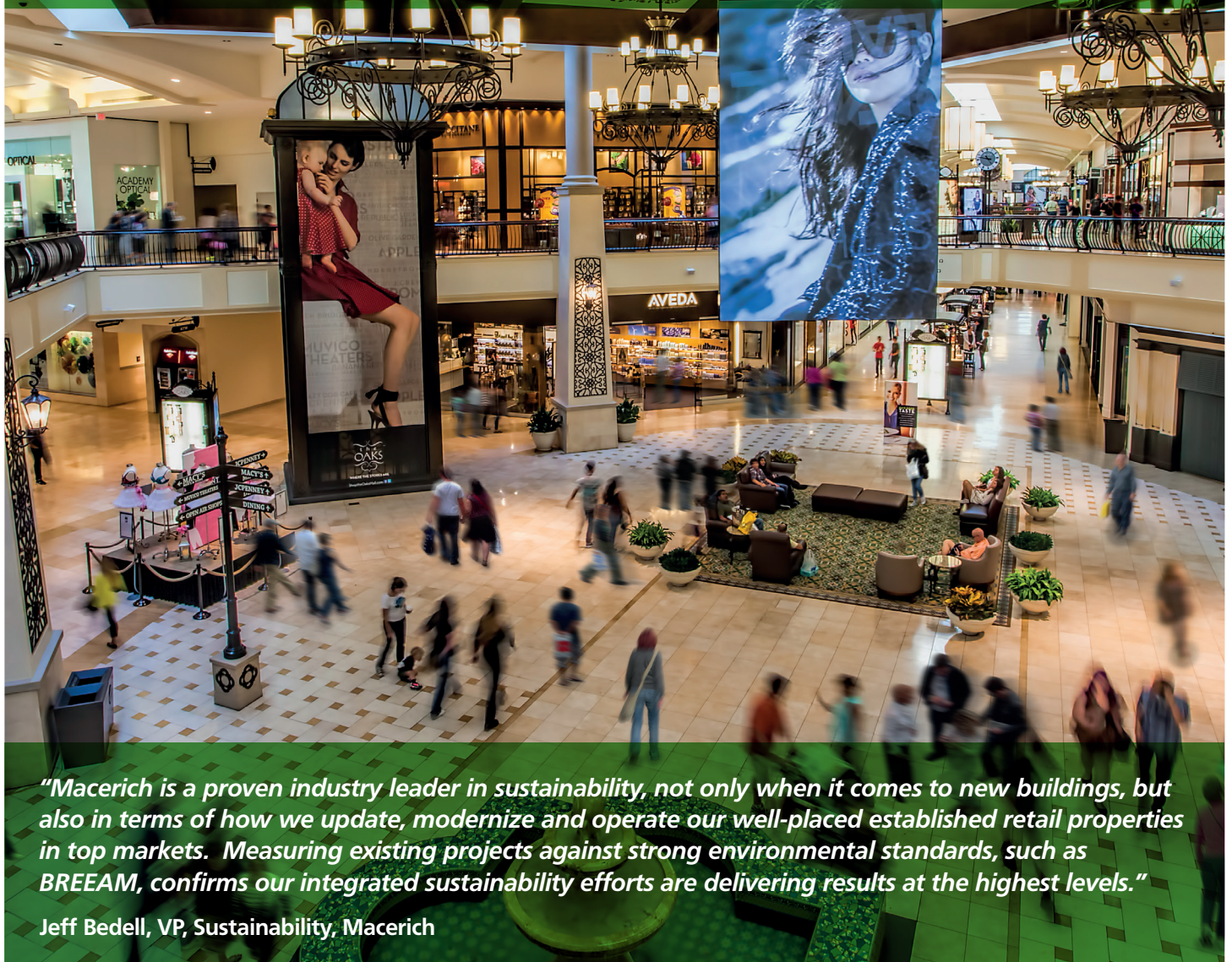


Case Study

The Oaks Mall First BREEAM USA Certification Macerich earns a BREEAM USA In-Use rating in record time



"Macerich is a proven industry leader in sustainability, not only when it comes to new buildings, but also in terms of how we update, modernize and operate our well-placed established retail properties in top markets. Measuring existing projects against strong environmental standards, such as BREEAM, confirms our integrated sustainability efforts are delivering results at the highest levels."

Jeff Bedell, VP, Sustainability, Macerich

"In partnership with Macerich, RealFoundations completed an evaluation of BREEAM USA assessment methodology as the framework for Macerich to achieve sustainable performance through operational efficiency across their portfolio. BREEAM is the clear market leader with its dynamic real time scoring platform, continuous tracking of improved performance at the asset level and across the portfolio. BREEAM In-Use methodology proved without a doubt the right tool for Macerich to embed as they expand their corporate program."

John Seaton, Director, RealFoundations



The Oaks: Key BREEAM In-Use Facts

100% LED lighting

20% of the building's energy consumption comes from solar panels on the roof.

The Oaks is well connected to the public transport network, providing customers with a range of sustainable transport alternatives.

The Oaks has particularly water efficient fittings, including waterless urinals, low flow taps and appliances.

