



THE OFFICE BUILDING OF THE FUTURE

IA | INTERIOR
ARCHITECTS





SHOPPING
CENTER

PARKING



Floor Module

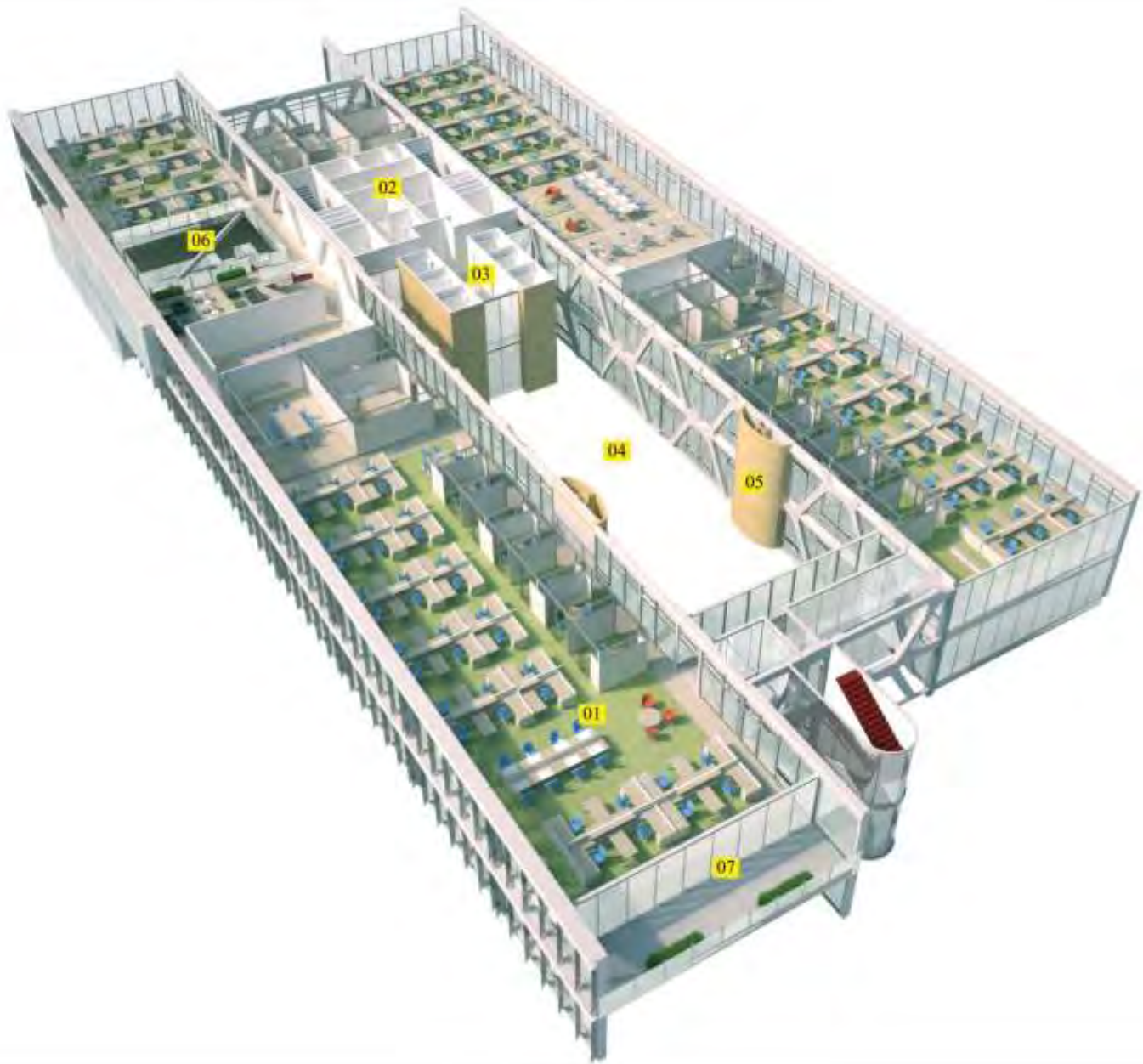
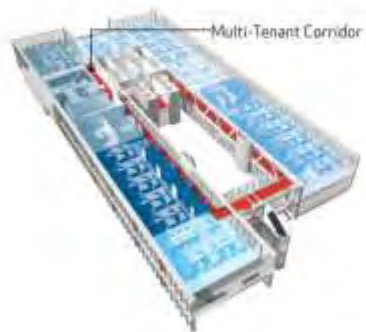
Core Structural Module

