



**SMART
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Smart Buildings Center & Tool Lending Library

Carol Lewellen

Energy and Construction Best Practices Summit
May 19, 2016



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Smart Buildings Center

Technology & innovation

Education

Diagnostics tools



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Operated by the Northwest Energy Efficiency
Council

Seed funding from the Department of Commerce

Innovation center & event space

Tool lending library

Data analytics



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Innovation Center & Event Space



Event/Training Center



Large Conference Room



Small Conference Room

events@smartbuildingscenter.org



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Tool Lending Library



- 85 tool types
- Online reservation system
- Loan period up to 4 weeks
- Local pickup or shipped
- Open 9am to 4pm
Tue., Wed., Thur.

Tool Lending Library at the SBC

FREE!!



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Tool Applications

- Troubleshooting heating & cooling systems
- Measurement of system(s) performance
- Verification of system operating conditions
- Control system troubleshooting
- Energy consumption metering
- Electrical system maintenance
- Solar energy survey
- Testing and balancing air & water systems
- Measuring & managing plug energy use



Airflow Measurements



- Flowhoods
- Vane Anemometers
- Thermal Anemometers
- Manometers





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Water Flow Measurements



- Liquid Manometer
- Ultrasonic Flow Meter
- BTU Meter





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Indoor Environment

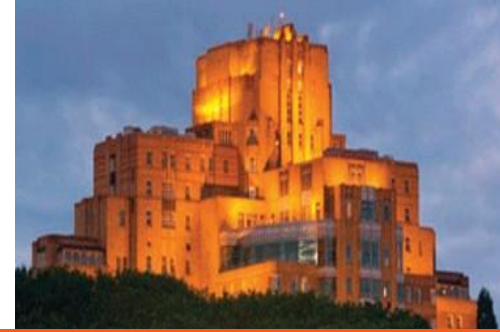
- Temperature
- Humidity
- Surface temperature
- Thermal Imaging
- CO₂





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Sound Measurement & Leak Detection



- Sound levels
- Ultrasonic Leak Detector
- Refrigerant Leaks
- Gas leaks





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Lighting & Solar Surveys



- Light meters
- LED light meters
- Ballast detectors
- Surface reflectance
- Solar irradiance





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Electrical & Power



- Multi-meters
- Motor loggers
- Contact loggers
- Power meters





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Data Loggers



- Temperature
- Humidity
- CO2 & CO
- Lighting
- Plug loads
- Air pressure
- Occupancy
- Water pressure



Tool Reservation Process

1. Complete and submit the Tool Request Form
2. Reserve the tools on the MyTurn reservation system
3. Make arrangements for tool pickup or shipping
4. Return tools to the Tool Lending Library when finished



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Tool Request Form

we're open! Check out our [Tool Lending Library...](#)



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[HOME](#)[ABOUT SBC](#)[TOOL LIBRARY](#)[USE OUR SPACE](#)[SMART + EFFICIENT](#)[SBC NEWS](#)

You are here: [Home](#) / [Tool Lending Library](#) / Tool Request Form

Tool Request Form

Fill out this form to access resources at the Tool Lending Library. Borrowers must read and agree to our [Lending Policy](#) and [Customer Agreement](#) prior to submitting a request. We typically respond via email within 3 business days.

Borrower Information

TOOL LIBRARY CONTACTS

Carol Lewellen

Tool Librarian

☎ [206-538-0685](tel:206-538-0685)

carol.lewellen@smartbuildingscenter.org

Duane Lewellen

Sr. Project Manager

☎ [206-538-0856](tel:206-538-0856)



Tool List & Application Notes

Tool Inventory

Available tools include loggers, logger sensors, power and light meters, air flow tools and more. Review our [Tool List \(PDF\)](#). If you don't see a specific tool you need, please contact us.

Tool Resources – Notes, Guides, & Information

Our [library of videos and application notes](#) has information on measurement techniques, step-by-step instructions for some tools, and useful tips. It's a great place to start exploring all the potential applications of our inventory.



Establish Account on Tool Reservation System

Smart Buildings Center

Create Account | Log In

Home Inventory

Search Inventory

Smart Buildings Center


Welcome to the Smart Buildings Center Tool Lending Library

The Smart Buildings Center Tool Lending Library stocks a wide variety of high grade diagnostic tools for facility engineers, building managers, and other professionals to evaluate energy use in their commercial buildings in Washington State.

Please see what we have to offer by either clicking the "Browse Inventory" button, or typing in the "Search Inventory" box.

If you see anything you would like to borrow for your commercial building in Washington State, please go to the main Smart Buildings Center website by clicking our icon on the right. There you can learn about our program and complete our application process.

<http://www.smartbuildingscenter.org>

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Address

Seattle 98104 USA

Hours

Monday	Closed
Tuesday	9:00 AM - 4:00 PM (PDT)
Wednesday	9:00 AM - 4:00 PM (PDT)
Thursday	9:00 AM - 4:00 PM (PDT)
Friday	Closed
Saturday	Closed
Sunday	Closed



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Reserve Tool & Check Out

[Home](#) [Inventory](#) [Admin](#) [Check In or Out](#) [Find User](#) [Search Inventory](#)


All Items 906 results

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Search Within... 

Availability
☐ In-stock now
☐ Show disabled items

Type
[Air Flow Meters](#) (14)
[Data Loggers](#) (643)
[Detectors](#) (13)
[Distance Meters](#) (2)
[Hydronic Meters](#) (5)
[Infrared Cameras](#) (3)



Alnor EBT701 Balometer
(00907)


In-Stock

CAB1

Reserve

Admin [Check Out](#) [Edit](#)

5



Carbon Monoxide Meter
(00894)


In-Stock

F3B

Reserve

Admin [Check Out](#) [Edit](#)

5



CO Logger (00902)

In-Stock

F1C

Reserve

Admin [Check Out](#) [Edit](#)

Sort By [Relevance](#)



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Tool Demonstration Workshops



Hands-on
demonstration of
the tools and
applications by
tool
manufacturers
and industry
experts



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Signup For SBC Updates

SIGN UP FOR UPDATES

Join the Smart Buildings Center mailing list for information about events and energy efficiency news.

SUBSCRIBE

SBC NEWS

Seattle City Light's Strategic Plan Update April 13

APRIL 8, 2016

TOOL LENDING LIBRARY

Logging CO2 at the Smart Buildings Center

DECEMBER 14, 2015



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We need your help with case studies



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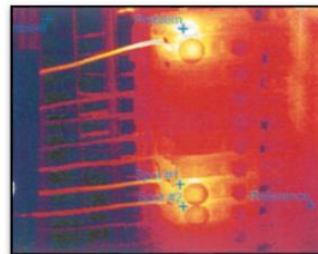
CASE STUDY

Everett Community College avoids electrical problems



“We weren't measuring energy use so much as we were looking for irregularities on the breakers”
Steve Lyons said. “Our

When you have a college campus with 1 million square feet in 24 buildings and many electrical panels getting up there in age, preventative maintenance should be a top priority. But, maintenance and electrical staff's time is often taken up with work order requests or hot/cold calls, and PM is given a back seat – or as known in the industry 'run to fail'. This can cause huge disruptions for students, staff and faculty, especially when much of the campus depends on electricity to run their computers, classes and work stations. Electrical Supervisor,



Steve Lyons, attended an event where The Smart



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Tool Lending Library Contact Info

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Contact: Duane Lewellen, Project Manager
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duane.lewellen@smartbuildingscenter.org

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Seattle, WA 98144