



INVITATION FOR BID NUMBER AEPA IFB #009-B

CARPETING

PART B – SPECIFICATIONS

TABLE OF CONTENTS

1. Scope of Bid	1
2. Anticipated Member Agency Participation	3
3. Glossary of Terms.....	3
4. Special Terms & Conditions.....	4
5. Specifications	8

1. Scope of Bid

AEPA member states are seeking to contract for high quality woven, tufted and performance-backed floor covering systems for which the manufacturer currently provides a 15-year or lifetime non-prorated warranty. The flooring products offered must have passed the test of time and children and be highly useful in high traffic areas. Systems designed for use in public schools are required; systems used in other public facilities (medical, athletic, central office, etc.) should be offered.

Manufacturers are encouraged to offer their complete line of commercial floor coverings that are commonly used by school districts and other government agencies. Contracts will be recommended to manufacturers whose products meet the specifications. The specifications are designed to define the quality products needed by AEPA member agencies. Acceptable products will be highly resistant to abrasion from soil, rocks and other materials that result in premature wear; they will restrict the leaching of radon 222 and friable asbestos; they will not create static discharge and resist spotting, curling, and unraveling.

Experience with this contract indicates that many government agencies would prefer to have a local authorized dealer responsible for the installation. The key to a successful floor-covering contract with a manufacturer is the installer. The manufacturer must insist on contracting only with factory-trained and highly skilled installers. The Agency will evaluate the installers as well as the product. Modern manufacturing processes produce high quality floor covering. The best floor covering poorly installed is a disappointment to the buyer; it is a costly embarrassment to the manufacturer.

Manufacturer responding to this IFB shall have an established relationship with one or more certified installers in the states or regions being bid. Any authorized dealer that installs may also provide coving and floor covering accessories and other related installation services. However, the contract must be between the Agency and the manufacturer, with the costs for coving, installation, and accessories clearly identified in this bid [prices may vary by state or region]. In this way, the manufacturer controls

the installations and can add or change installers, as needed. All purchase orders shall be sent to one address indicated by the manufacturer; invoices and payments must be sent to the manufacturer's address. The Agency will have no direct contact for ordering, billing, or payment with an independent installing dealer. All pricing of carpet, accessories, and installation must be included in the initial bid; no "call" or "to be determined" or similar indefinite pricing will be permitted. Accessories and labor (installation) may vary by state or region; cost of the manufacturers flooring must be equal in all states (freight may vary, as needed).

When responsible and responsive bidders meet the specifications, price is the main determining factor in an IFB. Initial research into top-of-the-line products currently offered by major floor covering manufacturers indicates that quality is similar. Major manufacturers use high caliber fibers and interlace the threads in acceptable ways. As technical differences between products are reduced, the importance of cost becomes more significant. Therefore, each manufacturer is encouraged to offer the very best pricing possible to maximize competition.

Carpet Systems:

Carpet shall be 100 percent recyclable, high performance commercial carpet system with 15- or more year non-prorated warranty for use in public buildings. [Backing systems and accessories that are recyclable, are preferred.]

The Carpet and Rug Institute (CRI) recommends that carpeting offered for high traffic areas in public schools be of a low-profile densely tufted, tight loop construction, have a density rating of 4500 or above, and be made of solution-dyed nylon. They also recommend against lighter colors due to the increased maintenance required; tweeds or patterns in carpet tend to hid soiling.

Carpets must be installed according to manufacturer's instructions, typically following CRI's Standard for Installation of Commercial Carpet, CRI 104 guidelines. Carpets must be installed with adequate adhesive so no wrinkles, buckles, or zippering appears and no seams fail. Only carpeting systems that have a regular 15 or more year non-prorated guarantee will be placed on contract. [Less efficient carpeting installed in non-high traffic areas (such as a superintendent's office or board room) must have the same 15-year guarantee, but may not be installed in school hallways or classrooms.]

A serious issue for educational institutions is the static propensity of some floor coverings. In a computer lab, even a small static discharge from a student wearing a leather-soled shoe can erase a storage disk or damage a computer's electronics. Therefore, all carpet offered on this contract shall have been tested for static using the (AATCC) testing method. This knowledge will assist buyers in making wise selections for rooms where static electricity would be harmful to sensitive equipment.

Do not submit floor-covering samples with your bid. Floor covering samples will be requested, as necessary, during the evaluation process.

