



ICCCFO Spring Conference

Health, Wellness, Your Building and You:

WELL Building Standard Primer

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2001



Chicago City Hall / Green Roof



Woodstock North High School District 200 / Accessible green roof over science Lab



Joliet Junior Community College / Campus Center / Accessible green roof garden



Moraine Valley Community College / Southwest Education Center / Accessible green roof garden and educational space



REGISTERED



REGISTERED



what's next?

2017



sustainability & energy
resilience & adaptation
health & wellness



REFERENCE
GUIDE FOR
BUILDING
DESIGN AND
CONSTRUCTION



U.S. GREEN BUILDING COUNCIL

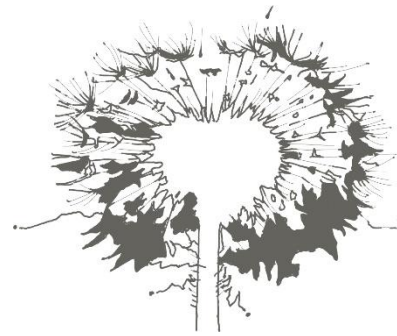


**LIVING
BUILDING
CHALLENGESM
3.1**

**A Visionary Path to a
Regenerative Future**



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INTERNATIONAL
LIVING FUTURE
INSTITUTESM



THE
WELL
BUILDING STANDARD®

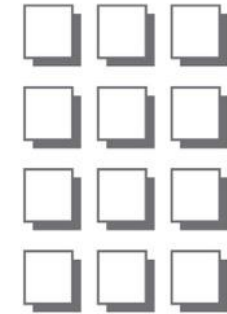
VERSION 1.0



IWBI



GBCI



**GREEN BUSINESS®
CERTIFICATION INC.**



+



Levels of WELL Certification



WELL Certification Process



THE WELL BUILDING STANDARD®

v1 with May 2016 addenda



WELL BUILDING STANDARD® FEATURES MATRIX

This table shows which features are Preconditions and Optimizations for the different typologies of the standard for commercial and institutional offices. Refer to the tables in the beginning of each concept for details about the applicability of specific parts.

	Core and Shell	New and Existing Interiors	New and Existing Buildings
Air			
01	P	P	P
02	P	P	P
03	P	P	P
04	P	P	P
05	P	P	P
06	P	P	P
07	P	P	P
08	P	O	P
09		P	P
10	P		P
11	P	P	P
12	P		P
13		O	O
14	O	O	O
15	O	O	O
16		O	O
17	O	O	O
18		O	O
19	O	O	O
20	O	O	O
21		O	O
22		O	O
23	O	O	O
24	O	O	O
25		O	O
26		O	O
27		O	O
28		O	O
29		O	O
Water			
30	P	P	P
31	P	P	P
32	P	P	P
33	P	P	P
34	P	P	P
35		O	O
36	O	O	O
37	O	O	O

INTENT

The WELL Building Standard for Air promotes clean air through reducing or minimizing the sources of indoor air pollution, requiring optimal indoor air quality to support the health well-being of building occupants.

AIR FEATURE LEVEL MATRIX

	Core and Shell	New and Existing Interiors	New and Existing Buildings
01 AIR QUALITY STANDARDS			
1: Standards for Volatile Substances	P	P	P
2: Standards for Particulate Matter and Inorganic Gases	P	P	P
3: Radon	P	P	P
02 SMOKING BAN			
1: Indoor Smoking Ban	P	P	P
2: Outdoor Smoking Ban	P	-	P
03 VENTILATION EFFECTIVENESS			
1: Ventilation Design	P	P	P
2: Demand Controlled Ventilation	P	P	P
3: System Balancing	-	P	P
04 VOC REDUCTION			
1: Interior Paints and Coatings	P	P	P
2: Interior Adhesives and Sealants	P	P	P
3: Flooring	P	P	P
4: Insulation	P	P	P
5: Furniture and Furnishings	P	P	P
05 AIR FILTRATION			
1: Filter Accommodation	P	P	P
2: Particle Filtration	P	P	P
3: Air Filtration Maintenance	P	P	P
06 MICROBE AND MOLD CONTROL			
1: Cooling Coil Mold Reduction	P	P	P
2: Mold Inspections	P	P	P
07 CONSTRUCTION POLLUTION MANAGEMENT			
1: Duct Protection	P	P	P
2: Filter Replacement	P	P	P
3: Moisture Absorption Management	P	P	P
4: Dust Containment and Removal	P	P	P
08 HEALTHY ENTRANCE			
1: Permanent Entryway Walk-Off Systems	P	O	P
2: Entryway Air Seal	P	O	P
09 CLEANING PROTOCOL			
1: Cleaning Plan for Occupied Spaces	-	P	P

01

AIR QUALITY STANDARDS

Pollutants generated indoors can lead to a variety of symptoms and health conditions. Volatile organic compounds (VOCs), combustion byproducts and airborne particulate matter are known to trigger nausea, headaches, asthma, respiratory irritation and allergies. While ambient outdoor air is often better quality, natural ventilation methods, operable doors and windows, and general building envelope infiltration can diminish indoor air quality if external air quality parameters are poor.

