103.02

Expiration Date: March 3, 2010
Approval Date: March 3, 2005



**EXTERIOR ELEVATION
AWNING WINDOW**
SCALE: 3/4" = 1'-0"

FIN MOUNT CONDITION SHOWN. SEE OPTIONAL SHEAR SCREW & DIRECT MOUNT DETAILS ON SHEET 4 FOR ALTERNATE INSTALLATION METHODS

TYP. FIN SCREW AS SHOWN WITHIN 2" OF CORNERS & 6 1/2" MAX. O.C. SEE "FRAME ANCHOR REQUIREMENTS TABLE" ON THIS SHEET FOR SCREW REQUIREMENTS.

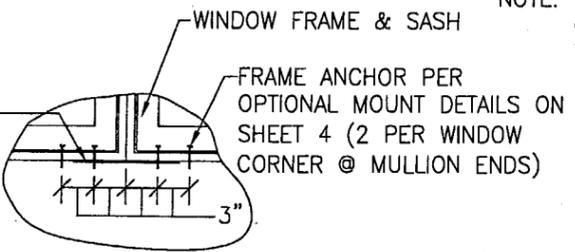
**EXTERIOR ELEVATION
MULTIPLE WINDOWS SIDE BY SIDE**
SCALE: 3/4" = 1'-0"

SEE SINGLE WINDOW ELEVATION FOR DETAIL NOT SHOWN

NOTE: UP TO 4 WINDOWS CONSISTING OF ANY COMBINATION OF FIXED OR OPERABLE MAY BE PLACED IN ONE OPENING PROVIDING THE OPENING IS DESIGNED TO SUPPORT THE WINDOWS.

FIN MOUNT CONDITION SHOWN. SEE OPTIONAL SHEAR SCREW & DIRECT MOUNT DETAILS ON SHEET 4 FOR ALTERNATE INSTALLATION METHODS

2 3/4" X 10" X 26 GA. PLATE ACROSS MULLION ENDS: SECURE TO JAMBS WITH MIN. (4) 1/2" X 16 GA. STAPLES EACH SIDE OF MULLION (TYP. ALL MULLIONS)



**TYP. VERTICAL MULLION END
DETAIL WHEN SHEAR SCREW OR
DIRECT MOUNT CONDITION EXISTS**

FRAME ANCHOR REQUIREMENTS TABLE			
FIN SCREWS			
OPENING TYPE (SUBSTRATE)	JAMB TO OPENING FASTENER TYPE	MINIMUM EMBED	MINIMUM EDGE DIST.
2X_ WOOD FRAME OR BUCK	NO. 8 X 1 1/2" SMS SCREWS	1 3/8"	1/2"
SHEAR SCREWS			
2X_ WOOD FRAME OR BUCK	NO. 10 SMS SCREW	1 1/4"	3/4"
CMU/CONCRETE	(1) 3/16" CONCRETE SCREW	1 1/4"	2"

(1) CONCRETE SCREWS SHALL BE ELCO OR ITW RAMSET/RED HEAD TAPCONS, HILTI KWIK-CON II OR POWERS RAWL TAPPER (HARDENED STEEL OR S.S.).

* ANCHOR NOTE: FRAME MAY BE EITHER DIRECT MOUNTED TO THE OPENING, MOUNTED ONTO A CONTINUOUS WOOD SPACER, OR ANCHORED TO A MIN. 2x4 NO. 3 SOUTHERN PINE WOOD BUCK. WHEN ANCHORED TO A 2x4 BUCK, NO. 10 SHEAR SCREWS OR FIN SCREWS SHALL BE USED. WHEN DIRECT MOUNTED OR MOUNTED WITH SPACER, 3/16" CONCRETE SCREWS SHALL BE USED. SEE "ANCHOR REQUIREMENTS TABLE" FOR EMBED REQUIREMENTS.

