

Recycled Content Park and Recreation Products for Alameda County





RECYCLED CONTENT PARK AND RECREATION PRODUCTS IN ALAMEDA COUNTY

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Buying recycled content **playground equipment, playground surfacing, and parks furnishings** is cost effective, easy to do, and a good way to keep our outdoors “green”.

If you specify or purchase park and recreation products, buying recycled can turn the materials collected for recycling into budget-friendly quality products.

“Asphalt-concrete pathways were recycled and ground-in-place for new concrete pathways. Site furnishings utilized plastic made from recycled milk jugs as slats for benches. The finished park was well received by the public, and to date, all of the recycled materials have exceeded our expectations.”

– City Landscape Architect,
City of Pleasanton

1. PARK & RECREATION PRODUCTS CONTAINING RECOVERED MATERIALS

The U.S. Environmental Protection Agency (EPA) recommends minimum recycled content levels to look for when purchasing park and recreation products, as shown in the table below. Rather than specifying just one level of recycled content, ranges are offered that reflect actual market conditions.

EPA's Recommended Content Levels for Park and Recreation Products*

Park and Recreation Products	Recovered Material Content
Park Benches & Picnic Tables	
Plastic	90-100% postconsumer 100% total
Plastic Composites	50-100% postconsumer 100% total
Fencing	
Plastic Fencing for Specified Uses	60-100% postconsumer 90-100% total
Playground Equipment	
Plastic	90-100% postconsumer 100% total
Plastic Composites	50-75% postconsumer 95-100% total
Playground Surfaces	
Plastic or Rubber	90-100% postconsumer
Running Tracks	
Plastic or Rubber	90-100% postconsumer
Signage	
Plastic	80-100% postconsumer 80-100% total
Plastic Sign Posts/Supports	80-100% postconsumer 80-100% total

* EPA also includes steel, concrete and aluminum products. They are excluded here as they are commonly recycled materials.

Source: www.epa.gov/smm/comprehensive-procurement-guidelines-park-and-recreation-products

2. SALVAGED AND RECYCLED CONTENT MATERIALS IN THE LANDSCAPE

The **Bay-Friendly Landscaping Guide to Recycled Content and Salvaged Materials** from ReScape California shows how to add value, reduce greenhouse gas emissions and create attractive landscapes using salvaged and recycled content materials. Examples and how-to's are offered as well as resources for where to find (and send) salvaged materials. Suggestions include:

- Salvaged bricks for paving and headers
- Reused concrete (urbanite) for benches, paving, and walls
- Fly ash in place of Portland cement for concrete
- Mulch and compost from local plant trimmings, food scraps and dimensional lumber and pallets
- Recycled glass pavers and decorative mulch
- Recycled plastic and composite lumber for decking, headers, and railings
- Recycled plastic products for play surfaces, playground equipment, wheel stops and site furnishings

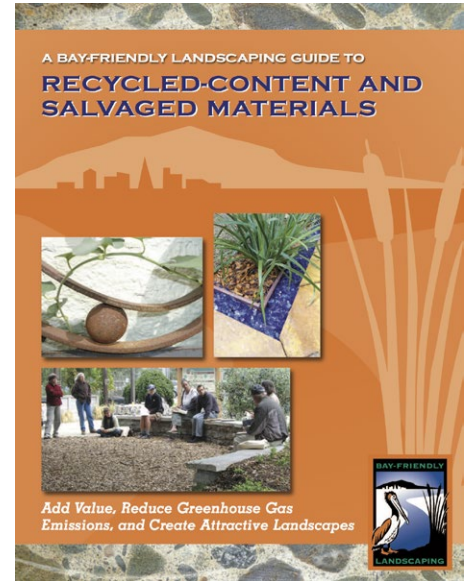
👉 Download at: rescapeca.org/resources/publications-list

Bay-Friendly Rated Landscapes is a rating system that recognizes excellence in high performance landscape design, construction and maintenance in the San Francisco Bay Area. It was originally developed and piloted by StopWaste in Alameda County and is now offered throughout the Bay Area by ReScape California (formerly known as the Bay-Friendly Landscaping and Gardening Coalition).

The **Bay-Friendly Rating Manual** recommends using salvaged items and recycled content materials for non-plant, non-structural landscape materials such as:

- Decking and fencing
- Site furnishings such as bike racks, benches, tables and chairs
- Planters and retaining walls
- Parking stops
- Play structures and surfaces
- Edging/headers
- Decorative glass mulch

For more information about Bay-Friendly Rated Landscapes and to download the Rating Manual and other tools, visit rescapeca.org/rated-landscapes.



👉 **Salvaged materials** are items that are put to a new use after their initial use, without being remanufactured between uses.

👉 **Recycled content** products are those made from materials derived from discarded goods. They are remanufactured between uses.

3. PARK FURNISHINGS AND OUTDOOR CONTAINERS

Park benches, tables and other furnishings made from recycled plastic offer many performance and durability benefits. Examples of product lines for **park furnishings made with recycled plastic** are listed in Table 1 in Appendix B.

Containers for trash or recyclables are also a common purchasing need. Table 1 also lists a sampling of product and purchasing information for **outdoor containers/receptacles made with recycled content**.

