

Installation New Construction Rough-In

- Fasten electrical connection box (as required per local electrical code) at desired position on side of stud.
- Drill one 1-inch hole in base plate for single-cable installation and two 1-inch holes for two-cable installation.
- Thread **pull-cord** through hole(s) in base plate and in corresponding holes in electrical box. Secure the pull cords in the electrical box. Tie the floor ends of pull-cord together with **Warning Tags** and fasten to floor.
- Install the guard plate over the hole for the cold leads and sensor wire before dry-walling.
- Install guard plate as shown in Figure 1.

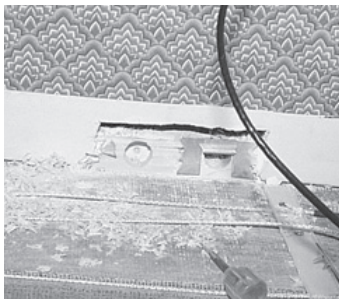


Fig. 1

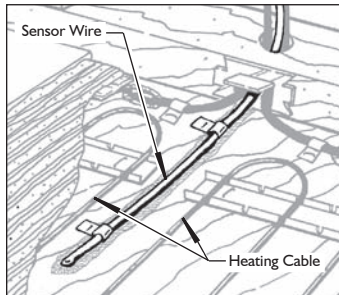


Fig. 2

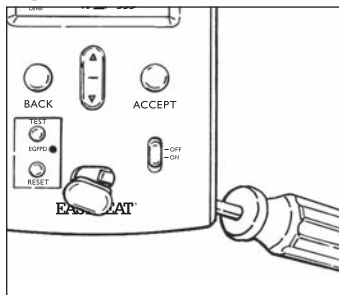


Fig. 3

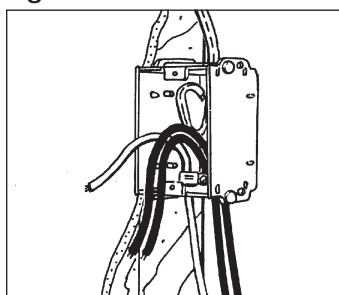


Fig. 4

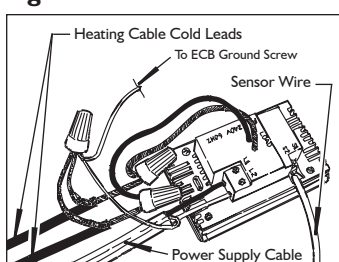


Fig. 5

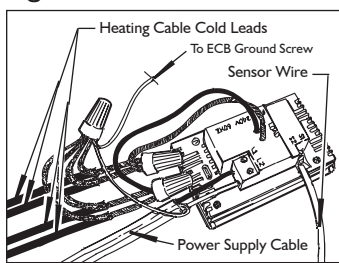
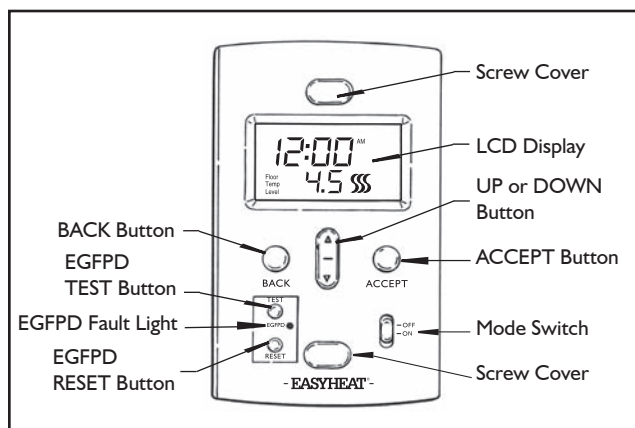


Fig. 6

Thermostat Installation

- Pull sensor wire into ECB and secure to the floor. See Figure 2. The sensor must not cross or overlap any other cable on the floor AND must be embedded in the cementitious based mortar in the same manner as the heating cables.
- Ensure the supply branch circuit has been disconnected / de-energized.**
- Prepare the thermostat for installation:
 - Remove the thermostat, wire connectors and screws from packaging.
 - Pop out the Screw Cover by gently pushing from behind, with the enclosed screwdriver, see Figure 3.
 - Trim excess length of supply branch circuit, cold lead and temperature sensor cables, as necessary, leaving about 6" projecting from the Electrical Connection Box (ECB), see Figure 4.
- Prepare each heating cable / cold lead for connection / splicing and connect per Figure 5 or Figure 6, as applicable. Use **Screwdriver** for connection to the Power Supply cables and the sensor wire connections.
- Neatly fold all wiring into ECB and fasten thermostat with #6-32 screws provided. Do not apply excessive force to the thermostat. Apply firm but continuous force until the screws can be fully seated.
- Align the thermostat, then finish tightening the two screws.
- Snap the Screw Covers over the screw heads.

