

openings full scale including base and crown moldings. These long scrolls of computer plots are taped up to the walls of our office or to the walls of a house we may be remodeling. Interior features such as cabinetry and fireplace mantels are printed and considered full size. This allows us to consider the contour and profile of details, but more importantly it allows our clients to determine how much of an upper kitchen cabinet they can reach without standing on a stool, or where the mantel of a fireplace should fall in relation to their eye level.

Throughout this process our objectives are to study all aspects of the design in greater detail, to flesh out areas of the project that have not yet been considered, and to guide our clients through the process of understanding what their building will look like and how it will function for them. With most of the design decisions made, we are ready to start the construction drawing phase. However, before we begin, we need to know if the project is still on budget. During schematic design, estimates of probable construction cost are based on cost information from comparable projects and on unit costs (cost per square foot allowances). In the schematic design phase we are primarily concerned that the scope of the work, the size of the project, is not out of line with our client's budget. Because of the detailed information now available on interior finishes, fixtures, fittings, millwork, and cabinetry, it is important to determine that preliminary assumptions and allowances haven't been exceeded. Because the choices made during this phase of the work can have such large financial ramifications, we usually ask our clients to pay for a detailed cost estimate. While we are capable of providing this service we usually prefer to employ a cost estimator or a general contractor. If the project is over budget we then must go through the often painful and difficult process of backtracking and reconsidering the decisions we have worked so hard to convince our clients are the right choices for their project.

Below is a list of the steps in the design development process.

1. Work out floor plans, equipment, furniture, and fixture layouts to scale from schematic or freehand sketches. Review any resulting changes in size or layout with client.
2. If you have not previously done so, conceive and communicate to the client your visual ideas for the interiors. What are their character, ambiance, etc.?

3. Draw to scale elevations of all interior surfaces and elements, including built-in cabinets and custom furniture.
4. Do research necessary to select all materials, fixtures, fittings, and furnishings.
5. Draw construction and finishing details for all typical and atypical conditions in the project.
6. Prepare or commission a sufficiently detailed cost estimate to determine if the cost of the project design, as you've developed it, exceeds the original cost estimate or the budget established by the client.