

## 2022 PRESCRIPTIVE ENERGY EFFICIENCY REQUIREMENTS

FOR MINOR ADDITIONS or ALTERATIONS to 1 or 2 FAMILY DWELLINGS<sup>1</sup>

PRESCRIPTIVE COMPLIANCE METHOD [CEES 150.2(a)1 & (b)1]			Climate Zone 6 (southwest of I-405)	Climate Zone 8 (northeast of I-405)	
INSULATION <sup>2</sup>	Roof / Ceiling System <i>(no ducts in attic) Option C</i>	Roof <i>(between roof joists)</i>	Not Required		
		Ceiling <i>(between &amp; over ceiling joists)</i>	R-30		
	Cathedral Ceiling <i>(No attic)</i>	Roof/Ceiling <i>(between rafters)</i>	R-22 (alteration only)		
	Walls <sup>3,4</sup>	2 x 4 at 16" on center spacing	R-13 + R-5 CI or R-15 HD + R-4 CI	R-13 + R-10 CI or R-15 HD + R-10 CI	
		2 x 6 at 16" on center spacing	R-19 + R-2 CI or R-21 HD + R-2 CI	R-19 + R-7 CI or R-21 HD + R-5 CI	
	Floor	Raised Wood Framed	R-19		
Concrete <i>(raised or slab on grade)</i>		Not Required			
RADIANT BARRIER <i>(Installed at interior face of roof sheathing)</i>			Required		
FENESTRATION	Maximum U-factor		0.30		
	Maximum SHGC (Solar Heat Gain Coefficient)		0.23		
	Area of All Added Glazing <i>(total of all 4 sides of building)</i>		Less than 75 sf or 30% of added CFA, whichever is greater		
	Added West Facing Glazing Only		Less than 60 sf or 5% of added CFA, whichever is greater		
EXTERIOR DOOR	Maximum U-factor (less than 25% glazing)		0.20		
WATER HEATING	Gas Storage Type (≤ 55 gal tank)		≤ 75,000 Btu/hr		
	Gas Tankless or On-Demand System		≤ 200,000 Btu/hr		
	Electric (240-volt) Heat Pump Water Heater (HPWH)		NEEA Tier 3 or higher unit rating		
	Electric Tankless Water Heater		Point-of-use distribution		
HEATING	HERS VERIFICATION REQUIRED	New or replaced units and/or systems		Central Furnace (FAU) or Heat Pump <i>(Split, Mini Split or Packaged Units)</i>	
COOLING		New or replaced units and/or systems		Central AC or Heat Pump <i>(Split, Mini Split or Packaged Units)</i>	
KITCHEN HOOD		New, replaced or reinstalled exhaust fans		Electric cooktop: ≥ 160 cfm	≤ 3 sones
	Gas cooktop: ≥ 280 cfm				

**Footnotes:**

- This summary may be used in lieu of a computer generated CF1R report for OTC reviewed minor additions (not to exceed 150 square feet) or remodels, or as approved by the Building Official. Projects including work listed as "HERS Verification Required" or which do not comply with all parts of the listed requirements shall provide all pages of a computer generated, HERS registered, CF1R energy analysis report and 2022 Single Family Residential Mandatory Measures, on full-size sheets in the construction documents.
- The R-values shown are for wood-frame construction with cavity insulation installed between the framing members and continuous insulation (CI) installed across the face of the framing members. [CEES 150.1(c)1, Table 150.1-A & JA4 Table 4.3.1]
- Extension of existing wood-frame walls along the same straight line may install R-15 HD in 2x4 framing or R-21 HD in 2x6 framing, in lieu of stated cavity and continuous insulation assembly. [CEES 150.2(a)1Biii]
- Where existing siding is not being removed or replaced, cavity insulation of R-15 HD in 2x4 framing or R-21 HD in 2x6 framing shall be installed, and continuous insulation is not required. [CEES 150.2(a)1Bvi]
- Photovoltaic (PV) systems are not required for additions or alterations to single family residential buildings. [CEES 150.2(a) Exc. 6]
- Whole House Fan (WHF) ventilation systems are not required for additions less than 1000 sf. [CEES 150.2(a) Exc. 5]
- Quality Insulation Installation (QII) requirements of Section 150.1(c)1E do not apply to additions less than 700 sf. [CEES 150.2(a)Bv]

**Abbreviations:**

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| CEES - California Energy Efficiency Standards, also known as California Energy Code.               | CFA - Conditioned floor area.    |
| CI - Continuous insulation, may be installed over the interior or exterior face of the wall studs. | HD - High density insulation.    |
| NEEA - Northwest Energy Efficiency Alliance.   | HERS - Home Energy Rating System |