A Button Explanation



Screw Covers - Decorative covers which conceal the screws securing the thermostat, easily removable.

LCD Display - Large scale readout which indicates the operational status of thermostat

Mode Switch - Allows easy selection of On and Off modes.

Up/Down Button - Used during time setting to move values up or down (if held down for 2 seconds, values will change rapidly).

Back Button - Used during time setting to go back to the previous step.

Accept - Used during time setting to accept the setting, and to advance to the next step.

EGFPD Test Button - Used to simulate a ground fault, tests the EGFPD circuitry and activates EGFPD Fault Light.

EGFPD Fault Light - Turns on when a ground fault is detected.

EGFPD Reset Button - Resets a simulated, or repaired EGFPD fault, and deactivates EGFPD Fault Light.

Electrical installation must be in accordance with all applicable national electrical codes (NEC, CEC) as well as local electrical and building codes, regulations and inspection procedures. Electrical inspection of the installation may be required before, during, and after installation. Check with your local electrical inspection department before beginning installation. Per U.S. National Electrical Code - Installation in a bathroom requires that the Thermostat / Equipment Ground Fault Protection Device be installed on a circuit protected by a separate Ground Fault Current Interrupter (GFCI).

B LCD Explanation

Note - Not all display elements will appear simultaneously.



Hour Digits - Indicates the time of day with AM or PM.

Sensor - Flashes when the Floor Sensor is malfunctioning.

Floor Temp Level - A numeric scale from 0.0 - 12.0, displayed in 0.5 increments. In normal operation, this number represents the **actual** temperature level of the floor. However, during temperature level adjustment, this number represents the **desired** temperature level of the floor. Level 0.0 is OFF, Level 0.5 is minimum warmth, and Level 12.0 is maximum warmth.

SSS - Indicates that the floor heating is energized, flashes slowly during 3 minute standby cycle.

C Energizing the Thermostat

When power is first connected to the thermostat, the LCD Display flashes as shown below. After 90 seconds the display will stop flashing and go to the default time setting of Monday, 12:00AM and display the Floor Temp Level. The display will also stop flashing if a button is pressed, or the mode switch is moved to another position.

"DISPLAY FLASHING"



D Setting the Time and Day

1. Move the mode switch to the **Off** position; the actual Floor Temp Level and current time are displayed.



2. To enter the time setting, press and hold the **BACK** and the **ACCEPT** buttons for 3 seconds, the AM symbol flashes. Press the **UP** or **DOWN** button to set AM or PM. Press the **ACCEPT** button once to accept the AM/PM setting.



3. After accepting the AM or PM setting; the Hour digits flash. Press the **UP** or **DOWN** button to set HOUR. Press the **ACCEPT** button once to accept the AM/PM setting.



4. After accepting the Hour setting; the Minute digits flash. Press the **UP** or **DOWN** button to set the Minute. Press the **ACCEPT** button once to accept the minute value and exit the time setting program.



During the previous steps, if no key input is received for 90 seconds or the mode switch is moved to other position, the thermostat will exit the time setting mode and reset to the Default value of 12:00 AM, Monday. The time is now set, the thermostat clock will start running.

E Floor Temp Level setting

Slide the mode switch to **ON** position, press and hold the **UP** or **DOWN** button for 3 seconds, the Floor Temp Level digits flash. Press the **UP** or **DOWN** button to toggle the desired Floor Temp Level and then press the **ACCEPT** button to accept the setting.

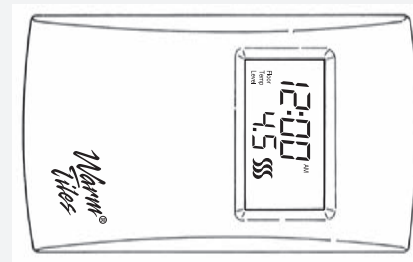
If the desired Floor Temp Level is **below** the ambient temperature, the thermostat will not energize the heating system and the heating icon will be off. If the desired Floor Temp Level is **above** the ambient temperature, the thermostat will energize the heating system and the heating icon will show on the LCD.

F Ground Fault Interrupter (EGFPD)

The thermostat has an Integral Ground Fault Protection Device (EGFPD) circuit to isolate the faults on the heating cable load. This circuitry is active **ONLY** when the heating cable load is energized (the **SSS** Heating Icon will show continuously busy on the LCD display). Test this circuitry monthly, as follows: Ensure the heating cables are energized (if the heating icon **SSS** is not shown on the display, increase the temperature setting of the floor to activate the cables). Press the **TEST** button once to simulate a fault; the red EGFPD light will come on and the "GFI" symbol will flash on the display. Press the **RESET** button to restore power to the cables, and return the floor temperature setting to the original setting.

