

207	y of Portland, Maine - Congress Street, 04101	Tel: (207) 874-8703	5, Fax: (207) 874-871	6 08	1106	111	2010	2	012 H0	14001
	ation of Construction:	Owner Name:		Owner Addr	ess:		-	<u> </u>	Phone:	
126	5 NORTH ST	WOJCIK RAY	YMOND T & ZETTA	912 SCHC	OL ST					
Busi	ness Name:	Contractor Name	:	Contractor A	ddress:				Phone	
		Hills Pond Bu	ilders	912 Schoo	l Street	Perki	ns Twp		20758525	538
Less	ee/Buyer's Name	Phone:	Phone:		:					Zone:
				Garages -	Attach	ed				R-6
Past	Use:	Proposed Use:		Permit Fee:		Cost o	f Work:	C	EO District:	7
			lome - Demolish		0.00	\$	35,000	.00	1	
			e (20' x 20') & rebuild	FIRE DEPT	•	Appro	oved I	NSPECT	TION:	
			otprint attached to ng to improve lot			Denie	d	Use Grou	PR-2	Type: 5B
			ameliorate roof/water						TBC-2	<i>J00</i> 3
		icenec							-	
	osed Project Description:								PR-2 JBC-2	Q1
	molish existing garage (20' x iched to existing building to			Signature:	NACTI	VITID	·	Signature	11/20/00	<u> </u>
	f/water issues.		y & amenorate	PEDESTRIA	IN ACTI	VIIIES	5 DIS I R	ICI (P.A	α. <i>D</i> () /	
				Action:	Approv	ed	Appro	oved w/Co	onditions	Denied
				Signature:				E	Date:	
Pern	nit Taken By:	Date Applied For:		Z	oning	App	roval			
ldo	obson	09/03/2008					_			
1.	This permit application doe	es not preclude the	Special Zone or Revie	ws Zoning Appeal			Historic Pres	ervation		
				w5		·8 · · PP ·	a1			
	Applicant(s) from meeting Federal Rules.		Shoreland		Variance		41		Not in Distric	t or Landma
2.		applicable State and	Shoreland			2	.41		Not in Distric	
	Federal Rules. Building permits do not inc	applicable State and clude plumbing, f work is not started			Variance	ncous				quire Reviev
	Federal Rules. Building permits do not inc septic or electrical work. Building permits are void if	applicable State and clude plumbing, f work is not started e date of issuance.	Wetland		Variance Miscella	e neous onal Use			Does Not Red	quire Reviev
	Federal Rules. Building permits do not inc septic or electrical work. Building permits are void if within six (6) months of the False information may inva	applicable State and clude plumbing, f work is not started e date of issuance.	Wetland Flood Zone		Variance Miscella Conditio	ncous nal Use ation			Does Not Rea	quire Review iew
	Federal Rules. Building permits do not inc septic or electrical work. Building permits are void if within six (6) months of the False information may inva permit and stop all work.	applicable State and clude plumbing, f work is not started e date of issuance. llidate a building	<ul> <li>Wetland</li> <li>Flood Zone</li> <li>Subdivision</li> <li>Site Plan</li> </ul>		Variance Miscella Conditio Interpreta	ncous nal Use ation			Does Not Red Requires Rev Approved	quire Reviev iew
	Federal Rules. Building permits do not inc septic or electrical work. Building permits are void if within six (6) months of the False information may inva permit and stop all work.	applicable State and clude plumbing, f work is not started e date of issuance. llidate a building	<ul> <li>Wetland</li> <li>Flood Zone</li> <li>Subdivision</li> <li>Site Plan</li> <li>Maj Minor MM</li> </ul>		Variance Miscella Conditio Interpret: Approve	ncous nal Use ation			Does Not Red Requires Rev Approved Approved w/d Denied	quire Reviev iew
2.	Federal Rules. Building permits do not inc septic or electrical work. Building permits are void if within six (6) months of the False information may inva permit and stop all work.	applicable State and clude plumbing, f work is not started e date of issuance.	<ul> <li>Wetland</li> <li>Flood Zone</li> <li>Subdivision</li> <li>Site Plan</li> </ul>		Variance Miscella Conditio Interpret: Approve	ncous nal Use ation			Does Not Red Requires Rev Approved Approved w/d Denied	quire Review iew

### **CERTIFICATION**

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

SIGNATURE OF APPLICANT	ADDRESS	DATE	PHONE
RESPONSIBLE PERSON IN CHARGE OF WORK, TITLE		DATE	PHONE
		<u>ر</u>	

City of Portland, Maine - Buil	<b>v</b>			Permit No: 08-1106	Date Applied For: 09/03/2008	CBL:
389 Congress Street, 04101 Tel: (		(207) 87	4-8710	<u></u>	07/03/2008	012 H014001
Location of Construction:	Owner Name:			Owner Address:		Phone:
126 NORTH ST	WOJCIK RAYMONI	D T & ZE	TTA	912 SCHOOL ST		
Business Name:	Contractor Name:			Contractor Address:		Phone
	Hills Pond Builders			912 School Street	Perkins I wp	(207) 585-2538
Lessee/Buyer's Name	Phone:			Permit Type: Garages - Attache	d	
Proposed Use:		]	Propos	ed Project Description:		
Four Family Home - Demolish existin in relocated footprint attached to exis conformity & ameliorate roof/water is	ting building to improve		Demo attach	lish existing garage	(20' x 20') & rebuil	d in relocated footprint onformity & ameliorate
Dept: Zoning Status: A	pproved with Condition	ns <b>Re</b> v	viewer	: Ann Machado	Approval D	Date: 10/03/2008
Note: Existing 20' x 20' garage is le setback will now be 13' and changing slightly (the ridge o 1) Your present structure is legally n	side setback closest to the f the roof will be 1.5' hi	he line wi gher) but	ill be 5 the vo	The shell of the ne lume is staying the s	ew garage is ame.	
only have one (1) year to replace of the above shall require that this be the owner's responsibility to co	it in the same footprint ( s structure meet the curre	(no expan ent zonin	isions), g stand	with the same heigh ards. The one (1) ye	nt, and same use. A ar starts at the time	ny changes to any
2) This property shall remain a four approval.	family dwelling. Any ch	ange of ı	ise shal	ll require a separate	permit application f	for review and
<ol> <li>This permit is being approved on work.</li> </ol>	the basis of plans submi	itted. An	y devia	tions shall require a	separate approval b	before starting that
Dept: Building Status: A Note:	pproved with Condition	ns <b>Re</b> v	viewer	: Chris Hanson	Approval D	Date: 11/20/2008 Ok to Issue: ☑
<ol> <li>Guards must be 42 inches in heigh guard. Stair treads shall not be least</li> </ol>					installed on both sic	les of the stair
2) The design load spec sheets for an	y engineered beam(s) /	Trusses r	nust be	submitted to this of	fice.	
<ol> <li>Permit approved based on the plan noted on plans.</li> </ol>	ns submitted and review	ed w/owr	ner/con	tractor, with additio	nal information as a	greed on and as
4) Frost protection must be installed	per the enclosed detail a	as discuss	ed w/o	wner/contractor.		
5) An inspection of the installation o his/her certification shall be subm	f the steel and concrete a titled to this office stating	and struc g complia	tural br ince wi	acing shall be condu th the approved plan	ucted by a licensed ns.	engineer and
<ol> <li>Your guardrail system installed ar Code.</li> </ol>	ound your deck must me	eet the loa	ading r	equirements of secti	on 1607.7.1 of the l	BC 2003 Building
<ol> <li>Separate permits are required for a approval as a part of this process.</li> </ol>	any electrical, plumbing	, HVAC	or exha	ust systems. Separat	te plans may need to	o be submitted for
Dept: Fire Status: A	pproved	Rev	iewer:	Capt Greg Cass	Approval D	ate:
Note:						Ok to Issue:
				·····		

Location of Construction:	Owner Name:		Owner Address:	Phone:
126 NORTH ST	WOJCIK RAYMON	D T & ZETTA	912 SCHOOL ST	
Business Name:	Contractor Name:		Contractor Address:	Phone
	Hills Pond Builders		912 School Street Perkins Twp	(207) 585-2538
Lessee/Buyer's Name	Phone:		Permit Type:	
			Garages - Attached	

9/4/2008-amachado: Left vcm for Josh. Need demo permit application & need construction details for how the stairs will go up to the second floor deck.

9/22/2008-amachado: Received construction details for relocated stairs from second floor. Still need demo permit.

10/16/2008-tm: Called and left a voicemail for Tom @ hill pond builders that more info needed on framing details of garage. Plans show 2x with no indication of what size of lumber being used.

10/3/2008-amachado: Received demo permit information.

10/3/2008-amachado: Gave permit to Lannie to schedule predemolition inspection.

10/9/2008-smh: N.U. confirmed no gas lines, building measured. Smh

10/16/2008-tm: called Josh after receiving his call and left a message that the structual insulated panels he is using is from 2007 adopted IRC code is not the code we use. We are using IRC 2003 edition.

10/17/2008-tm: spoke to Gary Nelson of ICC plan review and he says that SIPs are a 2007 supplement that will be in the 2009 Code. The applicant should supply this supplement and request a waiver for alternate building methods. Called Josh twice today @ 8:12 am and 10:18 am.

- ispectores

STAIRS - MOST Comply Ballosters - PER IBC 2003 Gorage is Attached must have Sheetrock on Attached Side Min. Q A Ilpopo . P.S. Owner agreed per phi Conversition 17/20/08 phi Tom O 505-7538 Builder. phoue

SIP's (STRUCHal Insulated ICC callabout Vanls

2007 Supplement TRC \$6 SIPPLED (1 6-R-614 N 4000 606 - Copy of 2007 Lupplement as partog Weiver- Will be in 2009 (Fam Kellson (rælleden 1700708 G 9:55100) Jer plankerna Ice plankerna Will need to supply us a copy of complite (about 10 pages) Supplement and and request a warner to use the SIP's upon Gamp Alson Ic flan Neview as alternative construction plan-



# **General Building Permit Application**

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

Location/Address of Construction: 126	North Street	
Total Square Footage of Proposed Structure/A	rea 410 SE Square Footage of Lot 40	128 SF
Tax Assessor's Chart, Block & Lot Chart# Block# Lot# 777777777777777777777777777777777777	Applicant * must be owner, Lessee or Buye Name $\int OS hug T$ . $USic K$ Address $425 Wist 45^{-h} St$ . $t$ City, State & Zip NY, NY 10036 Owner (if different from Applicant)	$\frac{(20'7)}{749-965} (i)$ $\frac{(212)}{676} (i)$
	Name Address City, State & Zip	C of O Fee: \$ 370 Total Fee: \$ 370
Current legal use (i.e. single family) If vacant, what was the previous use? Proposed Specific use: Is property part of a subdivision? <u>Not that</u> Project description: Relocate 7 re- Z a metionate 100 f	<u>storage</u> 4family <u>Know of</u> Ifyes, please name construct the jurage to it /water issues	
Contractor's name: <u>Hr71s</u> Pond Address: <u>912</u> School Street City, State & Zip <u>Per Kins</u> Twp.	S. Iders	
Who should we contact when the permit is read Mailing address: <u>912</u> School Street	r r	elephone: <u>207-585-25</u> 3F

Please submit all of the information outlined on the applicable 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 or to download copies of this form and other applications visit the Inspections Division on-line at <u>www.portlandmaine.gov</u>, or stop by the Inspections Division 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: Date: 27/08 This is not a permit; you may not commence ANY work until the permit is issue

From:	Joshua Wojcik <joshuawojcik@hotmail.com></joshuawojcik@hotmail.com>
То:	Ann Machado <amachado@portlandmaine.gov></amachado@portlandmaine.gov>
Date:	9/22/2008 4:37:08 PM
Subject:	RE: Rebuilding garage at 126 North Street

#### Thanks Ann.

I've been working down my call list. Apparently, I have to stripe the proposed location, before some of the utilities can accept my notification.

Also, I'm sending out my notification to my neighbors tonight and should have my demo permit in the mail to you by tomorrow.

One question/point of clarification. The whole asbestos certification thing isn't required for this project, right?

Thanks!

-Josh> Date: Mon, 22 Sep 2008 10:26:04 -0400> From: AMACHADO@portlandmaine.gov> To: joshuawojcik@hotmail.com> Subject: RE: Rebuilding garage at 126 North Street> > Josh - > > I was away from 9/17 - 9/19. I got the stair information today. It> looks good. If the plan reviewer needs more information, they will> contact you directly. I still need a demo permit application from you> before I can move this permit forward. > > Thanks, Ann> >>> Joshua Wojcik <joshuawojcik@hotmail.com> 09/17 10:54 AM >>>> > Thanks Ann. I apologize for the delay. Attached are three pdfs - the> first shows the existing stairs and the other two show the proposed> construction detail for the stairs. The current stairs are constructed> from 2x6 pressure treated stringers, with 7.5' x 10.5' triangles> fastened to the stringers. The treads are made from 5/4' pressure> treated. As you will note from the drawing of the existing stairs,> there is currently a set of support columns under the 9th step (from the> top). Everything is protected by a coat of paint. Since the existing> stairs are in good condition, the proposed stairs will make use of the> existing stringers, risers, treads, etc. The first landing will be> constructed where the 8th step is now. The pdf labeled 'stair> construction drawings - detail for connection to existing stair'> illustrates that the existing stair stringers will rest on a 2x4 ledger, > where they connect to the first landing. The proposed stringers> connecting to the second landing will also rest on a 2x4 ledger. All> landings will be supported by 4x4 pressure treated posts, will be> constructed by pressure treated 2x6's (at just under 16 o.c.) and will> continue to utilize 5/4' pressure treated decking. As the drawing> labeled, 'stair construction drawings - landing detail' illustrates, the> stair stringers will hang from each of the landings via a 5/8' pressure> treated plywood hanger. Our intention is to lag bolt all pertinent> connection points (posts to landings, hangers to stringers, stringers to> ledgers, etc.). Also, as I think I mentioned earlier, the stairs will,> at their narrowest, be more than 32' wide and the hand railings will be supported by 4x4 posts at a height of 36". If you need additional> details/clarifications, please let me know. -Josh> Date: Wed, 10 Sep> 2008 08:32:23 -0400> From: AMACHADO@portlandmaine.gov> To:> joshuawojcik@hotmail.com> Subject: RE: Rebuilding garage at 126 North> Street> > Josh -> > I was able to open both Pdfs. > > You still need to> give the construction details for the steps and> landings. You need> information on the columns (support of steps &> landings). You need> framing details (girder size & spans, joist size,> span & spacing, joist> hangers or ledger, decking size of landings). You> need heights for> guardrail & handrails, & baluster spacing.) You need> a stair detail> showing tread depth, riser height, nosing on tread &> width of stairs.> If you have questions on this then call Chris Hanson> (plan reviewer) at> 874-8696. > > Ann> > > Want to do more with

Windows Live? Learn "10 hidden secrets" from> Jamie.> http://windowslive.com/connect/post/jamiethomson.spaces.live.com-Blog-cns!550F681DAD532637!5295. entry?ocid=TXT\_TAGLM\_WL\_domore\_092008

See how Windows connects the people, information, and fun that are part of your life. http://clk.atdmt.com/MRT/go/msnnkwxp1020093175mrt/direct/01/ Ann Machado City of Portland Planning and Urban Development Department 389 Congress Street, Rm. 308 Portland, ME 04101

August 27, 2008

Ms. Machado,

Per our recent discussions, I am writing to apply for a (re)construction permit for my garage at 126 North Street. I understand that separate permits are required before I proceed with any demolition or electrical work.

