Location of Construction: 20 Alice St Alice St (Lot 09)	Owner:			1-800-498 -0777 156-9230	Permit No:9 8 0 1 2 3
Owner Address: P.O. 80x 337/43 Cottage A	Lessee/Buyer's Name:	Phone:	Business		PERMIT ISSUED
Contractor Name:	Address:	Phone:			Permit Issued: FEB 2 0 1998
Past Use:	Proposed Use:	COST OF WORK \$ 92,000.00		PERMIT FEE: \$ 480.00	
Vacant Land	l-fac dwelling	FIRE DEPT. A Bignature:	enied	INSPECTION: Use Group Type WC4 6 Signature:	Zone: CBL: 387-A-039
Proposed Project Description:				S DISTRICT (VA.	
Construct Single Pamily Described 2-car garage beginnes/Bulkhead in rear	celling	A	approved approved w Denied	vith Conditions: Date:	□ Special Zone or Reviews: □ Shoreland □ Wetland □ Flood Zone □ Subdivision
Permit Taken By:	Date Applied For:	29 January 1998			⊠ Site Plan maj □minor □mm
 Building permits do not include plumbing, sep Building permits are void if work is not started tion may invalidate a building permit and stop 	within six (6) months of the date of iss	uance. False informa-			☐ Miscellaneous ☐ Conditional Use ☐ Interpretation ☐ Approved ☐ Denied
		Į	PERM WITH RE(NT ISSUED QUIFILMENTS	Historic Preservation Not in District or Landmark Does Not Require Review Requires Review Action:
				-1412	
I hereby certify that I am the owner of record of the authorized by the owner to make this application a if a permit for work described in the application is areas covered by such permit at any reasonable ho	s his authorized agent and I agree to coissued, I certify that the code official's	onform to all applicable authorized representativ	laws of thive shall have	s jurisdiction. In add	lition, Denied
SIGNATURE OF APPLICANT Peter Suaque	ADDRESS:	DATE:	r.	PHONE:	
RESPONSIBLE PERSON IN CHARGE OF WORK	K, TITLE rmit Desk Green-Assessor's Can			PHONE:	CEO DISTRICT

2/24/98 - Visited Site Reviewed plans u/ Beten / Fitted in Blanks"
on Plans We need Eng spect on Root musses - will be puring
For dation Fri 2/27 - De Note; Recd Trues Plans VIA FAX 2/24/98 1 1 PMD
10/2:3/96 Story 30 Hours Today Car 177 fortel
3/4/98 Gh to backfull
3/18/98. Problem W/ meety Stair Reguments - met on Sight - 129 to 2nd -
I advised Builder to Consult of architect - "will have to meet peginements "@
4/14/98 - Royh Planting ch - Royh Francy ok - (will meet), Stair log) ok to Clase
5/22/98 Call for Final - Blog / Plunt / Elec-
(1) Weeds Exit Stains -
Dreeds Proper plyon pig under Sent F
5/28/08 - Obene Constant (Warter for O Werdell ER)
5/29/93 - Send Pecm. Copo (Wordell Letter attached)
Single Formily Dwelling Wattached Garages - No dechs -
and the same of th
(at a 10 as 9, 2
00/07/09/09/09/09/09/09/09/09/09/09/09/09/09/
Inspection Record Part 1
Type Date
Foundation: Foundation: Framing:
Plumbing: Plumbing:
Final:
Other:



CITY OF PORTLAND, MAINE Department of Building Inspection

Certificate of Occupancy

LOCATION

20 Alice St (Lot #9)

387-A-039

Issued to

Peter Bosque

Date of Issue

29 May 1998

This is to certify that the building, premises, or part thereof, at the above location, built — altered - changed as to use under Building Permit No. 980123 , has had final inspection, has been found to conform substantially to requirements of Zoning Ordinance and Building Code of the City, and is hereby approved for occupancy or use, limited or otherwise, as indicated below.

PORTION OF BUILDING OR PREMISES

APPROVED OCCUPANCY

Entire

Limiting Conditions:

Single Family Dwelling W/attached garage no okek

This certificate supersedes certificate issued

Approved:

(Date) Inspector

Inspector of Buildings

Notice: This certificate identifies lawful use of building or premises, and ought to be transferred from owner to owner when property changes hands. Copy will be furnished to owner or lessee for one dollar.

MEMORANDUM

TO:

Code Enforcement

Kandi Talbot, Planner

FROM:

Jim Wendel, Development Review Coordinator

DATE:

May 28,1998

RE:

Request for Certificate of Occupancy

20 Alice Street

On May 27, 1998 a site visit was made to review the conformance of the site improvements with the approval dated 2/5/98; my comments are:

It is my opinion that all of the conditions of the site plan approval have been satisfactorily completed and a permanent certificate of occupancy could be issued assuming code enforcement has no outstanding issues.

