



Visioning: Goals

Workplace of the Future • Establish Project Goals • Set Priorities



HEALTH & WELLNESS

protocol // material selection // quiet rooms // biophilia



WORKSTYLES

hospitality + residential hybrid // private meeting spaces // impromptu meeting areas // designated pin-up space // open seating



FLEXIBILITY

private zones // quiet // active // open // design for ten years from now // add personal employee identity



TECHNOLOGY

webinar room // projection screen // standardization of technology



SUSTAINABILITY

thermal comfort of rooms // marquee offices for sustainable protocols



RESILIENCY

create multi-functional amenities for staging site //
refuge place // operations to accommodate employees //
create assurances



SOCIAL RESPONSIBILITY

materials that support other communities // messaging that demonstrates community outreach



ADVOCACY

encourage the right to practice in different platforms // communicate mission statement // engage the public // educate

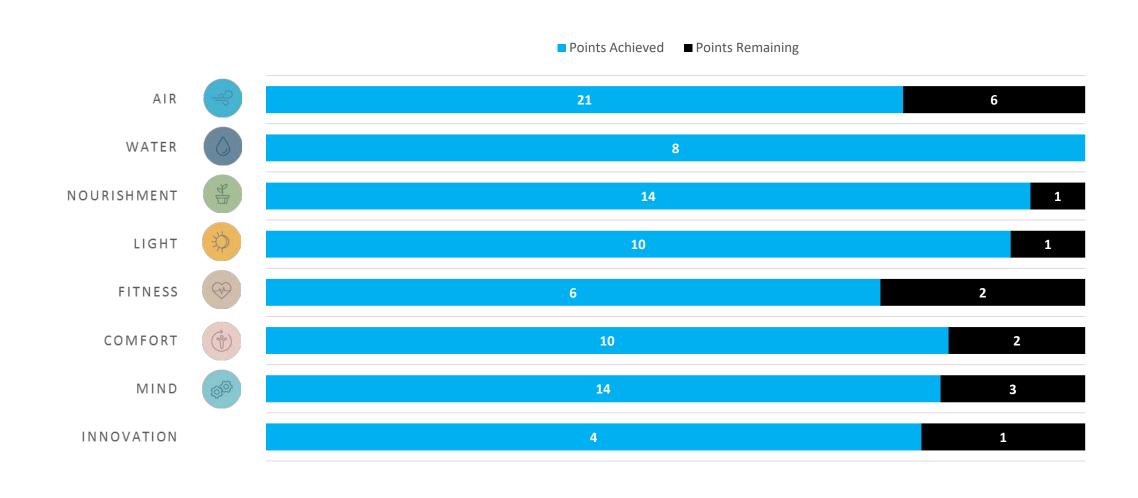


MISCELLANEOUS

nod to the past // representation of industry milestones



Occupant Health: WELL Platinum Certification v1.0





Occupant Health: LEED Platinum Certification v2009





Site Selection: Urban Context

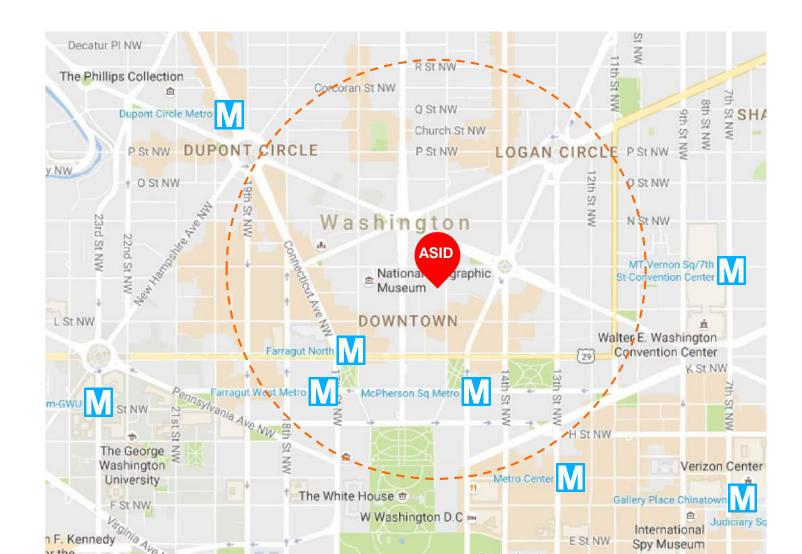
1152 15TH STREET, NW WASHINGTON, DC

Downtown

Metro Accessible

Amenities

