

Historic Hotel Andaluz: Conserving Water Resources and Seeking LEED Gold Certification

*Hotel Andaluz:
conserving water for the
desert Southwest with
high efficiency toilets*

Case Study Highlights

Company: Hotel Andaluz
Albuquerque, New Mexico

Requirements:

- Water-conserving toilets
- Attractive design
- HETs contributing points to LEED Gold certification

Solution: 118 Caroma toilets consisting of Sydney Smart 270 Elongated and Caravelle 270 Easy Height Elongated HETs

Benefits:

- Water use reduced by more than 45% annually
- Offset connector made it easy to adjust to the variations in rough-in dimensions
- Three points towards goal of LEED Gold certification



Following a \$30 million renovation, the historic La Posada de Albuquerque Hotel has been transformed into the pre-eminent boutique hotel in the Southwest. Hotel Andaluz in Albuquerque, New Mexico embraces you with redefined hospitality, historic significance, environmentally responsible design, luxurious amenities, and a Cultural Center that celebrates the arts and culture of New Mexico.

As with many areas in the desert Southwest, Albuquerque faces water shortages and potential restrictions throughout the year. The Albuquerque Bernalillo Water Utility Authority has made great strides over recent years and plans into the future to reduce the overall per capita usage to 150 gallons per day by 2012. One method

to reduce water usage is through their toilet rebate program, offering \$200 rebates for both commercial and residential installations by switching a high flow toilet to a high efficiency toilet (HET). There is also a \$50 per toilet rebate for conversions from low flow toilets to HETs for both residential and commercial installations (current as of January 2010). This applies to new and existing installations.

As part of a \$30 million renovation of the Hotel Andaluz, one goal is LEED Gold certification, potentially the first for a hotel listed on the National Register of Historic Places. Goodman Realty Group chose Caroma to furnish 118 high efficiency toilets for the historic hotel guest rooms because of water savings and toilet design.

Caroma high efficiency toilets

Goodman Realty Group chose the Sydney Smart 270 Elongated and Caravelle 270 Easy Height Elongated HETs to replace three gallon toilets previously installed. Both Caroma toilets (and all floor-mount toilets by Caroma) have been WaterSense labeled. WaterSense is a partnership program sponsored by the

“Compared to other toilets that have a small trapway, the Caroma HETs have basically eliminated the need for maintenance to fix toilet issues...keeping the maintenance costs down.”

*Darin Sand
LEED AP
Goodman Realty Group*

U.S. Environmental Protection Agency and mandates that toilets use 20 percent less water than the current federal standard.

The Sydney Smart HETs were a great addition to the redesigned bathrooms. The Sydney Smart range is a dual flush toilet featuring two buttons. The full flush button uses 1.28 gallons of water per flush for solid waste, and the half flush button uses just 0.8 gallons per flush for liquid and paper waste. Assuming a 1:4 full/half flush ratio, it averages just 0.90 gallons per flush! The Caravelle HETs average just 0.96 gallons per flush, using 1.6 gallons for a full flush and 0.8 gallons for a half flush.

All Caroma toilets have a large trapway, nearly double the industry average, virtually eliminating the possibility of blockages and overflows from normal use. The 270 series of toilet bowls also have an adjustable rough-in of 10"-12" and an included offset connector to allow for rough-in variances.



Historic bathrooms restored in the Hotel Andaluz

The results

Because the Hotel Andaluz has also applied for LEED Gold certification, water savings were critical. "When the hotel was bought by Goodman Realty Group in 2005, there were 3 gallon per flush toilets installed," explains Darin Sand, LEED AP for Goodman Realty Group. "We expect to save at least 45% of indoor water usage by using Caroma toilets. At a minimum, we'd expect more than 100,000 gallons of water saved each year assuming just 50% occupancy and four flushes per room per day. Additionally, using these toilets is a key component in helping us receive three points towards LEED certification."

According to Sand, One of the main reasons Caroma toilets were chosen was because of the adjustable rough-in. "This hotel was originally opened in 1939, and during that time, rough-ins were usually 10". However, when we were remodeling the bathrooms, we discovered that the rough-ins were 10", 11", 12", or somewhere in-between. With the offset connector supplied with the Caroma toilets we chose, we could easily handle any of these variations."

Since the hotel has reopened, there have been no clogs or blockages. "Compared to other toilets that have a small trapway, the Caroma HETs have basically eliminated the need for maintenance to fix toilet issues," explains Sand. "That not only helps keep the maintenance costs down, but it also eliminated the possibility that guests will be frustrated or embarrassed by toilet issues."



Hotel Andaluz beautiful lobby

Other environmentally-friendly features

Hotel Andaluz also has several other environmentally-friendly features. A few of these include an integrated building energy management system to control the heating/cooling and lighting when the room is unoccupied, solar heated hot water system providing 60% of the heating required for domestic hot water, a 7,000 gallon rainwater capture tank to reduce storm water runoff and irrigate outdoor and indoor landscaping, interior finishes incorporating natural, recycled, and low volatile organic compound (VOC) products, green cleaning supplies, recycled paper used in all printed hotel collateral, and many others.

"This hotel was originally opened in 1939, and...rough-ins were usually 10". However...we discovered (they) were 10", 11", 12", or somewhere in-between. With the offset connector supplied with the Caroma toilets we chose, we could easily handle any of these variations."

Darin Sand

Sydney Smart and Caravelle

Sydney Smart 270 Elongated



Contemporary style, advanced performance

- High efficiency toilet (HET) - 1.28/0.8 gallons (4.8/3 litres) per flush
- Two piece, two button dual flush toilet
- Elongated bowl
- Large fully concealed trapway
- Virtually unblockable
- 10-12" adjustable rough-in
- WaterSense labeled

Dimensions

31 1/4"L x 18 3/4"W x 31 7/8"H (bowl height = 15")

Sydney 270 also available in Round Front Plus, Easy Height Round Front Plus, and Easy Height Elongated.

Caravelle 270 Easy Height Elongated



Slimline design, European styling

- High efficiency toilet (HET) - 1.6/0.8 gallons (6/3 litres) per flush
- Two piece, two button dual flush toilet
- 17" high elongated bowl
- Large fully concealed trapway
- Virtually unblockable
- 10-12" adjustable rough-in
- WaterSense labeled

Dimensions

31 1/4"L x 14 3/8"W x 34 3/4"H (bowl height = 17")

Caravelle 270 also available in Round Front Plus, Easy Height Round Front Plus, and Elongated.

Photo shown with Caravelle 270 Easy Height Round Front Plus bowl



Additional information available

Caroma

Phone: +1 800 605 4218

Fax: +1 503 681 2150

Email: info@caromausa.com

Website: www.caromausa.com