

CITY OF SACRAMENTO

Permit No: 9901369

1231 I Street, Sacramento, CA 95814

Insp Area: 4

Site Address: 1115 LOCHBRAE RD SAC
NOTHR

Sub-Type:

Parcel No: 2750165012

Housing (Y/N): N

CONTRACTOR

CALIFORNIA SHEDS
1414 DEL PASO BL
SACRAMENTO CA

95815

OWNER

ASSAD RUTH I/EST OF
1115 LOCHBRAE RD
SACRAMENTO CA

95815

ARCHITECT

Nature of Work: STORAGE SHED LESS THAN 120 SQ FT

CONSTRUCTION LENDING AGENCY : I hereby affirm under penalty of perjury that there is a construction lending agency for the performance of the work for which this permit is issued (Sec. 3097, Civ. C).

Lender's Name _____ Lender's Address _____

LICENSED CONTRACTORS DECLARATION: I hereby affirm under penalty of perjury that I am licensed under provisions of Chapter 9 (commencing with section 7000) of Division 3 of the Business and Professions Code and my license is in full force and effect.

X License Class B License Number 507025 Date 08-11-98 Contractor Signature [Signature]

OWNER-BUILDER DECLARATION: I hereby affirm under penalty of perjury that I am exempt from the contractors License Law for the following reason (Sec. 7031.5, Business and Professions Code; any city or county which requires a permit to construct, alter, improve, demolish, or repair any structure, prior to its issuance, also requires the applicant for such permit to file a signed statement that he or she is licensed pursuant to the provisions of the Contractors License Law (Chapter 9 (commencing with Section 7000) of Division 8 of the Business and Professions Code) or that he or she is exempt therefrom and the basis for the alleged exemption. Any violation of Section 7031.5 by any applicant for a permit subjects the applicant to a civil penalty of not more than five hundred dollars (\$500.00);

____ I, as a owner of the property, or my employees with wages as their sole compensation, will do the work, and the structure is not intended or offered for sale (Sec. 7044, Business and Professional Code: The Contractors License Law does not apply to an owner of property who builds or improves thereon, and who does such work himself or herself or through his/her own employees, provided that such improvements are not intended or offered for sale. If, however, the building or improvement is sold within one year of completion, the owner-builder will have the burden of proving that he/she did not build or improve for the purpose of sale.)

____ I, as owner of the property, am exclusively contracting with licensed contractors to construct the project (Sec. 7044, Business and Professions Code: The Contractors License Law does not apply to an owner of property who builds or improves thereon, and who contracts for such projects with a contractor(s) licensed pursuant to the Contractors License Law).

____ I am exempt under Sec. _____ B & PC for this reason: _____

Date _____ Owner Signature _____

IN ISSUING THIS BUILDING PERMIT, the applicant represents, and the city relies on the representation of the applicant, that the applicant verified all measurements and locations shown on the application or accompanying drawings and that the improvement to be constructed does not violate any law or private agreement relating to permissible or prohibited locations for such improvements. This building permit does not authorize any illegal location of any improvement or the violation of any private agreement relating to location of improvements.

I certify that I have read this application and state that all information is correct. I agree to comply with all city and county ordinances and state laws relating to building construction and hereby authorize representative(s) of this city to enter upon the abovementioned property for inspection purposes.

X Date 02-14-98 Applicant/Agent Signature [Signature]

WORKER'S COMPENSATION DECLARATION: I hereby affirm under penalty of perjury one of the following declarations:

____ I have and will maintain a certificate of consent to self-insure for workers' compensation as provided for by Section 3700 of the Labor Code, for the performance of work for which the permit is issued.

____ I have and will maintain workers' compensation insurance, as required by Section 3700 of the Labor Code, for the performance of the work for which this permit is issued. My workers' compensation insurance carrier and policy number are:

Carrier EXEMPT Policy Number _____ Exp Date _____

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

X Date 2-11-99 Applicant Signature [Signature]

WARNING: FAILURE TO SECURE WORKER'S COMPENSATION COVERAGE IS UNLAWFUL AND SHALL SUBJECT AN EMPLOYER TO CRIMINAL PENALTIES AND CIVIL FINES UP TO ONE HUNDRED THOUSAND DOLLARS (\$100,000) IN ADDITION TO THE COST OF COMPENSATION, DAMAGES AS PROVIDED FOR IN SECTION 3706 OF THE LABOR CODE, INTEREST AND ATTORNEY'S FEE.

THIS PERMIT SHALL EXPIRE BY LIMITATION IF WORK IS NOT COMMENCED WITHIN 180 DAYS.



**James Hardie
Building Products**

Internal memorandum

**James Hardie
Industries (USA) Inc.**

10901 Elm Avenue
Fontana, California 92337

Telephone 1-909-356 6300
1-800-426 4051
Fax 1-909-356 4907

To: All Sales and Technical
Services Representatives
From: John Mulder
Subject: FEMA Recognition
Date: 3 November 1997

Please find attached a copy of a letter from the Federal Emergency Management Agency recognizing James Hardie's non-asbestos fiber-cement interior lining and exterior siding products as Class V materials or materials highly resistant to floodwater damage.

