

DISPLAY THIS CARD ON PRINCIPAL FRONTAGE OF WORK

CITY OF PORTLAND

Please Read Application And Notes, If Any, Attached

PERMIT ISSUED
Permit Number: 051528
OCT 25 2005
CITY OF PORTLAND

This is to certify that WEILAND CATHERINE & DREW WELLMAN JTS/owner
has permission to 1 st flr unit 1 interior Renova...
AT 13 ANDERSON ST

provided that the person or persons, firm or corporation accepting this permit shall comply with all of the provisions of the Statutes of this State and of the Ordinances of the City of Portland regulating the construction, maintenance and use of buildings and structures, and of the application on file in this department.

Apply to Public Works for street line and grade if nature of work requires such information.

Notification of inspection must be given and when permission procured before this building or part thereof is started or closed-in.
FOUR HOUR NOTICE IS REQUIRED.

A certificate of occupancy must be procured by owner before this building or part thereof is occupied.

OTHER REQUIRED APPROVALS
Fire Dept.
Health Dept.
Appeal Board
Other
Department Name

Handwritten signature and date 10/25/05
Director - Building & Inspection Services

PENALTY FOR REMOVING THIS CARD

City of Portland, Maine - Building or Use Permit

389 Congress Street, 04101 Tel: (207) 874-8703, Fax: (207) 874-8716

Permit No: 05-1528	Date Applied For: 10/19/2005	CBL: 013 D010001
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Location of Construction: 13 ANDERSON ST	Owner Name: WEILAND CATHERINE & ANDR	Owner Address: 13 ANDERSON ST	Phone:
Business Name:	Contractor Name: owner	Contractor Address:	Phone:
Lessee/Buyer's Name	Phone:	Permit Type: Alterations - Dwellings	

Proposed Use: 3 Unit Condo/ 1 st flr unit 1 interior Renovations	Proposed Project Description: 1 st flr unit 1 interior Renovations
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Dept: Zoning **Status:** Approved **Reviewer:** Tammy Munson **Approval Date:** 10/25/2005
Note: **Ok to Issue:**

Dept: Building **Status:** Approved with Conditions **Reviewer:** Tammy Munson **Approval Date:** 10/25/2005
Note: **Ok to Issue:**

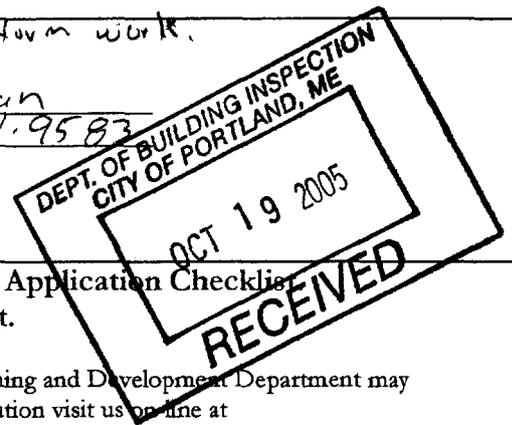
1) Separate permits are required for any electrical, plumbing, or heating.
2) As discussed, hardwired interconnected battery backup smoke detectors shall be installed in all bedrooms, on every level, and in a common area.



General Building Permit Application

If you or the property owner owes real estate or personal property taxes or user charges on any property within the City, payment arrangements must be made before permits of any kind are accepted.

Location/Address of Construction: <u>13 Anderson Street, Portland 04101</u>		
Total Square Footage of Proposed Structure <u>Existing structure = 3,720</u> <u>Unit #) = 1,025</u>		Square Footage of Lot <u>3,132</u>
Tax Assessor's Chart, Block & Lot Chart# Block# Lot# *	Owner: <u>Andrew M Tieman +</u> <u>Catherine Veiland</u>	Telephone: <u>978-884-9583</u>
Lessee/Buyer's Name (If Applicable)	Applicant name, address & telephone: <u>Andrew M Tieman</u> <u>Owner</u>	Cost Of Work: \$ <u>7,500</u> Fee: \$ _____ C of O Fee: \$ _____
Current Specific use: <u>Residential Condominium</u> Proposed Specific use: <u>Same Residential Condominium</u>		
Project description: <u>Renovation of 1st floor condominium unit.</u> <u>See attached for detail.</u>		
Contractor's name, address & telephone: <u>None - owner will perform work.</u>		
Who should we contact when the permit is ready: <u>Drew Tieman</u> Mailing address: _____ Phone: <u>978-884-9583</u>		



Please submit all of the information outlined in the Commercial Application Checklist. Failure to do so will result in the automatic denial of your permit.

In order to be sure the City fully understands the full scope of the project, the Planning and Development Department may request additional information prior to the issuance of a permit. For further information visit us on line at www.portlandmaine.gov, stop by the Building Inspections office, room 315 City Hall or call 874-8703.

I hereby certify that I am the Owner of record of the named property, or that the owner of record authorizes the proposed work and that I have been authorized by the owner to make this application as his/her authorized agent. I agree to conform to all applicable laws of this jurisdiction. In addition, if a permit for work described in this application is issued, I certify that the Code Official's authorized representative shall have the authority to enter all areas covered by this permit at any reasonable hour to enforce the provisions of the codes applicable to this permit.

Signature of applicant: _____	Date: <u>October 19, 2005</u>
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This is not a permit; you may not commence ANY work until the permit is issued.

October 17, 2005

Drew Tieman
13 Anderson Street
Portland, ME 04101

Re: **Structural Design** – 13 Anderson Street Portland, Maine
CME Project No. 05-258

Dear Drew:

We have reviewed the construction documents for the proposed renovations to be constructed at your home on 13 Anderson Street, in Portland, Maine.

We have provided the following recommendations in accordance with requirements of the local building authority in Portland. The International Building Code, IBC 2003 reference is used to determine conformance to the latest building standards. The specifications provide details to be used in construction of the proposed renovations.

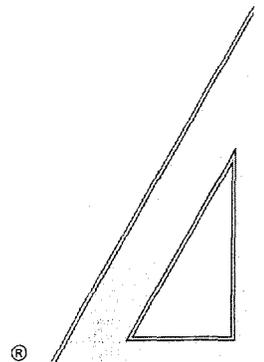
Building Superstructure

Headers over openings in walls:

1. Provide 3½ x 9½ Versa-Lam® F_b=3080 psi DF as indicated on contract documents (Boise Cascade, Eastern Engineered Wood Products)
2. Provide Simpson strong-Tie® Column Post Cap Connector model # PC44 with specified fasteners at engineered wood connection to column post.
3. Provide Simpson strong-Tie® Column Post Base Connector model # EPB44T with specified fasteners at engineered wood column base connection to basement slab.
4. Provide Simpson strong-Tie® angle clip Connector model # A44 to each side of post with specified fasteners at existing wood girder to wood column post connection in basement

**LICENSED
PROFESSIONAL
ENGINEERS**

BUILDING DIAGNOSTICS
INSPECTIONS
ENVIRONMENTAL SERVICES
MAINTENANCE PLANNING
DESIGN



Drew Tieman
10/17/05
Page 2

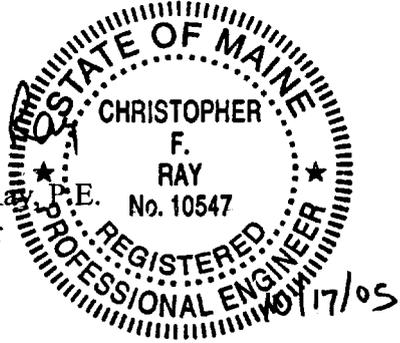
It has been a pleasure working with you on this project. We hope that you will call us if you have further questions concerning this report. In addition, should you need any further assistance in the future we would be glad to be of service to you.

