

WHITE PAPER



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CHOOSING THE RIGHT PARTNER FOR YOUR LIGHTING APPLICATION

There was a time when deciding how best to light an office or other commercial environment was relatively straightforward. However, today the process is anything but simple.

Studies have shown how important proper illumination is— affecting everything from productivity and mood to safety and aesthetics. Lighting also offers great flexibility and potential for increasing energy efficiency. As a result, a plethora of products, new technologies, and strict codes now add layers of complexity.

The key is good planning. Coordination among teams, the right design and product specifications, code compliance, and other factors all influence both schedule and budget, which is why choosing the right design partner is critical to a lighting application’s success.

WORKING WITH A LIGHTING DESIGNER

If you want to make a dramatic statement, achieve a certain aesthetic, or illuminate an intricate setting—such as a performing arts space—then it can be wise to work with a certified lighting designer.

Cary Johnson, a Senior Associate at Gensler, considers lighting as critical to design success as color, material and layout. Even for an office environment, he often taps the creative vision of a lighting designer to ensure character and variety in a lighting scheme.

“These days, technology has opened the door to much more interesting opportunities for lighting,” he says.

However, Johnson does always turn to an MEP partner to compute load calculations for light levels and energy consumption. “I expect to be able to lean back on the engineers for that,” he says.

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- Cary Johnson
Senior Associate at Gensler

“I tend to choose consultants for my work based on how easy it is to pick up the phone. Can I make one call and know I’m talking to the entire team versus managing a herd of consultants? When I call Matt, I know I can talk to him about plumbing, mechanical and electrical—yes, now I’ll absolutely consider talking to him about lighting as well.”

- Scott Hindsley
Principal at Archideas, Inc.

He also will rely solely on an MEP partner when the project is an industrial setting. “Then you don’t need a lighting designer,” he says. “Your electrical engineer can select effective fixtures that are affordable and meet the lighting requirements.”

WORKING WITH A MANUFACTURER’S REPRESENTATIVE

The choice not to work with a lighting designer can also be driven by cost. For example, Scott Hindsley, Principal at Archideas, Inc., primarily works on solution-driven projects. “My clients are typically budget minded,” he says.



For a typical office space, Hindsley often looks to a manufacturer’s representative to see how best to utilize their products to achieve appropriate levels of illumination. However, he notes, “this adds a layer to the process. It’s then our responsibility to be sure we’re taking everything into consideration.”

For one LEED project involving site and building illumination, Hindsley encountered another kind of obstacle.

“There were multiple products involved, and we needed to have one entity do the calculations that included all of the fixture types,” he says. “For the reps, they’re obligated to support only the products they represent. Since a variety of manufacturers had been specified, no single rep was able to do the calculations for us. So we used a lighting designer to take the illumination files from each and blend them to create a composite solution.”

Based on that example, Hindsley says, “It would be of great value to have an engineer involved in lighting. It would improve the process by minimizing the number of people involved when coordinating a project. They could take the manufacturer’s data and do the calculations ... and perhaps by bundling this with their other services, I could gain some buying power.”

WORKING WITH AN MEP FIRM

Streamlined services are one reason to turn to an MEP partner for lighting, especially for practical-based applications, like large commercial spaces where lighting controls are key.

“No matter who you work with, it’s important to address the responsibility for lighting up front. Sometimes the architect intends to do the design but then gets pulled away by other priorities, so we end up filling in the gaps. But that’s not ideal.”

- Aaron Burch
Associate at RTM

“If RTM is already your engineering partner, you can have us check lighting levels and code compliance as part of our overall collaboration,” says Aaron Burch, Associate at RTM. “We can even tie the lighting controls into other systems, like HVAC.”

Budget and schedule are other reasons. “As engineers, we’re always cost-conscious and strongly committed to the schedule,” Burch says.

For an office setting, some architects will plan to do the lighting design themselves.

“They’ll sometimes rely on rule of thumb,” says Matt Zega, Associate at RTM. “Others have an idea how they want it to look, and RTM can make their vision reality.”



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Jessica Iversen, Project Engineer at RTM, often runs quick photometric calculations when an architect has been waiting on an unresponsive lighting designer or manufacturer’s representative. “They’re always appreciative and sometimes surprised when we say ‘We could do those today for you.’”

RTM also can create lighting designs that take into account function, layout, furniture, and reflections. “We’ll do a rendering to see what a room would look like and what we need to adjust for,” Iversen says.

Product consultation is another offering—objective guidance on fixtures and lighting control systems from reputable manufacturers, as well as projected payback analysis.

Finally, checking code compliance is a critical step that should be planned in advance to ensure different lamp types can work together and appropriate lighting control types are utilized.

“That’s where we offer a lot value,” Burch says. “Even if fixtures are chosen by another vendor, we always check to be sure they’ll work the way they’re intended and recommend suitable alternatives when they won’t.”

HAVING A PLAN

The success of a lighting plan can usually be traced to the planning stage.

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the design but then gets pulled away by other priorities, so we end up filling in the gaps. But that's not ideal."

Zega adds that not every job is the right fit for an MEP firm. "We'll refer you to a lighting design partner when appropriate to best meet your needs," he says.

After talking recently with Zega about RTM's lighting design capabilities, Hindsley looks forward to tapping the firm for a future project.

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