

Large companies and real estate developers know the value of working with an architect, but people with more modest building needshomeowners, for example, or people who run small businesses or small organizations—often have a false sense that architectural services are out of their reach. For those who haven't collaborated with an architect on a building addition or renovation, Architecture Minnesota presents an introductory guide to the process, complete with advice and reflections from an art center director, a minister, and a home-renovating couple, and the architects who worked with them. Their stories are instructive and proof that architects work at every scale and with every budget to enhance home life and work life, recreation and worship.



Who Can Call Themselves Architects?

Only licensed (or registered) architects can legally call themselves architects, and achieving licensure is no easy task. Those who aspire to be an architect must first attain a professional degree in architecture from a school accredited by the National Architectural Accrediting Board, then complete the rigorous Internship Development Program, and finally pass the Architect Registration Examination. Why such a long and demanding path to licensure? To ensure the health, safety, and welfare of building occupants. It's in your best interest to work with a licensed—and thus highly trained and skilled—architect.

1. CHOOSING AN ARCHITECT

Minnesota boasts an abundance of talented and highly qualified architects. But how do you find the one that's best suited to your project?

Before you begin your search, it's important to assess your needs and vision for the project. Among the questions to ask are: What do I like/not like about my current space? Do I want to remodel or build new? How will the new space be used and by whom? What is my budget?

Based on your assessment, you may realize you're looking for an architect who specializes in the renovation of historic structures, or a firm that does new construction, or someone with advanced knowledge of sustainable design.

The more informed you are about what you want (or don't want), the more likely you'll find a firm that's a good fit for your project. "For an architect, it's best when a client has strong ideas," says Locus Architecture principal Paul Neseth, AIA (page 42). "It takes a great client to make great architecture."

A good place to begin your search for a qualified professional is AIA Minnesota's firm directory, available at *aia-mn.org* and published annually in the May/June issue of *Architecture Minnesota*. The directory, which is searchable by firm name, location, and specialty, offers individual firm listings complete with contact information and representative work.

Finally, it's wise to interview your shortlist of firms. Ask questions and evaluate your potential comfort level in working with each one. Communication and trust can make or break a project.



Why Choose an AIA Architect?

In addition to meeting professional standards for licensure to practice architecture (see sidebar on page 39), members of the American Institute of Architects abide by the AIA Code of Ethics and Professional Conduct, signaling their commitment to high standards of practice. AIA architects must also fulfill annual continuing-education requirements to maintain their professional standing. Why insist on the AIA designation? To get the very best.

3. ROUGH SKETCHES

2. DECIDING WHAT TO BUILD

In this phase, often referred to as **programming**, you and your architect will begin to translate your wish list, dreams, and budget into realistic and definable spaces. In other words, it's time to get specific about what you want to build and do a budget check at the same time.

In addition to identifying the basic requirements of the project (number of rooms, for example, and the function of each), now is the time to think about how your aesthetic preferences, lifestyle, and/or professional needs will shape the plan and its spatial qualities. If you're planning a residential project, consider how you and your family live: Do you favor one-floor living? Like the morning sun in your kitchen? Need a large space for entertaining?

For an office or other commercial project, consider how the business functions: What message should the reception area send to clients? How close should the conference room be to offices? How can circulation patterns in the workspace be improved? Your architect will use all this information to develop a rough estimate of square-footage needs and cost per square foot to determine its fit within your budget.

Architects excel at seeing the big picture, at pulling the many pieces of a project together in a meaningful way. Architect Meghan Kell Cornell, AIA, brought this skill to Julie and Dale Heiden's multi-stage remodel of a 1970s-era North Oaks house (pages 38 and 45). "Meghan had a long-term, holistic vision for the house and a respect for what we needed and could afford," says Dale Heiden.

As Kell Cornell explains, that's her job: "I learn from my clients and take their vision into physical form."

Schematic design—the initial drawings prepared by the architect—gives clients a first glimpse at the positioning of the building on the site, the arrangement of rooms, and the flow of space. Often an architect will present two or three possible schemes for the client's consideration. Depending on the budget and scale of the project, models or computerized images of the design might be generated to help the client visualize the future space.

This is both a creative and a problem-solving phase, and a critical one, because decisions made in this phase will become the basis for design development and construction documents to follow. The architect and client will review each scheme and work together to generate a final scheme that incorporates the best of all features presented.

In addition to exploring the layout of space, at this stage an architect will begin to think about the quality, materiality, and experience of the space as well, as Cole Rogers, artistic director of Highpoint Center for Printmaking, discovered in his collaboration with James Dayton, AIA, of James Dayton Design (page 41). "I understood the spatial and circulation needs of a printmaking facility, but Jim brought light and flow into the project," says Rogers. "In addition to making a space in which art can be produced, Jim created a space that can inspire the art being made in it."

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How Are Architects Compensated?

Generally speaking, the fee an architect receives depends on the scope of the work and the type of services provided. Methods for structuring fees include an hourly rate, a stipulated sum, a percentage of the cost of the project, and a calculation based on square footage. An open discussion between client and architect can yield a compensation plan that works for both parties.

5. FINAL DRAWINGS

4. DESIGN DEVELOPMENT

In schematic design, the basic plan for your project began to come into focus. In design development, the focus will sharpen. Your architect will refine the design and develop detailed drawings that show accurate room shapes, sizes, and measurements.