Also attached is a copy of the referenced Technical Bulletin 2-93, which lists acceptable "Classes of Flooring" (Table 2) and acceptable "Classes of Walls and Ceilings" (Table 3).

As indicated in the letter, James Hardie's non-asbestos fiber-cement interior lining and exterior siding products are now considered by FEMA as "flood-resistant materials", Class V.

You may make this information available (in its entirety) to both your Distributor's and your Customer's as well as to Local Building Officials having jurisdiction.

Should you have any questions or if I can be of any further assistance, please do not hesitate to contact me directly at: telephone (909) 356-6366 or by facsimile (909) 427-0634.

Best personal regards,

John L. Mulder,
Technical Services Manager

Attachments
cc: D Merkley, R. Klein, File
JLM/jm
p:\jlm\1997\codes\fema\110397a.doc

ISSUED

FEB 11 1999

CITY OF SACRAMENTO
DEVELOPMENT SERVICES DIV



Federal Emergency Management Agency

Washington, D.C. 20472

October 29, 1997

John L. Mulder
Technical Services Manager
James Hardie Building Products
10901 Elm Avenue
Fontana, California 92337

Dear Mr. Mulder:

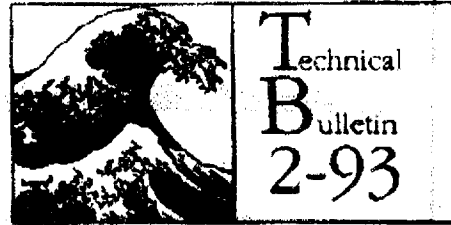
This is in response to your telephone conversation with Clifford Oliver and a follow-up letter of September 26, 1997. Thank you for sending us information about James Hardie's non-asbestos fiber cement interior lining and exterior siding products.

Based on the information you provided, we would consider these products to be flood-resistant materials. These products would be considered as Class V materials, or materials highly resistant to floodwater damage. In any future revisions to our Technical Bulletin 2-93, "Flood-Resistant Materials Requirements" we will include non-asbestos fiber-cement products.

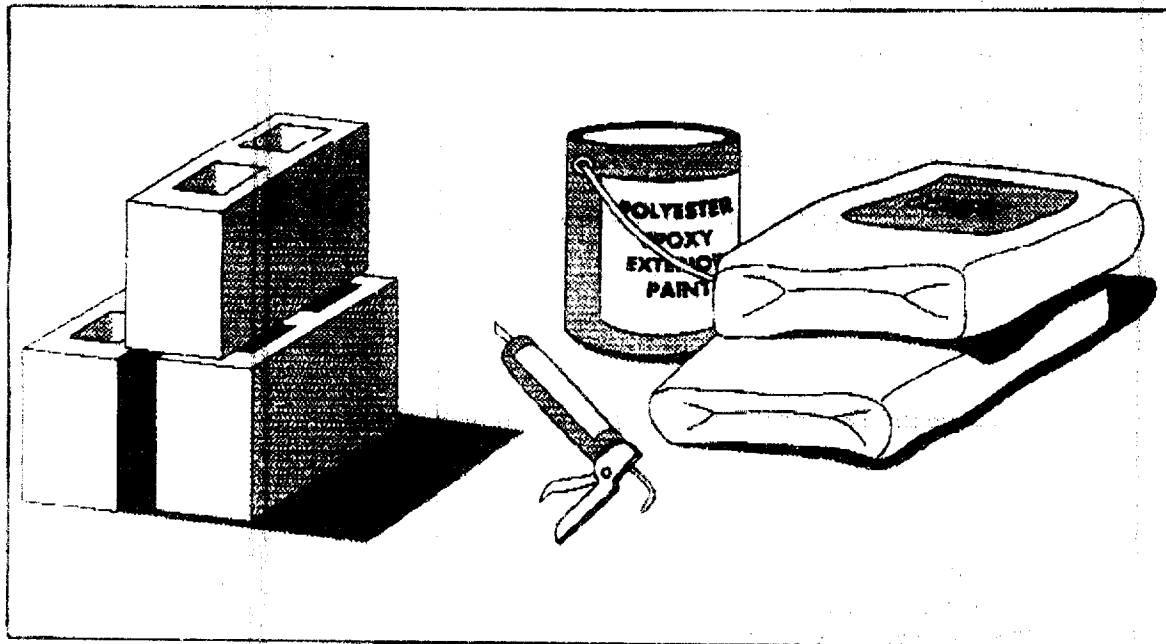
Thank you again for bringing these products to our attention. Please give me a call at 202-646-3935 if you have any questions.