## **Project Description:**

The existing garage will be demolished and re-built in a new location and with a new roof line. The new location is adjacent to the primary structure on the property (a four unit rental property), which requires the direction of the garage to be pivoted by 90 degrees. The garage will be constructed 5' off of the north property line and approximately 13' from the western line. Please see the attached plot plan for details.

Although the garage and primary structure will share much of one wall (which also means the siding/flashing of the garage will be tied into the primary structure's siding), the garage will NOT rely on the house for structural support, thus the structure of the primary building will not be altered or impacted during construction. The garage will rest on a concrete slab-on-grade (with footers) and will be constructed from Structural Insulated Panels (SIPs). SIPs provide both structure and insulation and in this case will be bolstered by a ridge beam, a mid-roof support beam and by the support columns 1-4 (see drawing). Of the four support columns, 1, 2 and 3 will be embedded in the structural panels, while column 4 will stand up against the western wall of the primary structure. The walls will consist of 4.5" panels and the roof will be made from 6.5" panels. Please refer to the construction drawings for dimensions and the connection detail drawings for additional details.

SIPs have been in use for decades. They are most often used as the "skins" for timber-frame homes, but they are structural in nature and are 2-7 times as strong as conventional framing, depending on the test. Structural insulated panel wall systems were adopted into the International Residential Code (IRC) on May 22, 2007. They are also used for roofs (and have been for decades) and are currently going through the process of being adopted into the IRC. For more information on this, please visit

http://www.sips.org/content/index.cfm?pageId=195. I have also included the transverse and axial load data as well as the sheer wall chart for the panels I intend to use.

The existing garage has a roof that is salt-box in style, but extremely obtuse (almost flat). The style and layout (e.g. position of the roof ridge) of the proposed garage roof will be consistent with the existing roof, however the new garage will have a 4:12 pitch roof on the shallow side (north face). In order to ensure that the new garage has the same volume as the existing garage, the front and rear walls will be lowered by 1.5', while the roof peak would be raised by 1.5' (or the floor will be lowered by 1.5'). See attached volume analysis.

Both the existing and the proposed garage have (and will have) electricity.

Aside from the siding, the only aspect of the primary structure that will be modified is the stairwell leading to/from the 2nd floor deck, which is a currently a straight shot along an east/west axis. The proposed stairwell will gain two landings and change direction twice. There is ample room for this change.

The new location of the garage will necessitate the removal of a 7.5' x 13.5' section of the driveway, however it will also require the addition of a section of driveway that is approximately 12' by 7.5'. Thus, the driveway under the proposed plan will provide sufficient parking for all tenants.

The project cost estimate from my builder is \$35,000.

## **Justification for Proposed Changes:**

The pitch of the existing roof has resulted in problems with snow and water, which will be greatly ameliorated by a steepe pitch. The salt box style roof (and proposed pitch) also roughly mimic the roof line of the primary structure, making it aesthetically preferable.

Relocating the garage to a position adjacent to the house reduces the non-conformity of the garage substantially. It also greatly improves the ability to remove snow from the driveway. Positioning the garage in this way does eliminate the ability of large automobiles to park in the garage, but the garage is not currently used for parking it is used exclusively for storage, which is how it will continue to be used.

SIPs are being used because they are an extremely efficient (and strong) building material. The use of SIPs for the roofing system provides an excellent opportunity for a cathedral ceiling, thus - I am requesting the addition of a storage loft on the western side of the garage.

Skylights are being incorporated into the design to maximize the use of natural lighting, thus reducing the carbon foot-print of the garage.

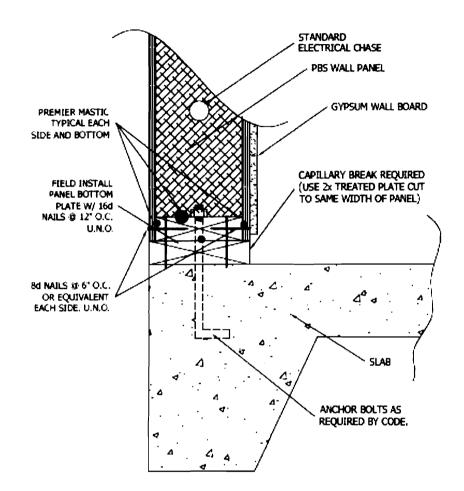
# List of Attachments:

- 1. Plot plan and land survey & title
- 2. Volume Analysis
- 3. Construction drawings
- 4. Connection (cross-section/framing) details
- 5. Transverse, axial, and shearwall load data from panel manufacturer

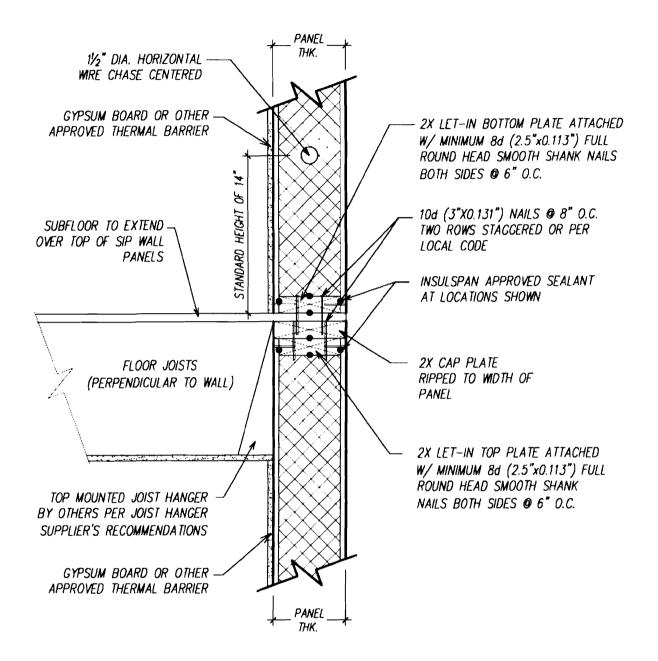
I know we have already discussed this project in some depth (and I appreciate your help thus far), but if you or any of your colleagues have any questions, or if my application is missing anything, please do not hesitate to contact me at either joshuawojcik@hotmail.com or at (207) 749-9656.

Sincerely yours,

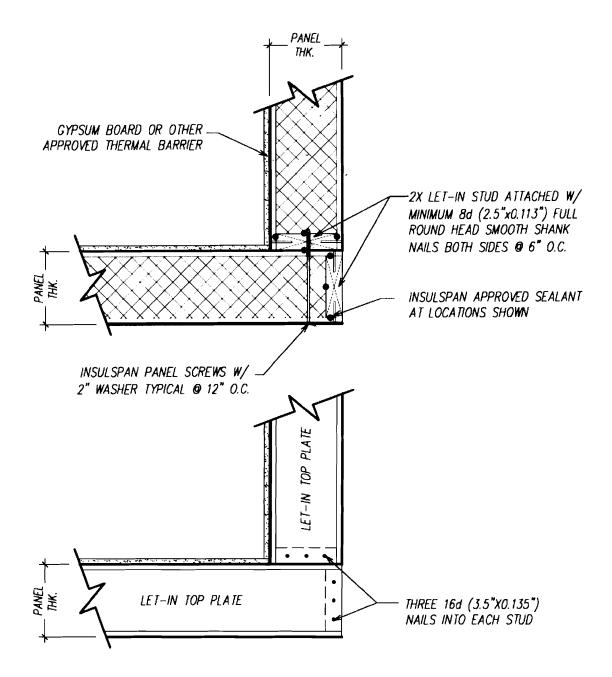
Joshua T. Wojcik



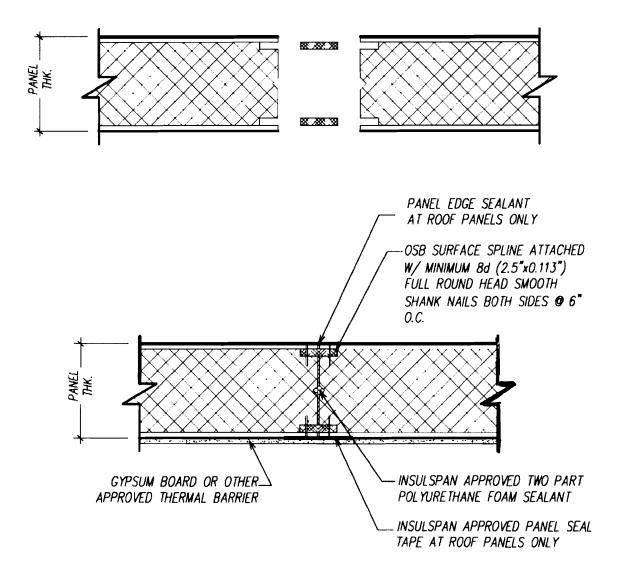
Detail for the slab-to-floor connection.



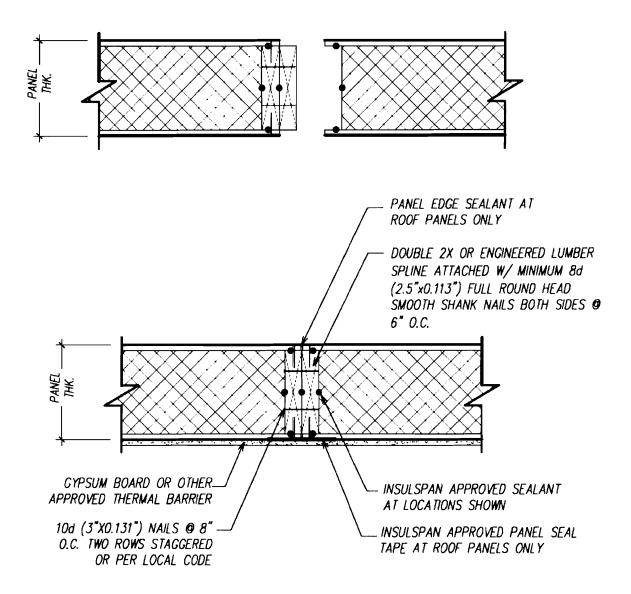
Detail for the wall-to-floor (using joist hangers)-to-wall connections. This will be used for the lofted storage space floor.



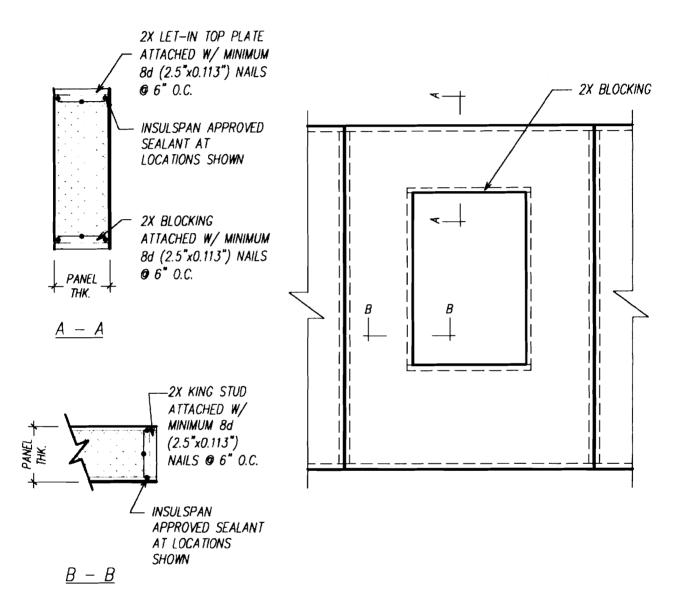
Detail for the wall corner connections. The 2x caps on each corner strengthen the connections and reinforce the structure provided by the panels.



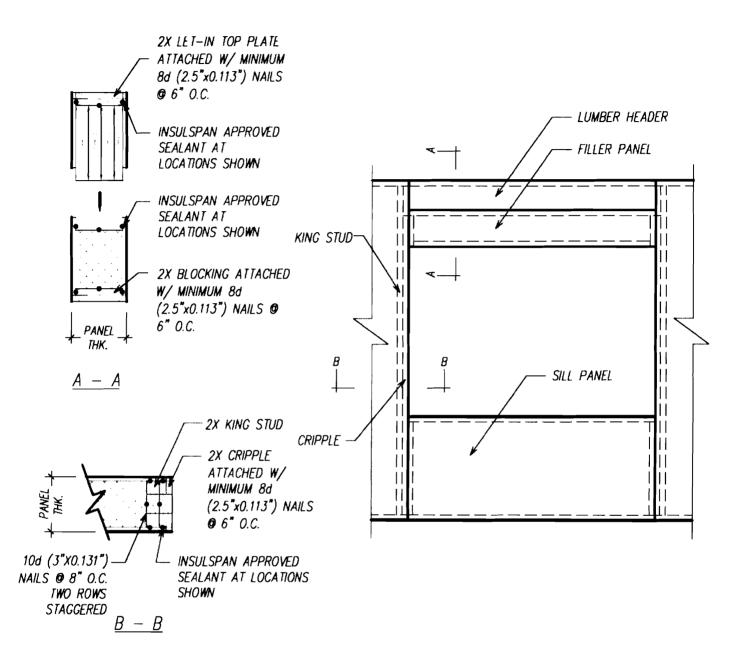
Detail for panel-to-panel connections, where structural columns are not being embedded in the panels.



