
GLOBAL ENGINEERING &
INTEGRATED DESIGN SERVICES

AKF



Robert Benson Photography

POWERING HUMAN POTENTIAL

FIRM OVERVIEW

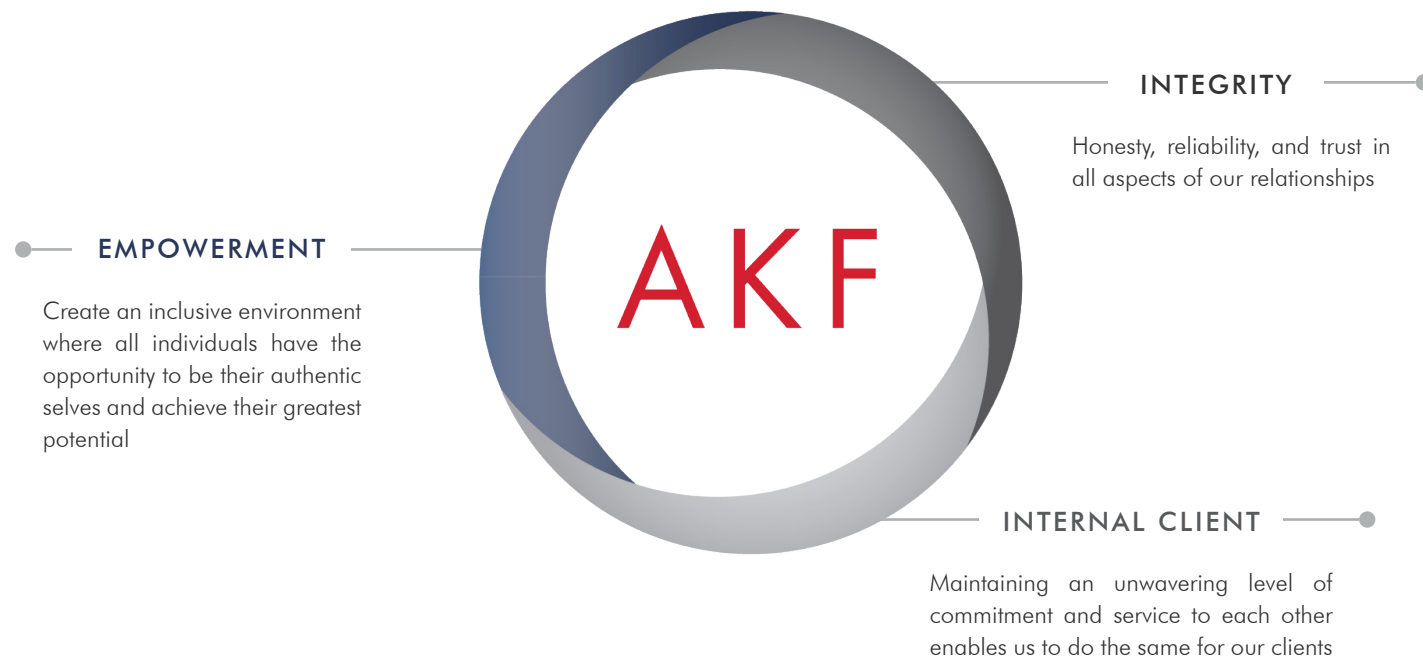
Through a commitment to optimizing spaces, AKF's MEP/FP engineering, design, and technology expertise powers human potential in buildings so occupants can live, heal, learn, work, and play to the best of their abilities. We build flexible and high-performance spaces to achieve the highest quality of convenience and comfort to motivate people and communities. We are an industry leader in sustainable design and energy-efficient solutions to reduce the environmental impact and energy use of new and existing buildings. Our experienced professionals are dedicated to innovating new ways to design for the built environment amidst the evolving landscape and trends of the AEC industry. With successful projects completed worldwide, AKF is headquartered in New York City with 13 offices throughout the United States and Mexico.



CORE VALUES

We are committed to each other's success; that value informs everything we do. It informs our work on each project for every client. By empowering each other, we support all members of the firm. This allows us to support our clients' goals and the communities in which we work.

We do this by keeping our core values at the forefront of every decision and every interaction. In order to do so, it's critical to truly understand the intent of our core values and what they mean in practice.



