

# Merchandise Mart

Location: Chicago Illinois

Building Type: Commercial Retail and Conference Center

Retrofit of an existing 1930 building

4.2 million sq ft. - the largest commercial retail building in the world -

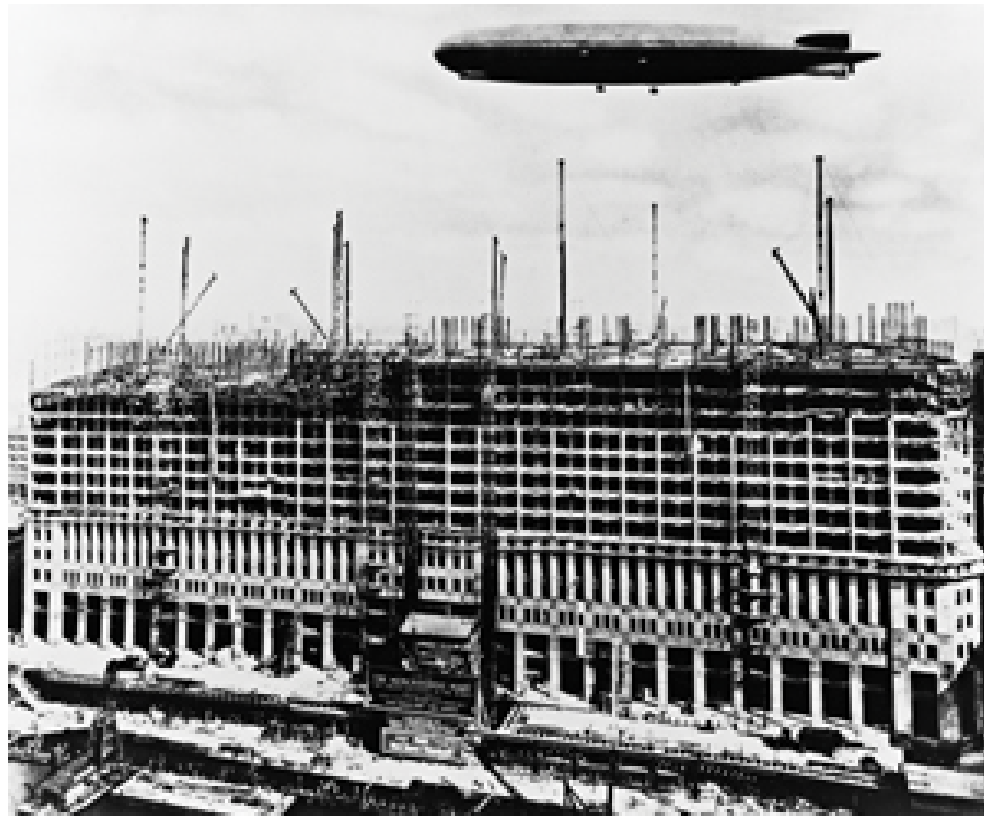
Occupies a 750' x 350' city block at 24 stories

Urban downtown Chicago setting

20,000+ Visitors each day plus 3 million+ Visitors to trade shows each year

Earned LEED - EB O&M Silver certification in November 2007 - Largest LEED certified building in the World. 42 Points

## Construction Photo



## History:

The Merchandise Mart in Chicago was built in the last half of the 1920's and was the brainchild of the Marshall Field and Company, looking to consolidate its wholesale operations spread throughout 13 different properties in Chicago. The Merchandise Mart was the largest building in the world until 1943 when the US Pentagon surpassed it. In 1945 ownership of the mart was passed on to the Kennedy Family, and in 1998 Vernado Realty Trust acquired the building.



Exterior Views of the Merchandise Mart

## Drawing of the Merchandise Mart



## What is LEED-EB - O&M (operations & maintenance)

O&M is a set of voluntary performance standards for the sustainable ongoing operation of buildings not undergoing major renovation. It provides sustainability guidelines for building operations, periodic upgrades of building systems, minor space-use changes, and building processes.

O&M is based on actual building operation performance, not design expectations. The certification application must provide data demonstrating that the building's operations meet the LEED for existing buildings: O&M pre reqs and attempted credits. The performance of the entire building including all tenant spaces must be accounted for in these calculations.

A 2006 Green Building Council Council study found that by retrofitting existing buildings owners can save 90 cents per square foot annually, on average, in energy and other costs - and earn back their investment in 2 - 2.5 years.





**M e r c h a n d i s e M a r t - S h o w r o o m s & L E E D C h e c k l i s t**

**The Journey to achieve LEED:**

In 2005 The Merchandise Mart began its journey to LEED certification by first conducting a comprehensive analysis of building practices. The first phase was an attempt to see if LEED certification was even a feasible thing for such a large building to do. However, almost 15 years earlier the Mart had begun its journey.

1990 - The Mart began using only Green Seal approved cleaning products for all building maintenance.

1991 - The Mart implemented a recycling program which now encompasses all forms of paper products, glass, light bulbs, batteries, aluminum, and construction materials

1996 - The Mart became the first major property to enter into an agreement with the district cooling system - to reduce CFC discharge

2006 - The Mart joined Clean Air Counts - included only using low VOC cleaning products, paints and building materials (yearly average of construction is 700,000 sq. ft.), as well as energy efficient lighting and alternative workplace transit options. Reduced pollution by 264,018 pounds. In one year, the mart had saved 13,000 trees and saved 5.5 million gallons of water.