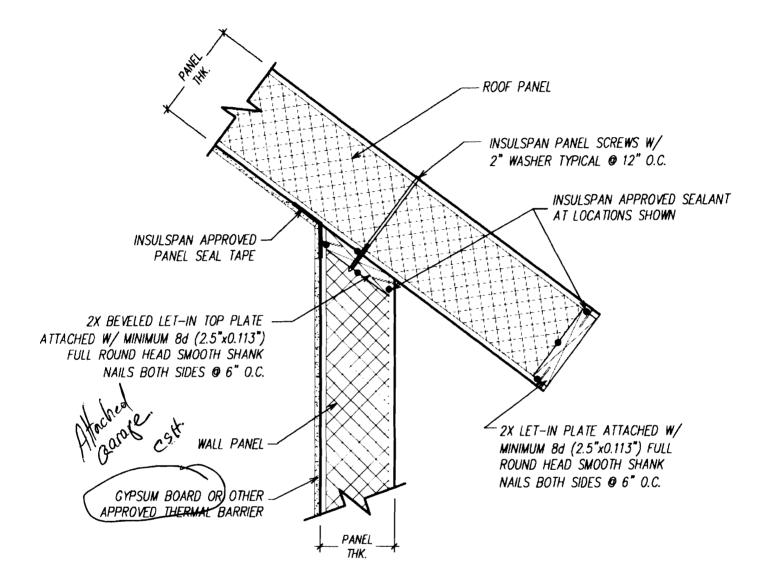
Detail for panel-to-panel connections, where structural columns are embedded in the panels. Where the roof support beams connect to the walls, support columns (double 2x's) will be embedded in the panels where the panels connect.



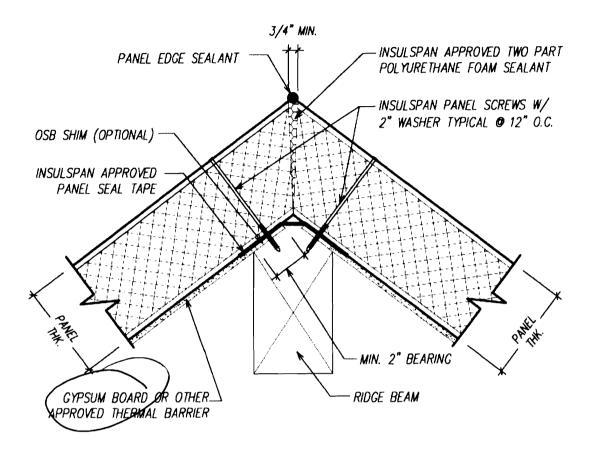
Detail for small openings. For small windows, (e.g. sides and rear) the cutouts will simply be reinforced with 2x's.



Detail for large openings. For large openings (e.g. the doors), the headers will be made of 2x's and will sit on jack studs. For this project, there will be no lower sill panel.



Detail for wall-to-roof connections. Each wall panel is beveled and capped. The roof panel sits on the panels and are screwed to the wall. The eaves are also capped.



Detail for roof ridge connection. Roof panels are supported by wall panels on one end and a beveled ridge beam on the other (and in the case of my project are undergirded by a mid-roof support beam). They are screwed to the beams as shown. To ensure proper sealing, a gap is left at the ridge line and is filled in with two-part foam.



# **Demolition Call List & Requirements**

Site Address: 126 North Street	Owner: Joshun	T. Wojzik
Structure Type: <u>2-Car</u> garage	Contractor: <u>H.71</u> s	fond Builders

Utility Approvals	Number	Contact Name/Date
Central Maine Power	1-800-750-4000	Kelly Humphrey 19/22/08
Northern Utilities 9/10/08 Ok per Mark	797-8002 ext 6241	Mark Allen 9/22/08
Portland Water District	761-8310	Stephanie Shaw 9/22/08
Dig Safe (2-6:30 pm)	1-888-344-7233	Carol 9/23/08
Dig Sufe co	nf.#2008390	4150 - effective 9/26 @ 11:30 AM

After calling Dig Safe, you musi wait 72 business hours before digging can begin.

DPW/ Traffic Division (L. Cote)	874-8891	Hen Lucy Late	9/24/08
DPW/ Sealed Drain Permit (C. Merritt)	874-8822	Carol Merrith	9/23/08
Historic Preservation	874-8726	Deb Andrews	9/23/08
Fire Dispatcher	874-8576	Jin Richards	9/23/08
DEP – Environmental (Augusta)	287-2651	Sandy Moody	9/27/08

# **Additional Requirements**

- 1) Written Notice to Adjoining Owners
- 2) A Photo of the Structure(s) to be demolished
- 3) Certification from an asbestos abatement company

All construction and demolition debris generated in Portland must be delivered to Riverside Recycling Facility at 910 Riverside Street. <u>Source separated</u> salvage materials placed in specifically designated containers are exempt from this provision. For more information contact Troy Moon @ 874-8467.

U.S. EPA Region 1 - No Phone call required. Just mail copy of State notification to:

Demo / Reno Clerk US EPA Region I (SEA) JFK Federal Building Boston, MA 02203

I have contacted all of the necessary companies/departments as indicated above and attached all required documentation.

Signed:

\_\_\_\_ Date: <u>9/29/08</u>

For more information or to download this form and other permit applications visit the Inspections Division on our website at www.portlandmaine.gov

Building Inspections Division • 389 Congress Street • Portland, Maine 04101 • (207) 874-8703 • FACSIMILE (207) 874-8716 • TTY (207) 874-8936

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# NOTIFICATION

Property Owner Adjoining 126 North Street Portland, ME 04101

007

September 22, 2008

Dear Sir/Madame,

I am writing to notify you of my intent to demolish and reconstruct my two-car garage located at the rear of 126 North Street.

I am concerned with the structural integrity of the garage and am taking the opportunity to also improve the conformity of the structure.

We will be conducting this work over the next month or two (depending on when the permit is issued) and do not expect that this work will inconvenience you in any way.

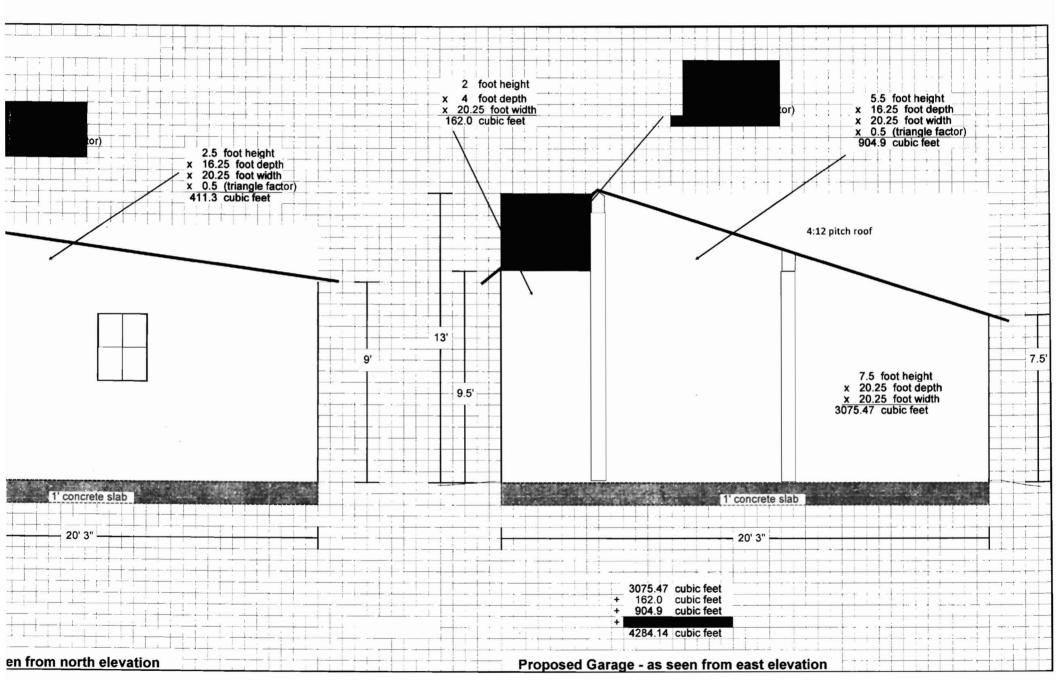
If you have any questions, please do not hesitate to contact me at 207-749-9656 or at joshuawojcik@hotmail.com.

Regards,

Joshua T. Wojcik Owner, 126 North Street





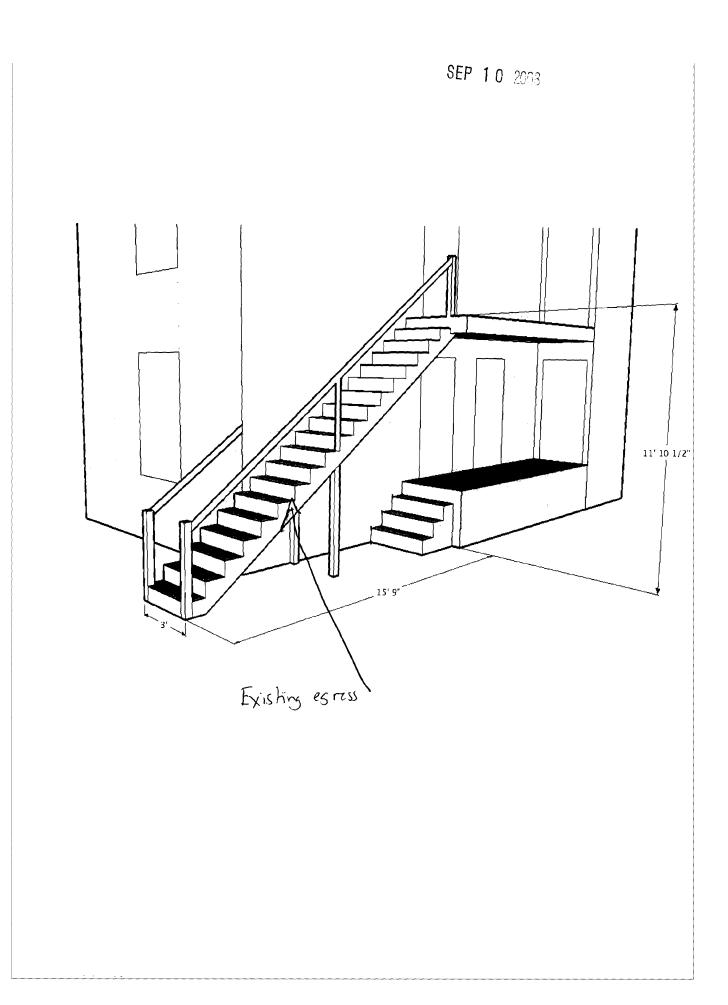


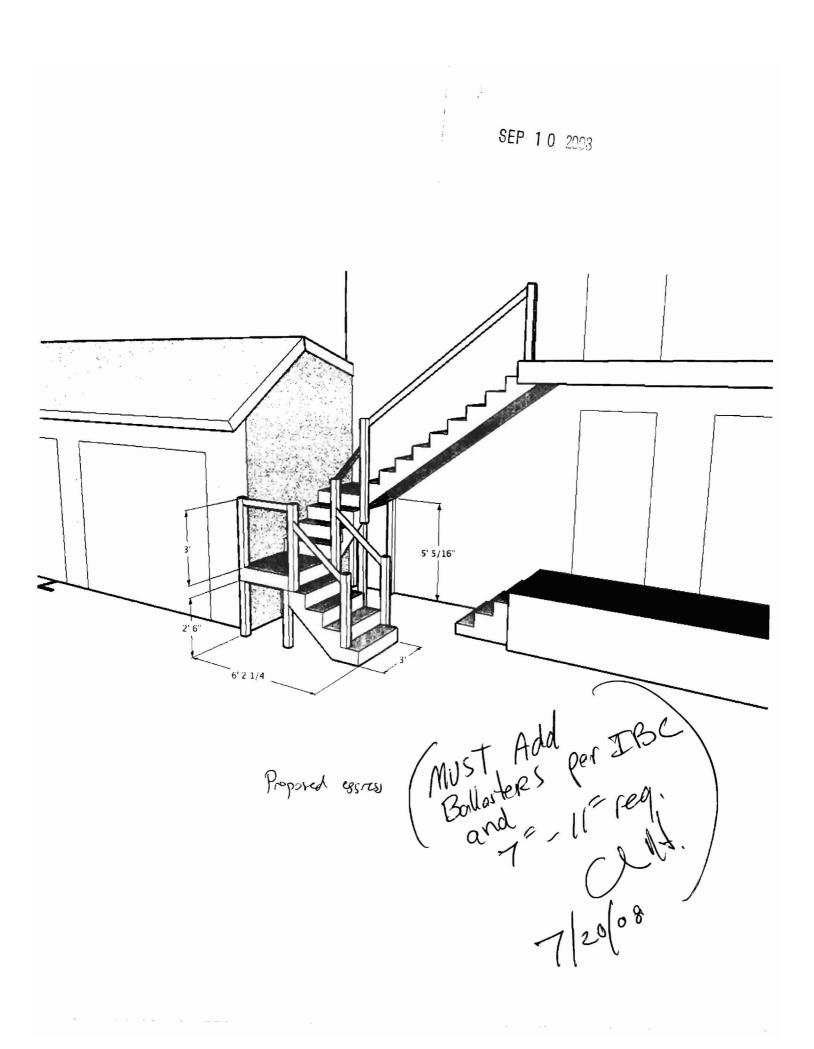
126 North Street

Portland, ME

Printed 8/27/2008

Volume Analysis; Page 1





### New World Panels, LLC

#### ALLOWABLE TRANSVERSE LOADS (PSF)

-B16 Structural Insulated Building Panels are made of two equal layers of 7/16" OSB glue laminated to a solid core of EPS foam.

- <u>Rated structural sheathing</u> used in the panels comply with the requirements of United States Volumtary Product Standard PS 2-92 (UBC Standard 23-3) fo 7/16 inch thick (11.1mm) Structural I, Exposure 1, faced sheathing with a span index of 24/16, and the requirements in the sandwich panel manufacture guality control manual.

- Each structural panel has a core of 1.0 pcf nominal bulk density EPS foam [0.95pcf (15.2kg.m3) minimum], adhered to the sheathing using a qualified lamination adhesive outlined in the sandwich panel manufacturer's quality control manual.

