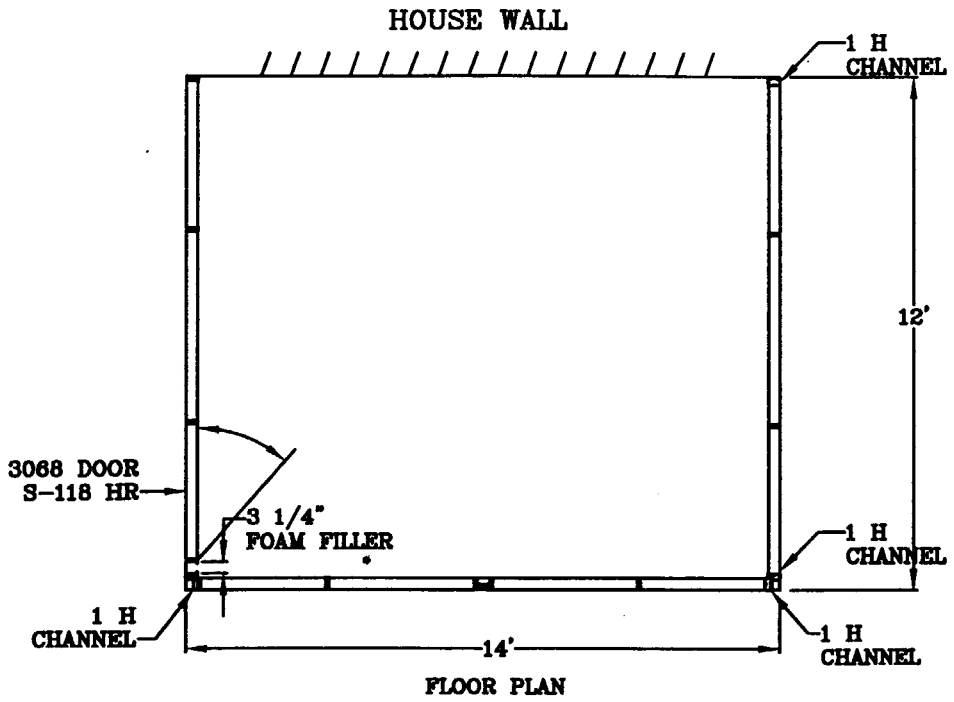
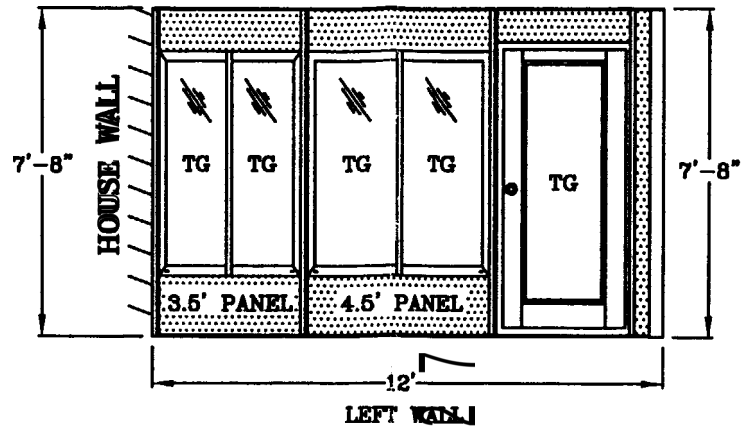
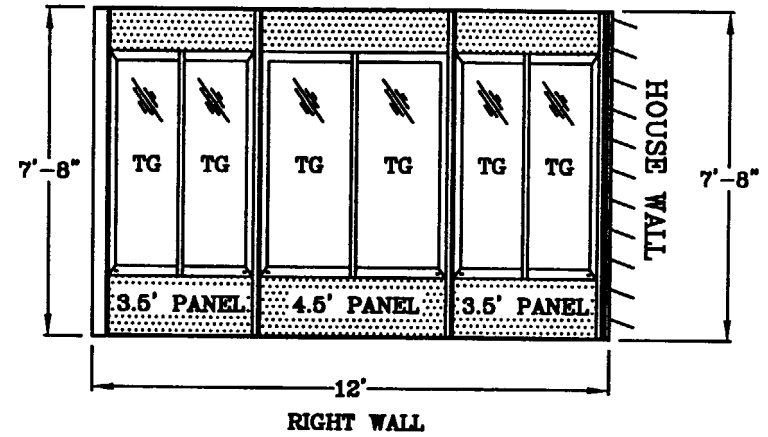


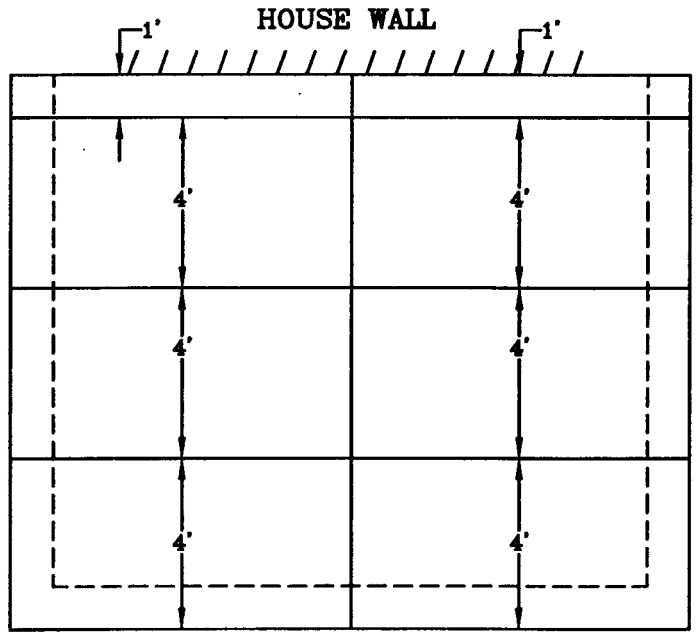
FLOOR PLAN



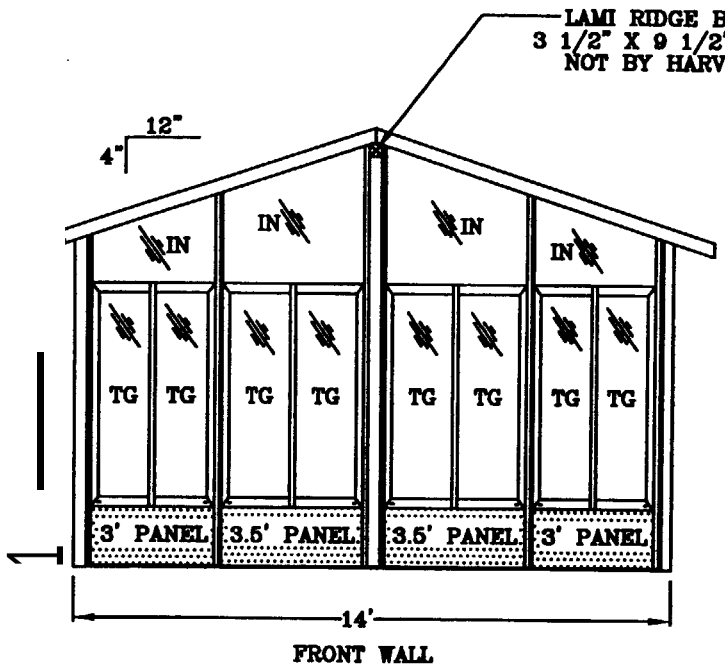
LEFT WALL



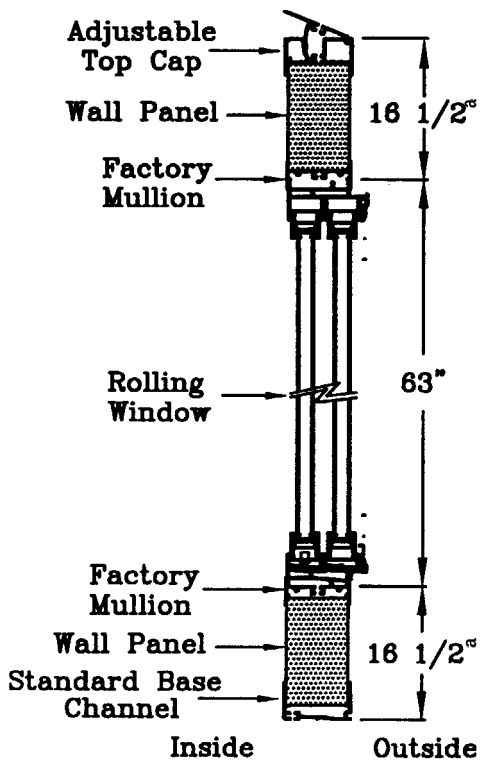
RIGHT WALL



ROOF PLAN



FRONT WALL



GABLE SIDE CROSS SECTION

GENERAL NOTES:

1.) This 3-season system has been drawn per contractor request. It is the contractor's responsibility to comply with all local building codes and to obtain building permits as required.
2.) Laminated ridge beam sized in accordance with Boise Versa-Lam roof load tables. It is contractor's responsibility to comply with Versa-Lam Specifications if selecting any ridge beam other than Versa-Lam.
3.) Window Style: Rolling
4.) Window Color: White
5.) Wall Panel Color: White
6.) Wall: 3 1/4" Insulated R-13
7.) Roof: 4" insulated White R-16
8.) Glazing Legend:

IN = Insulated DSB TG = Tempered
LE = Low-E DSB TE = Tempered Low-E
P = Solid Panel TA = Tempered Low-E/Arg
LA = Low-E Argon DSB

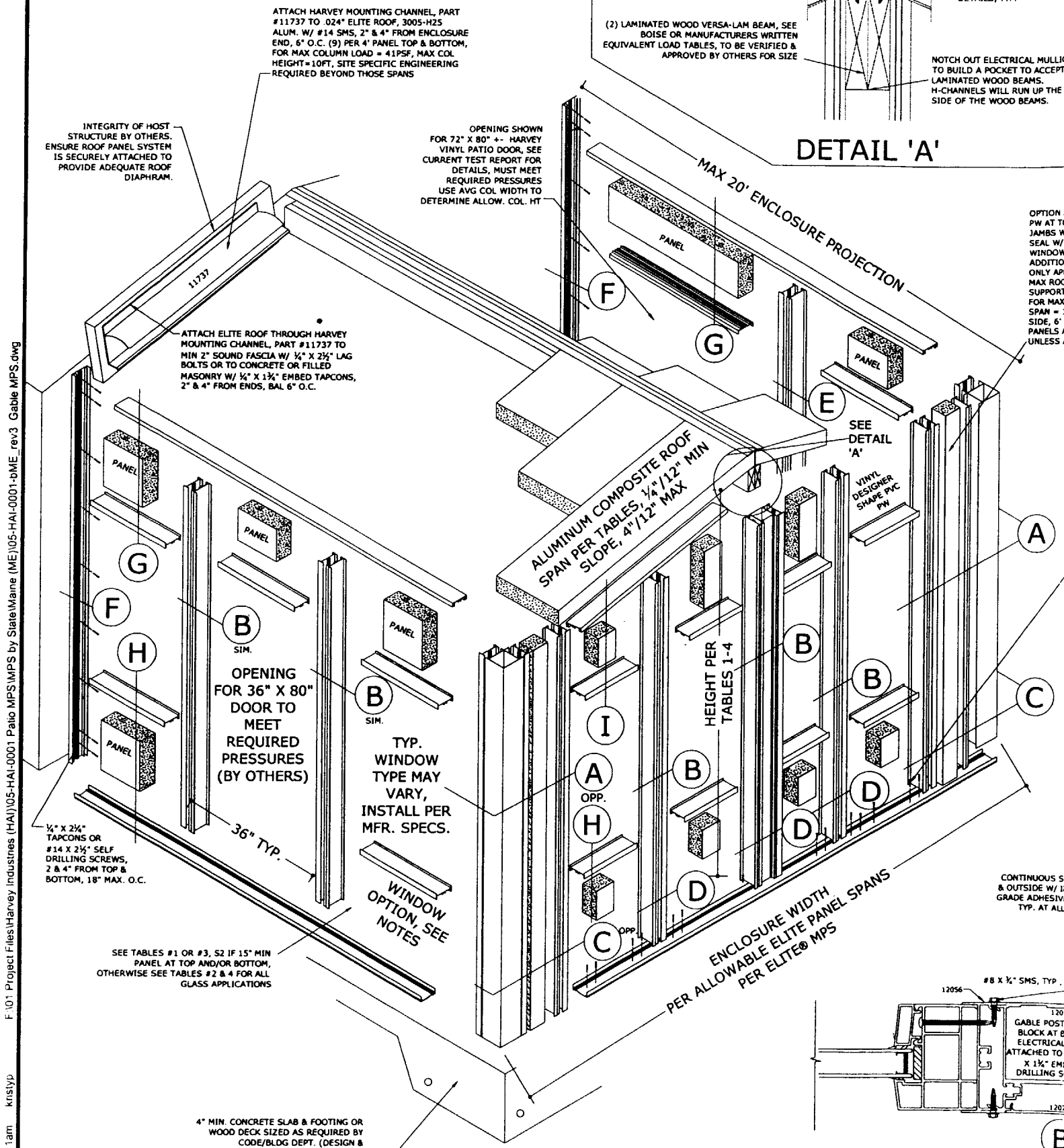
PROPOSAL DRAWING
FOR DESIGN ONLY - USE AS GUIDE

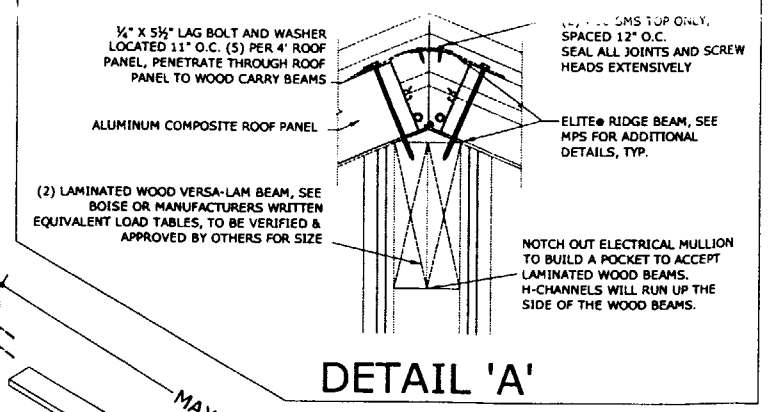
*FOR CONSTRUCTION & ASSEMBLY DETAILS SEE INSTALLATION INSTRUCTIONS

HARVEY INDUSTRIES INC.
CLASSIC VINYL PATIO ROOM

DESCRIPTION:	GABLE STYLE
ROOM SIZE:	12' X 14'
DEALER REALEASE SIGNATURE:	DATE:
	ORDER NUMBER:
DRAWN BY: PAF	DRAWN FOR: AMERICAN DESIGN
DATE: 12/12/05	
REV DATE:	SCALE: NTS SHEET 1 OF 1

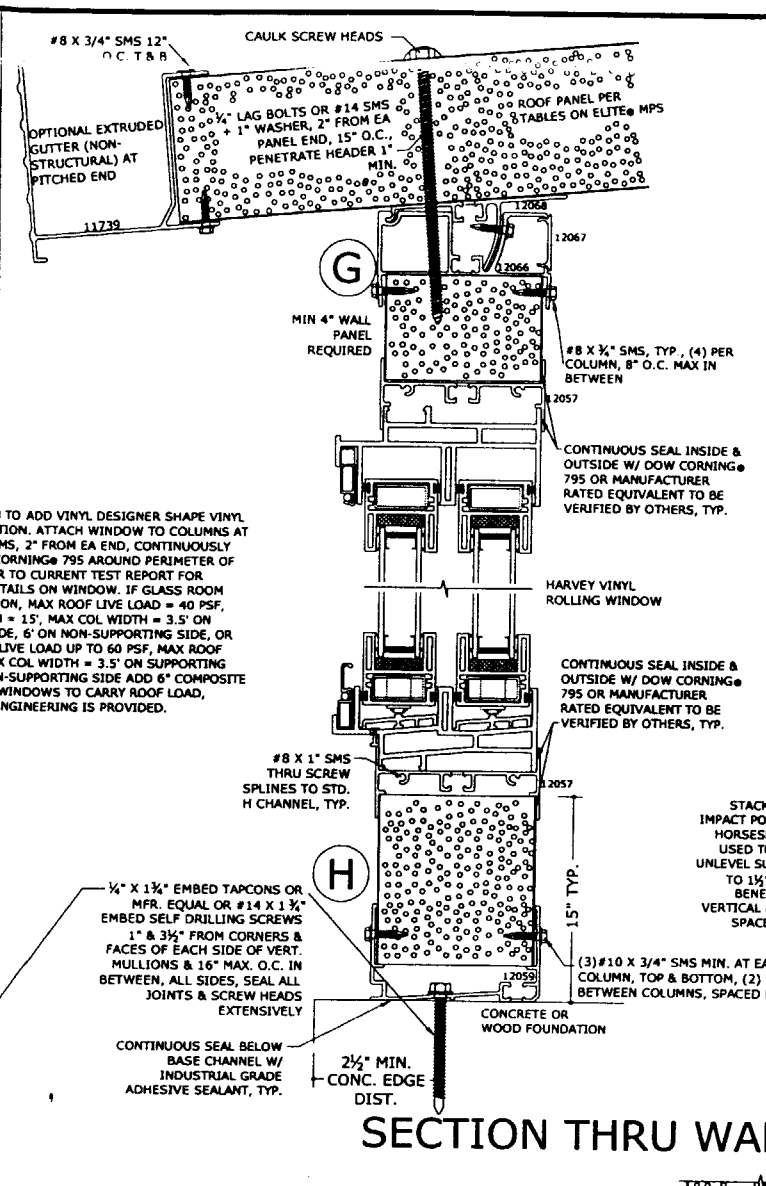
HARVEY INDUSTRIES INC. MASTER PLAN SHEET - GABLE ROOF EDITION



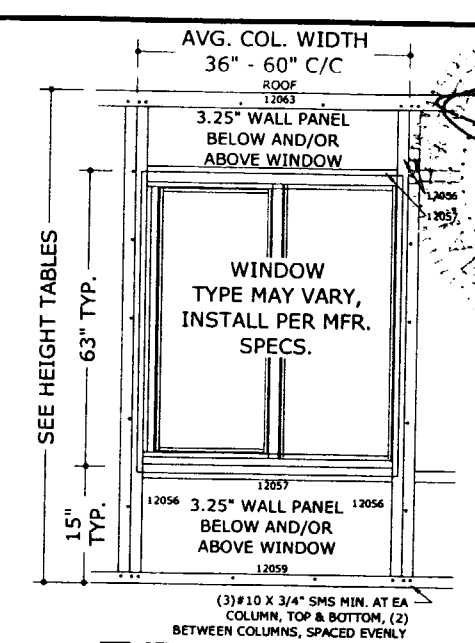


DETAIL 'A'

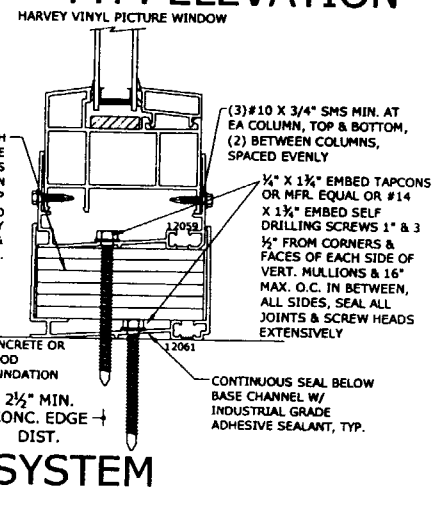
OPTION SHOWN TO ADD VINYL DESIGNER SHAPE VINYL PW AT TOP SECTION. ATTACH WINDOW TO COLUMNS AT JAMBS W/ #8 SMS, 2" FROM EA END, CONTINUOUSLY SEAL W/ DOW CORNING® 795 AROUND PERIMETER OF WINDOW. REFER TO CURRENT TEST REPORT FOR ADDITIONAL DETAILS ON WINDOW. IF GLASS ROOM ONLY APPLICATION, MAX ROOF LIVE LOAD = 40 PSF, MAX ROOF SPAN = 15', MAX COL WIDTH = 3.5' ON SUPPORTING SIDE, 6' ON NON-SUPPORTING SIDE, OR FOR MAX ROOF LIVE LOAD UP TO 60 PSF, MAX ROOF SPAN = 15', MAX COL WIDTH = 3.5' ON SUPPORTING SIDE, 6' ON NON-SUPPORTING SIDE ADD 6" COMPOSITE PANELS ABOVE WINDOWS TO CARRY ROOF LOAD, UNLESS ADD'L ENGINEERING IS PROVIDED.

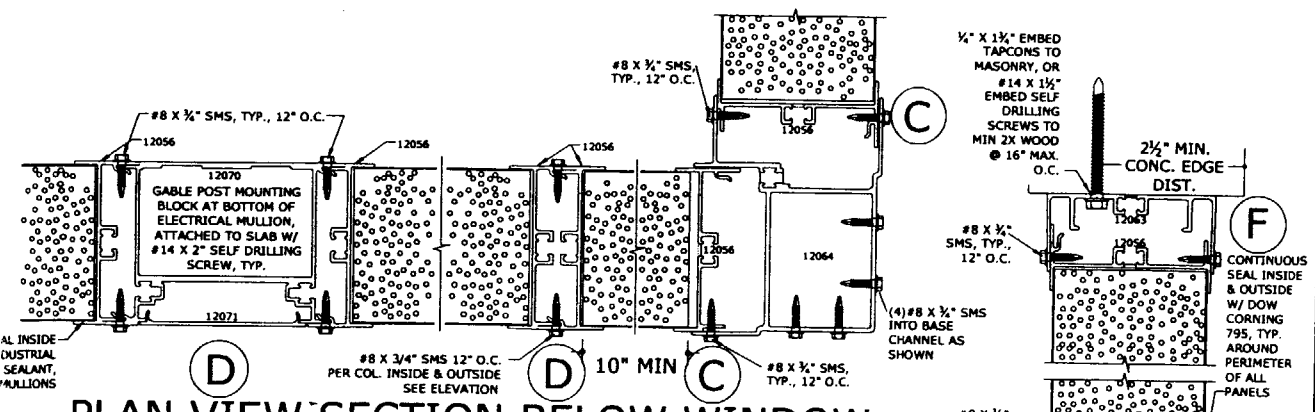


SECTION THRU WALL SYSTEM

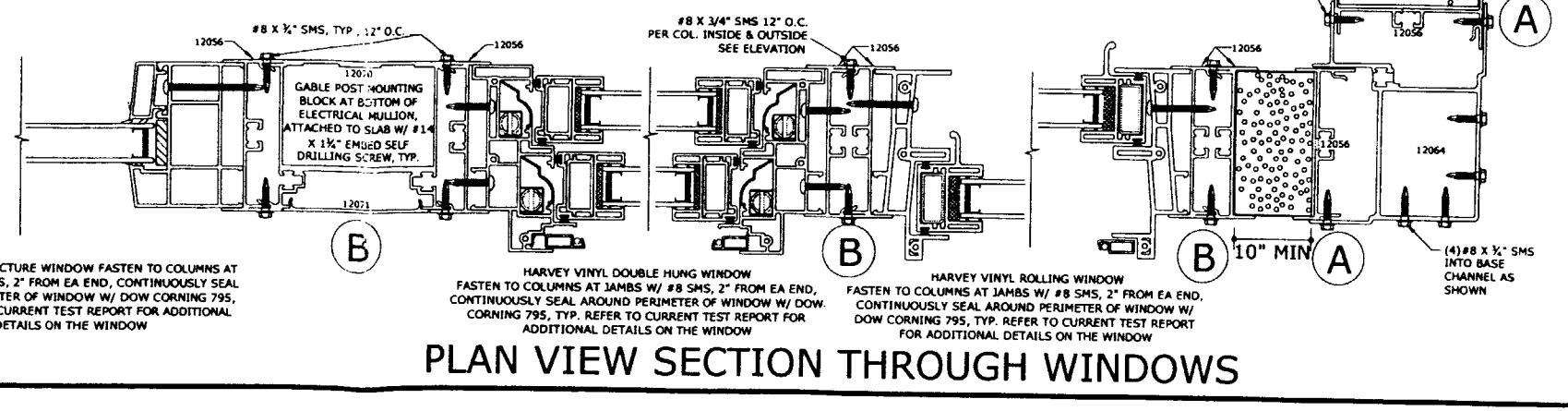


TYP. ELEVATION





PLAN VIEW SECTION BELOW WINDOW



HARVEY VINYL PICTURE WINDOW FASTEN TO COLUMNS AT JAMBS W/ #8 SMS, 2" FROM EA END, CONTINUOUSLY SEAL AROUND PERIMETER OF WINDOW W/ DOW CORNING 795, TYP. REFER TO CURRENT TEST REPORT FOR ADDITIONAL DETAILS ON THE WINDOW

