

City of Portland, Maine – Building or Use Permit Application 389 Congress Street, 04101, Tel: (207) 874-8703, FAX: 874-8716

BUILDING PERMIT REPORT

DATE: 5 June 99 ADDRESS: 1249 Washington Ave. CBL: 408-A-028

REASON FOR PERMIT: 12x18 pre-fab alum. sun room

BUILDING OWNER: A. Wadowiak

PERMIT APPLICANT: _____ Contractor Jesse Dahley American Profiles

USE GROUP R-3 BOCA 1996 CONSTRUCTION TYPE _____

CONDITION(S) OF APPROVAL

This permit is being issued with the understanding that the following conditions are met:

Approved with the following conditions: *1 *11 *13 +27+29 +32+33

1. This permit does not excuse the applicant from meeting applicable State and Federal rules and laws.
2. Before concrete for foundation is placed, approvals from the Development Review Coordinator and Inspection Services must be obtained. (A 24 hour notice is required prior to inspection)
3. Foundation drain shall be placed around the perimeter of a foundation that consists of gravel or crushed stone containing not more than 10 percent material that passes through a No. 4 sieve. The drain shall extend a minimum of 12 inches beyond the outside edge of the footing. The thickness shall be such that the bottom of the drain is not higher than the bottom of the base under the floor, and that the top of the drain is not less than 6 inches above the top of the footing. The top of the drain shall be covered with an approved filter membrane material. Where a drain tile or perforated pipe is used, the invert of the pipe or tile shall not be higher than the floor elevation. The top of joints or top of perforations shall be protected with an approved filter membrane material. The pipe or tile shall be placed on not less than 2" of gravel or crushed stone, and shall be covered with not less than 6" of the same material. Section 1813.5.2
4. Foundations anchors shall be a minimum of $\frac{1}{2}$ " in diameter, 7" into the foundation wall, minimum of 12" from corners of foundation and a maximum 6' o.c. between bolts. (Section 2305.17)
5. Waterproofing and damp proofing shall be done in accordance with Section 1813.0 of the building code.
6. Precaution must be taken to protect concrete from freezing. Section 1908.0
7. It is strongly recommended that a registered land surveyor check all foundation forms before concrete is placed. This is done to verify that the proper setbacks are maintained.
8. Private garages located beneath habitable rooms in occupancies in Use Group R-1, R-2, R-3 or I-1 shall be separated from adjacent interior spaces by fire partitions and floor/ceiling assembly which are constructed with not less than 1-hour fire resisting rating. Private garages attached side-by-side to rooms in the above occupancies shall be completely separated from the interior spaces and the attic area by means of $\frac{1}{2}$ inch gypsum board or the equivalent applied to the garage means of $\frac{1}{2}$ inch gypsum board or the equivalent applied to the garage side. (Chapter 4, Section 407.0 of the BOCA/1996)
9. All chimneys and vents shall be installed and maintained as per Chapter 12 of the City's Mechanical Code. (The BOCA National Mechanical Code/1993). Chapter 12 & NFPA 211
10. Sound transmission control in residential building shall be done in accordance with Chapter 12, Section 1214.0 of the City's Building Code.
11. Guardrails & Handrails: A guardrail system is a system of building components located near the open sides of elevated walking surfaces for the purpose of minimizing the possibility of an accidental fall from the walking surface to the lower level. Minimum height all Use Groups 42", except Use Group R which is 36". In occupancies in Use Group A, B, H-4, I-1, I-2, M and R and public garages and open parking structures, open guards shall have balusters or be of solid material such that a sphere with a diameter of 4" cannot pass through any opening. Guards shall not have an ornamental pattern that would provide a ladder effect. (Handrails shall be a minimum of 3e4" but not more than 38". Use Group R-3 shall not be less than 30", but not more than 38".) Handrail grip size shall have a circular cross section with an outside diameter of at least 1 $\frac{1}{4}$ " and not greater than 2". (Sections 1021 & 1022.0) - Handrails shall be on both sides of stairway. (Section 1014.7)
12. Headroom in habitable space is a minimum of 7'6". (Section 1204.0)
13. Stair construction in Use Group R-3 & R-4 is a minimum of 10" tread and 7 $\frac{1}{4}$ " maximum rise. All other Use Group minimum 11" tread, 7" maximum rise. (Section 1014.0)
14. The minimum headroom in all parts of a stairway shall not be less than 80 inches. (6'8") 1014.4
15. Every sleeping room below the fourth story in buildings of Use Groups R and I-1 shall have at least one operable window or exterior door approved for emergency egress or rescue. The units must be operable from the inside without the use of special knowledge or separate tools. Where windows are provided as means of egress or rescue they shall have a sill height not more than 44 inches (1118mm) above the floor. All egress or rescue windows from sleeping rooms shall have a minimum net clear opening height dimension of 24 inches (610mm). The minimum net clear opening width dimension shall be 20 inches (508mm), and a minimum net clear opening of 5.7 sq. ft. (Section 1018.6)
16. Each apartment shall have access to two (2) separate, remote and approved means of egress. A single exit is acceptable when it exits directly from the apartment to the building exterior with no communications to other apartment units. (Section 1010.1)
17. All vertical openings shall be enclosed with construction having a fire rating of at least one (1) hour, including fire doors with self closer's. (Over 3 stories in height requirements for fire rating is two (2) hours.) (Section 710.0)

