

User Guide

September 21, 2021

The Jim and Janet Sinegal Center for Science and Innovation

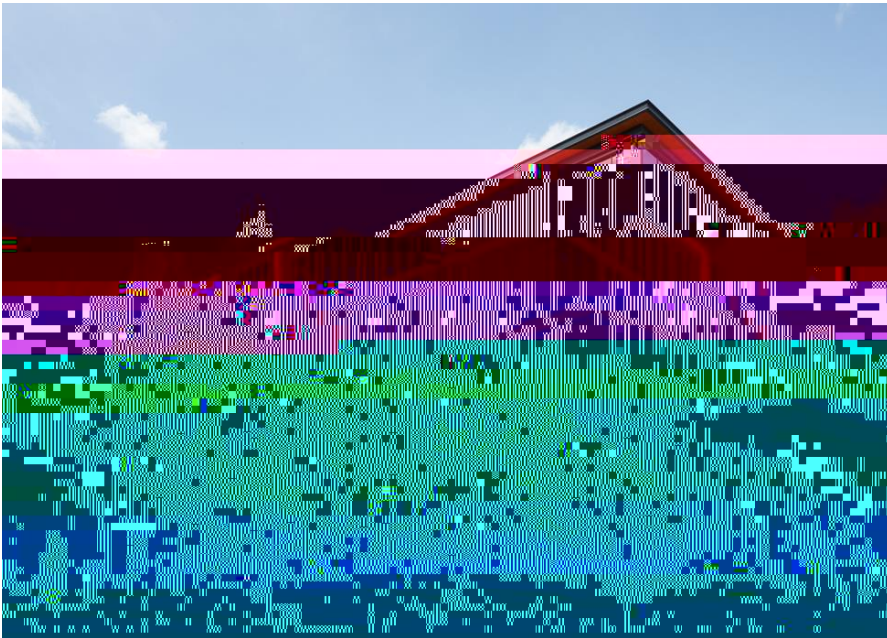


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Building Overview

Welcome to the Jim and Janet Sinegal Center for Science and Innovation. The Center is named for dedicated supporters of Seattle University for over a quarter of a century. Jim Sinegal is the co-founder of Costco and has been involved with Seattle U for the past 27 years. He has served as chair of the board, honorary co-chair for The Campaign for the Uncommon Good, is a co-founder of the Seattle University Youth Initiative and a co-founder of the Costco Scholarship Fund, which benefits underrepresented students at Seattle University and the University of Washington. Together, Jim and Janet have served as Seattle U Gala chair and have supported the university's College of Nursing, including the Clinical Performance Laboratory.

The Sinegal Center (SINE) is home to the Departments of Biology, Chemistry, and Computer Science, the Center for Community Engagement, the Billodue Makerspace, radio station KXSU, and the Convergence Zone café.

General Arrangement

The building is divided into two main sections: to the east of the atrium is the lab block and to the west is the faculty office block. Within the lab block research labs are located along the 12th Avenue façade and teaching labs are located along the atrium. There is a one story service area along the south side which houses mechanical and electrical rooms and other infrastructure.

Size

The building is approximately 111,000 gross square feet and has five floors plus a mechanical penthouse.

Building goals

The Board of Trustees and President Sundborg gave the Design + Construction team a number of goals for the project these included:

- The new building should showcase our mission at the entrance to campus.
- Every SU student should visit the building at least once a week.
- The complex should be a keyhole showin

Sustainability

LEED

LEED (Leadership in Energy and Environmental Design) is the most widely used green building rating system in the world. Available for virtually all building types, LEED provides a framework for healthy, highly efficient, and cost-saving green buildings. LEED certification is a globally recognized symbol of sustainability achievement and leadership. The Sinegal Center is designed to LEED standards; the certification review is underway by the US Green Building Council. The building is on track to achieve Gold certification.

- The calculated Energy Use Intensity (EUI) of the building is 87 – a typical lab building designed to energy code standards has a EUI of 185.
- The reinforcing steel (rebar) in the concrete structure is 93% post-consumer recycled content.
- The roof houses a solar array in the southwest corner and is solar ready in other areas.
- The atrium provides a break between the high intensity air handling needed in labs and the lower intensity needed for office space - allowing for the use of two systems and energy savings.
- Controlled power outlets: Designated by a blue plug these energy code required devices are tied to the building controls and an occupancy sensor in the room. They can be set to power off the outlet during times when an area is not in use such as school breaks.
- Slow start lights: You will notice that light fixtures come on gradually this is a function of the control system required by the energy code; it took over 80 days to program the lighting controls for the building.
- Daylight sensors and occupancy sensors are present throughout the building and will turn off lights when enough daylight is present and turn lights on when occupants enter rooms.

Landscape Design

Kubota Legacy Garden

The site chosen for the SInegal Center included an approximately 60-year-old garden which was part of the legacy of Fujitaro Kubota's years designing our campus landscape. To honor this legacy, the project relocated six large trees and 18 boulders to the Union Green at the start of the project and returned them to the site as a new Kubota Legacy Garden. This area is located in the northwest corner of the site and was designed to provide a place of quiet and peace off the hustle and bustle of the lower mall.

