

Designation: F2122 - 13

Standard Practice for Treestand Safety Devices¹

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1. Scope

- 1.1 This practice provides guidance for providing user safety devices on treestands.
- 1.2 The values stated in inch-pound units are to be regarded as standard. No other units of measurement are included in this 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

F2121 Practice for Treestand Labels

F2123 Practice for Treestand Instructions

F2337 Test Method for Treestand Fall Arrest System

3. Terminology

- 3.1 The terminology and definitions in the referenced documents are applicable to this practice.
 - 3.2 Definitions:
- 3.2.1 *backbar*, *n*—adjustable component of a climbing treestand or handclimber that engages the tree to provide support. The backbar may be rigid or flexible.
- 3.2.2 *climbing stick*, *n*—device to assist climbing a tree primarily to a fixed position treestand. A structure that is secured to the tree and allows the user to support his weight and climb to the desired height on the tree.
- 3.2.3 *climbing treestand*, *n*—treestand that provides both the means to ascend the tree, and allow the user to remain at a desired elevation.
- 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.

- 3.2.4 fall arrest system, n—system that is assembled for the purpose of arresting an accidental fall of its user. A FAS consists of a full body harness, lanyard, anchorage means, and connecting.
- 3.2.5 *full body harness, n*—component with a design of straps that is fastened about the person in a manner so as to contain the torso and distribute the fall arrest forces over at least the upper thighs, pelvis, chest, and shoulders, with means for attaching it to other components or subsystems.
- 3.2.6 handclimber, or climbing aid, n—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.
- 3.2.7 *integral seat, n*—treestand seat which is attached to the base (where the user stands) platform.
- 3.2.8 *ladder treestand*, *n*—treestand that is secured to the tree at the elevation where the platform is located. (The ladder treestand may be secured to the tree at other locations and has steps that are used to reach the platform or hunting position.)
- 3.2.9 non-climbing, fixed position or hang-on treestand, n—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.)
- 3.2.10 *platform*, *n*—horizontal structural area of a treestand on which the user stands and/or places his feet.
- 3.2.11 *suspension relief device*, *n*—device to allow relief of a person's weight on the lower extremities if suspended in a harness or allow the user to descend to the ground. The device is to help maintain circulation in the legs and help prevent suspension trauma (blood pooling).
- 3.2.12 *tripod or tower stand, n*—tripod or tower stand is constructed to be self-supporting and is not required to be secured to a tree.
- 3.2.13 *two person treestand, n*—ladder or hang-on treestand designed and marketed for use by two persons simultaneously.

4. Summary of Practice

4.1 This practice provides guidelines for the selection, availability and placement of user safety devices on treestands and climbing sticks particularly for quality assurance and adequacy of auxiliary safety including:



- 4.1.1 Use of instructions in anticipation of user error or misuse.
 - 4.1.2 Availability of instructions in case of their loss.
 - 4.1.3 User fall protection (fall arrest system).
 - 4.1.4 Interconnects (two piece units).
 - 4.1.5 Auxiliary security.
 - 4.1.6 Securing and pivot stabilizing for ladder treestands.

5. Significance and Use

- 5.1 This practice is provided to develop and maintain uniformity in practices for availability, use, and selection of safety devices on treestands and climbing sticks, particularly with regard to quality assurance and safety.
- 5.2 It is emphasized that the use of these practices will not alter the validity of data determined with specific tests, but provides guidance in the interpretation of test results (valid or invalid) and guidance in the selection of a reasonable general provision in those instances where no standard exists today.

6. Procedure

- 6.1 It is recommended that manufacturers follow the methods of safety provisions so described herein. When unusual or special conditions require auxiliary safety devices, means or methods not covered herein, the manufacturer shall be responsible for their development to assure adequate availability for the user.
 - 6.2 Selection of Safety Devices:
- 6.2.1 User instructions shall be supplied with each individual unit and shall be in accordance with Practice F2123.
- 6.2.1.1 Instructions shall contain detailed information on the proper set up, use and safety precautions for the unit.
- 6.2.2 Labels and warnings shall be placed on the unit in accordance with Practice F2121.
- 6.2.2.1 Notice of availability of instructions will be identified on the unit as a part of required label information as given in 6.2.2.
- 6.2.3 A fall arrest system that meets Test Method F2337 shall be provided with each treestand as standard equipment. The fall arrest system capacity shall not be less than the rated capacity of the treestand, except for a two person treestand (see 6.2.3.4). Instructions on the proper use, warnings, and securing the harness to the tree shall be provided either separately or as part of the treestand instructions.
- 6.2.3.1 The fall arrest system shall have provision to be secured to the tree that the user climbs. It shall be so constructed that the user is able to adjust and minimize the free-fall length.
- 6.2.3.2 In the case of climbing and hang-on treestands, the features of the fall arrest system shall include allowing the user to have it secured to the tree while in the process of climbing the tree.
- 6.2.3.3 The Fall Arrest System for hang-on treestands shall include the means to allow the user to be dually connected via

- a climbing belt and the primary harness tether for the condition of transitioning from a climbing device to the hang-on treestand.
- 6.2.3.4 For two person treestands, there shall be a fall arrest system provided for each person, that is, two FAS. The fall arrest system rated capacity shall be a minimum of 300 lb.
- 6.2.3.5 Ladder treestands shall include means to stabilize the ladder from pivoting about the ladder axis and secure it to the tree prior to use. Crisscrossing rope, straps, or other methods to secure the ladder treestand to the tree to prevent pivoting prior to climbing is an example of such means. Instructions shall include proper installation and use.
- 6.2.4 Two-piece climbing treestands (those without integral seats) specifically, those involving a "stand-up/sit-down" mode of ascending or descending a tree, shall include a flexible interconnecting device to secure the upper and lower pieces together and prevent them from separating.
- 6.2.4.1 A cable, rope, strap or other similar interconnecting means, shall be configured such that it will not encumber the user while climbing while prohibiting the lower part from falling if the lower part were to become disengaged from the user.
- 6.2.4.2 The use of a device to secure the upper piece (seat) whenever the user removes the load (standing) is highly recommended. An elastic cord, rope, strap, etc. should be an integral component of the upper piece and its use explained in the unit instructions.
- 6.3 Auxiliary safety devices shall be provided where additional safety precautions can be made to further protect the user. Examples include: anti-slip platform surfaces, backbar locking devices or tie-offs (for climbing treestands, use of handclimbers for locking means, balance bars, etc.).
- 6.3.1 For special cases or non-typical units, specific safety devices shall be provided where applicable.
- 6.4 Ladder treestands and tripod stands shall include means to secure all vertical platform support sections together such that inadvertent separation of the sections during use cannot occur. The use of pins, bolts, clips, etc. through each joint (or other coupling device) to prevent sections/columns from separating if subjected to tension loads is an example of such means.
- 6.5 A suspension relief device shall be provided complete with instructions. This device shall be capable of allowing the user to relieve the load on the user's lower extremities if suspended in a harness to help maintain circulation in the legs and help prevent suspension trauma (blood pooling). The capacity rating of the suspension device shall equal the FAS rated capacity.

7. Keywords

7.1 backbar; climbing stick; platform; treestand; tripod



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.

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