

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

Location of Construction: 35 HILLIS STREET		Owner: DONALD PALMER		Phone: 207-775-1783		Permit No: <b>0038</b>	
Owner Address:		Lessee/Buyer's Name:		Phone:		BusinessName:	
Contractor Name: JESSE STAHLEY/AMERICAN PROFILES		Address: *** 20 BLAINE STREET, MANCHESTER,		Phone: NH 03102		Permit Issued:	
Past Use:  SINGLE FAMILY		Proposed Use:  SINGLE FAMILY		COST OF WORK: \$13,000.00		PERMIT FEE: \$ 102.00	
				FIRE DEPT. <input type="checkbox"/> Approved <input type="checkbox"/> Denied		INSPECTION: Use Group A-3 Type: <b>5B</b>	
Proposed Project Description:  BUILD 10 X 13 3 SEASON SUNROOM		Signature:		Signature: <i>[Signature]</i>		Zone: <b>R-5</b> CBL: 176-B-008	
		PEDESTRIAN ACTIVITIES DISTRICT (P.A.D.)		Action: <input type="checkbox"/> Approved <input type="checkbox"/> Approved with Conditions <input type="checkbox"/> Denied		Zoning Approval: <b>OK</b> <i>[Signature]</i> 1/14/01 Special Zone or Reviews: <input type="checkbox"/> Shoreland <input type="checkbox"/> Wetland <i>to remain</i> <input type="checkbox"/> Flood Zone <i>HAM</i> <input type="checkbox"/> Subdivision <input type="checkbox"/> Site Plan maj <input type="checkbox"/> minor <input type="checkbox"/> mm <input type="checkbox"/>	
Permit Taken By:  GAYLE		Date Applied For:  JANUARY 10, 2001		GG		Zoning Appeal <input type="checkbox"/> Variance <input type="checkbox"/> Miscellaneous <input type="checkbox"/> Conditional Use <input type="checkbox"/> Interpretation <input type="checkbox"/> Approved <input type="checkbox"/> Denied	

1. This permit application does not preclude the Applicant(s) from meeting applicable State and Federal rules.
2. Building permits do not include plumbing, septic or electrical work.
3. Building permits are void if work is not started within six (6) months of the date of issuance. False information may invalidate a building permit and stop all work..

**PERMIT ISSUED WITH REQUIREMENTS**

**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 provisions of the code(s) applicable to such permit

SIGNATURE OF APPLICANT \_\_\_\_\_ ADDRESS: \_\_\_\_\_ DATE: JANUARY 10, 2000 PHONE: \_\_\_\_\_

RESPONSIBLE PERSON IN CHARGE OF WORK, TITLE \_\_\_\_\_ PHONE: \_\_\_\_\_

**PERMIT ISSUED WITH REQUIREMENTS GEO DISTRICT**

**THIS IS NOT A PERMIT/CONSTRUCTION CANNOT COMMENCE UNTIL THE PERMIT IS ISSUED**

**Minor/Minor Site Review for New Detached Single Family Dwelling, Additions/Alterations/Accessory Structures, Multi-Family, Commercial Interior Rehab (other than additions), Change of Use**

In the interest of processing your application in the quickest possible manner, please complete the Information below for a Building or Use Permit.

**NOTE\*\*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: 35 Hillis St

Total Square Footage of Proposed Structure <u>130'</u>	Square Footage of Lot
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Tax Assessor's Chart, Block & Lot Number Chart# <u>176</u> Block# <u>B</u> Lot# <u>008</u>	Owner: <u>Donald Palmer</u>	Telephone#: <u>207 775 1783</u>
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<del>Lessee/Buyer's Name (If Applicable)</del>	<del>Owner's/Purchaser/Lessee Address:</del>	Cost Of Work Fee: <u>\$ 102.00</u> \$ <u>13,000</u>
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Current use: Deck Proposed use: Sun Room  
 Project description: Build 10' X 13' 3 Season Sun Room (Pre Fab Alum)

Contractor's Name, Address & Telephone: Jesse Stahly American Profiles 20 Blaine St Manchester NH 03102  
 please send permit to Jesse Rec'd By: Gay 1/10

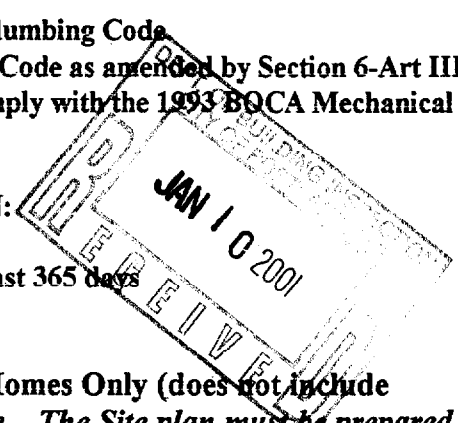
Separate permits are required for Internal & External Plumbing, HVAC and Electrical installation.

- All construction must be conducted in compliance with the 1999 B.O.C.A. Building Code as amended by Section 6-Art II.
- All plumbing must be conducted in compliance with the State of Maine Plumbing Code.
- All Electrical Installation must comply with the 1999 National Electrical Code as amended by Section 6-Art III.
- HVAC(Heating, Ventilation and Air Conditioning) installation must comply with the 1993 BOCA Mechanical Code.

