

A Light Touch: Healing Design at the Mother Baby Center



Project: The Mother Baby Center at Abbott Northwestern Hospital and Children's Hospitals & Clinics

Location: Minneapolis, MN

Year of Installation: 2013

Product Used: LightPlane Panels, ViviGraphix Spectra glass, ViviChrome Chromis glass, CabForms 1000 Elevator Interiors, LEVELe-103 Elevator Interiors, Stainless Steel and Bonded Quartz.

Architect: HDR Architecture, Inc.

General Contractor: Knutson Construction

Photographer: Kurt Johnson Photography

The Mother Baby Center at Abbott Northwestern Hospital and Children's Hospitals & Clinics is a beautiful new birth center that merges the Labor, Delivery and Newborn nurseries from Abbott Northwestern Hospital with the Neonatal Intensive Care Unit, Special Care Nursery and Infant Care Center from the neighboring Children's Hospitals and Clinics of Minnesota.

This unique collaborative effort brought together the best of both hospitals, blending two different delivery care models with two distinct brands to form one holistic, centralized center—a \$50 million facility especially created for women with high-risk pregnancies and babies in need of special care.

Designed by HDR Architecture, Inc., the 96,000 square-foot Mother Baby Center offers a dedicated entrance for expectant moms and families, and is focused on keeping mothers and infants together during their care in a healing, welcoming and state-of-the-art space.

The neighboring facilities at Abbott and Children's have long had a cooperative relationship and have been physically linked by a tunnel, but this project marks their first true joint venture. Previously, when babies were born ill or prematurely at Abbott, they were whisked away from their mothers to receive care at Children's Neonatal Intensive Care Unit across the street. The

Mother Baby Center will allow both mother and baby to be in the same facility, easing some stress on new families.

The four-story building houses 13 spacious labor and delivery rooms, three operating rooms, 44 post-partum rooms, and a 24-room special care nursery along with two newborn nurseries, a six-room maternal assessment center, family sleep rooms and more.



LightPlane Panels in ViviGraphix Spectra glass with custom graphic interlayer and Standard finish



LightPlane Panels in ViviGraphix Spectra glass with custom graphic interlayer and Standard finish

Creating a Nurturing Space

HDR immediately recognized the need to make the Mother Baby Center a healing environment and extensively researched how design can impact health and wellness. The exterior of the building is distinguished with bright bands of color per floor and a unique, shifting design. While those themes are carried throughout the interior, the designers felt that additional items were needed to create the right atmosphere.

They were also tasked with taking what can be a very intimidating and stressful setting and making it a warm, nurturing environment for both mother and child.

Aneetha McLellan, associate vice president & director of interior architecture at HDR, said, "Our design challenge was to come up with a unique, iconic design element that would make the interior stand out on the Children's Hospital campus."

"We were immediately drawn to nature, as evidence-based design has shown that nature is a healing element. This naturally led us

towards botanicals; flowers have a feminine, organic feel to them that inherently seemed to fall into place."

HDR researched various types of flowers and colors and what they mean to different spiritualities and cultures, to ensure that the varieties they chose would have only have positive, comforting connotations for patients and visitors.

Once the floral theme was approved, featuring blue hyacinths, yellow and raspberry spider mums, and orange chrysanthemums, they had to plan how to best integrate the theme throughout the center, not only aesthetically, but practically. One of the solutions was to have large-scale floral photos displayed in illuminated panels.

McLellan said, "We wanted something that stood out on each corridor to help both patients and visitors find their way around. Initially, we thought of light boxes which would have to be physically built, but we had concerns about the wiring involved and the even distribution of light, as well as time and cost."

"We needed a pronounced, vivid, even spray of illumination. We thought lights would help stimulate staff and help to provide a cheery atmosphere in a place that is not always a happy place for patients."

The LightPlane Solution

It was right around this time that Mike Konieczny, Forms+Surfaces Territory Manager, met with HDR to discuss elevator interiors, and happened to show them a sample of our LightPlane Panels.

Julie Robertson, interior designer with HDR, said, "It was literally perfect timing; we had just started to detail the use of light panel images with colors. When everyone saw the sample, it was a no-brainer since it spared us from having to custom design a lighted case piece. Everyone immediately jumped on board with LightPlane."

McLellan agreed and said, "Using the LightPlane product saved us a drastic amount of time and work compared to building our own light wells."



LightPlane Panels in ViviChrome Chromis glass with custom color interlayer and Standard finish

In addition to the time and cost savings, other key benefits included the even light distribution that LightPlane offers with no "hot spots" or fading, its slim profile, complete design flexibility, and ease of maintenance.

McLellan added, "We liked the fact that LightPlane was incorporated as part of the structure instead of something applied afterwards. It is part of the bones of the architecture; part of an architectural solution as opposed to something framed and hung up on a wall. When a product is part of the solution it is solid within the space; it's not easy to value-engineer out of the project. It's not an added amenity."

The LightPlane Panels serve a functional purpose by helping to light the hallways, and an aesthetic purpose by serving as artwork (eliminating the need to buy additional art), plus a directional purpose by serving as a wayfinding system.

McLellan said, "The LightPlane Panels with the large scale flowers were the key element that set the stage for everything that followed."

