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# ONEW BUILD SOLUTIONS THE HEAD SOLUTIONS



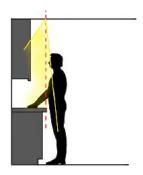
Great lighting is almost always made of carefully selected layers of light and rarely achieved with just one solution. But what can you do when your budget or schedule is tight?

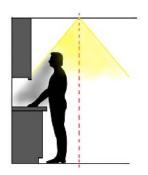
David Warfel, our founding designer, set out to discover what single solution- what One Thing- we might recommend first for those building or remodeling a home. In a series of posts on his blog, David moved through each room of a typical home, often sketching explanations along with his writing.

We gathered David's posts together here in the hope that you might find them helpful. After all, helping others with light is what we are all about.

Visit <u>languageoflight.blog.</u>

#### KITCHENS





IF YOU CAN ONLY DO ONE THING TO IMPROVE THE LIGHTING IN YOUR NEW KITCHEN... put the recessed downlights in the right place.

Getting great lighting in a home can be a little intimidating and overwhelming. Homeowners will often spend most of their lighting energy (and budget) choosing chandeliers, pendants, and sconces that look just right for the home, leaving little energy (and budget) left for what we call "architectural lighting."

Architectural lighting is that which we hope disappears into the background, all while providing better light for what you are doing and making the home feel more relaxing, comfortable, and inviting. This is the focus of our business and we help hundreds every year getting the right light in the right place at the right time.

But what if you are not going to hire us to help? What if you have limited resources in time or budget and just want to do one thing better in your new kitchen?

The answer is simple: get the recessed downlights in the right place. This is the most important decision to be made because, unlike almost every other lighting choice in the kitchen, it can be terribly difficult and expensive to fix later. It is much easier to change out pendants or add under cabinet lighting in a few years than to move recessed fixtures in the ceiling.

Getting downlights placed correctly is not exactly rocket science. Just think about where the light is really needed. In a kitchen, that is usually the countertops (where you chop with sharp knives and read recipes) and the counters (where you hunt for the spice you need). Sadly, most lighting in kitchens is laid out to light the floor better than the counters, placing your work surface in shadow. Good lighting underneath cabinets can help, but start off right by placing the downlights where they need to be.



We like to place the recessed downlights directly over the counter edge as shown on the left side of the diagram above. This usually places a nice scallop of light on the upper cabinet fronts (this is why we center the lights on cabinet doors- so the scallops look good and light goes inside the cabinet). When there is a soffit above the counters, we shift the lights closer to the cabinet fronts. Avoid placing downlights over the aisles between counters unless you plan to chop vegetable on the floor (which I do not recommend). If you have a kitchen island or peninsula, you will also need good lighting on it. Some pendants can deliver great light for the island top, but many will not. If your pendant has a good shade that directs most of the light down towards the counter, you may be fine. If not – if

#### KITCHENS

your pendant has clear shades, visible bulbs, chandelier bulbs, or more light coming out of the sides or top than the bottom, add in



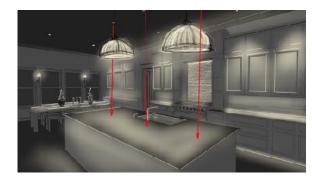
recessed downlights to "push" light to the countertop. This approach will give you great light on the island and allow you to dim the pendants to a beautiful glow.

The best-lit dining and breakfast tables feature a soft glow from a chandelier and strong light on the tabletop itself, not unlike a well-lit kitchen island. Again, there are few chandeliers that will provide both kinds of light in a satisfactory manner. Supplementing the decorative fixtures with a pair of recessed downlights will provide better illumination on the table itself.

This is great for setting a relaxing dining scene and comes with the added benefit of delivering great light for homework, crafting, baking, paying bills,

and the myriad of other uses our tables tend to serve.

Why do I recommend recessed downlights as the 1THING for a kitchen new build? When properly placed, a layer of recessed downlights can provide almost all the light you need- and no other light source comes close. Perhaps more importantly, adding recessed lighting later is extremely difficult and expensive. Get it right during construction and it will serve you well for decades.



#### And one more thing...

If you want to take your kitchen to the next level, add in properly placed under cabinet lighting. This layer of light happens to be my favorite in a kitchen and can be added (albeit somewhat messily) after construction is complete. Used in conjunction with properly placed recessed downlights, this layer will fill out the work surfaces and can even provide great night lighting for the after-dinner hours.

Read more about kitchen lighting HERE and counters specifically HERE.

#### BATHS



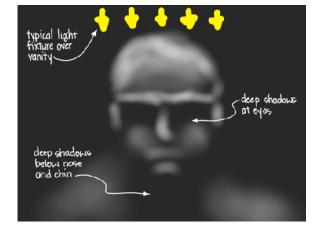
In retrospect, perhaps I should have saved this post for Halloween. Why? Because I attempted to illustrate light on the human face and ended up creating ghosts. I was never very good at drawing faces, well, honestly, I was never ANY good at drawing faces. But since faces are the reason we have mirrors over bathroom sinks, I needed to do something to illustrate a concept. My apologies for the creepy feelings.

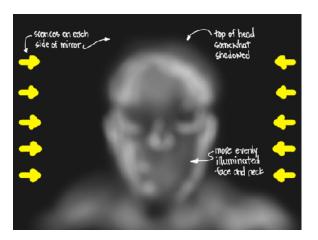
Okay, let's get to it. What is the one thing you can do in a new build to get lighting in the bathroom better? There a lot of great ideas for making baths more relaxing, easier to use, more comfortable, and better looking. But every day starts and ends with a look in the

mirror, and wouldn't it be great if the mirror magically made us look better?

A mirror can't do that, but lighting can. So if I had to pick just one thing to do in a bath, I would hang a tall sconce with soft white shade on each side of the mirror, like this one hung vertically.

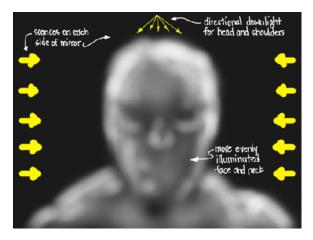
The easiest place to put vanity lighting is above the mirror and, sadly, the easiest installation method is usually the main motivator for residential lighting. If homes were built at nighttime, maybe there would be better lighting. But for now, most mirrors have fixtures above that leave deep shadows under the eyes, nose, and chin. Need to see better? Leaning in towards the mirrors only makes it worse.





Here's a diagram showing the one thing you can do to make the biggest difference: hang vertical soft-shaded sconces on either side of the mirror. Shadows are chased away and your face will look better. No television personality would stand for what we put in our bathrooms (unless it was an interrogation scene), so take a cue from the pro's and get the right light in the right place.

