

CITY OF SACRAMENTO
1231 I Street, Sacramento, CA 95814

Permit No: 0413608

Insp Area: 3
Thos Bros: 297J7

Site Address: 4859 T ST SAC
Parcel No: 011-0132-002

Sub-Type: NOTHR
Housing (Y/N): N

CONTRACTOR
PETKUS BROS
3068 SUNRISE BL
RANCHO CORDOVA CA

OWNER
NEGRETE ANTONIO AL
4859 T ST
SACRAMENTO CA 95819

ARCHITECT

Nature of Work: NEW PATIO COVER, 320 SQ FT

CONSTRUCTION LENDING AGENCY : I hereby affirm under penalty of perjury that there is a construction lending agency for the performance of the work for which this permit is issued (Sec. 3097, Civ. C).

Lender's Name _____ Lender's Address _____

LICENSED CONTRACTORS DECLARATION: I hereby affirm under penalty of perjury that I am licensed under provisions of Chapter 9 (commencing with section 7000) of Division 3 of the Business and Professions Code and my license is in full force and effect.

License Class B License Number 670242 Date 8/19/04 Contractor Signature Francisco Rojas

OWNER-BUILDER DECLARATION: I hereby affirm under penalty of perjury that I am exempt from the contractors License Law for the following reason (Sec. 7031.5, Business and Professions Code; any city or county which requires a permit to construct, alter, improve, demolish, or repair any structure, prior to its issuance, also requires the applicant for such permit to file a signed statement that he or she is licensed pursuant to the provisions of the Contractors License Law (Chapter 9 (commencing with Section 7000) of Division 8 of the Business and Professions Code) or that he or she is exempt therefrom and the basis for the alleged exemption. Any violation of Section 7031.5 by any applicant for a permit subjects the applicant to a civil penalty of not more than five hundred dollars (\$500.00);

_____, I, as a owner of the property, or my employees with wages as their sole compensation, will do the work, and the structure is not intended or offered for sale (Sec. 7044, Business and Professional Code: The Contractors License Law does not apply to an owner of property who builds or improves thereon, and who does such work himself or herself or through his/her own employees, provided that such improvements are not intended or offered for sale. If, however, the building or improvement is sold within one year of completion, the owner-builder will have the burden of proving that he/she did not build or improve for the purpose of sale.)

_____, I, as owner of the property, am exclusively contracting with licensed contractors to construct the project (Sec. 7044, Business and Professions Code: The Contractors License Law does not apply to an owner of property who builds or improves thereon, and who contracts for such project with a contractor(s) licensed pursuant to the Contractors License Law).

I am exempt under Sec. _____ B & PC for this reason: _____

Date 8/19/04 Owner Signature Francisco Rojas

PAID
CITY OF SACRAMENTO
AUG 19 2004
BUILDING PERMIT

IN ISSUING THIS BUILDING PERMIT, the applicant represents, and the city relies on the representation of the applicant that the applicant verified all measurements and locations shown on the application or accompanying drawings and that the improvement to be constructed does not violate any law or private agreement relating to permissible or prohibited locations for such improvements. This building permit does not authorize any illegal location of any improvement or the violation of any private agreement relating to location of improvements.

I certify that I have read this application and state that all information is correct. I agree to comply with all city and county ordinances and state laws relating to building construction and hereby authorize representative(s) of this city to enter upon the abovementioned property for inspection purposes.

Date 8/19/04 Applicant/Agent Signature Francisco Rojas

WORKER'S COMPENSATION DECLARATION: I hereby affirm under penalty of perjury one of the following declarations:
_____, I have and will maintain a certificate of consent to self-insure for workers' compensation as provided for by Section 3700 of the Labor Code, for the performance of work for which the permit is issued.

FP - I have and will maintain workers' compensation insurance, as required by Section 3700 of the Labor Code, for the performance of the work for which this permit is issued. My workers' compensation insurance carrier and policy number are:

Carrier STATE FUND Policy Number 713-02 0000502 Exp Date 10/01/2004

_____, (This section need not be completed if the permit is for \$100 or less) I certify that in the performance of the work for which this permit is issued, I shall not employ any person in any manner so as to become subject to the workers' compensation laws of California and agree that if I should become subject to the workers' compensation provisions of Section 3700 of the Labor Code, I shall forthwith comply with those provisions.

Date 8/19/04 Applicant Signature Francisco Rojas

WARNING: FAILURE TO SECURE WORKER'S COMPENSATION COVERAGE IS UNLAWFUL AND SHALL SUBJECT AN EMPLOYER TO CRIMINAL PENALTIES AND CIVIL FINES UP TO ONE HUNDRED THOUSAND DOLLARS (\$100,000) IN ADDITION TO THE COST OF COMPENSATION, DAMAGES AS PROVIDED FOR IN SECTION 3706 OF THE LABOR CODE, INTEREST AND ATTORNEY'S FEE.

THIS PERMIT SHALL EXPIRE BY LIMITATION IF WORK IS NOT COMMENCED WITHIN 180 DAYS.

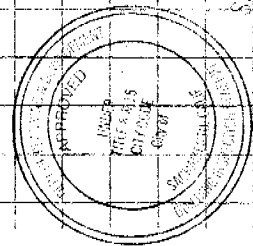
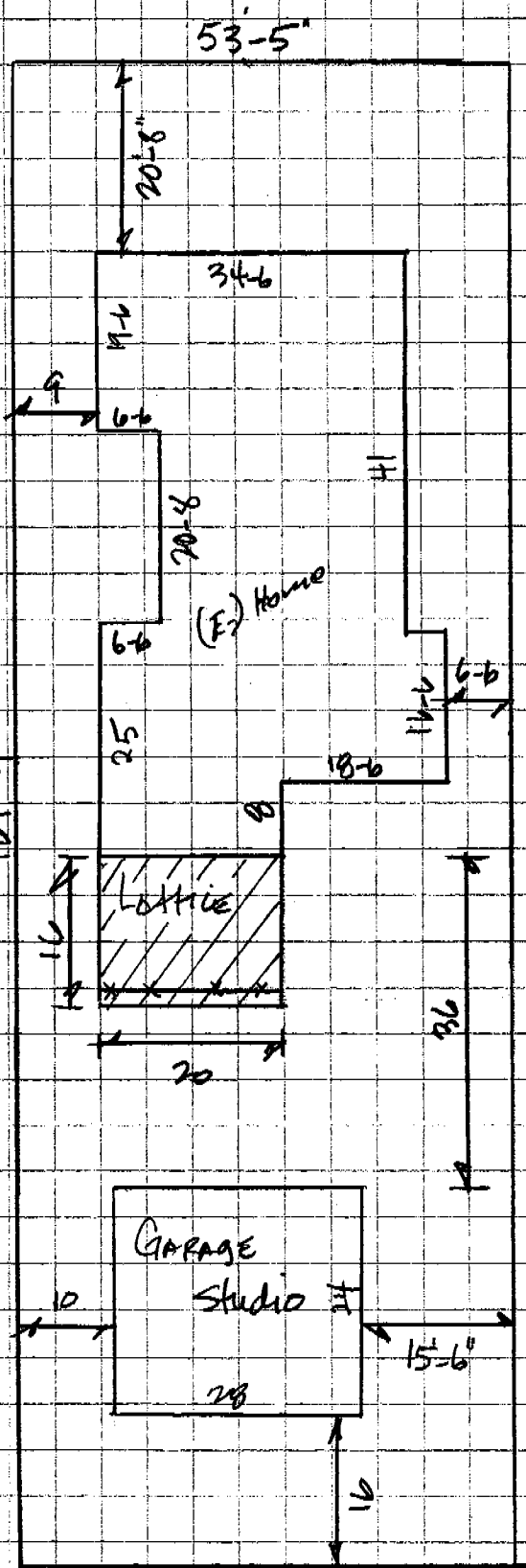
City of Sacramento Planning Division
PLANNING REVIEW FOR BUILDING PERMIT SUBMITTAL

ADDRESS: 4859 T STREET	APN: 011-0132-002
DRPB AREA / PUD / SPD: CITYWIDE	ZONING: R-1
EXISTING LAND USE: RSF	
PROPOSED USE: 320 SQ FT PATIO COVER ADDITION TO REAR OF EXISTING STRUCTURE.	
<u>PLANNING STAFF WILL CHECK ONE OR MORE OF THE ITEMS BELOW:</u>	
<input type="checkbox"/>	Planning review is NOT required.
<input type="checkbox"/>	Use is NOT allowed; applicant CANNOT submit for plan check.
<input type="checkbox"/>	Requires APPLICATION(s): PC ZA IR ER DR PB Required Planning application must be submitted <i>before</i> project can be submitted for plan check.
<input type="checkbox"/>	Application(s) IN PROGRESS: Applicant may submit for concurrent building permit plan check, at applicant's risk. Building Division must check with Planning staff and/or SITE before issuing building permit.
<input type="checkbox"/>	Application(s) COMPLETED: Building permit must conform to approved plans and comply with all conditions of approval. Do NOT issue building permit prior to end of 10 day appeal period.
<input checked="" type="checkbox"/>	Plans may be submitted for plan check. Plan checker(s) shall confirm compliance with Zoning Ordinance requirements and all applicable development standards <i>prior to issuance</i> of building permit.
<input checked="" type="checkbox"/>	Meets setback & lot coverage requirements as shown on site plan provided.
<input checked="" type="checkbox"/>	Plans to be submitted have been stamped/signed by Planning counter staff.
<input type="checkbox"/>	Route to SITE for plan check and inspection.
<input type="checkbox"/>	Preliminary review ONLY; the information on this form must be reviewed again and confirmed at the time of building permit submittal.
COMMENTS: LOT AREA = 8276 (METROSCAN). EXISTING LOT COVERAGE = 1754 + PROPOSED 320 = 2074 / 8276 = 25% TOTAL LOT COVERAGE. MEETS ALL STEBACK AND LOT COVERAGE REQUIREMENTS. NO ADDITIONAL PLANNING ENTITLEMENTS REQUIRED. NOT VISIBLE FROM STREET VIEW.	
DATE: 08/19/04	BY: BONNIE SURGEON

CITY COPY 0413608 4859 T St

ANTONIO NEGRETE
4859 T St.
SACRAMENTO 95819
451-6461

1/20" = 12"



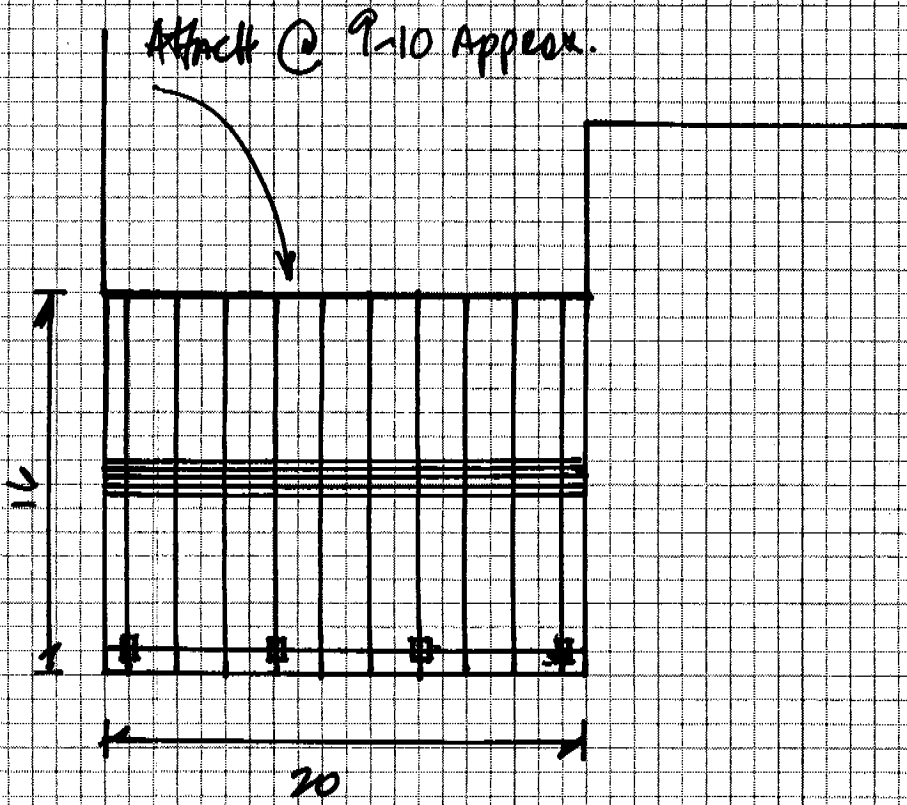
This set of plans and specifications must be kept on the job at all times to make any changes or additions that the Engineer or City Inspector may require. The approval of this plan shall not be held to excuse or relieve the violator of any City Ordinance or State Law.

ISSUED
City of Sacramento
AUG 19 2004
NORTH PERMIT
CENTER

APPROVED SETBACKS & LOT COVERAGE
DATE: 8-19-04 BY: B. Sugeon
CITY OF SACRAMENTO - PLANNING DIVISION
This approval shall NOT be held to permit or approve the violation of any State law, City Ordinance, or private agreement, and assumes the property lines and other information submitted by the applicant are accurate and complete.

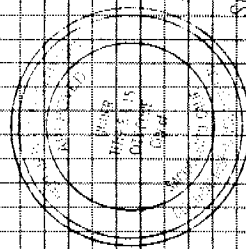
LAYOUT GRID

FRONT



All Posts in Safety Stakes

ISSUED
NORTH PLAINFIELD
AUG 19 2004



Post Placement will be:

Per Engineering Custom / Signoff Required



Setback from
Cover

Starting points from corners of house as viewed
from rear yard:

LEFT:

RIGHT:



ICC Evaluation Service, Inc.
www.icc-es.org

Business/Regional Office # 5360 Workman Mill Road, Whittier, California 90601 # (562) 699-0543
Regional Office # 900 Montclair Road, Suite A, Birmingham, Alabama 35213 # (205) 599-9800
Regional Office # 4051 West Flossmoor Road, Country Club Hills, Illinois 60478 # (708) 799-2305

Legacy report on the 1997 Uniform Building Code™

DIVISION: 10—SPECIALTIES
Section: 10530—Protective Covers

ATTACHED AND FREESTANDING PATIO COVERS AND COMMERCIAL ROOF STRUCTURES

AMERIMAX BUILDING PRODUCTS, INC.
5208 TENNYSON PARKWAY, SUITE 100
PLANO, TEXAS 75024

1.0 SUBJECT

Attached and Freestanding Patio Covers and Commercial Roof Structures.

2.0 DESCRIPTION

2.1 General:

The patio covers and commercial roof structures include freestanding and attached designs. The walls must be unenclosed. Allowable loads and a summary of plans under this report are shown in Table 1.

2.2 Materials:

2.2.1 Aluminum: The aluminum is available in roll-formed and extruded shapes of various alloys and tempers, complying with Chapter 20 of the UBC.

2.2.2 Steel: The steel is various grades of galvanized, cold-formed steel complying with ASTM A 653.

2.3 Installation:

The structures are erected and framed in the manner set forth in the attached plans.

2.4 Identification:

Each structure bears a permanent decal or identifying tag stating the allowable roof live load, the horizontal wind load, the uplift wind load, the name of the manufacturer and the model number.

3.0 EVIDENCE SUBMITTED

Plans, calculations, and reports of transverse load tests and fastener tests.

4.0 FINDINGS

That the Attached and Freestanding Patio Covers and Commercial Roof Structures of Amerimax Building Products, Inc., described in this report comply with the 1997 Uniform Building Code™ (UBC), subject to the following conditions:

4.1 Construction is in accordance with the attached plans, dated February 8, 2000, and the UBC, except the maximum snow loads are limited to 30 psf.

4.2 The 10 psf (479 Pa) live load patio covers are in compliance with Appendix Chapter 31, Division III, of the UBC.

This report is subject to re-examination in one year.

TABLE 1

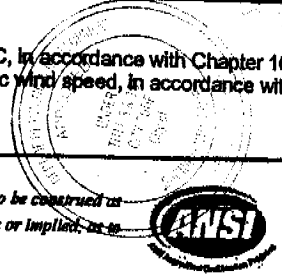
Table with 6 columns: DRAWING NUMBER, NO. OF PAGES, TYPE OF STRUCTURE, SUPPORT METHOD, DESIGN LOAD (psf) [subdivided into Roof Live [or (Snow)], Horizontal Wind, Wind Uplift], PERMITTED ENCLOSURE (based on horizontal wind calculations). Rows include drawing numbers 97GN, 97SC, 97CD, and 97LT.

For SI: 1 psf = 47.88 Pa, 1 mph = 1.61 km/h.

Horizontal wind and wind-uplift loads developed with a basic wind speed of 70 or 90 mph, Exposures B and C, in accordance with Chapter 16, Division III, of the UBC. Patio-cover horizontal wind and wind-uplift loads developed with a 70 or 90 mph basic wind speed, in accordance with Appendix Chapter 31, Division III, of the UBC.

ICC-ES legacy reports are not to be construed as representing aesthetics or any other attributes not specifically addressed, nor are they to be construed as an endorsement of the subject of the report or a recommendation for its use. There is no warranty by ICC Evaluation Service, Inc., express or implied, as to any finding or other matter in this report, or as to any product covered by the report.