1350.10disk5/20alice.doc

BUILDING PERMIT REPORT

DATE: 19 5-cb 98 ADDRESS: 20 ALICE ST. (WT49) 387-A-039
REASON FOR PERMIT: Single Family dwelling /2 Cargarage R.3
BUILDING OWNER: Peter Busque
contractor: SAA
PERMIT APPLICANT: SPP
use group $R-3$ boca 1996 construction type $5B$
CONDITION(C) OF INDROVIA

CONDITION(S) OF APPROVAL

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

Approved with the following conditions: 43 *3, *5, *6, *9, *10, *11, *12, *16, *24, *25, *26, *27, *29, *30, *31, *32 × 33, *34 1.35

- ★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. Precaution must be taken to protect concrete from freezing.
- 4. 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.
- 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 ½ inch gypsum board or the equivalent applied to the garage means of ½ inch gypsum board or the equivalent applied to the garage side. (Chapter 4 Section 407.0 of the BOCA/1996)
- 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).
 - 7. Sound transmission control in residential building shall be done in accordance with Chapter 12 section 1214.0 of the city's building code.
- 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 34" 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 1/4" and not greater than 2".
- ₹ 9. Headroom in habitable space is a minimum of 7'6".
- ₹10. 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.
- * 11. The minimum headroom in all parts of a stairway shall not be less than 80 inches. (6' 8")
- 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.
 - 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.
 - 14. All vertical openings shall be enclosed with construction having a fire rating of at lest one (1)hour, including fire doors with self closer's. (Over 3 stories in height requirements for fire rating is two (2) hours.)
 - 15. The boiler shall be protected by enclosing with (1) hour fire-rated construction including fire doors and ceiling, or by providing automatic extinguishment.
- 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 19, 920.3.2 (BOCA National Building Code/1996), 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

In addition to the required AC primary power source, required smoke detectors in occupancies in Use Groups R-2, R-3 and I-1 shall receive power from a battery when the AC primary power source is interrupted. (Interconnection is required)

- A portable fire extinguisher shall be located as per NFPA #10. They shall bear the label of an approved agency and be of an 17.
- The Fire Alarm System shall be maintained to NFPA #72 Standard. 18.
- 19. The Sprinkler System shall maintained to NFPA #13 Standard.
- 20. All exit signs, lights, and means of egress lighting shall be done in accordance with Chapter 10 Section & Subsections 1023. & 1024. Of the City's building code. (The BOCA National Building Code/1996)
- 21. 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".
- The builder of a facility to which Section 4594-C of the Maine State Human Rights Act Title 5 MRSA refers, shall obtain a 22. certification from a design professional that the plans commencing construction of the facility, the builder shall submit the certification to the Division of Inspection Services.
- Ventilation shall meet the requirements of Chapter 12 Sections 1210. Of the City's Building Code. 23.
- × 24. All electrical, plumbing and HVAC permits must be obtained by a Master Licensed holders of their trade.
- **★**25. All requirements must be met before a final Certificate of Occupancy is issued.
- All building elements shall meet the fastening schedule as per Table 2305.2 of the City's Building Code. (The BOCA National X-26. Building Code/1996).
- Ventilation of spaces within a building shall be done in accordance with the City's Mechanical Code (The BOCA National X-27. Mechanical Code/1993).
- Please read and implement the attached Land Use-Zoning report requirements. 28. Blease read and in planent attached development review requireme **+**29.
- *¥* 30.
- i damproofing shall be done in accordance with section 1813,0 of The buil ¥ 31.
- 321 331 Pre- Engineered Trusses - Submit disign data before ConsTrucTI Shingles. Shall meet The requirements of section 150% 413.
- as per section 2305,17.
- £ 301. be done in accordance with Section 1404 of The mechanical Code

Samuel Hoffses/Code/Enforcement

cc: Lt. McDougall, PFD Marge Schmuckal

CITY OF PORTLAND, MAINE DEVELOPMENT REVIEW APPLICATION PLANNING DEPARTMENT PROCESSING FORM ADDENDUM

19980006	
I. D. Number	

	DDENDUM		
Busque, Peter - Withdrawn		1/29/98	
Applicant		Application Date	
P.O. Box 337 - 43 Cottage Ave, Windham, ME 04062		Alice St - Lot #9	
Applicant's Mailing Address		Project Name/Descript	ion
Peter Busque	20 Alice St		
Consultant/Agent	Address of Proposed Site		
893-1200 892-7758	387-A-039		
Applicant or Agent Daytime Telephone, Fax	Assessor's Reference: Chart-B	lock-Lot	
DRC Conditions of	Approval		
Approved subject to Site Plan Review (Addendum) Conditions of Approval:			
All damage to sidewalk, curb, street, or public utilities shall be repaired to	City of Portland standards prior to		
issuance of a Certificate of Occupancy.			
Two (2) City of Portland approved species and size trees must be planted	on your street frontage prior to		
issuance of a Certificate of Occupancy.			
Your new street address is now 20 Alice Street			
, the number must be displayed on the street frontage of your house prior to	issuance of a Certificate of Occupancy.		
The Development Review Coordinator (874-8300 ext.8722) must be notifi	ed five (5) working days		
prior to date required for final site inspection. Please make allowances for co	empletion of site plan requirements		
determined to be incomplete or defective during the inspection. This is esse		- Label	
be completed and approved by the Development Review Coordinator prior to			i
Occupancy. Please schedule any property closing with these requirements			<u> </u>
Show all utility connections: water, sanitary, sewer, storm drain, electric, t			
A sewer permit is required for you project! Please contact Carol Merritt at			4
and Drainage section of Public Works must be notified five (5) working days	prior to sewer connection to	,	
schedule an inspector for your site.	No. of the second second		1!
As-built record information for sewer and stormwater service connections	must be submitted to Public Works	ì	
Engineering Section (55 Portland Street) and approved prior to issuance of	a Certificate of Occupancy.		
The site contractor shall establish finish grades at the foundation, bulkhed	ad and basement windows to be in		
conformance with the first floor elevation (FFE) and sill elevation (SE) set by	the building contractor to provide		
for positive drainage away from entire footprint of building.			· · · · · · · · · · · · · · · · · · ·
A drainage plan shall be submitted to and approved by Development Revi			
elevation (FFE), sill elevation (SE), finish street/curb elevation, lot grading, e	existing and proposed contours,		
drainage patterns and paths, drainage swales, grades at or near abutting pro-	operty lines, erosion control devices		
and locations and outlets for drainage from the property.			
The Development Review Coordinator reserves the right to require addition	onal lot grading or other drainage		
improvements as necessary due to field conditions.			
Eroded soil shall be contained on-site. Hope and alice Street shall be sw	ept clean from tracked soil from		·
vehicles. silt fence shall be located along the property line with lot 7.			
Planning Conditions	of Approval		
			, \$
			,.
Inspections Condition	ns of Approval		
1. Separate permits shall be required for future decks, sheds, pool, and/or	garage.		
	<u> </u>		-