Yours truly,

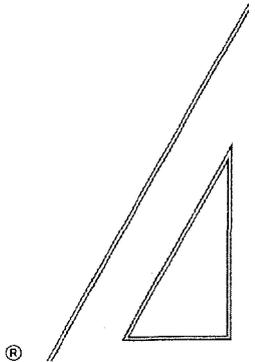
Christopher F. Ray

Christopher F. Ray, P.E.
Project Engineer

CFR/ja



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CODE SUMMARY

Code: International Building Code 2003

Live Loads:

Roof 0 to 200 sf: 20 psf
 200 to 600 sf: 24 - 0.02Area, but not less than 12 psf
 over 600 sf: 12 psf

Floor 40 psf
 Stairs & Exitways 40 psf
 Balcony 60 psf
 Mechanical 100 psf
 Partitions 20 psf

Dead Loads:

Floor 14.5 psf
 Roof 16.3 psf

Roof Snow Loads:

Design Roof Snow load Pg = 46.2 psf
 Flat Roof Snow Load Pf = 46.2 psf
 Snow Exposure Factor Ce = 1.00
 Importance Factor I = 1.00
 Thermal Factor Ct = 1.10
 Ground Snow Load Pg = 60.0 psf
 Rain on Snow Surcharge = 0.0 psf
 Sloped-roof Factor Cs = 1.00

Wind Design Data:

Basic Wind speed 110 mph
 Mean Roof Ht (h) 36.0 ft
 Building Category II
 Importance Factor 1.00
 Exposure Category B
 Enclosure Classif. Enclosed Building
 Internal pressure Coef. +/-0.18
 Directionality (Kd) 0.85

Earthquake Design Data:

Seismic Use Group = I
 Importance Factor I = 1.00
 Mapped spectral response Ss = 37.30 %g
 accelerations S1 = 10.00 %g
 Site Class = C
 Spectral Response Coef. Sds = 0.298
 Sd1 = 0.113
 Seismic Design Category = B
 Basic Structural System = Bearing Wall Systems
 Seismic Resisting System = Light frame walls with shear panels - wood structural panels/sheet steel panels
 Design Base Shear V = 0.046W
 Seismic Response Coef. Cs = 0.046
 Response Modification Factor (R) = 6.5
 Analysis Procedure = Equivalent Lateral-Force Analysis

PC/EPC POST CAPS



A custom connection for post-beam combinations at medium design loads.

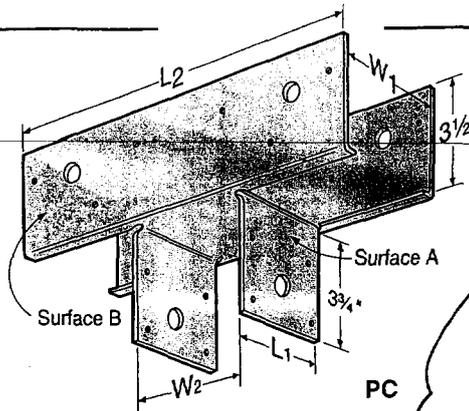
MATERIAL: PC—12 gauge; PC-16—16 gauge

FINISH: Galvanized. Some products available in Z-MAX; see Corrosion-Resistance, page 5.

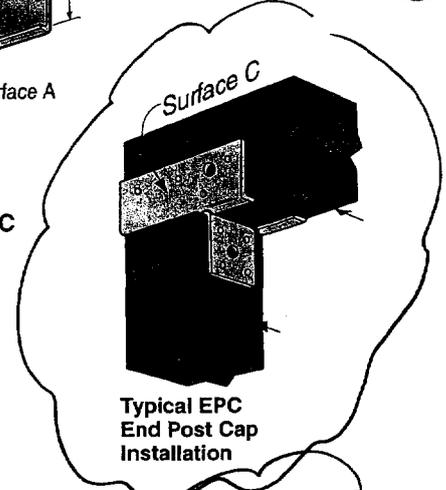
INSTALLATION: • Use all specified fasteners; see General Notes.
• $\frac{3}{16}$ " holes are provided for optional bolting. Loads do not apply to bolted connection.

OPTIONS: • For end conditions, specify EPC post caps, providing dimensions are in accordance with table; see illustration.
• Some PC and EPC models are available in rough sizes.
• For heavy duty applications, see also CC series.

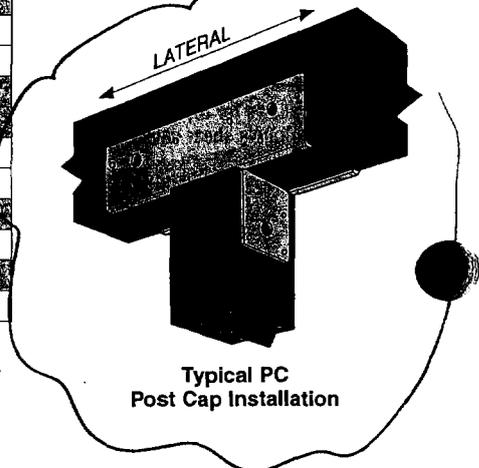
CODES: BOCA, ICBO SBCCI NER-443; City of L.A. RR 25149.



PC



Typical EPC End Post Cap Installation



Typical PC Post Cap Installation

Model No.	Post Size	DIMENSIONS						Fasteners, each side			Allowable Load			
		W ₁	W ₂	L ₁	L ₂	L ₃	Surface A	Surface B	Surface C	Uplift Avg. Uplift	Uplift PC/EPC (133)	Uplift EPC (160)	Lateral PC (133/160)	Lateral EPC (133/160)
PC44-16	4x4	3 $\frac{3}{8}$	3 $\frac{3}{8}$	2 $\frac{5}{8}$	11	7 $\frac{1}{8}$	4-16d	6-16d	4-16d	3433	1000	1000	925	1000
PC44	4x4	3 $\frac{3}{8}$	3 $\frac{3}{8}$	2 $\frac{5}{8}$	11	7 $\frac{1}{8}$	4-16d	6-16d	4-16d	4933	1470	1700	925	1070
PC46-16	4x6	3 $\frac{3}{8}$	5 $\frac{1}{2}$	2 $\frac{5}{8}$	13	9 $\frac{1}{2}$	4-16d	6-16d	4-16d	3433	1000	1000	925	1000
PC46	4x6	3 $\frac{3}{8}$	5 $\frac{1}{2}$	2 $\frac{5}{8}$	13	9 $\frac{1}{2}$	4-16d	6-16d	4-16d	4933	1470	1700	925	1070
PC48-16	4x8	3 $\frac{3}{8}$	7 $\frac{1}{2}$	2 $\frac{5}{8}$	15	11 $\frac{1}{4}$	4-16d	8-16d	6-16d	3433	1000	1000	1475	1285
PC48	4x8	3 $\frac{3}{8}$	7 $\frac{1}{2}$	2 $\frac{5}{8}$	15	11 $\frac{1}{4}$	4-16d	8-16d	6-16d	4933	1470	1700	2075	1610
PC64-16	4x6	5 $\frac{1}{2}$	3 $\frac{3}{8}$	4 $\frac{1}{8}$	11	7 $\frac{1}{8}$	4-16d	6-16d	4-16d	3433	1000	1000	925	1000
PC64	4x6	5 $\frac{1}{2}$	3 $\frac{3}{8}$	4 $\frac{1}{8}$	11	7 $\frac{1}{8}$	4-16d	6-16d	4-16d	4933	1470	1700	925	1070
PC66-16	6x6	5 $\frac{1}{2}$	5 $\frac{1}{2}$	4 $\frac{1}{8}$	13	9 $\frac{1}{4}$	4-16d	6-16d	6-16d	3433	1000	1000	925	1285
PC66	6x6	5 $\frac{1}{2}$	5 $\frac{1}{2}$	4 $\frac{1}{8}$	13	9 $\frac{1}{4}$	4-16d	6-16d	6-16d	4933	1470	1700	925	1610
PC84	4x8	7 $\frac{1}{2}$	3 $\frac{3}{8}$	6 $\frac{1}{8}$	11	7 $\frac{1}{8}$	4-16d	6-16d	6-16d	4933	1470	1700	925	1610
PC86	6x8	7 $\frac{1}{2}$	3 $\frac{3}{8}$	6 $\frac{1}{8}$	11	7 $\frac{1}{8}$	4-16d	6-16d	6-16d	4933	1470	1700	925	1610
PC88	8x8	7 $\frac{1}{2}$	7 $\frac{1}{2}$	6 $\frac{1}{8}$	15	11 $\frac{1}{4}$	4-16d	8-16d	6-16d	4933	1470	1700	2075	1610

1. Allowable loads have been increased 33% and 60% for earthquake or wind loading with no further increase allowed; reduce for other load durations according to the code.
2. Lateral loads are in the direction of the beam's axis, as shown.
3. Allowable loads are for nails only.

