TESS Library Documentation

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01. Applications Library Technical Reference

The Applications Library contains a series of Types combined with Simulation Studio plugins that make user entry of data simpler. Applets include generic weekend/weekday schedulers, setup/setback thermostats, and heating/cooling season schedulers.

02. Controller Library Technical Reference

The Controller Library contains a number of Types that model thermostats, multistage thermostats, aquastats, proportional controllers,humidistats, and many others.

03. Geothermal Heat Pump Library Technical Reference

At the core of the Geothermal Heat Pump Library is *the* state of the art ground heat exchanger model used in simulating borefields in geothermal heating and cooling applications.

04. Green Building Library Technical Reference

Newly released with version 2 of the TESS Libraries, this library contains not only Types for modeling Building Integrated Photovoltaics and advanced lighting controls, but also contains an extensive library of new windows for use with Type56.

05. Ground Coupling Library Technical Reference

Newly released with version 2.0 of the TESS Library, the Ground Coupling Library is a set of components that model the energy exchange between the ground and slabs, slabs with embedded piping, basements, buried fluid storage tanks and buried pipes.

06. HVAC Library Technical Reference

The HVAC Library contains over 40 components that model various kinds of heating, ventilation, and air conditioning equipment commonly encountered in buildings and building systems.

07. Hydronics Library Technical Reference

The Hydronics Library includes a set of components that model various kinds of pumps, fans, ducts, and liquid distribution piping.

08. Loads and Structures Library Technical Reference

This Library offers a series of simplified approaches to simulating buildings. Included are models that impose known loads on liquid or air streams, lumped capacitance multizone building models as well as a library of 25 common building templates for use with Type56.

09. Optimization Library Technical Reference

This Library provides a seamless method for performing multivariable optimizations on your TRNSYS input file using Lawrence Berkeley National Lab's GenOpt Optimization Tool.

10. Solar Library Technical Reference

The Solar Library includes more than a dozen solar collector models including a powerful integrated collector storage (ICS) system with extensive internal heat exchanger configuration options.

11. Storage Tank Library Technical Reference

The Storage Tank Library contains one of the most versatile sets of liquid storage tank models available in TRNSYS as well as a set of Simulation Studio plugins that greatly simplify parameter and input initial value entry.

12. Utility Library Technical Reference

This library contains a number of components that are generally useful in many different kinds of simulations. Contents include infiltration models, binned output sorters, random number generators, equipment fouling models and others.

13. Parameter Input Output Reference Manual

This manual contains lists of all the Parameters, Inputs, Outputs, and Derivatives of each component in the twelve libraries.