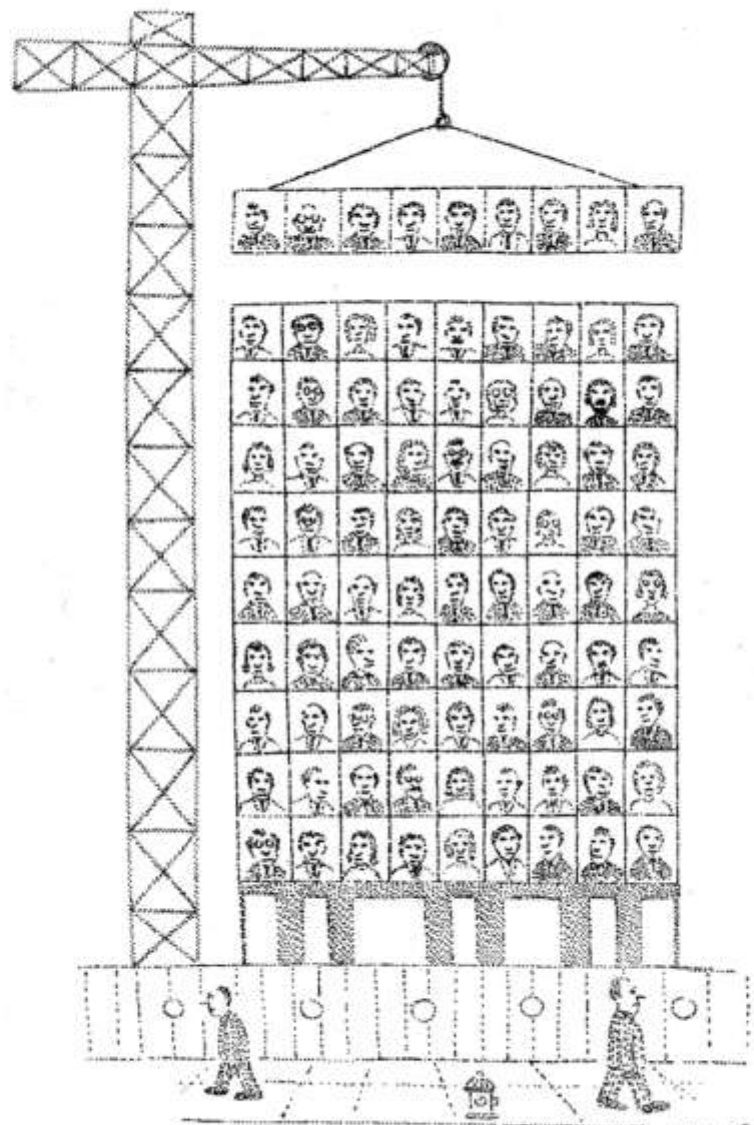
Wall Module



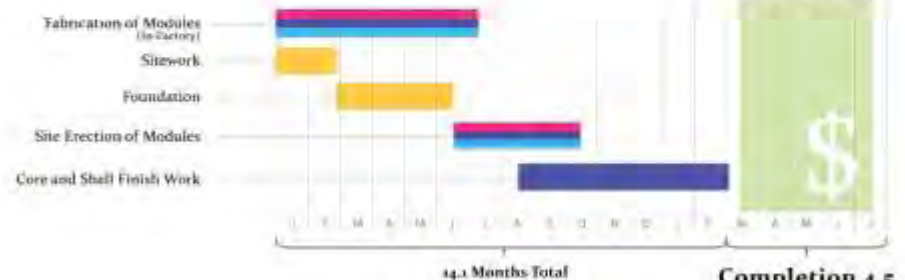
