

Summary of Residential Energy Code Comparison

New York State Energy Conservation Construction Code

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	N.Y.S. Energy Conservation Construction Code Effective March 1, 1991	Proposed N.Y.S. Energy Conservation Code Based on the 2001 IECC
Exempt Buildings	Buildings that do not contain conditioned space Buildings that do not use either electricity or fossil fuel Historic buildings	Same
Substantial Renovation of Existing Buildings	When more than 50% of a building system is replaced (in 12 month period) replaced portion shall comply with the energy code	Same
Compliance Documentation	Compliance Forms (limited availability)	Compliance Forms User Manuals Compliance Software Workbooks
Residential Compliance Methods	1. Annual Energy Analysis (Part 3 - §7812) 2. Prescriptive Approach (Part 5 - §7814) 3. Thermal Rating Method (Part 6 - §7815) 4. Base Equipment (Part4 - §7813)	1. Annual Energy Analysis & Renewable Energy(Chap. 4) Allows renewable energy to be excluded from total energy consumption 2. Prescriptive Approach (Chap. 6 & Chap. 11 of Residential Code) 3. Performance Approach (Chap. 5) A. Performance on an individual component basis B. Total Building envelope performance C. Acceptable practice on a individual component basis D. Prescriptive specification on an individual component basis

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Typical Prescriptive Requirements (7000 Degree Days) 17% Glazing Non-electric	Exterior Wall R-18 Roof/Ceiling R-24 Foundation Wall R-10 Glazing R-1.7	Exterior Wall R-25 Roof/Ceiling R-49 Foundation Wall R-15 Glazing R-3.0 Roughly 30% overall difference between codes
Electrically Heated Residential Buildings	Requires more stringent envelope than for non-electrically heated buildings	Same
Recessed Lighting Fixtures installed in Building envelope	No specific requirements	Specific requirements (§502.1.3) Sealed recessed lighting fixtures must meet at least one of three requirements.
Windows and Door Assemblies installation	<i>Allowable infiltration rates</i> Windows 0.37cfm/ft. sash crack Doors 0.5 cfm/ft ²	<i>Allowable infiltration rates</i> Windows 0.3 cfm/ft ² Doors Sliders 0.3 cfm/ft ² Doors Swinging 0.3 cfm/ft ²
Mass Walls	No specific requirements	Can consider thermal mass of building component for compliance (ex. applies to log homes, sand masses, etc.)
Sunrooms	No specific requirements	Specific requirements for additions with glazing >40%
Mechanical Equipment Efficiency	Most equipment established by preemptive federal law Does not allow heating and air conditioning efficiency trade-offs	Same Includes more heating and cooling system types Allows heating and air conditioning efficiency trade-offs to reduce building envelope thermal requirements. (Software)

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Duct Construction	Supply ducts sealed with adhesives, sealants, gaskets, tape systems	Specific sealing requirements (§503.3.3.4) Unlisted duct tape not allowed
Transport Energy	No specific requirements	Specifies air-transport factor for an all-air system
Piping Insulation	Exempts: Heating piping located in conditioned space for detached one- and two- family dwellings or townhouses.	Same (within the building thermal envelope)
Duct Insulation	Exempts: Ducts within the building envelope located in conditioned space for detached one- and two- family dwellings or townhouses.	Same (within the building thermal envelope)
Service Water Heating Performance	Most equipment established by preemptive federal law	Same
Swimming pools	No specific requirements	Pool covers for heated pools on-off switch for pool heaters Time clock for pool pumps
Electric Meters	Required for each dwelling unit	Same
Fireplaces	Tight fitting doors required except when installed damper does exceed 20cfm @ 0.3" w.p.g. Prohibits pilot lights on gas units in fireplaces	Tight fitting doors required on all fireplace units Does not prohibit pilot lights