Successful Workplace Design

Engaging a Multi-Generational Workforce

Presented by
Powers Products Co.
AIA Course #:AIAPPC-SWD100
1 Learning Unit - HSW
77 Years of proven, SINGLE-SOURCE SERVICE

Unique combination of product & construction expertise
DESIGN – ASSIST SERVICES

120+ years of direct expertise

Daylight modeling

IECC, NFRC, ICC Code assistance

Design and layout expertise

BIM FAMILIES

Turn-key furnish + install pricing

PROJECT TOURS

CAD details

Local AHJ relationships + fire code expertise

Structural analysis assistance

Fire + Smoke Separation

Space Flexibility + Automation

Dynamic Glass Interiors

Daylighting

Connecting Interior + Exterior Space

Project-specific specifications

Owner training + annual testing + service
SPACE FLEXIBILITY/GLASS + AUTOMATION + INTERIOR/EXTERIOR CONNECTION

Product Manager – Dave Steele

- Leader in operable wall solutions (glass, opaque, decorative)
- Excellent sound separation - 56 STC for opaque, 45 STC for glass
- Manual or automated
- 40+ year partnership
• **ComfortDrive®** - Automated Self-Driving Panel System – Intelligent, motorized single panels (CompactLine® glass system)

• **Encore Automated** – Continuous panels up to 56 STC

• State-of-the-art safety systems
• Interior, frameless sliding glass door and office front systems
• No floor track; +/- 1/8” adjustment
• Synchronized bi-parting doors
• Office front glass systems
Elegant, cost effective office front system

- Sliding and pivot doors
- 5 week lead time
- 1-1/2” profile, highly adjustable
- Wide range of wood finishes

Product Manager – Brian Mackey

SPACE FLEXIBILITY/GLASS + AUTOMATION + INTERIOR/EXTERIOR CONNECTION
**SPACE FLEXIBILITY/GLASS + AUTOMATION + INTERIOR/EXTERIOR CONNECTION**

Product Manager – Brian Mackey

- Simple, easy installation with high adjustability
- Extremely short lead time
- Pivot or sliding doors
- Very competitive cost
SPACE FLEXIBILITY/GLASS + AUTOMATION + INTERIOR/EXTERIOR CONNECTION

Product Manager – Dave Steele

- Interior/Exterior Folding and Sliding (pocketed or stacking) glass door systems
- Excellent thermal properties
- Minimal, clean design, with narrow stiles and rails for more glass
• Counter-weighted system; no overhead structure needed.
• Easy to operate, small motor required
• Up to 90'w x 30'h opening
• Best NFRC thermal performance in the industry
• Variety of claddings including glass (up to 1” thermal), metal, stone, wood
• Counter-weighted system
• Easy to operate, small motor required
• Up to 90'w x 30'h opening
• Best NFRC thermal performance in the industry
Lift & Slide door systems – European design and hardware set
Folding and multi-slide door systems
Versatile – Large doors, curved openings, low profile track with drain channels
Thermally broken – U-factor = 0.29
• Cross corridor security with egress
• CrossingGard Grille offers security and auto-open to fire alarm system
• Unique, decorative grille patterns
FIRE + SMOKE SEPARATION

Product Manager – Keith Lunsford

- Smoke separation at elevator hoistway
- Greatly reduce smoke evacuation requirements in atrium
- Horizontal and vertical acting smoke curtains
- Draft curtain solutions
FIRE + SMOKE SEPARATION
Product Manager – Keith Lunsford

- Wide-span opening protective solutions
- Fire-rated steel door (up to 3-hr) and curtain systems
- Fail-safe – doors close in event of alarm, power outage, motor failure
- High egress capabilities
- FEMA 361 certified/ICC 500 compliant solutions – sustained 240 psf/large missile
FIRE + SMOKE SEPARATION

Product Manager – Keith Lunsford

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- FEMA 361 certified/ICC 500 compliant solutions – sustained 240 psf/large missile
• Fully-integrated door system - all working hardware is pre-assembled
• Emergency service elevator lobby solution
• Conceal hardware improves aesthetics, performance, reduces tampering and vandalism
• Full-length adjustable leading edge allows for fine tuning
DAYLIGHTING
Product Manager – Ken Senour

• Leader in translucent daylighting systems
• Structural, thermally-broken grid core
• Museum quality daylight; colored face sheets and insulation; new grid patterns
• Energy Savings: R-value=4.3 standard; up to R20
• Weatherability
DAYLIGHTING

Product Manager – Ken Senour

- Turn-key canopy and skyroof solution; single source responsibility
- Aluminum box beam structure
- Free engineering and support-reaction calculations
- Integrates Kalwall translucent panels
• World’s leading skylight manufacturer
• VMS – Modular system; optional motorized shades and venting
• Dynamic Dome – Optically engineered with advanced water management
• SunTunnel – Tubular daylight device with optional daylight controller
Skyline Skylights
- Monumental skylight systems
- Local manufacturer of unit skylights

