# WINDOW & DOOR MANUFACTURERS ASSOCIATION

# **WDMA T.M. 13-19**

# **Method for Preparing Retention and Penetration Testing Samples**

Published By Window and Door Manufacturers Association 330 N. Wabash Avenue, Suite 2000, Chicago, IL 60611 2025 M Street NW, Suite 800, Washington, DC 20036

® Copyright 2009

® Copyright 2019

No part of this publication shall be reproduced in any form, in an electronic retrieval system or otherwise, without the prior written permission of the publisher.

#### 1. PURPOSE

**1.1.** The purpose of this method is to provide guidelines for preparing retention and penetration wafers for testing of millwork treatments.

## 2. SCOPE

- 2.1. This method describes the sampling of a "sacrificial" part of a standard size. The data from the "sacrificial" part may subsequently be used to determine the efficiency of the treatment to penetrate different wood species and/or the efficiency of the treating system (application method and treatment) to apply the treatment to the parts.
- **2.2.** This method may also be used for preparing samples of other dimensions including actual millwork parts if desired.

## 3. SUMMARY

- **3.1.** Outlined below are two procedures for sampling a "sacrificial" piece of wood. The samples produced may be used to determine the retention and penetration of the active ingredients. One procedure is used for checking retention and penetration of parts treated after machining and the other procedure is used for checking the retention and penetration of parts treated prior to final machining of components.
- 3.2. Once the wafers are cut, the retention and penetration data may be generated by analyzing individual samples from multiple pieces, reporting the average and standard deviation; or, grinding the samples from multiple pieces into sawdust, thoroughly mixing the sawdust into one homogeneous sample, and analyzing the final sawdust composite.