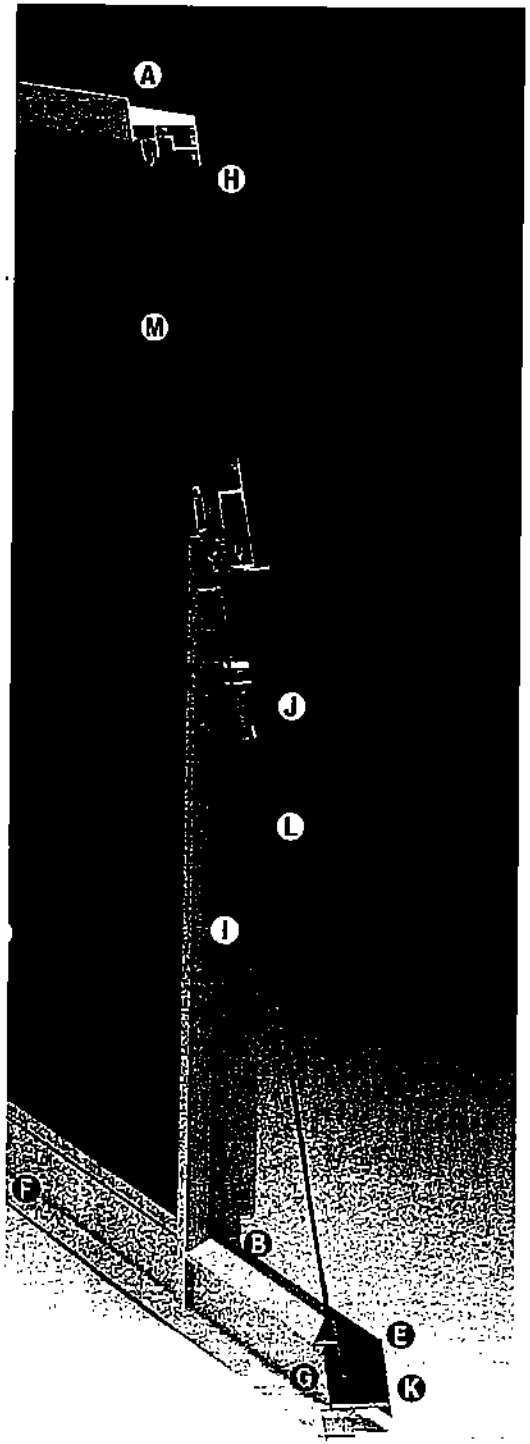
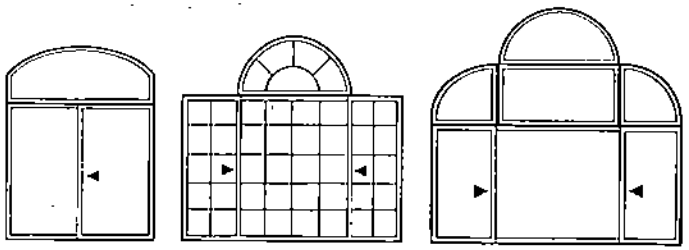


Create Window Combinations

NuAir's mulling component system enables you to take advantage of our product versatility to create exciting window combinations. NuAir will provide the necessary product information to your architect or engineer so they are able to determine the proper calculations to meet current building codes and safety requirements.

Here are some examples using Horizontal Roller Windows:

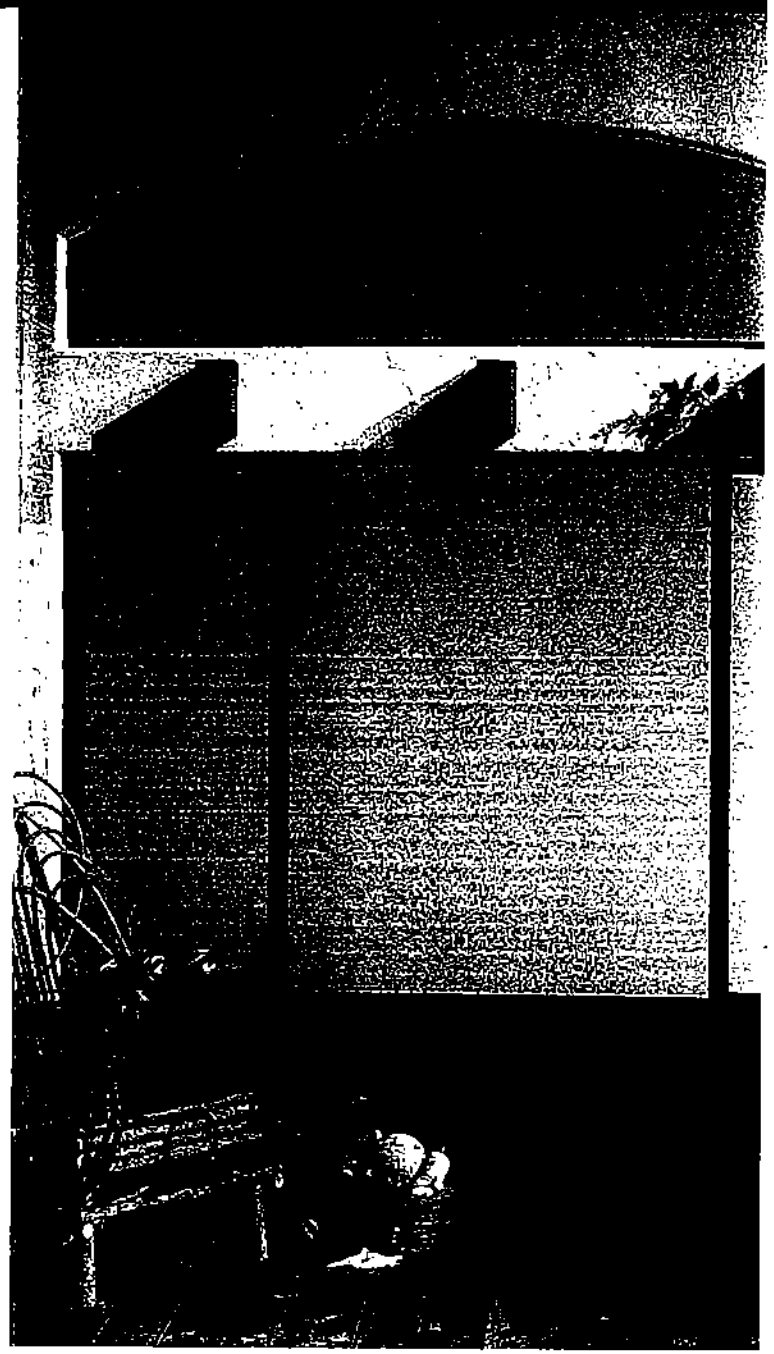


WARRANTY

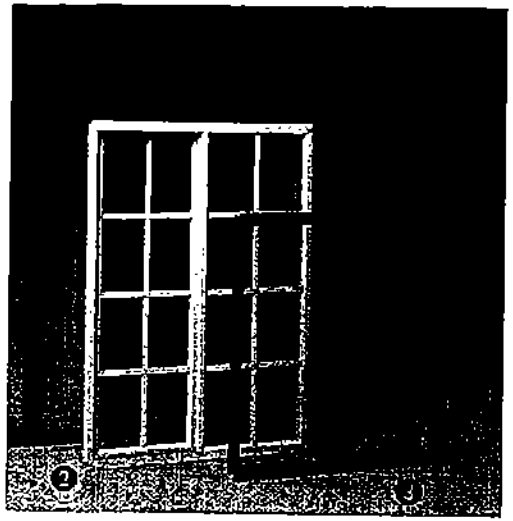
NuAir products carry a limited warranty with details issued upon purchase. The gold label on each NuAir product indicates the product purchased has been tested and certified to meet or exceed the voluntary performance standards for AAMA.

Detailed specifications, price lists, rough opening sizes, test data and manufacturer installation instructions are available upon request.

DISTRIBUTOR



Gliding Across The Scene



outhern homes, the Horizontal Roller Window presents wide reezes by gliding open with fingertip ease. Used in i fixed windows and innovative muntin systems, the is a flexible "moving picture" for tropical living.
l Roller 3 - NuAir combines a fixed picture window view ting doors on both sides for ventilation.
ite Configuration - Create a traditional look with exterior for maintenance-free energy efficiency, insulated muntins.
lorizontal Roller - Available in many standard sizes.

oller Features

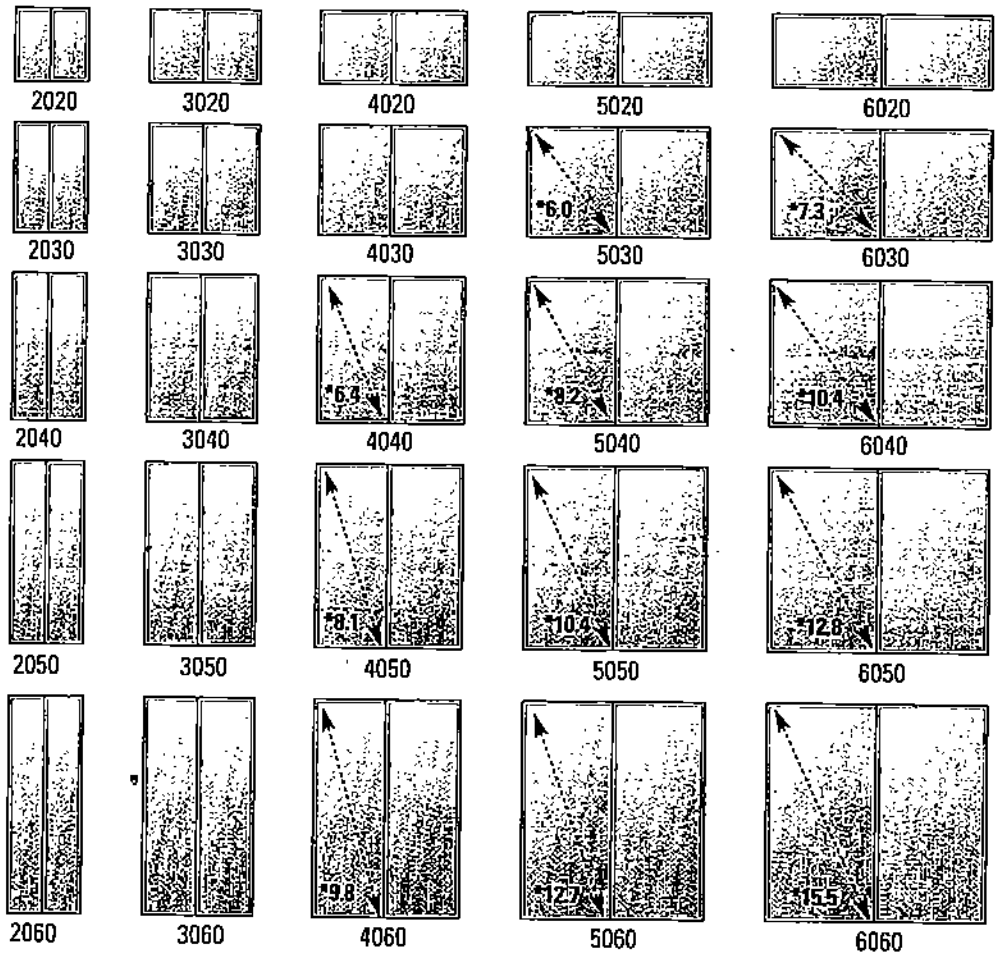
in rugged 6063 T5 aluminum alloy; flange frame is for easy installation.
resistant stainless steel adjustable wheels and axles provide ingertip operation; injection molded nylon wheel housing ding motion.
ing wear guides allow no metal-to-metal contact for lifetime, -free operation.
l at critical joints ensures against water infiltration.
ards against water infiltration.
provide excellent water drainage of sill.
inum glazing bead trims out exterior glass for beautiful

, leg allows for many glass options.
eter weatherstripping provides a tight seal for energy nd weather protection.
g meeting rail design along with a built-in keeper and sweep le a tight fit and added protection against forced entry.
provides quietly smooth gliding.
sliding door and track for easy cleaning from the inside.
en with ultra-fine mesh snaps out for easy cleaning.

to be mulled to other NuAir window products.

Buck/Inside Dimensions	24	36	48	60	72
Masonry Rough Opening - 1/2" Flange	25 3/4	37 3/4	49 3/4	61 3/4	73 3/4
Wood Frame Rough Opening - Fin	24 1/4	36 1/4	48 1/4	60 1/4	72 1/4
Screen Size	11 1/8	17 1/8	23 1/8	29 1/8	35 1/8
Fixed Glass	11	17	23	29	35
Door Glass	9	15	21	27	33
Egress			20 3/4	26 3/4	32 3/4

24	25	24 1/4	21 1/8	21	20 1/8
36	37	36 1/4	33 1/8	33	32 1/8
48	49	48 1/4	45 1/8	45	44 1/8
60	61	60 1/4	57 1/8	57	56 1/8
72	73	72 1/4	69 1/8	69	68 1/8



Stack shown is XO style, viewed exterior to interior. O Panel does not move.
* Indicates square foot measurement with door open.
Life Safety Egress Requirements-min. 5.7 sq. ft. clear opening.

Horizontal Roller Windows are also available in Commodity and Custom sizes with a wide variety of options, styles, glazing and glass choices.

Non-Impact, 900 Series Horizontal Roller Window Installation Details for Masonry Applications (for use in Wind Zones of 150 MPH or less per Florida Building Code 2001)*

Buckstrips must be set in a bead of sealant. The exterior joint between the buckstrip and masonry must also be sealed. Buckstrips shall run the entire length of the rough opening. A buckstrip is not necessary at the sill if it is pre-cast. Buckstrips should be pressure-treated yellow pine, spruce or comparable lumber. Window fasteners may be installed on either the interior or exterior side.