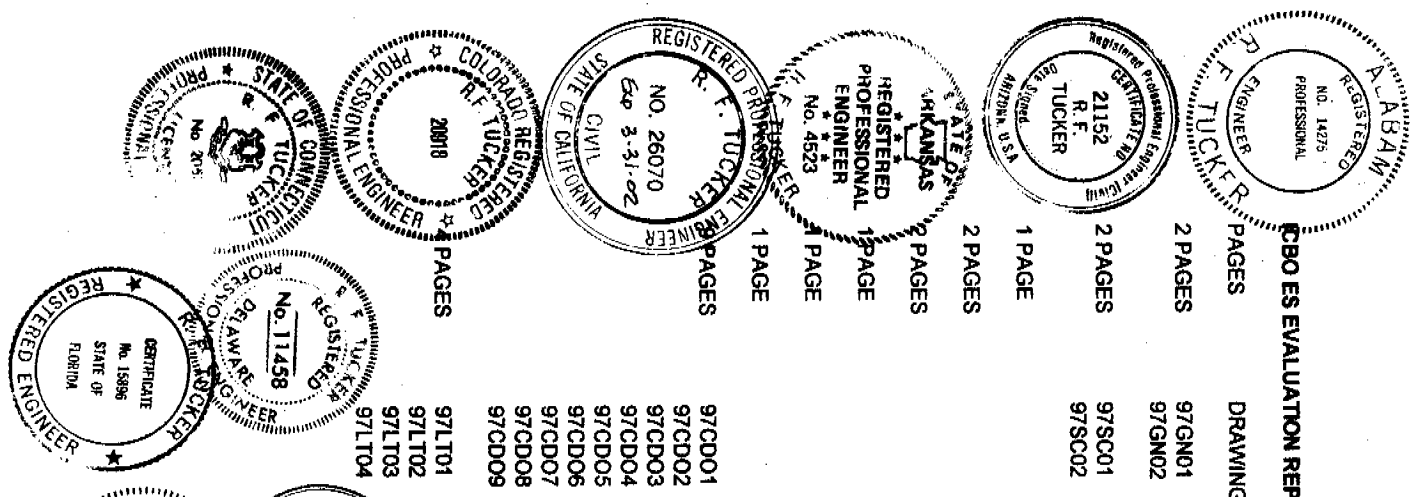
ISSUED City of Sacramento



AUG 19 2004

NORTH PERMIT CENTER

Retain Previous Plans



BOB ES EVALUATION REPORT NO ER-2621P

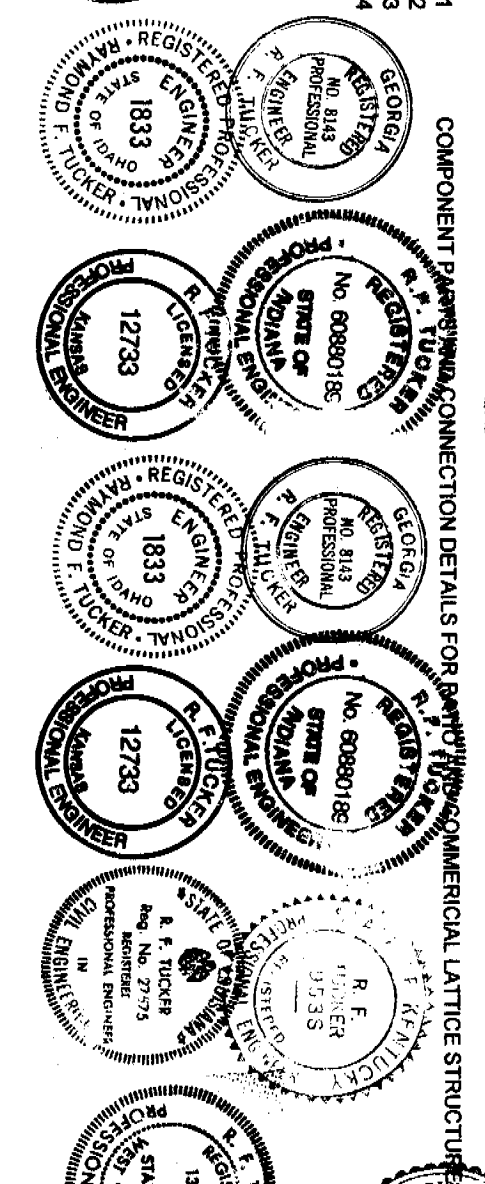
DRAWING	PAGES
97GN01	2 PAGES
97GN02	2 PAGES
97SC01	1 PAGE
97SC02	2 PAGES
97CD01	1 PAGE
97CD02	2 PAGES
97CD03	1 PAGE
97CD04	1 PAGE
97CD05	1 PAGE
97CD06	1 PAGE
97CD07	1 PAGE
97CD08	1 PAGE
97CD09	1 PAGE

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- 4.0 FREESTANDING AND ATTACHED LATTICE PATIO STRUCTURES
- 5.0 FREESTANDING AND ATTACHED LATTICE COMMERCIAL STRUCTURES
- 6.0 COLUMN AND FASTENER REQUIREMENTS FOR COMMERCIAL AND PATIO STRUCTURES

COMPONENT PARTS AND CONNECTION DETAILS

- COMPONENT PARTS AND CONNECTION DETAILS FOR PATIO COMMERCIAL LATTICE STRUCTURES

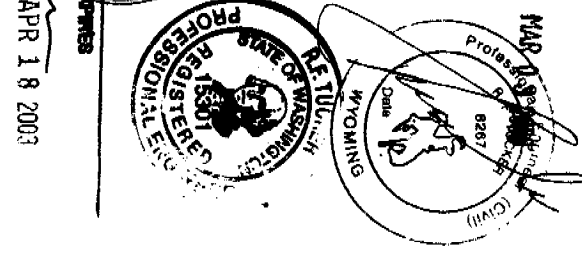


I hereby certify that this plan, specification or report was prepared by me or under my direct supervision and that I am a duly Registered Professional Engineer under the laws of the State of Minnesota.

R. F. TUCKER
 REGISTERED PROFESSIONAL ENGINEER
 NO. 33793

Amerimax
 1140 ALL PRO DRIVE
 ELKHART, IN 46514
 (765) 246-6200

REGISTERED PROFESSIONAL ENGINEER
 FREDERIC KATAKURA
 No. 16273
 Exp. 6-30-05



APR 18 2003

ISSUED
 AUG 19 2004

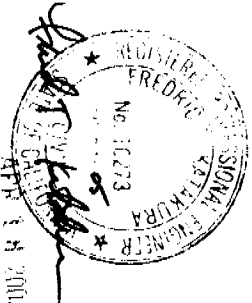
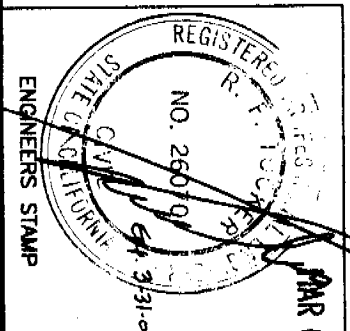
GENERAL NOTES:
(CONTINUED FROM SHEET NO. 1)

- NOTE: EXPOSURE "B" HAS TERRAIN WHICH HAS BUILDINGS, FOREST OR SURFACE IRREGULARITIES COVERING AT LEAST 20 PERCENT OF THE GROUND LEVEL AREA EXTENDING ONE MILE OR MORE FROM THE SITE.
EXPOSURE "C" HAS TERRAIN WHICH IS FLAT AND GENERALLY OPEN, EXTENDING ONE-HALF MILE OR MORE FROM THE SITE, IN ANY FULL QUADRANT.
5. CONCRETE MIX: $f_c=2500$ PSI 28 DAYS. APPENDIX CHAPTER 31 DIVISION III PATIO STRUCTURES MAY BE ATTACHED TO CONCRETE SLAB WITHOUT FOOTINGS WHEN THE COLUMN LOAD IS 750# OR LESS. CONCRETE SHALL BE A MINIMUM OF 3.5 INCHES THICK AND NO CRACKS WITHIN 2'-6" OF COLUMNS. COLUMNS SHALL BE SET BACK A MINIMUM OF 4 INCHES FROM EDGE OF SLAB.
 6. FOOTINGS HAVE BEEN DESIGNED FOR CLASS 5 SOIL. ALLOWABLE SOIL BEARING PRESSURE OF 1000 POUNDS PER SQUARE FOOT. STRUCTURES SUPPORTED BY FLAGPOLE TYPE COLUMNS ARE NOT ADVERSELY AFFECTED BY A 1/2 INCH LATERAL GROUND MOVEMENT AND FOOTINGS FOR THOSE STRUCTURES HAVE BEEN DESIGNED FOR AN ALLOWABLE LATERAL SOIL BEARING PRESSURE OF 200 POUNDS PER SQUARE FOOT PER FOOT OF DEPTH. SOILS OF ORGANIC CLAYS OR SILTS REQUIRE A SOIL INVESTIGATION AND SPECIALLY DESIGNED FOOTINGS. FILLS MUST BE PLACED UNDER A LABORATORY CONTROLLED COMPACTION SUBJECT TO APPROVAL OF THE BUILDING OFFICIAL.
 7. ALUMINUM BOLTS TO BE 2024-T4.
 8. COMMERCIAL STRUCTURES MAY BE USED FOR PARKING OF MOTOR VEHICLES PER LOCAL BUILDING CODES. APPENDIX CHAPTER 31 DIVISION III PATIO STRUCTURES MAY NOT BE USED FOR PARKING OF MOTOR VEHICLES.
 9. FREESTANDING STRUCTURES SHALL NOT BE ENCLOSED IN ANY MANNER.
 10. STEEL BOLTS SHALL BE ASTM A-307.
 11. ALTERNATE ALUMINUM ALLOYS OF EQUAL OR HIGHER STRENGTHS MAY BE USED.
 12. STEEL FASTENERS SHALL BE EITHER STAINLESS, GALVANIZED OR DOUBLE CADMIUM PLATED "AN" BOLTS.
 13. HIGH STRENGTH BOLTS SHALL BE ASTM A-325.
 14. EMBEDDED COLUMN SURFACES SHALL BE CLEAN AND FREE FROM OILY SURFACES.
 15. PATIO STRUCTURES ARE DESIGNED IN ACCORDANCE WITH APPENDIX CHAPTER 31 DIVISION III OF THE UNIFORM BUILDING CODE.
 16. HEADER SPLICES SHALL NOT BE LOCATED NEARER TO THE END OF THE STRUCTURE THAN THE FIRST INTERIOR COLUMN.

17. PATIO STRUCTURES MAY BE ENCLOSED WITH INSECT SCREENING.
18. STRUCTURES MAY BE ATTACHED TO RAFTER OVERHANGS PER SCHEDULE
19. WHERE ALUMINUM ALLOY PARTS ARE IN CONTACT WITH DISSIMILAR METALS OTHER THAN STAINLESS, ALUMINIZED OR GALVANIZED STEEL, OR ABSORBENT BUILDING MATERIALS, LIKELY TO BE CONTINUOUSLY OR INTERMITTENTLY WET, THE FACING SURFACES SHALL BE PAINTED OR OTHERWISE SEPARATED IN ACCORDANCE WITH U.B.C. SECTION 2004.3.
20. ALL SCREWS CONFORM TO ANSI B18-6-4 AND SAE J933.

GENERAL NOTES FOR LATTICE STRUCTURES:

- (PERTAINS TO LATTICE STRUCTURES ON DRAWINGS 97SC02 AND 97LT01 THRU 97LT06.)
1. SEE GENERAL NOTES, SHEET 1, SECTION 4 FOR LEVELLOAD AND WIND LOADS.
 2. OPEN LATTICE STRUCTURES SHALL NOT BE ENCLOSED.



DATE	2/8/2000	REVISION		DATE		REVISION	
SCALE	NONE	DRAWING OR PART NAME	GENERAL NOTES				
DATE	2/8/2000	DRAWING OR PART NUMBER	97GN02				

Ametimax Engineering Services
 1140 All Pro Drive
 Elkhart, IN 46514

ICBQ ES EVALUATION REPORT NO. ER-2821P
 SHEET 2 OF 2

1.0 ROOF PANEL SPANS AND OVERHANGS FOR PATIO AND COMMERCIAL STRUCTURES

3 1/2" x 12" ROOF PANEL DESIGN
SPAN FOR PATIO STRUCTURES

LIVE LOAD (PSF)	70 MPH WIND	90 MPH WIND	OVERHANG
10	0.018	0.024	18'-7"
20	0.024	0.032	18'-7"
30	0.032	0.040	18'-7"
40	0.040	0.048	18'-7"

2 1/2" x 6" ROOF PANEL DESIGN
SPAN FOR PATIO STRUCTURES

LIVE LOAD (PSF)	70 MPH WIND	90 MPH WIND	OVERHANG
10	0.018	0.024	13'-5"
20	0.024	0.032	13'-5"
30	0.032	0.040	13'-5"
40	0.040	0.048	13'-5"

3 1/2" x 12" STEEL PANEL ALLOW. DESIGN SPAN FOR COMMERCIAL STRUCTURES

LIVE LOAD (PSF)	70 MPH WIND	90 MPH WIND	MAX. OVERHANG
20	0.018	0.024	11'-11"
25	0.024	0.032	10'-5"
30	0.032	0.040	9'-1"
40	0.040	0.048	7'-7"

2 1/2" x 6" ROOF PANEL ALLOW. SPAN FOR COMMERCIAL STRUCTURES

LIVE LOAD (PSF)	70 MPH WIND	90 MPH WIND	MAX. OVERHANG
20	0.018	0.024	8'-8"
25	0.024	0.032	7'-4"
30	0.032	0.040	6'-0"
40	0.040	0.048	4'-8"

2 1/2" x 12" ROOF PANEL ALLOW. SPAN FOR COMMERCIAL STRUCTURES

LIVE LOAD (PSF)	70 MPH WIND	90 MPH WIND	MAX. OVERHANG
20	0.018	0.024	8'-8"
25	0.024	0.032	7'-4"
30	0.032	0.040	6'-0"
40	0.040	0.048	4'-8"

PANEL TO PANEL FASTENING #10 SWS FASTENER SPACING

PANEL TYPE	WIND LOAD (PSF)	WIND SPEED (MPH)	FASTENER SPACING (IN)
PATIO	10	70	5"
	20	90	4'-8"
	30	110	3'-11"
	40	130	3'-1"
COMMERCIAL	10	70	6'-8"
	20	90	5'-2"
	30	110	4'-7"
	40	130	3'-2"

2 1/2" x 18" STRUCTURAL PANEL FOR PATIO OVERHANGS

LIVE LOAD (PSF)	70 MPH WIND	90 MPH WIND	OVERHANG
10	0.018	0.024	11'-11"
20	0.024	0.032	11'-11"
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2 1/2" x 12" ROOF PANEL DESIGN SPAN FOR PATIO STRUCTURES

LIVE LOAD (PSF)	70 MPH WIND	90 MPH WIND	OVERHANG
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ALT. 2 1/2" x 12" ROOF PANEL ALLOW. SPAN FOR PATIO STRUCTURES

LIVE LOAD (PSF)	70 MPH WIND	90 MPH WIND	OVERHANG
10	0.018	0.024	11'-11"
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ALT. 2 1/2" x 12" ROOF PANEL ALLOW. SPAN FOR COMMERCIAL STRUCTURES

LIVE LOAD (PSF)	70 MPH WIND	90 MPH WIND	MAX. OVERHANG
20	0.018	0.024	11'-11"
25	0.024	0.032	10'-5"
30	0.032	0.040	8'-8"
40	0.040	0.048	7'-4"

2 1/2" x 12" STEEL PANEL DESIGN SPAN FOR PATIO STRUCTURES

LIVE LOAD (PSF)	70 MPH WIND	90 MPH WIND	OVERHANG
10	0.018	0.024	14'-8"
20	0.024	0.032	14'-8"
30	0.032	0.040	14'-8"
40	0.040	0.048	14'-8"

2 1/2" x 12" ROOF PANEL DESIGN SPAN FOR PATIO STRUCTURES

LIVE LOAD (PSF)	70 MPH WIND	90 MPH WIND	OVERHANG
10	0.018	0.024	14'-8"
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30	0.032	0.040	14'-8"
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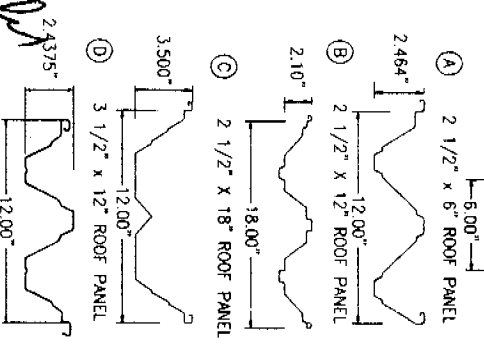
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REGISTERED PROFESSIONAL ENGINEER
FREDRIC T. KAMRATRA
NO. 68273
EXPIRES 6/30/05
STATE OF CALIFORNIA

APR 18 2003

REGISTERED PROFESSIONAL ENGINEER
NO. 25070
STATE OF CALIFORNIA

AMERITIMAX BUILDING PRODUCTS, INC.
1140 ALL PRO DRIVE
ELKHART, IN 46514

ICBO IS EVALUATION REPORT ER-2621P
ROOF PANEL SPANS FOR PATIO AND COMMERCIAL STRUCTURES
PATIO SPANS FOR ALL 2.5" PAN FOR PATIO AND COMMERCIAL STRUCTURES
SHEET 1 OF 8 DATE: 2/8/2006

5.0 FREESTANDING AND ATTACHED LATTICE COMMERCIAL STRUCTURES

LIVE LOAD	TRIB WIDTH	MAX COLUMN SPACING	B' C BEAM HEADER				ATTACHED MIN COL TYPE	LIVE LOAD	TRIB WIDTH	MAX COLUMN SPACING	B' C BEAM HEADER				ATTACHED MIN COL TYPE																																																															
			CONSTRAINED FOOTER SIZES	FREESTANDING FOOTER SIZES	FTR	MIN COL TYPE					CONSTRAINED FOOTER SIZES	FREESTANDING FOOTER SIZES	FTR	MIN COL TYPE																																																																
20	4	31'-0"	27	29	32	33	21	25	30	33	36	37	22	23																																																																
															5	29	31	33	36	37	22	23																																																								
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																																																								41	0	0	0	0	1	2	3															
																																																																42	0	0	0	0	0	1	2							
																																																																								43	0	0	0	0	0	0
44	0	0	0	0	0	0	0																																																																							
								45	0	0	0	0	0	0	0																																																															
																46	0	0	0	0	0	0	0																																																							
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																																48	0	0	0	0	0	0	0																																							
																																								49	0	0	0	0	0	0	0																															
																																																50	0	0	0	0	0	0	0																							

COL	MAXIMUM COLUMN HEIGHT	SINGLE SPAN ATTACHED	FREESTANDING OR MULTISPAN ATTACHED
A	12'-0"	12'-0"	12'-0"
B	12'-0"	12'-0"	12'-0"
C	12'-0"	12'-0"	12'-0"
D	12'-0"	12'-0"	12'-0"
E	12'-0"	12'-0"	12'-0"
F	12'-0"	12'-0"	12'-0"
G	12'-0"	12'-0"	12'-0"
H	12'-0"	12'-0"	12'-0"
I	12'-0"	12'-0"	12'-0"
J	12'-0"	12'-0"	12'-0"

GENERAL METHOD FOR USING THESE TABLES

1. CHOOSE FREESTANDING OR ATTACHED COMMERCIAL OR PATIO LATTICE STRUCTURE.
2. DETERMINE PROJECTION, WIDTH, OVERHANG, WIND LOAD AND LIVE LOAD.
3. FIND TRIBUTARY WIDTH FROM TABLE 5.8 AND DRAWING 5702Z.
4. CHOOSE A RAFTER FROM TABLES 4.3, 4.5, 5.3 OR 5.4 THAT HAS ADEQUATE CLEARSPAN FOR YOUR NEEDS.
5. CHOOSE A HEADER FROM TABLES 4.1, 4.2 OR 5.2 THAT HAS ADEQUATE COLUMN SPACING.
6. USE THE COLUMN SIZE SHOWN.
7. USE THE COLUMN SHOWN FOR SINGLE SPAN ATTACHED PATIO.
8. LOOK AT THE TABLES PROVIDED FOR ALL OTHERS.
9. FIND THE APPROPRIATE DETAILS IN THE CONNECTION DETAIL SHEETS.

FOR CONCRETE PATIO SLABS

1. FOLLOW 1-4 ABOVE.
2. FIND THE MAXIMUM COLUMN SPACING ON SLAB FROM THE DESIRED COLUMN HEIGHT.
3. CHOOSE A RAFTER FROM TABLE 4.1 OR 4.2 THAT CAN SPAN THAT DISTANCE FOR THAT TRIB WIDTH AND LIVE AND WIND LOAD.
4. FIND THE APPROPRIATE DETAILS IN THE CONNECTION DETAIL SHEETS.

