

# The Lighting Design Process

## Benefits of IlluminArt services

Lighting specifiers typically use one of three methods to achieve lighting solutions. They are; an engineered (footcandle) method, a product solution method or a design process method which is more broad, comprehensive and thorough. Illuminart engages all of its clients with a design process to achieve optimum results for their project. This process may not be familiar to some so we offer this explanation of its benefits to the owner and project team.

The process method involves 5 phases of design.

### **Phase 1 / Schematic Design and Programming**

To achieve a successful lighting plan, it is necessary to establish goals and objectives early through conversations with the stake holders. This involves asking the right questions to achieve the best results and to meet expectations. Goals may include: issues of visibility, lighting quality, color rendering, glare control, psychological perceptions, energy, maintenance, establishing budgets, initial cost, long term costs, product availability, manufacturer preference, lighting fixture aesthetics, daylight harvesting options, lighting control preferences, luminance (reflectance) values, architectural integration or constraints and time line objectives. Once these are all understood, preliminary concepts may be discussed and presented for approval. From this, the design team expectations may all be realized.

Illuminart attends international lighting conferences to keep abreast of new technologies and techniques however, some additional research may be required to be assured that the concepts being considered are based on the most recent information available. Lighting technology is fast paced and new developments are introduced a few time each year and are reviewed and updated in this phase of design.

### **Phase 2 / Design Development**

After the initial concepts are approved, the design solutions are ready to be developed to achieve the goals established in the 1<sup>st</sup> phase. Sketch plans and CAD plans are developed, computer modeling verifies assumptions, photo-light renderings may be required to communicate the design intent and equipment data is researched, reviewed and verified. Life cycle cost analysis may be provided to verify long term cost benefits of the proposed design. Mockups or samples may also be required in this phase.

Approved alternates may be selected in this phase, equipment unit pricing is started, budget goals reviewed, equipment availability is verified and all of this is communicated to the design team.

### **Phase 3 / Construction Documents**

Comprehensive, clear, professional specifications are essential to communicate the design intent and prevent misunderstandings by suppliers and contractors. Illuminart uses the IALD Specification Integrity Guide recommendations to create its specifications. We use methods to prevent problems from misunderstandings by suppliers and contractors. We work closely with the project architect, engineer and interior designer to ensure the lighting is properly documented and integrated in their plans.

### **Phase 4 / Bid and Construction**

We assist contractors and suppliers in understanding the lighting bid documents early to help them in pricing the job. We meet with the installing contractor before equipment is ordered to review the design intent, explain the lighting plan and goals. This meeting prevents misunderstandings and saves time and costly mistakes during construction. We are available to assist in expediting equipment deliveries if needed and addressing issues that may arise. We also may visit the site to address issues and provide guidance.

### **Phase 5 / Final Inspection, Focus, User Orientation**

A lighting system is only as good as it is aimed, adjusted and then operated over time. Site visits during construction and after installation are essential to verify that the lighting is installed as specified to meet expectations. Aiming and instruction of adjustable light fixtures for the owners representatives will provide the right lighting effect and insure it is done properly in the future. Basic maintenance training or instructions will help the lighting look as intended long into the future. User training of lighting control system operation and training of how the lighting is to be used helps save energy and prevent complaints from lack of basic understanding. After each site visit, a memo is provided with a punch list of items for consideration.