2. Anticipated AEPA Member Agency Participation

State	Participate (Yes/No/Undecided)	Estimated First year Purchase Volume	State	Participate (Yes/No/Undecided)	Estimated First year Purchase Volume
California	Yes	\$3,000,000	New Jersey	Yes	Unknown
Colorado	Yes	Unknown	New Mexico	Yes	\$500,000
Connecticut	Yes	\$200,000	North Dakota	Yes	\$30,000
Florida	Yes	\$100,000	Ohio	Yes	\$500,000
Indiana	Yes	\$1,300,000	Oregon	Yes	\$50,000
Iowa	Yes	Unknown	Pennsylvania	Yes	\$1,000,000
Kansas	Yes	Unknown	Texas		Unknown
Kentucky	Yes	Unknown	Virginia	Yes	Unknown
Michigan	Yes	Unknown	Washington	NO	N/A
Minnesota	Yes	Unknown	Wyoming	Yes	Unknown
Missouri	Yes	Unknown			
Montana	Yes	\$50,000			
Nebraska	Yes	Unknown	Total		\$6,730,000

Participating in the solicitation does not guarantee that an AEPA Member Agency will enter into a contract with any vendor. Each AEPA Member Agency will make that determination after reviewing AEPA recommended bids. The AEPA Member Agency's contracting decision shall be final.

Estimated first year volume for this solicitation is provided above where available. AEPA Member Agencies anticipate that purchase volume will increase in contract years 2-4. This information is provided as an aid to vendors in preparing bids only. It is not to be considered a guarantee of volume under this IFB. The successful vendor's discount and pricing schedule shall apply regardless of the volume of business under the contract.

3. Glossary of Terms

AATCC: American Association of Textile Chemists and Colorists

ADA: Americans with Disabilities Act, see Section 4.5.3

AEPA Member Agency: A state cooperative purchasing agency recognized by AEPA to represent a specified state in contracting activities associated with this solicitation.

APA American Plywood Association

ASP: Application Service Provider

Contracting AEPA Member Agency: An AEPA Member Agency that enters into a contract as a result of this solicitation.

CRI: Carpet and Rug Institute

FCIB: Floor Covering Installation Board

IAQ: Indoor Air Quality

Member: A public school district or other qualifying agency authorized to use the contracts of an **AEPA Member Agency**.

MSDS: Manufacturer Safety Data Sheet

TVOC: total volatile organic compounds

Vendor: Individual or entity providing goods and services to AEPA members based on the specifications of this solicitation.

4. Special Terms & Conditions

The following are in addition to the applicable standard terms and conditions. Please review these carefully. Any exceptions to these terms and conditions shall be clearly stated in writing and included with the bid response.

4.1 General

- 4.1.1 Any product substitution must be approved by the Agency prior to being sold to any member. The reason for the substitution must be stated in writing.
- 4.1.2 Any substituted product must be manufactured of the same basic type of materials, meet or exceed all the features of the product being substituted, and meet the other requirements of this IFB.
- 4.1.3 A claim that a substituted product is equal or superior to the approved product must be supported with written documentation. A sample may be requested, at no cost to the buyer.
- 4.1.4 New products, introduced after this contract is approved, may be added upon approval of the majority of AEPA members, if the new products meet or exceed current products, meet the terms, conditions, and requirements of this IFB, and are priced equal to or less than current products. In no circumstance may any new product be placed on this contract to avoid competitive bidding statutes in member states.
- 4.1.5 All products offered on this contract must have a complete set of factory specifications that match or exceed the requested minimums.
- 4.1.6 Performance bond in an amount equal to 100% of the price specified in a contract between the member and the manufacturer shall be provided, when requested by the member. Bonds shall only be executed by a surety company authorized to do business in the state of the member. Manufacturer shall indicate bonding capacity in its response and identify the approximate cost of bonding in the pricing section.
- 4.1.7 The terms and conditions of this IFB shall prevail over any additional agreements between the buyer (member) and the manufacturer in the event of any conflict. The manufacturer must not assume the member knows what steps are necessary prior to the start of any project. The manufacturer must be willing to assist the member in all aspects of the project.
- 4.1.8 The condition of the site prior to start up will be agreed upon between the member and the manufacturer and described in writing and shall be signed by both parties.
- 4.1.9 Manufacturer shall assume full responsibility for protection and safekeeping of any products stored for the member, regardless of where the product is stored. Manufacturer shall immediately replace any lost or damaged product stored for the member. If the manufacturer cannot guarantee the safekeeping of product stored on the property of the member, the manufacturer may store the product on its own property.
- 4.1.10 Manufacturer agrees to comply with all local, state and federal laws.
- 4.1.11 Adjoining property owners must not be annoyed by noise, pollutants, or material hauling operations.
- 4.1.12 All work will be accomplished in conformance with OSHA safety requirements, and any additional federal, state, or local fire or safety requirements. Manufacturer agrees to advise member when work is expected to be hazardous to students, teachers, employees, administrators, the public and or other workers.
- 4.1.13 The worksite shall provide a working environment as recommended by the manufacturer, including area heating or cooling, light and power requirements.
- 4.1.14 Clean up will be on a daily basis and the worksite will be returned to original and safe condition upon completion of the work.
- 4.1.15 In the event other trades are at work in the same area, work on the floor will not be completed prior to work on ceilings, walls, or other areas, which might harm the flooring. Completed work

