

WCEC welcomes you to the 2013 Affiliate's Forum

May 7, 2013

Jim Rix
WCEC Program Manager

Facilities Info

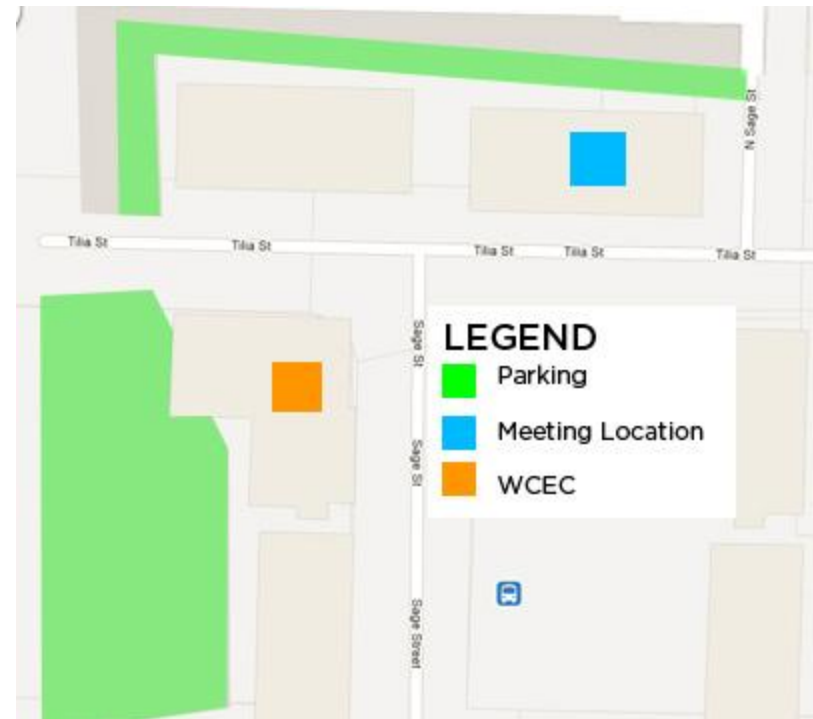
- Exits
- Bathrooms
- WiFi Access

Network: moobilenet

User name: roadmap@ucd.edu

Password: kickoff

- Parking



Agenda

- 9:30 Title 24 Code Changes
- 10:15 CEC's Energy Efficiency Research Activities
- 10:45 Utility Programs Panel
- 12:00 Lunch
- 1:30 Lab Tour
- 2:00 WCEC Research Update
- 3:15 Evaporative Technologies
- 3:45 Impact of Behavior on HVAC Efficiencies
- 6:00 Affiliate's Dinner (Tuco's)

