

CITY OF SACRAMENTO

1231 I Street, Sacramento, CA 95814

Permit No: 0513356

Insp Area: 2

Thos Bros: 297C7

Site Address: 2800 RIVERSIDE BL SAC

Parcel No: 012-0104-007

Sub-Type: AOTHR

Housing (Y/N): N

CONTRACTOR

AFFORDABLE AWNINGS  
10087 MILLS STATION RD ST.E  
SACRAMENTO CA 95827

OWNER

GALVIN JAMES M/SHARON A  
2800 RIVERSIDE BL  
SACRAMENTO, CA 95818

ARCHITECT

Nature of Work: NEW 200 SF SOLID ATTACHED ALUM PATIO COVER

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 (4) 501/003 License Number 611832 Date 8-31-05 Contractor Signature A. Donaldson

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 \_\_\_\_\_ Owner Signature \_\_\_\_\_

PAYED  
CITY OF SACRAMENTO  
AUG 31 2005  
NEIGHBORHOODS PLANNING  
AND DEVELOPMENT SERVICE

IN ISSUING THIS BUILDING PERMIT, the applicant represents, and the city relies on the representation of the applicant, that the applicant has 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 8-31-05 Applicant/Agent Signature Ryan Donaldson

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.

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 COMPENSATION INSURANCE Policy Number 713-0009753 Exp Date 07/01/2006

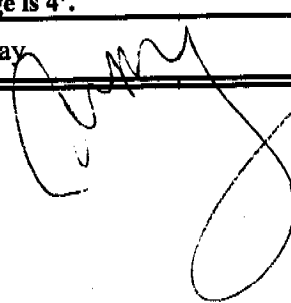
(This section need not be completed if the permit is for \$100 or less) I certify that in the performance of the work for which this permit is issued, I shall not employ any person in any manner so as to become subject to the workers' compensation laws of California and agree that if I should become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

Date 8-31-05 Applicant Signature Ryan Donaldson

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  
Development Services Department  
**PLANNING REVIEW FOR BUILDING PERMIT SUBMITTAL**

ADDRESS: 2800 RIVERSIDE BLVD	APN: 012-0104-007
DRPB AREA / PUD / SPD: none	ZONING: R-1
EXISTING LAND USE: One-story single family home w detached garage.	
PROPOSED USE: Attach 5' x 20' patio cover to back of house.	
<b>PLANNING STAFF WILL CHECK ONE OR MORE OF THE ITEMS BELOW:</b>	
<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 approved <i>before</i> project can be submitted for plan check
<input type="checkbox"/>	Application(s) IN PROGRESS:    File Number: Application must be approved before project can be submitted for plan check.
<input type="checkbox"/>	Application(s) COMPLETED:    File Number & approval date: Building permit must conform to approved plans and comply with all conditions of approval. Do NOT accept applications for a building permit prior to the end of the 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"/>	Route to SITE for inspection only, plan check not required.
<input type="checkbox"/>	Preliminary review ONLY; the information on this form must be reviewed again and confirmed at the time of building permit submittal.
CONDITIONS AND COMMENTS:	Setbacks and lot coverage okay as shown on site plan provided 8/31/2005 (drawn to scale). This house is only 4' from sidewalk on 3 <sup>rd</sup> avenue side (the street side setback.) Although the patio cover could follow existing line of house, the applicant is proposing to have the patio cover set back further from the street side than the house. Note, minimum distance from patio cover support post to existing detached garage is 4'.
DATE: 08/31/05	BY: Monica May 

CITY COPY

# ER-2640P

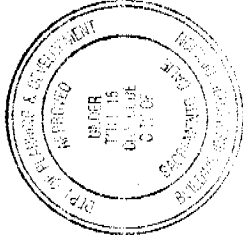
## GENERAL NOTES AND SPECIFICATIONS:

1. ALUMINUM DESIGN AND STRESSES ARE PER THE 1997 EDITION OF THE UNIFORM BUILDING CODE AND THE LATEST EDITION OF THE ALUMINUM CONSTRUCTION MANUAL.
2. ALTERNATE ALUMINUM ALLOYS MAY BE SUBSTITUTED FOR THOSE SHOWN, PROVIDED THEY ARE REGISTERED WITH THE ALUMINUM ASSOCIATION AND HAVE EQUAL OR GREATER YIELD AND ULTIMATE STRENGTHS.
3. ALL CONCRETE SHALL HAVE A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 2,500 P.S.I. CONCRETE SLAB SHALL HAVE 3 1/2" MINIMUM THICKNESS AND SHALL BE IN GOOD CONDITION.
4. ALL FOOTINGS SHALL BEAR ON FIRM, NATURAL UN-DISTURBED SOIL OR CERTIFIED FILL. DESIGN VERTICAL SOIL BEARING PRESSURE = 1,000 P.S.F.
5. ALL STEEL MEMBERS SHALL BE HOT-DIP GALVANIZED, RUST-O-LEUM OR EQUAL PAINTED OR ELECTROPLATED AND CONFORM TO A.S.T.M. A-448, GRADE C, UNLESS OTHERWISE NOTED.
6. ALUMINUM FASTENERS SHALL BE 2024-T4. ALL OTHER FASTENERS SHALL BE GALVANIZED STEEL, CADMIUM OR ZINC PLATED. ALL BOLTS SHALL CONFORM TO A.S.T.M. A-307 AND HAVE STANDARD CUT PLATE WASHERS. HOLES FOR BOLTS SHALL BE BOLT DIAMETER PLUS 1/16" MAXIMUM.
7. EXPANSION BOLTS SHALL BE "HILTI KWIK-BOLTS" PER I.C.C. ER-4627, RAWL DRIVE ANCHOR PER ICC ER-5225, OR EQUAL. ALL BOLTS SHALL HAVE A MINIMUM CONCRETE EDGE DISTANCE OF SIX BOLT DIAMETERS.
8. EACH INSTALLATION SHALL BEAR AN IDENTIFYING TAG GIVING THE NAME AND ADDRESS OF THE MANUFACTURER, DESIGN LOADS AND ENCLOSABILITY.
9. ALL ITEMS PERTAINING TO EACH PARTICULAR INSTALLATION SHALL BE CIRCLED, I.E., PROJECT, POST SPACING, FOOTING DETAIL, ETC.
10. OPEN LATTICE PATIO COVER SHALL NOT BE ENCLOSED WITH ANY TYPE OF SOLID MATERIAL, AND THE DESIGN LOADS HAVE ONLY BEEN APPLIED TO THE HORIZONTAL PROJECTION AREA OF THE LATTICE, RAFTERS, BEAM, ETC. PER I.C.C. CRITERIA.
11. FREESTANDING PATIO COVER SHALL NOT BE ENCLOSED WITH ANY TYPE OF SOLID MATERIAL.
12. SOLID ATTACHED PATIO COVERS MAY BE ENCLOSED COMPLYING WITH APPENDIX CHAPTER 31, DIVISION 111, OF THE 1997 IBC.
13. THE INSTALLATION OF LAG SCREWS & WOOD SCREWS ARE REQUIRED TO BE IN ACCORDANCE WITH THE NATIONAL DESIGN SPECIFICATION (NDS), SECTIONS 9.1.2 & 11.1.2.

0513356

This set of plans and specifications must be kept on the job at all times and it is unlawful to make any changes or alterations from the same without written permission from the Building Inspection Division.

The approval of this plan and specifications SHALL NOT be held to permit or constitute the violation of any City Ordinance, Code, or Law.



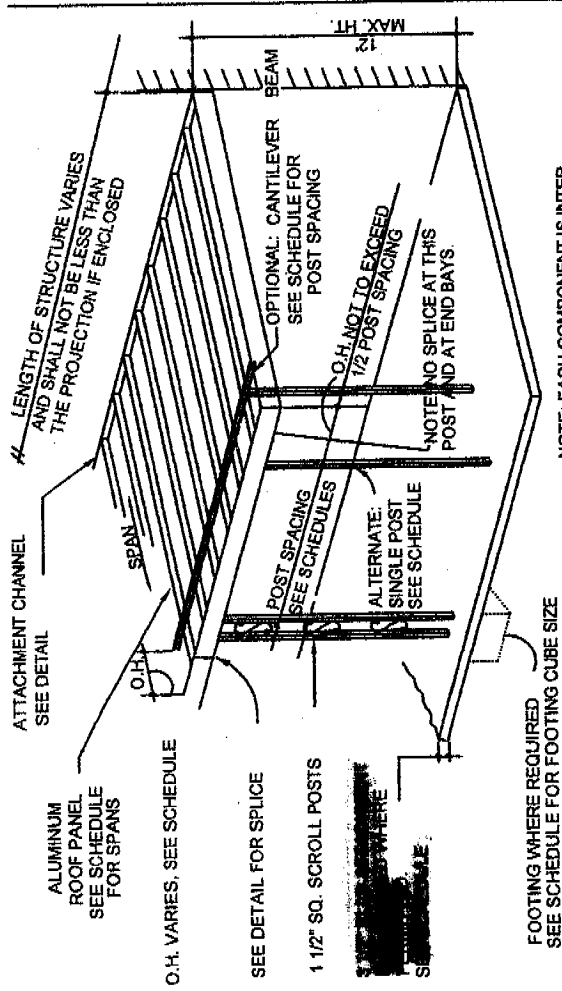
City of Sacramento  
 Building Inspection Division  
 9/1/2005  
 APPROVED  
 0513356

NOTES: ALL COMPONENTS ARE INTERCHANGABLE UNLESS OTHERWISE NOTED

I.C.C. E.S. EVALUATION REPORT NUMBER ER-2640P	DRAWN BY: K.K. DATE: 11/23/2002 SCALE: NONE REVISED BY: K.K. & D.P.	 FOX ENGINEERING INC. JAMES G. FOX, CIVIL ENGINEER 8060 TELEGRAPH RD., DOWNEY, CA 90240 (562) 806-1337 FAX: 562-2508 foxeng@hotmail.com	GENERAL NOTES	LIVE LOAD = 10, 20 & 30 psf HORIZ. WIND = 70, 80 & 110 MPH	PATIO COVER SYSTEM AS MFG. BY: DURALUM PRODUCTS, INC. 8269 ALPINE AVE. SACRAMENTO, CA 95826 (916) 452-7221 FAX 403-1519 sales@duralum.com JOB NO. 0702-074
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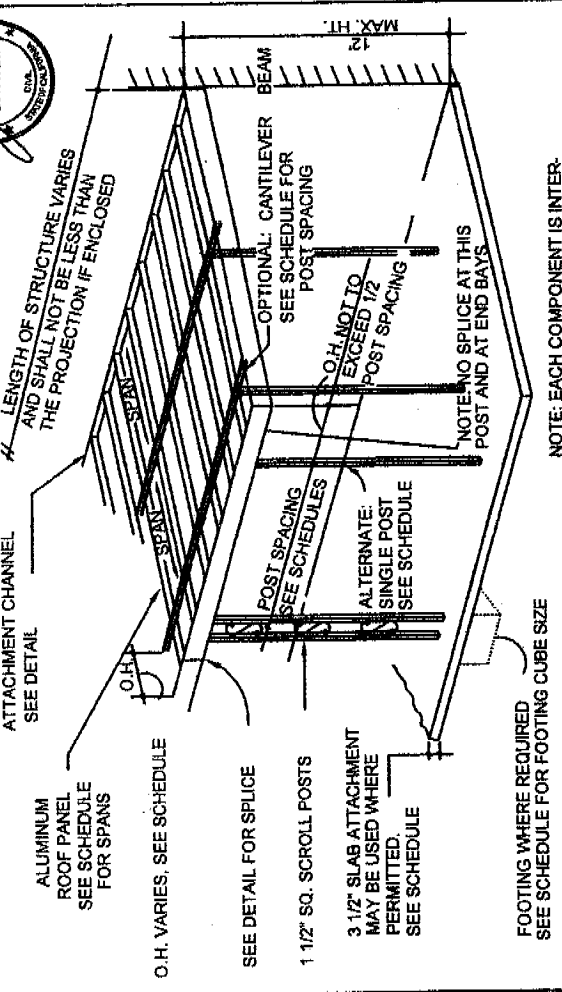
2800 RIVERSIDE AV

