

IRVINE



WORLD GREEN

2006

GREEN BUILDING RESOURCE GUIDE



OUR CHOICES BUILD OUR CHANCES FOR SUSTAINABLE COMMUNITIES

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INCENTIVE PROGRAM WEB SITES

- **Southern California Edison**
<http://www.sce.com>
- **The Gas Company**
<http://www.socalgas.com>
- **Irvine Ranch Water Company**
<http://www.irwd.com>
- **U.S. Environmental Protection Agency – Energy Star Program**
<http://www.energystar.gov>



This resource guide provides comprehensive lists of retail stores that supply the Green Building materials listed in the Irvine Green Homes Program.

Listings in this directory are provided for information purposes only to promote sustainable building practices. The inclusion of any particular company or service should not be construed as a recommendation or endorsement by the City of Irvine. Product information and claims included in this guide have been provided by manufacturers and have not been verified. In some cases, certain materials or methods presented in this guide may not be consistent or compatible with local building codes, "covenants, conditions & restrictions (i.e., C.C.&R.'s)" of homeowner associations, or other regulations in your area. You are advised to contact the appropriate city or county agency that regulates building and construction activities, as well as local homeowner associations, to be certain that you are complying with all codes and conditions in your area.

This listing of resources is an evolving list – the availability of materials generally correlates with the demand for them. Currently, not all of the materials listed in the Guidelines are available in the Orange County Area. Local sources will begin to stock more green building materials when they are confident that there is a consumer demand for them. Requesting your local supplier to stock the materials listed in the Guidelines is the first step in making them readily available in the Orange County Area.

Green building practices are rapidly becoming part of main stream building. We will update this list regularly to reflect increased availability and add newer products.

For more information on Green Building Guidelines or Resources, please contact:

City of Irvine
Department of Public Works
Fiscal & Environmental Programs
1 Civic Center Plaza
P.O. Box 19575
Irvine, California 92606-5208
(949) 724-6459

I. JOB SITE

RECYCLE CONSTRUCTION & DEMOLITION WASTE

Construction and demolition (C&D) materials account for approximately 22% of the waste stream according to the California Integrated Waste Management Board. Simple deconstruction practices that include thoughtful dismantling of building components can lead to renewed life for many building products-which can be reused or recycled. Reuse and recycling of construction material is a smart environmental practice that can also be more economical. For more information about C & D management, see the California Integrated Waste Management Board's website at www.ciwmb.ca.gov/ConDemo.

C & D DEBRIS RECYCLING RESOURCES

Ewles Materials – Irvine Plant

16081 Construction Circle
Irvine, CA 92606
Phone: (949) 552-5008
Alternate Phone: (714) 894-1938
Fax: (714) 894-7699

The ReUse People of California –

Southern California Location
Lorenz Schilling, Manager
23010 Lake Forest Drive, Suite D-302
Laguna Hills, CA 92653
Phone: (888) 588-9490
Web Site: www.theusepeople.org

Vi Gold Coast Recycling

(Part Of Tierra Verde Ind.)
7973 Irvine Blvd
Irvine, CA 92618
Phone: (949) 551-0363
Fax: (949) 551-1537
Web site: www.tv-ind.com
E-mail: srkarz@earthlink.net



Building green lowers operating costs via
reduced energy and water utility bills.
High-quality windows, Energy Star-rated
appliances, solar electricity generation
systems, native landscaping and drought-
tolerant plantings save money by saving
energy and conserving water.

BUILDING MATERIAL REUSE FACILITIES

Diverting waste from landfills is an important environmental priority that can be met by salvaging and reusing building materials-giving each material a longer lifecycle and reducing the space used in landfills.

SALVAGE AND REUSE RESOURCES

Department of General Services (DGS)

The Reutilization Department disposes of salvage and surplus personal property from California state agencies. The property is made available to other state agencies, political subdivisions, and assistance organizations for a predetermined service and handling fee. If the property is not picked up by an eligible entity, private citizens and the general public may purchase the property in a cash-and-carry, first-come, first-served basis.

701 Burning Tree Road
Fullerton, CA 92833
Phone: (714) 449-5900
Fax: (714) 449-5917 (fax)
Web site: www.pd.dgs.ca.gov/

Habitat for Humanity ReStore, Orange County

A building materials reuse center that accepts new and used building materials and resells them to the public at pennies on the dollar. All proceeds and/or materials are used to help support Habitat for Humanity and the homes they build.

2165 South Grand Avenue
Santa Ana, CA 92705
Phone: (714) 434-6200
Fax: (714) 434-1222
Email: info@habitatoc.org
Web site: www.habitatoc.org

The ReUse People of California –

Southern California Location
Lorenz Schilling, Manager
23010 Lake Forest Drive, Suite D-302
Laguna Hills, CA 92653
Phone: (888) 588-9490
Web site: www.thereusepeople.org

FLY ASH CONCRETE

For every ton of cement manufactured, about 6.5 million BTUs of energy are consumed and about one ton of carbon dioxide is released. Reducing carbon dioxide emissions helps reduce global warming. Replacing that ton of cement with fly ash, which is a byproduct of producing electricity by burning coal, would save enough electricity to power the average American home for 24 days, and reduce carbon dioxide emissions equal to two months use of an automobile. Flyash in concrete strengthens the concrete so that less energy is used to manufacture it. More information is available at www.flyash.com.

Ask your redi mix concrete company for a minimum of 20% fly ash in the mix.

2. LANDSCAPE MATERIALS

NATIVE AND DROUGHT TOLERANT PLANTS

California Native plants are a specialty item for most nurseries. Some retail nurseries devote a certain area to them, but others have them mixed in among other plants. For tips on identifying native plants, see www.dewaterwise.com.

PLANT RESOURCES

Armstrong Garden Center
15265 Culver Dr.
Irvine, CA 92604
Phone: (949) 857-9278
Web site: www.armstronggardencenter.com

El Modeno Gardens, Inc.
11911 Jeffrey Road,
Irvine, CA 92602
Phone: toll free (800) 776-8111
Email: elmo-gard@elmodenogardens.com
Web site: www.elmodenogardens.com



COMPOST AND MULCH

Ask for compost and mulch products made from urban and organic sources, which help divert waste from landfills as well as providing nutrients for your garden. Utilizing urban waste limits the total impact people have on the environment. Organic waste does not contain harmful chemicals and is rich in the nutrients necessary for healthy plant production.

SOIL PRODUCT RESOURCES

Tierra Verde Industries
7982 Irvine Blvd.
Irvine, CA 92618
Phone: (949) 551-0363
Fax: (949) 551-1532
E-mail: sirkaz@earthlink.net
Web site: www.tv-ind.com

Brea Green Recycling, Inc.
1983 Valencia Ave.
Brea, CA 92622
Phone: (714) 747-3459
Fax: (949) 777-0172

Professional Community Management, Inc.
(Lesire World)
23981 Via Campo Verde
Laguna Woods, CA 92653
Phone: (949) 268-2022
Fax: (949) 470-0148

R & S Soil Products
25153 Commercentre Drive
Lake Forest, CA 92630
Phone: (949) 810-8884
Fax: (949) 454-1997



3. WOOD PRODUCTS

FSC CERTIFIED WOOD LUMBER AND TIMBERS FOR STRUCTURAL BUILDING COMPONENTS

The Forest Stewardship Council (FSC) is a non-profit organization that certifies wood products that come from well-managed forests. The FSC certification is an independent, "third party" certification with a "chain of custody" helping ensure that the certification is meaningful. Look for the FSC logo. More details at www.fsc.us.org.

FSC LUMBER RESOURCES

Royal Plywood
14171 E. Park Place
Cerritos, CA 90703
Phone: 562-404-2989 or 714-521-5735
Fax: 562-404-6224
Email: sales@royalplywood.com
Web site: www.royalplywood.com

Hayward Lumber
PO Box 18009
Monterey CA 93940
Contact: Steve Brauneis
Phone: 1-831-644-1900
Fax: 1-831-644-7610
Toll Free: 1-800-640-1959
Email: sbrauneis@haywardlumber.com
Web site: www.haywardlumber.com

ENGINEERED LUMBER PRODUCTS

Engineered lumber products are made from scrap and small lumber and are compressed for additional strength, reducing the need for large old growth wood products. Additionally, because of their exact dimensions and true form, engineered wood products reduce jobsite lumber waste.

- Glulam
- Wood "I" Joists
- Finger-jointed Studs
- Laminated Veneer Lumber
- Oriented Strandboard
- Parallel Strand Lumber

These products listed above, as well as some certified lumber and timbers are available at most local lumber yards and home improvement stores.

ENGINEERED LUMBER RESOURCES

Lowe's of Irvine
Phone: 714-358-1665
13300 Lambaree Road
Fax: 714-358-1682
Irvine, CA 92602

Lowe's of Chino Hills
Phone: 909-627-6039
13251 Peyton Dr.
Fax: 909-627-5575
Chino Hills, CA 91709

Lowe's of Anaheim
Phone: 714-447-6140
1500 N. Lemay Street
Fax: 714-447-6144
Anaheim, CA 92801

ALL-COAST Forest Product, Inc. in Chino
13880 Monte Vista Ave.
Phone: 800-954-6881 or 909-627-8551
PO Box 4120
Fax: 909-628-6154
Chino, CA 91708



North Slope Sustainable Wood
PO Box 6846
Missoula, MT 59807
406-327-1123

3. WOOD PRODUCTS

SALVAGED TIMBERS

Timbers that have been salvaged from older buildings can be given new life as timbers, beams, mantles, floors, and decks. By salvaging and reusing hearty woods, new trees are saved and beautiful and rare woods are revitalized.

SALVAGED TIMBER RESOURCE

Vintage Timberworks
Sales Office and Showroom:
115E Industrial Avenue
Escondido, CA 92029
Phone: (760) 743-0744
Fax: (760) 743-5714

Vintage Timberworks
Production and Inventory Yard:
47100 Rainbow Canyon Road
Tombola, CA 92592
Phone: (909) 695-1003
Fax: (909) 695-9001
E-Mail: wood@vintagetimber.com
Web site: www.vintagetimber.com

TREATED WOOD

Treating wood protects it from the elements and provides for a durable, longer lasting wood product that is not compromised by pests, weather or exposure. Many traditional pressure treated woods contain chemicals that are toxic to the environment and dangerous to the water supply as the chemicals leech into the ground. Newer, less toxic alternatives are now available.