CITY OF PORTLAND, MAINE **DEVELOPMENT REVIEW APPLICATION**

9980	006		

expiration date

amount

I. D. Number PLANNING DEPARTMENT PROCESSING FORM Busque, Peter - Withdrawn 1/29/98 Application Date Applicant Alice St - Lot #9 P.O. Box 337 - 43 Cottage Ave, Windham, ME 04062 Applicant's Mailing Address Project Name/Description 20 Alice St **Peter Busque** Consultant/Agent Address of Proposed Site 387-A-039 893-1200 892-7758 Applicant or Agent Daytime Telephone, Fax Assessor's Reference: Chart-Block-Lot New Building ☐ Building Addition ☐ Change Of Use Residential Proposed Development (check all that apply): ☐ Warehouse/Distribution Parking Lot Other (specify) Office Retail Manufacturing 26 x 38 13,135 Sq Ft R-2 Proposed Building square Feet or # of Units Acreage of Site Zoning **Check Review Required:** PAD Review ☐ 14-403 Streets Review Site Plan Subdivision (major/minor) # of lots ☐ Flood Hazard ☐ Shoreland ☐ HistoricPreservation ■ DEP Local Certification Zoning Conditional ☐ Zoning Variance Other Use (ZBA/PB) Site Plan \$100.00 Date: 1/29/98 Fees Paid: \$50.00 Subdivision **Engineer Review Inspections Approval Status:** Reviewer Marge Schmuckal ■ Approved Approved w/Conditions ☐ Denied see attached Approval Expiration Additional Sheets Approval Date 2/18/98 Extension to Attached signature Required* ☐ Not Required **Performance Guarantee** * No building permit may be issued until a performance guarantee has been submitted as indicated below Performance Guarantee Accepted expiration date date amount Inspection Fee Paid date amount ☐ Building Permit Issued date Performance Guarantee Reduced date remaining balance signature ☐ Conditions (See Attached) ☐ Temporary Certificate of Occupancy date Final Inspection date signature ☐ Certificate Of Occupancy date Performance Guarantee Released date signature ☐ Defect Guarantee Submitted

submitted date

Defect Guarantee Released

CITY OF PORTLAND, MAINE DEVELOPMENT REVIEW APPLICATION PLANNING DEPARTMENT PROCESSING FORM

19980006		
I. D. Number		

Applicant P.O. Box 337 - 43 Cottage Ave, Windham Applicant's Mailing Address	n, ME 04062	-	1/29/98 Application Date Alice St - Lot #9 Project Name/Description
Peter Busque		∠⊘ Alice St	
Consultant/Agent		Address of Proposed Site	
893-1200 892-7		387-A-039	
Applicant or Agent Daytime Telephone, Fax		Assessor's Reference: Ch	art-Block-Lot
Proposed Development (check all that appl	uring	☐ Building Addition ☐ Change tribution ☐ Parking Lot ☐ 35 Sq Ft	Of Use Residential Other (specify)
Proposed Building square Feet or # of Units		age of Site	Zoning
Check Review Required:			
Site Plan (major/minor)	Subdivision # of lots	PAD Review	14-403 Streets Review
☐ Flood Hazard	Shoreland	☐ HistoricPreservation	☐ DEP Local Certification
Zoning Conditional Use (ZBA/PB)	Zoning Variance		Other
Fees Paid: Site Plan \$50.0	0 Subdivision	Engineer Review	\$100.00 Date: 1/29/98
DRC Approval Status:		Reviewer Jim Wendel	
r	Approved w/Conditions see attached	☐ Denied	
Approval Date2/5/98	Approval Expiration	2/5/99 Extension to	Additional Sheets
Condition Compliance	im Wendel	2/5/98	Attached –
	signature	date	
Performance Guarantee	Required*	☐ Not Required	
* No building permit may be issued until a p	erformance guarantee has be	en submitted as indicated below	
Performance Guarantee Accepted			
	date	amount	expiration date
☐ Inspection Fee Paid			
	date	amount	
☐ Building Permit			
	date		
Performance Guarantee Reduced			
	date	remaining baland	ce signature
Temporary Certificate Of Occupancy		Conditions (See Attacl	hed)
Temperary commons or occupancy	date		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
Final Inspection			
LI Final Inspection	date	signature	
Certificate Of Occupancy	dato	olghataro	
	date		
Performance Guarantee Released			
-	date	signature	
Defect Guarantee Submitted	submitted date	amount	expiration date
Defect Guarantee Released		·	
	date	signature	