**YOU MUST INCLUDE THE FOLLOWING WITH YOUR APPLICATION:**

- A Copy of Your Deed or Purchase and Sale Agreement if purchased in the last 365 days
- A Plot Plan (Sample Attached)

**A "minor/minor" site plan review is required for New Single Family Homes Only (does not include additions, alterations or accessory structures) prior to permit issuance. The Site plan must be prepared and sealed by a registered land surveyor. FOUR COPIES ARE REQUIRED FOR NEW SINGLE FAMILY HOMES**



**THIS IS NOT A PERMIT/CONSTRUCTION CANNOT COMMENCE UNTIL THE PERMIT IS ISSUED**

**A complete plot plan (Site Plan) includes:**

- The shape and dimension of the lot, all existing buildings (if any), the proposed structure and the distance from the actual property lines. Structures include decks porches, a bow windows cantilever sections and roof overhangs, as well as, sheds, pools, garages and any other accessory structures.
- Scale and North arrow; Zoning District & Setbacks
- First Floor sill elevation ( based on mean sea level datum);
- Location and dimensions of parking areas and driveways;
- Location and size of both existing utilities in the street and the proposed utilities serving the building;
- Location of areas on the site that will be used to dispose of surface water.
- Existing and proposed grade contours

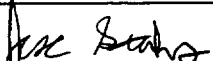
**Building Plans are required for all construction, including interior rehab (Sample Attached)**

A complete set of construction drawings showing all of the following elements of construction:

- Cross Sections w/Framing details (including porches, decks w/ railings, and accessory structures)
- Floor Plans & Elevations
- Window and door schedules
- Foundation plans with required drainage and damp proofing
- Electrical and plumbing layout. Mechanical drawings for any specialized equipment such as furnaces, chimneys, gas equipment, HVAC equipment (air handling) or other types of work that may require special review must be included.

**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/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.*

<b>Signature of applicant:</b> 	<b>Date:</b> 10-01
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Minor/Minor Site Review Fee: \$300.00/Building Permit Fee: \$30.00 for the 1st \$1000.cost plus \$6.00 per \$1,000.00 construction cost thereafter.

**AUTOCAD OR ADOBE FORMAT REQUIRED FOR ALL COMMERICAL PROJECTS**

BUILDING PERMIT REPORT

DATE: 10 January 2001 ADDRESS: 35 Hillis Street CBL: 176-B-008

REASON FOR PERMIT: To Construct a 10x13 3 Season suaroom

BUILDING OWNER: Donald Palmer

PERMIT APPLICANT: \_\_\_\_\_ (CONTRACTOR American Profiles/Jesse Smith)

USE GROUP: R-3 CONSTRUCTION TYPE: 5B CONSTRUCTION COST: 13,000.00 PERMIT FEES: 100.00

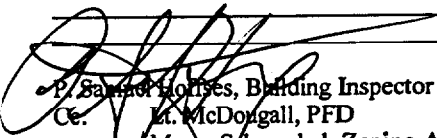
The City's Adopted Building Code (The BOCA National Building Code/1999 with City Amendments)  
The City's Adopted Mechanical Code (The BOCA National Mechanical Code/1993)

CONDITION(S) OF APPROVAL

This permit is being issued with the understanding that the following conditions shall be met: 41, 42, 42B, 42C, 31, 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) **"ALL LOT LINES SHALL BE CLEARLY MARKED BEFORE CALLING."**
- 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 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 dampproofing shall be done in accordance with Section 1813.0 of the building code.
- 6. Precaution must be taken to protect concrete and masonry. Concrete Sections 1908.9-19.8.10/ Masonry Sections 2111.3-2111.4.
- 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 1/2 inch gypsum board or the equivalent applied to the garage side. (Chapter 4, Section 407.0 of the BOCA/1999)
- 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". In occupancies in Use Group A, B.H-4, I-1, I-2, M, R, 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 34" but not more than 38". Exception: Handrails that form part of a guard shall have a height not less than 36 inches (914 mm) and not more than 42 inches (1067 mm). Handrail grip size shall have a circular cross section with an outside diameter of at least 1 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 3/4" 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 1010.4)
- 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 closure's. (Over 3 stories in height requirements for fire rating is two (2) hours. (Section 710.0)
- 18. The boiler shall be protected by enclosing with (1) hour fire rated construction including fire doors and ceiling, or by providing automatic extinguishment. (Table 302.1.1)

19. All single and multiple station smoke detectors shall be of an approved type and shall be installed in accordance with the provisions of the City's Building Code Chapter 9, Section 920.3.2 (BOCA National Building Code/1999), and NFPA 101 Chapter 18 & 19. (Smoke detectors shall be installed and maintained at the following locations):
  - In the immediate vicinity of bedrooms
  - In all bedrooms
  - In each story within a dwelling unit, including basements
20. A portable fire extinguisher shall be located as per NFPA #10. They shall bear the label of an approved agency and be of an approved type. (Section 921.0)
21. The Fire Alarm System shall be installed and maintained to NFPA #72 Standard.
22. The Sprinkler System shall be installed and maintained to NFPA #13 Standard.
23. All exit signs, lights and means of egress lighting shall be done in accordance with Chapter 10 Section & Subsections 1023.0 & 1024.0 of the City's Building Code. (The BOCA National Building Code/1999)
24. Section 25 - 135 of the Municipal Code for the City of Portland states, "No person or utility shall be granted a permit to excavate or open any street or sidewalk from the time of November 15 of each year to April 15 of the following year".
25. The builder of a facility to which Section 4594-C of the Maine State Human Rights Act Title 5 MRSA refers, shall obtain a certification from a design professional that the plans commencing construction of the facility, the builder shall submit the certification the Division of Inspection Services.
- \*26. Ventilation and access shall meet the requirements of Chapter 12 Sections 1210.0 and 1211.0 of the City's Building Code. (Crawl spaces & attics).
- \*27. All electrical, plumbing and HVAC permits must be obtained by Master Licensed holders of their trade. No closing in of walls until all electrical (min. 72 hours notice) and plumbing inspections have been done.
28. All requirements must be met before a final Certificate of Occupancy is issued.
29. All building elements shall meet the fastening schedule as per Table 2305.2 of the City's Building Code (The BOCA National Building Code/1996).
30. Ventilation of spaces within a building shall be done in accordance with the City's Mechanical code (The BOCA National Mechanical Code/1993). (Chapter M-16)
31. Please read and implement the attached Land Use Zoning report requirements. *to remain 1 family.*
32. Boring, cutting and notching shall be done in accordance with Sections 2305.3, 2305.3.1, 2305.4.4 and 2305.5.1 of the City's Building Code.
33. Bridging shall comply with Section 2305.16.
- \*34. Glass and glazing shall meet the requirements of Chapter 24 of the building code. (Safety Glazing Section 2406.0)
35. All flashing shall comply with Section 1406.3.10.
36. All signage shall be done in accordance with Section 3102.0 signs of the City's Building Code, (The BOCA National Building Code/1999).
- \*37. The proposed structure shall be constructed as per manufacturer's requirements.

