For Christ Cathedral, heatdeflecting quatrefoils prove to be a blessing

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If you confess that you have never before come across the word "quatrefoil," you are to be forgiven.

Yet at Christ Cathedral in Garden Grove, quatrefoils have become a common topic of conversation. The unusual contraptions are designed to improve temperature control and acoustics inside – while on the outside, transforming the glass tower into a glittering nightlight.

On Saturday evening, Oct. 13, Orange County Catholics marked the progress of their new cathedral with a ceremony celebrating the "First Lighting and Blessing of the Quatrefoils."

So, what are these things called quatrefoils?

In this usage, they are window shades made of plastic and fabric. Each and every one of the 12,000 glass panes, which create what was once called the Crystal Cathedral, is now covered with a quatrefoil. And each quatrefoil is composed of four triangles, permanently situated at varying angles.

It's been an enormous undertaking that has required 1 million pounds of scaffolding, said Tony Jennison, vice president of philanthropy for Orange Catholic Foundation, which raises money for the building's renovation.

The entire \$72.3 million remodel is scheduled for completion in time for the cathedral's dedication on July 17, 2019.

Saturday night's program began outdoors with the flip of a switch, illuminating the 12-story-tall tower "like a box of stars," Jennison said.

The lights had been tested previously, he said, just not all at once.

Bishop Kevin Vann led the blessing. Then the 500 attendees took a guided tour of the construction site inside.

Now that the \$6 million worth of quatrefoils are in place, attention can be focused on other updates – such as the marble flooring and oak pews.

Interior lighting looks pretty much as it did before. But at sundown, drivers-by may notice that the exterior building seems to twinkle. That's because the quatrefoils let out varying amounts of light.

The triangular pieces hovering over each pane open at different degrees, from zero to 45, based on a study to determine where the sun beams in.

"You could see people fanning themselves and even wearing sunglasses on 'Hour of Power," Jennison said, referring to the Rev. Robert H. Schuller's television show filmed inside his Crystal Cathedral. "The quatrefoils minimize heat and glare."

They serve other functions, as well – among them, superior acoustics for the 16,000piece pipe organ acquired from the Crystal Cathedral.

Also, the screens offer better visuals, Jennison said: "Before, you could see the parking lot from your seat."

The Diocese of Orange purchased the famous building for \$57.5 million in 2012, two years after Crystal Cathedral Ministries filed for bankruptcy. It began its renovation project in the summer of 2017 with seismic retrofitting, installation of air conditioning, fountain repairs and other improvements.

Jennison said the diocese does not know of any other building in the country designed with individually angled quatrefoils – an elaborate system conceived by architectural firm Johnson Fain.

The Crystal Cathedral debuted as a unique landmark in 1980. Thirty-eight years later, Christ Cathedral boasts its own innovation – curiosities called quatrefoils. Tags: architecture, Christ Cathedral, religion, Top Stories OCR

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After majoring in journalism at the University of Texas, Susan Christian Goulding got her start as a copy editor and reporter at the (late, great) Los Angeles Herald Examiner. She then worked at the (late, great) Santa Monica Outlook and the Daily Breeze as a features editor, writer and columnist. She moved to the Orange County bureau of the Los Angeles Times as a features and business writer. After that five-year stint, she worked as a correspondent for People magazine and a regular freelancer for Readers Digest while raising her two kids, Erin and Matt. During this time, she also wrote a weekly column for the Daily Breeze. Next, she gave up all possibility of free time and earned a teaching credential and masters at UCI. She taught English for four often rewarding and always challenging years in Compton, then at LMU and El Camino College. Missing journalism, Goulding circled back to her original career last year, joining the Orange County Register as a reporter. She also enjeys hers return to column with the second Home magazine.