

School of Architecture

College of Fine Arts, CFA 201 Carnegie Mellon University Pittsburgh, PA 15213



Caption: Infrared images reveal envelope performance and CMU grad, Ashwin Ranna, prepares for blower door test. Photo credit: N Baird

48-752: Zero Energy Housing Units: 9 Instructor: Nina Baird, PhD

Are you interested in designing or renovating the high-performance multifamily housing of the future? Would it surprise you to know that despite numerous successful single-family projects, only a limited number of successful multistory, multifamily zero examples exist? Creating multifamily housing that reaches net zero or carbon neutral goals is challenging since occupant behavior can influence the outcome as much as building design and construction. Yet multifamily housing is an essential typology to address rapid development and urbanization. Take on the challenge of creating high performance housing for our net zero future by exploring the technical and social demands of multifamily zero energy design or renovation. 48-752 is a *graduate level course* designed to support that goal. Through lectures, outside research, discussion, and a final applied project, you'll explore the design approaches, codes, policy, technology, and energy infrastructure options that can help you achieve the housing performance we know is essential for a sustainable future.