

**SPECIFICATION
FOR
CARPET, TUFTED, NYLON, AND CARPET CUSHION,
WITH ENVIRONMENTAL SUSTAINABILITY CHARACTERISTICS**

SCOPE

This specification is not intended to include all available types of the commodity as indicated in the title of this specification, but is intended to include only those types generally used by state agencies, state institutions, universities, public schools, and community colleges. This specification is for use by these parties in the procurement of carpets and cushions. Use for any other purpose is not intended. Use for promotional purposes is specifically prohibited. Only carpets which have a 100% nylon pile are covered by this specification. As used in this specification, the terms "carpet" and "carpeting" are also meant to apply to area rugs.

It is realized that there may be instances where the user's circumstances require a specialized type of carpet or a carpet of a type not covered by this specification (e.g. olefin carpet, or carpets of woven construction). It is not the intent of this specification to eliminate such other types of carpet from purchase consideration in these circumstances. However, they are outside the scope of this specification.

Similarly, note that this specification does not cover products which have no recycled content nor could themselves be recycled, but instead may be composted, for example. This is not meant to imply that such products would not be considered by the State. But they are outside the scope of this specification, and would have to be purchased by other means.

I. CLASSIFICATION

This specification covers tufted carpets including broadloom, 6-foot goods, and tiles; loop pile and cut pile types; unitary and secondary backings (also including vinyl-backed), and attached and separate carpet cushions. A total of five classes of carpeting are specified. Within each class, several user specified options are allowed. These options are identified herein, under section VIII. ORDERING DATA. Woven carpets are not covered in this specification. Nor are carpets of the combination cut-and-loop construction, including tip shear construction. Carpets covered by this specification shall be classified within the classes listed in Table 1.

Table 1. Carpet classes

CLASS	TYPE PILE	MINIMUM PILE YARN WEIGHT (OZ/SQ YD)	MINIMUM DENSITY (OZ/CU YD)	PATTERN	ADD'L REQUIREMENTS
1	loop	17	5,500	any	See Section M.
2	loop	20	5,000	any	See Section M.
3	loop	26	5,000	any	
4	loop	28	5,300	any	
5	cut	36	4,500	any	

II. APPLICABLE STANDARDS AND REFERENCES

The following documents shall form a part of this specification. The issue or revision for the respective document which is in effect on date of bid opening shall apply, except where specifically otherwise called for.

1. ASTM D 297 Test Methods for Rubber Products
2. ASTM D 418 Standard Test Methods for Testing Pile Yarn Floor Covering Construction
3. ASTM D 1335 Test Method for Tuft Bind of Pile Floor Coverings
4. ASTM D 1667 Standard Specification for Flexible Cellular Materials --- Vinyl Chloride Polymers and Copolymers (Closed-Cell Foam).
5. ASTM D 2646 Method of Testing Backing Fabrics
6. ASTM D 3574 Test Methods for Flexible Cellular Materials--Slab, Bonded, and Molded Urethane Foams
7. ASTM D 3676 Specification for Rubber Cellular Cushion Used for Carpet or Rug Underlay
8. ASTM D 3936 Test Method for Delamination Strength of Secondary Backing of Pile Floor Coverings
9. ASTM D 5417 Practice for Operation of the Vettermann Drum Tester
10. ASTM D 5848 Standard Test Method for Mass Per Unit Area of Pile Yarn Floor Coverings
11. ASTM E 648 Test Method for Critical Radiant Flux of Floor Covering Systems Using a Radiant Heat Energy Source
12. ASTM E 662 Standard Test Method for Specific Optical Density of Smoke Generated by Solid Materials
ASTM documents may be obtained from:
ASTM International
100 Barr Harbor Drive
PO Box C700
West Conshohocken, PA 19428-2959
or online at <http://www.astm.org/>
13. AATCC 16E Colorfastness to Light: Water-cooled Xenon-arc Lamp, Continuous Light
14. AATCC 134 Electrostatic Propensity of Carpets
15. AATCC 174 Antimicrobial Activity Assessment of Carpets (referenced in "Test Requirements for Antimicrobial Carpet")
16. AATCC 175 Stain Resistance: Pile Floor Coverings
AATCC documents may be obtained from:
American Association of Textile Chemists and Colorists
PO Box 12215
Research Triangle Park, NC 27709-2215
or online at <http://www.aatcc.org/>