FCT

The Basement window
can remove if it's safe in + out of
Floor says we'd be hiring so that we may
and you would have to do the left side of the
wall EXTREME fast basement windows
LASTS; Be sure what the left side

FLASHING DRAK.

1349 MASSIEFLWY WILM TELAR 150WHR

A/OTX:

9-0313

Date 5/19/99

Address of Owner 1349 MASSIEFLWY WILM TELAR 150WHR

Signature of Owner X

permits.

To act as agent of building permit and, or any zoning requirements needed to obtain

Building Department of the City of MAINE

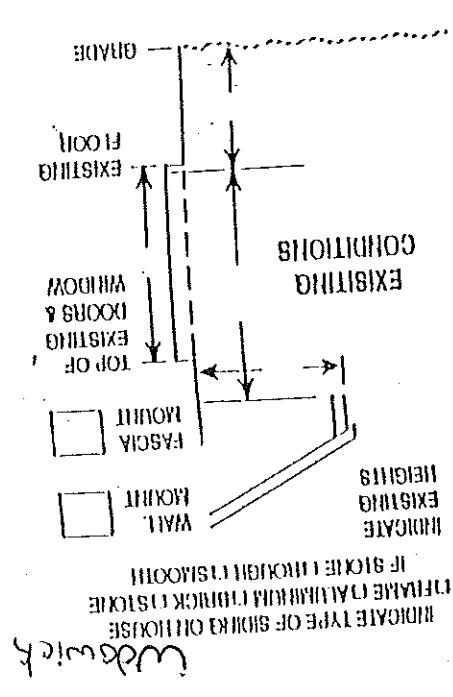
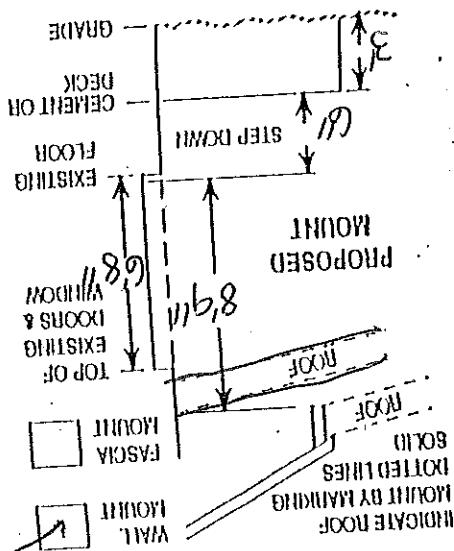
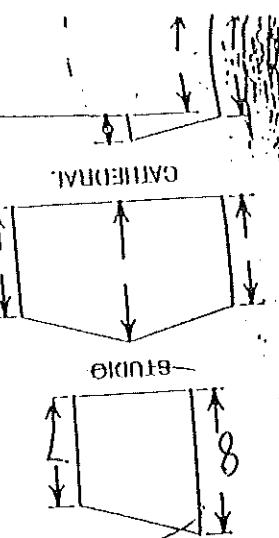
City

State

hereby verify that I have authorized Lee Stellepiens/Almetecan Project to apply to the

