CITY OF PORTLAND, MAINE
RESURGAM
Reviewed for Code Compliance
Inspections Division
Approved with Conditions
Date: 07/18/16

General Notes

- Table is based on:
  - Uniform loads.
  - More restrictive of simple or continuous span. Ratio of short span to long span should be 0.4 or greater to prevent uplift.
  - Deflection criteria of L/240 live load and L/180 total load.

Also see **How to Use This Table** on page 10 and **General Assumptions** on page 5.

Bearing Requirements

Minimum beam supports to be two trimmers (3") at each end and 7½" at continuous-span supports.

In **Sizing Tables** on pages 10 and 11:

(3) Indicates requirement of three trimmers (4½") at each end and 11¼" at continuous-span supports.

6 + 12 Lambert St. David DiPietro
Ridge Specs - The Entire Roof

Ridge Beams *continued*

Roof Load (PSF)		House Width	Column Spacing 18'		20'		22'		24'	
Non-Snow Area 125%	20LL + 15DL	24'	3½" x 11⅞"	M P	3½" x 14"	M P	3½" x 16"	M P	3½" x 16"	M P
			3½" x 14"	M P	5¼" x 11¼"	M P	5¼" x 14"	M P	5¼" x 14"	M P
			5¼" x 11¼"	M P					5¼" x 16"	M P
		30'	3½" x 14"	M P	3½" x 14"	M P	3½" x 16"	M P	3½" x 18"	M P
			5¼" x 11¼"	M P	3½" x 16"	M P	5¼" x 14"	M P	5¼" x 16"	M P
			5¼" x 11⅞"	M P	5¼" x 14"	M P	5¼" x 16"	M P	7" x 14"	P
		36'	3½" x 14"	M P	3½" x 16"	M P	3½" x 18"	M P	3½" x 18"	M P
			3½" x 16"	M P	5¼" x 14"	M P	5¼" x 16"	M P	5¼" x 16"	M P
			5¼" x 11⅞"	M P			7" x 14"	P	7" x 14"	P
	20LL + 20DL	24'	3½" x 14"	M P	3½" x 14"	M P	3½" x 16"	M P	3½" x 18"	M P
			5¼" x 11¼"	M P	3½" x 16"	M P	5¼" x 14"	M P	5¼" x 16"	M P
			5¼" x 11⅞"	M P	5¼" x 11⅞"	M P	5¼" x 16"	M P	7" x 14"	P
		30'	3½" x 14"	M P	3½" x 16"	M P	3½" x 16"	M P	3½" x 18"	M P
			3½" x 16"	M P	5¼" x 14"	M P	5¼" x 14"	M P	5¼" x 16"	M P
			5¼" x 11⅞"	M P			5¼" x 16"	M P	7" x 14"	P
		36'	3½" x 14"	M P	3½" x 16"	M P	3½" x 18"(3)	M P	3½" x 20"(3)	M
			3½" x 16"	M P	5¼" x 14"	M P	5¼" x 16"	M P	5¼" x 18"	M P
			5¼" x 14"	M P	5¼" x 16"	M P	7" x 14"	P	7" x 16"	P
Snow Area 115%	25LL + 15DL	24'	3½" x 14"	M P	3½" x 14"	M P	3½" x 16"	M P	3½" x 18"	M P
			5¼" x 11¼"	M P	3½" x 16"	M P	5¼" x 14"	M P	5¼" x 16"	M P
			5¼" x 11⅞"	M P	5¼" x 11⅞"	M P	5¼" x 16"	M P	7" x 14"	P
		30'	3½" x 14"	M P	3½" x 16"	M P	3½" x 16"	P	3½" x 18"	M P
			3½" x 16"	M P	5¼" x 14"	M P	3½" x 18"	M P	5¼" x 16"	M P
			5¼" x 11⅞"	M P			5¼" x 14"	M P	7" x 14"	P
		36'	3½" x 14"	P	3½" x 16"	P	3½" x 18"(3)	P	3½" x 20"(3)	M
			3½" x 16"	M P	3½" x 18"	M P	3½" x 20"(3)	M	5¼" x 18"	M P
			5¼" x 14"	M P	5¼" x 14"	M P	5¼" x 16"	M P	7" x 16"	P
	30LL + 15DL	24'	3½" x 14"	M P	3½" x 14"	M P	3½" x 16"	M P	3½" x 18"	M P
			5¼" x 11¼"	M P	3½" x 16"	M P	5¼" x 14"	M P	5¼" x 16"	M P
					5¼" x 14"	M P	5¼" x 16"	M P	7" x 14"	P
		30'	3½" x 14"	P	3½" x 16"	M P	3½" x 18"	M P	3½" x 20"(3)	M
			3½" x 16"	M P	5¼" x 14"	M P	5¼" x 16"	M P	5¼" x 16"	M P
			5¼" x 11⅞"	M P	5¼" x 16"	M P	7" x 14"	P		
		36'	3½" x 16"	M P	3½" x 18"(3)	M P	3½" x 18"(3)	P	5¼" x 18"	M P
			5¼" x 14"	M P	5¼" x 14"	M P	3½" x 20"(3)	M	7" x 16"	P
					5¼" x 16"	M P	5¼" x 16"	M P		
	40LL + 15DL	24'	3½" x 14"	M P	3½" x 16"	M P	3½" x 18"	M P	3½" x 18"(3)	P
			3½" x 16"	M P	5¼" x 14"	M P	5¼" x 16"	M P	3½" x 20"(3)	M
			5¼" x 11⅞"	M P	5¼" x 16"	M P	7" x 14"	P	5¼" x 16"	M P
		30'	3½" x 16"	M P	3½" x 18"(3)	M P	3½" x 20"(3)	M	5¼" x 18"	M P
			5¼" x 14"	M P	5¼" x 16"	M P	5¼" x 16"	M P	7" x 16"	P
					7" x 14"	P				
		36'	3½" x 18"(3)	M P	3½" x 20"(3)	M	5¼" x 18"	M P	5¼" x 18"(3)	P
			5¼" x 14"	M P	5¼" x 16"	M P	7" x 16"	P	5¼" x 20"(3)	M
			5¼" x 16"	M P	7" x 14"	P				

