



Healing Harmony ... people, place and planet



St. Mary's Hospital
MEDICAL CENTER

Environmental Stewardship:
Demonstrating Reverence for the Earth



An Affiliate of Hospital Sisters Health System



About the glass panels:

The glass artwork pictured on the cover is the focal point of the lobby at St. Mary's Hospital in Green Bay, WI. The painted glass panels are the work of world-known Massimo Cruciani of Assisi, Italy. The panels are designed to fill our hearts with colorful images of Assisi which offer fragile, simple beauty within a richness of color.

About the artist:

Massimo Cruciani, a professional photographer early in his career, evolved into a painter of acrylic on glass during his more than thirty-year career as an artist. He brings together "old world" and "new world" in a mastery that gives us an appreciation for the perfection of the natural world amid progress of new world technology and healing.

In keeping with the Hospital Sisters Health System architectural style that is reminiscent of Italy and the time of St. Francis and St. Clare, these panels symbolize light and hope for all who enter St. Mary's Hospital.

We witness our Franciscan spirituality by reverencing all creation, living and promoting peace and justice and respecting the dignity of all people.

The Hospital Sisters began the legacy of Reverence for the Earth with their simple request for the hospital to implement practices which respect not only people but the environment we live in. The environmental journey at St. Mary's Hospital began more than a quarter century ago with multiple efforts including our first large success, a stormwater management project that today continues to recycle polluted stormwater runoff from our campus into a unique filtering system that restores it to 99 percent purity after filtering. This customized system has been studied, revised and used worldwide.



St. Mary's Recognized Nationally

St. Mary's Hospital has been a leader and an early member of Practice Greenhealth, the nation's leading health care networking organization, committed to sustainable, eco-friendly practices to improve the health of patients, staff and the environment. The hospital has received multiple awards for its significant and enduring impact.

For the third consecutive year, St. Mary's Hospital is one of approximately 30 hospitals in North America that has earned and maintained the elite Practice Greenhealth

Environmental Leadership Circle Award. To earn this achievement strict criteria were met demonstrating environmental sustainability through energy efficiency, recycle rates, becoming mercury-free and innovative campus practices such as the stormwater filtering program and the installation of the largest living roof in Wisconsin.