HARVEY VINYL DOUBLE HUNG WINDOW FASTEN TO COLUMNS AT JAMBS W/ #8 SMS, 2" FROM EA END, CONTINUOUSLY SEAL AROUND PERIMETER OF WINDOW W/ DOW. CORNING 795, TYP. REFER TO CURRENT TEST REPORT FOR ADDITIONAL DETAILS ON THE WINDOW

HARVEY VINYL ROLLING WINDOW FASTEN TO COLUMNS AT JAMBS W/ #8 SMS, 2" FROM EA END, CONTINUOUSLY SEAL AROUND PERIMETER OF WINDOW W/ DOW CORNING 795, TYP. REFER TO CURRENT TEST REPORT FOR ADDITIONAL DETAILS ON THE WINDOW

PLAN VIEW SECTION THROUGH WINDOWS

FRANK L. BENNARDO, P.E. # 10478
STATE OF FLORIDA
04/15/2005
VALID FOR 1 JOB SITE ONLY
VALID ONLY WITH RAISED ENGINEER SEAL
FRANK L. BENNARDO, P.E., INC.
CONSULTING ENGINEERS
4441 NORTH DIXIE HIGHWAY
BOCA RATON, FL 33431
(561) 391-2888 FAX: (561) 391-2862
WWW.FLBENGINEERING.COM
CERTIFICATE OF AUTHORIZATION: #9885

HARVEY INDUSTRIES, INC.
1400 MAIN STREET
WALTHAM, MA 02451
(781) 899-2500

GABLE STYLE MASTER PLAN SHEET

REMARKS	DRWN	CHKD	DATE
INIT ISSUE	KLP	FLB	04/14/05

05-HAI-0001-b

PAGE SCALE: -

DESCRIPTION:

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1 OF 2

HARVEY INDUSTRIES, INC. MASTER PLAN SHEET -GABLE ROOF EDITION

DESIGN NOTES

2000 INTERNATIONAL BUILDING CODE, ASCE 7-98 IMPORTANCE CAT = I, I=0.77, Kd=0.85, Kzt=1.0, Kz=TABLE 6.5, 25SQFT TRIB AREA CONSIDERED FOR MULL CALCULATIONS, ENCLOSED PATIO STRUCTURE
qh = 0.00256*Kz*Kzt*Kd*V*V*I
P = qh ((GCp)-(GCpi)), GCpi=+/-0.18, MRH=15', ZONE 5
A 1/3 ALLOWABLE STRESS INCR. WAS NOT USED IN TABLES.

EXISTING WINDOWS & DOORS LEADING OUT TO PATIO ENCLOSURE MUST REMAIN. IN WINDBOURNE DEBRI AREAS, PLEASE ENSURE THAT THE MAIN HOST STRUCTURE IS PROTECTED WITH IMPACT RESISTANT PRODUCTS.

CALCULATED COMPONENTS AND CLADDING DESIGN PRESSURES ARE LISTED IN TABLES FOR CORRESPONDING WIND SPEED AND EXPOSURE.

DESIGN APPROVED FOR 41PSF LIVE LOAD AT 15' MAX. CLEAR SPAN BEFORE ADD'L ENGINEERING IS REQUIRED.

WINDOW & DOOR ALLOWABLE PRESSURES SHALL BE PER ANY APPROVED MANUFACTURER SPECS FOR SIZE AND TYPE WINDOWS INSTALLED. INSTALL ALL WINDOWS & DOORS PER MANUFACTURER SPECIFICATIONS TO MEET REQUIRED DESIGN PRESSURES AS STATED IN TABLES OR AS PER ABOVE.

GENERAL NOTES

1) THIS DOCUMENT IS NSIDERED INVALID & UNCERTIFIED WITHOUT THE ORIGIN SIGNATURE & RAISED SEAL OF FRANK L. BENNARDO, P.E.
** ALTERATIONS, ADDITIONS, OR OTHER MARKINGS TO THIS DOCUMENT ARE NOT PERMITTED AND INVALIDATE OUR CERTIFICATION. HIGHLIGHTING OF DOCUMENTS IS AT THE BUILDING DEPARTMENTS DISCRETION.
2) THIS STRUCTURE HAS BEEN DESIGNED AND SHALL BE FABRICATED IN ACCORDANCE WITH THE REQUIREMENTS OF THE 2000 INTERNATIONAL BUILDING CODE.
3) NO IMPACT CERTIFICATION IS OFFERED WITH THIS DESIGN. ADHERE TO BUILDING CODE REQUIREMENTS TO PROVIDE AN APPROVED IMPACT PROTECTION SYSTEM AT THE MAIN ENVELOPE OF THE STRUCTURE.
4) THE EXISTING HOST STRUCTURE MUST BE CAPABLE OF SUPPORTING THE LOADED STRUCTURE AS VERIFIED BY THE PERMIT HOLDER. NO WARRANTY, EITHER EXPRESSED OR IMPLIED, IS CONTAINED HEREIN.
5) COMPOSITE WALL MEMBERS SHALL BE CONSTRUCTED USING TYPE 3005-H14 OR H25 ALUMINUM FACINGS OR DURATEX, EXTERIOR HARDBOARD, GREENBOARD SHEETROCK INTERIOR, (1) PCF ASTM C-578 EPS ROOM CORNER FIRE TEST CONDUCTED TO "U.B.C. 26 - 3 ROOM FIRE TEST STANDARD FOR INTERIOR OF FOAM PLASTIC SYSTEMS" WITH GREENBOARD, 1.5LB EPS, AND 0.045" ALUMINUM. DESIGN AND CERTIFICATION OF PANELS BY OTHERS.
6) ALL EXTRUSIONS SHALL BE ALUMINUM ALLOY TYPE 6063-T6 OR 6060-T61 U.N.O. EXTRUSION THICKNESS PER THIS SHEET, WITH A +-0.010" TOLERANCE U.N.O.
7) ALL PRIMARY MEMBERS AND TENSION CONNECTIONS SHALL BE FASTENED AS SHOWN IN ACCORDANCE WITH PROPER FASTENING METHODS AND CODES. ANY FASTENER STRIPPED OR NOT ADEQUATELY HOLDING SHALL BE REPLACED.
8) FASTENERS SHALL HAVE A HEAD AND/OR BE PROVIDED WITH 1/4" DIAMETER WASHER MINIMUM UNLESS NOTED. EMBED. LENGTHS NOTED ON DRAWING SHALL NOT INCLUDE STUCCO OR FINISH MATERIAL.
9) ALL FASTENERS TO BE 2024-T4 ALLOY, NON-MAGNETIC STAINLESS STEEL, OR CADMIUM PLATED OR OTHERWISE CORROSION RESISTANT MATERIAL AND SHALL COMPLY WITH5.1.1C, SPECIFICATIONS FOR ALUM. STRUCTURES -SECTION 1, THE ALUMINUM ASSOCIATION,INC., & APPLICABLE FEDERAL, STATE, AND LOCAL CODES.
10) THE CONTRACTOR IS RESPONSIBLE TO INSULATE ALUMINUM MEMBERS FROM DISSIMILAR METALS TO PREVENT ELECTROLYSIS. USE 'KOPPERS BITUMINOUS PAINT' OR MFR. EQUAL IN ACCORDANCE WITH APPLICABLE CODE REQUIREMENTS.
11) ELECTRICAL GROUND AND ALL RELATED WIRING AND CONSIDERATIONS TO BE DESIGNED BY OTHERS AS REQUIRED.
12) IF REQUIRED BY CODE, THE EPS CORE SHALL BE SEPARATED FROM THE BUILDING INTERIOR BY A 15 MINUTE THERMAL BARRIER OF APPROVED 1/2 INCH GYPSUM WALLBOARD OR EQUAL (GREENBOARD SHEETROCK IS APPROVED).
13) ALL CONCRETE FOUNDATIONS SHALL BE MIN. f'c=3000PSI AT 28 DAYS ON 2500 PSF MIN COMPACTED SOIL (BY OTHERS). ALLOW 3 DAY CURE BEFORE INSTALLING BOLTS. CONCRETE TO COMPLY WITH LATEST ADOPTED ACI CODE.
14) REINFORCING STEEL SHALL MEET ASTM A-615 GRADE 60. WELDED WIRE FABRIC SHALL COMPLY WITH ASTM A-185.
15) WINDOWS AND DOORS SHALL BE IN ACCORDANCE WITH REQUIRED WIND PRESSURES & A.N.S.I/A.A.M.A CURRENT SPECS AS SUMMARIZED HEREIN. CERTIFICATION OF DOORS AND WINDOWS TO MEET REQUIRED PRESSURES IS BY OTHERS.
16) ROOF PITCH TO BE 1/4" PER FOOT MIN, 4" PER FOOT MAX PROVIDED HIGHEST WALL DOES NOT EXCEED SPECIFIED HEIGHT.
17) ENGINEER SEAL AFFIXED HERETO VALIDATES STRUCTURAL DESIGN AS SHOWN ONLY. USE OF THIS SPECIFICATION BY CONTRACTOR, et al. INDEMNIFIES AND SAVES HARMLESS THIS ENGINEER FOR ALL COSTS & DAMAGES INCLUDING LEGAL FEES & APPELLATE FEES RESULTING FROM MATERIAL FABRICATION, SYSTEM ERECTION, & CONSTRUCTION PRACTICES BEYOND THAT WHICH IS CALLED FOR BY LOCAL, STATE, AND FEDERAL CODES AND FROM DEVIATIONS OF THIS PLAN.
18) EXCEPT AS EXPRESSLY PROVIDED IN THIS SPECIFICATION, NO CERTIFICATIONS OR AFFIRMATIONS ARE INTENDED.