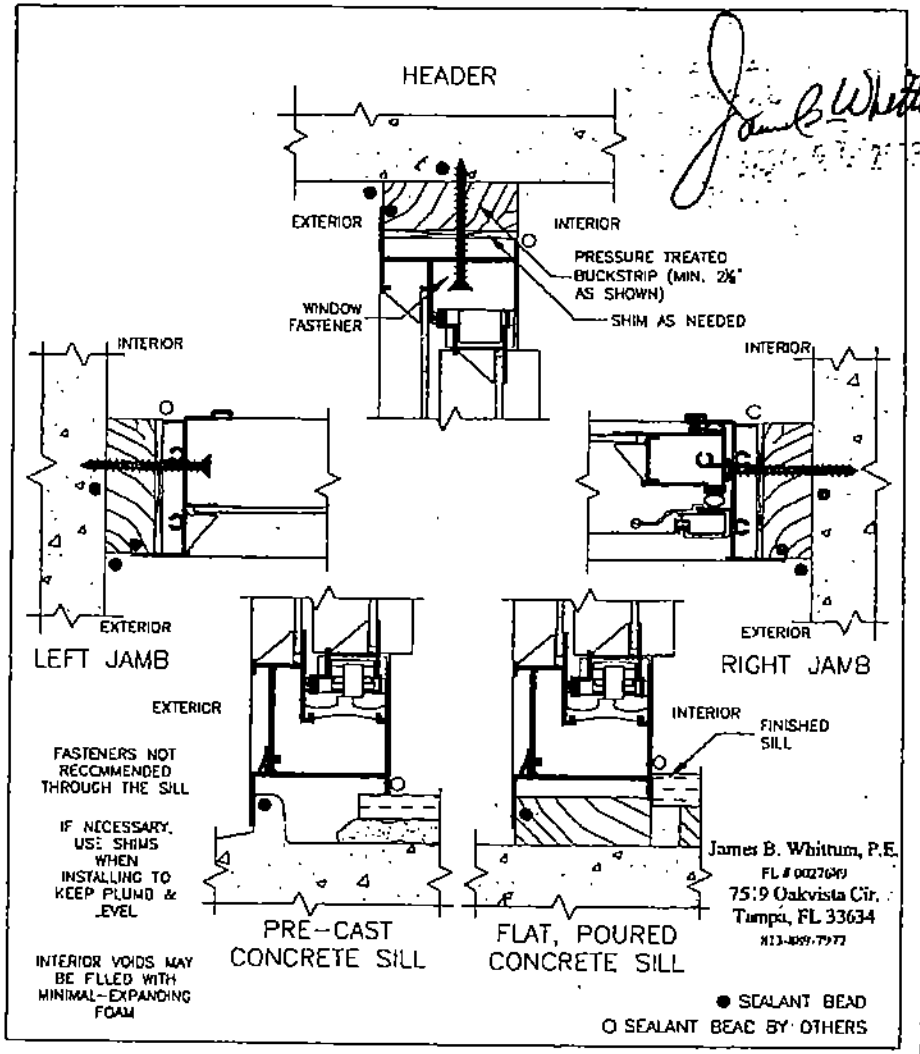
If using under 1-1/2" thick buckstrips:

Installation fasteners should be minimum 3/16" x 2-1/4" masonry screws, installed through the window and buckstrip, into the masonry. Window may be shimmed, as needed, provided a minimum screw embedment of 1-1/4" is maintained in the masonry. Fasteners should be located at a maximum of 4" from each corner and a maximum of 18" on center or use the manufacturer's pre-punched installation holes. It is recommended that fasteners not be installed through the sill of the window. The actual size of the buckstrips should be no less than 1/2" x 2-1/8".

If using 1-1/2" thick or greater buckstrips (not detailed):

Installation fasteners should be minimum #10 x 1-1/2" wood screws, installed through the window into the buckstrip. Window may be shimmed, as needed, provided a minimum screw embedment of 1-1/4" is maintained in the buckstrip. Fasteners should be located at a maximum of 4" from each corner and a maximum of 18" on center or use the manufacturer's pre-punched installation holes. It is recommended that fasteners not be installed through the sill of the window. The actual size of the buckstrip should be no less than 1-1/2" x 2-1/8" and should be installed using minimum 3/16" x 2-3/4" masonry screws to maintain the 1-1/4" embedment and a maximum of 18" on center.

Note: For minimum masonry anchoring based on design pressure, see "Alternate Masonry Installation Fastening Methods for Horizontal Roller Windows" drawing.



*The product depicted above is intended for use on typical construction. The use of additional flashing, vapor barriers, fasteners, etc may be specified by the project's design professional. Basic wind speed alone is not sufficient to determine the required design pressure (DP). The DP must be calculated in accordance with ASCE 7-98 by a design professional that is familiar with the project design and location, as specified in the 2001 FBC. DP comparative analysis charts and AAMA-101 compliant test reports are available for all NuAir manufactured products. Please consult your local building codes for exact requirements.

AMERICAN ARCHITECTURAL MANUFACTURERS ASSOCIATION MEMBER

Windows and Doors NUAIR

813/885-1654 - 800/282-6627 · www.NuAir.com · 8105 Anderson Road, P.O. Box 15436, Tampa, Florida 33684

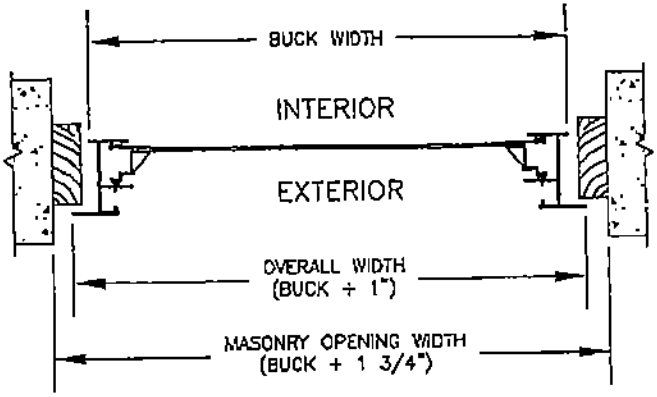
Frame Style Measurements

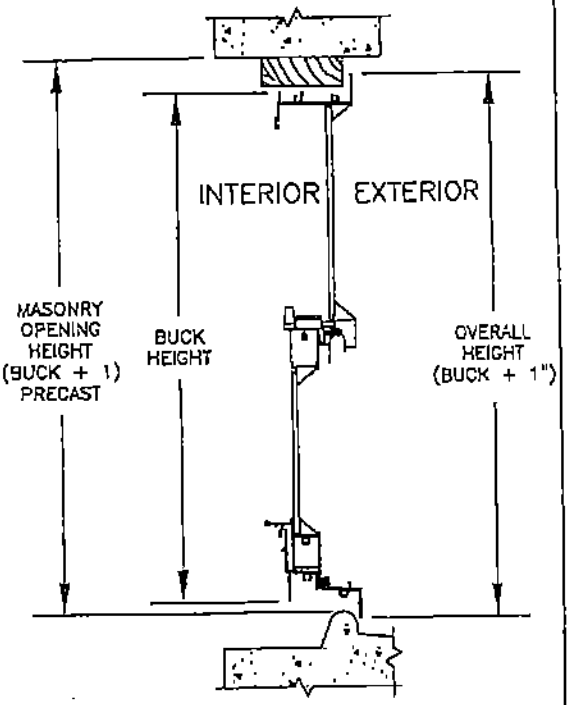
NUAIR

813/885-1654 • 800/282-6627 • www.NuAir.com • 8105 Anderson Road, P.O. Box 15436, Tampa, Florida 33684

FLANGE WINDOWS

(MASONRY CONSTRUCTION)



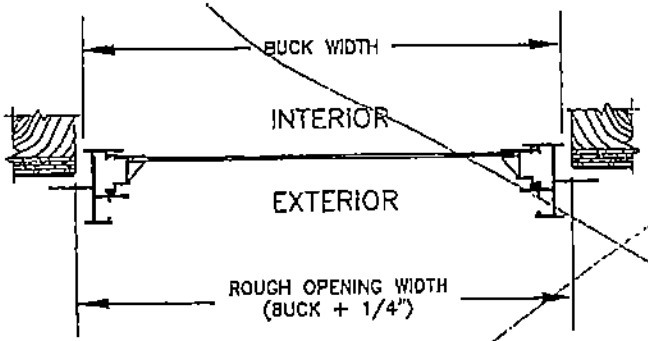


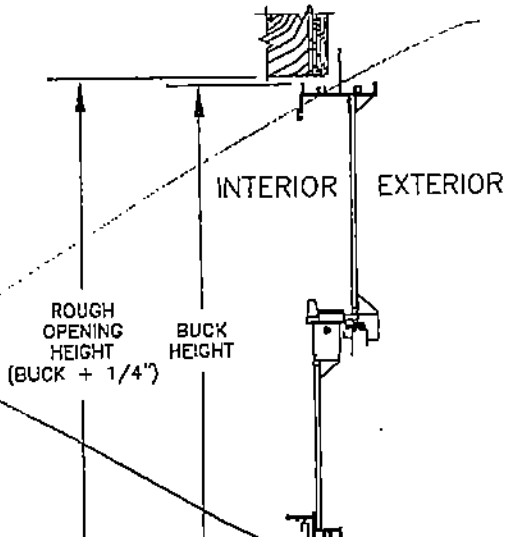
WINDOW SIZE: _____ (WIDTH) X _____ (HEIGHT) ☐ BUCK ☐ OVERALL

MASONRY OPENING SIZE: _____ (WIDTH) X _____ (HEIGHT)

FIN WINDOWS

(WOOD-FRAME CONSTRUCTION)





Windows and Doors NUAIR

8105 Anderson Road , PO Box 15436, Tampa, FL 33684 PH: 813-885-1654, 1-800-282-6627

ORDER CONFIRMATION

OUR ORDER NUMBER: 752507
CUSTNO: 00005 YOUR ORDER NUMBER: SFSmith

SOLD TO: NuAir Counter/Individuals
8105 Anderson Road
P.O.Box 15436
Tampa Fl 33684

SHIP TO: Karen Smith
3152 Antica St
Ft. Meyers, FL 33905

ATTN: Dean Tripp/Bill Dixon

ATTN: Karen
SCHEDULED DELIVERY DATE: 10/03/06

(Nancy will call)

ORDER DATE	SHP.VIA	F.O.B.	TERMS
09/22/06	9 CUST PICKUP	Tampa,FL	COD

SALESMAN	ACCT REP	TELEPHONE	SPECIAL INSTRUCTIONS
Bill Dixon	BD	2399397312	

ITM	PRODUCT NO	DESCRIPTION	ORDER QTY	UNIT PRICE	EXT PRICE
001	0H42SM4050CI	HRSPEC XO GRY-INS FL M WD= 46.3750 HT= 48.3750	3	283.02	849.06
002	1HSIS14050M	IMP/975 HR SPEC CHAR SCREEN M WD= 22.3130 HT= 45.5000	3	13.76	41.28
003	SHPHF	SHIPPING/HANDLING/FUEL CHARGE	1	9.00	9.00

MATERIAL:	899.34
TAX:	62.95
TOTAL:	962.29

THE ITEMS, QUANTITY, AND PRICING ON THIS CONFIRMATION MUST BE REVIEWED AND ANY ERRORS REPORTED WITHIN CLOSE OF BUSINESS THE DAY THE ORDER IS PLACED. THIS CONFIRMATION IS TO CHECK ACCURACY OF ITEMS ORDERED, AND WILL BE DELIVERED BY SCHEDULED DELIVERY DATE UNLESS THE CREDIT DEPARTMENT NOTIFIES YOU OTHERWISE. THANK YOU.

Table Of Glass Performance Values

Insulated Units with an 1/8" Interior Clear Lite

Glass Type	Nominal Glass Thickness		Visible Light[1] (VT) Transmittance	Ultra-Violet[2] (UV) Transmittance	U-Factor[3]		Solar Heat Gain Coefficient[4] (SHGC)
	inches	mm	%	%	Summer Daytime	Winter Nighttime	
Uncoated							
Clear	1/8	3	81	58	0.59	0.54	0.77
Gray Tint	1/8	3	55	29	0.61	0.54	0.58
Gray Tint	3/16	5	45	21	0.64	0.56	0.51
Bronze Tint	1/8	3	62	31	0.61	0.54	0.62
Bronze Tint	3/16	5	53	23	0.64	0.57	0.56
Solexia™ Glass	1/8	3	75	47	0.62	0.54	0.51
Solexia™Glass	3/16	5	64	36	0.65	0.57	0.45
EverGreen™ Glass	1/8	3	69	23	0.62	0.54	0.51
Graylite® Glass	1/8	3	27	15	0.62	0.54	0.46
Azurla™ Glass	1/8	3	69	44	0.62	0.54	0.48
Azuria™ Glass	3/16	5	64	39	0.65	0.57	0.43
Coated*							
Bronze Reflective Glass	5/32	4	22	7	0.63	0.57	0.36
Bronze Reflective Glass	3/16	5	21	6	0.63	0.57	0.34
Low-E							
Solar E™ Solar Control Glass	1/8	3	54	39	0.41	0.37	0.48
Solar E™ Solar Control Glass	3/16	5	55	36	0.49	0.45	0.48

1. Visible light transmittance
The percentage or fraction of the visible spectrum (380 to 720 nanometers) weighted by the sensitivity of the eye, that is transmitted through the glazing. Select windows with a higher VT to maximize daylight an view.

2. Ultraviolet Light (UV)
The invisible rays of the spectrum that are outside of the visible spectrum at its short-wavelength violet end. Ultraviolet rays are found in everyday sunlight and can cause fading of paint finishes, carpets, and fabrics.

3. U-Factor
A measure of the rate of non-solar heat loss or gain through a material or assembly. The lower the U-factor, the the greater a window's resistance to heat flow and the better its insulating value. A low U-Factor is more useful in colder climates than the SHGC.