will be covered by the on-site building project manager to prevent damage from other trades, when necessary.

- 4.1.16 Manufacturer shall deliver materials to the worksite in new, unopened, and well-marked containers or wrappings showing product and manufacturer's name. Damaged to unlabeled materials will not be accepted. Products will be delivered in sufficient quantity to allow for continuity of work. It is desirable that products be shipped to the jobsite in a recyclable or reusable container.
- 4.1.17 All work shall be coordinated with the proper member representative (General Contractor, Construction Manager, school administrator, etc.).
- 4.1.18 Work will be accepted in writing only after satisfactory inspection of the work or installation in the presence of an authorized member representative. Terms for acceptance and title to the work must be clearly agreed upon and described in the contract prior to the start of the work. If any part of the work requires the member to assume control prior to completion, this needs to be defined. Both parties must agree on the definition of what constitutes final acceptance before final payment.
- 4.1.19 Any agreement to progress payments rather than a lump sum payment must be clearly made prior to the start of the project with milestones for payments indicated.
- 4.1.20 All work areas will be identified by signage, warning tape, or other warning devices, as required by law and ordinary safe business practices. All signs will be the property of the manufacturer, will remain until the work is finished in any particular area, and be removed by the manufacturer when the work is finished.
- 4.1.21 All materials used at the worksite by the manufacturer shall have the necessary MSDS papers on file in a location accessible to both the manufacturer and member's personnel.
- 4.1.22 Manufacturer will provide for the records of the member, copies of all permits, licenses, certifications, inspection reports, releases, jurisdictional settlements, notices, receipts for fee payments, judgments, similar documents, correspondence, and records established in conjunction with the work performed and compliance with applicable standards.

4.2 **Installation terms and conditions**

- 4.2.1 All installation of commercial floor covering products offered through this contract must be performed by a properly licensed and bonded (when necessary) contractor authorized by the manufacturer.
- 4.2.2 All installing dealerships authorized by the manufacturer must be in good standing with the state and its political subdivisions. Any formal debarment of a manufacturer or dealer in the past five years by any Federal, State or local government must be disclosed. [Place this information in the response for the state involved, if the debarment was only for one state.]
- 4.2.3 Floor covering offered shall be available for lease purchase if the buyer so requests. The manufacturer is not required to offer leasing; if leasing is offered, it must be clearly offered in the bid, including the identification of the states, which currently may use leasing, offered by the manufacturer.
- 4.2.4 Installers named by the manufacturer must be qualified to inspect sub-floor for cracks, holes, abrasions, rough spots, ridges, and other conditions that may adversely effect a quality installation and agree to notify the owner, architect, or general contractor in writing of necessary steps before the floor covering may be put down. In addition, sub-floor should be clean, and free from moisture, grease, wax, paint, or other foreign substances. Buyer must allow offeror to unroll carpet 24 hours prior to installation to permit it to be conditioned to the surrounding environment and 65°F or higher temperature. It is the responsibility of the installers to inform the buyer of site preparation requirements.
- 4.2.5 Installation adhesives, seam weld or sealer shall neither add to nor contribute to air quality problems. Installation with adhesives, seam weld or sealer will allow for immediate occupancy and require no airing-out, curing, or "off gassing." All adhesives shall be supplied by the flooring

manufacturer and shall meet ADA requirements. All products offered should have MSDS sheets included with the proposal; all buyers must be given MSDS sheets for their records. [Products for MSDS sheets include solvents, adhesives, seam weld, sealer and floor covering components such as pre-backing, backing, stabilizers, preservatives, fungicides, bactericides, anti-static, anti-stain and anti-soil additives.]