TIMBERSIL NON-TOXIC PRESSURE TREATED WOOD RESOURCES

Manufacturer:
Timber Treatment Technologies
Toll-free: 866-318-9432
Fax: 901-759-1205
Website: www.timbersil.com

Available at:
Reliable Wholesale Lumber
Redondo Circle
Huntington Beach, CA 92648
Phone: (714) 848-8222

Huff Lumber
13535 E. Rosecrans Avenue
Santa Fe Springs, CA 90670
Phone: (562) 921-1411

Jones Wholesale Lumber
10711 S. Alameda Street
Lynwood, CA 90267
Phone: (323) 567-1301

WOLMANIZED NATURAL SELECT WOOD

Wolmanized® wood is made in a pressurized cylinder using a closed system that recycles excess preservative for future use and releases no air pollutants nor wastewater.

WOLMANIZED NATURAL SELECT WOOD RESOURCES

Manufacturer:
Arch Wood Protection, Inc.
Phone: toll-free (866) 789-4567

Distributor:
San Diego Wood Preserving
National City
Phone: (619) 474-6447

Conrad Forest Products
1625 W. San Bernardino Road
West Covina, CA 91793
Phone: (949) 929-2848
Web site: www.conradfp.com

HARDWOOD AND SOFTWOOD PLYWOOD

Utilizing plywoods reduces the need for old growth timber and helps save existing forests and their ecosystems.

HARDWOOD PLYWOOD RESOURCES

Royal Plywood

14771 E. Park Place
Cerritos, CA 90703
Phone: 562-404-2989 or 714-521-5735
Fax: 562-404-6224
Email: sales@royalplywood.com
Web site: www.royalplywood.com

Roseburg Forest Products (FSC)

Roseburg, OR 97470
Phone: (800) 243-1111
Web site: www.rfpc.com

Available at:
Home Depot Stores
www.homedepot.com

Cal Panel

14055 Artesia Blvd.
Cerritos, CA 90703
Phone: 714-523-3874
Fax: 800-451-1745
Email: info@calpanel.com
Web site: www.calpanel.com

EUROPLY

European hardwood plywood is the same type of high-quality, virtually void-free plywood that is often sold as "Baltic birch," except that it is made with wood certified through the Forest Stewardship Council as coming from well-managed forests. This is the most respected verification in the world that the lumber was harvested sustainably.

EUROPLY RESOURCES

Manufacturer

Columbia Forest Products
Phone: (800) 547-1797
Web site: www.ColumbiaForestProducts.com

Available at:

Lowe's of Irvine
Phone: 714-368-1665
13300 Lambtree Road
Fax: 714-368-1582
Irvine, CA 92602

Lowe's of Chino Hills
Phone: 909-627-0335
13251 Peyton Dr.
Fax: 909-627-5576
Chino Hill, CA 91709

Lowe's of Anaheim
Phone: 714-447-6140
1500 N. Lemon Street
Fax: 714-447-6144
Anaheim, CA 92801

Weber Plywood and Lumber Company

15501 Mosher Street
Rustin, CA 92680
Phone: 714-259-1100

Kelly - Wright Hardwoods

155 East La Jolla Street
Pacifica, CA 92670
Phone: 714-632-9930

Forest Plywood - La Mirada

14711 Artesia Blvd.
La Mirada, CA 90638
Phone: 714-523-1721

Cal Panel

14055 Artesia Blvd.
Cerritos, CA 90703
Phone: 714-523-3874
Fax: 800-451-1745
Email: info@calpanel.com
Web site: www.calpanel.com

Heritage Hardwoods

4650 Edison Avenue
Chino, CA 91710
Phone: 909-591-4841
Web site: http://www.herwood.net

3. WOOD PRODUCTS

DECKING - CERTIFIED REDWOOD

Manufacturer/MI:
Big Creek Lumber Co.
3564 Highway 1
Caveport, CA 95017
Phone: (831) 423-4156 www.fscus.org

RECYCLED CONTENT PLASTIC & COMPOSITE LUMBER

Recycled plastic lumber makes good use of recycled plastic and is an effective replacement for pressure-treated lumber, protecting timber resources and preventing the use of chemical lumber treatments. Using plastic lumber for decking reduces the amount of plastics in landfills (currently 25% of landfill space) and provides a durable, maintenance-free alternative to traditional woods. The most environmentally friendly products contain only high-density or low-density polyethylene and 50% or more post-consumer recycled content.

PLASTIC & COMPOSITE LUMBER RESOURCES

Care Free Plastic Lumber
Manufacturer
US Plastic Lumber Company
Phone: (561) 394-3511
Web site: www.carefree-products.com

Available at:
Home Depot
www.homedepot.com

Nexwood (Composite)
Manufacturer
NexWood Technology Resources Limited
Phone: (888) 763-9966
Web site: www.nexwood.com

TimberTech Decking (Composite)
Manufacturer
TimberTech Limited
Phone: (800) 307-7760
Web site: www.timbertech.com

Trex Decking and Railing (Composite)
Manufacturer
Trex Company
Phone: (800) 289-8739
Web site: www.trex.com

Trex is available at most local lumber yards and home improvement stores. Visit the website www.trex.com or call (800) 289-8739 to locate the closest Trex retailer.

Weather Best
Dixieline
653 Lomas Santa Fe Dr
Solana Beach, CA 92705
(658) 792-5141

Orange Coast Hardware and Lumber Co
2727 S Main St
Santa Ana, CA 92707
(714) 556-1774

Ganahl Lumber
34152 Doherty Park Rd
Capistrano Beach, CA 92674
(949) 496-1765
www.ganahl.com

Orange County Lumber
436 W Rialto Ave
Rialto, CA 92707
(714) 556-1774





4. BOARDS & PANELS

MEDIUM DENSITY FIBERBOARD (MDF) (FORMALDEHYDE-FREE)

Medium density fiberboard (MDF) is usually manufactured from sawmill waste and a urea-formaldehyde (UF) binder. Formaldehyde, a known human carcinogen should be avoided in interior products. "Green" MDF contains a high percentage of recycled materials and are free of formaldehyde.

MÉDITÉ II AND MÉDÈX FORMALDEHYDE FREE MDF RESOURCES

Manufacturers:
SierraPine Ltd.
Phone: (800) 576-3339
Web site:
www.sierrapine.com/products/mdf/mdf-formeal-free.htm

Weber Plywood & Lumber Co.
15501 Mosher Street
Tustin, CA 92680
phone: (714) 259-1100
fax: (714) 259-8054

California Panel & Veneer
14055 Artesia Blvd.
Cerritos, CA 90701
Phone: (562) 926-5834
Fax: (562) 404-7806

Forest Plywood Sales
14711 Artesia Blvd.
La Habra, CA 90638
Phone: (714) 523-1721
Fax: (714) 523-7894



Eco-friendly often means reduced maintenance and replacement costs due to greater durability of materials. Building a deck from recycled plastic lumber, for example, utilizes durable recycled materials that resist termites and require no maintenance.

5. ROOFING/SIDING

ROOFING

Roofing products should be energy efficient, light colored and reflective to help reduce both energy costs and the "Urban Heat Island" effect. The "Urban Heat Island" effect occurs when many dark surfaces cover an urban area causing an increase in surrounding temperatures. Using lighter colored roofing materials and landscaping materials decreases this problem and keeps homes cooler and energy bills down.

- ENERGY STAR qualified roof products reflect more of the sun's rays. This can lower roof surface temperature by up to 100°, decreasing the amount of heat transferred into a building.
- ENERGY STAR qualified roof products can help reduce the amount of air conditioning needed in buildings, and can reduce peak cooling demand by 10-15%.

Energy Star roofing product information is available at www.energystar.gov

FIBER-CEMENT SIDING & ROOFING

Durability is one of the most important factors in the environmental friendliness of siding products since siding is exposed to the elements. Fiber-cement siding is economical, easy to find and durable. It serves as an alternative to wood products for siding and comes in many colors and styles.

FIBER-CEMENT SIDING & ROOFING RESOURCES

*Hardi-Plank/Hardiboard®
Manufacturers:*

James Hardie Building Products
Phone: (888) JHARDIE
Web site: www.jameshardie.com

Ganahl Lumber - Costa Mesa
1275 S Bristol Street
Costa Mesa, CA 92626
Contact: Brad Satterfield
Phone: 714 556-1500 FAX: (714) 545-4261

Home Depot (Store #603)
2782 E. Camino Real
Tustin, CA 92782
Phone: 714 8389200

Home Depot (Store #6680)
1750 E Edinger Ave
Santa Ana, CA 92705
Phone: 714 259-0330

Home Depot (Store #606)
3500 MacArthur Blvd
Santa Ana, CA 92704
Phone: 714 966-8551

Home Depot (Store #6639)
10801 Garden Grove Blvd
Garden Grove, CA 92843
Phone: 714 5300319

Orange Coast Hardware & Lumber
2727 S Main Street
Santa Ana, CA 92707
Contact: Scott Jiggers
Phone: 714 556-1774
FAX: (714) 556-4015

*Maxiproek/Mangano® Fiber Cement Siding
Manufacturers:*

MaxiTile, Inc.
849 E. Sandhill Ave.
Carson, CA 90746
Phone: 310-217-0316
Toll-free: 800-338-9453
Fax: 310-515-6851
www.maxitile.com

RECYCLED CONTENT/FSC EXTERIOR SIDING

TRUE WOOD EXTERIOR SIDING (FSC) RESOURCES

Manufacturer:
The Collins Companies
Phone: (800) 329-1219
Web site: www.collinswood.com

Lowe's Of Irvine #0769
13300 Jamboree Road
Irvine, Ca 92602
(714) 368-1665
Fax: (714) 368-1682

Lowe's Of Aliso Viejo #1900
26501 Aliso Creek Road
Aliso Viejo, Ca 92656
(949) 616-7725
Fax: (949) 616-7728

Lowe's Of Huntington Beach #1753
3175 Warner Avenue
Huntington Beach, Ca 92647
(714) 907-9006
Fax: (714) 907-9009

Lowe's Of Rancho Santa Margarita #0758
30481 Avenida De Las Flores
Rancho Santa Margarita, Ca 92688
(949) 589-5005
Fax: (949) 589-5022

Lowe's Of Anaheim #1030
1500 N. Lemon Street
Anaheim, Ca 92801
(714) 447-6140
Fax: (714) 447-6144

LP'S SMARTSIDE(TM)

Siding and exterior trim includes formaldehyde free OSB-based (lap and panel), soffit, and fascia trim products treated during manufacture with zinc borate

LP SMARTSIDE™ RESOURCES

Lowe's of Irvine #0769
13300 Jamboree Road
Irvine, Ca 92602
(714) 368-1665
Fax: (714) 368-1682

Lowe's of Aliso Viejo #1900
26501 Aliso Creek Road
Aliso Viejo, Ca 92656
(949) 616-7725
Fax: (949) 616-7728

Lowe's of Huntington Beach #1753
3175 Warner Avenue
Huntington Beach, Ca 92647
(714) 907-9006
Fax: (714) 907-9009

Lowe's of Rancho Santa Margarita #0758
30481 Avenida De Las Flores
Rancho Santa Margarita, Ca 92688
(949) 589-5005
Fax: (949) 589-5022

Lowe's of Anaheim #1030
1500 N. Lemon Street
Anaheim, Ca 92801
(714) 447-6140
Fax: (714) 447-6144

6. PLUMBING

TANKLESS HOT WATER HEATERS

The most efficient domestic water heaters include electronic-ignition gas-fired on-demand models. Other factors to consider include indoor air quality (in terms of combustion gases) and the ozone-depletion impacts associated with refrigerants for heat pumps and blowing agents for storage tank insulation. On-demand water heaters have no standby losses or storage tank insulation concerns, and some models have sealed combustion and no pilot lights.