I do not need my lighting to make me look older or more tired than I already am.



And one more thing...

A little trick we stole from our tv and film experience is to place a recessed downlight about 2′ behind the front of the sink cabinet (behind your head). This is called a backlight and has the magical effect of making your head and shoulders stand out and look great.

Seriously, try it and you'll look so good you will be tempted to start taking selfies.
Read more about the trick HERE.

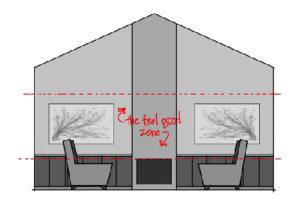
If you are not a big fan of sconces on either side of the mirror, or do not have the space, don't despair. Look for mirrors with

built in light strips around the perimeter that shine softly on your face. This is a modern interpretation of the old dressing room mirrors and provides a very good light with few shadows.

Now see if you can forget the ghosty diagrams and go make yourself look good.



#### LIVING ROOMS



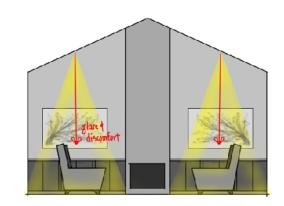
This post is the third in my 1THING: New Builds series designed to boil better lighting down to the bare essentials. And I promise I'll get to the subject – living rooms – in just a moment. But first, I owe you an apology.

One of the benefits of blogging – at least the way I blog – is that perfection is not the goal. Writing a magazine article comes with a little more pressure to "get it right," to hone the writing, to make every sentence engaging. I imagine writing a book provides even greater pressure towards perfection. Those of you who have read more than one post here and discovered the typos or the questionable grammatical structures, or wondered what the heck I was trying to say know that perfection is not something I do here.

This post is further proof (hence the apology) that I am far from perfect. I'm trying to say something here – that adding light to help you feel good is key to a comfortable living room – but the creativity I strive for just didn't seem to flow. The idea is solid, the expression a little lackluster for my tastes.

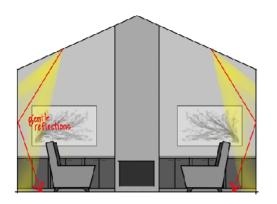
And that is why I enjoy blogging. I get to try out ideas, ramble a bit, explore concepts, and follow a meandering path that generally tends towards sharing the gift of light with anyone willing to listen.





The first thing that popped into my head is cove lighting, hidden lights that reflect off the ceiling filling the room with soft, even light. On further reflection, however, I changed my mind. I love cove lighting, but it is not the 1THING I would choose if I could only wire up one solution.

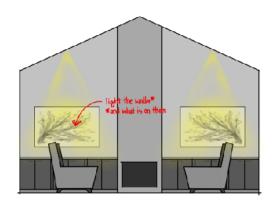
## LIVING ROOMS



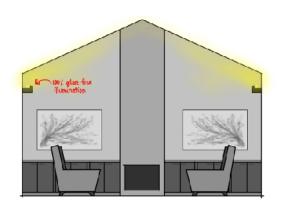
There is a sweet spot in every room that we will call the feel good zone, or the place for light that helps us feel better. That spot is not the ceiling, but is what we see when we sit down and look straight ahead. Look up from the screen you are using to read this blog post. What do you see? Don't stretch your neck to see the ceiling, just look across from you. That's the sweet spot, the feel good zone.

For most of us, our gaze will eventually end either 1) out a window or 2) at a wall. Windows are fantastic (during the daytime), so I'll concentrate on the walls. That's where I want the light.

Choosing this technique has another benefit if you just so happen to have anything on your walls. We have an eclectic mix of art and family photographs on ours. Light aimed at the walls illuminates these objects and that increases our enjoyment of the objects themselves (isn't that the point of having them?). And if you spent good money for beautiful art, why are your lights pointed at the carpet?



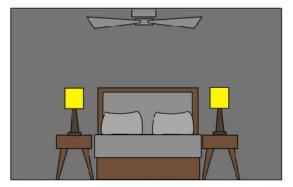
If I could choose only one technique to hardwire into my next living room, I'd choose lighting that can bounce off the walls in the sweet spot of the feel good zone.



And one more thing...

As with all of the 1THING posts, I am including one *more* thing, the second lighting technique I would include in a living room if budget allowed. If I have the walls covered with light, my next move would be to bounce light gently off the ceiling. This adds another layer of comfort, lifts the ceiling, and delivers 100% glare-free illumination to the entire room when done properly. Now I just need to find a solution that does both at once....

#### BEDROOMS

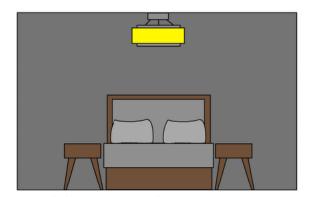


Lamps are great... but usually not enough.

I am having fun with both 1THING series, and this week's post on bedrooms is no exception. I am pretty good at overcomplicating things, so the mental gymnastics of forcing myself to make a single choice is proving to be good exercise. Plus, I think I might quit my job so I can just sketch and doodle on my iPad all day because it is just too much fun. Shh...don't tell my boss.

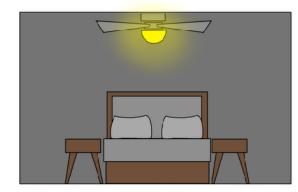
This is not the first time I have written about bedroom lighting, nor will it be the last. Bedrooms offer plenty of opportunity for good and bad lighting, but today I am imagining that you are building a new home and the electrical contractor gives you the ultimatum: what is the one light you want me to wire up for you? For me, it is cove lighting. But first, let me tell you what is usually on my ceiling when I buy an older home: A ceiling fan light.

I call this condition CFLS, or Ceiling Fan Light Syndrome, and it is no better in a bedroom than a living room or any other space. Ceiling fans are awesome – I love them – but the light kits put the light in about the worst place for everything with the possible exception of packing a suitcase. The glare bomb in the middle of the ceiling means almost everything important is in shadow and your eyes will hurt no matter where you look. But what about pretty light fixtures instead?



Chandeliers are inconsistent.

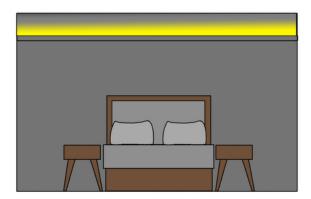
Decorative fixtures are another common find in bedrooms. Usually hanging in the center of the ceiling, these fixtures are there to look pretty and remind us of a time when the only way we could light a



Coiling fan lights fill the room ... with glare.

room was to hang candles or gas-burning chandeliers in the middle and hope for the best. Chandeliers can look lovely, especially when turned off, but the quality of light produced ranges wildly from excellent to atrocious. Since I rarely get to pick the decorative fixtures (and that's a good thing – interior designers are better at that), I cannot guarantee that the light emitted will be of much use. That does not mean that I want the bedroom to be dark.

