H. Wayne Thompson, Jr. Mechanical/Electrical Engineer Principal

Registered Professional Engineer

Washington University/MS Purdue University/BSME Duke University/Mechanical Engineering Commissioned Officer, United States Marine Corps

Professional Qualifications:

Mr. Thompson has extensive experience performing system and economic analyses of existing buildings for property managers, owners and architects. Typical issues addressed include inadequate cooling or heating, changing occupancy requirements, high utility costs, excessive energy usage and operating costs, and deficient system performance. He has performed more than 500 property condition assessments for mortgage lenders, potential investors and owners of real estate property, including detailed field surveys of mechanical and electrical systems, review of existing energy conservation methods, evaluation of code compliance and observation of maintenance procedures.

He has recently completed an intensive course of studies leading to a CCIM designation in order to acquire the requisite skills to properly evaluate the financial performance of commercial investment real estate. The CCIM (Certified Commercial Investment Member) curriculum consists of courses that incorporate financial analysis, market analysis, user decision analysis, and investment analysis. Most relevant for an engineering study is the ability to analyze the investment performance of an existing building by means of a discounted cash flow analysis prior to committing capital funds for energy or equipment upgrades.

With a particular expertise in water-source heat pump design, Mr. Thompson has served on the national ASHRAE Technical Committee 7.6, Unitary Heat Pumps, which has the duty to constantly update the society's technical handbook and literature, and keep abreast of the latest state-of-the-art advances in the industry. He designed the first water-source heat pump system in Kansas City for the Penntower high-rise office building, the first in the Chicago area for the Butterfield Office Plaza in Oakbrook, and the first in Johnson County, Kansas for the Fairway Corporate Center. He has designed water-source heat pump systems, including geothermal type, for over 2 million square feet of building space ranging in size from one ton residential well-water units to multi-unit, high tonnage systems interconnected by means of a condenser water loop capable of recovering waste heat from industrial processes, refrigeration machinery, or computer equipment.

He has been a featured speaker and participated in seminars on numerous occasions for professional, academic and corporate meetings including a Kansas State University Architectural Engineering Seminar, Kansas City Section American Society of Civil Engineers, Missouri Valley Electric Association Convention, International Technical Conference and Trade Show of the Association of Operative Millers, Kansas City Chapter of the Association of Operative Millers, Seminar for Mortgage Bankers and Commercial Real Estate Lenders, the Bearing Headquarters Company Western Region Annual Meeting and American Institute of Architects Kansas City Annual Preservation Seminar "Restoring the Urban Core" and Kansas City Power & Light National Teleconference.