

# 3.0 University Place



## Sustainable Design Overview

# CERTIFICATIONS

## LEED Platinum

- Achieved LEED Platinum Pre-Certification in 2013
- First LEED v4 Beta Platinum Pre-Certified Building in the World

## WELL Platinum

- Anticipate WELL Platinum Pre-Certification in 2022
- First LEED & WELL Platinum lab building in the World

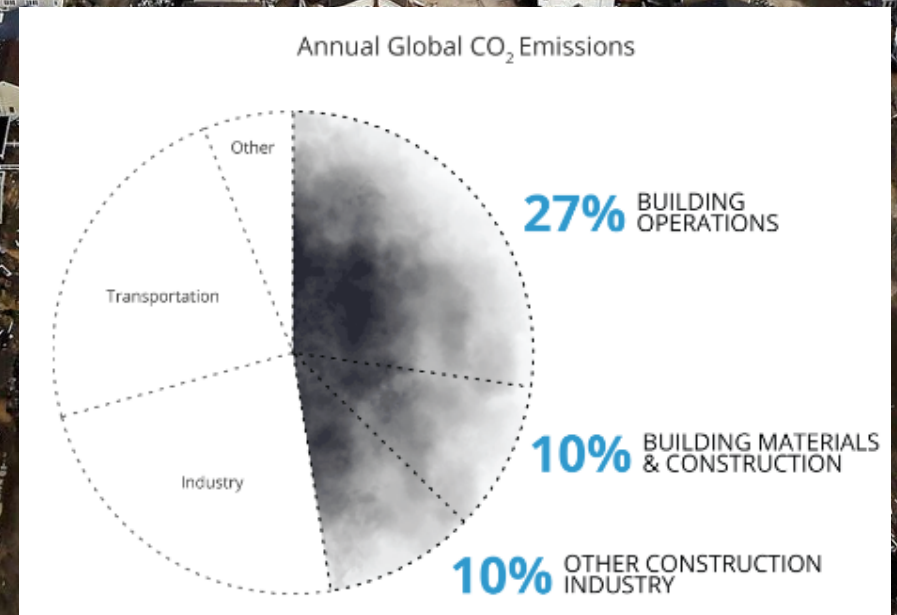
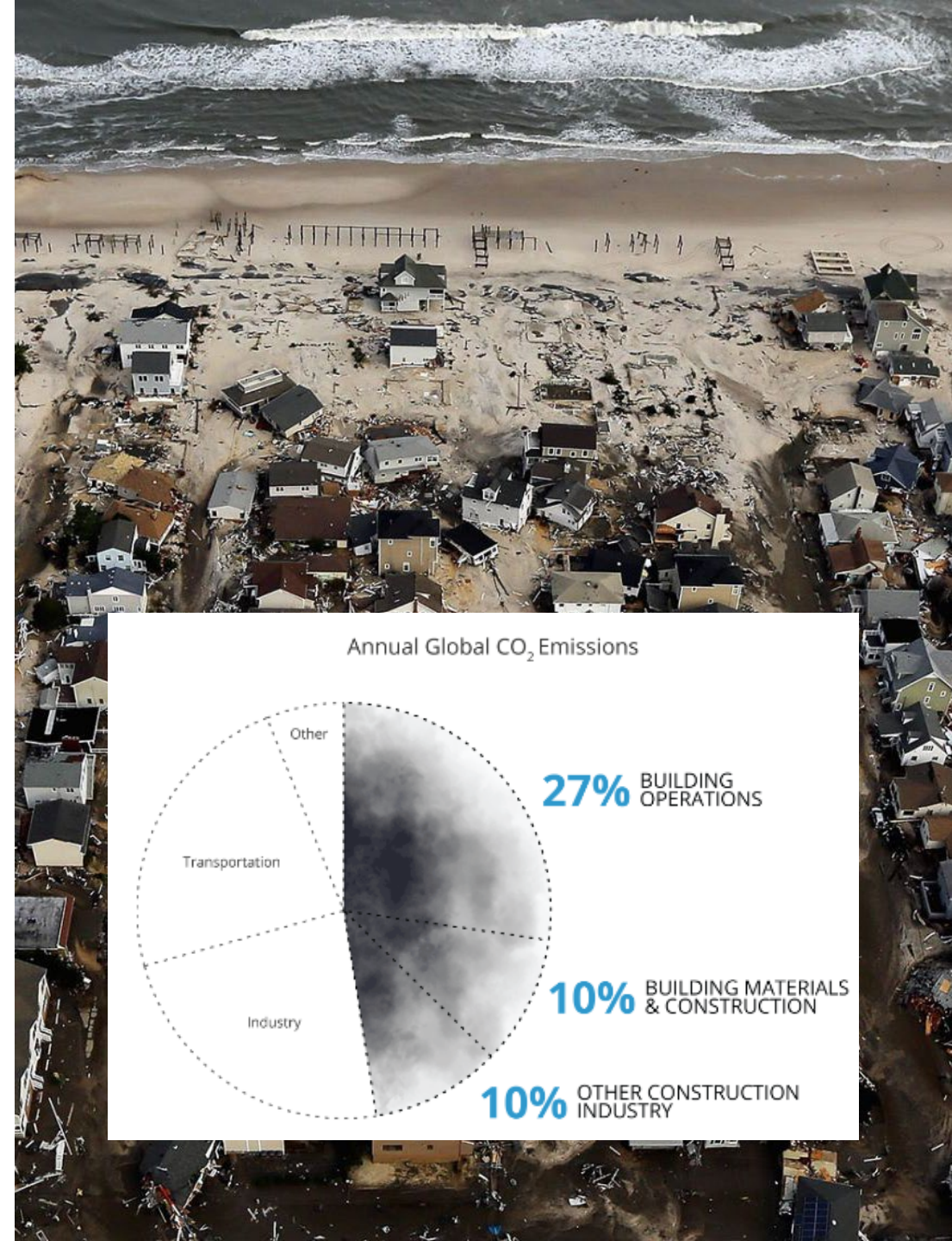
## WELL Health-Safety Rating