Sincerely,

Paul Tertell, P.E.
Civil Engineer
Mitigation Directorate



**Flood-Resistant Materials Requirements
for Buildings Located in Special Flood Hazard Areas
in accordance with the
National Flood Insurance Program**



**FEDERAL EMERGENCY MANAGEMENT AGENCY
FEDERAL INSURANCE ADMINISTRATION**

**FIA-TB-2
4/93**

TECHNICAL BULLETIN 2-93

Flood-Resistant Materials Requirements for Buildings Located In Special Flood Hazard Areas in accordance with the National Flood Insurance Program

Introduction

The requirement to use construction and finishing materials that are resistant to flood damage in all new and substantially improved buildings in identified Special Flood Hazard Areas (SFHAs) is an important part of the National Flood Insurance Program's (NFIP's) flood-damage-resistant design and construction standards. A residential building's lowest floor is required to be elevated to or above the base flood elevation (BFE). All construction below the lowest floor is susceptible to flooding and must consist of flood-resistant materials. Uses of enclosed areas below the lowest floor in a residential building are limited to parking, building access, and limited storage—areas that can withstand inundation by floodwater without sustaining significant structural damage.

The purpose of this Technical Bulletin is to provide data and guidance on what constitute "materials resistant to flood damage" and how and when these materials must be used to improve a building's ability to withstand flooding.

NFIP Regulations

Section 60.3(a)(3) of the NFIP regulations requires that the community:

"Review all permit applications to determine whether proposed building sites will be reasonably safe from flooding. If a proposed building site is in a floodprone area, all new construction and substantial improvements shall...(ii) be constructed with materials resistant to flood damage..."

It should be noted that Technical Bulletins provide guidance on the minimum requirements of the NFIP regulations. Community or State requirements that exceed those of the NFIP take precedence. Design professionals should contact the community to determine whether more restrictive local or State regulations apply to the building or site in question. All applicable standards of the State or local building code must also be met for any building in a flood hazard area.

Required Use of Flood-Resistant Materials

Flood-Resistant Material

"Flood-resistant material" is defined as any building material capable of withstanding direct and prolonged contact with floodwaters without sustaining significant damage. The term "prolonged contact" means at least 72 hours, and the term "significant damage" means any damage requiring more than low-cost cosmetic repair (such as painting).

Table 1 Flood-Resistant Classification of Materials		
N F I P	Class	Class Description
A C C E P T A B L E	5	Highly resistant to floodwater damage. Materials within this class are permitted for partially enclosed or outside uses with essentially unmitigated flood exposure.
	4	Resistant to floodwater damage. Materials within this class may be exposed to and/or submerged in floodwaters in interior spaces and do not require special waterproofing protection.
U N A C C E P T A B L E	3	Resistant to clean water damage. Materials within this class may be submerged in clean water during periods of intentional flooding.
	2	Not resistant to water damage. Materials within this class require essentially dry spaces that may be subject to water vapor and slight seepage.
	1	Not resistant to water damage. Materials within this class require conditions of dryness.

Source: COE 1992 "Floodproofing Regulations"

Table 2 Flooring Materials Classifications for Flood Resistance					
Types of Flooring Materials	Classes of Flooring				
	Acceptable		Unacceptable		
	5	4	3	2	1
Asphalt Tile ¹					•
With asphaltic adhesives			•		
Carpeting (glued down type)					•
Cement/bituminous, formed-in-place		•			
Cement/latex, formed-in-place		•			
Ceramic tile ¹					•
With acid-and alkali-resistant grout			•		
Chipboard					•
Clay tile	•				
Concrete, precast or in-situ	•				
Concrete tile	•				
Cork					•
Enamel felt-base floor coverings					•
Epoxy, formed-in-place	•				
Linoleum					•
Magnesite (magnesium oxychloride)					•
Mastic felt-base floor covering					•
Mastic flooring, formed-in-place	•				
Polyurethane, formed-in-place	•				
PVA emulsion cement					•
Rubber sheets ¹					•
With chemical-set adhesives ^{2,3}	•				
Rubber tile ¹					•
With chemical-set adhesives ³		•			
Silicone floor, formed-in-place	•				

Wall and Ceiling Materials

Table 3 lists wall and ceiling materials commonly used in construction that fall within the five classes described in Table 1. Not all available construction and finishing materials are listed. For products not listed herein, manufacturers' literature should be reviewed for recommended uses. Such recommendations must be complied with fully. All masonry and wood products used in floodprone buildings must comply with the applicable materials standards of the nationally recognized standards organizations, such as the American Society for Testing and Materials (ASTM), the American Concrete Institute (ACI), and the American Wood Products Association (AWPA).