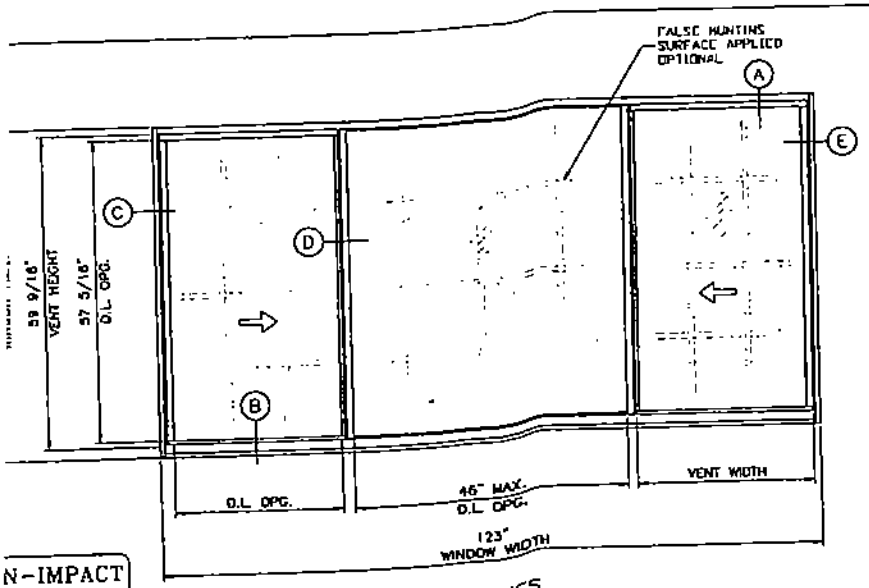
4. Solar Heat Gain Coefficient
The fraction of solar radiation admitted through a window or skylight, both directly transmitted, and absorbed and subsequently released inward. The solar heat gain coefficient has replaced the the shading coefficient as the standard indicator of a window's shading ability and is expressed as a number between 0 and 1. The lower a window's solar heat gain coefficient, the less solar heat it transmits, and the greater its shading ability.

*** Performance values are based on coating being used on surface 2.**

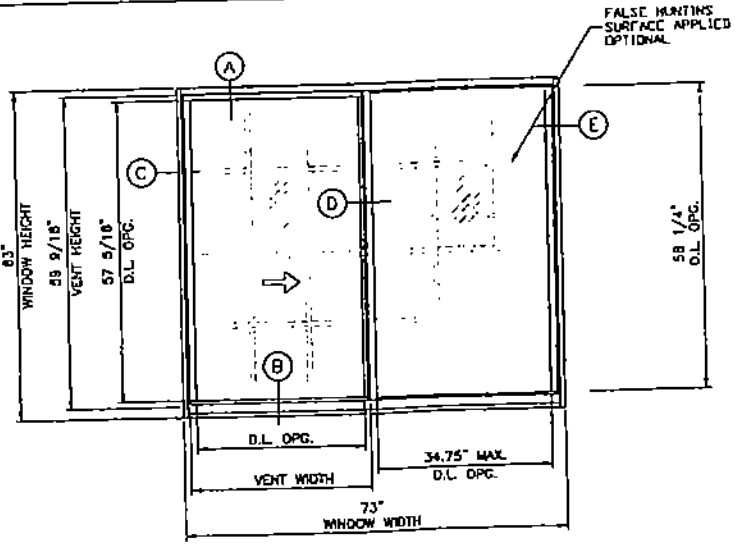
Product Evaluation Report

By Registered Florida Professional Engineer

Date:	September 16, 2005
Code:	Florida Building Code 2004
Product Category:	Windows
Product Subcategory:	Horizontal Roller Window
Product Name:	900 Series
Product Specifications:	Aluminum, Non-impact, Fin and Flange
Manufacturer:	NuAir Manufacturing 8105 Anderson Rd Tampa, FL 33614
Manufacturer Representative:	Jens Rosowski, Product Engineer
Engineer:	James Whittum, P.E. 8533 Acorn Ridge Ct. Tampa, FL 33625 FL #27689
Evaluator:	Joseph Demidovich, P.E. 157 Woodside Dr. Lakeland, FL 33813 FT, #22356
Quality Assurance Entity:	National Accreditation and Management Institute
Statement of Compliance:	This product has been evaluated and found to be in compliance for use in areas using the 2004 Florida Building Code, where building pressure requirements have been determined through Chapter 16. Glass load resistance is per the references of Chapter 24. Tests and calculations have been performed per the references of Chapter 16 and standard engineering practices.
Limits of Use:	Product should not be installed where the code requires an impact resistant product. Size and glass design pressure limits are dependent on the glass thickness as shown in the analysis chart(s) on the [illegible]



XOX FRAMES



XO FRAMES
OX OPPOSITE

TYPICAL ELEVATION
TESTED UNITS

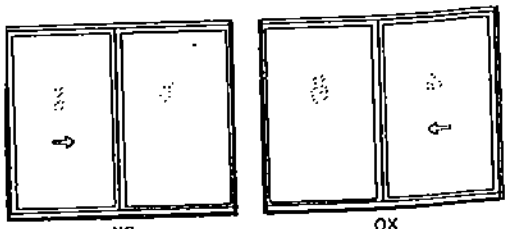
N-IMPACT
ESISTANT

SERIES-900 ALUM HORIZONTAL SLIDING WINDOW

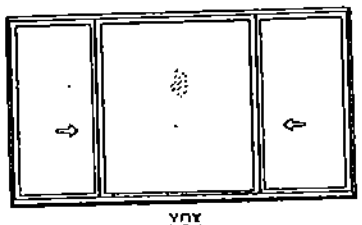
ESIGN LOAD RATING FOR THESE WINDOWS TO BE AS PER
CHARTS SHOWN ON THE FOLLOWING SHEETS.

VINDOWS NOT RATED FOR IMPACT, AND REQUIRE PROTECTION BY
APPROVED IMPACT RESISTANT SHUTTERS.

APPROVED CONFIGURATIONS



XO OX



XOX

NOTES:

WIND LOADS AS PER ASCE 7-88, ASCE 7-93, ASCE 7-95 OR ASCE 7-98 AS REQUIRED BY PREVAILING BUILDING CODE.

WOOD BUCKS BY OTHERS, MUST BE ANCHORED PROPERLY TO TRANSFER LOADS TO THE STRUCTURE.

ANCHORS SHALL BE AS LISTED, SPACED AS SHOWN ON DETAILS. ANCHOR EMBEDMENT TO BASE MATERIAL SHALL BE BEYOND WALL DRESSING OR STUCCO.

ANCHORING OR LOADING CONDITIONS NOT SHOWN IN THESE DETAILS ARE NOT PART OF THIS APPROVAL.

THE PRODUCT DEPICTED ABOVE IS INTENDED FOR USE ON TYPICAL CONSTRUCTION. THE USE OF ADDITIONAL FLASHING, VAPOR BARRIERS, FASTENERS, ETC MAY BE SPECIFIED BY THE PROJECT'S DESIGN PROFESSIONAL. BASIC WIND SPEED ALONE IS NOT SUFFICIENT TO DETERMINE THE REQUIRED DESIGN PRESSURE (DP). THE REQUIRED DP MUST BE CALCULATED IN ACCORDANCE WITH ASCE 7-98 BY A DESIGN PROFESSIONAL THAT IS FAMILIAR WITH THE PROJECT DESIGN AND LOCATION, AS SPECIFIED IN THE 2004 FBC. DP COMPARATIVE ANALYSIS CHARTS AND AAMA-101 COMPLIANT TEST REPORTS ARE AVAILABLE FOR ALL NUAIR MANUFACTURED PRODUCTS. PLEASE CONSULT YOUR LOCAL BUILDING CODES FOR EXACT REQUIREMENTS.

TEST INFORMATION:

SERIES	TEST BUCK SIZE	DP	WATER INF.	AIR INF.	PER	TEST REPORT #	CERTIFICATION #
900 XOX	122" X 48"	± 30.0	6.75 PSF	.19 CFM/FT²	PASSED	CTLA-386W-7	N1004355A-R1
900 XOX	122" X 60"	± 30.0	6.75 PSF	.19 CFM/FT²	PASSED	CTLA-386W-6	N1004355-R1
900 XO	72" X 72"	± 30.0	7.5 PSF	.19 CFM/FT	PASSED	CTLA-386W-3	N1004354-R1
900 XO	72" X 80"	± 40.0	7.5 PSF	.19 CFM/FT	PASSED	CTLA-386W-4	N1004354A-R1
900 XO	60" X 48"	± 50.0	7.5 PSF	.19 CFM/FT	PASSED	CTLA-386W-5	N1004354B-R1

THE ABOVE ARE TEST RESULTS FOR THE SIZE TESTED AND DO NOT REFLECT THE ACTUAL DESIGN PRESSURE FOR OTHER UNITS. SEE COMPARATIVE ANALYSIS CHARTS FOR SPECIFIC DESIGN PRESSURES PER SIZE/CLASS OPTIONS. FOR SPECIFIC TEST INFORMATION, PLEASE SEE THE TEST REPORT.

FLORIDA APPROVAL NUMBER: FL209

THIS DOCUMENT MUST BE SIGNED AND SEALED TO BE VALID.

James B. Whittum, P.E
FL # 0027689
8533 Acorn Ridge Ct.
Tampa, Florida 33625
813-926-9719

SEP 16 2005

ELV

NUAIR

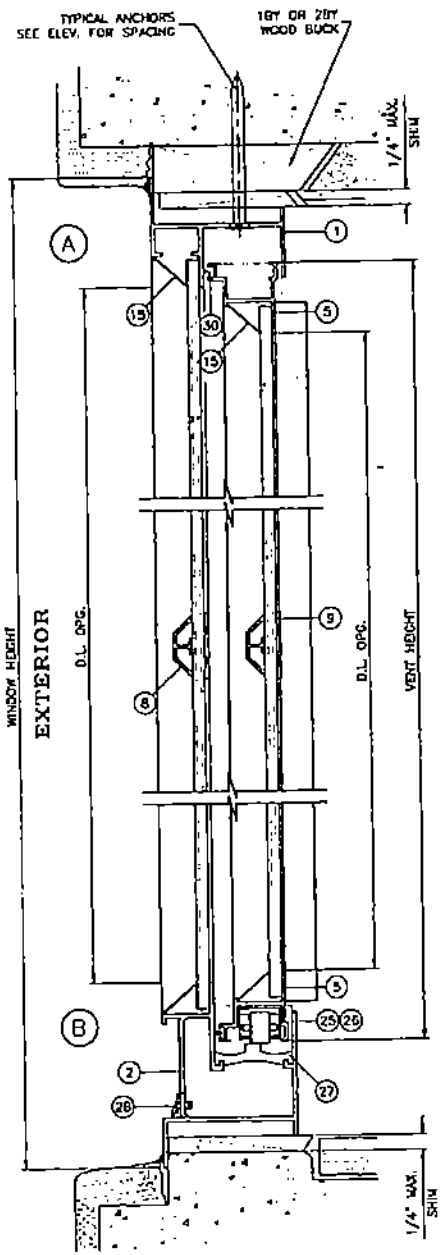
SERIES-900 ALUM H ROLLER WINDOW (NON-IMPACT)

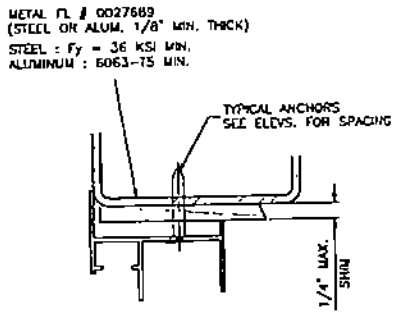
NUAIR WINDOWS AND DOORS
8105 ANDERSON ROAD
TAMPA, FL. 33634
TEL (800) 282-8627 FAX (813) 888-9737

revisions:
no. date by description

date: 09/09/05
scale: 1/2" = 1"
dr. by: JR
chk. by:

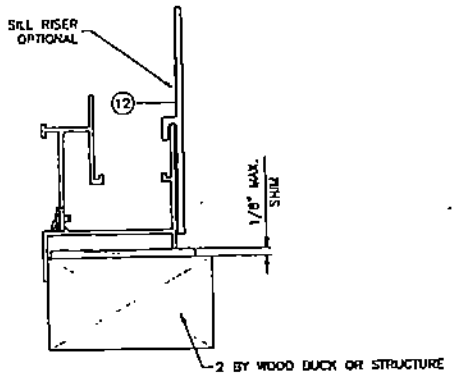
drawing no.
HR900
SHEET 1





FLANGE FRAME WINDOW

FAILURE TO SUPPORT THE FRAME USING SHIMS AT EACH FASTENER MAY RESULT IN GLASS BREAKAGE. INSTALLER MUST USE A HIGH-QUALITY, ADHESIVE CAULK UNDER THE FIN OR FLANGE.



WOOD BUCKS NOT BY NUAIR, MUST SUSTAIN LOADS IMPOSED BY GLAZING SYSTEM AND TRANSFER THEM TO THE BUILDING STRUCTURE.

TYPICAL ANCHORS:

1/4" TAPCONS
OR EQUIV. MASONRY ANCHORS
INTO 2BY WOOD BUCKS OR WOOD STRUCTURE
1-3/8" MIN. PENETRATION INTO WOOD

THRU 1BY WOOD BUCKS INTO MASONRY OR DIRECTLY INTO MASONRY
1-1/4" MIN. EMBED INTO MASONRY

DIRECTLY INTO CONCRETE
1-1/4" MIN. EMBED INTO CONC.

3/16" ORILLFLEX SELF DRILLING SCREWS
INTO METAL FL # 0027689 (1/8" MIN. THICKNESS)

#10 SMS
INTO APPROVED MULLIONS (NO SHIM SPACE)

WEEPHOLES:

W1 = 1" X 1/4" WEEP HOLE WITH PLASTIC BAFFLE AT 5" FROM EACH END AND AT MID SPAN

ANCHORS TO BE SPACED AS FOLLOWS:
-ALL ANCHORS NO MORE THAN 4" FROM EACH CORNER.
-1/4" MASONRY ANCHORS TO BE NO LESS THAN 23" CENTER TO CENTER, OR AT PRE-PUNCHED LOCATIONS.
-SM SCREWS INSTALLED THROUGH FIN FRAMES TO BE NO LESS THAN 22" CENTER TO CENTER.
-DECKING SCREWS INSTALLED THROUGH FIN FRAMES TO BE NO LESS THAN 10" CENTER TO CENTER.

THIS DOCUMENT MUST BE SIGNED AND SEALED TO BE VALID.