Applicant: Peter Busque Date: 2/17/98
Address: 20 Alie 8t. C-B-L: 307-A-39
CHECK-LIST AGAINST ZONING ORDINANCE
Date - New
Zone Location - R-2
Interior or corner lot - CON. Hope Struct I family dwelling with Attached gravage Proposed Use/Work - TO CON Struct I family dwelling with Attached gravage Severage Disposal - City
Proposed Use/Work - 10 CM SILW 17 17 17 18
Defrite Disposition
Lot Street Frontage - 50 reg - 106+8how
- 2Crea - 25 + Shown
Rear Yard - 25 rea - 25 + Shown
Rear Yard - 25' reg - 25' + Shown Side Yard - 14' reg 2 stores - 25' + Shown Side Yard - 20' reg on side 8t - 25' + Shown Compared to the ord - front stows - ret Stair
Side Yard - 14 reg on side 8t - 29 + Shown Projections - lett enclosed bulkhead - front stans - retr stair Projections - lett enclosed bulkhead - front stans - retr stair Width of Lot - 80 reg - 106 shown
Width of Lot - Eding - 106'shown
77-1-1-4
Lot Area - 10,000 + reg - 13,137 8 5000
Lot Coverige Impervious Swij we
Area per Family - 10,000 4 - N.
Off-street Parking - 25 PACes Feg - Z Shows
Loading Bays - M
Site Plan-Mmor/mmor/ 26 x 30 = (988#
Shoreland Zoning/Stream Protection - V/N
Flood Plains - PAnel Z of 17 - Ene Ci pAnel 23000 51 - 0007B
parel 2300651-0001D
effective DATA 7/17/66

MANUFACTURED HOUSING USED AS DWELLINGS (Appendix A)				
Provisions adopted (114) Compliance with Appendix A verified				
SWIMMING POOLS, SPAS, AND HOT TUBS (Appendix D)				
Provisions adopted (115) — Compliance with Appendix D verified				
ENERGY CONSERVATION (Appendix E)				
CABO Model Energy Code adopted (119)				
RADON CONTROL MEASURES (Appendix F)				
Provisions applicable (Table 301.2a & 324) Compliance with Appendix F verified				
See attached Building Permit report				

BOCA®	
Valuation: PLAN REVIEW RECORD	Plan Review #
Fee: 480.00	Date: 19/Feb/98
CABO	
ONE AND TWO FAMILY DWELLING CODE	
JURISDICTION Torthand Cumbaland 1	Pe
(City, County, Township, etc.)	
BUILDING LOCATION <u>20 ALICE ST. (LIT49) 387</u>	-A-039 B
(Street address)	
BUILDING DESCRIPTION, Single family dwelling/ 4.	Mached Largaruje 19:
REVIEWED BY For	ANOTIONAL BUNLA MORE/96
Numerals indicated in parenthesis are applicable code sections of the 1995 Edition of the CABO OR review accomplished as indicated in this record is limited to those code sections specifically identifie applicable code sections with due regard for the amount and type of detailed information which is typical and two family dwellings. It does not reference all code provisions which may be applicable to specific lonly by those who are knowledgeable and capable of exercising competent judgement in evaluating competent.	te and Two Family Dwelling Lode. The plan and herein. This record references commonly ally found on construction documents for one buildings. This record is designed to be used

CORRECTION LIST			
No.	DESCRIPTION	Code Section	
1.	Plymbing, Electrical and HVAC permits Must		
	be obtained - See reg. #24		
2	Safety glazing shall be used in accordance with		
U- 1	Section 2405.0 of The building Code, code ther glass	2405.0.	
	Shall be done in accordance with sections 2402.0 - 2403	2402,0	
3,	Treads & risers. See rey. 10"min Tread 734"max rise see regar	1014,6	
4.	Guardrails and Handrails (See Mepory) &	1014,2	
<i>5.</i>	Water proofing & dan p roofing (see report # 31.	1813.0	
6.	ANchon bolts	230517	
7.	Pre-Engineered Roof Trusse of (Supply detail) # 32		
8,	Asphalt Shingles	1507, 4,3	
9	Fire places and Chimney Chapter 2113.0 building Code	2113.0	
	Fire places and Chimney Chapter 2113.0 building Code.	1404 M	



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	CORRECTION LIST	<u> </u>
Na	DESCRIPTION	Code Section
No.	DEGOTH (16.7)	
2		
<u></u>		

CHIMNEYS AND FIREPLACES (cont'd.)