ALLOWABLE DESIGN LOAD		
WINDOW WIDTH	POSITIVE	NEGATIVE
36" AND LESS	70 PSF	80 PSF
OVER 36"	65 PSF	70 PSF

SNUBBER REQUIREMENTS	
WINDOW WIDTH	NUMBER OF SNUBBERS
24" & LESS	1
GREATER THAN 24"	2

DIRECT GLAZED PICTURE OR FIXED CASEMENT WINDOW (SEE DRAWING NO. 1094 OR 1095 UNDER SEPARATE APPROVALS FOR DETAILS) (DIRECT GLAZED WINDOW MUST USE 35mm (1 3/8") THICK JAMB)

2 3/4" X 10" X 26 GA. PLATE ACROSS MULLION ENDS: SECURE TO JAMBS WITH MIN. (4) 1/2" X 16 GA. STAPLES EACH SIDE OF MULLION (TYP. ALL MULLIONS)

GENERAL NOTES

1. THESE WINDOW SYSTEMS HAVE BEEN TESTED, ANALYZED AND APPROVED FOR DESIGN PRESSURES NOT TO EXCEED THOSE SHOWN IN THE "ALLOWABLE DESIGN LOADS" TABLE(S).
2. BUCKING, OPENINGS & BUCKING FASTENERS MUST BE PROPERLY DESIGNED & INSTALLED TO TRANSFER WIND LOADS TO THE STRUCTURE.
3. ALL HARDWARE & FASTENERS SHALL BE IN ACCORDANCE WITH THESE DRAWINGS & MAY NOT VARY UNLESS SPECIFICALLY MENTIONED ON THE DRAWINGS.
4. THE DETAILS & SPECIFICATIONS SHOWN HEREIN REPRESENT THE PRODUCTS TESTED & PROPOSED FOR WATER, AIR, IMPACT, CYCLIC & UNIFORM STATIC AIR PRESSURE TESTING IN CONFORMANCE WITH FLORIDA BUILDING CODE PROTOCOLS TAS-201, 202 & 203 FOR LARGE MISSILE IMPACT WINDOWS.
5. THESE WINDOW SYSTEMS HAVE BEEN DESIGNED IN ACCORDANCE WITH THE FLORIDA BUILDING CODE (FBC) FOR HIGH VELOCITY HURRICANE ZONES (HVHZ).
6. IMPACT SHUTTERS ARE NOT REQUIRED WITH THESE WINDOWS.
7. ALL ANCHORS SHALL BE INSTALLED AS SPECIFIED ON THESE DRAWINGS. SPECIFIED EMBEDMENT TO BASE MATERIAL SHALL BE BEYOND WALL FINISH OR STUCCO.

CORNER CONSTRUCTION:

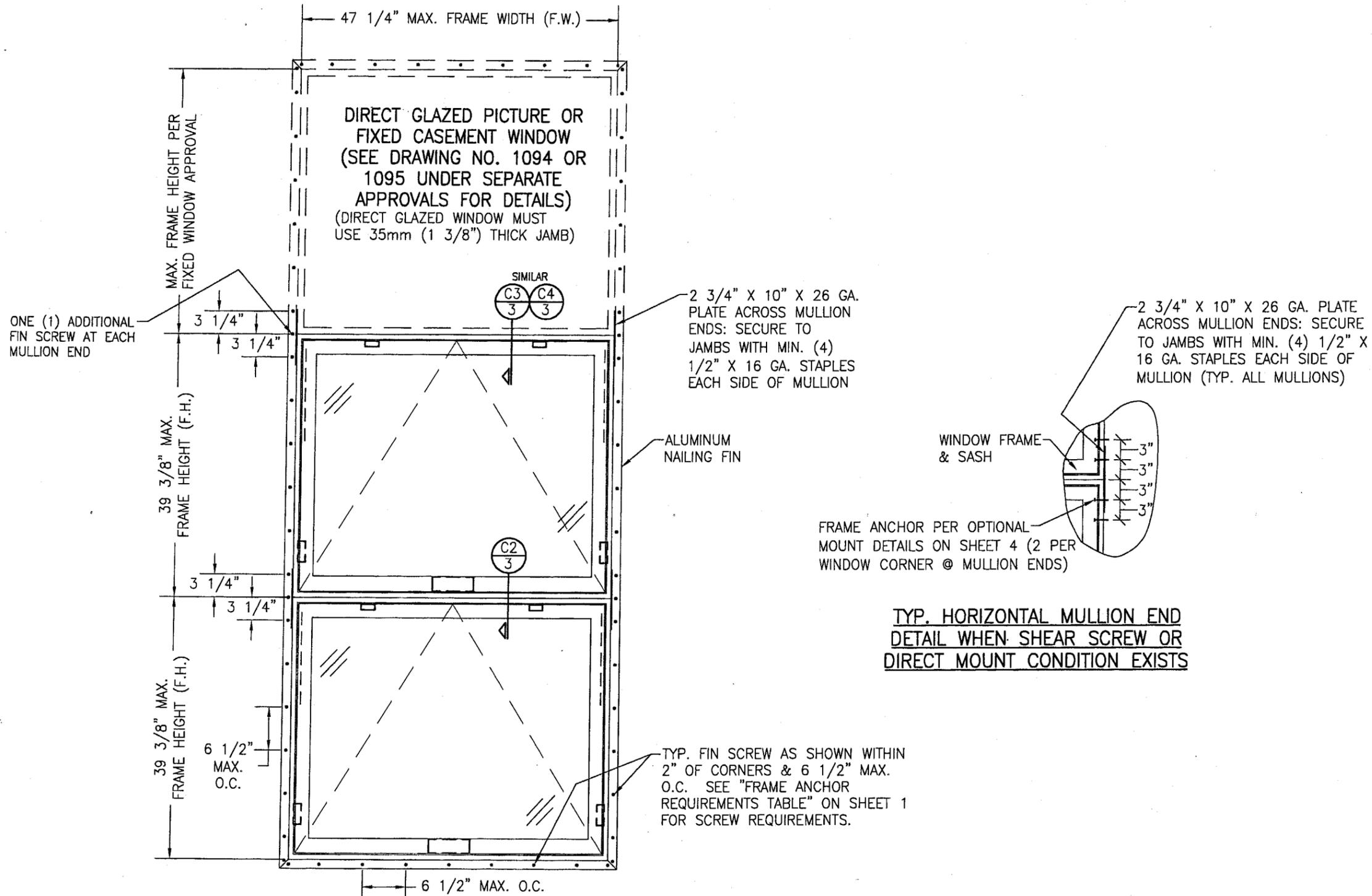
SASH: WOOD MEMBERS ARE DOUBLE ENDED FOR TENON JOINT AND MECHANICALLY FASTENED USING TWO (2) 16 GA. 1 1/4" FINISH NAILS PER CORNER. THE SASH CLADDING IS SNAPPED ONTO MEMBER AND FASTENED USING 16 GA. X 3/4" BRAD NAILS 1" FROM CORNERS & 6" O.C. THEN SEALED WITH TREMFLEX 834.

JAMB: WOOD MEMBERS ARE COPED, SEALED, BUTTED TOGETHER AND MECHANICALLY FASTENED USING THREE (3) 1 3/4" 16 GA. STAPLES HORIZONTALLY AND TWO (2) 1 3/4" 16 GA. STAPLES VERTICALLY. TREMCO DYMOMIC FC IS APPLIED TO THE SEAM PRIOR TO JOINING THE WOOD MEMBERS. THE CLAD IS MITERED, GASKETED WITH A CLOSED CELL FOAM 1/16" THICK THEN BUTTED TOGETHER AND MECHANICALLY FASTENED USING ONE (1) #6 X 1 1/2" S.M.S. SCREW PER CORNER. TREMFLEX 834 IS THEN APPLIED TO THE CLAD SEAM.