4. Uplift loads do not apply to splice conditions.
5. Spliced conditions must be detailed by the specifier to transfer tension loads between spliced members by means other than the column cap.

APS ALUMINUM POST STANDOFF

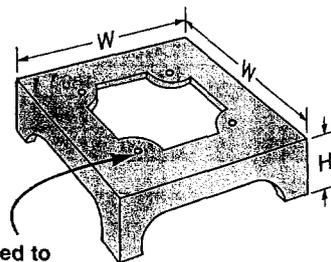
The APS standoff height above concrete or masonry floors or decks reduces decay at post and column ends.

MATERIAL: Cast aluminum

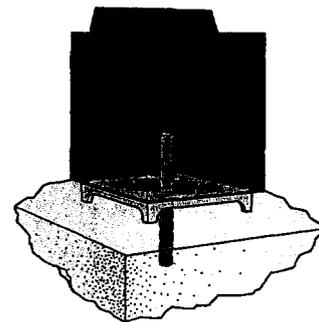
INSTALLATION: • See General Notes.

- Attach to post before installation using four nail holes.
- Embed rod into concrete and extend into wood member.
- For nominal or rough sawn lumber.

Model No.	Post/Column Size	Dimensions W ₁	H	Allowable Uplift (Avg)
APS4	4x4	3 $\frac{3}{4}$	1	780
APS5	5x5	4 $\frac{3}{4}$	1	1095
APS6	6x6	5 $\frac{3}{4}$	1	1095
APS8	8x8	8	1 $\frac{1}{4}$	2655
APS10	10x10	9 $\frac{3}{4}$	1 $\frac{3}{4}$	5355
APS12	12x12	11 $\frac{3}{4}$	1 $\frac{3}{4}$	8550



APS6 (others similar)



Typical APS5 Installation

1. Loads may not be increased for short-term loading.
2. The download is calculated based on the APS bearing area and concrete strength of 2500 psi.

Simpson's hidden standoff post base for Viga posts. The PBV6 fits a 6" or 8" diameter viga post, and the PBV10 fits a 10" or 12" diameter post.

MATERIAL: 14 ga **FINISH:** Galv. or textured powder-coated flat black paint; check factory.

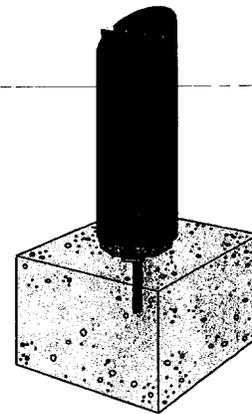
INSTALLATION: • **Footing installation:** Drill a 3/4" hole 10" deep min. into the center of the viga post. Clean out dust. Half fill the hole with SET epoxy. Insert the all-thread rod, and allow epoxy to set. Slip PBV over the rod and secure to the post.

- Drill a 3/4" hole 5" deep minimum into the center of the footing. Clean out dust. Half-fill the hole with SET epoxy. Insert the all-thread rod into the hole.
- **4" minimum slab installation:** Drill hole into viga post as noted above. Align post surface with edge of slab. Mark center of post on slab. Drill a 3/4" hole 3 1/2" deep into slab. Half fill the hole with SET epoxy. Insert the all-thread rod into hole.
- Not recommended for non-top-supported installation such as fences.

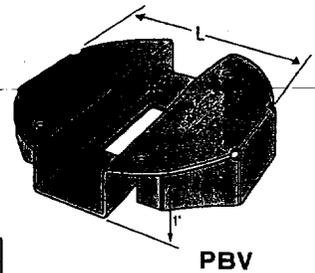
Model No.	Nail	Uplift (133)	Avg. Uplift (160)	Down (100)
PBV6	5/4 4-SDS 1/4x3	1880	2985	9250
PBV10	9/16 4-SDS 1/4x3	2815	2985	15865

1. Uplift loads are increased 33% and 60% for earthquake or wind loading; no further increase allowed. Reduce by 33% and 60% for normal loading.

2. Download may not be increased for short-term loading.
3. Download based on 700 psi wood bearing for Ponderosa Pine.
4. Min edge dist. for table loads is 4 3/4".
5. For 4" slab, the allowable uplift load is 1580 lbs with 2 3/4" minimum edge distance.



Typical PBV6 Installation



US Patent D 399,013

The EPB44T fits 4x posts and beams. Adjustable up and down.

MATERIAL: 12 gauge base, threaded rod support 5/8" x 5" (shipped assembled)

FINISH: Base—G60 galvanized, threaded rod—zinc plate

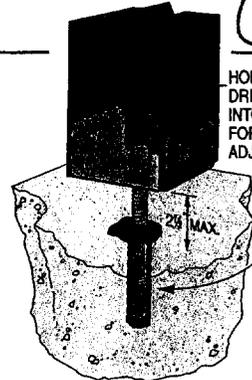
INSTALLATION: • **Secured with epoxy:** Drill a 3/4" hole 2 1/2" deep min. into the concrete. Half fill the hole with epoxy. Insert the EPB44T and adjust to the desired height. To adjust after the epoxy cures, drill a hole in the center of the post and turn the post base up or down to the desired height.

- **Supported by a nut:** Drill a 3/4" hole 2 1/2" deep min. into concrete. Install a 5/8-11 NC nut and cut washer on the threaded rod. (Nut and washer not supplied). Insert EPB44T into the hole and adjust to the desired height.
- Embedded in wet concrete: Embed 5/8" rod minimum 4" embedment.
- Minimum sidecover is 3" from the center of the threaded rod.
- Fully engage at least three threads in the base.
- Not recommended for non-top-supported installations such as fences.

CODE: BOCA, ICBO, SBCCI NER-432.

Model No.	Nail	Uplift (133)	Avg. Uplift (160)	Down (100)
EPB44T	6-16d	3703	1130 1140	410 3275

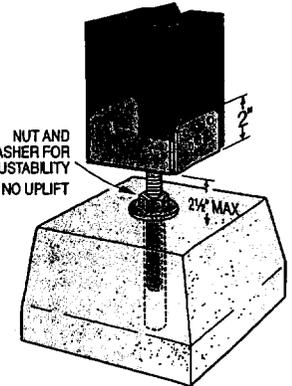
1. Loads may not be increased for short term loading.
2. Uplift & lateral loads require the threaded rod to be set in wet concrete or attached to cured concrete with epoxy.
3. Specifier to design concrete for shear capacity.



Typical EPB44T Installed with Epoxy

HOLE DRILLED INTO POST FOR ADJUSTABILITY

EPOXY OR CAST-IN-PLACE FOR UPLIFT



Typical EPB44T installed with nut and washer (not supplied)

U.S. Patent 5,666,774

Catalog C-2001 © Copyright 2000 SIMPSON STRONG-TIE CO., INC.

The EPB44A is a single-piece, non-welded elevated post base.