# SOLID PATIO TYPES



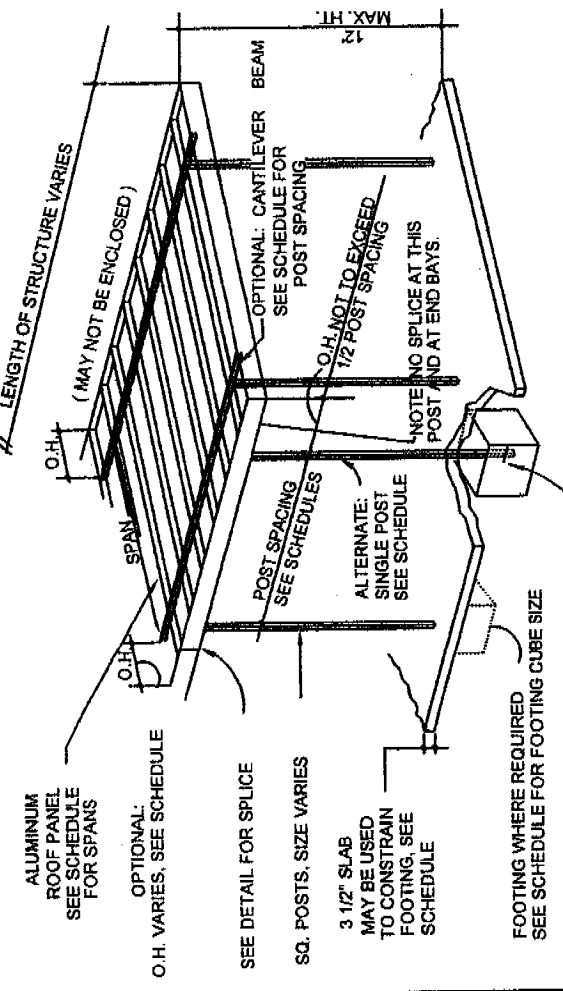
NOTE: EACH COMPONENT IS INTER-CHANGEABLE WITH ANY OTHER COMPONENT UNLESS OTHERWISE SHOWN.

TYPE "A" ATTACHED SINGLE SPAN WCANTILEVER OPTION



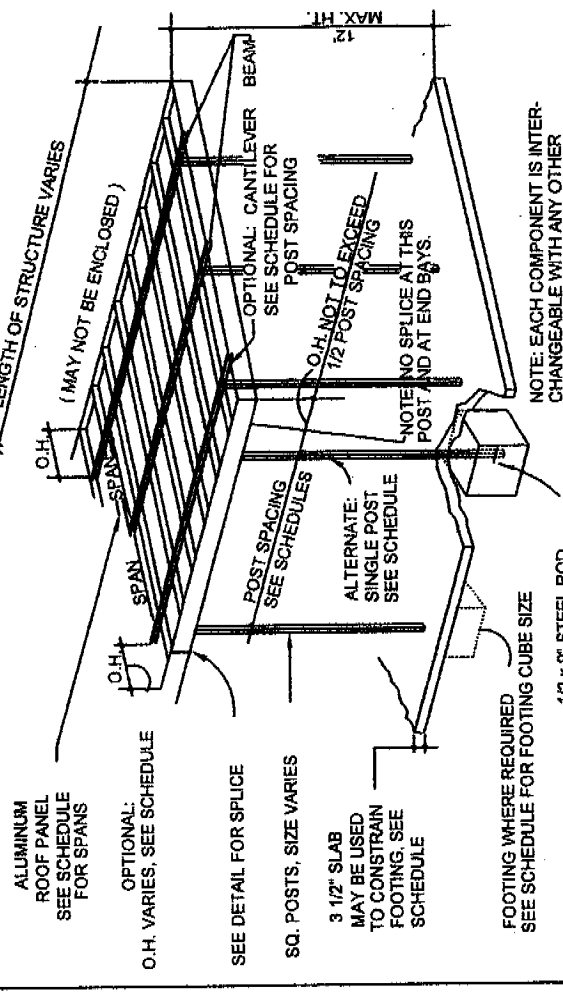
NOTE: EACH COMPONENT IS INTER-CHANGEABLE WITH ANY OTHER COMPONENT UNLESS OTHERWISE SHOWN.

TYPE "B" ATTACHED MULTISPAN WCANTILEVER OPTION



NOTE: EACH COMPONENT IS INTER-CHANGEABLE WITH ANY OTHER COMPONENT UNLESS OTHERWISE SHOWN.

TYPE "C" FREESTANDING WCANTILEVER OPTION

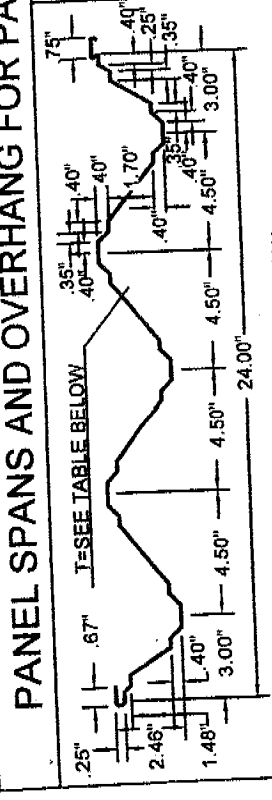
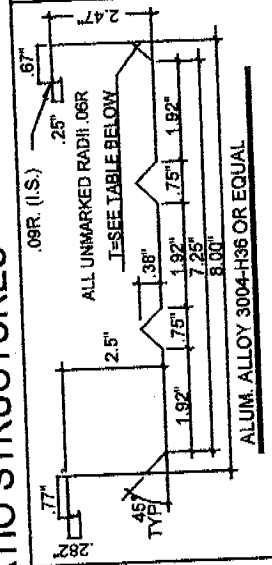
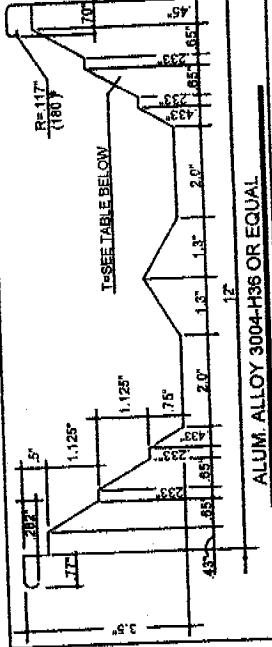


NOTE: EACH COMPONENT IS INTER-CHANGEABLE WITH ANY OTHER COMPONENT UNLESS OTHERWISE SHOWN.

TYPE "D" FREESTANDING MULTISPAN WCANTILEVER OPTION

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				SHEET 2 OF 30 JOB NO. 090267A

70/90/110 MPH 12' HEIGHTS



ALUM. ALLOY 3004-H36 OR EQUAL

ALUM. ALLOY 3004-H36 OR EQUAL

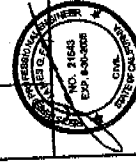
ALUM. ALLOY 3004-H36 OR EQUAL

12" x 3 1/2" W PANEL

8"x2 1/2" FLAT PAN W(2)-VS

ALUM. ALLOY 3004-H36 OR EQUAL

L.L. (PSF)	PANEL "T" (IN.)	70 MPH		90 MPH		110 MPH		"T" (IN.)	70 MPH		90 MPH		110 MPH		"T" (IN.)	70 MPH		90 MPH		110 MPH		O.H.
		SPAN	O.H.	SPAN	O.H.	SPAN	O.H.		SPAN	O.H.	SPAN	O.H.	SPAN	O.H.		SPAN	O.H.	SPAN	O.H.	SPAN	O.H.	
10	.030	12'-1"	4'-0"	12'-1"	4'-0"	8'-0"	2'-6"	.020	12'-10"	4'-2"	10'-5"	3'-7"	8'-4"	2'-11"	.020	15'-9"	5'-6"	12'-9"	4'-5"	10'-3"	3'-7"	3'-7"
	.024	15'-0"	5'-2"	14'-0"	4'-8"	9'-0"	3'-0"	.024	14'-1"	4'-7"	13'-2"	4'-4"	10'-7"	3'-8"	.024	19'-0"	6'-6"	15'-7"	5'-5"	12'-6"	4'-4"	4'-4"
	.032	17'-0"	5'-11"	17'-0"	5'-8"	10'-0"	3'-6"	.032	15'-5"	5'-1"	15'-5"	5'-1"	15'-0"	4'-11"	.032	20'-6"	7'-2"	14'-9"	5'-1"	12'-2"	4'-3"	4'-3"
20	.018	9'-2"	3'-2"	8'-9"	3'-0"	8'-0"	2'-6"	.020	9'-10"	3'-2"	9'-10"	3'-2"	8'-4"	2'-9"	.020	12'-0"	4'-2"	12'-0"	4'-2"	12'-0"	4'-2"	4'-2"
	.024	10'-8"	3'-8"	10'-4"	3'-4"	9'-0"	3'-0"	.024	11'-3"	3'-8"	11'-3"	3'-8"	10'-7"	3'-5"	.024	14'-0"	4'-10"	14'-0"	4'-10"	14'-0"	4'-10"	4'-10"
	.032	13'-3"	4'-6"	11'-9"	3'-8"	10'-0"	3'-6"	.032	12'-4"	4'-0"	12'-4"	4'-0"	12'-4"	4'-0"	.032	16'-0"	5'-7"	16'-0"	5'-7"	16'-0"	5'-7"	5'-7"
30	.018	7'-6"	2'-6"	7'-6"	2'-8"	8'-0"	2'-6"	.020	8'-1"	2'-8"	8'-1"	2'-8"	8'-1"	2'-8"	.020	10'-0"	3'-6"	10'-0"	3'-6"	10'-0"	3'-6"	3'-6"
	.024	9'-0"	3'-0"	9'-0"	2'-11"	9'-0"	3'-0"	.024	9'-4"	3'-1"	9'-4"	3'-1"	9'-4"	3'-1"	.024	12'-0"	4'-2"	12'-0"	4'-2"	12'-0"	4'-2"	4'-2"
	.032	10'-10"	3'-9"	10'-10"	3'-9"	10'-0"	3'-6"	.032	10'-10"	3'-7"	10'-10"	3'-7"	10'-10"	3'-7"	.032	14'-0"	4'-10"	14'-0"	4'-10"	14'-0"	4'-10"	4'-10"
								.040	11'-8"	3'-10"	11'-8"	3'-10"	11'-8"	3'-10"	.040	14'-6"	5'-1"	14'-6"	5'-1"	14'-6"	5'-1"	5'-1"



I.C.C. E.S. EVALUATION  
 REPORT NUMBER  
 ER-2640P  
 DRAWN BY: K.K.  
 DATE: 1/23/2002  
 SCALE: NONE  
 REVISED BY: K.K. & D.P.