Sample specifications for **recycled plastic playground equipment, benches and tables** are included in Appendix A of this Fact Sheet.

“Park benches made with plastic lumber work great for us. We haven’t had any problems in the last two or three-year period. It holds up well, whereas our wooden benches need on-going maintenance.”

– *Supervisor, Area Maintenance and Plumbing, City of Oakland*

4. HEALTH AND ENVIRONMENTAL IMPACTS OF TIRE-DERIVED PRODUCTS

Recycling remains an important and preferential result for materials at end of life compared to other options such as landfilling or incineration. However, it is also the case that recycled materials can contain legacy pollutants in quantities that exceed allowable limits for new products. Products manufactured with recycled tires are one of these materials of concern.

As a result, many studies have been conducted to determine the health and environmental impacts of tire-derived products such as playground surfacing and synthetic turfs that use recycled tire materials. *To date, an elevated health risk from playing on fields with tire crumb rubber has not been found, but these studies have limitations and more studies continue to be conducted to comprehensively evaluate the concerns about health risks from exposure to tire crumb rubber.*

1. The following link from CalRecycle (California’s Department of Resources Recycling and Recovery) provides access to recent articles, research, studies, and fact sheets that specifically examine the potential health and environmental risks associated with various tire-derived product types:

www.calrecycle.ca.gov/Tires/Products/Health/default.htm

2. Due to continued consumer concern over the potential health impacts of pollutants in recycled crumb rubber, the U.S. Environmental Protection Agency (EPA), the Centers for Disease Control and Prevention/Agency for Toxic Substances and Disease Registry (ATSDR), and the U.S. Consumer Product Safety Commission (CPSC) launched a multi-agency action plan to study key environmental human health questions about the safety of recycled tire crumb used in playing fields and playgrounds in the United States. A status report was issued in December 2016.

Analysis of the tire crumb samples collected from fields and recycling facilities, and the exposure characterization component of the study will continue in 2017. Parts of the exposure study may be conducted during the hotter months of 2017. The CPSC playground study also will continue in 2017. For more information, visit:

www.epa.gov/chemical-research/federal-research-recycled-tire-crumbs-used-playing-fields

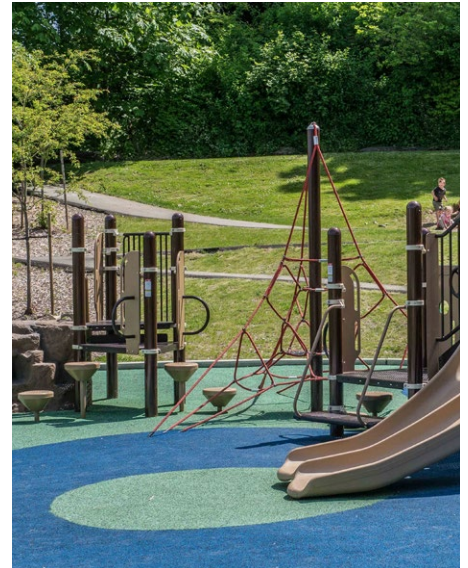
3. California's Office of Environmental Health Hazard Assessment (OEHHA), under contract from CalRecycle, is also conducting a comprehensive evaluation of tire crumb. At their request, the US National Toxicology Program initiated a research program to better understand potential health impacts of chemicals released from synthetic turf with an emphasis on crumb rubber. EPA, CPSC and other federal agencies are also working with California's OEHHA to provide expertise to assist with OEHHA's evaluation of tire crumb.

More information about California's study is online at:

oehha.ca.gov/risk-assessment/synthetic-turf-studies

More information about the NTP research is online at:

ntp.niehs.nih.gov/results/areas/syntheticurf/research.html



Purchasing for Recycling and Safety

StopWaste partnered with Healthy Building Network and the San Francisco Department of the Environment to investigate ways to enhance the quality of post-consumer recycled-content raw materials (or “feedstock”) used in the manufacturing of building products. Tires (crumb or shredded) are one of 11 recycled content raw materials evaluated.

The briefing paper, *Optimizing Recycling: Criteria for Comparing and Improving Recycled Feedstocks in Building Products*, provides purchasers, government agencies, manufacturers and the recycling industry with recommendations for optimizing recycled content feedstocks in building products to increase their value, marketability and safety.

The findings and recommendations for purchasers and governments include:

- Continue to prioritize recycled content in purchasing decisions; the benefits tend to outweigh the negatives.
- Ask for transparency data when purchasing products. Prefer leading manufacturers that disclose information and include recycled materials from known sources or that have been tested for contaminants of concern.
- Invest in advancing local recycling infrastructure wherever possible.

Download a copy of the report, *Optimizing Recycling: Criteria for Comparing and Improving Recycled Feedstocks in Building Products*, from:

www.stopwaste.org/resource/optimizing-recycled-content-building-materials-2015

Visit HealthyBuilding.net to view additional [research and reports](#) including an associated series of research papers on optimizing specific recycled feedstocks and the production of healthier building products:

healthybuilding.net/content/research-and-reports

To assist in contacting manufacturers about the materials and processes used in manufacturing their products, see the listings of **California Manufacturers of Tire-Derived Products** in Table 3 in Appendix B. Contact information is provided along with categories of products manufactured using California waste tires.

