

Model Bid Language: Carpet Tile and Broadloom

Introduction

Carpet is an important part of the look, feel and performance of our indoor environment. But manufacturing carpet has a large environmental impact, and the product and installation can affect the quality of the indoor air. Fortunately, there are many ways we can reduce these impacts through our purchasing and operational decisions. In fact, Alameda County has successfully installed carpets meeting the environmental performance specifications provided herein for at least the last 5 years.

Extend Carpet Life – Carpet’s greatest environmental impact happens in production. Explore opportunities that minimize carpet purchases or future replacement.

- Specify durable carpet tiles which can be replaced individually in high use areas.
- Implement preventative maintenance strategies, such as installing walk-off grates or mats, to minimize dirt tracked into the building and extend the life of the carpet.

Purchase Environmentally Preferable Carpet – Carpet made from recycled content and with minimal off-gassing emissions (VOCs) reduce environmental and health impacts.

- Specify recycled content carpets, which have lower lifecycle environmental impacts than those made from virgin petroleum.
- Specify carpet products and installation methods (such as tape-down) that minimize or eliminate off-gassing emissions, known as VOCs, to improve the indoor air quality.

Recycle Used Carpet – Carpet is one of the top ten items by volume in California landfills, comprising 3.2% by volume in 2008 (CalRecycle). A 2010 study conducted for the State of Washington determined that the recycling of carpet (regardless of the transportation distance to recycling markets) emits by far the fewest greenhouse gas emissions when compared to other end-of-life options for carpet such as landfilling, incineration, or waste-to-energy (Morris, Dr. Jeffery).

- Recycling should be specified whenever carpet removal is part of the project scope.
- Consider take-back or lease agreements that ensure the manufacturer will recycle carpet being installed.

How to Use this Document

The purpose of this document is to provide guidance to agencies/departments that purchase carpet or carpet installation services. It provides specific language to insert into the quote request or bid so that all vendors provide bids on products and related services that meet the County’s minimum environmental standards for carpet procurement. Note that this specification is limited in scope to environmental performance and should be integrated with all other performance requirements to form a complete specification.

Alameda County’s General Service Agency has developed these minimum environmental performance standards through extensive research and stakeholder input to ensure many high performance products are available at multiple price points. Project teams are encouraged to seek carpet products that go beyond these minimum specifications, such as higher recycled content levels or using installation methods with zero VOC emissions (no-glue installations). Options such as these are identified when the following phrase is found:

[*Note to Specifiers: ...*].

For more information on the standards referenced, refer to the FAQs at the end of this document.

Minimum Environmental Standard

CARPET SPECIFICATION

NSF/ANSI-140® Platinum Registration

All carpet must be certified NSF/ANSI-140® Standard (most recent version) at the Platinum achievement level. Among other conditions, this level of the standard requires at least 10% postconsumer recycled content by total product weight. Bidder shall provide proof of independent third-party certification with bid submission.

Carpet Type

Carpet specified shall be tile type. Broadloom carpet should only be used for stair covering applications, or other areas where tile is not suitable for the function.

Fiber Type

Carpet shall be a commercial grade nylon fiber type 6, or type 6,6.

Color Dye Process

Carpet must be a solution-dyed product.

Indoor Air Quality Requirements

Carpet products must meet the Low Emitting Materials standards as outlined in U.S. Green Building Council LEED Credit [EQ 4.3](#) (Version 2009). Under these criteria, carpet must meet or exceed the requirements of the Carpet and Rug Institute (CRI) Indoor Air Quality Green Label Plus Standard at the time of the award (see <http://www.carpet-rug.com> for details). Bidders must provide proof of certification with their Response that the carpet has been tested and achieves CRI's Indoor Air Quality Testing and Labeling Program criteria.

[Note to Specifiers: For projects occurring in occupied spaces, consider including the following language to reduce indoor air quality issues/complaints. Tests indicate that the majority of carpet emissions will dissipate within 48 to 72 hours with proper ventilation.]

