

Impact of Hole-Punching on Foam Physical Properties

The combination of Carpenter high quality foam with the new Carpenter hole-punch fabrication process gives you...

- a softer product (reduction in IFD dependent on foam type).
- a significant increase in breathability (permeability).
- no change in the high level of resistance to softening, body impressions and resiliency.

Special Note on Heat Dissipation: Purchase of a new FLIR thermal imaging system for the RTC was approved on September 14, 2010. This new technology will enable the RTC to generate 'pressure-map-like' images showing the dissipation of heat over time on the surface of mattresses, toppers and pillows. Examination of hole-punched versus solid surfaces will certainly be a top priority with this new technology.



Examples – Effect of Hole Punching

Carpenter Foam Grade*	Change in 25% IFD
VX12250 (Visco 2.5)	-7.7%
VX9300 (Visco 3.0)	-14.4%
VX10150 (Visco 1.5)	-31.1%
C27115 (Conventional)	-25.1%
CDX20215 (Omalon)	-10.6%
M10245 (Avena)	-16.9%
M20375 (Avena)	-14.1%

* Test procedures followed per ASTM D3574-08 – Standard Test Method for Flexible Cellular Materials.



ASTM D3574 Permeability Increase with Hole Punching