Help Advance Industry Best Practices

While further research on the health and environmental impacts of tire-derived products is underway, there are steps purchasers can take to encourage industry best practices in disclosing product information:

- When purchasing products that contain crumb rubber from used tires, request information from manufacturers about the sources of the recycled material, the presence of toxicants in the finished product (if any), and product ingredient lists.
- Safety Data Sheets (SDS, formerly known as Material Safety Data Sheets) and Health Product Declarations (HPDs)¹ that include information about the constituents that are present in end-use products.
- Clarification that no heavy metals or other contaminants are present in amounts greater than a threshold of 1000 ppm (0.1%).
- For uses where volatilization of chemicals is expected, such as indoors or in areas that are exposed to heat like outdoor areas in the sun, ask for VOC emissions testing reports to verify if products meet the California Department of Public Health (CDPH) [Indoor air quality program standards](#)².

5. ATHLETIC, RECREATIONAL AND PLAYGROUND SURFACING

A wide variety of athletic, recreational and playground surfaces are made from recycled plastic or rubber. Many of these products are made from California's recycled tires. Visit [CalRecycle online](#) and see Appendix B for lists of suppliers and manufacturers of tire-derived products.

www.calrecycle.ca.gov/tires/products

Playground Surfaces

Recycled tire rubber is used to make different types of surfacing products designed for use in and around play areas. Compared with traditional products like engineered wood fiber, dirt or grass, these rubberized surfaces are typically:

- **Softer and safer, reducing injuries when children fall.** Rubber surfaces in public play areas must meet ASTM F1292, Fall Height Standards and ASTM F1951, Accessibility Standard of Surface Systems.
- **Long lasting and durable.** This reduces the cost to replace wood and sand play surfaces.

¹ HPDs are developed under the Health Product Declaration Collaborative open standard: www.hpd-collaborative.org

² www.cdph.ca.gov/programs/IAQ/Pages/VolatileOrganicCompounds.aspx

The California School for the Blind in Fremont, California replaced the tan bark in three of the schools' playgrounds with poured-in-place rubberized surfacing material. According to the Supervisor of Building Trades, California Department of Education, it was a good decision.

"Oh, it's great to see. It's 100% better than tan bark or sand. The material is so spongy and nice. My only complaint is that it's so expensive. However, it prevents infectious control issues associated with open playgrounds and I even have drains underneath for water runoff. I like it so much I am putting in a few more of these!"

- **Attractive.** Rubber surfaces come in a variety of colors, and some can be designed and installed to formed customized shapes and designs.
- **Americans with Disabilities Act (ADA) Compliant.** As of March 15, 2012, public playground areas are required to comply with new federal ADA design regulations.

Playground surfaces can be installed with poured-in-place systems, tiles, loose fill mulch or synthetic turf. The pour-in-place systems would be a good option with respect to mitigating some of the health concerns that have been raised about loose fill mulch.

Pour-in-Place

Pour-in-place systems are installed on-site, and provide a long-lasting, safe surface under and around play equipment. Recycled tire rubber is mixed with a binder and colorants to form a permeable, stable surface providing ADA accessibility in all weather conditions. With a variety of colors and patterns, these surfaces are highly customizable. The base of pour-in-place systems is usually made from recycled tires. While synthetic rubber is often used for the top, some vendors choose to use 100 percent recycled tire rubber to maximize environmental benefits.

Tiles

Unlike pour-in-place surfacing, tiles are modular and are made in the factory prior to installation. Tiles come in a wide range of colors and variations, and offer a low-maintenance alternative to conventional materials like dirt, grass, or engineered wood fiber.

Loose Fill (Mulch)

Loose fill rubber playground surfaces consist of either nuggets about 1/2"–3/4" in size, or rubber bark about 2" to 3" long that resembles wood chips. Both rubber nuggets and bark provide a longer lasting, softer alternative to wood and sand. Both are available in a wide assortment of different colors and last approximately five years.

A Case Study for Pour-in-Place Playground Surface

"The park's neighbors love the new playground."

– Sandra Kaya, Livermore Area Recreation and Park District, California

The Livermore Area Recreation and Park District selected a recycled rubber pour-in-place surface for use under and around the Bothwell Park play area. Installed in 2010, the project utilized the equivalent of 3,281 California tires diverted from landfill.

Benefits:

The surfacing provides shock absorption for children as well as a stable surface on which a stroller or wheelchair can maneuver easily. Compared to sand or wood chips, the recycled rubber pour-in-place surface requires less maintenance. Sand and wood chips need to be replenished and replaced on a regular basis because they blow away or are inadvertently carried away.

Synthetic Turf for Playgrounds, Sports Fields & Running Tracks

Recycled tire rubber is used in the construction of many different types of synthetic turf for athletic surfaces including running tracks, all-purpose sport fields, professional surfacing in stadiums, play areas, and putting greens.

Synthetic turf is an alternative to natural grass in outdoor applications. Synthetic turf consists of grass-like blades made from polymers, with recycled tire rubber used as infill and/or in underlayments to provide cushioning. Synthetic turf resembles grass, conserves water compared to natural grass and lasts for 8-10 years.