Basis for Classification of Wall and Ceiling Materials

The classification of wall and ceiling materials is based on their vulnerability to damage from inundation by floodwaters. Class 1, 2, and 3 wall and ceiling materials are not acceptable for below-BFE applications for one or more of the following reasons:

- Normal adhesives specified for above-grade use are water soluble or are not resistant to alkali or acid in water, including ground seepage and vapor.
- Wall and ceiling material contains wood, wood products, gypsum products, or other material that dissolves or deteriorates, loses structural integrity, or is adversely affected by water.
- Wall or ceiling material is not resistant to alkali or acid in water.
- Wall or ceiling material is impervious but is dimensionally unstable.
- Wall or ceiling materials absorb or retain water excessively after submergence.

Table 3 Walls and Ceiling Materials Classifications for Flood Resistance					
Types of Wall and Ceiling Materials	Classes of Walls and Ceilings				
	Acceptable		Unacceptable		
	5	4	3	2	1
Fiberboard panels, vegetable types					
Sheathing grade (asphalt coated or impregnated)				•	
Otherwise					•
Gypsum products					
Gypsum board (including greenboard ¹)				•	
Keene's cement or plaster				•	
Plaster, otherwise, including acoustical				•	
Sheathing panels, exterior grade				•	
Glass (sheets, colored tiles, panels)		•			
Glass blocks	•				
Hardboard					
Tempered, enamel or plastic coated				•	
All other types				•	
Insulation					
Foam or closed-cell types		•			
Batt or blanket types					•
All other types				•	
Metals, non-ferrous (aluminum, copper, or zinc tiles)			•		
Metals, Ferrous	•				
Mineral fiberboard					•
Plastic wall tile (polystyrene, urea formaldehyde, etc.)					
Set in waterproof adhesives, pointed with waterproof grout			•		
Set in water-soluble adhesives				•	

Types of Wall and Ceiling Materials	Classes of Walls and Ceilings				
	Acceptable		Unacceptable		
	5	4	3	2	1
Strawboard					
Exterior grade (asphalt-impregnated kraft paper)				●	
All other types				●	
Wall covering					
Paper, burlap, cloth types					●
Wood					
Solid, standard				●	
Solid, naturally decay-resistant ^{1,2}	●				
Solid pressure treated, .40 CCA minimum ¹	●				
Plywood					
Marine Grade ¹	●				
Pressure treated, .40 CCA minimum ¹	●				
Exterior grade				●	
Otherwise					●

Note: ¹ Not on the COE list; added by FEMA
² Refer to local building code for guidance

