

HARDSCAPE CONNECTION

A LEEDing Example: ROHNERT PARK CITY HALL



Designing and fabricating a construction project to be environmentally friendly, requires coordination between many different team members. The new Rohnert Park City Hall project was no exception. Coordination between

owner, architect, contractor and product manufacturer is critical. The City of Rohnert Park wanted their new facility to be designed and built “green”. The objective was to be awarded a LEED Gold certification. The Leadership in Energy and Environmental Design (LEED) Green Building Rating System™ provides nationally accepted benchmarks for the design, construction and operation of high performance green buildings. Under the US Green Building Council (USGBC) LEED promotes a whole-building approach to sustainability by recognizing performance in five key areas of human and environmental health: sustainable site development, water savings, energy efficiency, materials selection and indoor environmental quality.



A major role in achieving LEED credits on the Rohnert Park project was storm water and site pollution control and management. Landarc and Associates, a landscape architectural firm based out of San Jose, chose Calstone’s new permeable paver system to attain green methods of paving. JS Hauling Company out of San Rafael California was hired to install the permeable interlocking concrete pavement (PICP). This specialty contractor completed the project per specifications. Over 4,700 square feet of Calstone’s 4X8 permeable paver system was installed in the parking lot and drive areas of the new City Hall. The designed laying pattern was a 90° herringbone. The color selected was Tuscan Gold; a special blend of colors that mimic



the natural beauty of Santa Barbara stone found along the coast. The Tuscan Gold color also has a high Solar Reflective Index (SRI) rating and can help reduce the heat island effect normally caused by asphalt paving. Reducing heat island effect will assist the new City Hall in cooling the interior during the summer months.

By allowing storm water to infiltrate the paving surface, you can eliminate runoff and control specific pollutants. Brake dust, oil, petroleum, tire residue and asphalt paving are damaging environmental concerns. Controlling these pollutants is vital to our eco system and Calstone's permeable paver systems are leading the way "green" methods of construction.

Calstone now offers two distinct permeable paver systems to meet your project goals in achieving LEED and green construction. Quarry Stone and 4X8 styles provide design flexibility to fit any project. A full palette of color options can compliment any scheme and reflected mood.

If you are an architect, engineer, contractor, home owner or government agency...Contact Calstone to find out how we can help with your green building project. Offering complimentary continuing education courses to design professionals and municipalities is just one way Calstone can bring new environmental building methods to light. Visit our website or contact your Calstone team member now for more information.



Where Calstone Concrete Pavers Can Help Your Project Achieve LEED Credits:

LEED Credit	LEED Intent	How Calstone Pavers Contributes
Sustainable Sites (SS) 6.1 - Storm Water Design Quantity Control 1 Point	Limit disruption of natural water hydrology by reducing impervious cover, increasing on-site infiltration, and managing stormwater runoff.	Permeable Interlocking Concrete Pavement (PICP) captures and treats stormwater beneath the pavement. Captured stormwater can be infiltrated to ground water, released at a controlled rate to a storm drain, or harvested for use in any of 5 water efficiency credits
Sustainable Sites (SS) 6.2 - Storm Water Design Quality Control 1 Point	Reduce or eliminate water pollution by reducing impervious cover, increasing on-site infiltration, eliminating sources of contaminants, and removing pollutants from stormwater runoff.	PICP systems can be designed to infiltrate all stormwater on site. Water that is infiltrated on site is considered 100% treated. All PICP's reduce the Total Suspended Solids (TSS) in captured water.
Sustainable Sites (SS) 7.1 - Heat Island Effect 1 Point 50% 2 Points 100% (ID)	Reduce heat islands (thermal gradient differences between developed and undeveloped areas) to minimize impact on microclimate and human and wildlife habitat.	Calstone offers high albedo colors that reduce heat absorption. Lighter colored pavements aid in improving night time visibility and reduce site lighting requirements.
Materials and Resources (MR) 2.1 and 2.2 - Construction Waste Management 1 Point 50% 2 Points 75% 3 Points 95% (ID)	Divert construction and demolition debris from disposal in landfills. Redirect recyclable recovered resources back to the manufacturing process.	100% of the materials used in a PICP system are recyclable, and 100% of Calstone packaging materials are recyclable. All shipping pallets, excess paving stones, cut & scrap stones, and base & bedding materials, can be returned directly to Calstone for on-site recycling.
Materials and Resources (MR) 3.1 and 3.2 - Materials Reuse 1 Point 5% 2 Points 10% 3 Points 15% (ID)	Reuse building materials in order to reduce demand for virgin materials and to reduce waste, thereby reducing impacts associated with the extraction and processing of virgin resources.	Paving stones, and most of the components in a PICP system, are completely reusable. A PICP can be removed and replaced in the original or new layout with little to no additional material required.
Materials and Resources (MR) 4.1 and 4.2 - Recycled Content 1 Point 10% 2 Points 20% 3 Points 30% (ID)	Increase demand for building products that incorporate recycled content materials, thereby reducing impacts resulting from extraction and processing of virgin materials.	Calstone is constantly active in research and development of mix designs using recycled materials. Special high recycled content custom mix designs are available. Many of these designs offer additional performance advantages.
Materials and Resources (MR) 5.1 and 5.2 - Regional Materials 1 Point 10% 2 Points 20% 3 Points 40% (ID)	Increase demand for building materials and products that are extracted and manufactured within the region, thereby supporting the use of indigenous resources and reducing the environmental impacts resulting from transportation.	All Calstone manufacturing facilities service the same area within a 500 mile radius. Over 99% of the materials used in our paving stones are sourced within a 500 mile radius.
Innovation in Design (ID) 1.1 - 1.4	To provide design teams and projects the opportunity to be awarded points for exceptional performance	Additional points as noted above for exemplary performance SS 7.1, MR 2.2, 3.2, 4.2, and 5.2

CALSTONE

Manufacturing Service Centers:

San Martin

13775 Llagas Ave.
San Martin, CA 95046
phone (408) 686-9627
fax (408) 686-9127

Galt

421 Crystal Way,
Galt, CA 95632
phone (209) 745-2981
fax (209) 745-2983

Sunnyvale

1155 Aster Ave.
Sunnyvale, CA 94086
phone (408) 984-8800
fax (408) 984-2648

Tracy

426 East Grant Line Road
Tracy, CA 95376
phone (209) 833-7366
fax (209) 833-7467

www.calstone.com

YOUR CALSTONE TEAM HARDSCAPE DIVISION

Scott Julien

South San Francisco To Monterey Area **Area 1**
work 408-984-8800 *mobile* 408-594-4064
email scottjulien@calstone.com

John Spanne

North Bay Area **Area 2**
work 209-833-7366 *mobile* 408-594-4063
email johnspanne@calstone.com

Eric Johnson

Hardscape Sales / Sacramento **Area 3**
work 209-833-7366 *mobile* 408-505-3189
email erikjohnson@calstone.com

Alex Farros

Director of Hardscape Sales **Area 4**
work 209-833-7366 *mobile* 408-594-4046
email alexfarros@calstone.com



Calstone is a manufacturer of concrete Hardscape products including concrete Interlocking Paving Stones, Segmental Retaining Walls, Fence Wall Systems and outdoor entertainment structures. Calstone has been manufacturing concrete products in Northern California since 1948.