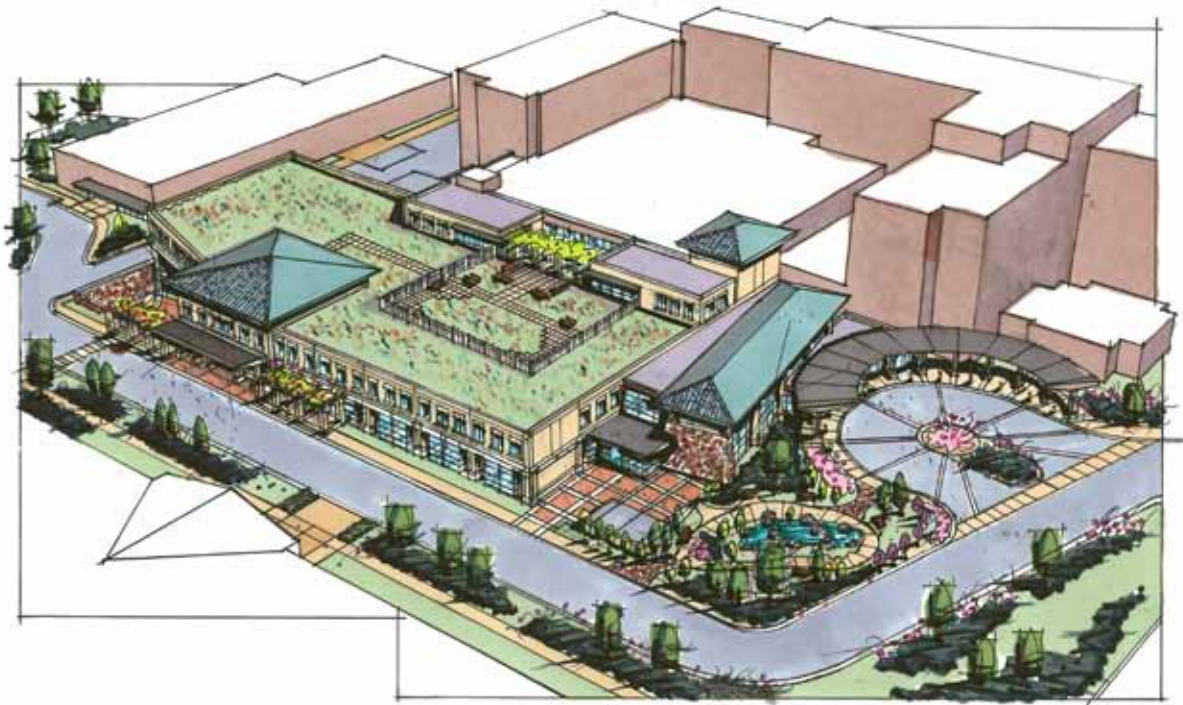
Awards and Recognitions

- Presentation of St. Mary's efforts at the Catholic Health Association National Assembly, New Orleans 2009
- Member – Practice Greenhealth Leadership Circle
- 2009 Practice Greenhealth, Environmental Leadership Award
- 2008 Cover story of environmental efforts published in national journal, *Frontiers of Health Services Management* (American College of Health Care Executives)
- 2008 Practice Green Health, Environmental Leadership Award
- 2007 Practice Green Health, Environmental Leadership Award
- 2006 Hospitals for a Healthy Environment, Making Medicine Mercury-Free Award
- 2006 Focus on Energy Award
- 2002 Brown County Conservation Alliance Award
- 1999 WI Engineering Excellence Award
- 1999 WI Business Friend of the Environment Award

We are stewards of the ministry entrusted to us, as well as the resources needed to provide quality health care services to the communities we serve.

-Hospital Sisters Health System mission statement

St. Mary's new 117,000 square foot cancer center is another example of ongoing green initiatives. In November 2008, the project began with demolition of a former clinic on the campus which resulted in an 82 percent recycle rate for materials such as asphalt, metals, concrete and brick. During the construction of the cancer center on St. Mary's campus, the recycling rate of all materials was 88 percent with eleven separate waste streams being managed (e.g. packing materials, wood, dry wall, metal, plastic, brick.)



"Start by doing what's necessary; then do what's possible; and suddenly you are doing the impossible." - St. Francis of Assisi



A Healthy Building Promotes Healing

The cancer center expansion, the largest environmental effort in St. Mary's history, includes 22,000 square feet of rooftop gardens as well as 2,400 square feet of ground level healing gardens that provide places of serenity and contemplation for patients and their families. There are water features, heated walking paths and outdoor seating to encourage people to pause for reflection.

The center was built using Leadership in Energy and Environmental Design (LEED) standards. Other energy conserving features include day lighting, rainwater collection and irrigation (cisterns collect 90 percent of rainwater), polyvinyl chloride (PVC)-free materials and the use of natural finishes such as stone, wood, slate and limestone.

Environmentally sustainable initiatives for construction of the cancer center include:

- Implemented a 22,000 square foot "living green roof" with walking paths
- Tiered ground level healing gardens
- Building to Leadership in Energy and Environmental Design (LEED) standards
- Daylighting
- Bio-filtration of stormwater
- Rainwater collection and irrigation (cisterns that collect 90 percent of rainwater)
- Polyvinyl chloride (PVC)-free/all natural finishes, stone, wood, slate, limestone
- Energy Star heating and cooling systems
- Heat reclamation – use of "waste heat"
- Water-saver technology
- Complete construction site recycling

Planting Hope – Why a Living Roof Was Built

“The concept of a living roof has great implication for the hope that cancer patients and their families gain as they come here for healing.”

– Susan Bellin, Chair of Friends of St. Mary’s Hospital Board

Aesthetic Benefits

- Green roofs look better than asphalt or tar.
- Natural views create more productive, healthy, happy, creative, relaxed people.
- Green roofs expand the usefulness of buildings.

Environmental Benefits

Urban Heat Island Mitigation

- The urban heat island effect is the temperature difference between urban areas and their rural surroundings.
- Green roof vegetation helps by cooling the air, slowing air movement and acting as a substrate for pollution to settle out and detoxify.
- Roof temperatures are significantly reduced during the summer months.



Noise Reduction

- Plants, moisture and air trapped in the soil are great acoustic insulators.
- Green roofs can reduce exterior sound by up to 40 decibels, creating a more peaceful interior environment.

Fire Prevention

- Succulent green roof plants help reduce the risk of fire.

Water Conservation/Reduction of Stormwater Runoff

- Soil in the green roof systems acts like a sponge and absorbs excess rainwater.