17. Federal Standard FF-1-70 (as found in 16 CFR 1630)
18. Americans With Disabilities Act
19. The Carpet Specifier's Handbook (CRI)
20. CRI-TM-101 Assessment of Carpet Surface Appearance Change using the CRI Reference Scales
21. CRI-104 Standard for Installation of Commercial Textile Floorcovering Materials
22. The Carpet and Rug Institute Indoor Air Quality Carpet Testing Program (CRI)
CRI documents may be obtained from:
The Carpet and Rug Institute
PO Box 2048
Dalton, GA 30722
or online at <http://www.carpet-rug.com/>
23. ISO 2551 (Aachen Test) Machine-made Textile Floor Coverings - Determination of Dimensional Changes in Varying Moisture Conditions, available from:
American National Standards Institute, Inc.
Attn: Customer Service Department
25 W 43rd Street, 4th Floor
New York, NY 10036
or online at <http://www.ansi.org/>
24. Test Requirements for Antimicrobial Carpet (contained in "GSA Technical Requirements Booklet for Carpet, Carpet Tiles and Carpet Cushion, FSC Group 72, Part 1, Section A, for period October 1, 1997, to September 30, 2002.")
25. Textile Fiber Identification Act
26. Selecting the Correct Contract Carpet Cushion for Every Traffic Area (latest edition), available from:
The Carpet Cushion Council
23 Courtney Circle
Bryn Mawr, PA 19010
or online at <http://www.carpetcushion.org/>
27. NFPA 253: Standard Method of Test for Critical Radiant Flux of Floor Covering Systems Using a Radiant Heat Energy Source
National Fire Protection Association (NFPA)
1 Batterymarch Park
Quincy, MA 02169
or online at <http://www.nfpa.org/>
28. NC State Building Code
29. FTC Part 260 – Guides for the Use of Environmental Marketing Claims
<http://www.ftc.gov/bcp/gnrule/guides980427.htm>
30. U.S. EPA Comprehensive Procurement Guidelines, Glossary of Terms
<http://www.epa.gov/cpg/glossary.htm>

III. REQUIREMENTS

A. GENERAL

Where technical terms are used but not specifically defined herein, the intent is to apply the definition (or the implied meaning) given in "The Carpet Specifier's Handbook" published by The Carpet and Rug Institute.

Products are not acceptable if they deviate from the specifications in the manufacturer's respective current sample books or other manufacturer's published literature, or if they deviate from the manufacturer's standard production practices (the latter requirement applies where specifications for the particular characteristic in question are not published). The only exceptions to these requirements for a "standard product" are in cases where this specification states that non-standard characteristics are acceptable, or otherwise where such exceptions are authorized in writing by the Division of Purchase and Contract on a case-by-case basis.

At the State's request, the manufacturer may be required to substantiate claims made in its specifications by providing certified copies of test reports for tests conducted by a recognized independent testing laboratory.

B. PILL TEST FOR FLAMMABILITY

The "pill test" assesses the tendency for a carpet to propagate a flame from a small ignition source, like a match dropped on the carpet. All carpeting is to meet the acceptance criteria of the pill test, which is Federal Standard FF 1-70. This standard requires that no more than one out of eight test specimens shall burn a distance of 3" from the point of ignition when tested according to the method prescribed in that standard.