TANKLESS HOT WATER HEATER RESOURCES

*Bosch
Paloma, Aqua Star and Powerstream*

Lowe's of Irvine #0769
13300 Jamboree Road
Irvine, Ca 92602
(714) 368-1665
Fax: (714) 368-1682

Lowe's of Aliso Viejo #1900
26501 Aliso Creek Road
Aliso Viejo, Ca 92656
(949) 616-7725
Fax: (949) 616-7728

Lowe's of Huntington Beach #1753
8175 Warner Avenue
Huntington Beach, Ca 92647
(714) 907-9006
Fax: (714) 907-9009

Lowe's of Rancho Santa Margarita #0758
30481 Avenida De Las Flores
Rancho Santa Margarita, Ca 92688
(949) 589-5005
Fax: (949) 589-5022

Lowe's of Anaheim #1030
1500 N. Lemon Street
Anaheim, Ca 92801
(714) 447-6140
Fax: (714) 447-6144

Manufacturer:
Controlled Energy Corporation
Phone: (800) 642-3199
Web site: www.controlledenergy.com

Available at:
Controlled Energy Corporation
Grainger
10712 Bloomfield Ave
Santa Fe Springs, CA 90670-3260
310-944-4628

JB Pipe & Supply
7282 Westminster Blvd
Westminster, CA 92683
714-891-1744

Columbia Specialty Company Inc
16209 Minnesota Ave
Paramount, CA 90723
562-634-6425

Low Energy Systems (Mail Order)
Same as above
Englewood, CO 80110
Phone: (800) 873-3507
Web site: www.tanklesswaterheaters.com

Paloma Tankless Hot Water Heater
Manufacturer: **Isn't there a local distributor**
Paloma Industries, Inc.
Oxnard, CA
Phone: (800) 873-3507
Web site: www.palomaindustries.com

Available at:
Low Energy Systems (Mail Order)
Englewood, CO 80110
Phone: (800) 873-3507
Web site: www.tanklesswaterheaters.com

Takagi Flash T-K1 and T-M1
Manufacturer:
Takagi Industrial Co. USA
Phone: (888) 882-5244
Web site: www.takagi-usa.com

ON-DEMAND HOT WATER CIRCULATION PUMP

An electronically controlled valve and pumping system that rapidly distributes hot water from the water heater to fixtures in a home or commercial building, saving energy and water. Metlund Hot Water Demand System

ON-DEMAND HOT WATER CIRCULATION PUMP RESOURCES

Manufacturer
Advanced Conservation Technology
ACT, Inc. Metlund Systems
3176 Palomar St., Ste. 115
Costa Mesa, CA 92626
Phone: 714-668-1200
Toll-free: 800-638-5663
Fax: 714-668-1927
www.gothotwater.com

*Low Flow Toilets, Faucets, Shower Heads
and Clothes Washing Machines*
Irvine Ranch Water District
www.irwd.com
949-463-5300



Salvaging products reduces solid waste.
Reusing items such as bricks, lumber and
plumbing fixtures and building with
products made from agricultural waste
material, such as wheat straw translates
to less trash in our landfills.

7. INSULATION

Sealing and insulating our homes is key to energy efficiency and thermal comfort. To find out specific details about appropriate levels of insulation for your home, visit www.energystar.gov.

CELLULOSE INSULATION

Cellulose insulation has several environmental advantages including containing approximately 75-80% post-consumer recycled newspaper and nontoxic borate and/or ammonium sulfate fire retardants. The energy performance is comparable to high-density fiberglass batts at roughly R-3.7 per inch, but cellulose insulation generally packs more tightly so it is more effective at controlling air leakage.

CELLULOSE INSULATION RESOURCE

Greenstone-Cotton
Manufacturer
GreenFiber
Phone: (888) 592-7648
Web site: www.greenstone.com

RECYCLED COTTON FIBER INSULATION

Recycled denim or cotton fiber insulation reduces resource use and landfill use. It contains 85% post-industrial recycled natural fibers and does not contain chemicals known to be harmful and it achieves insulation values equivalent to traditional insulations.

RECYCLED COTTON FIBER INSULATION RESOURCES

Ultra Touch
Manufacturer
Bonded Logic, Inc.
411 East Bay Road
Chandler, AZ
Phone: (480) 812-9114
Web site: www.bondedlogic.com

Available at
Victor Insulation
10841 Noye St #10
Los Alamos, CA 90720
714-915-0545
<http://www.victorinsulation.net>

Victor Insulation
3850 Placentia Lane
Riverside, CA 92501
714-915-0545 / 714-883-4540
<http://www.victorinsulation.net>



RECYCLED CONTENT FIBERGLASS INSULATION

Recycled content fiberglass insulation helps to reduce resource use. Look only for brands that are labeled formaldehyde-free in order to improve indoor air quality.

RECYCLED CONTENT FIBERGLASS INSULATION RESOURCES

InsulSafe iv
(Formaldehyde-Free, Blown)
Manufacturer:
Certain Teed Corporation
Phone: (800) 441-9850
Web site: www.certainteed.com

MiraFlex (Formaldehyde-Free)
Manufacturer:
Owens Corning Fiberglass
Phone: (800) 828-7155
Web site: www.owenscorning.com

Climate Pro (Blown Fiberglass)
Comfort-Therm (Encapsulated)
Unfaced and Kraft Faced
(All are formaldehyde-free)
Manufacturer:
Johns Manville
Denver, CO
Phone: (800) 654-3103

Available at
Home Depot Stores
www.homedepot.com

Lowe's of Irvine #0769
13300 Jamboree Road
Irvine, Ca 92602
(714) 368-1555
Fax: (714) 368-1682

Lowe's of Aliso Viejo #1900
20501 Aliso Creek Road
Aliso Viejo, Ca 92656
(949) 516-7725
Fax: (949) 616-7728

Lowe's of Huntington Beach #1753
8175 Warner Avenue
Huntington Beach, Ca 92647
(714) 907-9006
Fax: (714) 907-9009

Lowe's of Rancho Santa Margarita #0758
30481 Avenida De Las Flores
Rancho Santa Margarita, Ca 92688
(949) 589-5005
Fax: (949) 589-5022

Lowe's of Anaheim #1030
1500 N. Lemon Street
Anaheim, Ca 92801
(714) 447-6140
Fax: (714) 447-6144



Improved indoor air quality from eco-friendly
products reduces the risk of childhood
asthma and other respiratory diseases. In
addition to using non-toxic materials, proper
heating, air conditioning and ventilation
equipment as well as air filters give your
family clean air to breathe.

8. PAINTS/ STAINS/ FINISHES

Better paints, stains and finishes for the planet and for indoor air quality contain lower levels of Volatile Organic Compounds (VOCs). VOCs are the chemicals that offgas to form smog and pollute the indoor air. Paint and similar products are labeled with the VOC content. Look for indoor paints with VOC content of less than 50 g/l for interior flat, 100 g/l for interior non-flat. For exterior applications, look for products with less than 100 g/l for flat and 200 g/l for non-flat. Most major brands now have low VOC paints available in the full color palette. More information on acceptable standards for indoor air quality is available at:

Green Seal
1400 16th Street NW, Suite 300
Washington, DC 20036
202/588-8400, 202/588-8465 (fax)
www.greenseal.org

LOW AND NO VOC PAINTS RESOURCES

EnviroCoat (No-VOC)
Manufacturer: **Kelly-Moore**
Phone: (800) 874-4436
Web site: www.kellymoore.com

Health Spec (Low-VOC)
Manufacturer:
Sherwin Williams
Visit www.sherwinwilliams.com for local retailer.

LifeMaster Dulux (No-VOC or Mercury)
Manufacturer:
ICI DuLux Paints
Phone: (415) 863-7235

Pristine Ecospec (Low-VOC)
Manufacturer:
Benjamin Moore Paints
Phone: (800) 344-0400
Web site: www.benjaminmoore.com

Ganahl Lumber Company
1775 S Bristol Street
Costa Mesa, Ca 92626
(714)556-1500

Orange County Paint 02
720 W First Street
Tustin, Ca 92780
(714) 838-8271

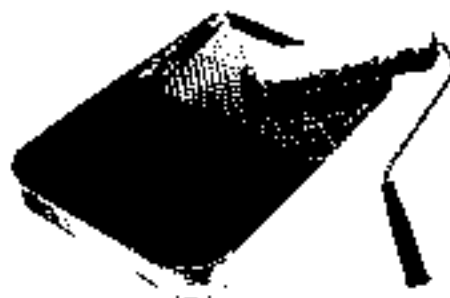
De Vault Paint Corp
2601 S Harbor Blvd
Santa Ana, Ca 92704
(714) 546-9191

Safecoat (No-VOC, Formaldehyde and Mercury Free)
Manufacturer:

American Formulating and Manufacturing (AFM)
Phone: (800) 739-0321
Web site: www.afm-safecoat.com

Green Nest LLC
P.O. Box 6117
Irvine, California 92616
www.greennest.com
Phone: 888.GREEN-ONE (222.473.4663) or
949.455.3073
Fax: 949.387.3805
Email: Support: support@greennest.com

Wonder-Pure (No-VOC/Odor same)
Manufacturer:
Devoe Paint Dealers
Phone: (800) 984-5444
Web site: www.devoepaint.com



9. LOW SOLVENT ADHESIVES & CAULKING

CONSTRUCTION ADHESIVE RESOURCES

DrITac's Low VOC Adhesive

Manufacturer:

DrITac Premium Flooring Adhesives

Brooklyn, NY 11237

Phone: (800) 394-9310

Web site: www.drifac.com does this give
local distributors

PL Premium Polyurethane Construction Adhesive Brand

PL Premium SF 365

Manufacturer:

OSI Sealants

Mentor, OH

Phone: (800) 624-7767

Web site: www.osisealants.com

Speed Grip Adhesive

Manufacturer:

Geocel Corporation

Litchfield, IN

Phone: (800) 348-7615

Web site: www.geocelusa.com

Sonneborn Premium Adhesive

(Wood, Concrete, and Masonry)

Manufacturer:

ChemRex, Inc.

