

SELF-CLEAN COATING DETECTOR

(FOR PHOTOCATALYTIC COATINGS WITH HYDROPHILIC PROPERTIES)

MODEL #RD1350

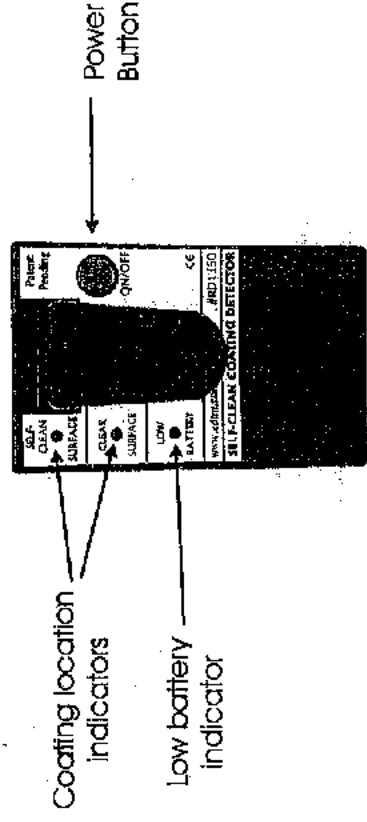
Patent Pending

GENERAL DESCRIPTION:

The RD1350 is capable of identifying the presence and location of SELF-CLEAN coatings that are photocatalytic with hydrophilic properties. The meter uses state of the art technology coupled with microprocessor control to achieve an EASY-TO-USE hand held meter. The tool is powered by a 9 volt alkaline battery (included).

Photocatalytic coatings should be placed on the exterior surface of a window. The photocatalytic coating uses the sun's UV light to gradually break down, loosen and dissolve dirt and soil. The coating effectively vaporizes dirt that is on the surface of the glass.

The hydrophilic properties of the coating prevent water from beading when it hits the surface of the glass. Therefore the water has a sheeting effect when it contacts the glass surface. The sheeting effect allows water to carry dirt away from the surface, and prevent the window from streaking or allowing water spots to occur.



FEATURES:

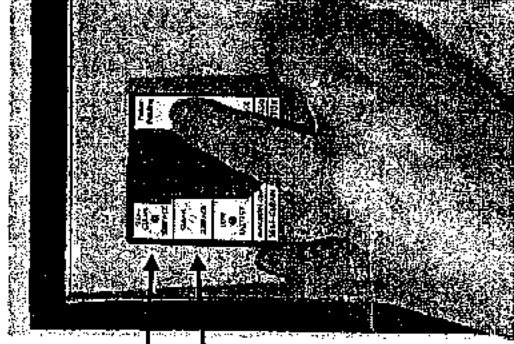
- EASY TO READ INDICATORS
- CONVENIENT BELT-CLIP
- MICROPROCESSOR CONTROL
- NO ADJUSTMENTS OR CALIBRATIONS NECESSARY
- REAR-MOUNTED SENSOR
- MOMENTARY POWER SWITCH
- SMALL, PORTABLE CONVENIENT SIZE

Manufactured by **BEDTM, Inc.** in the USA
See back cover for additional products

METHOD OF OPERATION -- RD1350

The RD1350 uses an optical principle to detect the presence of the SELF-CLEAN coatings. To take a reading simply place the meter FLAT on the glass and push/hold the momentary power button. The meter will blink all three indicators quickly and then register the correct reading by showing one of three conditions:

- SELF-CLEAN SURFACE:** the meter is touching the SELF-CLEAN coating
- CLEAR SURFACE:** the glass surface being touched by the meter is CLEAR, NO self-clean coating applied
- NO INDICATORS LIT:** the meter is not pressed against the glass correctly or there is no glass present



SELF-CLEAN INDICATOR

CLEAR SURFACE INDICATOR

The instrument and glass should be held stationary during the reading. Since the RD1350 meter uses an optical property to conduct measurements, dirty glass can affect the accuracy of the meter. Therefore it is important to test an area of the glass that is the cleanest. You may want to wipe the glass area clean before taking a measurement.