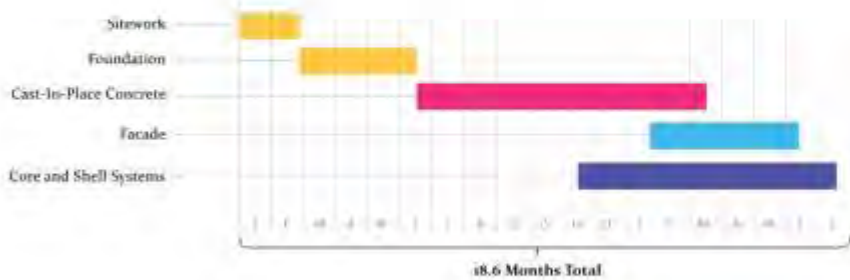
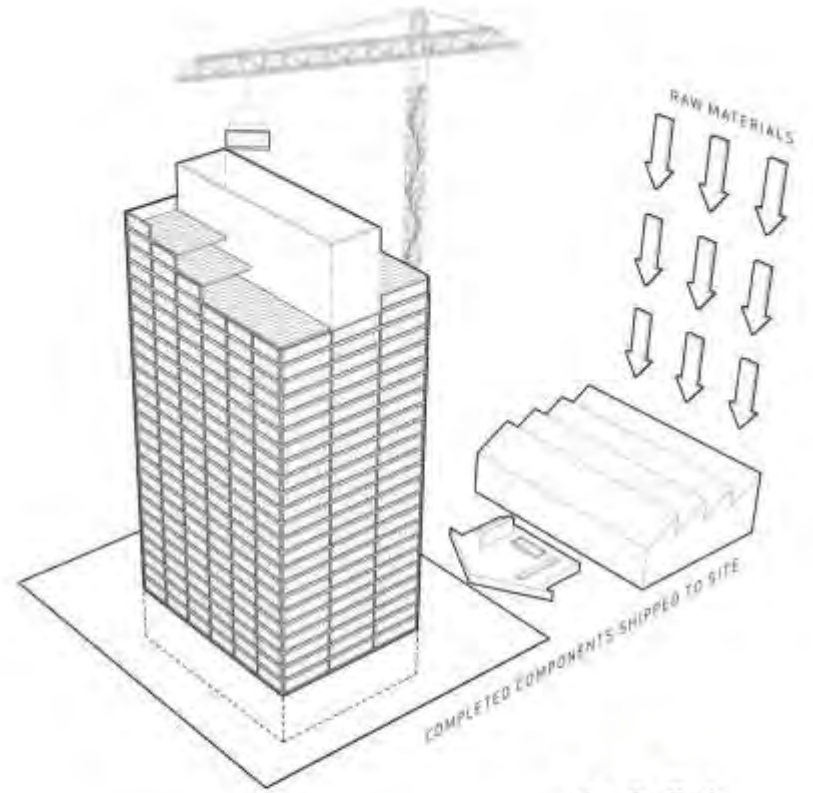
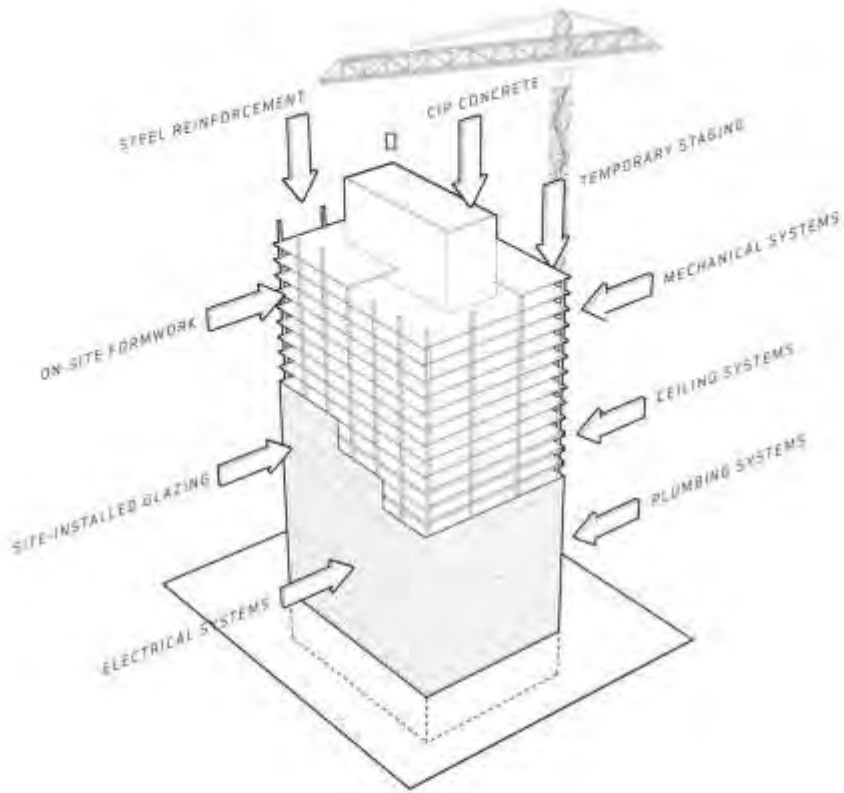








