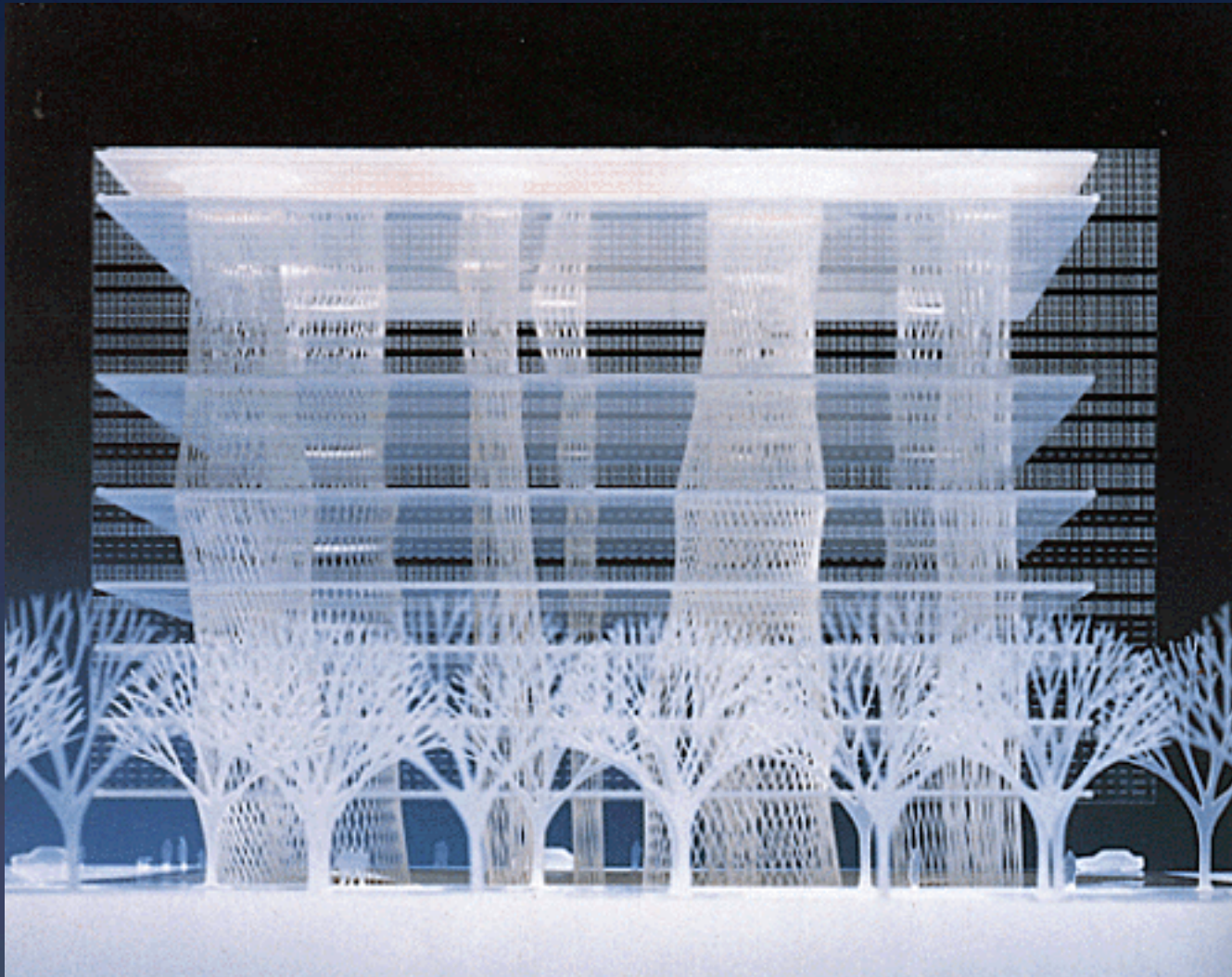
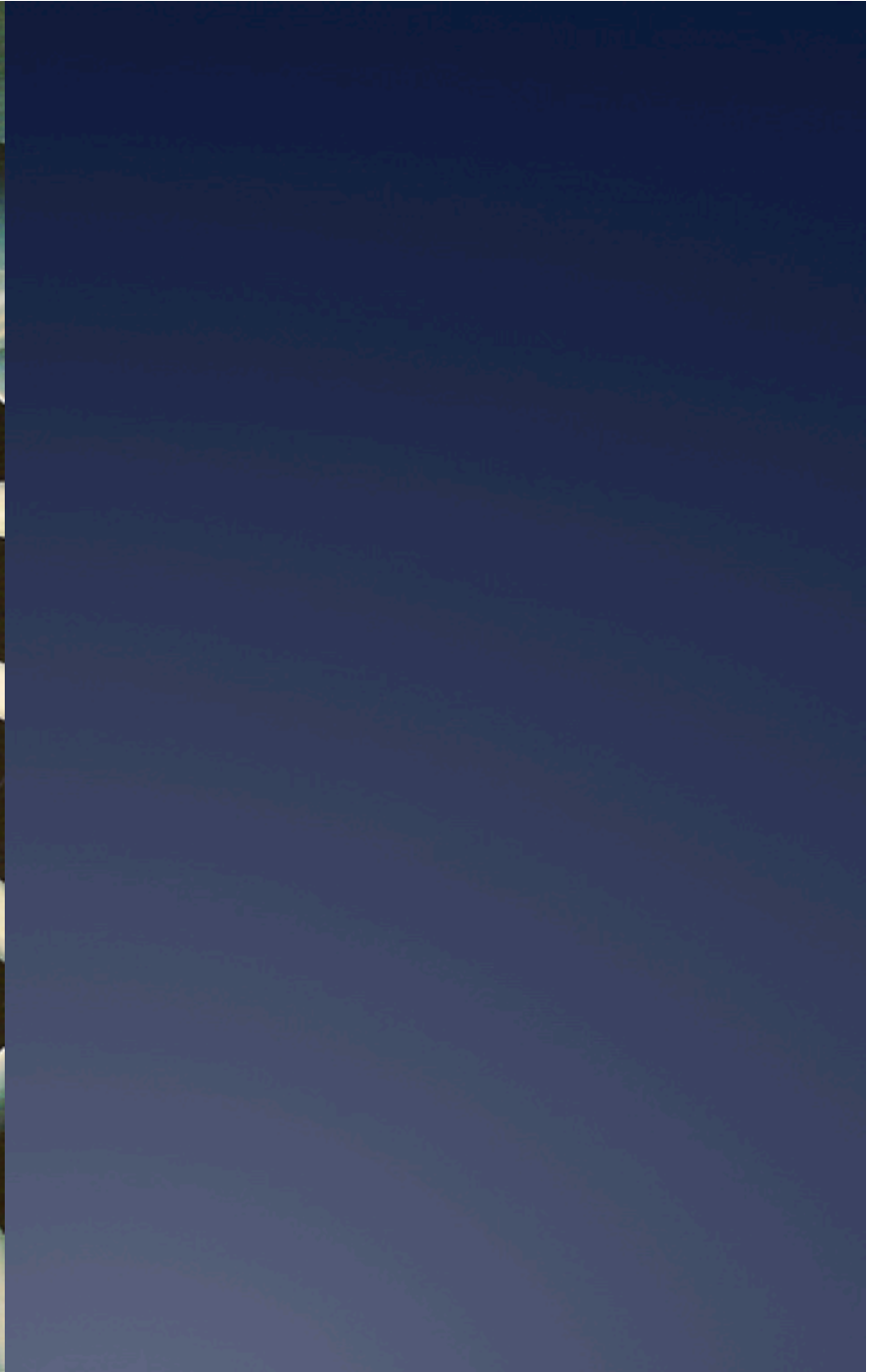


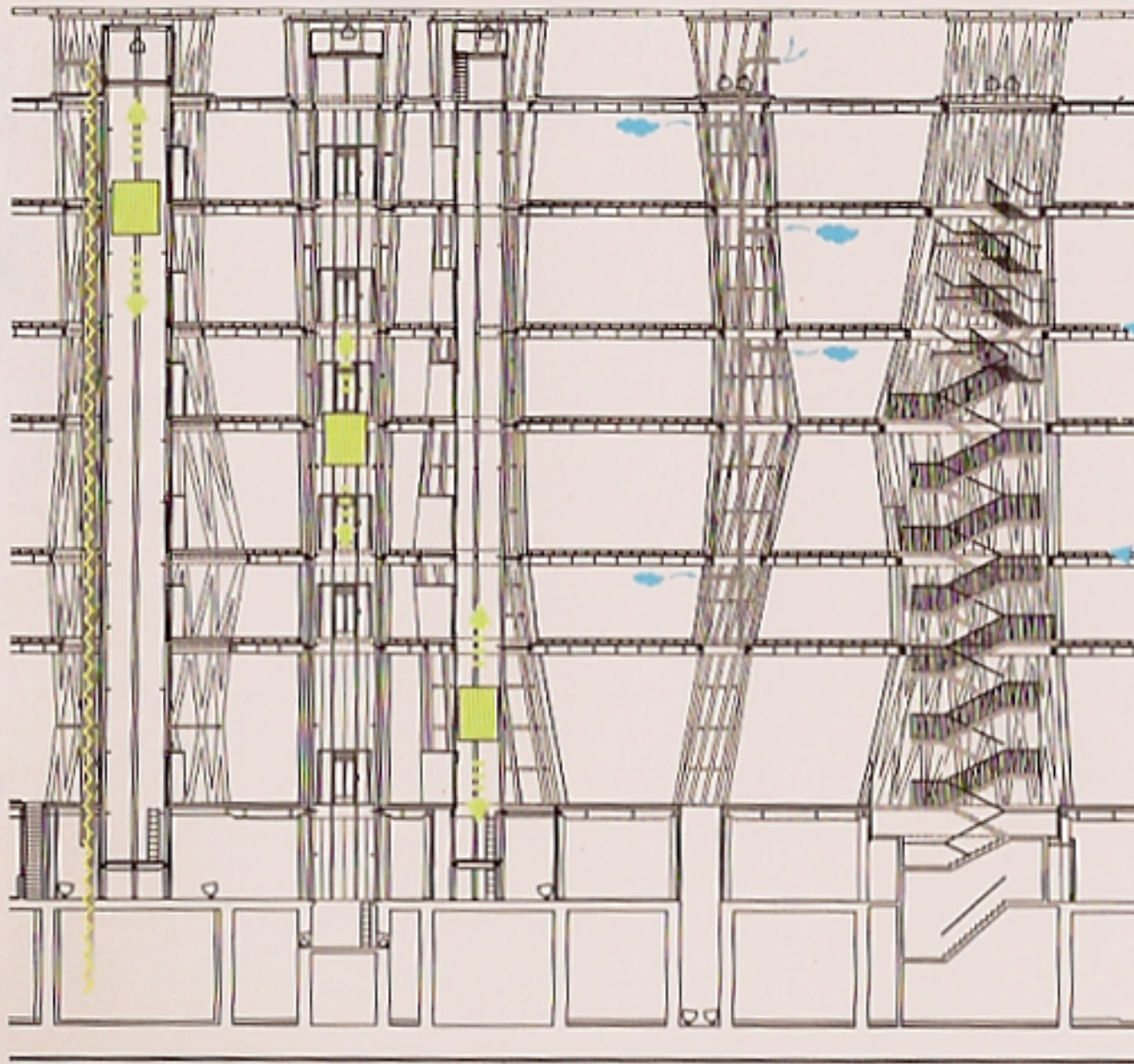
The column expanded

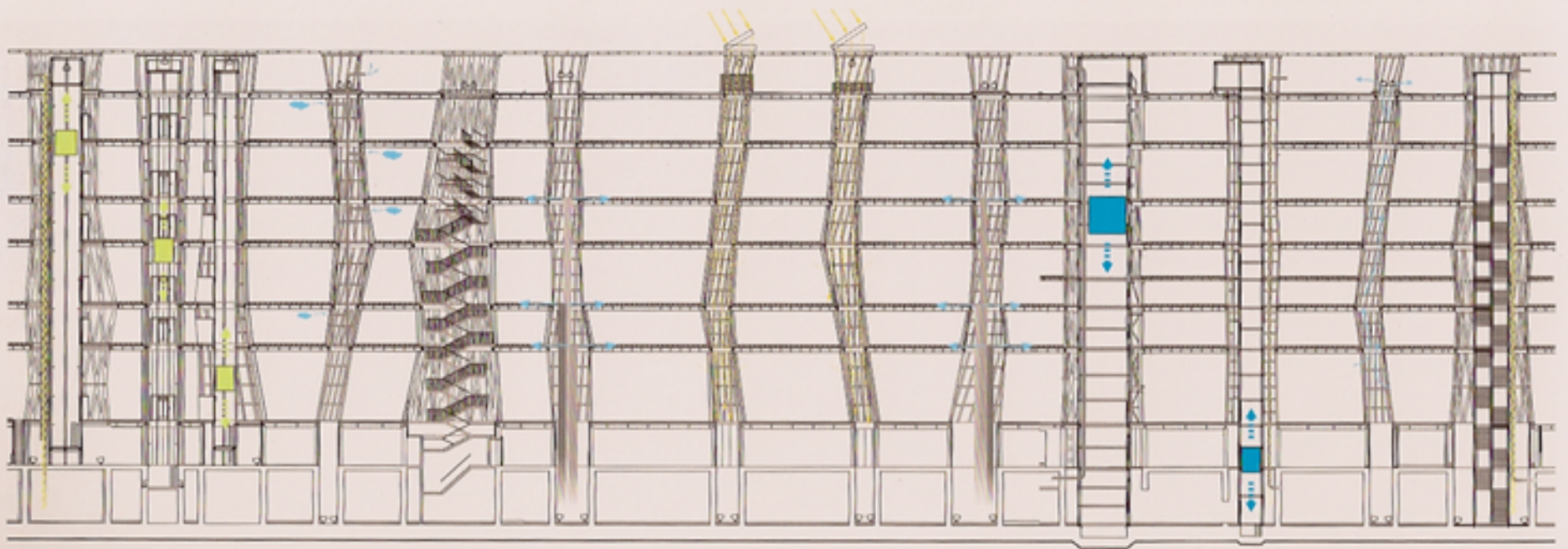
Sendai
Mediatheque, Toyo
Ito, 2000



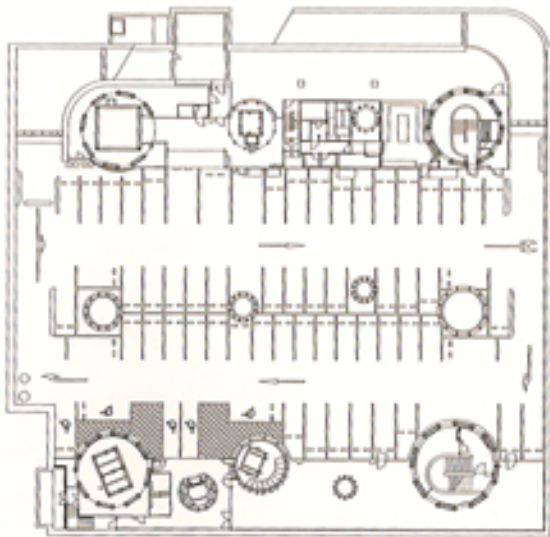