Sel	· ·
// IASONRY FIREPLACES (cont'd.)	FACTORY-BUILT FIREPLACES (cont'd.)
Hearth extension	
Fireplace clearance	FACTORY-BUILT FIREPLACE STOVES (1005)
Firestopping	Approved and listed
Combustible materials	Installation
FACTORY-BUILT FIREPLACES (1004)	EXTERIOR AIR SUPPLY (1006)
Approved and listed	
MECHANICAL (Chapters 11-28)
Appliance labeling (1302, 1303) Appliance access (1305, 1401) Appliance location (1307) Heating and cooling load calculations (1401) Ventilation (Chapter 17) Exhaust systems (Chapter 18)	Chimney and vent location and terminations (1001, 2104) Fuel gas pipe sizing (2609) Liquefied Petroleum Gas container location (2611) Oil tank location (2701) Penetrations of fireresistance rated assemblies
	(320.3.1.1) Chapters 29-38)
STATE PLUM 67 Water service location and depth (3103, 3104)	Drain, waste and vent pipe sizing and riser diagram (3504, 3505, 3601)
Sanitary and storm sewer location and depth (3103, 3104)	Backwater valves (3508)
Listed plastic materials (3109)	Private sewage disposal system design (Chapter 38)
Plumbing fixtures (Chapter 32)	Penetrations of fireresistance rated assemblies
Water heater size and location (Chapter 33)	(320.3.1.1)
Water supply and distribution system design calculations (3403, 3409)	
ELECTRICAL (Chapters 39-46)
Listed and labeled materials (3903)	Feeder requirements and load calculations (4204)
Service size and load calculations (4102)	(4204) Required lighting and receptacle outlets
Available fault current (4106)	(4401, 4403)
Service equipment and location (4101, 4106)	Penetrations of fireresistance rated assemblies (3902)
Required branch circuits (4203)	

ROOF COVERINGS (cont'd.)

ASPHALT SHINGLES (903)	BUILT-UP ROOFING (907)
Steep-slope application (slope ≥ 4:12)	Underlayment
	Installation requirements
Attachment (Table 903.4)	WOOD/SHINGLES (908)
Flashing	Sheathing requirements
Hips and ridges	Installation requirements
SLATE SHINGLES (904)	Attachment & exposure (Tables 908.3 & 908.3.3)
Application	Valley flashing
Underlayment	Label
	WOOD SHAKES (909)
METAL (905)	Sheathing requirements
Application	Installation requirements
Roof slope	Attachment & exposure (Tables 908.3 &
Underlayment	908.3.3)
TILE, CLAY OR CONCRETE SHINGLES (906)	Valley flashing
Application	Label
Attachment	REROOFING (910)
Roof slope	25 percent or more of roof repaired, replaced or
Underlayment	recovered
Nailing and flashing	Structural support
	Recover vs replace
CHIMNEYS AND FIRE	PLACES (Chapter 10)
MASONRY CHIMNEYS (1001)	MASONRY CHIMNEYS (cont'd.)
Construction (1001.1 & Figure 1003.1)	Chimney clearance
Changes in dimension	Firestopping
Additional load	FACTORY-BUILT CHIMNEYS (1002)
Termination	Approved and listed
Wall thickness; ≥ 4"	Installation
Flue lining - material/installation	MASONRY FIREPLACES (1003)
Multiple flues	Construction (Figure 1003.1 & Table 1003.1)
Flue area (appliance)	Fireplace walls
Flue area (masonry fireplace)	Steel fireplace units
Inlet	Lintel (noncombustible)
Cleanout opening	Hearth extension material

NOTE: Entries to this Plan Review Record that require a field check or inspection of the installation require coordination with the inspection phase of the project.

BUILDING PLANNING (Chapter 3)

LOCAL DEG	IGN CRITERJA	(201)		LOC	AL DESIGN CRI	TERIA (contid)
	the land				ecay area	ILA
Floor live	1,5	<u></u>		•	inter design temp	=2
Roof live	11.6			·		J
Roof sno	4//-			•	adon	·
Wind pre	£ .			psf	ATION ON LOT ((302)
Seismic z				4.4	<i>[</i>	,
Weatheri	1.11			N	1-hour ratir	ng for exterior walls located less than property line
Frost line	Add	7		n/		, , ,
Termite a	rea	<u> </u>		14	Exterior wa	all openings
R	OOM PLANNIN	IG REQUIRE	MENTS (303	through 305)		
Use	Area (ft ²)	Width	Average ceiling	Minimum ceiling	Natural* light	Natural ventilation*
Living	150	7'	7′6″	5′0″	8% floor area	4% floor area
Dining	70	, 7'	7'6"	5′0″	8% floor area	4% floor area
Kitchen	50	N.A.	7′0″	5′0″	8% floor area	4% floor area
Bedroom	70	7′	7′6″	5′0″	8% floor area	4% floor area
Bathroom	N.A.	N.A.	7′0″	5′0″	3 square feet	1½ square feet
* See Sections	303.1 & 303.3 for r	mechanical ventil	ation			
<u> XeS</u> F	Required heating	g <i>(303.6)</i>		PRI\	/ATE GARAGES	(cont'd.)
, SANITATIOI	N (306 & 307)				Floor surfa	ce noncombustible
OK V	Vater closet in c	ompartment w	vith privacy: m	nini- FGF	RESS (310 throug	nh 315)
	num 30" wide v				, -	om each dwelling unit (310.1)
C	loset			See	13	· · · · ·
	avatory				opening 5.	oom window for emergency escape: 7 square feet (grade floor, 5 square
VT	ub or shower in	compartmen	t with privacy		feet), 22" r	net clear height, 20" net clear width: sill height = 44" (310.2)
- K	itchen area wit	h sink			i	r protection (310.3)
Pallic. S	sanitary sewer/p	orivate dispos	al	-0	Exit door ≥	: (3′0″ × 6′8″) <i>(311.1)</i>
1	308) 2405,0		_		Exit acces	s or hallway ≥ 3' (311.1)
499	abeling				Landings;	minimum 3' × 3' (312.1)
1	ouvered window	or ioloupio	r vew	_/\	A Ramp slop	e (1:8 maximum) (313.1)
		•		_v	/ <i> /</i>)_ Ramp han 	drails; one required if slope > 1:12
	luman impact lo Vind loads	Jaus/Hazaruoi	us locations	Λ.	V / a ` ´ ´	ling, minimum $3' \times 3'$ (313.3)
11/			ge-mil 1	See		ninimum width = 3'0"; maximum stair
	skylights and slo		- 401	10	rise = $7^{3}/4''$; minimum tread = 10" with $\frac{3}{4}$ "-1 $\frac{1}{4}$ "
PHIVALE GA	ARAGES (309) Irenal		A96	M	1//	nimum headroom = 6'8" (314)
	Ire nat lo opening betw	een garage a	nd sleeping ro	om/	Winders (3	,
	Other openings					piral, and circular stairways hrough 314.6)
	olid wood doors quivalent	s, 20-minute fi	re-rated door	s or	o///	lumination (314.7)
	' Sarage-dwelling r equivalent on		⁄2″ gypsum bo	ard	or more ri	required on one side of stair if three sers; handrail height = 30" to 38": 1/4" to 2" (315.1 & 315.2)
					1 Aub size	74 10 L (010.1 & 010.L)

