

Wishing WELL: Frequently Asked Questions About the Building Industry's Newest Trend In Certifications

You've probably heard of corporate sustainability. And no doubt you hear talk about employee health and wellness. What you may not know is that the new emphasis on health in the workplace is driving a surge of interest in a building certification process focused solely on health: the WELL Building Standard. You'll probably be hearing more about it from designers, architects, building owners and customers, so here's a quick overview.



What is the WELL Standard?

The WELL Building Standard is a voluntary building standard focused on human health and wellness launched in 2014. WELL is meant to address all aspects of the built environment that influence human health and well-being. The original standard was the result of four years of work by leading scientific, medical, and building construction and engineering experts. A revised standard, Well v2.0, was introduced in 2018.

For a building to receive WELL certification, it must receive a passing score in key "concept" areas such as Air, Water, Light, etc. Each concept includes several "features" specifying detailed requirements. Mandatory features are called Preconditions. Optional features are known as Optimizations.

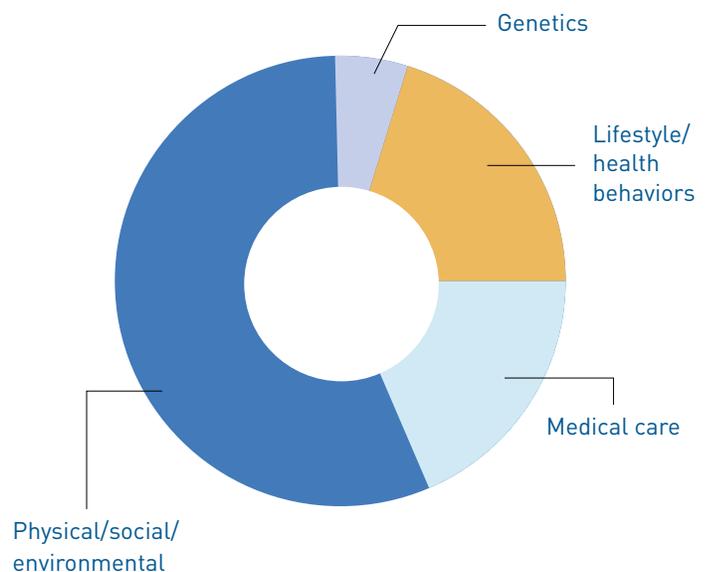
Certification involves submitting project documentation, collecting assurance letters and undergoing a detailed inspection. An entire building may be WELL certified, or only the core and shell, or only a separate interior project, as with a tenant build-out. Certifying a 100,000-square-foot office building under WELL v1.0 might cost \$50,000. That doesn't include the cost of the construction and design features to meet the standard.

Why do we need another building standard?

Everyone from leading employers to public health officials to educators have come to realize that the build environment has an enormous impact on our health and well-being. We spend 90% of our time indoors. If indoor spaces don't provide the environmental conditions our bodies require, our physical, emotional and mental health pays the price – and with it our productivity, cognition, creativity and morale. In fact, the spaces we inhabit at work, home and elsewhere may have a bigger influence on our overall health than our lifestyle and health habits, genetics or medical care.

While we have standards and model codes that focus on safety and security, energy conservation and sustainability, WELL bills itself as the first comprehensive, evidence-based international standard devoted to protecting and improving all aspects of human health and wellness. The WELL website has extensive research and case studies on the impacts that organizations have seen once they have moved into WELL-certified spaces.

DETERMINANTS OF POPULATION HEALTH



What changed between WELL v1.0 and v2.0?

Concerns about the original WELL Standard's high cost, rigid requirements and lack of suitability to existing buildings and some other structures led to the creation of WELL Standard v2.0, piloted in 2018 and now replacing v.1.0. Changes included a subscription model allowing installment payments, adaptation of metrics by building type and region, "crosswalks" allowing credit for other certifications, more alternative pathways for meeting requirements and simplified scoring.

WELL v1.0 will remain open for new registrants for some time. But since new applicants are more likely to pursue certification under WELL 2.0 than its more inflexible and expensive predecessor, the information below will primarily apply to WELL v2.0.