- 4.2.6 Adhesives that contain an EPA registered antimicrobial agent to insure high indoor air quality may be offered.
- 4.2.7 The Floor Covering Installation Board shall certify the floor covering installer performing the installation. [Exception will be granted if the manufacturer guarantees the installation.]
- 4.2.8 Installation of all floor covering shall be in accordance with FCIB standards, CRI-104; where manufacturer installation instructions or specifications exceed CRI-104, the manufacturer's instructions shall be followed.
- 4.2.9 Accurate estimates of floor covering yardage needed to complete a project will be provided to the buyer. Final invoice will be for actual floor covering installed and normal waste and overage. The buyer will pay for no excess yardage ordered or shipped, unless the buyer for later use requests excess. No more than 2% waste will be permitted; a waste factor of 1.5% of the net floor area to be carpeted will be standard. If any attic stock is ordered, it must be sold at a non-installed price.
- 4.2.10 Authorized installer will provide on-site management and operation of all personnel used in the work. Installers who are employees of the installing contractor are preferred. The on-site contractor will have at least five years experience in the supervision of floor covering installation.
- 4.2.11 Authorized installer will coordinate all site activities with the general contractor, architect, school supervisor, or person appointed by the buyer.
- 4.2.12 The installation by the Authorized installer will guarantee the workmanship of the installation of the floor covering for one or more years dated from the final acceptance by the buyer. [Exceptions due to state laws or special circumstances must be clearly stated.]
- 4.2.13 The manufacturer certifies that each installer identified in this bid (or any future installer that works this contract) has any necessary OSHA Health and Safety and/or Hazard Communication Plan in place. The manufacturer will obtain a copy of any written safety plan or Hazard Communication Plan prepared by the installer. This plan must be provided to buyer, if requested.
- 4.2.14 FCIB certification must be renewed from time to time; the manufacturer will insure that renewal certification is kept up to date.
- 4.2.15 Upon completion of a job, a responsible agent of the buyer will sign an industry-standard final inspection sheet. A copy of this inspection sign-off will be sent to the buyer with the final invoice.

4.3 **Product terms and conditions**

- 4.3.1 The manufacturer of carpeting will provide a 15-year non-prorated warranty against items such as de-lamination of the secondary backing from the primary backing, edge ravel, excessive wear, zippering, resiliency loss, moisture barrier, and excessive static.
- 4.3.2 A copy of the standard official 15-year and "Lifetime" non-prorated warranty shall be included in the bid and shall be signed by a company officer (an officer of the manufacturing mill) and notarized. No product normally warranted for a shorter period shall be increased in price to make a 15-year warranty. Warranty shall be sole source responsibility of the manufacturer. A second source warranty or a warranty that involve parties other than the manufacturer is unacceptable.
- 4.3.3 Warranty must not be conditional based on the use of chair pads.
- 4.3.4 Installed carpet will give protection from static discharges. When tested under the AATCC Test Method #134-1979, the carpet will not give static discharges in excess of 3.5 KV during the warranty period.

- 4.3.5 Acceptable fiber will meet the nylon type 6 or 6.6 spec industry standard. Antron® Legacy®, Antron Lumena®, Dynex SDTM, and DSDN®, Solutia Ultron and Ultron VIP, Aquafil Forza and EcoSolution Q are the preferred fiber brands. Others offered must meet or exceed the quality and features of these fibers. [Note: if offering a fiber not manufactured by DuPont, insert one or more studies from independent labs that certify the quality of the fiber offered.]
- 4.3.6 Customized computer generated designs for a minimum number of square yards may be offered for selected products. All such offerings must be clearly priced; no “call” or “to be determined” pricing will be allowed. [Clear and accurate pricing is absolutely necessary in competitive bidding.]
- 4.3.7 Agency or members will not be responsible for quotation errors and/or omissions based on “take offs” from accurate and current scaled floor plans provided by the buyer or architect. End user is responsible for describing in detail the total scope of work for the project, including furniture moving, special requirements, access times, etc. Any abnormal or non-standard additional costs must be based on prior approval by the member and must be based on pricing in this contract.
- 4.3.8 Manufacturer may approve the use of a current issue of an industry standard unit pricing book to determine a price for work not identified in the IFB. However, any such use must be uniform and based on the labor rates for the state and locality of the member. R.S. Means pricing books are approved.