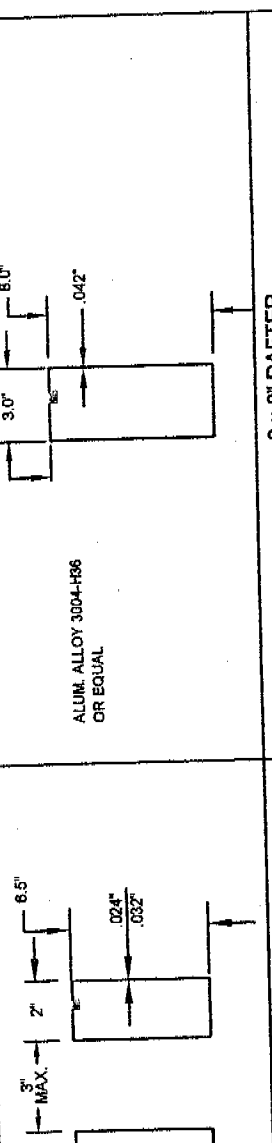
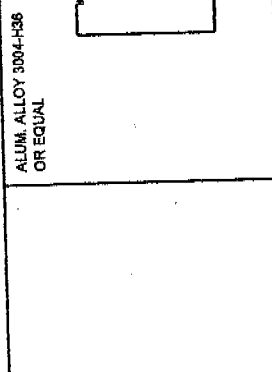
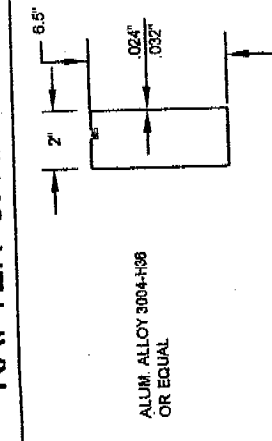
FOX ENGINEERING INC.  
 JAMES G. FOX, CIVIL ENGINEER  
 8060 TELEGRAPH RD., DOWNEY, CA 90240  
 (562) 906-1337 FAX: 927-2508 foxeng@hotmail.com

LIVE LOAD =  
 10, 20 & 30 psf  
 HORIZ. WIND =  
 70, 90 & 110 MPH

PATIO COVER SYSTEM AS MFG. BY:  
 DURALUM PRODUCTS, INC.  
 8269 ALPINE AVE., SACRAMENTO, CA 95826  
 (916) 452-7021 FAX 463-1519 sales@duralum.com

SHEET  
 4 OF 30  
 JOB NO. 0902-0674

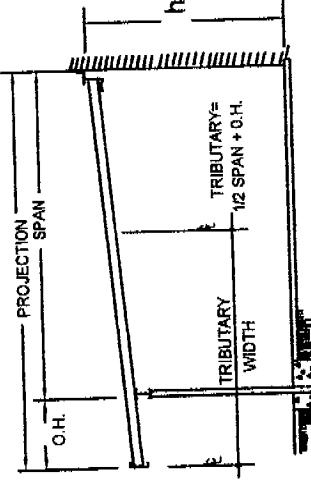
# RAFTER SPANS AND OVERHANG FOR OPEN LATTICE PATIO STRUCTURES 70/90/110 MPH 12' HEIGHTS



LL (PSF)	2 x 6 1/2" RAFTER				DBL. 2 x 6 1/2" RAFTER				3 x 8" RAFTER			
	16" O.C.		24" O.C.		16" O.C.		24" O.C.		16" O.C.		24" O.C.	
	SPAN	O.H.	SPAN	O.H.	SPAN	O.H.	SPAN	O.H.	SPAN	O.H.	SPAN	O.H.
10	.024	15'-0"	4'-0"	4'-0"	21'-0"	4'-0"	17'-4"	4'-0"	21'-0"	4'-0"	21'-0"	4'-0"
	.032	19'-0"	4'-0"	4'-0"	21'-0"	4'-0"	20'-2"	4'-0"				
20	.024	10'-8"	3'-8"	3'-0"	14'-0"	4'-0"	12'-3"	4'-0"	19'-8"	4'-0"	17'-1"	4'-0"
	.032	14'-0"	4'-0"	4'-0"	19'-0"	4'-0"	16'-6"	4'-0"				
30	.024	8'-10"	3'-0"	2'-8"	13'-2"	4'-0"	10'-6"	3'-8"	17'-0"	4'-0"	14'-3"	4'-0"
	.032	11'-10"	3'-10"	3'-5"	18'-0"	4'-0"	12'-3"	4'-0"				

**TRIBUTARY WIDTH TABLE** - CLEAR SPAN (FT.)

O.H.	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
0'	4	4	4	5	5	6	6	7	7	8	8	9	9	10	10	10
1'	4	5	5	6	6	7	7	8	8	9	9	10	10	11	11	11
2'	5	6	6	7	7	8	8	9	9	10	10	11	11	12	12	12
3'	6	7	7	8	8	9	9	10	10	11	11	12	12	13	13	13
4'	7	8	8	9	9	10	10	11	11	12	12	13	13	14	14	14
5'	8	9	9	10	10	11	11	12	12	13	13	14	14	15	15	15
6'	9	10	10	11	11	12	12	13	13	14	14	15	15	16	16	16
7'	10	11	11	12	12	13	13	14	14	15	15	16	16	17	17	17
8'	11	12	12	13	13	14	14	15	15	16	16	17	17	18	18	18
9'	12	13	13	14	14	15	15	16	16	17	17	18	18	19	19	19



NOTE: TRIBUTARY ON MULTIPLE SPANS IS EQUAL TO CENTER SPAN TO CENTER SPAN



I.C.C. E.S. EVALUATION  
 REPORT NUMBER  
 ER-2640P

FOX ENGINEERING INC.  
 JAMES G. FOX, CIVIL ENGINEER  
 8060 TELEGRAPH RD., DOWNEY, CA 90240  
 (562) 806-1337 FAX: 927-2509 foxeng@earthlink.net

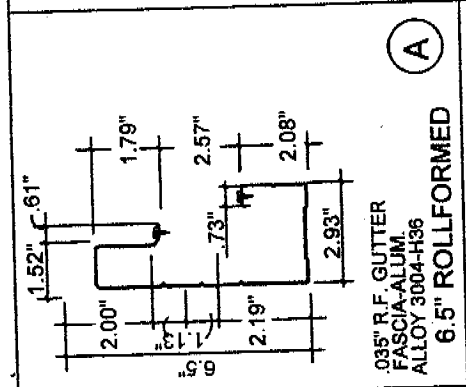
LIVE LOAD =  
 10, 20 & 30 psf  
 HORIZ. WIND =  
 70, 90 & 110 MPH

PATIO COVER SYSTEM AS MFG. BY:  
 DURALUM PRODUCTS, INC.  
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 (916) 452-7021 FAX 403-1519 sales@duralum.com

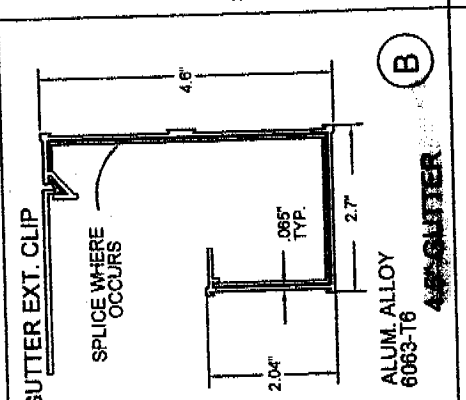
SHEET  
 6 OF 30  
 Job No. 07020674



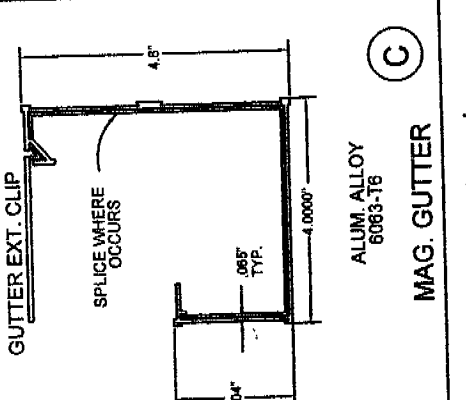
# HEADER BEAM TYPES & ATTACHMENT DETAILS



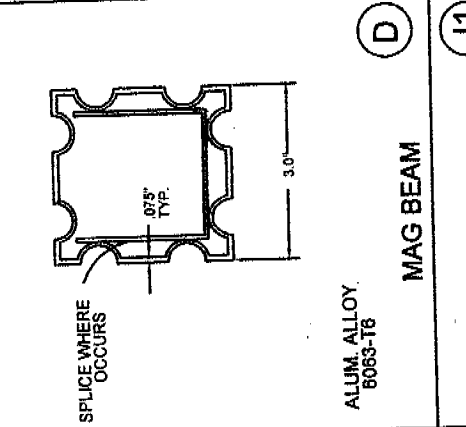
**(A)**  
0.35\"/>



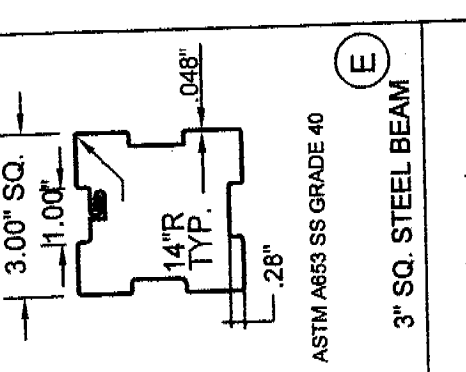
**(B)**  
ALUM. ALLOY 6063-T6  
MAG GUTTER



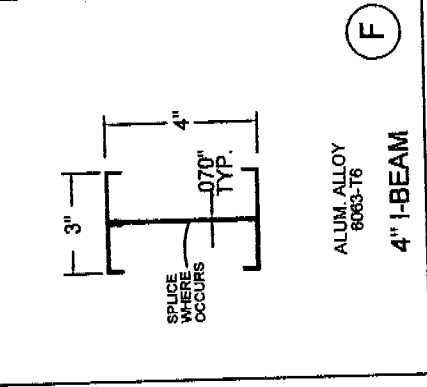
**(C)**  
ALUM. ALLOY 6063-T6  
MAG GUTTER



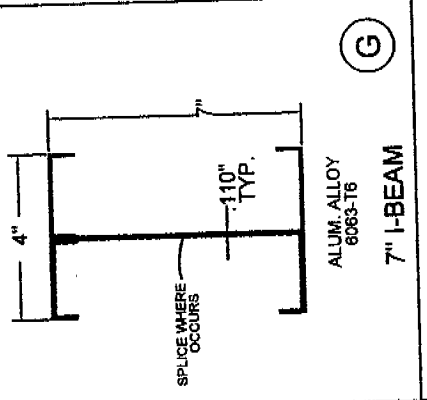
**(D)**  
ALUM. ALLOY 6063-T6  
MAG BEAM