Rubberized running tracks can provide a lasting, consistently even and safe surface for competitive events. Rubberized tracks are typically a multilayer product using crumb rubber made from tires and resin in a composite system, formed onsite by mixing, pouring and leveling the application.

Advantages include:

- **Durability.** Synthetic lawns last for 8 to 10 years with proper maintenance.
- **Reduced Maintenance Labor and Costs.** Synthetic turf eliminates need for weekly mowings during the growing season as well as the need to handle grass clippings. One synthetic lawn sport field can reduce water consumption by more than 500,000 gallons annually, reducing water bills. Routine maintenance is still needed for synthetic turf and includes replacing and leveling tire-crumb infill as well as removing debris and cleaning the surface.
- **Increased playing time.** Synthetic turf provides hundreds of more hours playing time than natural grass in a year as it is much less affected by rain and doesn't need time to allow for growth of the grass to rejuvenate the field. Synthetic turf running tracks provide lasting, consistently even surfaces for competitive events.

Disadvantages include:

- **More Expensive to Install.** Switching to synthetic turf is a significant capital investment compared to natural grass.
- **Hotter playing surface.** Unlike natural grass which cools the air through evapotranspiration, synthetic lawns can trap heat and create a heat island. The increased heat can contribute to users' heat stress and other heat related health effects.
- **End of life disposal.** The in-fill tire crumb can be reused however most of the grass polymers are not recyclable and represent a significant disposal impact and cost at the end of the life of the synthetic turf.
- **Greenhouse Gasses.** Synthetic turf reuses a waste product which saves energy but the virgin polymers and material involved in the manufacture of synthetic turf have significantly greater greenhouse impacts than natural grass.

A listing of California Suppliers of Playground Surfaces and Synthetic Turf Made from California Waste Tires is included in Table 2 of Appendix B.

Before purchasing, see Section 4 for information on potential health concerns related to the use of crumb rubber.

6. ADDITIONAL RESOURCES

There are many resources available to help identify products and their performance, see sample bids and specifications, and read case studies of successful programs.

- **StopWaste** offers technical assistance to Alameda County public agencies for purchasing environmentally preferable products. The website features resources such as additional fact sheets, guides and links to other helpful environmental purchasing websites and documents.
www.stopwaste.org/epp
- **RecycleWhere?** is an online search tool for Alameda County which helps you determine how and where to recycle any type of recyclable item.
recyclewhere.org
- **Alameda County and the General Services Agency** are committed to sharing their resources and experiences to promote green purchasing in public agencies. Policies, success stories, bids, specifications and other resources are available.
www.acsustain.org
- **SF APPROVED** provides a directory of green products and services that meet San Francisco's health and environmental requirements.
www.sfapproved.org
- **The California Department of General Services Environmentally Preferable Purchasing Program** provides information on how the State is succeeding in buying environmentally sustainable products and services.
www.dgs.ca.gov/buyinggreen
- **The U.S. Environmental Protection Agency's Sustainable Marketplace** provides information and tools for institutional purchasers, consumers and manufacturers to help identify, evaluate and purchase greener products and services.
www.epa.gov/greenerproducts
- **The Responsible Purchasing Network (RPN)** offers procurement-related professional guides and resources on socially responsible and environmentally sustainable purchasing. Note that some resources are only available to members.
www.responsiblepurchasing.org

Disclaimer

The information provided in this Fact Sheet should be considered by public agency and business purchasers who are interested in buying environmentally preferable products. StopWaste provides it as a public service in an attempt to provide environmental benefits and reduce costs. Listing in this Fact Sheet is not a recommendation or an endorsement. This Fact Sheet is not a substitute for the exercise of sound judgment in particular circumstances and is not intended as recommendations for particular products or processes. StopWaste is the Alameda County Waste Management Authority, the Alameda County Source Reduction and Recycling Board, and the Energy Council operating as one public agency.

This Fact Sheet was prepared by Kies Strategies & StopWaste in February 2017.

7. APPENDIX A: SAMPLE SPECIFICATIONS FOR BUYING ENVIRONMENTALLY PREFERABLE PARK & RECREATION PRODUCTS

The Commonwealth of Massachusetts, Operational Services Division, has used the following procurement language for recycled plastic playground equipment, recycled plastic lumber benches and tables, and athletic and playground surfaces:

PLAYGROUND EQUIPMENT

General Description

The Commonwealth desires contractors who can provide a variety of playground equipment that contains postconsumer recycled plastic. Playground equipment may include, but is not limited to, composite structures, individual components, and sand boxes.

Mandatory Product Specifications

- All non-moving plastic and metal parts **must** be warranted for a minimum of ten (10) years against structural failure due to warping, sagging, cracking, corrosion, deterioration, or manufacturing defects.
- All playground equipment **must** include postconsumer recycled plastic lumber in at least two (2) of the following applications: decking, sandbox borders, roofing, walls/partitions, fascia inserts, other.
- All recycled plastic elements used in playground equipment **must** contain a minimum of 85% postconsumer plastic and **must** not contain any fiberglass or other materials which may cause adverse skin reaction or other skin sensitivities.
- All plastic lumber **must** contain ultraviolet (UV) stabilizers and be color-fast throughout the entire material.

