

THE KENDEDA BUILDING

for Innovative Sustainable Design



Georgia Tech



Health & Happiness

The **Health and Happiness Petal** seeks to create robust, healthy spaces by requiring operable windows, exemplary indoor air quality, and elements that reinforce our connection with nature.



Materials

The **Materials Petal** fosters an economy that eliminates use of harmful materials, reduces the carbon footprint of buildings, promotes use of locally-sourced goods, and requires use of salvaged materials during the construction process.



Equity

The **Equity Petal** seeks to benefit the community by requiring human-scaled places that are equally accessible to all, prohibiting the reduction of adjacent developments' access to fresh air and sunlight, and promoting business practices that value the welfare of people.



Beauty

The **Beauty Petal** requires the building to elevate our spirits and inspire us to be better through design, public art, public tours, and educational opportunities.



Place

The **Place Petal** seeks to create connected communities by setting standards for where to build, how to protect and restore a place once it has been developed, and how to use active forms of transportation to, and within, the site.



Water

The **Water Petal** requires that 100% of the building's water be supplied by rainwater treated on-site and that all stormwater and water discharges be treated on-site for reuse or infiltration into the ground.

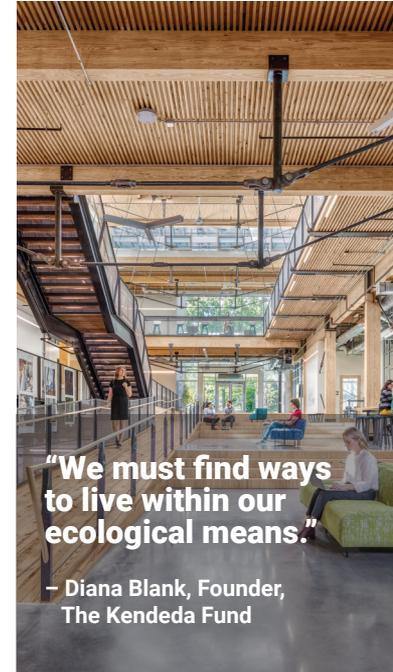


To conceptualize regenerative buildings, the Living Building Challenge uses as its metaphor a flower with seven "Petals," which are performance areas that have to be met for certification.



Energy

The **Energy Petal** requires that at least 105% of the building's energy be supplied by on-site renewables on a net annual basis, as well as on-site energy storage for resiliency.



"We must find ways to live within our ecological means."

- Diana Blank, Founder, The Kendeda Fund

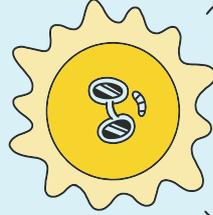
BEAUTY

- » Designed to mimic nature's beauty in form and function.
- » Education about regenerative buildings via classes, tours, events, and website.



HEALTH & HAPPINESS

- » Windows throughout for natural lighting.
- » Higher levels of fresh air brought into the building.
- » Connections to nature through the use of wood and outdoor views.



ENERGY

- » 72% more efficient than a similar building.
- » Radiant heating and cooling system in the flooring.
- » 330 kW (DC) solar array generates approximately 455,000 kWh annually.



PLACE

- » Built on previously developed land.
- » Roof garden has bee hives, fruit, and vegetable plants.
- » Pedestrian-friendly features and bus stop.



WATER

- » Rainfall is stored in 50,000-gallon cistern.
- » Stormwater managed on site.
- » Greywater treated via constructed wetland.
- » Condensate water used for irrigation.
- » Composting toilets dramatically reduce water usage.



EQUITY

- » Centrally located ramp.
- » Project does not block natural daylight to surrounding buildings.
- » Portion of the floor deck constructed by participants of a workforce development program for economically disadvantaged Atlanta residents.



MATERIALS

- » Minimizes the use of materials that contain unhealthy chemicals to the greatest extent possible.
- » During construction, diverted more waste from landfill than sent to landfill.
- » At least 50% of products and services were sourced from within 1,000 km of the site.

The Kendeda Building is a living, learning laboratory. This is a place for experimentation and discovery. The building was designed and built to meet the requirements of the Living Building Challenge (version 3.1), a building certification program and regenerative design framework created and administered by the International Living Future Institute.

This rigorous certification consists of seven performance areas or “Petals” that are divided into 20 requirements called “Imperatives.” As you explore this building, you will find performance areas designated by the icons and colors above.

Photos by Jonathan Hillier and Justin Chan.
Artwork by Beardy Glasses.