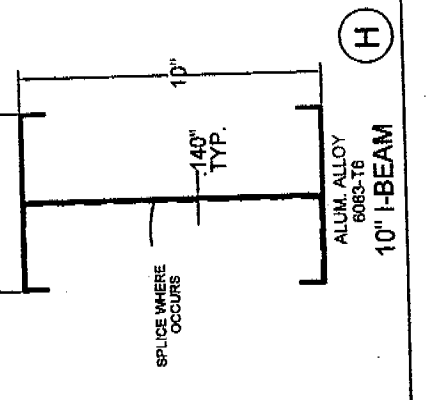
**(E)**  
ASTM A653 SS GRADE 40  
3\"/>



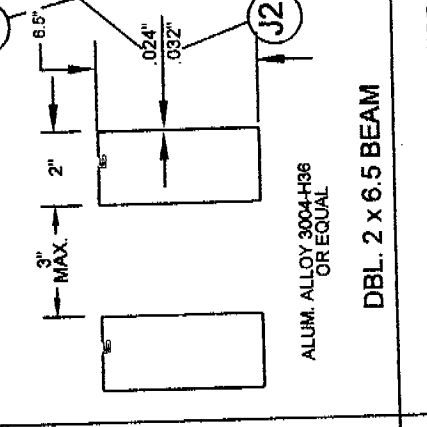
**(F)**  
ALUM. ALLOY 6063-T6  
4\"/>



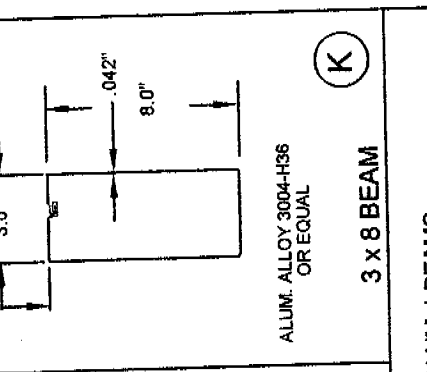
**(G)**  
ALUM. ALLOY 6063-T6  
7\"/>



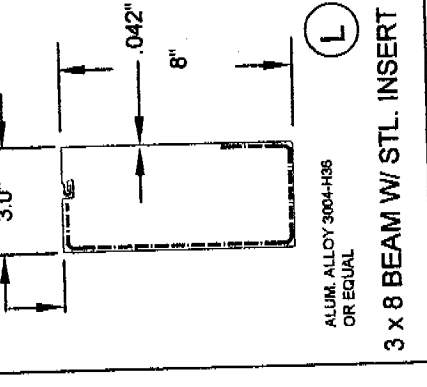
**(H)**  
ALUM. ALLOY 6063-T6  
10\"/>



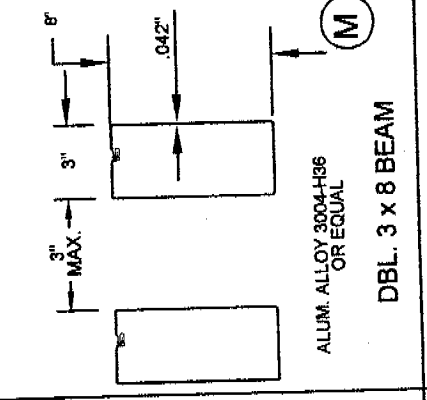
**(J1)**  
**(J2)**  
ALUM. ALLOY 3004-H36 OR EQUAL  
DBL. 2 x 6.5 BEAM



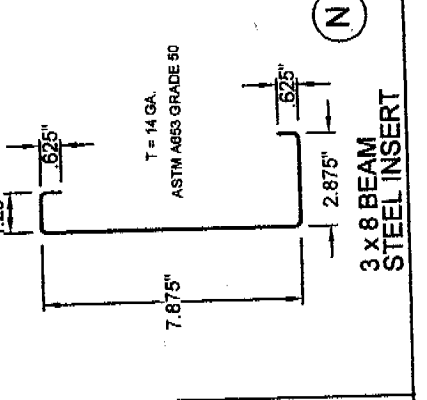
**(K)**  
ALUM. ALLOY 3004-H36 OR EQUAL  
3 x 8 BEAM



**(L)**  
ALUM. ALLOY 3004-H36 OR EQUAL  
3 x 8 BEAM W/ STL. INSERT



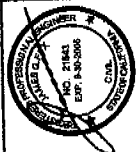
**(M)**  
ALUM. ALLOY 3004-H36 OR EQUAL  
DBL. 3 x 8 BEAM



**(N)**  
T = 14 GA.  
ASTM A653 GRADE 50  
3 x 8 BEAM STEEL INSERT

ALTERNATE STEEL C-BEAM FOR ALUM. I-BEAMS

4\"/>	7\"/>	10\"/>
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I.C.C. E.S. EVALUATION REPORT NUMBER ER-2640P

DRAWN BY: K.K.  
DATE: 11/23/2002  
SCALE: NONE  
REVISED BY: K.K. & D.P.

FOX ENGINEERING INC.  
JAMES G. FOX, CIVIL ENGINEER  
8060 TELEGRAPH RD., DOWNEY, CA 90240  
(562) 808-1337 FAX: 827-2509 foxeng@netmail.com

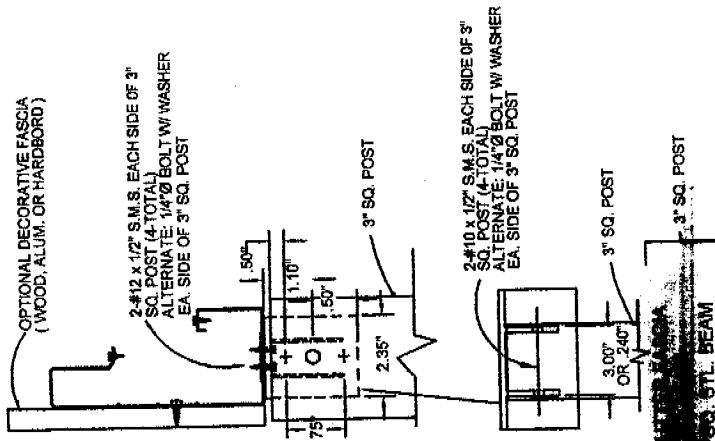
LIVE LOAD = 10, 20 & 30 psf  
HORIZ. WIND = 70, 90 & 110 MPH

BEAM TYPES

PATIO COVER SYSTEM AS MFG. BY:  
DURALUM PRODUCTS, INC.  
9269 ALPINE AVE., SACRAMENTO, CA 95825  
(916) 452-7021 FAX 403-1518 sales@duralum.com

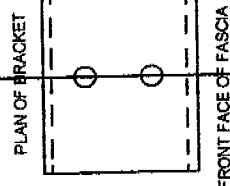
SHEET 10 OF 30  
JOB NO. 09025874

# BEAM TO POST CONNECTION DETAILS

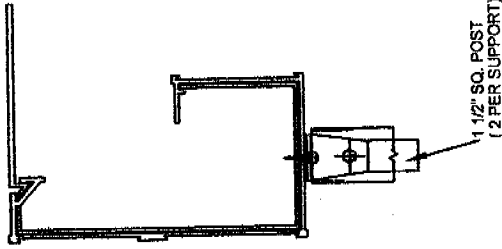


13

BRACKET AT EACH  
1 1/2" SQ. POST ALUM.  
x .080" ALLOY 3004-H36  
2 #10 x 1/2" S.M.S. AT  
EACH POST  
ALTERNATE:  
1/4" Ø BOLT AND WASHER  
ON CENTERLINE AT  
EACH POST.



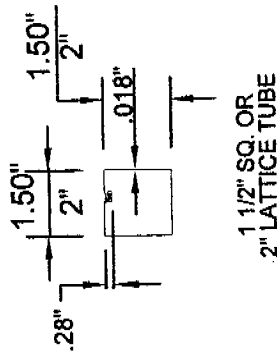
FRONT FACE OF FASCIA  
LOCATION OF  
2 #12 S.M.S.  
TO FASCIA.



14

GUTTER FASCIA  
MAG BEAM  
3" SQ. STL. BEAM

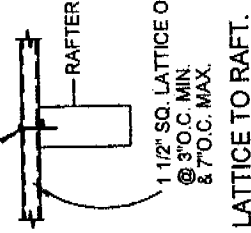
ALUM. ALLOY 3004-H36



15

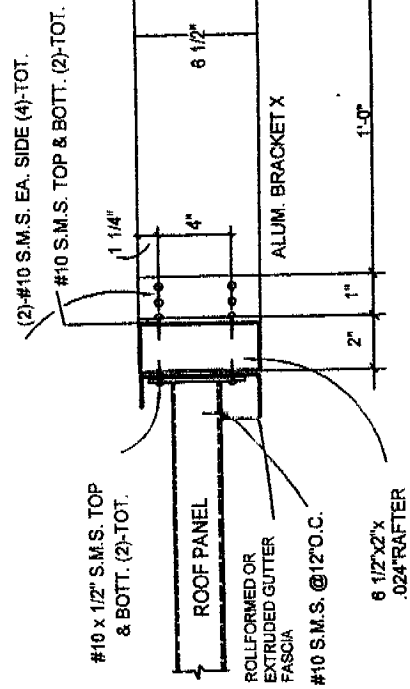
1 1/2" SQ. OR  
2" LATTICE TUBE

#8 x 2" SMS  
OR 2 1/2", TYP.



17

1 1/2" SQ. LATTICE OR 2"  
@ 3" O.C. MIN.  
& 7" O.C. MAX.



18

RAFTER "TAIL" TO GUTTER

.040" @ 6063-T6  
.040" 3004-H36 ALUM.

SCREWS NOTED IN DETAIL  
TO BE @ CENTERLINE

1/2" MIN. EDGE DISTANCE, TYP.

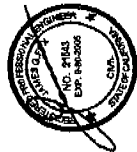
FASTENER  
PER DETAIL

SEE VARIOUS  
DETAILS

\* W= 2 1/8" OR 1 1/8" FOR 6 1/2" RAFTER &  
\* W= 3 1/8" OR 2 7/8" FOR 8" RAFTER

"U" BRACKET - GENERAL

18



IC.C. E.S. EVALUATION  
REPORT NUMBER  
ER-2840P

DRAWN BY: K.K.  
DATE: 1/22/2002  
SCALE: NONE  
REVISED BY: K.K. & D.P.

FOX ENGINEERING INC.  
JAMES G. FOX, CIVIL ENGINEER  
8060 TELEGRAPH RD., DOWNEY, CA 90240  
(562) 808-1337 FAX: 562-2508 foxeng@earthlink.com

BEAM TO POST

LIVE LOAD =  
10, 25 & 30 psf  
HORIZ. WIND =  
70, 90 & 110 MPH

PATIO COVER SYSTEM AS MFG. BY:  
DURALUM PRODUCTS, INC.  
8269 ALPINE AVE., SACRAMENTO, CA 95826  
(916) 452-7021 FAX 403-1519 sales@duralum.com