The lattice column: Sendai Mediatechue, 2000 Toyo Ito



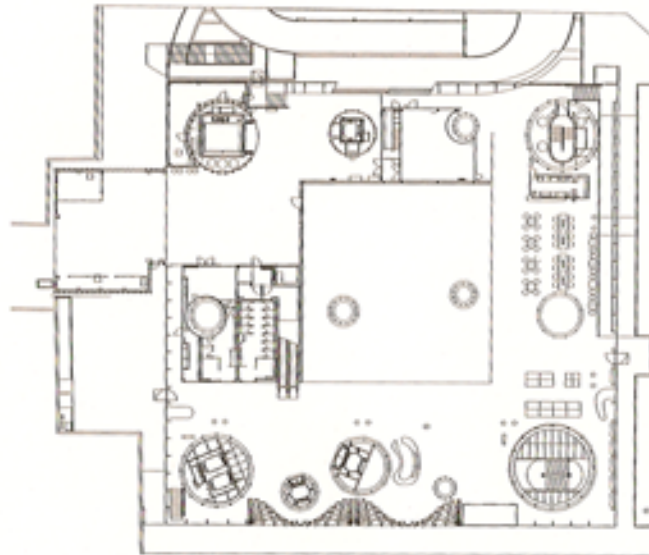




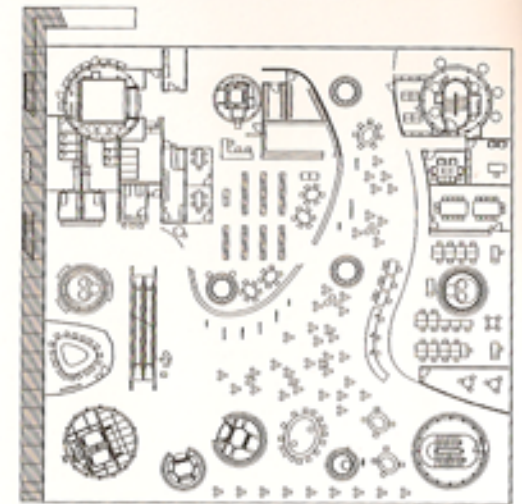
The tubes function variously as housing for stairs and lifts, air conditioning and light wells



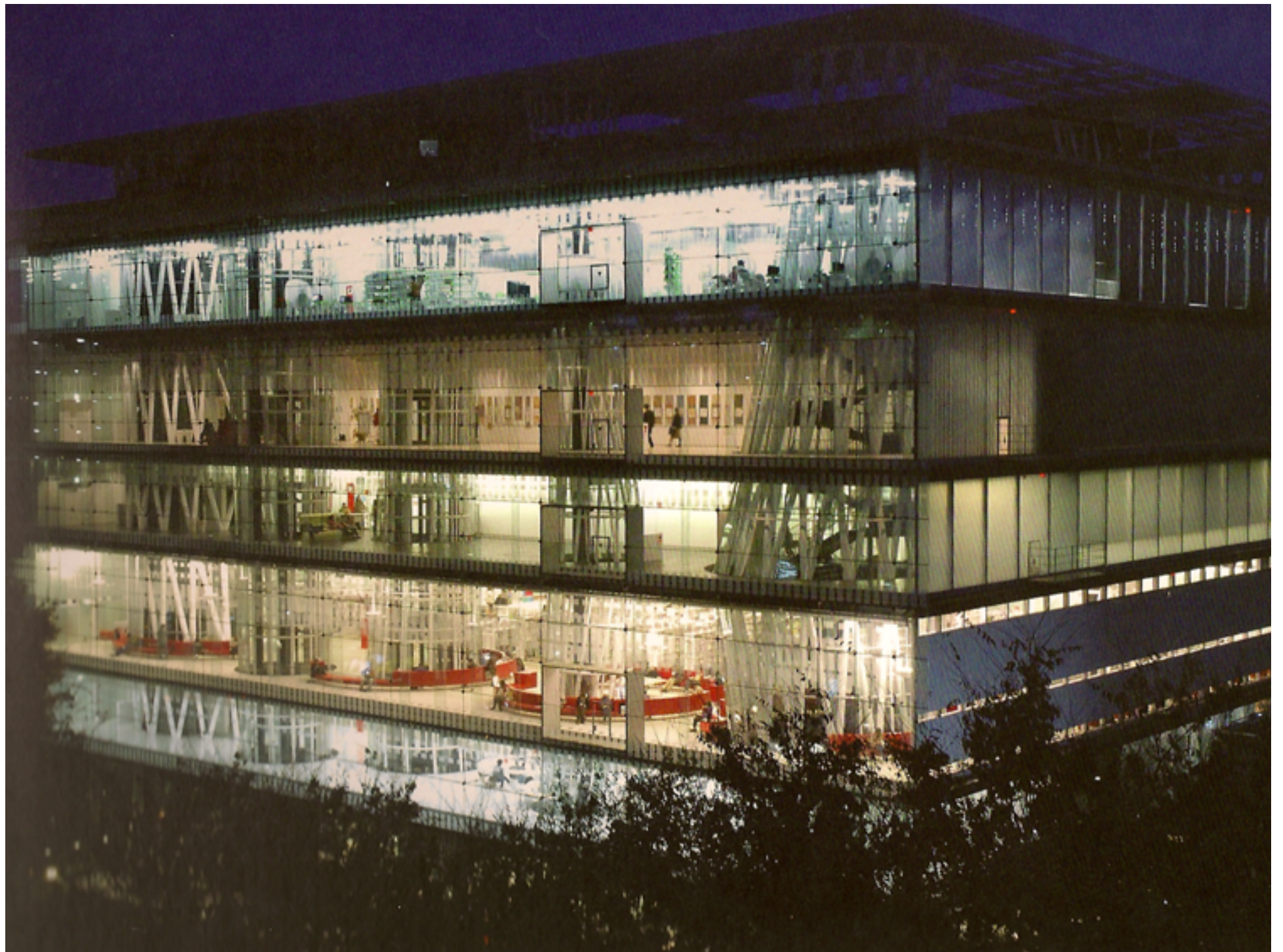
Basement plan

