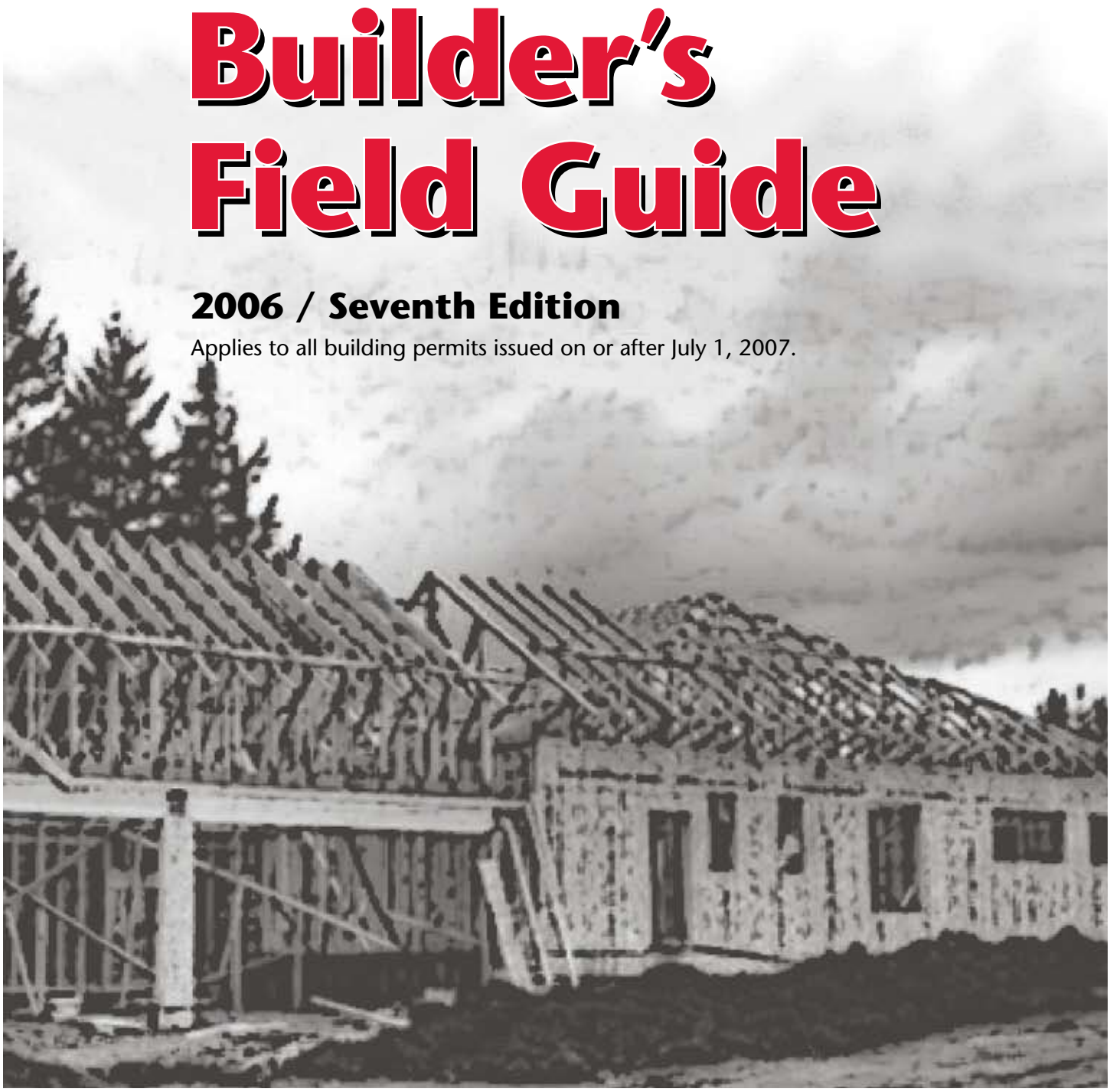
WASHINGTON STATE UNIVERSITY
EXTENSION ENERGY PROGRAM

Washington State Energy Code

Builder's Field Guide

2006 / Seventh Edition

Applies to all building permits issued on or after July 1, 2007.



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Published December 2008.

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With support from the following:

NORTHWEST ENERGY EFFICIENCY ALLIANCE

DEPARTMENT OF ENERGY • UNITED STATES OF AMERICA •

Northwest Building Efficiency Center

Produced with support from the Northwest Energy Efficiency Alliance
and the U.S. Department of Energy.

