



Doug McCleery PE, CEM possesses an extensive knowledge of building science, HVAC system design and installation, building codes, quality assurance and construction best practices. Doug's career has been dedicated to engineering design for high performance homes and buildings, and is currently focused on emerging

technical approaches to building electrification and decarbonization.

Since joining MaGrann Associates in 1988, he has been responsible for technical direction of consulting, analysis, diagnostic, engineering design and quality assurance activities at MaGrann.

Doug is a licensed Professional Engineer in multiple states and for over 15 years was an active certified HERS Rater. He has been certified by ACCA as an instructor for residential load calculation, duct design, and equipment selection (Manuals J, D & S) and by IGSHPA as a geothermal heat pump trainer.

Professional Experience

Doug is the primary Professional Engineering license holder for MaGrann Associates and principal of McCleery Engineering, licensed in New York. He has overall responsibility for oversight and compliance of all engineering and technical consulting activities, and leads new service and process development for MaGrann.

Engineering Design

- Developed and has led an engineering consulting services group at MaGrann since 1993, which specializes in providing MEP engineering design solutions for new high performing single- and multi-family residential and multi-use buildings and energy retrofits for existing buildings.

- Provides engineering reports and has served as an expert for legal cases in Superior Court and County Construction Board of Appeals relating to design and installation of heating and cooling systems and energy related specifications for residential construction.

- Develops quality control field inspection and modeling protocols for energy code compliance, utility residential new construction programs, and HVAC design and construction.

Code Compliance and Development

- Leads the development of MaGrann's building system commissioning standards for energy/green codes and program compliance.

- Participates in numerous codes & standards development processes; serves on the Codes Committee of the New Jersey Builders Association and RESNET SCD-200 Training/Certification Committee.

- Provided technical consulting to the Redevelopment

Authority of the City of Philadelphia, including plan review for compliance with their Multifamily Energy Specification and periodic review and update of their specifications.

Technical Training

- Developed and delivered quality assurance and technical training programs in support of residential new construction programs, including ENERGY STAR New Homes in New Jersey, Kentucky and Ohio.

- Regularly provides building code training to builder and architect clients, construction trades and industry organizations during code revision cycles.

- Presented at national and regional technical conferences including ACI/BPA, Atlantic Builders Conference, ICAA, Midwest Energy Conference, EEBA, Multi-Family Building Conference, RESNET and KEEA/EEA-NJ.

Retrofit Support

Has provided technical and program design consulting for development of MaGrann's existing multifamily building services, which include ASHRAE audits, retrofit system engineering, project administration, Cx and M&V. Programs have included Quality Assurance for PSE&G and AFC First (Keystone HELP) existing home programs, PSE&G and PHFA existing multifamily building programs, Levittown PA retrofit scoping studies for US DOE and evaluation support for NJ Comfort Partners.

Expertise

Building codes, Engineering (MEP) design, HVAC design and installation including cold climate heat pumps, VRF systems, heat pump water heating, building systems commissioning, energy efficient and sustainable construction, utility program design, building performance and diagnostics, home energy ratings, quality assurance, technical training.

Certifications

- Licensed Professional Engineer (PE) – NJ, PA, NY, DE, VA, MD, DC
- ACCA (Air Conditioning Contractors of America) certified trainer, residential
- IGSHPA accredited ground loop trainer

Years of Experience

36

Education

B.S. Mechanical Engineering; Carnegie-Mellon University, Pittsburgh, PA

Professional Affiliations

ASHRAE (American Society of Heating, Refrigerating & Air Conditioning Engineers) Member (1998-); Northeast HERS Alliance Secretary/VP and Chair of Technical Committee (2014-2018); ICC (International Code Council)