#### BEDROOMS



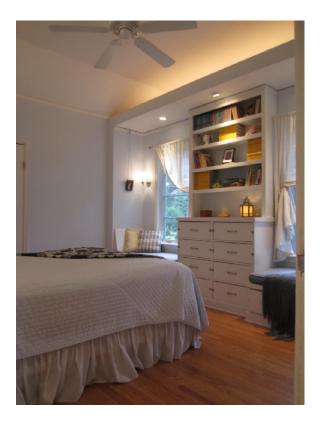
Cove lighting gently fills the room.

I remodeled the bedroom in my first home and added a built-in ceiling cove that gave me a location to hide lighting (it was incandescent back in those days). The resulting cove light spread out softly throughout the room, doing a better job than a ceiling fan or chandelier at getting light into the space without uncomfortable glare. That was twenty years ago, and I'm still in love with cove lighting. Here's a

flashback photo of that first attempt:

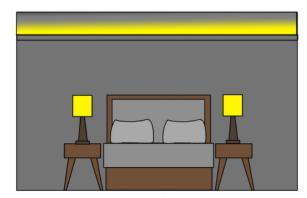
Time marches on and I have a lot more ways of delivering gentle illumination to a bedroom, but my go-to solutions are all derivatives of that first cove. Check out this recent photo of a relaxing bedroom:





Did you notice the linear light embedded below the crown molding? That's okay if it didn't stand out- good lighting is not about calling attention to itself. This subtle approach allows me to fill a room with diffuse light without framing up a large cove. It also happens to be one more reason to love linear lighting.

#### BEDROOMS



Like peanut butter and chocolate...

So if you have just once choice in your next new build bedroom, try cove lighting. You will likely find it the most relaxing light you've ever experienced. And isn't that what bedrooms are for?

AND ONE MORE THING...

As is my habit, I like to tack on one more idea in case you want to take things a step further. In this case, the answer is simple: bedside lamps. I'll dig into these in a future post, but nothing beats a bedside lamp for reading, relaxing, and convenience when turning out the lights. Of course, I'll find a way to complicate things....

#### DINING ROOMS



get comfortable with a lighting hug.

This post brings dining rooms into my 1THING: New Build series, but you'll have to skip ahead or slog through some early morning musings to get there. Sorry.

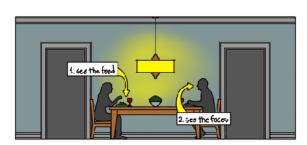
Blogging is a bit of weird phenomenon. Here I sit, week after week, writing about lighting with no deadlines, no paycheck, and no guarantee that what I write will be read by even a single person. This might make you question my sanity, or at least ask two questions: why do I blog – and will I ever run out of things to say?

The first question is easier to answer than the second. I blog for two reasons: because I want to help and because I

become a better designer through the creative exercise. If a single person reads a post and gets better lighting in their life then I consider the blog a raging success. If no one reads the blog, however, I still get a place to explore ideas, concepts, analogies. And I get to doodle and draw, which is just plain fun.



light that helps us see better is the heart of design.



light that helps us see better is the heart of design.

The second question gets at a core fear of my blogging mind: will I become one of those bloggers that says the same thing, over and over, constantly rewriting the same articles?

Possibly. Preparing today's post on dining rooms brought about a rather strong feeling of deja vu. Haven't I said this all before? Well, yes, but using different words and sentences. The question is "what is the one thing I would recommend for lighting a dining room if an electrician was involved?"

How about giving your dining room a lighting hug?

#### DINING ROOMS



get comfortable with a lighting hug.

Okay, before I get to the lighting hug, let's talk about the heart of lighting design. Light can help us see better is the absolute minimum of decent lighting. I often break this into components, or promises, like "light can help you see what you are doing so you can do it better" and "light can help you know where you are, where you are going, and who is with you."

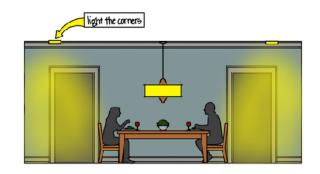
In a dining room, light that helps us see better needs to do two things: see the food so we can eat it and see the faces of others so we can enjoy their company. That means that strong light on the table and soft light on faces is the most important layer of light in a dining room, and that choosing a chandelier or pendant takes a little thought if you want to tackle both.

Since I make the rules, I'm going to assume that you already have a chandelier or pendant over your dining table. What is the 1THING I would do in addition to the chandelier? Give the room a lighting hug.

A lighting hug is a phrase I blurted out while on camera with Lee Travis of Wipliance a few months ago. Lee asked me for the basic idea of good landscape lighting and the words just tumbled out. It sounded a little cheesy to me, but a few months later I continue to mull it over.

What is a hug? It is, technically speaking, someone else wrapping their arms around you. But a hug is more than a squeeze. It is a gift of warmth, of care, of concern, even love. A hug speaks to our bodies and souls, comforts us, and helps us relax. I recently visited my parents, of whom I have seen precious little during the pandemic. Their hugs were better than ever.

A lighting hug will not replace a hug from a loved one, but it can help you feel a little more comfortable, a little more relaxed. There is serious research behind the ideas here, but simply put, a lighting hug is light around you. I might call it "light for feeling better" in another post, but the idea is the same. Chase a few of the shadows away and put light beyond the table.



#### DINING ROOMS



Practically speaking, a lighting hug is light on the walls or vertical surfaces of a space. During the day, we get natural hugs from any space with a window. At night, however, the single light above the table will struggle to replace what we lose when the sun goes down.

Early in my career I had a habit of putting recessed downlights in the corners of the room. These lights chase away shadows and make a hug around the dining table, as seen in the photo of my parent's dining room in this post. This is still a solid approach for those who insist on strict symmetry in ceiling geometry and I do return to it occasionally. But now that I have advanced beyond ceiling geometry to preference human biology and psychology, I trend to other solutions.

My default these days is to put light on the walls- or anything on the walls like art, textures, and wall coverings. I use recessed adjustable downlights so I can tilt them to highlight a painting and reflect light gently back into the room. These are centered on walls and vertical surfaces (like the faces of cabinetry) to put the light in the right place for a comforting hug. It might not make your food taste better, but it will help you feel better while you sit at the table. And that's one thing you can do to live a better life.