TABLE 5.3

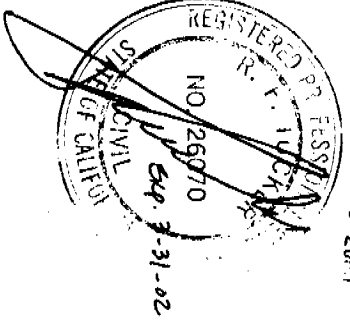
LIVE LOAD (PSF)	MAX ROOF HEIGHT 18'	MAX OVERHANG
20	8'-10"	4'-5"
25	8'-10"	4'-5"
30	7'-8"	3'-10"
40	5'-10"	2'-11"
60	N/A	4'-8"

TABLE 5.4

EQUIVALENT FOOTING (IN)	NON-CON-STRAINED	MAX OVERHANG
18	18	4'-11"
20	20	4'-11"
22	22	4'-11"
24	24	4'-11"
26	26	4'-11"
28	28	4'-11"
30	30	4'-11"
32	32	4'-11"
34	34	4'-11"
36	36	4'-11"
38	38	4'-11"
40	40	4'-11"
42	42	4'-11"
44	44	4'-11"
46	46	4'-11"
48	48	4'-11"
50	50	4'-11"

TABLE 5.5

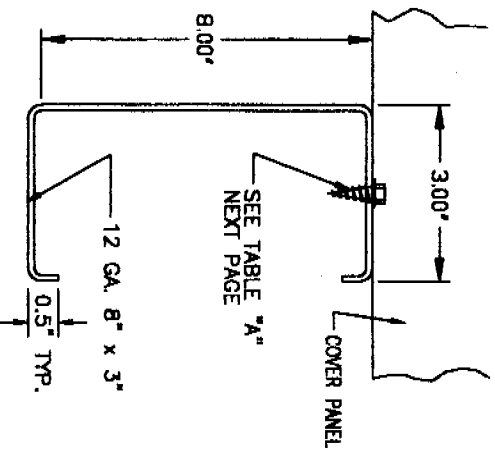
PROJ (FT)	RAFTER OVERHANG (FT)	MAX OVERHANG
0	1/2	2 1/2
1	1	3 1/2
2	1 1/2	4 1/2
3	2	5 1/2
4	2 1/2	6 1/2
5	3	7 1/2
6	3 1/2	8 1/2
7	4	9 1/2
8	4 1/2	10 1/2
9	5	11 1/2
10	5 1/2	12 1/2
11	6	13 1/2
12	6 1/2	14 1/2
13	7	15 1/2
14	7 1/2	16 1/2
15	8	17 1/2
16	8 1/2	18 1/2
17	9	19 1/2
18	9 1/2	20 1/2
19	10	21 1/2
20	10 1/2	22 1/2
21	11	23 1/2
22	11 1/2	24 1/2
23	12	25 1/2
24	12 1/2	26 1/2
25	13	27 1/2
26	13 1/2	28 1/2
27	14	29 1/2
28	14 1/2	30 1/2
29	15	31 1/2
30	15 1/2	32 1/2
31	16	33 1/2
32	16 1/2	34 1/2
33	17	35 1/2
34	17 1/2	36 1/2
35	18	37 1/2
36	18 1/2	38 1/2
37	19	39 1/2
38	19 1/2	40 1/2
39	20	41 1/2
40	20 1/2	42 1/2
41	21	43 1/2
42	21 1/2	44 1/2
43	22	45 1/2
44	22 1/2	46 1/2
45	23	47 1/2
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48	24 1/2	50 1/2
49	25	51 1/2
50	25 1/2	52 1/2



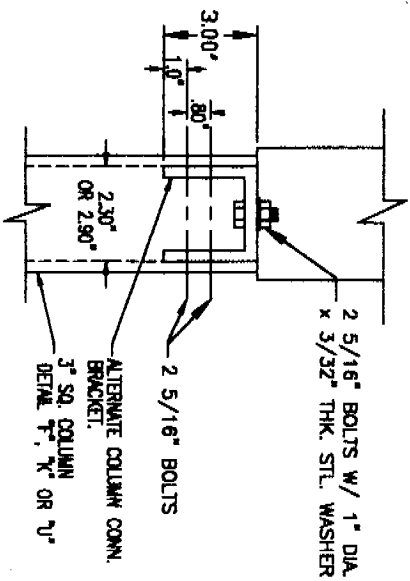
MAR 03 2009
APR 18 2003

Amerimax
 MEDICAL PRODUCTS, INC.
 1140 ALL PRO DRIVE
 ELKHART, IN 46514
 ICBQ ES EVALUATION REPORT EN-2621P
 HEADER SPANS, COLUMN SPACING,
 FOOTER SIZE, AND OVERHANG
 FOR
 COMMERCIAL LATTICE STRUCTURES
 SHEET 7 OF 8
 DATE: 2/6/2000

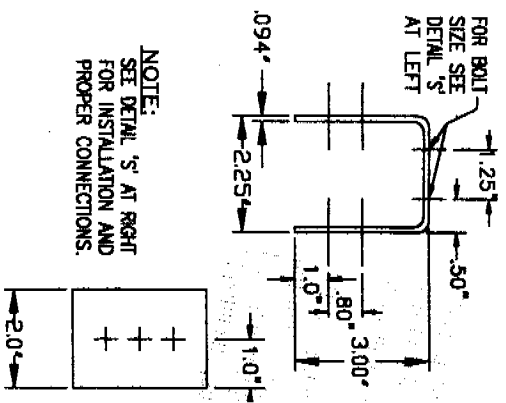
ISSUED
 City of Springfield
 AUG 19 2004



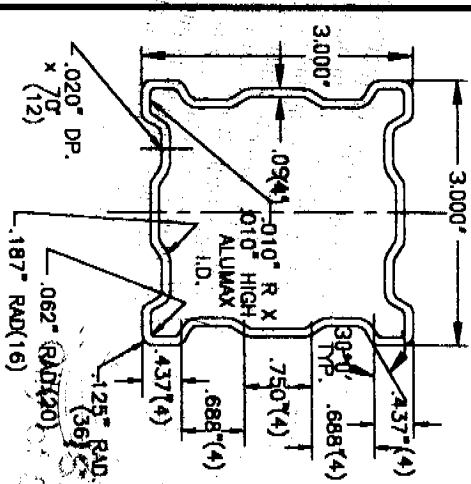
Ⓡ STEEL "C"- CHANNEL HEADER
(STEEL A-653 Fy=50,000 PSI)



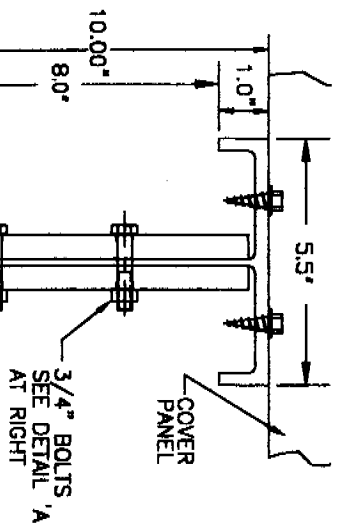
Ⓢ 3" COLUMN CONNECTIONS FOR FASCIA HEADERS



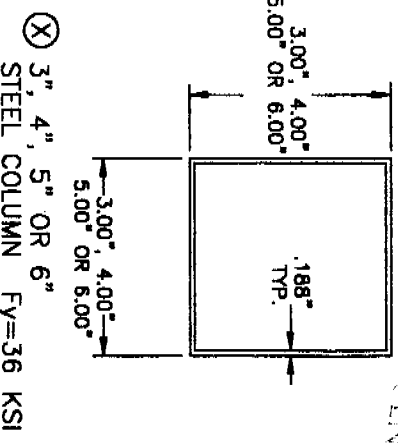
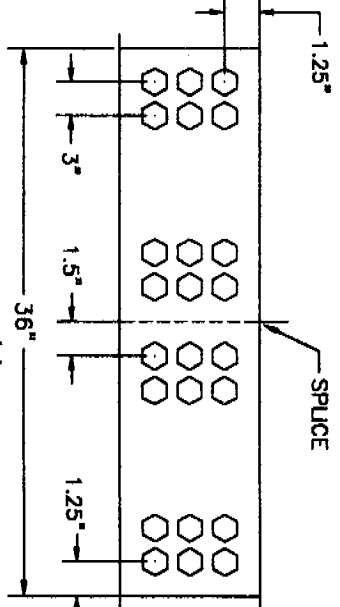
Ⓣ 3" ALTERNATE COLUMN CONN. BRACKETS
(STEEL A-653 Fy=40,000 PSI)



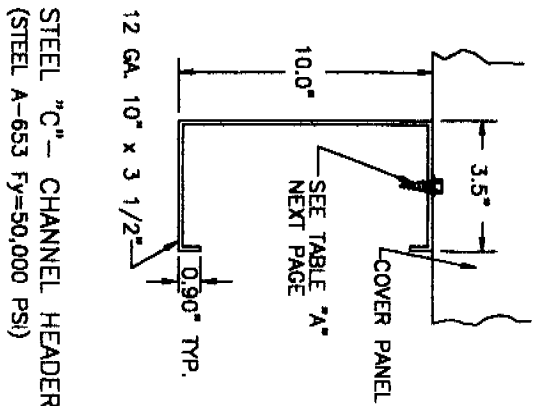
Ⓤ FLUTED COLUMN
(3" ALUM. 6063-T6)
1" = 0.062" UNLESS OTHERWISE NOTED



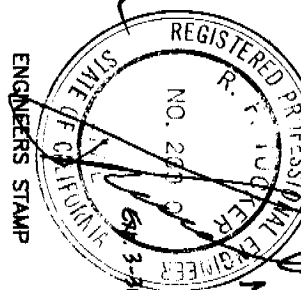
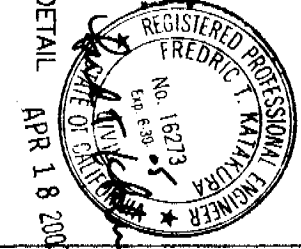
Ⓦ 10" FULL-STRENGTH SPLICE DETAIL
ASTM A 653 Fy=36 KSI



Ⓧ 3", 4", 5" OR 6" STEEL COLUMN Fy=36 KSI



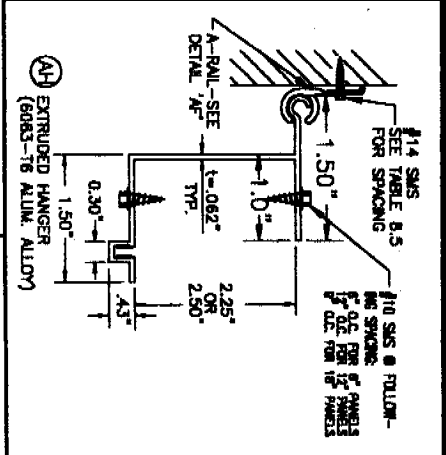
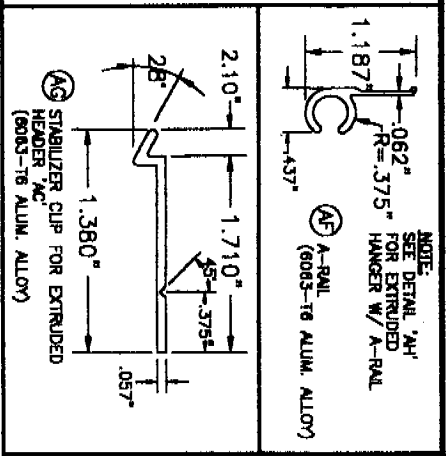
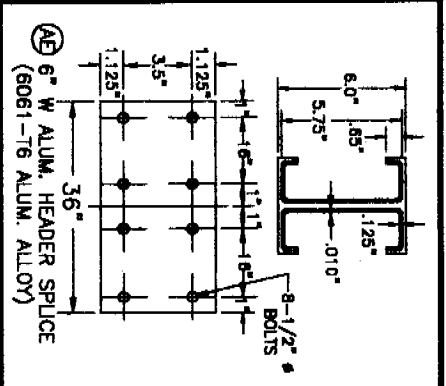
Ⓥ STEEL "C"- CHANNEL HEADER
(STEEL A-653 Fy=50,000 PSI)



DATE	REVISION	DATE	REVISION
MAR 03 2003			

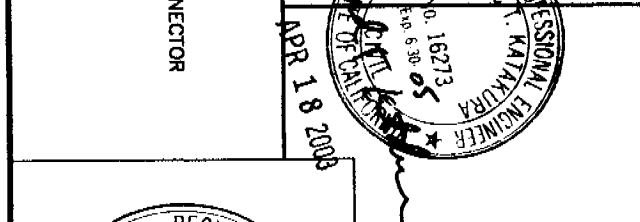
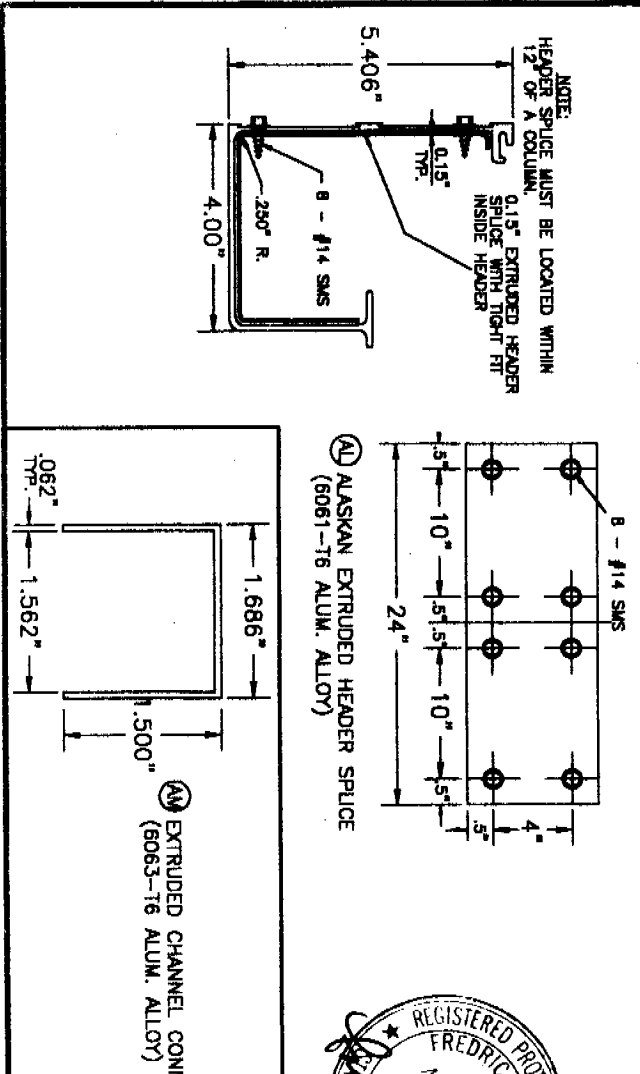
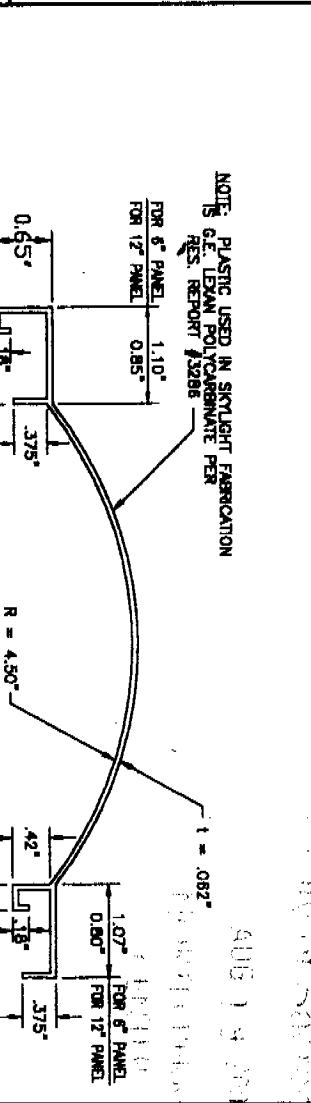
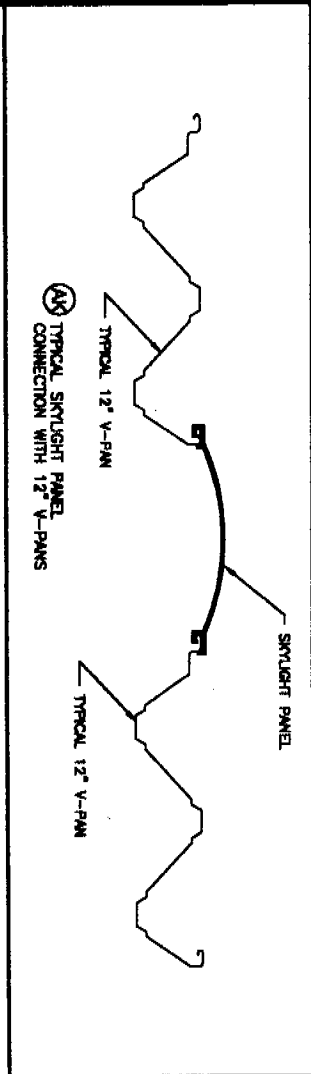
DRAWING OR PART NUMBER: 97CD03
 DRAWING OR PART NAME: 1090 ES EVALUATION REPORT NO. ER-2621P
 SCALE: NONE
 DATE: 2/6/2000
 SHEET: 3 OF 9

Ametimax
 Engineering Services
 1140 All Pro Drive
 Elkhart, IN 46514



SCHEDULE OF ALLOWABLE SPANS FOR 6\"

LEVEL LOAD (PSF)	*6\"			*12\"		
	1	2	3	1	2	3
10	11'-9"	14'-5"	17'-2"	17'-9"	11'-0"	13'-3"
20	8'-8"	10'-6"	12'-6"	13'-5"	7'-11"	10'-4"
25	7'-2"	9'-5"	11'-3"	12'-1"	7'-2"	9'-3"
30	6'-1"	8'-8"	10'-4"	11'-1"	8'-7"	9'-9"



REGISTERED PROFESSIONAL ENGINEER
FREDRIC KATAKURA
 No. 16273
 APR 18 2000

REGISTERED PROFESSIONAL ENGINEER
R. I. COCKE
 No. 26070
 APR 09 2000

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 1140 All Pro Drive
 Elkhart, IN 46514

ICBO ES EVALUATION REPORT NO. ER-2621P

DATE	REVISION	DATE	REVISION

ENGINEER'S STAMP

DATE: 2/8/2000
 DRAWING NUMBER: 97CD05
 SHEET: 5 OF 9

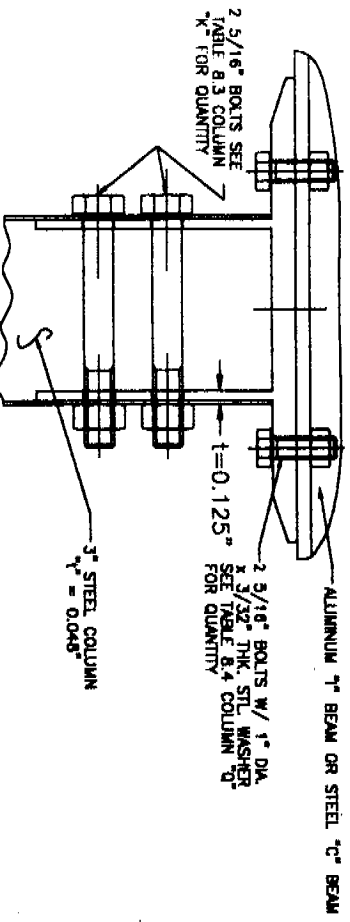
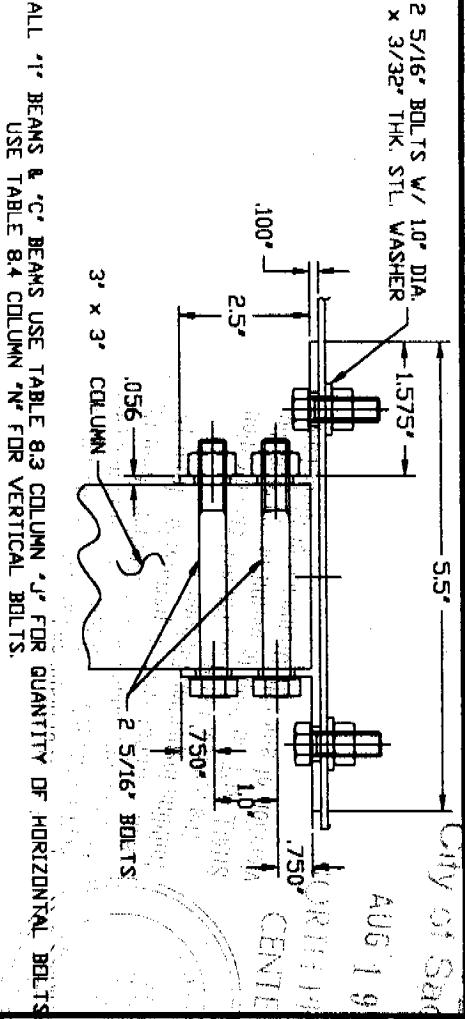
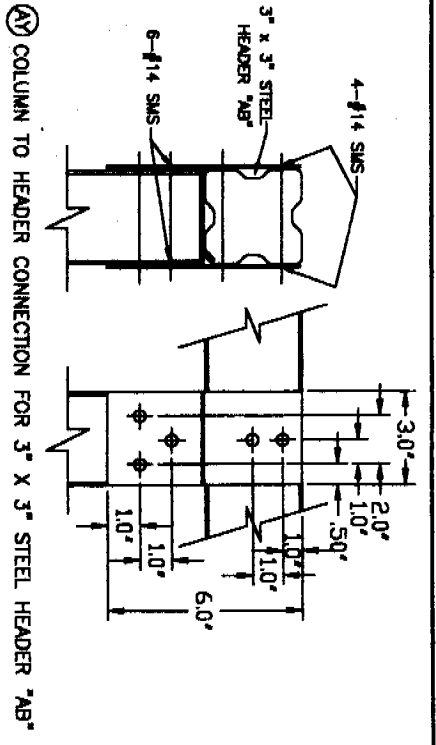
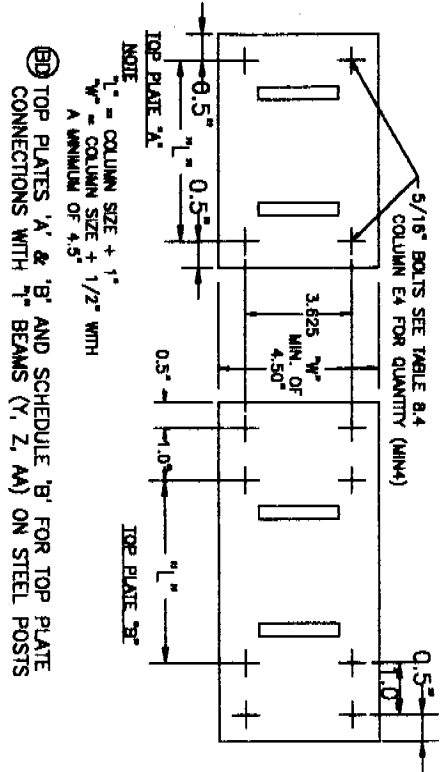
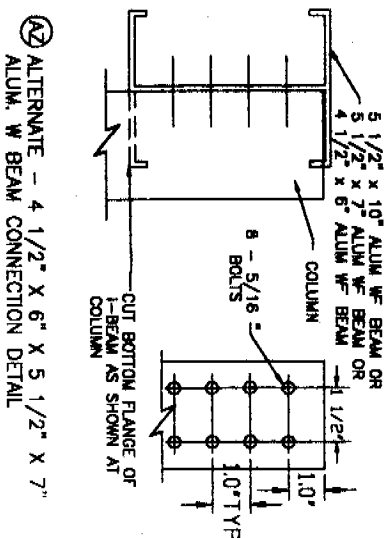
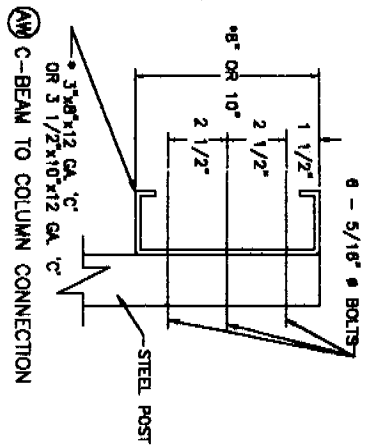
NOTE: PLASTIC USED IN SKYLIGHT FABRICATION IS G.E. LEVIAN POLYCARBONATE PER RES. REPORT #3286

NOTE: SEE SCHEDULE ABOVE FOR ALLOWABLE SPANS FOR PANELS ADJACENT TO SKYLIGHT PANELS & NUMBER OF ROOF PANELS NEEDED FOR 1 SKYLIGHT PANEL.

* USE A MINIMUM OF (4) SKYLIGHT PANEL PER (4) - 6\"

AND (1) SKYLIGHT PANEL PER (2) - 12\"

FOR SKYLIGHT TO PANEL CONNECTIONS, USE THE SAME NUMBER OF SCREWS AS PANEL TO HEADER. SEE TABLE 'A' DETAIL.



REGISTERED PROFESSIONAL ENGINEER
 FREDRIC T. KATAKURA
 No. 16273
 Exp. 6-30-03
 STATE OF INDIANA
 APR 26 2003

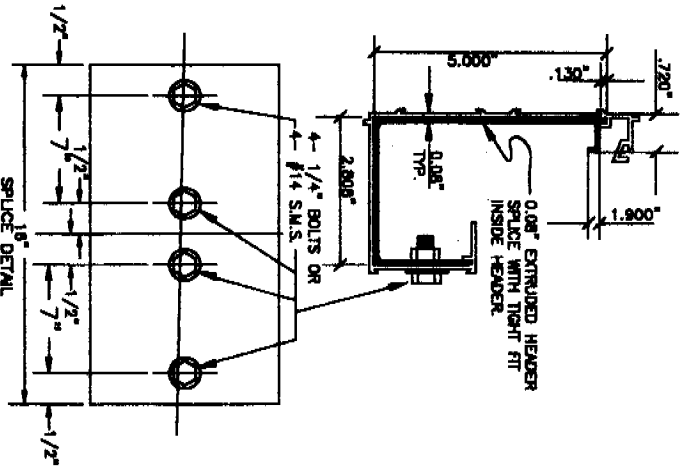
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ICBO ES EVALUATION REPORT NO. ER-2621P

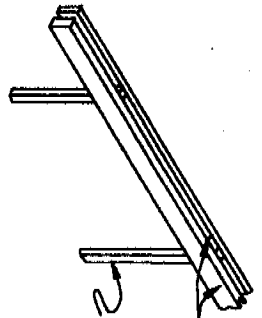
DATE: 2/8/2000
 SHEET: 7 OF 9

REVISION	DATE	REVISION
MAR 03 2000		

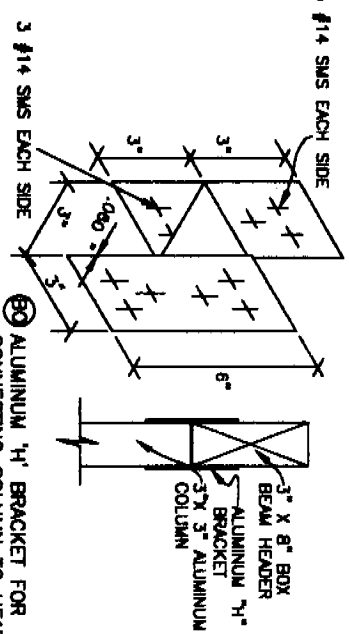
City of Indianapolis
 RECEIVED
 AUG 19 2004
 CITY CENTER



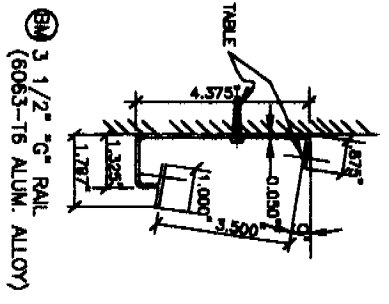
ⓑ 5 1/2" EXTRUDED HEADER SPLICE
(6063-T6 ALUM. ALLOY)



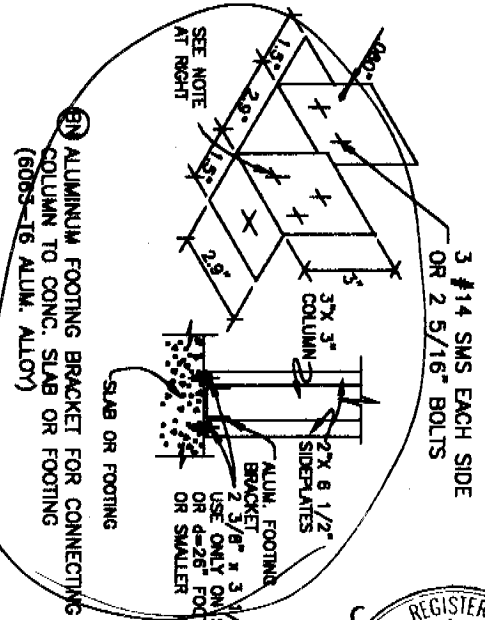
ⓑ ALTERNATE 2-2" X 6 1/2" HEADERS



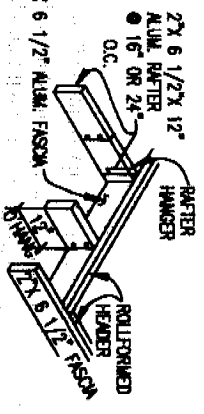
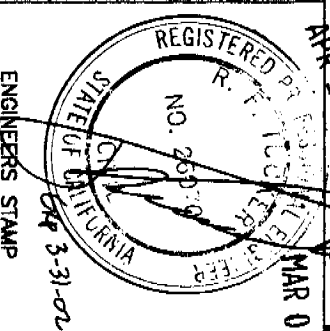
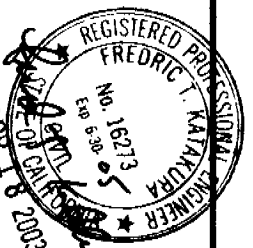
ⓑ ALUMINUM 'H' BRACKET FOR
CONNECTING COLUMN TO HEADER
(6063-T6 ALUM. ALLOY)



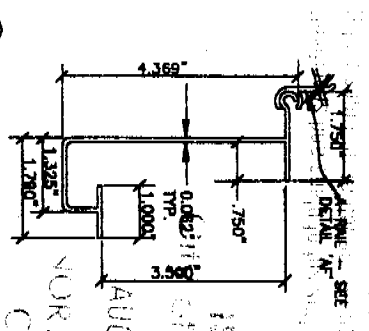
ⓑ 3 1/2" "C" RAIL
(6063-T6 ALUM. ALLOY)



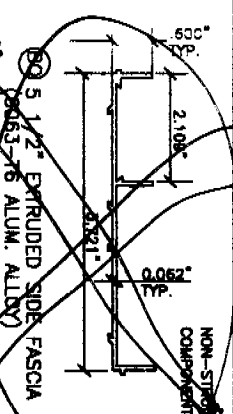
ⓑ ALUMINUM FOOTING BRACKET FOR CONNECTING
COLUMN TO CONC. SLAB OR FOOTING
(6063-T6 ALUM. ALLOY)



ⓑ ALTERNATE - DECORATIVE
FASCIA TRIM



ⓑ 3 1/2" "J" HANGER
(6063-T6 ALUM. ALLOY)



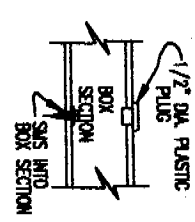
ⓑ 5 1/2" EXTRUDED SIDE FASCIA
(6063-T6 ALUM. ALLOY)

DATE	2/8/2000	REVISION	
SCALE	NONE	DATE	
PROJECT	ICBO ES EVALUATION REPORT NO. ER-2621P	REVISION	
DRAWN BY	KG	DATE	
CHECKED BY		REVISION	
DATE	2/8/2000	REVISION	
PROJECT NUMBER	97CDD09	REVISION	
SHEET	9 OF 9	REVISION	



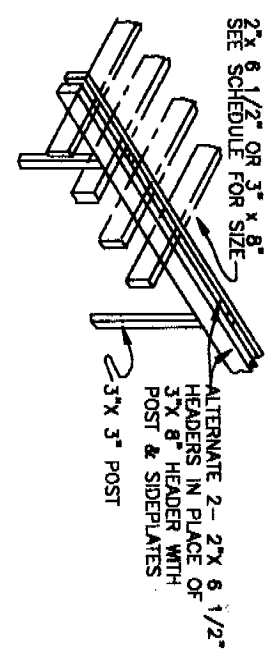
Amerimax
Engineering Services
1140 All Pro Drive
Elkhart, IN 46514

ISSUED
AUG 19 2004
NORTH HAVEN
CENTER

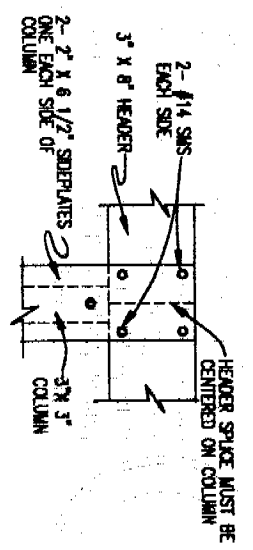


NOTE: USE PLASTIC PLUG TO FILL 1/2" DIA. ACCESS HOLES USED WHEN ATTACHING S.M.S. INTO ANOTHER BOX SECTION IN WHICH THE S.M.S. LENGTH WOULD EXCEED 2 1/2".

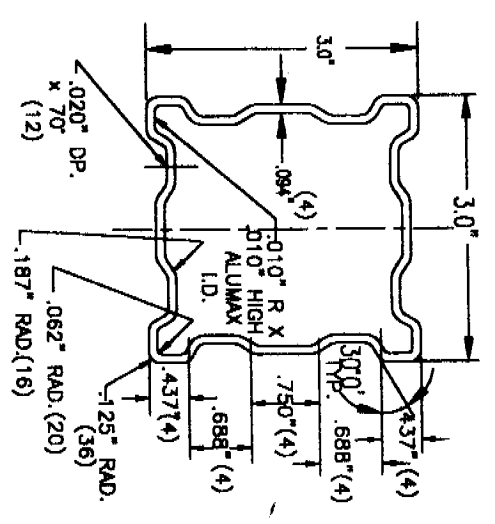
L10 PLASTIC PLUG DETAIL



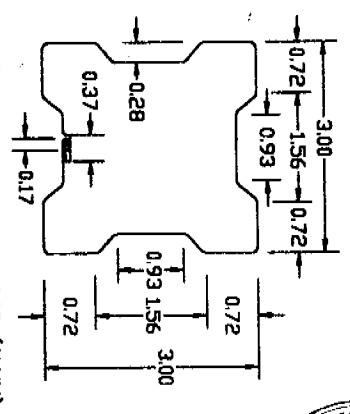
L11 ALTERNATE 2-2" X 6 1/2" HEADERS



L16 HEADER SPLICE DETAIL



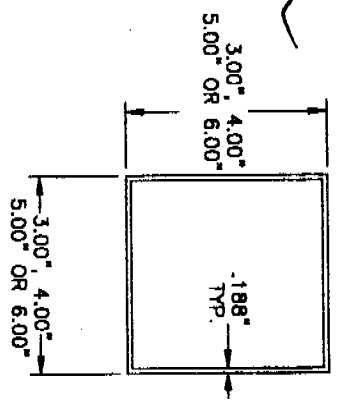
L31 FLUTED COLUMN
(3" ALUM. 6063-T6)
TYP. = 0.062" UNLESS OTHERWISE NOTED



T (IN) = 0.024, 0.030, 0.040 (ALUM)
= 0.048 (STEEL)

NOTE:
COLUMNS MAY BE TRIMMED W/FLEX-ALUM. FINISH.

