THE ECONOMIST BUILDING

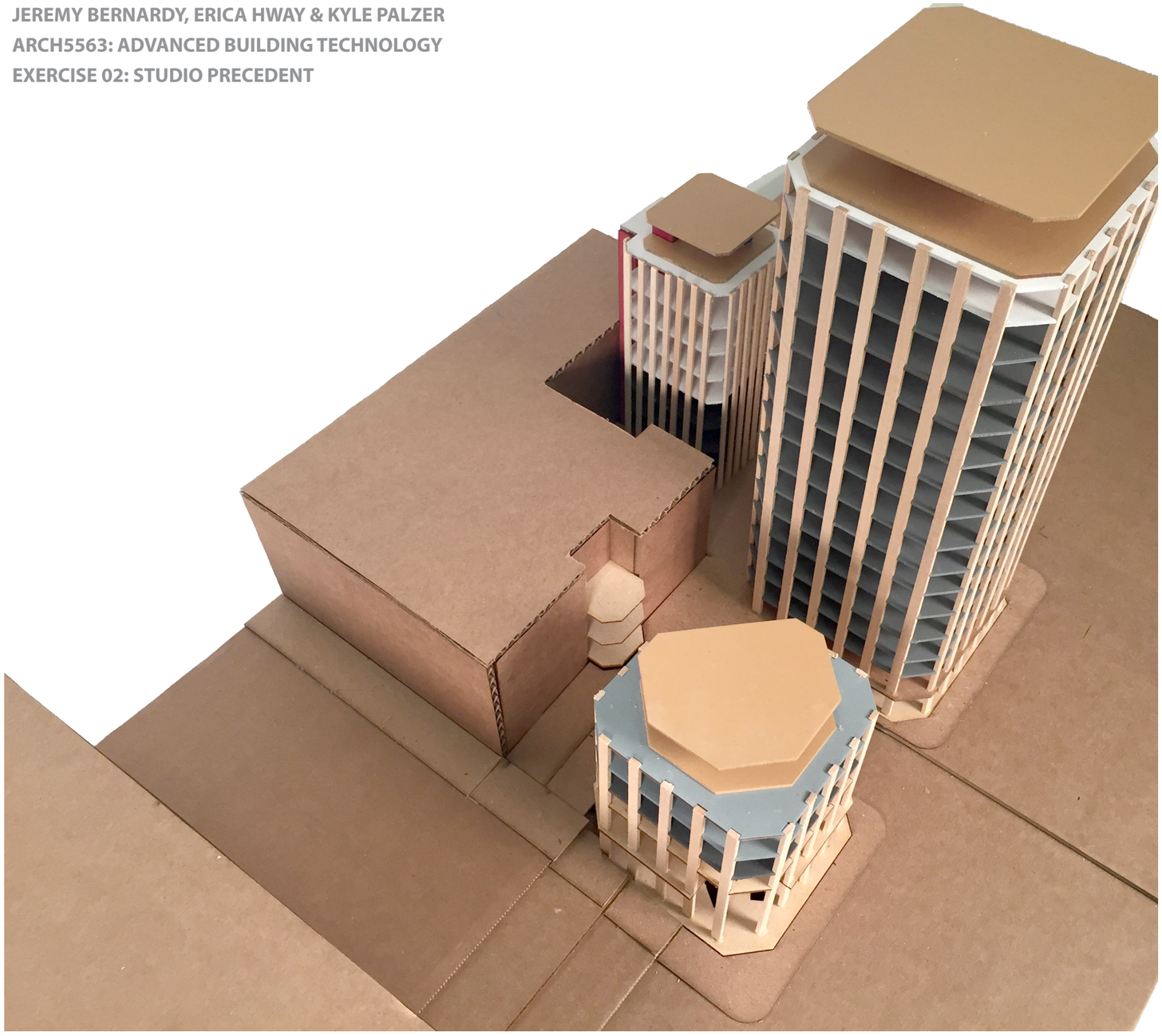
25 ST. JAMES'S ST. LONDON, UK

ALISON & PETER SMITHSON

JEREMY BERNARDY, ERICA HWAY & KYLE PALZER

ARCH5563: ADVANCED BUILDING TECHNOLOGY

EXERCISE 02: STUDIO PRECEDENT



CONTEXT

The firm of Alison and Peter Smithson was begun shortly after the couple graduated from architecture school at Durham University in 1949. It was at this time that they joined the architecture department of the London County Council. This would prove to be a major driver for the direction of their personal practice and theory. The pair, compared with other firms of the period, did not produce anywhere near the amount of built projects but rather focused on defining urbanism and setting a new precedent within the architecture community.

