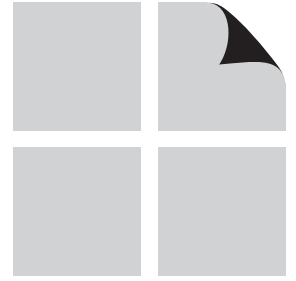


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P W F

PERMANENT WOOD FOUNDATION DESIGN SPECIFICATION

WITH COMMENTARY

Permanent Wood Foundation Design Specification with Commentary 2007 Edition

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AF&PA American Wood Council

1111 Nineteenth St., NW, Suite 800

Washington, DC 20036

email: awcinfo@afandpa.org

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FOREWORD

Permanent Wood Foundation (PWF) systems are intended for light frame construction including residential buildings. The realization of full performance potential requires proper attention to design, fabrication, and installation of the foundation. This document primarily addresses structural design requirements.

The Permanent Wood Foundation is a load-bearing wood-frame wall and floor system designed for both above and below-grade use as a foundation for light frame construction. The PWF specifications are based on information developed cooperatively by the wood products industry and the U.S. Forest Service, with the advice and guidance of the Department of Housing and Urban Development's Federal Housing Administration and utilizing research findings of the National Association of Home Builders Research Center. The system combines proven construction techniques along with proven below-grade moisture control technology.

Stress-graded lumber framing and plywood sheathing in the system shall be engineered to support lateral soil pressures as well as dead, live, snow, wind, and seismic loads.

Moisture control measures based on foundation engineering, construction practice, and building materials technology are employed to achieve dry and comfortable living space below-grade. The most important of these moisture control measures is a granular drainage layer surrounding the lower part of the basement that conducts ground water to a positively drained sump, preventing hydrostatic pressure on the basement walls or floor. Similarly, moisture reaching the upper part of the basement foundation wall is deflected downward to the gravel drainage system by polyethylene sheeting, or by the treated plywood wall itself. The result is a dry basement space that is readily insulated and finished for maximum comfort and conservation of energy, utility, and use of space.

Wood foundation sections of lumber framing and plywood sheathing may be factory fabricated or constructed at the job site.

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TABLE OF CONTENTS

Section/Title	Page	Section/Title	Page
1 GENERAL REQUIREMENTS	1	4 ENVIRONMENTAL CONTROL	11
1.1 Scope	2	4.1 Design for Dryness	12
1.2 Conformance With Standards	2	4.2 Design for Climate Control	13
1.3 Terminology	2	5 STRUCTURAL DESIGN	15
1.4 Notation	3	5.1 General	16
2 MATERIALS	5	5.2 Material Design Standards	16
2.1 Framing	6	5.3 Design Loads and Design Methodology	16
2.2 Sheathing	6	5.4 PWF Wall Design	18
2.3 Preservative Treatment	6	5.5 Footing Design	22
2.4 Connections In Preservative-Treated Wood	7	5.6 Basement Floor Design	24
2.5 Aggregate for Footings and Fill	7	5.7 Design of Framing Around Openings	24
2.6 Caulking Compound	7	REFERENCES	25
2.7 Polyethylene Sheeting	7		
2.8 Polyethylene Sheeting Adhesive	8		
3 SOIL: TYPES, STRUCTURAL PERFORMANCE, DRAINAGE	9		
3.1 Soil Types	10		
3.2 Soil Structure Characteristics	10		

LIST OF FIGURES

Figure	Page
1 PWF Exterior Basement Wall Showing Location of Vapor Barrier With Vented Air Space	13
2 PWF Exterior Basement Wall Showing Location of Vapor Barrier with no Vented Air Space	14
3 Pressure Diagram Used to Calculate Bending Moment, Shear, and Deflection in Foundation Walls with Basement Resisting Lateral Soil Load.	17
4 Pressure Diagram Used to Calculate Bending Moment, Shear, and Deflection in Foundation Walls with Crawl Space Resisting Lateral Soil Load.	17
5 Basement Wall Anchorage to Resist Wind Uplift.....	21
6 Crawl Space Wall Anchorage to Resist Wind Uplift.....	21

COMMENTARY TABLE OF CONTENTS

Section/Title	Page	Section/Title	Page
C1 GENERAL REQUIREMENTS	29	C4 ENVIRONMENTAL CONTROL ...	32
C1.1 Scope	29	C4.1 Design for Dryness	32
C1.2 Conformance with Standards	29	C4.2 Design for Climate Control	32
C1.4 Notation	29	C5 STRUCTURAL DESIGN	33
C2 MATERIALS	30	C5.2 Material Design Standards	33
C2.2 Sheathing	30	C5.3 Design Loads and Design Methodology	33
C2.3 Preservative Treatment	30	C5.4 PWF Wall Design	34
C2.5 Aggregate for Footings and Fill	30	C5.5 Footing Design	42
C3 SOIL: TYPES, STRUCTURAL PERFORMANCE, DRAINAGE ...	31	C5.6 Basement Floor Design	44
C3.2 Soil Structural Characteristics	31	REFERENCES	45

LIST OF COMMENTARY FIGURES

Figure	Page	Figure	Page
C4.2.1.2	Insulation of Exterior Walls in Crawl Space Construction..... 32	C5.4-9	Shear and Bending Moment for the Portion of PWF Stud Located Below Inside Backfill Height and Subjected to Lateral Forces Due to Both Outside and Inside Backfill. 39
C5.3	Typical Loads and Reactions in a Permanent Wood Foundation..... 33	C5.4.4.1	Framing Strap to Transfer Lateral Loads into Floor Joists 41
C5.4-1	Lateral Soil Load Distribution and Reactions for PWF Basement Wall Stud 34	C5.4.4.2	Concrete Slab to Resist Lateral Forces at the Bottom of a Crawl Space Wall 41
C5.4-2	Lateral Soil Load Distribution and Reactions for PWF Basement Wall Stud in Calculating Shear Forces 34	C5.4.5.1	Net Resultant of Forces Due to Differential Backfill Height..... 42
C5.4-3	Calculating Shear at a Section “x” in the PWF Stud 35	C5.5.2.2-1	Plywood Reinforcing Strip..... 42
C5.4-4	Calculating Bending Moment at a Section “x” in the PWF Stud..... 36	C5.5.2.2-2	Forces on Cantilevered Portion of Footing Plate 43
C5.4-5	Lateral Soil Load Distribution and Reactions for PWF Crawl Space Wall Stud..... 37	C5.5.3.2-1	Distribution of Axial Load from Wood Footing Plate 43
C5.4-6	Net Lateral Soil Load Distribution and Reactions for PWF Crawl Space Wall Stud..... 38	C5.5.3.2-2	Spread Footing using Alternating Layers of Wood Planks 44
C5.4-7	Calculating Shear at a Section “x” in the PWF Crawl Space Stud 38	C5.6.2.2	Blocking for PWF End Walls..... 44
C5.4-8	Shear and Bending Moment for the Portion of Crawl Space PWF Stud Located Above Inside Backfill Height and Subjected to Lateral Forces Due to Outside Backfill Only..... 39		