- New certification for re-entry post-COVID-19



# CLIMATE CHANGE

- The goal of the **Paris Agreement** is to implement carbon reduction strategies that limit temperature rise **below 2.0° Celsius, preferably 1.5° Celsius**, above pre-industrial levels.
- This requires a **complete transformation** of how we produce, transport, and use energy.
- Buildings generate **40% of global annual greenhouse emissions**.
- Carbon emitted from **building materials account for 10%** of building sector emissions.



# LEED STATS



## Commercial New Construction Projects

Global LEED Certified Projects: **76,841**

Global LEED Platinum Projects: **3,166 or 4%**

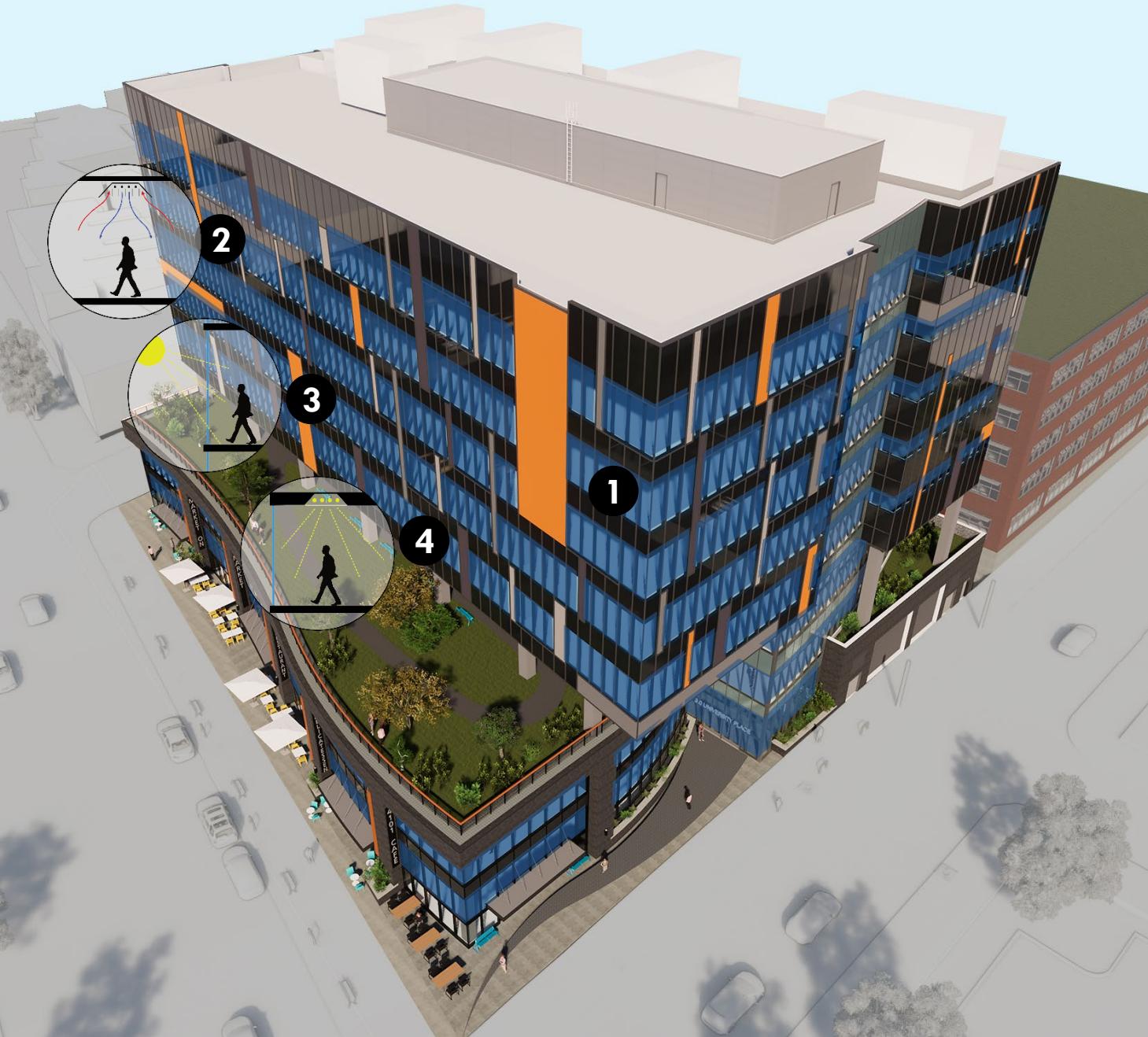
Philadelphia LEED Certified Projects: **344**

Philadelphia LEED Platinum Projects: **21 or 6%**

## Philadelphia LEED Platinum Projects

- Aquatic Facility at the Overbrook School
- 2.0 University Place
  - US Citizenship & Immigration Services
  - US Facilities
  - Berman Indicator
  - Wright Commissioning
  - Benjamin's Desk
  - NTM Engineering
  - The Studio @ 2.0
- Project Felix
- Friends Center Philadelphia
- Comcast Technology Center
  - NBC 10 / Telemundo 62
- Jones Lang LaSalle Philadelphia Office
- Friends Center Philadelphia
- The Barnes Foundation
- United By Blue Flagship Store
- 1 Crescent Drive
- 5 Crescent Drive
  - GlaxoSmithKline
- Horticulture Center at Morris Arboretum

