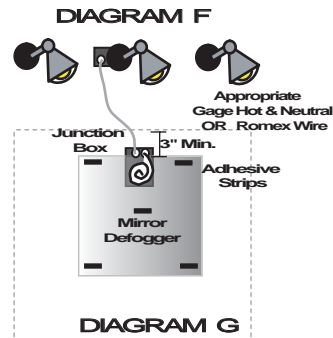


Step by Step Installation Instructions

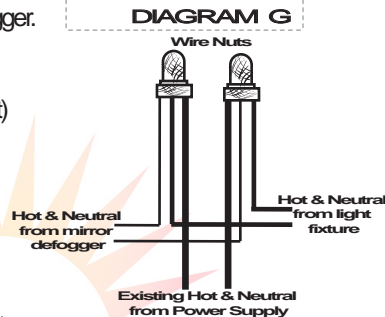
(continued)

Product Installation

Step 12. Adhere the WarmTouch Mirror Defogger to the finished wall using the 5 double-sided adhesive strips. (See Diag. F). Be sure to position the defogger so that the aluminum side is facing the back of the mirror, the junction box is directly behind the lead wire, the top of the defogger is no closer than 3" from the top of the anticipated mirror placement, and any excess lead wire can be placed neatly in the junction box so that the mirror will sit flush against the defogger.

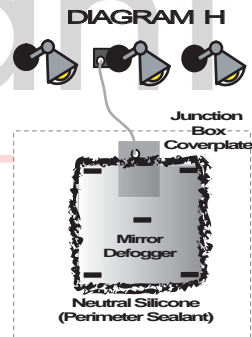


Step 13. Have a qualified electrician use wire nuts to "hard wire" the mirror defogger. Electrical connections should be made as follows: Connect Brown: (Hot) from the mirror defogger to the Line (Hot) from the Power Source and Blue (Neutral) from the defogger to the Neutral from the Power Source. Remember! If multiple defoggers are being used in combination, make sure to wire them in PARALLEL. (See Diag. G)



Step 14. Wrap the wire connectors and wire with electrical tape and store them in the junction box. Attach a steel coverplate to protect the connections.

Step 15. Run a bead of neutral silicone around the perimeter of the defogger to seal the edges and prevent condensation from building up between the back of the mirror and the defogger. (See Diag. H)



Step 16. With the assistance of another person, mount the mirror on the wall using screw clips or other removable mounting methods.

Step 17. Turn the circuit breaker for the switch back on. Turn the switch ON to supply power to the mirror defogger. Warmth should be felt within 5-10 minutes. If mirror does not warm, consult the Troubleshooting Section of this manual. After testing is complete, turn the defogger off to allow silicone to dry and cure according to the manufacturer's instructions.

Trouble Shooting

Verify that: 1) the circuit has been reactivated properly. 2) the circuit breaker has not tripped. 3) the connections are made properly at the junction box and/or 4) the heating element and/or electrical lead wire has not been altered or damaged. If the unit still does not warm, please consult our Technical Department at 1-800-959-9276 to review the Resistance Testing Procedures and to check for shorts.

Limited Warranty

WarmTouch Mirror Defoggers are warranted for a period of one year from the date of sale against defects in manufacturing. DK Heating Systems, Inc. and its affiliates will not warranty the labor, material costs for installation, repair or replacement of any other item(s) damaged due to misuse or improper installation of this product, or any other product used to install a WarmTouch Electric Mirror Defogger. These installation instructions are meant to be a guide followed in accordance with National, State, and Local Electrical Codes and are applicable for both residential and commercial applications. This warranty is null and void if product is used for any purpose other than those stated herein or if it is altered in any form.

WarmTouch[®] Electric Mirror Defogger



Bring Simplicity to Life

Installing the WarmTouch Electric Mirror Defogger is a simple, effective, and low-cost way to prevent fog build-up on the surface area of any flat wall mirror. The WarmTouch Electric Mirror Defogger typically uses as little energy as an average light bulb and does not require any maintenance.

Simple Control Options

The WarmTouch Electric Mirror Defogger can be controlled in a variety of ways: 1) an existing light switch or fan switch, 2) an independent switch (illuminating styles are recommended to warn of unnecessary activation, 3) an independent wall-timer.

Safety First

Since appropriate wiring procedures may vary based on the existing electrical conditions, it is highly recommended that all of the electrical wiring and connections be completed by a qualified electrician. All installations must be completed in accordance with Local, State, and National Electrical Codes.

This high-quality product is produced to meet the highest safety standards (i.e. UL, C-UL, and National Electrical Codes).

Technical Specifications

Operating Voltage: 120 Volts - 60Hz

Available Sizes/Watts per unit:

16" X 24"/59W

18" X 20"/50W

24" X 30"/108W

28" X 42"/175W

Thickness: Approx. 1/16" thick

Electrical Connection: 14 Gage "Cold" Power Lead extends approx 60" from the top, center edge

Construction

WarmTouch Mirror Defoggers are constructed of a line voltage, low-wattage, resistance cable sandwiched between a conductive foil face and a felt covered backing.