Contractor must either air out carpet in a warehouse prior to installation, or ventilate the project area after installation, for at least 24-48 hours. If the carpet is to be aired out post-installation, the ventilation system must be used at all hours of the day and night during the required 24-48 hours. At the County's discretion, the Contractor shall provide an air filtration system with HEPA filter for the same 24-48 hours.

[Note to Specifier: The following recycled content specification represents the minimum recycled content levels required. Go greener by requiring higher recycled content levels of at least 25% post-consumer recycled content in the face fiber.]

Recycled Content

The products supplied must meet or exceed the following minimum percentages of recycled content:

- Complete carpet product must contain a minimum of 10% post-consumer recycled content as required by NSF/ANSI-140® Standard (most recent version) at the Platinum achievement level
- Carpet backing must be either non-PVC backing OR it must contain a minimum of 40% total recycled content PVC backing (either post-consumer or post-industrial recycled content, with preference for post-consumer content when available)

Bidder shall provide one of the following documentations to certify recycled content levels meet or exceed the levels specified:

- (1) A signed statement from the manufacturer’s Executive Officer
- (2) Documentation from an independent third party certification body

ADHESIVES SPECIFICATION

[Note to Specifiers: No glue installation methods are offered by some manufacturers. When available, specify these methods to virtually eliminate VOCs from installation.]

Indoor Air Quality Requirements:

All carpet adhesives shall meet the Low Emitting Materials standards as outlined in U.S. Green Building Council LEED Credit [EQ 4.3](#). Under these criteria, adhesives must meet a VOC limit of 50 g/L as required by the South Coast Air Quality Management District Rule #1168. Bidders must certify in a statement to be included in their response that all adhesives meet South Coast Air Quality Management District Rule #1168 criteria.

Note to Specifiers: Cushion is only applicable for certain broadloom installations. Do not include these specifications for projects that only include carpet tile.

CUSHION SPECIFICATION

Indoor Air Quality Requirements:

All carpet cushions must meet the Low Emitting Materials standards as outlined in U.S. Green Building Council LEED Credit EQ 4.3. Under these criteria, carpet cushion must meet or exceed the requirements of the CRI Indoor Air Quality Green Label Standard at the time of the award (see www.carpet-rug.com for details). Bidders must certify in a statement to be included in their Response that the carpet cushion has been tested by and met CRI’s Indoor Air Quality Testing and Labeling Program criteria.

Recycled Content

The products supplied must meet or exceed the following minimum percentages of recycled content:

- Carpet Cushion: must meet the current U.S. EPA Comprehensive Procurement Guidelines for Carpet Cushion [<http://www.epa.gov/cpg/products/carpcush.htm#recommended>], specified as follows:
 - Bonded polyurethane: 15-50% postconsumer content
 - Jute: 40% postconsumer content
 - Synthetic fibers: 100% total recovered materials content
 - Rubber: 60-90% postconsumer content

The contractor shall provide a written certification signed by the manufacturer’s President or CEO that the provided carpet cushion has the required recycled content level. Alternately, the vendor may provide third party documentation certifying the recycled content percentage.

RECYCLING SPECIFICATION

[Note to Specifier: Include this language when contract includes demolition of old flooring material]

Recycling Plan Requirements

All existing carpet and existing carpet waste shall be reused or recycled. A reclamation plan shall be submitted that will provide directions for the reclamation of all carpet at the job site. Carpet recycling options consist of:

- a. Repurposing - reusing the product in another application such as facilitating the donation of used carpeting to charities and other nonprofit organizations.
- b. Closed Loop Recycling - turning waste materials into new materials of the same value, such as vinyl backing into vinyl backing and nylon yarn into nylon carpet yarn.
- c. Open Loop Recycling – creating other product types from reclaimed carpet. For example, turning nylon face fiber into automotive parts or carpet padding, including nylon face fiber in recycled backings.
- d. Waste-to-Energy - using carpet for waste-to-energy. In the case of waste-to-energy, manufacturer shall justify why carpet cannot be recycled as this method should be a last resort.
- e. Landfill or incineration – are not approved disposal methods.