Project Team

Owner: Macerich

Management Team: RealFoundations

Assessor Organization: Healthy Buildings

Macerich, a leading owner, operator and developer of major retail real estate, earned the #1 GRESB ranking in the North America Retail Sector in 2016 for the second consecutive year. As a market leader, Macerich is committed to doing more to reduce energy, waste and water in its properties. As such, Macerich aspires to certify its malls with a green building rating and enrolled The Oaks as one of the first assets registered with BREEAM USA.

Macerich Corporate Sustainability Facts:

- 72 energy efficient projects save 30 million KWhs of energy annually, and 205 million kWhs since 2008
- Solar installations across 10 properties providing over 10MW of grid relief
- 350,730 metric tons of greenhouse gas emissions reduced in the past 6 years
- 17,000 tons of waste recycled in 2015 (31% of total waste)
- 98.3 million gallons of water saved in 2015

Why certify with BREEAM USA In-Use?

The BREEAM USA In-Use standard for existing buildings fits with Macerich's "Innovating to Zero" approach to sustainability, with a long-term goal to generate zero energy, waste and near zero emissions in addition to zero water, waste and zero landfill impact within its portfolio of over 50 shopping malls.

While other US-based assessment tools do not offer in place shopping center ratings, the BREEAM In-Use program was robust and flexible enough to fit The Oaks' parameters while also providing Macerich with immediate operational efficiencies that fully support its corporate goals. The BREEAM In-Use rating will help Macerich monitor and improve operating efficiency to maintain and improve its GRESB score for the North American retail sector and provide benchmarking across its whole portfolio in real-time.

The BREEAM In-Use Assessment

Part 1 (Asset Management)

Rating: Very Good

Star Rating: 4 Stars

Part 2 (Building Management)

Rating: Good

Star Rating: 3 Stars

"We at Healthy Buildings are delighted to support Macerich and BREEAM USA as they pioneer a practical and cost-effective sustainability program in the USA. It is often said that the leaders have to be first or best, or both. Between BREEAM and Macerich we have a powerful combination of experience and innovation. Our team looks forward to working with both organizations in the months and years to come."

Simon Turner, CEO, Healthy Buildings

The Project



Located in Thousand Oaks, California, The Oaks is a 1.3 million square foot shopping mall chosen by Macerich to be the first to undertake the BREEAM In-Use program. The Oaks was originally built in 1978 with renovations completed in 1993 and again in 2007. Macerich chose to pilot the BREEAM In-Use program on The Oaks because the efficiency upgrades in place are representative of others across its portfolio and the proximity to its corporate office would allow significant interaction between Healthy Buildings, RealFoundations and Macerich teams.

- In 2014, 6,000 solar panels were installed producing 1,652 kW of power
- New LED lighting with control protocols in use to minimize energy consumption and lower carbon footprint without any impact on shopping experience
- Upgraded HVAC system that minimizes energy usage
- More than 500 tons of mixed recycled materials every year
- Integrated thermal controls in common areas and mall offices regulated to save energy and still provide a comfortable working environment

BREEAM Drives Success by:

- Setting benchmarks that exceed regulations and local practices
- Recognizing actions and initiatives that are innovative and improve on BREEAM benchmarks and certifications
- Gathering industry feedback to ensure its continuing relevance to the market
- Promoting high levels of performance and best practice through published case studies and the BREEAM annual awards event
- Monitoring and carrying out research to further knowledge, strengthen industry tools, improve guidance and increase BREEAM's value

Value of BREEAM

Created in 1990 by BRE (the Building Research Establishment), BREEAM was the first green building certification program and today is recognized as the world's leading sustainability assessment method with over 2,250,000 assets registered in 81 countries and over 560,000 certificates issued.

BREEAM In-Use is an online environmental assessment methodology for existing buildings that allows for an independent assessment of asset performance, building management, providing a journey to understanding and improving the performance of a building or portfolio. Certification is achieved through independent, third-party assessment conducted on-site.

BREEAM In-Use is developed using peer-reviewed research and science, covering nine categories: Energy, Health & Well-being, Transport, Waste, Water, Land Use & Ecology, Materials, Management and Pollution



BRE Global

BRE Global Limited (incorporating BREEAM & LPCB) is an independent third party approvals body offering certification of fire, security and sustainability products and services to an international market. BRE Global's product testing and approvals are carried out by internationally recognised experts in renowned testing laboratories. BRE Global Limited is a custodian of a number of world leading brands including:

- BREEAM is the leading environmental method for buildings, sets the standard for best practice in sustainable design and has become the de-facto measure of a building's environmental performance
- LPCB for the approval of fire and security products and services, listed in the RedBookLive

BRE Global is part of the BRE Group, the trading subsidiary of the BRE Trust, a registered research and education charity.

BREEAM

Over the last 25 years BREEAM has evolved and grown to reflect advances in science, technology, policy and business. BREEAM is the world's leading sustainability assessment method for buildings and communities, with more than 560,000 certificates issued and a global reach encompassing 81 countries.

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Getting started

Visit our website www.breeam.com/usa to learn more about the processes and fees involved. Register your project on <http://breeaminuse.breeam.org> to start measuring your building's performance and start working towards certification. If you have any further questions, give us a call on: +1 (415) 747-5152 or send us an email at: breeaminuse@bregroup.com

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