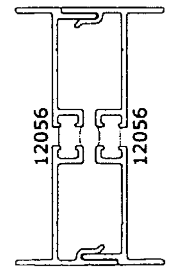


TABLE 1: STD. 'H' MULLION HEIGHT TABLE
15" MINIMUM SOLID PANEL HEIGHT

WIND VELOCITY & EXPOSURE	LOAD (PSF)	AVERAGE CENTER TO CENTER COLUMN SPACING > 2'-0"	2'-6"	3'-0"	3'-6"	4'-0"	4'-6"	5'-0"
100 B & LESS	17	11' - 1"	10' - 3"	9' - 8"	9' - 2"	8' - 9"	8' - 5"	8' - 2"
100 C, 110 B	21	10' - 4"	9' - 7"	9' - 0"	8' - 7"	8' - 2"	7' - 10"	7' - 7"
110 C, 120 B	25	9' - 9"	9' - 0"	8' - 6"	8' - 1"	7' - 9"	7' - 5"	7' 2"
120 C, 130 B	30	9' - 2"	8' - 6"	8' - 0"	7' - 7"	7' - 3"	7' - 0"	6' - 9"
130 C, 140 B	35	8' - 8"	8' - 1"	7' - 7"	7' - 3"	6' - 11"	6' - 8"	6' - 5"
140C, 150B	41	8' - 3"	7' - 8"	7' - 2"	6' - 10"	6' - 6"	6' 3"	6' 1"

TABLE 2: STD. 'H' MULLION HEIGHT TABLE
GLASS ROOM ONLY

WIND VELOCITY & EXPOSURE	LOAD (PSF)	AVERAGE CENTER TO CENTER COLUMN SPACING > 2'-0"	2'-6"	3'-0"	3'-6"	4'-0"	4'-6"	5'-0"
100 B & LESS	17	10' - 10"	10' - 1"	9' - 6"	9' - 0"	8' - 7"	8' - 3"	[illegible]
100 C, 110 B	21	10' - 1"	9' - 5"	8' - 10"	8' - 5"	8' - 0"	7' - 9"	[illegible]
110 C, 120 B	25	9' - 7"	8' - 10"	8' - 4"	7' - 11"	7' - 7"	7' - 3"	7' - 0"
120 C, 130 B	30	9' - 0"	8' - 4"	7' - 10"	7' - 5"	7' - 1"	6' - 10"	6' - 7"
130 C, 140 B	35	8' - 6"	7' - 11"	7' - 5"	7' - 1"	6' - 9"	6' - 6"	6' - 3"
140C, 150B	41	8' - 1"	7' - 6"	7' - 1"	6' - 8"	6' - 5"	6' - 2"	5' - 11"

'LOAD' REPRESENTS DESIGN WIND PRESSURE FORCE ON COLUMN, NOT ROOF LIVE LOAD

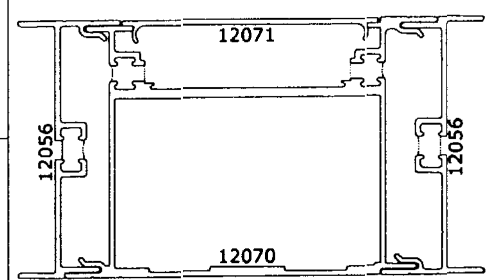


TABLE 3: ELECTRICAL MULLION HEIGHT TABLE
15" MINIMUM SOLID PANEL HEIGHT

WIND VELOCITY & EXPOSURE	LOAD (PSF)	AVERAGE CENTER TO CENTER COLUMN SPACING > 2'-0"	2'-6"	3'-0"	3'-6"	4'-0"	4'-6"	5'-0"
100 B & LESS	17	15' - 3"	14' - 2"	13' - 4"	12' - 8"	12' - 1"	11' - 8"	11' - 3"
100 C, 110 B	21	14' - 3"	13' - 3"	12' - 5"	11' - 10"	11' - 3"	10' - 10"	10' - 6"
110 C, 120 B	25	13' - 5"	12' - 6"	11' - 9"	11' - 2"	10' - 8"	10' - 3"	9' - 11"
120 C, 130 B	30	12' - 8"	11' - 9"	11' - 0"	10' - 6"	10' - 0"	9' - 8"	9' - 4"
130 C, 140 B	35	12' - 0"	11' - 2"	10' - 6"	9' - 11"	9' - 6"	9' - 2"	8' - 10"
140C, 150B	41	11' - 5"	10' - 7"	9' - 11"	9' - 5"	9' - 0"	8' - 8"	8' - 5"

TABLE 4: ELECTRICAL MULLION HEIGHT TABLE
GLASS ROOM ONLY

WIND VELOCITY & EXPOSURE	LOAD (PSF)	AVERAGE CENTER TO CENTER COLUMN SPACING > 2'-0"	2'-6"	3'-0"	3'-6"	4'-0"	4'-6"	5'-0"
100 B & LESS	17	15' - 0"	13' - 11"	13' - 1"	12' - 5"	11' - 11"	11' - 5"	11' - 0"
100 C, 110 B	21	13' - 11"	12' - 11"	12' - 2"	11' - 7"	11' - 1"	10' - 8"	10' - 3"
110 C, 120 B	25	13' - 2"	12' - 3"	11' - 6"	10' - 11"	10' - 5"	10' - 0"	9' - 8"
120 C, 130 B	30	12' - 5"	11' - 6"	10' - 10"	10' - 3"	9' - 10"	9' - 5"	9' - 1"
130 C, 140 B	35	11' - 9"	10' - 11"	10' - 3"	9' - 9"	9' - 4"	9' - 0"	8' - 8"
140C, 150B	41	11' - 2"	10' - 4"	9' - 9"	9' - 3"	8' - 10"	8' - 6"	8' - 3"

