

TMS 01-95

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 11-95, 12-95, 13-95 and 15-95

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.

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 manufactures capacity rating, particularly for

quality assurance and adequacy of safety factors including: NOTE: 4.1.2 and 4.1.3 may be combined into a single test.

4.1.1 Static load test

4.1.2 Stability test.

4.1.3 Adherence test.

4.1.4 Repetitive loading test. NOTE: Climbing treestands only.

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

5. Significance

5.1 This practice is provided to develop and maintain uniformity 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 be selected at random.

6.1.2 The test units shall first be visually inspected for any flaws, and defects, missing parts, etc., and any discrepancies are 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 static load test in accordance with the Standard Test Method for Treestand Static load Capacity, TMS 11-95.

6.1.4 After successful testing as given in 6.1.3, a stability test shall be performed in accordance with the Standard Test Method for Treestand Static Stability, TMS 12-95.

6.1.5 After successful testing as given in 6.1.4, an adherence test shall be performed in accordance with the Standard Test Method for Treestand Adherence, TMS 13-95.

6.1.6 For the case of climbing treestands only, after successful testing as given in 6.1.5 a repetitive loading test shall be performed in accordance with the Standard Test Method for Treestand Repetitive Loading Capability, TMS 15-95.

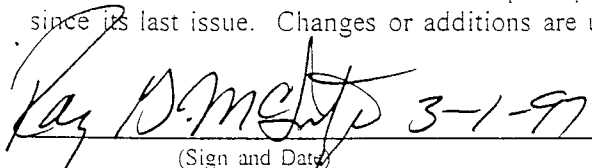
7. Failure Criterion

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.

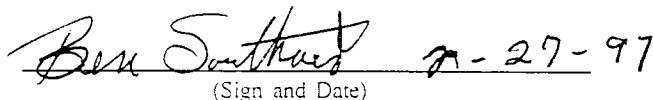
- 7.2 During static stability and adherence testing the stands will rotate as the load is applied. No sudden movement of the stand shall occur that could cause the used to loose their balance.

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.

 3-1-97
(Sign and Date)

President
Treestand Manufacturers Association

 7-27-97
(Sign and Date)

Secretary
Treestand Manufacturers Association