

SPECIFICATION FOR HIGH RESILIENT FOAM PRODUCTS

1. Types of high resilient foam product required include mattresses, pillows and cushions. They shall comply with the American Standard ASTM D 3770-79, with standard methods of Testing Flexible Cellular Materials ASTM D 3574-81.

2. Appearance
 - (a) Colour is whitish yellow.
 - (b) Colour must be of the minimum and unobjectionable.
 - (c) All items should be fully moulded throughout and free from any visual defects

3. Hardness
 - (a) All mattresses will be supplied in medium density.
 - (b) All pillows and cushions will also be supplied in soft density.

Modulus or comfort factor is high, load bearing characteristic is similar to that of latex foam in ratio of foam hardness to foam density.

Resilience of the foam mattress which is typically about 60% in latex foam (typically about 45).

The typical physical properties of the high resilient foam are tabled as follows:

(a) Density	-	46.3 kg/m ³
(b) Indentation force deflection (IFD) at 25%	-	72N
(c) Support factor 65% IFD/25% IFD	-	2.96
(d) Recovery ratio 25% R/25% IFD	-	89.6%
(e) Compression set at 75% deflection	-	2.5%
(f) Tensile strength	-	63.2 kpa
(g) Elongation	-	102%
(h) Tear strength	-	102N/m
(i) Resilience (ball rebound)	-	62%

4. Material

The material shall contain nothing known to be injurious to human tissues.

The material shall be uniform in texture and the skin shall be intact. Repairing is permissible provided that, after repair, the article meets the specification.

5. Covering

The quality of the material should be such that adequate protection is afforded to the 'high resilient' foam interior and the material should possess hard wearing properties. The 'cover' could be easily taken out and wash without damaging the foam.

Covering materials should be pre-shrunk calico.

6. Sample and test certification

All samples are to be tested in accordance with the American Standard ASTM D 3770-79 by SIRIM. Routine quality control test are performed frequently.