



## EAGLE VETERINARY HOSPITAL OLMOS PARK, TEXAS

**47%** total energy savings

**86%** of building construction and  
demolition waste diverted from landfills and incinerators

**100%** of rainwater runoff and  
condensation from HVAC system collected and reused

### LEED® Facts

Eagle Veterinary Hospital  
Olmos Park, TX

LEED for NC 2.2  
Certification awarded January 18, 2012

**Platinum** **53\***

Sustainable Sites 9/14

Water Efficiency 5/5

Energy & Atmosphere 15/17

Materials & Resources 7/13

Indoor Environmental  
Quality 12/15

Innovation & Design 5/5

*\*Out of a possible 69 points*

The information provided is based on that stated in the LEED® project certification submittals. USGBC and Chapters do not warrant or represent the accuracy of this information. Each building's actual performance is based on its unique design, construction, operation, and maintenance. Energy efficiency and sustainable results will vary.

## EAGLE VETERINARY HOSPITAL

## First new commercial building in San Antonio to earn LEED Platinum status

Emphasizing water reclamation, energy efficiency, indoor environmental quality, and materials

**PROJECT BACKGROUND**

The design approach taken by Mdn Architects was one of ensuring synergy between systems and the everyday functionality of the medical facility. Water reclamation, a photovoltaic system that provided power for the building, maximum natural lighting, and materials with long life cycles were all part of this vision. As part of Mdn's holistic design approach, the collaboration of local utility companies early in the design process was also crucial. Through this strong partnership Eagle Veterinary Hospital was able to achieve extremely high standards in efficiency.

**MAJOR PROJECT HIGHLIGHTS**

Mdn Architects and owner Dr. Kirilin took measures to ensure a clean and healthy environment for workers and fellow neighbors. Limiting the amount of construction dust and debris through indoor air quality management plan and onsite recycling greatly improved the area air quality. Storm water control was incorporated into the water harvesting system and all roof runoff is captured by cisterns and used within the facility. Native vegetation maintains a natural landscape with low water use. Due to the limited footprint of the construction site, an adjacent unimproved lot was used for staging and storage; the site was then re-vegetated after construction was completed.

A primary requirement of the facility was the creation of a centralized working location where all veterinary doctors can easily multi-task; this was achieved through a pod concept which functions as the core of operations. The open floor plan and use of onsite assembled cabinetry helped reduce the amount of construction material waste. The building is also designed for future adaptability so the facility can be easily retrofitted for future growth. Though the fixed 2.5 million dollar budget posed a challenge, Mdn's knowledge of energy efficient design, along with early design process collaboration with local utility companies, ensured that Dr. Kirilin's dream could not only be met but surpassed.

**STRATEGIES AND RESULTS****Water Reclamation**

Mdn created a custom calculator that would take into account human and animal water consumption for all hospital functions. By implementing water efficient fixtures, total consumption was reduced by 79%. Additionally, the installation of a water reclamation network greatly offset the use of potable water provided through SAWS.

**Energy Modeling**

An energy model allowed the owner, utility companies, designers, engineers, and construction managers to collaborate and address energy concerns appropriately. As a result, the project achieved a total energy savings of 47%.

**Indoor Air Quality**

The project was designed with no VOC/low VOC materials to allow staff to begin medical practices immediately after construction ceased. The HVAC system was also properly zoned to avoid cross contamination and control air volume for various spaces. Mdn architects collaborated with the hospital owner in developing a Green Housekeeping Policy and a Pest Management Plan, which helps to ensure the hospital is free of harmful chemical and safe for recovering animals.

**Materials**

Through careful material selection the project achieved various milestones such as: 80% post consumer recycled content in the steel structure, 40% total recycled content of the completed project, 92% FSC certified building wood, 35% pre-consumer fly-ash in all concrete, 37% use of regional materials within 500 miles, re-use of reclaimed products from the previous structure, and 86% waste diversion from landfills.

**"I'm happy, because my water bill is averaging less than \$17 a month for a 10,500 square foot building."**

Dr. Kenneth Kirilin, Owner



Owner: Dr. Kenneth Kirilin  
 Architect: Mdn Architects  
 Civil Engineer: Moy Civil Engineers  
 Commissioning Agent: DBR Engineering  
 Contractor: Middleman Construction Company  
 Interior Designer: Mdn Architects  
 Landscape Architect: TBG Landscape Architects  
 LEED Consultant: Mdn Architects  
 Lighting Designer: DBR Engineering  
 MEP Engineer: DBR Engineering  
 Structural Engineer: REM Structural Engineers  
 Project Size: 10,556 square feet  
 Total Project Cost: \$ 2.3 million

Photographs Courtesy of: Mdn Architects

**ABOUT LEED**

The LEED® Green Building Rating System™ is the national benchmark for the design, construction, and operations of high-performance green buildings. Visit the U.S. Green Building Council's website to learn more.



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