DRAWN BY: K.P.S.	CHECKED BY: W.W.S.
PLOT: 1=16	DATE: 10/20/03
DATE	BY
REVISION DESCRIPTION	NO.
DRAWING TITLE ALUMINUM CLAD WOOD IMPACT AWNING WINDOW	
CONSULTANTS W. W. SCHAEFER ENGINEERING & CONSULTING, P.A.	MANUFACTURER C.P. LOEWEN ENTERPRISES
8895 N. MILITARY TRAIL, SUITE C-204 PALM BEACH GARDENS, FL 33410 PHONE: 561-775-4902 FAX: 561-775-4903	77 P.T.H. 52 WEST, BOX 2260 STEINBACH, MB CANADA ROA 2A0 204-326-6446
CERTIFICATION FEB 14 2005	WARREN W. SCHAEFER, P.E. P.E. NO. 44135
DRAWING NO. 1253	REV.
SHEET NO. 1	OF 4

Approved as complying with the Florida Building Code
Date **MARCH 3 2005**
NOA# **05-0103.02**
Miami Dade Product Control Division
By *[Signature]*

DRAWN BY: K.P.S.	CHECKED BY: W.W.S.
PLOT: 1=16	DATE: 10/20/03
NO.	DATE
REVISION DESCRIPTION	BY



TYP. HORIZONTAL MULLION END DETAIL WHEN SHEAR SCREW OR DIRECT MOUNT CONDITION EXISTS

**EXTERIOR ELEVATION
MULTIPLE WINDOWS STACKED VERTICALLY**

SCALE: 3/4"=1'-0"
SEE SINGLE WINDOW ELEVATION FOR DETAIL NOT SHOWN
NOTE: UP TO 4 WINDOWS CONSISTING OF ANY COMBINATION OF FIXED OR OPERABLE MAY BE PLACED IN ONE OPENING PROVIDING THE OPENING IS DESIGNED TO SUPPORT THE WINDOWS.