4.4 **Environmental, health and safety issues**

- 4.4.1 The manufacturer must provide written evidence that it has initiated or participates in a plan to recycle used carpet. A plan to dispose of used carpeting in a landfill or convert to energy through incineration is not a “plan.”
- 4.4.2 Products that cover flooring or sub flooring that contains asbestos may be provided. If your product meets the EPA definition as an enclosure for asbestos, provide a description of the circumstances that are necessary for your floor covering to eliminate the need for asbestos abatement.
- 4.4.3 Floor coverings, adhesives and padding for this contract must have a very low negative impact on the quality of air in an enclosed building such as a classroom or office compound. Emission rates of total volatile organic compounds (TVOC) must be indicated, inclusive of adhesives and padding. The air concentrations over time of individual organic compounds must be identified. Results of air quality studies performed on the floor covering to be placed on contract [by CRI (include Indoor Air Quality registration numbers) or the State of Washington (department of General Administration, Indoor Air Quality Compliance tables) or other agencies] must be included. (This will enable individual jurisdictions to determine which floor covering meets the standards of their agency.)
- 4.4.4 Products placed on contract must have no detectable levels of formaldehyde.
- 4.4.5 Products placed on contract must not emit 4-phenylcyclohexene vapors (or similar solvent odors).
- 4.4.6 Particle emissions over time must be lower than any maximum level of standards established by applicable local, state or federal law. If products are green labeled by the Carpet & Rug Institute (CRI), this condition will be met.
- 4.4.7 Tests that measure the carpet’s ability to resist radon from passing through the carpet may be included for informational purposes. This information will be important for schools in areas with high radon emissions. [However, Radon gases may emit through walls, electric sockets and vents; the carpet may limit exposure only under selected conditions.]

- 4.4.8 Floor covering, when installed, must be securely attached to the floor and be in full compliance with the Americans with Disabilities Act, Section 4.5.3.
- 4.4.9 Solution dyed fibers with permanent anti-microbial properties are required for use in health-related installations when tested as installed. Results of carpet tested according to the procedures outlined in AATCC 174 and AATCC 130 are to be included. Only carpet that shows a 90% reduction in bacterial growth after 24 hours and no visible fungal activity after three days will be offered to schools and health-related agencies.
- 4.4.10 Nylon fibers are to be treated with fluorochemical treatments applied during the final manufacturing process. Independent documentation must be provided for any treatment offered.
- 4.4.11 The carpet, when tested with its attached backing will meet flammability requirements of recognized national building codes.
- 4.4.12 Manufacturer must have fifteen years modular carpet production experience and must be registered to the ISO 9001/14001 Quality/Environmental Management System
- 4.4.13 Must submit California Gold certified products at a minimum. California Platinum preferred.
- 4.4.14 Must own and operate a closed loop recycling operation for both carpet backing and carpet nylon.

4.5 **Performance Backing Systems**

- 4.5.1 Backing with polyurethane, polyolefin compound or other proven system may be offered. Vinyl systems may be offered.
- 4.5.2 Backing must be used in any high traffic area.
- 4.5.3 All backing must be described in full detail, including information on its ability to be recycled. Backing must be priced according to kind, thickness, and other factors.
- 4.5.4 Backing for all goods offered must be non-prorated warranted for 15 or more years. Warranty must identify items such as zippering, de-lamination, edge ravel, moisture barrier, excessive wear and loss of resiliency.
- 4.5.5 No carpeting may be attached to the floor with a hook tape system or school white glue.

5. **Specifications:**

The following section provides a description of the technical requirements for the installation and the products being solicited. These specifications state the actual minimum needs for member agencies and are designed to promote full and open competition, with due regard to the nature of floor covering products.

- Product specifications that follow are written as a combination of function, design, and performance. For each product offered by a manufacturer, a complete set of manufacturer's product specifications must be included that indicate such things as carpet construction, face fiber, dye method, ply/yarn size, stitches per inch, gauge, tuft density, pile thickness, yarn weight, primary backing, primary pre-coat, secondary backing, ASTM and other test results, AATCC test score, average density, weight density, width of carpet, and other precise measurements, tolerances, quality control measures, and inspection requirements.
- Only bid the products that best describe the carpet your firm manufactures, which may only be one or two of the sections.
- NO BID the products your firm does not manufacture.