			SAND	WICH PANEL DIME	NSIONS	
Skin Thickness		7/16" (11.113mm)	7/16" (11.113mm)	7/16" (11.113mm)	7/16" (11.113mm)	7/16" (11.113mm)
Core Thickness		3-5/8" (92.08mm)	5 - 5/8" (142.88mm)	7 - 3/8" (187.33mm)	9 - 3/8" (238.13mm)	11 - 3/8" (288.93mm)
Panel Depth		4 - 1/2" (114.30mm)	6 - 1/2" (165.1mm)	8 - 1/4" (209.55mm)	10 - 1/4" (260.35mm)	12 - 1/4" (311.15mm)
PANEL	Deflection		ALLO	VABLE TRANSVER		
SPAN				(DEAD + LIVE) (psf		
8' - 0"	L / 180	69 s	103 s	133 s	152 s	168 s
2.44 Meters	L / 240	69 s	103 s	133 s	152 s	168 s
2438 mm	L/360	51 d	81 d	<u>106 d</u>	<u>136 d</u>	<u>111 d</u>
10' - 0"	L/180	55 s	82 s	105 s	120 s	133 s
3.05 Meters	L/240	53 d	82 s	105 s	120 s	133 s
3048 mm	L / 360	35 d	58 d	78 d	101 d	124 d
12' - 0"	L / 180	45 s	67 s	87 s	99 s	110 s
3.66 Meters	L / 240	38 d	64 d	87 s	99 s	110 s
3658 mm	L / 360	25 d	43_d	59 d	77 d	96 d
14' - 0''	L / 180	25 d	43 d	61 d	80 s	80 s
4.27 Meters	L / 240	18 d	32 d	45 d	61 d	76 d
4267 mm	L / 360	12 d	22 d	30 d	40 d	51 d
16' - 0"	L / 180	18 d	33 d	48 d	65 d	64 s
4.88 Meters	L / 240	14 d	25 d	36 d	48 d	62 d
4877 mm	L / 360	9 d	17 d	24 d	32 d	41 d
18' - 0"	L / 180	14 d	26 d	38 d	52 d	50 m
5.5 Meters	L / 240	11 d	20 d	28 d	39 d	50 d
5486 mm	L / 360	7 d	13 d	19 d	26 d	34 d
20' - 0"	L / 180	11 d	21 d	31 d	42 m	41 m
6.1 Meters	L / 240	8 d	16 d	23 d	32 d	41 m
6096 mm	L / 360	5 d	10 d	15 d	21 d	28 d
22' - 0"	L / 180	9 d	17 d	25 d	35 m	34 m
6.71 Meters	L/240	7 d	13 d	19 d	27 d	34 m
6706 mm	L/360	4 d	8 d	13 d	18 d	23 d
24' - 0"	L / 180	7 d	14 d	21 d	29 m	29 m
7.32 Meters	L/240	5 d	10 d	15 d	22 d	29 m
7315 mm	L / 360	3 d	7 d	10 d	15 d	19 d

- Values shown in tables are the allowable dead load plus live load.

- Controlling conditions: "s"=shear, "m"=bending, "d"=deflection

- Minimum Bearing required is 3"

- Deflection criteria are L/180 for roof loads with a pitch 6/12 or greater, L/240 for roof load with a pitch less than 6/12 and L/360 for floor loads

- All loads are for normal duration loads. No duration factors are allowed.

- For permanent or long-duration (> 6 mo.) use 1/2 the tabulated load to minimize creep deflection.

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- Additional load capacity can be achieved by using dimensional lumber, LVL or wood I-beam splines at the panel joints.

Table T-1 Transverse Loads on Sandwich Panels

#### New World Panels, LLC

### ALLOWABLE AXIAL LOADS (PLF)

<u>Structural Insulated Building Panels</u> are made of two equal layers of 7/16" OSB glue laminated to a solid core of EPS foam.
 <u>Rated structural sheathing</u> used in the panels comply with the requirements of United States Volumtary Product Standard PS 2-92 (UBC Standard 23-3) for 7/16 inch thick (11.1mm) Structural I, Exposure 1, faced sheathing with a span index of 24/16, and the requirements in the sandwich panel manufacturer's quality control manual.

- Each structural panel has a core of 1.0 pcf nominal bulk density EPS foam [0.95pcf (15.2kg.m3) minimum], adhered to the sheathing using a qualified lamination adhesive outlined in the sandwich panel manufacturer's quality control manual.

	SANDWICH PANEL DIMENSIONS						
Skin Thickness	7/16" (11.113mm)	7/16" (11.113mm)	7/16" (11.113mm)	7/16" (11.113mm)	7/16" (11.113mm)		
Core Thickness Panel Depth	3-5/8" (92.08mm) <b>4 - 1/2" (114.30mm)</b>	5 - 5/8" (142.88mm) <b>6 - 1/2" (165.1mm)</b>	7 - 3/8" (187.33mm) <b>8 - 1/4'' (209.55mm)</b>	9 - 3/8" (238.13mm) <b>10 - 1/4" (260.35mm)</b>	11 - 3/8" (288.93mm) <b>12 - 1/4" (<u>3</u>11.15mm</b>		
WALL HEIGHT			OWABLE AXIAL LO E LOAD) (PLF= Pound				
<b>8' - 0''</b> 2.44 Mtrs. 2438 mm	2,529	2,662	2,706	2,750	2,765		
10' - 0'' 3.05 Mtrs. 3048 mm	2,397	2,588	2,676	2,721	2,735		
<b>12' - 0''</b> 3.66 Mtrs. 3658 mm	2,250	2,529	2,618	2,676	2,706		
<b>14' - 0''</b> 4.27 Mtrs. 4267 mm	2,059	2,426	2,559	2,632	2,676		
<b>16' - 0''</b> 4.88 Mtrs. 4877 mm	1,838	2,309	2,485	2,574	2,632		
18' - 0'' 5.5 Mtrs. 5486 mm	1,603	2,176	2,397	2,515	2,588		
<b>20' - 0''</b> 6.1 Mtrs. 6096 mm	1,382	2,029	2,294	2,441	2,529		
<b>22' - 0''</b> 6.71 Mtrs. 6706 mm	1,162	1,868	2,176	2,368	2,471		
<b>24' - 0''</b> 7.32 Mtrs. 7315 mm	956	1,691	2,044	2,265	2,397		

For SI: 1inch = 25.4 mm, 1 foot = 304.8 mm, 1 plf = 14.6 N/m

1. Allowable loads are based on axial loads being applied over entire panel thickness.

2. All values are normal-duration loads. No increases for other load durations are allowed

3. All values listed are for single-span panels with supports at the top and bottom.

4. All axial loads can be applied with a maximum eccentricity equal to one-sixth (1/6th) of the panel thickness and a 5 psf perpendicular load.

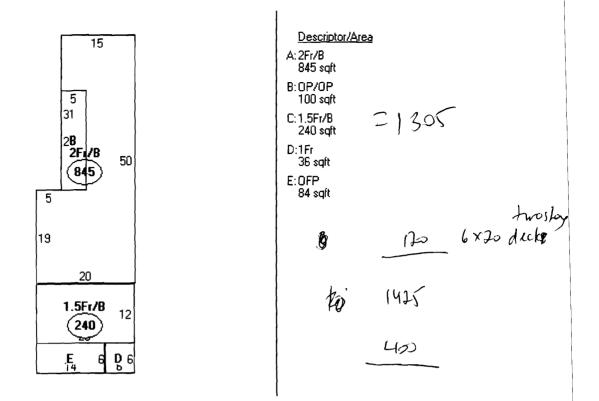
 Additional axial loading can be achieved by adding dimensional lumber, LVL's, wood I-beams, etc., at the panel joints as splines. The structural engineer for any particular project can determine this loading increase with calculations that can be provided with each project when necessary.

Table A-1 Axial loads on Sandwich Panels

PLF) foam. dard PS 2-92 (UBC Standard 23-3) for to the sheathing using a qualified	
dard PS 2-92 (UBC Standard 23-3) for	
DIMENSIONS	
) 7/16" (11.113mm) n) 9 - 3/8" (238.13mm) n) 10 - 1/4" (260.35mm)	7/16" (11.113mm) 11 - 3/8" (288.93mm) 12 - 1/4" (311.15mm)
S (PLF)	
170 155	170 155
2x10 SPLINE	2x12 SPLINE
480	480
	7/16" (11.113mm) 9 - 3/8" (238.13mm) 10 - 1/4" (260.35mm) 6 (PLF) 170 155 2x10 SPLINE

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Table S-1 Shear wall Loads on Sandwich Panels



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http://www.portlandassessor.com/images/Sketches/00629601.jpg

8/13/2008



#### FALLON COMPLETE MILLION

#### **Card Number** 1 of 1

Parcel ID 012 H014001

Location 126 NORTH ST

Land Use FOUR FAMILY

#### Owner Address WOJCIK RAYMOND T & ZETTA A WOJCIK & JOSHUA T WOJCIK JTS 912 SCHOOL ST PERKINS ME 04294

#### Book/Page 25418/226

#### Legal 12-H-14 NORTH ST 126

4015 SF

## **Current Assessed Valuation**

Land	Building	Total
\$109,100	\$152,200	\$261,300

# **Property Information**

Story Height	Sq. Ft.	Total Acres	
2	2146	0.092	
	Story Height 2		

Bedrooms	Full Baths	Half Baths	Total Rooms	Attic	Basement
8	4		20	None	Full

# **Outbuildings**

Туре	Quantity	Year Built	Size	Grade	Condition
GARAGE-WD/CB	1	1900	20X20	D	F

## Sales Information

Date	Туре	Price	Book/Page
08/27/2007	LAND + BLDING	\$366,300	25418-226
10/29/2004	LAND + BLDING	\$366,000	21948-108
11/01/2002	LAND + BLDING		18349-250
09/01/1997	LAND + BLDING	\$124,000	13294-194

# Picture and Sketch

	Picture	Sketch	Tax Map
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<u>Click here</u> to view Tax Roll Information.

Any information concerning tax payments should be directed to the Treasury office at 874-8490 or e-

mailed.

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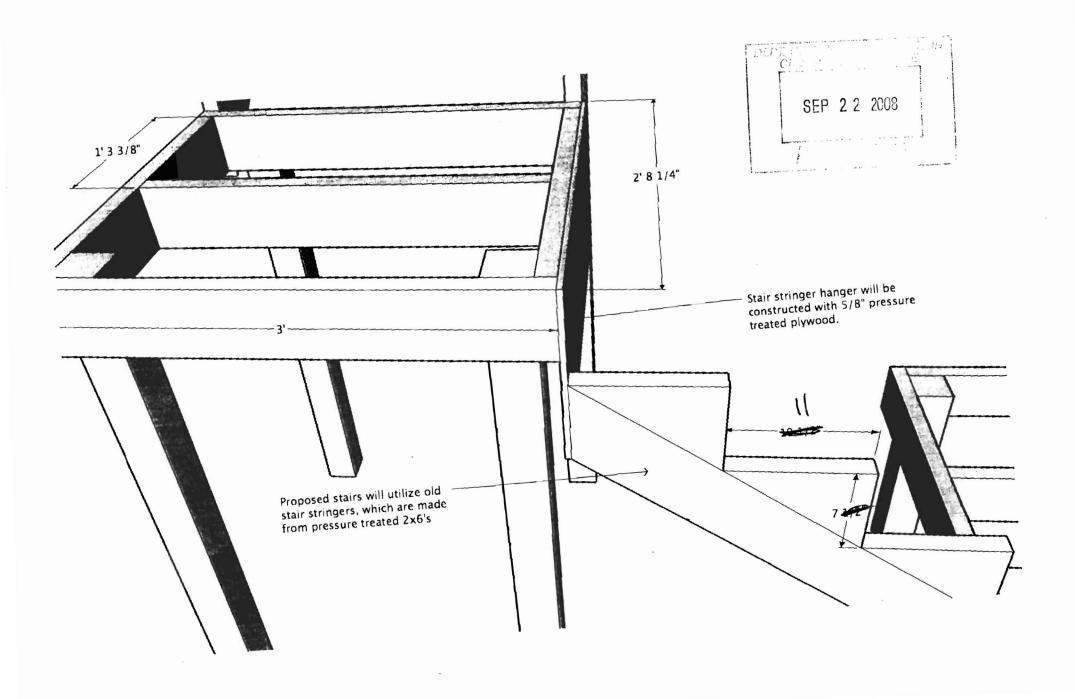
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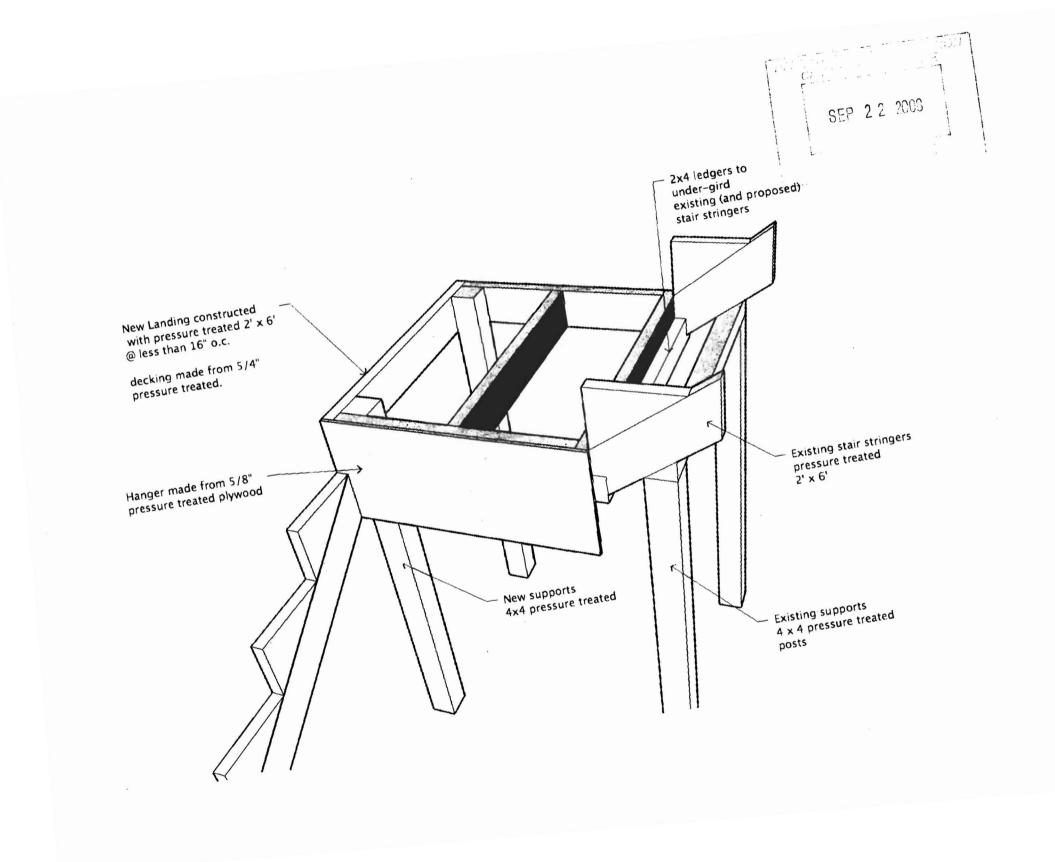
From:	Joshua Wojcik <joshuawojcik@hotmail.com></joshuawojcik@hotmail.com>
To:	Ann Machado <amachado@portlandmaine.gov></amachado@portlandmaine.gov>
Date:	9/17/2008 10:55:35 AM
Subject:	RE: Rebuilding garage at 126 North Street

