



Designation: F1912 – 17

## Standard Specification for Safety of Bean Bag Chairs<sup>1</sup>

This standard is issued under the fixed designation F1912; 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 ( $\epsilon$ ) indicates an editorial change since the last revision or reapproval.

### INTRODUCTION

This safety specification addresses choking and suffocation hazards that may exist with children and bean bag chairs.

From January 1973 to August 1995, the U.S. Consumer Product Safety Commission received reports of five deaths and 26 non-fatal incidents associated with bean bag chairs. Victims range in age from 14 months to 14 years. Deaths and injuries related to:

- (1) *Suffocation*—inside the bag,
- (2) *Suffocation*—from pellets clogging nose/throat,
- (3) *Choking*—pellets in mouth,
- (4) *Inhaling pellets*, and
- (5) *Earache*—pellets in ear.

### 1. Scope

1.1 This specification is intended to reduce choking and suffocation hazard(s) associated with bean bag chairs.

1.2 This specification covers bean bag chairs with and without zippers.

1.3 This specification covers two types of bean bag chairs:

1.3.1 Those designed to be refilled, and

1.3.2 Those designed with permanent closures and not intended to be refilled.

1.4 The values stated in inch-pound units are to be regarded as standard. The values given in parentheses are mathematical conversions to SI units that are provided for information only and are not considered 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. Terminology

2.1 *Definitions of Terms Specific to This Standard:*

2.1.1 *bean bag chair, n*—an article of furniture composed of a fabric, vinyl, leather, or other cover, no internal support

<sup>1</sup> This specification is under the jurisdiction of ASTM Committee F15 on Consumer Products and is the direct responsibility of Subcommittee F15.39 on Bean Bag Chairs.

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mechanism, and a filling of polymeric or natural material beads. Any seams which are not sewn shut are closed with a zipper.

2.1.2 *direct path, n*—an opening in a bean bag chair that allows a straight, 6 in. long, 1/8-in. diameter, cylindrical rod to penetrate from outside the bag to the beads or to a liner inside the bag that holds the beads if such a liner is used.

2.1.3 *permanently disabled, adj*—refers to a method(s) that will render the zipper inoperative in such a way that a consumer will need to destroy a zipper component in order to gain access into the bean bag through the zipper opening.

2.1.4 *refillable bean bag chair, n*—a bean bag chair intended to be refilled with polymeric material, natural material beads, or a liner that contains either of the mentioned filler materials.

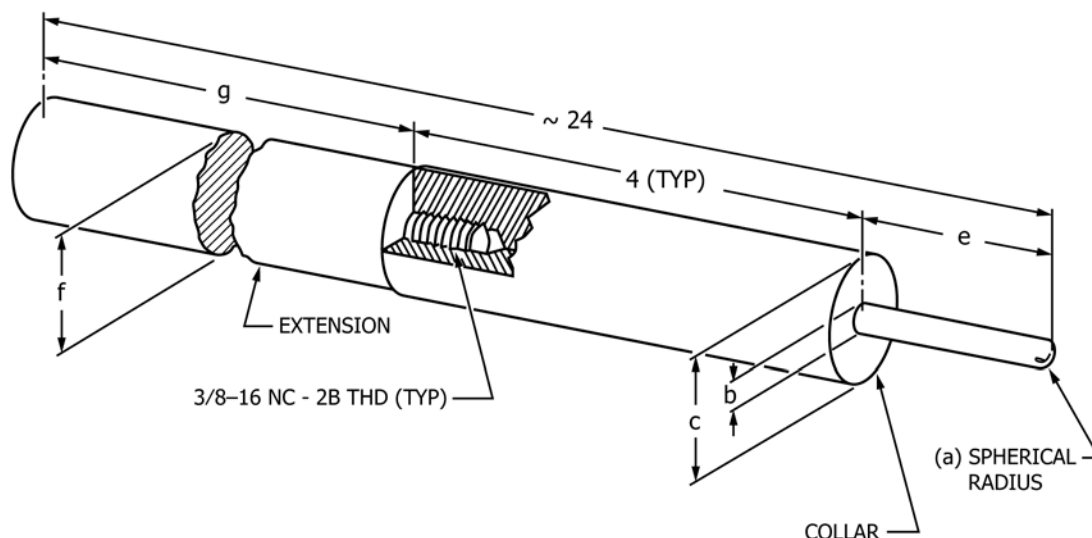
### 3. Performance Requirements

3.1 Bean bag chairs shall be supplied with label(s) permanently attached and as specified in Section 4. The label(s) shall warn the users of potential harm of an open bag and of the ingredients.

3.2 The durability test as specified in Section 5 shall not result in the failure of the bean bag's closures' components or projections, or failure of its seams that allow beads or filler material to escape, or allow access to the beads or liner holding the beads, if such a liner is used, by probe A defined in Fig. 1 driven by 5 lbf (22 N) or less.