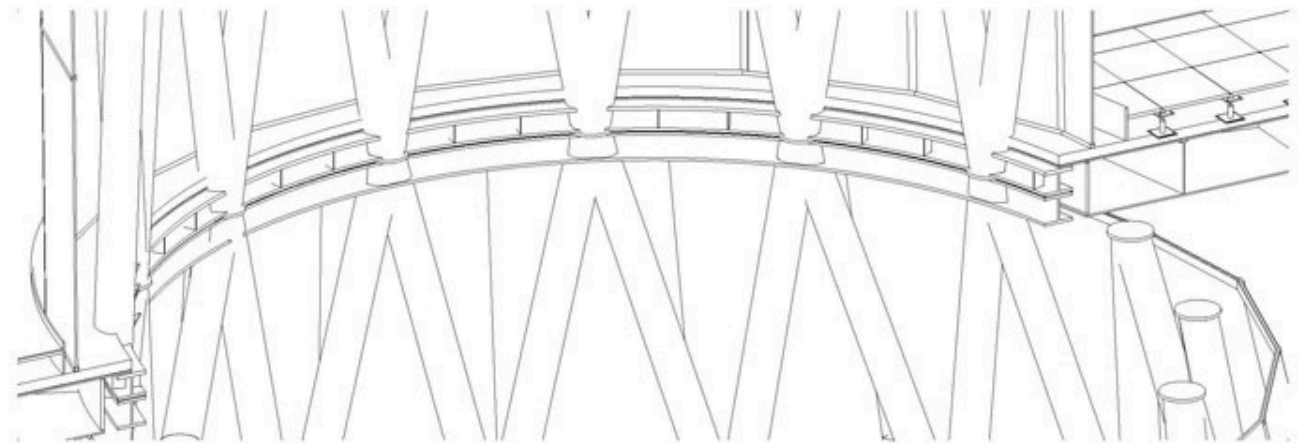
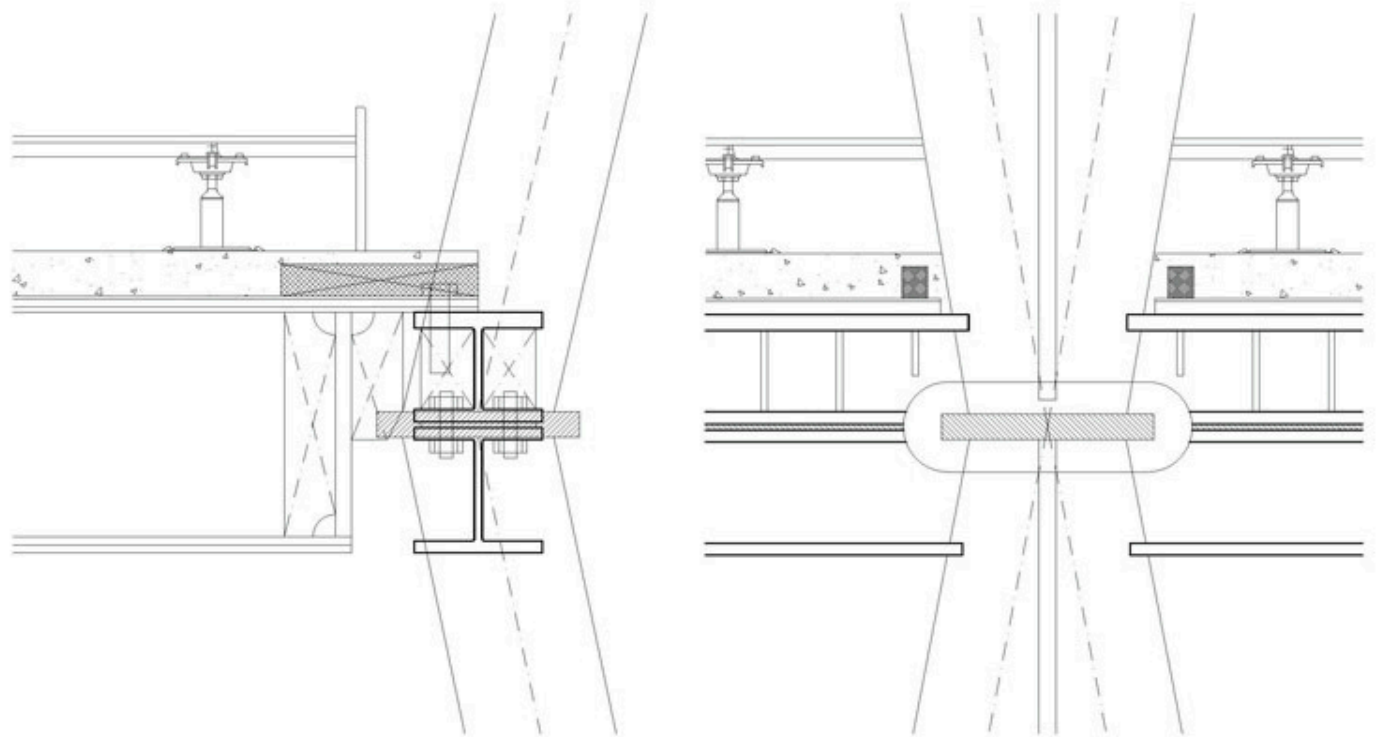
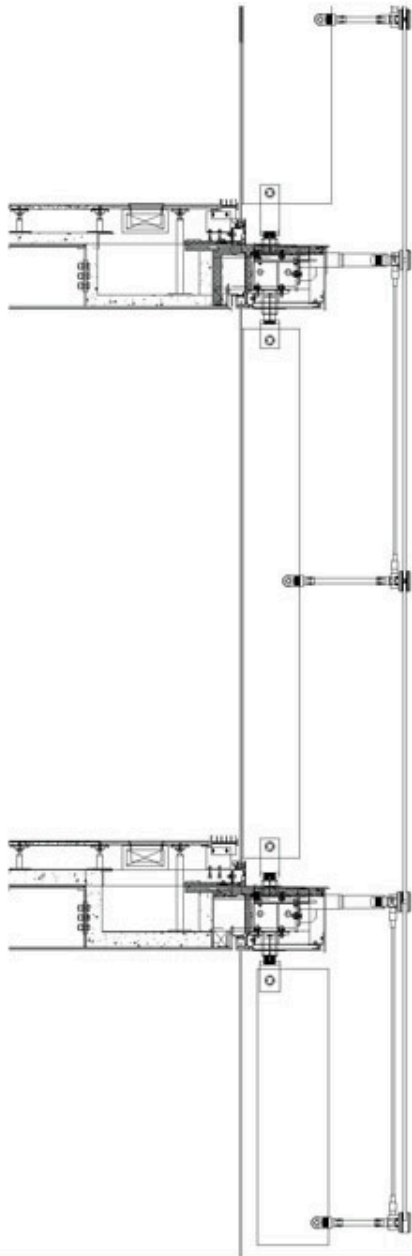


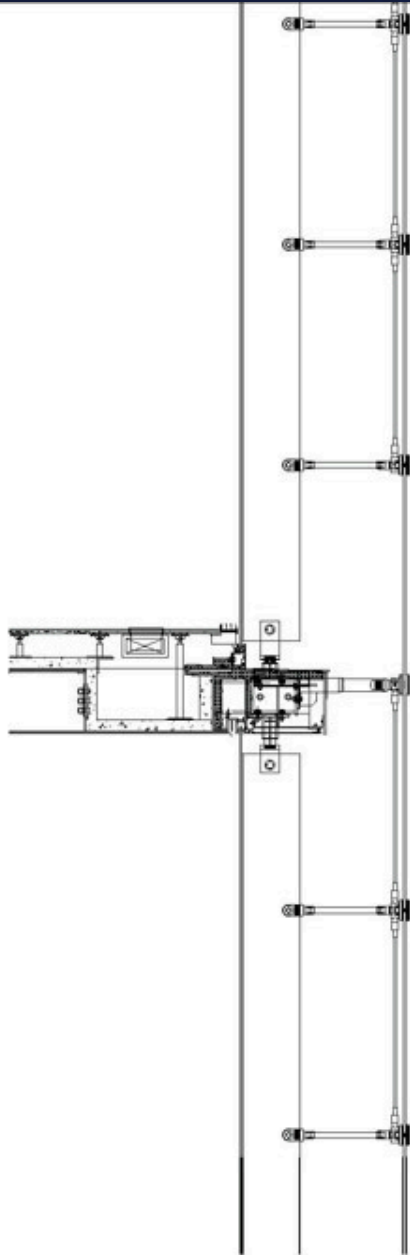
Ground-floor plan



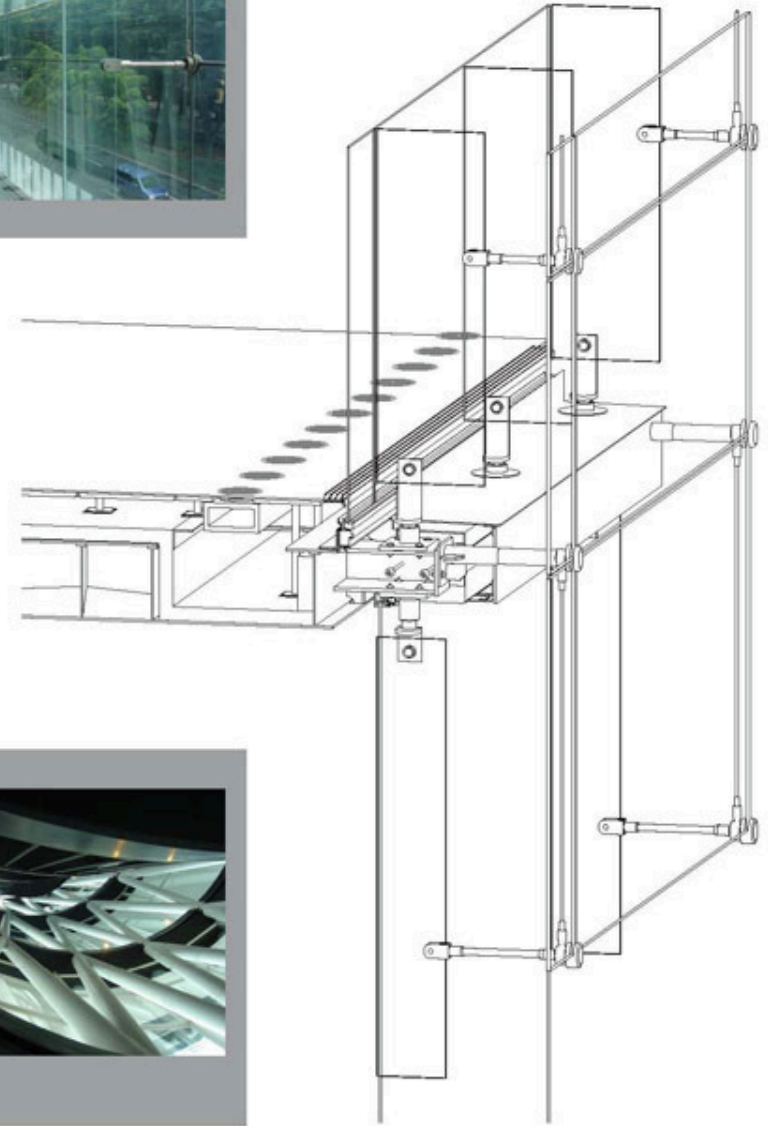
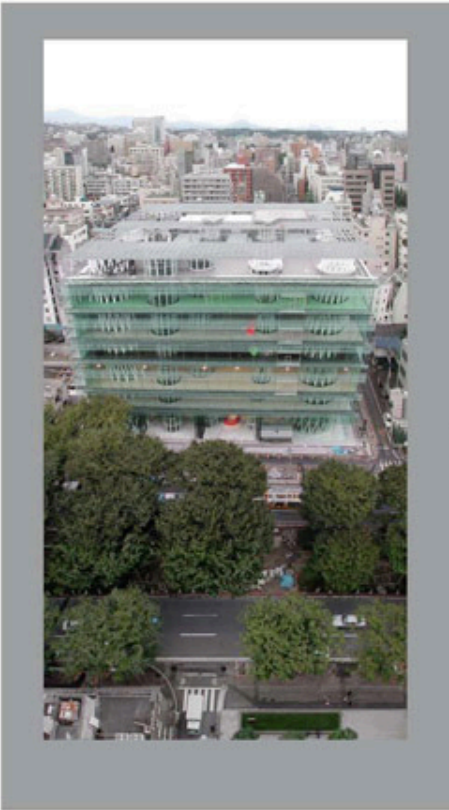
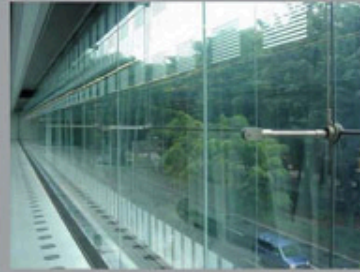