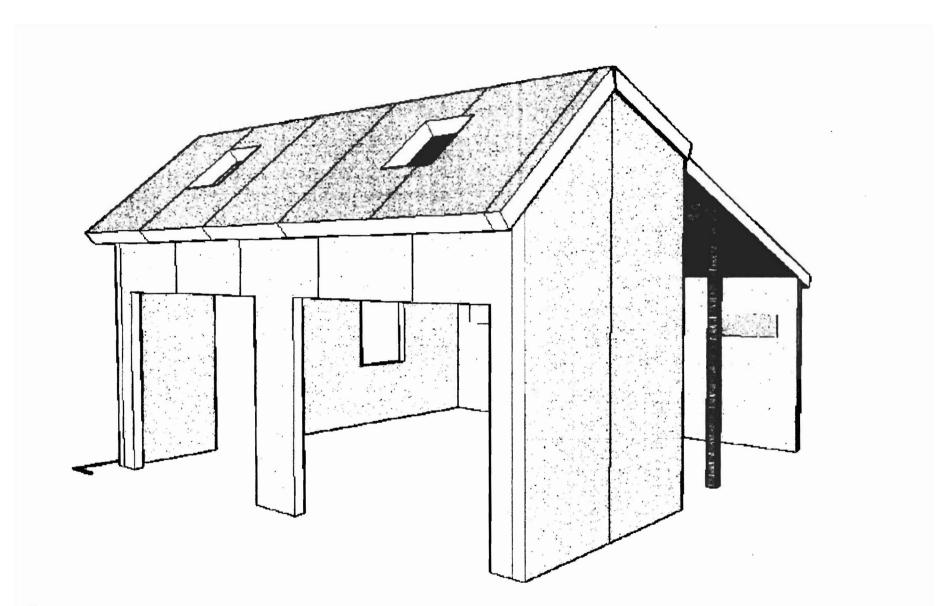
Thanks Ann. I apologize for the delay. Attached are three pdfs - the first shows the existing stairs and the other two show the proposed construction detail for the stairs. The current stairs are constructed from 2x6 pressure treated stringers, with 7.5' x 10.5' triangles fastened to the stringers. The treads are made from 5/4' pressure treated. As you will note from the drawing of the existing stairs, there is currently a set of support columns under the 9th step (from the top). Everything is protected by a coat of paint. Since the existing stairs are in good condition, the proposed stairs will make use of the existing stringers, risers, treads, etc. The first landing will be constructed where the 8th step is now. The pdf labeled 'stair construction drawings - detail for connection to existing stair illustrates that the existing stair stringers will rest on a 2x4 ledger, where they connect to the first landing. The proposed stringers connecting to the second landing will also rest on a 2x4 ledger. All landings will be supported by 4x4 pressure treated posts, will be constructed by pressure treated 2x6's (at just under 16 o.c.) and will continue to utilize 5/4' pressure treated decking. As the drawing labeled, 'stair construction drawings - landing detail' illustrates, the stair stringers will hang from each of the landings via a 5/8' pressure treated plywood hanger. Our intention is to lag bolt all pertinent connection points (posts to landings, hangers to stringers, stringers to ledgers, etc.). Also, as I think I mentioned earlier, the stairs will, at their narrowest, be more than 32' wide and the hand railings will be supported by 4x4 posts at a height of 36". If you need additional details/clarifications, please let me know. -Josh> Date: Wed, 10 Sep 2008 08:32:23 -0400> From: AMACHADO@portlandmaine.gov> To: joshuawojcik@hotmail.com> Subject: RE: Rebuilding garage at 126 North Street> > Josh -> > I was able to open both Pdfs. > > You still need to give the construction details for the steps and> landings. You need information on the columns (support of steps &> landings). You need framing details (girder size & spans, joist size, > span & spacing, joist hangers or ledger, decking size of landings). You> need heights for guardrail & handrails, & baluster spacing.) You need> a stair detail showing tread depth, riser height, nosing on tread &> width of stairs. If you have questions on this then call Chris Hanson> (plan reviewer) at 874-8696. > > Ann>

Want to do more with Windows Live? Learn "10 hidden secrets" from Jamie. http://windowslive.com/connect/post/jamiethomson.spaces.live.com-Blog-cns!550F681DAD532637!5295. entry?ocid=TXT\_TAGLM\_WL\_domore\_092008

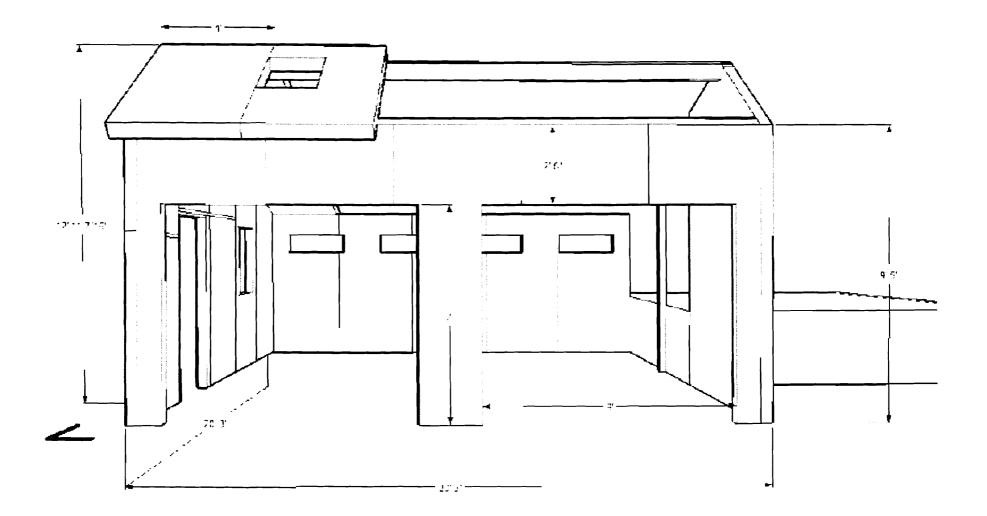
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	SEP 2 2 2008



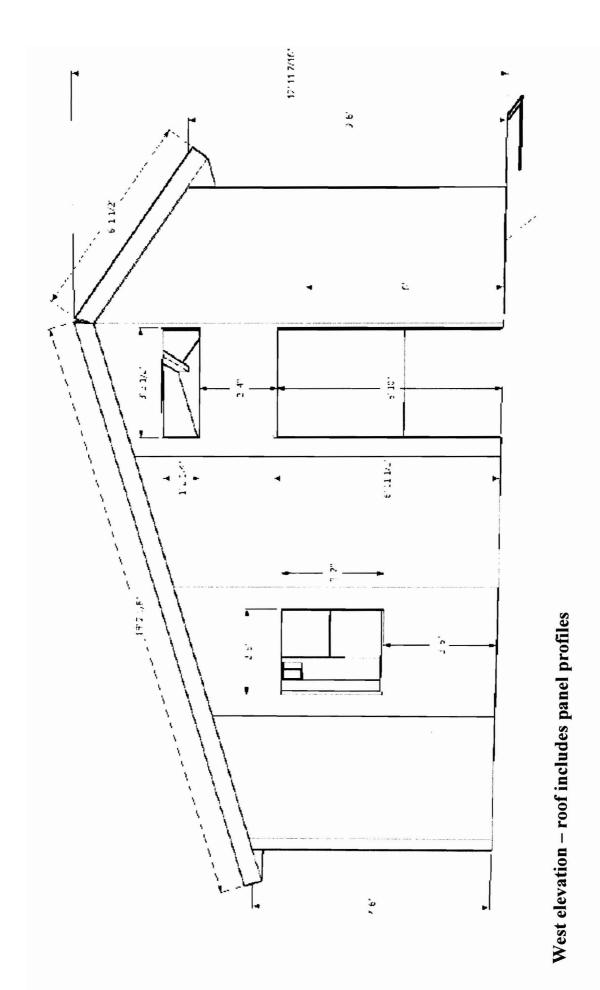




Ground level southeastern perspective – shown without siding/finish work and without the primary structure.

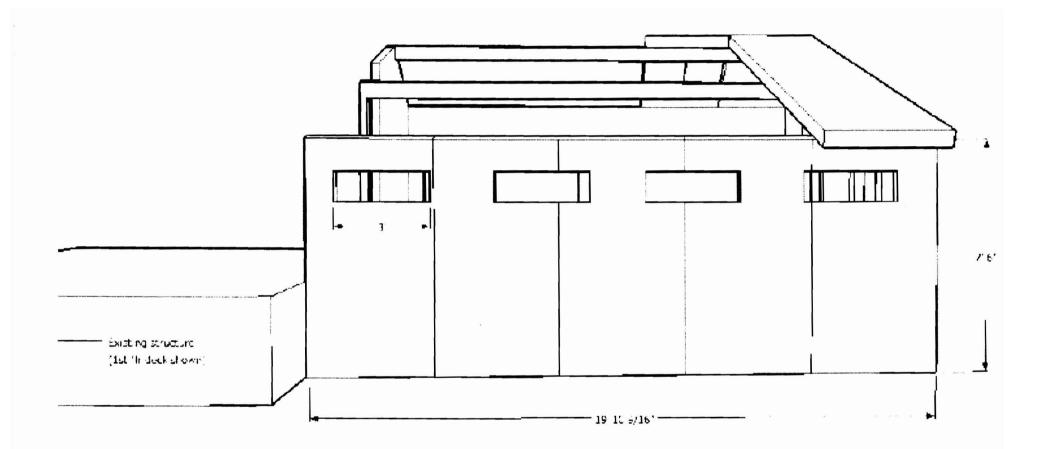


Front (south) elevation - shown with all but two roof panels removed to illustrate structure

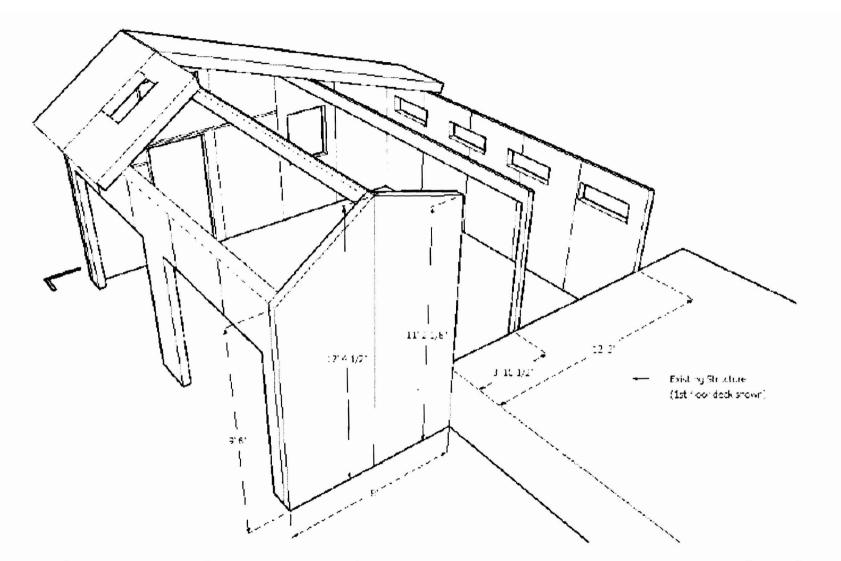




Page 2



Rear (north) elevation – again, most of roof panels are excluded to show structural configuration



Upper southeastern perspective – again, most of roof panels are excluded to show structural configuration.

Chris Hanson City of Portland Planning and Urban Development Department Building Inspection Services Program 389 Congress Street, Rm. 308 Portland, ME 04101

November 11, 2008

Mr. Hanson,

I am writing to request a waiver for my (re)construction permit for my garage at 126 North Street. My recollection of our phone conversation which occurred on 10/16/08 is that a waiver is needed for two reasons.

First, although the use of Structural Insulated Panels (SIPs) as a wall system has been incorporated in the IRC's 2006 code (it was added in May of 2007 as a supplement) Portland has not yet adopted this version of the code. Per your suggestion, I have attached the supplement. I would also like to clarify that my garage will be constructed using the prescribed methodology outlined in this supplement.

Second, because SIPs have not yet been adopted by the IRC as a roof system, I have attached a set of stamped drawings describing my plans for a SIP roof system.

In addition to my request for a waiver, I am transmitting for your review, stamped drawings for the foundation, which were not included in my original application packet.

Thank you again for your time and assistance. If you have any additional questions, please do not hesitate to contact me at (207) 749-9656.

Sincerely,

Joshua Wojcik

# SIPS PROPOSAL AFTER FINAL ACTION AGENDA – INCLUDES PUBLIC COMMENTS)

# SECTION R202 DEFINITIONS

**Core:** The light-weight middle section of the sandwich structural insulated panel composed foam plastic insulation, which provides the link between the two facing shells.

Facing: The structural wood panel facers that form the two outmost rigid layers of the structural insulated panel.

Panel thickness: Thickness of core plus two layers structural wood panel facers.

**Spline:** A long, flat, pliable strip of wood structural panel cut from the same material used for the panel facers, used to connect two structural insulated panels. The strip (spline) fits into a groove cut into the longitudinal edges of the two structural insulated panels to be joined. Splines are used in pairs, one behind each facing of the structural insulated panels being spliced as per Figure R614.8.

Structural Insulated Panel (SIP): A structural sandwich panel which consists of a light weight core securely laminated between two thin, rigid facings.

# R301.2.1.1 Design Criteria. (Add to existing text.)

6. Structural insulated panels shall be designed in accordance with the provisions of this code.

# R301.2.2.2.1 Weights of materials (Add to existing text.)

7. Ten psf (0.48 kN/m2) for structural insulated panel walls.

**R301.2.2.4.1 Height limitations.** Wood framed buildings shall be limited to three stories above grade or the limits given in Table R602.10.1. Cold-formed steel framed buildings shall be limited to two stories above grade in accordance with COFS/PM. Mezzanines as defined in Section 202 shall not be considered as stories. <u>Structural insulated panel buildings shall be limited to two stories above grade</u>.

**R301.2.3 Snow loads.** Wood framed construction, cold- formed steel framed construction, masonry and concrete construction, <u>and structural insulated panel construction</u> in regions with ground snow loads 70 psf (3.35 kN/m2) or less, shall be in accordance with Chapters 5, 6 and 8. (Remainder unchanged.)

# R301.3 Story height. (Add to existing text.)

5. For structural insulated panel walls, the maximum bearing wall height per story as permitted by Section 614 tables plus a height of floor framing not to exceed 10 feet.