Bioretention planters

The area around the SU campus is served by a combined sewer and storm water system. When we have heavy rainfall – which is becoming more common – this system can become overwhelmed and lead to flooding and sewage backing up into buildings. To mitigate this, the SInegal site has an extensive bio retention system. The planters with high concrete edges are part of this system. The planters are very deep and collect surface run-off and the roof drain water and direct it to a five-foot diameter, 60 foot long tank under the Marion sidewalk which slowly releases the collected water into the combined sewer system.

Planting for biodiversity

The landscape design team was tasked with creating a landscape that would support biodiversity and native plants. The landscape includes a wide range of plants to provide interest and habitat throughout the year.

performance, CLT is also fast and easy to install, generating almost no waste onsite. CLT offers design flexibility and low environmental impacts

A CLT panel consists of several layers of kiln-dried lumber boards stacked in alternating directions, bonded with structural adhesives, and pressed to form a solid, straight, rectangular panel. CLT panels consist of an odd number of layers (usually, three to seven,) and may be sanded or prefinished before shipping. While at the mill, CLT panels are cut to size, including door and window openings, with state-of-the-art CNC (Computer Numerical Controlled) routers, capable of making complex cuts with high precision. Finished CLT panels are exceptionally stiff, strong, and stable, handling load transfer on all sides

Intumescent paint

In the very Northeast corner of the building in the research write-up rooms you will see a set of four steel rods painted black. This corner of the building is actually hanging off the roof structure by these rods – which makes protecting them from fire is critical. They are coated in an intumescent coating for that purpose. Intumescent paint is a fire-retardant coating that when heated forms a foam produced by nonflammable gases, such as carbon dioxide and ammonia. This results in a thick, highly insulating layer of carbon (about 50 times as thick as the original coating) that serves to protect the coated substrate from fire.

Art Collection

The CSI project includes the collection of art to enhance both the Sinegal Center and Bannan Center. The art was collected under the guidance of a committee led by Fr Josef Venker, S.J. the SU campus art curator. The curatorial goals for this new collection are:

- Art that enhances the strength of the campus collection as a whole and supports the university's commitment to foster diversity, equity, and inclusion.

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, which may, in turn, afford solving the problem that engendered the collaboration, developing novel ways of framing research questions, and opening new research vistas.

The Amazon Project Center

This is the home of the Computer Science Project Center students and includes two mentoring rooms in the north atrium for the students to meet with their industry partners in a professional setting.

Classrooms

There are two 50-person general assignment classrooms off the north atrium which may be combined into a large event space by raising the center partition into the ceiling. There is a storage closet in the NW corner so check there if furniture is missing.

Computer Science Grad Suite

This suite features team huddle rooms, touch down space and a lounge area to provide a campus home for our growing group of graduate students in CS.

The Materials Management Suite

Located just south of the elevators is the dispensing window for the Materials Management Suite. In accordance with the Fire Code, this area provides specially designed storage for chemicals and gases. It also includes a special delivery and pick/up room for out chemical and gas vendors.

The Mudroom

Located in the south service corridor is a mudroom for Biology Field Sciences students to clean up and store their gear when returning from field trips.

Trash/Recycling

The building has a room serving as a collection point for trash and recycling outside the SW door. Access to the room is limited – call Facilities Services if you need to move something into the room for disposal.

Third Floor Destinations

Computer Science Departmental Office

Located at the center of the west side of the building

Computer Science Faculty Offices

Located along the west side

Biology Teaching labs

Anatomy and Physiology Teaching lab

Biology Research lab

Fourth Floor Destinations

Biology Departmental Office

Located at the center of the west side of the building

Biology Faculty Offices

Located along the west side

Biology Teaching labs

Biology Research labs

Fifth Floor Destinations

Chemistry Departmental Office

Located at the center of the west side of the building

Chemistry Faculty Offices

Located along the west side

Chemistry Teaching labs

Chemistry Research labs

Safety Features

The Atrium

The term atrium has a very specific meaning in the building code related to the fire and life safety systems required to build multi story open spaces. The reason for this is that this type of space can allow fire to spread quickly through all areas of the building unless special controls are in place. Some of the key code requirements are:

Limits on furniture and materials:

Seattle University has signed a legal agreement with the City of Seattle regarding what we can place in the atrium; it dictates the following:

- "All furniture in the atrium must be of solid wood or non-combustible materials."
- "With the exception of lightweight moveable chairs, all furniture must be bolted to the floor."
In practice this means that no additional furniture should be moved into the atrium.
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open unless they have a magnetic hold tied to the fire alarm system; temporary doorstops are not permitted. The purpose of this is to ensure that any fire does not spread into building evacuation routes.

Fire Stairs

There are two fire stairs in the building located at the north and south ends; these stairs provide a fire rated enclosure to the building exterior and should be used in the event of an emergency.

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