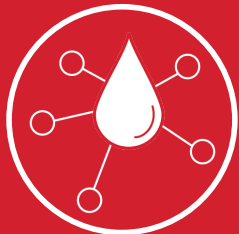
CORE ENGINEERING SERVICES



**MECHANICAL
ENGINEERING**



**ELECTRICAL
ENGINEERING**



**PLUMBING
ENGINEERING**



**FIRE PROTECTION
ENGINEERING**

MECHANICAL ENGINEERING

Complete heating, ventilation, and air conditioning (HVAC) design. Systems include air handling and ductwork distribution; BAS; chilled water / condenser water and hot water / steam equipment and distribution; and advanced technology systems including high performance energy systems, displacement ventilation, energy recovery, and geothermal.

PLUMBING ENGINEERING

Complete sanitary, vent, storm, and potable water distribution systems and equipment design. Systems include medical grade gas, laboratory grade process, high purity water, laboratory waste and vent, bulk gaseous storage, grey water, rainwater harvesting, solar heating, backflow protection, natural gas utility and waste treatment, and neutralization systems.

ELECTRICAL ENGINEERING

Complete building electrical design. Systems include power distribution, general lighting, medium and high voltage building entrance service design, emergency and standby power generation plants, special grounding systems, uninterruptible power supply systems, clean power systems, and renewable energy technologies including photovoltaics.

FIRE PROTECTION ENGINEERING

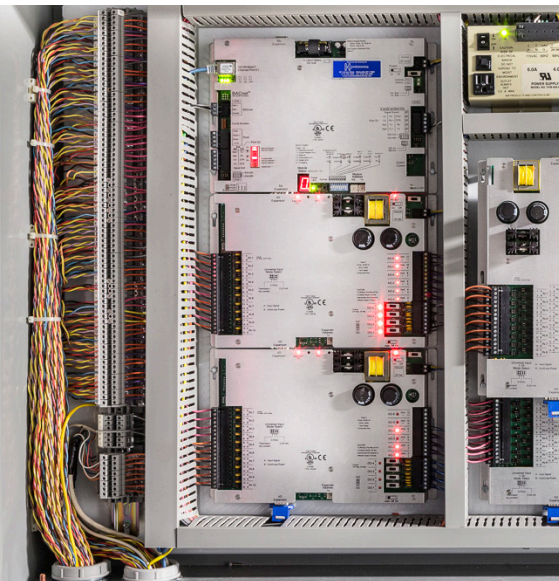
Code compliance analysis; fire / smoke detection; building fire pump, standpipe, and sprinkler systems; emergency communications; gas suppression systems; smoke evacuation; and control analysis and design.

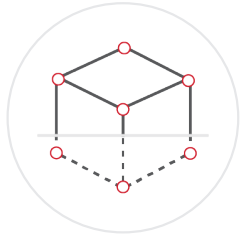


INTEGRATED SERVICES

Designing Systems for the Built Environment

As projects have become more complex and technically demanding, we have created an unparalleled series of Specialty Services whose experts collaborate with our project teams or directly with clients to provide services for the ongoing maintenance and operation of facilities. Together with our core engineering services, this very broad range of services has allowed the firm to become a single source provider to clients throughout the life cycle of their buildings.





3D SCANNING AND SCAN-TO-BIM®

AKF's 3D scanning capabilities enable conditions for all project areas to be accurately captured by our in-house specialists in a matter of a few hours. Scanning opportunities can include architectural layouts, above ceiling conditions, central plants, equipment rooms, service tunnels, roofs, and exteriors. These conditions can be delivered via complementary viewer as a registered point cloud with accompanying HDR imagery for use by all those involved in a project.



ARC FLASH AND SHORT CIRCUIT COORDINATION

Short Circuit, Coordination and Arc Flash Analyses are three integral evaluations of electrical systems. Each analysis plays a specific role in risk mitigation, operation, protection, reliability, and maintenance of an electrical system. AKF's commissioning experts can help you ensure the safety and security of your critical electrical equipment.



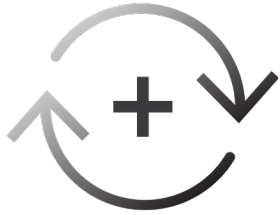
CODE CONSULTING

The rapid evolution of construction codes at the national and local levels presents a challenge for design professionals and owners undertaking new and existing building projects. As codes develop in response to advancements in building materials, methods, and systems, the importance of code compliance as a central aspect of project delivery is continually reinforced. AKF's code experts provide assistance with code review and regulatory approvals throughout the design and construction process to ensure that code compliance is achieved in all aspects of the project.