James B. Whittum, P.E
FL # 0027689
8533 Acorn Ridge Ct.
Tampa, Florida 33625
813-926-9719

SEP 1 6 2005

INS

NUAIR

SERIES-900 ALUM H ROLLER WINDOW (NON-IMPACT)

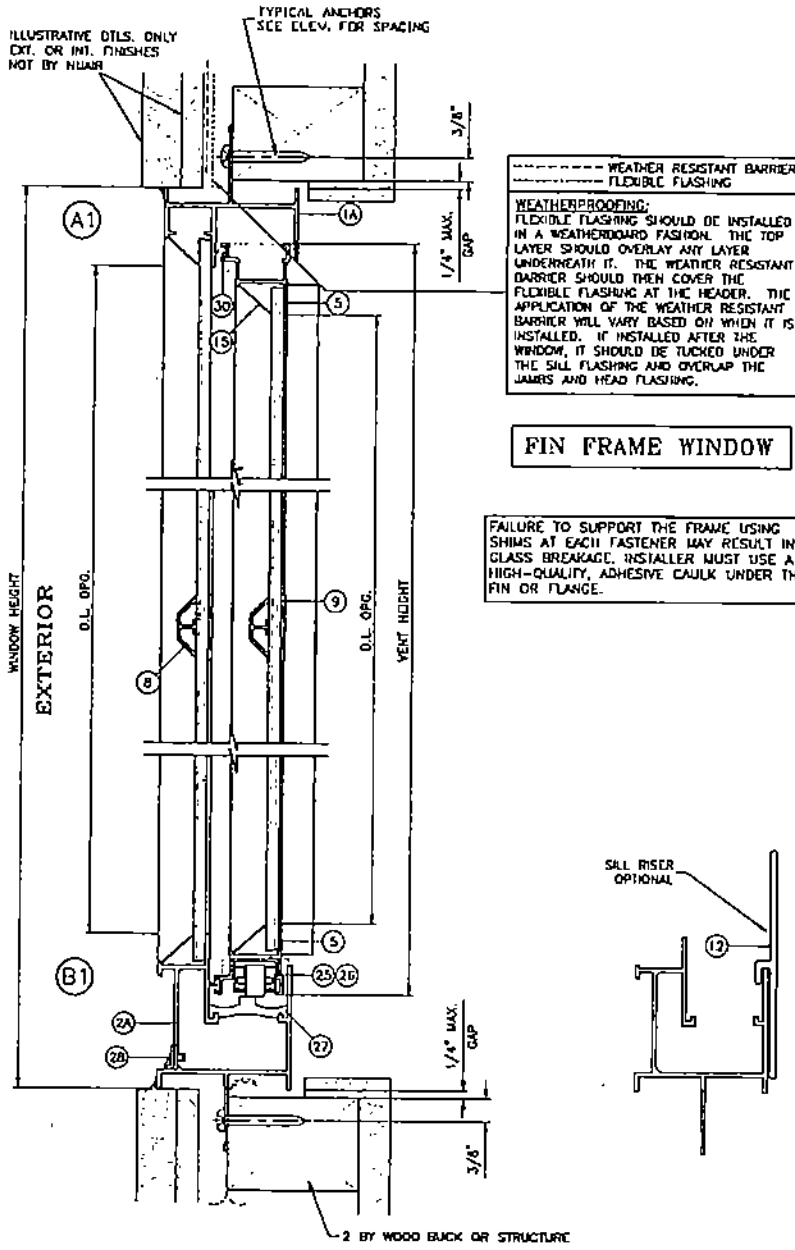
NUAIR WINDOWS AND DOORS
8105 ANDERSON ROAD
TAMPA, FL. 33634
TEL (800) 282-6827 FAX (813) 886-9737

revisions: not dole by description

date: 09/09/05
scale: 1/2" = 1'
dr. by: JR
chk. by:

drawing no. HR900

SHEET 2

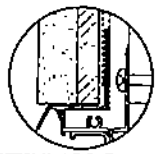


---------- WEATHER RESISTANT BARRIER
---------- FLEXIBLE FLASHING

WEATHERPROOFING:
FLEXIBLE FLASHING SHOULD BE INSTALLED IN A WEATHERBOARD FASHION. THE TOP LAYER SHOULD OVERLAY ANY LAYER UNDERNEATH IT. THE WEATHER RESISTANT BARRIER SHOULD THEN COVER THE FLEXIBLE FLASHING AT THE HEADER. THE APPLICATION OF THE WEATHER RESISTANT BARRIER WILL VARY BASED ON WHEN IT IS INSTALLED. IF INSTALLED AFTER THE WINDOW, IT SHOULD BE TUCKED UNDER THE SILL FLASHING AND OVERLAP THE JAMBS AND HEAD FLASHING.

FIN FRAME WINDOW

FAILURE TO SUPPORT THE FRAME USING SHIMS AT EACH FASTENER MAY RESULT IN GLASS BREAKAGE. INSTALLER MUST USE A HIGH-QUALITY, ADHESIVE CAULK UNDER THE FIN OR FLANGE.



OPTIONAL HEAD FLASHING

WOOD BUCKS NOT BY NUAIR, MUST SUSTAIN LOADS IMPOSED BY GLAZING SYSTEM AND TRANSFER THEM TO THE BUILDING STRUCTURE.

TYPICAL ANCHORS:

#8 X 1-3/4" SMS OR DRYWALL SCREWS
INTO WOOD FL # 0027689
1-3/8" MIN. PENETRATION INTO WOOD

#10 SMS OR SELF DRILLING SCREWS
INTO APPROVED MULLIONS
(NO SHIM SPACE)

WEEPHOLES:

W1 = 1" X 1/4" WEEP HOLE WITH PLASTIC BAFFLE AT 5" FROM EACH END AND AT MID SPAN

ANCHORS TO BE SPACED AS FOLLOWS:
-ALL ANCHORS NO MORE THAN 4" FROM EACH CORNER.
-1/4" MASONRY ANCHORS TO BE NO LESS THAN 23" CENTER TO CENTER. OR AT PRE-PUNCHED LOCATIONS.
-SM SCREWS INSTALLED THROUGH FIN FRAMES TO BE NO LESS THAN 22" CENTER TO CENTER.
-DECKING SCREWS INSTALLED THROUGH FIN FRAMES TO BE NO LESS THAN 10" CENTER TO CENTER.

THIS DOCUMENT MUST BE SIGNED AND SEALED TO BE VALID.

James B. Whittum, P.E
FL # 0027689
8533 Acorn Ridge Ct.
Tampa, Florida 33625
813-926-9719

SEP 1 6 2005

INS

NUAIR

SERIES-900 ALUM H ROLLER WINDOW (NON-IMPACT) MODEL HR900

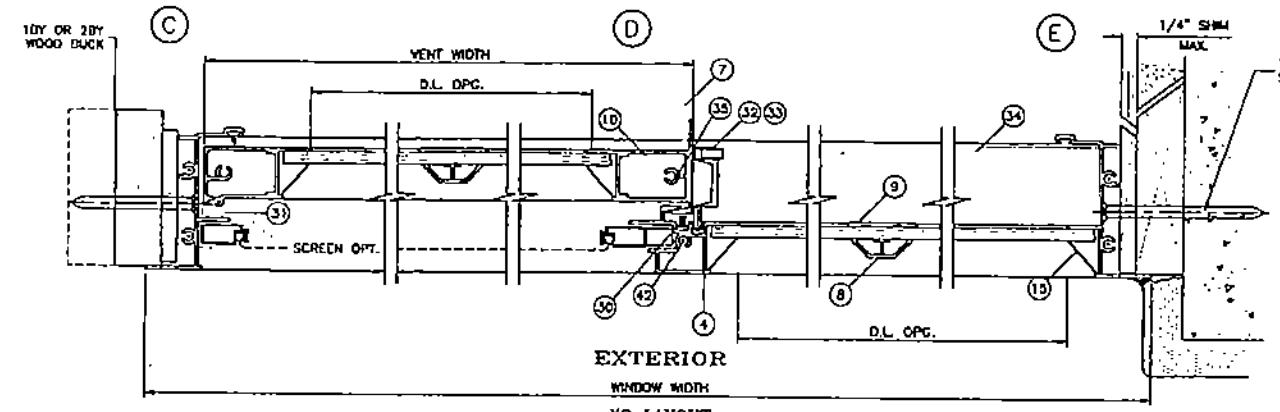
NUAIR WINDOWS AND DOORS
8105 ANDERSON ROAD
TAMPA, FL. 33684
TEL. (800) 282-6827 FAX (813) 886-9737

revisions:	no.	date	by	description

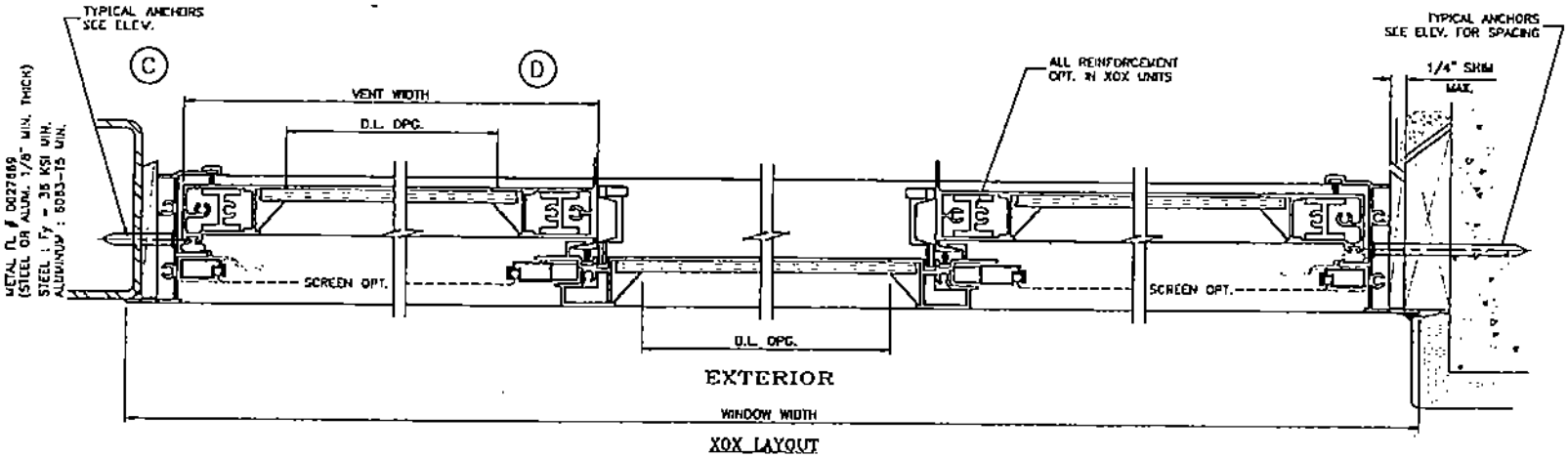
date: 09/09/05
scale: 1/2" = 1"
dr. by: JB
chk. by:

drawing no. HR900

SHEET 3

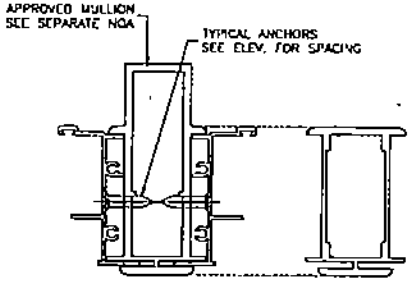


XO LAYOUT
OX OPPOSITE



XOX LAYOUT

FLANGE FRAME WINDOW



FAILURE TO SUPPORT THE FRAME USING SHIMS AT EACH FASTENER MAY RESULT IN GLASS BREAKAGE. INSTALLER MUST USE A HIGH-QUALITY, ADHESIVE CAULK UNDER THE FIN OR FLANGE.

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813-926-9719

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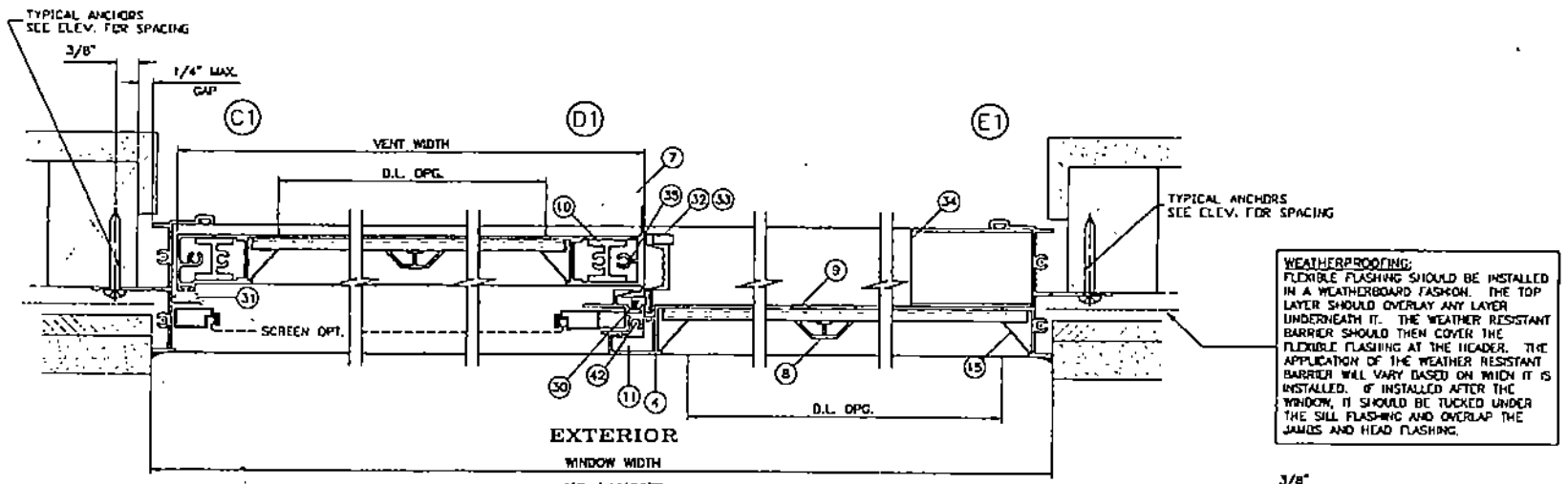
8105 ANDERSON ROAD
TAMPA, FL. 33684
TEL (800) 282-6827 FAX (813) 886-9737