L30 3" ALTERNATE COLUMN
(3003-H16 ALUM. ALLOY OR
A-446 Fy=40 KSI STEEL)



L32 3", 4", 5" OR 6" STEEL COLUMN
Fy=36 KSI

REGISTERED PROFESSIONAL ENGINEER
FREDRICK KATAKURA
No. 16373
Exp. 6.30.08
APR 18 2003

ISSUED
City of Sacramento

AUG 19 2004

NORTH PLUMB
CENTER

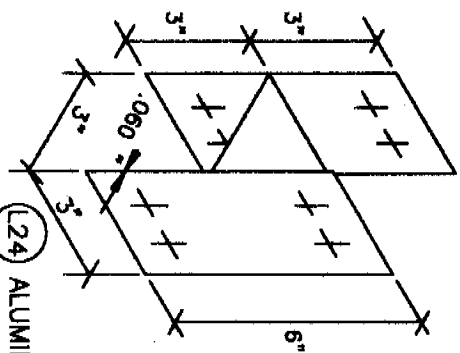
REGISTERED PROFESSIONAL ENGINEER
R. F. TUOHY
NO. 26070
EXPIRES 8-31-02
ENGINEER'S STAMP

DATE	REVISION	DATE	REVISION

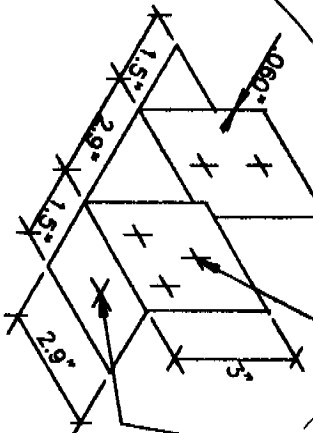
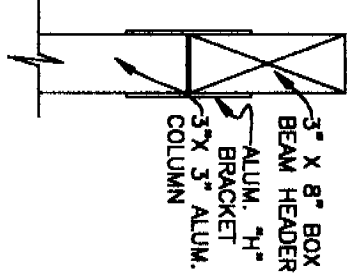
DRAWN BY: KG
SCALE: NONE
DATE: 2/8/2000

Amertmax
Engineering Services
1140 All Pro Drive
Elmhurst, IN 46514

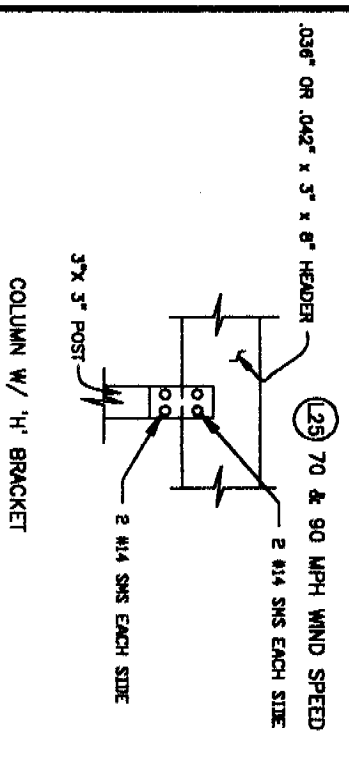
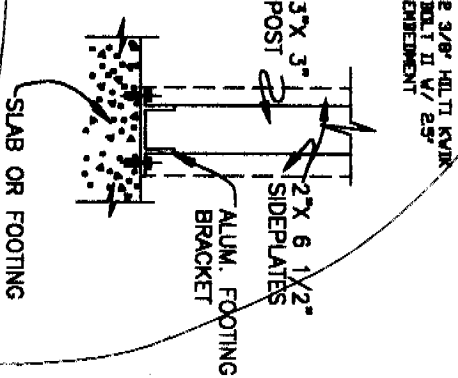
ICBO ES EVALUATION REPORT NO. ER-2621P
DRAWING COMPONENT PARTS & CONNECTION DETAILS
FOR PARTS & COMMERCIAL LATTICE STRUCTURES
DRAWING NUMBER: 97LTD3
SHEET: 2 OF 4



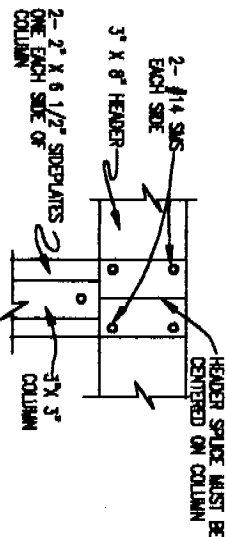
(124) ALUMINUM 'H' BRACKET FOR CONNECTING COLUMN TO HEADER (6063-T6 ALUM. ALLOY)



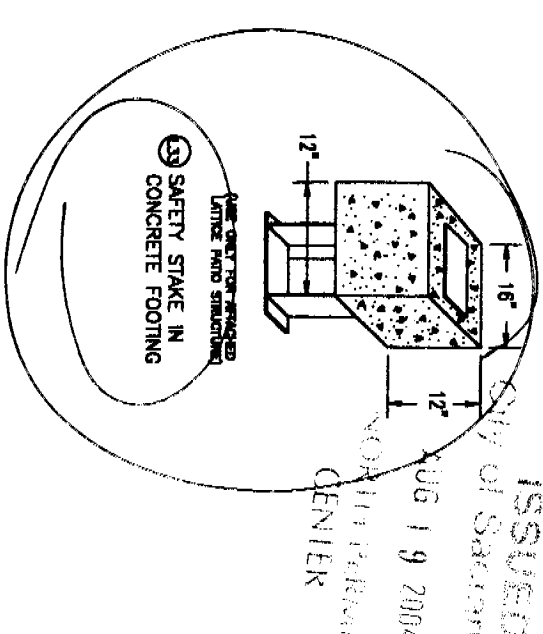
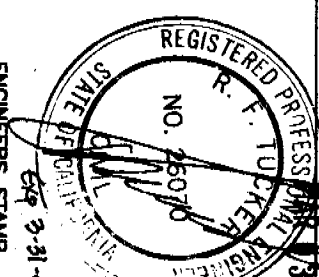
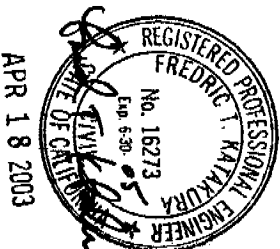
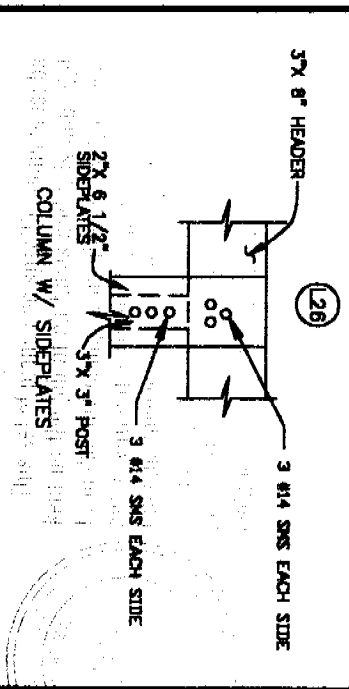
(127) ALUMINUM FOOTING BRACKET FOR CONNECTING POST TO CONC. SLAB OR FOOTING (6063-T6 ALUM. ALLOY)



COLUMN W/ 'H' BRACKET



(116) HEADER SPLICE DETAIL



(123) SAFETY STAKE IN CONCRETE FOOTING

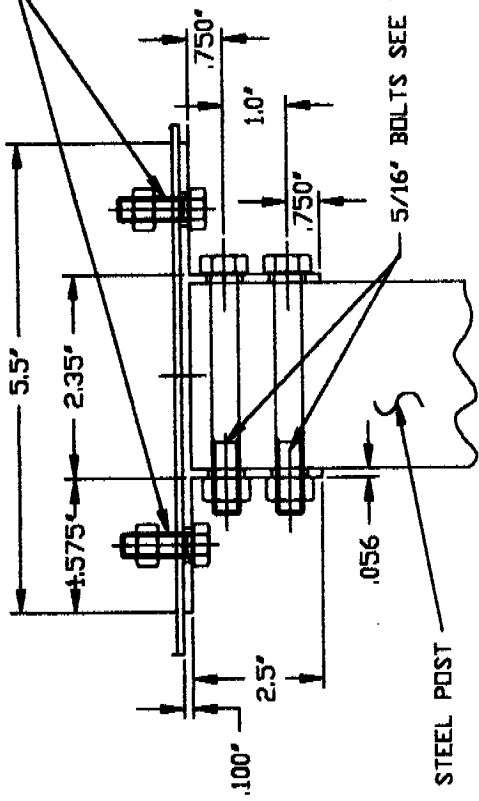
DATE	REVISION	DATE	REVISION
2/8/2000			

Ametimax Engineering Services
 BUILDING PRODUCTS, INC. 1140 All Pro Drive
 Elkhart, IN 46914

DRAWING COMPONENT PARTS & CONNECTION DETAILS
 FOR PART FOR PAINT & COMMERCIAL LATTICE STRUCTURES
 DATE: 2/8/2000
 SHEET: 4 OF 4

ISSUED
 City of Salem
 AUG 19 2004
 NORTH PLAZA
 CENTER

5/16" BOLTS W/ 1" DIA.
 x 3/32" THK. STL. WASHER
 TO 8" STEEL 'C' BEAM
 SEE TABLE 8.4 COLUMN E4
 FOR QUANTITY



.048 x 3' x 3' STEEL POST

5/16" BOLTS SEE TABLE 8.3 COLUMN 'M' FOR QUANTITY

(A) ALTERNATE 3" SQ. COLUMN CONNECTOR BRACKET
 (6063-T6 ALUM. ALLOY)

DETAIL 3" X 8" - 1 FOR ATTACHED STRUCTURES
 COLUMN TO WRAPPED 3" X 8" X 12 GA.
 'C' BEAM HEADER CONNECTIONS

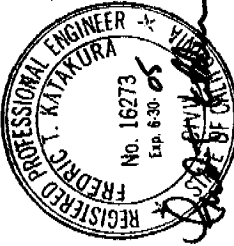


3" X 8" BOX BEAM WRAP

3" X 8" X 12 GA. 'C' BEAM

(L23) 3" X 12" X 12 GA. STL. 'C' BEAM
 WRAP W/ 3" X 8" ALUM. BOX BEAM

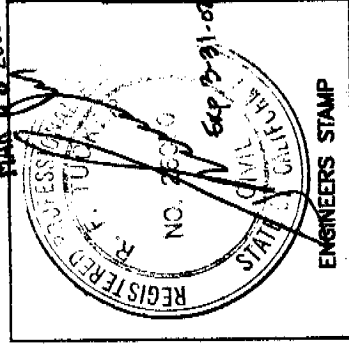
APR 18 2003



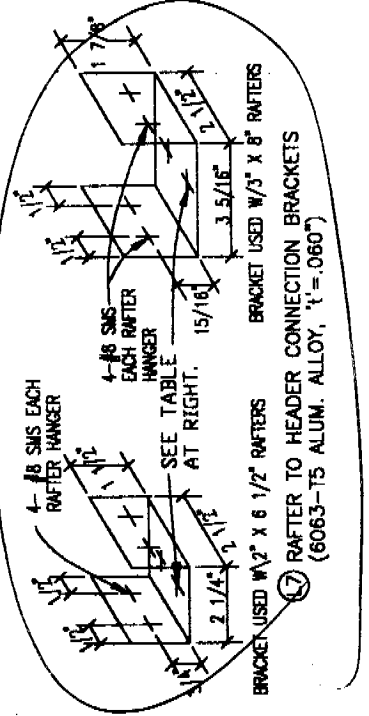
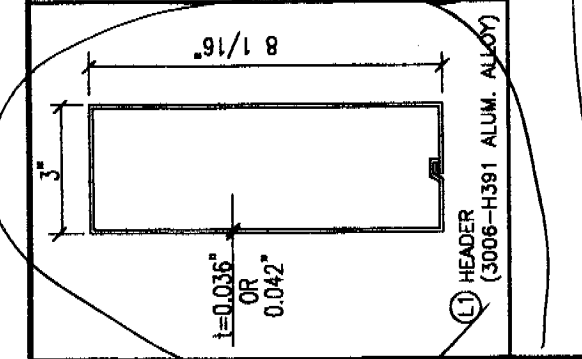
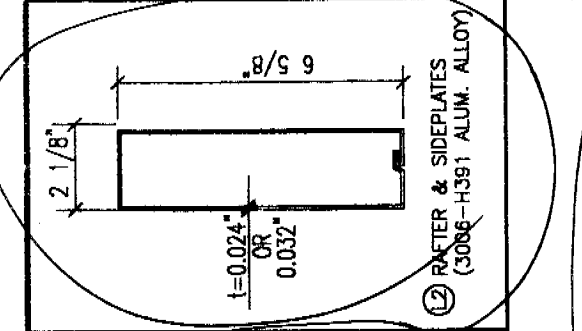
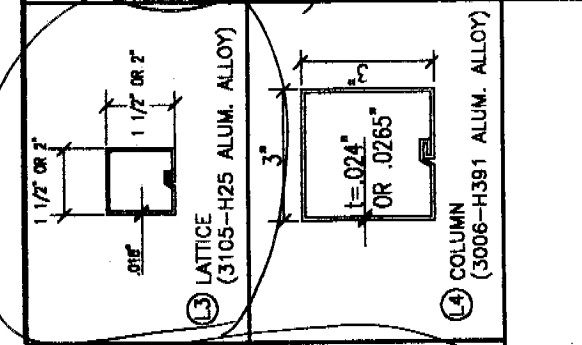
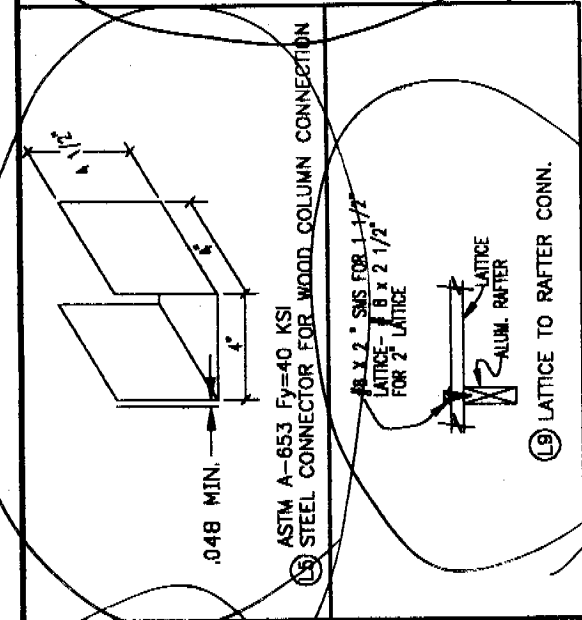
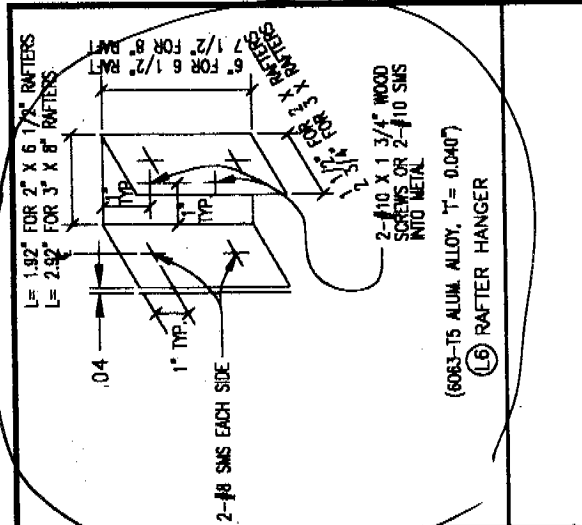
DATE	REVISION	DATE	REVISION

<p>Engineering Services 1140 All Pro Drive Elmhurst, IL 60120</p>	<p>ICBO ES EVALUATION REPORT NO. ER-2821P COMPONENT PARTS & CONNECTION DETAILS CALCULATED FOR PATIO & COMMERCIAL LATTICE STRUCTURES</p>
<p>DATE: 2/8/2000</p>	<p>SHEET: 3 OF 4</p>

MAR 03 2000



ENGINEERS STAMP



HEADER GAGE	HEADER	DETAIL	MAXIMUM WIND LOAD	MAX TRIB	FASTENING
.042	3' x 8'	L1	90 MPH PATIO	6'	2-#8 SMS EACH BRKT.
.036	3' x 8'	L1	90 MPH PATIO	10'	3-#8 SMS EACH BRKT.
.032	3' x 8'	L1	90 MPH PATIO	5'	2-#8 SMS EACH BRKT.
.094	3' x 8'	L1	90 MPH PATIO	10'	4-#8 SMS EACH BRKT.
	DBL 2 x 6	L11	90 MPH PATIO	10'	3-#8 SMS EACH BRKT.
	8\"/>				

MAR 03 2000

DATE	REVISION	DATE	REVISION

DRAWN BY: KG
 SCALE: NONE
 DATE: 2/9/2000
 SHEET NUMBER: 97LT01
 SHEET: 1 OF 4

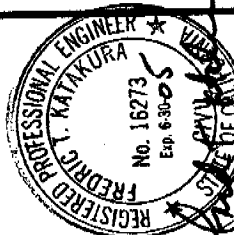
Amerimax
 BUILDING PRODUCTS, INC.
 Engineering Services
 1140 All Pro Drive
 Elkhart, IN 46514

DRAWING NO. ER-2621P
 DRAWING NAME: COMPONENT PARTS & CONNECTION DETAILS FOR PATIO & COMMERCIAL LATTICE STRUCTURES
 PROJECT NUMBER: 97LT01

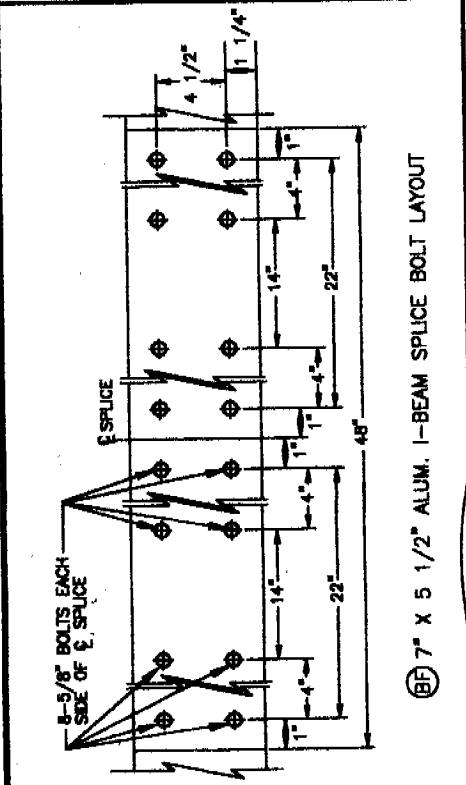
REGISTERED PROFESSIONAL ENGINEER
 R. TUCKER
 NO. 26070
 CIVIL ENGINEER
 STATE OF INDIANA
 EXP. 3-31-02
 ENGINEERS STAMP

REGISTERED PROFESSIONAL ENGINEER
 FREDRIC T. KATAKURA
 NO. 16273
 CIVIL ENGINEER
 STATE OF INDIANA
 EXP. 6-30-00
 ENGINEERS STAMP

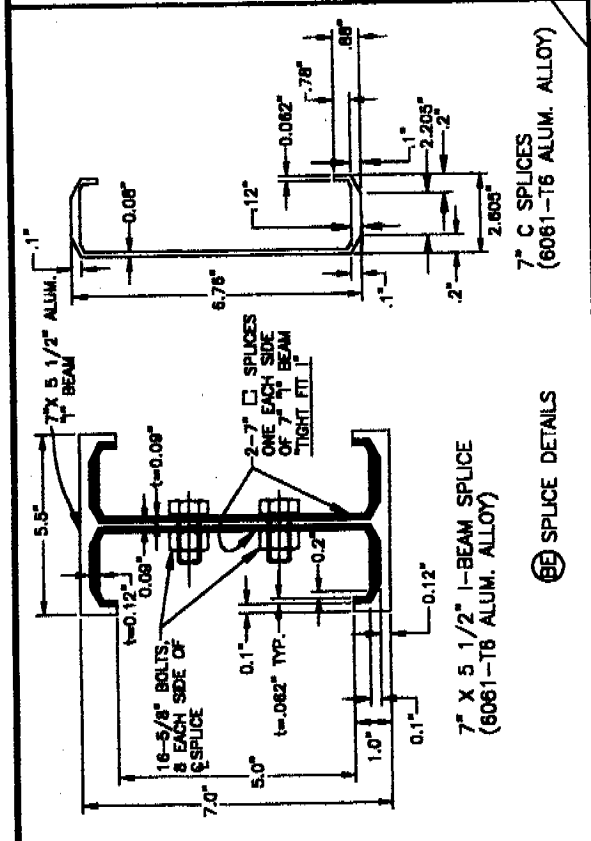
ALTERNATE RAFTER TO WALL CONN.
 174" x 4" LAG SCREW
 SEE TABLE 8.5 COLUMN ANCHOR QUANTITY ALL 10 PSF USE 1 LAG PER STUD 16" D/C
 EXISTING STRUCTURE
 2-#10 x 1" SCREW EACH SIDE
 WOOD LEDGER- 2 x DEPTH OF RAFTER
 2-#8 SMS EACH SIDE
 ALUM. RAFTER
 ALT. SIMPSON HANGER SHOWN UPON PER I.C.B.O. E.S. EV. #1258



APR 18 2000



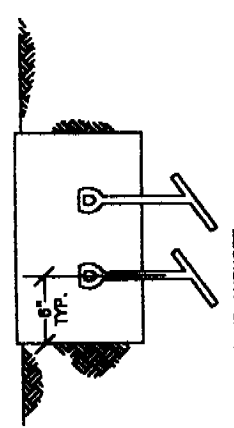
BF 7" X 5 1/2" ALUM. I-BEAM SPLICE BOLT LAYOUT



BE SPLICE DETAILS

7" X 5 1/2" I-BEAM SPLICE (6061-T8 ALUM. ALLOY)

