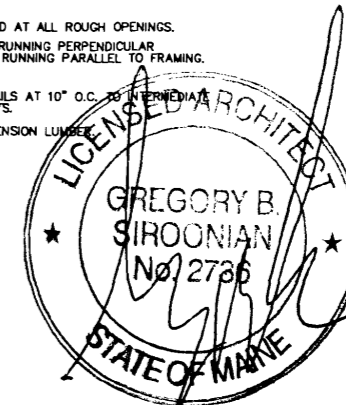


BUILDING SECTION C

SCALE: 3/8" = 1'-0"

STRUCTURAL DESIGN CRITERIA

- 1.0 DESIGN CRITERIA: THE FOLLOWING OUTLINES MINIMUM PERFORMANCE STANDARDS FOR THE PROJECT AND THE BASIS UPON WHICH SHOP DRAWINGS (IF ANY) WILL BE REVIEWED.
- 1.1 TYPICAL ALTERNATE STANDARDS (FOR REQUIREMENTS NOT OTHERWISE INDICATED IN THIS SPECIFICATION OR RELATED DRAWINGS): APPLICABLE BUILDING CODE (INCLUDING INDUSTRY STANDARDS REFERENCED THERE-IN) OR PRODUCT MANUFACTURER'S RECOMMENDED STANDARD, WHICHEVER IS THE MORE STRINGENT FOR A PARTICULAR ITEM OR CONDITION.
- 2.0 DEAD LOADS:
- 2.1 STRUCTURAL SHEATHING:
- 2.1.1 FLOORS: 3/4" MIN. THICK, T & G, CDX PLY OR ADVANTECH
- 2.1.2 EXTERIOR WALLS: 1/2" MIN. THICK ZIP WALL PLYWOOD
- 2.1.3 ROOFS: 5/8" MIN. THICK, ZIP ROOF PLYWOOD
- 2.2 FINISHES: (THE FOLLOWING REPRESENTS STRUCTURAL DESIGN CRITERIA, NOT FINISH SPECIFICATIONS)
- 2.2.1 FLOOR FINISHES AT ENTRIES, BATHROOMS AND KITCHEN AREAS: ASSUME THIN-SET CERAMIC TILE OVER 1/2" CEMENT FIBER BOARD UNDERLAYMENT
- 2.2.2 FLOOR FINISHES AT OTHER HABITABLE AREAS: ASSUME 3/4" HARDWOOD FLOORS
- 2.2.3 WALL FINISHES: ASSUME CERAMIC TILE WITH 1/2" CEMENT FIBER BOARD BACKER AT TUB AND SHOWERS; 1/2" BLUEBOARD AND PLASTER ALL OTHER LOCATIONS
- 2.2.4 CEILING FINISHES: ASSUME 1/2" BLUEBOARD AND PLASTER
- 2.2.5 ROOF FINISHES: ASSUME HEAVY DUTY, ARCHITECTURAL GRADE ASPHALT SHINGLES.
- 2.3 MAXIMUM DEAD LOAD OF 10 P.S.F.
- 3.0 LIVE LOADS:
- 3.1 FLOOR LOADS:
- 3.1.1 LIVING AREAS: 40 P.S.F.
- 3.1.2 SLEEPING AREAS: 30 P.S.F.
- 3.1.3 BALCONIES AND DECKS: 60 P.S.F.
- 3.1.4 UNINHABITABLE ATTIC SPACES: 20 P.S.F.
- 3.2 SNOW LOADS: BUILDING CODE FOR JOB SITE LOCATION
- 3.3 WIND LOADS: BUILDING CODE FOR JOB SITE LOCATION AND EXPOSURE.
- 4.0 ALLOWABLE DEFLECTION:
- 4.1 FLOOR/CEILING ASSEMBLIES (INCLUDING SUPPORTING BEAMS) - (NOTE: WINDOWS AND DOORS - ASSUME NAILING TABS AT JAMBS AND HEADS, WITH MANUF. RECOMMENDED HEAD CLEARANCES OF APPROXIMATELY 1/2")
- 4.1.1 LIVE LOAD DEFLECTION: L/480 UP TO 1/2" MAX.
- 4.1.2 TOTAL LOAD DEFLECTION: L/240 UP TO 3/4" MAX.
- 5.0 MATERIALS:
- 5.1 FRAMING DIMENSION LUMBER
- LOAD BEARING DIMENSION LUMBER FOR JOISTS, STUDS, PLATES, RAFTERS, HEADERS, BEAMS AND GIRDERS ETC. SHALL CONFORM TO THE BUILDING CODE, AND TO OTHER APPLICABLE STANDARDS OR GRADING RULES AND SHALL BE SO IDENTIFIED BY A GRADE MARK OR CERTIFICATE OF INSPECTION ISSUED BY AN APPROVED AGENCY. THE GRADE MARK OR CERTIFICATE SHALL PROVIDE ADEQUATE INFORMATION TO DETERMINE F_b, THE ALLOWABLE STRESS IN BENDING, AND E, THE MODULUS OF ELASTICITY.
- 5.1.1 ALLOWABLE JOIST SPANS: THE CLEAR SPAN OF FLOOR JOISTS SHALL NOT EXCEED THE VALUES SET FORTH IN THE BUILDING CODE. THE MODULUS OF ELASTICITY, E, AND THE ACTUAL STRESS IN BENDING, F_b, SHOWN IN THE TABLES SHALL NOT EXCEED THE VALUES SPECIFIED IN THE BUILDING CODE.
- 5.1.2 ALLOWABLE SPANS: THE UNSUPPORTED SPANS FOR CEILING JOISTS SHALL NOT EXCEED THE VALUES SET FORTH IN THE BUILDING CODE. THE UNSUPPORTED SPANS FOR RAFTERS SHALL NOT EXCEED THE VALUES SET FORTH IN THE BUILDING CODE.