As a blogger, I can keep recycling the same ideas to infinity, because each time I see the problem from a different angle. I have changed, grown, learned since I last wrote about the subject. I can return to a subject and see the same topic in, well, a new light.

And, if I'm lucky, someone will read it and live a better life as a result.

And one more thing...

Got a bigger budget, or a desire for a deeper hug, the kind you might call a bear hug? Try adding a simple cove around the space to light your ceiling softly. Robert Soler calls it "lighting your sky," and, well, that may be the simplest way to describe the approach. Bounce light off the ceiling and complete the hug.



I go on a nightly neighborhood lighting patrol. Sort of.

When our family divvied up the dog duties, I drew the just-before-bed nightly walk. Albus, our 9-year-old cockapoo, gamely trots around the block while I curse the neighborhood porchlights.

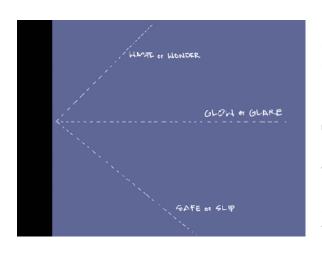
Okay, I do not curse the porchlights. But I do wonder how my neighbors would react if I dropped a little note in their mailbox politely requesting that they update their outdoor lighting. I have even considered offering my immediate neighbors new lighting at no charge. Why? Because most porch lights are picked for style, not substance. And, as you can guess from reading other blog posts, most light fixtures are absolutely horrible at... light.

So today, in a continuation of my 1THING: New Build series, I make my choice for better front porch lighting. I considered recessed downlights, but those are best for sweeping the porch floor and I am highly unlikely to ever be found with a broom in my hand after dark. I considered lanterns that hang over the front door, but those are not as ubiquitous as the either-side-of-the-front-door porch lanterns found on nearly every home in my neighborhood.

Porch lanterns or sconces next to the front door go way back in time to when they served a purpose in announcing the location of a home and door and providing the best possible light for 1722. Our forbears had just one option for light: burn something. Since candles rarely burn well upside down, and were rather dim, clear-glass lanterns were the epitome of luxury at a time when glass was expensive.

We are still putting nearly identical lanterns on the fronts of our homes despite three hundred years of progress. There are quite a few technologies of the 1700's that we are happy to give up (who goes to work on a horse these days?) but apparently outdated lighting is not among them.

Perhaps it is time for that to change.



Perhaps it is time for us to put lights on our porch that consider *first* what we need and only *then* what our ancestors used (and not the other way around). If I can only choose one hard-wired lighting solution for a front porch, I would choose a porch light that delivers glow over glare, safety over slipping, and wonder over waste.

#### **Glow over Glare**

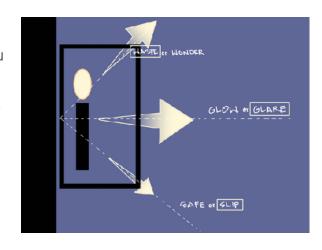
When a candle flame softly illuminates the face of a loved one, the dim level of light could be considered a glow. When a car headlight shines into your eyes, the bright blinding light could be called glare. Guess which light many of us choose to welcome us home, to invite friends to our front door?

Most porch lanterns direct most of their light straight out and into your eyes. When that light is significantly brighter than everything else around, it becomes glare. A soft glow is preferred, something that communicates welcome without blinding light. The originators of the lantern did not have this problem – our electric candles burn far brighter than the wax and wick versions of yesterday.

#### Safe over Slip

Perhaps the most important function of a porch light is to see where you are going so you don't trip, slip, or stumble. Front doors are often preceded by stoops, steps, and porches that could become safety hazards if underlit (or if you are blinded by glare). This is not a particularly difficult concept to grasp, yet it is astounding how many porch lights actually have solid bottoms or candle-style bulbs on top that result in the least light going down towards the ground.

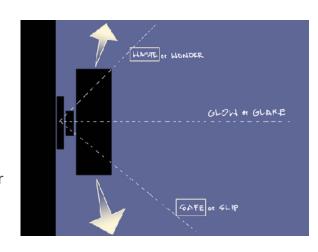
If I could only pick one light for my porch, I would look for a fixture that puts more light down to the ground than in any other direction.



#### **Wonder over Waste**

Let's go back to the candle-style porch lantern, which you are by now realizing I must want to toss to the trash heap of history. Sure, they can look lovely and stylistically appropriate for a home, but if I want to *use* the light then traditional porch lanterns do just about everything wrong. Candle-style bulbs atop a fake candle put most of their light in your eyes – and a second large helping into the sky. That is called waste at best – energy and light that does absolutely nothing for us – and light pollution at worst.

We use a lot of cylinders on modern homes that dramatically cut down on glare. But the most popular versions shine light down at the floor (safety first!) and up into the air (for dramatic effect). The upwards facing light is wasted if there is no roof overhead, and the aggregate of thousands of these fixtures in our neighborhoods makes it hard for us to appreciate the stars. There is wonderful light over our heads many evenings, but our waste makes it impossible to see.



# GLOW OF GLARE

#### **The Perfect Porch Light**

If I could only choose one light to install on my porch, I would choose a fixture that pushes most of its light to the ground to keep me, my family, and guests safe. I would choose a fixture that casts a soft glow outward, just a tiny amount of light that reaches out to the sidewalk to help us feel comfortable and welcome. And I would choose a fixture that puts absolutely no light upwards into the sky.

And one more thing...

I find it difficult to choose just one hard-wired lighting solution for each space, which is the point of this entire series. Why? Because great lighting needs to be the right light in

the right place at the right time. That usually results in multiple layers of light, each serving a unique purpose. So if I had a chance to do one more layer of light on my porch, I would add in a series of steplights to illuminate the path to the front door and along the porch itself. These lights put light down for safety and the right step light can keep the sky darker so you can see the stars.

Read more on welcoming lighting HERE.

Read more on outdoor sconces HERE.





Ouch. This post, more than others, paints me as a rather entitled and spoiled person. I'll work on that, but for now let's just assume the best- that the lessons I learned can help others live better lives. That is what lighting design – and this blog – is all about.

A few years ago our family had an extraordinary opportunity to take an extended trip across the United States. At that time we were homeschooling our children and I had a brief period after leaving one job before I needed to concentrate on the next, and my brilliant partner suggested that we take a "big trip."

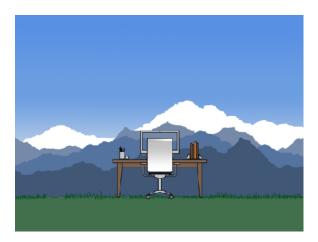
I promise this has something to do with lighting home offices, but I might reminisce a bit first.