# ENERGY

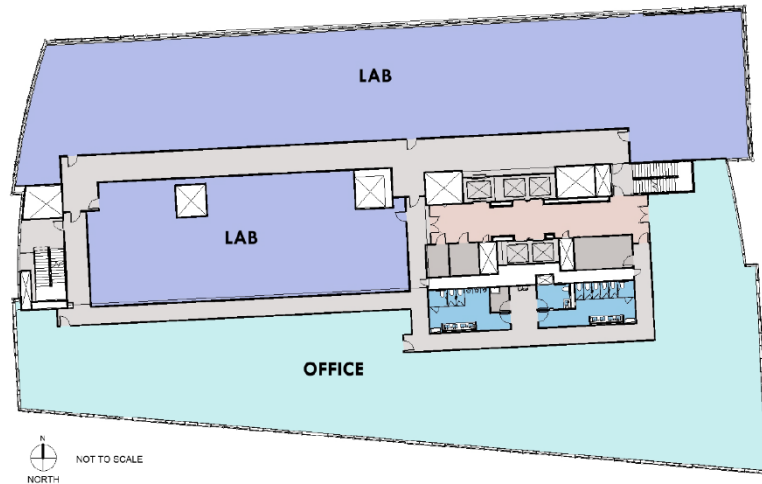


- Building anticipates **17% energy cost savings** compared to typical code-compliant new construction
- Submeters collect real-time energy data for ongoing benchmarking
- Superior energy efficiency strategies include:
  - 1 Electrochromatic glazing
  - 2 Innovative chilled beam heating and cooling system
  - 3 Improved daylighting
  - 4 High efficiency LED lighting

# LAB TENANT ENERGY MODEL

The Design Team developed a tenant-specific energy model to estimate energy costs for an entire floor made up of 55% laboratory space and 45% office space. See diagram of typical floor plan below. The tenant model provides specific information about how occupant density, operational hours, and equipment loads shall impact ongoing energy costs. Results are average costs via parametric modeling. Energy costs are variable based on provider, consumption, and demand. Indicated energy cost rates are best estimates per state average data.

## TYPICAL OFFICE & LAB FLOOR PLAN



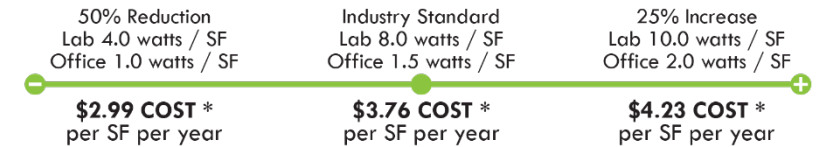
### Occupant Density

The number of people in a space demonstrated little impact on energy performance. The energy model uses industry standards to estimate number of typical occupants.



### Equipment Loads

The quantity and energy intensity of equipment that is plugged into receptacles can greatly impact energy performance. The energy model uses industry standards to estimate typical equipment loads.



### Hours of Operation

The number of shifts in a space can greatly impact energy performance. The energy model assumes typical one shift 40-hour work week from 9:00 am to 5:00 pm.



\* Predicted energy use based on energy model

# LOCAL ENERGY COMPARISON

The following analysis is based on publicly available energy consumption data from the 2017 or 2018 calendar year. Energy costs are variable based on provider, consumption, and demand. Indicated energy cost rates are best estimates per state average data.



**Office**  
 2.0 University Place | 30 N 41st St  
 Year Built: 2013  
 Space Types: Office  
 Certifications: LEED Platinum & ENERGY STAR

**66.1 ENERGY**      **\$1.62 COST**  
 kBtu per SF per year      per SF per year



**Office**  
 Glaxo Smith Kline | 5 Crescent Dr  
 Year Built: 2013  
 Space Types: Office, Small Ground Level Retail  
 Certifications: LEED Platinum & ENERGY STAR

**72.9 ENERGY**      **\$1.67 COST**  
 kBtu per SF per year      per SF per year



**Medical Office**  
 Penn Medicine | 3737 Market St  
 Year Built: 2014  
 Space Types: Medical Office (Exam Rooms, Radiology, Operating Rooms), Ground Level Retail  
 Certifications: LEED Gold

**153.5 ENERGY**      **\$3.25 COST**  
 kBtu per SF per year      per SF per year



**Office & Lab**  
 3.0 University Place | 4101 Market St  
 Year Built: 2021  
 Space Types: Office, Laboratory, Ground Level Retail  
 Certifications: LEED Platinum Pre-Certified

**83.4 ENERGY \***      **\$1.55 COST \***  
 kBtu per SF per year      per SF per year



**Lab**  
 Wistar Institute | 3601 Spruce St  
 Year Built: 1894 / 2014  
 Space Types: Office, Laboratory  
 Certifications: None

**288.1 ENERGY**      **\$5.80 COST**  
 kBtu per SF per year      per SF per year



**Lab**  
 UCity Square | 3711 Market St  
 Year Built: 2008  
 Space Types: Office, Laboratory, Ground Level Retail  
 Certifications: LEED Silver