- 5.1.3 PLYWOOD SHEATHING: AND WOOD STRUCTURAL PANELS USED FOR STRUCTURAL PURPOSES SHALL CONFORM TO THE BUILDING CODE. ALL PANELS SHALL BE IDENTIFIED BY A GRADE MARK OR CERTIFICATE OF INSPECTION ISSUED BY AN APPROVED AGENCY. PLYWOOD AND WOOD STRUCTURAL PANELS SHALL COMPLY WITH THE GRADES SPECIFIED IN THE BUILDING CODE.
- 5.1.3a WHERE USED AS SUBFLOORING OR COMBINATION SUBFLOOR UNDERLAYMENT, WOOD STRUCTURAL PANELS SHALL BE OF ONE OF THE BUILDING CODE. WHEN SANDED PLYWOOD IS USED AS A COMBINATION SUBFLOOR UNDERLAYMENT, THE GRADE SHALL BE AS SPECIFIED IN THE BUILDING CODE.
- 5.2 ENGINEERED WOOD
- ALL BEAMS, HEADERS AND GIRDERS SPECIFIED ON THE PLANS AS LVL BEAMS, OR COMPOSITE (BUILT-UP) LVL BEAMS, SHALL BE AS MANUFACTURED BY TRUS JOIST MACMILLAN OR APPROVED EQUAL. ALL SPANS, LOAD CAPACITIES, BEARING CONDITIONS AND FASTENING SCHEDULES SHALL BE AS REQUIRED BY THE MANUFACTURER.
- 6.0 INSTALLATION STANDARDS:
- 6.1 FRAMING SYSTEM: WESTERN PLATFORM
- 6.2 WOOD POSTS AND JACKS SUPPORTING WOOD FRAMING
- 6.2.1 WITHIN 2 X 4 WALL FRAMING: 4 X 4 MIN
- 6.2.2 WITHIN 2 X 6 WALL FRAMING: 4 X 6, OR 6 X 6 (REFER TO PLANS)
- 6.2.3 ALL WOOD POSTS SHALL BE CONNECTED TO THE WOOD FRAMING AT TOP WITH METAL POST CAP A.C. OR A.C.E. BY SIMPSON.
- 6.3 COLUMNS (BASEMENT OR EXTERIOR LOCATIONS): 3 1/2" LALLY COLUMNS
- 6.3.1 BASE PLATES: SPRINGFIELD BEARING PLATES WELDED TO COLUMN.
- 6.3.2 CAPS (CONNECTING COLUMNS TO WOOD FRAMING): SPRINGFIELD BEARING PLATES OR SIMPSON "CC" TYPE COLUMN CAPS
- 6.4 ANCHORS, CONNECTORS AND HANGERS
- 6.4.1 SIZE, CONFIGURATION, LOCATION AND QUANTITIES TO MEET WIND, EARTHQUAKE AND GRAVITY LOADS.
- 6.4.2 JOIST HANGERS: TOP FLANGE TYPE (UNLESS NOT FEASIBLE) SHALL BE USED AT ALL CONNECTIONS AS REQUIRED. HANGERS SHALL BE 18 GA. MIN. WITH ALL HOLES FILLED WITH REQUIRED FASTENERS.
- 6.5 WALL FRAMING
- 6.5.1 ALL EXTERIOR WALLS SHALL BE 2 X 4 OR 2 X 6 (AS INDICATED ON PLANS) EXTERIOR WALL SHEATHING SHALL BE FASTENED WITH 100 NAILS AT 10" O.C. AT INTERIOR SUPPORTS, AND 100 NAILS AT 6" O.C. AT PANEL EDGES, UNLESS OTHERWISE NOTED ON PLANS (U.O.N.)
- 6.5.2 2 X 4 INTERIOR STUD BEARING WALLS SHALL BE 2 X 4 STUDS AT 16" O.C. WITH BLOCKING AT MID HEIGHT FOR WALLS OVER 9 FEET HIGH, AND METAL X-BRACING (SIMPSON STRONG TIE TYPE WB) U.O.N.
- 6.6 FLOOR AND CEILING FRAMING (UNLESS NOTED OTHERWISE ON ATTACHED DRAWINGS): DIMENSION LUMBER.
- 6.6.1 PROVIDE DOUBLE JOISTS BENEATH ALL BEARING PARTITIONS AND AT ALL ROUGH OPENINGS.
- 6.6.2 PROVIDE SOLID BLOCKING BETWEEN JOISTS AT BEARING WALLS RUNNING PERPENDICULAR TO WALL AND BETWEEN JOISTS TO EITHER SIDE OF PARTITIONS RUNNING PARALLEL TO FRAMING.
- 6.6.3 PROVIDE SOLID BRIDGING AT 8 FT MAX. O.C.
- 6.6.4 PLYWOOD SUBFLOOR SHALL BE GLUED AND NAILED WITH 80 NAILS AT 10" O.C. TO INTERMEDIATE SUPPORTS AND 80 NAILS AT 6" O.C. TO PANEL EDGE SUPPORTS.
- 6.7 RAFTERS (UNLESS NOTED OTHERWISE ON ATTACHED DRAWINGS): DIMENSION LUMBER
- END.



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THE DRINKWATER RESIDENCE
 LONGVIEW DRIVE
 PORTLAND, MAINE

BUILDING SECTION C
 NOTES

REVISIONS	
NO.	DESCRIPTION

DATE: 09-28-09

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