

University of Arizona Student Recreation Center Expansion

SUSTAINABILITY + DESIGN



SUSTAINABLE SITES

The site for the SRCE was previously a parking lot. A significant benefit of infill developments is the reduction of new infrastructure and the invigoration of a stable and interactive community. Increasing the neighborhood density with the SRCE stimulates the use of alternative transportation modes such as public transit, bicycling and walking. The SRCE provides new open space for recreation and socialization and reduces the local heat island effect.



WATER EFFICIENCY

The SRCE incorporates high efficiency plumbing fixtures, which reduces its water use by 47.5%. Passive stormwater harvesting strategies have been utilized for the landscaped areas, increasing permeability and reducing runoff through the use of the plantings that surround the SRCE which have been selected for their ability to thrive in an arid environment.



ENERGY & ATMOSPHERE

The SRCE utilizes passive solar measures as the primary approach for energy efficiency, including optimal building orientation, daylight and views on the north and south, opaque walls on the east and west, deep overhangs that shade glass and ground surfaces, high efficiency building envelopes, and cool roofs.



MATERIALS & RESOURCES

Materials using recycled content make up over 20% of the total value of the materials in the SRCE. More than 10% of all the materials used for construction were either manufactured or produced within 500 miles of Tucson. Utilizing local materials not only resulted in fewer trucks traveling fewer miles but also helped local businesses and local economies to thrive.



INDOOR ENVIRONMENTAL AIR QUALITY

By virtue of its function, the SRCE promotes health and wellness activities. SRCE occupants' well being is further fostered by sweeping views to the exterior by implementing natural daylight to 99% of all the normally occupied spaces and by ensuring improved indoor air quality through additional ventilation. Interior materials and finishes have been selected and installed to reduce or eliminate volatile organic compounds.



INNOVATION IN DESIGN

Earning ID credits implies going beyond the LEED requirements and demonstrating outstanding results in building performance. Smart synchronization of energy systems means that the SRCE saves 50.4% of the energy cost compared to baseline. Appropriate selections of fixtures provides savings of 17.5% above the requirements of the Water Efficiency category.



Leadership in Energy and Environmental Design (LEED) is a voluntary certification program developed by the U.S. Green Building Council (USGBC) to promote a whole-building approach to sustainability. LEED recognizes performance in areas of human and environmental health; such as, sustainable sites, water efficiency, energy and atmosphere, materials and resources, and indoor environmental quality. Through utilizing the LEED certification program, design teams and building owners are able to design, construct, and operate buildings in an environmentally responsible manner. Buildings certified through the LEED program are shown to have multiple environmental, economic, and health benefits.

The University of Arizona Student Recreation Center Expansion project has received a LEED Platinum certification – the highest level - in recognition of the sustainable way in which the project was designed and constructed.



M3 is dedicated to promoting sustainable design at their new corporate office in Tucson, Arizona, through the use of the LEED for Commercial Interiors v2.0 certification program. M3 recognizes the need to promote sustainable design in their own facilities, as well as in the broader built environment. Occupants directly benefit from improved indoor environmental quality that promotes a healthier work and living environment.

The perimeter of the building is glazed with low transmittance energy efficient glass which will allow views and daylight to be maintained without the use of supplemental interior window coverings.

Staff are situated in open, low partition work station modules which will facilitate views across the office space to the surrounding perimeter views and daylight.