Desirable Product Specifications

- It is **desirable** that additional portions of playground equipment be made from recycled plastic lumber than those required above.
- It is **desirable** that Bidders use plastic lumber in playground equipment that is at least 90% postconsumer plastic material.
- It is **desirable** that Bidders use manufacturers that have achieved ISO 14001 certification.

PLASTIC LUMBER BENCHES AND TABLES

General Description

The Commonwealth is looking for contractors who can provide a range of outdoor benches and tables which are made from either all recycled plastic lumber or a combination of recycled plastic lumber and metal frames. These products may be used by state and local agencies at a variety of locations, including, but not limited to parks, campgrounds, bicycle paths, recreation areas, beaches, public health facilities, universities, schools, and roadway rest areas.

Mandatory Specifications

- All benches and tables offered by Bidder **must** consist of surface areas (all seating and table tops) which are made with recycled plastic lumber. Products may be offered with recycled plastic frame/legs or metal frame/legs.
- All plastic lumber **must** contain UV inhibitors and be consistent in color through the entire profile.
- All plastic lumber for seating and table tops **must** contain a minimum of 90% postconsumer recycled plastic and may be composed of a single resin or co-mingled plastic.
- All plastic lumber used for seating and table tops **must not** contain any fiberglass or other material which may cause skin irritation or other adverse reactions.
- If plastic lumber is used for framing/legs, it **must** contain a minimum of 70% postconsumer plastic, and may contain fiberglass or other materials designed to provide additional structural strength.
- All plastic lumber materials except for frames **must** be offered in at least three (3) different colors.
- Benches and tables **must** be of sufficient strength for frequent year-round outdoor use in all Commonwealth facilities listed above.
- All Bidders **must not** use Polyvinyl Chloride (PVC) in any components.
- All plastic lumber in benches and tables **must** be guaranteed against undue warping, sagging, cracking, splitting, and rotting for a minimum of twenty (20) years under normal use conditions.

Desirable Specifications

- It is **desirable** that Bidders offer plastic lumber for seating and table tops that contain a minimum of 95% postconsumer recycled plastic and may be composed of a single resin or co-mingled plastic.

General Contract Specifications

All Contractors in each category **must** agree to:

- Use recycled plastic or plastic lumber elements (when required) which is free of splinters, generally smooth to the touch (unless textured), and free of significant voids, holes, structural and aesthetic defects.
- Provide products which meet all specified minimum recycled content requirements; recycled content shall be based on the dry weight of the raw materials, exclusive of any additives such as adhesives, binders, coloring agents, or UV inhibitors.

It is **desirable** that:

- Bidders offer recycling options to collect damaged or out-of-date products and recycle them into new product.
- Bidders offer decals, plaques, plates, or other types of products that can be affixed to or imprinted on products sold by the Bidder which identifies products as containing recycled plastic and other relevant information. There will be no markup on decals, plaques or other such types of products whenever they are offered.
- Bidders offer additional products with recycled content in appropriate categories which may not be listed as part of this Request for Response (RFR). Such products will be reviewed by the Procurement Management Team (PMT) and accepted based on whether products meet the criteria established by the PMT; to receive contract award for additional products, Bidders must use Response Form A to submit information on the recycled content, source materials, performance standards and other relevant data as may be required by the PMT.

General Definitions

- **Postconsumer content**, as used in this RFR, means materials in a recycled product which are derived from businesses or consumers after having served their intended uses, and which have been separated or diverted from solid waste for the purpose of collection, recycling and disposition.
- **Post-industrial materials/content** refers to materials generated by manufacturers or product converters, such as trimmings, overruns, and obsolete products that are incorporated back into the manufacturing process of the same or a different product.
- **Recyclability** is the ability of a product or material to be recovered from or otherwise diverted from the solid waste stream for the purpose of recycling.
- **Recovered materials** are those materials recovered from either industrial or consumer waste streams, including post-industrial, pre-consumer, and postconsumer content.
- **Virgin products** are those made with 100% new/raw materials and contain no recycled content.

8. APPENDIX B: SUPPLIERS OF ENVIRONMENTALLY PREFERABLE PARK & RECREATION PRODUCTS

This Appendix includes the following lists of suppliers and manufacturers of recycled content park and recreation products:

- Table 1. Sample Suppliers of Park Furnishings Made With Recycled Plastic
- Table 2. California Suppliers of Playground Surfaces and Synthetic Turf Made from California Waste Tires
- Table 3. California Manufacturers of Tire-Derived Products

Table 1. Sample Suppliers of Park Furnishings Made with Recycled Plastic

These listings are not comprehensive; many businesses not listed carry recycled products. Product information is supplied by the manufacturers and is not verified. Exercise sound judgment and research products for your specific application. Note that not all products carried by the companies listed are made with postconsumer recycled content so be sure to check the specifications for your product choice.