We borrowed a good friend's pop-up camper trailer, packed our van full of way too many things, and embarked on a seven week camping trip across New England in autumn. We camped at state parks, National Parks, county parks, and our first KOA. We were hooked and spent the long drive home dreaming of how we could take this once-in-a-lifetime opportunity again next year.

For a few years we repeated long trips each September until our children went to schools with real calendars and my job heated up. We bought a tiny fiberglass camper, packed our van full of way too many things again, and took trips to the American southwest, near west, northwest, and California.

And, for a few weeks each year, my office looked something like the photo above. I worked on a deck overlooking the black hills of South Dakota. I sat at a coffee shop in Moab gazing out at the rocky arches beyond. I grabbed wifi at the visitor's center in the shadow of Glacier National Park. I worked at a picnic table in Colorado, another in Arizona, and many more. Looking back I realize that I was extraordinarily privileged. You could even say spoiled.





Every year I returned to a home office that served as the headquarters of a growing business that continues to operate remotely as we hire and expand across the continent. I had plenty of photographs to use as computer desktop images (that's Long's Peak in Rocky Mountain National Park, Colorado, above), but my view was cut down to a few inches of computer screen. And that all leads me directly to the trip I took this morning to a different destination: writing a 1THING: New Build post on lighting in home offices.

In each post of this series I attempt to narrow down the essence of good lighting into a single solution for hard-wired lighting in a different space. The exercise may be helpful to readers, but it is also incredibly beneficial for me to have time to really think and explore

lighting in theory and practice. If the world is going to get better lighting, I have to

think beyond super-high-tech offices and big-budget spaces. How can I help others work in a home office that feels like the image above? It all boils down to 1THING: light up your sky...your whole sky.

Here's one thing I learned to avoid in office lighting: strong direct light from overhead, like the sun or recessed downlights. Sitting in the sun in southern Utah, no matter how beautiful the sky and mountains, simply is not a comfortable working environment. Glare is something I don't need when I am working, looking at a computer screen, writing notes on paper, or any other office task. But neither do I want the opposite of a

sunny day- a cloudy day may be glare-free but leaves my mood and energy level low.

What my eyes, body, and soul crave is a sunny day...with some shade.

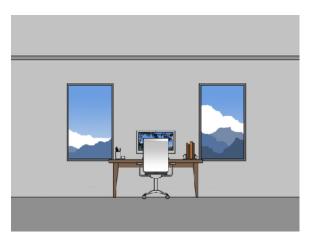


A good tree makes all the difference when working outside, and I sat underneath a few great trees on our big trips. I had uninterrupted views of spacious skies and purple mountains but was kept safe from the eyestrain-inducing skin-burning rays of the sun. In my mind, this is the best place to work. Ever.

Now let's go home, where I work and where more and more others spend at least part of their work week.

If I built my own office, it might look something like this. I dream of a home office with floor-to-ceiling windows on three sides and a great view. For the last three years, however, my office was crammed into a basement (a temporary solution that lasted too long) with zero windows. I was slowly going mad, so I moved upstairs and gained at least a few windows.



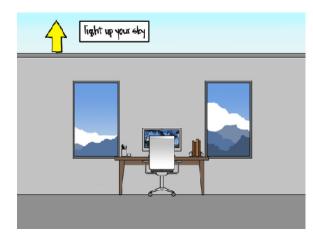


My view is not spectacular – I see the street and neighboring houses and the nearest mountains are a twelve hour driver – but at least I have some natural light. As you can see from the elected place what I least when I

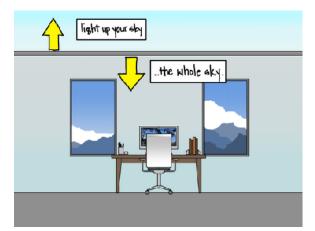
can see from the sketch above, a couple of windows does not replace what I lost when I moved indoors. So the first thing I did in my new office was add more lighting.

Here is the one thing I recommend wiring up in your new (or newly remodeled) home office: indirect lighting to fill out your sky. This is similar to my recommendation for bedrooms but with one key difference gleaned from my days of working outdoors: I extended the sky to the horizon.

The sky, when working outdoors, is not a small square above my head but rather a vast expanse that covers 360° of my view. The sky is right in front of me, to my left, and to my right. So in my "new" home office, I pushed light towards the ceiling for glare-free indirect light, but I also bounced light off the walls to fill out my sky. Because I view this office as (another) temporary space, I built a simple piece of furniture to support the lighting. If



you are building a new office, I recommend building uplighting and downlighting into a trim around the room.

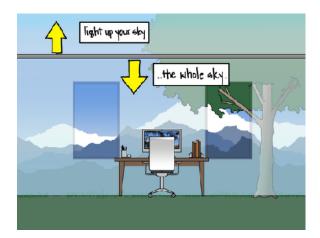


Here's a photo of what this looks like in my office now:

Note how the walls bounce light into the room, softly illuminating the desk without any glare or direct sources. No downlights. No desk lamps. No overhead fixtures. Just a sky. And while it isn't perfect, it gets me one step, 1THING closer.

Someday I hope to work from a picnic table in the shade with uninterrupted mountain views. Until then, I'm happier and healthier in my better illuminated home office.

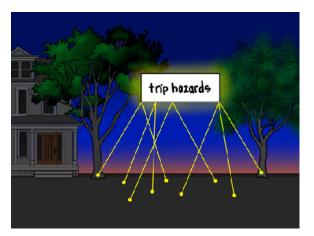




And one more thing...

If you are adding light for your ceiling and walls like I suggest above, consider making that lighting color-tunable. I utilized RGBTW linear lighting from ProLuxe that gives me warm white, cool white, red, green, and blue LED chips continuously along my ceiling and walls. This allows me to "match" daylight and skylight colors during the day and shift warmer towards sunset, increasing the chances of my body regulating itself to a normal 24-hour cycle. Our lighting should be as close to natural light as practical, and that means moving away from static white and embracing the full spectrum of color nature provides.

#### LANDSCAPES

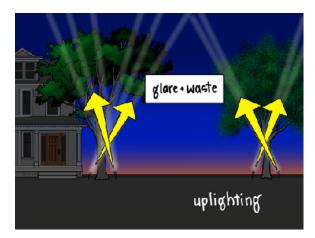


My 1THING: New Build series title is a bit awkward when it comes to the great outdoors. Seldom are trees and shrubs and lawns built...rather, they are grown. Oh well, I never promised literary quality, just lighting ideas. If it makes you feel better, call this my 1THING: When-you-hire-professionals-to-do-the-work series. Wow, that has a nice ring, eh?