C. RADIANT PANEL TEST FOR FLAMMABILITY

The "flooring radiant panel test" is a second flammability test. This test assesses the tendency for a carpet to spread flame when it is exposed to a fully developed fire above it, such as during an advancing flame front. All carpeting is to meet the acceptance criteria of the flooring radiant panel test, which is ASTM E-648 or NFPA-253, for Class I (average minimum 0.45 watts per square centimeter), in the direct gluedown configuration. In addition, the purchasing entity may require that the carpet be so tested in the actual installed configuration (e.g. with attached cushion) in accordance with applicable local building codes.

D. SMOKE GENERATION

The most widely used test method for smoke generation of carpet is the NBS Smoke Density Chamber test, referenced in ASTM E-662. All carpeting is to exhibit a value of optical density of 450 or less in the flaming mode when properly tested in accordance with this procedure.

E. ELECTROSTATIC RATING

For general office, classroom, and institutional environments, the carpet must not yield voltages in excess of 3.5 kV (kilovolts) under standard conditions of approximately 70°F and 20% relative humidity when tested in accordance with American Association of Textile Chemists and Colorists Test Method-134. For critical environments where computers and related equipment are used, a lower maximum kV value may be requested. (Refer to section VIII. ORDERING DATA.) Only static control inhibitors which are built-in, or are otherwise permanent, are acceptable. Temporary treatments are not acceptable, nor is any topical treatment if it discernibly increases soiling rate. Claimed static rating may not deviate from the value shown in the manufacturer's current sample book or other manufacturer's current published data.

F. FIBER BRANDING

All fibers (100%) used to produce the face yarns in carpets under this specification must be currently registered with the trademark registry of the U.S. Patent and Trademark Office. Any fibers which are not so trademarked are not acceptable. The trademarked yarn must be referenced as such in the manufacturer's current unaltered product specifications and sample book which are available to the public. The manufacturer's product website and published literature shall also indicate if the yarn is trademarked and shall not conflict with the manufacturer's current unaltered product specifications and sample book. Acceptable certified documentation of such trademark registration must be submitted to the Division of Purchase and Contract upon request.

This specification allows both Type 6 and Type 6-6 nylons. It also allows solution dyed and non-solution dyed products.

G. MINIMUM NUMBER OF COLORS OR PATTERNS

Each product (i.e. one line with a specific name and/or model number) must have at least eight (8) standard colors or patterns shown in the manufacturer's current sample book for that product.

Custom colors and patterns: For bidding purposes, it is acceptable for manufacturers to offer custom colors and patterns (i.e. colors and patterns not in the manufacturer's current sample book for that product) in order to obtain a reasonable match to the color or pattern requested by a user for a particular installation. Such custom-colored/patterned carpeting shall otherwise be of the same specifications as the corresponding standard-color/pattern carpet in the manufacturer's current sample book.

H. PILE YARN WEIGHT

The pile yarn weight is the average mass per unit area of the pile yarn and includes the buried portions of the pile yarn, and it is expressed in ounces per square yard. A tolerance of minus 6% (-6%) from the nominal pile yarn face weight specified in the manufacturer's current sample book is allowed. This tolerance takes precedence over greater tolerances, if any, which may be stipulated in such sample book. Pile yarn weight offered or bid may not deviate from the value(s) shown in the manufacturer's current sample book. That is, a manufacturer may not "dial up" or "dial down" the amount of pile yarn in a product to be different from that shown in the sample book for that product.

When testing for pile yarn weight is requested, the testing procedure is to be done in accordance with ASTM D 5848. See also VI ACCEPTANCE INSPECTION, for additional discussion of pile yarn weight.

I. AVERAGE PILE DENSITY

Average pile density applies to a particular yarn as tufted in a particular carpet product. It is the theoretical weight of the pile yarn if the tufts of yarn in a square yard of carpet were to be extended to be a full yard in height. The formula is:

$$\text{Average Finished Pile Density (in oz./cu. yd.)} = \frac{36 \times \text{Pile Yarn Weight (in oz./sq. yd.)}}{\text{Finished Pile Thickness (in inches)}}$$

Claimed average pile density may not deviate from the value shown in the manufacturer's current sample book or other manufacturer's current published data. Pile density of the product offered must meet the requirements of the respective carpet class herein.