T 1.55E TimberStrand® LSL M 2.0E Microllam® LVL P 2.0E Parallam® PSL

6 + 12 CAMBERD ST. David Di

Reviewed for Code Compliance
Inspections Division
Approved with Conditions
Date: 07/18/16

Rafters will have Ridge hangers.

Floor joist will have floor joist hangers attached to beam for flush mounting.

Commercial and Residential Building Energy Codes

- State Owned / Funded Buildings
- Adoption Process
- Enforcement Process
- Compliance Process
- Background

Reviewed for Code Compliance
Inspections Division
Approved with Conditions
Date: 07/18/16

Contacts | Web Site Policies | U.S. Department of Energy | USA.gov | Compliance Evaluation Resources

Last Updated: Tuesday, November 3, 2015 - 7:00pm

6 + 12 Camberr St. David DiPietro

3 pages of Rescheck -
This is all the information we can find

CITY OF PORTLAND, MAINE RESURGAM

Reviewed for Code Compliance
Inspections Division
Approved with Conditions
Date: 07/18/16

Maine

Commercial | Residential | Code Change

Current Code: ASHRAE Standard 90.1-2007

Amendments / Additional State Code Information: As of September 28, 2011, municipalities over 4,000 in population were required to enforce the new code if they had a building code in place by August 2008. Municipalities under 4,000 are not required to enforce it unless they wish to do so and have the following options: 1. Adopt and enforce the Maine Uniform Building and Energy Code 2. Adopt and enforce the Maine Uniform Building Code (the building code without energy) 3. Adopt and enforce the Maine Uniform Energy Code (energy code only) 4. Have no code

Approved Compliance Tools: Can use COMcheck

State Specific Research: Impacts of ASHRAE 90.1-2007 for Commercial Buildings in the State of Maine (BECP Report, Sept. 2009)

Approximate Energy Efficiency: Equivalent to ASHRAE 90.1-2007

Effective Date: Dec. 01, 2010

Code Enforcement: Mandatory

DOE Determination: ASHRAE 90.1-2007: Yes
ASHRAE 90.1-2010: No

Energy cost savings for Maine resulting from the state updating its commercial and residential building energy codes in accordance with federal law are significant, estimated to be on the order of nearly $47 million annually by 2030.