  
 P. Sargent, Building Inspector  
 Cc. M. McDougall, PFD  
 Marge Schmuckal, Zoning Administrator  
 Michael Nugent, Inspection Service Manager

PSH 10/1/00

**\*\*This permit is herewith issued, on the basis of plans submitted and conditions placed on these plans, any deviations shall require a separate approval.**

**\*\*\*THIS PERMIT HAS BEEN ISSUED WITH THE UNDERSTANDING THAT ALL THE CONDITIONS OF THE APPROVAL SHALL BE COMPLETED. THEREFORE, BEFORE THE WORK IS COMPLETED A REVISED PLAN OR STATEMENT FROM THE PERMIT HOLDER SHALL BE SUBMITTED TO THIS OFFICE SHOWING OR EXPLAINING THAT THE CONDITIONS HAVE BEEN MET. IF THIS REQUIREMENT IS NOT RECEIVED YOUR CERTIFICATE OF OCCUPANCY SHALL BE WITHHELD. ( You Shall Call for Inspections )**

**\*\*\*\*ALL PLANS THAT REQUIRE A PROFESSIONAL DESIGNER'S SEAL, (AS PER SECTION 114.0 OF THE BUILDING CODE) SHALL ALSO BE PRESENTED TO THIS DIVISION ON AUTO CAD LT. 2000, DXF FORMAT OR EQUIVALENT.**

**\*\*\*\*\*CERTIFICATE OF OCCUPANCY FEE \$50.00**

Lot is 50 x 100 - They show 53' x 123'

4. \*If no mortgage survey - all dimensions are required.

INDICATE TYPE OF SIDING ON HOUSE  
 FRAME  ALUMINUM  BRICK  STONE  
 IF STONE  ROUGH  SMOOTH

INDICATE EXISTING HEIGHTS



WALL MOUNT  26  
 FASCIA MOUNT  10  
 17

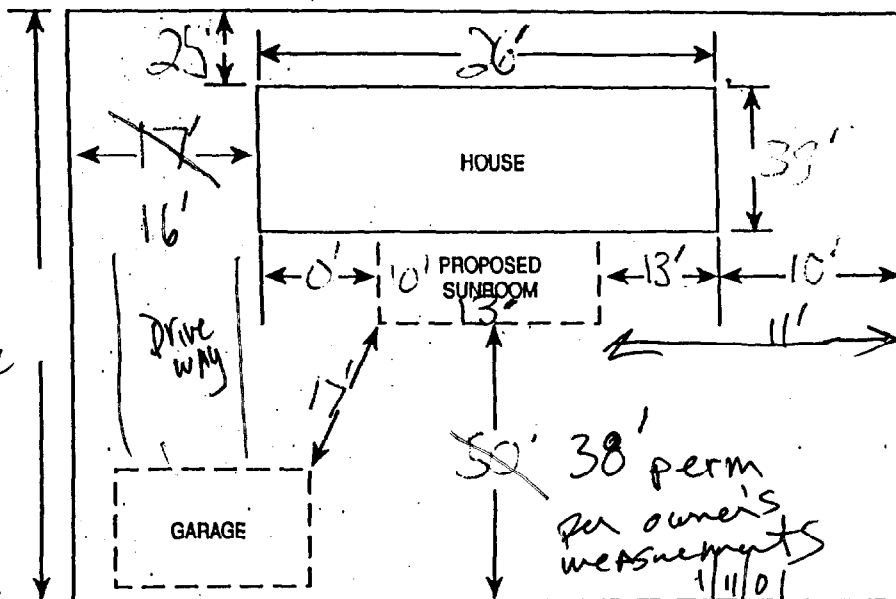
EXISTING CONDITIONS

TOP OF EXISTING DOORS & WINDOW

EXISTING FLOOR

GRADE

53?  
 50' wide



10  
 25  
 38  
 50  
 123

*R-5 zone*  
 Rear setback: 2d reg - 30' shown  
 Side Setback: 8' reg - 16' & 11' shown

IF PERMITS ARE TO BE PULLED, NEED COMPLETE MEASUREMENTS. The lot Dept. Adds up to 123' The Actual Dept 15' 100'

2.

