



Standard Test Method for Accelerated Evaluation of Wood Preservatives for Marine Services by Means of Small Size Specimens¹

This standard is issued under the fixed designation D 2481; the number immediately following the designation indicates the year of original adoption or, in the case of revision, the year of last revision. A number in parentheses indicates the year of last reapproval. A superscript epsilon (ε) indicates an editorial change since the last revision or reapproval.

This standard has been approved for use by agencies of the Department of Defense.

1. Scope

1.1 This test method determines the relative effectiveness of wood preservatives in small wood specimens exposed to a natural marine environment. It is not within the scope of this procedure to determine the retention or duration of protection for commercial size piles and timbers.

1.2 The requirements for preparing the material for testing and the test procedures appear in the following order:

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

2. Referenced Documents

2.1 ASTM Standards:

- D 390 Specification for Coal-Tar Creosote for the Preservative Treatment of Piles, Poles, and Timbers for Marine, Land, and Fresh Water Use²
- D 1165 Nomenclature of Domestic Hardwoods and Softwoods²
- D 2665 Specification for Poly(Vinyl Chloride) (PVC) Plas-

tic Drain, Waste, and Vent Pipe and Fittings³

3. Summary of Test Method

3.1 Small panels or blocks of wood are impregnated with an appropriate series of retentions of a preservative and are prepared for exposure, according to specified procedures. They are then exposed by total immersion in a natural marine environment. An index of physical condition determined during periodic inspection is used to measure the effectiveness of preservative treatment.

4. Significance and Use

4.1 This test method is useful in determining the relative efficacy between various treatments and naturally occurring wood-destroying agents. It is an initial means of estimating the tolerance limits of the biologically destructive agents or the threshold values of the chemical preservative, or both.

4.2 This test method is not intended to provide quantifiable reproducible values. It is a qualitative method designed to provide a reproducible means of establishing relative efficacy between experimental contract levels.

5. Test Specimens

5.1 *Selection of Wood*—Use sapwood of southern or Ponderosa pine or Douglas-fir for standard comparative tests. Use boards free from knots or excessive resins, and showing no visible evidence of infection by mold, stain, or decay fungi. Drill mounting holes before treatment.

5.2 Selection of Size:

5.2.1 *A Panels*—6 by 38 by 152 mm, vertical grain with longitudinal grain direction in the 152 mm dimension.

5.2.2 *B Panels*—19 by 76 by 460 mm.

5.2.3 *C Blocks*—19 by 19 by 19 mm, milled as accurately as possible. If necessary (for example, for convenience in handling) blocks may be drilled through the center of a tangential face with a 3-mm drill. The volume of the blocks without the

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² *Annual Book of ASTM Standards*, Vol 04.10.

³ *Annual Book of ASTM Standards*, Vol 08.04.