3.3 *Bean Bag Chairs, with Zippers but Not Intended To Be Refilled:*

3.3.1 Prior to shipment, zippers shall be closed and permanently disabled.



	a	b	c	e	f	g	
(CHILDREN 0-36 MONTHS INCL)	PROBE A	.110	.220	1.020	1.731	1	18 9/32
( " 37-96 " " )	PROBE B	.170	.340	1.510	2.280	1 1/2	17 25/32

ALL DIMENSIONS IN INCHES

FIG. 1 Accessibility Probes

3.3.2 The zipper shall be closed and disabled such that a force to open the zipper of 15 lbf (67 N) or more shall be required to produce a direct path.

3.4 *Bean Bag Chairs, with Zippers and Intended To Be Refilled:*

3.4.1 The zipper shall always lock when closed. The use of a special tool as described in the product literature or supplied at the time of purchase shall be required to open or reopen the zipper. A force to open the zipper of 15 lbf (67 N) or more shall be required to produce a direct path unless a special tool is used.

3.4.2 Prior to shipment the zipper shall be closed and the special tool required to open or reopen the zipper shall be removed from the zipper.

4. Label(s)

4.1 Bags having zippers but not intended for refilling shall have a permanent warning label as shown in Fig. 2.

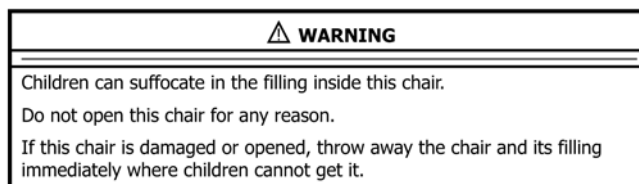
4.2 Bags having zippers that are intended for refilling shall have a permanent warning label as shown in Fig. 3, and information either on the warning label or on a separate permanent label describing detailed instructions for opening and reclosing the zipper.

5. Durability Test

5.1 *Scope*—This test evaluates the ability of the finished bean bag chair to contain the polymeric beads.

5.2 *Significance and Use*—This test method is designed to differentiate between acceptable and unacceptable bean bag chair design and construction. This test is not designed to simulate actual bean bag chair use.

5.3 *Procedure:*



*Lettering*  
Signal word: ALL CAPS  
Black lettering on orange background  
Sans serif-type font, 18 point  
Safety alert symbol:  
Black triangle with an orange exclamation mark  
Message text:  
Black lettering on a white background  
Sans serif-type font, 10 point  
Minimum dimensions of label:  
2¼ inches high and 4½ inches wide

FIG. 2 Warning Label for Bean Bag Chairs With Zippers That are Not Intended for Refilling

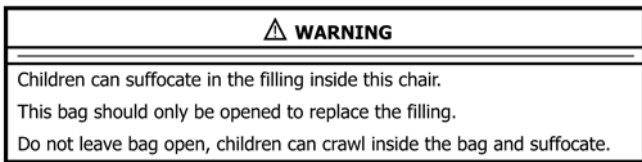
5.3.1 The test shall be conducted in room temperatures of 65 to 80°F (18 to 27°C).

5.3.2 The test load shall consist of a 100 ± 2-lb (81.6 ± 1-kg) sand bag, cylindrical in shape, with a 16 ± 0.2-in. (40.6 ± 0.5-cm) diameter base.

5.3.3 Place the bean bag chair on a level concrete floor, which may or may not be covered with a ¼-in. vinyl floor covering, with the upper center of the bean bag chair facing up.

5.3.4 Position the test load 8 in. above the upper center of the bean bag chair and drop the test load unimpeded on to the upper center of the bean bag chair.

5.3.5 After the impact in 5.3.4, position the test load 8 in. above the upper center of the bean bag chair as compressed by



*Lettering*

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Black lettering on orange background  
 Sans serif-type font, 18 point

Safety alert symbol:

Black triangle with an orange exclamation mark

Message text:

Black lettering on a white background  
 Sans serif-type font, 10 point

Minimum dimensions of label:

2¼ inches high and 4½ inches wide

**FIG. 3 Warning Label for Bean Bag Chairs With Zippers That are Intended for Refilling**

the first impact. Drop the test load unimpeded on to the upper center of the bean bag chair.

5.3.6 Raise the test load to the same position used in 5.3.5 and drop the test load unimpeded ensuring that the test load strikes the upper center of the bean bag chair.

5.3.7 Repeat the procedure described in 5.3.6 until 300 total impacts have been made.

5.3.8 Inspect the bean bag for tears, openings, or permeations.

5.4 *Precision*—No statement on precision is possible since this test method does not yield numerical results.

5.5 *Bias*—No statement on bias is possible since this test method does not yield numerical results.

**6. Keywords**

6.1 bean bag chairs; furnishings; safety specifications

**APPENDIX**

(Nonmandatory Information)

**X1. RATIONALE**

X1.1 *Subsection 2.1.3*—Some examples of permanently disabled include, but are not limited to, hog rings, heavy duty staples, melting of zipper teeth, sewn thread or fabric over the zipper teeth, etc. Removal of a zipper pull tab that will enable

a locking mechanisms within the zipper slider is not considered a method of permanently disabling the zipper because the locking mechanism can be disabled with the insertion of a paper clip allowing for the zipper to become active once again.

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