Value of an AIA Architect and what they do

What can an architect do for you?

An architect can help.

Maybe you represent an organization about to embark on a building or renovation project or a company that's going to expand a facility, adapt an existing structure to a new use, or construct an entirely new building. Or maybe you want to build a new home or renovate an old one.

An architect can help. Use our online directory to find an AIA Architect who can help turn your vision into reality.

Commercial and Institutional Architects

Whether you're about to expand your current facility, adapt an existing structure to a new use, or construct an entirely new building, your building project represents a major investment that will affect the productivity and efficiency of your organization for years. Smart decision-makers know that the way to maximize such an investment begins with consulting an architect. Architects have the education, training, experience and vision to maximize your construction dollar and ease the entire design and construction process.

Early involvement is key. By helping you define the building project, architects can provide meaningful guidance for design. They can conduct site studies, help secure planning and zoning approvals, and perform a variety of other pre-design tasks. Plus, when architects are involved at the earliest planning stage, they gain more opportunities to understand your business, develop creative solutions, and propose ways to reduce costs. The long-term result is a facility that adds to the productivity, efficiency, and effectiveness of your operation.

Residential Architects

You have a vision of what you want. Now you need to make that vision a reality.

Architects are specially educated to help you define what you want to build, present options you might never have considered, and help you get the most for your valuable investment. They don't just design four walls and a roof -- they create total environments, both interiors and exteriors, that are functional and exciting places in which to work and live.
Architects are trained problem solvers. Need more room for your growing family? Architects can show you how to enlarge your home so you won't have to move. Have a limited budget? Architects can propose ways to get more for your investment than you imagined possible.

Architects help you get the most from your construction dollar. Architects can reduce building costs, decrease your home's energy needs, and increase its future resale value through good design.

Building is a long process that is often messy and disruptive, particularly if you're living in the space while it's under construction. Your architect represents you, not the contractors. Your architect looks out for your interests and smoothes the process, helps find qualified construction contractors, and visits the worksite to help protect you against work that's not according to plan.

**Architects - What They Do**

People need places in which to live, work, play, learn, worship, meet, govern, shop, and eat. Architects are responsible for designing these places, whether they are private or public; indoors or out; rooms, buildings, or complexes. Architects are licensed professionals trained in the art and science of building design who develop the concepts for structures and turn those concepts into images and plans.

Architects create the overall look of buildings and other structures, but the design of a building involves far more than its appearance. Buildings also must be functional, safe, and economical and must suit the needs of the people who use them. Architects consider all these factors when they design buildings and other structures.

Architects may be involved in all phases of a construction project, from the initial discussion with the client through the final delivery of the completed structure. Their duties require specific skills—designing, engineering, managing, supervising, and communicating with clients and builders. Architects spend a great deal of time explaining their ideas to clients, construction contractors, and others. Successful architects must be able to communicate their unique vision persuasively.

The architect and client discuss the objectives, requirements, and budget of a project. In some cases, architects provide various predesign services: conducting feasibility and environmental impact studies, selecting a site, preparing cost analysis and land-use studies, or specifying the requirements the design must meet. For example, they may determine space requirements by researching the numbers and types of potential users of a building. The architect then prepares drawings and a report presenting ideas for the client to review.

After discussing and agreeing on the initial proposal, architects develop final construction plans that show the building's appearance and details for its construction.
Accompanying these plans are drawings of the structural system; air-conditioning, heating, and ventilating systems; electrical systems; communications systems; plumbing; and, possibly, site and landscape plans. The plans also specify the building materials and, in some cases, the interior furnishings. In developing designs, architects follow building codes, zoning laws, fire regulations, and other ordinances, such as those requiring easy access by people who are disabled. Computer-aided design and drafting (CADD) and building information modeling (BIM) technology has replaced traditional paper and pencil as the most common method for creating design and construction drawings. Continual revision of plans on the basis of client needs and budget constraints is often necessary.

Architects may also assist clients in obtaining construction bids, selecting contractors, and negotiating construction contracts. As construction proceeds, they may visit building sites to make sure that contractors follow the design, adhere to the schedule, use the specified materials, and meet work quality standards. The job is not complete until all construction is finished, required tests are conducted, and construction costs are paid. Sometimes, architects also provide postconstruction services, such as facilities management. They advise on energy efficiency measures, evaluate how well the building design adapts to the needs of occupants, and make necessary improvements.