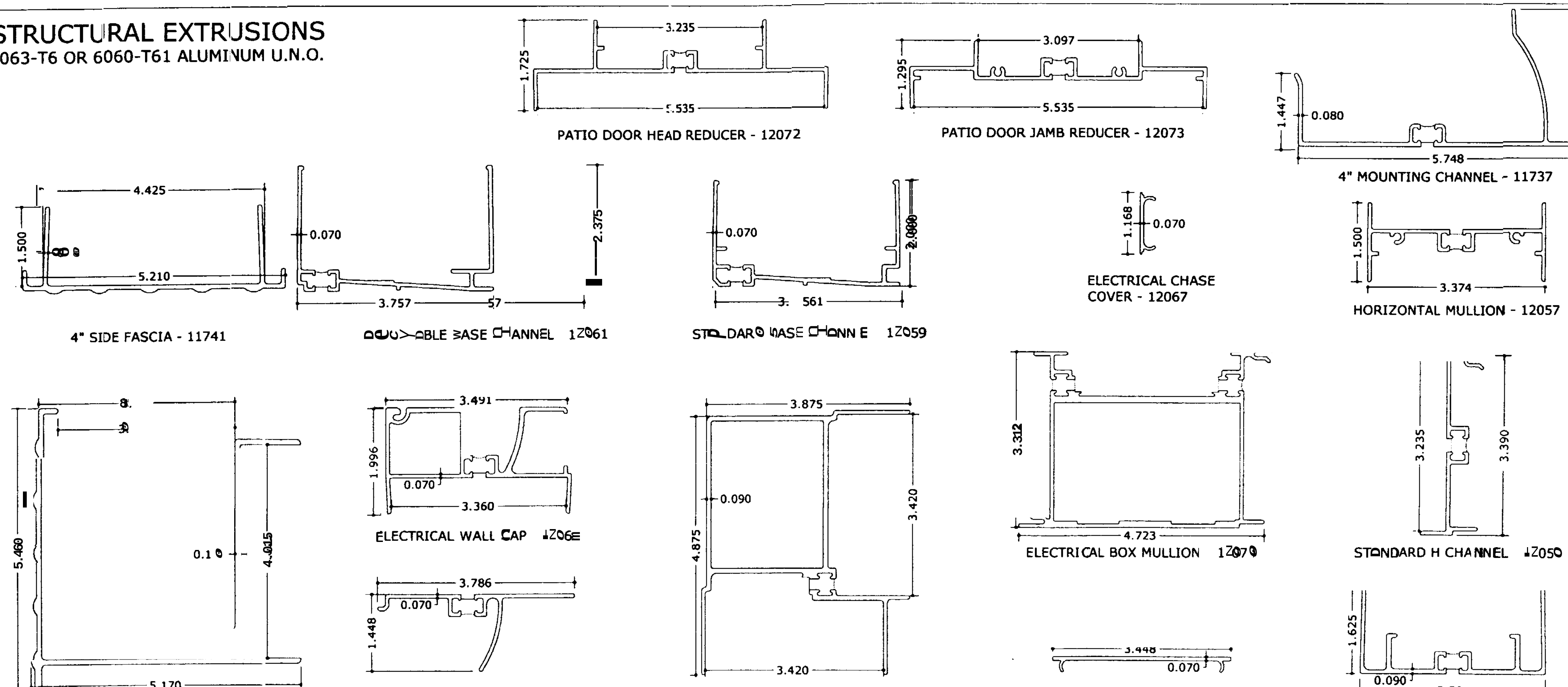
'LOAD' REPRESENTS DESIGN WIND PRESSURE FORCE ON COLUMN, NOT ROOF LIVE LOAD

VERTICAL MULLION DESIGN NOTES:

TABLES MAY BE USED FOR FRONT OR SIDE WALL APPLICATIONS BUT EACH COLUMN MUST MEET TABLE HEIGHT CRITERIA.
COLUMN STRENGTH VALUES OBTAINED FROM A SECTION PROPERTY ANALYSIS OF PARTS AS SHOWN. DESIGN DEFLECTION = L/180, ALLOWABLE STRESS FOR 6063-T6 OR 6060-T61 ALUMINUM = 15,000PSI.

NOTE: USE TABLES 1 & 3 WHEN A TOTAL OF 15" MINIMUM HEIGHT IN SOLID PANELS EXISTS ABOVE AND/OR BELOW THE GLAZING. USE TABLES 2 & 4 FOR GLASS ROOMS ONLY, W/ NO SOLID PANELS INSTALLED FOR MULLION HEIGHTS. MAXIMUM GRAVITY AND WIND LOADS ARE NOT CONSIDERED TO ACT SIMULTANEOUSLY DUE TO UPLIFT FACTOR AT MAXIMUM WIND VELOCITY.
ALTERNATE SPANS MAY BE ACHIEVED BY A SITE-SPECIFIC ANALYSIS OF ACTUAL FRAMING CONDITIONS. SEE A LICENSED ENGINEER FOR FURTHER ANALYSIS AS NEEDED.
NOTE: TABLES 1 & 3 MAY ALSO BE USED FOR SOLID PANEL WALL HEIGHTS. REFER TO ADDITIONAL ENGINEERING BY OTHERS FOR SOLID PANEL SPANS BEYOND THESE SPANS.
AVERAGE CENTER TO CENTER SPACING: DEFINED AS ½ THE DISTANCE BETWEEN COLUMNS TO THE LEFT, PLUS ½ THE DISTANCE BETWEEN COLUMNS TO THE RIGHT

STRUCTURAL EXTRUSIONS
6063-T6 OR 6060-T61 ALUMINUM U.N.O.



FRANK L. BENNARDO, P.E. INC.
CONSULTING ENGINEERS
4441 NORTH DIXIE HIGHWAY
BOCA RATON, FL 33431
(561) 391-2888 FAX: (561) 391-2882
WWW.FLBENGINEERING.COM
CERTIFICATE OF AUTHORIZATION: #9885

FRANK L. BENNARDO, P.E. #16476
04/14/2005
VALID FOR (1) JOB(S) ONLY
VALID ONLY WITH RAISED ENGINEER SEAL

HARVEY INDUSTRIES, INC.
1400 MAIN STREET
WALTHAM, MA 02451
(781)899-2500

GABLE STYLE MASTER PLAN SHEET

REMARKS	DRWN	CHKD	DATE
INIT ISSUE	KLP	FLB	04/14/05

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05-HAI-001-o
PAGE SCALE:
DESCRIPTION:

2 OF 2

ELITE ROOF PANEL CLEAR SPAN TABLES 2000 INTERNATIONAL BUILDING CODE EDIT

MAX. WIND VELOCITY, EXPOSURE, LIVE LOAD, AND DEFLECTION AS LISTED IN EACH TABLE

DEFLECTION = L / 80 — 11/10/03

LL	WIND SPEED & EXPOSURE	3" .024 1lb	3" .024 2lb	3" .032 1lb	3" .032 2lb	4" .024 1lb	4" .024 2lb	4" .032 1lb	4" .032 2lb	6" .024 1lb	6" .024 2lb	6" .032 1lb	6" .032 2lb	8" .024 1lb	8" .024 2lb	8" .032 1lb	8" .032 2lb
10	100B	20' 0"	20' 0"	21' 6"	21' 6"	23' 11"	23' 3"	24' 2"	23' 11"	30' 6"	32' 6"	31' 7"	32' 5"	33' 10"	37' 6"	37' 1"	38' 5"
20	110B,C, 120B	15' 11"	15' 10"	17' 1"	17' 1"	19' 0"	18' 6"	19' 0"	18' 9"	22' 10"	25' 1"	22' 11"	23' 10"	23' 11"	26' 11"	26' 6"	27' 11"
30	140B, 140C	13' 5"	13' 4"	14' 10"	14' 10"	15' 10"	15' 3"	15' 6"	15' 4"	18' 8"	20' 6"	18' 9"	19' 6"	19' 6"	22' 0"	21' 8"	22' 10"
40	150B, 150C	11' 8"	11' 6"	12' 10"	12' 10"	13' 9"	13' 2"	13' 5"	13' 3"	16' 2"	17' 9"	16' 3"	16' 10"	16' 11"	19' 0"	18' 9"	19' 9"
50	160B, 160C	10' 5"	10' 4"	11' 6"	11' 5"	12' 3"	11' 9"	12' 0"	11' 10"	14' 5"	15' 10"	14' 6"	15' 1"	15' 1"	17' 0"	16' 9"	17' 8"
60	175B, 175C	9' 6"	9' 5"	10' 6"	10' 5"	11' 2"	10' 9"	11' 0"	10' 10"	13' 2"	14' 6"	13' 3"	13' 9"	13' 9"	15' 6"	15' 3"	16' 1"
80	180B, 180C	8' 3"	8' 2"	9' 1"	9' 1"	9' 8"	9' 4"	9' 6"	9' 4"	11' 5"	12' 6"	11' 5"	11' 11"	11' 11"	13' 5"	13' 3"	13' 11"