Package Contents

- Thermostat
- Door without Display Window
- Wire Connectors
- Cable Guards
- Screwdriver
- #6-32 x 1" screws
- Sensor / Wire Assembly - 10' long
- Pull-Cord
- "DO NOT REMOVE" Warning Tags
- Door Label



**Easy Heat Non Programmable
Thermostat**
Models ET-1 (120VAC) &
ET-2 (208/240VAC)
Operating & Installation Instructions

If the EGFPD trips and can't be reset, turn the Mode switch to the **OFF** position, and have a qualified electrical technician check on the electrical circuit before energizing the system again.



Under NO circumstances should the thermostat be bypassed, and the heating cables energized, when a fault condition exists.

G Power Outage Recovery

Power interruptions to the thermostat will not affect the time or Floor Temp Level settings. However, a power interruption of greater than approximately 10 minutes will require that the clock be reset (see "Setting the Time" above). Of course, for extended power interruptions, the display will remain blank.

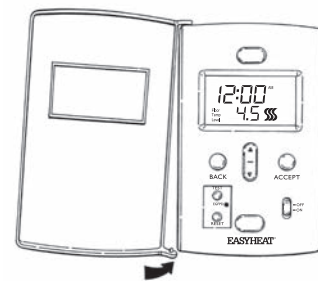
H Sensor Icon

If the thermostat detects a fault with the Floor Sensor, the **Sensor icon will flash on the LCD display. The power to the heating cable will be disabled.**



I Changing the Door

The ET series thermostats come with 2 doors, allowing you to customize the look of your thermostat to best match the room decor. The doors remove easily. With the door halfway open, gently pull down at the bottom hinge point and twist the door away from the thermostat. Simply reverse the process to install the new door.



Troubleshooting

Problem	Possible Cause	Suggested Correction
Display is Blank	No power to the thermostat	Restore power supply
EGFPD test button won't cause thermostat to trip	Thermostat is in Standby mode (Heating Symbol Flashing Slowly)	Wait for 3 minutes; until heating icon stops flashing and is on continuously
GFI flashing on LCD display	Ground Fault detected by thermostat	Press Reset button on thermostat. If fault does not clear, switch to Off mode, call service technician or contact Easy Heat Customer Service Center
Cold/Hot Floor	Floor Temp Level Set too low/high	Increase/decrease Floor Temp Level Setting
Floor Temp won't reach set level	Cables may not be able to reach set level due to room heat loss	Reduce source of heat loss, such as open windows, insulate floor directly under cables
Floor Heating doesn't turn on	Cable Problem	Cables must be checked
	Thermostat in Off mode	Switch to ON mode
	Power supply problem	Check breaker panel and wiring
	Problem with sensor wire, Sensor flashing on LCD display	Sensor and/or connections to thermostat must be checked
	Cable problem	Cables must be checked

Limited Warranty and Liability

Easy Heat warrants that if there are any defects in material or workmanship in any Warm Tiles thermostat during the first eighteen (18) months after the date of its purchase, we will replace the thermostat with an equivalent model, not including any labor or other installation costs.

Our obligation to replace the thermostat as described above is conditioned upon (a) the installation of the thermostat conforming to the specifications set forth in our installation instructions and (b) the thermostat not having been damaged by mechanical or electrical activities unrelated to the operation of the mat or cable.

A thermostat replacement as described above shall be your sole and exclusive remedy for a breach of this warranty. This limited warranty does not cover any service costs relating to the repair or replacement of any thermostat.

We shall not be liable for any incidental, special or consequential damages as a result of any breach of this warranty or otherwise, whether or not caused by negligence. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.

We make no other express warranty regarding any Warm Tiles mat or cable. No affirmation of fact or promise made by us, by words or action, shall constitute a warranty. If any model or sample was shown to you, the model or sample was used merely to illustrate the general type and quality of the goods and not to represent that the goods would necessarily be of that type or nature. **No agent, employee or representative of ours has authority to bind us to any affirmation, representation or warranty concerning the goods sold unless such affirmation, representation or warranty is specifically incorporated by written agreement.**

Any implied warranty of merchantability or fitness for particular purpose that may arise in connection with the sale of this product shall be limited in duration to eighteen (18) months from the date of purchase. We disclaim all other implied warranties, unless we are prohibited by law from doing so, in which case all such implied warranties shall expire at the earliest time permitted by applicable law. Some states do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you.

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state or province to province.

To obtain a replacement under this warranty, please send a description of the defect and proof of purchase, postage paid, to Easy Heat at the addresses noted herein.