FACTS

About the Living Roof:

- The green roof covers approximately 22,000 square feet. It is the largest in Wisconsin and north of Chicago.
- 16,000 square feet are “green” while 6,000 square feet are terraced, walking paths and seating.
- The primary plants are Sedum and Alum species, which perform well in a Zone 4 climate. Additional zone 4 species will be added over time.
- Each year the garden will come to life in late March to early April.
- Throughout spring, summer and fall, the colors of yellow, white, burgundy and pink will emerge, with many shades of green as a backdrop.
- An additional 2,400 square feet of healing gardens at ground level incorporate significant water features and terraced areas for the benefit of cancer patients.
- Both rooftop and ground level gardens create an ideal habitat for birds and butterflies, adding to the visual experience.
- The living roof has a rainwater device (two cisterns) to collect 99 percent of all rainwater. Not only does it self-irrigate the rooftop plants, but rainwater is stored and used to irrigate the other gardens on campus.

“If we take care of the environmental issues before they happen, we embrace the values of our healing ministry and make this a place of health, healing and wellness.” – Corrine Vercauteren, Director Environmental Services



Atrium and Ground Level Healing Gardens

From the cancer center windows, patients who receive treatment look out onto a garden of hope on the ground level. A tiered garden of perennials and annuals draws in nature, birds and butterflies as a symbol of hope and healing. This focal point offers peace and calm to those receiving treatment.

The front entrance from Shawano Avenue has a soothing water feature in the circular drive up. Inside the atrium, the glassed-in area allows natural light to surround those who enter and come for treatment.

The west entrance, along with the atrium entrance, has Italianate features which include the roof line,

piazza-style brick entry near the atrium and gardens reminiscent of the area where St. Francis and St. Clare provided their healing ministries. The lobby glass artwork of Massimo Cruciani, Assisi, Italy, accentuates these features as well, with light, color and hope.

The use of natural wood and finishes of limestone and slate bring the earth inside, enhancing the warmth and spiritual atmosphere.

The environmentally-sustainable cancer center at St. Mary's Hospital offers state-of-the-art-HOPE; the best in cancer treatment, technology and compassionate care, enhanced by beautiful greenery to inspire and help heal our patients.

Other environmentally sustainable initiatives of St. Mary's include:

- Stormwater management project
- Mercury-free facility
- Community fever thermometer exchange - 800 households participated
- Chemical rounding team – 4,700 pounds of un-necessary chemicals removed from campus to date
- Going green in-service – education with house-wide attendance
- Pharmacy waste management program in place
- Sharps management program in place
- Surgery transposal system – eliminates 4,200 suction canisters from waste stream annually
- 41 percent recycle/re-use rate (18-25 percent is national average)
- House-wide “green team” – 24 members
- Management and tracking of 24 waste streams
- Complete elimination of ETO (ethylene oxide)
- Micro fiber cleaning technology – 85 percent reduction in chemicals and water use
- Conversion to fast floor cleaning technology – 90 percent reduction in chemical and water use
- Focus on Energy partner
- Mission donations - local, national and international level
- Partner with Habitat for Humanity's Green Bay Re-store
- Paul's Pantry partner since 1984 – 150 tons of food donated to date
- Brown County community sharps drop-off location
- Completely smoke-free campus

Ron Van Schyndel and Corrine Vercauteren of Environmental Services perform “chemical rounding.”



Canticle of the Creatures

All praise be yours, My Lord,
Through all that you have made.
And first my lord Brother Sun, who brings the day...

How beautiful is he, how radiant in all his splendor!
Of you, Most High, he bears the likeness.

All praise be yours, my Lord, through Sister Moon and Stars;
In the heavens you have made them, bright and precious and fair.

All praise be yours, my Lord, through Brothers Wind and Air...

All praise be yours, my Lord, through Sister Water,
So useful, lowly, precious and pure.

All praise be yours, my Lord, through Brother Fire,
Through whom you brighten up the night...

All praise be yours, my Lord, through Sister Earth, our mother,
Who feeds us...and produces various fruits
With colored flowers and herbs....

Praise and bless my Lord, and give him thanks,
And serve him with great humility.

—*St. Francis of Assisi*



From the request of the Hospital Sisters to have reverence for the earth, we continue to take responsibility for our environmental impact as well as bringing our initiatives to others around the world as they look to us as leaders in the green movement.

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