

# TM 15-23 Vertical Edge Impact Test

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## Test Method for Determining the Vertical Edge Impact of Backing for Veneered Wood Door Stiles



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**TEST METHOD FOR DETERMINING THE VERTICAL EDGE IMPACT RESISTANCE OF**  
**BACKING FOR VENEERED WOOD DOOR STILES**

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## **1. SCOPE**

This test method determines the ability of a backer material for veneered wood door stiles to resist impact along its vertical corner edge. This is a small-scale test, using a falling weight to impart an impact load to the edge of a sample. The depth of the depression created by the impact ~~is~~ constitutes the pass/fail criteria.

## **2. SIGNIFICANCE AND USE**

- 2.1.** This test method can be used to evaluate the reaction of various veneered door stile backer material combinations, including solid or veneered wood, and engineered constructions. The method considers an impact as might be generated by an uncushioned rolling cart or hospital gurney as a benchmark to establish a comparison between materials. Damage to the test specimens measured by this test is compared to an acceptable level based on testing of door stiles with veneered edges and basswood hardwood backer.

## **3. APPARATUS**

- 3.1.** The impact device (fig. 1 & 2) shall consist of steel weight with a  $50.8 \pm 1.6$  mm ( $2 \pm 1/16$  inch) wide impact head, support flanges and guide tubes. The weight of the impact device shall be  $6.81 \pm 0.04$  kg ( $15 \pm 0.1$  lb.). A base having guide rods is provided to serve as the platform for the test jig to ensure consistent low-friction delivery of the impact device. At rest, the midpoint of the impact head shall engage the test specimen along its full 50.8mm (2 inch) width. The impact device shall be capable of being lifted and released at least 3050mm (12 inches) above the test specimen.
- 3.2.** The sample jig (fig. 1) shall be securely mounted to the base of the test apparatus and shall hold the sample at a 15-degree angle to the face of the impact head. The jig shall be of a construction that will prevent flexing of the jig during impact.
- 3.3.** A separate measurement fixture (fig. 3) shall be constructed to support the sample along the impacted corner while holding it at an angle of 15 degrees from vertical (105 degrees to the base). A relief cutout is required in the back piece to prevent any sample deformation from