MATERIAL: EPB44A—14 ga.; others—12 ga. base plate, 1 1/8" OD x 8" pipe

FINISH: EPB44A—Galvanized; all others—Simpson gray paint

INSTALLATION: • Use all specified fasteners. See General Notes.

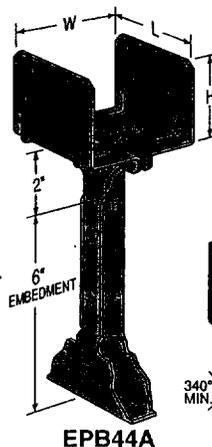
- Allows 1" to 2 1/2" clearance above concrete, 2" for EPB44A. Insert EPB into concrete after screeding.
- Not recommended for non-top-supported installations such as fences.

OPTIONS: 12" pipe available for EPB44, 46, 66; specify "-12" after model number.

CODES: BOCA, ICBO, SBCCI NER-393; City of L.A. RR 24818 (EPB).

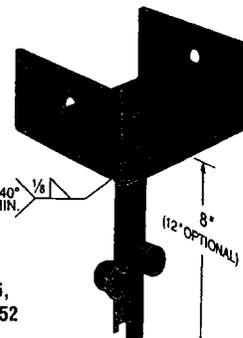
Model No.	W	H	Nail	Allowable Loads					
				Uplift (133)	Avg. Uplift (160)	Down (100)	Uplift (133)	Down (100)	
EPB44A	3 3/8	3	2 1/2	8-16d	3600	1100	815	935	2670
EPB44	3 3/8	3 1/2	2 1/2	8-16d	3600	800	985	1135	3465
EPB46	5 1/2	3 3/8	3	8-16d	3600	800	985	1135	3465
EPB66	5 1/2	5 1/2	3	12-16d	—	1500	985	1135	3465

1. Loads may not be increased for short-term loading.
2. EPB44 and EPB46 have extra nail holes; only eight must be filled to achieve table loads.
3. Specifier to design concrete for shear capacity.



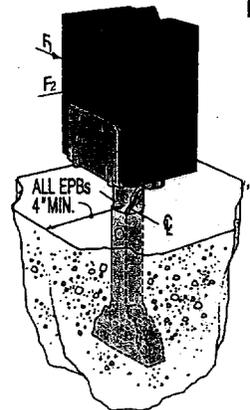
EPB44A

U.S. Patent 4,995,206, Canada Patent 2,031,552



EPB66 (EPB44 and EPB46 similar)

EPB ELEVATED POST BASES



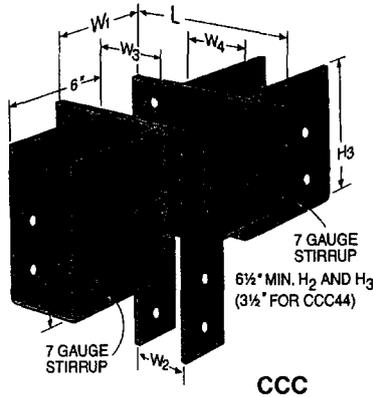
Typical EPB44A Installation

There are cost-effective alternatives for replacing column caps by using a combination of connectors. Here are some examples. Designer must specify the options required.

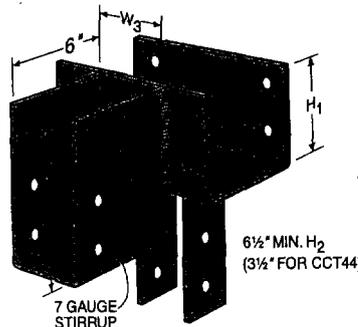
For more information, request Form T-CC and the Product Worksheet.
NOTE: The side cap will be welded flush with the top of the main cap.

Order each connector separately.

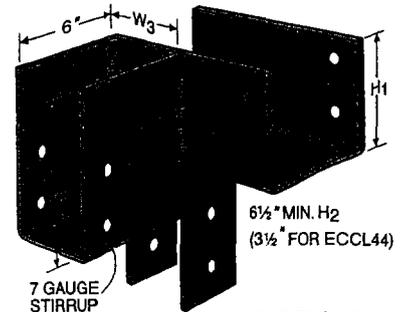
Instead of the column caps, use these connector combinations.



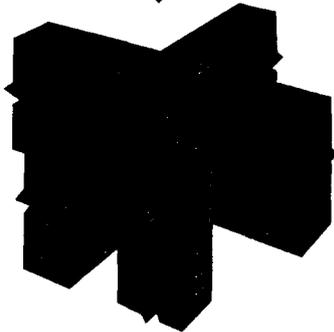
CCC



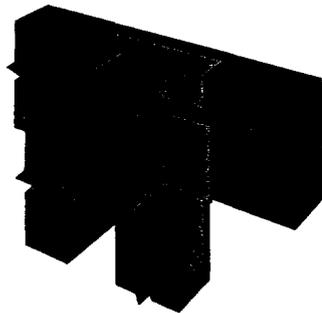
CCT



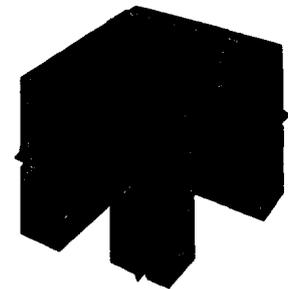
ECCLL (for left), shown above. Order ECCLR for right condition.



CC and WD



CC and GLT



ECC and HW

CCQ/ECCQ COLUMN CAPS

This design uses SDS screws to provide faster installation and maintain the wood cross section. The SDS screws provide for a lower profile compared to standard through bolts.

MATERIAL: CCQ5/8 and ECCQ5/8—3 gauge; all others—7 gauge.

FINISH: Simpson gray paint.

INSTALLATION: Fasteners provided. See General Notes.

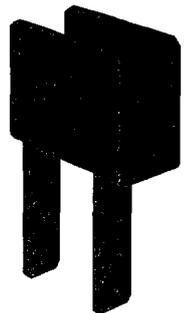
OPTIONS: Straps may be rotated.

CODE: Submitted to ICBO 10/99.

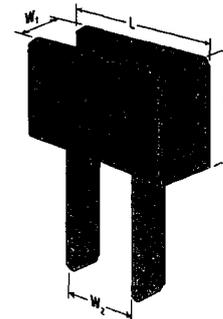
Model No.	Dimensions					No. of Simpson SDS Wood Screws		Allowable Loads			
	W ₁	W ₂	L		H	Beam	Post	Uplift CCQ/ECCQ		Down	
			CCQ	ECCQ				(133)	(160)	CCQ (100)	ECCQ (100)
CCQ3/4-4-SDS2	3/4	3/8	11	7 1/2	6 1/2	16	14	5955	7145	19250	6125
CCQ3/4-6-SDS2	3/4	5/2	11	7 1/2	6 1/2	16	14	5955	7145	19250	9625
CCQ44-SDS2	3/8	3/8	7	5 1/2	4	14	14	5955	7145	15310	7655
CCQ46-SDS2	3/8	5/2	11	8 1/2	6 1/2	16	14	5955	7145	24060	12030
CCQ5/8-4-SDS2	5/8	3/8	13	9 1/2	8	16	14	5955	7145	37310	10045
CCQ5/8-6-SDS2	5/8	5/2	13	9 1/2	8	16	14	5955	7145	37310	15785
CCQ5/8-8-SDS2	5/8	7 1/2	13	9 1/2	8	16	14	5955	7145	37310	21525
CCQ66-SDS2	5/8	5/2	11	7 1/2	6 1/2	16	14	5955	7145	37810	18905



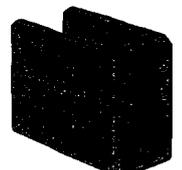
CCQ46-SDS2 Typical Installation



ECCQ46-SDS2



CCQ46-SDS2



ECCQ46-SDS2

- ECCQ44 has only 12-SDS 1/2"x2 into the beam. The uplift load is 5105 at 133 and 6125 at 160.
- Downloads are determined using F_{cL} equal to: 560 psi for glulam sizes and 625 psi for all others; reduce where end bearing value of post, L/R of post, or other criteria are limiting.
- Spliced conditions must be detailed by the specifier to transfer tension loads between spliced members by means other than the column cap.
- Uplift loads do not apply to splice conditions.

12 clips secure 2x4 flat blocking between joists or trusses to support sheathing.

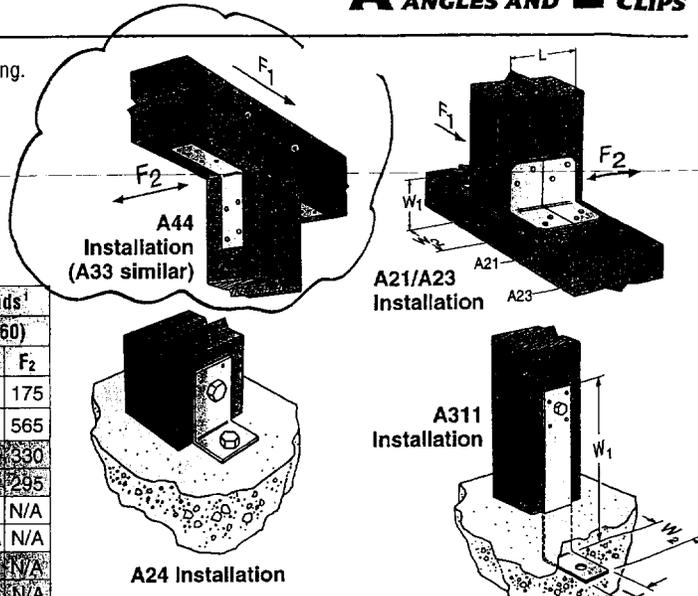
MATERIAL: Z clips—see table. A21 and A23—18 ga.; all other A angles—12 ga.

FINISH: Galvanized

INSTALLATION: • Use all specified fasteners. See General Notes.

• Z clips do not provide lateral stability. Do not walk on stiffeners or apply load until diaphragm is installed and nailed to stiffeners.

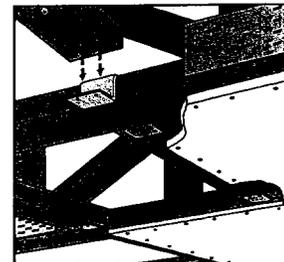
CODES: BOCA, ICBO, SBCCI NER-421 (except A33, A44); City of L.A. RR 25076 (except A33, A44); Dade Co. FL 99-0623.04.



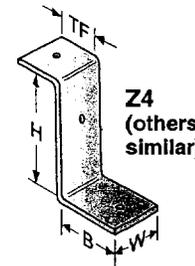
Model No.	Dimensions			Fasteners				Avg Uplift F ₂	Allowable Loads ¹			
	W ₁	W ₂	L	Base		Post			(133) ²		(160)	
				Bolts	Nails	Bolts	Nails		F ₂	F ₁	F ₂	F ₂
A21	2	1½	1¾	—	2-10dx1½	—	2-10dx1½	540	245	175	290	175
A23	2	1½	2¾	—	4-10dx1½	—	4-10dx1½	1767	485	485	585	565
A33	3	3	1½	—	4-10d	—	4-10d	2635	625	600	750	330
A44	4¾	4¾	1½	—	4-10d	—	4-10d	2490	625	600	750	295
A66	5½	5½	1½	2-¾	—	2-¾	—	N/A	N/A	N/A	N/A	N/A
A88	8	8	2	3-¾	—	3-¾	—	N/A	N/A	N/A	N/A	N/A
A24	3¾	2	2½	1-½	—	1-½	2-10d	N/A	N/A	N/A	N/A	N/A
A311	11	3¾	2	1-½	—	1-½	4-10d	N/A	N/A	N/A	N/A	N/A

Model No.	Ga	Dimensions				Fasteners (Total)	Avg Uplift	Allowable Download (125)
		W	H	B	TF			
Z2	20	2½	1½	1¾	1¾	4-10dx1½	1507	465
Z4	12	1½	3½	2½	1¾	2-16d	1450	465
Z6	12	1½	5½	2	1¾	2-16d	1517	485
Z28	28	2½	1½	1¾	1¾	10dx1½	—	—
Z38	28	2½	2½	1¾	1¾	10dx1½	—	—
Z44	12	2½	3½	2	1¾	4-16d	2800	865

- Z28 and Z38 do not have nail holes. Fastener quantities are as required.
- Allowable loads have been increased 25% for roof loading (Z clips), 33% and 60% for earthquake or wind loading (A angles); no further increase allowed; reduce for other load durations according to the code.
- Z4 and Z6 loads apply with a nail into the top and a nail into the seat.



Typical Z2 Installation



Z4 (others similar)

SP/SPH/RSP4 STUD PLATE TIES

The RSP4 is a reversible stud plate tie with locating tabs, which aid placement on double top plates or a single bottom plate.

MATERIAL: SPH—18 gauge, all others—20 gauge

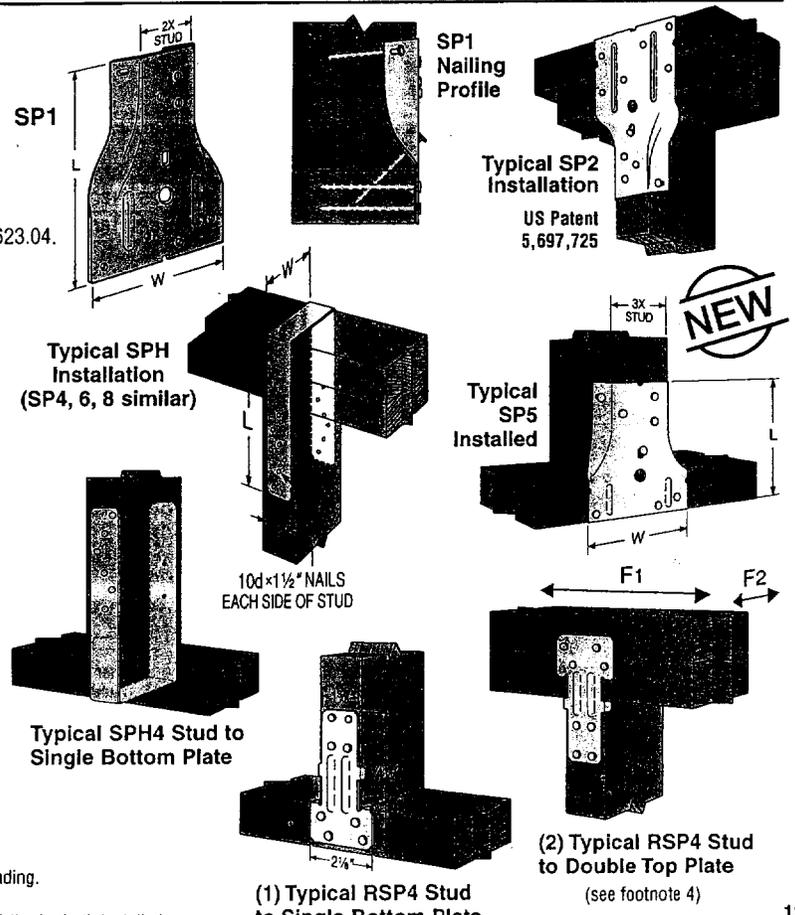
FINISH: Galvanized

INSTALLATION: • Use all specified fasteners; see General Notes.

• SP—one of the 10d common stud nails is driven at a 45° angle through the stud into the plate.

CODES: BOCA, ICBO, SBCCI NER-432, NER-443, NER-499; SBCCI 9603A; City of LA RR 25318 (RSP4); Dade Co. FL 99-0623.04.