Phone: (957) 496-6000

Tree in One Adhesive Same as above

Manufacturer:

American Formulating & Manufacturing (AFM)

Phone: (619) 249-0421

www.afmsafecoat.com

Available at:

Green Nest LLC

PO Box 5117

Irvine, California 92616

www.greennest.com

Phone: 888.GREENHOME (888.473.4563) or

949.455.3073

Fax: 949.387.3806

Email: Support: support@greennest.com

WOOD & PLASTIC ADHESIVE RESOURCES

Site Bond Solvent Free Construction Adhesive

Manufacturer:

Franklin International

Phone: (800) 877-4583

Web site: www.sitebond.com



**Non-toxic materials improve indoor
environmental quality. Unlike traditional
products, green materials don't release
significant pollutants into the building.
Choose no-VOC paints, formaldehyde-free
cabinets, non-toxic caulks, sealers and
adhesives, and CRI Green Label carpets.**

10. FLOORING

WOOD (FSC & SALVAGED) RESOURCES (See page 8 for FSC information)

Green Nest LLC
P.O. Box 6117
Irvine, California 92616
www.greennest.com
Phone 949.GRENN-ONE (888.473.4653) or
949.465.3073
Fax 949.387.3806
Email: Support: support@greennest.com

Curtis Flooring
Contact: Dan
156 Roymar Road
Oceanside, CA 92054
760-721-3007

RECYCLED CONTENT CARPETING, BACKING & PADDING RESOURCES

Image Carpet
Manufacturer:
Mohawk Carpet
Phone: (800) 266-4295
Web site:
www.mohawkc carpet.com



Renew Carpeting
Manufacturer:
Shaw Industries, Inc.
Phone: (800) 342-7429
Web site: www.shawcontract.com

SUSTAINABLE FLOORING AND NATURAL LINOLEUM

Natural linoleum is made from all natural ingredients including pine resin, cork and saw dust with a jute backing. This is a durable, low-maintenance flooring product that comes in an endless array of styles.

NATURAL LINOLEUM RESOURCES

DIY Natural Linoleum
Manufacturer:
Armstrong World Industries
Phone: (800) 446-1405
Web site: www.armstrongfloors.com

Marmoleum Natural Linoleum
Manufacturer:
Forbo Industries, Inc.
Phone: (800) 842-7839
www.forbo-industries.com



RECYCLED CONTENT CERAMIC TILE RESOURCES

Environmental Stone
Manufacturer:
Environmental Stone Products
Phone: (888) 629-1969
Web site: www.environmentalstone.com
(Mail Order Only)

Oceanside Glass Tiles
Manufacturer:
Oceanside Glasstile Co.
Carlsbad, CA 92008
Phone: (760) 434-0051
Web site: www.glastile.com

Available at
Home Expo Stores
Summitville Recycled Porcelain Tile
Manufacturer:
Summitville Tiles
Phone: (330) 223-1511
Web site: www.summitville.com

Terra Green Recycled Tile
Terra Green Ceramics
Phone: (765) 935-4760
Web site: www.terragreenceramics.com

BAMBOO FLOORING

Bamboo is a rapidly renewable resource, a grass, that matures in three to five years. Using bamboo flooring in place of wood helps sustain forests by not using old growth woods. It is durable and easy to maintain and can be refinished like wood flooring. Bamboo flooring can be found at most major flooring retailers, including Home Depot and Lowes.

ECO-TIMBER AND BAMBOO FLOORING RESOURCES

Green Nest LLC
PO Box 6117
Irvine, California 92615
www.greennest.com
Phone 888 GREENHOME (888 473 4663) or
949 455 3073
Fax: 949 387 3800
Email Support: support@greennest.com

Curtis Flooring
Contact: Dan
168 Roymar Road
Oceanside, CA 92054
760 721 3001

CORK FLOORING

Cork is a rapidly renewable resource that comes from the inside or bark area of the tree. Trees do not need to be cut down or killed to harvest the cork. It has natural resiliency, sound absorption and durability.

CORK FLOORING RESOURCES

Acousti-Cork
Manufacturers: **Azorim Industrial Solutions**
Call 800-255-2675 for local distributor

All Natural Cork Floating Floor and Parquet Tiles
Manufacturer:
Natural Cork, Ltd.
Phone: (800) 404-2675
Web site: www.naturalcork.com

Dodge Cork Tile Manufacturers Wicanders
Phone: (800) 828-2675
Web site: www.wicanders.co.uk/

Dodge-Regupol Inc.
Phone: (800) 322-1923
www.regupol.com



II. COUNTERTOPS

Countertops made of recycled content that are durable are an environmentally friendly alternative to chemically intensive synthetic countertop materials.

RECYCLED CONTENT COUNTERTOP RESOURCES

Oceanside Glass Tile
Available at
Concept Studio, Inc.
2737 Pacific Coast Highway
Corona Del Mar, CA 92625
Phone: (949) 759-0606

Surface Concepts
26001 Menlo Circle, Suite 105,
Laguna Hills, CA, 92653
Phone: (949) 348-1033

Recycled Glass/Concrete Aggregate
Available at:
United Terrazzo
16005 Phoebe Avenue
La Mirada, CA 9063
714-523-1530
Fax: 714-523-0304

Synconcrete
Manufacture:
Synthesis
2908 Colorado Ave.
Santa Monica, CA 90404
Phone: (310) 529-9932
Web site: www.synthesisinc.com

Ice Stone Recycled Glass/Concrete
Aggregate

Earth Accents
1501 Cloverfield Blvd.
2nd Floor, South Tower
Santa Monica, CA 90404
Tel: (866) 223-9990
Fax: (310) 309-4707
info@earthaccents.com
<http://www.earthaccents.com>

Call for local installation information



Green materials help preserve natural habitats, and protect air and water quality. Products made from rapidly renewable materials, such as bamboo flooring and natural linoleum, and Forest Stewardship Council (FSC) certified wood products from sustainably managed forests help protect old growth forests and other fragile ecosystems.

12. RENEWABLE ENERGY

Photovoltaics (PV): Photovoltaics (PV) enable the direct conversion of sunlight into electricity. Some PV modules are integrated into building components, such as roofing and wall glazings—these are often referred to as building-integrated photovoltaics (BIPV). By using alternative forms of energy, we reduce the emission of greenhouse gases contributing to global warming.

RENEWABLE ENERGY RESOURCES

Advanced Building Technologies

37 Morena
Irvine CA 92612
Jim Sharbaugh
949 651 0261
949 651 6460
jsharbaugh@att.net

Astro Power

5030 Commercial Circle, Ste. B
Concord, CA 94520
Phone: (925) 288-0400
Web site: www.astropower.com

Installer:

Contact manufacturer for a listing of installers and/or visit the California Energy Commission website for more information on programs and installers
www.energy.ca.gov

Solar-Tec Systems

33971-A Silver Lantern
Dana Point, CA 92629
Ed Shaffer
949 248 9728
949 248 9729
SolarTec.S@aol.com
www.solar-tec.com

Solar Planet

3601 Parkview Lane, Suite AB
Irvine CA 92612
Jerry Jander
949 413 7888
Manufacturers
Shell Solar Industries
4050 Adorn Lane
Camarillo, CA 93011
Phone: (805) 482 6800
Fax: (805) 388 6395
E-mail: solarsalesusa@shell.com

SOLAR HOT WATER SYSTEMS

A wide range of technologies are employed for solar water heating, including integral-collector storage (ICS) systems, evacuated-tube collector systems, and flat-plate collector systems. These are good for in-home water heating and similar technologies are available for pool heating.

SOLAR HOT WATER SYSTEM RESOURCES

Manufacturer/Distributors

Heliodyne

4910 Seaport Ave
Richmond, CA 94804
Phone: (510) 236-9614
Web site: www.heliodyne.com

Mohr Power Solar, Inc.

Address: 109 N. Maple St. Suite #D
Corona, California 92880
Phone: (800) 637-6527 or (909) 730-2000
Fax: (909) 736-3180
Web Site: <http://www.mohrpower.com>

QuEnergy International Corp

21680 Gateway Center Dr., #350
Diamond Bar, California 91765
Phone: 909-396-8000

SPAP Company LLC

4465 Outrigger Circle
Huntington Beach, California 92648
Phone: 714-960-0586

Servamatic Solar

76017 Marquente Parkway H 107
Mission Viejo, California 92692
Phone: 800-468 8420

Installer

Contact manufacturer for a listing of installers and/or visit the California Energy Commission website for more information on programs and installers
www.energy.ca.gov

PARTNERS

City of Irvine

BIA

The Gas Company

Global Green USA

The Irvine Company

Irvine Ranch Water District

Lennar

Local Builders

Southern California Edison

ACKNOWLEDGMENTS

Global Green USA

LPA, Inc.

CTG Energetics

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For More Information:

www.irvine.ci.ca.us/greenbuilding



CHOICES

BUILD

SUSTAINABLE COMMUNITIES

IRVINE COMMERCIAL GREEN BUILDING PROGRAM



WHAT IS GREEN BUILDING?

Green or sustainable building is creating environmentally sensitive, energy conscious and healthier developments.

Green building can include:

ENERGY EFFICIENCY

WATER CONSERVATION AND REDUCTION OF RUNOFF

**ENVIRONMENTALLY FRIENDLY BUILDING MATERIALS
AND SPECIFICATIONS**

WASTE REDUCTION

INDOOR ENVIRONMENTAL QUALITY

SMART GROWTH AND SUSTAINABLE DEVELOPMENT





WHY BUILD GREEN?

QUALITY OF LIFE

Improving our living space through reduced indoor air pollution, smarter designs, and improving environmental conditions for future generations

ECONOMY

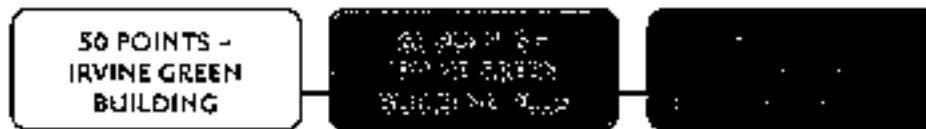
Saving money and increasing property values through more durable building designs and reduced lifecycle costs

ENVIRONMENT

Reducing our impact on the environment through smarter use of limited resources and land

HOW TO BUILD A GREEN BUILDING

The Irvine Green Buildings Program has developed criteria for building commercial and retail projects to become "Green Certified." To qualify as a Green Building, the project must score at least 50 points and include the ten required items (see asterisked items in the scoring chart).