INDICATE TYPE OF SIDING ON HOUSE  
 FRAME  ALUMINUM  BRICK  STONE  
 IF STONE  ROUGH  SMOOTH

INDICATE ROOF MOUNT BY MARKING DOTTED LINES  
 SOLID



WALL MOUNT   
 FASCIA MOUNT

PROPOSED MOUNT

TOP OF EXISTING DOORS & WINDOW

EXISTING FLOOR

CEMENT OR DECK

GRADE

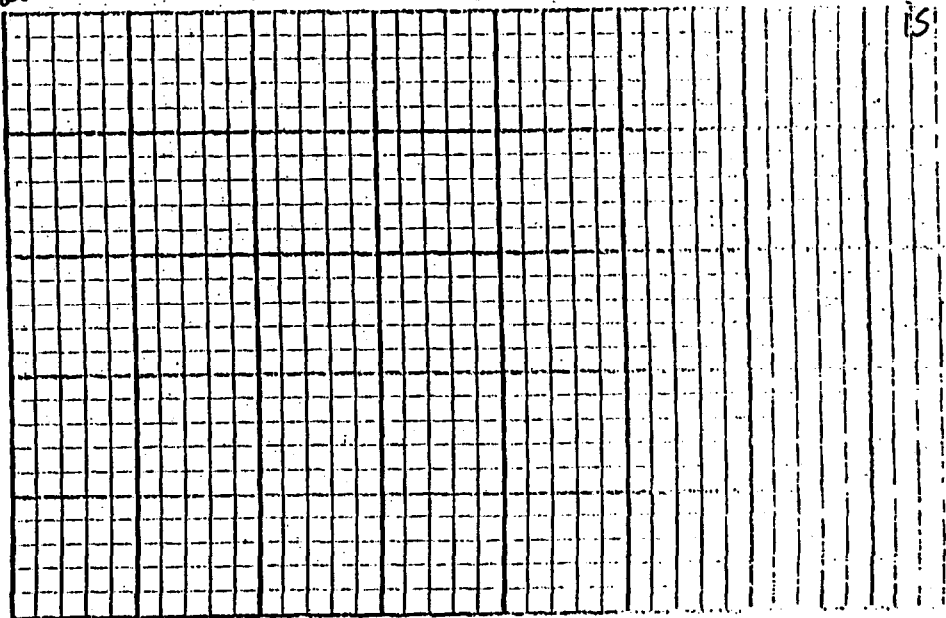
7 3/4"

6 3/4" STEP DOWN

3 1/2"

Corner Lot

Interior Lot

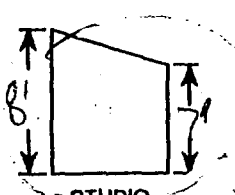


Draw Layout of Room - Door Locations, Skylights, Spa Location

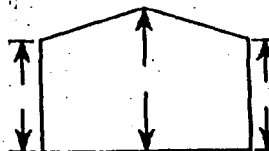
- Locate breakthrough and size
- Dimension existing slabs, sidewalks and steps

- Identify interior room being enclosed
- Locate existing pool

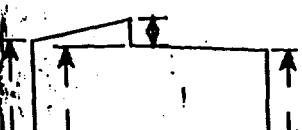
3.



STUDIO



CATHEDRAL



6. SURVEY CHECKLIST

- Mortgage survey
- Existing footings
- Necessary photos for access into rear yard

- Photo of electric panel and meter
- Steps by:
  - Homeowner
  - Tony V's

EXISTING CONDITIONS:

- Overhead lines
- H2O Spicket
- Dryer Vent
- A/C
- Septic Lines
- Lights
- Tree
- Sprinkler lines
- BBQ
- Cable
- Phone

Existing Home  Slab  Crawl  Basement

What condition is existing roof on home?

**ALLOWABLE TRANSVERSE LOADS (PSF)  
FOR STRUCTURAL INSULATED PANELS**

Panels are made of two equal layers of APA rated sheathing, either OSB or 5-ply plywood. The core is nominal 1.0 pcf density ( min. 0.9 pcf) EPS (expanded polystyrene foam) adhered to the sheathing with glue and set under pressure. Each panel has splines that are nailed to the skin as described below.

SPLINE PARAMETERS					
Spline Configuration	Spline spacing		Spline material		Spline nailing
Single Spline	48" o/c		SYP #2		6d @ 6"o/c
STRUCTURAL INSULATED PANEL DIMENSIONS					
Skin thickness	7/16"	7/16"	7/16"	7/16"	7/16"
Core thickness	3-5/8"	5-5/8"	7-3/8"	9-3/8"	11-3/8"
Panel depth	4 -1/2"	6 -1/2"	8 -1/4"	10-1/4"	12-1/4"
Spline size	2 x 4	2 x 6	2 x 8	2 x 10	2 x 12
SPAN (ft)	ALLOWABLE TRANSVERSE LOAD (psf)				
4	145	224	297	387	481
5	116	179	238	309	385
6	96	149	198	258	321
7	83	128	170	221	275
8	72	112	149	193	241
9	64	99	132	172	214
10	50	89	119	155	193
11	39	81	108	141	175
12	31	67	99	129	160
13	25	54	88	119	148
14	20	44	72	110	138
15	17	37	61	94	128
16	14	31	51	80	114
17		26	43	68	98
18		22	37	58	84
19		19	32	51	73
20		17	28	44	64
21		15	24	38	56
22		13	21	34	49
23			19	30	44
24			17	27	39
25			15	24	35
26			13	21	31
27				19	28
28				17	25

Deflection criterion of L/360 was used. Some allowable loads are not based on deflections. No multipliers for other deflection criteria are allowed. All values are for normal duration loads. No increases for other durations are allowed.