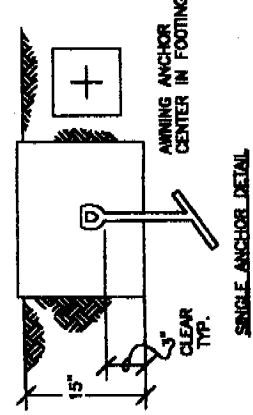
7" C SPLICES (6061-T6 ALUM. ALLOY)



ANCHOR DETAILS FOR ATTACHED STRUCTURES

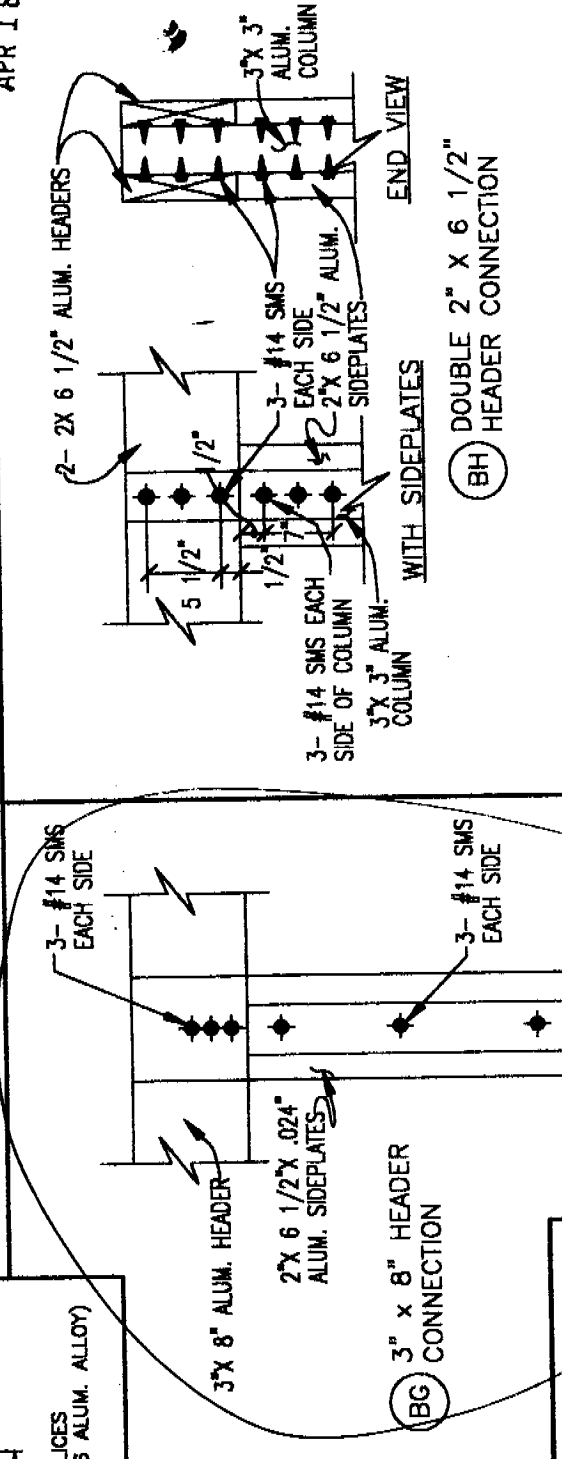
FOOTING "d" (IN)	ALTERNATE FOOTING SIZE	NO. OF ANCHORS
18	12" X 12" X 15"	1
20	15" X 15" X 15"	1
22	18" X 18" X 15"	1
24	20" X 20" X 15"	1
26	24" X 24" X 15"	2
28	24" X 24" X 15"	2
30	24" X 24" X 15"	2
32	24" X 24" X 15"	3
34	24" X 24" X 15"	4
36	24" X 24" X 15"	4

2, 3, OR 4 ANCHOR DETAIL



SINGLE ANCHOR DETAIL

ANCHOR DETAILS FOR ATTACHED STRUCTURES



BH DOUBLE 2" X 6 1/2" HEADER CONNECTION

BG 3" X 8" HEADER CONNECTION

DATE: MAR 03 2000

REVISION: _____

DATE: _____

REVISION: _____

Engineering Services
1140 All Pro Drive
Elkhart, IN 46514

Amerimax
BUILDING PRODUCTS, INC.

ICBO ES EVALUATION REPORT NO. ER-2621P

SCALE: NONE

DATE: 2/6/2000

PROJECT NUMBER: 97CD08

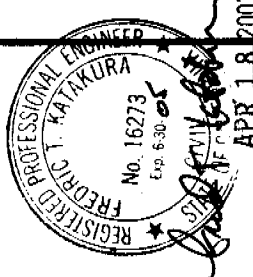
SHEET: 8 OF 9

REGISTERED PROFESSIONAL ENGINEER
R. T. TUCKER
NO. 26070
STATE OF INDIANA

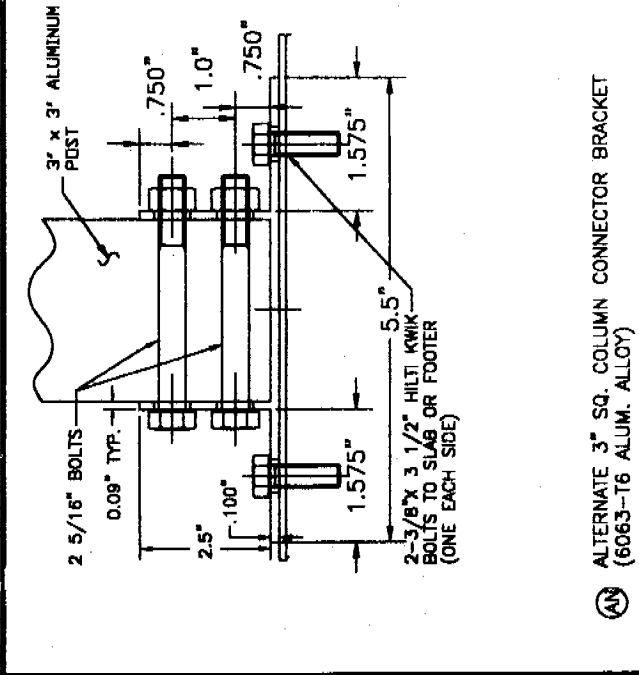
DATE: MAR 31 2002

EX 3-31-02

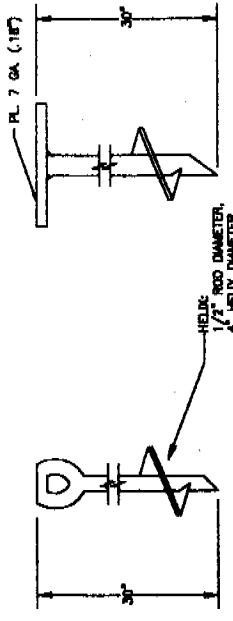
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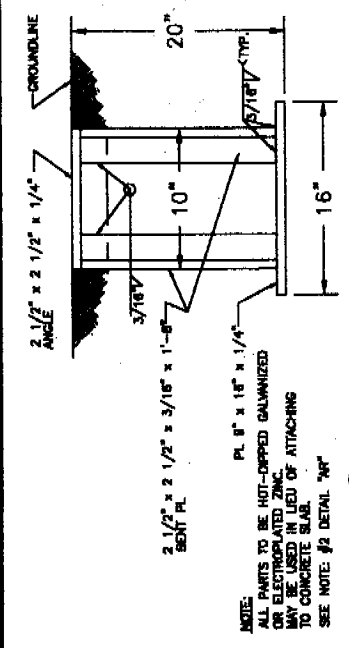
AN ALTERNATE 3" SQ. COLUMN CONNECTOR BRACKET (6063-T6 ALUM. ALLOY)



ALTERNATE TO CONCRETE SLAB ATTACHMENT

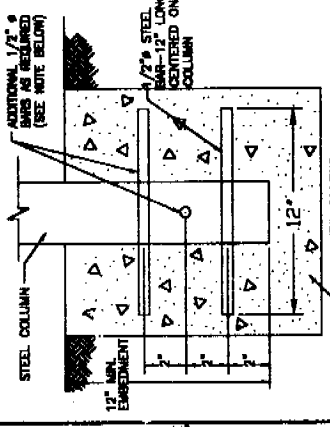
- NOTES
1. ALL PARTS TO BE HOT-DIP GALVANIZED OR ELECTROPLATED ZINC. MAY BE USED IN LIEU OF ATTACHING TO CONCRETE SLAB.
 2. FABRICATION OF ANCHORS AND SAFETY STANCHES IS BEYOND THE SCOPE OF THIS REPORT. FABRICATION DETAILS AND QUALITY CONTROL SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
 3. ANCHORING MUST BE USED IN THE FOLLOWING TYPES OF SOIL: SAND, GRAVEL, CLAY, SANDY GRAVEL, SILTY GRAVEL, SILTY SAND, CLAYEY SAND, CLAYEY GRAVEL, SANDY CLAY, SILTY CLAY, AND CLAYEY SILT.

AWNING ANCHOR



AP SAFETY STAKE (ALTERNATE TO CONCRETE SLAB ATTACHMENT)

NOTE: ALL PARTS TO BE HOT-DIP GALVANIZED OR ELECTROPLATED ZINC. MAY BE USED IN LIEU OF ATTACHING TO CONCRETE SLAB. SEE NOTE #2 DETAIL "AP"



NOTE: 1 - 1/2" STEEL BAR FOR FOOTINGS UP TO 36" CUBE AND 2 - 1/2" STEEL BAR FOR FOOTINGS UP TO 48" CUBE.

ALTERNATE FREESTANDING STRUCTURE COLUMN TO FOOTING CONNECTION DETAIL

SCHEDULE "F" - COLUMN TO FOOTING CONNECTIONS FOR 18" TO 42" FOOTING SIZES

FOOTING SIZE "d" (INCHES)	HILT FASTENER CONNECTION TO COLUMN TUBE SIZE	REQUIRED TENSION ANCHOR BOLTS
18"	2-1/4" x 2" d	430#
20"	2-3/8" x 2 1/2"	580#
22"	2-5/8" BOLTS	850#
24"	2-3/8" BOLTS	790#
26"	2-1/2" x 3 1/2"	1330#
28"		1350#
30"	2-5/8" x 4" d	1670#
32"		2080#
34"		N/A
36"		N/A
38"		N/A
40"		N/A
42"	3-3/8" BOLTS	N/A

*"d" SIZE IN ANCHOR BOLT OR HILT FASTENER SIZES INDICATES DEPTH OF EMBEDMENT. EXAMPLE: 2 1/2" INDICATES 2 1/2" EMBEDMENT OF ANCHOR OR EQUAL TO HILT FASTENERS. ALTERNATE MUST BE ICBO ES. APPROVED TO PROVIDE ALLOWABLE TENSION EQUAL TO REQ'D TENSION FOR ANCHOR BOLT VALUES SHOWN. HILT INDICATES HILT KB-II ANCHOR BOLTS PER ICBO E.S. BY #4627.

FOOTING SCHEDULE

DATE	REVISION	DATE	REVISION

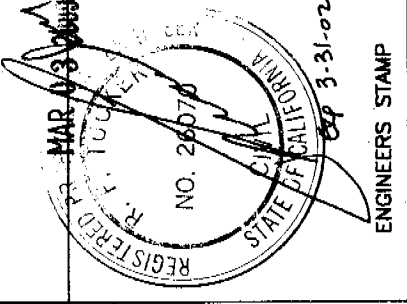
Amerimax
ENGINEERING INC.

Engineering Services
1140 All Pro Drive
Elkhart, IN 46514

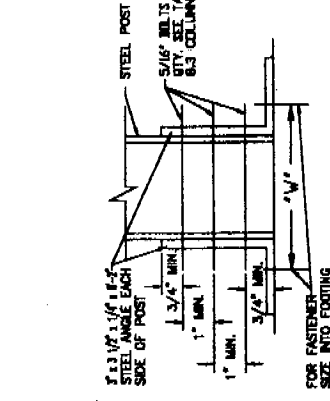
DRAWN BY: KG
SCALE: NONE
DATE: 2/8/2000

ICBO ES EVALUATION REPORT NO. ER-2621P
DRAWING NAME: PART COMPONENT PARTS & CONNECTION DETAILS
DRAWING NUMBER: 97CD06

SHEET 6 OF 9

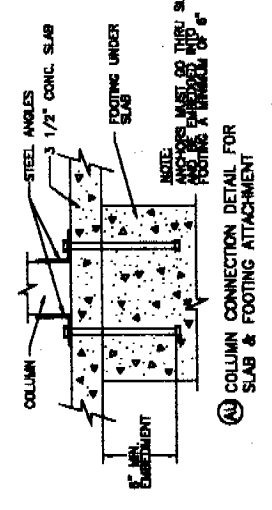


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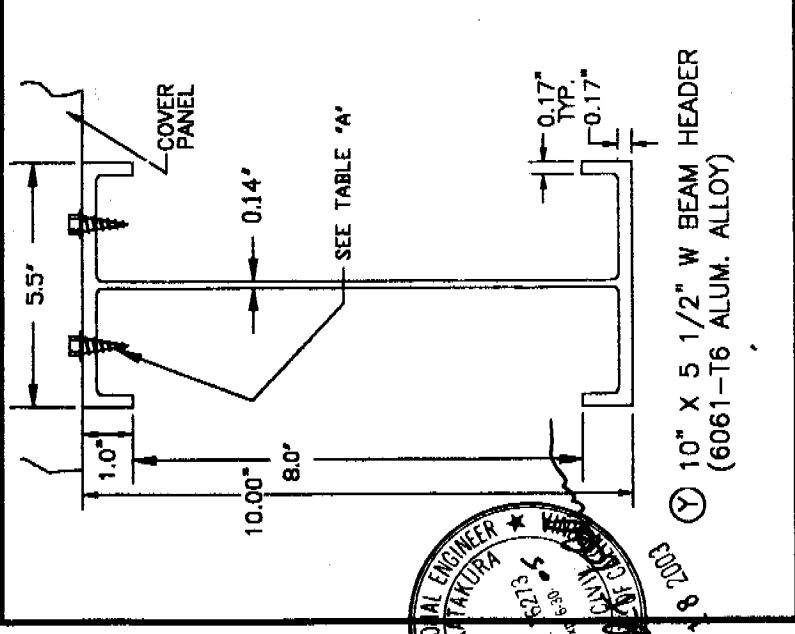


FASTENER SIZE	MINIMUM W (WIDTH)	MINIMUM W (WIDTH)
1/4"	3"	3"
3/8"	4 1/2"	6"
1/2"	6"	7 1/2"
5/8"	7 1/2"	8"
3/4"	8"	8"

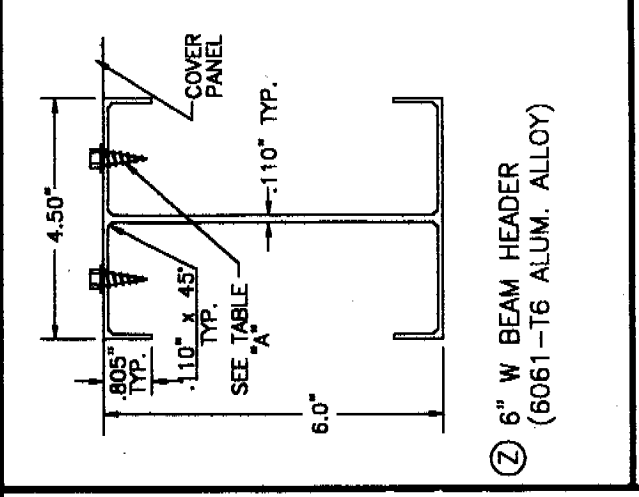
AS ATTACHED STRUCTURE COLUMN TO FOOTING CONNECTION DETAIL "d" = 18" TO 32" HILT FASTENER ALTERNATE



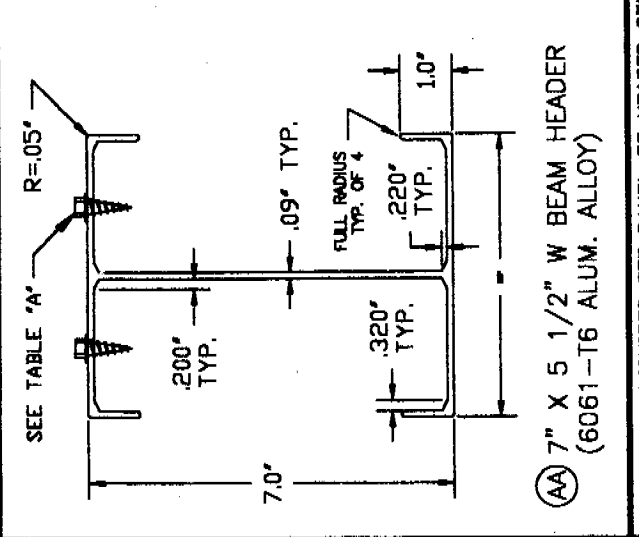
AS COLUMN CONNECTION DETAIL FOR SLAB & FOOTING ATTACHMENT



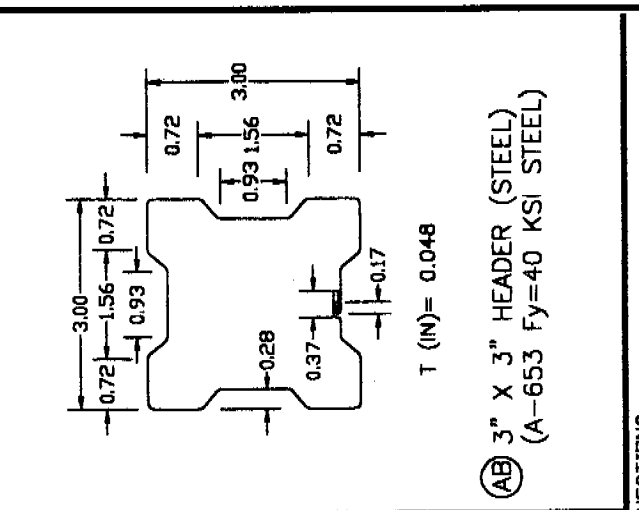
⑦ 10" X 5 1/2" W BEAM HEADER
(6061-T6 ALUM. ALLOY)



② 6" W BEAM HEADER
(6061-T6 ALUM. ALLOY)



⑩ 7" X 5 1/2" W BEAM HEADER
(6061-T6 ALUM. ALLOY)



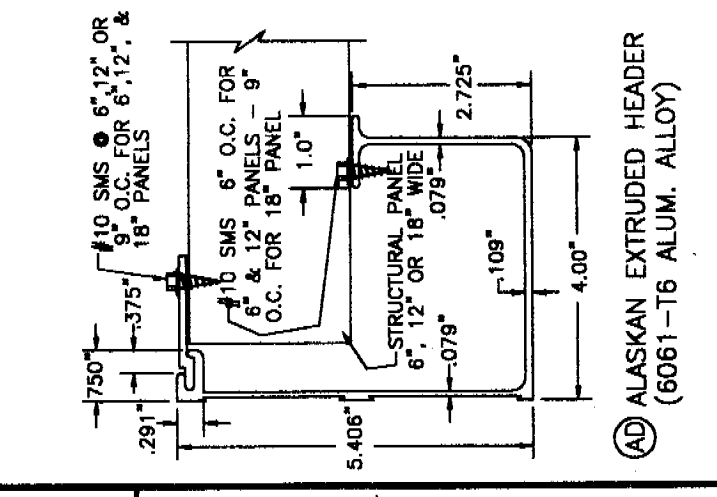
⑩ 3" X 3" HEADER (STEEL)
(A-653 Fy=40 KSI STEEL)