First-floor plan

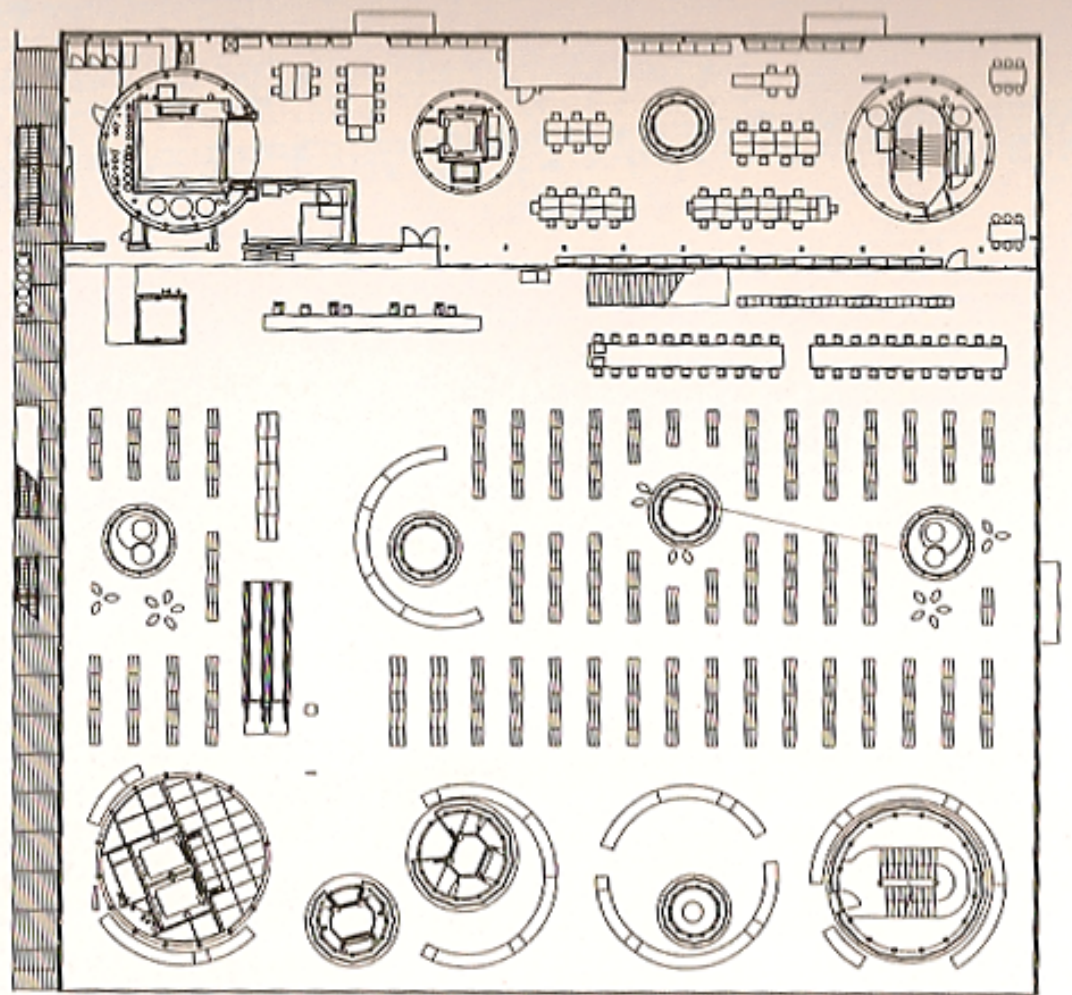
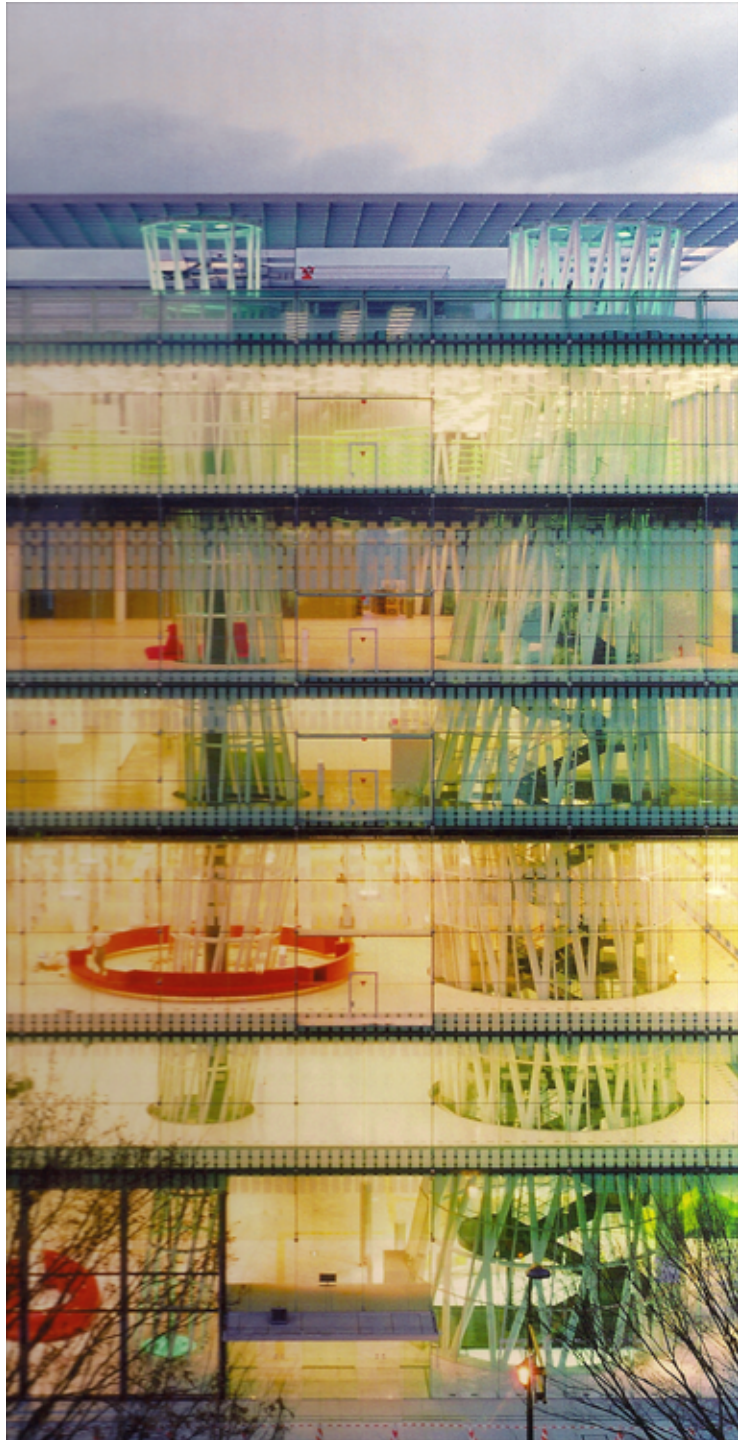






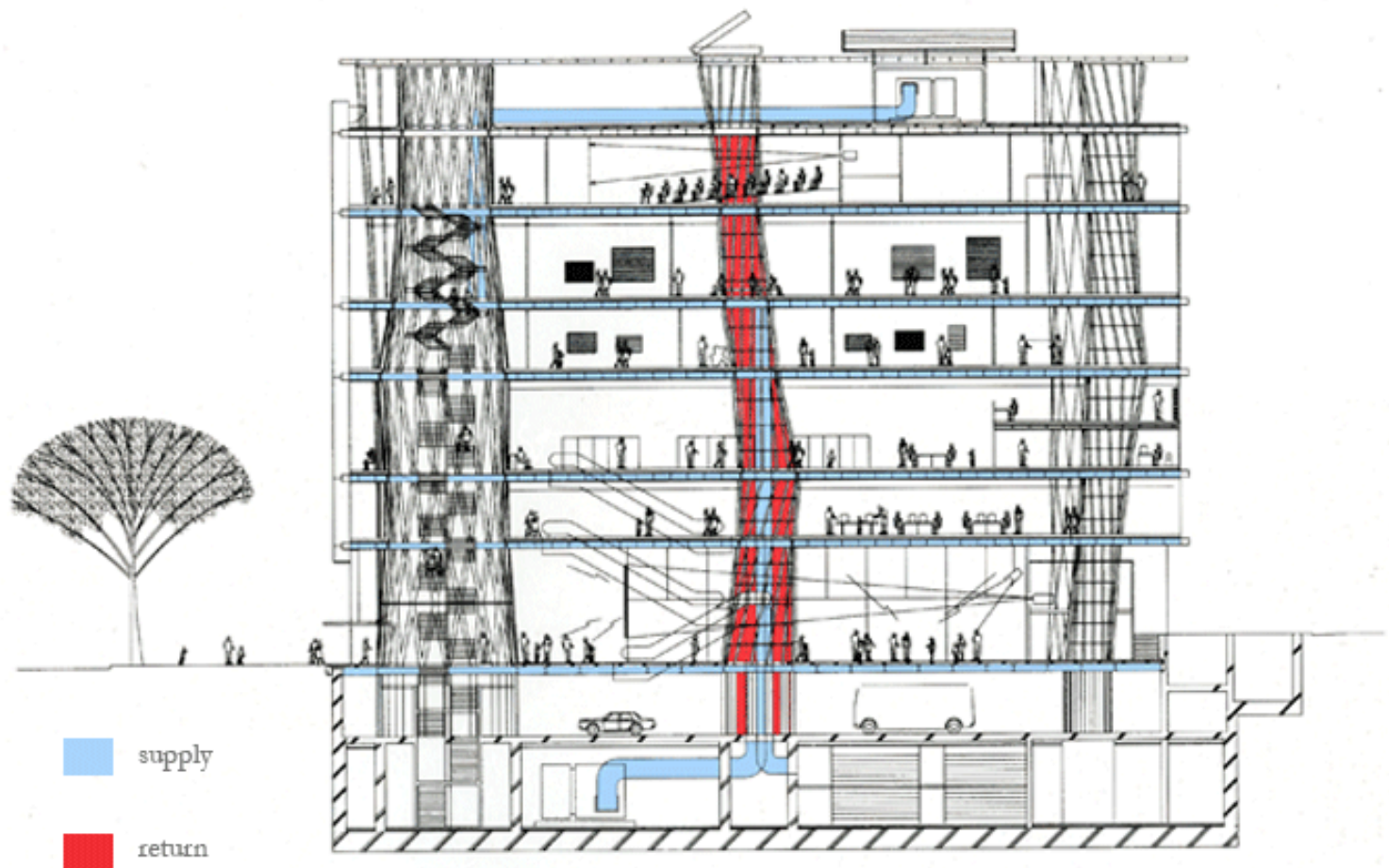
- 4. GLAZING LAYERS
 - INTERIOR GLASS
 - SILK PRINTED FILM
 - SEALING
 - RIB; TEMPERED GLASS
 - SHATTERPROOF FILM
 - RIB SUPPORT HARDWARE SUB
- 5. NONCOMBUSTIBLE WOOD
- 6. GROUND FLOOR PLATE
 - MARBLE
 - BASE MORTAR
 - REINFORCED CONCRETE
 - DECK PLATE





Second-floor plan

The active climate control system is an all-air system. Air is distributed through the column clusters from the machine room located in the second basement level and from the machine room located on the roof. The air is distributed out from the base of the columns and into the raised floor at each level. The air is expelled through registers along the building's enclosure systems and at registers located randomly within the raised floor system. The air is returned at the column capital and is drawn down the column clusters. The building is connected to the city's chilled water system and the cooling tower is located off-site.



The Sendai Mediatheque employs both passive and active climate control systems. The double glazed enclosure of the south façade is a passive method of climate control. The double skin acts as a thermal blanket trapping air to keep the building warm during the cooler seasons and also allowing for the passage of air through it, which cools the building in the warmer periods of the year.