Now, where was I? Ah, yes, narrowing down thousands of lighting choices to just one for outdoor landscape illumination. There are so many great techniques for outdoor lighting (and indoor, for that matter), that choosing

just one can be a challenge. But that's the very idea – to challenge myself to pick one that I think is the most important, or the most beneficial, or the most beautiful. In the case of a landscape with mature trees, I might have hit all three with today's choice: moonlighting.





Uplighting trees has long been the first thing I think of when tasked with

illuminating a landscape. The technique is easy and looks incredible, like pants that feel like pajamas and look like tailored slacks. Unlike pants, however, uplighting is probably the last technique we should be using. Uplighting makes trees look great, but at the expense of everyone and everything on the planet.

Uplighting is never 100% reflected in the trees, which means that there is always light being sent into the night sky. This is electricity wasted, coal or wind power or nuclear power wasted, fixture capacity wasted. Uplights also have a tendency to shine in your eyes, especially when looking down to make sure you don't trip. They can introduce glare just when you most need glare eliminated. And that light in the sky isn't just waste- it

#### LANDSCAPES

keeps us from seeing the stars, disturbs our sleep, and bothers the plants and animals and planet. Bad, bad, more bad. Too bad it looks so good.

If natural light is the best light during the day, perhaps it makes sense that my favorite nighttime lighting technique mimics natural light at night. Camping under a full moon can be a lovely experience (assuming you are not in mosquito territory). Flashlights and lanterns are seldom needed once our eyes acclimate to the low level of light. The moon shines (reflects, rather, but I get to decide just how technical to get on the blog and I'm not going there), er, the moon shines down through trees, softly illuminating

the ground and casting beautiful, moving shadows of branches and leaves. Moonlight can be magical, so

much so that we write songs about it and associate a moonlit night with romance. Too bad we cannot turn it on and off when needed.

Now that we have a favorite type of natural light at night, we just need to do our best to mimic it. Look at the direction of moonlight – it comes from above, down through

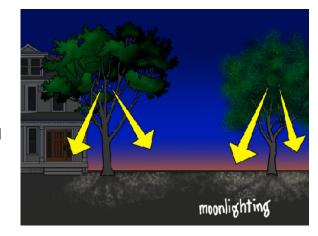
the trees, to hit the ground. This is better than uplight for many reasons, such as reducing glare and minimizing light pollution. It just makes sense, too...seldom do we need to see the trees at night, but every night we need to see where our feet are going.

We need to see the ground.



Let's take those same spotlights and send someone (a professional, I hope) up into the tree to carefully place them among the branches and leaves. The pro might attach the fixtures with belts that need adjusted annually or screws that allow the tree to grow more before adjusting. Then ask your installer to run the wire up the backside of the tree (and dab paint on it to blend it into the trunk for extra good looks). Finally, aim the spotlights down at the ground, through the tree branches, so that light hits the ground in the same general direction as moonlight.





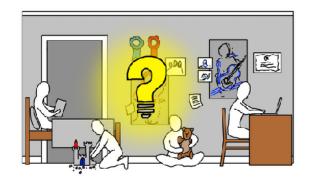
# LANDSCAPES

The end result can be magical, romantic, beautiful, functional, and more planet-friendly. Put them on timers, photocells, or motion sensors so they turn off when not needed, and enjoy the night.

Or you could lasso the moon and keep it above your yard....



#### BEDROOMS FOR CHILDREN



My children are at the age where calling them kids becomes increasingly dubious. Sixteen and twenty-one years of age, they spend more time away from home every year. That doesn't mean that stepping on LEGOs is a past hazard- the threat is still very real.

(And yes, I know that the correct term is LEGO, not LEGOs. Old habits die hard)

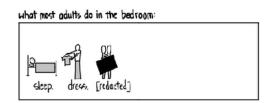
So when it came time to write a 1THING: New Build post on lighting for kids' bedrooms, I

had plenty of research material readily available. Literally next door to my office, in fact, is a room occupied by offspring that could use better lighting. If I were

building the house from scratch, how would I light their room? What would I design if I could only choose one solution?

The answer, like all lighting answers, comes from closer examination of what light they need.

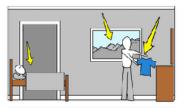
I admit that we generally design better lighting for primary bedrooms than for children. We even had one client ask for bad lighting in their children's rooms. "We want them to leave," they said. When I stop to think about how we light children's rooms, however, it occurs to me that perhaps we have it backwards. After all, what happens in the primary bedroom?





If our bedroom is any indication, not much happens. We sleep. We get dressed. And a few other things that do not require much light at all. Our kids rooms, especially when they were younger, need to cover a lot more activities. Their lighting, in other words, needs to be pretty good and pretty adaptable to a wide variety of tasks.

## BEDROOMS FOR CHILDREN



Where adults need light in the bedroom

Above is a handy little diagram of where adults need lighting in a bedroom...and where kids need it. I am reminded of Robin William's genie from Aladdin saying "the exits are here, here, here, ...anywhere!" as they prepared to disembark the magic carpet. Kids need lighting here, here, here...anywhere! And, as a parent, I know that light everywhere can be a good thing.

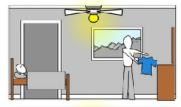


where kids need light in the bedroom.

Lately we've been working on a LEGO castle together, a project that has spanned a decade, seen multiple renovations and additions, and is now surrounded by a detailed town and a moat. I was enlisted to help raise the entire castle on a new plinth of stone, an endeavor that took a bit of planning and more than a bit of work.

And I realized, much to my chagrin, that either LEGOs are smaller than they used to be or my eyes have gotten worse. I needed more light. I needed better light. And here's what the bedrooms in our home have:

Yep, these are perfect examples of advanced CFLS (Ceiling Fan Light Syndrome). Not the right kind of light for our bedroom or our children's, but that doesn't stop it from being the most typical lighting found in a vast majority of homes. The ceiling fan light is great for packing a suitcase and pretty much horrible for everything else, a good source of glare and shadow that makes rooms ugly, uncomfortable, and of dubious function.



how most adult bedrooms are illuminated.



how most kids bedrooms are illuminated.

#### the one thing to light a kide room.



What kids need in their bedrooms mirrors the way my own seem to store their things: spread out everywhere.

The sketch above shows a decorative fixture called a semi-flush mount. If your home is older, think of the classic schoolhouse globes, those white-glass fixtures that hung in rows in the schools of yesteryear (before buzzing fluorescents took over). I would put four

#### BEDROOMS FOR CHILDREN

of them in the room, in a basic grid (the kind I eschew elsewhere, but kids rooms are different). Light would be everywhere – and four of them chases away shadows and lowers the need for super-bright bulbs. The result is a brighter-but-softer illumination that works for most activities in kids rooms.