BUILDING PLANNING (cont'd.)

EGRESS (cont'd.)	DWELLING UNIT SEPARATION (320)
Guardrails; required for porches, balconies, open sides of stairs, or raised floor surfaces > 30" above floor Minimum guardrail height = 36" (315.3) Opening limitations; < 4" (315.4) SMOKE DETECTORS (316) 920, 3.2 SMOKE DETECTORS (316) 920, 3.2 Power source FOAM PLASTIC (317) Approved Requirements Location WALL AND CEILING FINISH (318) Flame spread Smoke density INSULATION (319) Flame spread Smoke density	Construction (1-hour minimum) Floor/ceiling and wall continuity Sound transmission Townhouse exception (2 hours)* Townhouse parapet* Townhouse structural independence* *Not applicable to structures classified in accordance with the BOCA National Building Code as Use Group R-4. MOISTURE VAPOR RETARDERS (321.1) Required DECAY AND TERMITE AREAS (322 & 323) Location required (Table 301.2a) Adequate protection RADON PROTECTION (324) Required (Table 301.2a) (If required see page 12)
Attic	NC (Chapter 4)
FOUNDATION	NS (Chapter 4)
Design Installation FOOTINGS (403) Depth below (outside) grade = 12" minimum;	FOUNDATION WALLS (cont'd.) See Plane Drains required if habitable or usable spaces are below grade* (405) Dampproofing if basements are below grade* (406) 18 13, 0 Waterproofing if high water table* (406.2)
but below frost line except for insulated footings Insulated footing provided Soil bearing value Footing width (see page 5) Footing edge thickness = 6" minimum; footing projection = 2" minimum, but ≤ to footing thickness	Sill plate (22) 2305. 12 Bolting in concrete = 1/2" diameter bolts at 6' o.c. and within 12" from corner, 7" embedment Bolting in masonry = 1/2" diameter bolts at 6' o.c. and within 12" from corner, 15" embedment
FOUNDATION WALLS (404 through 406)	FOUNDATION INSULATION (407) Protective covering (extend minimum 6" below
IV Comments	Protective covering (extend minimum 6" below

ROOF-CEILING CONSTRUCTION (cont'd.)

RAFTERS	
Grade; $E = F_b = (802.1)$	FRTW allowable stresses/grading (802.1.1)
Rafters supporting a gypsum or plastered ceiling	(cathedral type)*
Gypsum ceiling (Δ = L/240) (301.6) LL = 20: Use Table 802.4e LL = 30: Use Table 802.4f LL = 40: Use Table 802.4g	Plastered ceiling (Δ = L/360) (301.6) LL = 20: Use Table 802.4h LL = 30: Use Table 802.4i LL = 40: Use Table 802.4j
Rafters not supporting a finished ceiling (attic type	e)*
(Light roofing: DL = 10 psf)	_ High slope (slope > 3:12)
* LL = Live load (psf); DL = Dead load; L = span length	
JOISTS (CEILINGS)	
Grade; E = F _b = (802.1)	FRTW allowable stresses/grading (802.1.1)
Joists with limited attic storage (roof slope > 3:12) (LL = 20 psf; DL = 10 psf) (Table 301.4)*
Plaster ceiling (∆ = L/360) <i>(301.6)</i> Use <i>Table 802.4a</i>	Gypsum ceiling ($\Delta = L/240$) (301.6) Use Table 802.4b
Joists with no attic storage (roof slope ≤ 3:12) (LL	_ = 10 psf; DL = 5 psf) <i>(Table 301.4)*</i>
Plaster ceiling (Δ = L/360) (301.6) Use <i>Table 802.4c</i> * LL = Live load (psf); DL = Dead load; L = span length	Gypsum ceiling (∆ = L/240) <i>(301.6)</i> Use <i>Table 802.4d</i>
PLYWOOD ROOF SHEATHING (803.2)	PARTICLEBOARD ROOF SHEATHING (cont'd.)
<u>CDX</u> Grade	Thickness
5/c/ ¹ Thickness	Allowable spans (Table 803.3.2)
FRTW allowable stresses/grading	Installation (803.3.3)
Allowable spans (Table 503.2.1.1a)	ATTICS
Installation (803.2.3)	Ventilation requirements (806)
PARTICLÉBOARD ROOF SHEATHING (803.3)	Access requirements (807)
M/ Grade	Soffit vert. See PLan.
ROOF	COVERINGS (Chapter 9) Chapter 15
GENERAL (901)	DECK PREPARATION (902)
Load/weather resistance	Underlayment application
Approved materials	Underlayment attachment

* If uninhabitable, see crawl space (409)

grade)

Protective covering (extend minimum 6" below

Footing required under foundation wall (400:1)

Minimum wall thickness/maximum depth of unbalanced fill (see page 5)

WALL CONSTRUCTION (cont'd.)