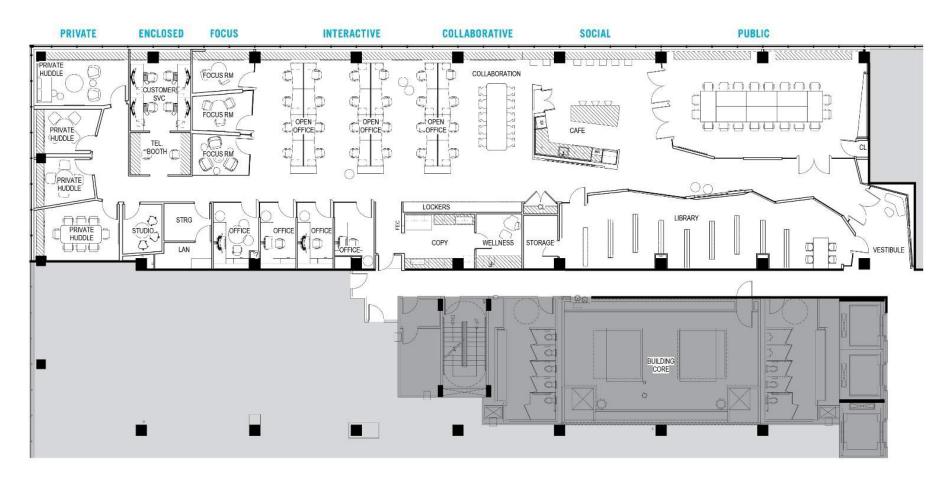
Walkable





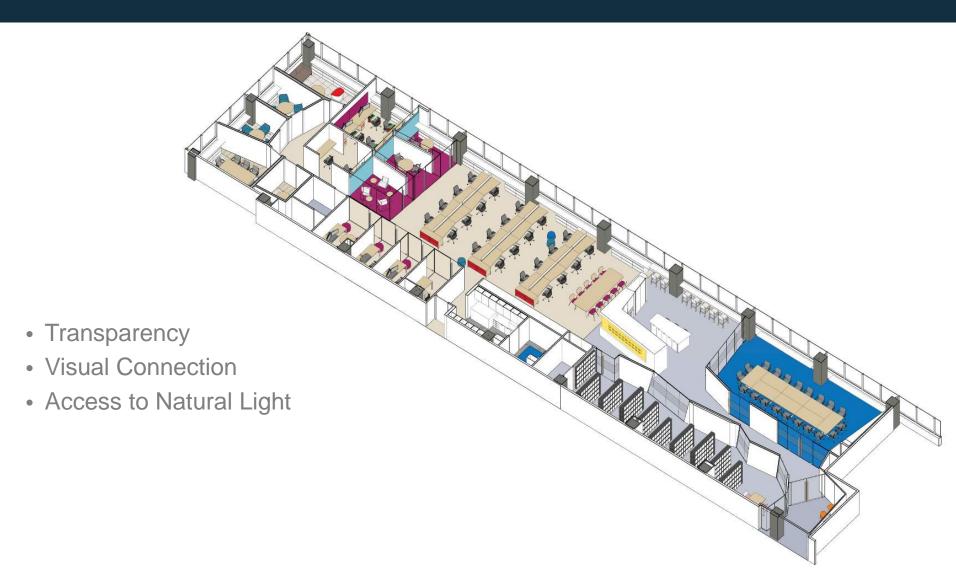
ASID Office: Organization

- Public to Private
 Various Workstyles
- Acoustic Comfort
- Unassigned Seats

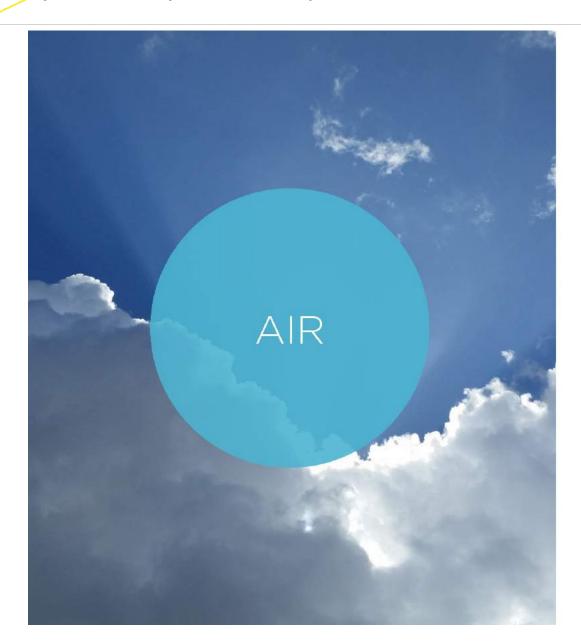




ASID Office: Organization







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



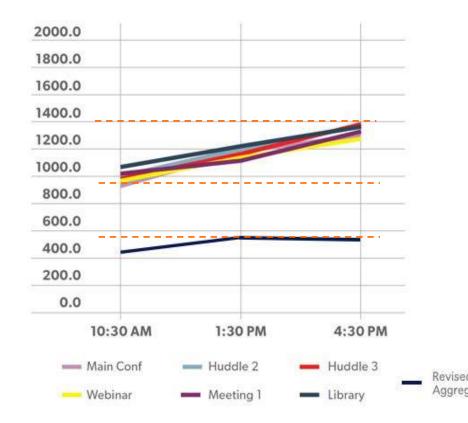
Healthy Space: CO₂ Levels

Post-Occupancy Study

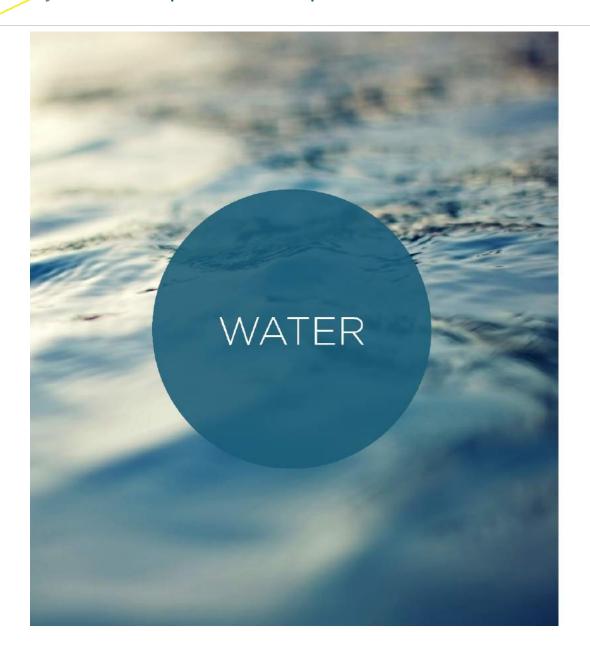
CO₂ BY TIME



CO₂, O₃ Sensors





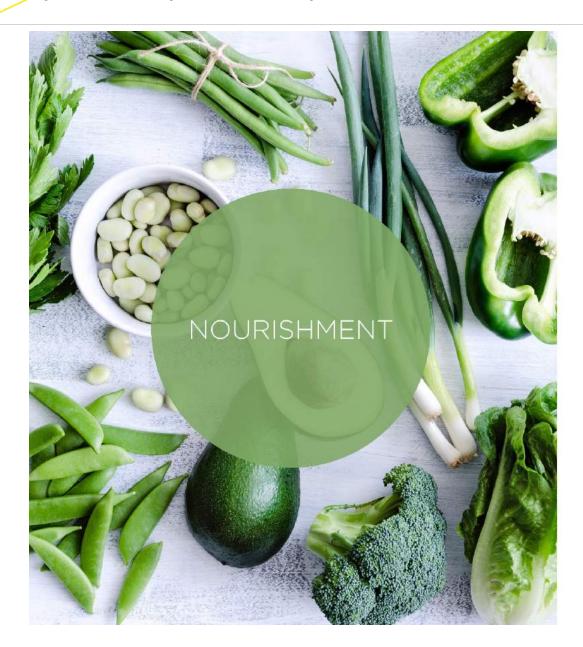


Promote safe and clean water through proper filtration and other methods, and require the appropriate quality of water for various uses.