FASTENERS REQUIRED FOR PANEL TO HEADER CONNECTIONS

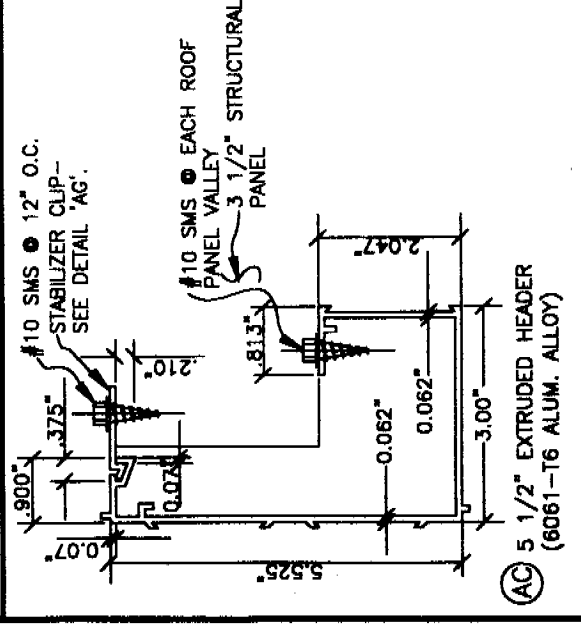
MAX. WIND LOAD	HEADER DESCRIPTION	MAX. TRIP WIDTH	FASTENING SCHEDULE	NOTE'S
90 MPH PATIO	ALL FASCIA	10'	2-#10 SMS PER 12" PANEL	
90 MPH PATIO	STEEL CLOVER, C BEAMS, I BEAMS	12'	2-#14 SMS PER 12" PANEL	
90 MPH PATIO	STEEL CLOVER, C BEAMS, I BEAMS	21'	3-#14 SMS PER 12" PANEL	
70 MPH EXP C AND 90 MPH EXP B	ALL FASCIA	10'	2-#10 SMS PER 12" PANEL	
70 MPH EXP C AND 90 MPH EXP B	STEEL CLOVER, C BEAMS, I BEAMS	16'	3-#14 SMS PER 12" PANEL	SEE #1
70 MPH EXP C AND 90 MPH EXP B	STEEL CLOVER, C BEAMS, I BEAMS	16'	2-#14 SMS PER 12" PANEL	SEE #2
90 MPH EXP C	ALL FASCIA	10'	2-#10 SMS PER 12" PANEL	
90 MPH EXP C	STEEL CLOVER, C BEAMS, I BEAMS	16'	4-#14 SMS PER 12" PANEL	SEE #1
90 MPH EXP C	STEEL CLOVER, C BEAMS, I BEAMS	16'	3-#14 SMS PER 12" PANEL	SEE #2

① PANEL USE 50% LESS SCREWS
② PANEL USE 50% MORE SCREWS

#1 .018 & .024 PANELS
#2 .032 & .036 PANELS



④ ALASKAN EXTRUDED HEADER
(6061-T6 ALUM. ALLOY)



⑤ 5 1/2" EXTRUDED HEADER
(6061-T6 ALUM. ALLOY)

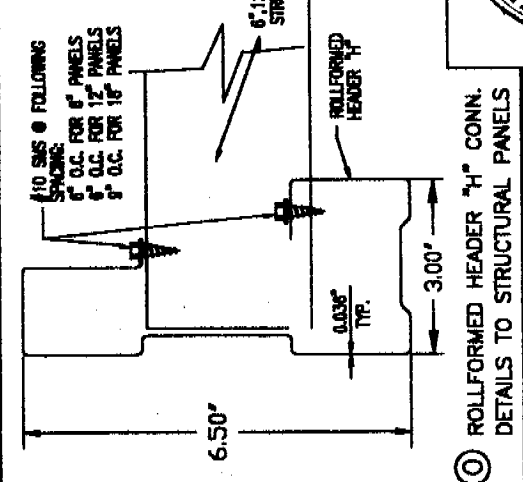
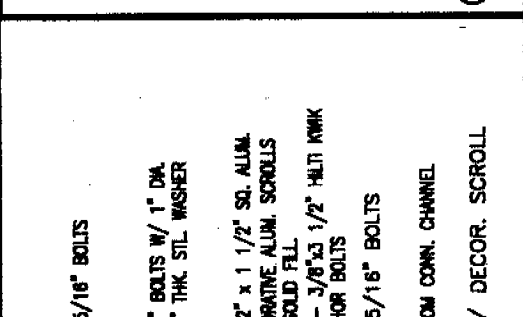
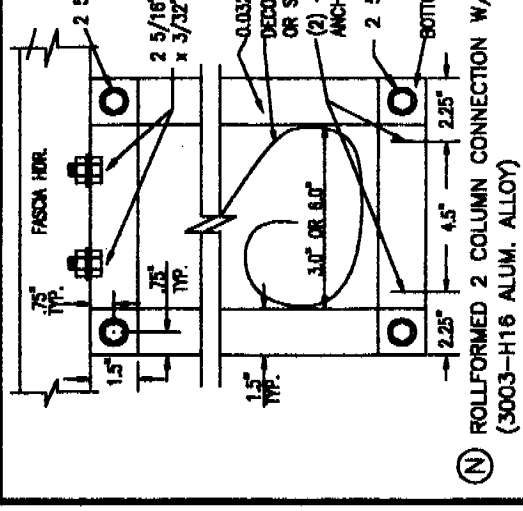
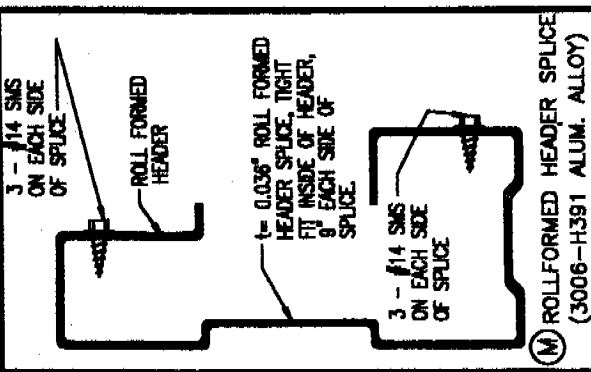
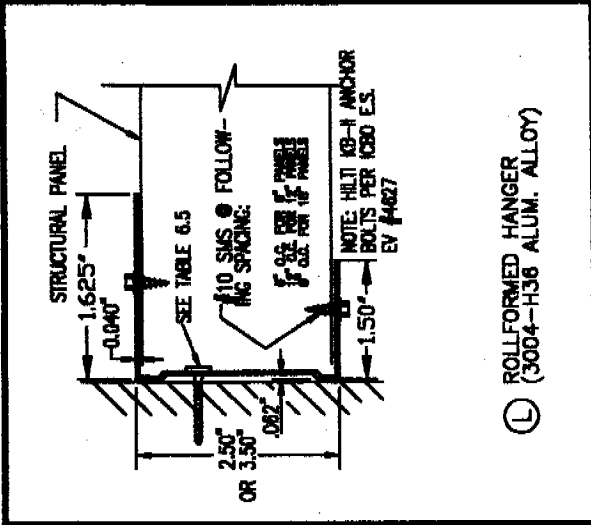
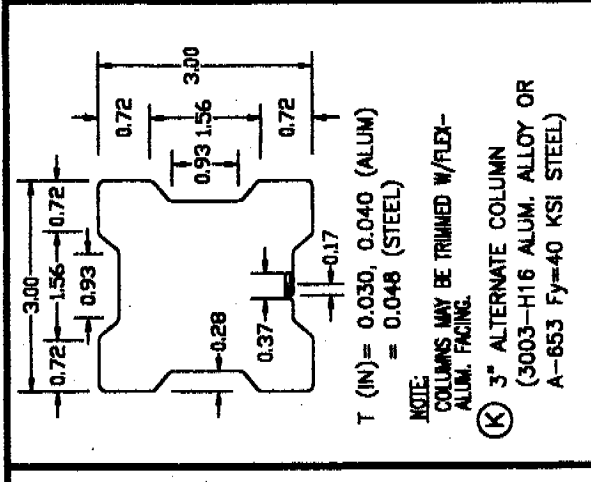
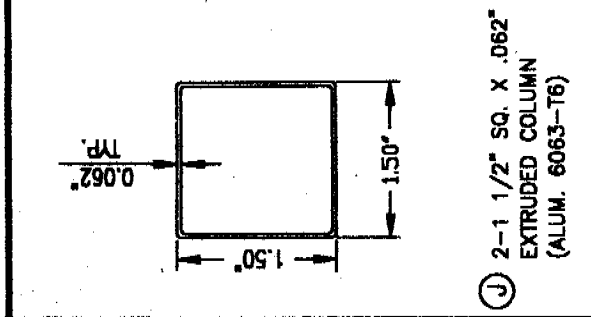
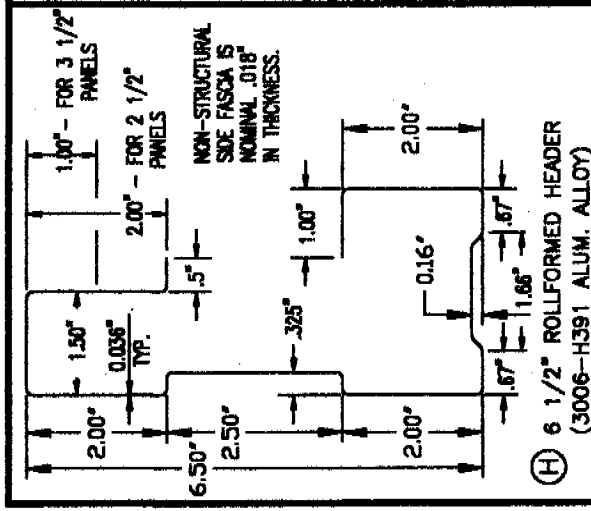
REGISTERED PROFESSIONAL ENGINEER
FREDRICK TAKURA
No. 6303
APR 8 2003

REGISTERED PROFESSIONAL ENGINEER
R. TUCKER
No. 26970
MAR 03 2000
STATE OF CALIFORNIA
ENGINEERS STAMP

Ameclimax
BUILDING PRODUCTS, INC.

Engineering Services
1140 All Pro Drive
Elkhart, IN 46514

FORM BY: KG
SCALE: NONE
DATE: 2/9/2000
ICBO ES EVALUATION REPORT NO. ER-2621P
COMPONENT PARTS & CONNECTION DETAILS
PROJECT NUMBER: 97CD04
SHEET: 4 OF 9



REGISTERED PROFESSIONAL ENGINEER
 FREDRIC T. KATAKURA
 No. 16273
 Exp. 6-30-05
 CIVIL ENGINEER
 STATE OF CALIFORNIA
 APR 18 2000

DATE	REVISION	DATE	REVISION
2/8/2000			

REGISTERED PROFESSIONAL ENGINEER
 R. T. TUCKER
 No. 26070
 Exp. 12-31-02
 CIVIL ENGINEER
 STATE OF CALIFORNIA
 ENGINEERS STAMP

Amertimax
 MILLING PRODUCTS, INC.

Engineering Services
 1140 All Pro Drive
 Elmhurst, IN 46514

ICBO ES EVALUATION REPORT NO. ER-2821P

SCALE: NONE

DATE: 2/8/2000

SHEET: 2 OF 9

6.0 COLUMN AND FASTENER REQUIREMENTS FOR COMMERCIAL AND PATIO STRUCTURES

Table 6.3: Required Number of Fasteners for Shearing Loads

Column Spacing multiplied by Trib Width	Minimum Column Required for Attached Structures										
	Live Load (psf)										
Lattice Tributary Area (sq ft)	10	20	25	30	40	60					
23	A1	A1	A1	A1	A2	C					C
31	A1	A1	A1	A2	C	C					C
37	A1	A1	A2	B	C	C					C
44	A1	A2	B	C	C	D					D
55	A1	B	C	C	C	D					D
62	A1	C	C	C	C	E					E
69	A1	C	C	C	C	E					E
77	A1	C	C	C	C	E					E
85	A2	C	C	C	C	E					E
92	A2	C	C	C	C	E					E
100	A2	C	C	C	C	E					E
106	B	C	C	C	C	E					E
108	C	C	C	C	C	E					E
115	C	C	C	C	C	E					E
123	C	C	C	C	C	E					E
138	C	C	C	C	C	E					E
164	C	D	E	E	E	F					F
185	C	E	E	E	E	F					F
216	C	E	E	E	E	F					F
248	D	E	E	E	E	F					F
277	D	E	E	E	E	F					F
308	D	E	E	E	E	F					F
338	E	E	E	E	E	F					F
385	E	E	E	E	E	F					F
482	E	F	F	F	F	G					G
616	E	F	F	F	F	G					G
682	E	G	G	G	G	H					H
769	E	G	G	G	G	H					H
923	F	G	G	G	G	H					H

Table 6.1

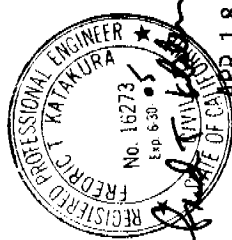
Table 6.2

COLUMN TYPE	COLUMN DESCRIPTIONS	DETAIL	MAX COL HIGHT
A1	0.024" x 3" SQUARE ALUM COLUMN	F	10'-6"
A2	0.024" x 3" SQUARE ALUM COLUMN	F	8'-0"
B	0.032" x 1 1/2" SQUARE ALUM SCROLL COLUMN	E, N	8'-0"
B	0.027" x 3" SQUARE ALUM COLUMN	F	11'-4"
C	3" CLOVERLEAF ALUM. 0.040"	K	12'-0"
D	FLUTED COLUMN ALUM. 0.062"	U	12'-0"
E	3" CLOVERLEAF STEEL 0.046"	K	8'-7"
F	3" SQUARE STEEL COLUMN	X	18'-0"
G	4" SQUARE STEEL COLUMN	X	18'-0"
H	5" SQUARE STEEL COLUMN	X	18'-0"
J	6" SQUARE STEEL COLUMN	X	18'-0"

Table 6.4: Required Number of Fasteners for Tension Loads

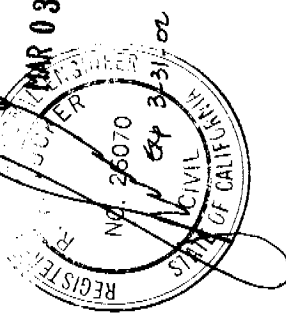
Slab	Aluminum Material Gauge (in)										Steel Gauge (in)		Design Uplift (lbs)	Footer Size d (in)			
	A	B	C	D	E	F	G	H	I	J	K	L			M	N	O
25	6	2	2	4	4	2	3	1	3	1	3	1	3	1	5	750	Slab
26	6	2	2	4	4	2	3	1	3	1	3	1	3	1	5	765	26'
27	6	3	2	4	4	2	3	1	3	1	3	1	3	1	5	856	27
28	6	3	2	5	4	2	4	2	4	1	4	1	4	1	6	855	28
29	8	3	3	5	5	2	4	2	4	1	4	1	4	1	6	1061	29
30	8	4	3	6	5	2	5	2	5	1	5	1	5	1	7	1175	30
31	8	4	3	6	6	3	5	2	5	2	5	2	5	2	7	1296	31
32	8	4	3	7	6	3	5	2	5	2	5	2	5	2	7	1426	32
33	8	4	4	8	7	3	6	2	6	2	6	2	6	2	7	1564	33
34	8	4	4	8	7	3	6	2	6	2	6	2	6	2	7	1710	34
35	8	4	4	9	8	3	7	2	7	2	7	2	7	2	7	1866	35
36	8	4	4	9	8	3	7	2	7	2	7	2	7	2	7	2030	36
37	8	5	4	9	8	3	7	2	7	2	7	2	7	2	7	2204	37
38	8	5	4	9	8	3	7	2	7	2	7	2	7	2	7	2368	38
39	8	5	4	9	8	3	7	2	7	2	7	2	7	2	7	2531	39
40	8	6	5	9	8	3	7	2	7	2	7	2	7	2	7	2785	40
41	8	6	5	9	8	3	7	2	7	2	7	2	7	2	7	2959	41
42	8	6	5	9	8	3	7	2	7	2	7	2	7	2	7	3224	42
43	8	6	5	9	8	3	7	2	7	2	7	2	7	2	7	3459	43
44	8	6	5	9	8	3	7	2	7	2	7	2	7	2	7	3706	44
45	8	6	5	9	8	3	7	2	7	2	7	2	7	2	7	3965	45
46	8	6	5	9	8	3	7	2	7	2	7	2	7	2	7	4235	46
47	8	6	5	9	8	3	7	2	7	2	7	2	7	2	7	4518	47
48	8	6	5	9	8	3	7	2	7	2	7	2	7	2	7	4812	48
49	8	6	5	9	8	3	7	2	7	2	7	2	7	2	7	5119	49
50	8	6	5	9	8	3	7	2	7	2	7	2	7	2	7	5439	50

- Spacing between bolts and screws shall be 2.5 times the shank diameter
- The edge distance of bolts and screws shall be 3 times the shank diameter
- Connections shall be arranged so that the center of resistance of the connection shall coincide with the resultant line of action of the load.



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1140 ALL PRO DRIVE
ELKHART, IN 46514
ICBO IS EVALUATION REPORT ER-2821P
COLUMN AND FASTENER TABLES

SHEET 8 OF 8 DATE: 2/8/2000

TABLE 6.5: WALL ATTACHMENTS FOR PATIO AND COM. STRUCTURES

LIVE LOAD (PSF)	ANC 1		ANC 2		ANC 3		ANC 4	
	O/C	SPACING CONCRETE ANCHORS	O/C	SPACING MASONRY ANCHORS	O/C	SPACING FOR #10 X 2' SMS SCREWS	O/C	CLEAR SPAN (FT)
10	24"	24"	24"	16"	16"	16"	22"	22"
20	24"	24"	16"	16"	8"	8"	11"	11"
25	24"	24"	15"	15"	8"	8"	11"	11"
30	24"	24"	14"	14"	8"	8"	10"	10"
40	24"	24"	12"	12"	8"	8"	13"	13"
60	16"	16"	10"	10"	4"	4"	11"	11"

Fastener Terminology
#14 SMS = #14 sheet metal or Tek screw, 3/4" minimum length
5/16" B = 5/16" Diameter Bolt
See General Notes for specifics on fasteners

- Cleatspan on this chart is the distance from the wall to the first row of columns.
- 1-1/8" Kwik Bolt II 1/4" diameter and 2" embedment. ICBO ER-4627 or other anchor w/ 5500# shear vs wind and seismic loads.
- Masonry anchors must have a shear value of 250# for wind or seismic loads.
- 1/4" Lag screws must have 2 1/4" of penetration into studs. These lag screws must have an 1/8" lead hole.
- 10 psf evaluated at 90 mph wind load (15 psf). All other loads evaluated at 90 mph exposure C.