Often working with engineers, urban planners, interior designers, landscape architects, and other professionals, architects in fact spend a great deal of their time coordinating information from, and the work of, other professionals engaged in the same project.

They design a wide variety of buildings, such as office and apartment buildings, schools, churches, factories, hospitals, houses, and airport terminals. They also design complexes such as urban centers, college campuses, industrial parks, and entire communities.

Architects sometimes specialize in one phase of work. Some specialize in the design of one type of building—for example, hospitals, schools, or housing. Others focus on planning and predesign services or construction management and do minimal design work.

**Work Environment**
Usually working in a comfortable environment, architects spend most of their time in offices consulting with clients, developing reports and drawings, and working with other architects and engineers. However, they often visit construction sites to review the progress of projects. In 2008, approximately 1 in 5 architects worked more than 50 hours per week, as long hours and work during nights and weekends is often necessary to meet deadlines.

**Education & Training Required**
In most States, architects must hold a professional degree in architecture from one of the 117 schools of architecture that have degree programs accredited by the National
Architectural Accrediting Board (NAAB). However, State architectural registration boards set their own standards, so graduation from a non-accredited program may meet the educational requirement for licensing in a few States.

Most architects earn their professional degree through a 5-year Bachelor of Architecture degree program, which is intended for students with no previous architectural training. Others earn a master's degree after completing a bachelor's degree in another field or after completing a preprofessional architecture program. A master's degree in architecture can take 1 to 5 years to complete depending on the extent of previous training in architecture.

The choice of degree depends on preference and educational background. Prospective architecture students should consider the options before committing to a program. For example, although the 5-year bachelor of architecture offers the most direct route to the professional degree, courses are specialized, and if the student does not complete the program, transferring to a program in another discipline may be difficult. A typical program includes courses in architectural history and theory, building design with an emphasis on CADD, structures, technology, construction methods, professional practice, math, physical sciences, and liberal arts. Central to most architectural programs is the design studio, where students apply the skills and concepts learned in the classroom and create drawings and three-dimensional models of their designs. Also, a growing number of schools, including are now offering architecture degrees online.

Many schools of architecture also offer post-professional degrees for those who already have a bachelor's or master's degree in architecture or other areas. Although graduate education beyond the professional degree is not required for practicing architects, it may be useful for research, teaching, and certain specialties.

All State architectural registration boards require architecture graduates to complete a training period—usually at least 3 years—before they may sit for the licensing exam. Every State follows the training standards established by the Intern Development Program, a program of the American Institute of Architects and the National Council of Architectural Registration Boards (NCARB). These standards stipulate broad training under the supervision of a licensed architect. Most new graduates complete their training period by working as interns at architectural firms. Some States allow a portion of the training to occur in the offices of related professionals, such as engineers or general contractors. Architecture students who complete internships while still in school can count some of that time toward the 3-year training period.

Interns in architectural firms may assist in the design of one part of a project, help prepare architectural documents or drawings, build models, or prepare construction drawings on CADD. Interns also may research building codes and materials or write specifications for building materials, installation criteria, the quality of finishes, and other related details.
Certifications Needed (Licensure)
All States and the District of Columbia require individuals to be licensed (registered) before they may call themselves architects and contract to provide architectural services. During the time between graduation and becoming licensed, architecture school graduates generally work in the field under the supervision of a licensed architect who takes legal responsibility for all work. Licensing requirements include a professional degree in architecture, a period of practical training or internship, and a passing score on all divisions of the Architect Registration Examination. The examination is broken into nine divisions consisting of either multiple choice or graphical questions. The eligibility period for completion of all divisions of the exam varies by State.

Most States also require some form of continuing education to maintain a license, and many others are expected to adopt mandatory continuing education. Requirements vary by State but usually involve the completion of a certain number of credits annually or biennially through workshops, formal university classes, conferences, self-study courses, or other sources.

Other Skills Required (Other qualifications)
Architects must be able to communicate their ideas visually to their clients. Artistic and drawing ability is helpful, but not essential, to such communication. More important are a visual orientation and the ability to understand spatial relationships. Other important qualities for anyone interested in becoming an architect are creativity and the ability to work independently and as part of a team. Computer skills are also required for writing specifications, for 2-dimensional and 3-dimensional drafting using CADD programs, and for financial management.