

Portfolio 1
IDSN 3202
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THE FIRM: TRIPLE YOU DESIGN

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"Our spaces are enlightening, inviting others to create mindfully."
Warren, Wiser, Weisman







At the Mart, Knoll is...

Showcasing high-end office furniture and systems Competing with other furniture companies for foot traffic

THE SPACE:

The Merchandise Mart, Chicago, IL **Showroom Design** 80th Year Anniversary of Knoll



Competitors: Steelcase, Herman Miller, Teknion, Kimball



TRENDS IN HISTORIC PRESERVATION

Challenges

- Receiving preservation funds
- Modern buildings are scrutinized

Councils

 The National Trust for Historic Preservation

Examples

- Frank Lloyd Wright's Falling Waters
- Pope-Leighey House
- Eero Saarinen's Trans World Airlines Flight Center at Kennedy International Airport.

Goals

 To convert historic buildings into facilities we use every day





Specifications

- Fixtures with low water use
- Pressure Reduction
 Valves (PRV)
- Insulated PipeSystems

Installations

- Cluster areas of water use
- Minimize run lengths
- Optimize pipe diameter
- Use fewer bends

Waste Stack Branch Vents 3rd Floor 2nd Floor

Multi-story Drainage and Venting

SUSTAINABLE BUILDINGS: PLUMBING DESIGN

Systems and Monitoring

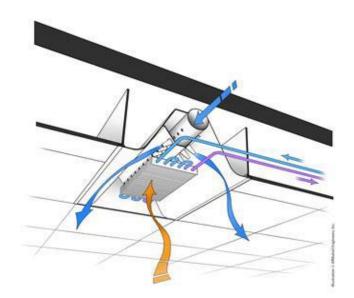
- Prevent and minimize leaks
- Rain sensors deactivate irrigation systems during rainfall
- Reuse grey water for site irrigation
- Recover and reuse water from cooling towers and boilers

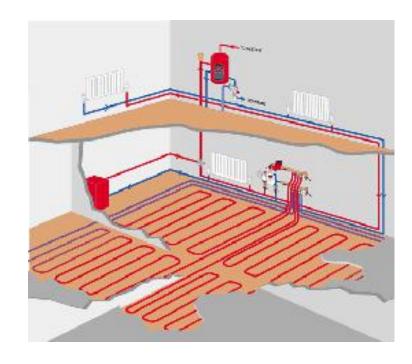




Specifications

- Energy Star
 - Dishwasher
 - Clothes dryer
 - Clothes washer
 - Dehumidifiers
 - Air filters
 - Freezers
 - Refrigerators
 - Windows
 - Ceiling fans
 - Ventilating fans
 - HVAC systems
 - Furnaces
 - Boilers
 - Computer monitors





Monitoring

SUSTAINABLE BUILDINGS: MECHANICAL DESIGN

- Simulate HVAC loads using software
 - Revit
- Install devices to monitor system use

Installations

- High performance HVAC systems
- Chilled beams
- Radiant panels





SUSTAINABLE BUILDINGS: ELECTRICAL DESIGN

Specifications

- Energy Star LED bulbs
- Contract with a Green Power Provider



Installations

- Solar photovoltaic systems
- Provide lighting options for various levels of need
- Utilize natural daylight
- Architectural light shelves
- Occupancy light switch
- Design light systems that emit less light pollution
- Wind turbines
- Biomass Energy
- Low-impact hydro

Monitoring

- Comply with energy Policy and Conservation Act of 1975 (EpcA)
- Energy use can be monitored using meters
 - Separate lighting and receptacle panels for monitoring
- Properties Face Power Density Requirements
- Commissioning





SPACE PROGRAM

- Open work stations
- Private offices
- Open offices
- Collaborative work space
- Lounging / Ancillary Space
- Conference Rooms
- Entice customer to stay
- Colorful and engaging
- Café
- 2 Textile sample rooms

Requirements

80% of specification to be Knoll product
Utilize 5/8 Knoll Constellations
Illustrate the 5 Principle Workstation Areas







