

## 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**

The Tool Lending Library responds to an online tool request by email within one business day with information regarding tool availability and to get more information about the project if needed. After the borrower confirms the loan, it takes one or more days (depending on the size of the loan) to prepare the instruments and make them available for pick up at our San Francisco location.

With a few exceptions, 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 (see our certification and liability insurance policy below).

We have receptacle plug-load analyzers and other devices that are appropriate for homeowners interested in measuring energy use of appliances, home offices and other plug loads.

### **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 one week. Borrowers must provide documentation of commercial general liability insurance.

**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 meters** 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. Please arrange for assistance in advance of picking up the meter.

### Other specialized tools

Borrowers of building performance testing equipment (Blower Door, Duct Blaster, etc.) must provide documentation of commercial general liability insurance and Building Performance Institute (BPI), Residential Energy Services Network (RESNET®)/HERS, or equivalent certification. These requirements are meant to ensure that envelope testing tools borrowed from the PEC Tool Lending Library are used in a safe and effective way.

#### Blower Door Kit, Duct Blaster Kit

Loan periods are a maximum of one week. Due to its size the envelope testing equipment cannot be shipped, and must be picked up from the Pacific Energy Center in San Francisco 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.

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### **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.