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Ted Staples - Controversy over the "Stretch Code"

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There has been much controversy over the past year regarding the adoption of 780 CMR 120.AA aka the "Stretch Code" which is occurring on a town by town basis throughout Massachusetts. Much of the debate appears to be driven by fear of the unknown, which is largely due to the fact that the predominate compliance path of this code is relatively undefined when compared to traditional prescriptive codes. The Stretch Code is unlike these traditional building codes which prescribe the level of insulation, performance of glazing, etc. The Stretch Code is predominantly a performance based code, where a proposed building's anticipated energy usage is measured against what it's usage would be if built to a standard prescriptive code or "baseline". In general, the design team chooses improvements which will achieve the code required energy savings over the baseline.

In low rise residential construction, including multifamily three stores or less, this process is achieved by using a HERS Index. The HERS (Home Energy Rating System) index was developed by the Residential Energy Services Network (RESNET), an organization founded in 1995 to develop a national market for home energy rating systems and energy efficient mortgages. The HERS Index currently uses a 2006 energy code for its "baseline." The Stretch Code requires new homes achieve a HERS Index of either 65 or 70 (depending on size) which correlates to 65% or 70% of the energy used if built to the baseline. Of note, the HERS Index serves as the backbone for the EPA's Energy Star for homes program.

Compliance for commercial buildings requires performance based energy modeling as defined by "Appendix G" of ASHRAE/IESNA 90.1 2007 Energy Standard for Buildings Except Low Rise Residential Buildings; a model code for commercial buildings. Through this process, the Stretch Code requires the proposed building achieve a savings of 20% below the prescriptive energy requirements of the ASHRAE Standard. Of note, this performance based approach is similar to the process used to achieve energy and atmosphere points in the USGBC's LEED program.

Regardless of the controversy, and while it is too early to tell if the energy efficiency goals of the Stretch Code will be met, it is clear that this new code is having a profound effect on the building industry. Performance modeling, first developed 44 years ago, has become common conversation among design teams virtually overnight. By requiring performance based compliance, the Stretch Code is creating demand for the energy professional who in most cases, is tasked with finding practical, and cost effective solutions; a vital component to the success of the green building industry.

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