FIN MOUNT CONDITION SHOWN. SEE OPTIONAL SHEAR SCREW & DIRECT MOUNT DETAILS ON SHEET 4 FOR ALTERNATE INSTALLATION METHODS

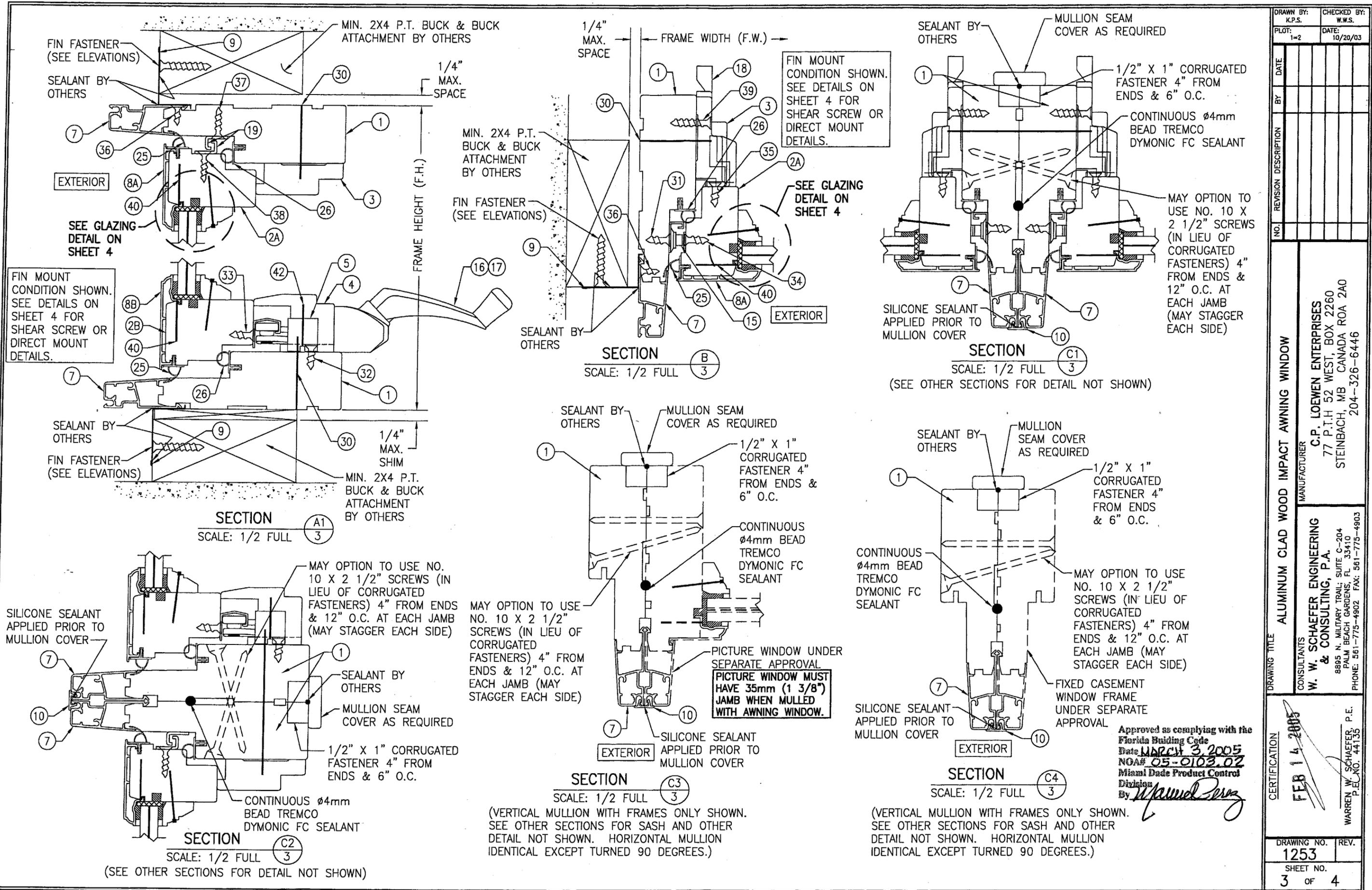
Approved as complying with the Florida Building Code
Date MARCH 3, 2005
NOA# 05-0103.02
Miami Dade Product Control
Division
By Warren W. Schaeffer

DRAWING TITLE
ALUMINUM CLAD WOOD IMPACT AWNING WINDOW

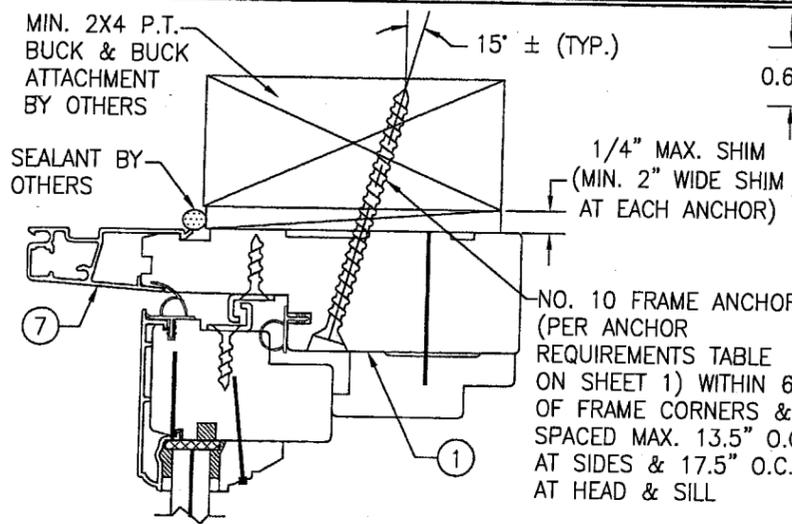
CONSULTANTS
W. W. SCHAEFFER ENGINEERING & CONSULTING, P.A.
8895 N. MILITARY TRAIL, SUITE C-204
PALM BEACH GARDENS, FL 33410
PHONE: 561-775-4902 FAX: 561-775-4903