revisions:
no. date by description

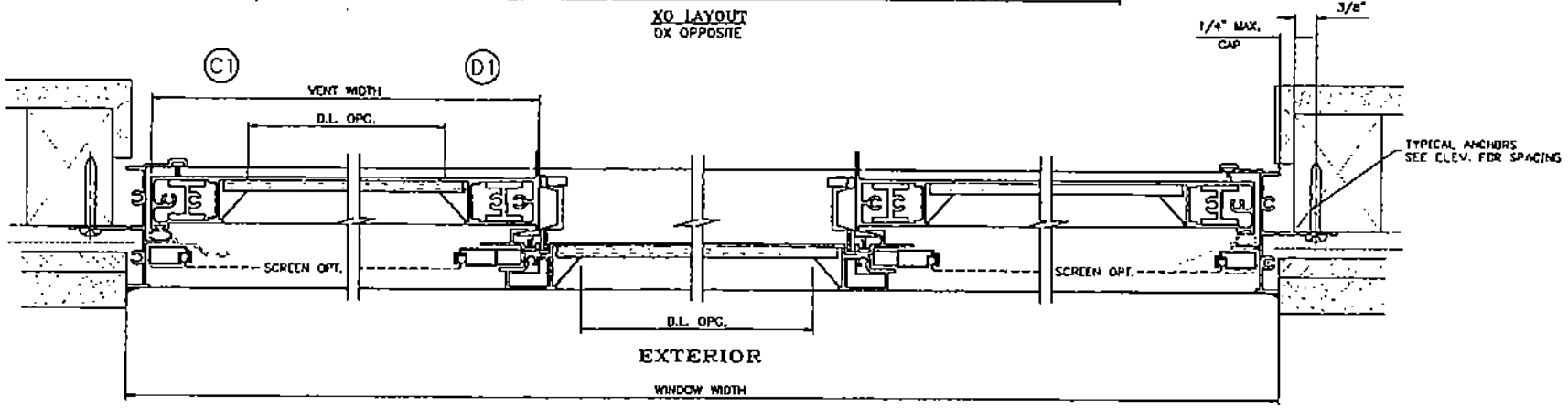
date: 08/09/05
scale: 1/2" = 1"
dr. by: JK
ck'd. by:

drawing no.
HR900

SHEET 4



XO LAYOUT
OX OPPOSITE

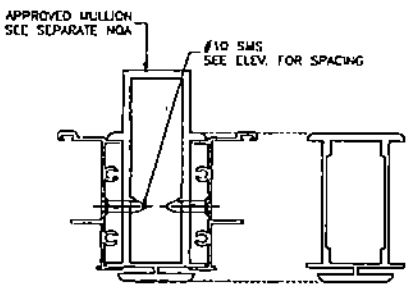


XOX LAYOUT

WEATHERPROOFING:
FLEXIBLE FLASHING SHOULD BE INSTALLED IN A WEATHERBOARD FASHION. THE TOP LAYER SHOULD OVERLAY ANY LAYER UNDERNEATH IT. THE WEATHER RESISTANT BARRIER SHOULD THEN COVER THE FLEXIBLE FLASHING AT THE HEADER. THE APPLICATION OF THE WEATHER RESISTANT BARRIER WILL VARY BASED ON WHEN IT IS INSTALLED. IF INSTALLED AFTER THE WINDOW, IT SHOULD BE TUCKED UNDER THE SILL FLASHING AND OVERLAP THE JAMBS AND HEAD FLASHING.

FIN FRAME WINDOW

FAILURE TO SUPPORT THE FRAME USING SHIMS AT EACH FASTENER MAY RESULT IN GLASS BREAKAGE. INSTALLER MUST USE A HIGH-QUALITY, ADHESIVE CAULK UNDER THE FIN OR FLANGE.



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INS

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NUAIR WINDOWS AND DOORS
8105 ANDERSON ROAD
TAMPA, FL. 33634
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revisions:

no	date	by	description

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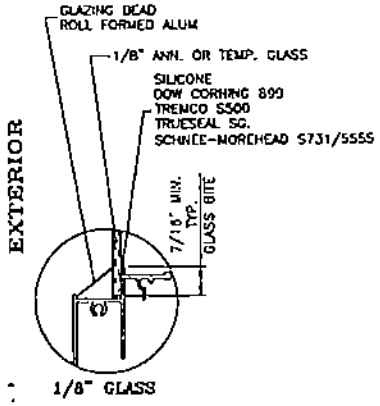
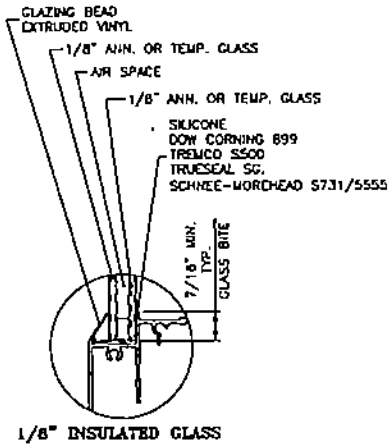
scale 1/2" = 1"
dr. by JR
ch. by

drawing no. HR900

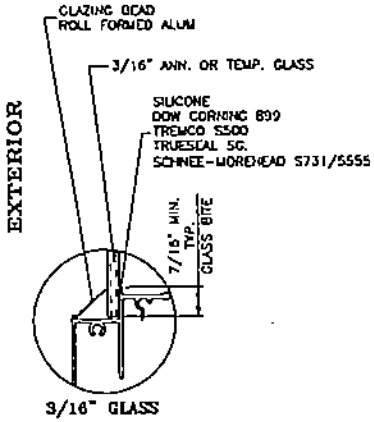
SHEET 5



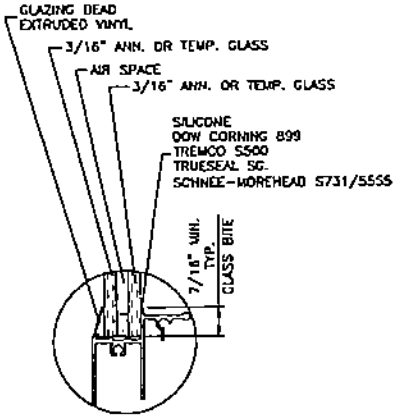
1/8" GLASS



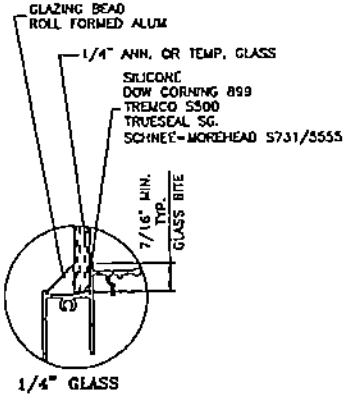
1/8" INSULATED GLASS



3/16" GLASS



3/16" INSULATED GLASS



1/4" GLASS

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James B. Whittum, P.E
FL # 0027689
8533 Acorn Ridge Ct.
Tampa, Florida 33625
813-926-9719

OCT 1 3 2005

GLS

NUAIR

SERIES-900 ALUM H ROLLER WINDOW (NON-IMPACT)

NUAIR WINDOWS AND DOORS
8105 ANDERSON ROAD
TAMPA, FL. 33634
TEL (800) 282-8627 FAX (813) 885-9737

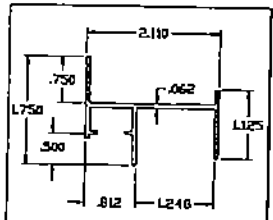
revisions:

no	date	by	description

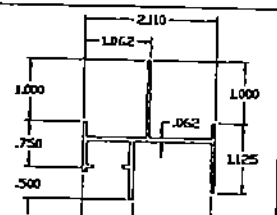
date: 09/09/05
scale: 1/2" = 1'
dr. by: JB
chk. by:

drawing no.
HR900

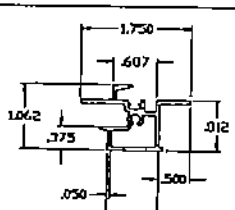
SHEET 6



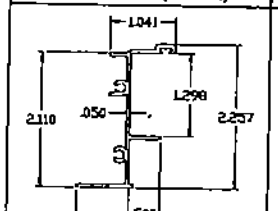
FRAME HEAD (FLANGE)



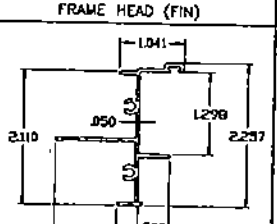
FRAME HEAD (FIN)



FIXED MEETING RAIL



FRAME JAMB (FLANGE)



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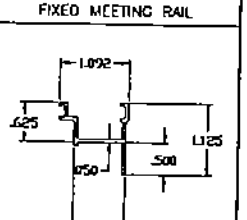
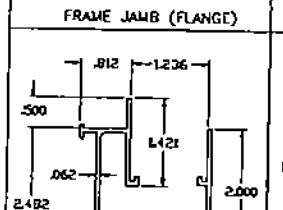
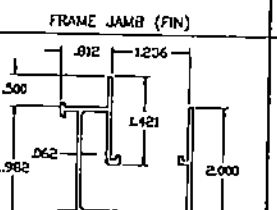


VENT TOP/BOTTOM RAIL



FRAME SILL (FLANGE)



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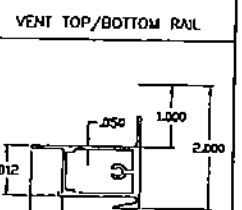
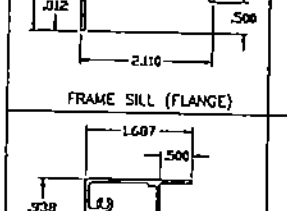
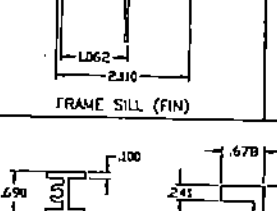


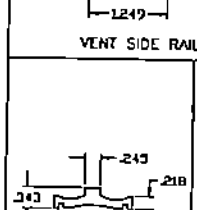
MEETING RAIL



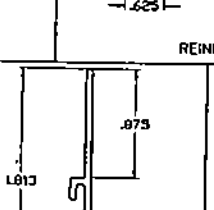
VENT SIDE RAIL



REINFORCEMENT



SILL TRACK



SILL RISER

ITEM #	PART #	QUANTITY	DESCRIPTION	MATERIAL	MANF./SUPPLIER/REMARKS
1	904	1	FRAME HEAD - FLANGE	6063-T5	-
1A	902	1	FRAME HEAD - FIN	6063-T5	-
2	910	1	FRAME SILL - FLANGE	6063-T5	-
2A	917	1	FRAME SILL - FIN	6063-T5	-
3	904	2	FRAME JAMB - FLANGE	6063-T5	-
3A	908	2	FRAME JAMB - FIN	6063-T5	-
4	990	2	FIXED MEETING RAIL	6063-T5	-
5	978	4	DOOR TOP & BOTTOM	6063-T5	-
6	910	2	DOOR LOCK RAIL	6063-T5	-
7	926	2	DOOR INTERLOCK RAIL	6063-T5	-
8	933	AS REQ'D	IMPACT APPLIED MUNTIN	6063-T5	-
9	709	AS REQ'D	APPLIED MUNTIN BACKER	6063-T5	-
10	956	2	REINFORCEMENT	6063-T5	-
11	891	1	MTG. RAIL REINFORCEMENT	6063-T5	-
12	943	AS REQ'D	SILL RISER	6063-T5	-
15	-	AS REQ'D	ROLL FORMED GLAZING BEAD	ALUMINUM	-
21		AS REQ'D	SILICONE BACKBEDDING		
23	7HP51	AS REQ'D	GLASS SETTING BLOCK	RUBBER	1/16 x 1/2 x 1 1/2
25	7HP12W	4	ROLLER WHEEL & PIN	STEEL	CORROSION RESISTANT
26	7HP13W	8	ROLLER HOUSING	NYLON (NATURAL)	INJECTION MOLDED
27	6H909	AS REQ'D	TRACK INSERT	EXTRUDED VINYL	-
28	7HP24D/W	4	WEEPHOLE COVER	VINYL	INJECTION MOLDED
29	79P37C	2	SCREW PLUG	CLEAR PLASTIC	-
30	6HW40	AS REQ'D	DOOR & MTHG. RAIL WOOLPILE	-	SILICON TREATED PILE
31	6UV40B	AS REQ'D	JAMB BULB VINYL	EXTRUDED VINYL	-
32	7HH15	AS REQ'D	DOOR LATCH	DIE CAST	PAINTED WHITE OR BLACK
33	7HF16	AS REQ'D	DOOR LATCH ASSEMBLY SCREW	ZINC PL. STEEL	8-18 X 3/4 TYPE A8, ⊎ C'SUNK
34	79P26	2	DOOR STOP	EXTR'D POLYVINYL	-
35	79340	8	DOOR ASSEMBLY SCREW	ZINC PL. STEEL	#8 X 3/4 PANHEAD
39	-	-	-	-	-
40	71P23	8	FRAME ASSEMBLY SCREW	ZINC PL. STEEL	#8 X 3/4 PANHEAD
40A	-	2	FRAME ASSEMBLY SCREW	ZINC PL. STEEL	#8 X 2" PANHEAD
42	7UF23	2	FRAME MEETING RAIL SCREW	STAINLESS STEEL	#8 X 2, PANHEAD
70	7XP03	8	INTEGRAL FIN CORNER INS.	-	ADHESIVE BACKED FOAM

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FL # 0027689
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813-926-9719

SEP 16 2005

MAT

NUAIR

SERIES-900 ALUM H ROLLER WINDOW (NON-IMPACT)