SHEET  
12 OF 30  
JOB NO. 0103-087

10# L.L. 70/90 MPH FREESTANDING & ATTACHED SOLID PATIOS 12' OR LESS

TRIBUTARY WIDTH	6.5" ROLLFORM						4" I-BEAM						4.5" / MAG GUTTER						MAG BEAM						3" SQ. STEEL BEAM								
	70 & 90 MPH			70 & 90 MPH			70 & 90 MPH			70 & 90 MPH			70 & 90 MPH			70 & 90 MPH			70 & 90 MPH			70 & 90 MPH			70 & 90 MPH			70 & 90 MPH			70 & 90 MPH		
	MAX. POST SPACING	FREESTAND FTG. (IN.)	MIN. POST TYPE	ATTACHED FTG. (IN.)	MIN. POST TYPE	MAX. POST SPACING	FREESTAND FTG. (IN.)	MIN. POST TYPE	ATTACHED FTG. (IN.)	MIN. POST TYPE	MAX. POST SPACING	FREESTAND FTG. (IN.)	MIN. POST TYPE	ATTACHED FTG. (IN.)	MIN. POST TYPE	MAX. POST SPACING	FREESTAND FTG. (IN.)	MIN. POST TYPE	ATTACHED FTG. (IN.)	MIN. POST TYPE	MAX. POST SPACING	FREESTAND FTG. (IN.)	MIN. POST TYPE	ATTACHED FTG. (IN.)	MIN. POST TYPE	MAX. POST SPACING	FREESTAND FTG. (IN.)	MIN. POST TYPE	ATTACHED FTG. (IN.)	MIN. POST TYPE			
4'	17'-0"	26/27	F	22	A/B	21'-9"	29/30	G	22	A/B	15'-7"	26/27	G	22	A/B	16'-4"	27/28	G	23	A/B	13'-7"	24/26	F	22	A/B	24/26	F	22	A/B				
5'	14'-3"	26/27	F	23	A/B	19'-6"	29/30	G	22	A/B	14'-0"	26/27	F	23	A/B	14'-7"	27/28	G	23	A/B	12'-2"	24/26	F	23	B	24/26	F	23	B				
6'	11'-4"	26/27	F	23	B	17'-9"	29/30	G	23	B	12'-9"	26/27	F	24	B	13'-4"	27/28	G	24	B	11'-1"	24/26	F	23	B	24/26	F	23	B				
7'	9'-8"	26/27	F	24	B	16'-5"	29/30	G	24	B	11'-9"	26/27	F	24	B	12'-4"	27/28	G	25	B	10'-3"	21/22	F	24	B	24/26	F	24	B				
8'	8'-6"	23/24	F	24	B	15'-4"	26/27	G	24	B	11'-0"	23/24	F	25	B	11'-6"	23/24	G	25	B	9'-7"	21/22	F	24	B	21/22	F	24	B				
9'	7'-7"	23/24	F	25	B	14'-6"	26/27	G	25	B	10'-5"	23/24	F	26	B	10'-10"	23/24	G	26	B	9'-0"	21/22	F	25	B	21/22	F	25	B				
10'	6'-9"	23/24	F	25	B	13'-9"	26/27	G	25	B	9'-10"	23/24	F	26	B	10'-3"	23/24	G	26	B	8'-7"	21/22	F	25	B	21/22	F	25	B				
11'	6'-2"	23/24	F	26	B	13'-1"	26/27	G	25	B	9'-5"	23/24	F	26	B	9'-10"	23/24	G	26	B	8'-2"	21/22	F	25	B	21/22	F	25	B				
12'	5'-8"	23/24	F	26	B	12'-7"	26/27	G	26	B	9'-0"	23/24	F	27	B	9'-5"	23/24	G	27	B	7'-10"	20/21	F	26	B	20/21	F	26	B				
13'	5'-2"	20/21	F	26	B	12'-1"	23/24	G	26	B	8'-8"	20/21	F	27	B	9'-0"	23/24	G	27	B	7'-6"	20/21	F	26	B	20/21	F	26	B				
14'	4'-10"	20/21	F	27	B	11'-7"	23/24	G	26	B	8'-4"	20/21	F	27	B	8'-8"	20/21	G	28	B	7'-3"	20/21	F	26	B	20/21	F	26	B				
15'	4'-6"	20/21	F	27	B	11'-3"	23/24	G	27	B	8'-0"	20/21	F	28	B	8'-1"	20/21	G	28	B	7'-0"	20/21	F	26	B	20/21	F	26	B				
16'	4'-3"	20/21	F	27	B	10'-10"	23/24	G	27	B	7'-9"	20/21	F	28	B	8'-1"	20/21	G	28	B	6'-9"	20/21	F	27	B	20/21	F	27	B				
17'	4'-0"	20/21	F	27	B	10'-7"	23/24	G	27	B	7'-7"	20/21	F	28	B	7'-11"	20/21	G	29	B	6'-7"	20/21	F	27	B	20/21	F	27	B				
18'	3'-9"	18/19	F	28	B	10'-3"	20/21	G	28	B	7'-4"	18/19	F	29	B	7'-8"	18/19	G	29	B	6'-4"	18/19	F	27	B	18/19	F	27	B				
19'	3'-7"	18/19	F	28	B	10'-0"	20/21	G	28	B	7'-2"	18/19	F	29	B	7'-6"	18/19	G	29	B	6'-2"	18/19	F	27	B	18/19	F	27	B				
20'	3'-4"	18/19	F	28	B	9'-8"	20/21	F	28	B	7'-0"	18/19	F	29	B	7'-3"	18/19	G	29	B	6'-0"	18/19	F	28	B	18/19	F	28	B				
21'	3'-2"	18/19	F	28	B	9'-6"	20/21	F	28	B	6'-9"	18/19	F	29	B	7'-1"	18/19	G	30	B	5'-11"	18/19	F	28	B	18/19	F	28	B				

FOOTNOTE: "SAMPLE"

NOTE: FOOTING SHOWN IN CUBIC INCHES WITHOUT SLAB.  
SEE ALTERNATE FOOTING TABLES  
SHT. 9 FOR ATTACHED & SHT. 29 FOR FREESTANDING



FIGURE INDICATES MAX. HT. = 10'-0" (with diagonal line symbol)  
FIGURE INDICATES MAX. HT. = 12'-0" (with diagonal line symbol)



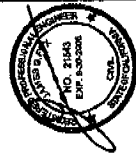
I.C.C. E.S. EVALUATION REPORT NUMBER ER-2840P	DRAWN BY: K.K. DATE: 1/23/2002 SCALE: NONE REVISED BY: K.K. & D.P.	FOX ENGINEERING INC. JAMES G. FOX, CIVIL ENGINEER 8060 TELEGRAPH RD., DOWNEY, CA 90240 (562) 808-1337 FAX: 927-2508 foxeng@hotmail.com	LIVE LOAD = 10, 20 & 30 psf HORIZ. WIND = 70, 90 & 110 MPH	POST SPACING TABLE 70/90 FREESTANDING AND ATTACHED	PATIO COVER SYSTEM AS MFG. BY: DURALUM PRODUCTS, INC. 8288 ALPINE AVE., SACRAMENTO, CA 95826 (916) 452-7021 FAX: 403-4519 sales@duralum.com	SHEET 14 OF 30 JOB NO. 0902074

**10# L.L. 110 MPH FREESTANDING & ATTACHED SOLID PATIOS 12' OR LESS**

FLOORING	HEIGHT	6.5" ROLLFORM				4" I-BEAM				4.5 / MAG GUTTER				MAG BEAM				3" SQ. STEEL BEAM								
		110 MPH		110 MPH		110 MPH		110 MPH		110 MPH		110 MPH		110 MPH		110 MPH		110 MPH		110 MPH						
		MAX. POST SPACING	FTG. (IN.)	MIN. POST TYPE	ATTACHED	MAX. POST SPACING	FTG. (IN.)	MIN. POST TYPE	ATTACHED	MAX. POST SPACING	FTG. (IN.)	MIN. POST TYPE	ATTACHED	MAX. POST SPACING	FTG. (IN.)	MIN. POST TYPE	ATTACHED	MAX. POST SPACING	FTG. (IN.)	MIN. POST TYPE	ATTACHED					
4	17'-0"	11'-7"	31/32	F	23	A/B	18'-4"	35/36	H	27	A/B	12'-9"	32/33	F	24	A/B	13'-4"	33/34	F	25	A/B	11'-1"	31/32	F	23	A/B
5	13'-7"	10'-4"	31/32	F	24	A/B	16'-5"	35/36	G	28	A/B	11'-5"	32/33	F	25	A/B	11'-11"	33/34	F	26	A/B	9'-11"	31/32	F	23	A/B
6	11'-4"	7'-6"	31/32	F	23	A/B	15'-0"	35/36	G	29	B	10'-5"	32/33	F	26	A/B	10'-10"	33/34	F	26	A/B	9'-0"	31/32	F	25	A/B
7	9'-8"	8'-9"	31/32	F	26	A/B	13'-10"	35/36	G	30	B	9'-7"	32/33	F	26	A/B	10'-0"	33/34	F	27	A/B	8'-4"	31/32	F	25	A/B
8	8'-6"	8'-2"	28/29	F	26	A/B	13'-0"	32/33	G	31	B	9'-0"	29/30	F	27	A/B	9'-5"	30/31	F	28	A/B	7'-10"	28/29	F	26	A/B
9	7'-7"	7'-9"	28/29	F	27	A/B	12'-3"	32/33	G	31	B	8'-6"	29/30	F	28	A/B	8'-10"	30/31	F	28	A/B	7'-4"	28/29	F	26	A/B
10	6'-9"	7'-4"	28/29	F	27	A/B	11'-7"	32/33	G	32	B	8'-0"	29/30	F	28	A/B	8'-8"	30/31	F	29	A/B	7'-0"	28/29	F	27	A/B
11	6'-2"	7'-0"	28/29	F	28	A/B	11'-1"	32/33	G	32	B	7'-8"	29/30	F	29	A/B	8'-5"	30/31	F	29	A/B	6'-8"	28/29	F	27	A/B
12	5'-8"	6'-8"	28/29	F	28	A/B	10'-7"	32/33	G	33	B	7'-4"	29/30	F	29	A/B	7'-8"	30/31	F	29	A/B	6'-4"	28/29	F	28	A/B
13	5'-2"	6'-5"	25/26	F	29	A/B	10'-2"	29/30	G	33	B	7'-0"	26/27	F	29	A/B	7'-4"	27/28	F	29	A/B	6'-1"	25/26	F	28	A/B
14	4'-10"	6'-2"	25/26	F	29	A/B	9'-10"	29/30	G	34	B	6'-9"	26/27	F	30	A/B	6'-10"	27/28	F	30	A/B	5'-10"	25/26	F	28	A/B
15	4'-6"	6'-0"	25/26	F	29	A/B	9'-6"	29/30	G	34	B	6'-7"	26/27	F	30	A/B	6'-10"	27/28	F	30	A/B	5'-7"	25/26	F	29	A/B
16	4'-3"	5'-9"	25/26	F	29	A/B	9'-2"	29/30	G	34	B	6'-4"	26/27	F	31	A/B	6'-7"	27/28	F	31	A/B	5'-4"	25/26	F	29	A/B
17	4'-0"	5'-9"	25/26	F	30	A/B	8'-11"	29/30	G	34	B	6'-2"	26/27	F	31	A/B	6'-5"	27/28	F	31	A/B	5'-1"	25/26	F	29	A/B
18	3'-9"	5'-5"	23/24	F	30	A/B	8'-8"	26/27	G	35	B	6'-0"	23/24	F	31	A/B	6'-3"	24/25	F	31	A/B	4'-10"	23/24	F	29	A/B
19	3'-7"	5'-4"	23/24	F	30	A/B	8'-5"	26/27	G	35	B	5'-10"	23/24	F	31	A/B	6'-1"	24/25	F	32	A/B	4'-7"	23/24	F	29	A/B
20	3'-4"	5'-2"	23/24	F	31	A/B	8'-2"	26/27	G	35	B	5'-8"	23/24	F	31	A/B	5'-11"	24/25	F	32	A/B	4'-4"	23/24	F	29	A/B
21	3'-2"	5'-0"	23/24	F	31	A/B	8'-0"	26/27	G	36	B	5'-6"	23/24	F	32	A/B	5'-9"	24/25	F	32	A/B	4'-1"	23/24	F	29	A/B

NOTE:  
FOOTING SHOWN IN CUBIC INCHES WITHOUT SLAB.  
SEE ALTERNATE FOOTING TABLES  
SHT. 9 FOR ATTACHED &  
SHT. 29 FOR FREESTANDING

FOOTNOTE: "SAMPLE"  
FIGURE INDICATES MAX. HT. = 10'-0"  
FIGURE INDICATES MAX. HT. = 12'-0"



