

# Template for Vendors

## Recycled Product Specifications

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Because of the U.S. Department’s commitment to the environment, safety, and health, we purchase environmentally preferable products with special emphasis on the preferred products acts of Congress direct us to purchase: those with biobased and recycled content, energy and water efficient, alternative fuels and vehicles, non-ozone depleting, and other environmentally preferable (non-toxic, non-hazardous) materials. We are required to report our purchases of all products designated for purchase with biobased and recycled content.

Suppliers of products need to be aware of the requirement for U.S. Department of Energy staff and their contractors to purchase the recycled products that have been designated by the U.S. Environmental Protection Agency. Once EPA designates an item, the Resource Conservation and Recovery Act Section 6002 requires that any procuring agency, when using appropriated federal funds to procure that item, shall purchase it with the highest percentage of recovered materials practicable (40 CFR 247). The requirement is that 100 percent of the purchases of the designated products shall meet or exceed the EPA guideline standards unless written justification is provided that a product is 1) not available competitively within a reasonable time frame, 2) does not meet appropriate performance standards, or 3) is only available at an unreasonable price. No exceptions are allowed for book paper, carbonless paper, computer printout paper, copy paper, cotton fiber paper, cover stock, file folders, forms bond, office paper (such as notepads), and white woven envelopes. For details on the specifications for recycled products, see the U.S. Environmental Protection Agency’s website at <http://www.epa.gov/epaoswer/non-hw/procure/products.htm>.

The products presently requiring recycled content are:

Product	Required	Percent Content and Prices Available from Vendor
<b>Office Products</b>		.
Awards/Plaques - Free-Standing Statues/Wall Hangings (not frames)	75% post-consumer glass or 40% post-consumer paper or 50% post-consumer plastic or plastic/wood composite or 100% recycled wood	
Binders – 3-ring Paperboard	80% post-consumer paper	
Binders – 3-ring Plastic Covered	25% recycled plastic	

<b>Product</b>	<b>Required</b>	<b>Percent Content and Prices Available from Vendor</b>
Binders – Solid Plastic	90% post-consumer HDPE 30% post consumer PE 100% post-consumer PET 80% post-consumer miscellaneous plastics	
Boxes – Storage/Magazine	40% post-consumer fiber	
Cards - Index	30% post-consumer fiber	
Clipboards – Solid Plastic	90% post-consumer HDPE 50% post-consumer PS 15% post-consumer miscellaneous plastics	
Covers – Coverstock/Report (no exceptions allowed)	30% post-consumer fiber	
Desktop Accessories - Plastic	25% post-consumer polystyrene	
Diskettes - Computer	electronically cleaned diskettes – no requirement but available	
Dividers - Cardstock	30% post-consumer fiber	
Envelopes – Kraft	10% post-consumer fiber	
Envelopes - Tyvek®	25% post-consumer with total of 35% recycled plastic	
Envelopes – White Woven (no exceptions allowed)	30% post-consumer fiber	
Folders – Manila/Hanging (no exception allowed)	30% post-consumer fiber	
Folders – Solid Plastic File	90% post-consumer HDPE	
Folders – Solid Plastic Presentation	90% post-consumer HDPE	
Forms – Bond (no exceptions allowed)	30% post-consumer fiber	
Furniture - Office	100% recycled agriculture fiber or 75% recycled aluminum or 70% post-consumer HDPE with total of 95% recycled HDPE or 100% post-consumer PET or 25% post-consumer remanufactured/refurbished components or 16% post-consumer steel with total of 25% recycled steel or 1% post-consumer wood composite with total of 80% recycled wood composite	
Ink Jet Cartridges	remanufactured - no requirement but available	
Mailers – Diskette/CD, Tubes	75% post-consumer fiber	