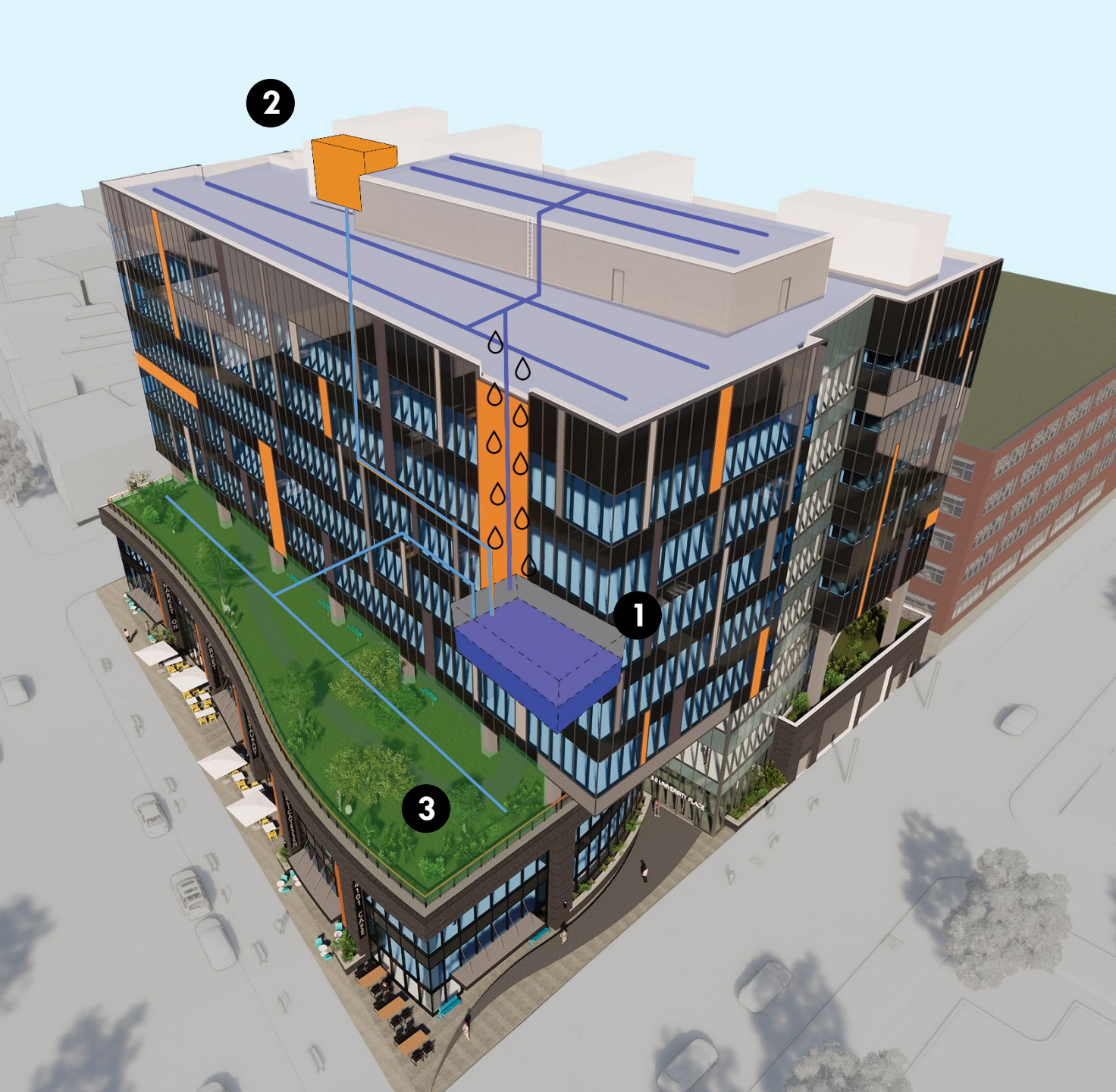
**275.8 ENERGY**      **\$7.56 COST**  
 kBtu per SF per year      per SF per year



**Lab**  
 University of Pennsylvania  
 Translational Research Lab | 125 S 31st St  
 Year Built: 1948 / 2004  
 Space Types: Office, Laboratory (Vivarium)  
 Certifications: None

**311.8 ENERGY**      **\$9.29 COST**  
 kBtu per SF per year      per SF per year

\* Predicted energy use based on energy model



# WATER

- Low-flow plumbing fixtures achieve 35% potable water savings in restrooms
- State-of-the-art rainwater harvesting system:
  - 1 Rainwater from the tower roof is collected into basement cistern
  - 2 Harvested rainwater is reused for cooling tower make-up
  - 3 Harvested rainwater is reused in irrigation



# WELLNESS & ESG OVERVIEW

- **Attract and retain top talent** by prioritizing employee health and well-being.
- Post-COVID demands **healthier buildings**, as seen in outdoor air amounts, improved filtration, and high floor-to-floor heights for greater air mixing.
- Hybrid workplace strategies require environments to be more intentional and provide better amenities.
- Jones Lang LaSalle study developed the **3-30-300 rule** per square foot per year.
  - \$3 for utilities
  - \$30 for rent
  - \$300 for payroll

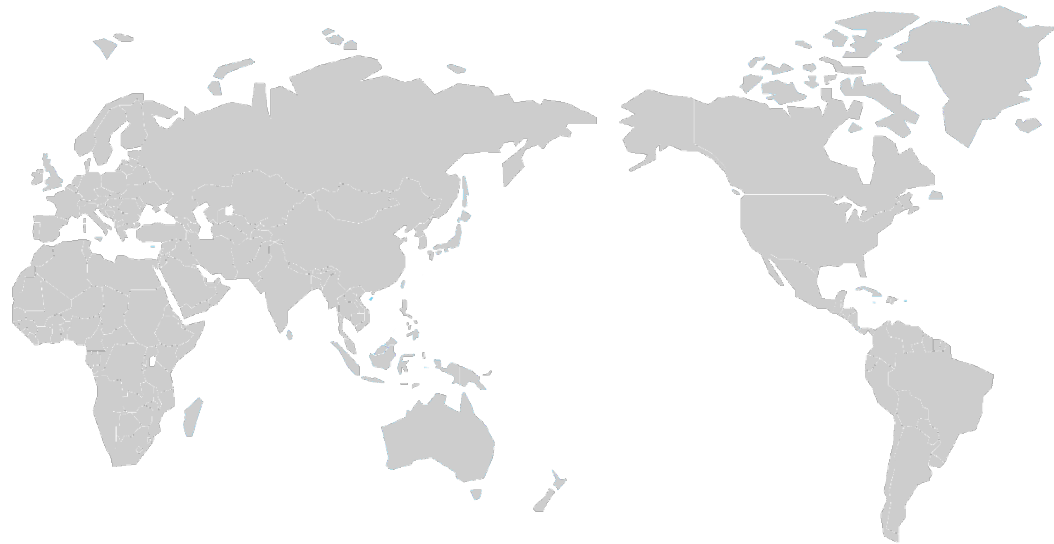


# WELL OVERVIEW

- New green building certification and rating
- Each strategy is based on scientific and medical research
- Intent is to improve employee **productivity, engagement, and retention**
- Project undergoes on-site testing to verify performance



# WELL STATS



## Commercial New Construction Projects

Global WELL Certified Projects: **655**

Global WELL Platinum Projects: 161 or **25%**

Philadelphia WELL Certified Projects: **3**

Philadelphia WELL Platinum Projects: **0**

### Philadelphia WELL Projects

- FMC Tower: WELL Bronze
  - NASDAQ: WELL Silver
  - Wharton External Affairs: WELL Silver

### US LEED & WELL Platinum Projects

- 1 Vanderbilt
- Phipps Center for Sustainable Landscapes
- Phipps Exhibit Staging Center
- American Society of Interior Designers National Headquarters Office

### Global LEED & WELL Platinum Projects

- JLL Shanghai Office, China
- Glumac Shanghai Office, China
- One Taikoo Place, China
- K11 Atelier King's Road, China
- Lemajor Premium Experience Center, China
- GBCI India Office, India
- Wisdom Park West Zone 2<sup>nd</sup> Floor, China
- Landsea Green Center, China
- Swire Properties Head Office, China
- One Museum Place, China
- SKF Gotaholm, Sweden
- PWC Shanghai Office, China
- BIAD Office, China
- Guocoland Changfeng, China
- Sierra ODC e-Facility, India
- Gartner Center of Excellence, India
- 218 Electric Road, China