J. USER-SPECIFIED FEATURES

Within each of the classes specified herein, the user may elect to specify various additional allowed features that then must be offered in the bid. Generally all of these features will not be offered in the same product. Therefore, in each class of the QPL (Qualified Products List) associated with this specification, manufacturers are encouraged to qualify a selection of products in which at least one product will satisfy any combination of the allowed user-specified features. Allowed user-specified features within a class are identified in the list in section VIII. ORDERING DATA, below. However, the user is not required to make selections among the choices provided for any characteristic in that list, except for carpet class (as identified in this specification and the associated QPL), backing type, configuration of product, color/color family (and type of pattern, if a pattern class is selected), and whether installation by the contractor is required.

K. COLOR SPECIFICATION

Users may specify a color by reference to a specific color available on a product in the requested class. Reference of such color does not require that only an exact match may be offered. Instead such reference requires that the color offered be within the same family as the specified color and be of a reasonably close match to the referenced color. However, the State reserves the right to determine whether the color offered is a close enough match to the color requested to satisfy the intended application. See also the provision under section III REQUIREMENTS, G. MINIMUM NUMBER OF COLORS OR PATTERNS, which discusses custom colors and patterns.

L. PILE THICKNESS

Where a measured value of pile thickness is required by the State, it shall be determined and reported in accordance with ASTM D 418. Unless otherwise specified, pile thickness is to be determined in the finished, rather than tufted, condition.

M. THERMOPLASTIC BACKING

Thermoplastic backings must be a minimum of 1/16" thick, though the user may request 1/8" thick backing if such is determined to be necessary. At the State's option, documentation of backing performance may be requested, and may be used in the determination of whether to allow these products. See section III REQUIREMENTS, P. ATTACHED CUSHION for testing requirements of thermoplastic attached cushion.

N. MODULAR CARPET

Modular carpet (or "carpet tiles") are to be a minimum size of 18"x18". Sizes shall be specified or requested by the using agency (see also paragraph VIII. ORDERING DATA, c)). In all cases, the tile is to be within 1/32" of the specified size dimensions, as determined by physical measurement. Dimensional instability of tiles is to be +/- .15% maximum with respect to the specified size, when tested as prescribed in ISO 2551 (Aachen Test). Backing on modular carpet is addressed in the section herein entitled "Thermoplastic Backing."

O. PRIMARY AND SECONDARY BACKINGS

Unitary, secondary, or other types of backings are to be provided as required by this specification and/or IFB. Tufted carpets will have a primary backing material into which the pile yarns are tufted to form the carpet. Woven slit fiber polypropylene (100%), nonwoven polypropylene (100%), nonwoven polyester or polyester/nylon blends, or an equivalent approved by the State may be used for the primary backing material. If secondary backings of the fabric type are used, 100% woven polypropylene (e.g. "leno weave") or an equivalent approved by the State are acceptable. Jute backing materials are not acceptable under this specification. Fabric secondary backing is to be laminated to the primary backing by synthetic latex or other compounds typical of best industry practice. All fabric backing systems are to have a minimum dry breaking strength after tufting of 100 pounds when tested as prescribed by ASTM D-2646. However, unitary backing and "ActionBac" brand of secondary backing are exempt from the requirement for this test. A chemical backcoating on the primary backing without the addition of a secondary backing, to produce a "unitary" backing, is also acceptable when requested for particular installations, such as direct glue-down. Thermoplastic backings and attached cushion backings are covered elsewhere in this specification.

P. ATTACHED CUSHION

Rubber type attached cushion shall meet the requirements of ASTM D3676 for Class A, except that minimum density is to be 18 lbs/ft³, minimum compression resistance is to be 5 psi, and maximum compression set 10%. Ash content is to be maximum 50% when measured in accordance with ASTM D 297.