<b>Product</b>	<b>Required</b>	<b>Percent Content and Prices Available from Vendor</b>
Mouse Pad	recycled - no requirement but available	
Paper – Bond/ Computer/ Copy/ Fax/Printer/ Xerox (no exceptions allowed)	30% post-consumer fiber	
Paper – Book (no exceptions allowed)	30% post-consumer fiber	
Paper – Brochure Non-Glossy (no exceptions allowed)	30% post-consumer fiber	
Paper – Calendars Desk/Wall	30% post-consumer fiber	
Paper – Carbonless (no exceptions allowed)	30% post-consumer fiber	
Paper – Certificate (no exceptions allowed)	30% post-consumer fiber	
Paper – Daytimer/Planner/Organizer (no exceptions allowed)	30% post-consumer fiber	
Paper – Glossy Calendar/Magazine/Poster	10% post-consumer fiber	
Paper - Newsprint	10% post-consumer fiber	
Paper – Pads Desk/ Engineering/ Legal/Lined/Note/Steno/ Sticky (no exceptions allowed)	30% post-consumer fiber	
Paper – Stationery (no exceptions allowed)	30% post-consumer fiber	
Paper – 3-Hole (no exceptions allowed)	30% post-consumer fiber	
Pencils	recycled - no requirement but available	
Portfolios – Solid Plastic Clip	90% post-consumer HDPE	
Protectors – Plastic Document	recycled - no requirement but available	
Printer Ribbons	Reinked/reloadable printer ribbons	
Tags and Tickets	20% post-consumer fiber	
Toner Cartridges	Remanufactured	
<b>Janitorial Products</b>		
Boxes – Corrugated Moving	25% post-consumer fiber	
Napkins - Paper	30% post-consumer fiber	
Recycling Containers - Office	20% post-consumer plastic 16% post-consumer steel with total of 25% recycled steel	
Tissue - Facial	10% post-consumer fiber	

<b>Product</b>	<b>Required</b>	<b>Percent Content and Prices Available from Vendor</b>
Tissue - Toilet	20% post-consumer fiber	
Towels - Paper	40% post-consumer fiber	
Trash Bags - Plastic	10% post-consumer	
Trash Receptacles - Office	20% post-consumer plastic or 16% post-consumer steel with total of 25% recycled steel	
Wipes – General Purpose Industrial	40% post-consumer fiber	
<b>Building Insulation</b>	Building insulation only, not pipe or electrical insulation	
Cellulose Loose Fill and Spray	75% post-consumer paper	
Fiberglass	20% glass cullet	
Perlite Composite Board	23% post-consumer fiber	
Phenolic Rigid Foam	5% recycled plastic	
Plastic, Non-Woven Batt	100% recycled plastic	
Plastic Rigid Foam, Polyisocyanurate/Polyurethane: Foam-in-Place	5% recycled	
Plastic Rigid Foam, Polyisocyanurate/Polyurethane: Glass Fiber Reinforced	6% recycled	
Plastic Rigid Foam, Polyisocyanurate/Polyurethane: Rigid Foam	9% recycled plastic	
Rock Wool	75% slag	
<b>Construction Products</b>		
Carpet - Polyester	25% PET	
Carpet Cushion - Bonded Polyurethane  - Jute - Rubber - Synthetic fibers	15% post-consumer old carpet cushion 40% post-consumer burlap 60% post-consumer tire rubber 100% recycled carpet fabrication scrap	
Cement and Concrete with Fly Ash	possible 0-40% coal fly ash; for specifications, see <a href="http://www.epa.gov/epaoswer/non-&lt;br/&gt;hw/procure/products/cemspecs.htm">http://www.epa.gov/epaoswer/non- hw/procure/products/cemspecs.htm</a> Fly ash increases strength as well as curing time of concrete	

<b>Product</b>	<b>Required</b>	<b>Percent Content and Prices Available from Vendor</b>
Cement and Concrete with Blast Furnace Slag	25-50% ground granulated blast furnace slag; for specifications, see <a href="http://www.epa.gov/epaoswer/non-hw/procure/products/cemspecs.htm">http://www.epa.gov/epaoswer/non-hw/procure/products/cemspecs.htm</a>	
Cement and Concrete with Cenospheres	Requirement is to include in all construction contracts allowing use of a minimum of 10% cenospheres Cenospheres are a component of fly ash and create a high performance concrete (increase strength, endurance, and thermal stability; decrease shrinkage and weight); do not leach hazardous pollutants (National Specification - ASTM C-618)	
Cement and Concrete with Silica Fume from silicon or ferrosilicon metal production	Requirement is to include in all construction contracts allowing use of a minimum of 5% silica fume Silica fume is solid waste collected on filters of electric arc furnace stacks and creates a high performance concrete (increases strength, endurance, microstructure density, electrical resistivity; decreases fluid permeability and so damage from freeze/thaw cycles). ASTM standards require silica fume used in concrete be derived only from silicon or ferrosilicon metal production which yields silica fume with less than 2% silicon metal. Sold premixed in bags. (National Specifications - ASTM C1240, AASHTO M840, ACI 234R-96)	
Crossing Surfaces – Railroad Grade	15% fly ash in concrete or 85% plastic/composite with total of 100% plastic/composite or 85% tire rubber or 16% post-consumer steel with total of 25% recycled steel or 90% post-consumer wood/composite	
Dividers - Restroom and Shower	20% post-consumer plastic or 16% post-consumer with total of 25% recycled steel	
Fiberboard - Structural	80% recycled	
Floor Tiles	90% recycled plastic or rubber	
Flowable Fill	6% fly ash or ferrous foundry sand	

