The Challenge: Create a shading system for a historic space with dramatic floor-to-ceiling arched palladium windows.

Ambiance, atmosphere
In the heart of downtown Bethlehem, Pennsylvania, is the Historic Hotel Bethlehem, a stately brick structure that has been serving visitors to Pennsylvania’s Lehigh Valley since 1922. Listed on the National Trust for Historic Preservation as a Historic Hotel of America, every decision made about the building’s appearance has a special significance.

When guests enter the hotel, they see the Terrace Room just off the main lobby, “One of the most beautiful interior spaces in Bethlehem,” says the hotel’s director of sales and marketing, Patrick Ryan. The space features dramatic floor-to-ceiling palladium windows that provide abundant natural light, 30-foot high ceilings and original Moravian tiles, crafted by the Lehigh Valley’s first European settlers. For its elegance and timeless ambience, the room is often chosen as the site for major press announcements. And with capacity for about 150 people and grand views of the...
elegance and timeless ambiance

Lehigh Valley, it’s also a popular selection for wedding receptions and corporate events.

But with the increased use of A/V equipment and projection screens in the space, a major challenge was beginning to develop for the Terrace Room. The beautiful palladium windows that are such a selling point for the space also made watching any video presentation virtually impossible during the day. To deal with the issue, the hotel would mount temporary pipe and drape to block out the light. That solved the glare problem, but detracted somewhat from the grandeur of the room. Worse, there was a three-day waiting period between order and installation. When a client booked the room for one day and asked for A/V equipment, the hotel was forced to devote three days to the event. Two days’ worth of potential revenue was being wasted—unacceptable for a profit center like the Terrace Room.

Patrick Ryan got in touch with Lutron Electronics to develop a solution to the Terrace Room’s problem. Lutron’s Customer Engineer, Joe Seneca, arrived to oversee the Hotel Bethlehem project. Seneca saw that the Terrace Room’s five windows were 113.5 inches (2.9 meters) wide by 111 inches (2.8 meters) tall. Arches topped each window. Working with West Side Electrical Service in Bethlehem for licensed electrical work, Seneca and Ryan decided five Sivoia QED™ shades would suit the requirements of the project.

Sivoia QED shades, introduced in 2003, are engineered to provide elegant and precise movement through enhanced digital technology. The Sivoia QED family includes roller shades, Roman shades, and drapery track systems. Sivoia QED shades feature a low-voltage electronic drive concealed within the roller tube or as an external drive on the drapery track. The system offers near-silent operation (44dbA at three feet (1 meter)) and intelligent control through seeTouch™ keypads, IR (infrared) remotes or integration with Lutron lighting control systems. The system can be programmed with preset positions for the most effective control of daylight in a space.

Because the hotel is a historic building—and because it is in a historic section of the city—great care went into the selection of the fabric and color of the shades. After all, they would be seen clearly from outside the hotel. The hotel selected Lutron’s PVC-free Blackout Premiere with flocque backing, a fabric with a subtle, sandy hue called Mississippi, which blends with the stately design of the space. The shades are white on the exterior-facing side, which saves energy by reflecting sunlight back out of the window, reducing solar heat build-up.
Because it is a blackout fabric, no light can pass through. To ensure that no light at all enters the room when the shades are down, the fabric runs between side channels and the exposed, extruded-aluminum hembar comes to rest behind a sill angle. The rollers themselves are housed within a fascia with a top-back cover that is mounted on the mullion between the window and the windowed arch above it.

The arches presented a unique challenge to Seneca and his team. To block the light entering the space through the arches, special wooden frames were designed and fitted with the shade fabric. Bachman Drapery Studios in Tylersport, Pennsylvania, designed the arch fittings and concealed the stitching with decorative gimping.

The shades were wired back to an SVQ-10-PNL power panel, and are controlled by a five-button seeTouch™ standalone keypad.

The result, says Ryan, has his customers raving. For any event requiring use of the shades, hotel employees or the guests themselves can select one of four preset levels, and the shades drop in perfect, silent unison. No more pipe and drape; no more lost revenue. In fact, the installation has allowed Ryan to flip the space very quickly, allowing for multiple engagements in the Terrace Room each day. “Dealing with pipe and drape wasn’t just difficult for us,” says Ryan. “It was difficult for our customers. So to say our customers love these shades—that’s an understatement.”

The fabric stats:
The shades in the Hotel Bethlehem are:
Lutron Blackout Premiere - Mississippi
42% fiberglass, 58% acrylic
Flocked backing - white
Ts: 0, Rs: 69, As: 31, Tv: 0

Bill of Materials:
5 Sivoia QED™ roller 100 shades
1 SVQ-10-PNL power panel
1 SVQ-5WRL seeTouch™ 5-button wall control
5 pairs of side channels
5 fascias with top-back cover
Client:
Historic Hotel Bethlehem
Bethlehem, Pennsylvania

Equipment provider:
Lutron Electronics Co., Inc.
Coopersburg, Pennsylvania

Electrical contractor:
West Side Electrical Service
Bethlehem, Pennsylvania

Drapery designer:
Bachman Drapery Studios
Tylersport, Pennsylvania