performance testing · treatment · maintenance & operations · hydration promotion



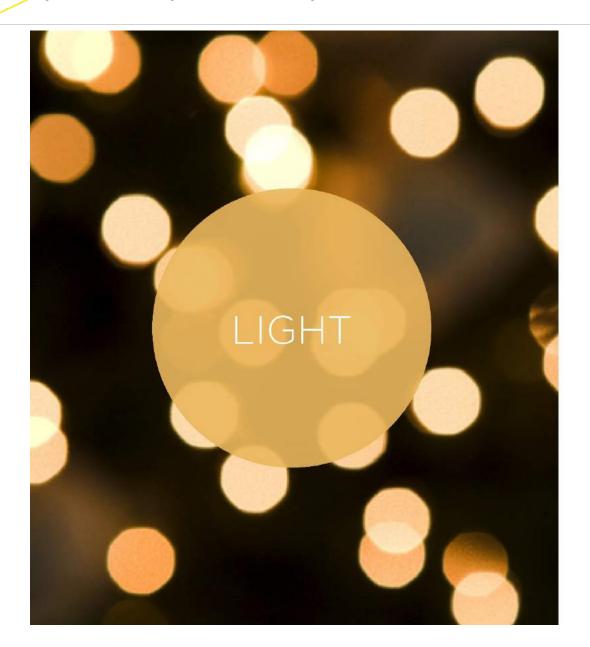




Require the availability of fresh, wholesome foods, limit unhealthy ingredients and encourage better eating habits and food culture.

healthy portions · mindful eating · food production access to healthy foods · food preparationallergies & alternatives · transparency environmental cues & influencers





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



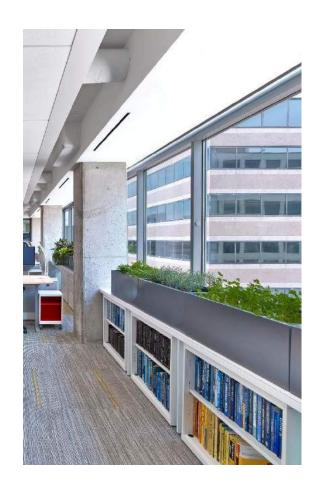
A CIRCADIAN RHYTHM IS ROUGHLY A 24 HOUR CYCLE IN THE PHYSIOLOGICAL PROCESSES OF LIVING BEINGS

