# ELECTRICAL SAFETY: RESETTING CIRCUIT BREAKERS



## **CIRCUIT BREAKERS**

Electrical circuit breakers are designed to "trip" (i.e., stop electrical current from flowing through the circuit) when more current flows through the circuit than the overcurrent or trip current protection allows.



Before resetting a breaker, you *must determine the* cause of the trip. It is safe to reset a breaker only if it has been determined that the circuit was overloaded. Repeatedly resetting a breaker could result in an arc flash or a fire.

If the cause is due to a short-circuit or a ground fault, a qualified electrician must be notified to investigate the problem.

On the Seattle campus, Contact <u>UW Facilities</u> <u>Customer Care Team</u> or the site's local facilities and engineering department if you are unsure.

## **OVERLOADED CIRCUITS**

**Warning signs** of an overloaded circuit include:

- Lack of power in appliances
- Lights that flicker or dim, especially when other appliances are turned on
- Buzzing noises from outlets or switches
- Outlet or switch covers warm to the touch

Be aware of the amperage of the breakers to avoid circuit overload. Appliances that may draw a high amperage include:

- Vacuum cleaners
- Refrigerators
- Hot plates
- Irons

Avoid plugging these appliances into the same outlet or circuit.

You can find out exactly how much amperage appliances draw by referring to the manufacturer's manual.



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#### STEPS TO RESET THE BREAKER

An unqualified electrical worker may reset a breaker if they are trained to do so, **and** the cause of the trip was an overloaded circuit.

- You must determine the source of the overload prior to resetting the breaker.
- You must identify the correct circuit breaker; the tripped breaker should be clearly labeled to reflect the outlets, appliances or equipment impacted.
- 3. Wear long-sleeved shirts and pants made of untreated, natural fibers and safety glasses.
- Stand to the side of the panel while following the steps in the <u>Electrical Circuit Breaker</u> <u>Reset Procedure</u> on the EH&S website.

As a best practice, document each time a circuit breaker trips to help determine if there is an underlying root cause that can prevent additional problems.

An UNQUALIFIED PERSON must be trained and familiar with any electrical-related safety practices.

#### KNOW WHEN TO STOP

Contact **UW Facilities Customer Care** 

- If the panel is wet
- > If any wires are visible behind the breaker
- If breakers are not labeled
- If the equipment is under <u>lockout/tagout</u>\*
- If there is more than one tripped breaker
- If the breaker has been tripped repeatedly



Stand to the side of the panel and use one hand to flip the breaker from the "off" position to "on."

#### REGULATORY GUIDANCE

For more information on the requirements, Washington state has the following requirements in place for employees:

- WAC (Washington Administrative Code) 296-24-960 – Working on or Near Exposed Energized Parts
- WAC (Washington Administrative Code) 296-24-970 - Training
- NFPA (National Fire Protection Association)
   70E Standard for Electrical Safety in the Workplace

# TRAINING REQUIREMENTS

EH&S provides the following safety training courses:

# **REQUIRED SAFETY TRAINING:**

- Arc Flash and Electrical Safety Best Practices
- Basic Electrical Safety
- Lockout/Tagout Awareness

Contact EH&S at 206.543.7388 for more information.