For severe applications such as stairways, entrances, elevators, and health-care facility corridors the user may specify a minimum density of 20 lbs/ft³.

Thermoplastic attached cushion, when tested in accordance with ASTM D 1667, shall meet the following requirements:

	<u>Minimum</u>	<u>Maximum</u>
Thickness	.060"	.170"
Density	15 lbs/ft ³	36 lbs/ft ³
Compression deflection, 25%	25.0 psi	50 psi
Compression set, 25%	-----	10%

Polyurethane type attached cushion, when tested in accordance with ASTM D 3676 and ASTM D 3574, shall have a minimum density of 15 lbs/ft³, minimum compression resistance of 5 psi, and maximum compression set of 15%. Ash content is to be maximum 50% when measured in accordance with ASTM D 297.

Q. SEPARATE CUSHION

Separate cushion shall meet the criteria recommended in "Selecting the Correct Contract Carpet Cushion for Every Traffic Area," published by the Carpet Cushion Council, for the class under which the cushion is offered (Class 1: Moderate Traffic, Class 2: Heavy Traffic, Class 3: Extra Heavy Traffic). All types of separate cushion listed in that document are allowed under this specification. Separate cushion shall comply with any and all applicable provisions concerning flammability or fire protection in the NC State Building Code and in the applicable local ordinances.

R. TUFT BIND

Tuft bind shall be a minimum of 10.0 pounds for loop pile carpet and 5.0 pounds for cut pile carpet, when tested by the method prescribed in ASTM D-1335.

S. DELAMINATION

Delamination strength of secondary backing shall be of a minimum average value of 3.0 pounds per inch when tested by the method prescribed in ASTM D-3936.

T. APPEARANCE RETENTION

Vetterman Drum Test using CRI 101 Reference Scale for 22,000 cycles with ASTM D-5417 shall have a minimum individual value of 3.0 and a minimum average value of 3.5.

U. COLORFASTNESS

Colorfastness to light shall be a minimum value of 4 after the administration of at least 40 AFU (AATCC fading units), using the international gray scale for color change, when tested as prescribed by AATCC-16 option E (xenon arc).

V. NOISE REDUCTION

One method for rating the sound absorbency of carpet or carpet/underlayment systems is the Noise Reduction Coefficient (NRC).

This rating is in the form of a single number which represents the average of the carpet's individual sound adsorption coefficients measured at several different sound pitches ranging from 125 Hz (cycles/second) to 4000 Hz. In theory, the value of the rating can range from zero (no sound absorbency) to one (absorbs all sound). From data presented in the Carpet and Rug Institute's "Carpet Specifier's Handbook," the NRC of various types of carpets and carpet/underlayment systems typically ranges from .15 to .70, though values are not necessarily restricted to this interval.

There is no minimum value of the NRC required in this specification. However, under certain circumstances when noise reduction is critical in the intended application (as justified in writing by the requesting using agency to the Division, at the Division's option), special consideration may be given to the NRC rating in determining which products are acceptable. The Division reserves the right in such circumstances to solicit a special bid for carpets satisfying the required NRC, or to delegate authority to do so to the using agency where appropriate.

W. DIMENSIONAL TOLERANCE IN WIDTH

For broadloom and 6-foot goods, dimensional tolerance in width shall be within 1% of manufacturer's specifications, as determined by physical measurement.

X. ANTIMICROBIAL TREATMENT

When antimicrobial treatment is requested, such treatment must be applied to both the pile and the backing, or to the backing only, whichever is specified. When an antimicrobial test is requested, one or more samples (as appropriate) of the antimicrobial-treated carpet must meet all the requirements of "Test Requirements for Antimicrobial Carpet," except that the first paragraph ("Only carpet and carpet tile ... of the cited tests.") does not apply, and the sample(s) must also meet AATCC 174 to the extent required in the prior document. Testing must be performed by an independent testing agency approved by the State. Anti-microbial agents are to be registered with the U.S. Environmental Protection Agency under the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA), and a technical data sheet on the agent(s) applied is to be provided upon request by the State or the using agency. "Reporting of antimicrobial and fungicide test results before washing and after washing" as required in "Test Requirements for Antimicrobial Carpet" is imposed herein to require one test before the first washing and one test after the final washing, not a test before and after each washing.