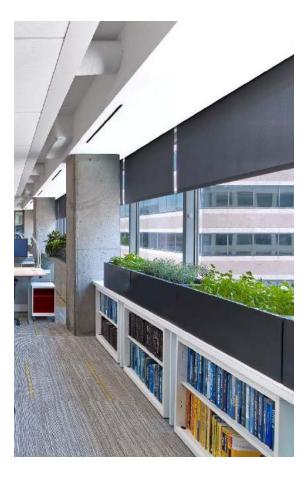






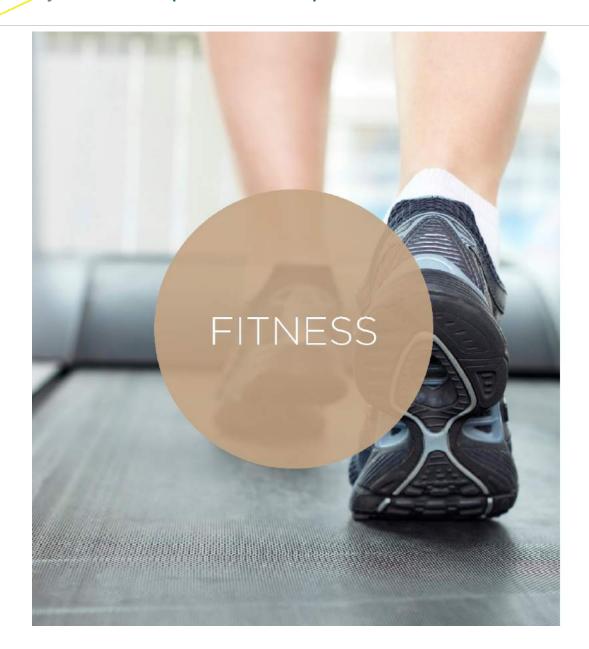
Ambient Environment: Automation









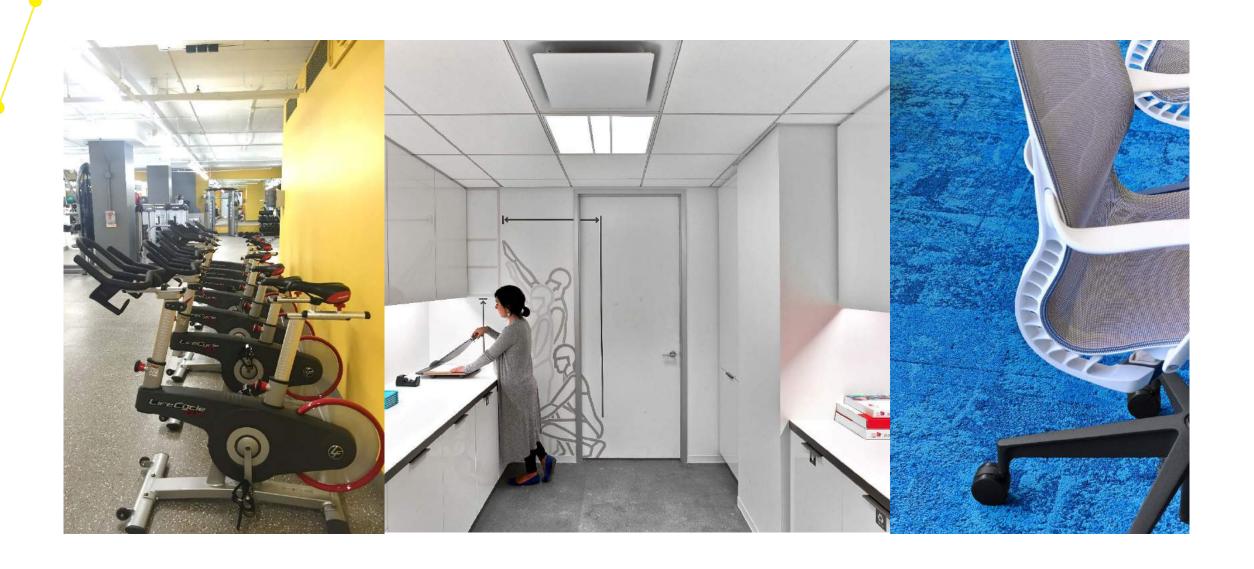


Allow for the seamless integration of exercise and fitness into everyday life by providing the physical features and components to support an active and healthy lifestyle.

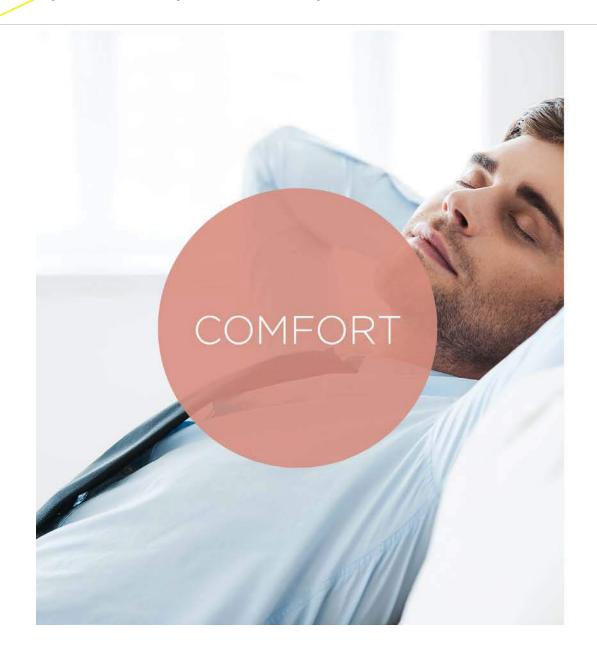
exterior active design · interior active design · activity-based working · physical activity spaces · awareness and habits · physical activity programs











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

ergonomic · acoustics · thermal olfactory · accessibility







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

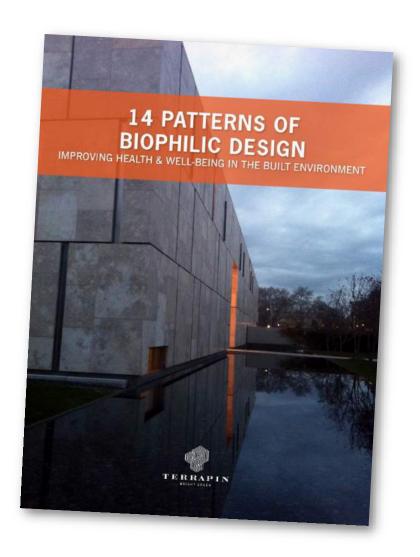


BIOPHILIA IS HUMANKIND'S INNATE BIOLOGICAL CONNECTION TO NATURE.