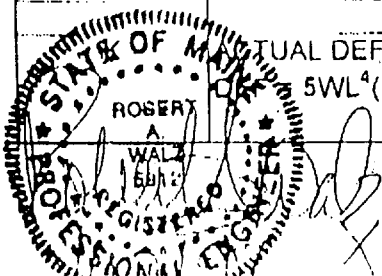
Table T.6 Transverse Load 7/16" skin Single Spline SYP #2 6d @ 6"o/c

Table T.6 - Transverse Loads on Splined S.I. Panels

12/20/92

ROOF SPAN CALCULATIONS

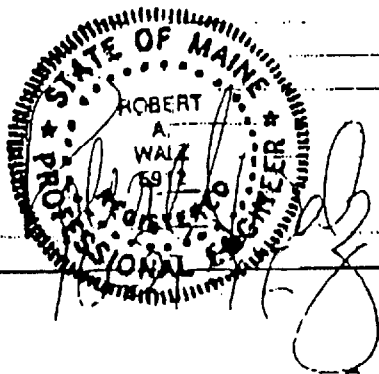
A	RIOUX SPAN (feet)	10.00 ✓		
B	LOADING CONDITIONS			
	LIVE LOAD (psf)	50.00 ✓		
	DEAD LOAD (psf)	2.00 ✓		
	TOTAL LOAD (psf)	52.00 ✓		
C	MATERIAL SPECIFICATIONS			
	FOAM CORE THICKNESS (inches)	4.25 ✓		
	FOAM CORE DENSITY (pcf)	2.00 ✓		
	E <sub>c</sub> (psi)	480		
	F <sub>y</sub> (psi)	35		
	G <sub>c</sub> (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) <sup>2</sup>	0.384		
	A2 (inches) <sup>2</sup>	0.384		
E	ALUMINUM WORKING STRESS (psi)	11,818		
F	Y (inches)	2.16		
	I (inches) <sup>4</sup>	3.52		
	S (inches) <sup>3</sup>	1.63		
G	BENDING STRESS (psi)			
	F <sub>b</sub> = 1.5WL <sup>2</sup> /S	6,882	IS LESS THAN	11,818
		Bending Stress is Acceptable		
H	SHEAR STRESS (psi)			
	F <sub>v</sub> = WL/(H+C)12	6.07	IS LESS THAN	35
		Shear Stress is Acceptable		
I	SKIN BUCKLING STRESS (psi)			
	C <sub>cr</sub> = 0.5(cube root)(E)(E <sub>c</sub> )(G <sub>c</sub> )	7,215	IS GREATER THAN	6,882
		Skin Buckling Stress is Acceptable		
J	ALLOWABLE DEFLECTION (inches)			
	DEFLECTION = L/120	1.20		
	ACTUAL DEFLECTION (inches)			
	$5WL^4(1728)/384EI + WL^2/4(H+C)G_c$	1.03	IS LESS THAN	1.20
		Deflection is Acceptable		