6. Job conditions prior to installation

- 6.1 Installing dealers will not begin installation unless the buyer or their agent has properly prepared the sub-floor. The sub-floor must be subject to the approval of the installing dealer to insure all irregularities are removed prior to installation.
- 6.2 Sub-floor will be clean and free from moisture, grease, wax, paint, or other foreign substances.
- 6.3 Installing dealer agrees to arrange with the buyer to unroll flooring 24 hours prior to installation to allow it to conform to the surrounding environment of 65° F degrees or higher. Carpet tiles shall be stored between 40°F and 100°F and shall be conditioned between 60°F and 90°F for 48 hours prior to installation. If manufacturer recommends different installation preparation standards, they will be followed.
- 6.4 Manufacturer agrees that any costs to move furniture and to prepare the sub-floor must be included in the buyer's purchase order. Vendor also agrees to arrange that the rooms and sub-floors be maintained at 65°.
- 6.5 Preparation of concrete, strip wood, plywood, old wood, and/or terrazzo/ceramic sub-floors will be made according to manufacturer's instructions. Permanent building lights or lighting of equal brilliance will be available during installation.
- 6.6 As a protection for both the buyer and the manufacturer, the installing dealer must not install on floors that do not meet recognized industry standards. For example, plywood sub-floors must meet the standards of the American Plywood Association's APA Construction Guide, Residential & Commercial, Form E301. The maximum amount of moisture evaporation from a concrete floor is 3 pounds of water per 1,000 square feet in a 24-hour period; the acceptable floor pH range is between 7.0 and 9.0.
- 6.7 Adhesives used to bond products must be non-toxic, non-flammable, releasable and able to provide a water and alkali-resistant barrier. Adhesives shall provide 100 percent coverage in compliance with ADA rules.
- 6.8 All materials used in sub-floor preparation and repair shall be recommended by the manufacturer and shall be chemically and physically compatible with the system being installed.
- 6.9 The work site shall provide a working environment as recommended by the manufacturer including area heat (or cooling), light and power requirements.
- 6.10 Manufacturer must deliver all material to the job site in original packaging and with identification labels that identifies the manufacturer, product name, identification number, and other information.
- 6.11 Product shall be covered and stored in a protected dry location with a temperature between 65°F and 90°F and not in any traffic area for other trades. Rolls shall be stacked horizontally and no higher than two high on a flat surface. (If a surface is not flat, rolls tend to move or suffer damage.)

7. Installation preparation, execution, and clean up

- 7.1 All floors must be inspected and approved by a manufacturing representative and the installing dealer.
- 7.2 Under no conditions will carpeting be installed if the sub-floor or work environment fails to meet the manufacturer's installation instructions.
- 7.3 Product will be installed as specified by the manufacturer.

- 7.4 Installing dealer will install cove and provide other related final changes to the work. All costs associated with installation (coving, VCT, mud mats, removal of existing flooring, stair treads, etc) will be identified on the pricing pages.
- 7.5 All rubbish, wrappings, debris, trimmings, soda cans, and other trash will be removed from the site and disposed as permitted by state law.
- 7.6 All usable scraps of carpet will be left for the owner. Excess carpet may be left with the owner, or be taken to the installing dealer's building. Under no condition will the owner be charged for excess carpet not installed, unless the owner has ordered excess carpet for other purposes.
- 7.7 Carpet will be completely vacuumed using a beater brush/bar commercial vacuum.
- 7.8 If other trades are working in the area, the carpet will be protected from damage by the building project manager.
- 7.9 Any necessary final inspection papers will be signed before a final invoice is sent for the work.

