

Designing to a HERS 45: Identifying tools and trends in multifamily buildings

Presenter: Shari Rauls

Presenter Biographies and Experience:

Shari Rauls is a Sustainability Consultant at Steven Winter Associates with five years of experience helping multifamily projects achieve sustainability goals as well as local and state energy code compliance in the Northeast. Shari focuses on program certifications such as Passive House, LEED for Homes, ENERGY STAR, and HERS ratings and helps project teams achieve their goals through energy modeling, plan reviews and on-site field verification. Shari Rauls received a Bachelor of Arts in Engineering and a Bachelor of Arts in Architecture from Brown University. Since graduating in 2020, she has become a PHIUS Verifier, LEED for Homes AP, and HERS Rater through her work at Steven Winter Associates. Shari has worked on certifying dozens of projects to PHIUS, PHI, ENERGY STAR, LEED for Homes, and HERS. Shari held a training for NEHERS in August of 2024 where she outlined pathways to meet the Massachusetts Stretch Code requirements of designing to a HERS 45. Other past speaking opportunities included presenting on HVAC equipment sizing in NESEA's Building Energy Boston Conference in 2024, and speaking on a panel about Embodied Carbon at the Embodied Carbon Summit 2.0 in Boston last spring.

Abstract:

Energy modeling for residential projects using the HERS score has been widely adopted in the US. It is used in energy code compliance, ENERGY STAR compliance using the ERI pathway, and is connected to 45L tax credits and often to state incentives in the Northeast. Using energy modeling to inform design decisions can be a powerful tool. This session will discuss how a multifamily project used HERS modeling in the schematic design phase to determine energy efficiency measures to meet Massachusetts Stretch Code compliance requirements of HERS 45. General challenges and takeaways will be discussed to achieve a low HERS score for multifamily buildings. The weight of individual energy efficiency measures will be shown to best optimize a project for low energy use. A tool used by Steven Winter Associates to track different energy efficiency pathways to meet the same HERS score outcome will also be shared. This session will show you how using energy modeling as an iterative process involving the entire design team can streamline a project to success.