Once you know the arrangement of rooms and their sizes, it's critically important to review that information to be sure the spaces will meet your needs. Changes or redesign in later stages of the process may be difficult to make and can be costly. Speak up if your office break room seems a little too small, or if you want the kitchen window shifted a foot to the left, or if the circulation pattern in your restaurant could be improved.

Know yourself and what you want and need. For example, even though the new sanctuary space at the White Bear Unitarian Universalist Church was basically rectilinear in shape, Locus Architecture's Paul Neseth designed curved rows of seating. The configuration was driven by the congregation's recognition that, "as a community, we need a sense of intimacy and to see one another during services," explains pastor Victoria Safford.

In addition to fine-tuning dimensions, you'll start thinking about materials and room finishes during this phase. The range of architectural finish materials and their colors is virtually unlimited, but your architect will guide you through the selection process, encouraging you to choose materials that not only look good but are also durable, budgetfriendly, and easy to care for.

Now that you've resolved any lingering issues about your project—and approved its design—your architect will prepare **construction documents**, or final drawings and specifications detailing the requirements for the construction of the project. Not only do construction documents define the scope of the job, they also give the owner and the architect legal control over the construction process. The drawings will also become part of the building contract.

In most cases, the final scale drawings include a site plan, foundation and footing plans, floor plans, building sections, elevations, larger-scale details of certain aspects of the building, and framing, electrical, and roofing plans. Each drawing is annotated to indicate such things as materials and window and door specifications.

Up to this point in the process, the project team has consisted of you and your architect. The construction documents will become a bridge, and the primary means of communication, between you and a third party—the building contractor who'll supervise the construction of your project.

The construction documents are usually distributed to a few contractors. Based on the drawings and specifications, each contractor will calculate the cost of services, material, and labor required to complete the job.

"For an architect, it's best when a client has strong ideas. It takes a great client to make great architecture," says Locus Architecture's Paul Neseth, AIA.



Will My Garage Look Like a Frank Gehry Museum?

No—unless you're a Gehry fan with exceptionally understanding neighbors. Because this myth persists, we've been asking architects in our Studio department Q&A to tell us what they think the biggest misconception about architects is. Their answers? That architects "overcomplicate buildings," "have a preconception of what your project looks like," and "can't keep to a budget." The truth is that architects only want what their clients will love and can afford, plain and simple.

7. GETTING IT BUILT RIGHT

It's finally time to start building. You, your architect, and your contractor will work together during this phase, but each of you has a unique role in the process. Effective communication among the parties will help eliminate surprises and ensure success.

Your contractor is solely responsible for construction methods, techniques, schedules, and procedures and will physically build the project. Your architect can assist you in making sure the project is built according to the construction documents by making site visits to observe construction, keeping you apprised of progress, and reviewing and approving the contractor's application for payment. As the project owner, you should make regular visits to the construction site and report anything that seems to be amiss.

Architects can also provide a host of services that don't immediately spring to mind. "Although some things may be more cost-effective for an owner to do, an architect will go as far as you want him or her to go on a project," says Meghan Kell Cornell. Client Dale Heiden explains: "Meghan guided us through the bumps and bruises of the process to secure myriad approvals from city and county agencies." For Highpoint Center for Printmaking, James Dayton participated in numerous fundraising presentations for the organization's new building—a "big value add" for the nonprofit, says Cole Rogers. With the aid of a model, Dayton illustrated the needs of the organization and offered solutions to meet those needs.

"No project is without its challenges—that's where trust comes in," says pastor Victoria Safford, reflecting on her successful collaboration on the White Bear Unitarian Universalist Church with Locus Architecture. "It's a relationship. Together we walked through anxiety and the happy part of imagination." AMN

6. HIRING THE CONTRACTOR

It's your job to select and hire the contractor, but your architect can help steer you in the right direction by offering a list of contractors whom he or she has previously worked with and would recommend. It's the contractor's responsibility to obtain bids from the many subcontractors (plumbers, electricians, roofers, masons, carpenters, painters, and so on) and choose the best ones for your job.

Homeowner Dale Heiden says that one of the many advantages of working with Meghan Kell Cornell was that "as an architect she helped us find trusted partners such as builders and other artisans. We would have been much more concerned about who was renovating our house without Meghan's input."

The process of selecting a contractor is much like choosing an architect. It's wise to interview a few top prospects to gauge your comfort level with each person. You are, after all, about to embark on another one of the more important relationships of your life.

In these challenging economic times, some architects recommend bringing a contractor into the design process as early as possible. Architect James Dayton believes the approach saves time and money: "We work hard to bring contractors into the discussion on day one." When the team consists of the client, architect, and contractor, he adds, there's greater opportunity "to get information upfront, and this helps manage the budget."



Web Resources

The American Institute of Architects and its Minnesota component, AIA Minnesota, offer a wealth of online information and advice about how to hire and work with an architect and what to expect during the design and construction process. To get started, try these links:

howdesignworks.aia.org/working.asp aia-mn.org/ext_working/publications

GUIDE TO WORKING WITH AN ARCHITECT WAS DESIGNED BY TILKA DESIGN (TILKA.COM) FOR THE MAY/JUNE 2012 ISSUE OF ARCHITECTURE MINNESOTA.



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