This publication can also be found on the Internet at:
www.energy.wsu.edu/codes/

WSUEEP-08-027 December 2008

Introduction

The 7th edition of the ***Builder's Field Guide*** outlines acceptable construction practices that meet the 2006 Washington State Energy Code Second Edition (WSEC) and the 2006 Washington State Ventilation and Indoor Air Quality (VIAQ) Code.

The current edition of the WSEC was adopted effective July 1, 2007; the current edition of the VIAQ Code was adopted effective July 1, 2006. The Codes apply to all building jurisdictions in the State for residential construction. For Non-residential construction, the code applies everywhere in the state, except Seattle, where municipal versions of the code have been adopted.

The ***Builder's Field Guide*** covers only residential practices and requirements. A similar guide for non-residential buildings is available from the Northwest Energy Efficiency Council. *www.neec.net*

In an effort to provide broad access to this Guide, and to reduce paper consumption, the Guide is available on-line. The on-line version of the Guide is provided to the public free of charge, and all users may print out copies as necessary. You may also want to consider downloading the electronic versions of the WSEC and VIAQ, also available on-line. The ***Builder's Field Guide***, the WSEC and the VIAQ can be downloaded from: *www.energy.wsu.edu/code/*. See the copyright notice on the back side of the title page.

Code Review Process

These codes, and all Washington State Building Codes, are developed by the Washington State Building Code Council (SBCC). The SBCC oversees a public process that reviews all codes. The building community, utilities, local government, and state agencies participate in the public process through technical advisory groups organized around each code. The WSEC is updated every three years.

If you are interested in participating in the next code review process, please contact the SBCC at (360) 725-2966 or via e-mail at *sbcc@cted.wa.gov*.

While the practices included in this Guide are generally acceptable for Code compliance, your local building official has the final say as to what meets code in specific applications. Alternative practices not illustrated may be acceptable, but must be approved by the local jurisdiction.

The illustrations contained in this Guide reflect Code requirements. Occasionally, however, recommended practices that go beyond Code requirements are included.

The "good practices" are labeled as such and should not be construed as Code requirements.

Code References in the Guide

Code references throughout the Guide are bracketed and appear in the left-hand column.

[Number] References to the 2006 Washington State Energy Code, Second Edition (WSEC) will look like this.

[VNumber] References to the 2006 Washington State Ventilation and Indoor Air Quality Code (VIAQ) will look like this.

Acknowledgements

Funding for maintenance of the ***Builder's Field Guide*** has been provided by the Northwest Energy Efficiency Alliance and the U.S. Department of Energy through the Northwest Building Efficiency Center.

The 2006 version was updated by WSU Extension Energy Program staffers Gary Nordeen (project leader), Luke Howard, Cindy Wills, and Gerry Rasmussen (graphic designer), and supervised by Todd Currier (team leader).

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List of Acronyms Used in the WSEC

ABS	Acrylonitrile Butacliene Styrene
ACCA	Air Conditioning Contractors of America Association, Inc.
ACH	Air Changes per Hour
AFUE	Annual Fuel Utilization Efficiency (DOE)
APA	American Plywood Association (*now called* APA–The Engineered Wood Association)
ASHRAE	American Society of Heating, Refrigerating and Air-Conditioning Engineers
ASTM	American Society for Testing and Materials
BTU (Btu)	British Thermal Units
CFM (cfm)	Cubic feet per minute
COP	Coefficient of Performance
DOE	U.S. Department of Energy
EPA	U.S. Environmental Protection Agency
EPS	Expanded Polystyrene
HSPF	Heating Season Performance Factor
HUD	U.S. Department of Housing and Urban Development
HVAC	Heating, Ventilation and Air Conditioning
HVI	Home Ventilating Institute
IC rated	Insulation Cover Rated
ICF	Insulated Concrete Form
IMC	International Mechanical Code
IRC	International Residential Code

NAECA	National Appliance Energy Conservation Act (1987)
NFRC	National Fenestration Rating Council
SBCC	Washington State Building Code Council
SHGC	Solar Heat Gain Coefficient
SMACNA	Sheet Metal & Air Conditioning Contractors National Associaton
UA	U-Factor x Area
UL 181	Underwriter's Laboratory Test #181
VIAQ Code	Washington State Ventilation and Indoor Air Quality Code
WSEC	Washington State Energy Code
WSUEEP	Washington State University Extension Energy Program
XPS	Extruded Polystyrene