



Small Object Impact Test

ASTM Impact tests; D-2794, D-3029, D-4226, and G14 are done with a BYK-Gardner Light Duty Impact Tester. The impacter is a two-pound, ½” steel cylinder with a 1.27 cm. (0.50 in.) diameter round nosed end. This weight may be lifted to any desired height in a graduated guide tube approximately 40.6 cm. High (16 in.) and then dropped, subjecting the specimen to an impact force of up to 28 inch-pounds. This test was performed from a 4” drop, 8” drop, 12” drop, and a 16” drop, subjecting the sample absorber panels to the impact force of 28 inch/pounds.

High Impact- Tackable (3- layers of mat)	Standard Absorber w/ Plastic Edge (1- layer of mat)	Standard Absorber w/ Soft Edge (1- layer of mat)
4" drop - no indentation	4" drop - no indentation	4" drop - no indentation
8" drop - no indentation	8" drop - 1/8" indentation	8" drop - trace indentation
12" drop - trace indentation	12" drop - 1/4" indentation	12" drop - 1/8" indentation
16" drop - 1/8" indentation	16" drop - 3/8" indentation	16" drop - 1/4" indentation
* Went off the scale without tearing the cloth, barely visual defamation.	* Went off the scale without tearing the cloth, dented only.	* Went off the scale without tearing the cloth, slightly dented only.
After 30 minutes- Maximum 16 inch (28 inch/pounds) impact test only:		
Must <u>feel</u> to know product was impacted, no visual indentation.	3/8" is now 1/4" indention	Barely visual indentation
After 24 hours- Maximum 16 inch (28 inch/pounds) impact test only:		
No sign of ever having been impacted.	You can still visually see indentation noticeably on original 3/8" indentation	Must <u>feel</u> to know product was impacted- no visual indentation.

* The only difference between specimens 2 and 3 are the plastic edges. The cloth and mat being glued to the hard edges holds it tight. It's the inability to flex from the edges at impact caused the panel to absorb more impact and deform the face more readily.