	POINTS
1. SITE & LANDSCAPE	15
* 1.a Recycle Construction & Demolition Waste – 50%-59% waste diversion	1
1.b Recycle Construction & Demolition Waste – 60%-75% 1 pt	1
1.c Recycle Construction & Demolition Waste > 76% waste diversion	1
1.d Use Recycled-Content Landscape and Site Materials	1
1.e Install California Friendly Landscapes: 1 pt for 25% - 49%, 2 pts for >= 50% of Landscaped Area	2
1.f Minimize Turf Areas to Less than 25% of Landscaped Area	1
* 1.g Install Water-Efficient Irrigation Systems	1
1.h Use Reclaimed Water for Landscape	1
1.i Install Irrigation Controllers that are Based on Weather Signal or Moisture-Sensor	1
1.j Treat Stormwater Using Natural or Mechanical Treatment Systems	1
* 1.k Reduce Exterior Light Pollution: Exterior Parking Lot and Walkway Fixtures Over 100 watts to be Full Cut-off	1
* 1.l Provide Recycling Bins and Space for Storage and Collection of Recyclables	1
* 1.m Provide Bike Racks for Use by Occupants and Visitors	1
* 1.n Provide 1 Tree for each 41 Parking Spaces OR at least 30% of Parking is Covered	1
2. FOUNDATION, FRAME, AND ROOFING	6
2.a Incorporate Fly Ash or Slag Cement in Concrete (1 point for >10%, 2 pts >20%)	2
2.b FSC Wood for min of 25% of Lumber	1
2.c Use Roof Products certified by Energy Star or the Cool Roof Rating Council	1
2.d Provide Roof with Long-term Bonds: 1 pt for 10 year, 2 pts For 20 year	2
3. PLUMBING	10
3.a Insulate All Domestic Hot Water Pipes	1
3.b Install On-Demand (Tankless) Hot Water Heaters	1
3.c Install Low Flow Bathroom Faucets (<1.1 gpm)	1
3.d Install Low Flow Showerheads (<2.5 gpm) or stall shower or if gym/spa or Water-Efficient Kitchen Faucets (<2.5 gpm)	1
3.e Install Water Efficient Toilets (Dual-Flush or <1.3 gpf)	2
3.f Install Water Efficient Urinals (1 pt for 0.5 gpf, 2pts for water-free)	2
3.g Use Reclaimed Water for Toilet and Urinal Flushing	2
4. LIGHTING & APPLIANCES	6
4.a Exceed Title 24 Exterior Lighting requirements (2 pt for 5%, 4 pts for 10%)	4
4.b Install Energy Star Transformers	1
4.c Install Energy Star Exit Signs	1

5. HVAC	5
* 5.a Construct Ductwork per SMACNA Standards and Guidelines	1
5.b Protect Ground-Level South- and West-Facing Windows with Trees, Awnings, Eaves, or Overhangs	1
5.c Install HVAC Systems with Non-HCFC Refrigerants	1
5.d Install High Efficiency HVAC Filters (1 pt for \geq MERV 8 , 2 pts for \geq MERV 13)	2
6. ENERGY PERFORMANCE	30
6.a Exceed Title 24 by at least 5% - 10 pts total	10
6.b Exceed Title 24 by more than 5% - 1 point for each additional % up to 20%	15
6.c Participate in Savings By Design Program	2
6.d Complete a Commissioning Process for all MEP and Energy Systems	3
7. RENEWABLE ENERGY	7
* 7.a Provide Conduit and Proposed Layout for Future Photovoltaic (PV) System	2
7.b Install Photovoltaic (PV) System: 1 point for each 5 kW	5
7.c Install Solar Water Heating Systems	1
8. INDOOR ENVIRONMENTAL QUALITY	8
* 8.a Use Low VOC Interior Paints and Wood Finishes: (< 50 g/l flat; \leq 150 g/l non-flat)	1
8.b Use Low VOC Construction Adhesives and Sealants (\leq 50 gpl)	1
8.c Use Composite Wood Products With No Added Urea Formaldehyde	1
8.d Seal All Faces of Particle Board and Composite Wood Products	1
8.e Install CRI Green Label Certified Carpet	1
8.f Use Formaldehyde-Free Insulation	1
8.g Provide Daylighting for 50% of Occupied Spaces (day lit spaces are located within 15 ft. of window or 25 ft. of skylight)	1
8.h Provide Views to the Outdoors for 75% of Occupied Spaces	1
9. RESOURCE EFFICIENT MATERIALS	8
9.a Provide Tenant Improvement Package with Green Finish Materials options (1 pt for each):	
• Exposed Concrete for Flooring or Counters	
• FSC Certified or Reclaimed Wood Flooring	
• Natural Linoleum, Rubber, Bamboo or Cork Flooring	
• Zero-VOC interior paints	
• Recycled Content (25%) Ceiling tiles	
• Recycled Content (25%) Carpet	
• Recycled Content (50%) Drywall	
• Energy Star Lighting Fixtures	
• Water Efficient Plumbing Fixtures	4
9.b Install a Minimum of 500 sq. ft. of the Following Resource-efficient Materials (1 pt for each):	
• Exposed Concrete for Flooring or Counters	
• FSC Certified or Reclaimed Wood Flooring	
• Natural Linoleum, Rubber, Bamboo or Cork Flooring	
• Recycled Content (25%) Ceiling tiles	
• Recycled Content (25%) Carpet	
• Recycled Content (50%) Drywall	
• Recycled-Content (25%) Tiles	
• Energy Star Lighting Fixtures	4
10. EDUCATION, AWARENESS AND OPERATIONS	5
* 10.a Provide a Tenants/Owners Manual Which Describes the Green Building and Energy Efficiency Measures Incorporated Into the Building and Provides Guidelines on How Occupants can Help to Maintain and Optimize Performance of the Green, Energy, and Water systems in the Building and Available Incentives	2
10.b Provide Property Management that Facilitates and Provides Information About Alternative Transportation and Ridesharing for Occupants and Tenants	1
10.c Provide Property Management Services that Facilitate a Minimum of 50% Reuse or Recycling of Existing Tenant Improvements	1
10.d Provide Property Management that Facilitates Tenant Recycling of Solid Waste Including Paper, Cardboard, Plastic, Aluminum, and Glass	1
TOTAL POINTS AVAILABLE	100

* These items are minimum qualifying measures required to participate in the Irvine Green Homes program

BUILDING A GREEN IRVINE



Since its founding in 1971, the City of Irvine has been a model of thoughtful, self-sustaining community planning. Here in Irvine, the ambitious dream of meeting human needs is undertaken with an equally passionate commitment to nurturing and protecting the community's physical environment. The merging of these efforts has produced exceptional and widely praised results.

WILD LIFE CONSERVATION

Within the City of Irvine sphere, over 20,000 acres are in open space – 12,070 in wild land conservation and 8,266 acres in urban open space:

SOLID WASTE DIVERSION

The City of Irvine diverts over 50% of its solid waste away from landfills by providing recycling, green waste, and construction waste diversion programs to residents;

URBAN FOREST

The City of Irvine has demonstrated a significant commitment to building an "Urban Forest" with over 55,000 trees planted on public land;

WATER QUALITY

A 30-year effort to maintain water quality in the Upper Newport Bay Nature Preserve and State Ecological Reserve, perhaps Southern California's most significant saltwater estuary;

RECLAIMED WATER

Irvine Ranch Water District maintains one of the largest reclaimed water systems in the world, providing reclaimed water for irrigation of municipal and commercial landscaping;

RESTORATION

The restoration and revitalization of the San Joaquin Marsh Preserve, the most significant freshwater marsh in coastal Southern California and a major West Coast stopping point for migrating birds;

TRANSPORTATION

The City of Irvine has been planned to accommodate pedestrians, bicyclists, motorists, busses, and commuter trains so that residents can navigate safely and efficiently;

ENERGY EFFICIENCY

The City of Irvine is a member of the Community Energy Partnership working to reduce energy use in City facilities and provide resources to help residents and businesses conserve energy;



INCENTIVE PROGRAM WEB SITES

- **Southern California Edison**
<http://www.sce.com/>
- **The Gas Company**
<http://www.socalgas.com>
- **Irvine Ranch Water Company**
<http://www.irwd.com/>
- **U.S. Environmental Protection Agency – Energy Star Program**
<http://www.energystar.gov/>

PARTNERS

City of Irvine
CIG Energetics
Global Green USA
Irvine Ranch Water District
LMR Property, Inc.
Local Builders
LPA, Inc
Maquire Properties
NAIOP
Opus West
Southern California Edison
The Gas Company
The Irvine Company

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For More Information:

www.cityofirvine.org/environmentalprograms



Printed on recycled paper with soy based ink.

BUILDING A GREEN IRVINE



HOW TO BUILD A GREEN BUILDING

The Irvine Green Buildings Program has developed criteria for building commercial and retail projects to become “Green Certified.” To qualify as a Green Building, the project must score at least 50 points and include the ten required items (see asterisked items in the scoring chart).

IRVINE GREEN BUILDING

IRVINE GREEN BUILDING
PLUS

Applicant: _____	Property Owner: _____
Address: _____	Address: _____
Phone No.: _____	Phone No.: _____
E-mail: _____	E-mail: _____
Contact: _____	Contact: _____

Plan Check #: _____	Date: _____
Project Address (es): _____	
Tract No.: _____	Lot No.: _____

1 SITE & LANDSCAPE	15
*1.a Recycle Construction & Demolition Waste. 50%-59% waste diversion	1
1 b Recycle Construction & Demolition Waste. 60%-75% 1 pt	1
1 c Recycle Construction & Demolition Waste. > 76% waste diversion	1
1 d Use Recycled-Content Landscape and Site Materials	1
1.e Install California Friendly Landscape. 1 pt for 25% - 49%, 2 pts for >= 50% of Landscaped Area	2
1 f Minimize Turf Areas to Less than 25% of Landscaped Area	1
*1 g Install Water-Efficient Irrigation Systems	1
1.h Use Reclaimed Water for Landscape	1
1.i Install Irrigation Controllers that are Based on Weather Signal or Moisture Sensor	1
1.j Treat Storm water Using Natural or Mechanical Treatment Systems	1
*1.k Reduce Exterior Light Pollution. Exterior Parking Lnt and Walkway Fixtures Over 100 Watts to be Full Cut off	1
*1.l Provide Recycling Bins and Space for Storage and Collection of Recyclables	1
*1 m Provide Bike Racks for Use by Occupants and Visitors	1
*1 n Provide 1 Tree for each 4 Parking Spots OR at least 30% of Parking is Covered	1
2. FOUNDATION, FRAME, AND ROOFING	6
2 a Incorporate Fly Ash or Slag Cement in Concrete (1 point for >10%, 2 pts >20%)	2
2 b FSC Wood for min of 25% of Lumber	1
2 c Use Roof Products certified by Energy Star or the Cool Roof Rating Council	1
2.d Provide Roof with Long-Term Bond (1 pt for 10 year, 2 pts For 20 year)	2
3. PLUMBING	10
3.a Insulate All Domestic Hot Water Pipes	1
3 b Install On-Demand (Tankless) Hot Water Heaters	1
3 c Install Low Flow Bathroom Faucets (<1 gpm)	1
3.d Install Low Flow Showerheads (< 2.5 gpm) (in staff shower or if gpm/spa) or Water Efficient Kitchen Faucets (<2.5 gpm)	1
3.e Install Water Efficient Toilets (Dual-Flush or <1.3 gpf)	2
3.f Install Water Efficient Urinals (1 pt for 0.5 gpf, 2pts for water-free)	2
3.g Use Reclaimed Water for Toilet and Urinal Flushing.	2
4. LIGHTING & APPLIANCES	6
4 a Exceed Title 24 Exterior Lighting requirements (2 pt for 5%, 4 pts for 10%)	4
4 b Install Energy Star Transformers	1
4.c Install Energy Star Exit Signs	1