Kingspan Light+Air / Bristolite
- Broad selection of unit skylights
- Excellent thermal performance
AIA CES Quality Assurance

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LEARNING OBJECTIVES

- Designing spaces to attract and retain productive, creative and efficient employees
- Working well, the impact of biophilic design on worker health
- Privacy needs in the work environment
- Developing a cohesive community through collaborative flexible spaces
Successful Workplace Design

Evolution of the workforce

From “Mad Men” to Gen “Z”
Successful Workplace Design

Evolution of the workforce

Generation “Z”, the Builder Generation

• 71 million born between 1997-2015
• Culture heroes: innovators & entrepreneurs
• Aspirations: volunteering, environmental clubs, interest in where things are made
• Since birth their lives have been featured on Facebook!
• Command powerful tech tools, the iPad infants
• Connect through technology & real life experience
• Strive to bring craft and humanity into high-tech experiences
• Resist being labeled
• The oldest in this generation turns 21 in 2018!
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Evolution of the workforce

Millennials

- Represent nearly a third of the office-using employment base
- 75% of the US workforce by 2025
- Want the best of both worlds, transportation lines, walkability, high-quality real estate and live/work amenities
- Look for meaning, more than a paycheck
- Wellness programs tailored to their needs
- Collaborative work environment
- Fluid spaces that can accommodate change
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Evolution of the workforce

Gen “X”

- 34% of the workforce in 2015
- Sandwiched between the Boomers and Millennials
- Dominant generation within the labor workforce was short lived – just 3 years.
- Born between 1965 & 1979 oldest now 50
- Love social media. 81% have Facebook accounts!
- 61.1 million in US population
- Currently has the biggest disposable income
- 41% consider themselves entrepreneurs
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Evolution of the workforce

Baby Boomers

• Working past normal retirement years
• 29% of the workforce in 2015
• Adapting to new technologies at a slower pace
• Provide “institutional” knowledge to the collective experience
• Privacy is preferred work environment
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Evolution of the workforce

“I just got comfortable with my work station!”

“We acquired another 6 month old startup!”

She turns 21 in 2018 and is working on her resume!

“I just got comfortable with my work station!”
Mobile technology + mobile workforce

Creative co-working strategies

Where we work

• Home
• Public spaces (Starbucks, restaurant, bars!)
• Transportation (plane, train, bus, Uber)
• Hotels
• Office
• In between spaces (lobbies, bus stops)
Mobile technology + mobile workforce
Creative co-working strategies

- Can the workplace accommodate various work styles and places?
- Design co-work environments that create experiences!
- Touch down spaces
- Private space for “heads down” work
- Trending toward reduction in square foot per employee
Mobile technology + mobile workforce
Creative co-working strategies
Work & Leisure
Can they coexist?

Google obviously thinks it works for them!
Work & Leisure
Can they coexist?

Let’s step outside!
Corporations understand the benefits of design criteria that:

- Promotes wellness
- Increases productivity
- Reduces absenteeism
- Attracts a well balanced workforce
- Provides a variety of “experiential” spaces
- Reduces operational expenses

The Spheres - Amazon Headquarters – Seattle – NBBJ Architects
Working Well
Biophilic Design and the Workplace

- Daylight
- Living walls
- Connection to the outdoors
- Movement enabled

Natural daylight improves human performance, reduces absenteeism and saves energy!
Working Well

Biophilic Design and the Workplace

Daylighting through translucent sources, skylights and atriums.
Working Well
Biophilic Design and the Workplace

Living walls and natural ventilation improve air quality.
Working Well
Biophilic Design and the Workplace

Connection to the outdoors – visually and physically enhances human performance.
New B.O.M.A. standards allow for usable outdoor area to be included in rentable square footage!
Biophilic Design and the Workplace

Practical, inviting and functional stair connections encourage movement
Working Well
Biophilic Design and the Workplace

- Administered by the International WELL Building Institute
- “Help people work, live, perform, and feel their best”
- Holistic formula for better health and wellness outcomes
- Seeking improvements in employee productivity, engagement and retention
- Scoring system to achieve Silver, Gold, Platinum certification
- WELL accredited professionals
Biophilic Design and the Workplace

- Administered by the Center for Active Design (CfAD)
- 63 evidence-based design and policy strategies supporting at least 1 of 7 health impact categories.
- Strategy examples include:
  - availability of a fitness center,
  - lactation room,
  - water filling station,
  - quiet room,
  - access to a walking trail,
  - healthy food options
- Facilities achieving score of +90 are considered Fitwel certified at one of three levels
Working Well
The Case for Investing in WELL Standards

