

Overview of Proposed Maine Residential Energy Standards (Maine RES)

- ◆ Voluntary energy standard for new residential construction and for additions, alterations, and repairs to residential buildings in Maine.
- ◆ A market-oriented, value-added program for builders, designers, realtors, and homeowners.
- ◆ Based on national models (Model Energy Code/International Energy Conservation Code).

Proposed Prescriptive Building Envelope and Heating System Provisions of Maine RES			
	Percentage Window Area to Gross Exterior Wall Area		
<i>Building Element</i>	8%	12%	15%
Glazing U-factor			
All Zones	0.35	0.35	0.35
Ceiling R-value			
Zone 1	38	38	49
Zone 2	38	49	49
Zone 3	49	49	49
Exterior Wall R-value			
All Zones	19	19	19
Floor over basement/crawl R-value			
All Zones	19	19	19
Basement wall R-value			
Zone 1	10	10	15
Zones 2 and 3	10	15	15
Central Boiler AFUE			
Zone 1	82%	84%	84%
Zones 2 and 3	84%	84%	87.5%
Central Furnace AFUE			
Zone 1	80%	82%	82%
Zone 2	81%	83%	85%
Zone 3	81%	84%	87%

- These prescriptive values were determined with MECcheck-2000. Percentages are of gross exterior above-grade wall area.
 - For glazing areas greater than 15%, use component performance approach for compliance.
 - The R-values for basement walls assume the floor above the basement is not insulated.
 - The R-values for floors over basement/crawl spaces assume basement and crawl space walls below are not insulated.
 - Zone 1 includes counties of Androscoggin, Cumberland, Hancock, Kennebec, Knox, Lincoln, Penobscot, Sagadahoc, Waldo, Washington, and York.
 - Zone 2 includes counties of Franklin and Oxford.
 - Zone 3 includes counties of Aroostook, Piscataquis, and Sumerset. County groupings based on *International Energy Conservation Code 2000*, page 31.

- ◆ Multiple options for implementation:
 - Prescriptive Approach (build to R-values, U-factors and efficiencies in table).
 - Component Performance Approach (trade-off method using free software—MECcheck—or non-computer worksheets).
 - Systems Analysis Approach (most complicated approach, for houses with energy-renewable features).
- ◆ Compliance certification label available for complying homes (permanent stick-on label for application to electrical panel or other location).
- ◆ Options for compliance include:
 - Self-certification (builder and owner sign certification label).
 - Third-party verification (independent third party inspects and signs certification label).

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