MANKOFF



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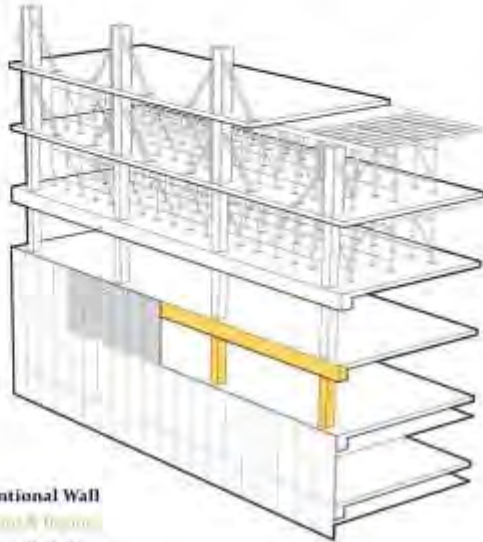


Completion 4.5 Months Earlier

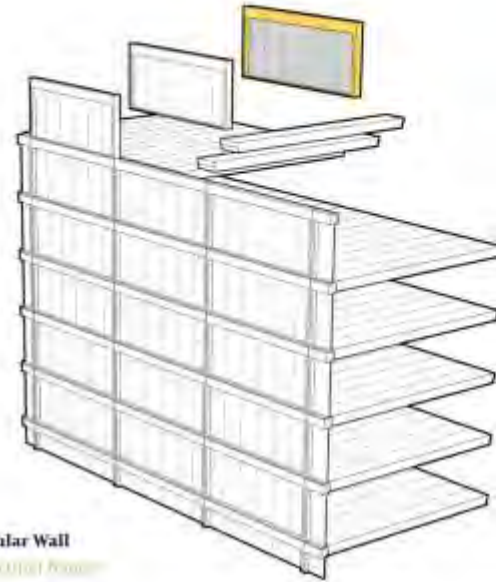
CONVENTIONAL SYSTEMS

MODULAR SYSTEMS

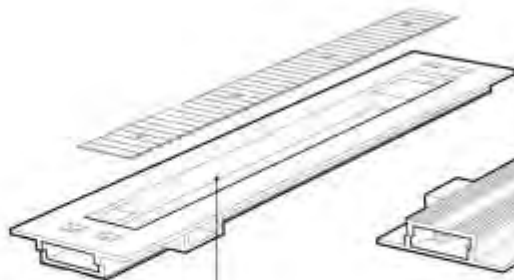
STRUCTURE & FACADE



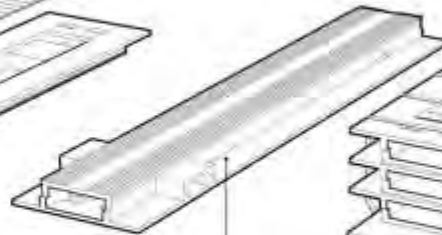
Conventional Wall
• Structural & facade
• Structural framing