NUAIR WINDOWS AND DOORS
8105 ANDERSON ROAD
TAMPA, FL. 33634
TEL (800) 282-6527 FAX (813) 885-9737

revisions:

no	date	by	description

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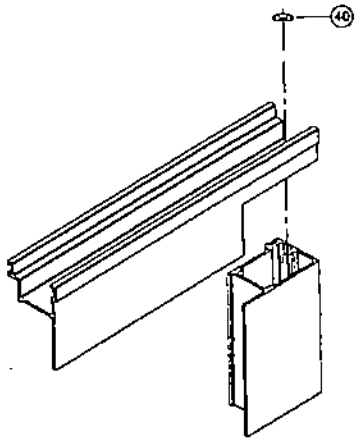
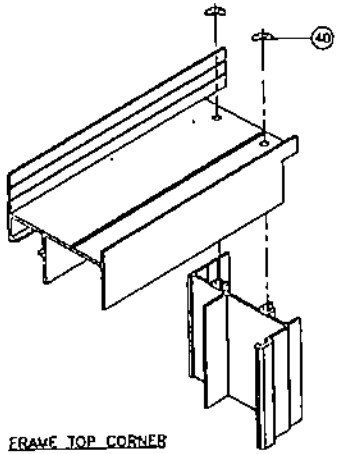
dr. by: JR
ch. by:

drawing no.
HR900

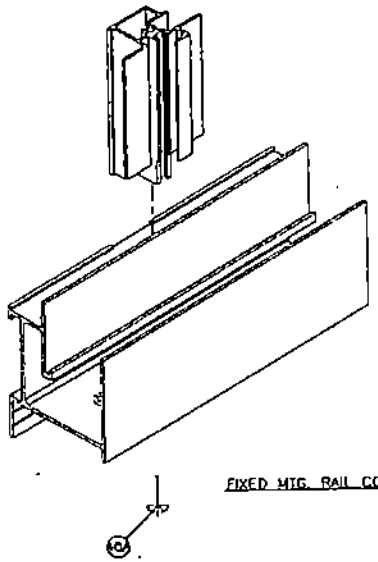
SHEET 7



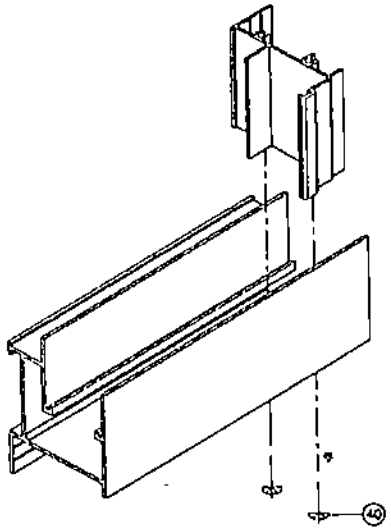
VENT TOP/BOTTOM CORNERS



FRAME TOP CORNER



FIXED MTG. RAIL CORNER



FRAME BOTTOM CORNER

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ASM

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date: 09/09/05
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dr. by: JR
ck. by:

drawing no.
HR900

SHEET 8

000, 975, & 9000 SERIES HORIZONTAL ROLLER, XO EGRESS SIZES

WINDOW BUCK SIZE		WIDTH																										
		47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72
	EGRESS	20.25	20.75	21.25	21.75	22.25	22.75	23.25	23.75	24.25	24.75	25.25	25.75	26.25	26.75	27.25	27.75	28.25	28.75	29.25	29.75	30.25	30.75	31.25	31.75	32.25	32.75
28	24.375																					5.1	5.2	5.3	5.4	5.5	5.5
29	25.375																			5.2	5.2	5.3	5.4	5.5	5.6	5.7	5.8
30	26.375																	5.2	5.3	5.4	5.4	5.5	5.6	5.7	5.8	5.9	6.0
31	27.375															5.2	5.3	5.4	5.5	5.6	5.7	5.8	5.8	5.9	6.0	6.1	6.2
32	28.375														5.3	5.4	5.5	5.6	5.7	5.8	5.9	6.0	6.1	6.2	6.3	6.4	6.5
33	29.375													5.4	5.5	5.6	5.7	5.8	5.9	6.0	6.1	6.2	6.3	6.4	6.5	6.6	6.7
34	30.375											5.3	5.4	5.5	5.6	5.7	5.8	6.0	6.1	6.2	6.3	6.4	6.5	6.6	6.7	6.8	6.9
35	31.375									5.3	5.4	5.5	5.6	5.7	5.8	5.9	6.0	6.2	6.3	6.4	6.5	6.6	6.7	6.8	6.9	7.0	7.1
36	32.375								5.3	5.5	5.6	5.7	5.8	5.9	6.0	6.1	6.2	6.4	6.5	6.6	6.7	6.8	6.9	7.0	7.1	7.3	7.4
37	33.375							5.4	5.5	5.6	5.7	5.9	6.0	6.1	6.2	6.3	6.4	6.5	6.7	6.8	6.9	7.0	7.1	7.2	7.4	7.5	7.6
38	34.375					5.3	5.4	5.6	5.7	5.8	5.9	6.0	6.1	6.3	6.4	6.5	6.6	6.7	6.9	7.0	7.1	7.2	7.3	7.5	7.6	7.7	7.8
39	35.375				5.3	5.5	5.6	5.7	5.8	6.0	6.1	6.2	6.3	6.4	6.6	6.7	6.8	6.9	7.1	7.2	7.3	7.4	7.6	7.7	7.8	7.9	8.0
40	36.375			5.4	5.5	5.6	5.7	5.9	6.0	6.1	6.3	6.4	6.5	6.6	6.8	6.9	7.0	7.1	7.3	7.4	7.5	7.6	7.8	7.9	8.0	8.1	8.3
41	37.375		5.4	5.5	5.6	5.8	5.9	6.0	6.2	6.3	6.4	6.6	6.7	6.8	6.9	7.1	7.2	7.3	7.5	7.6	7.7	7.9	8.0	8.1	8.2	8.4	8.5
42	38.375	5.4	5.5	5.7	5.8	5.9	6.1	6.2	6.3	6.5	6.6	6.7	6.9	7.0	7.1	7.3	7.4	7.5	7.7	7.8	7.9	8.1	8.2	8.3	8.5	8.6	8.7
43	39.375	5.5	5.7	5.8	5.9	6.1	6.2	6.4	6.5	6.6	6.8	6.9	7.0	7.2	7.3	7.5	7.6	7.7	7.9	8.0	8.1	8.3	8.4	8.5	8.7	8.8	9.0
44	40.375	5.7	5.8	6.0	6.1	6.2	6.4	6.5	6.7	6.8	6.9	7.1	7.2	7.4	7.5	7.6	7.8	7.9	8.1	8.2	8.3	8.5	8.6	8.8	8.9	9.0	9.2
45	41.375	5.8	6.0	6.1	6.2	6.4	6.5	6.7	6.8	7.0	7.1	7.3	7.4	7.5	7.7	7.8	8.0	8.1	8.3	8.4	8.5	8.7	8.8	9.0	9.1	9.3	9.4
46	42.375	6.0	6.1	6.3	6.4	6.5	6.7	6.8	7.0	7.1	7.3	7.4	7.6	7.7	7.9	8.0	8.2	8.3	8.5	8.6	8.8	8.9	9.0	9.2	9.3	9.5	9.6
47	43.375	6.1	6.3	6.4	6.6	6.7	6.9	7.0	7.2	7.3	7.5	7.6	7.8	7.9	8.1	8.2	8.4	8.5	8.7	8.8	9.0	9.1	9.3	9.4	9.6	9.7	9.9
48	44.375	6.2	6.4	6.5	6.7	6.9	7.0	7.2	7.3	7.5	7.6	7.8	7.9	8.1	8.2	8.4	8.6	8.7	8.9	9.0	9.2	9.3	9.5	9.6	9.8	9.9	10.1

HEIGHT

Clear opening in square feet:

NOTE: CHART IS FOR XO OR OX WINDOWS. IF USING XOX WINDOWS, REFERENCE THE XO WINDOW SIZE THAT USE THE SAME VENT.
FLORIDA BUILDING CODE 2001 REQUIRES 20" IN WIDTH, 24" IN HEIGHT, AND 5.7 SQUARE FEET OF CLEAR OPENING (5.0 ON GROUND FLOOR), TO MEET EGRESS REQUIREMENTS.

THIS DOCUMENT MUST BE SIGNED AND SEALED TO BE VALID.

James B. Whittum, P.E
FL # 0027689
8533 Acorn Ridge Ct.
Tampa, Florida 33625
813-926-9719

SEP 1 6 2005

EGR

NUAIR

SERIES-900 ALUM H ROLLER WINDOW (NON-IMPACT)

NUAIR WINDOWS AND DOORS
8105 ANDERSON ROAD
TAMPA, FL. 33634
TEL (800) 282-6627 FAX (813) 885-9737

revisions
no. date by description

date: 09/09/05
scale: 1/4" = 1'
dr. by: JR
chk. by:

drawing no.
HR900

SHEET 9

Design Pressures for 900 Series, XO or OX Horizontal Roller Windows (psf), in Masonry Installation

Buck Size (inches)		Call Name	# of 1/4" Screws			1/8" An.		1/8" I.G.		1/8" Temp.		3/16" An.		3/16" I.G.		3/16" Temp.	
Width	Height		Jamb	Hdr	Sill	(+)	(-)	(+)	(-)	(+)	(-)	(+)	(-)	(+)	(-)	(+)	(-)
25.5	25	IA2	2	0	0	50.0	126.9	50.0	126.9	50.0	126.9	50.0	126.9	50.0	126.9	50.0	126.9
36	25	22	2	2	0	50.0	117.0	50.0	134.8	50.0	134.8	50.0	134.8	50.0	134.8	50.0	134.8
52.125	25	32	2	3	0	50.0	87.3	50.0	108.7	50.0	108.7	50.0	108.7	50.0	108.7	50.0	108.7
73.125	25	42	2	4	0	50.0	61.2	50.0	88.5	50.0	88.5	50.0	88.5	50.0	88.5	50.0	88.5
25.5	37.375	IA3	3	0	0	50.0	106.0	50.0	127.3	50.0	127.3	50.0	127.3	50.0	127.3	50.0	127.3
36	37.375	23	3	2	0	50.0	70.9	50.0	114.2	50.0	114.2	50.0	114.2	50.0	114.2	50.0	114.2
52.125	37.375	33	3	3	0	50.0	62.4	50.0	91.9	50.0	91.9	50.0	91.9	50.0	91.9	50.0	91.9
73.125	37.375	43	3	4	0	48.8	48.8	50.0	74.0	50.0	74.0	50.0	74.0	50.0	74.0	50.0	74.0
25.5	49.625	IA4	3	0	0	50.0	91.1	50.0	95.9	50.0	95.9	50.0	95.9	50.0	95.9	50.0	95.9
36	49.625	24	3	2	0	50.0	51.1	50.0	79.8	50.0	79.8	50.0	79.8	50.0	79.8	50.0	79.8
52.125	49.625	34	3	3	0	43.5	43.5	50.0	61.1	50.0	61.1	50.0	61.1	50.0	61.1	50.0	61.1
73.125	49.625	44	3	4	0	37.3	37.3	50.0	50.9	50.0	50.9	50.0	50.9	50.0	50.9	50.0	50.9
25.5	62	IA5	4	0	0	50.0	82.2	50.0	82.2	50.0	82.2	50.0	82.2	50.0	82.2	50.0	82.2
36	62	25	4	2	0	44.7	44.7	50.0	61.1	50.0	61.1	50.0	61.1	50.0	61.1	50.0	61.1
52.125	62	35	4	3	0	31.3	31.3	45.7	45.7	45.7	45.7	45.7	45.7	45.7	45.7	45.7	45.7
73.125	62	45	4	4	0	29.9	29.9	36.5	36.5	36.5	36.5	36.5	36.5	36.5	36.5	36.5	36.5
25.5	72	IA6	4	0	0	50.0	53.5	50.0	53.5	50.0	53.5	50.0	53.5	50.0	53.5	50.0	53.5
36	72	26	4	2	0	41.9	41.9	44.7	44.7	44.7	44.7	44.7	44.7	44.7	44.7	44.7	44.7
52.125	72	36	4	3	0	25.3	25.3	35.7	35.7	35.7	35.7	35.7	35.7	35.7	35.7	35.7	35.7
73.125	72	46	4	4	0	25.6	25.6	29.7	29.7	29.7	29.7	29.7	29.7	29.7	29.7	29.7	29.7
24	24	2020	2	0	0	50.0	140.5	50.0	140.5	50.0	140.5	50.0	140.5	50.0	140.5	50.0	140.5
36	24	3020	2	2	0	50.0	124.0	50.0	140.5	50.0	140.5	50.0	140.5	50.0	140.5	50.0	140.5
48	24	4020	2	3	0	50.0	93.6	50.0	122.9	50.0	122.9	50.0	122.9	50.0	122.9	50.0	122.9
60	24	5020	2	4	0	50.0	79.3	50.0	112.4	50.0	112.4	50.0	112.4	50.0	112.4	50.0	112.4
72	24	6020	2	4	0	50.0	64.0	50.0	93.6	50.0	93.6	50.0	93.6	50.0	93.6	50.0	93.6
24	36	2030	3	0	0	50.0	128.0	50.0	140.5	50.0	140.5	50.0	140.5	50.0	140.5	50.0	140.5
36	36	3030	3	2	0	50.0	73.8	50.0	120.0	50.0	120.0	50.0	120.0	50.0	120.0	50.0	120.0
48	36	4030	3	3	0	50.0	67.4	50.0	101.3	50.0	101.3	50.0	101.3	50.0	101.3	50.0	101.3
60	36	5030	3	4	0	50.0	59.2	50.0	92.6	50.0	92.6	50.0	89.8	50.0	92.6	50.0	92.6
72	36	6030	3	4	0	50.0	51.0	50.0	78.0	50.0	78.0	50.0	78.0	50.0	78.0	50.0	78.0
24	48	2040	3	0	0	50.0	105.4	50.0	105.4	50.0	105.4	50.0	105.4	50.0	105.4	50.0	105.4
36	48	3040	3	2	0	50.0	52.7	50.0	83.1	50.0	83.1	50.0	83.1	50.0	83.1	50.0	83.1
48	48	4040	3	3	0	46.3	46.3	50.0	67.5	50.0	67.5	50.0	67.5	50.0	67.5	50.0	67.5
60	48	5040	3	4	0	44.5	44.5	50.0	58.9	50.0	58.9	50.0	58.9	50.0	58.9	50.0	58.9
72	48	6040	3	4	0	39.5	39.5	50.0	54.0	50.0	54.0	50.0	54.0	50.0	54.0	50.0	54.0
24	60	2050	4	0	0	50.0	90.0	50.0	90.0	50.0	90.0	50.0	90.0	50.0	90.0	50.0	90.0
36	60	3050	4	2	0	45.4	45.4	50.0	63.5	50.0	63.5	50.0	63.5	50.0	63.5	50.0	63.5
48	60	4050	4	3	0	33.2	33.2	50.0	50.6	50.0	50.6	50.0	50.6	50.0	50.6	50.0	50.6
60	60	5050	4	4	0	33.8	33.8	43.2	43.2	43.2	43.2	43.2	43.2	43.2	43.2	43.2	43.2
72	60	6050	4	4	0	31.3	31.3	38.6	38.6	38.6	38.6	38.6	38.6	38.6	38.6	38.6	38.6
24	72	2060	4	0	0	50.0	55.1	50.0	55.1	50.0	55.1	50.0	55.1	50.0	55.1	50.0	55.1
36	72	3060	4	2	0	41.9	41.9	44.7	44.7	44.7	44.7	44.7	44.7	44.7	44.7	44.7	44.7
48	72	4060	4	3	0	26.5	26.5	37.6	37.6	37.6	37.6	37.6	37.6	37.6	37.6	37.6	37.6
60	72	5060	4	4	0	25.5	25.5	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9
72	72	6060	4	4	0	25.9	25.9	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0

DESIGN LOAD ANALYSIS NOTES:
-VALUES BASED ON AAMA 101-97 OR NAFS-02 TEST RESULTS.
-STRUCTURAL ANALYSIS PER THE METHODS OF AAMA 203.
-GLASS ANALYSIS PER ASTM E1300-02.
-FASTENER CALCULATIONS FOR SHEAR AND BENDING HAVE BEEN CALCULATED WITH A .190" SCREW DIAMETER (FOR 1/4" NOMINAL) AND .250" CANTILEVER, AND WITHOUT A 1/3 LOAD INCREASE.
-INSULATED GLASS NOT TESTED BUT QUALIFIED BY ASTM E1300.