Maine DOE Determination Letter, May 31, 2013

Maine State Certification of

Popular Links

Status of State Energy Codes

Select a state

State Related Resources

Code Program
Northeast Energy Efficiency Program
Maine's Current Building Code FAQ's
Bureau of Building Codes & Standards

Program and Incentives

Financial Incentives

State Contacts

Primary Contact for State Adoption

Kathy Chamberlin
Bureau of Building Codes and Standards
Department of Public Safety
Secretary
45 Commerce Drive
65 State House Station
Augusta, Maine 04333-0165
kathy.chamberlin@maine.gov
(207) 624-7007

Secondary Contact for State Adoption

Denis Bergeron
Director
Maine Public Utilities Commission
Energy Division
Maine
(207) 287-1366
denis.bergeron@maine.gov

State Agency Office Head

Richard McCarthy
Manager
State Fire Marshal Office - Codes
Department of Public Safety
45 Commerce Drive,
65 State House Station
Augusta, Maine 04333-0165
(207) 626-3886
richard.mccarthy@maine.gov

Reviewed for Code Compliance
Inspections Division
Approved with Conditions
Date: 07/18/16

Regulations & Rulemaking

The U.S. Department of Energy (DOE) is required by law to establish mandatory energy efficiency requirements for new federal commercial and residential buildings and to develop energy efficiency standards for manufactured homes. Federal law also requires that DOE publish determinations as to whether new editions of ASHRAE Standard 90.1 and the International Energy Conservation Code will improve energy efficiency. In response, DOE, through the Building Energy Codes Program (BECP) undertakes rulemaking processes to facilitate full disclosure of DOE's analyses and development methodologies, to solicit public input, and to publish final rules. DOE's rulemaking process involves

- Publication in the Federal Register of an advance notice of proposed rulemaking (issued when required under statute or when DOE seeks to notify the public that a rulemaking is being considered generally and usually requests comment on the appropriate scope or on specific topics)
- Publication in the Federal Register of a notice of proposed rulemaking (or preliminary determination) to provide notice and an opportunity for public comment
- Review and consideration of public comments; prepare reasoned responses to significant comment received
- Publication of a final rule in the Federal Register

For more information on the DOE role in the rulemaking process, visit the About section of this website.

DETERMINATIONS

DOE is required by law (the Energy Conservation and Production Act, as amended (ECPA)) to issue a determination as to whether the latest edition of ASHRAE Standard 90.1 (for commercial and multi-family high-rise residential buildings) or the latest version of the International Energy Conservation Code (for low-rise residential buildings) will improve energy efficiency compared to the previous edition of the corresponding standard or code. DOE has one year to publish a determination in the Federal Register after each new edition of the standard/code is published.

Learn more

ENERGY EFFICIENCY STANDARDS FOR FEDERAL BUILDINGS

ECPA establishes minimum energy efficiency requirements for new commercial and residential federal buildings. The standards are based on model industry codes. DOE is required to determine whether to update the energy efficiency standards to reference the model industry codes following updates to the model industry codes. The energy efficiency requirements for new federal commercial and multi-family high-rise residential buildings are established in 10 CFR Part 433, while the energy efficiency requirements for new federal low-rise residential buildings are established in 10 CFR Part 435.

Learn more

ENERGY EFFICIENCY STANDARDS FOR MANUFACTURED HOUSING

DOE is required by law (the Energy independence and Security Act of 2007) to establish standards for energy efficiency in manufactured housing. The standards are to be based on the most recent version of the International Energy Conservation Code (IECC) except in cases in which the DOE Secretary finds that the IECC is not cost-effective, or a more stringent standard would be more cost-effective, based on impacts of the provisions on the purchase price of the home and the total life-cycle construction and operating costs.

