

Buy Green: Environmental Performance Specifications for Carpet

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Green Purchasing Roundtable
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Local Action, Global Impact.

What Is the Green Purchasing Roundtable?

Purpose is to advance green purchasing locally

- Tri-Annual meetings on specific topics
 - Learn about issues
 - Identify tools you can use
 - Network with your peers
- Periodic updates on opportunities
- Technical assistance available to Alameda County public agencies

Announcements: New Resources Available

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Success Stories in Purchasing

- Carpet
- Janitorial Cleaning Products
- Janitorial Paper Products
- Level 3 Diesel Particulate Filters
- Lighting
- Multi-Function Device
- Office Paper
- Print Services

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Carpet


Carpet is an important part of the look, feel and performance of our indoor environment. But manufacturing carpet has a large environmental impact, and air quality in the workspace can be affected by off-gassing from the product and the glues used to install it. To reduce our impact and improve the health and comfort of our office spaces, the County specifies carpet that contains recycled content and minimizes off-gassing, and requires that all carpet removed be recycled.

How We Did It:

- We researched environmental performance issues and market availability of greener carpets.
- We engaged key stakeholders who procure or specify carpet to identify the best way to integrate best practices into their project delivery process.
- We produced several versions of the technical documents presenting the environmental performance standards in the formats our stakeholders need.

Challenges:

- Several departments influence carpet purchases at the County,



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Available at <http://www.acgov.org/sustain/what/purchasing/success/index.htm>



Purchasing

[Bids and Specifications](#)

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Green Purchasing Roundtable

Green purchasing can mean a new way of doing business for many public agencies. So several times a year, Alameda County hosts Green Purchasing Roundtable meetings where cities, school districts, and special districts from Alameda County come together to learn from experts and each other on how to make greener purchases, get buy-in from users, and implement successful green contracts.

The meeting presentations are available here so that Roundtable members and non-members can access them as needed. However, we encourage you to use this information as a starting place for your research, as green technologies may have evolved since these presentations were put together. You can find a lot more specific information on Alameda County's green purchasing efforts throughout this website, particularly in the [Bids and Specifications](#) section.



We promote green purchasing locally by organizing regular Green Purchasing Roundtable meetings.

Presentations

Date	Topic	Presentations
May 1, 2012	Green Office Supplies	Green Office Supplies (PDF - 3488kb) *
October 2, 2012	Green IT	Green IT (PDF - 6089kb) *
January 30, 2013	Green Cleaning	Green Cleaning (PDF - 3350kb) *
		Tire Derived Products - Maia.C (PDF - 7468kb) *
May 31, 2013	Tire Derived Products/Rubberized Asphalt	Rubberized Asphalt-CalRecycle - Nate.G (PDF - 948kb) *
		Rubberized Asphalt-GCI - Ross.K (PDF - 6405kb) *



FACT SHEET

Environmentally Preferable Janitorial Paper Supplies in Alameda County

Good news! Environmentally friendly paper towels, bathroom tissue, paper napkins and facial tissue are readily available in Alameda County.

What to Look For

QUALITY, COST AND AVAILABILITY are still primary considerations when making purchases. Adding environmental benefit considerations does not need to sacrifice other factors and, in fact, may reduce costs and improve performance.

The top three environmental preferences to ask for are:

1. Recycled Content – the most important.
2. Processed Chlorine Free (PCF) – less toxic whitening.
3. Green Seal or UL/EcoLogo Certified Products – independent, third-party certifications.

Today's 3 Take-Aways

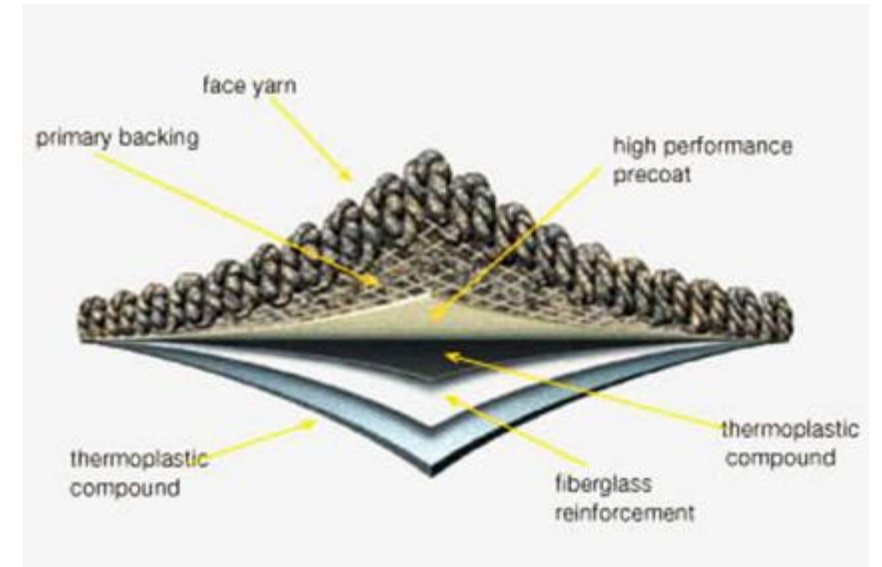
1. Include environmental performance in carpet specifications
2. Require carpet recycling as part of installation contract
3. Support development of carpet recycling markets by buying products made with recycled content carpet