West Village

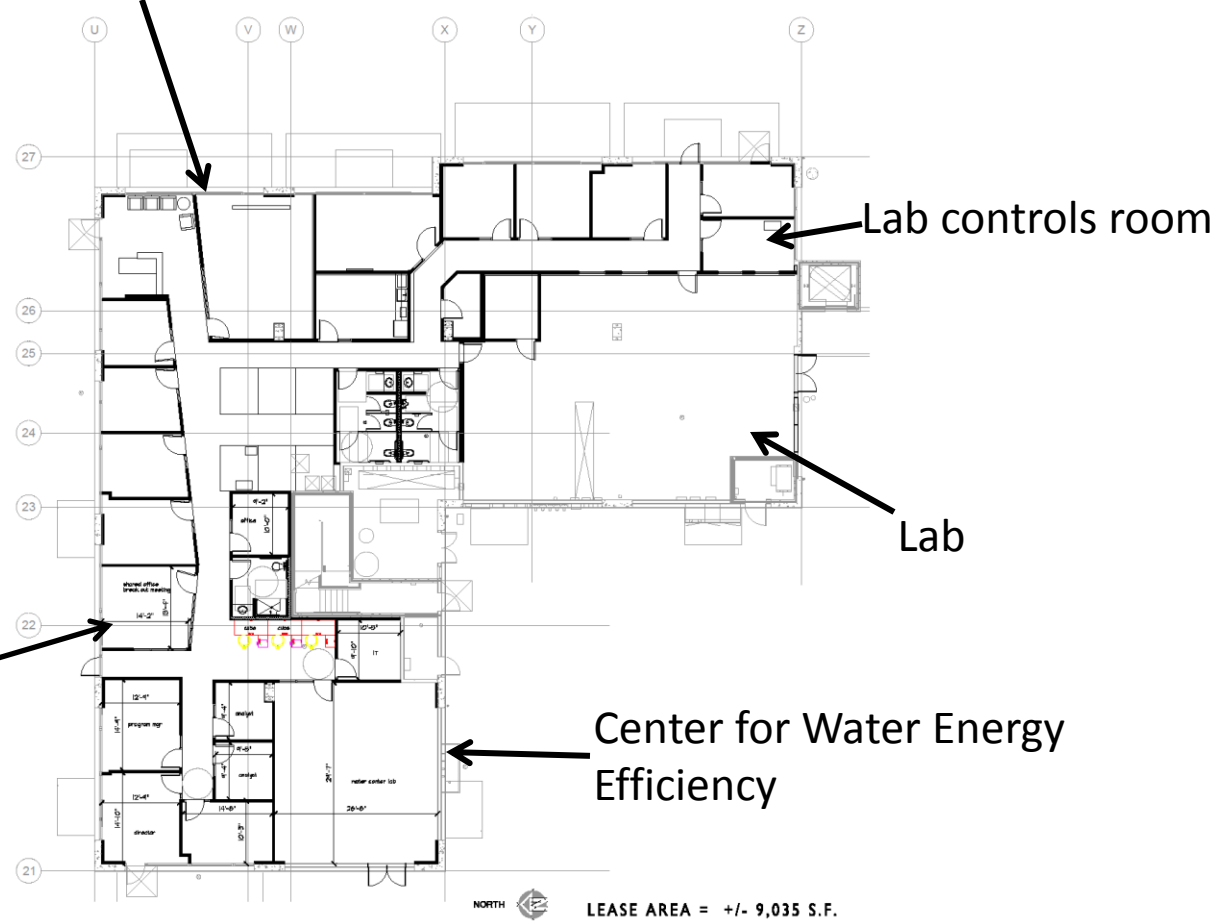


- Planned ZNE community...mixed light commercial and residential
 - Will include single family homes for University staff/faculty
- Consolidates most UC Davis Energy Efficiency Centers in one location