BEHIND THE GLASS

When testing loose pieces of glass, it is best to hold the glass upright in free air. Holding the glass in free air is the optimal testing condition. To avoid possible errors in measurement, do not place the glass on any surface. Placing the glass on tabletops or other surfaces that have a glossy, reflective, or bright color finish may affect the accuracy of the readings. If you must test the glass on a tabletop surface, make sure the surface is not glossy, reflective or brightly colored. To improve accuracies on tabletop measurements, place a dark colored fabric on the tabletop surface first, then place the glass on the fabric. It is also possible to take measurements of glass on top of other pieces of glass, as long the background glass is not reflective. This is helpful if you are measuring stacks/pallets of glass.

MAINTENANCE & OPERATING TIPS

- 1. CLEANING:** It may be necessary to clean the RD1350 meter occasionally. Since the meter is an optical product, the sensing area on the back side of the enclosure may need cleaning to maintain the meter's reliability. Use compressed air to blow debris and dirt from the lens area. If the dirt cannot be removed with compressed air, use a soft lint-free cloth to lightly remove the dirt. Only apply light pressure to the lens.
- 2. POSSIBLE ERRORS:** It is possible that specific reflective coatings can cause errors to occur in your measurements. Placing the RD1350 in direct contact with a low e coating or reflective coating may cause the meter to incorrectly show the surface contains a SELF-CLEAN coating. For highly reflective coatings, it may even be possible for the meter to incorrectly indicate a SELF-CLEAN coating is present, when the highly reflective coating is on surface #2. If you are unsure if your window contains a low e coating, use a low e coating detector (EDTM Model # AET 600) to identify its presence and location.
- 3. APPLICATIONS:** The RD1350 can measure single pieces of glass, glass installed in windows (double or triple glazed insulating units), laminated glass, tempered glass, as well as many other types of glass. The meter will always be testing the first surface of glass ONLY.
- 4. MEASUREMENT CONFIRMATION:** It is recommended to take multiple readings at different locations on each piece of glass to confirm an accurate measurement. This will reduce the number of mistakes that may occur from dirty glass or other possible errors.
- 5. ROCKING ENCLOSURES/BOWING GLASS:** Be certain the meter is placed flatly against the glass as shown in the picture on the opposite page. Lifting the meter away from the glass surface will affect the results of your test. Be aware that it is possible for glass to bend or bow. Therefore confirm the enclosure does not rock on the glass. The enclosure should be sitting flat at all times. If the enclosure is rocking, try moving to another location on the glass.
- 6. SECURITY:** DO NOT open the enclosure. Opening the enclosure will void the product warranty and affect the calibration of the RD1350 meter.
- 7. CALIBRATION:** This meter is specially calibrated to measure PHOTOCATALYTIC SELF-CLEAN coatings with hydrophilic properties. It may not work properly if testing other types of self-clean glass.
- 8. MISUSE:** Do not apply excessive amounts of force to the power button. Extreme force may damage the switch or cause the entire meter to flex. This will affect the calibration of the meter and may cause errors to occur.
- 9. LIGHTING CONDITIONS:** The RD1350 is designed to operate in most all normal lighting conditions. The meter can be used indoors or outdoors, as well as in direct sunlight. As this meter uses optical properties to conduct its measurements, extremely powerful lamps behind the meter may affect the performance. If this condition occurs, move the glass to another location for testing, or block the light that is shining behind the meter.

BATTERY REPLACEMENT

The RD1350 is powered by a 9 volt alkaline battery. When the battery voltage is getting too low to operate the meter, the low battery indicator will light. It is OK to complete the set of measurements you are conducting, however it is recommended that the battery be replaced immediately thereafter. To replace the battery, remove the battery cover near the bottom of the meter and replace with a new battery. Alkaline batteries are recommended to operate this meter.