

NORMA ASTM D 3273

Standard Test Method for Resistance to Growth of Mold on the Surface of Interior Coatings in an Environmental Chamber

Significance and Use

An accelerated test determining the resistance of interior coatings to mold growth is useful in estimating the performance of coatings designed for use in interior environments that promote mold growth and evaluating compounds that may inhibit such and the aggregate levels for their use (see also Note 1).

This test method should preferably be used by persons who have had basic microbiological training.

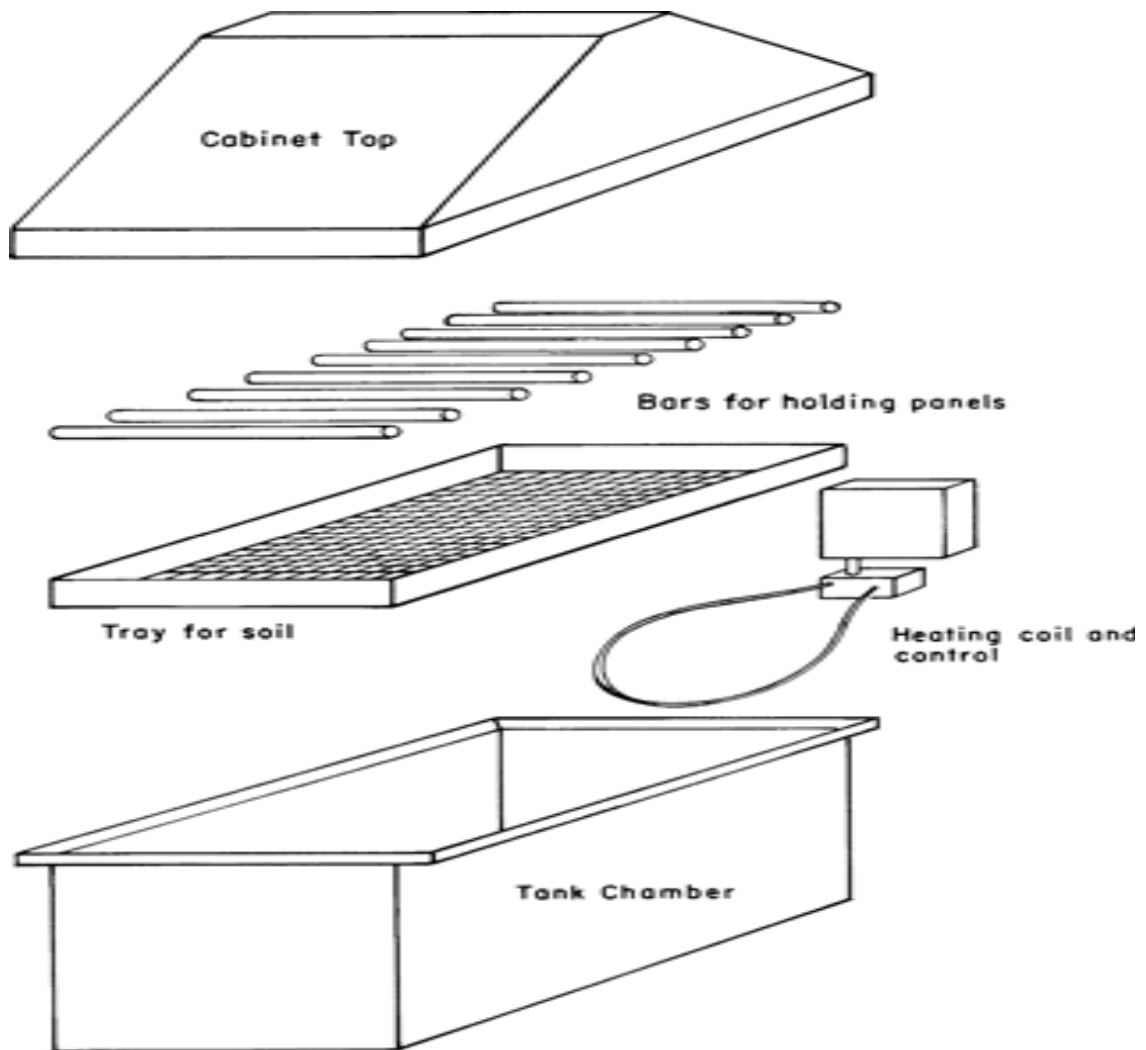


Fig.1 Environmental Cabinet Assembly

1. Scope

1.1. This test method describes a small environmental chamber and the conditions of operation to evaluate reproducibly in a 4 week period the relative resistance of paint films to surface mold fungi, mildew growth in a severe interior environment. The apparatus is designed so it can be easily built or obtained by any interested party and will duplicate results obtained in a large tropical chamber.

1.2. This test method can be used to evaluate the comparative resistance of interior coating to accelerated mildew growth. Performance at a certain rating does not imply any specific period of time for a fungal free coating. However, a better rated coating nearly always performs better in actual end use.

NOTE 1 - This test method is intended for the accelerated evaluation of an interior coating's resistance to fungal defacement. Use for the test method for evaluating exterior coating's performance has not been validated, nor have the limitations for such use been determined. If this test method is to be used for the testing of an exterior coating system, a precautionary statement regarding interpretation of results as being outside of the scope of this method must be included. Any accelerated weathering (leaching, weathering machine exposure, etc) should be reported and should also bear reference to the fact that it is beyond the current scope of this method.

1.3. Temperature and humidity must be effectively controlled within the relatively narrow limits specified in order for the chamber to function reproducibly during the short test period. Severity and rate of mold growth on a film is a function of the moisture content of both the film and substrate. A relative humidity of 95% +/- 3% at a temperature of 32.5 +/- 1 °C (90 +/- 2°F) is necessary for test panels to develop rapidly and maintain an adequate moisture level to support mold growth.

1.4. The values stated in SI units are to be regarded as the standard. The values given in parentheses are for information only.

1.5. This standard does not purport to address all of the safety concerns, if any, associated with its use. It is the responsibility of users of this standard to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to use.

2. Referenced Documents (purchase separately)

ASTM Standards

E177 Practice for use of the Terms precision and Bias in ASTM Test Method.

E 691 Practice for conducting an interlaboratory study to determine the precision of a Test Method.

De esta prueba surgen las imágenes que a continuación se muestran:

