



Standard Specification for Harnesses for Rescue, Safety, and Sport Activities¹

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1. Scope

1.1 This specification covers harnesses for human use in technical rope rescue and climbing, mountaineering, caving, canyoneering, and other rope-based sport activities. It establishes requirements for the testing, performance, and marking of harnesses and for the instructions that are supplied with them.

1.2 This specification may contain test methods that do not entirely simulate real-life situations. The test methods are designed to give reproducible results in a laboratory and, thereby, a means for product comparison.

1.3 Three types of harnesses are covered by this specification: full body harnesses, sit harnesses, and chest harnesses.

1.4 The values stated in SI units are to be regarded as standard. No other units of measurement are included in this standard.

1.5 *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

E4 Practices for Force Verification of Testing Machines
F1773 Terminology Relating to Climbing, Mountaineering, Search and Rescue Equipment and Practices

3. Terminology

3.1 *Definitions*—Terms defined in Terminology **F1773** shall be applicable to this specification.

3.2 *Definitions of Terms Specific to This Standard:*

¹ This specification is under the jurisdiction of ASTM Committee **F32** on Search and Rescue and is the direct responsibility of Subcommittee **F32.01** on Equipment, Testing, and Maintenance.

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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.

3.2.1 *adjusting device, n*—any device that allows adjustment to be made to the harness to suit the requirements of the wearer.

3.2.2 *authority having jurisdiction (AHJ), n*—an organization, office, or individual responsible for enforcing the requirements of a code or standard, or for approving equipment, materials, installation, or a procedure.

3.2.3 *belay/rappel loop, n*—a loop intended for attaching a belaying or rappelling device to the harness.

3.2.4 *belt, n*—the part of the harness that is around the waist.

3.2.5 *buckle, n*—a connector used for attaching webbing segments together.

3.2.6 *load-bearing parts, n*—parts of the harness that transmit load during testing in accordance with Section **12**.

3.2.7 *nonload-bearing parts, n*—other parts of the harness.

3.2.8 *rope attachment points, n*—parts of the harness intended for the attachment of a rope or lanyard.

3.2.9 *performance rating for a harness, n*—a pass/fail designation indicating if the harness has passed all required tests presented in this specification.

4. Summary of Specification

4.1 Representative samples of harnesses shall be tested for minimum strength.

5. Significance and Use

5.1 The strength of harnesses is one of the properties used to evaluate their suitability for a task.

5.2 Marking and instructions aid in the selection and use of harnesses.

5.3 Due to the diverse requirements of various rescue activities and environments, any of the included harness types may be suitable for rescue, including those marketed principally for climbing, and those with frontal and/or dorsal attachment points. It is the responsibility of the AHJ or user to determine if a specific harness design is appropriate for a particular task. The exception is the sole use of a chest harness which must be used with a sit harness to be effective.

6. Harness Labeling and Information

6.1 The following information shall be affixed durably to the harness: