

## Tool Lending Library Policy

The Tool Lending Library (TLL) is a Public Goods funded program that loans building measurement equipment free of charge to people working on short term energy efficiency projects in California. Typical loan durations range from one to four weeks. We also provide advice and application notes for some of the tools in the TLL. There are special considerations or borrower qualifications for some of the equipment in the TLL. This document describes the specific policies around these tools.

### **Response Time guidelines**

We're happy to accommodate quick turnaround loans when we can. Typically, we respond by email within one business day to an online tool request with information regarding tool availability and to get more information on the loan if needed. Next, depending on the size of the loan, we need one or more days to prepare the instruments and make them available for pick up. We can also ship to customers if the borrower provides shipping account information to cover the cost. Some instruments are few in number and may have waiting lists established. Be sure to confirm availability with us before making any project commitments that require tools from the Tool Lending Library.

### **Residential projects**

The Tool Lending Library program focuses primarily on commercial and industrial energy conservation projects. We do have a few tools that target residential projects including our Minneapolis Blower Door and Duct Blaster. However these tools are only made available to home performance professionals that are able to cover the value of the equipment in case of damage (see our liability insurance policy below). We do have plug-load analyzers and other devices that are appropriate for homeowners.

## **Specific Equipment Considerations**

### **Electrical Power Meters**

Any tool borrowed from the Pacific Energy Center requiring installation in a motor control center or any other location with line voltage (any voltage above 12V), must be installed by a licensed, qualified electrician. Customers will agree to hire a qualified electrician before borrowing power meters from the TLL.

### **HVAC Service Assistant, Refrigerant Manifold Gauge Set**

These instruments connect to air conditioning equipment and are used to verify the quality of the cooling components and refrigerant. Borrowers of this equipment must be EPA certified to handle refrigerant at the Universal Certification level as required by EPA Clean Air Act section 608 rule 40CFR part 82 subpart F.

### **Infrared Camera, Pulse Total Station, Ultrasonic flow meters**

The Tool Lending Library requires borrowers to furnish documentation of sufficient business liability insurance to cover up to \$10,000 for loss or damage to these instruments. Normally, these instruments are picked up from and hand-delivered back to the Pacific Energy Center when borrowed. This minimizes the chance of shipping damage and delays.

**IR Camera** loan periods are a maximum of 5 days and must be returned no later than noon Friday of the week in which they are borrowed (no weekend loans). This allows the library to receive and inspect the camera on Friday in preparation for the next loan the following Monday morning.

**Total Station** loan periods are rarely granted for more than 10 days, and borrowers must be experienced with laser surveying instrumentation.

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**Ultrasonic flow meter** loan periods are rarely granted for more than 10 days. These instruments are challenging to set up and operate properly. The Tool Lending Library recommends that someone experienced in the use of ultrasonic flow measurement equipment conduct the setup and monitoring to help insure the resulting data is accurate. The TLL can provide guidance in its use at the time the meter is picked up but we have limited ability to provide support once it is in the field during setup or operation.

### Other specialized tools

#### Blower Door

Loan periods are a maximum of 5 days and must be returned no later than noon Friday of the week in which they are borrowed. The size and weight of this tool make it prohibitive to ship. It must be picked up from the Pacific Energy Center when borrowed.

#### Weather Station

Weather monitoring equipment can be loaned for periods of 1 – 3 months. The collected data must be made available to the Tool Lending Library at the end of the project so it can be used in future studies. The collected data can also be correlated with any available longer term data to infer annual weather patterns. Because of their size, weather stations must also be picked up by borrowers from the PEC.

#### LightWave Research Smoke Generator

The vapor generated from this equipment can be an irritant. Borrowers should use the smoke generator in unoccupied spaces, and control the amount of vapor generated to allow only the minimal concentration of smoke to fill the room that is needed for analysis. Do not leave the generator unattended when operating.

#### Strobe tachometers

The strobe tachometers should not be used around individuals with [photosensitive epilepsy](#), a form of [epilepsy](#) in which [seizures](#) are triggered by visual stimuli such as flashing lights.

### Other loan limitations

#### Special Research and Educational Loans

Generally, tools are loaned for durations from one day to one month. There are cases where extended loan period may be granted. These projects are those that will result in explicit energy efficiency and/or demand reduction benefits for California utility customers. We will assess these special projects on a case-by-case basis.

#### Loans outside of California

As a California-funded program, we cannot loan tools out-of-state. The only exceptions to this policy occur when a California customer is involved with an investigation, training or demonstration project outside of California where the data gathered ultimately benefits California energy efficiency efforts.

#### Lost or damaged tools

Tool borrowers agree to return equipment in the same condition they were in when borrowed. Borrowers who lose or damage equipment are asked to replace the equipment with tools of equal value. Borrowers who lose or damage equipment will have their borrowing privileges revoked until the equipment is replaced.

#### Software

Data logger and other proprietary software programs associated with tools in the lending library are made available to the tool borrower for the duration of the loan. Borrowers agree to un-install these programs after the tools are returned.