This feature requires an assessor to complete a performance test after occupancy as an independent means of verifying that the building, whether naturally or mechanically ventilated, is meeting critical air quality requirements.



Cardiovascular
Endocrine
Immune
Nervous
Respiratory

Core and Shell New and Existing Interiors New and Existing Buildings

PART 1: STANDARDS FOR VOLATILE SUBSTANCES

The following conditions are met:

- a.¹ Formaldehyde levels less than 27 ppb.
- b.¹ Total volatile organic compounds less than 500 µg/m³.

P	P	P
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PART 2: STANDARDS FOR PARTICULATE MATTER AND INORGANIC GASES

The following conditions are met:

- a.² Carbon monoxide less than 9 ppm.
- b.² PM_{2.5} less than 15 µg/m³.
- c.³ PM₁₀ less than 50 µg/m³.
- d.³ Ozone less than 51 ppb.

P	P	P
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PART 3: RADON

The following conditions are met in projects with regularly occupied spaces at or below grade:

- a.⁴ Radon less than 4 pCi/L in the lowest occupied level of the project.

P	P	P
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air

Create **optimal indoor air quality** to support the health and well-being of building occupants.

air

Create **optimal indoor air quality** to support the health and well-being of building occupants.



An underwater photograph showing a large, cylindrical, white water filter in the foreground, surrounded by various pieces of trash and debris. In the background, several people are swimming in the water. The overall scene suggests a focus on water quality and pollution.

water

Promote **safe and clean water** through proper filtration and other methods, and require the appropriate quality of water for various uses.

water



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water



water

A photograph of a water treatment facility. In the background, there is a long, low building with a corrugated metal roof. Several large, cylindrical, stainless steel water storage tanks are mounted on metal frames along the building. In the foreground, a body of water is visible, with several large, light-colored pipes extending from the land into the water. The sky is clear and blue.

water

A photograph of a stream with a thick layer of bright green algae covering the water's surface. A person wearing a dark long-sleeved shirt and blue jeans is crouching on the rocky bank, holding a clear plastic water bottle and dipping it into the water. The background shows lush green vegetation and a rocky shoreline.

water



nourishment

Require the availability of fresh, wholesome foods, limit unhealthy ingredients and **encourage better eating habits** and food culture.



A vibrant display of fresh vegetables including broccoli, bell peppers, zucchini, and tomatoes. The vegetables are arranged in a way that creates a sense of abundance and freshness. The colors are bright and varied, from deep greens to bright yellows and reds.

nourishment

Require the availability of fresh, wholesome foods, limit unhealthy ingredients and **encourage better eating habits** and food culture.

nourishment



College of Lake County/ Student Café with abundant daylight and views to nature



light

Provide illumination guidelines to **minimize disruption to the body's circadian system**, enhance productivity and provide appropriate visual acuity where needed. It also requires specialized lighting systems designed to increase alertness, enhance occupant experience and **promote sleep**.

light



Moraine Valley Community College / Southwest Education Center / Classroom with natural light, views and daylight harvesting

light

A large, modern student café with a circular skylight and large windows, featuring students sitting at tables. The interior is bright and airy, with a high ceiling and a curved wooden beam structure. The skylight is a large, multi-faceted geometric shape that allows natural light to filter in. The windows are floor-to-ceiling, providing a view of the outdoors. Several students are seated at tables, some working on laptops. The overall atmosphere is clean, bright, and conducive to learning and social interaction.

Joliet Junior College / Campus Center / Student Café with abundant daylight and views to nature

light



Joliet Junior College / Campus Center / Boardroom with abundant daylight and views to nature

comfort



Establish requirements designed to **create distraction-free, productive and comfortable indoor environments.**



fitness

Promotes the **seamless integration of physical activity into everyday life** by providing the opportunities and support for an active lifestyle and **discouraging sedentary behaviors.**

mind



Require design, technology and treatment strategies designed to provide a **physical environment that optimizes cognitive and emotional health.**





air
water
nourishment
light
fitness
comfort
mind



air
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nourishment
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fitness
comfort
mind

thank you!

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