8. Cushion roll goods backing, construction and installation performance criteria

- 8.1 All roll good cushion backed floor covering must be able to meet the EPA definition of an asbestos enclosure to be installed over asbestos floor tile. All roll good cushion backed floor covering must be impermeable at the seams. The manufacturer will provide independent documentation showing air impermeable at the seams with a minimum airflow test rate of 550 cubic feet per minute. The test must indicate "0 cubic feet per minute" of airflow at the seams. When installed the carpet will provide an airtight, impermeable, permanent barrier to asbestos containing building material to prevent the release of asbestos fibers into the air. [A manufacturer may recommend abatement as a superior method to control asbestos.]
- 8.2 Floor covering must provide a 100 percent moisture barrier. Independent test results must be provided that show "no moisture penetration" after 10,000 impacts when calibrated at a minimum of 10 pounds per square inch. Test results showing moisture penetration after 10,000 impacts are not acceptable.
- 8.3 Floor covering with a built-in tackifier adhesive system rather than a wet system is preferred. Installation, regardless of the adhesive used, must be accomplished without a lingering odor.
- 8.4 The cushion backing system must be a fully heated and pressure fused (not glued) construction to permit no delamination from the primary and secondary backing. Independent test results may be submitted at time of bid that document no degradation of backing and that the backing remained closed cell after 50,000 cycles of the Phillips Roll Chair test. The same test must show no seam degradation after 50,000 cycles.
- 8.5 On average, the backing weight should be about 2.2 lbs. per square yard and be about 3/16th of an inch thick.
- 8.6 Seams shall be properly chemically and permanently welded to create a system that is a monolithic barrier covering the sub-floor.
- 8.7 The carpet shall be delivered with a recycle bag for recycling the plastic film used to protect the microencapsulated tackifier.

9. Specifications for 12' Wide Carpet for Classrooms and Hallways

- 9.1 Construction: Tufted Graphic Loop and/or Pattern Loop
- 9.2 Dye Method: Solution Dyed or Yarn Dye
- 9.3 Yarn: Type 6 or 6.6 nylon

- 9.4 Production Yarn Weight: Minimum 20 oz
- 9.5 Production Gauge: Minimum 1/8
- 9.6 Backing: High Performance Backing System with a LIFETIME NO FAILURE WARRANTY
- 9.7 Electrostatic Propensity: less than 3.5 KV Rating – permanent conductive fiber
- 9.8 Flammability: ASTM E - 648 Flooring Radiant Panel – Class
- 9.9 ASTM E - 662 NBS Smoke Chamber – less than 450
- 9.10 Warranty: Lifetime No Failure Warranty

10. Specifications for 6' Wide High Performance Carpet for Classrooms and Hallways

- 10.1 Construction: Tufted Graphic Loop and/or Pattern Loop
- 10.2 Dye Method: Solution Dyed or Yarn Dyed
- 10.3 Yarn: Type 6 or 6.6 nylon
- 10.4 Production Yarn Weight: Minimum 20 oz
- 10.5 Production Gauge: Minimum 1/8
- 10.6 Backing: Polyolifen or PVC
- 10.7 Electrostatic Propensity: less than 3.5 KV Rating – permanent conductive fiber
- 10.8 Flammability: ASTM E – 648 Flooring Radiant Panel – Class 1
- 10.9 ASTM E – 662 NBS Smoke Chamber – less than 450
- 10.10 Warranty: Lifetime No Failure Warranty

11. Specifications for Carpet Tiles for All Areas

- 11.1 Construction: Tufted Graphic Loop, Tufted Textured Loop and/or Pattern Loop
- 11.2 Dye Method: 100% Solution Dyed or Yarn Dyed (Recycled content nylon will receive preferential treatment)
- 11.3 Size: Minimum 18” x 18”
- 11.4 Yarn: Type 6 or 6.6 nylon
- 11.5 Production Yarn Weight: Maximum 20 oz
- 11.6 Production Gauge: Minimum 1/8
- 11.7 Primary Backing: Must be non woven. Woven primary backings not allowed.
- 11.8 Secondary Backing: Fiberglass Reinforced Thermoplastic Composite containing not less than 40% post consumer or post industrial content. Secondary backing must be 100% recyclable in a closed loop system at end of useful life.
- 11.9 Electrostatic Propensity: less than 3.5 KV Rating – permanent conductive fiber
- 11.10 Flammability: ASTM E – 648 Flooring Radiant Panel – Class 1
- 11.11 ASTM E – 662 NBS Smoke Chamber – less than 450

- 11.12 Warranty: Lifetime No Failure Warranty
- 11.13 Random Installation Method: All product must be designed for random installation, meaning that each and every tile can be installed in any of the four possible directions without regard to pile direction, pattern or orientation of any adjacent tiles while still creating a finished carpet tile assembly that appears to be a visually continuous carpeted surface with no tile appearing out of place or improperly positioned
- 11.14 Recycled Content: State for each and every product individually, broken down by fiber and backing. Post Consumer is preferred. Higher %'s will receive preferential treatment.
- 11.15

