



# ARCHITECTURAL DESIGN FOR A HEALTHY WORK ENVIRONMENT

## Enhancing Manufacturing and Product Development

Architectural design plays a pivotal role in shaping the work environment and can **significantly impact** the well-being and productivity of employees.

In manufacturing and product development settings, where employees engage in physically demanding tasks and require creative thinking, a well-designed workspace can foster employee health, wellness, and overall satisfaction.

When we picture manufacturing and product development workspaces, we may not see the sort of elements we think of in other working environments such as sleep pods, coffee bars, or fitness centers, but the fundamentals of an effective, healthy work environment are universal.

These architectural design principles can be employed to create a better work environment for manufacturing and product development employees, ultimately boosting their well-being and productivity.

### OPTIMAL SPACE PLANNING

#### Promoting employee health, productivity, and well-being

##### Ergonomics

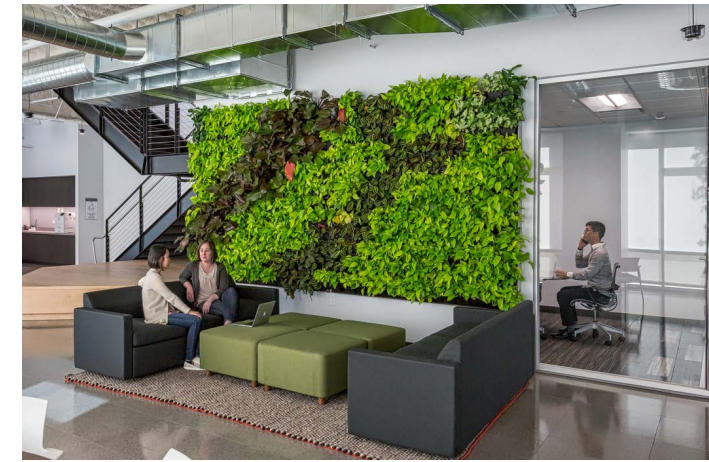
Incorporating ergonomic principles into employee workspace design ensures that employees can perform their tasks comfortably and with minimal strain or risk of injury. Ergonomic seating, adjustable workspaces, and proper task lighting contribute to a healthy and productive work environment.

##### Spatial Efficiency

Efficient space planning optimizes workflows and minimizes unnecessary movement and congestion. By arranging workstations, equipment, and storage areas in an organized manner, employees can navigate the space smoothly and reduce the risk of accidents.

##### Safety

Planning pedestrian aisles away from hazardous equipment, powered industrial trucks and automated guided vehicles. Well-designed aisle-ways with proper head clearance and away from visual blind spots. Eliminating uneven walkways and limited elevated areas where slips, trips, falls and other accidents can occur.



### NATURAL LIGHT AND VENTILATION

#### Creating a profound impact on employee experience

##### Improved Mood and Productivity

Exposure to natural light positively affects mood, reduces stress, and enhances productivity. Incorporating large windows, skylights, and open spaces enables ample daylight to reach the work areas, fostering a pleasant and stimulating atmosphere.

##### Indoor Air Quality

Proper ventilation systems promote clean and fresh air, reducing the buildup of indoor pollutants. Efficient air circulation systems and incorporation of outdoor spaces or greenery help maintain a healthy indoor environment.

### NOISE REDUCTION AND ACOUSTICS

#### Reducing noise to create a quiet workplace

##### Soundproofing Materials

Incorporating sound-absorbing materials, such as acoustic panels, ceiling treatments, white noise and absorbing floor coverings, helps reduce noise levels and prevent sound disturbances within the workspace.

##### Strategic Layout

Designing separate zones for noisy equipment or utilizing barriers between workstations can mitigate noise disruptions and create quieter spaces for focused tasks.

##### Quiet Zones

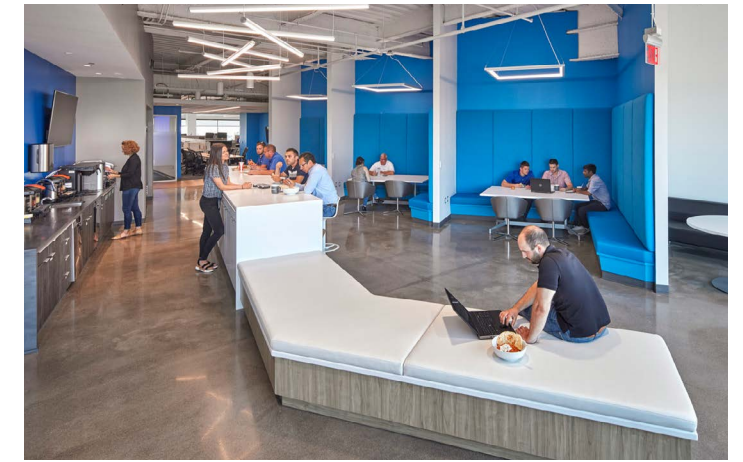
Allocating and creating quiet zone break areas with specific noise reduction to allow employees to get away from loud work environments.

### BIOPHILIC DESIGN

#### Integrating nature and natural elements

##### Stress Reduction

Incorporating elements such as indoor plants, green walls, or nature-inspired artwork can help reduce stress levels, enhance relaxation, and improve overall mental well-being.



### Connection with Nature

Providing views of nature or creating outdoor spaces for breaks allows employees to reconnect with nature, fostering creativity, and promoting a sense of well-being.

### Productivity and Creativity

Biophilic design has been shown to boost productivity and creativity, resulting in enhanced employee performance and innovation among employees.

### COLLABORATIVE SPACES AND BREAK AREAS

#### Contributing to well-being and engagement

##### Collaboration Zones

Designing open areas, team rooms or dedicated collaboration spaces encourages teamwork, communication, and idea sharing. Flexible furniture arrangements and interactive technologies facilitate collaboration and foster a sense of community.

##### Relaxation Areas

Providing comfortable and inviting break areas, with access to natural light and greenery, allows employees to unwind, recharge, and socialize. Incorporating amenities like coffee stations, fitness, or quiet lounges promotes relaxation and mental rejuvenation.

Considerate, purposeful design holds immense potential to transform manufacturing and product development work environments into spaces that prioritize employee health, wellness, and productivity. Investing in architectural design strategies that enhance employee health and wellness ultimately leads to increased job satisfaction, higher productivity, and a more positive and thriving workplace culture.