

square feet studio

Our Office Sustainability Process
LEED CI 2.0

Design Narrative

When we set about finding a new location for our office, we identified three goals. First, to deepen our personal and professional roots in the community, second to practice smart, simple and sustainable design for ourselves and third to LEED certify the project.

To achieve our third goal, we had a lot of work to do which we have illustrated here. First of all, we needed the right team of engineers and contractor for the work and secondly, we needed to allocate the management time and costs. Our team consisted of a contractor and mechanical, electrical, and plumbing engineer who we had long standing relationships with and who were eager to take on this challenge. For the management and paperwork aspects, we decided to take that on ourselves as a way to create an internal foundation to pursue future LEED work.

In the end, we felt sure the design could meet requirements for LEED-silver; our big question was if we'd be able to document appropriately and not otherwise slip up during the process. We met regularly with the engineers and contractor at the front end to check and re-check our assumptions and design decisions. Even after construction started, we regularly met to keep track of our design controls while layering in those elements which were heavily construction related.

We completed the work in 14 weeks and were delighted with the results. Then unfortunately, we let the momentum for certification fall off as we got back to work on other more pressing projects and reveled in the happiness of being done. After literally another year of dabbling in the completion of the paperwork, we got serious again, and finished the submission process 18 months after we moved in.



Sustainable Sites

Attempted Credits:

- SS 2 Development Density and Community Connectivity
- SS 3.1 Alternative Transportation, Public Transportation Access
- SS 3.2 Alternative Transportation, Bicycle Storage & Changing Rooms
- SS3.3 Alternative Transportation, Parking Availability

One reason we chose this building for our new offices is its great location. Inman Alley is a renovated warehouse in the historic Inman Park neighborhood, full of recently reclaimed industrial buildings, close to downtown Atlanta and the retail districts on N. Highland Avenue and Edgewood Avenue. It fronts the Northeast segment of the Atlanta Beltline, has easy access to Marta and is a short distance from the Path system of bike trails which run from downtown Atlanta to Stone Mountain. There are dozens of restaurants, and essential services such as dry cleaning, pharmacies and copy centers nearby. 5 of our 7 current staff live within 5 miles so we included showers and a bike rack to encourage bicycle commuting or a lunchtime run.

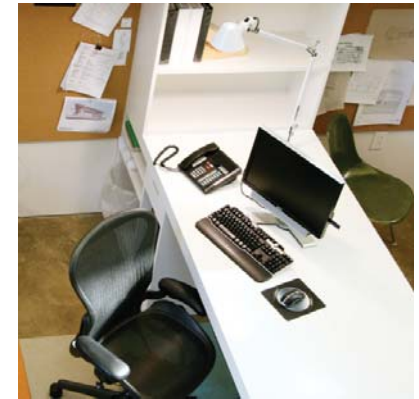


Energy and Atmosphere

Attempted Credits:

- EA 1.3 Optimize Energy Performance, HVAC
- EA 1.4 Optimize Energy Performance, Equipment and Appliances
- EA 3 Energy Use, Measurement & Payment Accountability
- EA 4 Green Power

During design, we reduced our lighting load to .81 watts per square foot by allowing natural daylight to provide most of our light, utilizing task lighting in work areas and specifying fluorescent lighting wherever possible. We implemented Energy Star rated devices for 80% of our equipment and committed to purchase 50% of our power from a Green-e certified landfill which utilizes the gas byproduct to generate power. Our 13 SEER mechanical system was designed to meet E-benchmark requirements and no CFC refrigerants were utilized.

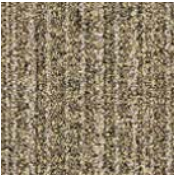


Materials and Resources

Attempted Credits:

- MR 1.1 Tenant Space, Long-Term Commitment
- MR 2.1 Construction Waste Management, Divert 50% from Landfill
- MR 2.2 Construction Waste Management, Divert 75% from Landfill
- MR 3.3 Resource Reuse, 30% Furniture and Furnishings
- MR 4.1 Recycled Content, 10% (post-consumer + 1/2 pre-consumer)
- MR 4.2 Recycled Content, 20% (post-consumer + 1/2 pre-consumer)
- MR 5.1 Regional Materials, 20% Manufactured Regionally
- MR 5.2 Regional Materials, 10% Extracted and Manufactured Regionally
- MR 6.1 Rapidly Renewable Materials

This is an area where we were able to really make significant contributions to our sustainability goals. A large portion of our work is commercial interior and our use of materials is a key part of our practice so we really pushed ourselves in this category. During construction we recycled concrete, brick, sheetrock, metal and wood scraps by separating them into designated dumpsters for pick-up by a local construction waste recycling firm. Even then, our total waste generated could fit in the back of a pick-up truck. We even used brick from the demolition to make the table base for our rear patio picnic table which also utilized wood scraps from another project as a top. Many products utilized included high recycled content. These products included structural and light gauge steel, insulation made from old blue jeans, terrazzo tiles with broken windshield glass aggregate and pin up panels of ground up newsprint. Even a portion of the paint had some recycled content. Recycling areas were included in the office plan for paper, metal, glass and plastics and the building houses a central recycling facility. We even found some rapidly renewable products to contribute in our linen drapery and cork pin up areas.