LIMIT EXTERIOR (+) LOADS AS FOLLOWS
WITHOUT 1 " SILL HEIGHT EXTENDER = +45.0 PSF
WITH 1 " SILL HEIGHT EXTENDER = +65.0 PSF

FLANGE FRAME WINDOW

THIS DOCUMENT MUST BE SIGNED AND SEALED TO BE VALID.

James B. Whittum, P.E
FL # 0027689
8533 Acorn Ridge Ct.
Tampa, Florida 33625
813-926-9719

SEP 16 2005

CA1

NUAIR

SERIES-900 ALUM H ROLLER WINDOW (NON-IMPACT)

NUAIR WINDOWS AND DOORS
8105 ANDERSON ROAD
TAMPA, FL. 33634
TEL (800) 282-6827 FAX (813) 886-9737

revisions:
no	date	by	description

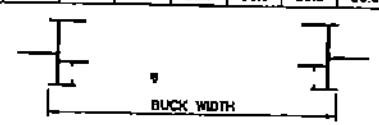
date: 09/09/05
scale: 1/2" = 1"
dr. by: JR
ck'd. by:

drawing no.
HR900

SHEET 10

Design Pressures for 900 Series, XO or OX Horizontal Roller Windows (psf), in Wood Frame Installation

Duck Size (inches)		Cat Name	1/8" An.				1/8" I.G.				1/8" Temp.				3/16" An.				3/16" I.G.				3/16" Temp.			
			Deck. Screw		#10 SMS		Deck Screw		#10 SMS		Deck. Screw		#10 SMS		Deck. Screw		#10 SMS		Deck. Screw		#10 SMS		Deck. Screw		#10 SMS	
Width	Height		(+)	(-)	(+)	(-)	(+)	(-)	(+)	(-)	(+)	(-)	(+)	(-)	(+)	(-)	(+)	(-)	(+)	(-)	(+)	(-)	(+)	(-)	(+)	(-)
25.5	25	1A2	50.0	144.0	50.0	144.0	50.0	164.9	50.0	169.7	50.0	164.9	50.0	169.7	50.0	164.9	50.0	169.0	50.0	164.9	50.0	169.7	50.0	164.9	50.0	169.7
36	25	22	50.0	117.0	50.0	117.0	50.0	141.1	50.0	146.4	50.0	141.1	50.0	146.4	50.0	141.1	50.0	146.4	50.0	141.1	50.0	146.4	50.0	141.1	50.0	146.4
52.125	25	32	50.0	87.3	50.0	87.3	50.0	123.2	50.0	128.9	50.0	123.2	50.0	128.9	50.0	123.2	50.0	128.9	50.0	123.2	50.0	128.9	50.0	123.2	50.0	128.9
73.125	25	42	50.0	61.2	50.0	61.2	50.0	110.2	50.0	110.2	50.0	111.8	50.0	117.9	50.0	95.3	50.0	95.3	50.0	111.8	50.0	117.9	50.0	111.8	50.0	117.9
25.5	37.375	1A3	50.0	106.0	50.0	106.0	50.0	137.4	50.0	145.1	50.0	137.4	50.0	145.1	50.0	137.4	50.0	145.1	50.0	137.4	50.0	145.1	50.0	137.4	50.0	145.1
36	37.375	23	50.0	70.9	50.0	70.9	50.0	113.6	50.0	114.2	50.0	113.6	50.0	114.2	50.0	113.6	50.0	114.2	50.0	113.6	50.0	114.2	50.0	113.6	50.0	114.2
52.125	37.375	33	50.0	62.4	50.0	62.4	50.0	91.9	50.0	91.9	50.0	91.9	50.0	91.9	50.0	91.9	50.0	91.9	50.0	91.9	50.0	91.9	50.0	91.9	50.0	91.9
73.125	37.375	43	48.8	48.8	48.8	48.8	50.0	83.5	50.0	83.5	50.0	83.5	50.0	83.5	50.0	79.6	50.0	79.6	50.0	83.5	50.0	83.5	50.0	83.5	50.0	83.5
25.5	49.625	1A4	50.0	91.1	50.0	91.1	50.0	105.8	50.0	105.8	50.0	105.8	50.0	105.8	50.0	105.8	50.0	105.8	50.0	105.8	50.0	105.8	50.0	105.8	50.0	105.8
36	49.625	24	50.0	51.1	50.0	51.1	50.0	79.8	50.0	79.8	50.0	79.8	50.0	79.8	50.0	79.8	50.0	79.8	50.0	79.8	50.0	79.8	50.0	79.8	50.0	79.8
52.125	49.625	34	43.5	43.5	43.5	43.5	50.0	61.1	50.0	61.1	50.0	61.1	50.0	61.1	50.0	61.1	50.0	61.1	50.0	61.1	50.0	61.1	50.0	61.1	50.0	61.1
73.125	49.625	44	37.3	37.3	37.3	37.3	50.0	50.9	50.0	50.9	50.0	50.9	50.0	50.9	50.0	50.9	50.0	50.9	50.0	50.9	50.0	50.9	50.0	50.9	50.0	50.9
25.5	62	1A5	50.0	82.2	50.0	82.2	50.0	82.2	50.0	82.2	50.0	82.2	50.0	82.2	50.0	82.2	50.0	82.2	50.0	82.2	50.0	82.2	50.0	82.2	50.0	82.2
36	62	25	44.7	44.7	44.7	44.7	50.0	61.1	50.0	61.1	50.0	61.1	50.0	61.1	50.0	61.1	50.0	61.1	50.0	61.1	50.0	61.1	50.0	61.1	50.0	61.1
52.125	62	35	31.3	31.3	31.3	31.3	45.7	45.7	45.7	45.7	45.7	45.7	45.7	45.7	45.7	45.7	45.7	45.7	45.7	45.7	45.7	45.7	45.7	45.7	45.7	45.7
73.125	62	45	29.9	29.9	29.9	29.9	36.5	36.5	36.5	36.5	36.5	36.5	36.5	36.5	36.5	36.5	36.5	36.5	36.5	36.5	36.5	36.5	36.5	36.5	36.5	36.5
25.5	72	1A6	50.0	53.5	50.0	53.5	50.0	53.5	50.0	53.5	50.0	53.5	50.0	53.5	50.0	53.5	50.0	53.5	50.0	53.5	50.0	53.5	50.0	53.5	50.0	53.5
36	72	26	41.9	41.9	41.9	41.9	44.7	44.7	44.7	44.7	44.7	44.7	44.7	44.7	44.7	44.7	44.7	44.7	44.7	44.7	44.7	44.7	44.7	44.7	44.7	44.7
52.125	72	36	25.3	25.3	25.3	25.3	35.7	35.7	35.7	35.7	35.7	35.7	35.7	35.7	35.7	35.7	35.7	35.7	35.7	35.7	35.7	35.7	35.7	35.7	35.7	35.7
73.125	72	46	25.6	25.6	25.6	25.6	29.7	29.7	29.7	29.7	29.7	29.7	29.7	29.7	29.7	29.7	29.7	29.7	29.7	29.7	29.7	29.7	29.7	29.7	29.7	29.7
24	24	2020	50.0	171.0	50.0	171.0	50.0	173.5	50.0	183.3	50.0	173.5	50.0	183.3	50.0	157.0	50.0	157.0	50.0	173.5	50.0	183.3	50.0	173.5	50.0	183.3
36	24	3020	50.0	124.0	50.0	124.0	50.0	144.6	50.0	152.7	50.0	144.6	50.0	152.7	50.0	144.6	50.0	152.7	50.0	144.6	50.0	152.7	50.0	144.6	50.0	152.7
48	24	4020	50.0	93.6	50.0	93.6	50.0	130.1	50.0	137.5	50.0	130.1	50.0	137.5	50.0	130.1	50.0	137.5	50.0	130.1	50.0	137.5	50.0	130.1	50.0	137.5
60	24	5020	50.0	79.3	50.0	79.3	50.0	121.5	50.0	128.3	50.0	121.5	50.0	128.3	50.0	121.5	50.0	128.3	50.0	121.5	50.0	128.3	50.0	121.5	50.0	128.3
72	24	6020	50.0	64.0	50.0	64.0	50.0	115.2	50.0	115.2	50.0	115.7	50.0	122.2	50.0	112.0	50.0	112.0	50.0	115.7	50.0	122.2	50.0	115.7	50.0	122.2
24	36	2030	50.0	128.0	50.0	128.0	50.0	144.6	50.0	152.7	50.0	144.6	50.0	152.7	50.0	144.6	50.0	152.7	50.0	144.6	50.0	152.7	50.0	144.6	50.0	152.7
36	36	3030	50.0	73.8	50.0	73.8	50.0	115.7	50.0	120.0	50.0	115.7	50.0	120.0	50.0	115.7	50.0	120.0	50.0	115.7	50.0	120.0	50.0	115.7	50.0	120.0
48	36	4030	50.0	67.4	50.0	67.4	50.0	101.2	50.0	101.3	50.0	101.2	50.0	101.3	50.0	101.2	50.0	101.3	50.0	101.2	50.0	101.3	50.0	101.2	50.0	101.3
60	36	5030	50.0	59.2	50.0	59.2	50.0	92.5	50.0	92.6	50.0	92.5	50.0	92.6	50.0	89.8	50.0	89.8	50.0	92.5	50.0	92.6	50.0	92.5	50.0	92.6
72	36	6030	50.0	51.0	50.0	51.0	50.0	86.8	50.0	90.0	50.0	86.8	50.0	90.0	50.0	82.3	50.0	82.3	50.0	86.8	50.0	90.0	50.0	86.8	50.0	90.0
24	48	2040	50.0	114.0	50.0	114.0	50.0	115.7	50.0	115.7	50.0	115.7	50.0	115.7	50.0	115.7	50.0	115.7	50.0	115.7	50.0	115.7	50.0	115.7	50.0	115.7
36	48	3040	50.0	52.7	50.0	52.7	50.0	83.1	50.0	83.1	50.0	83.1	50.0	83.1	50.0	83.1	50.0	83.1	50.0	83.1	50.0	83.1	50.0	83.1	50.0	83.1
48	48	4040	46.3	46.3	46.3	46.3	50.0	67.5	50.0	67.5	50.0	67.5	50.0	67.5	50.0	67.5	50.0	67.5	50.0	67.5	50.0	67.5	50.0	67.5	50.0	67.5
60	48	5040	44.5	44.5	44.5	44.5	50.0	58.9	50.0	58.9	50.0	58.9	50.0	58.9	50.0	58.9	50.0	58.9	50.0	58.9	50.0	58.9	50.0	58.9	50.0	58.9
72	48	6040	39.5	39.5	39.5	39.5	50.0	54.0	50.0	54.0	50.0	54.0	50.0	54.0	50.0	54.0	50.0	54.0	50.0	54.0	50.0	54.0	50.0	54.0	50.0	54.0
24	60	2050	50.0	90.0	50.0	90.0	50.0	90.0	50.0	90.0	50.0	90.0	50.0	90.0	50.0	90.0	50.0	90.0	50.0	90.0	50.0	90.0	50.0	90.0	50.0	90.0
36	60	3050	45.4	45.4	45.4	45.4	50.0	63.5	50.0	63.5	50.0	63.5	50.0	63.5	50.0	63.5	50.0	63.5	50.0	63.5	50.0	63.5	50.0	63.5	50.0	63.5
48	60	4050	33.2	33.2	33.2	33.2	50.0	50.6	50.0	50.6	50.0	50.6	50.0	50.6	50.0	50.6	50.0	50.6	50.0	50.6	50.0	50.6	50.0	50.6	50.0	50.6
60	60	5050	33.8	33.8	33.8	33.8	43.2	43.2	43.2	43.2	43.2	43.2	43.2	43.2	43.2	43.2	43.2	43.2	43.2	43.2	43.2	43.2	43.2	43.2	43.2	43.2
72	60	6050	31.3	31.3	31.3	31.3	38.6	38.6	38.6	38.6	38.6	38.6	38.6	38.6	38.6	38.6	38.6	38.6	38.6	38.6	38.6	38.6	38.6	38.6	38.6	38.6
24	72	2060	50.0	55.1	50.0	55.1	50.0	55.1	50.0	55.1	50.0	55.1	50.0	55.1	50.0	55.1	50.0	55.1	50.0	55.1	50.0	55.1	50.0	55.1	50.0	55.1
36	72	3060	41.9	41.9	41.9	41.9	44.7	44.7	44.7	44.7	44.7	44.7	44.7	44.7	44.7	44.7	44.7	44.7	44.7	44.7	44.7	44.7	44.7	44.7	44.7	44.7
48	72	4060	26.5	26.5	26.5	26.5	37.6	37.6	37.6	37.6	37.6	37.6	37.6	37.6	37.6	37.6	37.6	37.6	37.6	37.6	37.6	37.6	37.6	37.6	37.6	37.6
60	72	5060	25.5	25.5	25.5	25.5	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9	32.9
72	72	6060	25.9	25.9	25.9	25.9	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0



FIN FRAME WINDOW

DESIGN LOAD ANALYSIS NOTES:
-VALUES BASED ON AAMA 101-97 OR NAFS-02 TEST RESULTS.
-STRUCTURAL ANALYSIS PER THE METHODS OF AAMA 203.
-GLASS ANALYSIS PER ASTM E1300-02.
-FASTENER CALCULATIONS FOR SHEAR AND BENDING HAVE BEEN CALCULATED WITH A .190" SCREW DIAMETER (FOR 1/4" NOMINAL) AND .250" CANTILEVER, AND WITHOUT A 1/3 LOAD INCREASE.
-INSULATED GLASS NOT TESTED BUT QUALIFIED BY ASTM E1300.