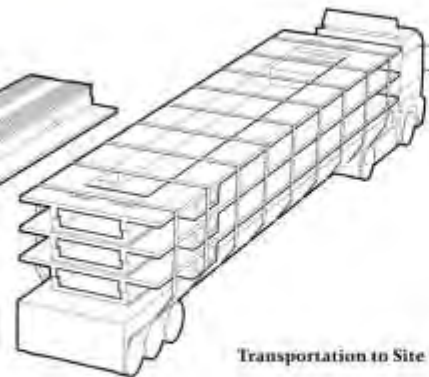
Modular Wall
• Structural framing
• Structural framing



Floor Plenum
• HVAC (supply air)
• Data & electrical



Ceiling Plenum
• HVAC (return air)
• Lighting & fire suppression



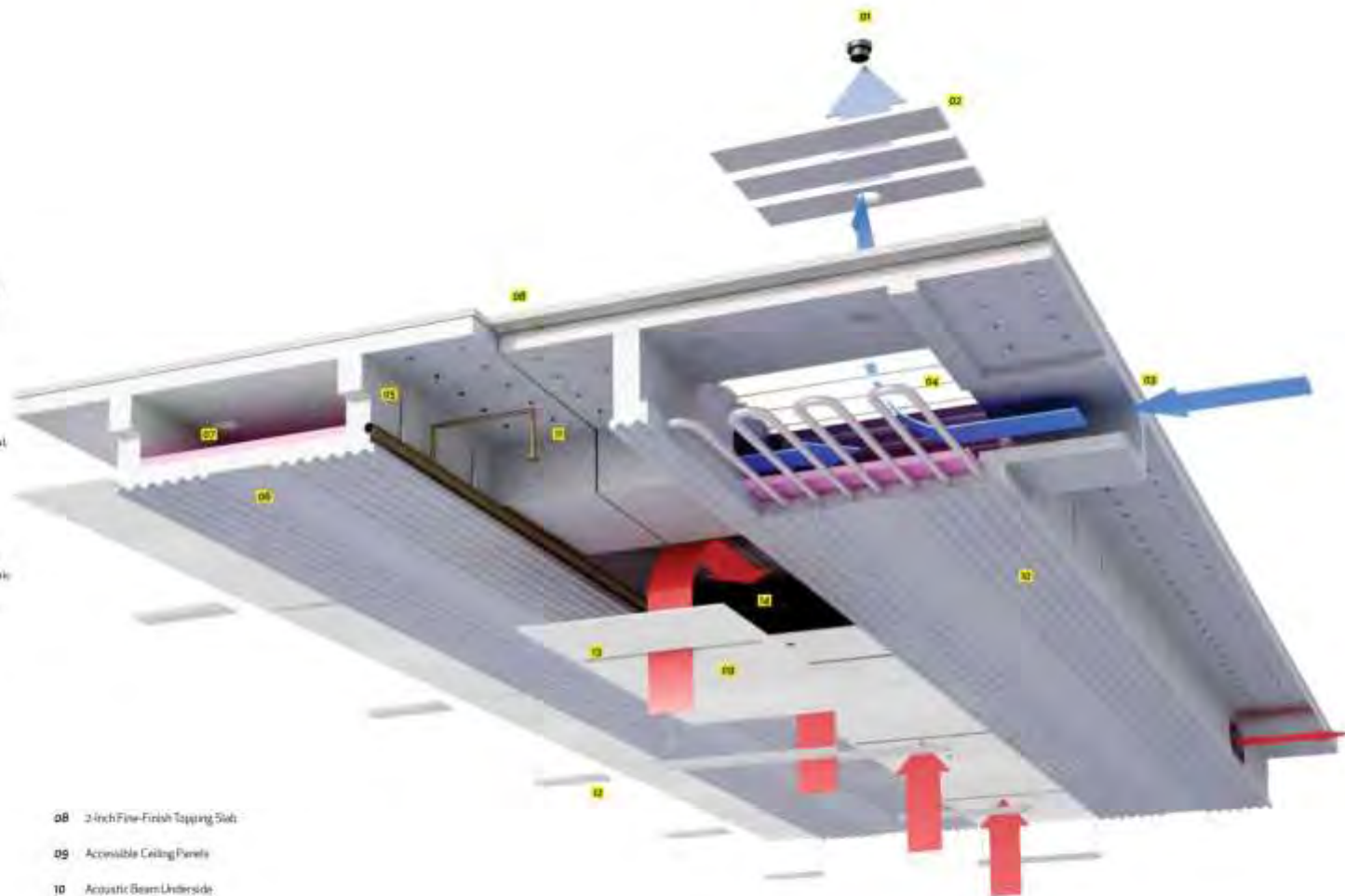
Transportation to Site

Floor Module

COORDINATED SYSTEMS

The structural floor system of the OEB incorporates mechanical, electrical, communications, fire suppression and lighting systems into a single, integrated assembly. Constructed using precast concrete, structural sections measuring 45 feet by 30 feet span the width of the floorplate and are reinforced to be 34 inches deep, one-half of the traditional plenum depth. This savings in plenum depth is achieved by alternating the ceiling and floor cavities and interweaving them within the necessary structural depth. Incorporated within the precast concrete elements are hydraulic cooling/heating loops to maintain proper building temperatures, integral air highways to distribute supply and exhaust air, and a cast-in mounting system for electrical and communication wiring.

The precast elements are fabricated off-site in a factory setting where all of the building mechanical and electrical systems can be pre-fitted. As the building elements arrive on-site, they are simply lifted off the delivery trucks and set directly in place. A topping slab joins the individual components to create a continuous diaphragm and the necessary systems are connected.



01 Under-Floor Air Diffuser (Supply Air)

02 Accessible Raised Floor Panels

