

Standard Operating Procedure Calibration Procedure for Wall Thermostat	SOP No. 6.019
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## 1 Purpose

- 1.1 The purpose is to provide guidelines for field calibration on wall thermostat after its installation.

## 2 Scope

- 2.1 This procedure shall cover all wall thermostats that will be commissioned by Therma's Calibration Department.

## 3 Reference

- 3.1 Manufacturer's Instruction Manual for heating, ventilation and air conditioning (HVAC) temperature transmitter wall thermostats.

## 4 Responsibility

- 4.1 Field calibration technician shall coordinate with user to avoid disruption of plant facilities or operations before performing calibration.
- 4.2 Field calibration technician shall perform calibration as per the following procedures.

## 5 Tools and Test Standards

- 5.1 Hart Scientific Digital Thermometer:  $\pm 0.5\%$  accuracy
- 5.2 Small hand tools
- 5.3 Temperature unit conversion table
- 5.4 Electrical extension cord

## 6 Procedures

- 6.1 Gather all necessary tools and test standard. Make sure that the test standard has been calibrated and within the calibration period.
- 6.2 Before performing calibration, perform the following maintenance for the wall thermostat.

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6.2.1 Inspect the transmitter for any physical defects/damage.

6.2.2 If dust has been accumulated on the external surface, clean the surface with clean cloth.

6.3 Connect digital thermometer to output of transmitter or monitor end user device.

6.4 Suspend the digital thermometer probe in close proximity to the temperature transmitter.

6.5 Allow sufficient time for thermometer temperature to stabilize. Record a single point in "As Found Data" section on form FN 6.016.1 (Calibration Sheet for Temperature Transmitter).

6.6 Perform Calibration Adjustment

6.6.1 If transmitter is not within manufacturer's specified accuracy, make an offset adjustment with hand held interface device at the transmitter or at the end user device.

6.6.2 Allow sufficient time for thermometer temperature to stabilize. Record a single point in "As Found Data" section on form FN 6.016.1 (Calibration Sheet for Temperature Transmitter).

6.7 Place Therma's calibration sticker on the wall thermostat upon completion of calibration.

6.8 If the transmitter did not meet the calibration tolerances and adjustments, contact the customer.

6.9 The field calibration technician shall fill in the calibration data including test standard data on form FN 6.016.1 (Calibration Sheet for temperature Transmitter) before submitting to project manager.

## 7 Review and Approval

7.1 The field calibration technician shall submit the form FN 6.016.1 (Calibration Sheet for Temperature Transmitter) to the project manager.

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## Document Approval

*Robert McCammond*  
Field Calibration

8-4-03  
Date

*Dale*  
Quality Assurance Manager

8-4-03  
Date

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