

Introduction

Congratulations on your purchase of the Extech MO280 Moisture Meter. This device non-invasively measures and displays moisture content (%) in wood, building products, and other materials. The MO280 can also detect moisture behind ceramic tiles or behind and under various floor or wall coverings, on fabric/cloth and on paper products. This professional meter, with proper care, will provide years of safe reliable service.

Theory of Operation

The square sensor on the rear of the instrument sends and receives a low power electromagnetic signal through the material under test. The LCD shows the average moisture content (in %) of the material under test to a max. depth of 3/4" (20mm). The MO280 is an auto-calibration device; no user calibration is needed.

Operation

Note: When the meter's display is active, the meter is measuring. If the meter's rear power switch is on and the display is blank, the meter is in sleep mode. Press the MEASURE button to resume measuring.

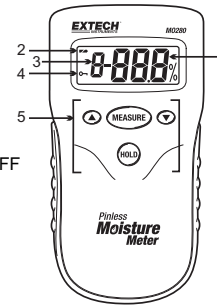
- Slide the rear power switch to the ON position
- Momentarily press the MEASURE button to begin measurements (the display will switch on)
- Press the UP or DOWN button to step through and select the material group (0 to 9) for the material to be tested.
- Place the meter's rear sensor (black square) against a flat surface on the material to be tested.
- The meter's audible tones will sound as the meter seeks a stable reading. A blinking reading with an urgent chirping sound indicates that the measurement is out of the range for the group selected.
- Press **and hold** the HOLD button to freeze a displayed reading
- Turn the rear power switch to OFF when meter is not in use. This will optimize the battery life

Specifications

Max. Measurement depth: 3/4" (20mm)
 Sensor area: 1.6" x 1.6" (40 x 40mm)
 Battery type: 9V (rear compartment)
 Display: LCD with sleep mode
 Operating conditions: 32°F to 122°F (0°C to 50°C)
 0 to 60%RH (non-condensing)
 Meter Dimensions: 2.75 (W) x 5.25 (H) x 1.0 (D)" (70 x 133 x 25.4mm)
 Weight: 5.6 oz (160g) with battery

Description

- Moisture reading
- Low battery icon
- Material group number 0-9
- Data Hold icon
- Keypad



Note: Sensor, battery compartment, and ON/OFF switch on reverse side of meter

Measurement Considerations

The thickness of the sample under test must be at least 3/4" (20mm). If the sample is thinner, use a stack of samples to measure. Also, the measurement area of the sample should be larger than the MO280 sensor area which is 1.6 x 1.6" (40 x 40mm).

Warranty

EXTECH INSTRUMENTS CORPORATION (a FLIR company) warrants this instrument to be free of defects in parts and workmanship for **one year** from date of shipment (a six month limited warranty applies to sensors and cables). If it should become necessary to return the instrument for service during or beyond the warranty period, contact the Customer Service Department at (781) 890-7440 ext. 210 for authorization or visit our website www.extech.com for contact information. A Return Authorization (RA) number must be issued before any product is returned to Extech. The sender is responsible for shipping charges, freight, insurance and proper packaging to prevent damage in transit. This warranty does not apply to defects resulting from action of the user such as misuse, improper wiring, operation outside of specification, improper maintenance or repair, or unauthorized modification. Extech specifically disclaims any implied warranties or merchantability or fitness for a specific purpose and will not be liable for any direct, indirect, incidental or consequential damages. Extech's total liability is limited to repair or replacement of the product. The warranty set forth above is inclusive and no other warranty, whether written or oral, is expressed or implied.

Support line (781) 890-7440
 Tech Support: Ext. 200; E-mail: support@extech.com
 Repair>Returns: Ext. 210; E-mail: repair@extech.com
www.extech.com

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Wood and Material Group Numbers

No.	Name	No.	Name
4	Abachi	4	Mahogany
5	Abura	5	Maple, Bigleaf
6	Afrormosia	5	Maple, Red
5	Agba	6	Maple, Sugar
4	Alder	6	Meranti
5	Ash	6	Oak Red
4	Aspen	7	Oak, White
4	Basswood	7	Pecan
6	Beech	4	Pine Eastern White
6	Birch	4	Ponderosa
4	Cedar, Eastern	5	Red
3	Cedar, Western	4	Southern Yellow
5	Cherry	4	Poplar
4	Chestnut	5	Ramin
3	Cottonwood	4	Redwood
4	Cypress	8	Rosewood
7	Dogwood	5	Sassafras
5	Douglas Fir	4	Spruce
5	Elm	5	Sycamore
5	Gum, Red	5	Teak
4	Hemlock	6	Walnut, Black
7	Hickory	4	Willow
5	Koa	3	Cloth
5	Lauan, White	3	Cotton
3	Lauan, Red	9	Dry wall
5	Larch	3	Fabric
4	Limba	9	Paper
6	Locust, Black	5	Plywood

Measurement ranges at 73°F (23°C)

Group No.	Range
0	23.4 to 79.9%
1	33.4 to 89.9%
2	43.4 to 99.9%
3	6.8 to 63.3%
4	6.7 to 63.2%
5	5.4 to 61.9%
6	3.4 to 59.9%
7	1.6 to 58.1%
8	0.4 to 56.9%
9	0.0 to 56.5%