Model No.	Dimensions		Fasteners		Avg Uplift	Allowable Uplift Loads	
	W	L	Stud ¹	Plate		DF/SP	
						(133) ²	(160) ²
SP1	3½	5½	6-10d	4-10d	1950	585	585
SP2	3½	6¾	6-10d	6-10d	3300	890	1065
SP3	4½	6¾	6-10d	6-10d	3467	890	1065
SP4	3¾	7½	6-10dx1½	—	2917	735	885
SP5	4½	5½	6-10d	4-10d	1950	585	585
SP6	5½	7¾	6-10dx1½	—	2917	735	885
SP8	7¾	8½	6-10dx1½	—	2917	735	885
SPH4	3¾	8¾	10-10dx1½	—	3993	1240	1240
SPH6	5½	9¾	12-10dx1½	—	4470	1360	1360
SPH8	7¾	8¾	10-10dx1½	—	3993	1240	1240
SPH8	7¾	8¾	12-10dx1½	—	4470	1360	1360
RSP4 (1)	2½	4½	4-8dx1½	4-8dx1½	1032	315	315
RSP4 (2)	2½	4½	4-8dx1½	4-8dx1½	1445	450	450



- SP1 and SP2: drive one stud nail at an angle through the stud into the plate to achieve the table load (see illustration).
- Allowable loads have been increased 33% and 60% for earthquake or wind loading; no further increase allowed. Reduce by 33% and 60% for normal loading.
- RSP4—see Installation details (1) and (2) for reference.
- RSP4 F2 is 280 lbs (installation 1) and 305 lbs (installation 2). F1 load is 210 lbs for both installations.
- Maximum load for SPH in Southern Yellow Pine is 1490 lbs.

CC/ECC/ECCU COLUMN CAPS



The industry standard column cap. Precision factory gang-punched holes speed installation on this product line.

MATERIAL: CC3¼, CC44, CC46, CC64, CC66, CC68, CC6-7—7 gauge; all others—3 gauge

FINISH: Simpson gray paint; may be ordered HDG; CCO—no finish.

INSTALLATION: • Use all specified fasteners. See General Notes.

• Bolt holes shall be a minimum of ¼" to a maximum of ⅜" larger than the bolt diameter (per 1997 NDS, section 8.1.2.1.).

OPTIONS: • Straps may be rotated 90° where $W_1 > W_2$ (see illustration).

• For special, custom, or rough cut lumber sizes, provide dimensions. An optional W_2 dimension may be specified with any column size given (note that the W_2 dimension on straps rotated 90° is limited by the W_1 dimension).

• Column caps with W_1 , L , H_1 , and hole schedules different from the table may be special ordered. Provide a drawing to ensure accuracy.

CCO/ECCO—Column cap only may be ordered for field-welding to pipe or other columns. No loads apply. **CCO and ECCO dimensions are the same as CC/ECC.**

CCOB—Any two CCOs may be specified for back-to-back welding to create a cross beam connector. Use the table loads; the load is no greater than the lesser element employed.

ECCU—For uplift at end conditions, see Technical Bulletin ECCUP.

ECC—For end conditions, specify ECC. Uplift loads do not apply to the ECC. ECC9 and ECC10 use four beam bolts.

CCC/CC/ECC/L—Cross Column Cap/T Column Cap/L Column Cap. 7 gauge stirrups may be welded to column cap sides. Uplift loads do not apply to side stirrups. **ECC/L has no uplift loads.** To order, add the appropriate letters and dimensions to the model number in the table; see examples.

The following criteria apply:

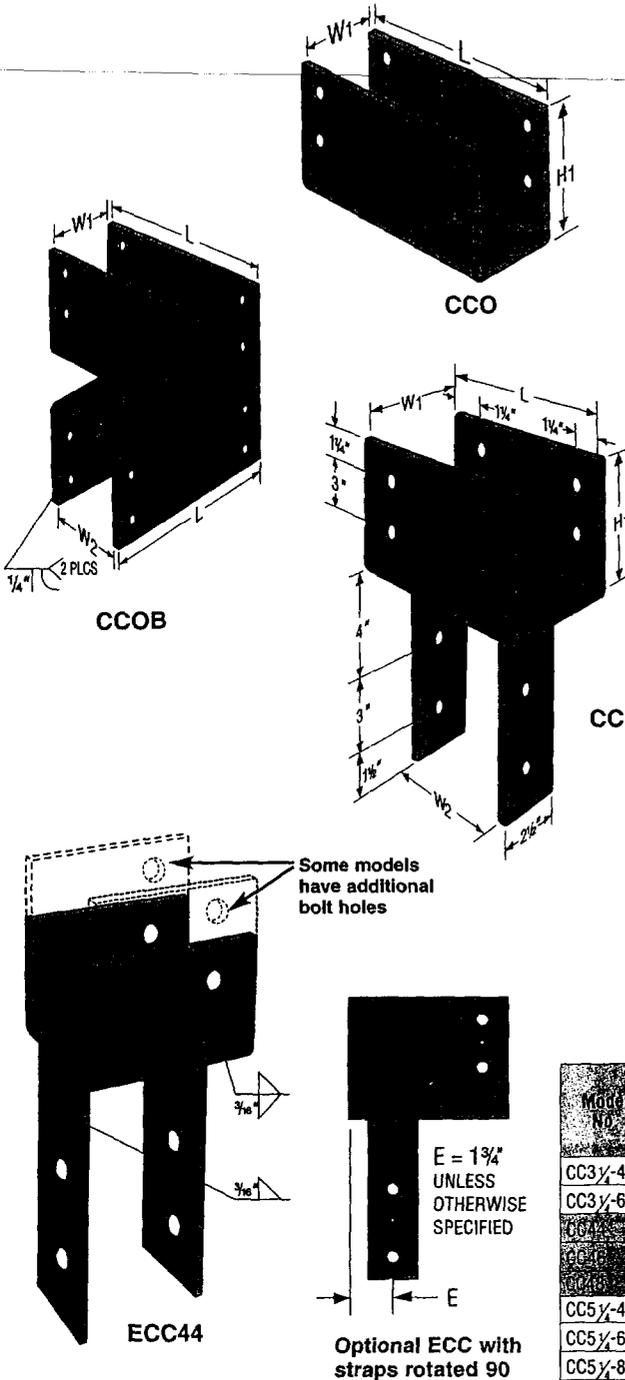
1. The side stirrup maximum allowable download cannot exceed 40% of the download in the table for the unmodified product, and cannot exceed 10,665 lbs. The sum of the loads cannot exceed the table load. The column width in the direction of the beam width must be the same as the beam width: W_1 .

2. Specify the stirrup height from the top of the cap. The minimum H_2/H_3 for the stirrup is $6\frac{1}{2}$ " ($3\frac{1}{2}$ " for 44s).

3. The L dimension may vary depending on W_3 or W_4 .

Ordering examples: A CC66 with $W_3 = 5\frac{1}{2}$ ", H_2 and $H_3 = 6\frac{1}{2}$ " is a CC66 column cap with $5\frac{1}{2}$ " beams on each side with all beam seats flush. An ECC/L66 with $W_3 = 3\frac{3}{8}$ ", $H_2 = 7\frac{1}{2}$ " is an ECC66 end column cap with a 4x beam on the right side (specify L instead of R for left side stirrup) and stirrup seat 1" below the cap seat.

CODES: ICBO 1211; City of L.A. RR 22086.



