Agenda

- Wellness in the built environment
- The WELL Building Standard
- Fitwel
- Q&A
We spend 90% of our time **indoors**.
Unlock **human potential** through your building.
### Occupant health outcomes:

The physical office factors influence the health of occupiers (health outcome) which can be measured or evaluated.

**Health:**
- Headaches
- Eye strain/damage
- Skin irritation
- Infections
- Fatigue
- Season Affective Disorder
- Asthma & breathing disorders
- Stress & depression
- Other physical complaints, e.g. backache
- Other serious disorders, including cardio vascular, etc.

### Occupant well-being and perception outcomes:

Health is an important element of well-being, but an occupant’s sense of well-being is also comprised of their perception of numerous factors, including how productive they think they are:
- Perceived physical health
- Perceived psychological health
- Perceived productivity
- Perceived office environment
- Perceived organizational culture

### Organizational or financial outcomes:

The office environment can have a direct impact on occupant productivity, in which health and well-being is often a compounding factor. This ‘outcome’ for the organization can be measured or evaluated in the following ways, all of which have financial implications for the employer:

**Productivity:**
- Absenteeism
- Staff turnover/retention
- Revenue
- Medical Costs
- Medical complaints
- Physical complaints
- Task efficiency & deadlines met
Invest in People for Return on Investment

PRODUCTIVE SALARIES & BENEFITS 86.3%
ENERGY 0.8%
RENT 8.9%
ABSENTEEISM 2.7%
PRESENTEEISM 1.3%

SOURCES: US DEPARTMENT OF LABOR 2010, BLS 2011; BOMA 2010
90% of employees admitted that their attitude about work is adversely affected by the quality of their workplace environment.
50% of U.S. employers with 50 or more employees, or $\frac{3}{4}$ of the workforce, offer wellness promotion initiatives.  

49% of U.S.-based companies say health and productivity programs are essential to their company strategy. 

“91% of employers report offering health and wellness programs for reasons beyond medical cost saving.” 

“Within the next 3-5 years, we can expect 99% of employers to offer health improvement and wellness programs.” 

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1 Workplace Wellness Programs Study. 2013. Rand Corporation  
4 Aon Hewitt 2013 Healthy Care Survey. Aon plc.
WELL IS FOR PEOPLE
The WELL Building Standard

- Provides a model for design and construction to integrate human health features in the built environment

- Is a performance-based system to measure impact of built environment on human health
Working together to optimize building performance for *human health* and our *environment*.
WELL is like a **NUTRITION LABEL** for your building, providing transparency on the quality of our built environment.
Levels of WELL Certification
The WELL Differentiator

Data Driven Environmental Assessments Through Onsite Performance Verification:

- Site Visit
- Performance Tests
- WELL Report
Seven Concepts

- Air
- Water
- Nourishment
- Light
- Fitness
- Comfort
- Mind
WELL Features evaluate ongoing aspects of building performance and occupant behavior to support the operations and maintenance of healthy buildings throughout the building lifecycle.
Body Systems Applied to WELL Features

A simple way to express the built environment’s complex impact on the human body

Cardiovascular
Digestive
Endocrine
Immune
Integumentary
Muscular
Nervous
Reproductive
Respiratory
Skeletal
Urinary
air

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

material selection · ventilation · filtration · moisture control · maintenance & operations · source of concern protection · construction processes
Productivity improvements of 8-11% are not uncommon as a result of better air quality.

- World Green Building Council, 2015\(^1\)

Concentrations of some pollutant indicators can be 2 to 5 times higher indoors compared to outdoors.

- Environmental Protection Agency, 2012\(^2\)

SOURCES OF INDOOR AIR QUALITY CONCERN

- Inadequate Ventilation: 52%
- Contamination from Inside Building: 13%
- Contamination from Outside Building: 4%
- Microbial Contamination: 5%
- Contamination from Building Fabric: 10%
- Unknown Source: 16%

water

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

performance testing · treatment · maintenance & operations · hydration promotion
“Declining water quality has become a global issue of concern as human populations grow, industrial and agricultural activities expand, and climate change threatens to cause major alterations to the hydrological cycle.”

Being dehydrated by just 2% can impair performance in tasks that require attention, psychomotor and immediate memory skills, as well as assessment of the subjective state.

It’s been estimated that up to 80% of the U.S. adult population goes through their normal day in at least a mildly dehydrated state.