All possible recycling options shall be clearly presented and submitted in writing to owner and specified prior to job start. A written description of the used carpet disposal process is required.

- a. Description shall contain information as to complete process of diversion from landfill, including entities in the chain of custody through to final disposition.
- b. At the completion of the project, a certificate shall be furnished verifying the reclamation of the carpet and the pounds of material diverted from the landfill.

Reclamation Services Procedures

Carpet shall be removed from the existing installation and prepared for pickup based on the type of material and reclamation option selected. Contractor shall verify requirements with recycler. Specifications for removal from the jobsite include:

1. Contractor shall confirm with County Project Manager that asbestos survey has been documented for the area and materials at a job, and document compliance with applicable federal and other asbestos laws. (Toxic Substances Control Act (15 U.S.C. § 2601 et seq.) and 40 CFR Part 61, Subpart M - National Emission Standards for Asbestos. See <http://www.epa.gov/asbestos/pubs/asbreg.html>.) If the Contractor suspects or detects asbestos at any time before or during the project, they shall stop work immediately and consult with the County Project Manager.
2. Remove adhesive according to recommendations of the Carpet and Rug Institute (CRI) publication 104.
3. Removal and Storage Procedures
 - a. Removal of carpet tile for recycling
 - i. Carpet tile shall be palletized and secured for shipping, (i.e., shrink wrap, banding, strapping).
 - ii. Carpet tile shall be kept dry and free of any moisture damage.
 - iii. Carpet tile shall be clean of any non-carpet debris.
 - b. Removal of broadloom carpet for recycling.
 - i. Broadloom carpet shall be rolled, palletized and secured for shipping. Cut pieces of performance broadloom shall also be acceptable, provided they are secured for shipping.
 - ii. Broadloom carpet shall be kept dry and free from moisture damage.

- iii. Rolls shall be clean of any non-carpet debris, front and back, other than ordinary soiling in normal use.
- 4. Repurposing of carpet material.
 - a. Approval of old carpet for possible donation shall be determined at the jobsite.
- 5. Comply with all applicable hauling and disposal regulations.

Manufacturer Take-back Agreement for Future Disposal of Installed Product

Contractor shall include in their bid the following information from the manufacturer of the installed product:

- A. Documentation from the manufacturer that the new carpet being installed will be acceptable (at the point of future replacement) through a manufacturer operated program for recycling or reuse
- B. Written description of such a process for the recycling and/or recovery of installed carpet products at the end of their useful life.
- C. Contact information for the take-back program.

REPORTING REQUIREMENTS

Note to Specifier: Project manager or contractor may obtain this information from the vendor. This data is required by the County’s Green Building Ordinance adopted in 2003.

Project manager or contractor shall provide usage and environmental reports three weeks after the January, 1 of the first year of the contract, and annually thereafter. Report shall include the following information, at minimum:

- (1) Installation/delivery date
- (2) Purchasing organization (department/agency)
- (3) Delivery location
- (4) Date order delivered or installation completion date
- (5) Item descriptions part numbers
- (7) Cost for each purchased material
- (8) Quantity of each material purchased
- (9) Unit of measure
- (10) Total order cost
- (11) Carpet meets NSF/ANSI-140 (current version) Platinum Standard (Y / N*)
- (12) Carpet meets LEED Credit EQ 4.3 (CRI Green Label Plus program) (Y / N*)
- (13) Adhesives meet LEED Credit EQ 4.3 (SCAQMD Rule #1168) (Y / N*)
- (14) Carpet cushion meets LEED Credit EQ 4.3 (CRI Green Label program) (Y / N*)

*If No, provide detailed justification for why product does not meet the County’s environmental criteria.