Model No.	Dimensions					Fasteners				Allowable loads			
	W ₁	W ₂	L		H ₁	Beam		Post		Uplift		Down	
			CC	ECC		Qty	Dia.	Qty	Dia.	CC (133)	CC (160)	CC (100)	ECC (100)
CC3¼-4	3¼	3¾	11	7½	6½	4	¾	2	¾	3035	3170	19250	6125
CC3¼-6	3¼	5½	11	7½	6½	4	¾	2	¾	3035	3170	19250	9625
CC44	3½	3½	7	5½	4	¾	2	¾	¾	220	1465	16310	
CC46	3½	5½	11	8½	6½	4	¾	2	¾	2330	2800	24060	
CC64	5½	7½	11	8½	6½	4	¾	2	¾	2330	2800	24060	
CC5¼-4	5¼	3¾	13	9½	8	4	¾	2	¾	6305	6690	37310	10045
CC5¼-6	5¼	5½	13	9½	8	4	¾	2	¾	6275	6690	37310	15785
CC5¼-8	5¼	7½	13	9½	8	4	¾	2	¾	6275	6690	37310	21525
CC66	5½	3¾	11	7½	6½	4	¾	2	¾	3365	3660	37810	
CC68	5½	5½	11	7½	6½	4	¾	2	¾	3365	3660	37810	
CC66	5½	7½	11	9½	6½	4	¾	2	¾	3365	3660	37810	24060
CC6-7¼	5½	7½	11	9½	6½	4	¾	2	¾	3365	3660	37810	24060
CC7¼-4	7½	3¾	13	10½	8	4	¾	2	¾	6260	7510	68250	18375
CC7¼-6	7½	5½	13	10½	8	4	¾	2	¾	6320	7585	68250	28875
CC7¼-7½	7½	7½	13	10½	8	4	¾	2	¾	6320	7585	68250	36750
CC78	6¾	3¾	13	10½	8	4	¾	2	¾	6270	7525	49140	18300
CC78	6¾	5½	13	10½	8	4	¾	2	¾	6270	7525	49140	20900
CC78	6¾	7½	13	10½	8	4	¾	2	¾	6270	7525	49140	25315
CC86	7½	5½	13	10½	8	4	¾	2	¾	6200	7440	54600	23100
CC88	7½	7½	13	10½	8	4	¾	2	¾	6200	7440	54600	31500
CC96	8¾	5½	13	10½	8	4	¾	2	¾	6260	7515	63700	26950
CC98	8¾	7½	13	10½	8	4	¾	2	¾	6260	7515	63700	36750
CC106	9½	5½	13	10½	8	4	¾	2	¾	6260	7515	69160	29260

1. Post sides are assumed to lie in the same vertical plane as the beam sides.
2. Loads may not be increased for short-term loading.
3. Downloads are determined using $F_c \perp$ equal to: 560 psi for glulam sizes and CC86, CC88 and CC106; 750 psi for 7½" size; 625 psi for all others; reduce where end bearing value of post, L/R of post, or other criteria are limiting.
4. Uplift loads have been increased 33% and 60% for earthquake or wind loading; reduce for other loading conditions in accordance with the code. Uplift loads are limited by the beam shear capacity except CC76, CC78, and CC96 through CC106.
5. ECC downloads assume a post of $W_1 \times W_2$.
6. Spliced conditions must be detailed by the specifier to transfer tension loads between spliced members by means other than the column cap.
7. Uplift loads do not apply to splice conditions.

October 19, 2005

Dear Inspector:

Please consider the attached Building Permit Application to renovate a 1st floor condominium unit at 13 Anderson Street in Portland's East Bayside neighborhood.

I am seeking a permit to modify four structural elements of the unit, as I believe these changes will improve the unit's functionality and appeal. These four changes are:

- **Increase the size of the opening between the living room and the dining room to improve flow through the space.** This requires spanning 8' along a secondary supporting wall (supports wall weight from units 2&3). The attached analysis indicates that a 3½" x 9½" header beam (*H1*) will provide adequate support, assuming proper connections and that any necessary supports are made from the post-points to a foundational element. While not indicated on the drawings, I have reviewed with my engineer consultant concepts for providing temporary supports necessary during the installation of the header beam. (3½" x 9½")
✓
- **Modify the entranceway so that entry is made into living space, rather than a hallway.** This requires spanning 7' along the central bearing wall. The attached structural analysis indicates that a 3½" x 9½" header beam (*H2*) will provide adequate support, assuming proper connections and that any necessary supports are made from the post-points to a foundational element. While not indicated on the drawings, I have reviewed with my engineer consultant concepts for providing temporary supports necessary during the installation of the header beam.
- **Modify the current split-kitchen to allow for a one-room kitchen and ½ bath with stacked laundry.** This requires spanning 7' along the central bearing wall. However, current conditions suggest that a header exists across this span. Once this area has been demolished, I will be able to accurately ascertain the current construction method and elements and review these with my engineering consultant to ensure consistency with the attached plans.
- **Remove the secondary supporting wall between the kitchen and dining room to incorporate the kitchen into the living space and increase the utility of both spaces.** This requires spanning 12' along a secondary supporting wall (supports wall weight from units 2&3). The attached analysis indicates that a 3½" x 9½" header beam (*H4*) will provide adequate support, assuming proper connections and that any necessary supports are made from the post-points to a foundational element. While not indicated on the drawings, I have reviewed with my engineer consultant concepts for providing temporary supports necessary during the installation of the header beam.

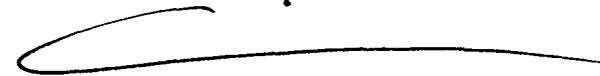
In addition to the attached structural analysis provided by Christopher F. Ray, PE of Criterium Mooney Engineers, I have included:

- a completed General Building Permit Application;
- a survey of the subject property;
- an enlarged floor plan and elevations noting the proposed changes in the entranceway/living room space; and
- an enlarged floor plan and elevations noting the proposed changes in the kitchen space

While not noted in the documents, I wanted to assure you that any plumbing and electrical modifications will be performed by licensed master plumbers and electricians as required by law. In addition, all common walls will provide the fire barrier required by law, including proper fire doors.

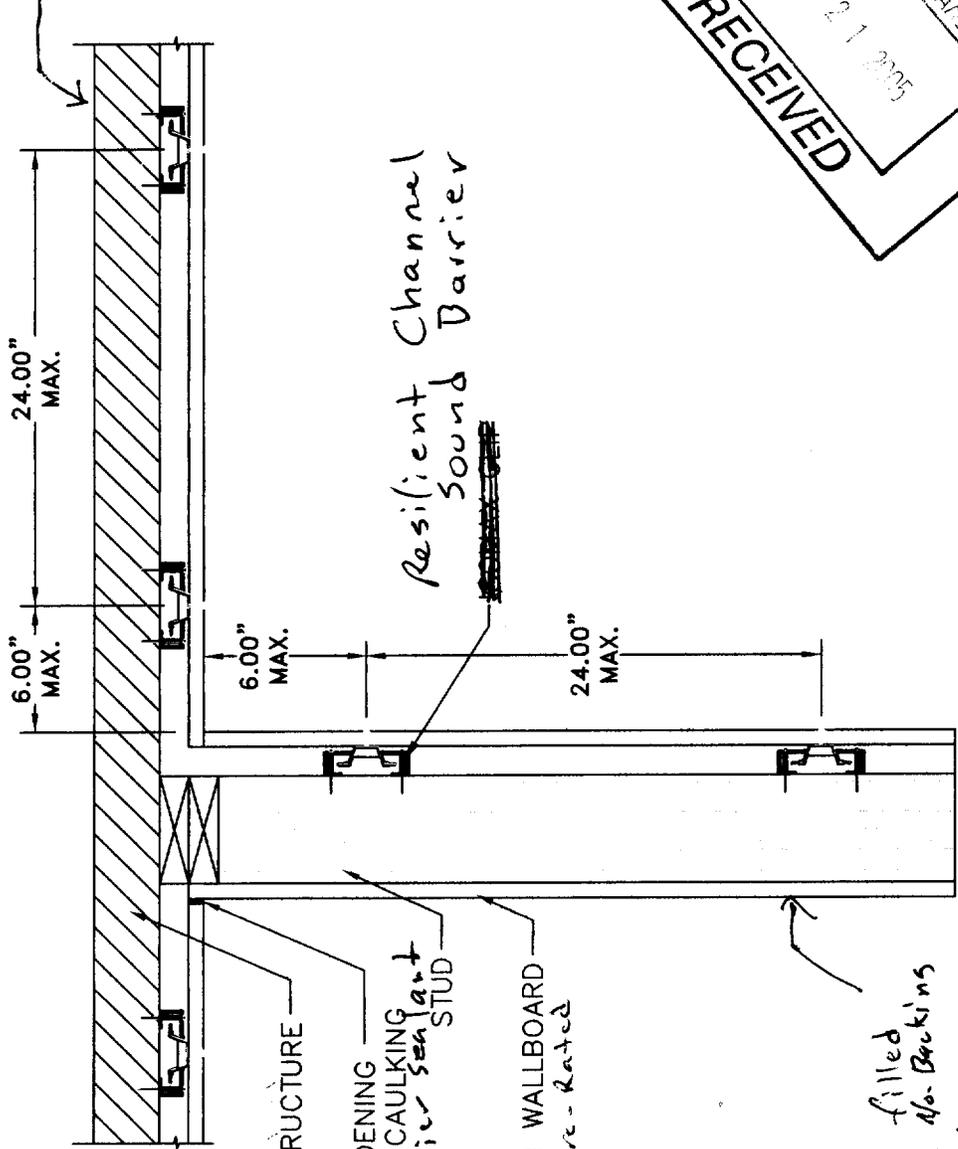
As this is my first building permit application with the City of Portland, I appreciate your patience in working with me. I will of course be available for a review of these plans or to answer any questions. Please reach me at 978.884.9583 which is an out-of-area cell phone that I use as my primary phone or weiman@maine.rr.com.