What does the WELL Standard cover?

WELL v2.0 covers 10 concept areas (see graphic) with mandatory Preconditions and Optimizations in each. The detailed requirements under each of these Features address virtually every environmental and design feature that could impact employee well-being.

Projects must meet the Preconditions in every concept area to earn WELL Silver Certification. Projects that also fulfill at least 40% of the Optimization features are awarded Gold Certification, and those that satisfy at least 80% of Optimization features win a Platinum Certification. If a building's interior spaces will be built out by third-party tenants, the WELL Core Certification is a distinct certification of features for those areas of shell buildings under owner control.

Requirements under WELL v2.0 are grouped under 10 concept areas instead of the original seven (Air, Water, Nourishment, Light, Fitness, Comfort, Mind). Within these categories are 23 mandatory Preconditions and 94 available Optimizations.

 <p>AIR</p> <ul style="list-style-type: none"> • 14 features • 4 preconditions • 10 optimizations 	 <p>WATER</p> <ul style="list-style-type: none"> • 8 features • 3 preconditions • 5 optimizations 	 <p>NOURISHMENT</p> <ul style="list-style-type: none"> • 12 features • 2 preconditions • 11 optimizations 	 <p>LIGHT</p> <ul style="list-style-type: none"> • 8 features • 2 preconditions • 6 optimizations 	 <p>MOVEMENT</p> <ul style="list-style-type: none"> • 12 features • 2 preconditions • 10 optimizations
 <p>THERMAL COMFORT</p> <ul style="list-style-type: none"> • 7 features • 1 precondition • 6 optimizations 	 <p>SOUND</p> <ul style="list-style-type: none"> • 5 features • 1 precondition • 4 optimizations 	 <p>MATERIALS</p> <ul style="list-style-type: none"> • 14 features • 3 preconditions • 11 optimizations 	 <p>MIND</p> <ul style="list-style-type: none"> • 15 features • 2 preconditions • 15 optimizations 	 <p>COMMUNITY</p> <ul style="list-style-type: none"> • 16 features • 3 preconditions • 13 optimizations

Most customers focus on bottom-line cost and payback. How is a premium certification like WELL relevant to them?

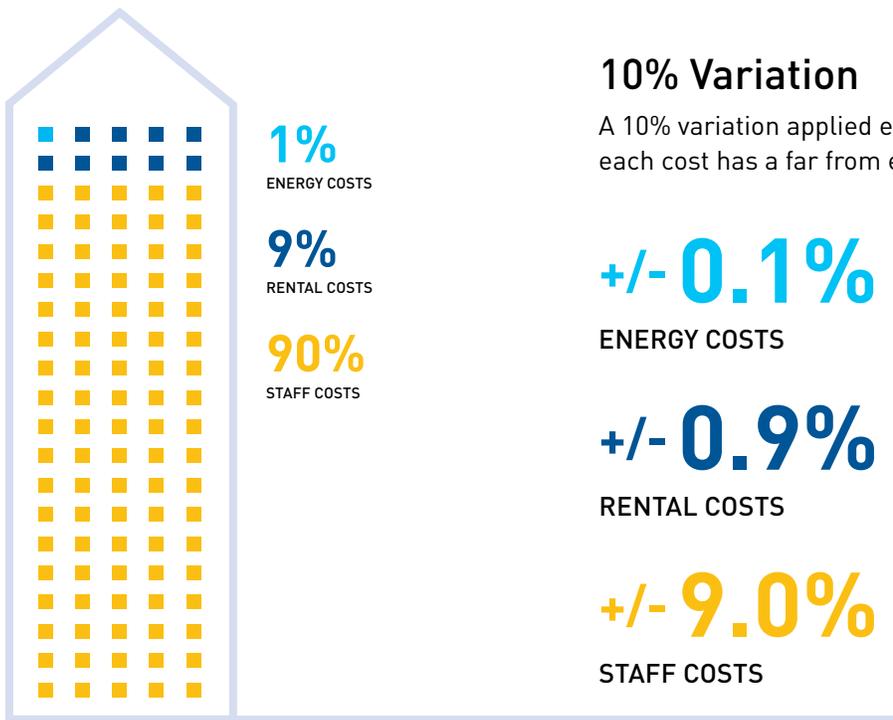
Twenty years ago, everyone asked the same thing about LEED certification. Today, LEED standards have been applied to more than 90,000 projects and have been emulated by model building codes worldwide, with 2.2 million additional square feet LEED-certified each day.¹ While WELL projects number less than 1,500, many architects and designers are asked to design to the WELL standard even on projects that aren't pursuing certification. That's because like LEED, the value proposition is strong.

