

## Technical Services Newsletter 1-800-944-2840 www.beaulieu-usa.com

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## **Carpet Specifications and Texture Retention Ratings for Commercial Carpet**

Today, the carpet industry manufactures a vast array of carpet constructions designed to fit the needs of the commercial market. Qualifying a carpet for a particular commercial end-use application has for many years been based on a carpet's performance properties as they pertain to "wear", which included considerations for the carpet's pile yarn weight, density, fiber type characteristics, and backing construction, with additional consideration given to carpet color, texture, and pattern. However, because a loss of a carpet's appearance has for many years been responsible for many claims erroneously associated with excessive wear, and because these claims were generally associated with improper specification, The Carpet and Rug Institute (CRI) and its members worked to develop a standardized means to test and evaluate a carpet's texture appearance retention properties, and to provide a rating system for this purpose in an effort to help builders, architects, project managers, and carpet dealers properly specify carpet for commercial facilities.

The current means to evaluate carpet texture retention is performed using the Hexapod Tumble Test (ASTM D-5252), which when used with the standard hexapod ball at 12,000 tumbling cycles, has been estimated to determine a carpet's texture appearance retention after being trafficked for one year (less the influence of soiling) in commercial environments. Whether a carpet manufacturer references to their texture retention rating as PAR (Performance Assessment Rating), ARR (Appearance Retention Rating), TARR (Texture Appearance Retention Rating), or as some other acronym, the meaning remains the same. Texture retention refers to a carpet's ability to retain a reasonable amount of the tuft's original shape and orientation and when the carpet is properly installed and maintained and, in the case of cut-pile constructions, not bloom, burst, or loose twist excessively.

More recently, the CRI created their Model Specification for Commercial Carpet guideline as a means to indicate what the expected minimum texture retention rating of a carpet is required for a wide range of commercial end-use applications. By utilizing this guideline, specifiers are encouraged to select a commercial carpet with a TARR rating indicated in the Traffic Level Classification a particular commercial end-use application, which is based on anticipated frequency and intensity of foot traffic exposure, which are categorized under Moderate, Heavy, and Severe Traffic Level Classifications. The selected carpet should meet the minimum TARR rating requirements based on this classification are currently set at 2.5 for light to moderate traffic (e.g. private offices, patient examination rooms), 3.0 for heavy traffic (e.g. classrooms and conference rooms), and 3.5 for severe traffic (e.g. corridors of office buildings, airport ticket and concourse areas).

Implicit here is that while utilizing both a carpet's appearance retention rating and The CRI Model Specification for Commercial Carpet guide helps make the process of selecting a commercial carpet easier, specifying the right commercial carpet for a particular application should begin with a carpet's manufacturing specifications and a complete understanding of carpet constructions and fiber type characteristics, proper installation method and sundries, and the type and level of care and maintenance required. These considerations, along with considerations for a carpet's appearance retention rating and an understanding of the minimum required TARR for a particular commercial end-use application will enable a carpet to meet the long-term demands in both its appearance retention and performance properties.

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