## M1308.1 Drilling and notching. (Add to existing text.)

Structural insulated panels shall be drilled and notched or altered in accordance with the provisions of Section R614.

# M2101.6 Drilling and notching. (Add to existing text.)

Structural insulated panels shall be drilled and notched or altered in accordance with the provisions of Section R614.

# P2603.2 Drilling and notching. (Add to existing text.)

Structural insulated panels shall be drilled and notched or altered in accordance with the provisions of Section R614.

## SECTION R614 STRUCTURAL INSULATED PANEL WALL CONSTRUCTION

**R614.1 General.** Structural Insulated Panel walls shall be designed in accordance with the provisions of this section. When the provisions of this section are used to design structural insulated panel walls, project drawings, typical details and specifications are not required to bear the seal of the architect or engineer responsible for design, unless otherwise required by the state law of the jurisdiction having authority.

**R614.2 Applicability Limits**. The provisions of this section shall control the construction of exterior structural Insulated panel walls and interior load-bearing structural insulated panel walls for buildings not greater than 60 feet (18 288 mm) in length perpendicular to the joist or truss span, not greater than 40 feet (10 973 mm) in width parallel to the joist span or truss, and not greater than two stories in height with each story not greater than 10 feet (3048 mm) high. All exterior walls installed in accordance with the provisions of this section shall be considered as load-bearing walls. Structural insulated panel walls constructed in accordance with the provisions of this section shall be limited to sites subjected to a maximum design wind speed of 130 miles per hour Exposure A, B or C and a maximum ground snow load of 70 pounds per foot (3.35 kN/m2), and Seismic Zones A, B, and C.

R614.3 Materials. Structural insulated panels (SIPs) shall comply with the following criteria:

**R614.3.1 Core**. The core material of SIPs shall be composed of foam plastic insulation meeting the requirements of ASTM C 578, and shall have a minimum density of 0.90 lb/cu ft or an approved alternate. All cores shall meet the requirements of Section R314. SIP core insulation shall bear a label with the manufacturer identification, product standard and type, flame-spread/smoke-developed and name of quality assurance agency.

**R614.3.2 Facing.** Facing materials for structural insulated panels shall be wood structural panels conforming to DOC PS 1 or DOC PS 2, each having a minimum nominal thickness of 7/16 inches (11 mm). Facing shall be identified by a grade mark or certificate of inspection issued by an approved agency. The facing materials shall meet the minimum qualification test values specified in Table R614.3.2.

# TABLE R614.3.2 MINIMUM PROPERTIES FOR ORIENTED STRAND BOARD FACING MATERIAL USED IN SIP WALLS

Thickness	Product	Flatwise Stiffness <sup>a</sup> (lbf-in <sup>2</sup> /ft)			Strength⁵ in/ft)	Tensi (Ibf/	Density <sup>a,c</sup>	
(in.)	FIGUEL	Along	Across	Along	Across	Along	Acros s	(pcf)
7/16	Sheathing	54,700	27,100	950	870	6,800	6,500	35

For SI: 1 lbf-in<sup>2</sup>/ft = 9.415 x 10<sup>8</sup> kiloNewton meter<sup>2</sup>/meter, 1 lbf-in/ft = 3.707 x 10<sup>-4</sup> kiloNewton meter/meter, 1 lbf/ft = 0.0146 Newton/millimeter, 1 pcf = 16.018 kilogram/meter<sup>3</sup>.

a. Mean test value shall be in accordance with Section 7.6 of DOC PS2.

b. Characteristic test value (5<sup>th</sup> percent with 75% confidence).

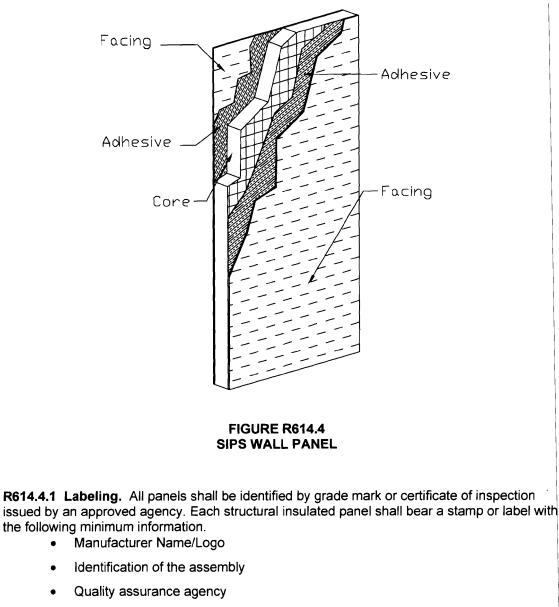
c. Density shall be based on oven-dry weight and oven-dry volume.

**R614.3.3** Adhesive. Adhesives used to structurally laminate the foam plastic insulation core material to the structural wood facers shall conform to ASTM D2559 or approved alternate specifically intended for use as an adhesive in the lamination of structural insulated panels. Each container of adhesive shall bear a label with the adhesive manufacturer name, adhesive name and type and the name of the quality assurance agency.

**R614.3.4** Lumber. The minimum lumber framing materials used for SIPs prescribed in this document is NLGA graded No. 2 Spruce-pine-fir (SPF). Other wood species/grades that meet or exceed the mechanical properties and specific gravity of No. 2 SPF shall be permitted for substitution.

**R614.3.5 SIP Screws.** Screws used for the erection of SIPs as specified in Section R614.5 shall be provided by the SIPs manufacturer and shall be sized to fully penetrate the main member – the wood member to which the assembly is being attached.

**R614.4 SIP Wall Panels.** SIPs for wall systems shall comply with Figure R614.4 and shall have minimum panel thickness as per Tables R614.5(1) and R614.5(2) for above-grade walls. All SIPs shall be identified by grade mark or certificate of inspection issued by an approved agency.



**R614.5 Wall Construction.** Exterior walls of structural insulated panel construction shall be designed and constructed in accordance with the provisions of this section and Tables R614.5(1) and R614.5(2) and Figures R614.5(1) and R614.5(2). Structural insulated panel walls shall be fastened through both facing surfaces to other wood building components in accordance with Tables R602.3(1) through R602.3(4).

Framing shall be attached in accordance to Section R602.3(1) unless otherwise provided for in Section R614.

November 15, 2005

# TABLE R614.5(1) MINIMUM THICKNESS FOR SIP WALL SUPPORTING SIP OR LIGHT-FRAME ROOF ONLY

Wind	Speed			Building Width (ft)													
	gust)	Snow		24			28		32			36			40		
Exp.	Exp.	Load	Wa	II Heigh	t (ft)	Wa	ll Heigh	t (ft)	Wa	II Heigh	t (ft)	Wa	I Heigh	t (ft)	Wa	ll Heigh	t (ft)
A/B	С	(psf)	-8	9	10	8	9	10	8	9	10	8	9	10	8	9	10
		20	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
85		30	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
05		50	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
		70	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
		20	4	4	_4	4	4	4	4	4	4	4	4	4	4	4	4
100	85	30	4	4	4	4	4	4	4	4	4	4	4	4	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	4	
100	05	50	4	4	4	4	4	4	4	4	4	4	4	4	4	Wall Height (         3       9         4       4         4       4         4       4         4       4         4       4         4       4         4       4         4       4         4       4         4       4         4       4         4       4         4       4         4       4         4       4         4       4         4       4         4       4         4       4         4       4         4       4         4       4         4       4         4       6         5       6	4
_		70	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4 4 4 4 4 4 4 4 4
110		20	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	100	30	4	4	4	4	4	_4	4	_4	4	4	4	4	4         4         4           4         4         4           4         4         4           4         4         4	4	4
	100	50	4	4	4	4	4	4	4	4	4	4	4	4		4	
		70	4	4	4	4	4	4	4	4	4	4	4	4	4	4_	4
		20	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
120	110	30	4	4	4	4	4	4	4	4	4	4	4	4	4 4	4	4
120		50	4	4	4	4	4	4	4	4	4	4	4	4			4
		70	4	4	4	4	4	4	4	4	4	4	4	6	4	4	6
		20	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
130	120	30	4	4	4	4	4	4	4	4	4	4	4	4	4     4       4     4       4     4       4     4       4     4       4     4       4     4       4     4       4     4       4     4       4     4       4     4       4     4       4     4       4     4       4     4       4     4       4     4	4	
100	120	50	4	4	4	4	4	4	4	4	6	4	4	6	4		6
		70	4	4	4	4	4	6	4	4	6_	4	6	N/A	4	6	N/A
		20	4	4	6	4	4	N/A	4	4	N/A	4	4	N/A	4	-	N/A
	130	30	4	4	N/A	4	4	N/A	4	4	N/A	4	6	N/A	4		N/A
	.50	50	4	6	N/A	4	6	N/A	4	N/A	N/A	6	N/A	N/A	6		N/A
		70 in oh -	4	N/Å	N/A	6	N/A	N/A	6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm. Deflection criteria: L/240. Roof load: 7 psf. Ceiling load: 5 psf. Wind loads based on Table R301.2(2). N/A indicates not applicable.

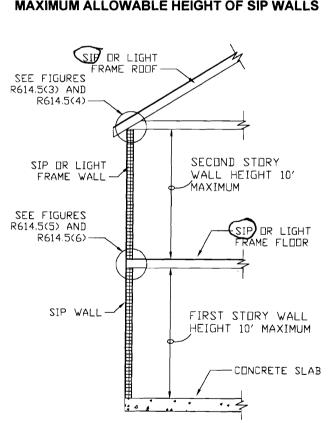
# TABLE R614.5(2) MINIMUM THICKNESS FOR SIP WALLS SUPPORTING SIP OR LIGHT-FRAME ONE STORY AND ROOF

(3-sec. Exp. A/B	gust) Exp. C	Snow Load		24													
		Load				28			32			36			40		
			Wa	ll Heigh	t (ft)	Wa	l Heigh	t (ft)	Wa	ll Heigh	t (ft)	Wal	l Heigh	t (ft)	Wa	ll Heigh	t (ft)
		(psf)	8	9	10	8	9	10	8	9	10	8	9	10	8	9	10
		20	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
85		30	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
05		50	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
		70	4	4	4	4	4	4	4	4	4	4	4	6	6	6	6
		20	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
100	85	30	4	4	4	4	4	4	4	4	4	4	4	4	Wall Height (           0         8         9           4         4         4           4         4         4           4         4         4           4         4         4           4         4         4           4         4         4           4         4         4           4         4         6           6         6         N/A           4         4         6           6         6         6           A         N/A         N/A           A         6         6           A         6         6           A         N/A         N/A           A         6         N/A           A         N/A         N/A           A         N/A         N/A	6	
100	05	50	4	4	4	4	4	4	4	4	4	4	4	6		6	
		70	4	4	4	4	4	4	4	4	6	6	6	6	6	N/A	N/A
	_	20	4	4	4	4	4	4	4	4	4	4	4	4	4	4	6
110	100	30	4	4	4	4	4	4	4	4	4	4	4	6	4	6	6
110	100	50	4	4	4	4	4	4	4	4	6	4	6	6		6	N/A
		70	4	4	4	4	4	6	6	6	N/A	6	N/A	N/A	N/A	N/A	N/A
		20	4	4	4	4	4	4	4	4	6	4	4	6	4	6	N/A
120	110	30	4	4	4	4	4	6	4	4	6	4	6	N/A	N/A N/A N/A 6 4 6 N/A 6 6 N/A N/A N/A	N/A	
120		50	4	4	6	4	_4	6	4	6	N/A	6	N/A	N/A			N/A_
		70	4	4	6	4	6	N/A	6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
		20	4	4	6	4	4	6	4	6	N/A	4	6	N/A	6	N/A	N/A
130	120	30	4	4	6	4	4	N/A	4	6	N/A	6	N/A	N/A	Wall Height (           8         9           4         4           4         4           4         4           4         4           4         4           4         4           4         4           4         4           4         4           4         6           6         N/A           4         6           6         6           N/A         N/A           4         6           6         N/A           N/A         N/A	N/A	
100	120	50	4	_ 6	N/A	4	6	N/A	6	N/A	N/A	N/Ā	N/A	N/A			N/A
		70	4	6	N/A	6	N/A	N/A	Ň/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
_		20	6	N/A	N/A	6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A		N/A	Ň/A
	130	30	6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A_	N/A	N/A	N/A	N/A
	.00	50	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A			N/A
		70	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Ň/A	N/A	N/A	N/A	N/A	N/A

For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm.

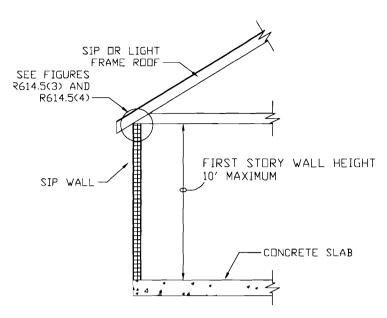
For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mr Deflection criteria: L/240. Roof load: 7 psf. Ceiling load: 5 psf. Second floor live load: 30 psf. Second floor dead load: 10 psf. Second floor dead load from walls: 10 psf. Wind loads based on Table R301.2(2).

N/A indicates not applicable.



# FIGURE R614.5(2) MAXIMUM ALLOWABLE HEIGHT OF SIP WALLS







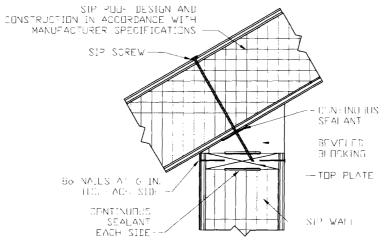
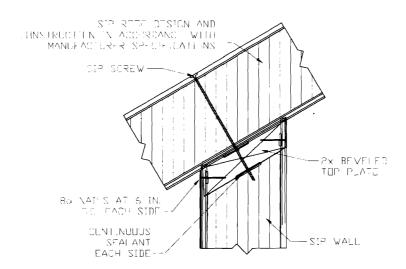
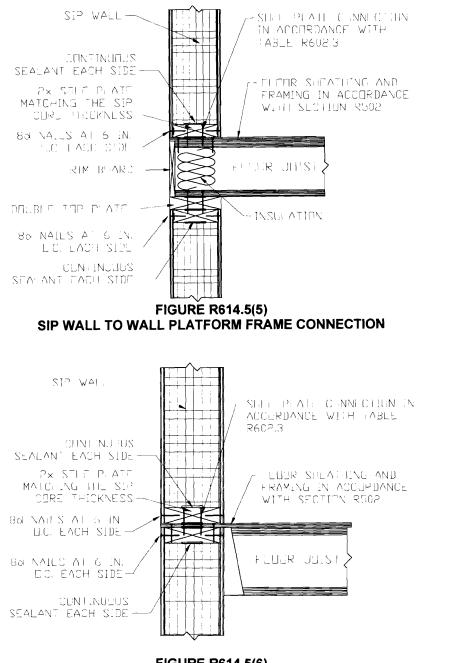


FIGURE R614.5(3) SIP WALL TO ROOF BEVELED TOP PLATE CONNECTION

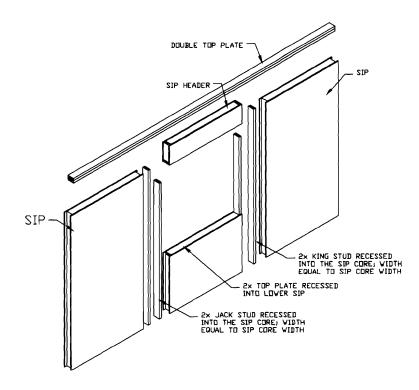




# FIGURE R614.5(6) SIP WALL TO WALL BALOON FRAME CONNECTION

**R614.5.1 Top plate.** Structural insulated panel walls shall be capped with a double top plate installed to provide overlapping at corner, intersections and splines in accordance with Figure R614.5.1. End joints in top plates shall be offset at least 24 inches (610 mm). Plates shall be a nominal 2 inches in depth (51 mm) and have a width equal to the width of the structural insulated panel core.