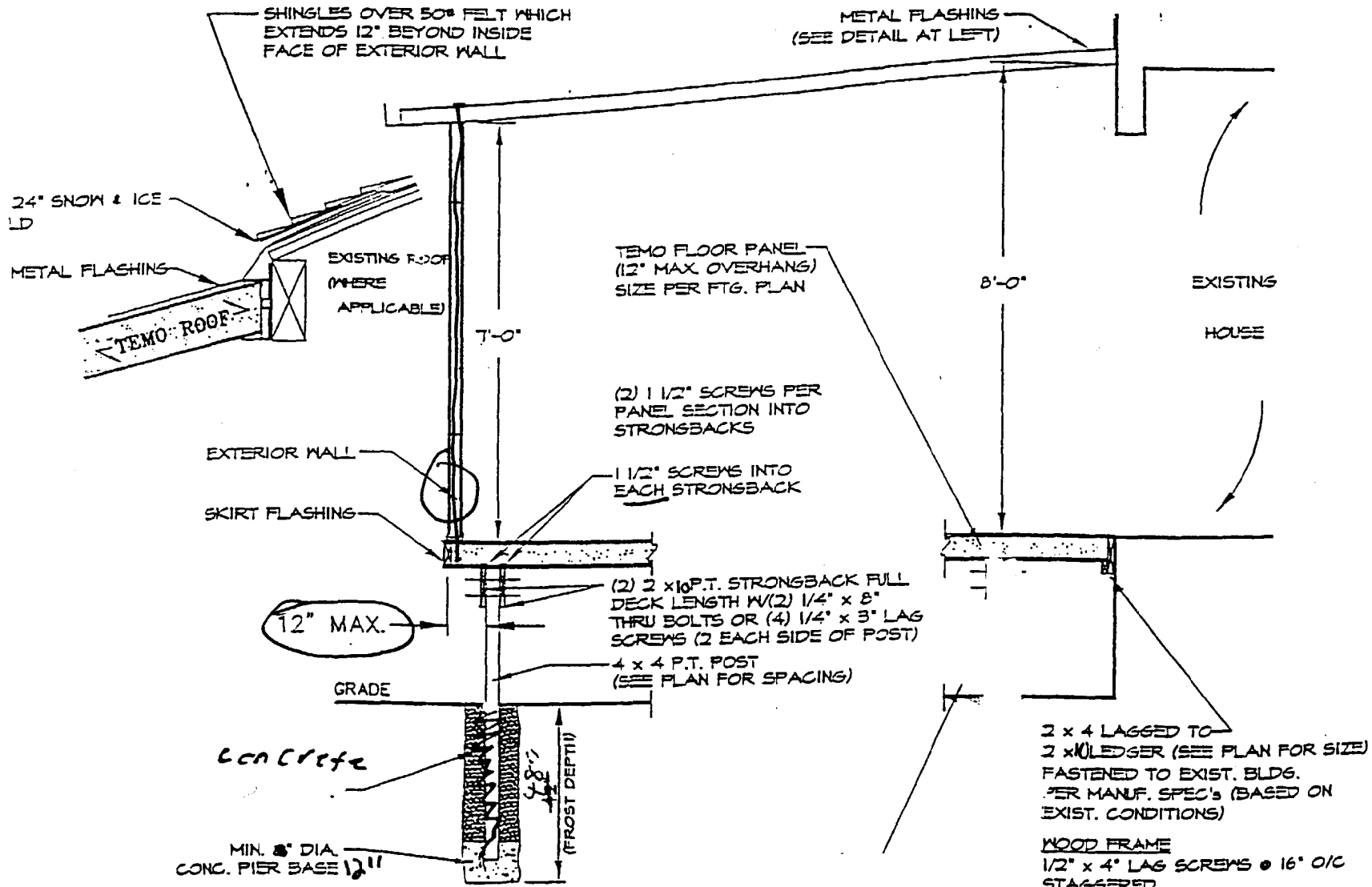




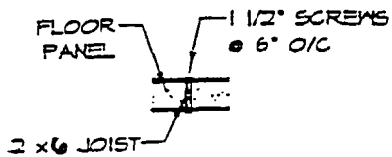
### ROOF SPAN CALCULATIONS

RIOUX			
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	One Pound Foam	Two Pound Foam
Foam Density (pcf)	2.00		
E <sub>c</sub> (psi)	480	200	480
F <sub>v</sub> (psi)	35	20	35
G <sub>c</sub> (psi)	620	300	620
T1 (inches)	0.032		
T2 (inches)	0.032		
H (inches)	4.31		
A1 (inches) <sup>2</sup>	0.384		
A2 (inches) <sup>2</sup>	0.384		
E (psi)	10,100,000		
Aluminum Working Stress (psi)	11,818		
Y (inches)	2.16		
I (inches) <sup>4</sup>	3.52		
S (inches) <sup>3</sup>	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		





NOTE:  
ALL STRUCTURAL LUMBER  
TO BE PRESSURE TREATED

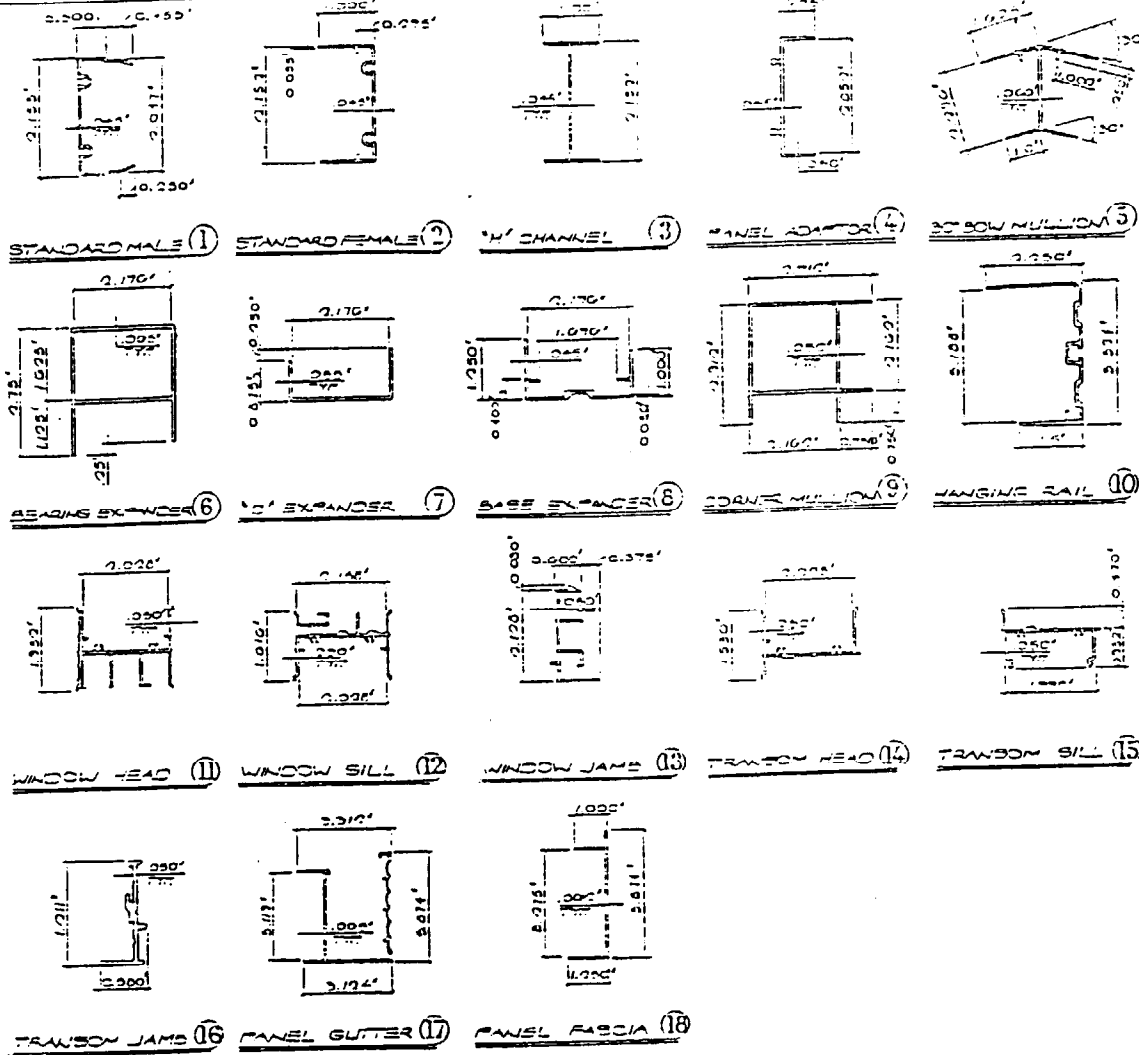


# SECTION 'A'

NOTE:  
WHERE NO PIERS ARE SEEN  
NEAR EXISTING HOUSE (AS SHOWN)  
LEDGER ATTACHMENT TO EXISTING  
WALLS SHALL BE THROUGH

REVISIONS	DATE	PI. ( )	CLIENT/PROJ.