Design Characteristics

Modernism and Bauhaus
Maintain Integrity of the
Architecture

Collaborative

Workplace Productivity



SPACE PROGRAM



WORK AREAS							
<u>Space</u>	Number	Unit Sguare Feet	Extended Sq. Feet	Location	Notes		
Totals							
Workstation\ 1 (6X6)	49	36	1784				
Workstation 2 (6X8)	23						
Workstation 3 (8X8)	10	84	640				
Office 1 (10x10)	10						
Office 2 (10X12)	5	120	600				
Personnel Totals:	97		4708		k		

SUPPORT SPACES

<u>Space</u>	Number	Unit Sguare Feet	Extended Sq. Feet	Location	Notes
Reception	1	400	400	Direct access to Broadcast, Executive	Waiting for 6, TV's
Confference Room Small (4 Occupants) 10X12	4	120	480		
Conference Room Medium (8 Occupants) 14X18	2	252	504		
Conference Room Large (20 Occupants) 15X33, 17 with width	1	300	300	Shared by all areas	Full AV
Pantry 10X15	1	150	150	breakroom	Coffee, sink, refrigerator, cabinets
Dafé	1	300	300		Full kitchen, seating
Lounge Space (Total)	1	3000	3000		950
Textile Room	1	800	800		
Sample Room	1	800	800		
Support Totals:			6734		

Department Summary

Information:

 Personnel
 4708 Square Ft.

 Equipment
 6734 Square Ft.

 Sub Total:
 11442 Square Ft.

Circulation 1.54

Total Program Usable: 18,700 Square Ft.

Total Plan Usable: 18,700 Square Ft.

Interviewee:

Interview Date: Revision Submitted: Sign Off:



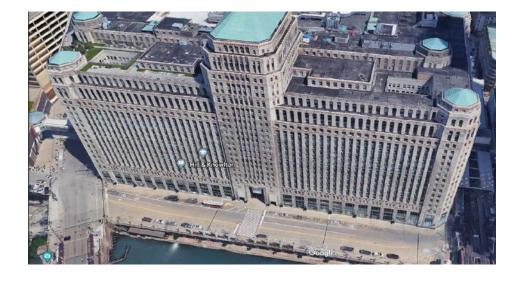
SITE PROFILE

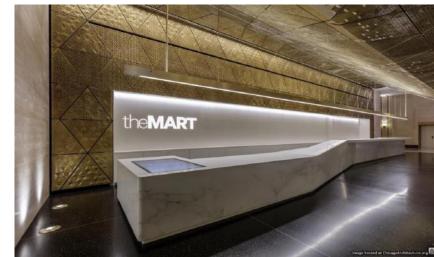
Knoll Merchandise Mart Showroom

22,000+/Square Foot Showroom

Floorplan of the space to be designed



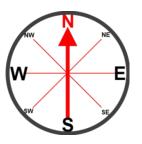








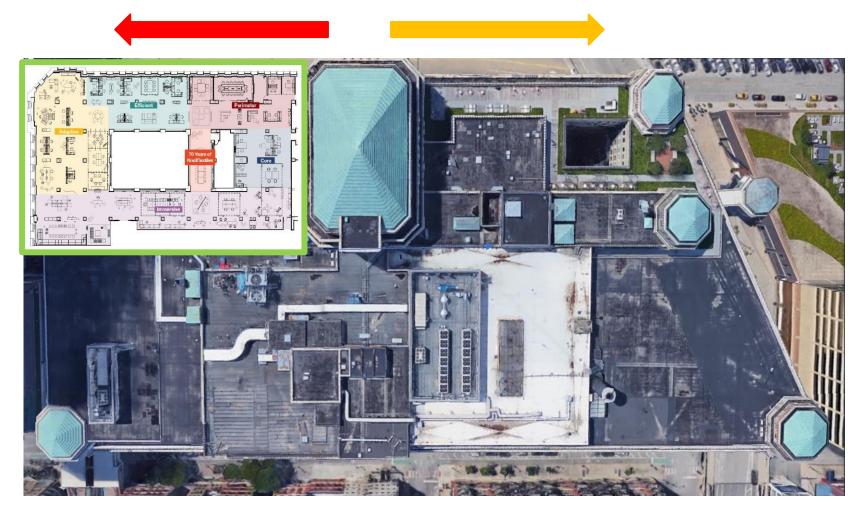
SITE ANALYSIS



The building takes up 2 city blocks and is 25 stories tall.