Table No. 602.3d MAXIMUM STUD SPACING (inches)

STUD SIZE	SUPPORTING ROOF AND CEILING ONLY	ROOF AND ONE FLOOR TWO FLOORS		SUPPORTING ONE FLOOR ONLY
2 × 4	241	16		24 ¹
3 × 4	241	24	16	24
2 × 5	24	24		24
2×6	24	24	16	24

For **SI**: 1 inch = 25.4 mm.

¹ Shall be reduced to 16 inches if Utility grade studs are used.

WALL COVERING (Chapter 7)

INTERIOR WALL COVERING (702)	EXTERIOR WALL COVERING (cont'd.)	
Plaster material (702.2)	Wood shakes and shingles (703.5)	
Plaster support (702.2.1)	Exterior lath (703.6)	
Gypsum wallboard material (702.3.1)	Masonry veneer (703.7 & Figure 703.7)	
Gypsum wallboard support, application and fastening (702.3.2 through 702.3.5)	Maximum height (35' in Seismic Zones 0, 1 or 2; 25' in Seismic Zones 3 or 4); Steel angle lintels (Table 703.7.1) (4" minimum bearing	
Shower and bath compartments: Smooth, hard,	each end)	
nonabsorbent surface to minimum 6 feet above floor (702.4)	Veneer ties: #9 wire or #22 corrugated metal;	
Other finishes (702.5 & 702.6)	24" o.c. horizontal spacing; 3½ square feet maximum area supported (wind > 30 psf and Seismic Zones 3 or 4 maximum area = 2 square	
EXTERIOR WALL COVERING (703)	feet) (703.7.2.1)	
Sheathing paper required (703.2)		
Wood siding (703.3)	· Vinyil sidings	
Attachment and minimum thickness (Table 703.4)	VIII y Z Zini I i i	

ROOF-CEILING CONSTRUCTION (Chapter 8)

ROOF FF	RAMING (802)	ROOF F	ROOF FRAMING (cont'd.)		
MA	Cathedral ceilings (802.2.1)		Bearing		
	Rafter tie where joists are not parallel to rafters (4' o.c.) (802.3)		Cutting and notching		
			Bored holes		
	_ Rafter brace to bearing walls (2" \times 4" at 4' o.c. minimum) (Figure 802.4.1)		Lateral support and bridging		
	Purlin rafter support (2" × construction mini-		Framing of openings		
	mum) (802.4.1)		Trusses		
	Connection of roof-ceiling system to masonry walls (Figures 604.10a through 604.10c)		Roof tie-down		

FOUNDATIONS (cont'd.)

Table 403.1 MINIMUM WIDTH OF CONCRETE OR MASONRY FOOTINGS (inches)

		LOAD-BEARING VALUE OF SOIL (psf)							
	1,500	2,000	2,500	3,000	3,500	4,000			
Conventional \	Wood Frame Constr	uction							
1-story	16	12	10	8	7	T 6			
2-story	19	15	12	10	8	7			
3-story	22	17	14	11	10	9			
4-Inch Brick Ve	eneer over Wood Fra	ıme or 8-Inch Holl	ow Concrete Mase	onry					
1-story	19	15	12	10	8	7			
2-story	25	19	15	13	11	10			
3-story	31	23	19	16	13	12			
8-Inch Solid or	Fully Grouted Maso	nry							
1-story	22	17	13	11	10	9			
2-story	31	23	19	16	13	12			
3-story	40	30	24	20	17	, 15			

For SI: 1 inch = 25.4 mm, 1 psf = 0.0479 kN/m².

Table No. 404.1.1a

MINIMUM THICKNESS AND ALLOWABLE DEPTH OF UNBALANCED FILL FOR UNREINFORCED MASONRY AND CONCRETE FOUNDATION WALLS WHERE UNSTABLE SOIL OR GROUNDWATER CONDITIONS DO NOT EXIST IN SEISMIC ZONES 0. 1 OR 2^{1,2}

FOUNDATION WALL CONSTRUCTION	NOMINAL THICKNESS ³ (inches)	MAXIMUM DEPTH OF UNBALANCED FILL ¹ (feet)
Masonry of Hollow Units, Ungrouted	8 10 12	4 5 6
Masonry of Solid Units	6 8 10 12	3 5 6 7
Masonry of Hollow or Solid Units, Fully Grouted	8 10 12	7 8 8
Plain Concrete	6 ⁴ 8 10 12	6 7 8 8
Rubble Stone Masonry	16	8
Masonry of hollow units reinforced vertically with No. 4 bars and grout at 24 inches on center. Bars located not less than $4\frac{1}{2}$ inches from pressure side of wall.	8	7

For SI: 1 inch = 25.4 mm, 1 psf = 0.0479 kN/m^2 .