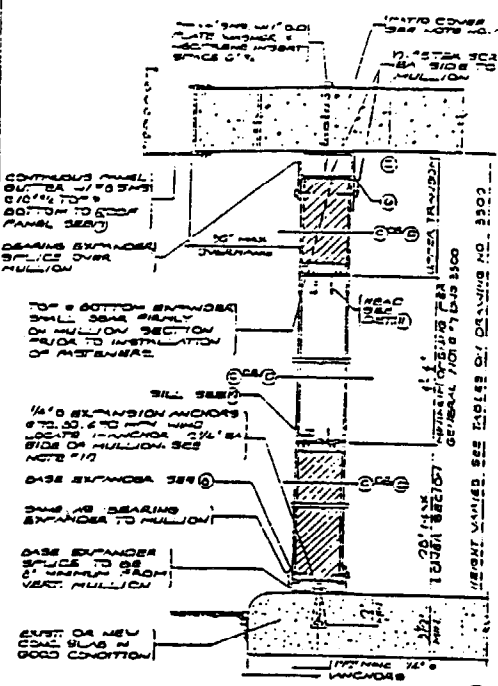
DRAWN BY: DAVID CENTORBI CK'D BY: \_\_\_\_\_  
MEASURED BY: \_\_\_\_\_ DATE: \_\_\_\_\_  
SCALE: 1/8" = 1'-0"



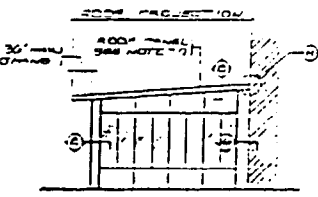
**GENERAL NOTES & SPECIFICATIONS**

- THIS PATIO COVER & ENCLOSURE SYSTEM IS LIMITED TO RECREATION AND OUTDOOR LIVING PURPOSES AND IS NOT TO BE USED AS A GARAGE, CHANGE, OR HABITABLE ROOM.
- THIS ENCLOSURE SYSTEM IS TO BE INSTALLED UNDER THE PATIO COVER ADD'N PANEL SHOWN ON DRAWING NO. 3501.
- DESIGN LOADS: SEE TABLES FOR DESIGN LOADS.
- FASTENERS: 1/4" RIVETS, WHERE SHOWN, SHALL BE 5052 ALUMINUM RIVETS WITH CADMIUM STEEL PLATED HENDALL AS MANUFACTURED BY THE U.S.N. CORP. SHEET METAL SCREWS SHALL BE #12S SHOWN AND SHALL BE STAINLESS STEEL, ZINC PLATED, GALVANIZED STEEL OR 6061-T6 ALUMINUM.
- ALL STRUCTURAL COMPONENTS OF THIS ENCLOSURE SYSTEM (EXCEPT SOLID PANELS) ARE OF ALUM. TEMPER 5000-T5 UNLESS SPECIFICALLY NOTED OTHERWISE.
- THE SOLID WALL PANELS SHOWN SHALL COMPLY WITH A CURRENTLY RECOGNIZED I.C.C. EVALUATION SERVICE INC. REPORT. ALL EXTERIOR PORTIONS OF THE SOLID WALL PANEL WHICH ARE SUBJECT TO WATER INTRUSION SHALL BE FULLY CAULKED.
- WHERE ENCLOSURE IS REQUIRED TO BE LEFT OPEN PER SECTION 3110, THE OPEN AREA OF THE LOWER WALL AND ONE ADDITIONAL WALL SHALL BE A MINIMUM OF 1/2 FEET BELOW THE FLOOR. IF OPEN IS DEFINED AS INSECT SCREENING AND/OR REACHABLE REMOVABLE TRANSPARENT OR TRANSLUCENT PLASTIC NOT MORE THAN 1/8 OF AN INCH IN THICKNESS. SEE NOTE #8 BELOW FOR OPTIONAL GLAZING.
- PORTIONS OF THE WALL NOT REQUIRED TO BE PLASTIC (SEE NOTE #7 ABOVE) MAY BE GLASS THAT COMPLIES WITH CHAPTER 12 OF THE UNIFORM BUILDING CODE, WHICH IS APPROVED BY THE BUILDING OFFICIAL. GLASS COMPLYING WITH CHAPTER 12 OF THE CODE MAY BE SUBSTITUTED FOR THE PLASTIC INDICATED IN NOTE #7, AS PERMITTED BY SECTION 104.2.3 OF THE CODE FOR EQUIVALENT MATERIALS OF CONSTRUCTION. (SEE NOTE #13)
- EACH PATIO COVER & ENCLOSURE SYSTEM SHALL HAVE PERMANENTLY AFFIXED AN IDENTIFICATION TAG GIVING THE NAME & ADDRESS OF THE MANUFACTURER, DESIGN LOADS, AND I.C.C. E.S. REPORT NO.
- THE BEARING SYSTEM MULLIONS HAVE BEEN DESIGNED FOR LOAD COMBINATIONS REQUIRED BY CHAPTER 16 OF THE UNIFORM BUILDING CODE.
- ALL ALUMINUM IN CONTACT WITH DISSIMILAR MATERIALS SHALL BE PROTECTED PER U.S.C. SECTION 1011.5.2.
- EXPANSION ANCHORS SHALL BE RAWL-STUD ANCHORS OR EQUIVALENT PER I.C.C. EVALUATION REPORT NO. 1410. ANCHORS SHALL HAVE A MINIMUM TENSION VALUE (IN CONCRETE) OF 300 POUNDS. THE 1/2" ANCHORS SHALL HAVE A MINIMUM TENSION VALUE (IN CONCRETE) OF 400 POUNDS.
- TEMPERED GLASS WITH A THICKNESS NOT TO EXCEED 1/2 INCHES IS AN ACCEPTABLE ALTERNATE TO PLASTIC INDICATED IN NOTE #7. ALL TEMPERED GLASS SHALL CONFORM TO THE REQUIREMENTS OF CHAPTER 12 OF THE U.S.C. & I.C.C. EVALUATION SERVICE, INC. ACCEPTABLE.