4.0 FREESTANDING AND ATTACHED LATTICE PATIO STRUCTURES

LIVE TRIB LOAD	TRIB WIDTH	MAXIMUM COLUMN SPACING				TRIB WIDTH	MAXIMUM COLUMN SPACING				LIVE LOAD	TRIB WIDTH	MAXIMUM COLUMN SPACING				LIVE LOAD	TRIB WIDTH	MAXIMUM COLUMN SPACING			
		FOR ATTACHED LATTICE ON SLAB					FOR ATTACHED LATTICE ON SLAB						FOR ATTACHED LATTICE ON SLAB						FOR ATTACHED LATTICE ON SLAB			
		MAX. COLUMN SPACING	MIN. COLUMN TYPE	MAX. COLUMN SPACING	MIN. COLUMN TYPE		MAX. COLUMN SPACING	MIN. COLUMN TYPE	MAX. COLUMN SPACING	MIN. COLUMN TYPE			MAX. COLUMN SPACING	MIN. COLUMN TYPE	MAX. COLUMN SPACING	MIN. COLUMN TYPE			MAX. COLUMN SPACING	MIN. COLUMN TYPE	MAX. COLUMN SPACING	MIN. COLUMN TYPE
10	4	21'-1"	10'-3"	10'-3"	10'-3"	10	17'-5"	5'-2"	5'-2"	5'-2"	10	17'-5"	5'-2"	5'-2"	5'-2"	10	17'-5"	5'-2"	5'-2"	5'-2"		
10	5	18'-10"	10'-3"	10'-3"	10'-3"	10	17'-5"	5'-2"	5'-2"	5'-2"	10	17'-5"	5'-2"	5'-2"	5'-2"	10	17'-5"	5'-2"	5'-2"	5'-2"		
10	6	16'-1"	10'-3"	10'-3"	10'-3"	10	17'-5"	5'-2"	5'-2"	5'-2"	10	17'-5"	5'-2"	5'-2"	5'-2"	10	17'-5"	5'-2"	5'-2"	5'-2"		
10	7	14'-1"	10'-3"	10'-3"	10'-3"	10	17'-5"	5'-2"	5'-2"	5'-2"	10	17'-5"	5'-2"	5'-2"	5'-2"	10	17'-5"	5'-2"	5'-2"	5'-2"		
10	8	12'-1"	10'-3"	10'-3"	10'-3"	10	17'-5"	5'-2"	5'-2"	5'-2"	10	17'-5"	5'-2"	5'-2"	5'-2"	10	17'-5"	5'-2"	5'-2"	5'-2"		
10	9	10'-7"	10'-3"	10'-3"	10'-3"	10	17'-5"	5'-2"	5'-2"	5'-2"	10	17'-5"	5'-2"	5'-2"	5'-2"	10	17'-5"	5'-2"	5'-2"	5'-2"		
10	10	9'-4"	10'-3"	10'-3"	10'-3"	10	17'-5"	5'-2"	5'-2"	5'-2"	10	17'-5"	5'-2"	5'-2"	5'-2"	10	17'-5"	5'-2"	5'-2"	5'-2"		
10	11	8'-5"	10'-3"	10'-3"	10'-3"	10	17'-5"	5'-2"	5'-2"	5'-2"	10	17'-5"	5'-2"	5'-2"	5'-2"	10	17'-5"	5'-2"	5'-2"	5'-2"		
10	12	7'-8"	10'-3"	10'-3"	10'-3"	10	17'-5"	5'-2"	5'-2"	5'-2"	10	17'-5"	5'-2"	5'-2"	5'-2"	10	17'-5"	5'-2"	5'-2"	5'-2"		
10	13	7'-0"	10'-3"	10'-3"	10'-3"	10	17'-5"	5'-2"	5'-2"	5'-2"	10	17'-5"	5'-2"	5'-2"	5'-2"	10	17'-5"	5'-2"	5'-2"	5'-2"		
10	14	6'-4"	10'-3"	10'-3"	10'-3"	10	17'-5"	5'-2"	5'-2"	5'-2"	10	17'-5"	5'-2"	5'-2"	5'-2"	10	17'-5"	5'-2"	5'-2"	5'-2"		
10	15	5'-7"	10'-3"	10'-3"	10'-3"	10	17'-5"	5'-2"	5'-2"	5'-2"	10	17'-5"	5'-2"	5'-2"	5'-2"	10	17'-5"	5'-2"	5'-2"	5'-2"		
10	16	5'-0"	10'-3"	10'-3"	10'-3"	10	17'-5"	5'-2"	5'-2"	5'-2"	10	17'-5"	5'-2"	5'-2"	5'-2"	10	17'-5"	5'-2"	5'-2"	5'-2"		
10	17	4'-5"	10'-3"	10'-3"	10'-3"	10	17'-5"	5'-2"	5'-2"	5'-2"	10	17'-5"	5'-2"	5'-2"	5'-2"	10	17'-5"	5'-2"	5'-2"	5'-2"		
10	18	4'-0"	10'-3"	10'-3"	10'-3"	10	17'-5"	5'-2"	5'-2"	5'-2"	10	17'-5"	5'-2"	5'-2"	5'-2"	10	17'-5"	5'-2"	5'-2"	5'-2"		
10	19	3'-5"	10'-3"	10'-3"	10'-3"	10	17'-5"	5'-2"	5'-2"	5'-2"	10	17'-5"	5'-2"	5'-2"	5'-2"	10	17'-5"	5'-2"	5'-2"	5'-2"		
10	20	3'-0"	10'-3"	10'-3"	10'-3"	10	17'-5"	5'-2"	5'-2"	5'-2"	10	17'-5"	5'-2"	5'-2"	5'-2"	10	17'-5"	5'-2"	5'-2"	5'-2"		
10	21	2'-5"	10'-3"	10'-3"	10'-3"	10	17'-5"	5'-2"	5'-2"	5'-2"	10	17'-5"	5'-2"	5'-2"	5'-2"	10	17'-5"	5'-2"	5'-2"	5'-2"		
10	22	2'-0"	10'-3"	10'-3"	10'-3"	10	17'-5"	5'-2"	5'-2"	5'-2"	10	17'-5"	5'-2"	5'-2"	5'-2"	10	17'-5"	5'-2"	5'-2"	5'-2"		
10	23	1'-5"	10'-3"	10'-3"	10'-3"	10	17'-5"	5'-2"	5'-2"	5'-2"	10	17'-5"	5'-2"	5'-2"	5'-2"	10	17'-5"	5'-2"	5'-2"	5'-2"		
10	24	1'-0"	10'-3"	10'-3"	10'-3"	10	17'-5"	5'-2"	5'-2"	5'-2"	10	17'-5"	5'-2"	5'-2"	5'-2"	10	17'-5"	5'-2"	5'-2"	5'-2"		
10	25	0'-5"	10'-3"	10'-3"	10'-3"	10	17'-5"	5'-2"	5'-2"	5'-2"	10	17'-5"	5'-2"	5'-2"	5'-2"	10	17'-5"	5'-2"	5'-2"	5'-2"		
10	26	0'-0"	10'-3"	10'-3"	10'-3"	10	17'-5"	5'-2"	5'-2"	5'-2"	10	17'-5"	5'-2"	5'-2"	5'-2"	10	17'-5"	5'-2"	5'-2"	5'-2"		
10	27	0'-0"	10'-3"	10'-3"	10'-3"	10	17'-5"	5'-2"	5'-2"	5'-2"	10	17'-5"	5'-2"	5'-2"	5'-2"	10	17'-5"	5'-2"	5'-2"	5'-2"		
10	28	0'-0"	10'-3"	10'-3"	10'-3"	10	17'-5"	5'-2"	5'-2"	5'-2"	10	17'-5"	5'-2"	5'-2"	5'-2"	10	17'-5"	5'-2"	5'-2"	5'-2"		
10	29	0'-0"	10'-3"	10'-3"	10'-3"	10	17'-5"	5'-2"	5'-2"	5'-2"	10	17'-5"	5'-2"	5'-2"	5'-2"	10	17'-5"	5'-2"	5'-2"	5'-2"		
10	30	0'-0"	10'-3"	10'-3"	10'-3"	10	17'-5"	5'-2"	5'-2"	5'-2"	10	17'-5"	5'-2"	5'-2"	5'-2"	10	17'-5"	5'-2"	5'-2"	5'-2"		

LIVE TRIB LOAD	TRIB WIDTH	MAXIMUM COLUMN SPACING				TRIB WIDTH	MAXIMUM COLUMN SPACING				LIVE LOAD	TRIB WIDTH	MAXIMUM COLUMN SPACING			
		FOR ATTACHED LATTICE ON SLAB					FOR ATTACHED LATTICE ON SLAB						FOR ATTACHED LATTICE ON SLAB			
		MAX. COLUMN SPACING	MIN. COLUMN TYPE	MAX. COLUMN SPACING	MIN. COLUMN TYPE		MAX. COLUMN SPACING	MIN. COLUMN TYPE	MAX. COLUMN SPACING	MIN. COLUMN TYPE			MAX. COLUMN SPACING	MIN. COLUMN TYPE	MAX. COLUMN SPACING	MIN. COLUMN TYPE
10	4	17'-4"	A	17'-4"	A	10	17'-4"	A	17'-4"	A	10	17'-4"	A	17'-4"	A	
10	5	14'-3"	A	14'-3"	A	10	17'-4"	A	14'-3"	A	10	17'-4"	A	14'-3"	A	
10	6	11'-11"	A	11'-11"	A	10	17'-4"	A	11'-11"	A	10	17'-4"	A	11'-11"	A	
10	7	10'-2"	A	10'-2"	A	10	17'-4"	A	10'-2"	A	10	17'-4"	A	10'-2"	A	
10	8	8'-11"	A	8'-11"	A	10	17'-4"	A	8'-11"	A	10	17'-4"	A	8'-11"	A	
10	9	7'-11"	A	7'-11"	A	10	17'-4"	A	7'-11"	A	10	17'-4"	A	7'-11"	A	
10	10	7'-2"	A	7'-2"	A	10	17'-4"	A	7'-2"	A	10	17'-4"	A	7'-2"	A	
10	11	6'-2"	A	6'-2"	A	10	17'-4"	A	6'-2"	A	10	17'-4"	A	6'-2"	A	
10	12	5'-11"	A	5'-11"	A	10	17'-4"	A	5'-11"	A	10	17'-4"	A	5'-11"	A	
10	13	4'-11"	A	4'-11"	A	10	17'-4"	A	4'-11"	A	10	17'-4"	A	4'-11"	A	
10	14	4'-2"	A	4'-2"	A	10	17'-4"	A	4'-2"	A	10	17'-4"	A	4'-2"	A	
10	15	3'-1"	A	3'-1"	A	10	17'-4"	A	3'-1"	A	10	17'-4"	A	3'-1"	A	
10	16	2'-2"	A	2'-2"	A	10	17'-4"	A	2'-2"	A	10	17'-4"	A	2'-2"	A	
10	17	1'-2"	A	1'-2"	A	10	17'-4"	A	1'-2"	A	10	17'-4"	A	1'-2"	A	
10	18	0'-2"	A	0'-2"	A	10	17'-4"	A	0'-2"	A	10	17'-4"	A	0'-2"	A	
10	19	0'-0"	A	0'-0"	A	10	17'-4"	A	0'-0"	A	10	17'-4"	A	0'-0"	A	
10	20	0'-0"	A	0'-0"	A	10	17'-4"	A	0'-0"	A	10	17'-4"	A	0'-0"	A	
10	21	0'-0"	A	0'-0"	A	10	17'-4"	A	0'-0"	A	10	17'-4"	A	0'-0"	A	
10	22	0'-0"	A	0'-0"	A	10	17'-4"	A	0'-0"	A	10	17'-4"	A	0'-0"	A	
10	23	0'-0"	A	0'-0"	A	10	17'-4"	A	0'-0"	A	10	17'-4"	A	0'-0"	A	
10	24	0'-0"	A	0'-0"	A	10	17'-4"	A	0'-0"	A	10	17'-4"	A	0'-0"	A	
10	25	0'-0"	A	0'-0"	A	10	17'-4"	A	0'-0"	A	10	17'-4"	A	0'-0"	A	
10	26	0'-0"	A	0'-0"	A	10	17'-4"	A	0'-0"	A	10	17'-4"	A	0'-0"	A	
10	27	0'-0"	A	0'-0"	A	10	17'-4"	A	0'-0"	A	10	17'-4"	A	0'-0"	A	
10	28	0'-0"	A	0'-0"	A	10	17'-4"	A	0'-0"	A	10	17'-4"	A	0'-0"	A	
10	29	0'-0"	A	0'-0"	A	10	17'-4"	A	0'-0"	A	10	17'-4"	A	0'-0"	A	
10	30	0'-0"	A	0'-0"	A	10	17'-4"	A	0'-0"	A	10	17'-4"	A	0'-0"	A	

TABLE 4.1
CLEAR SPANS FOR 3.0 B BAY

LIVE LOAD	PANEL T	70 MPH	OVER
10	10	0.024	11'-8"
10	10	0.024	11'-8"
20	10	0.024	11'-8"
20	10	0.024	11'-8"
25	10	0.024	11'-8"
30	10	0.024	11'-8"
30	10	0.024	11'-8"
40	10	0.024	11'-8"
40	10	0.024	11'-8"
60	10	0.024	11'-8"
60	10	0.024	11'-8"

TABLE 4.2
CLEAR SPANS FOR 2.0 BAY

LIVE LOAD	PANEL T	70 MPH	OVER
10	10	0.024	11'-8"
10	10	0.024	11'-8"
20	10	0.024	11'-8"
20	10	0.024	11'-8"
25	10	0.024	11'-8"
30	10	0.024	11'-8"
30	10	0.024	11'-8"
40	10	0.024	11'-8"
40	10	0.024	11'-8"
60	10	0.024	11'-8"
60	10	0.024	11'-8"

TABLE 4.3
CLEAR SPANS FOR 1.0 BAY

LIVE LOAD	PANEL T	70 MPH	OVER
10	10	0.024	11'-8"
10	10	0.024	11'-8"
20	10	0.024	11'-8"
20	10	0.024	11'-8"
25	10	0.024	11'-8"
30	10	0.024	11'-8"
30	10	0.024	11'-8"
40	10	0.024	11'-8"
40	10	0.024	11'-8"
60	10	0.024	11'-8"
60	10	0.024	11'-8"

REGISTERED PROFESSIONAL ENGINEER
R. T. MOKER
No. 26070
MAR 03 2000

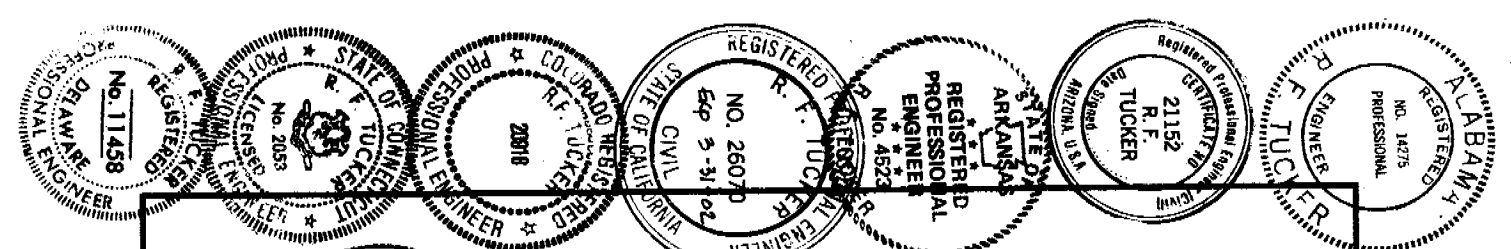
REGISTERED PROFESSIONAL ENGINEER
FREDRIC T. KATAKURA
No. 16273
APR 18 2003

Amerimax
BUILDING PRODUCTS, INC.
1140 ALL PRO DRIVE
ELKHART, IN 46514

CSBO ES EVALUATION REPORT ER-2821P
HEADER SPANS, COLUMN SPACING,
FOOTER SIZE AND COLUMN TYPE FOR
MULTISPAN STRUCTURES
LATTICE PATIO STRUCTURES
SHEET 6 OF 8 DATE: 2/8/2000

TABLE 4.4
COLUMN SCHEDULE FOR FREESTANDING STRUCTURES AND INTERMEDIATE COLUMNS FOR MULTISPAN STRUCTURES

COL	COLUMN SCHEDULE FOR ATTACHED LATTICE PATIO STRUCTURES	MAX. COLUMN HEIGHT
A	0.024 x 3.3" SQUARE ALUM. COLUMN	11'-6"
B	0.032 x 1.12" SQUARE ALUM. COLUMN	11'-6"
C	0.027 x 3" SQUARE ALUM. COLUMN	8'-0"
D	0.040 x 3" SQUARE ALUM. COLUMN	12'-0"
E	3" OVERLEAF STEEL 0.046"	12'-0"
F	3" SQUARE STEEL COLUMN	12'-0"
G	4" SQUARE STEEL COLUMN	12'-0"
H	5" SQUARE STEEL COLUMN	12'-0"
J</		



- DESIGN IN ACCORDANCE WITH THE UNIFORM BUILDING CODE 1997 EDITION.
- ALUMINUM DESIGN IN ACCORDANCE WITH THE LATEST EDITION OF ALUMINUM ASSOCIATION'S SPECIFICATIONS AND CHAPTER 20 OF THE UNIFORM BUILDING CODE.
- EACH BUILDING PERMIT SHALL BE ACCOMPANIED BY TWO COMPLETELY DIMENSIONED PLOT PLANS SHOWING EXACT LOCATION AND SIZE OF EXISTING AND PROPOSED STRUCTURES.
- DESIGN LOADINGS:

A. APPENDIX CHAPTER 31 DIVISION III PATIO COVERS:

LIVELOAD: 10 POUNDS PER SQUARE FOOT
 20 POUNDS PER SQUARE FOOT
 25 POUNDS PER SQUARE FOOT
 30 POUNDS PER SQUARE FOOT
 40 POUNDS PER SQUARE FOOT
 60 POUNDS PER SQUARE FOOT

WIND LOAD: FIBR 0.412 > SLOPE < 212

B. COMMERCIAL STRUCTURES

LIVELOAD: 20 POUNDS PER SQUARE FOOT
 25 POUNDS PER SQUARE FOOT
 30 POUNDS PER SQUARE FOOT
 40 POUNDS PER SQUARE FOOT
 60 POUNDS PER SQUARE FOOT

Speed mph	Height Zone	Design Lateral/Uplift	Wind Pressure (psf)	Eaves and Overhangs
70	Less than 10'	7.5	7.5	7.5
90	Less than 10'	11.3	11.3	11.3
70	Less than 12'	10	10	10
90	Less than 12'	15	15	15

1. hereby certify that the design of the structure is in accordance with the provisions of the Uniform Building Code and the specifications of the Aluminum Association, Inc. for design of aluminum components and joints.

R. F. TUCKER

DATE: MAR 03 2000

REVISION: _____ DATE: _____ REVISION: _____

SCALE: NONE

DATE: 2/8/2000

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1140 All Pro Drive

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Engineering Services

1140 All Pro Drive

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