Their first project together was the Hunstanton School in Norfolk, England. This school was the birth of the movement New Brutalism in post-War Britain. The Smithsons, still relatively young compared with other firms they were in competition with, won the competition to design a school that was to become part of a new educational program in England: the secondary modern (Spellman, 2004). This form of education had not been defined at the time of the competition but was needed as a response to the growing population of 'baby-boomers'. The Smithsons focused on materiality and circulation in a way that would progress their agenda for the new movement forward. Their work was influenced by LeCorbusier and Mies van der Rohe but sought to produce projects that were more "honest in nature" (Vidotto, 1997); what you see is the true structural frame, a careful consideration of an available material palette [to reflect the shortage of supply due to war], and attention to detail in how the building could better serve the educational needs of faculty and students.

THE ECONOMIST BUILDING

The Economist Building was their next major commission by then Economist chairman Sir Geoffrey Crowther and joint-manager Peter Dallas Smith. They won the invite-only competition beating out the firm of George, Trew, and Dunn. The design of the new structure was centered on an intimate plaza that would serve both the function of providing a secluded space of contemplation while simultaneously acting as a connection to the nearby streets. The Smithsons, at this time, were still pushing their ideas of urban restructure, material use, scale and proportion, and circulation. The Economist Building became a testing ground for each of these platforms and ultimately was a successful symbol of great architecture within London.

The material palette for the Economist Building reflects that of New Brutalism in which a clearly defined structure is employed through the use of rough faced concrete offset by large spans of sheet glass windows. The expression of structure and directness of concrete was meant to convey meanings of a new society following the destructive impact that World War II had caused. New Brutalism offered a way to showcase progress of a 'Second Machine Age' and bring Europe back to a forefront leader in the context of global power.

THEORY AND DESIGN INTEGRATION

The commission of the Economist Building provided a vehicle through which the Smithsons were able to drive their ideas on urban restructure, how function and form can coexist, and how the experience of the user molds the design.

The design of the structure attends closely to the scale and proportion of the human. A popular theory during the 1960s and 1970s that the Smithsons had developed was labeled as "Streets in the Sky" (Smithson, 2005). Their driving force behind the theory was developing a city that would separate the pedestrian user from automobiles on the street. In the Economist Building this notion became the raised plaza between the three structures that allowed a place for chance encounters and personal contemplation apart from the distraction of the city. The plaza, however, was not so far removed that one felt isolated from the city but rather attempted to create a smooth transition between the two zones.

The proportion and placement of the buildings within the site facilitated the advancement of the Smithson's agenda for a new urban planning strategy by placing their tall buildings (a residential tower and The Economist Building) at the rear of the site on the narrower and less busy streets while placing the smaller building (the bank building) on the front of the site which has a wider and more populated street (Smithson, 2001). This was contrary to other architects at the time in that most saw the main street of a site as the place where their grand bold statement for a design would be placed. To the Smithsons placing the larger, taller buildings at the back of the site was a way for them to not compete with the formality of the street that was present prior to the construction of the new design (Smithson, 2005). A tall structure on a narrow street allowed for the user to be unaware of the height that was surrounding them.

The Smithsons were firm believers that a building's function should be integrated seamlessly into the building design in order to provide both beauty and functionality. The two main ways they achieved this goal was through the use of integrated ventilation and lighting. With ventilation they placed the mechanical chase within the columns as a way to hide the system while effectively using the vertical nature of the column to transfer air and water effectively. They also integrated the furniture of the building into these systems. The desks contained air supplies that could be individually controlled. These were supplied from the column HVAC, and the hot and cold water running through were also used to heat or cool the air respectively. This created a well designed local environment intended to improve worker conditions.

Likewise, the Smithsons also integrated lighting and air handling into the furniture through the use of movable book shelves with "light vents". Here, books would be placed below in the shelves while at the top lights would run along its length lighting both the office and corridors simultaneously. This was another well designed and highly functional element. Above the lights, there was also room for air to late from the office spaces into the halls and finally to the central core where it would be released from the air handling units. By integrating the systems of the building seamlessly with functional elements, the Smithsons were able to strike a balance to both improve the well-being of the occupants and make effective use of space.

Circulation through this building was focused on a central service core that would provide both a space for mechanicals (air intake and plumbing) and movement vertically. At the time, this was an American development that had not been tested in the United Kingdom and was considered a high risk move for the Smithsons by critics. In the circulation core, there are three general passenger gearless high-speed elevators (500 fpm), a geared fireman's lift (300 fpm), and two sets of staircases. While each building in the four-building complex on the site has an individual circulation core, a common sub-plaza level allows for horizontal circulation between the buildings. This design helps reinforce the notion of a "charged void" as a relief from the living and working zones as well as a way to easily connect the parking space to all of the structures.