MANUFACTURER
C.P. LOEWEN ENTERPRISES
77 P.T.H. 52 WEST, BOX 2260
STEINBACH, MB CANADA ROA 2A0
204-326-6446

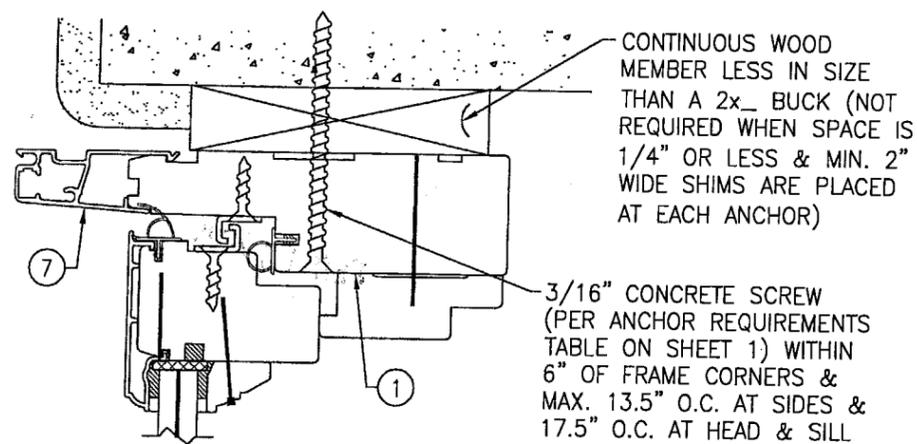
CERTIFICATION FEB 14 2005	WARREN W. SCHAEFFER, P.E. (P.E. NO. 44135)
DRAWING NO. 1253	REV.
SHEET NO. 2	OF 4



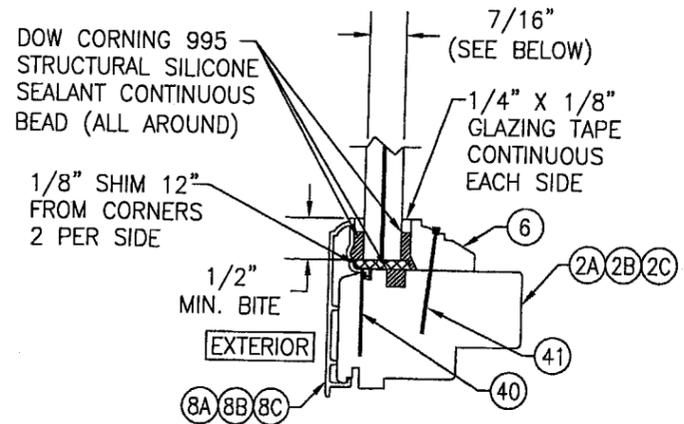
DRAWN BY: K.P.S.	CHECKED BY: W.W.S.
	DATE: 10/20/03
PLOT: 1=2	
NO.	REVISION DESCRIPTION
DATE	BY
DRAWING TITLE ALUMINUM CLAD WOOD IMPACT AWNING WINDOW	
MANUFACTURER C.P. LOEWEN ENTERPRISES 77 P.T.H 52 WEST, BOX 2260 STEINBACH, MB CANADA ROA 2A0 204-326-6446	
CONSULTANTS W. W. SCHAEFFER ENGINEERING & CONSULTING, P.A. 8895 N. MILITARY TRAIL, SUITE C-204 PALM BEACH GARDENS, FL 33410 PHONE: 561-775-4902 FAX: 561-775-4903	
CERTIFICATION FEB 14 2005	By <i>Warren W. Schaeffer</i>
	Approved as complying with the Florida Building Code Date MARCH 3 2005 NOA# 05-0103.02 Miami Dade Product Control Division
DRAWING NO. 1253	REV.
SHEET NO. 3	OF 4