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1Policy Brief, UN Water, 2011
3Avoid Dehydration in the Workplace, Mike Marcovsky, ISHN, 2009.
nourishment

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

healthy portions · mindful eating · food production access to healthy foods · food preparation allergies & alternatives · transparency environmental cues & influencers
Eating unhealthily is linked with a 66% increased risk of loss of productivity\(^1\)

Adults with the greatest knowledge of nutrition are 25% more likely to eat a healthy diet. \(^2\)

Greater fruit and vegetable intake is associated with a 27% lower odds of depression\(^3\)

\(^1\)Population Health Management, Vol. 17 2014
\(^3\)The association between fruit and vegetable consumption and mental health disorders: evidence from five waves of a national survey of Canadians. McMartin, SE, FN, Jacka and Colman, I. 3-4, s.l.: Preventative Medicine, 2013 Vol. 56.
light

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

circadian design · daylighting · glare control · color quality · activity-based lighting levels · visual acuity
Light

Focused work increased by 15% for those who had window views.¹

Lack of access to natural light in workplaces and schools possess a 26% health hazard.²

Lack of natural light is considered the number one workplace health hazard by 36% of psychologists and psychiatrists.²

fitness

Allow for the seamless integration of exercise and fitness into everyday life by providing the physical features and components to support an active and healthy lifestyle.

exterior active design · interior active design · activity-based working · physical activity spaces · awareness and habits · physical activity programs
Our environment is changing how we live.

Physical inactivity is the 4th leading risk factor for mortality.
“Rare exercise is linked with **50%** increased risk of low productivity.”\(^1\)

Healthy workplaces can lead to improved employee productivity, reduced absenteeism and staff turnover, less accidents, fewer insurance and worker compensation claims, as well as lower costs related to retirement.\(^2\)

\(^1\)Population Health Management, Vol. 17, 2014  
\(^2\)Heart and Stroke Foundation. Walk BC British Columbia Recreation and Parks Association. [Online] [Cited: January 28, 2015.]  
comfort

Establish requirements to create a distraction-free, productive and comfortable indoor environment.

*ergonomic · acoustics · thermal · olfactory · accessibility*
Comfort

Thermal Considerations:
• 4% reduction in performance at warmer temperatures.\(^1\)
• 6% reduction in performance at cooler temperature.\(^1\)

Acoustic Considerations:
• 66% drop in performance when exposed to distracting noise.\(^2\)

mind

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

stakeholder engagement · transparency · wellness awareness & protocols · connection to nature · adaptable spaces · altruism
Mind

Biophilia
After 40-second microbreak, subjects who see green roofs, instead of concrete roofs, demonstrate higher concentration levels.

- 6% increase in concentration levels for those who saw the green roof.
- 8% drop in concentration levels for those who saw the concrete roof.

The Value Proposition of WELL: Office

- Improved Environment for Employees and Clients
- Return on Investment
- Industry Leadership + Corporate Communications
- Increased Productivity
- Improved Employee Satisfaction + Retention
The Value Proposition of WELL: Multifamily Residential

Pilot Program

• Improved Environment for Residents

• Recognition + Market Differentiation for Property

• Increase in Value of Property

• Positive Impact on Health of Residents

• Improved Energy + Quality of Sleep for Residents
The Value Proposition of WELL: Retail

Pilot Program

- Improved Environment for employees
- Return on Investment
- Improved experience for customers
- Increased employee satisfaction + retention
- Increase of repeat customers
**Fitwel**

- There are no prerequisites that could be cost-prohibitive or unsuitable for a specific building type.
- Fitwel’s strategies are applicable and impactful in existing buildings. It can also be used as a roadmap for the design of new construction facilities.
- Fitwel certification is completed through a user-friendly and efficient web-based tool, increasing the cost-effective nature of the system.

**Health Impact Categories:**

- Impacts Community Health
- Reduces Morbidity + Absenteeism
- Supports Social Equality for Vulnerable Populations
- Instills Feelings of Well-being
- Provides Healthy Food Options
- Promotes Occupant Safety
- Increases Physical Activity
# Fitwel Certification

## 12 Sections of the Certification:

<table>
<thead>
<tr>
<th>Location</th>
<th>Building Access</th>
<th>Outdoor Spaces</th>
<th>Workspaces</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cafeterias and Prepared Food Retail</td>
<td>Vending Machines and Snack Bars</td>
<td>Entrances and Ground Floor</td>
<td>Emergency Procedures</td>
</tr>
<tr>
<td>Water Supply</td>
<td>Stairwells</td>
<td>Indoor Environment</td>
<td>Shared Spaces</td>
</tr>
</tbody>
</table>

## The Fitwel Rating:

- **Fitwel 1-Star Rating**
  - Building has achieved a basic level of health promotion by incorporating evidence-based design and policy strategies that support the physical, mental, and social health of its occupants.

- **Fitwel 2-Star Rating**
  - Building has achieved an intermediate level of health promotion by incorporating evidence-based design and policy strategies that support the physical, mental, and social health of its occupants.

- **Fitwel 3-Star Rating**
  - The highest level achievable. Building incorporates an exemplary number of evidence-based design and policy strategies that support the physical, mental, and social health of its occupants.
Questions?