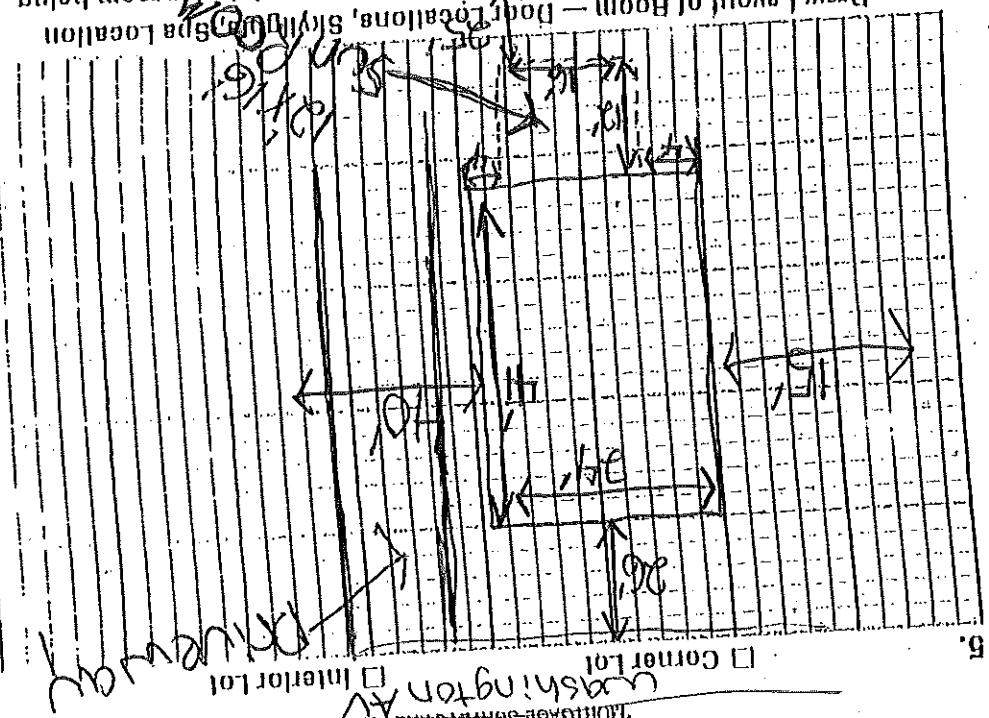
I, the undersigned, the owner of the property at 1349 MASSIEFLWY WILM.

AFFIDAVIT



6. SURVEY CHECKLIST

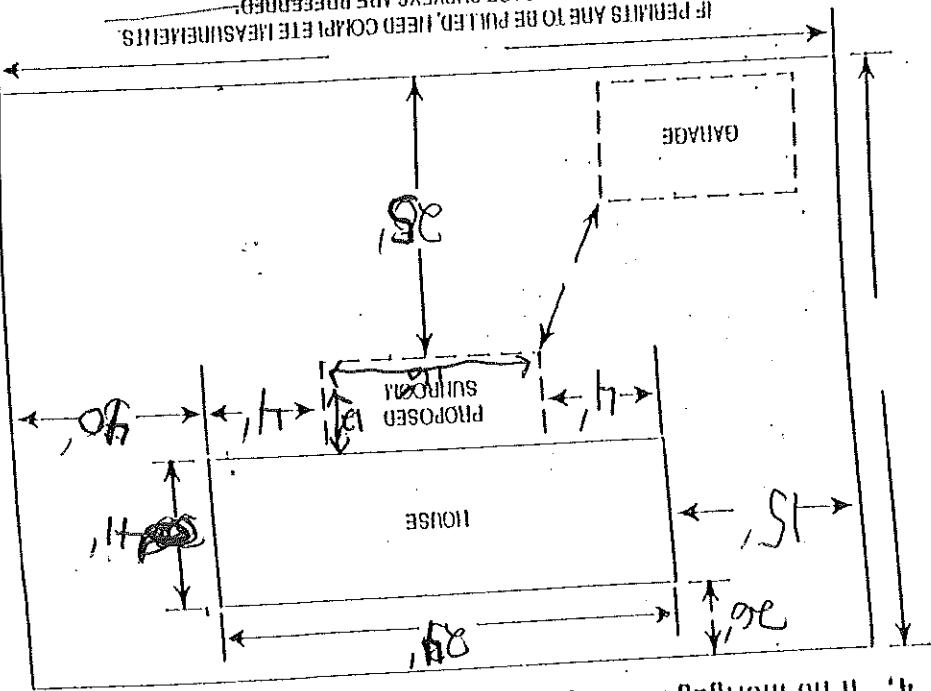
- Draw Layout of Room — Date _____ Location _____ Siding _____
- Identify layout of room below
- Locate fireplace through slab
- Identify layout of room below
- Release easel wall
- Locate ezel wall and steps
- Slopes by:
- Homeowner Tony V.A.
- Photo of exterior plan and interior plan
- Necessary pilotes for access into rear yard
- Existing footings
- Mortgage survey
- Photo of exterior plan and interior plan
- Existing footings
- Walk condition to existing roof on lot
- Existing footings
- Walk condition to existing roof on lot



If permits are to be pulled, need copy of measurements.