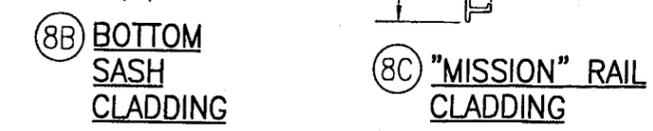
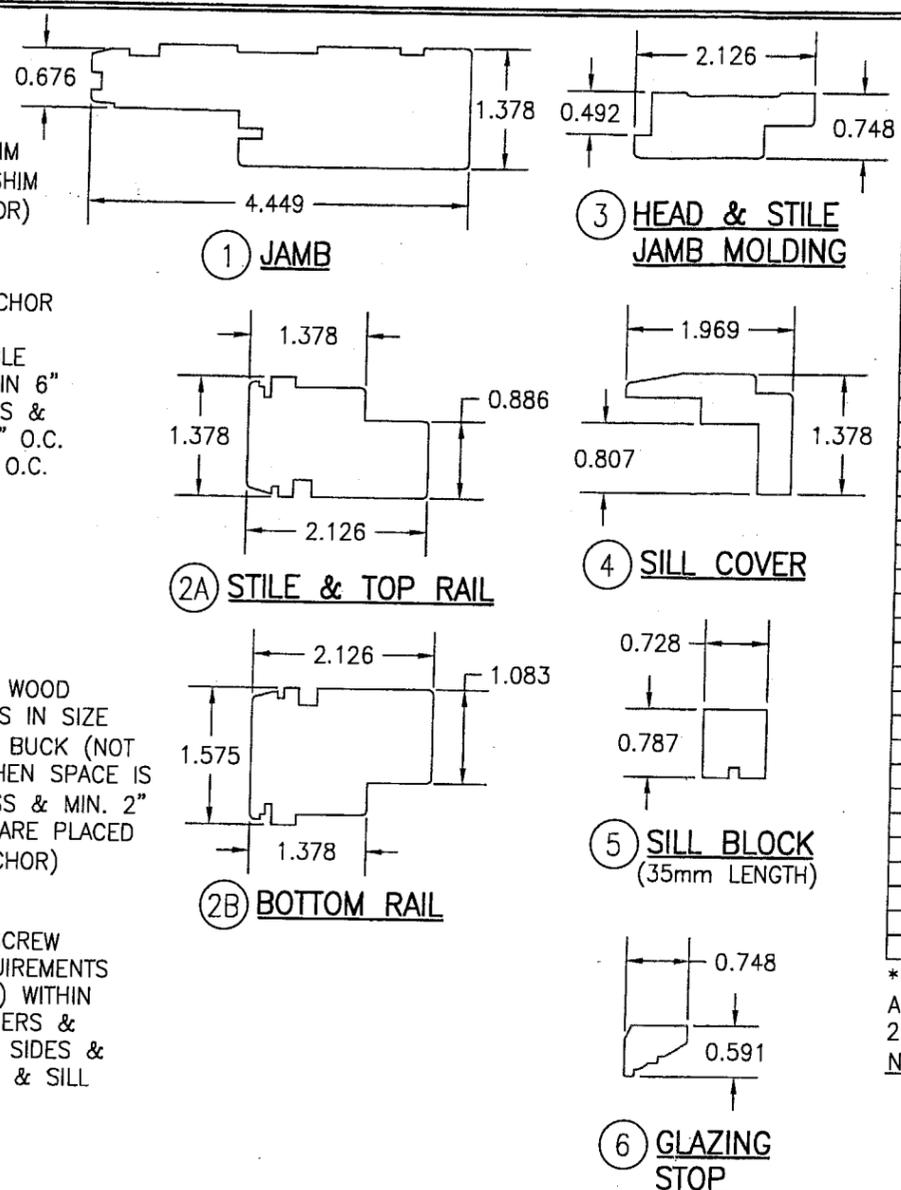
OPTIONAL SHEAR SCREW MOUNT DETAIL
 FOR DETAIL NOT SHOWN, SEE OTHER SECTIONS
 (HEAD SECTION SHOWN, SIDE AND SILL SIMILAR)



OPTIONAL DIRECT MOUNT DETAIL
 FOR DETAIL NOT SHOWN, SEE OTHER SECTIONS
 (HEAD SECTION SHOWN, SIDE AND SILL SIMILAR)



