side first, into each opening in the rigid bed structure below the lower edge of the uppermost member of the guardrail and above the underside of the upper bunk's foundation. Orient the block so that it is most likely to pass through the opening (*e.g.*, the major axis of the block parallel to the major axis of the opening) (''most adverse orientation''). Then, gradually apply a 33-lbf (147–N) force in a direction perpendicular to the plane of the large end of the block. Sustain the force for 1 minute.

(b) *Upper bunk end structure* (see § 1513.3(b)(2)). Without a mattress or foundation on the upper bunk, place the wedge block shown in Figure 1 into any opening, tapered side first, and in the most adverse orientation. Determine if the wedge block can pass freely through the opening.

(c) *Lower bunk end structure* (see § 1513.3(b)(3)). (1) Without a mattress or foundation on the lower bunk, place the wedge block shown in Figure 1, tapered side first, into each opening in the lower bunk end structure in the most adverse orientation. Determine whether the wedge block can pass freely through the opening. If the wedge block passes freely through the opening, determine whether a 9-inch (230-mm) diameter rigid sphere can pass freely through the opening.

(2) With the manufacturer's recommended maximum thickness mattress and foundation in place, repeat the test in paragraph (c)(1) of this section.

(3) All portions of the boundary of any opening that is required to be probed by the wedge block of Figure 1 by paragraphs (c)(1) and (c)(2) of this section, and that permits free passage of a 9-inch diameter sphere, must satisfy the requirements of paragraphs (c)(3)(i) and (c)(3)(ii) of this section addressing neck entrapment:

(i) Insert the ''A'' section of the test template shown in Figure 2 of this part into the portion of the boundary to be tested, with the plane of the template in the plane of the opening and with the centerline of the top of the template (as shown in Figure 2) aligned parallel to the centerline of the opening, until motion is stopped by contact between the test template and the boundaries of the opening (see Figure 3 of this part). By visual inspection, determine if there is simultaneous contact between the boundary of the opening and both sides of the ''A'' section of the template. If simultaneous contact occurs, mark the contact points on the boundary of the opening and conduct the additional test described in paragraph (c)(3)(ii) of this section.

(ii) To check the potential for neck entrapment, place the neck portion of the ''B'' section of the template into the opening, with its plane perpendicular to both the plane of the opening and the centerline of the opening (see Figure 4 of this part). If the neck portion of the ''B'' section of the template can completely enter the opening (passes 0.75 inch or more beyond the points previously contacted by the ''A'' section of the template), the opening is considered to present a neck entrapment hazard and fails the test, unless its lower boundary slopes downward at 45'' or more for the whole distance from the narrowest part of the opening the neck can reach to the part of the opening that will freely pass a 9-inch diameter sphere.

§ 1513.5 Marking and labeling.

(a) There shall be a permanent label or marking on each bed stating the name and address (city, state, and zip code) of the manufacturer, distributor, or retailer; the model number; and the month and year of manufacture.

(b) The following warning label shall be permanently attached to the inside of an upper bunk bed end structure in a location that cannot be covered by the bedding but that may be covered by the placement of a pillow.

⚠ **WARNING**

To help prevent serious or fatal injuries from entrapment or falls:

- Never allow a child under 6 years on upper bunk
- Use only a mattress that is __ inches long and __ inches wide on upper bunk
- Ensure thickness of mattress and foundation combined does not exceed __ inches and that mattress surface is at least 5 inches below upper edge of guardrails

DO NOT REMOVE THIS LABEL

§ 1513.6 Instructions

Instructions shall accompany each bunk bed set, and shall include the following information.

(a) *Size of mattress and foundation.* The length and width of the intended mattress and foundation shall be clearly stated, either numerically or in conventional terms such as twin size, twin extra-long, etc. In addition, the maximum thickness of the mattress and foundation required for compliance with § 1513.3 (a)(5) and (b)(1) of this part shall be stated.

(b) *Safety warnings.* The instructions shall provide the following safety warnings:

(1) Do not allow children under 6 years of age to use the upper bunk.

(2) Use guardrails on both sides of the upper bunk.

(3) Prohibit horseplay on or under beds.

(4) Prohibit more than one person on upper bunk.

(5) Use ladder for entering or leaving upper bunk.

(6) If the bunk bed will be placed next to a wall, the guardrail that runs the full length of the bed should be placed against the wall to prevent entrapment between the bed and the wall. (This applies only to bunk beds without two full-length guardrails.)