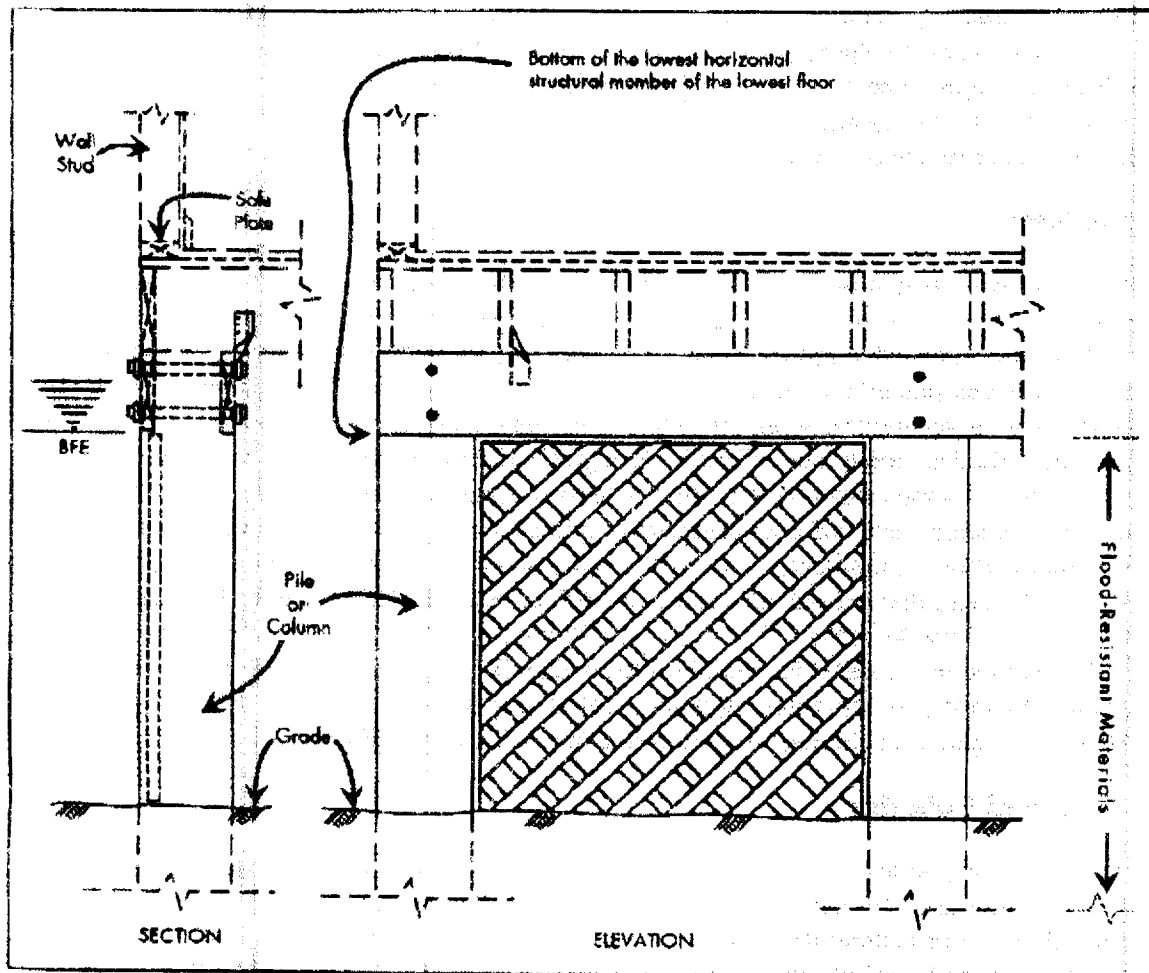


Figure 2. Flood-Resistant Material Requirements for Buildings Elevated in Accordance with NFIP Requirements for Zones V, VE, and V1-V30

Accessory Buildings

Some communities permit the construction of low-cost, small detached accessory buildings (e.g., garages, storage sheds) with a lowest floor elevation below the BFE (Technical Bulletin 5, "Free-of-Obstruction Requirements," provides definitions of "low-cost" and "small"). The below-BFE portions of such buildings must be constructed of flood-resistant materials so that flood damage will be minimized. Additional construction requirements for these buildings, such as the need to anchor the building to resist flotation, collapse, and lateral movement, also must be met before the building is permitted and built. For additional information about these requirements, contact the community that has permitting jurisdiction.

Wet Floodproofing

Wet floodproofing is designing a building to allow floodwaters to enter in order to equalize hydrostatic forces. The NFIP does not allow wet floodproofing in lieu of meeting the lowest

Further Information

The following publications provide further information concerning the use of flood-resistant materials:

1. "Answers to Questions About Substantially Damaged Buildings," FEMA, May 1991, FEMA-213.
2. "Floodproofing Non-Residential Structures," FEMA, May 1986, FEMA-102.
3. "Flood Proofing Regulations", Chapters 9 and 10, U.S. Army Corps of Engineers, March 1992, EP 1165-2-314.
4. "Flood Proofing Systems and Techniques," U.S. Army Corps of Engineers, December, 1984.
5. "Repairing Your Flooded Home," FEMA and the American Red Cross, August 1992, FEMA-234, ARC 4477.
6. "Technical Notes for Brick Construction," Brick Institute of America, McLean, Virginia, n.d.

Glossary

Base flood — The flood that has a 1-percent probability of being equaled or exceeded in any given year (also referred to as the 100-year flood).

Base Flood Elevation (BFE) — The height of the base flood, usually in feet, in relation to the National Geodetic Vertical Datum of 1929 or other datum as specified.

Basement — Any area of a building having its floor subgrade (below ground level) on all sides.

Coastal High Hazard Area — An area of special flood hazard extending from offshore to the inland limit of a primary frontal dune along an open coast and any other area subject to high-velocity wave action from storms or seismic sources.

Federal Emergency Management Agency (FEMA) — The independent federal agency that, in addition to carrying out other activities, oversees the administration of the National Flood Insurance Program.

Federal Insurance Administration (FIA) — The component of FEMA directly responsible for administering the National Flood Insurance Program.

Flood Insurance Rate Map (FIRM) — The insurance and floodplain management map issued by FEMA that identifies, on the basis of detailed or approximate analyses, areas of 100-year flood hazard in a community.

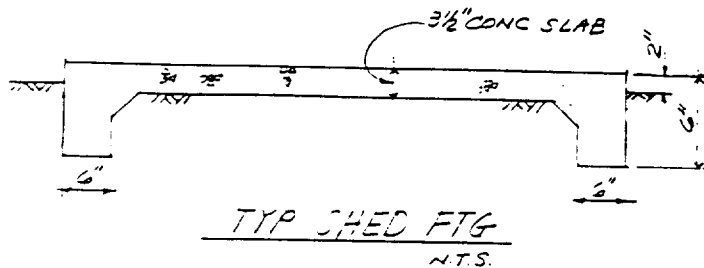
Floodprone area — Any land area susceptible to being inundated by floodwater from any source.

