

MATTRESS SPECIFICATIONS:

All materials shall meet or exceed the following minimum specifications.

Heavy Duty Residence Hall Innerspring Mattress Minimum Specifications

SIZE REQUIREMENTS:

- The following size shall be for standard or regular sized beds: 36" wide x 80" long x 7" thick
- The following size shall be for long sized beds: 36" wide x 84" long x 7" thick

CONSTRUCTION AND MATERIALS:

A. GENERAL

- a) All mattresses shall be manufactured in accordance with the best practice known to the manufacturing industry and shall be clean and free from defects in material and workmanship

B. TICKING

- b) The mattress shall be covered in "SOFLUX OX" Moisture Barrier Fabric, or approved equal meeting the following minimums:
- c) Yarn size of no less than 190 but not greater than 250 where the coating imparts the qualities of waterproofness.
- d) Shall be anti-bacterial, anti-fungal, and a moisture vapor transmission rate of less than 250 grams per meter squared over a 24 hour period.
- e) The mattress will be manufactured with the fabric side out.
- f) The top and bottom sections in the mattress ticking shall be made up of one full width of fabric with no seams. The ticking used for the borders shall contain not more than two seams all around with all ends hemmed, spliced and securely sewn together by machine in such a manner as to leave no break in the uniformity and finish.

C. SPRING UNIT

- a) All wire spring unit, knotted-coil construction shall consist of transverse rows of coils connected by the use of helicals running at right angles of the long axis of the unit in such a manner as to prevent a free hinge action. Shall meet the following minimums:
- b) All coils shall be Bonnell style hourglass shape.
- c) Each 36"X80" unit is to contain a minimum of 208 coils and each 36"X 84" shall contain a minimum of 216 coils. All coils of this unit are to be made of 13 gauge spring wire. All helicals to be made of 18 gauge spring wire. All spring wire used in the construction of these units is to be high carbon steel wire.
- d) Units to be 5" high. Each to contain a minimum of five turns or convolutions.
- e) All portions of the spring shall be properly heat treated to relieve internal stress and eliminate permanent stress from loading.
- f) Each unit to have helical or clipped border on both top and bottom perimeters with #6 gauge oil tempered border wire. The corners of this unit to have 2 ½ radius.
- g) The size of the innerspring unit shall be not less than 34 ½ x 78 and shall be manufactured to properly fit the specified bed size of 36" x 80".
- h) The size of the innerspring unit shall be not less than 34 ½ x 82½ and shall be manufactured to properly fit the specified bed size of 36" x 84".

D. UPHOLSTERING

- a) Each side of the innerspring unit is to be covered with a #10 Duraflex fiber pad (1.75 oz. per sq ft) needle punched

resinated fiber which overlaps the spring unit surface by at least 1 ½" in all directions. Placed directly over the Duraflex pads on each side of the unit is a 5 lb. batt of flame retardant cotton felt (10 lbs. Total). Over the cotton batting shall be a 1" thick high resilient California 117 flame retardant foam pad (s) weighing no less than 1.5 lbs. per cubic foot with a 34 lb. ILD. An inner roll edge shall be made by enfolding the edges of the foam toppers over the cotton and Duraflex pads and securing this all in place by hog ringing the fully flanged cover to the parameter coils of the spring unit "Integrity 30" or equal fire barrier knitted fabric shall be placed over all the upholstery in such a way that it completely encapsulates the entire mattress forming a full fire barrier. The ends of the barrier shall be completely closed with fiberglass thread.

- b) The border shall be of the same material as the top and bottom panels and will be vertically stitched so that the fire barrier is not broken.
- c) All cotton felt is to be treated with no less than 10% boric acid powder throughout the thickness of the felt so that the felting is flame retardant.
- d) The finished size of the mattress is to be 36" X 80" with a minimum thickness of 7".
- e) The finished size of the large unit is to be 36" X 84" with a minimum thickness of 7".

E. FLAMMABILITY TEST REQUIREMENTS:

- a) The mattress shall meet the flammability requirements of the following test methods:
 - Consumer Product Safety Commission, part 1632 Flammability Standard for mattresses (FF4-72, as amended).
 - California Technical Bulletin #129.
- b) The mattress manufacturer must provide written certification with his bid that this product had been certified to pass Technical Bulletin #129 full scale mattress burn test by the State of California of Home Furnishings and Thermal Insulation.
- c) Boston Fire Department IX-11 Full Composite Burn Test.
- d) The mattress manufacturer must provide the purchase written certification with his bid that his product has been certified in accordance with Boston Fire Department IX-11 (Regulatory notice of October 25, 1990 and revised August 19, 1991).
- e) ASTM 1590: The mattress manufacturer must provide the purchaser written certification that his mattress releases less than 100 kilowatts under ASTM 1590.