# CONNECTION TO NATURE

- **Accessible green roof** will be a building-wide amenity to enjoy native plants and city views, including movable furnishings, Wi-Fi, and event area.
- Incorporates **biophilic design** by demonstrating human's love of nature and living things through the incorporation of natural plantings, patterns, and materials.
- Scientific research indicates views of nature **improve productivity and lower stress levels.**



# CHILLED BEAM

- Innovative chilled beam system provides superior indoor air quality than typical forced air systems.
- Ventilation system delivers 100% outside air.
- Scientific research indicates additional fresh air make occupants feel refreshed and awake.
- Superior MERV 14 filtration media surpasses typical office buildings.
- Air handling units are equipped with **ultraviolet (UV) lights** to kill mold, bacteria, and viruses in ventilation equipment.



# ELECTROCHROMATIC GLASS



## VIEW DYNAMIC GLASS

- Eliminate glare control and uncomfortable solar heat gain
- Maintain beneficial access to daylight and views



## TRADITIONAL WINDOWS WITH SHADE

- Glare and irregular daylight distribution causes occupant discomfort
- Blinds obstruct daylight and views
- Blinds collect dust

*Source: View Glass*

# HEALTHY MATERIALS

- **Evaluated over 500 building materials** for improved environmental and health impacts.
- Collected material transparency reports, like **nutrition labels**, for building materials.
- Selected **low-emitting materials** to provide superior indoor air quality.
- Made careful decisions to **avoid chemicals of concern**, like PVC and formaldehyde.

# Declare.

## 1600 Wall System™ 1 Curtain Wall and System™ 2 Curtain Wall Kawneer Company, Inc.

**Final Assembly:** Multiple Locations in North America

**Life Expectancy:** 40+ Year(s)

**End of Life Options:** Recyclable (90-98%), Landfill (2-10%)

### Ingredients:

**Frame:** Anodized Aluminum; **Thermal & Weathering:** Bicyclo[2.2.1]hept-2-ene, 5-ethylidene-, polymer with ethene and 1-propene; Carbon black; Calcium carbonate; Calcium Oxide; Clay; Dicumyl-peroxide; Polyethylene; Zinc oxide; Acrylonitrile-Butadiene-Styrene Copolymer; **Fasteners:** Stainless Steel

**Living Building Challenge Criteria:** Compliant

### I-13 Red List:

LBC Red List Free      % Disclosed: 100% at 100ppm  
 LBC Red List Approved      VOC Content: Not Applicable  
 Declared

