# Jordan & Skala Engineers

### case study | Dallas Museum of Art

### LEED 2008 EBOM Overview

D	Sustainable Sites	<b>5</b> of 12
	Water Efficiency	<b>4</b> of 10
0	Energy & Atmosphere	<b>13</b> of 30
3	Material & Resources	<b>6</b> of 14
	Indoor Environmental Quality	<b>11</b> of 19
	Innovation In Operations	<b>5</b> of 7
	TOTAL	44 of 92

The Dallas Museum of Art (DMA) achieved LEED Silver certifications for energy use, lighting, water, and material use, as well as incorporating a variety of other sustainable strategies (as mentioned below). The DMA is among the 10 largest art museums in the United States, and since its return to free general admission in 2013, has welcomed more than two million visitors. By using less energy and water, the DMA is saving money, reducing greenhouse gas emissions, and contributing to a healthier environment for residents, workers, and the greater Dallas community.



## **PROJECT ACHIEVEMENTS:**

#### SUSTAINABLE SITES

- Alternative means of transportation (walk, bike, or bus)
- Heat island reductions, which included 94% of parking areas being located under cover to minimize impact on microclimates and human/wildlife habitat
- Building exterior management plan that employs environmentally sensitive practices to help preserve ecological integrity

#### WATER EFFICIENCY

 Permanently installed water meters measure the total potable water consumption for the entire building and associated grounds to identify opportunities for water, saving over 300,000 gallons annually

#### INDOOR ENVIRONMENTAL QUALITY

 High-performance green cleaning programs are adhered to in order to reduce the exposure of building occupants, visitors, and staff to potential hazardous contaminants

#### ENERGY & ATMOSPHERE

- Demonstrated energy efficiency in the 24th percentile above the national median reducing environmental and economic impact associated with excessive energy use
- Reduced approximately 4,600 metric tons of carbon (MtCO2) as a result of energy conservation measures

#### MATERIALS & RESOURCES

- Lamp purchasing policy targeting 90% of all mercury containing lamps that achieves an average of 57% reduction in mercury levels measured in picograms per lumen-hour
- Sustainable purchasing policy achieved over 97% of purchased products to comply with Environmental Preferable Purchasing (EPP) criteria

#### INNOVATION IN OPERATIONS

- Designed for active occupants
- Included a cooling tower water analysis
- LEED Accredited professionals were involved throughout the entire design process

## project highlights



of purchased products to comply with Environmental Preferable Purchasing (EPP) criteria





This handout is made from 100% post consumer recycled materials.

## jordanskala.com

EED SILVER

# Jordan & Skala Engineers

## case study | Dallas Museum of Art

EED SILVER

	SUSTAINABLE SITES		5/12		MATERIALS & RESOURCES (cont.)		
	SSc1	LEED Certified Design & Construction	0/1		MRc7.1-	Solid Waster Management - Ongoing	0/2
	SSc2	Building Exterior & Hardscape Management Plan	1/1		7.2 MRc8	Consumables Solid Waste Management - Durable	0/1
	SSc3	Integrative Pest Management Erosion Control, & Landscape Management Plan	1/1		MRc9	Goods Solid Waste Management - Facility Alterations & Additions	0/1
	SSc4.1-4.4	Alternative Commuting Transportation	1/4				
	SSc5.1	Reduced Site Disturbance - Protect & Restore Open Space	0/1		INDOOR EN	VIRONMENTAL QUALITY	<b>11/19</b>
	SSC6	Stormwater Management	0/1	-		Management Program	,
	SSc7.1	Heat Island Reduction Non-Roof	1/1	<u> </u>	EQc1.2	IAQ Best Management Practices -	0/1
	SSc7.2	Heat Island Reduction - Roof	1/1			Outdoor Air Delivery Monitoring	
	SSC8	Light Pollution Reduction	0/1		EQc1.3	IAQ Best Management Practices - Increased Ventilation	0/1
	WATER EFFIC	CIENCY	4/10		EQc1.4	IAQ Best Management Practices - Reduced Particulates	1/1
	WEc1.1- 1.2	Water Performance Measurement	2/2		EQc1.5	IAQ Best Management Practices - Facility Alterations & Additions	1/1
	WEc2 1-	Additional Indoor Plumbing Fixture &	1/3		EQc2.1	Occupant Comfort - Occupant Survery	1/1
	2.3	Fitting Efficiency	0/2		EQc2.2	Occupant Comfort - Occupant Controlled Lighting	1/1
	WEC3.1- 3.3	Water Efficient Landscaping - Reduce Potable Water Use By 50%	0/3		EQc2.3	Occupant Comfort - Thermal Comfort	0/1
	WEc4.1- 4.2	Cooling Tower Water Management - Chemical Management	1/2		EQc2.4-2.5	Occupant Comfort - Daylight & Views 50% Daylight/45% Views	0/2
0	ENERGY & A	TMOSPHERE	13/30		EQc3.1	Green Cleaning - High Performance Cleaning Program	1/1
	EAc1	Optimize Energy Performance	6/15		EQc3.2-3.3	Green Cleaning - Custodial Effectiveness Assessment, < 3	2/2
	EAc2.1-2.3	Existing Building Commissioning	4/6				/ =
	EAc3.1-3.3	Performance Measurement	2/3		EQc3.4-3.6	Green Cleaning - Sustainable Cleaning	2/3
	EAc4.1-4.4	Renewable Energy	0/4			Products & Materials	
	EAc5	Refrigerant Management	0/1		EQc3.7	Green Cleaning - Sustainable Cleaning Equipment	0/1
	EAc6	Emissions Reduction Reporting	1/1		EQc3.8	Green Cleaning - Entryway Systems	0/1
3	MATERIALS		6/14		EQc3.9	Green Cleaning - Indoor Integrated	0/1
	MRc1.1- 1.3	Sustainable Purchasing - Ongoing Consumable, 40%	3/3			r os managomorn	
	MRc2.1	Sustainable Purchasing - Durable Goods, Electric	1/1		INNOVATIO	ON IN OPERATIONS	5/7
	MRc2.2	Sustainable Purchasing - Durable	0/1	G	IOc1.1	Innovations in Operations: Outreach & Education Program	1/1
	MRc3	Sustainable Purchasing - Facility	0/1		IOc1.2	Innovations in Operations: Design for Active Occupants	1/1
	MRc4.1-	Sustainable Purchasing - Reduced	2/2		IOc1.3	Innovations in Operations: MRc1.1: Ongoing Consumables 100%	1/1
	4.Z		0/1		IOc1.4	Innovations in Operations: Cooling	1/1
	MRCS	Susiainable Purchasing - Food	0/1			Tower Water Analysis	
	MKC6	sona waste management - Waste Stream Audit	U/ I		IOc2	Documenting Sustainable Building Cost Impacts	0/1

## LEED 2008 for Existing Buildings: Operations & Maintenance

44/92 Total Points Achieved

CERTIFIED 34-42 points SILVER 43-50 points GOLD 51-67 points PLATINUM 68-92 points