DEFLECTION = L / 120 — 11/10/03

LL	WIND SPEED & EXPOSURE	3" .024 1lb	3" .024 2lb	3" .032 1lb	3" .032 2lb	4" .024 1lb	4" .024 2lb	4" .032 1lb	4" .032 2lb	6" .024 1lb	6" .024 2lb	6" .032 1lb	6" .032 2lb	8" .024 1lb	8" .024 2lb	8" .032 1lb	8" .032 2lb
10	100B	17' 6"	17' 5"	18' 10"	18' 9"	20' 11"	20' 4"	21' 1"	20' 11"	26' 8"	28' 5"	27' 7"	28' 3"	30' 3"	32' 9"	32' 6"	33' 7"
20	110B,C, 120B	13' 11"	13' 10"	14' 11"	14' 11"	16' 7"	16' 2"	16' 9"	16' 7"	21' 2"	22' 6"	21' 11"	22' 5"	23' 11"	26' 0"	25' 9"	26' 8"
30	140B, 140C	12' 1"	12' 1"	13' 0"	13' 0"	14' 6"	14' 1"	14' 8"	14' 6"	18' 6"	19' 8"	18' 9"	19' 6"	19' 6"	22' 0"	21' 8"	22' 10"
40	150B, 150C	11' 0"	11' 0"	11' 10"	11' 10"	13' 2"	12' 10"	13' 3"	13' 2"	16' 2"	17' 9"	16' 3"	16' 10"	16' 11"	19' 0"	18' 10"	19' 9"
50	160B, 160C	10' 3"	10' 2"	11' 0"	11' 0"	12' 2"	11' 9"	12' 0"	11' 10"	14' 5"	15' 10"	14' 6"	15' 1"	15' 1"	17' 0"	16' 10"	17' 8"
60	175B, 175C	9' 6"	9' 5"	10' 4"	10' 4"	11' 2"	10' 9"	11' 0"	10' 10"	13' 2"	14' 6"	13' 3"	13' 9"	13' 9"	15' 6"	15' 4"	16' 1"
80	180B, 180C	8' 3"	8' 2"	9' 1"	9' 1"	9' 8"	9' 4"	9' 6"	9' 4"	11' 5"	12' 6"	11' 6"	11' 11"	11' 11"	13' 5"	13' 3"	13' 11"

DEFLECTION = L / 150 — 11/10/03

LL	WIND SPEED & EXPOSURE	3" .024 1lb	3" .024 2lb	3" .032 1lb	3" .032 2lb	4" .024 1lb	4" .024 2lb	4" .032 1lb	4" .032 2lb	6" .024 1lb	6" .024 2lb	6" .032 1lb	6" .032 2lb	8" .024 1lb	8" .024 2lb	8" .032 1lb	8" .032 2lb
10	100B	16' 3"	16' 2"	17' 5"	17' 5"	19' 5"	18' 11"	19' 7"	19' 5"	24' 9"	26' 4"	25' 8"	26' 3"	28' 1"	30' 5"	30' 2"	31' 2"
20	110B,C, 120B	12' 11"	12' 10"	13' 10"	13' 10"	15' 5"	15' 0"	15' 7"	15' 5"	19' 8"	20' 11"	20' 4"	20' 10"	22' 3"	24' 1"	23' 11"	24' 9"
30	140B, 140C	11' 3"	11' 3"	12' 1"	12' 1"	13' 5"	13' 1"	13' 7"	13' 5"	17' 2"	18' 3"	17' 9"	18' 2"	19' 5"	21' 1"	20' 11"	21' 7"
40	150B, 150C	10' 3"	10' 2"	11' 0"	11' 0"	12' 2"	11' 11"	12' 4"	12' 3"	15' 7"	16' 7"	16' 2"	16' 6"	16' 11"	19' 0"	18' 10"	19' 7"
50	160B, 160C	9' 6"	9' 5"	10' 2"	10' 2"	11' 4"	11' 0"	11' 5"	11' 4"	14' 5"	15' 5"	14' 7"	15' 1"	15' 1"	17' 0"	16' 10"	17' 8"
60	175B, 175C	8' 11"	8' 11"	9' 7"	9' 7"	10' 8"	10' 4"	10' 9"	10' 8"	13' 2"	14' 6"	13' 4"	13' 9"	13' 9"	15' 6"	15' 4"	16' 1"
80	180B, 180C	8' 1"	8' 1"	8' 8"	8' 8"	9' 8"	9' 4"	9' 6"	9' 4"	11' 5"	12' 6"	11' 6"	11' 11"	11' 11"	13' 5"	13' 4"	13' 11"

DEFLECTION = L / 180 — 11/10/03

LL	WIND SPEED & EXPOSURE	3" .024 1lb	3" .024 2lb	3" .032 1lb	3" .032 2lb	4" .024 1lb	4" .024 2lb	4" .032 1lb	4" .032 2lb	6" .024 1lb	6" .024 2lb	6" .032 1lb	6" .032 2lb	8" .024 1lb	8" .024 2lb	8" .032 1lb	8" .032 2lb
10	100B	15' 3"	15' 3"	16' 5"	16' 5"	18' 3"	17' 9"	18' 5"	18' 3"	23' 3"	24' 10"	24' 2"	24' 8"	26' 5"	28' 7"	28' 5"	29' 4"
20	110B,C, 120B	12' 1"	12' 1"	13' 0"	13' 0"	14' 6"	14' 1"	14' 7"	14' 6"	18' 6"	19' 8"	19' 2"	19' 7"	20' 11"	22' 8"	22' 7"	23' 3"
30	140B, 140C	10' 7"	10' 7"	11' 4"	11' 4"	12' 8"	12' 4"	12' 9"	12' 8"	16' 2"	17' 2"	16' 9"	17' 1"	18' 4"	19' 10"	19' 8"	20' 4"
40	150B, 150C	9' 7"	9' 7"	10' 4"	10' 4"	11' 6"	11' 2"	11' 7"	11' 6"	14' 8"	15' 7"	15' 3"	15' 7"	16' 7"	18' 0"	17' 11"	18' 5"
50	160B, 160C	8' 11"	8' 11"	9' 7"	9' 7"	10' 8"	10' 4"	10' 9"	10' 8"	13' 7"	14' 6"	14' 1"	14' 5"	15' 1"	16' 9"	16' 7"	17' 1"
60	175B, 175C	8' 5"	8' 4"	9' 0"	9' 0"	10' 0"	9' 9"	10' 1"	10' 0"	12' 9"	13' 8"	13' 3"	13' 7"	13' 9"	15' 6"	15' 5"	16' 1"
80	180B, 180C	7' 7"	7' 7"	8' 2"	8' 2"	9' 1"	8' 10"	9' 2"	9' 1"	11' 5"	12' 5"	11' 6"	11' 11"	11' 11"	13' 5"	13' 4"	13' 11"

• NOTE: 10PSF TO BE USED WITH EXTREME CAUTION.

INSTRUCTIONS FOR TABLE USE
VERIFY APPROPRIATE LIVE LOAD & DEFLECTION, WIND VELOCITY, AND EXPOSURE WITH GOVERNING MUNICIPALITY AND BUILDING CODES IN EFFECT FOR THE PROJECT LOCATION. FIND ALLOWABLE ELITE ROOF CLEAR SPAN IN TABLES FOR APPROPRIATE PANEL DEPTH, FACING THICKNESS, AND EPS CORE WEIGHT SELECTED. USE GREATER OF MIN. LIVE LOAD OR MIN. WIND VELOCITY & EXPOSURE TO DETERMINE ALLOWABLE SPAN.

TABLE VALUE DERIVATIONS:

OPEN & ENCLOSED STRUCTURES:
WIND PRESSURE CALCULATIONS BASED ON ASCE 7-98 MWFRS, FIG. 6.4, Kd=0.85, 200 sq ft MIN. ROOF AREA, THETA LESS THAN 10 deg, AVERAGE OF MWFRS ZONES 2 & 3.