Thank You To the Presenters:



Why is Carpet Important

- Integral to the indoor environment
 - Glues and product off-gassing can affect indoor air quality and human health
- Resource intensive product
 - Most of carpets environmental impact happens during upstream raw materials extraction and product manufacturing
- Complex product that is difficult to recycle
 - 3.2% of waste by volume (2008) in California landfills, making it one of the top 10 items



Alameda County's Journey

- Initiated research in 2009
- Many and diverse staff that specify carpet
 - New construction and major remodels
 - Maintenance projects
 - Lease negotiations
- Each uses unique documents for performance specifications
- 2013 Summer intern translated research on environmental performance specifications into usable formats for stakeholders

Reduce, Reuse

- Buy durable carpet and maintain it well
 - Use walk-off mats at building entrance
 - Follow manufacturer recommendations for cleaning
 - Encourage prompt reporting of spills, and post reminders where food is commonly served
- Select carpet tile instead of broadloom
 - Produces less waste during installation
 - Can replace small portions when soiled or worn
- Explore opportunities for refurbished carpet tiles



Attributes of Sustainable Carpet

- Multi-attribute standard
- Material type
- Recycled content
- Indoor Air Quality (VOC limits)
- Recycling old carpet



Specifications set by Alameda County were designed to meet CALGreen (2010) and the US Green Building Council's LEED v2009.

Alameda County providing this information to assist agencies seeking to advance green purchasing efforts.
Agencies should use sound judgment to evaluate recommendations for application in their organizations.

Sustainable Carpet Standard

NSF-140

- Awards points for mandatory and voluntary measures that are used to evaluate six key attributes of carpets:
 - Public Health and Environment
 - Energy and Energy Efficiency
 - Bio-based and Recycled Content
 - Manufacturing
 - Reclamation and End of Life Management
 - Innovation
- The NSF-140 standard includes three levels of attainment, silver, gold, and **platinum**



Material Type and Recycled Content

- Specify face fiber that is:
 - Nylon material and is solution-dyed; and
 - Post-consumer recycled content of at least 10% (can go up to 25% and still have adequate competition)
- Specify backing that is:
 - PVC-free; or
 - If PVC backing, require a minimum of 40% post-consumer recycled content



Higher recycled content levels contribute more to LEED points

Indoor Air Quality (VOC limits)

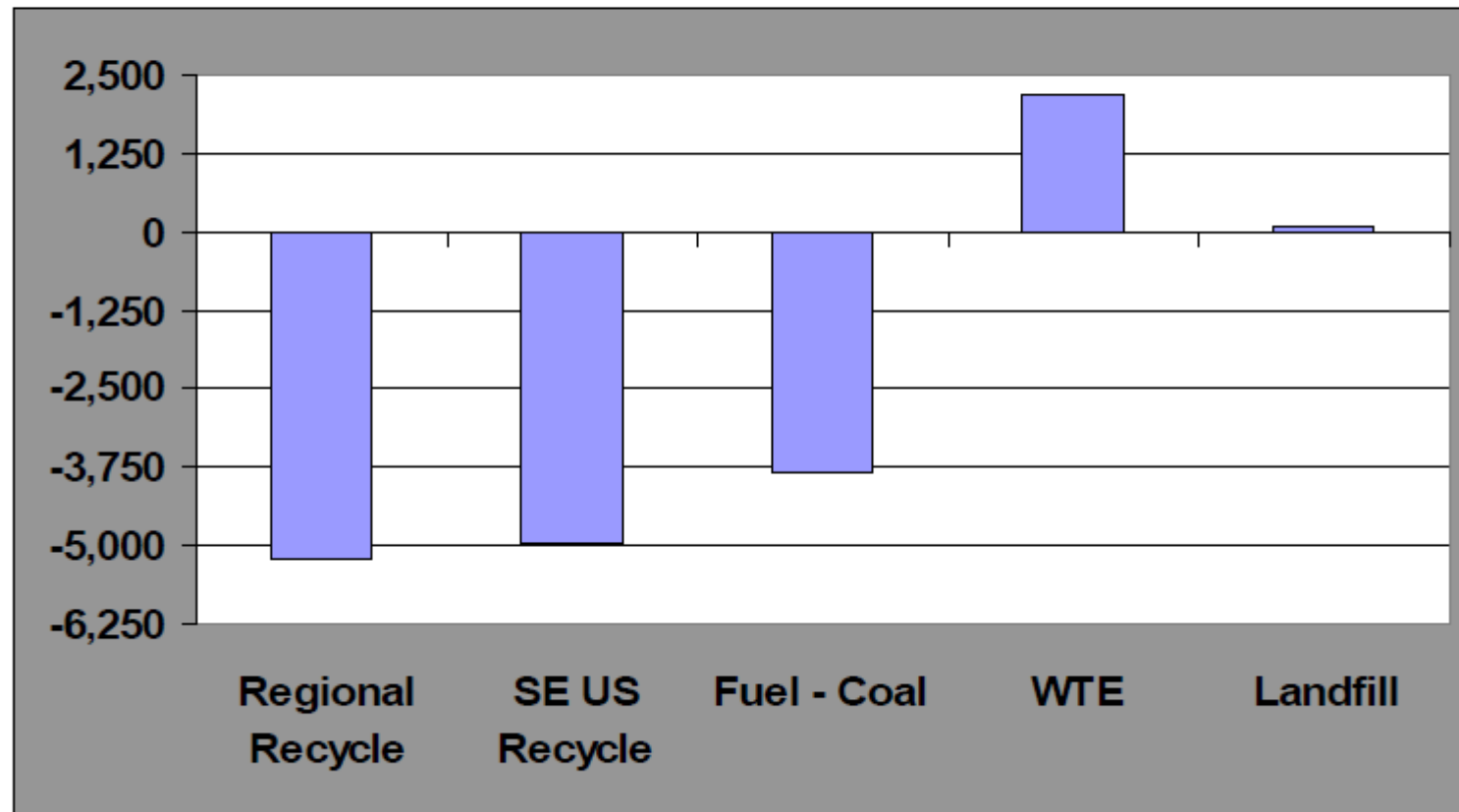
- Carpet
 - Meet Carpet and Rug Institute (CRI) Indoor Air Quality Green Label Plus Standard
- Adhesive
 - VOC limit of 50 g/L as required by the South Coast Air Quality Management District Rule #1168
- Carpet padding (*broadloom carpet only*)
 - Meet Carpet and Rug Institute (CRI) Indoor Air Quality Green Label Standard



