

Professional practice
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Architects - Profession & Background

- An architectural business may provide a variety of services to their clients. These services generally include consultation, design, and supervision of design of commercial, governmental, and residential structures or buildings. The plans, specifications, and other related documents that are produced in the design phase are called construction documents.
- 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. 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.
- 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; heating, ventilation and air conditioning systems (HVAC); 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 and a Certificate of Occupancy has been issued. Sometimes, architects also provide post construction 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 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.
- There is an increase in demand for architects with knowledge of 'green' design. Green design, also known as sustainable design, emphasizes the efficient use of resources such as energy and water, waste and pollution reduction, conservation, and environmentally friendly design, specifications, and materials. Rising energy costs and increased concern about the environment has led to many new buildings being built 'green.'
- 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.
- Architectural firms sometimes outsource the drafting of construction documents and basic design for large-scale commercial and residential projects to architecture firms overseas.

In the architectural profession, technical knowledge, management, and an understanding of business are as important as design

- **Participants in the Construction Industry**

- There are numerous participants that take part in the construction process. The key participants are listed below and are discussed in depth
- Contractors
- General/Prime Contractors
- Construction Managers
- Commercial Contractors
- Commercial Project Owners
- Residential Construction Developers
- Subcontractors
- Highway Contractors
- Heavy Construction Contractors
- General Architects
- Landscape Architects
- Engineers
- Material Suppliers
- Construction Lenders
- Surety Companies
- Each of the above participants can and often do have multiple roles in the construction process. For example, the owner could also be the general contractor (builder/developer). The general contractor in addition to providing supervision may also do specialty work that would typically be subcontracted (for example, concrete work). Construction lenders frequently hold an equity position in a development partnership in order to participate in the management decisions and to share in the profits. Anchor tenants, such as major department store chains participate in the development partnership in exchange for signing long-term leases. Contractors and material suppliers can obtain rights in the project by filing mechanics liens against the property.

- **The Contracting Process**

- When the owner/client determines that the project is feasible and that construction financing is available, the owner will solicit bids from general contractors and/or specialty contractors. Owners will use trade publications and newspapers to invite contractors to bid for the construction contract. The notice will provide the contractors with the procedures to be followed in submitting a bid.
- The bidding contractor obtains a copy of the plans and specifications prepared by the architect from the owner to prepare for the formal bid. The bidding contractor solicits bids from subcontractors, estimates direct material and labor costs, and evaluates the ultimate profit potential of the contract. The amount of the bid covers the estimated costs and profit for the construction project.
- The owner evaluates the submitted bids and will award the contract to the successful bidder. The contract document contains the contract amount, project start and completion dates, progress billing procedures, insurance requirements, and other pertinent information.
- In many cases, the landscape architect will oversee the bidding process on behalf of the project's owner for landscape site work that does not include extensive roadway or building work. The owner typically will then evaluate the bids after receiving review and recommendations by the landscape architect.
- A few architectural firms will act as the general contractor. These general contractors make bids on the project (as described above). The architect reviews the bids and recommends one or more of the general contractors to do the job. The owner/client selects and contracts with the general contractor(s) of their choice. There may be more than one general contractor selected for different phases of the project.

Types of services offered by Architects & scale of fees

The professional services, rendered by Architect means the services rendered pursuant to the **conditions of engagement** and the agreed scale of charges entered into between the **Client and the Architect** in their agreement.

“Service”, under the **consumer protection act**, means service of any description which is made available to potential users & includes the provision of facilities in connection with banking, financing insurance, transport, housing construction etc., But does not include the rendering of any service free of charge. Professional service by an Architect, falls under the ambit of “Service” and **service tax** has to be paid for his services by the client.

Architects have to comply with professional conduct, and **etiquette** and **code of ethics** of the Architects regulations 1989, violations of any of the provisions shall constitute **professional mis-conduct**.

Architecture is primarily the art & science of designing spaces for multifarious activities, where various engineering services are rationally combined with Architecture’s basic elements of Space, Structure & Form. In its broadened scope & baffling complexity, Architecture has generated specializations such as Structural Design, Urban Design, Landscape Architecture, Interior design, The Recent specializations also include Retrofitting of buildings, Architecture conservation & Construction Management.

Architectural design is essentially a product of an individual mind but realized through association of experts from allied fields who contribute in the process of construction for ensuring the high quality of the end product. The practice of the Architecture profession is regulated by the Architects Act 1972. The Council of Architecture has prescribed the conditions of engagement and scale of charges under the Architect’s professional conduct regulation 1989.

Comprehensive Architectural Services on any undertaken project

1. SCOPE OF WORK

The Architect is required to provide services in respect of the following :

- 1.1 Taking Client's instructions and preparation of design brief.
- 1.2 Site evaluation, analysis and impact of existing and / or proposed development on its immediate environs.
- 1.3 Design and site development.
- 1.4 Structural design.
- 1.5 Sanitary, plumbing, drainage, water supply and sewerage design.
- 1.6 Electrical, electronic, communication systems and design.
- 1.7 Heating, ventilation and air conditioning design (HVAC) and other mechanical systems.
- 1.8 Elevators, escalators, etc.
- 1.9 Fire detection, Fire protection and Security systems etc.
- 1.10 Periodic inspection and evaluation of Construction works. Until the completion of project.

Generally, the general architectural firm may be paid about 10 percent of the project cost for small jobs. For larger jobs, the percentage may drop to 4 percent or 5 percent of the project cost

Scale of Fees & Charges

SCHEDULE OF PAYMENT :

The Architect shall be paid professional fee in the following stages consistent with the work done plus other charges and reimbursable expenses as agreed upon :

Retainer

On appointment/ Signing of Agreement/ Acceptance of offer@ 5% of the total fees payable, or 10,000/= whichever is higher, adjustable at the last stage.

Stage 1

On submitting conceptual designs and rough estimate of cost. 10% of the total fees payable.

Stage 2

On submitting the required preliminary scheme for the Client's approval along with the preliminary estimate of cost. 20% of the total fees payable less payment already made at Stage 1.

Stage 3

On incorporating Client's suggestions and submitting drawings for approval from the Client/ statutory authorities, if required . Upon Client's / statutory approval necessary for commencement of construction, wherever applicable.30% of the total fees payable less payment already made at Stages 1 and 2. 35% of the total fees payable less payment already made at Stages1 to 3a.

Stage 4

Upon preparation of working drawings, specifications and schedule of quantities sufficient to prepare estimate of cost and preparation of tender documents. 45% of the total fees payable less payment already made at Stages1 to 3a.

Stage 5

On inviting, receiving and analyzing tenders; advising Client on appointment of contractors. 55% of the total fees payable less payment already made at Stages 1 to 4.

Stage 6

On submitting working drawings and details required for commencement of work at site. On completion of 20% of the work On completion of 40% of the work On completion of 60% of the work On completion of 80% of the work On Virtual Completion

65% of the total fees payable less payment already made at Stages 1 to 5.

70% of the total fees payable less payment already made at Stages 1 to 6a.

75% of the total fees payable less payment already made at Stages 1 to 6b(i).

80% of the total fees payable less payment already made at Stages 1 to 6b(ii).

85% of the total fees payable less payment already made at Stages 1 to 6b(iii).

90% of the total fees payable less payment already made at Stages 1 to 6b(iv).

Stage 7

On submitting Completion Report and drawings for issuance of completion/ occupancy certificate by statutory authorities, wherever required and on issue of as built drawings 100% of the fees payable less payment already made at various stages and retainer.