

TM 2-15

Swellometer Test

**Test Method to Determine
the Short-term Anti-Swell
Effectiveness of Treating
Systems**



**WINDOW & DOOR
MANUFACTURERS ASSOCIATION**

WDMA

THE WINDOW & DOOR MANUFACTURERS ASSOCIATION

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WDMA T.M. 2- 15
SWELLOMETER TEST
TEST METHOD TO DETERMINE THE SHORT TERM ANTI-SWELL EFFECTIVENESS
OF TREATING SYSTEMS

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1. Purpose of the Test

- 1.1** This test is designed to measure the effectiveness of treating systems for retarding dimensional changes in wood when exposed to water. By use of this test method, it can be determined if a commercial treating system meets the short term anti-swell effectiveness requirement of WDMA I.S.4. Any treating system intended to stabilize solid wood can be tested with this method including but not limited to short term anti-swell treating formulations, pressure systems, and wood modification systems. The test method is not intended for use with integrally treated cellulosic composites.

2. Testing Material

- 2.1 Test Specimens for parts machined before treatment:** Wood used for these tests must be straight-grained, flat-sawn clear, kiln-dried Ponderosa Pine sapwood (see attachment A). The boards shall be cut in a manner to give specimens 6 mm (1/4 inch) in the longitudinal dimension, 25 mm (1 inch) in the radial dimension, and 127 mm (5 inches) in the tangential dimension. Cutting shall be done with a sharp, fine-toothed saw to obtain as smooth a surface as possible without sanding. Each specimen shall be numbered for identification. (See Figure 2)

2.1.1 The parent board shall have an oven-dry specific gravity of 0.40 ± 0.03 .

2.1.2 The swelling of an untreated specimen from each parent board shall be determined before test. This is done by equilibrating the specimen according to Section 3.1 and then testing according to Section 3.4. The swelling of the specimen shall not be less than 4.12 mm (0.1625 inch).

- 2.2 Test Specimens for parts machined after treatment:** Wood used for these tests must be straight-grained, flat-sawn clear, kiln-dried wood of the primary species intended for use with