Wellness: Biophilia

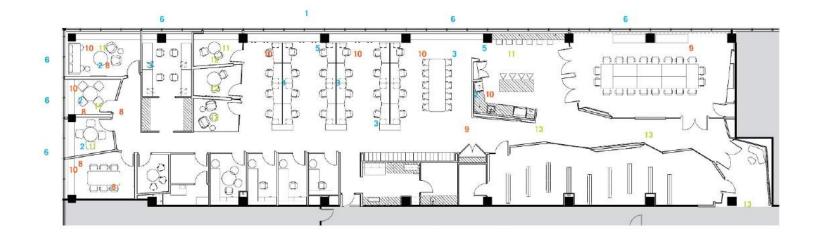
- 14 Patterns of Biophilic Design
 - Terrapin Bright Green
- Human Resources Equal 90% of Operating Cost
- Biophilic Design:
 - Reduce Absenteeism
 - Improve Productivity
 - Higher Rent





Wellness: Biophilia

- Biophilia Plan
- Diversity of Design Strategies
- Identifying Desired Responses



NATURE IN THE SPACE

Addresses the direct, physical and ephemeral presence of nature in a space or place. This includes plant life, water, sounds, scents and other natural elements.

NATURAL ANALOGUES

Addresses organic, non-living and indirect evocations of nature. This includes objects, shapes, sequences and patterns analogous to those found in nature.

NATURE OF THE SPACE

Addresses spatial configurations in nature. This includes our innate desire to be able to see beyond our immediate surroundings and fascination with obscured views and revelatory moments.

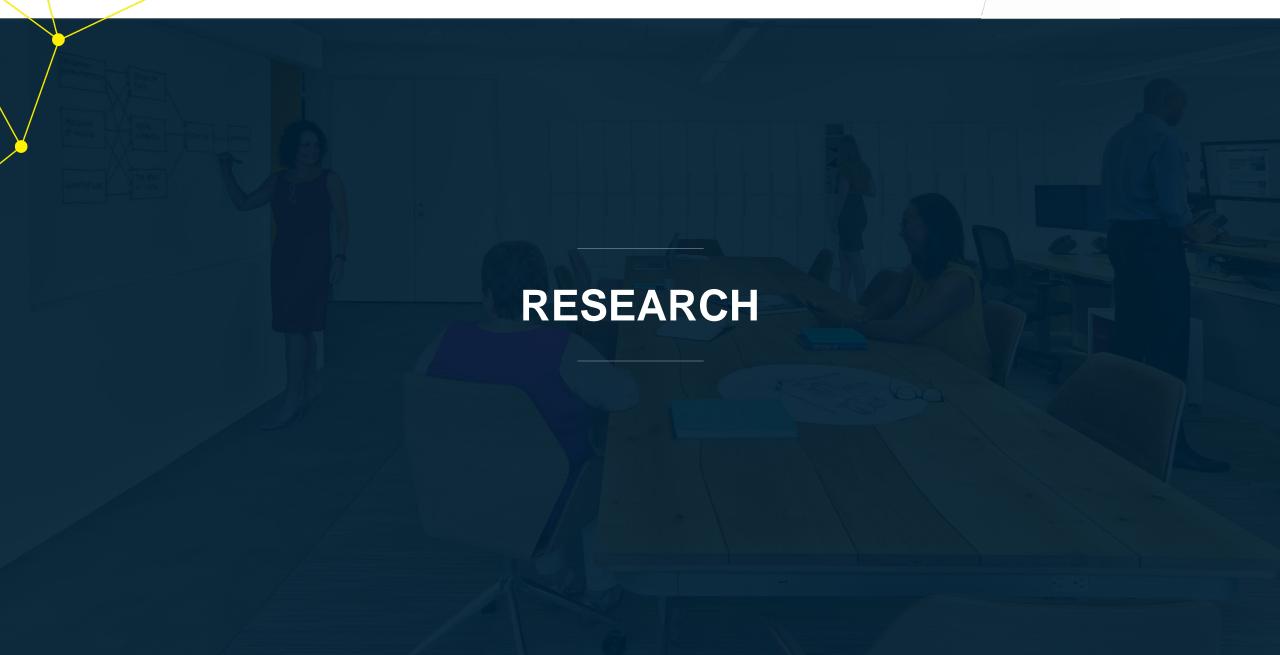














ASSESSMENT: Innovative Workplace



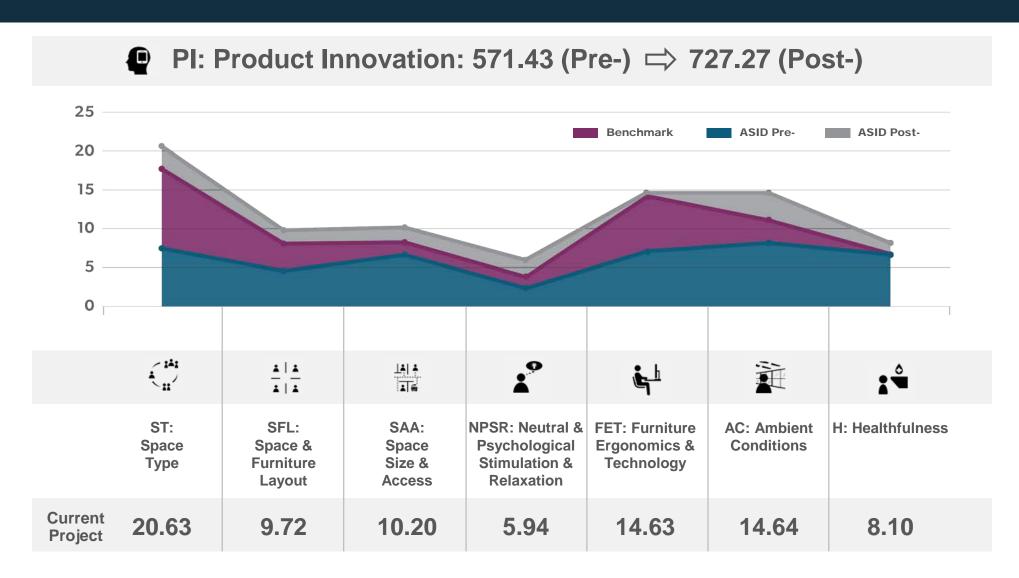
Key Performance Indicators of Knowledge Workplace Design Promoting Knowledge Worker Performance and Economic Competitiveness







Seven Key Indicators of Physical Environment Scores





Assessment: Workplace Dynamics

3C Design

Tools For Designing Connected, Collaborative, and Creative Workplaces



Social Sensing Technology







ACCELEROMETER
body movement
& posture

face-to-face interaction

BLUETOOTH proximity









Impact of Design: Proposed 3C Design Model

ENVIRONMENT

Satisfaction of

- Air Quality
- Light (Natural & Artificial)
- Noise
- Speech/Visual Privacy
- Ease of Interaction
- Furnishing Comfort
- Color/Texture
- Available Space
- Cleanliness



OUTCOME

- Job Satisfaction
- Turnover Intention
- Group Creativity
- Org. Productivity



Healthy Space: Healthy Workplace



Delos Applied Research Pilot Program

- WELL Building Survey
- Pre and Post-Occupancy Evaluation Longitudinal
- Onsite Performance Verification
- Focus on perceptions of workplace well-being and mental and physical health
- Psychometrically valid



Impact of Design: Performance & Health



Improvements

- Environmental satisfaction
 - Air, Physical comfort, Thermal comfort, Light, Acoustics,
 - Access to nature, Fitness, Water, Nourishment
 - Safety, Security
 - Sleep
 - Cleanliness, Maintenance
 - Workplace wellness policy
- Workplace Well-being scores
- Absenteeism scores (less absenteeism)
- Presenteeism
- Physical health
- Mental Health



Metrics: Data Gathering

- Obtain Real-Time Metrics:
 - Indoor Quality
 - Occupant Behavior
- Tracking:
 - Electrical Loads
 - Air Quality
 - Sound Levels
 - Quarterly Water Testing
 - Space Utilization
- Occupant Engagement





Thank You! Questions?



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