COMMISSIONING

Operational efficiency and systems sustainability are two main objectives of any building operator. In the age of energy and sustainability, commissioning, and retro-commissioning services are vital to ensuring optimal usage and longevity of building systems and functionality. The goal of the AKF Commissioning and Testing group is to ensure the owner's project requirements are achieved, delivering peak performance at any point of the building's lifespan.



ENERGY + PERFORMANCE

AKF Energy + Performance is driven by the desire to connect high-performance engineering design with insights gained from real-world improvements for existing building performance. We believe that just as the lessons gained from optimizing today's building operations through energy studies must inform tomorrow's building designs, the frontiers of high performance building design can also be used to inspire the optimization of today's buildings.



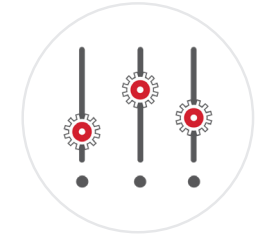
FIRE & LIFE SAFETY

Our engineering expertise in fire alarm systems, smoke control systems, fire sprinkler and standpipe systems, emergency power systems, special hazard suppression systems, and how to apply the building and fire code requirements for these systems to your projects allows AKF to serve your project's life safety, property protection, and business continuity needs, while maintaining an awareness of both cost and schedule.



INFRASTRUCTURE DESIGN

From the C-suite to the building engineer, energy has become a key consideration to everyone involved in a project. There are choices to be made concerning the types of energy for varying uses, as well as control of costs and economic incentives. Our specialists bring both vast experience and new, imaginative solutions to assignments. We strive to identify, design, and implement solutions that solve critical facility challenges. Our solutions are particularly focused on facilitating plant preventive maintenance and offering operational flexibility for the system.



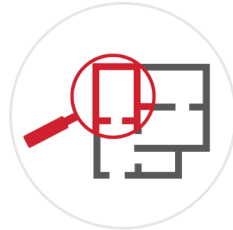
INSTRUMENTATION & BUILDING CONTROLS

As consultants, we assist our mechanical engineers with control specifications and design concepts, as well as instrumentation and control diagrams. For the retrofit market, we upgrade and provide enhancements to existing systems, acting either as consulting engineers or as construction manager's owner's representative. We help to eliminate any gray areas that owners are getting what is expected and are not locked into any particular vendor.



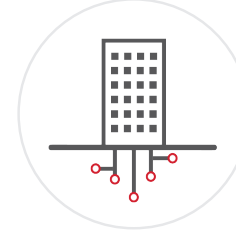
LIGHTING DESIGN BY LIGHTCRAFT

Lightcraft is a full service architectural lighting design group specializing in aesthetically pleasing, energy efficient and practical solutions for all kinds of interior and exterior projects. Lightcraft is a full service Architectural Lighting Design division of AKF.



MASTER PLANNING

As facilities expand their offerings to meet the ongoing needs of their clients and users, buildings and campuses need to be upgraded to support these changes. Whether existing building systems need to be upgraded, building additions require additional loads, or new buildings are developed that will rely on existing infrastructure, AKF's Master Planning team can help make your facility ready for the future.



SMART BUILDING CONSULTING

AKF "Start to Smart" services seeks to guide you through the lifecycle of your Smart Building project. We believe that the right integrated technology and automation can help empower people to create, cure, dream, build, and produce. It enhances the work and aspirations of those who occupy the spaces you are investing in.



TECHNOLOGY SERVICES

AKF designs every aspect of IT solutions, including master planning, base building, and occupant technology systems, critical facilities, wired and wireless systems, and local and wide area networks. Given the environmental and economic imperatives facing buildings and construction today, we emphasize systems that are environmentally responsible and highly cost-effective.



INDUSTRIES / SECTORS

Specialized Expertise to Meet Every Need


AKF's engineering and integrated services experts are passionate about the industries they work in. We believe that by offering fully integrated services, we can help your building be the best that it can be. By offering our clients teams that specialize in specific industries, our subject matter experts can share their skills and knowledge with all team members to achieve project goals.

- Arts & Culture
- Critical Space
- Education
- Government
- Healthcare
- Industrial
- Mixed-use
- Multi-family
- Retail & Hospitality
- Science & Technology
- Transportation
- Workplace



©Anton Grassl / Esto





Baltimore, MD
Boston, MA
Hamilton, NJ
Mexico City, MX
Minneapolis, MN
New Haven, CT
New York, NY
Philadelphia, PA
Portsmouth, NH
Puebla, MX
Raleigh, NC
Richmond, VA
Washington, D.C.

AKF

akfgroup.com