HDR specified 37 LightPlane Panels, all 81" high and ranging in width from 12" to 48". Some of the illuminated floral panels are staggered along curved corridors in the center, so that

when viewed from one end, the panels seem to merge into one spectacular floral image.

LightPlane in Bloom

HDR partnered with Kurt Johnson Photography to provide the vivid, large-scale floral photos to use in the LightPlane Panels.

Johnson was excited about the project and said, "In the healthcare arena, natural botanical photo realism has been shown to have a positive effect on patients. There is quantifiable research that natural images are proven to reduce pain, alleviate stress and speed recovery."

Johnson typically shoots with a shallow depth of field, where part of the close-up is in extreme focus and the background is diffused. This shoot needed a bigger depth of field than usual since the photos would be so large and backlit.

Johnson, who is an architectural photographer by training, says he's always been drawn towards doing close-ups of natural elements. "That's where my interest lies. I think it really pulls in the viewer."

Except for a few shots that had to be taken during the winter, most



LightPlane Panels in ViviGraphix Spectra glass with custom graphic interlayer and Standard finish



LightPlane Panel in ViviGraphix Spectra glass with custom graphic interlayer and standard finish

of the flowers were shot outdoors, in natural light, from Carolyn Johnson's own abundant garden.

The photos were taken with a Canon 23-megapixel camera and had to be precisely sized, cropped, and saved at a very high resolution, via special software to produce the final image files.

Each image then became the graphic interlayer between two transparent lites of glass that comprises Forms+Surfaces ViviGraphix Spectra glass, which was used within the LightPlane Panels.

Johnson said, "The LightPlane Panel is a whole different way of displaying artwork. It makes two-dimensional images seem three-dimensional; it adds depth.

"The technology that was brought to the table had a big impact," he said. "I couldn't have imagined a better outcome."

An Enlightened Approach

Now, when patients and visitors come off the elevator, they are welcomed to each floor with a specific color and flower theme. Additionally, each floor is broken into specific "neighborhoods" with its own color and flower. This helps patients find their way back to their rooms and establishes a little sense of home.

McLellan said, "These floral panels break up long, daunting hallways and make it more like walking through a garden. You want to see what's blooming around the corner. It tells a story in an artful way; it's soft and very welcoming."

Robertson agreed, adding, "It makes you want to walk further and explore; this is especially good for a mother in labor who needs to keep moving and walking around."

Additionally, patients used to complain about the bright hospital corridors at night. Now the LightPlane Panels can be dimmed while still providing direction.

McLellan said, "Scale and use of light are two factors changing the market. The use of artistically designed solutions that can provide illumination and serve dual functions definitely impacts the effectiveness of a space."

"People think that we had an astronomical interior design budget for this job, and that's good," she said. "I want them to think that. We actually had a very tight budget. In a way, this is the ultimate fake-out. We delivered a high design result with very little work."

Elevators Also Lift Spirits

In addition to the LightPlane Panels, Forms+Surfaces also provided elevator interiors for the facility.

Robertson said that her office doesn't ordinarily work on elevator interior projects, since typically there is not a lot of design involved with these environments. But in this case, it was important to create interiors that were not only durable and functional, but also welcoming and elegant like the rest of the space.

For the public elevators, HDR selected Forms+Surfaces LEVELe-103 Elevator Interiors, using White Bonded Quartz in Kalahari pattern and stainless steel in our High-Durability Seastone finish.



LEVELe-103 Elevator Interior with panels in Stainless Steel with Seastone finish, and custom laminate; ceiling in Stainless Steel with Seastone finish



CabForms 1000-A Elevator Interior in Stainless Steel with Seastone finish; ceiling in Stainless Steel with Seastone finish; Round handrails used at handrail and bumper heights

Robertson said, "For this project, we were drawn towards the Bonded Quartz pattern since it was consistent with other wavy patterns we used in the hospital, such as the ribbons we have on the ceiling."

The patient elevators also feature LEVELe-103 Elevator Interiors that incorporate a warm custom wood laminate in the accent panels along with our Seastone stainless steel. The more utilitarian staff elevators employ our CabForms 1000-A interiors, done entirely in Seastone stainless steel.

From the moment a patient, visitor or staff member steps into an elevator, to when they emerge at their specific floor, they are treated to a seamless and soothing design experience. Everything in the new center works together for maximum impact.



LEVELe-103 Elevator Interiors with panels in Stainless Steel with Seastone finish, and Bonded Quartz, White, with Kalahari pattern

A New Center is Born

According to McLellan, the Mother Baby Center had the goal of being full to capacity within five years, but two days after its opening, they were already turning people away.

"Patients do judge a book by its cover," she said. "They feel that in a beautifully designed space their care will be better."

Mike Konieczny agreed, saying, "Pregnant women now shop around to find the ideal setting to have their babies. The new Mother Baby Center is like a luxury hotel; it's beautiful and designed for comfort."

Everyone involved in this collaborative effort seems to agree that this project brought out the best in them, coming together to provide a special place of healing for newborn babies and their mothers.

Johnson said, "This was one of the most fulfilling projects I've ever done. It was very humbling."

We agree. Forms+Surfaces was thrilled to take part in this wonderful project, and seeing our LightPlane Panels put to such good use. If you are interested in learning more about our LightPlane Panels or any of our products, please visit us at www.forms-surfaces.com.



LightPlane Panels in ViviGraphix Spectra glass with custom graphic interlayer and standard finish

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