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### Notes:

Top plates shall be continuous over header. SIP facing surfaces shall be nailed to framing and cripples with 8d common galvanized box nails spaced 3 inches on center, staggering alternate nails ½ inch. Galvanized nails shall be hot-dipped or tumbled. Framing shall be attached in accordance to R602.3(1) unless otherwise provide for in Section R614.

# FIGURE R614.5.1 SIP WALL FRAMING CONFIGURATION

**R614.5.2 Bottom (sole) plate.** Structural insulated panel walls shall have full bearing on sole plate having a width equal to the nominal width of the foam core. When structural insulated wall panels are supported directly on continuous foundations, the wall wood sill plate shall be anchored to the foundation in accordance with Section R403.1.

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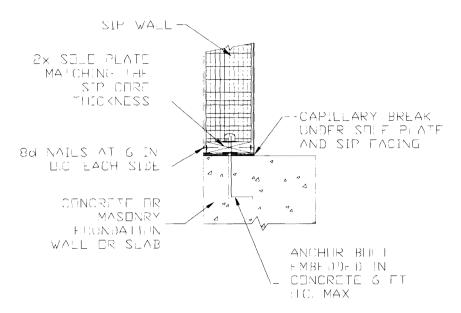


FIGURE R614.5.2 SIP WALL TO CONCRETE SLAB OR FOUNDATION WALL ATTACHMENT

**R614.5.3 Wall bracing.** Structural insulated panel walls shall be braced in accordance with Section R602.10. SIP walls shall be considered continuous wood structural panel sheathing for purposes of computing percent bracing required. SIP walls shall meet the requirements of R602.10.5 except that SIPs corners shall be fabricated as shown in Figure R614.9.

**R6.14.6** Interior load-bearing walls. Interior load-bearing walls shall be constructed as specified for exterior walls.

**R614.7 Drilling and Notching-SIPs**. The maximum vertical chase penetration in SIPs shall have a maximum side dimension of 2-inches (50.8 mm) centered in the panel core. Vertical chases shall have a minimum spacing of 24-inches (610 mm) on center. Maximum of 2 horizontal chases shall be permitted in each wall panel-one at 14-inches (360 mm) from the bottom of the panel and one at mid height of wall panel. The maximum allowable penetration size in a wall panel shall be circular or rectangular with maximum dimension of 12-inches (300 mm). Over-cutting of holes in facing panels shall not be permitted.

**R614.8 Splicing.** Structural insulated panels shall be spliced in accordance with Figure R614.8 or by other approved method.

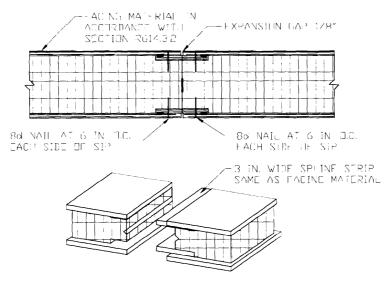
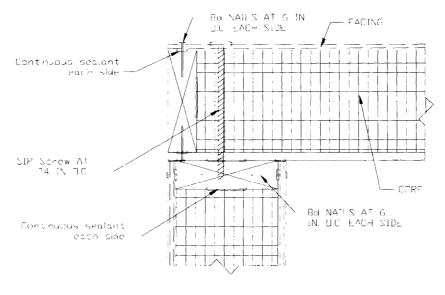


FIGURE R614.8 TYPICAL SIP SPLICING DETAILS

**R614.9 Corner Framing.** Corner framing of structural insulated panel walls shall be constructed in accordance with Figure R614.9.



# FIGURE R614.9 SIP CORNER FRAMING DETAIL

**R614.10 Headers.** Structural insulated panel headers shall be designed and constructed according to Table R614.10 and Figure R614.5.1(1). SIPs headers shall be continuous sections without splines. Headers longer than 4 ft should be constructed according to Section 602.7.

# TABLE R614.10 MAXIMUM SPANS FOR SIP HEADERS

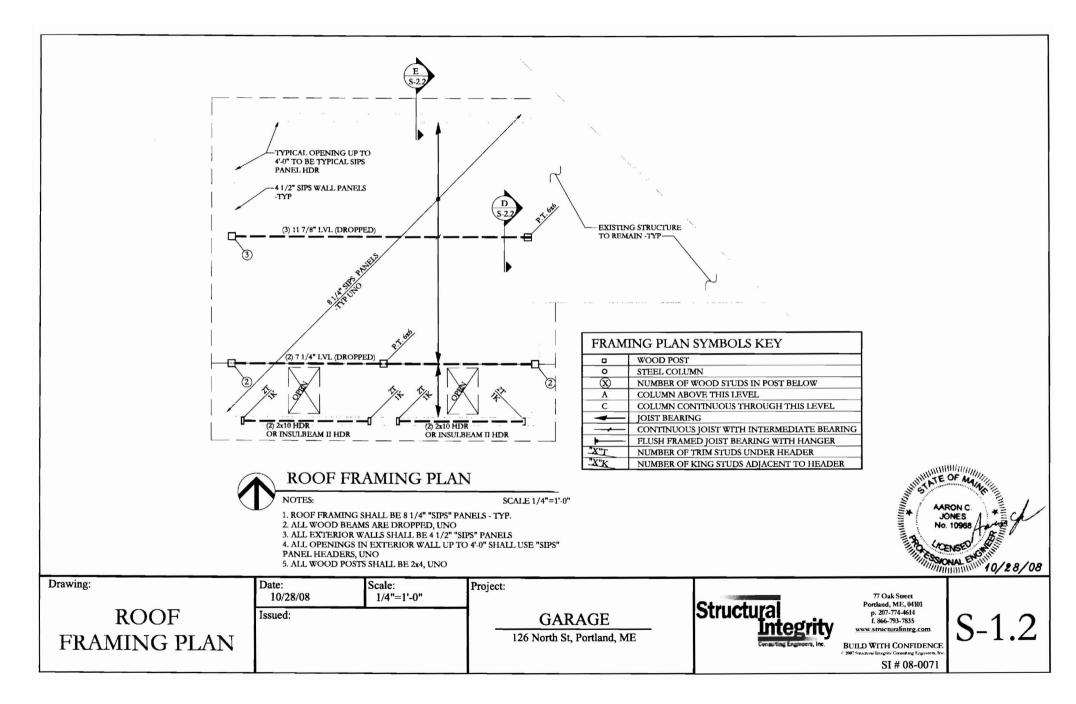
Load Condition	Snow	Building Width (ft)								
	Load (psf)	24	28	32	36	40				
	20	_4	4	4	4	2				
Supporting Roof	30	4	4	4	2	2				
Only	50	2	2	2	2	2				
	70	2	2	2	N/A	N/A				
	20	2	2	N/A	N/A	N/A				
Supporting Roof and	30	2	2	N/A	N/A	N/A				
One-Story	50	2	N/A	N/A	N/A	N/A				
	70	N/A	N/A	N/A	N/A	N/A				

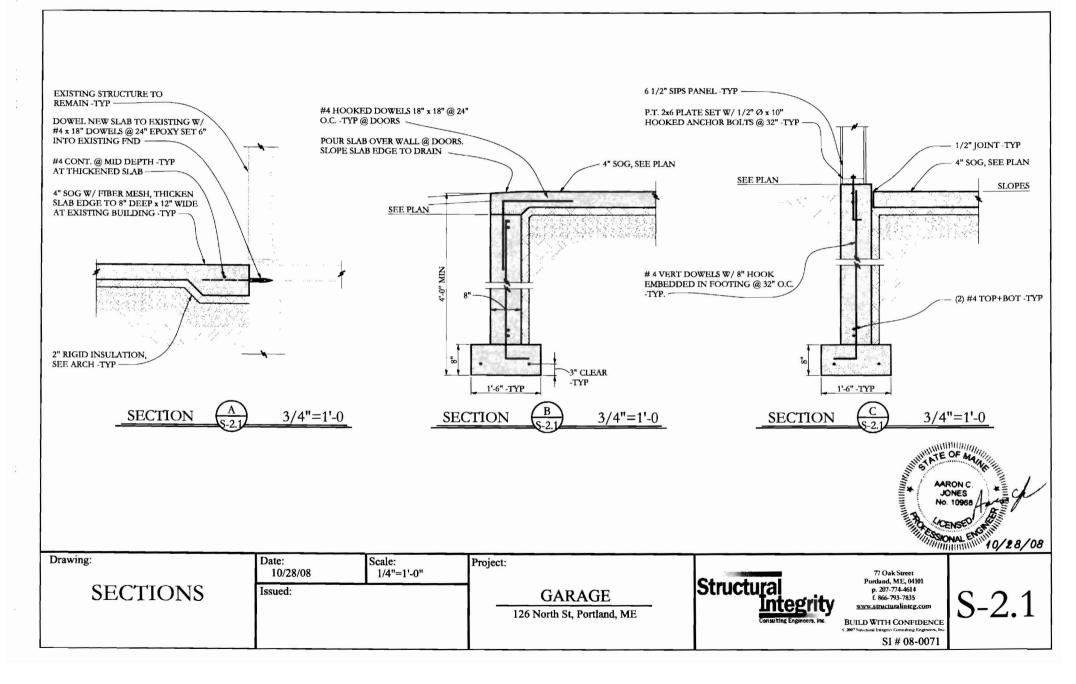
For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm. Deflection criteria: L/360. Roof load: 7 psf. Ceiling load: 5 psf. Second floor live load: 30 psf. Second floor dead load: 10 psf. Second floor dead load from walls: 10 psf.

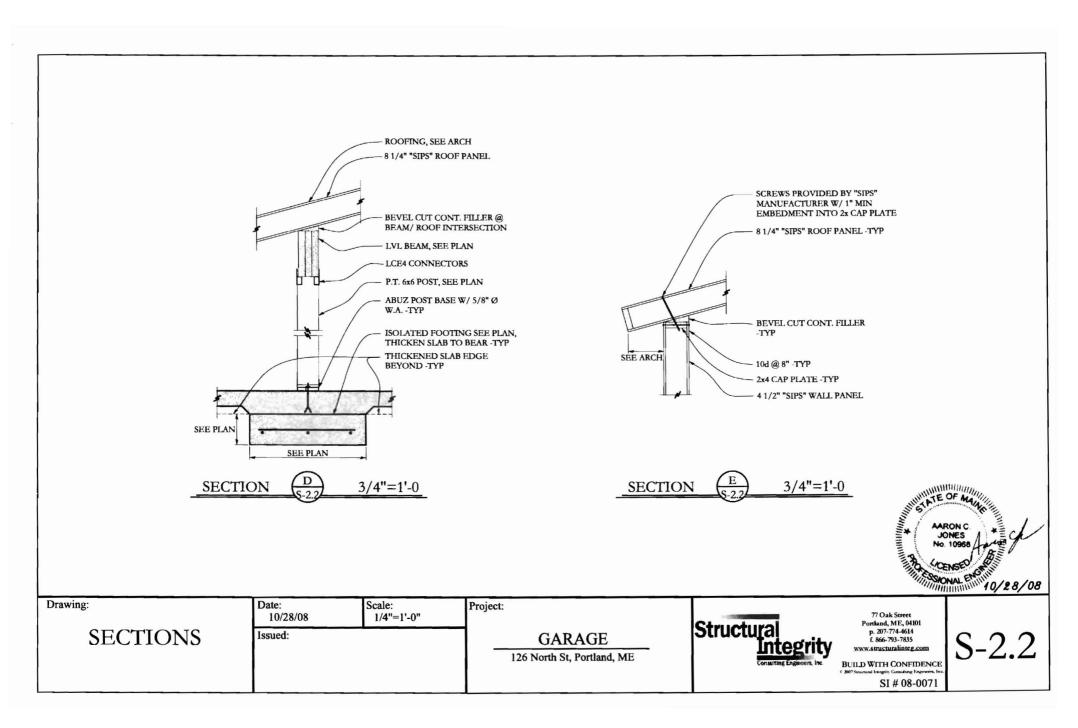
N/A indicates not applicable.