Thank you for your consideration,



Andrew M Tieman
Weiman Enterprises, LLC
weiman@maine.rr.com
978.884.9583

Bays Filled with No-Backings Insulation.



CEILING STRUCTURE

NON HARDENING
RESILIENT CAULKING
Fire-Barrier Sealant
STUD

GYPSUM WALLBOARD
5/8" Fire-Rated

Bays filled with No-Backings Insulation

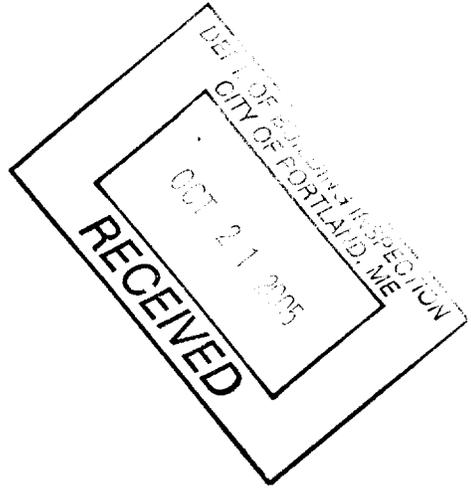
Resilient Channel
Sound Barrier

24.00" MAX.

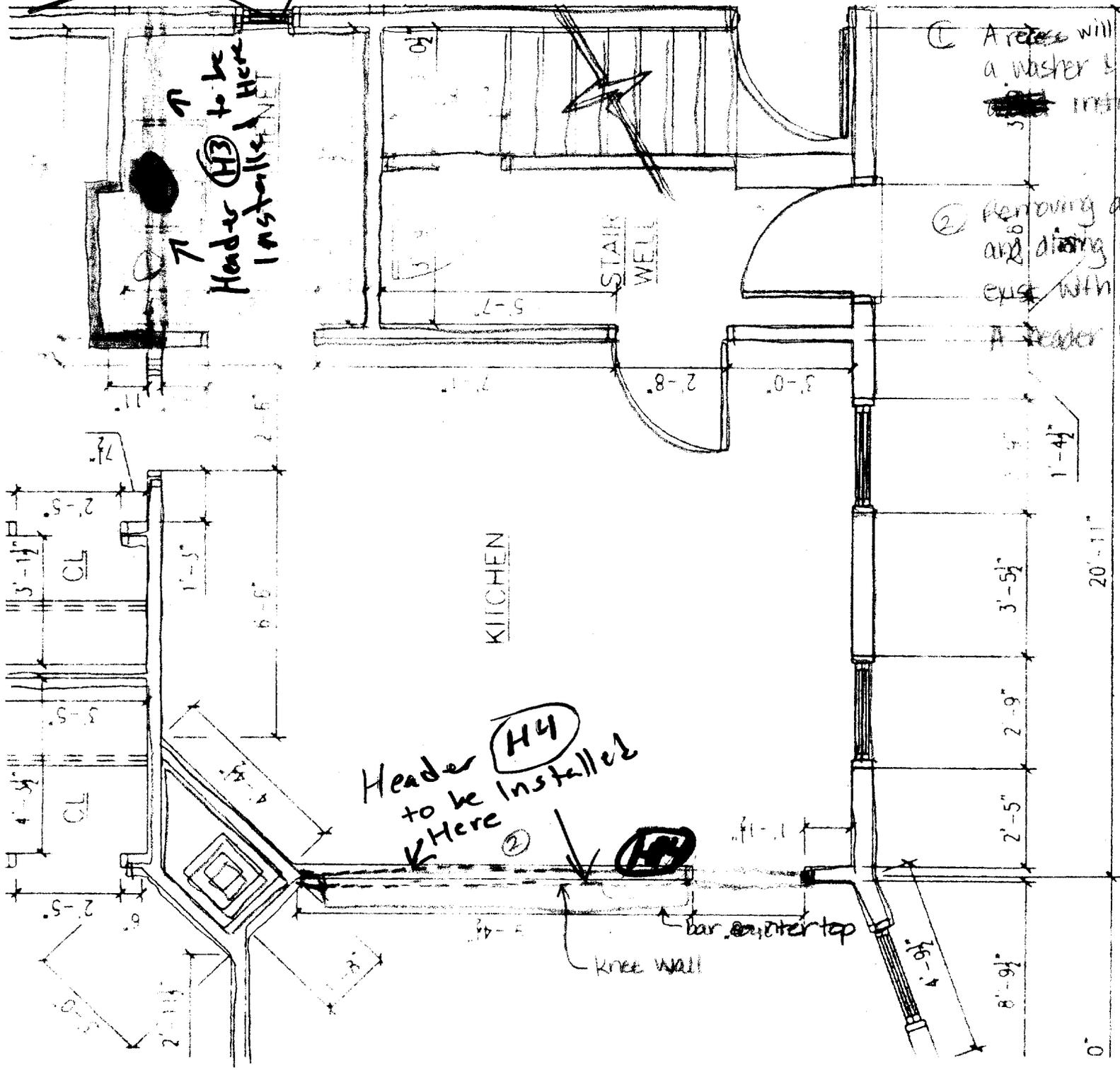
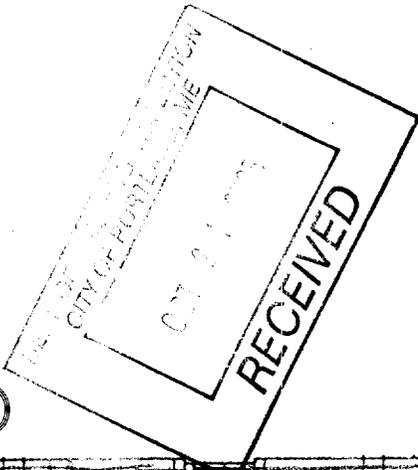
6.00" MAX.

6.00" MAX.

24.00" MAX.



WALL/CEILING SECTION



Header H3 to be installed here

Header H4 to be installed here

1 A recess with a washer

2 Removing a and dining exist with A header

KITCHEN

STAIR WELL

bar counter top

knee wall