These requirements are consistent with LEED IEQ Credit 3.4

Recycling Reduces Life-Cycle GHG

Figure 1
Greenhouse Gas Increase/ (Decrease) for Scrap Carpet Management Options
[Pounds CO2 Equivalents per Ton Carpet]



Recycling Specification

- Request a recycling plan prior to demolition
 - Where it will be recycled
 - How material will be kept free of debris and stored/packed appropriately
- Ensure asbestos survey is complete
- Require documentation that carpet was recycled



Two options for recycling:

- Manufacturer operated recycling programs
- Regional recycling processors

Summary of Minimum Specifications

- NSF-140 certification at the platinum level
 - Ensures a minimum of level of 10% recycled content
- Nylon material
- Solution-dyed
- Carpet, adhesives, and pad (if applicable) meet LEED® IEQ Credit 4.3 for indoor air quality (VOC limits)
- If selecting PVC backing, require a minimum recycled content level of 40%

Model Procurement Language

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.

Model Technical Specifications for Construction Documents

SECTION 09 68 [XX] – CARPET TILE

PART 1 – GENERAL

X.X SUBMITTALS

SPECIFIER NOTE:

LEED Credit EQ 4.3 specifies indoor air quality limits for carpet, adhesive, and cushion. Compliance with this credit is required regardless of whether LEED certification will be sought in a building project. LEED Credit EQ 4.3 requires compliance with CRI's Green Label and Green Label Plus Programs, as well as SCAQMD Rule #1168 for adhesives. The Carpet and Rug Institute (CRI) Green Label test methodology was developed by consensus during an official dialogue with the EPA. Green Label Plus, an enhancement to the CRI Green Label, incorporates additional requirements to meet California's Collaborative for High Performance Schools (CHPS) low-emitting materials criteria.

X. Indoor Air Quality Submittals (Required for LEED and non-LEED projects):

Provide documentation verifying compliance with LEED Credit EQ 4.3

1. Product Data for Credit EQ 4.3

- a. For carpet tile, documentation indicating compliance with testing and product requirements of CRI's "Green Label Plus" program.
- b. For installation adhesive, documentation including printed statement of VOC content of 50 g/L or less, as per SCAQMD Rule #1168.
[For broadloom carpet with cushion]
- c. For carpet cushion, documentation indicating compliance with testing and product requirements of CRI's "Green Label" program.

Other Resources

- State of California

<http://www.calrecycle.ca.gov/Carpet/Buyers.htm>



- King County, Washington

http://www.kingcounty.gov/operations/procurement/Services/Environmental_Purchasing.aspx



- State of Massachusetts

<http://www.mass.gov/anf/budget-taxes-and-procurement/procurement-info-and-res/procurement-prog-and-serv/epp-procurement-prog/green-products-and-serv/specific-epp-statewide-contracts/carpet-and-flooring-recycled-content.html#Related>



Piggybacking Opportunity

- US Communities
 - Lead agency: Seattle
 - Vendor selected: Empire Today
 - December 1, 2011 to November 30, 2014 with Option to renew for (3) additional (1) year periods



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