5	HVAC	5
5.a	Construct Ductwork per SMACNA Standards and Guidelines	1
5.b	Protect Ground Level South and West-Facing Windows with Trees, Awnings, Eaves, or Overhangs	1
5.c	Install HVAC Systems with Non-HCFC Refrigerants	1
5.d	Install High Efficiency HVAC Filters (1 pt for >= MERV 8, 2 pts for >= MERV 13)	2
6.	ENERGY PERFORMANCE	30
6.a	Exceed Title 24 by at least 5% - 10 pts total	10
6.b	Exceed Title 24 by more than 5% - 1 point for each additional % up to 20%	15
6.c	Participate in Savings By Design Program	2
6.d	Complete a Commissioning Process for all MEP and Energy Systems	3
7.	RENEWABLE ENERGY	7
7.a	Provide Conduit and Proposed Layout for Future Photovoltaic (PV) System	2
7.b	Install Photovoltaic (PV) System: 1 point for each 5 kW	5
7.c	Install Solar Water Heating Systems	1
8.	INDOOR ENVIRONMENTAL QUALITY	8
8.a	Use Low VOC Interior Paints and Wood Finishes: (< 50 g/l flat; <=150 g/l non-flat)	1
8.b	Use Low VOC Construction Adhesives and Sealants (<=50 gpl)	1
8.c	Use Composite Wood Products With No Added Urea Formaldehyde	1
8.d	Seal All Faces of Particle Board and Composite Wood Products	1
8.e	Install CRI Green Label Certified Carpet	1
8.f	Use Formaldehyde-Free Insulation	1
8.g	Provide Daylighting for 50% of Occupied Spaces (day lit spaces are located within 15 ft of window or 25 ft of skylight)	1
8.h	Provide views to the outdoors for 75% of occupied spaces	1
9.	RESOURCE EFFICIENT MATERIALS	8
	Provide Tenant Improvement Package with Green Finish Materials options (1 pt for each):	
	<ul style="list-style-type: none"> • Exposed Concrete for Flooring or Counters • FSC Certified or Reclaimed Wood Flooring • Natural Linoleum, Rubber, Bamboo or Cork Flooring • Zero-VOC interior paints 	
9.2	<ul style="list-style-type: none"> • Recycled Content (25%) Ceiling tiles • Recycled Content (25%) Carpet • Recycled Content (50%) Drywall • Energy Star Lighting Fixtures • Water Efficient Plumbing Fixtures 	4

Install a Minimum of 500 sq. ft. of the Following Resource -efficient Materials (1 pt for each).

- Exposed Concrete for Flooring or Counters
- FSC Certified or Reclaimed Wood Flooring
- Natural Linoleum, Rubber, Bamboo or Cork Flooring
- 9.b • Recycled Content (25%) Ceiling Tiles 4
- Recycled Content (25%) Carpet
- Recycled Content (50%) Drywall
- Recycled Content (25%) Tiles
- Energy Star Lighting Fixtures

10. EDUCATION, AWARENESS AND OPERATIONS 5

- *10.a Provide a Tenants/Owners Manual Which Describes the Green Building and Energy Efficiency Measures Incorporated into the Building and Provides Guidelines on How Occupants can Help to Maintain and Optimize Performance of the Green, Energy, and Water Systems in the Building and Available Incentives 2
- 10.b Provide Property Management that Facilitates and Provides Information About Alternative Transportation and Ridesharing for Occupants and Tenants 1
- 10.c Provide Property Management Services that Facilitate a Minimum of 50% Reuse or Recycling of Existing Tenant Improvements 1
- 10.d Provide Property Management that Facilitates Tenant Recycling of Solid Waste Including Paper, Cardboard, Plastic, Aluminum, and Glass 1

GRAND TOTAL POINTS 100

* These items are minimum qualifying measures required to participate in the Irvine Commercial Green Building program



HOW TO BUILD A GREEN HOME

The Irvine Green Home Program has developed criteria for building or remodeling homes to become "Green Certified." The following chart defines the items to consider when building a home. To qualify as a Green Home, the home must score at least 50 points and include the eight *required items (see asterisked items in the scoring chart).

**50 POINTS =
IRVINE GREEN HOME**

**60 POINTS =
IRVINE GREEN HOME
PLUS**

**75 POINTS =
IRVINE GREEN HOME
PREMIUM**

Applicant: _____	Property Owner: _____
Address: _____	Address: _____
Phone No.: _____	Phone No.: _____
E-mail: _____	E-mail: _____
Contact: _____	Contact: _____

Plan Check #: _____	Date: _____
Project Address(es): _____	
Tract No.: _____	Lot No.: _____

1. SITE & LANDSCAPE	12	
* 1.a Recycle Construction & Demolition Waste – 50% waste diversion	1	
1.b Recycle Construction & Demolition Waste – 51% -75% waste diversion	1	
1.c Recycle Construction & Demolition Waste - > 76% waste diversion	1	
1.d Install Drought Tolerant Landscape - 1 pt for each 25% of plants that are drought-tolerant	4	
1.e Minimize Turf Areas to Less than 25% of Landscaped Area	1	
* 1.f Install low-flow drip Irrigation Systems and/or Low flow Irrigation Sprinklers	1	
* 1.g Use Reclaimed Water for Public and Common Area Landscaping	1	
1.h Install Irrigation Controllers that are Based on Weather Signal or Moisture-Sensor	1	
1.i Treat Stormwater Using Natural Treatment Systems	1	
2. FOUNDATION, FRAME, AND ROOFING	8	
2.a Incorporate a Minimum of 20% Fly Ash or Slag Cement in Concrete	1	
2.b Use Engineered Lumber for Beams and Headers Larger than 4x6	1	
2.c Use Engineered Lumber for I-Joists and Web Trusses	1	
2.d Use Engineered Lumber-Sheathing (Oriented Strand Board)	1	
2.e Use Roof Products certified by Energy Star or the Cool Roof Rating Council	1	
2.f Use Roofing Materials with 40 year Warranty, or greater	1	
2.g Use Steel Studs or at least 25% of Wood Studs are FSC Certified Lumber	2	
3. PLUMBING	9	
3.a Insulate All Domestic Hot Water Pipes	2	
3.b Install On-Demand (Tankless) Hot Water Heaters	3	
3.c Install Low Flow Showerheads (< 2.5 gpm)	1	
3.d Install Water Efficient Kitchen & Bath Faucets (< 2.5 gpm)	1	
3.e Install Water Efficient Toilets (Dual-flush or < 1.3 gpf)	2	
4. LIGHTING & APPLIANCES	6	
4.a Install Pin Type Compact Fluorescent Lamps for all Hardwired Fixtures	1	
4.b Install Timer or Photo-sensor Controls for all Exterior Lighting	1	
* 4.c Install Energy Star Dishwashers	1	
4.d Showcase in Model and Offer or Install Energy Star Clothes Washing Machines	1	
4.e Showcase in Model and Offer or Install Energy Star Refrigerator	1	
4.f Showcase in Model and Offer or Install Energy Star Air Conditioner	1	
5. HVAC	8	
* 5.a Test all Ductwork for Leakage	1	
5.b Install at least Two EnergyStar Ceiling Fans in each Home	1	

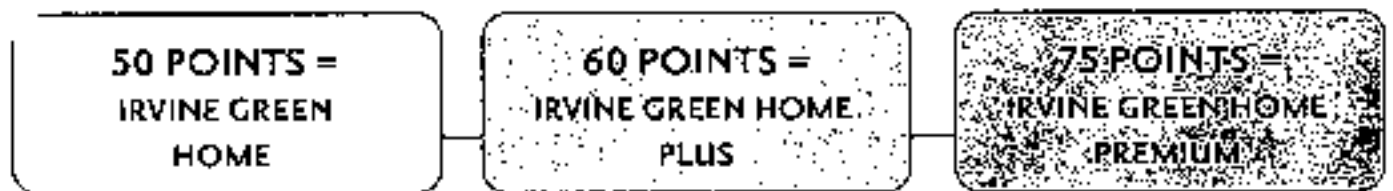
	Available Points	Earned Points
5.c Protect South Facing Windows with Trees, Awnings, Eaves, or Overhangs	1	
5.d Install HVAC Systems with Non-HCFC Refrigerants	1	
5.e Install High Efficiency HVAC Filters (MERV 6 or higher)	1	
5.f Vent Range Hoods to the Outside	1	
5.g Install Carbon Monoxide Alarms in each Home	1	
5.h Install Energy Star Bathroom Fans with Humidity Sensor or Timer Control	1	
6. ENERGY PERFORMANCE	28	
6.a Exceed Title 24 by at least 5% - 10 pts total	10	
6.b Exceed Title 24 by more than 5% - 1 point for each additional % beyond Title 24 up to 20%	15	
6.c Achieve Energy Star Home Certification	3	
7. RENEWABLE ENERGY	10	
* 7.a Provide Pre-Approved Photovoltaic System Attachment Detail	1	
* 7.b Install Conduit to the Roof for Photovoltaic System in each Home	1	
7.c Install Solar Water Heating Systems in each Home	2	
7.d Install Photovoltaic (PV) Panels: 3 points for each 1 KW per Home	6	
8. INDOOR AIR QUALITY	9	
* 8.a Use Low VOC Interior Paints: (< = 50 g/l flat; < = 150 g/l non-flat)	1	
8.b Showcase in Model and Offer Zero VOC Interior Paints: (< = 0.5 g/l)	1	
8.c Use Low VOC Water-Based Wood Finishes (< = 50 gpl)	1	
8.d Use Low VOC Construction Adhesives (< = 50 gpl)	1	
8.e Use Composite Wood Products With No Urea Formaldehyde for Subflooring	1	
8.f Seal All Exposed Edges of Particle Board	1	
8.g Use Only Formaldehyde-Free Wood Products for Cabinets, Shelving and Interior Trim	1	
8.h Showcase in Model and Offer or Install CRJ Green Label Certified Carpet	1	
8.i Use Only Formaldehyde Free Insulation	1	
9. RESOURCE EFFICIENT MATERIALS	6	
9.a Showcase in Model and Offer or Install Carpet with 25% or Greater Recycled-Content	1	
9.b Showcase in Model and Offer or Install "Green" Flooring Options: FSC Certified Wood, Reclaimed Wood, Natural Linoleum, Bamboo, or Cork (1 pt/100 sf)	4	
9.c Use Recycled Plastic Materials for Exterior Decking	1	
10. EDUCATION AND AWARENESS	4	
10.a Builder participation in marketing and educational campaign to include a homeowner's manual which describes the green building and energy efficiency measures incorporated into the home, and provides guidelines on how to maintain and optimize the green performance of the home.	4	
GRAND TOTAL POINTS	100	