Y. RESISTANCE TO SOILING

All carpets are to be treated with a fluorochemical agent. The agent must be specifically intended for application on carpet, must be applied in strict accordance with the fluorochemical manufacturer's published instructions, and must be present at the completion of the treatment in an amount equal to or exceeding that specified in such instructions. Written verification of compliance with this requirement is to be provided to the State or the using agency upon its request and in the manner specified, such as by certified affidavit.

Z. STAIN RESISTANCE

The stain resistance of the carpet shall be a minimum stain rating of 8 when tested using Red 40 and the AATCC 175 test.

AA. AMERICANS WITH DISABILITIES ACT

Where called for in the Invitation For Bids, carpet must comply with the Americans with Disabilities Act, section 4.5, with respect to edge treatment as specified (section 4.5.3), and maximum pile thickness of 1/2 inch (section 4.5.3).

BB. INSTALLATION

Installations are to be completed in accordance with CRI-104, "Standard for Installation of Commercial Textile Floorcovering Materials," for all aspects not covered in the manufacturer's written installation recommendations. Installation shall be in full compliance with all federal, state, and local regulations and ordinances. Methods of installation may include:

- (a) stretch-in, with separate cushion
- (b) direct gluedown, with or without attached cushion
- (c) double glue-down ("double-stick"), with separate cushion
- (d) other methods, where specifically approved by the State

CC. LABELLING

All carpet must be properly labeled in accordance with the Textile Fiber Identification Act. In addition, each roll (or package unit, where tiles are concerned) of carpet must be properly "side marked" by the manufacturer as to what jobsite the carpet is intended for, in order to provide traceability of the carpet during the testing process and related activities.

DD. INDOOR AIR QUALITY

All carpet in its standard configuration (as described in the architect's sample book) shall be Carpet and Rug Institute (CRI) Green Label or Green Label PLUS certified for Indoor Air Quality standards. Effective December 1, 2007, all carpet in its standard configuration (as described in the architect's sample book) shall be CRI Green Label PLUS certified for Indoor Air Quality standards. Written verification of compliance with this requirement is to be provided to the State or the using agency upon its request and in the manner specified, such as by copy of the certification.

EE. RECYCLED CONTENT AND RECYCLABILITY

It is required that the manufacturer's recycling program be in compliance with the FTC guidelines for recyclability 16 CFR § 260.7 (d), "Environmental marketing claims, recyclable."

a) The carpet offered must comply with at least one of the following three requirements:

- (1) Product contains a minimum 10% by weight of POSTCONSUMER MATERIALS (as defined below) recycled content, except that vinyl-backed and other similar hard-backed products contain 20% by weight of POSTCONSUMER MATERIALS recycled content. These percentages are calculated by dividing the weight of the post consumer recycled content in one square yard of the finished carpet (consisting of the pile, backing, and attached cushion if any) by the total weight of one square yard of the finished carpet, and multiplying by 100.
- (2) Product contains a minimum 20% by weight of RECOVERED MATERIALS (which are the sum of both PRECONSUMER and POSTCONSUMER materials, as defined below) recycled content. This percentage is calculated by dividing the weight of the recovered materials content in one square yard of the finished carpet (consisting of the pile, backing, and attached cushion if any) by the total weight of one square yard of the finished carpet, and multiplying by 100.
- (3) Product contains a minimum of 30% by weight of RECYCLABLE CONTENT (as defined below). This percentage is calculated by dividing the weight of the recyclable content in one square yard of the finished carpet (consisting of the pile, backing, and attached cushion if any) by the total weight of one square yard of the finished carpet, and multiplying by 100. Note that the recycling program must be currently operational.