Intended Uses

This product is ONLY intended for use behind FLAT WALL MIRRORS.

Mirror must be larger than WarmTouch Mirror Defogger. (Only covered area will be fog-free.)

Multiple Mirror Defoggers may be used in combination to heat larger mirrors.

These installation instructions are intended for REMOVABLE mirrors.

(Screw clips or other removable mounting methods for the mirror must be used.)

Limitations

Do NOT install this mirror defogger behind decorative, etched, or beveled mirrors.

Do NOT install defogger behind mirrors located along exterior walls or on interior walls where room temperature falls below 50 degrees Fahrenheit on either side of the wall.

Do NOT overlap, bend, cut, drill through, or alter the mirror defogger in any way.

Do NOT install WarmTouch Mirror Defogger in showers or saunas OR submerge it in water.

Do NOT use the defogger for any purpose other than those described in these instructions.

Electrical Requirements

WarmTouch Mirror Defoggers must be connected to a 110/120 Volt Power Source in accordance with National, State, and Local Codes. Power for the WarmTouch Mirror Defogger may be provided by the existing fuse or circuit breaker (typically 15 to 20 Amps) that supplies power to the light/fan switch. (Note: Connecting the mirror defogger to the light fixture will set it to operate whenever the light is turned on. Minimize usage by connecting the defogger to the fan switch, an independent switch, or a timer.) Multiple Mirror Defoggers may be connected IN PARALLEL to the same switch. (Appropriate gage wire must be determined by the electrician.) National Electrical Code requires the junction box & electrical connections to be accessible behind the mirror. Consult your Local Authorities to review any additional Local Electrical Codes that may apply prior to installation.

Materials & Tools Required

- Wire Cutting & Stripping Tools
- Wire Connectors
- Screw Driver
- Standard Junction Box
- Isopropyl Alcohol/ cloth
- Electrical Fish Tape
- Appropriate Gage & Color Electrical
- Wire or Romex (Consult your electrician)
- Drywall Router

Step by Step Installation Instructions

Preparation

- Step 1. Disconnect the power to the room light, fan, or independent switch circuit at the panel box.
- Step 2. Mark the mirror with piece of removable masking tape or a dry erase marker at the height of the tallest person who will be using the mirror (Make sure that this marking is no less than 3" from the top of the mirror.) (See Diag. A)
- Step 3. Measure & mark the center point above the sink or dressing table on the wall along the top edge of the mirror with masking tape. (See Diag. B)
- Step 4. Measure the distance from the floor to the height marking made in Step 2. (See Diag. C)
- Step 5. Carefully remove your mirror and place it in a well supported location. (For safety reasons, it is highly recommended that two people work together to remove and replace the mirror.)
- Step 6. Mark the height measurement on the wall with masking tape and mark an "x" where the center point of the sink or dressing table lines up with the height marking. This will mark the top center of your mirror defogger & lead location. (See Diag. C).
- Step 7. Locate an existing stud near the "X" marked in Step 6 or plan to install a sister stud or cross beam to which you can attach the junction box. Use a drywall router to cut out a section of drywall behind the "x" (top/center marking of your mirror defogger) so that the box will be installed directly behind the mirror defogger lead wire. (Caution: Be careful to avoid damaging existing wires & pipes.) (See Diag. D)
- Step 8. Remove 2 knockouts (one for the Hot and Neutral / Romex lead(s) from the desired power source and one for the defogger lead wire). Install the electrical junction box to the existing stud, "sister" stud, or cross beam in accordance with all National, State, and Local Codes. (See Diag. E)
- Step 9. Following all applicable electrical codes, run a 120 Volt AC power line/ Neutral from the existing power source (vanity light fixture, bathroom fan, independent switch or timer) to the junction box. using the appropriate Gage electrical wire (or Romex). (See Diag. E)
- Step 10. Repair and refinish the drywall making sure to leave an accessible opening for the junction box.
- Step 11. Wipe the wall clean of all drywall dust and use isopropyl alcohol solution to clean the back of the mirror, remove residue, and dry excess moisture to assure good adhesion.

DIAGRAM A



DIAGRAM B

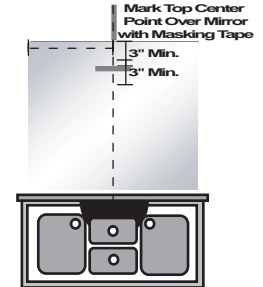


DIAGRAM C

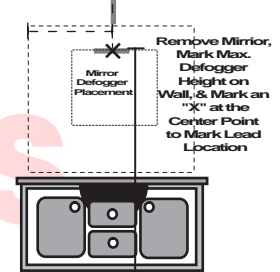


DIAGRAM D

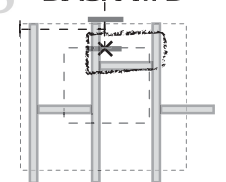


DIAGRAM E