¹ Unbalanced fill is the difference in height of the exterior and interior finish ground levels. Where an interior concrete slab is provided, the unbalanced fill shall be measured from the exterior finish ground level to the top of the interior concrete slab.

² The height between lateral supports shall not exceed 8 feet.

 $^{^3}$ The actual thickness shall not be more than $\frac{1}{2}$ inch less than the required nominal thickness specified in the table.

⁴ Six-inch plain concrete walls shall be formed on both sides.

FOUNDATIONS (cont'd.)

Table No. 404.1b

REQUIREMENTS FOR MASONRY OR CONCRETE FOUNDATION WALLS SUBJECTED TO NO MORE PRESSURE THAN WOULD BE EXERTED BY BACKFILL HAVING AN EQUIVALENT FLUID WEIGHT OF 30 POUNDS PER CUBIC FOOT LOCATED IN SEISMIC ZONE 3 OR 4 OR SUBJECTED TO UNSTABLE SOIL CONDITIONS

		LENGTH OF WALL		REQUIRED R	EINFORCING
MATERIAL TYPE	HEIGHT OF UNBALANCED FILL ¹ (feet)	BETWEEN SUPPORTING MASONRY OR CONCRETE WALLS (feet)	MINIMUM WALL THICKNESS ^{2,3} (inches)	HORIZONTAL BAR IN UPPER 12 INCHES OF WALL	SIZE AND SPACING OF VERTICAL BARS
Hollow	4 or less	unlimited	8	not required	not required
Masonry	more than 4	design required	design required	design required	design required
Concrete	4 or less	unlimited	8	not required	not required
or Solid	more than 4	less than 8	8	2-No. 3	No. 3 @ 18" O.C.
Masonry ⁴	8 or less	8 to 10	8	2-No. 4	No. 3 @ 18" O.C.
	8 or less	10 to 12	8	2-No. 5	No. 3 @ 18" O.C.
	more than 8	design required	design required	design required	design required

For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm, 1 pound per cubic foot (pcf) = 0.1572kN/m³.

COLUMNS (408)	CRAWL SPACE (409)	
Protection from decay or corrosion Structural requirements Anchorage Wood columns (minimum 4" square) Steel columns (minimum 3" diameter, standard	Ventilation Access (18" × 24") Removal of debris Finished grade	
weight) FLOORS (Chapter 5) Chipter 22		
WOOD JOISTS AND GIRDERS (502) 2x 10 Joists — Nonsleeping areas, LL = 40 psf (Table 502.3.1a) 2x 10 Joists — Sleeping areas, LL = 30 psf (Table 502.3.1b) Grade; E = Fb = S Girder supporting one floor only (Table 502.3.3a) Girder supporting more than one floor (Table 502.3.3b) Column supporting girder (Table 502.3.3b) Footing supporting column (Table 502.3.3b)	WOOD JOISTS AND GIRDERS (cont'd.) Joists under bearing partitions Bearing (1½" minimum on wood or steel; 3" on masonry) and lapped joists (3") Lateral restraint and bridging Drilling and notching Bored holes Fastening Framing of openings Floor trusses Draftstopping	

FLOORS (cont'd.)

Allowable span End joints PLYWOOD FLOOR SHEATHING (503.2) Grade Thickness Allowable spans (Tables 503.2.1.1a & 503.2.1.1b) Installation (Table 602.3a) PARTICLEBOARD FLOOR UNDERLAYMENT (503.3) Grade Thickness Installation (Table 602.3a)	Base course: 4" thick with maximum 3/4" gravel or 1/2" crushed stone Moisture barrier: placed over base course Construction CONCRETE FLOORS ON GROUND (505) Thickness: 31/2" minimum; Concrete strength = 2500 psi minimum Support: prepared subgrade; maximum earth fill = 8"; maximum sand or gravel fill = 24" Base course / 4" graded with 2" maximum aggregate) Vapor barrier METAL (506) Materials
GENERAL (601) Design Load requirements (301)	WOOD CONSTRUCTION (cont'd.) Cripple walls Wall bracing (Table 602.9)
WOOD CONSTRUCTION (GEE) Grade; E = Fb = Construction (Figures 602.3a & 602.3b) Stud grade spacing (Table 602.3d — see page 8) Exterior walls Interior bearing walls Interior nonbearing walls: 2" × 3" at 24" o.c. or	METAL CONSTRUCTION (600) Materials MASONRY CONSTRUCTION (600) General design Types of masonry Construction requirements WINDOWS & DOORS (600 & 609)
2" × 4" flat at 16" o.c. Drilling and notching — studs Drilling and notching — top plate Headers (Tables 602.6 & 602.6.2) Firestopping	Certification SHEATHING (610 & 611) Plywood and wood structural panels (610) Particleboard (611)

¹ Backfilling shall not be commenced until after the wall is anchored to the floor.

² Thickness of concrete walls may be 6 inches, provided reinforcing is placed not less than 1 inch or more than 2 inches from the face of the wall not

 $^{^3}$ The actual thickness shall not be more than $\frac{1}{2}$ inch less than the required thickness specified in the table.

⁴ Solid masonry shall include solid brick or concrete units and hollow masonry units with all cells grouted.