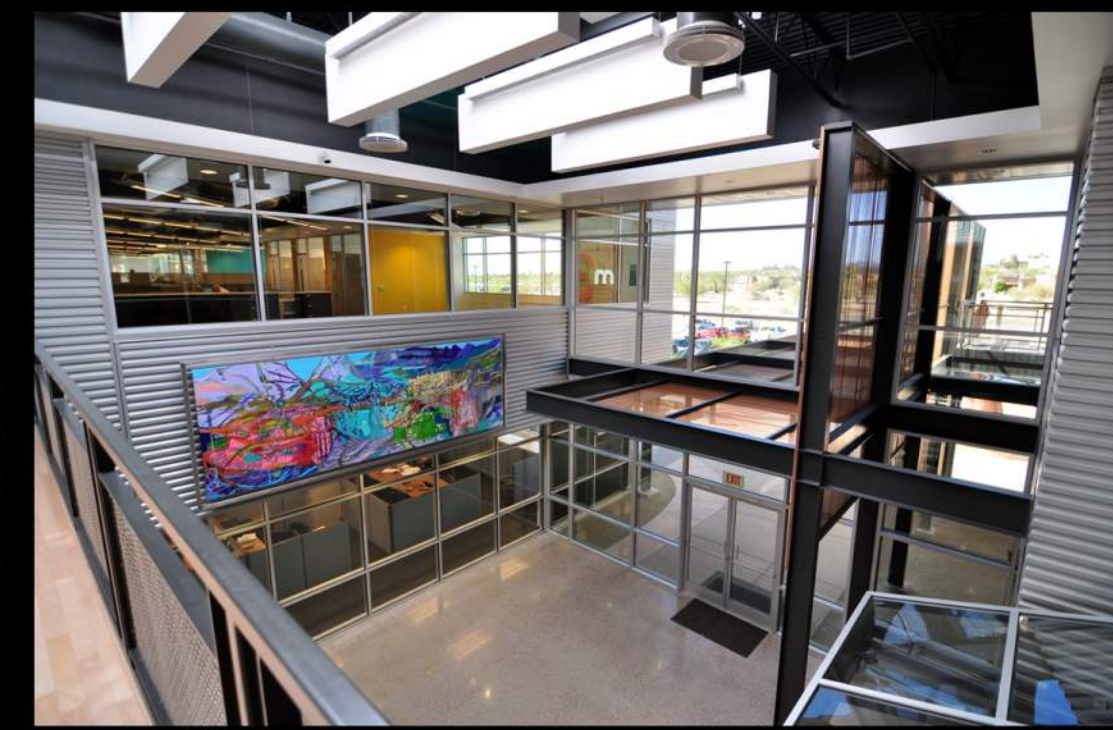
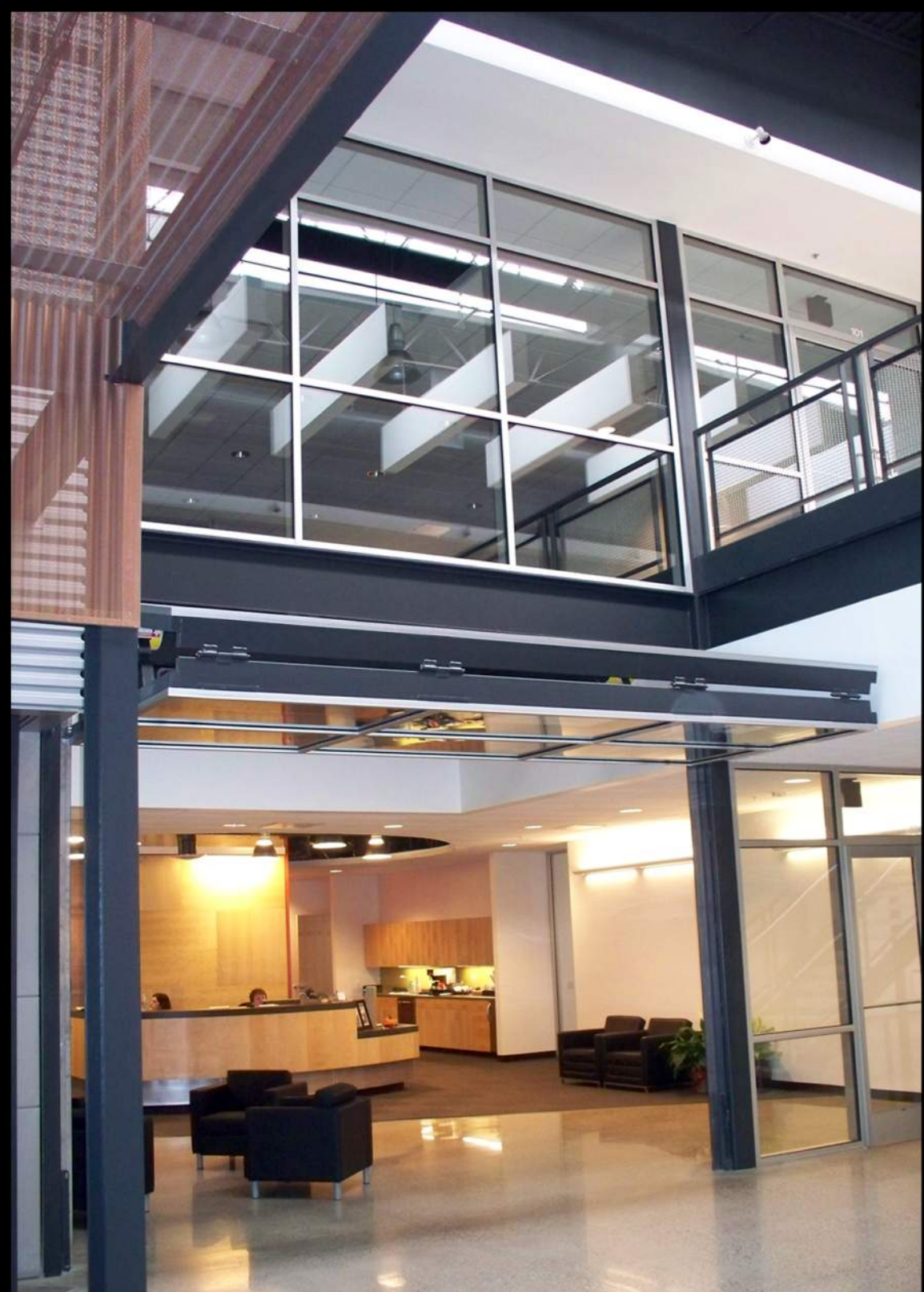
Perimeter light fixtures incorporate automatic dimming controls which sense the amount of daylight entering the perimeter zones and adjust the level of artificial lighting accordingly.

Materials that meet sustainable design principles are utilized in the general construction, finishes, and in the furnishings selected.

Lockers and changing rooms with showers are provided to encourage and support those persons that ride bicycles to work.

Employee break areas utilize energy star appliances where possible.

All of these items contribute to creating a commercial interior based on sustainable design principles. It is M3's intent that our own office will be an example demonstration project for staff and clients alike to promote the benefits of sustainable design.



88% Construction Waste diverted from Landfill
Recycling and reuse of construction waste diverted 75 tons of debris from the landfill.

31% Reduction in Water Use
Low-flow fixtures save 89,000 gallons of water per year reducing the burden on water supply and wastewater systems.

25% reduction in Lighting Power Density
Energy efficient light fixtures and controls will save \$59,000 over a ten year lease period and will be greater as the costs of electricity continue to rise.



ARCHITECTURE

ENGINEERING

CONSTRUCTION MANAGEMENT



SM

M3 Corporate Office Tucson, Arizona