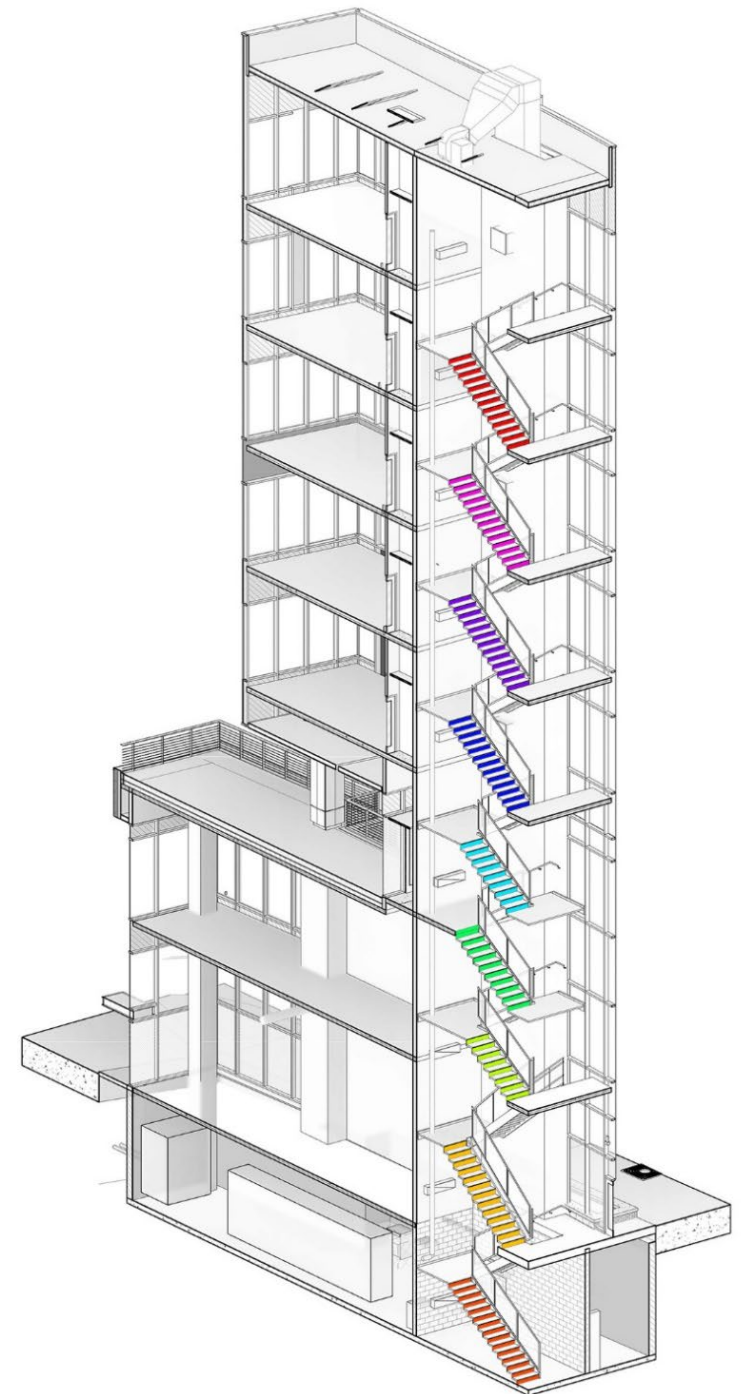
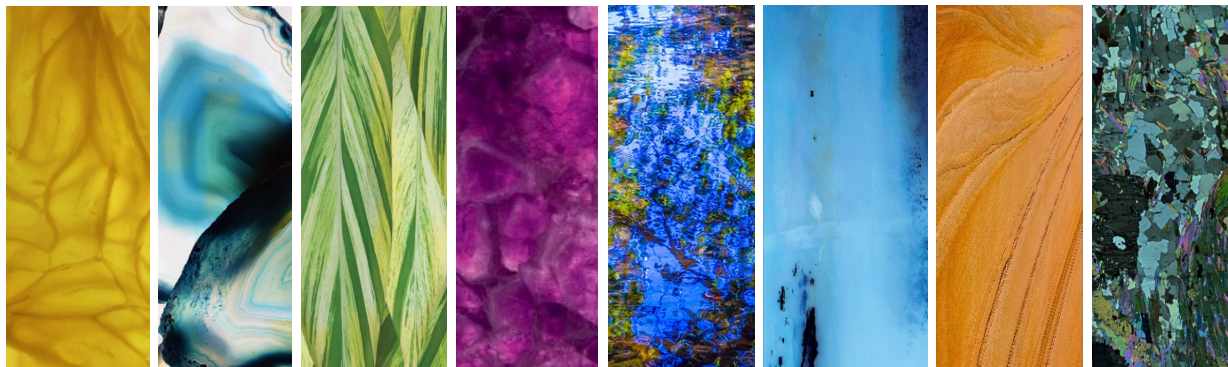
**I-10 Interior Performance:** Not Applicable

**I-14 Responsible Sourcing:** Not Applicable

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EXP. 01 DEC 2022  
Original Issue Date: 2017

# ACTIVE LIFESTYLES

- East stair was carefully designed to **encourage occupants to skip the elevators and take the stairs.**
- Stairs are prominently located before the elevators.
- Hold open devices shall keep doors open throughout the day.
- Corridor, stair tower, and stair riser feature artwork to create a unique identity for each floor.
- Signage shall encourage stair use.







3.0  
University  
Place

4101 CAFE

DELICATESSEN

MARKET

3.0 UNIVERSITY PLACE