03 Integrated Supply Air Duct

04 Closed-Loop Chilled Beam System

05 Cast-in Utilinut Mounting System

06 High-Strength 30-Foot Precast Floor Module

07 Chilled Beam Insulation

08 2-Inch Fine-Finish Topping Slab

09 Accessible Ceiling Panels

10 Acoustic Beam Underside

11 Integrated Accessible Utility Cavity

12 Sensor High-Efficiency Lighting

13 Return Air Diffuser

14 Integrated Return Air Plenum

Systems Integration

THE HIGH-PERFORMANCE WORKPLACE

The OBF will be filled with natural light and fresh air and respond to the specific needs of each inhabitant. Its occupants will demand floorplates that allow democratic and universal access to the building perimeter. The OBF will be organized as a narrow building that maximizes light, air and views in and through both sides of the lease depth. With pleisan spaces in the ending and floor deployed more efficiently, space is freed up to produce significantly higher ceiling heights. When natural ventilation is not possible, fresh air can be supplied through a matrix of small floor-mounted vents to provide each occupant the option to control local flow. Inexpensive overhead radiant heating and cooling will efficiently maintain the proper temperature.

- 01 Cross Ventilation Across Building Floorplate
- 02 Fresh Air From Floor Vents
- 03 Exhaust Air Through Ceiling
- 04 Radiant Cooling/Heating From Exposed Concrete Ceiling
- 05 Task Lighting
- 06 Dimmable Fluorescent Space Lighting
- 07 Roller Shades
- 08 Access To Floor Pleisan
- 09 Vertical Solar Shades With BIPV Solar Collector
- 10 Cost-insulation