12. Specification for 12' Wide Cushion Back Carpet for all areas

- 12.1 Construction: Tufted Graphic Loop and/or Pattern Loop
- 12.2 Dye Method: Solution Dyed or Yarn Dyed
- 12.3 Yarn: Type 6 or 6.6 nylon
- 12.4 Production Yarn Weight: Minimum 26 oz
- 12.5 Production Gauge: Minimum 1/8
- 12.6 Backing: High Performance Polyurethane pre-coat with an 18 lb. density polyurethane foam
- 12.7 Cushion and non-woven secondary backing.
- 12.8 Electrostatic Propensity: less than 3.5 KV Rating – permanent conductive fiber
- 12.9 Flammability: ASTM E – 648 Flooring Radiant Panel – Class 1
- 12.10 ASTM E – 662 NBS Smoke Chamber – Less than 450
- 12.11 Warranty: Lifetime No Failure Warranty

13. Specifications for Carpet for Administration Areas

- 13.1 Construction: Tufted Pattern Loop and/or Graphic Loop.
- 13.2 Dye Method: Solution Dyed or Yarn Dyed
- 13.3 Yarn: Type 6 or 6.6
- 13.4 Production Yarn Weight: Minimum 26 oz
- 13.5 Production Gauge: Minimum 1/8
- 13.6 Backing: Action Back or greater
- 13.7 Electrostatic Propensity: Less than 3.5 KV Rating – permanent conductive fiber
- 13.8 Flammability: ASTM E – 648 Flooring Radiant Panel – Class 1
- 13.9 ASTM E – 662 NBS Smoke Chamber – Less than 450
- 13.10 Warranty: Standard 10 Year Wear Warranty

14. Computer Room Installations: Installations in computer rooms requiring a raised floor covered with tufted carpet tiles; beneath the raised floor, wires and cables can be run

- 14.1 Any cable distribution system proposed must insure a minimal floor to ceiling height infringement.

- 14.2 The cable distribution system must permit teachers to easily raise the carpet tile to route low-voltage data wires.
- 14.3 The cable distribution system must add very little weight to the building.
- 14.4 The cable distribution system will consist of accessible panels no larger than 24 X 24 inches square that are mechanically fastened to the support understructure at each panel corner with a screw fastener. Installed panels shall be easily removable by one person with a lifting device and standard tools.
- 14.5 The finished flooring deck shall be level within +/- 1/8" over 10 feet in any direction. The system will provide a cavity of two (2) inches minimum between the underside of the panel and concrete slab to facilitate power, voice, data cables and trade fittings.
- 14.6 Panels will be all steel and shall have protection against corrosion to a minimum G30 galvanize process. No chipboard or particleboard material is acceptable due to resin contents and fire safety criteria.
- 14.7 Understructure assembly shall be all a nontoxic, construction grade polymer.
- 14.8 Adhesive will be nontoxic and have minimal residual odor.
- 14.9 Accessories offered will include manufacturer's lifting devices, standard ramps, handrails, fascia, access panels, and access holes with grommets indicated on the contract drawings. Only ADA approved ramps for use by the handicapped will be installed. Pedestals, perimeters, and ramps must be UL 94-VO rated.
- 14.10 Structural Performance: The Cable Distribution System will perform as indicated by the manufacturer when tested in accordance with ASTM E-196.
- 14.11 Electrical Resistance: Assembled system (panel and understructure) shall provide less than 10 ohms resistance without continuity clips.
- 14.12 Installation shall be free of vibration, rocking, squeaks, or any other unacceptable conditions.
- 14.13 Installation shall be protected by 1/2 in. minimum plywood before any equipment, materials or other heavy rolling or concentrated loads are moved across or positioned on the installed system.
- 14.14 Any foam or synthetic used in the flooring system must have passed the FAR 25.853b Vertical Burn Test.
- 14.15 All high and low voltage ports and components will have a minimum of five (5) years warranty.
- 14.16 No electrical wiring will be part of this contract. Others will do all electrical connections, wiring, and work.
- 14.17 A factory-authorized and trained representative will make all measurements and layout work necessary for an installation. The manufacturer is fully responsible for the accuracy of all measurements. Any additional costs caused by a measurement or ordering error will be the responsibility of the manufacturer.

(End of part B)