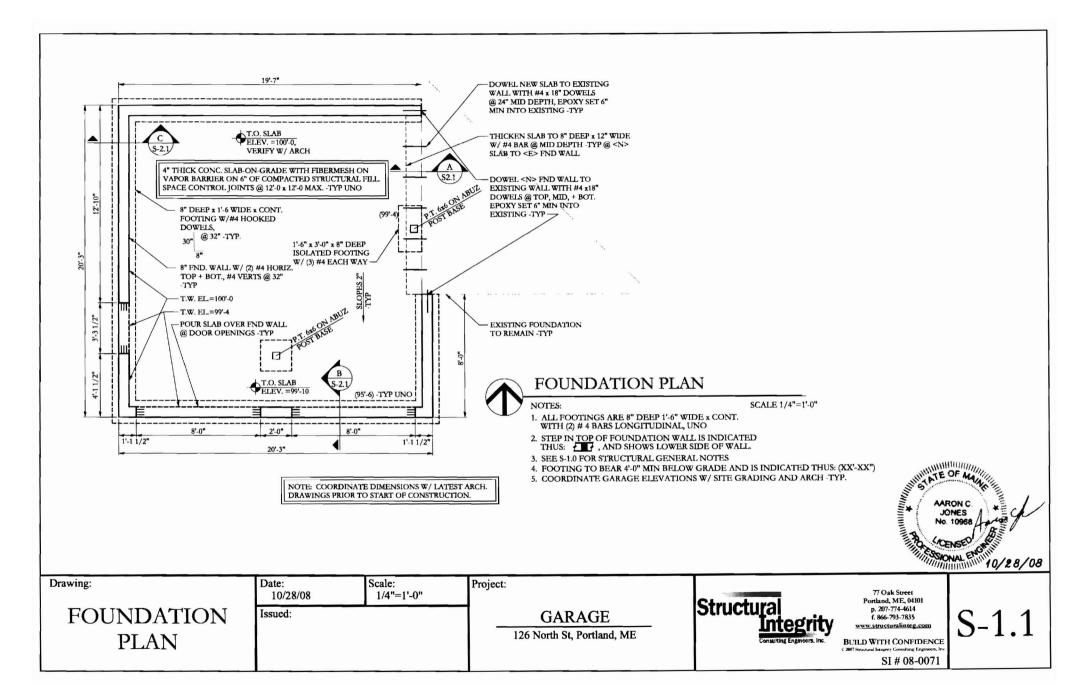
**R614.10.1 Wood structural panel box headers**. Wood structural panel box headers shall be allowed where structural insulated panel headers are not applicable. Wood structural panel box headers shall be constructed in accordance with Figure R602.7.2 and Table R602.7.2.

November 15, 2005









### GENERAL STRUCTURAL NOTES

### DESIGN LIVE LOADS

- Wend Floor
- 35 psf 100 mph. exp B. 3 second gust 40 psf
- FOUNDATION: CND\_TION: Fundations are designed without an engineer 's sull investigation. Foundation design criteria was assumed for purposes of foundation design and shall be confirmed by a solit-origineer, at owner's expense, prior to construction. (The procedure may require revisions to foundation design: a difficuot expense to the owner, 'f solit origineer determines that such design criteria are nappropriate for this Footings, shall be placed on undisturbed natural soil or compacted fill tested and approved by soils engancer.
- Maximum design soil pressure: 1500 pst

2000 IBC LLO N

- BASEMENT WALLS
   Slope perimeter grade away from building.
   Place concrete continuously without horizontal cold joints

# CONCRETE AND REINFORCEMENT:

	Manimum 28 day co				in Action
	as follows				
	Footmas	3000	D.S		
	Foundation Walls	3(8.8)	DN		
	Interior Slabs	3000	ps		
	All Concrete	3(XX)	DS		
•	Cement Type:				
	Concrete expos	ed to soil.		1.0	
	All other			1 11	
	Defermed and barrow		14 4	15	

- An other Deformed rendorcement. ASTM A615 grade (0), except bars specified to be field-bent, strrups, and tes which shall be grade 40 Fibremesh. 100% striggn polypropylene, fibrillated fibers as manufactured by Fibremesh Co. per ASTMC-1116 type 1114.13 and ASTM
- Enterment 100% straps nothropstere, blottladet libers as mutafahred by Fibremesh Co. per ASTMC-1116 type 1114.1.3 and ASTM C-1116 performance level one, 15 h per outs, such Wolded Wire Father (WWF) ASTM A188. See also plan, Typed a meaning foundation transmission of the bottom (except as noted) continuous at corrers and steps Reinforcement shall be laberated and placed per ACI Manual of Standard Practice (ACI-315). At splices, lap bars so diameters unless noted otherward and laberated and placed per ACI Manual of Standard Practice (ACI-315). At splices, lap bars so diameters unless noted otherward and flar sides of all openings, extend min, 2-0 beyond openings. Concrete cover on remoting, 1-1; in converte placed against forms. Y for converte placed against earth. See also drawings, In outnows members, splice top bars at and span and bottom bars over supports.

- WOOD FRAMING:

   \* Dimension Lumbers designed and shall be supplied using HASE VALLES Design Criteria

   \* SPF 2: and better (Macmium Mosture Content 19%)U/U/N

   Plates
   Sill plates: Preservative treated Hene Fir or Southern Pine

   \* "Preserve treated limber" of all be finaming meant of the specified species which hers been pressure treated with a decay and intercreation meeting all current standards for word in contact with current certain solution, meeting all current standards for word in contact with current events. Sill plates in contact with meanings or days may be treated Timbe Strung LSL (zine boards teament). Acceptable treatment mediums for word in contact with earlier or in even applications include ACU(Alkaine Coper Quatemars) and coper angle. All to connect the shall meet the recommendations of the pressure treated word maindartic. To be shall be shall not Depend Gid winted or Stanies. Steel: All screws, nails and bolts shall must hungers and other zomestors. Do not mix stainless with an her and precision.
- galvanized products. Do not allow aluminum to contact treated wood

- Top and Bottom Piates SPF SPF U O N. 2 x 4 and 2 x 6 to 8'-0

- Top and Bettom Piters SPF SPF U/O N, 2 v4 and 2 v6 to 8\*0 stud grade 2v4 over 8\*0 No 2 and better 2v6 over 8\*0 No 2 and better Columns Southern Yellow Pite No 1. Tob-1350 psi, F 1. 2500,000 psi Laminated Wener Lamber (LVL), Manufasturul 3 14\*7 w4 de Microflams (ML) hy, Trus Joist or equivalent Fb-2.600 psi, F-1.090,000 psi, 5v. 285 psi, depth noted on plans 151 Ram Joist Manufasturul 3 14\*7 wedph microflamed lammated stand burber by Trus Jost. No substantions All physicol stand board (OSB) sheathing shall be engineered grades with APA grade stamp actioning appropriate maximum maxima of sumorts.
- All physicod and oriented straid beard (URD) stratuting source to sequence expression of a particle of supports Filter sheathing, normal 1<sup>+</sup>, APA Stard-Filter 24 inch of the sequence expression of the straight of the s EXCESS BETWEEN SUDS. Sharing with volume and the second state of the second state and the second state of the second state of
- (conted or deformed shark) per 16<sup>-</sup>. (2d nails are not acceptable.
   End stud at each door jamb, at all exterior corners, and at ends of OSB sheathed wall sections shall have one H4 anchor to the sole plate.

See plans for sheathing locations other than code minimums (corners and 25' o.c.)

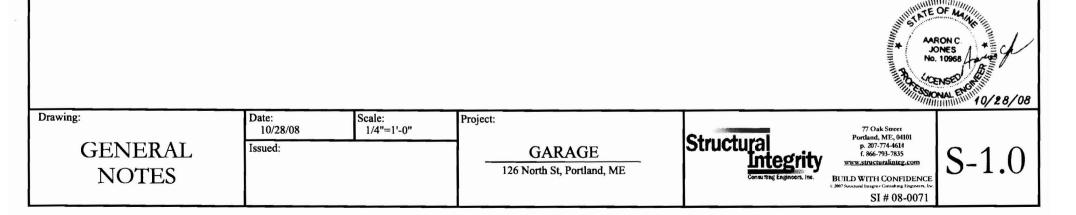
- STRUCTURAL ERECTION AND BRACING REPURPEMENTS
  The structural drawings illustrate the completed structures with all elements in their final positions, properly supported and brancet. The contrastor in the proper superior and proper shoring and brancag as may be required branches the final completed structure. These plans has been engineered for construction at one specific building site. Building assume ALL responsibility to use of their plans as an another building assume ALL responsibility to use of their plans as an another building assume ALL responsibility to use of their plans as an another building assume ALL responsibility to use of their plans as an another building as without specific results by the onner. Other plans are plans and the specific building assume building department or any other plans and the specific building assume assume assume assume the specific building assume and the specific building assume assume the specific building

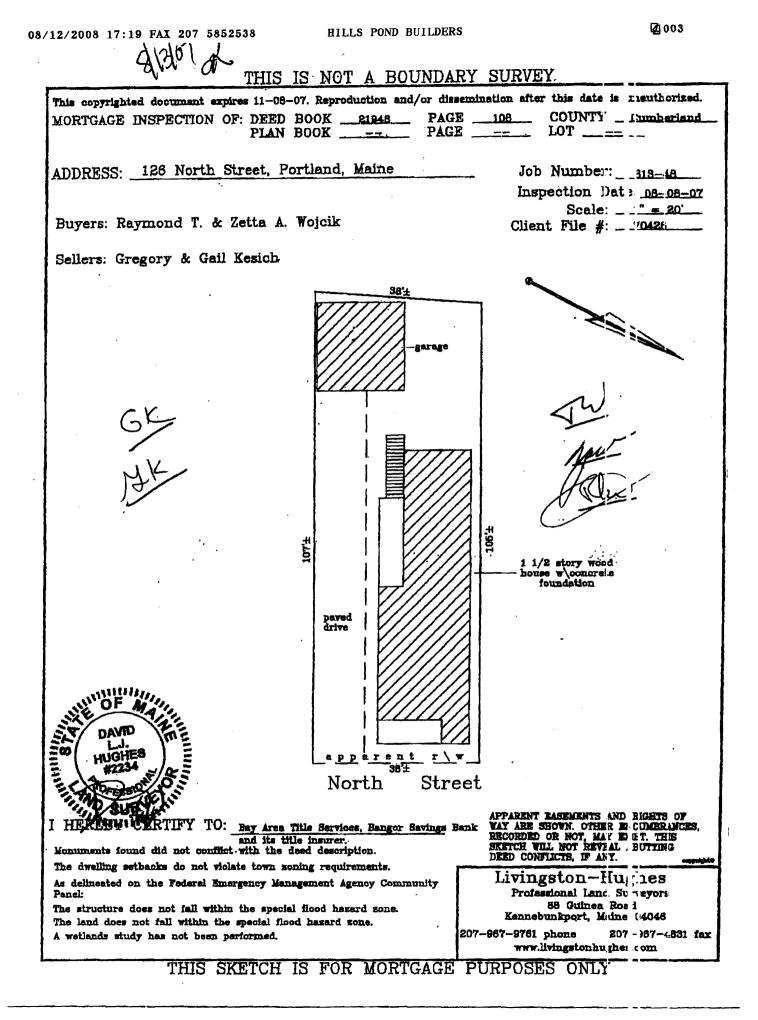
- shown and noted otherwise
- shown and noted offlerwise. The foundation design shown assumes that the owner builder is aware of the presence of expansive wolks and that he has read the previously referenced scale report. Use of these plans is indication that the owner builder accepts the risks associated with huilding on this site, expressible these related to suble on grade construction in finished areas. PAX will not be the liable for disenses caused by slab more ment and the state of the previously accepted and the state of the previously accepted by slab more ment accepted and the state of the previously accepted accepted and the state of the previously accepted by slab more ment accepted accepted

SHOP DRAWINGS Fabricator and or supplier of rebir. structural steel, prefabricated wood trusses. SPIS pands and prefabricated floor joint systems shall submit shop and reschund trawings for architect and engineer review. Submit one reproducible and two proits for each drawing. Allow five working days for review.

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File Number 7: 12.26

# WARRANTY DEED Maine Statutory Short Form

KNOW ALL MEN BY THESE PRESENTS, That I/we Gregory D. Kestch and Gail D. Kestch of the City/Town of Portland in the State of Maine, for consideration paid, grant(s) to Raymond T. Wojcik and Zetta A. Wojcik and Joshua T. Wojcik whose mailing address is 912 School Street, Perkins Township, Maine 04294, as Joint Tenants with WARRANTY COVENANTS, the real property situated in Portland, County of Cumberland and State of Maine more particularly described in Exhibit A attached hereto and incorporated herein by reference.

IN WITNESS WHEREOF, I/we have hereunto set my/our hand(s) and se l(s) this 24th day of August, 2007.

mille itness to

Fregory D. Kesich

Gail D. Kesich

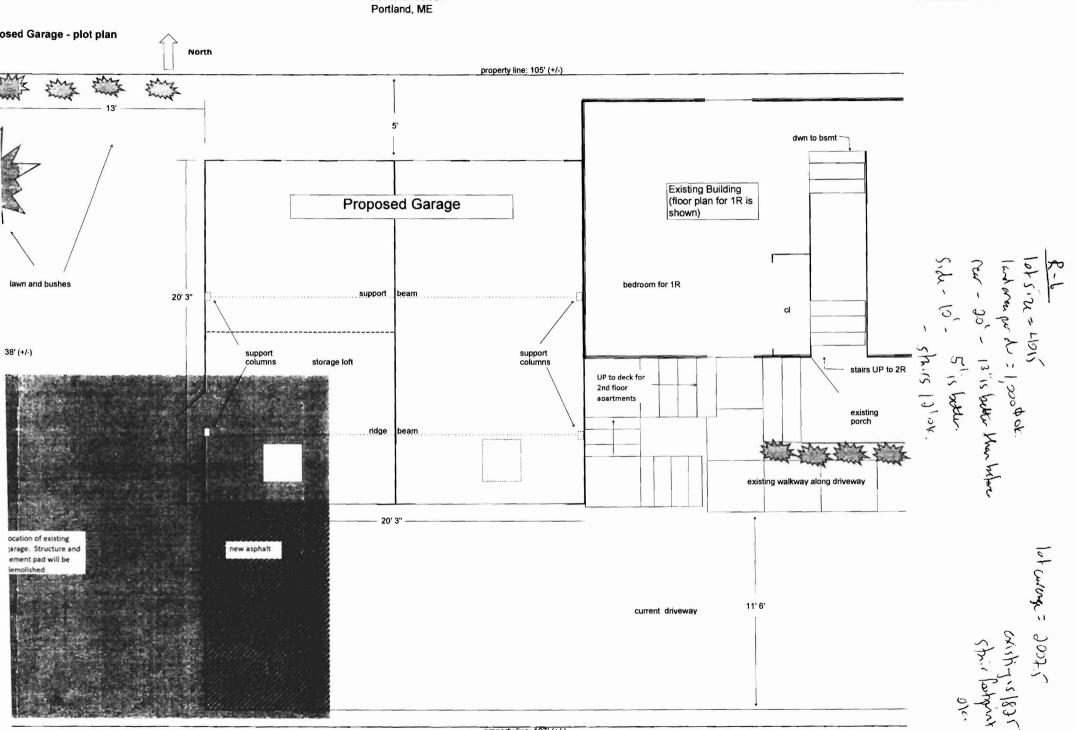
State of Maine County of Cumberland, ss.

August 24, 2007

Personally appeared before me the above named Gregory D. Kesich and Gai D. Kesich and acknowledged the foregoing instrument to be his/her/their free act and de d.

Notar (ttorney at L

SUSAN GAGE KNEDLER Notary Public, Maine My Commission Expires November 22, 2011



126 North Street

property line: 107' (+/-)

Site plan; Page1

Printed:8/27/2008