<b>Product</b>	<b>Required</b>	<b>Percent Content and Prices Available from Vendor</b>
Mats	10% post-consumer plastic or 75% post-consumer rubber or 100% post-consumer rubber/plastic composite	
Paint - Latex - Consolidated - Reprocessed whites/pastels - Reprocessed earthtones/darks	100% recovered material 20% recovered material 50% recovered material	
Paperboard - Laminated	100% post-consumer paper	
Patio Blocks	90% recycled plastic or rubber	
Pipe - Non-Pressure	cement - same specs as for concrete or 100% post-consumer HDPE or 5% post-consumer PVC with total of 25% recycled PVC or 16% post-consumer steel with total of 25% recycled steel Drainage pipes and conduit (see RMAN4-final.pdf file for pipe specifications)	
Ramps - Modular Threshold	10% recycled aluminum or 100% post-consumer rubber or 16% steel with a total of 25% recycled steel Remove barriers created by changes in elevation, such as door thresholds and providing access for those with disabilities. Rubber ramp only suitable for heights up to 6 inches, otherwise too heavy to ship.	
Roofing Materials	20% post-consumer aluminum or cement - same specs as for concrete or 50% post-consumer fiber (felt) or 100% post-consumer plastic or plastic/rubber composite or 12% post-consumer rubber with total of 100% recycled rubber or 16% steel with a total of 25% recycled steel or 100% recycled wood/plastic composite EPA found no roofing codes or standards that preclude the use of recycled content in roofing materials.	
<b>Landscaping Products</b>		

<b>Product</b>	<b>Required</b>	<b>Percent Content and Prices Available from Vendor</b>
Compost	recovered organic materials, such as grass clippings, leaves, yard trimmings, food waste – redefined to include biosolids and manure	
Edging - Lawn and Garden	30% post-consumer plastic/rubber	
Fertilizer (effective Sep 15, 2008)	recovered organic materials	
Hoses - Garden and Soaker	60% post-consumer plastic/rubber	
Hydraulic Mulch	100% post-consumer paper-based or 100% recovered wood/paper wood-based	
Posts/Timber - Landscaping	25% post-consumer HDPE with total of 75% recycled content or 75% post-consumer mixed HDPE/fiberglass with total of 95% recycled content or 50% mixed plastic/sawdust with total of 100% recycled content or 50% mixed resins with total of 95% recycled content	
<b>Park and Recreation Products</b>		
Benches – Park	25% post-consumer aluminum or 90% post-consumer plastic with a total of 100% recycled plastic or 50% post-consumer plastic with a total of 95% recycled plastic or 16% post-consumer steel with total of 25% recycled steel	
Fencing - Snow	60% post-consumer plastic with total of 90% recycled plastic	
Playground Equipment	25% post-consumer aluminum or 15% recycled concrete or 90% post-consumer plastic with a total of 100% recycled plastic or 50% post-consumer plastic or composites with a total of 95% recycled plastic or 16% post-consumer steel with total of 25% recycled steel	
Playground Surfaces and Running Tracks	90% rubber or plastic	