VALUES FOR 3", 4", & 6" 1LB & 2LB .032" & 1LB .024" PANELS OBTAINED FROM STRUCTURAL PROPERTIES DERIVED FROM CERTIFIED TEST REPORTS BY OTHERS. VALUES FOR 1lb .032" ROOF PANELS WERE DERIVED BY EXTRAPOLATION OF DATA.
VALUES FOR 8" WERE DERIVED FROM EMPIRICAL DATA & EXTRAPOLATION FROM TEST REPORTS ON 3", 4", & OTHER PANEL VALUES.
MAXIMUM OF CALCULATED DEFLECTION FROM TESTING OR MAXIMUM MOMENT (MIN. TEST EI USING 3003 H-16 HARDENED TO 3003-H154 (F'c=17ksi ULT, 11ksi YIELD 6.5ksi WORKING STRESS USED)
DEAD LOAD IS FACTORED INTO EI DERIVATIONS FOR LIVE LOAD VALUES ABOVE & SUBTRACTED FROM UPLIFT CALCULATIONS

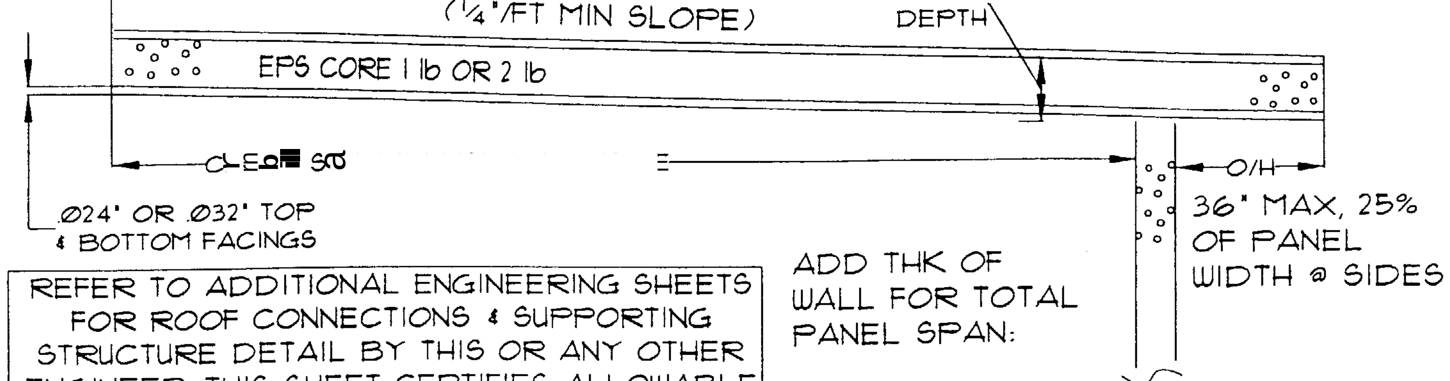
OTHER DESIGN CONSIDERATIONS:

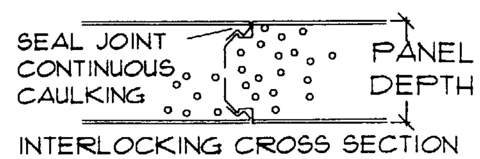
FRONT OVERHANG O/H MAY BE UP TO 3' WITH VALUES ABOVE (ADD TABLE LENGTH + WALL WIDTH + O/H FOR TOTAL PANEL LENGTH)
MAX. UNSUPPORTED SIDE OVERHANG IS 25% OF PANEL WIDTH (12" FOR 4' PANEL WIDTH)

ROOF PITCH TO BE 1/4" PER FOOT MIN, 3" PER FOOT MAX.

SPECIAL 'SITE SPECIFIC' SEALED ENGINEERING SHALL BE REQUIRED IN ORDER TO DEVIATE FROM LOADS, DEFLECTIONS, AND SPANS CONTAINED HEREIN. LINEAR INTERPOLATION OF THE TABLE IS NOT PERMITTED. CONTACT THIS ENGINEER FOR ALTERNATE SPAN CALCULATIONS.

EPS ROOF PANEL / SPAN DESCRIPTION:

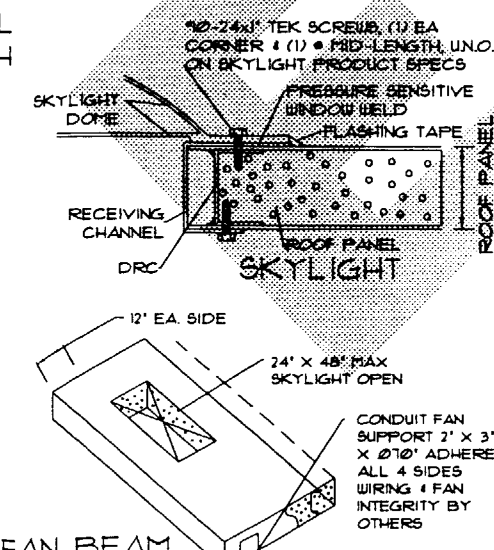




INTERLOCKING CROSS SECTION

REFER TO ADDITIONAL ENGINEERING SHEETS FOR ROOF CONNECTIONS & SUPPORTING STRUCTURE DETAIL BY THIS OR ANY OTHER ENGINEER. THIS SHEET CERTIFIES ALLOWABLE ROOF SPANS ONLY.

ROOF PANEL ACCESSORIES



GENERAL NOTES

1) THIS DETAIL ONLY VALID WHEN SIGNED AND SEALED BY FRANK L. BENNARDO, P.E. THIS SHEET SHALL CONTAIN A RED 'ELITE' STAMP OVER THE PLAN FACE OR IS NOT VALID FOR USE.
•• ALTERATIONS, ADDITIONS, HIGHLIGHTING, OR OTHER MARKINGS TO THIS DOCUMENT ARE NOT PERMITTED AND INVALIDATE OUR CERTIFICATION.
2) THIS SPECIFICATION CONFORMS TO THE REQUIREMENTS OF THE 2000 INTERNATIONAL BUILDING CODE, 1996 BOCA, 1997 UBC, 1997 SBC, AND NER 501. CONTRACTOR SHALL INVESTIGATE AND CONFORM TO ALL GOVERNING BUILDING CODE AMENDMENTS WHICH MAY APPLY. DESIGN CRITERIA BEYOND STATED HEREIN MAY REQUIRE ADDITIONAL SITE SPECIFIC SEALED ENGINEERING.
3) THE CONTRACTOR SHALL CAREFULLY CONSIDER POSSIBLE IMPOSING LOADS ON ROOF INCLUDING BUT NOT LIMITED TO ANY CONCENTRATED LOADS WHICH MAY JUSTIFY GREATER DESIGN CRITERIA. THIS ADDITIONAL ROOF LOAD CRITERIA SHALL BE PROPERLY ANALYZED BY A PROFESSIONAL ENGINEER.
4) COMPOSITE ROOF AND WALL MEMBERS SHALL BE CONSTRUCTED USING TYPE 3003-H154 ALUMINUM FACINGS, 1.5PCF ASTM C-578 CARPENTER BRAND EPS. ADHERE TO ALUMINUM FACINGS WITH ASHLAND CHEMICAL 2020D ISO GRIP. FABRICATION TO BE BY ELITE PANEL PRODUCTS ONLY IN ACCORDANCE WITH APPROVED FABRICATION METHODS.
5) ENGINEER SEAL AFFIXED HERETO VALIDATES DESIGN OF SPAN CHART VALUES AS SHOWN ONLY. USE OF THIS SPECIFICATION BY ELITE, et al. INDEMNIFIES AND SAVES HARMLESS THIS ENGINEER FOR ALL COSTS AND DAMAGES INCLUDING LEGAL FEES AND APPELLATE FEES RESULTING FROM MATERIAL FABRICATION, SYSTEM ERECTION, AND CONSTRUCTION PRACTICES BEYOND THAT WHICH IS CALLED FOR BY LOCAL, STATE, AND FEDERAL CODES AND FROM DEVIATIONS OF THIS DETAIL.
6) EXCEPT AS EXPRESSLY PROVIDED IN THIS DETAIL, NO CERTIFICATIONS OR AFFIRMATIONS ARE INTENDED.

VALID ONLY WITH RAISED ENGINEER SEAL
FRANK L. BENNARDO, P.E. 10478
GOOD FOR (1) JOB ONLY

FEB 09 2004

ME EDITION

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1801 NW 64 ST
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(800) 421-0682 FAX: (954) 491-1433

Building Innovation
ELITE
Panel Products

REVISIONS	
DESCRIPTION	DATE

SCALE: NTS
DRAWN BY: FLB
CHECKED BY:
PRINT DATE: 11/10/03
JOB #: 21401E- ME

SHEET:
1 OF 1