2007 - With green building practices in place, only contractors with proper training by the Delta institute, a non-profit organization that helped them achieve LEED, will be allowed to bid any projects within the Mart's scope.



**LEED-EB O&M Silver Certification at The Merchandise Mart**

Specifics on prerequisites and points awarded for The Merchandise Mart's LEED-EB O&M Silver certification follow, according to criteria established by the U.S. Green Building Council.

SUSTAINABLE SITES	WATER EFFICIENCY	ENERGY & ATMOSPHERE	MATERIALS & RESOURCES	INDOOR ENVIRONMENTAL AIR QUALITY	INNOVATION in UPGRADES, OPERATIONS, & MAINTENANCE
<p>Prerequisites</p> <ul style="list-style-type: none"> <li>Erosion and Sedimentation Control</li> <li>Age of Building</li> </ul> 	<p>Prerequisites</p> <ul style="list-style-type: none"> <li>Minimum Water Efficiency</li> <li>Discharge Water Compliance</li> </ul> 	<p>Prerequisites</p> <ul style="list-style-type: none"> <li>Existing Building Commissioning</li> <li>Minimum Energy Performance</li> <li>Ozone Protection</li> </ul> 	<p>Prerequisites</p> <ul style="list-style-type: none"> <li>Source Reduction and Waste Management (Waste Stream Audit)</li> <li>Source Reduction and Waste Management (Storage and Collection of Recyclables)</li> <li>Toxic Material Source Reduction (Reduced Mercury in Lamps)</li> </ul> 	<p>Prerequisites</p> <ul style="list-style-type: none"> <li>Outside Air and Exhaust</li> <li>Environmental Tobacco Smoke (ETS) Control</li> </ul> 	<ul style="list-style-type: none"> <li>The Green Spot (An On-Site Exhibit of Sustainable Highlights and Products): <b>1 point</b></li> <li>Recycling Rate of 63 Percent: <b>1 point</b></li> </ul> 
<p>Possible Points: 14 Points Earned: 6</p>	<p>Possible Points: 5 Points Earned: 1</p>	<p>Possible Points: 23 Points Earned: 8</p>	<p>Possible Points: 16 Points Earned: 11</p>	<p>Possible Points: 22 Points Earned: 9</p>	<ul style="list-style-type: none"> <li>NeoCon Program (Green-Design/ Green-Building Educational Programs and Showrooms/Exhibits): <b>1 point</b></li> </ul> 
<ul style="list-style-type: none"> <li>Plan for Green Site and Building Exterior Management ("Building a Better Mart" report): <b>2 points</b></li> <li>High-Development Density Building and Area: <b>1 point</b></li> <li>Alternative Commuting Transportation (Public Transportation Access): <b>1 point</b></li> </ul> 	<ul style="list-style-type: none"> <li>Water-Use Reduction: <b>1 point</b></li> </ul> 	<ul style="list-style-type: none"> <li>Building Operation (Staff Education): <b>1 point</b></li> <li>Building Operation (Building Systems Maintenance): <b>1 point</b></li> <li>Building Operation (Building Systems Monitoring): <b>1 point</b></li> <li>Additional Ozone Protection: <b>1 point</b></li> <li>Performance Measurement (Enhanced Metering): <b>2 points</b></li> <li>Performance Measurement (Emissions Reduction Reports): <b>1 point</b></li> <li>Documenting Sustainable Building Cost Impacts: <b>1 point</b></li> </ul> 	<ul style="list-style-type: none"> <li>Construction, Demolition, and Renovation Waste Management: <b>2 points</b></li> <li>Optimize Use of Alternative Materials: <b>2 points</b></li> <li>Optimize Use of IAQ-Compliant Products: <b>1 point</b></li> </ul> 	<ul style="list-style-type: none"> <li>Outside Air Delivery Monitoring: <b>1 point</b></li> <li>Construction IAQ Management Plan: <b>1 point</b></li> <li>Contemporary IAQ Practice: <b>1 point</b></li> </ul> 	<ul style="list-style-type: none"> <li>Green Cleaning (Entryway Systems): <b>1 point</b></li> <li>Green Cleaning (Isolation of Janitorial Closets): <b>1 point</b></li> <li>Green Cleaning (Low-Impact Cleaning Policy): <b>1 point</b></li> </ul> 
<ul style="list-style-type: none"> <li>Alternative Commuting Transportation (Bicycle Storage): <b>1 point</b></li> <li>Heat-Island Reduction (Non-Roof Surfaces): <b>1 point</b></li> </ul> 			<ul style="list-style-type: none"> <li>Sustainable Cleaning Products and Materials: <b>2 points</b></li> <li>Occupant Recycling: <b>3 points</b></li> <li>Additional Toxic Material Source Reduction (Lamps): <b>1 point</b></li> </ul> 	<ul style="list-style-type: none"> <li>Green Cleaning (Low-Impact Pest Management Policy): <b>2 points</b></li> <li>Green Cleaning (Low-Impact Cleaning Equipment Policy): <b>1 point</b></li> </ul> 	<ul style="list-style-type: none"> <li>Occupant Density: <b>1 point</b></li> <li>LEED Accredited Professional (Delta Institute): <b>1 point</b></li> </ul> 