LIMIT EXTERIOR (+) LOADS AS FOLLOWS
WITHOUT 1 " SILL HEIGHT EXTENDER = +45.0 PSF
WITH 1 " SILL HEIGHT EXTENDER = +65.0 PSF

THIS DOCUMENT MUST BE SIGNED AND SEALED TO BE VALID.

James B. Whittum, P.E
FL # 0027689
8533 Acorn Ridge Ct.
Tampa, Florida 33625
813-926-9719

SEP 16 2005

CA2

NUAIR

SERIES-900 ALUM H ROLLER WINDOW (NON-IMPACT)

NUAIR WINDOWS AND DOORS
8105 ANDERSON ROAD
TAMPA, FL. 33634
TEL. (800) 282-6827 FAX (813) 886-9737

revisions: no. | date | by | description

date: 06/09/05
scale: 1/2" = 1"
dr. by: JR
chk. by:

drawing no. HR900

SHEET 11

Design Pressures for 900 Series, XOX Horizontal Roller Windows (psf), in Wood Frame Installation

Buck Size (inches)		Call Name	1/8" An.				1/8" I.G.				1/8" Temp.				3/16" An.				3/16" I.G.				3/16" Temp.			
			Deck. Screw		#10 SMS		Deck. Screw		#10 SMS		Deck. Screw		#10 SMS		Deck. Screw		#10 SMS		Deck. Screw		#10 SMS		Deck. Screw		#10 SMS	
Width	Height		(+)	(-)	(+)	(-)	(+)	(-)	(+)	(-)	(+)	(-)	(+)	(-)	(+)	(-)	(+)	(-)	(+)	(-)	(+)	(-)	(+)	(-)	(+)	(-)
72	24	6020	45.0	74.7	45.0	74.7	45.0	115.7	45.0	110.0	45.0	115.7	45.0	110.0	45.0	115.7	45.0	119.0	45.0	115.7	45.0	110.0	45.0	115.7	45.0	119.0
84	24	7020	45.0	49.4	45.0	49.4	45.0	88.9	45.0	88.9	45.0	111.5	45.0	115.7	45.0	87.5	45.0	87.5	45.0	111.5	45.0	115.7	45.0	111.5	45.0	115.7
96	24	8020	45.0	49.4	45.0	49.4	45.0	88.9	45.0	88.9	45.0	108.4	45.0	113.4	45.0	87.5	45.0	87.5	45.0	108.4	45.0	113.4	45.0	108.4	45.0	113.4
108	24	9020	45.0	49.4	45.0	49.4	45.0	88.9	45.0	88.9	45.0	106.0	45.0	111.8	45.0	87.5	45.0	87.5	45.0	106.0	45.0	111.8	45.0	106.0	45.0	111.8
120	24	10020	45.0	49.4	45.0	49.4	45.0	88.9	45.0	88.9	45.0	104.1	45.0	110.0	45.0	87.5	45.0	87.5	45.0	104.1	45.0	110.0	45.0	104.1	45.0	110.0
72	36	6030	45.0	56.4	45.0	56.4	45.0	83.3	45.0	83.3	45.0	83.3	45.0	83.3	45.0	83.3	45.0	83.3	45.0	83.3	45.0	83.3	45.0	83.3	45.0	83.3
84	36	7030	42.7	42.7	42.7	42.7	45.0	76.9	45.0	76.9	45.0	82.6	45.0	83.3	45.0	69.7	45.0	69.7	45.0	82.6	45.0	83.3	45.0	82.6	45.0	83.3
96	36	8030	42.7	42.7	42.7	42.7	45.0	76.9	45.0	76.9	45.0	79.5	45.0	83.3	45.0	69.7	45.0	69.7	45.0	79.5	45.0	83.3	45.0	79.5	45.0	83.3
108	36	9030	42.7	42.7	42.7	42.7	45.0	76.9	45.0	76.9	45.0	77.1	45.0	81.5	45.0	69.7	45.0	69.7	45.0	77.1	45.0	81.5	45.0	77.1	45.0	81.5
120	36	10030	42.7	42.7	42.7	42.7	45.0	75.2	45.0	76.9	45.0	75.2	45.0	79.4	45.0	69.7	45.0	69.7	45.0	75.2	45.0	79.4	45.0	75.2	45.0	79.4
72	48	6040	42.9	42.9	42.9	42.9	45.0	50.0	45.0	50.0	45.0	50.0	45.0	50.0	45.0	50.0	45.0	50.0	45.0	50.0	45.0	50.0	45.0	50.0	45.0	50.0
84	48	7040	33.0	33.0	33.0	33.0	45.0	47.6	45.0	47.6	45.0	47.6	45.0	47.6	45.0	47.6	45.0	47.6	45.0	47.6	45.0	47.6	45.0	47.6	45.0	47.6
96	48	8040	33.0	33.0	33.0	33.0	45.0	46.9	45.0	46.9	45.0	46.9	45.0	46.9	45.0	46.9	45.0	46.9	45.0	46.9	45.0	46.9	45.0	46.9	45.0	46.9
108	48	9040	33.0	33.0	33.0	33.0	45.0	46.9	45.0	46.9	45.0	46.9	45.0	46.9	45.0	46.9	45.0	46.9	45.0	46.9	45.0	46.9	45.0	46.9	45.0	46.9
120	48	10040	33.0	33.0	33.0	33.0	45.0	46.9	45.0	46.9	45.0	46.9	45.0	46.9	45.0	46.9	45.0	46.9	45.0	46.9	45.0	46.9	45.0	46.9	45.0	46.9
72	60	6050	33.3	33.3	33.3	33.3	33.8	33.8	33.8	33.8	33.8	33.8	33.8	33.8	33.8	33.8	33.8	33.8	33.8	33.8	33.8	33.8	33.8	33.8	33.8	33.8
84	60	7050	26.5	26.5	26.5	26.5	32.1	32.1	32.1	32.1	32.1	32.1	32.1	32.1	32.1	32.1	32.1	32.1	32.1	32.1	32.1	32.1	32.1	32.1	32.1	32.1
96	60	8050	26.5	26.5	26.5	26.5	30.6	30.6	30.6	30.6	30.6	30.6	30.6	30.6	30.6	30.6	30.6	30.6	30.6	30.6	30.6	30.6	30.6	30.6	30.6	30.6
108	60	9050	26.5	26.5	26.5	26.5	30.1	30.1	30.1	30.1	30.1	30.1	30.1	30.1	30.1	30.1	30.1	30.1	30.1	30.1	30.1	30.1	30.1	30.1	30.1	30.1
120	60	10050	26.5	26.5	26.5	26.5	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0

Design Pressures for 900 Series, XOX Horizontal Roller Windows (psf), in Masonry Installation

Buck Size (inches)		Call Name	# of 1/4" Screws			1/8" An.		1/8" I.G.		1/8" Temp.		3/16" An.		3/16" I.G.		3/16" Temp.	
Width	Height		Jamb	Hdr	Sill	(+)	(-)	(+)	(-)	(+)	(-)	(+)	(-)	(+)	(-)	(+)	(-)
72	24	6020	2	4	0	45.0	74.7	45.0	93.6	45.0	93.6	45.0	93.6	45.0	93.6	45.0	93.6
84	24	7020	2	4	0	45.0	49.4	45.0	80.3	45.0	80.3	45.0	80.3	45.0	80.3	45.0	80.3
96	24	8020	2	4	0	45.0	49.4	45.0	70.2	45.0	70.2	45.0	70.2	45.0	70.2	45.0	70.2
108	24	9020	2	4	0	45.0	49.4	45.0	62.4	45.0	62.4	45.0	62.4	45.0	62.4	45.0	62.4
120	24	10020	2	6	0	45.0	49.4	45.0	70.2	45.0	70.2	45.0	70.2	45.0	70.2	45.0	70.2
72	36	6030	3	4	0	45.0	56.4	45.0	78.0	45.0	78.0	45.0	78.0	45.0	78.0	45.0	78.0
84	36	7030	3	4	0	42.7	42.7	45.0	66.9	45.0	66.9	45.0	66.9	45.0	66.9	45.0	66.9
96	36	8030	3	4	0	42.7	42.7	45.0	58.5	45.0	58.5	45.0	58.5	45.0	58.5	45.0	58.5
108	36	9030	3	4	0	42.7	42.7	45.0	52.0	45.0	52.0	45.0	52.0	45.0	52.0	45.0	52.0
120	36	10030	3	6	0	42.7	42.7	45.0	56.2	45.0	56.2	45.0	56.2	45.0	56.2	45.0	56.2
72	48	6040	3	4	0	42.9	42.9	45.0	50.0	45.0	50.0	45.0	50.0	45.0	50.0	45.0	50.0
84	48	7040	3	4	0	33.0	33.0	45.0	47.6	45.0	47.6	45.0	47.6	45.0	47.6	45.0	47.6
96	48	8040	3	4	0	33.0	33.0	43.9	43.9	43.9	43.9	43.9	43.9	43.9	43.9	43.9	43.9
108	48	9040	3	4	0	33.0	33.0	39.0	39.0	39.0	39.0	39.0	39.0	39.0	39.0	39.0	39.0
120	48	10040	3	6	0	33.0	33.0	42.1	42.1	42.1	42.1	42.1	42.1	42.1	42.1	42.1	42.1
72	60	6050	4	4	0	33.3	33.3	33.8	33.8	33.8	33.8	33.8	33.8	33.8	33.8	33.8	33.8
84	60	7050	4	4	0	26.5	26.5	32.1	32.1	32.1	32.1	32.1	32.1	32.1	32.1	32.1	32.1
96	60	8050	4	4	0	26.5	26.5	30.6	30.6	30.6	30.6	30.6	30.6	30.6	30.6	30.6	30.6
108	60	9050	4	4	0	26.5	26.5	30.1	30.1	30.1	30.1	30.1	30.1	30.1	30.1	30.1	30.1
120	60	10050	4	6	0	26.5	26.5	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0

LIMIT EXTERIOR (+) LOADS AS FOLLOWS
WITHOUT 1 " SILL HEIGHT EXTENDER = +45.0 PSF
WITH 1 " SILL HEIGHT EXTENDER = +65.0 PSF

DESIGN LOAD ANALYSIS NOTES:
-VALUES BASED ON AAMA 101-97 OR NAFS-02 TEST RESULTS.
-STRUCTURAL ANALYSIS PER THE METHODS OF AAMA 203.
-GLASS ANALYSIS PER ASTM E1300-02.
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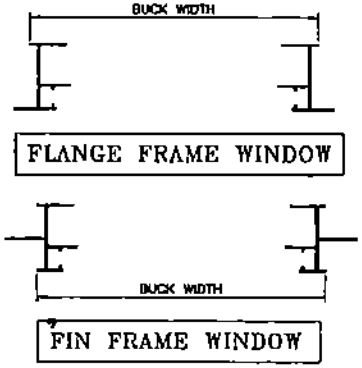
-INSULATED GLASS NOT TESTED BUT QUALIFIED BY ASTM E1300.



THIS DOCUMENT MUST BE SIGNED AND SEALED TO BE VALID.

James B. Whitlum, P.E
FL # 0027689
8533 Acorn Ridge Ct.
Tampa, Florida 33625
813-926-9719

SEP 1 6 2005

CA3

NUAIR

SERIES-900 ALUM H ROLLER WINDOW (NON-IMPACT)

NUAIR WINDOWS AND DOORS
8105 ANDERSON ROAD
TAMPA, FL. 33634
TEL. (800) 282-6827 FAX (813) 886-9737

revisions:
no. date by description

date: 09/09/05
scale: 1/2" = 1'
dr. by: JR
chk. by:

drawing no.
HR900

SHEET 12

James B. Whittum, P.E.
Fla. #27689
8533 Acorn Ridge Court
Tampa, Florida 33625
813-9269719, Fax 813-920-1257

January 11, 2005

RE: Rule 9B-72.110, Certification of Independence, Florida registered Professional Engineer

Manufacturer:
NuAir Manufacturing
8105 Anderson Rd
Tampa, FL 33684

Engineer:
James B. Whittum, P.E.
8533 Acorn Ridge Court
Tampa, Florida 33625

This certification is to attest that James Whittum, PE:

1. Does not have, nor intends to acquire a financial interest in NuAir Manufacturing.
2. Does not have, nor intends to acquire a financial interest in any other entity involved in the approval process of the product.

James B. Whittum
JAN 1 1 2005

Certificate of Independence

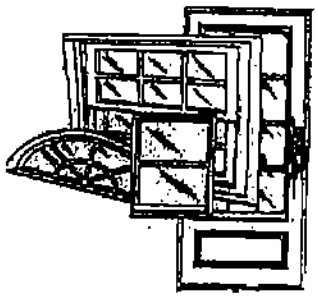
Per Rule 9B-72.110

Manufacturer: NuAir Manufacturing
8105 Anderson Rd
Tampa, FL 33614

Evaluator: Joseph Demidovich, P.E.
157 Woodside Dr.
Lakeland, FL 33813
FL #22356

This certification is to attest that Joseph Demidovich, P.E.:

Does not have, nor intends to acquire a financial interest in NuAir Manufacturing, or any other entity involved in the distribution, manufacturing or approval process of the product.



Certified Testing Laboratories

7252 Narcoossee Road
Orlando, FL 32822
Phone 800-381-7744
Fax 407-384-7751
E-mail jim@ctlarch.com

Statement of Independence

To Whom It May Concern:

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Furthermore the Laboratory does not employ anyone who is financially affiliated or associated with Nu-Air Window and Door.

Respectfully yours,

James W. Blakely