CITY OF SACRAMENTO
DEPARTMENT OF PLANNING AND DEVELOPMENT
BUILDING INSPECTIONS DIVISION

REQUIREMENTS FOR SHED FOUNDATIONS

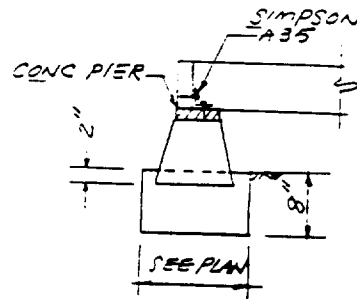
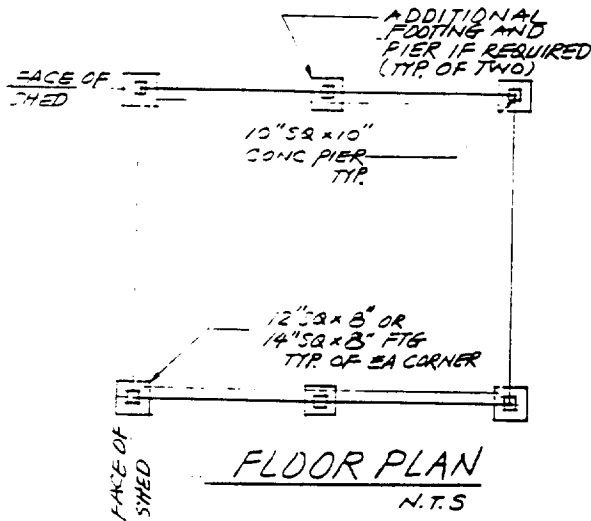
A. For sheds 64 sq. ft. to 119 sq. ft.:

1. 3 1/2" concrete slab with 6" x 6" perimeter footing.



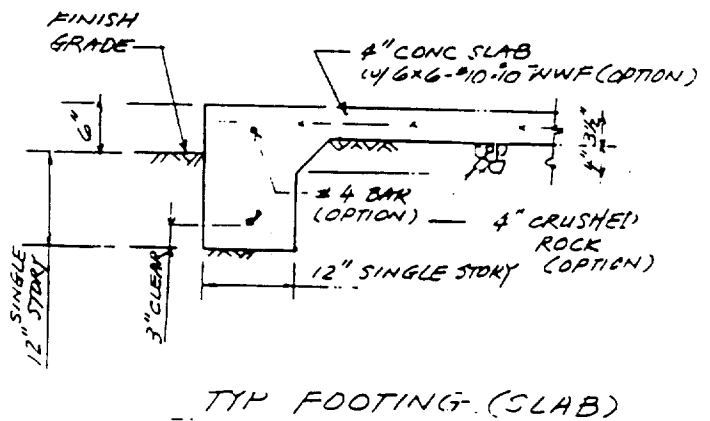
or

2. 10" x 10" x 10" Concrete piers with corner piers set on 12" x 12" x 8" footings.



B. For sheds 120 sq. ft. and larger:

1. 4" concrete slab with standard perimeter footing.



A/R FLOOD ZONE

General Residential Construction Requirements

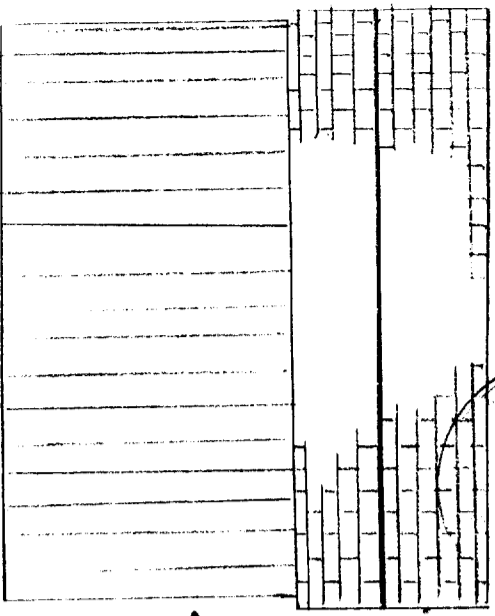
Residential construction in an A/R flood zone requires certain specialized construction features that are mandated by federal law. The purpose of these requirements is so that buildings constructed within the flood zone are able to withstand a specified flood level without incurring any significant damage. Additional information regarding construction in flood zones is available at the building department. The following are some of the basic construction requirements:

- a. A/R flood zone requirements apply to anything constructed at or below the flood level. The flood level is defined as being either 3' above the highest grade that is adjacent to the house, or the Base Flood Elevation (BFE), whichever is less. The BFE varies. Contact the building department for the BFE at a specific site. When using the BFE as the reference flood level, a licensed surveyor must field verify the building pad and house floor elevations.
- b. The finish floor of the residence has to be above the flood level. This requirement does not apply to garage and shed floors.
- c. All materials that are not higher than the flood level have to be water resistant. This includes anything built below the flood level, such as foundations, framing, siding, trim, finish work, cabinets, doors and door jambs, and applies to the house, garage and any accessory structures.
- d. Some approved water resistant materials are concrete, stucco, metal, construction heart grade redwood, pressure treated douglas fir lumber, pressure treated exterior grade plywood, and marine plywood. When pressure treated materials are cut or trimmed, the exposed edges have to be treated with an approved wood preservative. Examples of materials not considered water resistant are exterior grade plywood, douglas fir lumber, and standard grade redwood.
- e. All mechanical equipment, including HVAC equipment and hot water heaters, has to be above the flood level. Most types of under-floor ducting are not considered water resistant.
- f. Insulation installed below the flood level has to be closed cell type and ICBO approved. This may not be readily available.
- g. The house, garage, foundation, and interior stem walls must be able to withstand the hydrostatic force from floodwaters. There are two methods used to meet this requirement. Either provide an engineering analysis and design that accounts for these forces, or else provide vents in the foundation so the floodwaters can flow through unobstructed. If the flow-through method is used, the requirement is to provide 1 sq. in. of vent in the foundation for every 1 sq. ft. of building floor area. Space the vents evenly around the house, preferably on 2 opposing sides. The bottom of the vents must not be greater than 12" above the adjacent grade. Use 1/4" screen over the vents, and include a 10% reduction factor in the area calculation to allow for the screen. Show the flow-thru calculations on the plans. Indicate the size and location of all vents. Provide a detail of the vents to be used. Nominal sizes of pre-screened metal vents have a net area that is substantially less than indicated by the nominal dimensions.

Proposed 10' x 11'8" Storage Shed

This set of plans and specifications is for the job at all times and it is the responsibility of the applicant to make any changes or alterations to the plans and specifications without written permission from the Planning Commission.

Approval of this plan and specifications is held to permit or approve the construction of a City Ordinance as State Law.



→ Exterior Panels Siding
1/2" Plywood Siding

Approved by MWH P. 2/11/00

① Foundation & comp 1 w/ attached skirt.

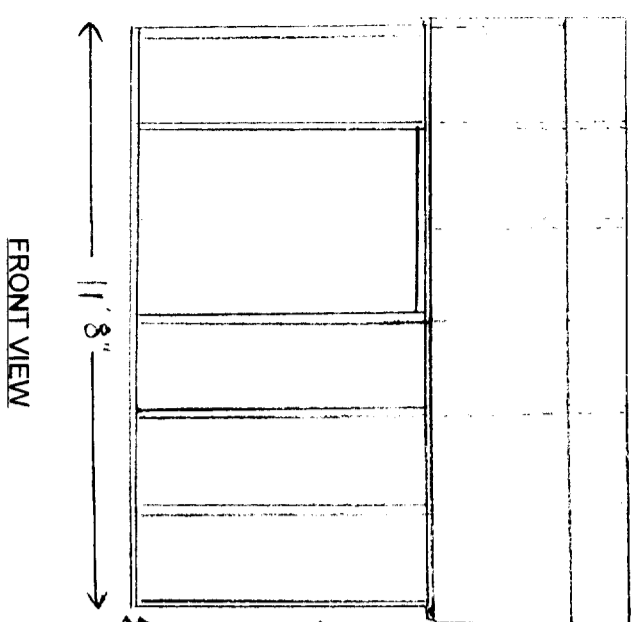
② Plan not detailed enough to show all complexity of construction.

Field verify adequacy of construction.

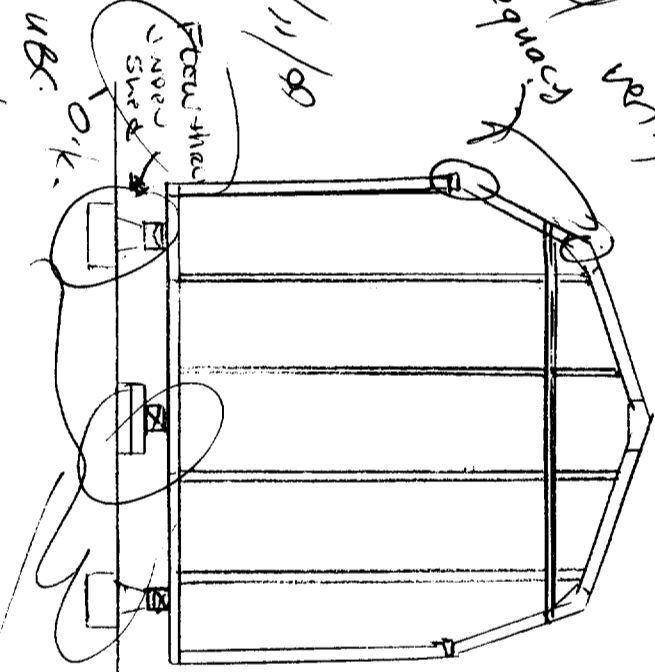
→ 1/2" Plywood Siding
→ Details - Joists - down required

④ A/R field req. requirements apply.

⑤ Floor joists of materials req'd. - no min. floor joist req'd.