In fact, some hard-nosed bottom-line companies are pursuing WELL certification and similar initiatives, because there is now plenty of field research and case studies showing that money invested to make employees happier, healthier and more comfortable pays off in real-dollar savings that are much greater than the payback for investments in energy conservation or space utilization.

A few examples:

- **Increased productivity:** The American Society of Interior Designers said it had achieved a 16 percent productivity gain after moving into its WELL-certified headquarters.²
- **Improved employee satisfaction and retention:** After two years in a WELL-certified building, one firm in the UK reports a 50% reduction in absenteeism and a 27% reduction in staff turnover for an annual savings of \$260,000 US.³
- **Improved desirability and value of commercial real estate:** Buildings with health and well-being features such as those promoted by the WELL standard can command up to a 20% rent premium over the market rate, as well as reap operational savings.⁴

TYPICAL BUSINESS OPERATING COSTS¹



¹ <https://new.usgbc.org/leed>

² How Healthy Is Your Office?, July 31, 2018, The New York Times

³ Well ahead: Cundall applies Well Building Standard to Birmingham office, March 2018, CIBSE Journal

⁴ Is WELL Certification Worth It for Developers?, Jul 10, 2017; National Real Estate Investor

What does WELL say about lighting?

The WELL Standard defines the intent of the Light concept: "Promotes exposure to light and aims to create lighting environments that are optimal for visual, mental and biological health."⁵ This includes providing illumination guidelines to minimize disruption to the body's circadian system, enhance productivity and provide appropriate visual acuity.

The original WELL standard had four lighting Preconditions and seven Optimizations. WELL v2.0 has two lighting Preconditions and six Optimizations.

WELL STANDARD v2.0: LIGHTING CONCEPT – FEATURES	
Preconditions (Mandatory)	Summary
Feature L01: Light Exposure & Education	Provide access to indoor light exposure and light education.
Feature L02: Visual Lighting Design	Provide visual comfort and enhance acuity for all users through electric lighting.
Optimizations	Summary
Feature L03: Circadian Lighting Design	Support circadian health through interventions using electric lighting.
Feature L04: Glare Control	Minimize visual discomfort caused by glare from daylight and electric light.
Feature L05: Enhanced Daylight Access	Support circadian and psychological health through indoor daylight exposure and outdoor views.
Feature L06: Visual Balance	Create lighting environments that enhance visual comfort.
Feature L07: Electric Light Quality	Enhance visual comfort and minimize flicker using electric lighting.
Feature L08: Occupant Control of Lighting Environments	Provide individuals with access to lighting environments that can be customized to their requirements.

What are the requirements for WELL v2.0 Feature L01: *Light Exposure and Education*?

The first WELL v2.0 Lighting Precondition requires projects to:

- Ensure appropriate light exposure in indoor environments by using daylighting or electric lighting strategies
- Encourage users to seek light exposure on their own by providing users with education about the importance of light for health

Access to appropriate levels of light in indoor environments can be achieved through building design, space layout and lighting design. Windows, atriums and skylights are design features that can be utilized to increase daylight in a space. The interior layout of the space also has an impact on the daylight exposure received by users; for example, conference rooms can be added to the center of the floor plate so that regularly occupied spaces have daylight exposure. Lighting strategies using electric lighting can be utilized to achieve required light exposure.⁶

What about Feature L02: *Visual Lighting Design*?

The second WELL v2.0 Lighting Precondition requires projects to:

- Provide appropriate illuminances on work planes for regular users of all age groups
- Take into account light levels required for the tasks performed in the space

⁵ This statement and the following descriptions of WELL v2.0 preconditions and Optimizations are excerpted from material available on the WELL v2.0 website.