* These items are minimum qualifying measures required to participate in the Irvine Green Homes Program



HOW TO BUILD GREEN CONDOMINIUM HOMES

The Irvine Green Home Program has developed criteria for building high density Condominium Homes to become "Green Certified." The following chart defines the items to consider. In order for high density Condominium Homes to qualify as Green Homes, they must score at least 50 points and include the seven required items (see asterisked items in the scoring chart).



Applicant: _____	Property Owner: _____
Address: _____	Address: _____
Phone No.: _____	Phone No.: _____
E-mail: _____	E-mail: _____
Contact: _____	Contact: _____

Plan Check #: _____	Date: _____
Project Address (es): _____	
Tract No. _____	Lot No. _____

Available
PointsEarned
Points

	Available Points	Earned Points
1. SITE & LANDSCAPE	12	
* 1.a Recycle Construction & Demolition Waste - 50% waste diversion	1	
1.b Recycle Construction & Demolition Waste - 51%-75% waste diversion	1	
1.c Recycle Construction & Demolition Waste - > 76% waste diversion	1	
1.d Install Drought Tolerant Landscape - 1 pt for each 25% of plants that are drought-tolerant	4	
1.e Minimize Turf Areas to Less than 25% of Landscaped Area	1	
* 1.f Install low-flow drip Irrigation Systems and/or Low-flow Irrigation Sprinklers	1	
* 1.g Use Reclaimed Water for Public and Common Area Landscape	1	
1.h Install Irrigation Controllers that are Based on Weather Signal or Moisture-Sensor	1	
1.i Treat Stormwater Using Natural Treatment Systems	1	
2. FOUNDATION, FRAME, AND ROOFING	8	
2.a Incorporate a Minimum of 10% Fly Ash or Slag Cement in Concrete	1	
2.b Use Engineered Lumber for Beams and Headers Larger than 4x6	1	
2.c Use Engineered Lumber for Joists and Web Trusses	1	
2.d Use Engineered Lumber-Sheathing (Oriented Strand Board)	1	
2.e Use Roof Products certified by Energy Star or the Cool Roof Rating Council	1	
2.f For Built-up Roofing, Use Materials with a Minimum 20-yr Warranty, for Shingle Roofing, Use Materials with a 40-yr Minimum Warranty	1	
2.g Use Steel Studs or at least 25% of Wood Studs are FSC Certified Lumber	2	
3. PLUMBING	10	
3.a Insulate All Domestic Hot Water Pipes	2	
3.b Install On Demand (Tankless) Hot Water Heaters	3	
3.c Install Low Flow Showerheads (< 2.5 gpm)	1	
3.d Install Water Efficient Kitchen & Bath Fixtures (< 2.5 gpm)	1	
3.e Install Water Efficient Toilets (Dual-Flush or < 1.3 gpf)	2	
3.f Provide Individual Water Meters to Each Condominium	1	
4. LIGHTING & APPLIANCES	6	
4.a Install Pin Type Compact Fluorescent Lamps for all Hardwired Fixtures	1	
4.b Install Timer or Photo-sensor Controls for all Exterior Lighting	1	
* 4.c Install Energy Star Dishwashers	1	
4.d Showcase in Model and Offer or Install Energy Star Clothes Washing Machines	1	
4.e Showcase in Model and Offer or Install Energy Star Refrigerator	1	
4.f Showcase in Model and Offer or Install Energy Star A/C Conditioner	1	
5. HVAC	8	
* 5.a Test all Ductwork for Leakage	1	
5.b Install at Least One Energy Star Ceiling Fan in Each Home	1	

	Available Points	Earned Points
5.c. Install South Facing Windows with Trees, Awnings, Eaves, or Overhangs	1	
5.d. Install HVAC Systems with Non-HCFC Refrigerants	1	
5.e. Install High Efficiency HVAC Filters (MERV 6 or higher)	1	
5.f. Vent Range Hoods to the Outside	1	
5.g. Install Carbon Monoxide Alarms in each Home	1	
5.h. Install Energy Star Bathroom Fans with Humidity Sensor or Timer Control	1	
6. ENERGY PERFORMANCE	29	
6.a. Exceed Title 24 by at least 5% - 10 pts total	10	
6.b. Exceed Title 24 by More than 5% - 1 Point for Each Additional % Beyond T-24 up to 20%	15	
6.c. Achieve Energy Star Home Certification	3	
6.d. Provide Individual Gas Meters to Each Contaminant	1	
7. RENEWABLE ENERGY	9	
* 7.a. Install Conduit to the Roof and Proposed Layout for Photovoltaic System in Each Building	1	
7.b. Install Solar Water Heating Systems for Domestic Hot Water	2	
7.c. Install Photovoltaic (PV) Panels: 2 Points for Each kW (Including Common Area)	4	
7.d. Install Solar Water Heating Assist for Swimming Pool Heating (1 pt for 15% - 45% 2 pts for 50% or greater)	2	
8. INDOOR AIR QUALITY	9	
* 8.a. Use Low VOC Interior Paints (≤50 g/l for ≤150 g/l non flat)	1	
8.b. Showcase in Model and Offer Zero VOC Interior Paints (≤0.5 g/l)	1	
8.c. Use Low VOC Water-Based Wood Finishes (≤50 g/l)	1	
8.d. Use Low VOC Construction Adhesives (≤50 g/l)	1	
8.e. Use Composite Wood Products With No Urea Formaldehyde for Subflooring	1	
8.f. Seal All Exposed Edges of Particle Board	1	
8.g. Use Only Formaldehyde-Free Wood Products for Cabinets, Shelving and Interior Trim	1	
8.h. Showcase in Model and Offer or Install CRE Green Label Certified Carpet	1	
8.i. Use Only Formaldehyde Free Insulation	1	
9. RESOURCE EFFICIENT MATERIALS	5	
9.a. Showcase in Model and Offer or Install Carpet with 25% or Greater Recycled Content	1	
9.b. Showcase in Model and Offer or Install "Green" Flooring Options: FSC Certified Wood, Recycled Wood, Natural Linoleum, Bamboo or Cork (1 pt/100 sf)	3	
9.c. Use Recycled Plastic Materials for Exterior Decking	1	
10. EDUCATION AND AWARENESS	4	
10.a. Builder participation in marketing and educational campaigns to include a homeowner's manual which describes the green building and energy efficiency measures incorporated into the home, and provides guidelines on how to maintain and optimize the green performance of the home.	4	
GRAND TOTAL POINTS	100	

* These items are minimum qualifying measures required to participate in the Irvine Green Homes Program.

CHOICES
BUILD
SUSTAINABLE
COMMUNITIES

IRVINE COMMERCIAL GREEN BUILDING PROGRAM



WHAT IS GREEN BUILDING?

Green or sustainable building is creating environmentally sensitive, energy conscious and healthier developments.

Green building can include:

ENERGY EFFICIENCY

WATER CONSERVATION AND REDUCTION OF RUNOFF

**ENVIRONMENTALLY FRIENDLY BUILDING MATERIALS
AND SPECIFICATIONS**

WASTE REDUCTION

INDOOR ENVIRONMENTAL QUALITY

SMART GROWTH AND SUSTAINABLE DEVELOPMENT





WHY BUILD GREEN?



QUALITY OF LIFE

Improving our living space through reduced indoor air pollution, smarter designs, and improving environmental conditions for future generations

ECONOMY

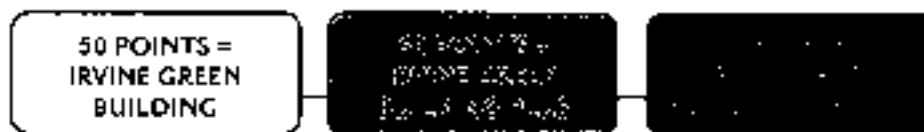
Saving money and increasing property values through more durable building designs and reduced lifecycle costs

ENVIRONMENT

Reducing our impact on the environment through smarter use of limited resources and land

HOW TO BUILD A GREEN BUILDING

The Irvine Green Buildings Program has developed criteria for making commercial and retail projects to become "Green Certified." To qualify as a Green Building, the project must score at least 50 points and include the ten required items (see asterisked items in the scoring chart)