b) Definitions:

- (1) "Post consumer material." as defined in the U.S. EPA Comprehensive Procurement Guidelines, Glossary of Terms, is "a material or finished product that has served its intended use and has been diverted or recovered from waste destined for disposal, having completed its life as a consumer item. Post consumer materials are part of the broader category of recovered materials" (see "recovered materials" below).
- (2) "Preconsumer materials," as defined in the U.S. EPA Comprehensive Procurement Guidelines, Glossary of Terms, are "materials generated in manufacturing and converting processes, such as manufacturing scrap and trimmings/cuttings."
- (3) "Recovered materials," as defined in the U.S. EPA Comprehensive Procurement Guidelines, Glossary of Terms, are "waste materials and byproducts that have been recovered or diverted from solid waste, but does not include materials and byproducts generated from, and commonly reused within, an original manufacturing process."

- (4) "Recyclable," as defined in FTC Part 260 – Guides for the Use of Environmental Marketing Claims, section 260.7(d), means that the product or package "can be collected, separated or otherwise recovered from the solid waste stream for reuse, or in the manufacture or assembly of another package or product, through an established recycling program." Note that, per Example 3 in the above reference, this definition precludes carpet or components thereof which may only be burned in incinerator facilities to produce heat and power, but cannot be recycled into another product.
- c) The product post-consumer and recovered materials recycled contents and the recyclable content shall not vary below the amounts claimed by the manufacturer to the State. Also, post-consumer and recovered materials recycled contents shall not be subject to availability.

The manufacturer fully shall fully comply with FTC Part 260 – "Guides for the Use of Environmental Marketing Claims," with respect to advertising, labeling, product inserts, catalogs, and sales presentations of all its carpet products submitted to and/or sold to the State of North Carolina and any and all of its contract users. The State reserves the right to require certification by an officer of the manufacturer that the manufacturer so complies.

- d) In this specification, carpet products which are the result of used carpet which has been removed and completely refurbished for reuse, specifically in an application where virgin carpet would customarily be installed, are considered to meet the above requirements for post-consumer recycled content and recyclable content.

IV. WARRANTY

Carpet shall be warranted for a period of fifteen (15) years, non-prorated, after date of acceptance of the installed job against excessive surface wear, edge ravel, zippering, delamination, shrinking, stretching, static electricity, and defects in material and workmanship. Excessive surface wear is defined as a reduction of pile weight, due to wear, of more than 10%. The carpet will maintain dry tuft bind. Chair pads are recommended but not required on all products except cut pile carpets. Cut pile carpets may require the use of chair pads; see manufacturer warranty information. Modular tile will remain dimensionally stable and not cup, dome, or dish under normal use. Carpet (including backing system and attached or separate cushion) which is defective in material and workmanship, or which shows edge ravel, zippering, delamination, or excessive surface wear during this warranty, period shall be repaired or replaced (and reinstalled) at no charge to the owner or his representative.

Installation, when such is the responsibility of the contractor, shall be warranted against defects for a period of two (2) years after date of acceptance. Installation defects appearing within this period are to be corrected by the contractor, in a manner acceptable to the owner, at no charge to the owner or his representative.

Any portion of manufacturer's standard warranty that exceeds the above warranty requirements shall be in effect on the contract, unless the State or owner (using agency) elects otherwise.

V. MANUALS AND INSTRUCTION

Contractor shall educate and ensure that all customers understand the process of recycling their used carpet and the recyclability of their new purchase.

Contractor must provide user with two (2) complete sets of the manufacturer's published recommended maintenance procedures including the recommended schedule for each maintenance task. In addition, a qualified representative is to provide complete verbal instruction at user's site to the appropriate personnel on such maintenance procedures and schedule. Instruction is to include demonstrations where feasible and appropriate. This instruction is to be provided at a time and date which is convenient for the using agency, but within 20 working days after the carpet has been installed, unless otherwise specifically allowed (in writing) or requested (in writing) by the purchasing office of the using agency.