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While developing a lighting strategy to accommodate the visual acuity of users, it is critical to take into account the tasks conducted as well as the age of the users. Projects may refer to published recommendations by lighting associations or authorities on using electric lighting design strategies for light levels required on the work plane. Lighting recommendations published by authorities provide a range of lighting levels for different age groups and tasks.

What are the optional lighting features for Well v2.0?

In the WELL world, optional lighting features are known as Optimizations. The WELL v2.0 standard has six of these. As mentioned earlier, these would count toward the overall number of Optimizations that a project must meet across all seven concepts to earn a Gold or Platinum certification.

Each Optimization feature addresses an important aspect of light and lighting that contributes to human comfort and wellness. Wherever possible, the requirements of the Standard are presented in terms of specific values and metrics that are already familiar tools to architects, lighting designers and specifiers.

Of special note is Feature L03: Circadian Lighting Design. While this Feature was a (mandatory) Precondition in WELL v1.0, in WELL v2.0, it is an Optimization. However, maintenance of healthy circadian function is a core intention of the WELL Light Concept across all preconditions and features, because so many elements of lighting can interact to impact the circadian cycle.

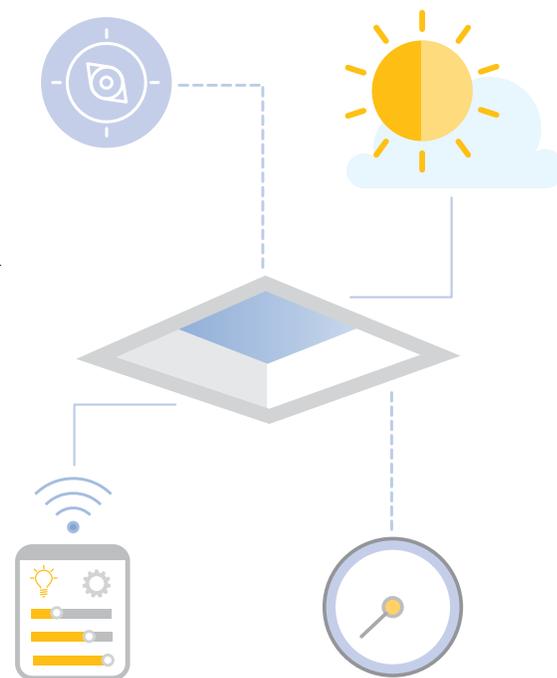
How can Cree solutions help customers meet the WELL standard or create environments that embrace WELL values?

When you look at Cree's product portfolio of luminaires for commercial indoor environments, SmartCast® Technology, and the potential applications for Cree's new Cadian™ dynamic skylight, Cree solutions seem almost custom-made to fulfill WELL requirements.

- Many Cree lighting products help lighting designers and end users meet or exceed WELL requirements right out of the box around such specifications as light levels and contrast ratios, glare control, visual comfort, acuity and color accuracy, dimming and color tuning, and user control.
- Cree lighting controls, especially those powered by SmartCast® Technology, simplify the process of shifting the color temperature of tunable white LEDs to track with natural daylight across the day – a central WELL requirement to maintain circadian health. SmartCast® Technology and SimplySNAP-powered controls help meet other WELL requirements too, such as setting up discrete lighting zones, task-tuning light levels and giving users preferential control.
- Finally, if you set out to design the ideal luminaire to help satisfy the goals of WELL's Light Concept, you'd wind up with Cree's Cadian™ dynamic skylight. WELL calls for the ample use of daylight and natural light. When that's impossible or impractical, WELL specifies the use of artificial lighting in a way that closely mimics the light values and circadian impact of natural light. That's precisely the value proposition of the Cadian™ experience.

In fact, if you read the WELL Light Concept requirement, you'll realize that the Cadian™ dynamic skylight in new and retrofit projects can help organizations meet both WELL Light Preconditions and all six Light Optimizations.

You might call that a job well done.



Visit lighting.cree.com/smartcast or contact a Cree lighting representative to learn more.