Company/Address/Phone/Website	Outdoor Furniture	Paving	Playground Structures	Bike Racks	Containers/Receptacles	Signs	Other Products
American Plastic Lumber P.O. Box 514 Shingle Springs, CA 95682 877 677-7701 american-plasticlumber.com	Benches, Tables, Chairs	No	No	No	Trash, Recycling, Planters	YES	Plastic Lumber
Barco Products 4 N. Washington Ave. Batavia, IL 60510 800-338-2697 www.barcoproducts.com	Tables, Benches, Chairs	Speed Bumps, Parking Stops	No	YES	Trash, Recycling, Planters, Ash Urns, Pet Waste Stations	No	Landscape Timbers
Bright Idea Shop 1500 Firestone Parkway, Suite D Akron, OH 44301 330-258-0168 www.brightideashops.com	Benches, Tables, Seating	Parking Stops, Speed Bump	YES (train, trucks, pirate ship)	YES	Trash, Recycling, Planters	YES	Spa Accessories
Columbia Cascade Co. 1300 S.W. Sixth Avenue, Suite 310 Portland, OR 97201-3464 800-547-1940 www.columbia-cascade.com	Tables, Benches, Chairs	No	YES (Replay Line)	No	Trash, Recycling	No	Plastic Lumber, Fitness Course Equipment
DuMor Site Furnishings Distributor: Ross Recreation Equipment Santa Rosa, CA 707-538-3800 www.dumor.com	Benches, Tables	No	No	No	Trash, Recycling	No	
Epic Plastics 104 E. Turner Rd. Lodi, CA 95420 209-333-6161 www.epicplastics.com	No	No	No	No	No	No	Landscape Edging and Accessories

Company/Address/Phone/Website	Outdoor Furniture	Paving	Playground Structures	Bike Racks	Containers/Receptacles	Signs	Other Products
FibreX Group 4165 Pruden Blvd., Bldg 2 Suffolk, VA 23434 800-346-4458 www.fibrexgroup.com	Benches, Tables	No	YES	YES	Trash, Recycling	No	
Landscape Forms Distributor: Rebecca Casey Berkeley, CA 800-430-6206, Ext. 1313 www.landscapeforms.com	Benches, Tables, Seating	No	No	No	Trash, Recycling	No	
R.J.Thomas Mfg. Co., Inc. Pilot Rock Park Equipment P.O. Box 946 Cherokee, Iowa 51012-0946 800-762-5002 www.pilotrock.com	Benches, Tables	Parking Stops, Speed Bumps	No	YES (Bike Blocks)	Trash, Recycling, Planters	No	Plastic Lumber
The Park Catalog Highland Products Group 3350 NW Boca Raton Blvd., Suite B2 Boca Raton, FL 33431 800-695-3503 www.theparkcatalog.com	Benches, Tables	No	No	No	Trash, Recycling	No	
Victor Stanley, Inc. Distributor: M.J.B. Corporation Grass Valley, CA 530-272-8005 www.victorstanley.com	Benches, Tables	No	No	YES	Trash, Recycling, Ash Urns	No	

Table 2. California Suppliers of Playground Surfaces and Synthetic Turf Made from California Waste Tires

Listings are adapted from the [CalRecycle California Tire-Derived Product Catalog](#) (Revised January 2016 and periodically updated):

www.calrecycle.ca.gov/Files/Tires/TDPCatalog

Product information is supplied by the manufacturers and is not verified. Exercise sound judgment and research products for your specific application. CalRecycle attempted to include information from all known California-based firms producing products made from California waste tires. **Remember to ask for products made from 100% California recycled tires!**

Suppliers	Products	
	Playground Surfaces	Synthetic Turf
BAS Recycling, Inc. 14050 Day Street Moreno Valley, CA 92553 Sako Beudjekian sbeudjekian@basrecycling.com (951) 214-6590 www.basrecycling.com	PLAYSOFT 1020 Cryogenic Crumb Rubber Infill	PLAYSOFT 1020 Cryogenic Crumb Rubber Infill
CRM Co. LLC 15800 S. Avalon Blvd. Rancho Dominguez, CA 90220 Dr. Barry Takallou hbtak@aol.com (949) 263-9100 www.crmrubber.com		CRM Crumb Rubber Infill
Environmental Molding Concepts 14050 Day Street Moreno Valley, CA 92553 Sako Beudjekian sbeudjekian@emcmolding.com (888) 836-2665 www.emcmolding.com	Kid Krete Poured-In-Place Safety Surfacing Kid Kushion Recycled Rubber Safety Tiles	
International Mulch Company 14050 Day Street Moreno Valley, CA 92553 Justin Colony justinc@internationalmulch.com (866) 936-8524 www.internationalmulch.com	NuPlay Nugget Rubber Mulch	
Millennium Molding, Inc. 13195 Santa Ana Avenue Fontana, CA 92337 Ryan Peterson rpeterson@mmolding.com (951) 509-9393 www.mmolding.com	Safe Play Grounds Surfaces Rubber Playground Surfaces Rubber Swing Mats Other Custom Products	
PDPlay Inc. 2458 South Santa Fe Avenue Vista, CA 92084 Mark Baker mark@pdplay.com (760) 597-5990 www.pdplay.com	PDPlay Pad Poured-In-Place Rubberized Surfacing	