CONCLUSION

The Economist Building represents a progression of design during the period following World War II that sought to counteract the theories and choices of prominent architects at the time. The structure and site integrated the condition of the human scale into the larger context of the city by creating an urban oasis that separated the street from the pedestrian. Inside the building, this scheme of integration was implemented into the overall form by concealing the mechanical ducts and pipes into the columns. This detail of the building assumed a dual identity by freeing space within the rest of the building and making a statement as to what structure is present. The Economist Building was as much an experiment of the personal theories and vision of Alison and Peter Smithson as it was a cultural revolution that brought new ideas to urban form and theory for the coming years.

RESOURCES

1. Spellman, Catherine, & Unglaub, Karl (2004). Peter Smithson: Coversations with Students, A Space for Our Generation. New York, New York: Princeton Architectural Press.

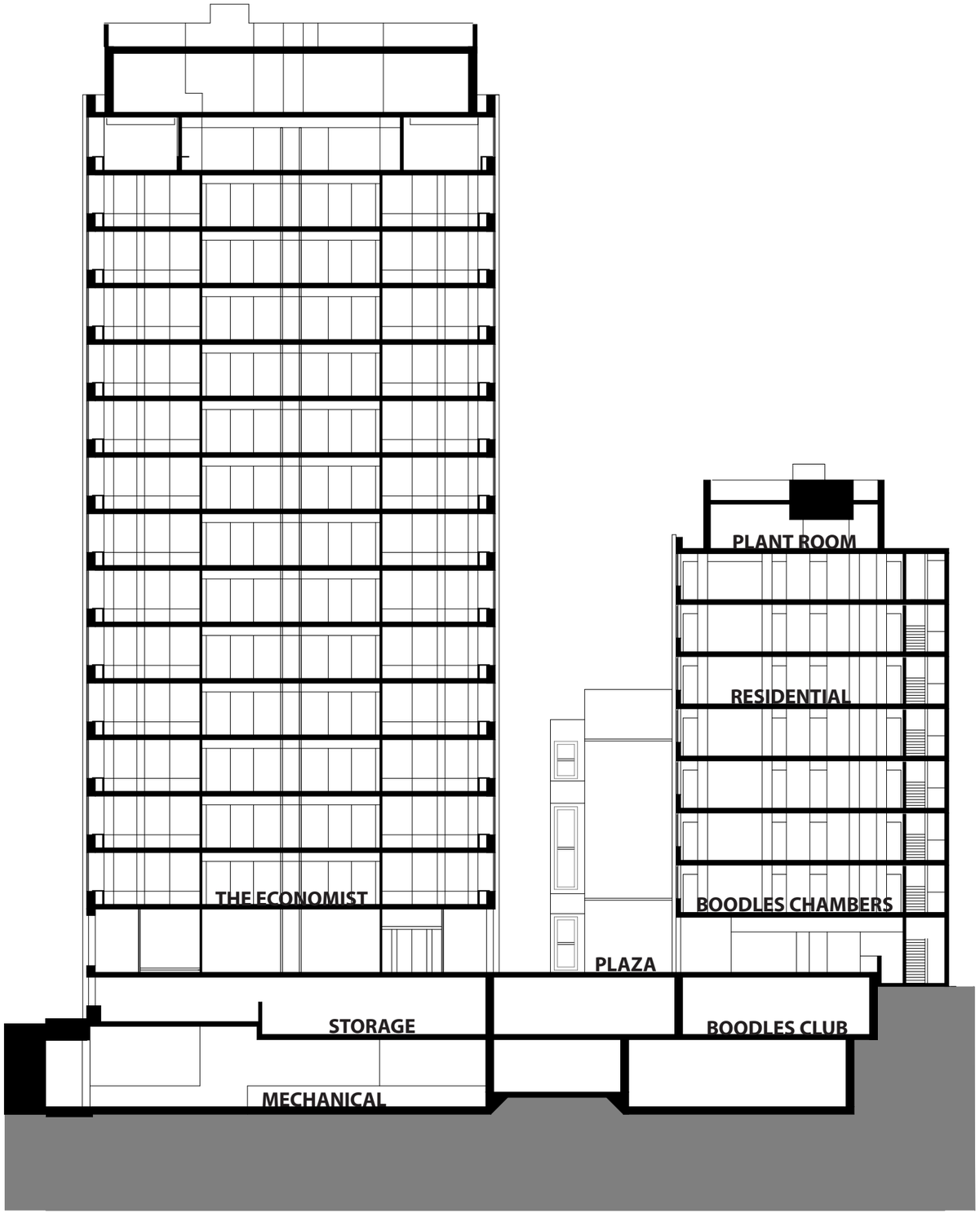
2. Smithson, Alison, & Smithson, Peter (2001). The Charged Void: Architecture. New York, New York: The Monacelli Press, Inc.

