Designation: F2120 – 06 (Reapproved 2014)

An American National Standard

Standard Practice for Testing Treestand Load Capacity[1]

This standard is issued under the fixed designation F2120; the number immediately following the designation indicates the year of original adoption or, in the case of revision, the year of last revision. A number in parentheses indicates the year of last reapproval. A superscript epsilon (ε) indicates an editorial change since the last revision or reapproval.

1. Scope

1.1 This practice provides guidance for testing the load capacity of treestands.

1.2 The values stated are in inch-pound units and are to be regarded as the standard.

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]

F2125 Test Method for Treestand Static Stability and Adherence

F2126 Test Method for Treestand Static Load Capacity

F2128 Test Method for Treestand Repetitive Loading Capability

F2531 Test Method for Load Capacity of Treestand Seats

3. Terminology

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

3.2 *Definitions:*

3.2.1 *backbar*—adjustable component of a climbing treestand or handclimber that engages the tree to provide support.

3.2.2 *climbing treestand*—treestand that 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*—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 *non-climbing, fixed position or hang-on treestand*—treestand that 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.)

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

3.2.6 *treestand*—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 manufacturer's capacity rating, particularly for quality assurance and adequacy of safety factors including:

4.1.1 Static load test.

4.1.2 Stability and adherence test.

4.1.3 Repetitive loading test.

NOTE 1—Climbing treestands only.

4.1.4 Treestand seat loading test.

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

5. Significance and Use

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 be selected at random.

[1] This practice is under the jurisdiction of ASTM Committee F08 on Sports Equipment, Playing Surfaces, and Facilities and is the direct responsibility of Subcommittee F08.18 on Treestands.

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[2] For referenced ASTM standards, visit the ASTM website, www.astm.org, or contact ASTM Customer Service at service@astm.org. For *Annual Book of ASTM Standards* volume information, refer to the standard's Document Summary page on the ASTM website.

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 Test Method F2128.

6.1.4 After successful testing as given in 6.1.3, a stability and adherence test in accordance with Test Method F2125.

6.1.5 After successful testing as given in 6.1.4, a static load test shall be performed in accordance with Test Method F2126.

6.1.6 After successful testing as given in 6.1.5, a static load test of the treestand seat shall be performed in accordance with Test Method F2531.

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

APPENDIX

(Nonmandatory Information)

X1. Additional Information

X1.1 This practice is provided for use by manufacturers of treestands and testing companies. Criteria has been developed for certification of treestands and this practice is an integral part of the certification. However, a treestand conforming to this practice alone does not constitute certification and those manufacturers desiring certification must meet all applicable standards as a minimum requirement.