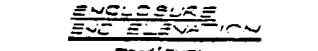
I.C.C. EVALUATION SERVICE, INC. REPORT NO. 1410  
 PATIO COVER & ENCLOSURE SYSTEM  
 Terno Inc.  
 350



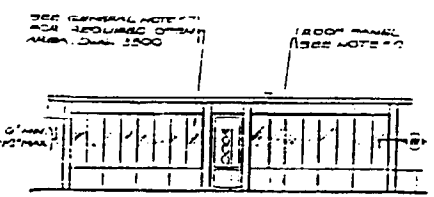
**BEARING WALL SECTION (A)**



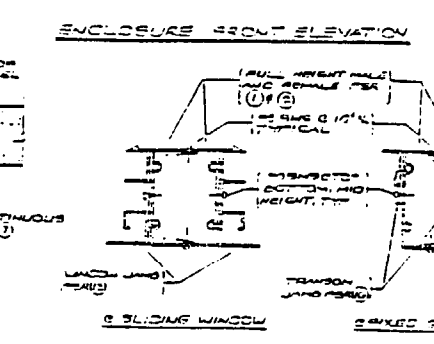
**ROOF PROJECTION**



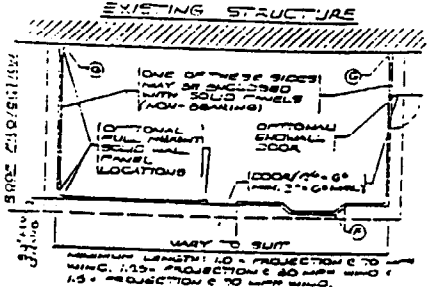
**NON-BEARING WALL & TOP (B)**



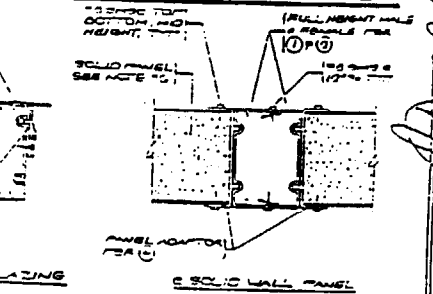
**ENCLOSURE ABOUT ELEVATION**



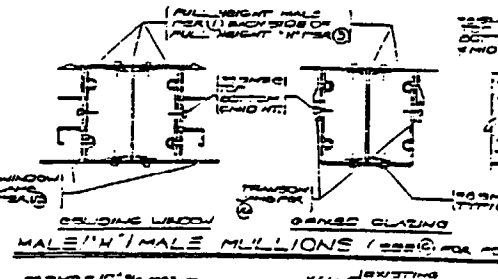
**MALE/FEMALE MULLIONS (C)**



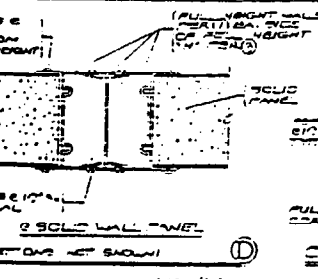
**EXISTING STRUCTURE**



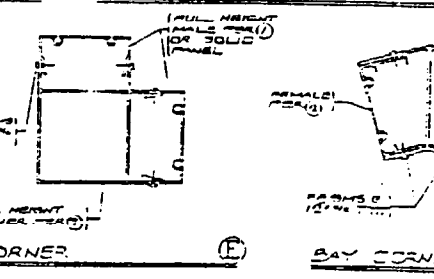
**TYPICAL ENCLOSURE FLOOR PLAN**



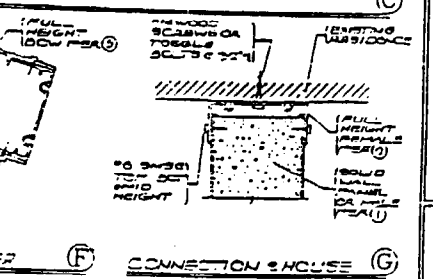
**MALE/FEMALE MULLIONS (D)**



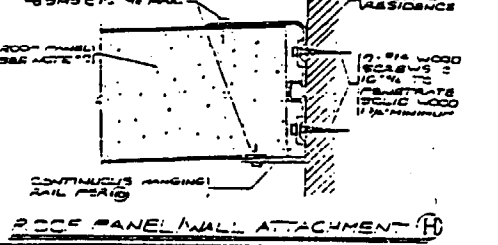
**CORNER (E)**



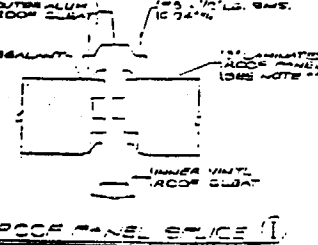
**BAY CORNER (F)**



**CONNECTION TO HOUSE (G)**



**ROOF PANEL WALL ATTACHMENT (H)**



**ROOF PANEL SLICE (I)**

Terno Inc.  
 8000 JULIE DRIVE • CANTON, OHIO 44705 • PHONE (216) 338-0100  
 FAX (216) 338-0101  
 ENCLOSURE SYSTEMS  
 PLANS, SECTIONS & DETAILS

Terno Inc.

DATE	
NO.	2501
DESIGNED BY	
CHECKED BY	
DRAWN BY	
DATE	10/80