



Building Department & Zoning Enforcement

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Stretch Code Basics (info provided by Green Communities: MA DOER: Department of Energy Resources - April 2018)

- Applies to New Construction; exempt: additions, renovations and repairs
- July 1, 2014: New Base Energy Code (IECC 2012), was IECC 2009: requires blower door test & increased insulation (walls & attic)
- July 1, 2017: New Base Energy Code (IECC 2015), was IECC 2012: basic difference need HERS rater required now by Stretch code. Typical SF cost \$1500 \$3000. Mass Saves may help with defer cost to consumer via rebates
- BBRS Stretch Code (9th Edition, Appendix, MA Building Code 780 CMR): applies to insulation, doors, windows, skylights, mechanical equipment, lighting, appliances, building tightness, duct tightness (renewables: not required but "points" given)
- July 1, 2018: Town of Sturbridge adopted "Stretch Code" at Town Meeting, goes into effect January 1, 2019

HERS Rating Defined (Home Energy Rating System):

- Annualized Energy Analysis: Heating, Cooling, Water Heating, Lighting & Appliances
- Reference Home: Based on IECC 2006 Code (International Energy Conservation Code), defined as 100 points. A one percent change in consumption = 1 point. For example, HERS 55 means about 45% more efficient than referenced home.

HERS Rater Process:

- Review Building Plans via computer modeling
- In Progress Inspections:
 - o 1st Inspection: Thermal By-Pass Checklist & Duct Tightness Test (if applicable)
 - 2nd Inspection: Insulation (usually combined with 1st inspection)
 - Final Inspection: Blower Door Test
- Finalize energy model based on verified performance & equipment

Commercial Stretch Energy Code 2017

- Large Commercial = Annual Energy use of 10% below ASHRAE 90.1 2013, Appendix G Modeling
- Appendix G is also used for LEED certification
- Applies to:
 - New Construction over 100,000 SF
 - Labs, Supermarkets, Conditioned Warehouses over 40,000 SF
 - Exempt: Additions, renovations & repairs

Stretch Code Documentation

- Residential (HERS rater requirements):
 - Permit: Plan Review submittal with projected HERS rating, based on plans
 - Certificate of Occupancy: Certified HERS Index Score based on final blower door, duct testing
- Commercial (Large Commercial Energy Model Requirements):
 - Permit: Plan Review ASHRAE 90.1, Appendix G, energy model submitted with plans
 - Certificate of Occupancy: Final energy model showing as-built building meets 10% savings.