MONITORAGE SURVEYS ARE PREFERRED.

IF STOKE THROUGH IS TOO COOL
OR FRAME IS ALREADY INHOUSE
MONITORAGE SURVEY IS PREFERRED.

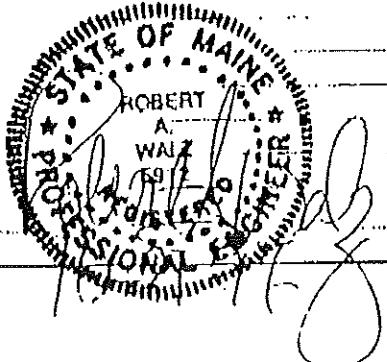


4. If no monitorage done

which
IF STOKE THROUGH IS TOO COOL
OR FRAME IS ALREADY INHOUSE
MONITORAGE SURVEY IS PREFERRED.

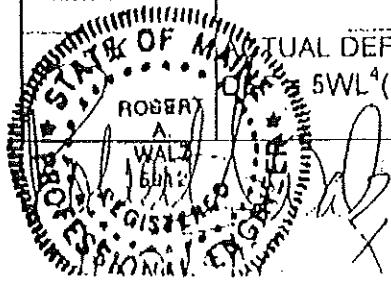
ROOF SPAN CALCULATIONS

ITEM	DESCRIPTION	ONE POUND FOAM	TWO POUND FOAM
SPAN (feet)		12.00	
LIVE LOAD (psf)		50.00	
DEAD LOAD (psf)		2.00	
TOTAL LOAD (psf)		52.00	
Foam Dimension - C (inches)		4.25	
Foam Density (pcf)		2.00	
E _c (psi)		480	200
F _v (psi)		35	20
G _c (psi)		620	300
T1 (inches)		0.032	
T2 (inches)		0.032	
H (inches)		4.31	
A1 (inches) ²		0.384	
A2 (inches) ²		0.384	
E (psi)		10,100,000	
Aluminum Working Stress (psi)		11,818	
Y (inches)		2.16	
I (inches) ⁴		3.52	
S (inches) ³		1.63	
Bending Stress (psi)		6,882	
Shear Stress (psi)		6.07	
Skin Buckling (psi)		7,215	
Allowable Deflection (inches)		1.20	
Actual Deflection (inches)		1.03	