	POINTS
1. SITE & LANDSCAPE	15
* 1.a. Recycle Construction & Demolition Waste – 50%-59% waste diversion	1
1.b. Recycle Construction & Demolition Waste – 60%-75% 1 pt	1
1.c. Recycle Construction & Demolition Waste > 76% waste diversion	1
1.d. Use Recycled-Content Landscape and Site Materials	1
1.e. Install California Friendly Landscape (1 pt for 25% - 49%, 2 pts for >= 50% of Landscaped Area)	2
1.f. Minimize Turf Areas to Less than 25% of Landscaped Area	1
* 1.g. Install Water-Efficient Irrigation Systems	1
1.h. Use Reclaimed Water for Landscape	1
1.i. Install Irrigation Controllers that are Based on Weather Signal or Moisture Sensor	1
1.j. Treat Stormwater Using Natural or Mechanical Treatment Systems	1
* 1.k. Reduce Exterior Light Pollution, Exterior Parking Lot and Walkway Fixtures Over 100 watts to be full cut-off	1
* 1.l. Provide Recycling Bins and Space for Storage and Collection of Recyclables	1
1.m. Provide Bike Racks for Use by Occupants and Visitors	1
* 1.n. Provide 1 Tree for each 4 Parking Spots OR at least 30% of Parking is Covered	1
2. FOUNDATION, FRAME, AND ROOFING	6
2.a. Incorporate Fly Ash or Slag Cement in Concrete (1 point for >10%, 2 pts >20%)	2
2.b. FSC Wood for min of 25% of Lumber	1
2.c. Use Roof Products certified by Energy Star or the Cool Roof Rating Council	1
2.d. Provide Roof with Long-Term Bond (1 pt for 10 year, 2 pts for 20 year)	2
3. PLUMBING	10
3.a. Insulate All Domestic Hot Water Pipes	1
3.b. Install On-Demand (Tankless) Hot Water Heaters	1
3.c. Install Low Flow Bathroom Faucets (<1.5 gpm)	1
3.d. Install Low Flow Showerheads (< 2.5 gpm) (or stall shower or 1 gpm/psi) or Water-Efficient Kitchen Faucets (<2.5 gpm)	1
3.e. Install Water Efficient Toilets (Dual-Flush or <1.3 gpf)	2
3.f. Install Water Efficient Urinals (1 pt for 0.5 gpf, 2pts for water-free)	2
3.g. Use Reclaimed Water for Toilet and Urinal Flushing	2
4. LIGHTING & APPLIANCES	6
4.a. Exceed Title 24 Exterior Lighting requirements (2 pt for 5%, 4 pts for 10%)	4
4.b. Install Energy Star Transformers	1
4.c. Install Energy Star Exit Signs	1

	POINTS
5. HVAC	5
* 5.a Construct Ductwork per SMACNA Standards and Guidelines	1
5.b Protect Ground-Level South- and West-Facing Windows with Trees, Awnings, Eves, or Overhangs	1
5.c Install HVAC Systems with Non-HCFC Refrigerants	1
5.d Install High Efficiency HVAC Filters (1 pt for \geq MERV 8 , 2 pts for \geq MERV 13)	2
6. ENERGY PERFORMANCE	30
6.a Exceed Title 24 by at least 5% - 10 pts total	10
6.b Exceed Title 24 by more than 5% - 1 point for each additional % up to 20%	15
6.c Participate in Savings By Design Program	2
6.d Complete a Commissioning Process for all MEP and Energy Systems	3
7. RENEWABLE ENERGY	7
* 7.a Provide Conduit and Proposed Layout for Future Photovoltaic (PV) System	2
7.b Install Photovoltaic (PV) System: 1 point for each 5 kW	5
7.c Install Solar Water Heating Systems	1
8. INDOOR ENVIRONMENTAL QUALITY	8
* 8.a Use Low VOC Interior Paints and Wood Finishes: (< 50 g/l flat; \leq 150 g/l non-flat)	1
8.b Use Low VOC Construction Adhesives and Sealants (\leq 50 gpl)	1
8.c Use Composite Wood Products With No Added Urea Formaldehyde	1
8.d Seal All Faces of Particle Board and Composite Wood Products	1
8.e Install CRI Green Label Certified Carpet	1
8.f Use Formaldehyde-Free Insulation	1
8.g Provide Daylighting for 50% of Occupied Spaces (day lit spaces are located within 15 ft. of window or 25 ft. of skylight)	1
8.h Provide Views to the Outdoors for 75% of Occupied Spaces	1
9. RESOURCE EFFICIENT MATERIALS	8
9.a Provide Tenant Improvement Package with Green Finish Materials options (1 pt for each):	
• Exposed Concrete for Flooring or Counters	
• FSC Certified or Reclaimed Wood Flooring	
• Natural Linoleum, Rubber, Bamboo or Cork Flooring	
• Zero-VOC interior paints	
• Recycled Content (25%) Ceiling tiles	
• Recycled Content (25%) Carpet	
• Recycled Content (50%) Drywall	
• Energy Star Lighting Fixtures	
• Water Efficient Plumbing Fixtures	4
9.b Install a Minimum of 500 sq. ft. of the Following Resource-efficient Materials (1 pt for each):	
• Exposed Concrete for Flooring or Counters	
• FSC Certified or Reclaimed Wood Flooring	
• Natural Linoleum, Rubber, Bamboo or Cork Flooring	
• Recycled Content (25%) Ceiling tiles	
• Recycled Content (25%) Carpet	
• Recycled Content (50%) Drywall	
• Recycled-Content (25%) Tiles	
• Energy Star Lighting Fixtures	4
10. EDUCATION, AWARENESS AND OPERATIONS	5
* 10.a Provide a Tenants/Owners Manual Which Describes the Green Building and Energy Efficiency Measures Incorporated Into the Building and Provides Guidelines on How Occupants can Help to Maintain and Optimize Performance of the Green, Energy, and Water systems in the Building and Available Incentives	2
10.b Provide Property Management that Facilitates and Provides Information About Alternative Transportation and Ridesharing for Occupants and Tenants	1
10.c Provide Property Management Services that Facilitate a Minimum of 50% Reuse or Recycling of Existing Tenant Improvements	1
10.d Provide Property Management that Facilitates Tenant Recycling of Solid Waste Including Paper, Cardboard, Plastic, Aluminum, and Glass	1
TOTAL POINTS AVAILABLE	100

* These items are minimum qualifying measures required to participate in the Irvine Green Homes program

BUILDING A GREEN IRVINE



Since its founding in 1971, the City of Irvine has been a model of thoughtful, self-sustaining community planning. Here in Irvine, the ambitious dream of meeting human needs is undertaken with an equally passionate commitment to nurturing and protecting the community's physical environment. The merging of these efforts has produced exceptional and widely praised results.

WILD LIFE CONSERVATION

Within the City of Irvine sphere, over 20,000 acres are in open space – 12,070 in wild land conservation and 8,266 acres in urban open space;

SOLID WASTE DIVERSION

The City of Irvine diverts over 50% of its solid waste away from landfills by providing recycling, green waste, and construction waste diversion programs to residents.

URBAN FOREST

The City of Irvine has demonstrated a significant commitment to building an "Urban Forest" with over 55,000 trees planted on public land;

WATER QUALITY

A 30-year effort to maintain water quality in the Upper Newport Bay Nature Preserve and State Ecological Reserve, perhaps Southern California's most significant saltwater estuary.

RECLAIMED WATER

Irvine Ranch Water District maintains one of the largest reclaimed water systems in the world, providing reclaimed water for irrigation of municipal and commercial landscaping.

RESTORATION

The restoration and revitalization of the San Joaquin Marsh Preserve, the most significant freshwater marsh in coastal Southern California and a major West Coast stopping point for migrating birds.

TRANSPORTATION

The City of Irvine has been planned to accommodate pedestrians, bicyclists, motorists, buses, and commuter trains so that residents can navigate safely and efficiently.

ENERGY EFFICIENCY

The City of Irvine is a member of the Community Energy Partnership working to reduce energy use in City facilities and provide resources to help residents and businesses conserve energy.



INCENTIVE PROGRAM WEB SITES

- **Southern California Edison**
<http://www.sce.com/>
- **The Gas Company**
<http://www.socalgas.com>
- **Irvine Ranch Water Company**
<http://www.irwd.com/>
- **U.S. Environmental Protection Agency – Energy Star Program**
<http://www.energystar.gov/>

PARTNERS

City of Irvine
CTG Energetics
Global Green USA
Irvine Ranch Water District
LNR Property, Inc.
Local Builders
LPA, Inc
Maguire Properties
NAIOP
Opus West
Southern California Edison
The Gas Company
The Irvine Company

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For More Information:

www.cityofirvine.org/environmentalprograms



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Helping Green Homeowners Hang Onto Their Green

by Ronald O. Lovridge

Riverside recently became the first city in the state to offer incentives to builders who meet the strong, measurable requirements of the California Green Builder (CGB) program. This cost-effective, turnkey program improves the environment without increasing the city's workload or costing its taxpayers a penny.

By offering homebuilders incentives that can speed up the building process, Riverside is saving them months of work and thousands of dollars in costs, which should help make green-built homes more affordable than ever before and ensure that more new homes are environmentally friendly.

The city and the homebuilding industry have been working together toward a sustainable Riverside for many years. In addition to water conservation and the landmark Multi-Species Habitat Conservation Plan, city leadership is committed to building out environmentally friendly homes for future growth.

In the summer of 2005, I appointed a Clean & Green Task Force to improve the environment and proactively fight global warming, with the goal of making Riverside a leader in the fight for a greener nation. I believed that a green building program was an important part of that effort, but that it must meet simultaneous goals of providing housing, built for less money with quantifiable environmental reduction.

After significant research and collaboration with community leaders, scholars, the Riverside Building Industry Association and city council members, I decided that "encouraging" builders to adopt the voluntary CGB program was the best alternative.

Program Highlights

On June 12, 2007, the city council unanimously approved a program that provides incentives to members of the CGB program. The program, developed by the nonprofit Building Industry Institute, has several major environmental benefits:

- CGB homes are 15 to 20 percent more energy efficient than the state's toughest-in-the-nation Title 24 requirements.
- They save at least 20,000 gallons of water a year compared to a typical house.
- The builders divert at least half of their construction waste from landfills, helping local jurisdictions meet their AB 939 waste diversion mandates.

continued

Ronald O. Lovridge is mayor of Riverside and a past president of the League. He can be reached at rlovridge@riversidera.gov.

Specific incentives include the release of electrical meters before final inspection, guaranteed timelines and a fast-track electric design and water process.

- Wood used in CGB homes is harvested from sustainable forest operations
- CGB homes produce less than half the carbon dioxide than would be generated during the lifetime of a typical California home.

For these reasons, the California Energy Commission has recognized the CGB program and the California Public Utilities Commission gave it a "Flex Your Power" Award.

Besides helping Riverside "go green," the program is also extremely cost effective for the city because it requires independent third party certification from city staff, to ensure that homes are built to meet CGB criteria.

Keeping Costs Down With Incentives

However, building green costs money: up to \$6,000 per home under the CGB program, and tens of thousands of dollars more if solar panels or other features are added. Riverside recognizes that home buyers are demanding the lowest possible price. To encourage the construction of green homes, the city decided to offer builders non-cash incentives that can pay for most of the extra costs of building green.

Specific incentives include the release of electrical meters before final inspection, guaranteed timelines and a fast-track electric design and water process. CGB developments also will receive priority field inspection service, ensuring that green projects are inspected first.

By offering incentives, the City of Riverside is encouraging homeowners to participate in the program, while preserving the opportunity of homeownership by keeping costs down.

In the most rapidly growing region of the state, Riverside is leading the way by planning for our future and creating environmentally friendly programs that conserve natural resources and preserve the quality of life for our residents. ■

The League of California Cities & Public Service Skills, Inc. proudly introduce

MuniLink



MuniLink

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Knowledge, Experience, Solutions

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