TMS 01

Standard Practice for Testing Treestand Load Capacity

1. Scope

1.1 This practice provides guidance for testing the load capacity of treestands. For changes to this specification since the last issue, refer to the Summary of Changes section at the end of the standard.

1.2 The values stated are in English units.

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*:

2.2 *Federal Standards*:

2.3 Manufacturing Standards: Treestand Manufacturing Standards TMS 11, 12 and 15.

3. Terminology

3.1 The terminology and definitions in the referenced documents are applicable to this practice.

3.2 *Definitions:*

3.2.1 *Non-climbing, fixed position* or *hang-on treestand*---a treestand which is secured to the tree at the elevation where it is used. (The user usually ascends the tree by some means and then lifts the treestand to the desired position and secures it for use.)

3.2.2 *Climbing treestand*--a treestand which provides both the means to ascend the tree, and allow the user to remain at a desired elevation.

3.2.3 *Handclimber,* or *climbing aid*-- a device to assist climbing with a climbing treestand. A structure that allows the user to support his weight when lifting a climbing treestand with his legs.

3.2.4 *Backbar*-- the adjustable component of a climbing treestand or handclimber which engages the tree to provide support.

3.2.5 *Platform*--the horizontal structural area of a treestand on which the user stands and/or places his feet.

3.2.6 *Treestand*—a device designed to be affixed to a tree or its branches so as to permit an individual to sit or stand thereon for the purpose of attaining an elevated position from which to observe, photograph or hunt.

4. Summary of Practice

4.1 This practice provides guidelines for the selection of tests for the evaluation of the load capacity of treestands in accordance with manufacturers capacity rating, particularly for quality assurance and adequacy of safety factors.

4.1.1 Static load test

4.1.2 Stability and Adherence test.

4.1.3 Repetitive loading test. NOTE: Climbing treestands only.

4.1.4 In the event of a repetitive load failure, manufacturer is to submit two additional stands for testing for final acceptance.

5. Significance

5.1 This practice is provided to develop and maintain uniformity in practices for the evaluation of the load capacity of treestands, particularly with regard to quality assurance and safety factors.

5.2 It is emphasized that the use of these procedures will not alter the validity of data determined with specific test methods, but provides guidance in the interpretation of test results (valid or invalid) and guidance in the selection of a reasonable test procedure in those instances where no standard exists today.

6. Selection of Test Procedures

6.1 The following methods are recommended for individual units and situations:

6.1.1 An individual test unit of the specified model shall selected at random.

6.1.2 The test unit shall first be visually inspected for any flaws, defects, missing parts, etc. and any discrepancies so noted. The test unit shall also be checked, and so noted, to assure that instructions are included with the unit.

6.1.3 The initial test performed shall be a repetitive loading test in accordance with the Standard Test Method for Treestand Repetitive Load Capacity, TMS 15.

6.1.4 After successful testing as given in 6.1.3, a stability and adherence test in accordance with the Standard Test Method for Treestand Static Stability and Adherence, TMS 12.

6.1.5 After successful testing as given in 6.1.4, a static load test shall be performed in accordance with the Standard Test Method for Treestand Static Load Capacity, TMS 11.

7. Failure Criterion

7.1 During all testing, yielding, permanent deformation, cracks or other structural defects shall be cause for failure. Visual inspection shall be the main inspection method; however, other non-destructive test methods may be used to determine if yielding has occurred.

7.2 During static stability and adherence testing, the stands will rotate as the load is applied. No sudden movement of the stand shall occur that could cause the user to lose their balance.

8. Keywords

8.1 adherence; backbar; climbing aid; platform; treestand

SUMMARY OF CHANGES

This section identifies the location of principle changes to this standard that have been incorporated since its last issue. Changes or additions are underlined on the section reference number.

Revision A – Section 4.1.5 added.
Revision B – Sections 4 and 6 changed to reflect TMS 12 and TMS 13 being combined.

9-29-08
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