Suppliers	Products	
	Playground Surfaces	Synthetic Turf
PlayMax Surfacing, Inc. 1950 Compton Avenue, Ste. 111 Corona, CA 92881 Chris Wolf cwolf@playmaxsurfacing.com (951) 250-6039 www.playmaxsurfacing.com	MaxPour Poured-In-Place Playground Surfacing MaxPour Supreme PolyMax Poly Bead Playground Surfacing SplashMax Poly Bead Splash Pad Surfacing EconoMax Bonded Rubber Mulch System	PlayTurf
reRubber LLC 315 S. Sultana Avenue Ontario, CA 91761 JD Wang jdwang@rerubber.com (909) 786-2811 www.rerubber.com		Crumb Rubber Infill
Robertson Recreational Surfaces, Inc. 16059 East Foothill Blvd Irwindale, CA 91706 Richard Hawley rhawley@playcore.com (602) 340-8873 www.totturf.com	TotTurf Recycled Interlocking Rubber Tiles TotTurf Poured-In-Place Rubber Surfacing Life Force and Splash Tread Surfacing	Synthetic Grass
Sierra Mat & Rubber Company 812 Kiernan Avenue Modesto, CA 95356 Loren Jessop info@sierrarubberproducts.com (209) 824-0341 www.sierrarubberproducts.com	Sierra Rubber Play Slide Mats	
SpectraTurf 500 E Rincon Street Corona, CA 92879 Lisa Anderson lisa.anderson@spectraturf.com (800) 875-5788 www.spectraturf.com	SpectraPour CA Poured-In-Place Playground Surfacing SpectraPour Supreme SpectraBound Tile Surfacing	
Tri-C Tire Recycling Division, Inc. 512 Harbor Blvd. West Sacramento, CA 95691 Michael Hunsaker mh.trictire@yahoo.com (916) 371-1700 www.trictire.com	Tri-C Play Surface	Tri-C Turf Infill
United Sustainable Surfacing of America, Inc. 4000 Barranca Pkwy, Ste 250 Irvine, CA 92604 Karoleen Alexander info@sustainablesurfacing.com (949) 551-4696 www.sustainablesurfacing.com		PolyTurf
West Coast Rubber Recycling, Inc. 1501 Lana Way Hollister, CA 95023 Cameron Wright cameron@groundrubbersolutions.com (831) 634-2800 www.groundrubbersolutions.com	GroundRubber Play Playground Surface	GroundRubber Turf Infill

Table 3. California Manufacturers of Tire-Derived Products

Listings are adapted from the [CalRecycle California Tire-Derived Product Catalog](#) (Revised January 2016 and periodically updated):

www.calrecycle.ca.gov/Files/Tires/TDPCatalog

Product information is supplied by the manufacturers and is not verified. Exercise sound judgment and research products for your specific application. CalRecycle attempted to include information from all known California-based firms producing products made from California waste tires.

Remember to ask for products made from 100% California recycled tires!

www.calrecycle.ca.gov/tires/products

TIRE-DERIVED PRODUCT MANUFACTURERS	PRODUCTS BY CATEGORY
Crossfield Products Corp. 3000 E. Harcourt Street Rancho Dominguez, CA 90221 Brad Watt bradw@cpcmail.net (310) 886-9100 www.crossfieldproducts.com	Building & Construction; Coatings, Sealants & Paints; Industrial Surfaces; Paving Materials & Products
Deccofelt Corporation 555 S. Vermont Avenue Glendora, CA 91741 Gerald Heinrich jheinrich@deccofelt.com (626) 963-8511 www.deccofelt.com	Building & Construction; Coatings, Sealants & Paints; Industrial Surfaces
Delamo Manufacturing 7171 Telegraph Road Montebello, CA 90640 Todd Carlson todd@delamo-mfg.com (888) 711-8011 www.delamo-mfg.com	Cleaning Tools
Eco-Flex California LLC 13000 Newport Road Ballico, CA 95303 Dennis Nairn dennis@eco-flex.com (866) 326-3539 www.eco-flex.com	Animal Care; Building & Construction; Flooring; Mats, Pavers & Tiles; Paths, Walkways, Sidewalks & Bike Trails; Paving Materials & Products
Environmental Molding Concepts 14050 Day Street Moreno Valley, CA 92553 Sako Beudjekian sbeudjekian@emcmolding.com (888) 836-2665 www.emcmolding.com	Animal Care; Building & Construction; Flooring; Mats, Pavers & Tiles; Paths, Walkways, Sidewalks & Bike Trails; Playground Surfaces; Roofing; Sport Surfaces