Carpet Tiles



Cotton Insulation



Recycled MDF Cabinetry



Construction Recycling



Aluminum Frames



Furniture Reuse



Recycled Glass Terrazzo Tiles



Steel Framing



Central Recycling Area



Recycled Bricks



Renewable Particle Board



Renewable Cork

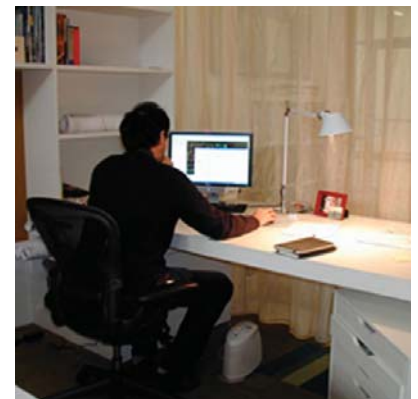
Indoor Environmental Quality

Attempted Credits:

- EQ 4.1 Low Emitting Materials, Adhesives and Sealants
- EQ 4.2 Low Emitting Materials, Paints and Coatings
- EQ 4.3 Low Emitting Materials, Carpet Systems
- EQ 4.1 Low Emitting Materials, Adhesives and Sealants
- EQ 4.4 Low Emitting Materials, Composite Wood and Laminate Adhesives
- EQ 4.5 Low Emitting Materials, Furniture and Seating
- EQ 6.1 Controllability of Systems, Lighting
- EQ 6.2 Controllability of Systems, Temperature and Ventilation
- EQ 7.1 Thermal Comfort, Compliance
- EQ 8.1 Daylight and Views, Daylight 75% of Spaces
- EQ 8.2 Daylight and Views, Daylight 90% of Spaces

One of the most important design decisions we made was to install a large area of operable storefront in our rear wall which provides views to Atlanta's Beltline, daylighting and natural ventilation directly into our studio. That single decision reduces our need for mechanical air conditioning and artificial lighting and greatly enhances our indoor air quality. Each work station has an individual task light for personal control of light levels and three ceiling fans help capture fresh air and breezes. Everyone in the studio has direct views to the outside at eye level when seated.

Zero VOC paints and coatings were used, carpet tiles were installed without glue, and panel products have no added urea-formaldehyde. New furniture acquisitions meet Greenguard certification and interior draperies of 100% natural linen provide additional glare and privacy control when needed in the studio.



LEED Check List



Point Breakdown:

LEED -CI Version 2.0 Registered Project Checklist

Yes	?	No		
3	0	0	Sustainable Sites	7 Points
0	0	0	Credit 1 Site Selection	1 to 3
			Select a LEED Certified Building	3
			-OR- Locate the tenant space in a building with the following characteristics:	1 to 3
			Option 1A Brownfield Redevelopment	1/2
			Option 1B Stormwater Management, Rate and Quantity	1/2
			Option 1C Stormwater Management, Treatment	1/2
			Option 1D Heat Island Reduction, Non-Roof	1/2 to 1
			Option 1E Heat Island Reduction, Roof	1/2
			Option 1F Light Pollution Reduction	1/2
			Option 1G Water Efficient Irrigation, Reduce by 50%	1/2
			Option 1H Water Efficient Irrigation, No Potable Use or No Irrigation	1/2
			Option 1I Innovative Wastewater Technologies	1/2
			Option 1J Water Use Reduction, 20% Reduction	1/2
			Option 1K On-site Renewable Energy	1/2 to 1
			Option 1L Other Quantifiable Environmental Performance	1/2 to 3
1			Credit 2 Development Density and Community Connectivity	1
1			Credit 3.1 Alternative Transportation, Public Transportation	1
1			Credit 3.2 Alternative Transportation, Bicycle Storage & Changing Rooms	1
1			Credit 3.3 Alternative Transportation, Parking Availability	1
2			Water Efficiency	2 Points
1			Credit 1.1 Water use Reduction, 20% Reduction	1
1			Credit 1.2 Water use Reduction, 30% Reduction	1
7		0	Energy & Atmosphere	12 Points
Yes			Prereq 1 Fundamental Commissioning	Required
Yes			Prereq 2 Minimum Energy Performance	Required
Yes			Prereq 3 CFC Reduction in HVAC&R Equipment	Required
			Credit 1.1 Optimize Energy Performance, Lighting Power	1 to 3
			Option A Reduce lighting power density to 15% below the standard	1
			Option B Reduce lighting power density to 25% below the standard	2
			Option C Reduce lighting power density to 35% below the standard	3
			Credit 1.2 Optimize Energy Performance, Lighting Controls	1
2	0	0	Credit 1.3 Optimize Energy Performance, HVAC	1 to 2
2			Option A Equipment Efficiency and Zoning & Controls	1 to 2
			Option B Reduce Design Energy Cost	1 to 2
2			Credit 1.4 Optimize Energy Performance, Equipment & Appliances	1 to 2
			Option A 70% of ENERGY STAR eligible equipment ENERGY STAR rated	1
			Credit 2 Enhanced Commissioning	1