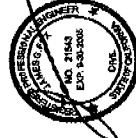
I.C.C. E.S. EVALUATION REPORT NUMBER ER-2840P	DRAWN BY: K.K. DATE: 11/23/2002 SCALE: NONE REVISED BY: K.K. & D.P.	FOX ENGINEERING INC. JAMES G. FOX, CIVIL ENGINEER 9060 TELEGRAPH RD., DOWNEY, CA 90240 (562) 806-1337 FAX: 562-2509 foxeng@netmail.com	LIVE LOAD = 10, 20 & 30 psf HORIZ. WIND = 70, 90 & 110 MPH	PATIO COVER SYSTEM AS MFG. BY: DURALUM PRODUCTS, INC. 8288 ALPINE AVE. SACRAMENTO, CA 95828 (916) 452-7021 FAX 916-452-1519 sales@duralum.com	SHEET 16 OF 30 JOB NO. 028-054
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20# L.L. 110 MPH FREESTANDING & ATTACHED SOLID PATIOS 12' OR LESS

TRIBUTARY WIDTH	6.5" ROLLFORM				4" I-BEAM				4.5 / MAG GUTTER				MAG BEAM				3" SQ. STEEL BEAM						
	MAX. POST SPACING		FREESTAND ATTACHED		MAX. POST SPACING		FREESTAND ATTACHED		MAX. POST SPACING		FREESTAND ATTACHED		MAX. POST SPACING		FREESTAND ATTACHED		MAX. POST SPACING		FREESTAND ATTACHED				
	(IN.)	(IN.)	FTG. (IN.)	MIN. POST TYPE	(IN.)	(IN.)	FTG. (IN.)	MIN. POST TYPE	(IN.)	(IN.)	FTG. (IN.)	MIN. POST TYPE	(IN.)	(IN.)	FTG. (IN.)	MIN. POST TYPE	(IN.)	(IN.)	FTG. (IN.)	MIN. POST TYPE			
4'	10'-3"	30/31	F	B	23	B	33/34	G	26	B	31/32	G	23	B	11'-9"	31/32	G	24	B	30/32	G	22	B
5'	9'-2"	30/31	F	B	23	B	33/34	G	27	B	31/32	G	24	B	10'-6"	31/32	G	24	B	30/32	G	23	B
6'	8'-5"	30/31	F	B	24	B	33/34	G	28	B	31/32	G	25	B	9'-7"	31/32	G	25	B	30/32	G	24	B
7'	7'-9"	27/28	F	B	25	B	33/34	G	29	B	31/32	G	26	B	8'-11"	31/32	G	26	B	30/32	G	24	B
8'	7'-3"	27/28	F	B	25	B	30/31	G	29	B	28/29	G	26	B	8'-4"	28/29	G	26	B	27/26	F	25	B
9'	6'-10"	27/28	F	B	26	B	30/31	G	30	B	28/29	F	27	B	7'-10"	28/29	F	27	B	27/26	F	25	B
10'	6'-6"	27/28	F	B	26	B	30/31	G	30	B	28/29	F	27	B	7'-5"	28/29	F	27	B	27/26	F	26	B
11'	6'-2"	27/28	F	B	27	B	30/31	G	31	B	28/29	F	27	B	7'-1"	28/29	F	27	B	27/26	F	26	B
12'	5'-10"	27/28	F	B	27	B	30/31	G	31	B	28/29	F	28	B	6'-9"	28/29	F	28	B/E	27/26	F	27	B
13'	5'-6"	27/28	F	B	27	B	30/31	G	32	B	25/26	F	28	B	6'-6"	25/26	F	28	B/E	24/25	F	27	B
14'	5'-2"	27/28	F	B	27	B	27/28	G	32	B	25/26	F	29	B	6'-2"	25/26	F	29	B/E	24/25	F	27	B
15'	-	-	-	-	-	-	27/28	G	32	B	25/26	F	28	B	6'-1"	25/26	F	29	B/E	-	-	-	-
16'	-	-	-	-	-	-	27/28	G	33	B	25/26	F	29	B	5'-10"	25/26	F	29	B/E	-	-	-	-
17'	-	-	-	-	-	-	27/28	G	33	B	25/26	F	30	B	5'-8"	23/24	F	30	B/E	-	-	-	-

NOTE:  
FOOTING SHOWN IN CUBIC INCHES WITHOUT SLAB.  
SEE ALTERNATE FOOTING TABLES  
SHT. 9 FOR ATTACHED &  
SHT. 28 FOR FREESTANDING

FOOTNOTE: "SAMPLE"  
FIGURE INDICATES MAX. HT. = 10'-0"  
FIGURE INDICATES MAX. HT. = 12'-0"



I.C.C. E.S. EVALUATION REPORT NUMBER ER-2640P	DRAWN BY: K.K. DATE: 1/23/2002 SCALE: NONE REVISED BY: K.K. & D.P.	FOX ENGINEERING INC. JAMES G. FOX, CIVIL ENGINEER 8080 TELEGRAPH RD. DOWNEY, CA 90240 (562) 806-1337 FAX: 927-2559 foxeng@hotmail.com	LIVE LOAD = 10, 20 & 30 psf HORIZ. WIND = 70, 90 & 110 MPH	PATIO COVER SYSTEM AS MFG. BY: DURALUM PRODUCTS, INC. 8289 ALPINE AVE., SACRAMENTO, CA 95826 (916) 452-7021 FAX 403-1519 sales@duralum.com	SHEET 18 OF 30 Job No. 0104064
					POST SPACING TABLE 110' FREESTANDING AND ATTACHED

**30# L.L. 110 MPH FREESTANDING & ATTACHED SOLID PATIOS 12' OR LESS**

TRIBUTARY WIDTH	6.5" ROLLFORM				4" I-BEAM				4.5 / MAG GUTTER				MAG BEAM				3" SQ. STEEL BEAM								
	MAX. POST SPACING		FREESTAND ATTACHED		MAX. POST SPACING		FREESTAND ATTACHED		MAX. POST SPACING		FREESTAND ATTACHED		MAX. POST SPACING		FREESTAND ATTACHED		MAX. POST SPACING		FREESTAND ATTACHED						
	(IN.)	MIN. POST TYPE	(IN.)	MIN. POST TYPE	(IN.)	MIN. POST TYPE	(IN.)	MIN. POST TYPE	(IN.)	MIN. POST TYPE	(IN.)	MIN. POST TYPE	(IN.)	MIN. POST TYPE	(IN.)	MIN. POST TYPE	(IN.)	MIN. POST TYPE	(IN.)	MIN. POST TYPE					
4'	8'-5"	29/30	G	21	B/C	13'-2"	31/32	G	24	B/C	9'-3"	29/30	G	22	B/C	9'-8"	29/30	G	22	B/E	8'-1"	29/30	G	21	B
5'	4'-10"	29/30	G	22	B/C	11'-9"	31/32	G	25	B/C	8'-3"	29/30	G	23	B/C	8'-8"	29/30	G	23	B/E	7'-2"	29/30	G	22	B
6'	4'-0"	29/30	F	23	B/C	10'-9"	31/32	G	26	B/C	7'-7"	29/30	F	24	B/C	7'-11"	29/30	G	24	B/E	6'-7"	29/30	F	22	B
7'	3'-5"	29/30	F	23	B/C	9'-11"	31/32	G	27	B/C	7'-10"	29/30	F	25	B/C	7'-4"	29/30	F	25	B/E	6'-1"	29/30	F	23	B
8'	3'-0"	26/27	F	24	B/C	9'-3"	28/29	G	27	B/C	6'-7"	26/27	F	25	B/C	6'-10"	26/27	F	25	B/E	5'-8"	26/27	F	23	B
9'	2'-8"	26/27	F	24	B/C	8'-9"	28/29	G	28	B/E	6'-2"	26/27	F	25	B/C	6'-5"	26/27	F	25	B/E	5'-4"	26/27	F	24	B
10'	2'-5"	26/27	F	25	B/C	8'-4"	28/29	G	28	B/E	5'-10"	26/27	F	25	B/C	6'-1"	26/27	F	25	B/E	5'-1"	26/27	F	24	B
11'	-	26/27	F	25	B/E	7'-11"	28/29	G	29	B/E	5'-7"	26/27	F	26	B/C	5'-10"	26/27	F	26	B/E	4'-10"	26/27	F	25	B
12'	-	26/27	F	25	B/E	7'-7"	28/29	G	29	B/E	5'-4"	26/27	F	26	B/C	5'-7"	26/27	F	26	B/E	4'-7"	26/27	F	25	B
13'	-	-	-	-	-	7'-3"	26/28	G	30	B/E	5'-1"	26/27	F	26	B/C	5'-4"	26/27	F	26	B/E	-	-	-	-	-
14'	-	-	-	-	-	7'-0"	25/26	G	30	B/E	4'-10"	26/27	F	27	B/C	5'-2"	26/27	F	27	B/E	-	-	-	-	-

NOTE:  
 FOOTING SHOWN IN CUBIC INCHES WITHOUT SLAB.  
 SEE ALTERNATE FOOTING TABLES  
 SHT. 9 FOR ATTACHED &  
 SHT. 28 FOR FREESTANDING

FOOTNOTE: "SAMPLE"  
 FIGURE INDICATES MAX. HT. = 10'-0"  
  
 FIGURE INDICATES MAX. HT. = 12'-0"



I.C.C. E.S. EVALUATION REPORT NUMBER ER-2840P	DRAWN BY: K.K. DATE: 1/23/2002 SCALE: NONE REVISED BY: K.K. & D.P.	FOX ENGINEERING INC. JAMES G. FOX, CIVIL ENGINEER 8060 TELEGRAPH RD., DOWNEY, CA 90240 (562) 808-1337 FAX: 927-2509 foxeng@hotmail.com	POST SPACING TABLE 110 FREESTANDING AND ATTACHED	LIVE LOAD = 10, 20 & 30 psf HORIZ. WIND = 70, 90 & 110 MPH	PATIO COVER SYSTEM AS MFG. BY: DURALUM PRODUCTS, INC. 9288 ALPINE AVE., SACRAMENTO, CA 95826 (916) 452-7021 FAX 403-1519 sales@duralum.com	SHEET 20 OF 30 JOB NO. 0703-0874