VI. ACCEPTANCE INSPECTION

When specified in the Invitation For Bids, or otherwise at the State's option, the carpet will be tested for compliance with the required pile weight for the delivered carpet (and any other specification requirement the State so chooses), at a testing facility chosen by the State. An original certified copy of the test report will be sent to the purchasing office responsible for the procurement. Unless otherwise specified, all costs for such testing are to be the responsibility of the contractor. If the pile yarn face weight is below the tolerance allowed herein, a deduction proportional to the shortage in pile weight will be made from the invoice net amount for the carpet. That is, if the pile yarn face weight is 7% under the nominal value specified in the manufacturer's current sample book, then an amount of 7% of the bid price of the carpet itself (not including installation and taxes) will be deducted by the contractor from the amount due on the invoice. If the shortage in pile weight is 10% or greater, the contractor may be required at the State's option to reinstall new carpet which meets all requirements, free of any additional charge.

In any case where a dealer or manufacturer has been a party on two or more occasions to providing the State with carpet of verified pile face weight outside the tolerance allowed herein, the dealer and/or manufacturer may be removed from the QPL immediately by the State. Any product removed for such reason may be prohibited from reinstatement or inclusion on the QPL for a period to be set by the State at time of removal.

If the carpet has been installed by the contractor providing the carpet (i.e. when the State itself has not installed the carpet), an additional acceptance inspection of the installation will be made upon notification by the contractor that the installation is complete.

VII. PAYMENT

Payment will be made in accordance with the terms of the contract. In no circumstance shall the user complete payment before all applicable testing and acceptance inspections are completed and confirm that the carpet (and installation, if contractor-provided) is proper and in full compliance with this specification.

VIII. ORDERING DATA

(for purchaser or requisitioner use only)

Purchaser or requisitioner must select a carpet class, a backing type, a product configuration, a color or color family (or type of pattern), and whether or not installation is required, as described in a), b), c), d), and e) below. In addition, purchaser or requisitioner may at his/her option select other various features as allowed below. However, such selections or choices beyond a) through e) are not required. If these selections are not made, bidders may offer any product from the selected QPL class which will meet the requirements of a), b), c), and d) below as specified by the purchaser or requisitioner.

- a) Class of carpet (1 through 5)
- b) Backing type: conventional, unitary, vinyl (may request 1/16" or 1/8" thick), vinyl equivalent, attached cushion (specify if 20 lbs/ft³ is required rather than the more common 18 lbs/ft³), or moisture resistant. Various backings may be offered and incorporated regardless of whether or not the requested type of backing is standard on the respective product.

NOTE: User may wish to consider unitary backing where high tuft bind is necessary.

- c) Configuration of product: broadloom, 6-foot, and/or tiles (if tiles, specify size needed). Various configurations may be offered regardless of whether or not they are offered as standard with the respective product. User may request any one of these configurations, or if necessary two or all of them for the same job.

- d) Pattern and color or color family: Note that this specification allows the manufacturer to offer and provide custom colors and patterns, in addition to the manufacturer's colors and patterns which are standard for a particular product.
- e) If installation by the contractor is required, and if so, the type of installation method.
- f) Antimicrobial treatment: This may be offered and applied regardless of whether or not antimicrobial treatment is standard with the respective product. If antimicrobial treatment is required, specify whether it is to be applied to both the pile and the backing, or to the backing only. Also, specify if antimicrobial adhesive is to be used in installation.
- g) Level or textured, for loop pile classes.
- h) If solution dyed yarns are required (e.g. for resistance to harsh cleaning agents in health-care environments).
- i) Maximum 2.0 kV electrostatic rating for data processing equipment (DPE) that may be especially sensitive. Obtain recommendation from DPE manufacturer if necessary.
- j) If adherence to The Americans with Disabilities Act is required.

***** END OF SPECIFICATION *****