Am I breaking my own rules? Maybe, but keep in mind that four semi-flush fixtures with soft globes will provide an entirely different kind of light than a disc light or downlight. Also keep in mind that the activities in an adult bedroom change very little over twenty years. The activities in a 5-year-old's room may be entirely different than a 12-year-old's room...which in turn may be different than a 17-year-old's room. In other words, lighting in the kids rooms needs to be better, needs to be everywhere.

If we get it right, we might protect our feet from LEGO pain. Or we could buy good slippers....

#### **DECKS**



I once read that the easiest ways to increase the sale price of your home were to paint the front door for a good first impression and add a deck to the back yard. I suppose adding a deck makes the back yard more enticing, perhaps even subconsciously saying to the buyer "purchase this home and you will relax on this deck every evening."

Whatever the psychology or sales strategy may be, an evening with family or friends on a patio or deck can be quite relaxing and memorable – and even better with the right light. Or, more to the point, an evening outdoors can be even better without the wrong light.

Most of our homes have a lovely wall sconce out back that efficiently delivers glare to every pair of eyes in the yard. These fixtures

are often the same poorly-conceived fixtures used on front porches, and look best when turned off during the day. At night, they silently drain away our comfort and relaxation while making it seem darker outside while obscuring our view of stars and distant lights. If you want a little too much of an explanation of why these sconces hurt – and what sconces might be better – check out my previous 1THING post on front porch lights.



this is where the stars shinc

this is where the city glows

this is where the sun sets

But this 1THING: New Build post is not about wall sconces. Honestly, I could do without

the sconces entirely on the back patio or deck. If I force myself to choose just one layer of light to hard-wire on a new deck, it would be step or deck lights.

This is not a new idea for me, but as I sketched through the concepts for today's post I stumbled on a nature-inspired justification for the low, amber light provided by a good step light. In the sketch above I divide light into three zones: where the sun sets at the horizon, where our eyes can see the city glowing (or distant neighbors), and where the stars shine.



We should avoid putting any light where the stars shine. Any light shining up and out just spoils the view, wastes electricity, and disrupts wildlife. There is no reason for it unless you are an airport.

We don't need any light where the city glows, either, because we want our view to be uninterrupted. There is light enough out there without us adding sconces or similar to contribute. Keep this zone dark.

We do need a little light to move around comfortably and safely. This light should go where the sunset goes – low down and pointed at the ground.

In the sketch above, I added a series of step lights (also called deck lights) to the posts that support the railings on this deck. These small fixtures can be placed on steel, wood, and composite posts, added to built-in benches, and installed on walls. Deck lights are most often low voltage, making for an easier installation, while many step lights can be found in both low and line voltage. The right step/deck light can add a lovely soft glow to the deck itself, reflecting gently up on the faces of your companions while keeping most of the sky free for enjoyment.



As you most likely know by now, not all step and deck lights are created equal. Sadly, most fit into the category of glare grenades (smaller than glare bombs, but no less deadly to our enjoyment). The fixtures on the left above have large glass or acrylic diffusers that put light in all directions, which includes wasting light and putting harmful light directly in your eyes. Look for shielded fixtures that block any view of the bulb or any visible glass/plastic. These will direct light where needed (down) and keep it out of your face.

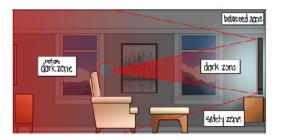
# **DECKS**



Don't have posts or railings? Get creative. You can install short posts. At our last home we had a patio, so I built wooden planters that divided the space – and gave me an excellent mounting place for step lights. You can install lights underneath benches, or put path lights in planting beds around a patio. Whatever you do, just keep light below the horizon line and fully shielded.

The next time you are relaxing on yourdeck, enjoy a better view with shielded, low deck lights. Sunsets and stars are more beautiful than anything we can create. Why compete?

#### MEDIA ROOMS



get in the zone.

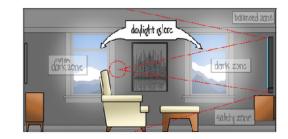
With just two months left in my 2022 blogging plan, I'm already growing nostalgic about my 1THING posts. The artificial constraints of narrowing all lighting down to just a single solution for new builds or plug-in retrofits for a handful of common spaces gave me focus and structure for the year, and the sketching exercises used to discover the solutions have been just plain fun. And, as intended, I've learned something from dedicating the time and energy to each successive challenge. My lighting designs get better when I blog. And perhaps you've found something useful, too.

This week's 1THING: New Build post tackles media rooms, which I categorize any room used primarily for watching television, movies, or other digital content. Media rooms are not dedicated home theaters- those are an entirely different space. Media rooms, unlike

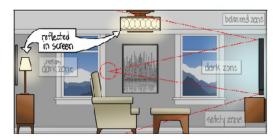
theaters, can also be used like living rooms for reading, playing games, conversation, and more. That makes them multi-functional spaces that could benefit from previous posts on living rooms, but what changes when the tv is turned on?

What is the first thing we do when watching a dark movie on a bright day? We pull the blinds or curtains in the room so we can see better. This is a great first step if you are getting serious about watching and there is too much natural lighting coming in the windows. Some light-filtering blinds might be even better, so you get a little sense of the outdoors, but that can be personal preference. That isn't really a lighting solution – cutting out light – but it's probably the first step.

Most of today's big-screen televisions have a glossy reflective coating that helps the television achieve crisp, deep blacks for nighttime scenes and overall detail. This means we spend the entire movie (or Downton Abbey binge session) staring at a black mirror. Perhaps the best way to evaluate your media room lighting is to sit down and look at the screen while it is turned off. What do you see?



#### MEDIA ROOMS



reflected glare (veiling reflections)

Most of us will see a reflection of the room around us, especially in the "not as dark zones" outlined above. Lamps, chandeliers, and art lighting in these zones will likely be much brighter than their surroundings, leading to something we call veiling reflections or reflected glare. Those are fancy terms for the "when-you-are-watching-The Batman-and-you-can-see-a-clear-reflection-of-your-floor-lamp-in-Batman's-cape" effect. Hmm, I suppose we could use the WYAWTBAYCSACROYFLIBC acronym for the above effect, or stick with the somewhat vague but significantly shorter "reflected glare" term. Your choice.

Okay, let's say you've lowered the blinds and turned off the decorative chandelier and lamps. That can make the room feel like a theater- dark and moody- and that isn't always the most comfortable.

Here's where it gets tricky - choosing just one source of light to add to a new build room.

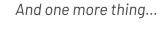
After some debate, I've settled on soft, indirect color-changing light as my recommendation.