Located downtown Chicago along the banks of the river

Most intense daylight would be from 1-2 pm which would be coming into the Northern windows along the design space



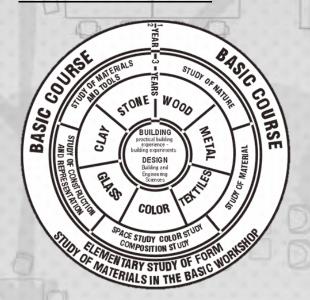


Street view in both directions from the entrance at the front of the building

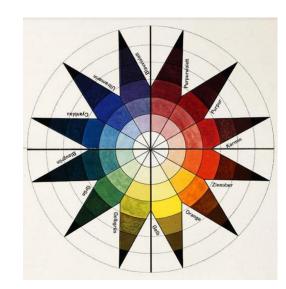




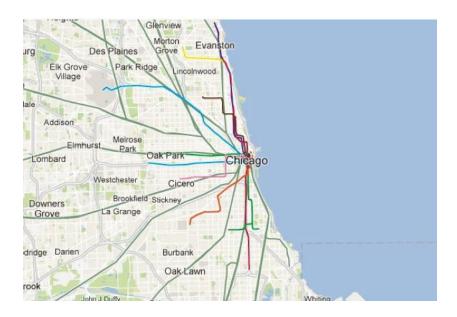
CONCEPT: REVOLUTION of Design

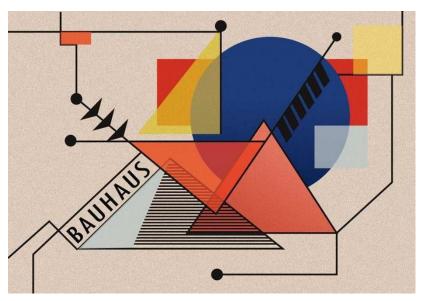


- Bauhaus and Modernism
- Woman Leaders: Florence Knoll
- Cohesion of Interiors and Exteriors
- Chicago's Railroad System
- History of Knoll's Constellations
- Immersive spaces in the workplace











DESIGN CHALLENGES AND RESOLUTIONS

To follow research and market trend...

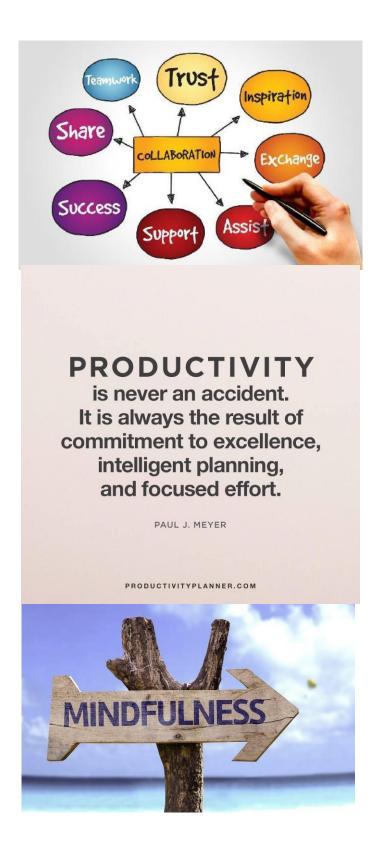
...implement the Five Principle Workstations

To promote mindfulness in the workplace...

...offer a variety of workstations designed to accommodate an array of activity

To commemorate the 80th anniversary of Knoll...

...design the progression of the space to reflect Knoll's history





INSPIRATION IMAGES