# 10# L.L. 70 & 90 MPH ATTACHED OPEN LATTICE PATIOS 10' HT. OR LESS

TRIBUTARY WIDTH	3" STEEL BEAM		DBL. 2"x6.5"x.024" BM		DBL. 2"x6.5"x.032" BM OR 3"x8" BEAM		DBL. 3" x 8" BEAM		3" x 8" BM W/INSERT		MINIMUM NO. OF POST		FOOTNOTE: * HT.=10' MAX.	
	MAX. COL. SPACING ON SLAB SEE FOOT-NOTE.	POST SPACING ON FTG.	CUBE FTG. SIZE 70 & 90 MPH	POST SPACING ON FTG.	CUBE FTG. SIZE 70 & 90 MPH	POST SPACING ON FTG.	CUBE FTG. SIZE 70 & 90 MPH	POST SPACING ON FTG.	CUBE FTG. SIZE 70 & 90 MPH	POST SPACING ON FTG.	CUBE FTG. SIZE 70 & 90 MPH	POST TYPE		
												1		2
6'	11'-4"	13'-7"	19	11'-7"	18	13'-3"	19	15'-7"	19	28'-9"	25	2 2	2 2	2 2
7'	9'-8"	13'-1"	19	10'-11"	19	12'-3"	20	14'-7"	20	28'-1"	26	2 3	2 2	2 2
8'	8'-6"	12'-7"	20	10'-6"	19	11'-5"	20	13'-9"	20	27'-5"	27	2 3	2 2	2 2
9'	7'-7"	12'-0"	21	10'-0"	20	10'-10"	21	13'-2"	21	26'-10"	27	2 3	2 2	2 2
10'	6'-9"	11'-6"	22	9'-7"	20	10'-4"	21	12'-8"	21	26'-3"	28	2 4	2 2	2 3
11'	6'-2"	11'-2"	22	9'-2"	21	9'-10"	22	12'-4"	22	25'-9"	29	2 4	2 3	2 3
12'	5'-8"	10'-3"	22	8'-10"	21	9'-5"	22	11'-9"	22	25'-3"	29	2 4	2 3	2 3
13'	5'-2"	9'-11"	22	8'-7"	21	9'-0"	23	11'-4"	23	24'-9"	30	3 4	2 3	2 4
14'	4'-10"	9'-7"	23	8'-4"	22	8'-8"	23	11'-0"	23	24'-4"	30	3 5	2 3	2 4
15'	4'-6"	9'-3"	23	8'-0"	22	8'-5"	24	10'-9"	24	23'-11"	31	3 5	2 3	3 4
16'	4'-3"	9'-0"	23	7'-10"	22	8'-2"	24	10'-6"	24	23'-6"	32	3 5	2 3	3 4
17'	4'-0"	8'-8"	23	7'-7"	22	7'-11"	24	10'-3"	24	23'-1"	32	3 5	2 4	3 4
18'	3'-9"	8'-7"	24	7'-5"	23	7'-8"	25	10'-0"	25	22'-9"	33	3 5	2 4	2 5
19'	3'-7"	8'-4"	24	7'-3"	23	7'-5"	25	9'-9"	25	22'-5"	33	3 6	2 4	3 5
20'	3'-4"	8'-2"	24	7'-1"	23	7'-2"	25	9'-6"	25	22'-1"	33	4 6	3 4	3 5
21'	3'-2"	8'-0"	24	6'-11"	23	6'-11"	26	9'-3"	26	21'-5"	34	4 6	3 4	3 5

FOOTNOTE: \*  
 HEADER AND OR  
 MIN. NO. OF POST  
 REQUIRED SPACING  
 MUST EXCEED  
 ALLOWABLE SLAB SPACING  
 OR LESSER MUST BE USED

NOTE:  
 FOOTING SHOWN IN CUBIC INCHES  
 WITHOUT SLAB.  
 SEE ALTERNATE FOOTING TABLES  
 SHT. 9 FOR ATTACHED &  
 SHT. 29 FOR FREESTANDING

FOOTNOTE: "SAMPLE"  
 FIGURE INDICATES 70 MPH

FIGURE INDICATES 90 MPH

FOOTNOTE: \*  
 COL. TYPES 1 = .024" SIDEPLATES, USE ON CONC. SLAB ONLY  
 COL. TYPES 2 = .032" SIDEPLATES, ON CONC. SLAB OR FOOTINGS.



I.C.C. E.S. EVALUATION REPORT NUMBER ER-2640P	DRAWN BY: K.K. DATE: 11/23/2002 SCALE: NONE REVISED BY: K.K. & D.F.	FOX ENGINEERING INC. JAMES G. FOX, CIVIL ENGINEER 8060 TELEGRAPH RD., DOWNEY, CA 90240 (562) 595-1337 FAX: 927-2509 foxeng@tdcnet.com	LIVE LOAD = 10, 20 & 30 psf HORIZ. WIND = 70, 90 & 110 MPH	PATIO COVER SYSTEM AS MFG. BY: DURALUM PRODUCTS, INC. 8289 ALPINE AVE., SACRAMENTO, CA 95826 (916) 452-7021 FAX 408-1519 sales@duralum.com	SHEET 22 OF 30 JOB NO. ER-2640P
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**20# L.L. 110 MPH ATTACHED OPEN LATTICE PATIOS 10' HT. OR LESS**

TRIBUTARY WIDTH	3" STEEL BEAM		DBL. 2"x6.5"x.024" BM		DBL. 2"x6.5"x.032" BM OR 3"x8" BEAM		DBL. 3" x 8" BEAM		3" x 8" BM W/INSERT		MINIMUM NO. OF POST FOOTING		
	MAX. COL. SPACING ON SLAB SEE FOOT-NOTE.	POST SPACING ON FTG.	CUBE FTG. SIZE	POST SPACING ON FTG.	CUBE FTG. SIZE	POST SPACING ON FTG.	CUBE FTG. SIZE	POST SPACING ON FTG.	CUBE FTG. SIZE	POST SPACING ON FTG.	CUBE FTG. SIZE	HT. = 10' MAX. POST TYPE	HT. = 10' MAX. POST TYPE
6'	8'-11"	9'-9"	19	8'-6"	18	10'-0"	19	13'-10"	21	20'-9"	24	1	2
7'	7'-1"	9'-3"	20	8'-0"	19	9'-8"	20	12'-1"	21	20'-3"	25	5	3
8'	5'-11"	8'-9"	20	7'-7"	19	9'-4"	20	11'-9"	22	19'-10"	26	5	3
9'	5'-1"	8'-4"	20	7'-3"	20	9'-0"	21	11'-5"	23	19'-5"	27	6	4
10'	4'-5"	8'-0"	21	6'-11"	20	8'-9"	22	11'-2"	23	19'-0"	28	7	4
11'	3'-11"	7'-8"	21	6'-8"	20	8'-6"	22	10'-11"	24	18'-7"	29	8	5
12'	3'-6"	7'-5"	22	6'-5"	21	8'-3"	23	10'-8"	24	18'-3"	29	8	5
13'	3'-2"	7'-2"	22	6'-2"	21	8'-0"	23	10'-5"	25	17'-11"	30	9	6
14'	-	6'-11"	22	6'-0"	21	7'-9"	23	10'-2"	25	17'-7"	30	9	6
15'	-	6'-8"	23	5'-10"	22	7'-6"	23	9'-11"	26	17'-3"	31	10	7
16'	-	6'-6"	23	5'-8"	22	7'-5"	24	9'-8"	26	17'-0"	31	10	7
17'	-	6'-4"	18	5'-6"	22	7'-0"	24	9'-5"	26	16'-8"	32	11	8

NOTE: \*  
FOR 70 / 90 MPH MIN. POST, SEE 10# TABLE

FOOTNOTE: \*  
HEADER AND OR MIN. NO. OF POST REQUIRED SPACING MUST EXCEED ALLOWABLE SLAB SPACING OR LESSER MUST BE USED

NOTE:  
FOOTING SHOWN IN CUBIC INCHES WITHOUT SLAB.  
SEE ALTERNATE FOOTING TABLES SHT. 9 FOR ATTACHED & SHT. 29 FOR FREESTANDING

FOOTNOTE: \*  
COL. TYPES 1 = .024" SIDEPLATES, USE ON CONC. SLAB ONLY  
COL. TYPES 2 = .032" SIDEPLATES, ON CONC. SLAB OR FOOTINGS.

I.C.C. E.S. EVALUATION REPORT NUMBER ER-264CP  
DRAWN BY: K.K.  
DATE: 11/23/2002  
SCALE: NONE  
REVISED BY: K.K. & D.P.

FOX ENGINEERING INC.  
JAMES G. FOX, CIVIL ENGINEER  
8080 TELEGRAPH RD., DOWNEY, CA 90240  
(562) 808-1337 FAX: 562-2509 foxeng@hotmail.com

POST SPACING TABLE  
110 FREESTANDING AND ATTACHED

LIVE LOAD = 10, 20 & 30 psf  
HORIZ. WIND = 70, 90 & 110 MPH

PATIO COVER SYSTEM AS MFG. BY:  
DURALUM PRODUCTS, INC.  
8289 ALPINE AVE., SACRAMENTO, CA 95826  
(916) 452-7021 FAX 916-1519 sales@duralum.com

SHEET 24 OF 30  
JOB NO. 0702-0674

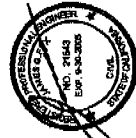


**10# L.L. 70 & 90 MPH FREESTANDING OPEN LATTICE PATIO COVERS 12' HT. OR LESS**

TRIBUTARY WIDTH	DBL. 2" x 6.5" x .032" BM. OR 3" x 8" BEAM				DBL. 2" x 6.5" x .024" BEAM				DBL. 3" x 8" BEAM				3" x 8" BM W/ INSERT							
	MAX. POST HT. = 8'		MAX. POST HT. = 12'		MAX. POST HT. = 8'		MAX. POST HT. = 12'		MAX. POST HT. = 8'		MAX. POST HT. = 12'		MAX. POST HT. = 8'		MAX. POST HT. = 12'					
	MAX. POST SPACING	MIN. POST TYPE	CUBE FTG.	MIN. POST TYPE	CUBE FTG.	MIN. POST TYPE	CUBE FTG.	MIN. POST TYPE	CUBE FTG.	MIN. POST TYPE	CUBE FTG.	MIN. POST TYPE	CUBE FTG.	MIN. POST TYPE	CUBE FTG.	MIN. POST TYPE	CUBE FTG.			
6'	12'-5"	F G	24 26	G G	26 28	11'-7"	F F	24 26	F G	24 28	15'-7"	G G	24 22	G G	26 30	28'-9"	G G	28 30	G J	30 34
7'	12'-2"	F F	24 26	F G	26 28	10'-11"	F F	24 26	F G	24 28	14'-6"	G G	24 22	G G	26 30	28'-1"	G G	28 30	G J	30 34
8'	11'-11"	F F	24 26	F G	26 28	10'-6"	F F	24 26	F G	24 28	13'-6"	G G	24 22	G G	26 30	27'-5"	G G	28 30	G J	30 34
9'	11'-8"	F F	24 26	F G	26 28	10'-0"	F F	24 26	F G	24 28	12'-9"	G G	24 22	G G	26 30	26'-10"	G G	28 30	G J	30 34
10'	11'-5"	F F	24 26	F G	26 28	9'-7"	F F	24 26	F G	24 28	12'-1"	G F	24 22	F G	26 30	26'-3"	G G	28 30	G J	30 34
11'	11'-2"	F F	22 24	F G	24 26	9'-2"	F F	24 26	F G	24 28	11'-7"	G F	24 22	F G	26 30	25'-9"	G G	28 30	G J	30 34
12'	10'-11"	F F	22 24	F G	24 26	8'-10"	F F	22 24	F G	24 26	11'-0"	G F	22 24	F G	24 28	25'-3"	G G	28 30	G J	30 32
13'	10'-9"	F F	22 26	F G	24 26	8'-7"	F F	22 24	F G	24 26	10'-7"	G F	22 24	F G	24 28	24'-9"	G G	28 30	G J	30 32
14'	10'-6"	F F	22 22	F G	24 26	8'-4"	F F	22 24	F G	24 26	10'-2"	G F	22 24	F G	24 28	24'-4"	G G	28 30	G G	30 32
15'	10'-4"	F F	22 22	F G	24 26	8'-0"	F F	22 24	F F	24 24	9'-10"	G F	22 24	F G	24 28	23'-11"	G G	28 30	G G	30 32
16'	10'-2"	F F	22 22	F G	24 26	7'-10"	F F	22 24	F F	24 24	9'-7"	G F	22 24	F G	24 28	23'-6"	G G	28 30	G G	30 32
17'	10'-0"	F F	22 22	F G	24 26	7'-7"	F F	22 24	F F	24 24	9'-3"	G F	22 24	F G	24 26	23'-1"	G G	26 30	G G	30 32
18'	9'-10"	F F	22 22	F G	22 24	7'-5"	F F	22 22	F F	22 24	9'-0"	G F	22 24	F G	24 26	22'-9"	G G	26 30	G G	28 32
19'	9'-8"	F F	22 22	F G	22 24	7'-3"	F F	22 22	F F	22 24	8'-9"	G F	22 24	F G	24 26	22'-5"	G G	26 30	G G	28 32
20'	9'-7"	F F	22 22	F G	22 24	7'-1"	F F	22 22	F F	22 24	8'-7"	G F	22 24	F G	24 26	22'-1"	G G	26 30	G G	28 32
21'	9'-5"	F F	22 22	F G	22 24	6'-11"	F F	22 22	F F	22 24	8'-4"	G F	22 24	F G	24 26	21'-5"	G G	26 30	G G	28 32