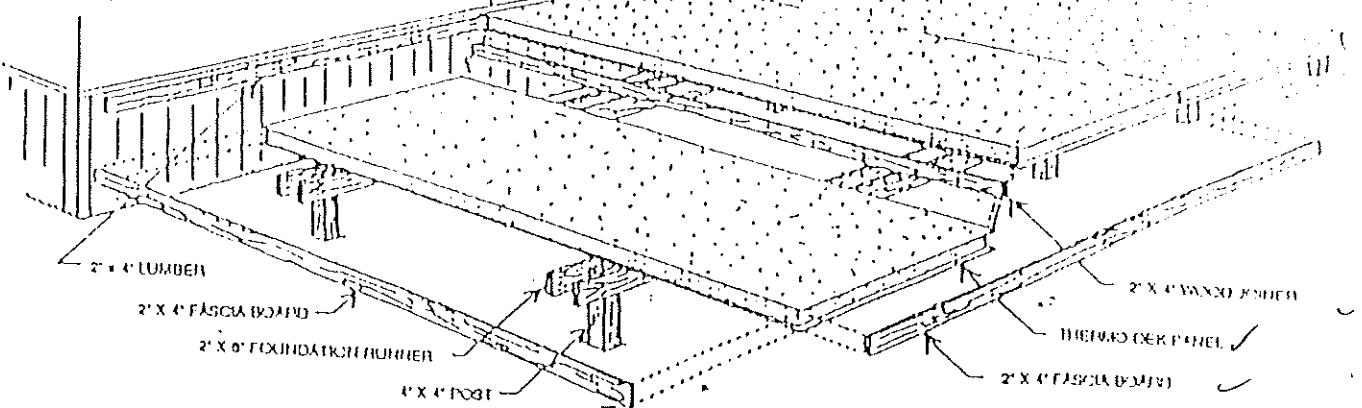


ROOF SPAN CALCULATIONS

A	RIOUX			
	SPAN (feet)	12.00		
B	LOADING CONDITIONS			
	LIVE LOAD (psf)	50.00		
	DEAD LOAD (psf)	2.00		
	TOTAL LOAD (psf)	52.00		
C	MATERIAL SPECIFICATIONS			
	FOAM CORE THICKNESS (inches)	4.25		
	FOAM CORE DENSITY (pcf)	2.00		
	E_o (psi)	480		
	F_y (psi)	35		
	G_c (psi)	620		
	ALUMINUM THICKNESS (inches)	0.032		
	E (psi)	10,100,000		
D	SECTION PROPERTIES			
	C (inches)	4.25		
	T1 (inches)	0.032		
	T2 (inches)	0.032		
	H (inches)	4.31		
	A1 (inches) ²	0.384		
	A2 (inches) ²	0.384		
E	ALUMINUM WORKING STRESS (psi)	11,818		
F	Y (inches)	2.16		
	I (inches) ⁴	3.52		
	S (inches) ³	1.63		
G	BENDING STRESS (psi)			
	$F_b = 1.5WL^2/S$	6,882	IS LESS THAN	11,818
		Bending Stress is Acceptable		
H	SHEAR STRESS (psi)			
	$F_v = WL/(H+C)12$	6.07	IS LESS THAN	35
		Shear Stress is Acceptable		
I	SKIN BUCKLING STRESS (psi)			
	$C_{cr} = 0.5(\text{cube root})(E)(E_o)(G_c)$	7,215	IS GREATER THAN	6,882
		Skin Buckling Stress is Acceptable		
J	ALLOWABLE DEFLECTION (inches)			
	DEFLECTION = L/120	1.20		
	ACTUAL DEFLECTION (inches)			
	$\Delta = 5WL^4(1728)/384EI + WL^2/4(H+C)G_c$	1.03	IS LESS THAN	1.20
		Deflection is Acceptable		



The following instructions are for installing the Thermo-dek system used to support the Dreamspace Enclosure. Any components, including hardware, that are not included with the installation package are to be purchased locally.



The Thermo-dek panels are normally 4' wide and may be up to 16' long. Thermo-dek panels consist of two 3/8" Oriented Strand Boards (OSB) laminated to the top and the bottom of 3 5/8" thick polystyrene core. The OSB boards extend 13 1/8" beyond the polystyrene core around the entire perimeter. This recessing creates a 1 5/8" opening which is used to secure and join the panels.

The following instructions will make the installation of the Thermo-dek an easy job.

STEP 1 - ATTACHMENT TO THE HOME

Determine the desired location of the Thermo-dek on the home. Create a level reference line along the home for the Thermo-dek 3/8" below the desired location. The top skin of the OSB panel will make up the 3/8" undersizing (See Fig. A). Carpeting or other floor coverings that are planned to be placed over the Thermo-dek will also affect the actual height of the Thermo-dek in respect to the reference line.

Beginning 1 5/8" in from either end of the Thermo-dek, secure 2"x4" lumber to the house wall using the reference line as the top guide for the lumber. The lumber should be attached 1 5/8" in from both ends of the Thermo-dek to accommodate the insert lumber that will be added later (See Fig. B). Be sure when attaching the lumber to the home that it is attached to the structure of the home.

The foundation for the Thermo-dek is made from pressure treated 4"x4" posts with 2"x6" stringers attached to both sides of the posts parallel to the home. 2"x4" lumber is used to join the Thermo-dek panels together, secure the panels to the home and to fill the front opening of the panels. 2"x4" lumber is used to fill the openings on the exposed sides of the Thermo-dek panels. The result is a warm, structurally sound floor for the Dreamspace Enclosure.

The Thermo-dek is intended for indoor use only, therefore, the Dreamspace Enclosure should be placed at the outside edges of the Thermo-dek panels to shield the panels from the weather. The lumber that is placed into the outside edges of the panels is used so that the Dreamspace Enclosure will have a structural member on which to attach the Thermo-dek system. The exposed edges must be covered with capping.