West Village WCEC Layout

Conference room

- Larger meeting rooms
- ~2000 ft² lab



Small conference room

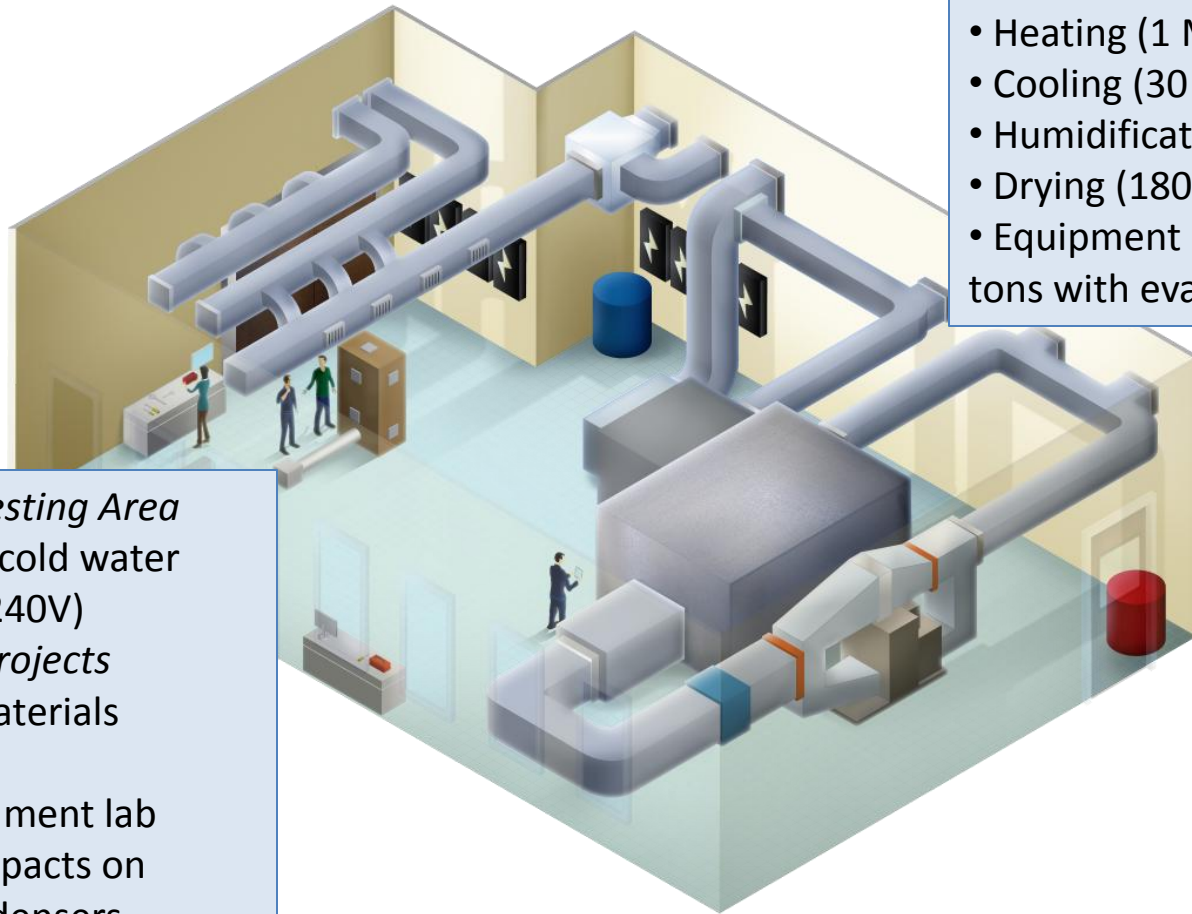
WESTERN COOLING EFFICIENCY CENTER

PRELIMINARY FLOOR PLAN
 UC DAVIS WESTERN VILLAGE - BUILDING MU-3
 11824-2 DATE: APRIL 06, 2012

1478 STONE POINT DRIVE SUITE 350 ROSEVILLE, CA 95661 T | 916 782 7200 F | 916 773 3037

ARCHITECTURAL PLANNING INTERIORS **Borges** ARCHITECTURAL GROUP

New WCEC Laboratory



Test Chamber Capabilities

- Heating (1 MBTU)
- Cooling (30 ton)
- Humidification (280 lb/hr)
- Drying (180 lb/hr)
- Equipment under test up to 5 tons with evaporative components

Small Scale Testing Area

- Process hot and cold water
- Electricity (120-240V)

Current projects

- Phase change materials
- Aerosol sealing
- Technician instrument lab
- Water quality impacts on evaporative condensers

WCEC West Village Lab

- Expected to be operational May 2013
 - Up to 5-ton testing capabilities
 - Produce 2400-3500cfm of air at any condition between 60-110°F and 0.005 to 0.013 g/g of absolute humidity.
 - Up to 8000 cfm for wind tests (less conditioning capabilities)
 - Can produce all expected test conditions under 92% of Sacramento weather conditions according to NREL TMY3 data
 - Capable of AHRI standard test rating conditions
 - Can condition 100% exhausted air, 100% outdoor air, or a mixture of the two for decreased energy consumption
 - Munters desiccant dryer allows for very hot and dry test conditions
 - Modular design for ease of upgrading and alterations

WCEC TEAM



- Part of the Energy Efficiency Center at UC Davis
- Launched April 2007
- Staff:

- Mark Modera, Director
- Jim Rix, Program Director Paul Fortunato, Outreach Coordinator
- Kristin Heinemeier, Principal Engineer William Allen, Senior Engineer
- David Grupp, Curtis Harrington, John Markley, Theresa Pistoichini, Jonathan Woolley, Associate Engineers
- Claudia Barriga, Staff Behavioral Research Assoc.
- Peter Breyfogle, Nelson Dichter, Caton Mande, Perry Young Assistant Engineers
- Zhijun Liu, Marco Pritoni, Nasim Tajmand, Mayra Vega Graduate Students

WCEC welcomes you to the 2013 Affiliate's Forum

May 7, 2013