<b>Product</b>	<b>Required</b>	<b>Percent Content and Prices Available from Vendor</b>
Tables – Picnic	25% post-consumer aluminum or 15% recycled concrete or 90% post-consumer plastic with a total of 100% recycled plastic or 50% post-consumer plastic composites or 16% post-consumer steel with total of 25% recycled steel	
<b>Transportation Products</b>		
Channelizers	25% post-consumer plastic or 100% post-consumer rubber for base	
Delineators - flexible	25% post-consumer plastic or 100% post-consumer rubber for base 16% post-consumer with total of 25% recycled steel for base	
Stops - Parking	100% post-consumer concrete, plastic, or rubber	
Traffic Barricades	100% recycled fiberglass or 80% post-consumer HDPE, LDPE, PET with total of 100% recycled or 16% post-consumer steel with total of 25% recycled steel	
Traffic Cones	50% recycled crumb rubber, LDPE, PVC	
<b>Vehicular Products</b>		
Coolants - Engine	reclaimed with only one base chemical (ethylene or propylene but not mixed)	
Oil - Lubricating	25% re-refined	
Parts – Rebuilt Vehicle	Rebuilt/Remanufactured in accordance with “Guides for Rebuilt, Reconditioned and Other Used Automotive Parts Industry,” Federal Trade Commission, 16CFR Part 20 Applies to all vehicle parts for automobiles, cranes, off-road vehicles, trucks	
Tires - Retread	Meet Federal Specification ZZ-T-441H for tire repair and retread services and meet Federal Specification ZZ-T-381 for purchasing retread tires, see <a href="http://www.epa.gov/epaoswer/non-hw/procure/products/retread.htm">http://www.epa.gov/epaoswer/non-hw/procure/products/retread.htm</a>	



<b>Product</b>	<b>Required</b>	<b>Percent Content and Prices Available from Vendor</b>
<b>Miscellaneous Products</b>		
Blasting Grit	100% recycled coal slag or 100% recycled copper and nickel slag or 100% post-consumer glass or 20% post-consumer glass/plastic with total of 100% recycled glass/plastic or 16% post-consumer steel with total of 25% recycled steel or 100% recycled walnut shells or 100% recycled bottom ash or 100% post-consumer fused alumina oxide Industrial abrasive used for corrosion control, prime and clean surfaces, etc. Contains recovered steel, coal combustion byproducts, metal slags, glass, plastic, or walnut shells. Workers must follow OSHA or similar standards because of the potential for the grit to contain heavy metals.	
Drums - Industrial	30% post-consumer HDPE or 100% post-consumer paper or 16% post-consumer steel	
Pallets	95% post-consumer wood or 100% post-consumer plastic or 50% post-consumer paperboard	
Posts/Supports - Sign	80% post-consumer plastic or 16% post-consumer steel	
Racks - Bike	100% post-consumer HDPE or 16% post-consumer steel with total of 25% recycled steel	
Signs	25% post-consumer aluminum or 80% post-consumer plastic	
Sorbents	100% recycled organics/composites 90% post-consumer paper or 25% recycled plastics or 95% post-consumer textiles or 100% recycled wood	
Strapping	50% post-consumer PET or 10% recycled PP or 67% post-consumer steel	

#### Acronyms

HDPE high density polyethylene (plastic no. 2 – milk, detergent, and oil bottles)

LDPE low density polyethylene (plastic no. 4 – many plastic bags, shrink wrap, garment bags)

PE	polyethylene
PET	polyethylene terephthalate (plastic no. 1 – soda and water containers)
PP	polypropylene (plastic no. 5 – refrigerated containers, some bags, most bottle tops)
PS	polystyrene (plastic no. 6 – throw away utensils and protective packing)
PVC	polyvinyl chloride

#### References

40 CFR 247. September 14, 2007. “Comprehensive Guideline V for Procurement of Products Containing Recovered Materials; Final Rule. *Federal Register*, Vol. 72, No. 178, pp. 52475-52488.

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40 CFR 247. January 19, 2000. “Comprehensive Guideline for Procurement of Products Containing Recovered Materials; Recovered Materials Advisory Notice III; Final Rule.” U.S. Code of Federal Regulations, Vol. 65, No. 12.

40 CFR 247. November 13, 1997. “Comprehensive Guideline for Procurement of Products Containing Recovered Materials; Final Rule.” U.S. Code of Federal Regulations, Vol. 62, No. 219.

16 USC 1671 et seq. (as amended). May 1, 2002. Farm Security and Rural Investment Act of 2002. Title 9 - Energy Biomass/Renewable Energy, Section 9002, “Federal Procurement of Biobased Products.” Public Law 107-171.

42 USC 6901 et seq. (as amended). October 31, 1976. Resource Conservation and Recovery Act of 1976 (RCRA), Section 6002(l) (42 USC 6962). Public Law 94-580.

60 FR 21386 (SWH-FRL-5198-8). May 1, 1995. “Recovered Materials Advisory Notice,” Part VI. *Federal Register*. URL: <http://www.epa.gov/docs/EPA-WASTE/1995/May/Day-01/pr-211.html>

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