***NOTE for EAc1:** All LEED for Commercial Interiors projects registered after June 26th, 2007 are required to achieve at least two (2) points under EAc1. Projects may earn two (2) points from achieving any combination of the 4 sub-credits under EAc1.

2	0	0		
2			Credit 3 Energy Use, Measurement & Payment Accountability	1 to 2
			Case A Projects with area less than 75% of total building area	1 to 2
			Case B Projects with area 75% or more of total building area	2
1			Credit 4 Green Power	1
9			Materials & Resources	14 Points
Yes			Prereq 1 Storage and Collection of Recyclables	Required
1			Credit 1.1 Tenant Space, Long Term Commitment	1
			Credit 1.2 Building Reuse, Maintain 40% of Interior Non-Structural Components	1
			Credit 1.3 Building Reuse, Maintain 60% of Interior Non-Structural Components	1
1			Credit 2.1 Construction Waste Management, Divert 50% From Landfill	1
1			Credit 2.2 Construction Waste Management, Divert 75% From Landfill	1
			Credit 3.1 Resource Reuse, 5%	1
			Credit 3.2 Resource Reuse, 10%	1
1			Credit 3.3 Resource Reuse, 30% Furniture and Furnishings	1
1			Credit 4.1 Recycled Content, 10% (post-consumer + 1/2 pre-consumer)	1
1			Credit 4.2 Recycled Content, 20% (post-consumer + 1/2 pre-consumer)	1
1			Credit 5.1 Regional Materials, 20% Manufactured Regionally	1
1			Credit 5.2 Regional Materials, 10% Extracted and Manufactured Regionally	1
1			Credit 6 Rapidly Renewable Materials	1
			Credit 7 Certified Wood	1
9			Indoor Environmental Quality	17 Points
Yes			Prereq 1 Minimum IAQ Performance	Required
Yes			Prereq 2 Environmental Tobacco Smoke (ETS) Control	Required
			Credit 1 Outside Air Delivery Monitoring	1
			Credit 2 Increased Ventilation	1
			Credit 3.1 Construction IAQ Management Plan, During Construction	1
			Credit 3.2 Construction IAQ Management Plan, Before Occupancy	1
1			Credit 4.1 Low-Emitting Materials, Adhesives and Sealants	1
1			Credit 4.2 Low-Emitting Materials, Paints and Coatings	1
1			Credit 4.3 Low-Emitting Materials, Carpet Systems	1
			Credit 4.4 Low-Emitting Materials, Composite Wood and Laminate Adhesives	1
1			Credit 4.5 Low-Emitting Materials, Systems Furniture and Seating	1
			Credit 5 Indoor Chemical and Pollutant Source Control	1
1			Credit 6.1 Controllability of Systems, Lighting	1
1			Credit 6.2 Controllability of Systems, Temperature and Ventilation	1
1			Credit 7.1 Thermal Comfort, Compliance	1
			Credit 7.2 Thermal Comfort, Monitoring	1
1			Credit 8.1 Daylight & Views, Daylight 75% of Spaces	1
1			Credit 8.2 Daylight & Views, Daylight 90% of Spaces	1
			Credit 8.3 Daylight & Views, Views for 90% of Seated Spaces	1
5			Innovation & Design Process	5 Points
1			Credit 1.1 Innovation in Design: Provide Specific Title	1
1			Credit 1.2 Innovation in Design: Provide Specific Title	1
1			Credit 1.3 Innovation in Design: Provide Specific Title	1
1			Credit 1.4 Innovation in Design: Provide Specific Title	1
1			Credit 2 LEED® Accredited Professional	1
35	0	0	Project Totals (Pre-Certification Estimates)	57 Points
GOLD			Certified: 21-26 points Silver: 27-31 points Gold: 32-41 points Platinum: 42-57 points	

smart. simple. sustainable.

square feet studio 154 Krog Street NE • Suite 170 • Atlanta, GA 30307