GLAZING DETAIL
 7/16" CARDINAL SEASTORM TYPE "B"
 LAMINATED GLASS (3/16" AN/0.015
 PVB/0.007 PET/0.075 PVB/3/16" AN)



ITEM #	ITEM DESCRIPTION	MANUFACTURER/NOTES
PARTS		
1	JAMB	* WOOD
2A	STILE & TOP RAIL	* WOOD
2B	BOTTOM RAIL	* WOOD
3	HEAD & STILE JAMB MOLDING	* WOOD
4	SILL COVER	* WOOD
5	SILL BLOCK	* WOOD (2 PER SILL)
6	GLAZING STOP	* WOOD
7	JAMB CLADDING	6060-T5 ALUMINUM
8A	SASH CLADDING	6060-T5 ALUMINUM
8B	BOTTOM SASH CLADDING	6060-T5 ALUMINUM
8C	"MISSION" RAIL CLADDING	6060-T5 ALUMINUM
9	NAILING FIN	STEEL (fy = 50 ksi MIN.)
10	EXTERIOR MULLION COVER	6060-T5 ALUMINUM
HARDWARE		
15	10" SCISSOR HINGE	TRUTH HW: #13.17
16	OPERATOR	TRUTH MAXIM
17	OPERATOR	TRUTH ENTRYGARD
18	HOME GARD LOCK & KEEPER	TRUTH LOCK: #16.52; KEEPER: #40902
19	SNUBBER	TRUTH HW: #21642-92
SEALS AND SEALANTS		
25	SASH WEATHER STRIP (VINYL)	INTEK #50345
26	FRAME WEATHERSTRIP (VINYL)	INTEK #30508A
MISC. FASTENERS		
30	1 3/4" 16 GA. STAPLE	6" FROM CORNER & 6" O.C.
31	NO. 7 X 3/4" SCREW	4 PER HINGE INTO JAMB
32	NO. 7 X 3/4" SCREW	3 PER OPERATOR TRACK
33	NO. 7 X 3/4" SCREW	2 PER OPERATOR GUIDE BRACKET
34	NO. 7 X 3/4" SCREW	4 PER HINGE INTO SASH
35	NO. 7 X 3/4" SCREW	2 PER LOCK/KEEPER
36	NO. 7 X 1/2" SCREW (NAIL FIN TO JAMB)	1" FROM CORNER & 6" O.C.
37	NO. 6 X 3/4" SCREW	2 PER SNUBBER TO JAMB
38	NO. 6 X 3/4" SCREW	2 PER SNUBBER TO SASH
39	NO. 6 X 1" SCREW	AS REQ'D FOR MULTIPOINT LOCK
40	18 GA. X 3/4" BRAD	1" FROM CORNERS & 6" O.C.
41	16 GA. 1 1/4" FINISH NAIL	1" FROM CORNERS & 6" O.C.
42	1" BRAD	1 PER BLOCK

* WOOD USED WITH TEST UNITS WAS GRADE 2 NORTHERN DOUGLAS FIR.
 ALTERNATE WOOD SPECIES TO BE APPLICABLE WITH THESE WINDOWS IS MIN. GRADE 2 MAHOGANY, OAK, CHERRY, MAPLE & CYPRUS.
 NOTE: ALL WOOD IS RECEIVED BY LOEWEN WINDOWS AS GRADE 2, BUT IS MACHINED BY LOEWEN TO A SELECT GRADE USE.

DRAWN BY: K.P.S.		CHECKED BY: W.W.S.	
PLOT: 1-2		DATE: 10/20/03	
NO.	REVISION DESCRIPTION	BY	DATE
DRAWING TITLE			
ALUMINUM CLAD WOOD IMPACT AWNING WINDOW			
CONSULTANTS		MANUFACTURER	
W. W. SCHAEFER ENGINEERING & CONSULTING, P.A.		C.P. LOEWEN ENTERPRISES	
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DRAWING NO. 1253		REV.	
SHEET NO. 4 OF 4			