FRONT VIEW



SIDE VIEW

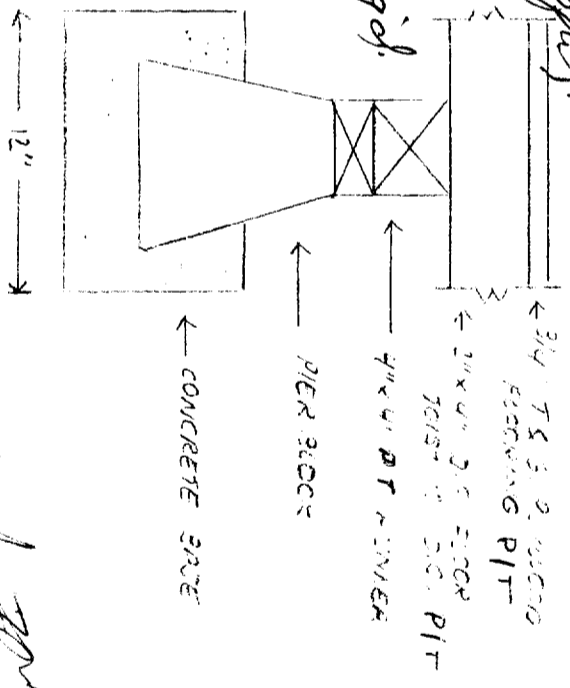
Field verify adequacy

O.K.

Field verify adequacy

O.K.

NOTING: ALL FOUR CORNERS



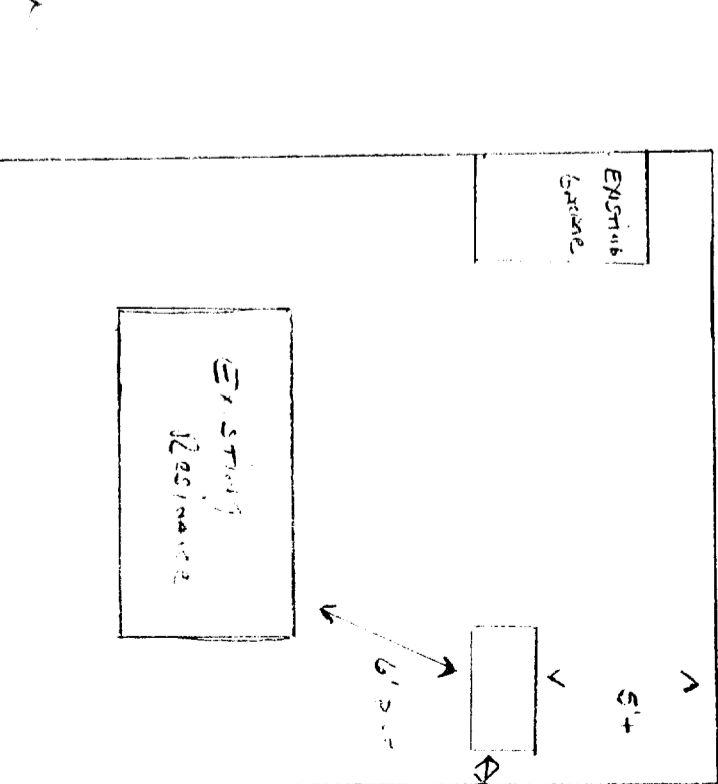
CONCRETE GRADE

← PIER BLOCK

← 4" x 4" PT MEMBER

← 2" x 4" JOIST

← 3/4" T & S 2" WOOD FLOORING PT



Plot Plan

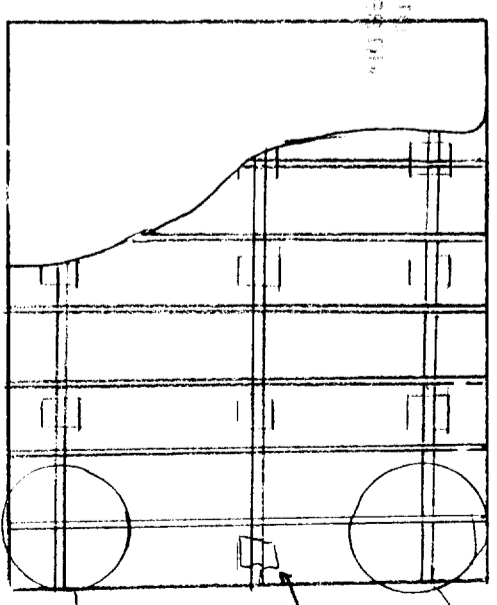
1115 LOCH BARKLE RD.

ISSUED

APR 1 1999

FLOOR DETAIL

ALL FLOOR MATERIALS FLOOR REST. PARTS TREATED.



3" x 16" x 2" CONCRETE COVERED BLOCK

See DETAIL

See DETAIL

Zoning approval does not authorize any building not complying with City Building Code. Before occupying any existing building the applicant must obtain approval from the Building Inspection Division.
 City Planning Commission
 2/10/00

9901369