TIRE-DERIVED PRODUCT MANUFACTURERS	PRODUCTS BY CATEGORY
International Mulch Company 14050 Day Street Moreno Valley, CA 92553 Justin Colony justinc@internationalmulch.com (866) 936-8524 www.internationalmulch.com	Landscape Surfaces; Paths, Walkways, Sidewalks & Bike Trails; Playground Surfaces
K.B. Industries, Inc. 1234 "O" Street Fresno, CA 93721 Kevin Bagnall kbagnall@kbius.com (727) 723-3300 www.kbius.com	Accessibility Products; Building & Construction; Civil Engineering; Industrial Surfaces; Landscape Surfaces; Paths, Walkways, Sidewalks & Bike Trails; Paving Materials & Products
Kirkhill 12023 Woodruff Avenue Downey, CA 90241 Edward Reker ereker@kirkhillrubber.com (562) 803-3117 www.kirkhillrubber.com	Automotive; Roofing
MBTechnology 188 South Teilman Avenue Fresno, CA 93706 Bahman Behbehani bahmanb@mbtechnology.com (559) 233-2181 ext. 19 www.mbtechnology.com	Industrial Surfaces; Roofing
Millennium Molding, Inc. 13195 Santa Ana Avenue Fontana, CA 92337 Ryan Peterson rpeterson@mmolding.com (951) 509-9393 www.mmolding.com	Accessibility Products; Ballistic Products; Civil Engineering; Flooring; Landscape Surfaces; Playground Surfaces; Traffic Related Products
Mission Rubber Company 1660 Leeson Lane Corona, CA 92879 Don Wrixon dwrixon@missionrubber.com (951) 479-4942 www.missionrubber.com	Building & Construction
Paragon Tactical 1580 Commerce Street Corona, CA 92880 Ed Fransen policesafety@supertrap.com (951) 736-9440 www.paragontactical.com	Ballistic Products
PDPlay Inc. 2458 South Santa Fe Avenue Vista, CA 92084 Mark Baker mark@pdplay.com (760) 597-5990 www.pdplay.com	Playground Surfaces

TIRE-DERIVED PRODUCT MANUFACTURERS	PRODUCTS BY CATEGORY
PlayMax Surfacing, Inc. 1950 Compton Avenue, Ste. 111 Corona, CA 92881 Chris Wolf cwolf@playmaxsurfacing.com (951) 250-6039 www.playmaxsurfacing.com	Accessibility Products; Playground Surfaces; Synthetic Turf
reRubber LLC 315 S. Sultana Avenue Ontario, CA 91761 JD Wang jdwang@rerubber.com (909) 786-2811 www.rerubber.com	Automotive; Building & Construction; Coatings, Sealants & Paints; Industrial Surfaces; Paving Materials & Products; Sports Field; Synthetic Turf; Tire-Derived Material Feedstock
Robertson Recreational Surfaces, Inc. 16059 East Foothill Blvd Irwindale, CA 91706 Richard Hawley rhawley@playcore.com (602) 340-8873 www.totturf.com	Accessibility Products; Mats, Pavers & Tiles; Playground Surfaces
SafePath Products 311 Otterson Drive, #10 Chico, CA 95928 Timothy Vander Heiden timv@safepathproducts.com (800) 497-2003 safepathproducts.com	Accessibility Products; Flooring; Industrial Surfaces; Mats, Pavers & Tiles; Sport Surfaces
Sierra Mat & Rubber Company 812 Kiernan Avenue Modesto, CA 95356 Loren Jessop info@sierrarubberproducts.com (209) 824-0341 www.sierrarubberproducts.com	Accessibility Products; Automotive; Building & Construction; Industrial Surfaces; Landscape Surfaces; Mats, Walkways & Tiles; Paths, Walkways, Sidewalks, & Bike Trails; Paving Materials & Products; Playground Surfaces; Traffic Related Products
SpectraTurf 500 E Rincon Street Corona, CA 92879 Lisa Anderson lisa.anderson@spectraturf.com (800) 875-5788 www.spectraturf.com	Accessibility Products; Playground Surfaces
Swisstrax Corp. 82-579 Fleming Way, Unit A Indio, CA 92201 Randy Nelson randy@swisstrax.com (760) 347-3330 www.swisstrax.com	Animal Care; Flooring; Industrial Surfaces; Mats, Pavers & Tiles; Paths, Walkways, Sidewalks, & Bike Trails
Terrecon, Inc. 10061 Talbert Ave, #200 Fountain Valley, CA 92708 Lindsay Smith lindsay@terrecon.com (714) 964-1400 www.terrecon.com	Flooring; Mats, Pavers & Tiles; Walkways, Sidewalks, & Bike Trails

TIRE-DERIVED PRODUCT MANUFACTURERS	PRODUCTS BY CATEGORY
Three-D Plastics 430 N Varney Street Burbank, CA 91502 Frank J. Dvoracek frank@3dplastics.com (877) 843-9757 www.trafficwks.com	Traffic Related Products
U.S. Rubber Recycling, Inc. 1231 South Lincoln Street Colton, CA 92324 Richard Snyder rsnyder@usrubber.com (909) 825-1200 www.usrubber.com	Building & Construction; Flooring; Industrial Surfaces; Mats, Pavers & Tiles; Paving Materials & Products;
United Sports Surfacing of America, Inc. DBA United Sustainable Surfacing of America, Inc. 4000 Barranca Pkwy, Ste 250 Irvine, CA 92604 Karoleen Alexander info@sustainablesurfacing.com (949) 551-4696 www.sustainablesurfacing.com	Industrial Surfaces; Landscape Surfaces; Paths, Walkways, Sidewalks & Bike Trails; Paving Materials & Products; Playground Surfaces; Sports Surfaces; Synthetic Turf