Learn more

Popular Links

Tools

COMcheck REScheck

Technical Assistance

Help Desk

Status of State Energy Codes

Select a state

News

- Energy Codes 101: What Are They and What is DOE's Role?
  Source: *DOE BECP*, posted: 05.31.2016
- Explaining the unique energy burden of low-income households
  Source: *ACEEE*, posted: 05.20.2016
- DOE's Smart Energy Analytics Campaign
  Source: *Alliance to Save Energy*, posted: 05.16.2016
- Game-Changing Report Launch – Greater Than The Sum Of Its Parts: The Case For A Systems Approach To Energy Efficiency
  Source: *Alliance to Save Energy*, posted: 05.11.2016
- OneNYC: Mayor de Blasio Announces Major New Steps to Dramatically Reduce NYC Buildings' Greenhouse Gas Emissions
  Source: *City of New York*, posted: 04.22.2016
- EERE News and Blog
  Source: *Energy.gov*

Social Media

CITY OF PORTLAND, MAINE RESURGAM

Reviewed for Code Compliance
Inspections Division
Approved with Conditions
Date: 07/18/16

REScheck

Residential Compliance Using RES*check*™

The RES*check* product group makes it fast and easy for builders, designers, and contractors to determine whether new homes, additions, and alterations meet the requirements of the IECC or a number of state energy codes. RES*check* also simplifies compliance determinations for building officials, plan checkers, and inspectors by allowing them to quickly determine if a low-rise residence meets the code.

SUBSCRIBE TO UPDATES

To receive updates about compliance tools subscribe to the BECP Mailing List.

RES*check* is appropriate for insulation and window trade-off calculations in residential detached one- and two-family buildings and multi-family buildings three stories or less in height above grade, such as apartments, condominiums, and townhouses. RES*check* works by performing a simple U-factor x Area (UA) calculation for each building assembly to determine the overall UA of a building. The UA that would result from a building conforming to the code requirements is compared against the UA for your building. If the total heat loss (represented as a UA) through the envelope of your building does not exceed the total heat loss from the same building conforming to the code, the software generates a report that declares your building is compliant with the code.

RES*check* Desktop can be downloaded and installed directly to your desktop, while RES*check-Web*™ is accessible directly from the website without having to download and install.

See if your state or county can use RES*check* to show compliance.

RES*check*™ Software

- Windows
- Mac
- RES*check-Web*
- Technical Support

RES*check*™ for Windows®

Version 4.6.2 (Build Version: 4.6.2.1)

Runs on Vista or Windows 7 in either single, multi-user, or network environments

Download REScheck for Windows

Download REScheck Now!

Supported Codes:
2009, 2012 and 2015 IECC; and various state and county energy codes.

What's New:
RES*check* version 4.6.2 includes support for 2014 Florida. Build version 4.6.2.1 fixes an issue with compliance index when project is "Additions" and discontinues support for Wisconsin Uniform Dwelling Code.

RES*check*™ for Mac®

The Mac version of RES*check* has been discontinued. Users are advised to use RES*check-Web*

RES*check-Web*

Start REScheck-Web

RES*check-Web* simplifies residential energy code compliance by automating tradeoff calculations for the IECC and a number of state-specific codes. It performs just like the RES*check* desktop version, but you don't need to download or install any software on your computer.

Have a compliance question or need assistance with the software?

BECP's team of building energy codes experts is available to answer specific questions submitted through our web-based help desk.

RES*check* Software Support Documents

- RES*check* Software User's Guide
- RES*check* Plan Review Quick Reference Guide
- Methodology for Developing the RES*check* Software through Version 4.4.3

UPDATES TO RESCHECK AND COMCHECK BUILDING ENERGY CODE COMPLIANCE SOFTWARE

The U.S. Department of Energy (DOE) is directed to provide technical assistance to states to support the implementation of model residential and commercial building energy codes (42 USC 6833). As part of this assistance, the DOE Building Energy Codes Program provides ongoing support for RES*check* and COM*check* compliance software, which are updated based on new editions of the model codes. DOE has published guidance surrounding its support for the software, including technical assistance requests for modified versions.