DOCUMENT SUBMISSIONS:

- Proof of independent third-party NSF/ANSI-140 Platinum certification
- Proof of certification that carpet and cushion have been tested by and met CRI's Indoor Air Quality Testing and Labeling Program criteria
- A statement signed by the manufacturer's Executive Officer or independent certification third-party that all adhesives meet LEED Credit EQ 4.3 or South Coast Air Quality Management District Rule #1168 criteria, 50 g/L
- A statement signed by the manufacturer's Executive Officer or independent certification third-party that the provided carpet materials have the specified recycled material percentage
- Prior to removal of carpet, provide a written description of the used carpet disposal process
- Documentation indicating compliance with applicable federal and other asbestos laws
- Upon completion of carpet removal, certificate must be provided by carpet recycling company verifying the reclamation of the carpet and the pounds of material diverted from the landfill
- Written confirmation and description of the take-back program to be used
- Written assurance that no carpet will be land-filled or incinerated for waste-to-energy purposes

Frequently Asked Questions

What is NSF/ANSI-140®?

The NSF/ANSI-140 Sustainability Assessment for Carpet Standard was developed through a multi-stakeholder process to document and improve the sustainability of carpet and rug products. Using the standard enables organizations throughout the carpet supply chain to achieve sustainable features and demonstrate compliance. You can find out more about the standard by visiting: <http://www.carpet-rug.org/carpet-and-rug-industry/sustainability/sustainable-carpet/index.cfm>

Are there enough products available at the Platinum level to ensure adequate competition?

As of June 2013, there are 10 manufacturers and 23 product platforms available at the NSF/ANSI-140 Platinum level on Carpet and Rug Institute's registry. The County's GSA Building Maintenance Department has used Platinum certified carpets successfully since the inception of the Standard in 2007. See a full list of available products at: <http://www.carpet-rug.org/carpet-and-rug-industry/sustainability/sustainable-carpet/sustainable-carpet-list.cfm>

What options are available for high recycled-content face fiber and backing?

There are a number of lines of carpet that go above and beyond the 10% recycled content required to achieve NSF/ANSI-140 Platinum certification. A market survey shows at least seven manufacturers offering models with recycled content components above 20%. Three of them offer 100% recycled content face fiber, and two offer 100% recycled content backing.

Why is recycling used carpet important?

Carpet is one of the top ten items by volume in California landfills, comprising 3.2% of total California landfill space in 2008 (CalRecycle). Used carpet materials can be recycled back into new carpet, or converted into other items such as roofing shingles, composite lumber, and automobile parts. Reusing and recycling carpet rather than extracting virgin materials is by far the most energy efficient end-of-life option for disposing of old carpet, even when it must be transported long distances (Morris 1).

What legislation does California have in place to promote carpet recycling?

In September 2010, California passed AB 2398, also known as the California Carpet Stewardship Bill. The purpose of the law is to increase diversion and recycling of carpet in the state of California. To do this, a small fee is added to all carpet sold in the state in order to support the development of second hand carpet recycling market with the hope that it will increase demand for used carpet. This program is managed by Carpet America Recovery Effort (CARE) (www.carpetrecovery.org). To learn more about the State's carpet recycling efforts, visit <http://www.calrecycle.ca.gov/Carpet/Program.htm>.

Questions?

Contact GSA Sustainability Program at greenpurchasing@acgov.org, or 510-208-9754.

Resources:

- CalRecycle: Carpet Materials Management, <http://www.calrecycle.ca.gov/carpet/>
- King County Linkup: <http://your.kingcounty.gov/solidwaste/linkup/carpet/index.asp>
- "Environmental Impacts from Carpet Discards Management Methods: Preliminary Results (Corrected)" (2010), Dr. Jeffrey Morris, Sound Resource Management, <http://your.kingcounty.gov/solidwaste/linkup/documents/CarpetDiscardMgmt-Jeff-Morris.pdf>
- Seattle US Communities Contract: <https://webapps.sanantonio.gov/RFPListings/Content.aspx?id=1311>