Hinge Loading Test

Test Method for Determining Hinge Loading Resistance of Wood Door Stiles
1. SCOPE

This test method determines the ability of a wood door stile to resist the horizontal withdrawal of an attached hinge. This is a small-scale test designed to simulate the application of a downward force to the knob area on the leading edge of a hinged swinging door.

2. APPLICABLE DOCUMENTS

2.1. ASTM D1761-12, Standard Test Methods for Mechanical Fasteners in Wood

2.2. ANSI B18.6.4-1998 (R2005), Thread Forming and Thread Cutting Tapping Screws and Metallic Drive Screws

3. SIGNIFICANCE AND USE

This test method can be used to evaluate the attached hinge withdrawal resistance of various door stile materials as well as to compare different hinge types and fastening systems.