• Return on Investment comparison...
  • Health & wellness programs estimated to cost $700 per employee per year
    • Program participation below 50% at most companies
  • WELL standard – one time investment of $100 to $400 per person
    • Passively benefits all occupants, visitors
    • Foundation for other company health and wellness initiatives

Source - “Financial support for Sustainability and the WELL Building Standard Decisions” – The Muldavin Company
Privacy Needs
Options in the Open Plan Environment

Efficiency of the open plan will not go away. Alternatives for privacy beyond the private office are necessary.
Privacy Needs
Options in the Open Plan Environment

Acoustical solutions:
- Sound masking
- Double glazing
- Door drop seals
- Sound absorption
- Phone booths
- Alcoves
- Huddle rooms
Community Building
Collaborative, Flexible Space Design

Spaces with multiple uses

- Conference
- Maker spaces
- Corridors
Community Building
Collaborative, Flexible Space Design

- Reconfigurable space through movable furniture
- Accommodate expansion and contraction of working groups
Community Building
Collaborative, Flexible Space Design

- Conference
- Classroom
- Event
- Training
Community Building
Collaborative, Flexible Space Design

- Conference
- Classroom
- Training
Community Building
Collaborative, Flexible Space Design

Multi-tenant buildings that provide community spaces for tenants and visitors will have a leasing advantage
Community Building
Collaborative, Flexible Space Design

Spaces designed to invite gathering of smaller groups and individual semi-private locations
Community Building
Advancements in Automation
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Advancements in Automation
Case Study
Cushman Wakefield/Gensler

Real Estate Services

- Full height glass walls provides daylight throughout the space
- Connecting stair between floors
- Sliding glass door system conserves office space
- Privacy alternatives with telephone “booths” + “huddle” rooms
Case Study

Continuum/BOKA Powell-Semple Brown Design

Real Estate Developer

- Full height glass wall system provides daylight throughout the space
- Full height wood door module is co-planer with glass office front
**Case Study**

Granite Place/Open Studio

Multi-tenant Office Building

- Common conference/training rooms
- Coffee bar/café for visitor & tenant convenience
- Variety of seating options and tables for collaboration
- Wi-Fi friendly with recharging connections readily available
Case Study
Bartlit Beck/BurkettEAU

Law Firm

- Fire + smoke separation at elevator lobby allows open connection to reception/waiting space
- Operable walls in conference room for space flexibility
- Dual glazed wall system for additional acoustic privacy
- Framed glass doors with drop seals for acoustical privacy
Case Study
Mi Casa Resource Center/Shopworks Architecture

Community Services

- 3 training rooms can be reconfigured into 2+1 rooms or one large open space
- Movable tables and stackable chairs
- Suspended operable partitions allow continuous floor material for consistent look
- White board is steel backed creating “tackable” walls with magnets
Case Study

PCL Construction/Gensler

Construction Services

- Folding dual glazing provides acoustical separation
- Wall folds to one side for space flexibility
- Connecting stair between floors promotes wellness
Case Study
Gensler – Denver/Gensler

Architecture/Interiors

- Operable glass walls provide space flexibility + daylighting
- Glass office fronts and sliding doors provide daylighting
- Stair functions as event seating
- Movable furniture creates multiple options
Case Study
Antero Resources/McPherson Architecture

Energy Services

- Atrium is achieved through fire and smoke separation systems
- Glass curtain wall brings in daylight and visual connection to the outdoors
- 5 story atrium stair promotes wellness
Case Study

Holland and Hart/BurkettEAU

Law Firm

- Connecting stair
- Dual pane glass wall system with 45 STC provides daylight with privacy
- Operable walls create large gathering/event space
- Movable tables and chairs
Case Study
Wilmer Hale/BurkettEAU

Law Firm

- Floor to ceiling glass brings in daylight
- Operable sliding glass doors and panels create a multi-functional space
- Uninterrupted floor and ceiling design elements create spacious ambiance
Case Study
Woodward World HQ/Ghafari

Manufacturing Company

- Diffuse natural daylighting in atrium space
- “Main Street” gathering space
- Connecting stair promotes movement
- Lunchroom connects to the outdoors
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Case Study
The Yard/Gensler

Multi-tenant Offices

- Glass skylights daylight repurposed warehouse
- Glass wall/door systems provide open light filled spaces
- Multi-use spaces for collaboration
Case Study
Alliance for Sustainable Colorado/Gensler

Multi-tenant Office

- Conference rooms convert to lecture, classrooms and event space
- Full height glass wall system provides daylighting
- Multi-use spaces throughout building for collaboration
Successful Workplace Design
Engaging a Multi-Generational Workforce

THANK YOU FOR ATTENDING

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