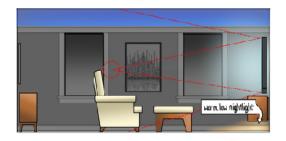
I do not use a lot of saturated color, but there is something relaxing about a deep blue sky above us. Indirect lighting, usually achieved with a cove or linear LED trim, can be soft and even on the ceiling, reducing glare. The light then bounced down into the room, making it easy to safely navigate on your way back to the kitchen for a snack at halftime.

A cove is not the only way to get indirect color-changing light into your media room. I have seen others add strips of light to the tops of their window trim, over doorways, and on top of bookshelves to achieve similar effects. Just keep in mind that the more evenly distributed, the lower the potential for veiling reflections.

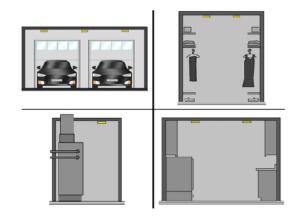


## MEDIA ROOMS





I discovered a zone in my diagram that needed a little bit of light to navigate safely, which I aptly named the safety zone. This is low down to keep light out of your eyes and off the screen and could be serviced by nightlights, step lights, or other downward-facing source. In the sketch below I illustrate linear LED "tape" light underneath a floating media cabinet that puts a soft glow on the floor. Sure, you'll get enough light from the ceiling... but this added approach will allow you to dim the ceiling a bit more and still feel comfortable.



An unpredicted grand finale to my 1THING posts takes me to the darkest places of our homes.

It is early December as I sit down to write the last 1THING: New Build post of the year. Like my own life, I started with a plan and a clear vision for where I was headed with the blog this year, made a few discoveries along the way, skipped some stops altogether, and ended up in a different place than imagined. If you had told me back in January that I would finish this series with a post extolling the virtues of LED disk (or wafer) lights, I would have called you mad.

Yet here we are. But why?

A few weeks ago I wrote a GEAR TALK post on optics that ended up being a bit of a rant against disk lights, the super-thin LED wafers that have replaced recessed downlights in the average American home. The post went a bit viral on LinkedIn (which for me means more than two people read it), with some commentators "feeling compelled to stick up for the disk light." I'll dig into some of those concerns in a future post, but for now I want to send a crystal clear message:

I hate disk lights.\*

I love disk lights.\*\*

In case further explanation is required, \*disk lights have no place in kitchens, living rooms, bedrooms, or anyplace meant to be enjoyed. And \*\*disk lights are awesome solutions for garages, closets, laundry rooms, and utility closets.

To emphasize the latter, I am dedicating this entire post to exploring when and where I believe disk lights make great solutions.





Let's start with the typical garage. In most, the only light source is a bare bulb above each parking stall or a light on the opener itself. This puts the best light on the roof of your car, which is likely the very least important place to put light. You might want better light, for example, on the doorhandles or floor or shelves. I suppose occasionally folks want to polish the roof of their car, but the rest of the year that light is in the wrong place.

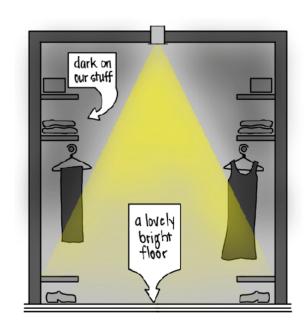
Disk lights to the rescue! The low cost and easy installation of disk lights makes it possible to spread them out in a garage, placing them where they will be more effective at lighting the things you actually need to see. This is one of the rare spaces in a house

that I use a tidy geometric grid of lights, primarily because garages are utilitarian and multi-functional. Parking a car is just one thing we use our garages for – storing bicycles and lawnmowers, keeping our golf clubs and sports gear, washing a car or working on a project, even playing hockey (yes, that happened) are others. Disk lights make garages nice and bright, everywhere, for nearly every purpose. And since few folks use their garages as a relaxing space to entertain friends, the inherent surface brightness of disk lights (mitigated by using them in groups) is of little consequence.



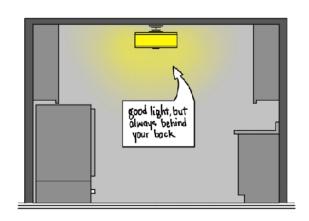
Closets are another space in which disk lights can, er, truly shine (sorry about the pun-light is so ingrained in our language that is just happens). I see home after home with recessed downlights in the middle of a walk-in closet, which provides lovely illumination to the floor, precisely where the least amount of clothing is stored (unless it's my kids' closets).

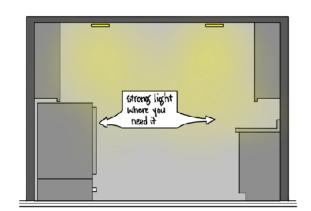
An array of disk lights, spread out in relation to shelves and hanging rods, gets light up onto the top shelves and onto the clothes in a much better fashion. And just because you used disk lights in the garage does not mean you have to



use the same disk lights in the primary closet – there are larger, lovelier disk lights and variants that can look attractive while the produce good light. One downlight creates harsh shadows; two disk lights begin to chase them away.

I have nothing against the lovely fixture drawn above in the laundry room. A semi-flush mounted decorative fixture can look good and provide useable light, but in this case we are putting our own bodies between the light and where we need it most, like counters and washers and dryers. We could use four decorative semi-flush mounts, but what if that seems too busy or too costly? Drumroll, please....





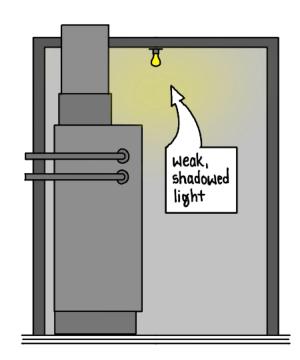
Once again, disk lights in groups, placed with care, can provide a larger volume of light

that chases aways shadows and makes it easier to accomplish tasks. Why not have a well-lit laundry room? This morning I was ironing a shirt and found myself wanting disk lights. Don't tell anyone, please.

Last, and probably least, let's look at utility closets. These cobweb-filled closets host the machines that make our houses comfortable like air conditioners and hot water heaters. Most of the time we never

visit them, but occasionally professionals come in to fix them up. You can be their friend (and save their flashlights from early retirement) by installing disk lights that outperform the one bare bulb typical of these spaces.

And, when you are in there relighting the pilot light on your hot water heater every few years, you will be glad you installed disk lights in your utility closet.





There. I did it. I found four spaces that are better served by disk lights than the most common solutions. Now I have this written record I can use when anyone accuses me of being a disk light hater.

Like a crafty politician, I'll just avoid the question when folks point out my other posts that beg you to keep disk lights out of the rest of the house.