NOTE:  
FOOTING SHOWN IN CUBIC INCHES WITHOUT SLAB.  
SEE ALTERNATE FOOTING TABLES SHT. 9 FOR ATTACHED & SHT. 29 FOR FREESTANDING

FOOTNOTE: "SAMPLE"  
INDICATES POST & FTG. FOR 70 MPH  
INDICATES POST & FTG. FOR 90 MPH

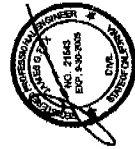


I.C.C. E.S. EVALUATION REPORT NUMBER ER-2640P	DRAWN BY: K.K. DATE: 11/23/2002 SCALE: NONE REVISED BY: K.K. & D.P.	FOX ENGINEERING INC. JAMES G. FOX, CIVIL ENGINEER 8060 TELEGRAPH RD., DOWNEY, CA 90240 (562) 806-1337 FAX: 827-2505 foxeng@hotmail.com	POST SPACING TABLE 70/90 FREESTANDING AND ATTACHED	LIVE LOAD = 10, 20 & 30 psf HORIZ. WIND = 70, 90 & 110 MPH	PATIO COVER SYSTEM AS MFG. BY: DURALUM PRODUCTS, INC. 9268 ALPINE AVE., SACRAMENTO, CA 95828 (916) 452-7021 FAX: 403-1519 sales@duralum.com
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**20# L.L. 110 MPH FREESTANDING OPEN LATTICE PATIO COVERS 12' HT. OR LESS**

TRIBUTARY WIDTH	DBL. 2" x 6.5" x .032" BM. OR 3"x8" BEAM				DBL. 3" x 8" BEAM				3" x 8" BM W/ INSERT											
	MAX. POST HT. = 8'		MAX. POST HT. = 12'		MAX. POST HT. = 8'		MAX. POST HT. = 12'		MAX. POST HT. = 8'		MAX. POST HT. = 12'									
	MIN. POST TYPE	CUBE FTG.	MIN. POST TYPE	CUBE FTG.	MIN. POST TYPE	CUBE FTG.	MIN. POST TYPE	CUBE FTG.	MIN. POST TYPE	CUBE FTG.	MIN. POST TYPE	CUBE FTG.								
6'	G	28	G	30	8'-6"	G	26	G	28	11'-5"	G	28	G	32	20'-9"	G	32	J	36	6'
7'	G	28	G	30	8'-0"	F	26	G	28	10'-7"	G	28	G	32	20'-3"	G	32	J	36	7'
8'	G	28	G	30	7'-7"	F	26	G	28	9'-11"	G	28	G	32	19'-10"	G	32	J	36	8'
9'	G	28	G	30	7'-3"	F	26	G	28	9'-4"	G	28	G	32	19'-5"	G	32	J	36	8'
10'	G	26	G	28	6'-11"	F	24	G	26	8'-10"	G	28	G	30	19'-0"	G	32	J	34	10'
11'	F	26	G	28	6'-8"	F	24	G	26	8'-5"	G	28	G	30	18'-7"	G	32	J	34	11'
12'	F	26	G	28	6'-5"	F	24	G	26	8'-1"	G	28	G	30	18'-3"	G	32	J	34	12'
13'	F	26	G	28	6'-2"	F	24	G	26	7'-9"	F	28	G	30	17'-11"	G	32	J	34	13'
14'	F	26	G	28	6'-0"	F	24	G	26	7'-5"	F	28	G	30	17'-7"	G	30	J	32	14'
15'	F	26	G	28	5'-10"	F	24	G	26	7'-2"	F	28	G	30	17'-3"	G	30	J	32	15'
16'	F	26	G	28	5'-8"	F	24	G	26	7'-0"	F	28	G	30	17'-0"	G	30	J	32	16'
17'	F	26	G	28	5'-6"	F	24	G	26	6'-9"	F	28	G	30	16'-8"	G	30	J	32	17'

NOTE:  
FOOTING SHOWN IN CUBIC INCHES  
WITHOUT SLAB.  
SEE ALTERNATE FOOTING TABLES  
SHT. 9 FOR ATTACHED &  
SHT. 29 FOR FREESTANDING



I.C.C. E.S. EVALUATION  
REPORT NUMBER  
ER-2640P

FOX ENGINEERING INC.  
JAMES G. FOX, CIVIL ENGINEER  
0080 TELEGRAPH RD., DOWNEY, CA 90240  
(562) 808-1337 FAX: 927-2509 foxeng@earthlink.net

POST SPACING TABLE  
110' FREESTANDING  
AND ATTACHED

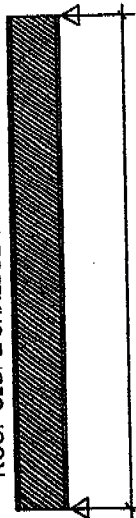
LIVE LOAD =  
10, 20 & 30 PSF  
HORIZ. WIND =  
70, 90 & 110 MPH

PATIO COVER SYSTEM AS MFG. BY:  
DURALUM PRODUCTS, INC.  
8289 ALPINE AVE., SACRAMENTO, CA 95825  
(916) 452-7021 FAX: 403-1519 sales@duralum.com

SHEET  
28 OF 30  
JOB NO. 0904564

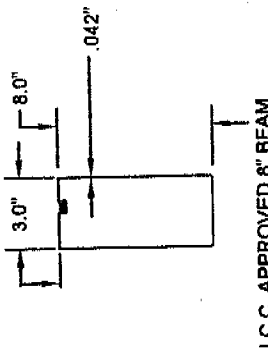
# ATTACHMENT DETAIL FOR INSULATED STRUCTURAL SANDWICH PANEL

ROOF SLOPE SHALL BE 1/4" : 12" MIN.



3" OR 4" STRUCTURAL SANDWICH PANEL  
SEE ELITE ALUMINUM CORP. I.C.C. ER-5658  
FOR PANEL SPANS AND DESCRIPTION DETAILS

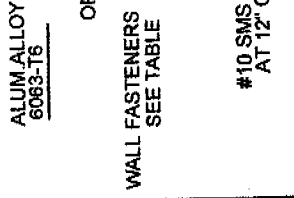
ALUM. ALLOY 3004-H36



I.C.C. APPROVED 8" BEAM

WIND DESIGN	S.M.S.
70 MPH	#14 @ 12" O.C.
90 MPH	#14 @ 12" O.C.
110 MPH	#14 @ 8" O.C.

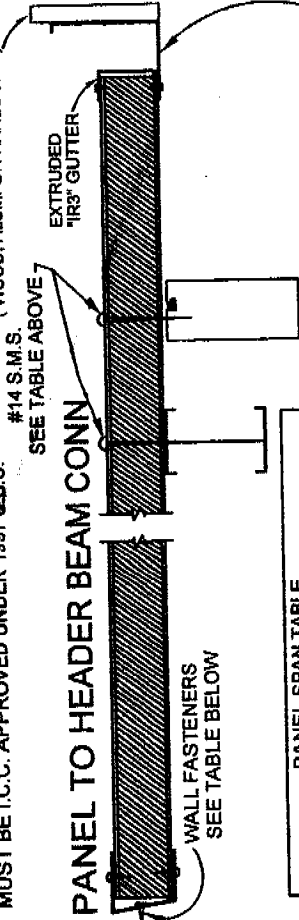
NOTE: #14 SMS SHALL HAVE A MIN. 1" PEN. INTO HEADER



ALUM. ALLOY 6063-T6  
WALL FASTENERS SEE TABLE  
APPROVED 3" INSUL. ROOF PANEL  
#10 SMS T&B AT 12" O.C.  
3" OR 4" HANGER CHANNEL

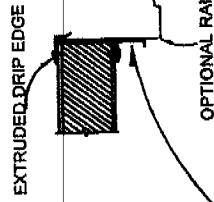
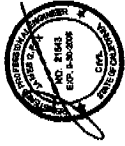
HEADER BEAM AND ENCLOSURE WALL SYSTEMS MUST BE I.C.C. APPROVED UNDER 1987 U.B.C.

OPTIONAL DECORATIVE FASCIA (WOOD, ALUM. OR HARDBOARD)



#14 S.M.S. SEE TABLE ABOVE

#14 S.M.S. SEE TABLE ABOVE



EXTRUDED DRIP EDGE

OPTIONAL RAIN GUTTER

PANEL SKIN INCH	LL=10	LL=20	LL=30
3"	18'-0"	12'-9"	10'-9"
4"	21'-4"	15'-1"	12'-4"
	22'-0"	17'-4"	14'-3"

HANGER / RAIL FASTENER TO FASCIA, WALL (STUD, MASONRY OR CONC.)

WIND DESIGN	AT 2x FASCIA W/ SIMPSON A35			AT WOOD STUD 16" O.C.			AT MASONRY OR CONCRETE		
	LL=10	LL=20	LL=30	LL=10	LL=20	LL=30	LL=10	LL=20	LL=30
70	A	C	C	E	H	H	J	J	K
90	B	C	C	E	H	H	J	J	K
110	D	C	C	G	H	H	J	J	K

DESCRIPTION OF LAG SCREW

A=1/4"Øx1 1/2"@12" O.C.  
B=3/8"Øx1 1/2"@16" O.C.  
C=3/8"Øx1 1/2"@12" O.C.  
D=7/16"Øx1 1/2"@12" O.C.

E=3/8"Øx2 1/2"@16" O.C.  
F=7/16"Øx2 1/2"@16" O.C.  
G=7/16"Øx2 1/2"@12" O.C.  
H=3/8"Øx2 1/2"@12" O.C.  
J=1/4"Øx1 1/8"@16" A.B.  
K=1/4"Øx1 1/8"@12" A.B.

INSULATED ROOF PANEL TO I.C.C. APPROVED BEARING WALL SYSTEM

INSULATED ROOF PANEL TO I.C.C. APPROVED NON-BEARING WALL SYSTEM

NOTE:  
PANELS SHALL BE ELITE ALUMINUM CORP. I.C.C. ER-5658 OR APPROVED EQUAL

THE PANELS USED WITH THE PATIO COVER STRUCTURES RECOGNIZED IN THIS EVALUATION REPORT MUST HAVE A CURRENT ICC-ES EVALUATION REPORT FOR USE WITH PATIO COVERS COMPLYING WITH APPENDIX CHAPTER 31, DIVISION III, OF THE U.B.C. WHICH MUST BE SUBMITTED WITH ER-2840-P WHEN INSULATED ROOF PANEL IS USED.

NOTE:  
ALL COMPONENTS ARE INTERCHANGABLE UNLESS OTHERWISE NOTED

I.C.C. E.S. EVALUATION REPORT NUMBER ER-2840P

DRAWN BY: K.K. DATE: 1/23/2002 SCALE: NONE REVISED BY: K.K. & D.P.



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INSULATED ROOF PANEL CONNECTIONS

LIVE LOAD = 10, 20 & 30 psf HORIZ. WIND = 70, 90 & 110 MPH

PATIO COVER SYSTEM AS MFG. BY: DURALUM PRODUCTS, INC. 8289 ALPINE AVE. SACRAMENTO, CA 95828 (916) 452-7021 FAX 408-1519 sales@durakum.com

SHEET 30 OF 30 JOB NO. 0670-0674