3. Smithson, Alison, & Smithson, Peter (2005). The Charged Void: Urbanism. New York, New York: The Monacelli Press, Inc

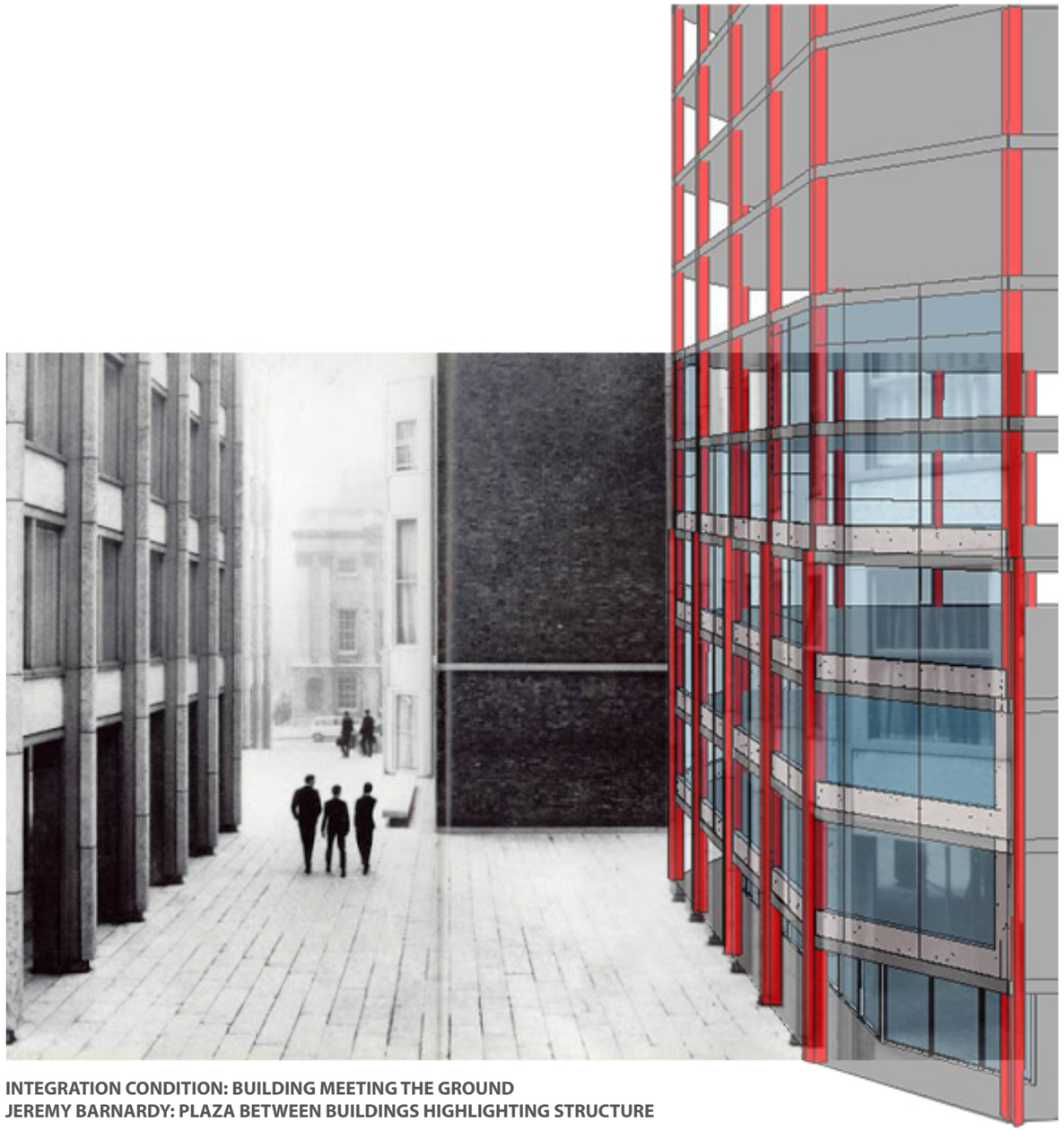
4. Vidotto, Marco. (1997). alison and peter smithson. Barcelona, Spain: Ingroprint S.A.

5. (1965). The Economist Group St. James's St. London. *Architectural Design,* 66-85

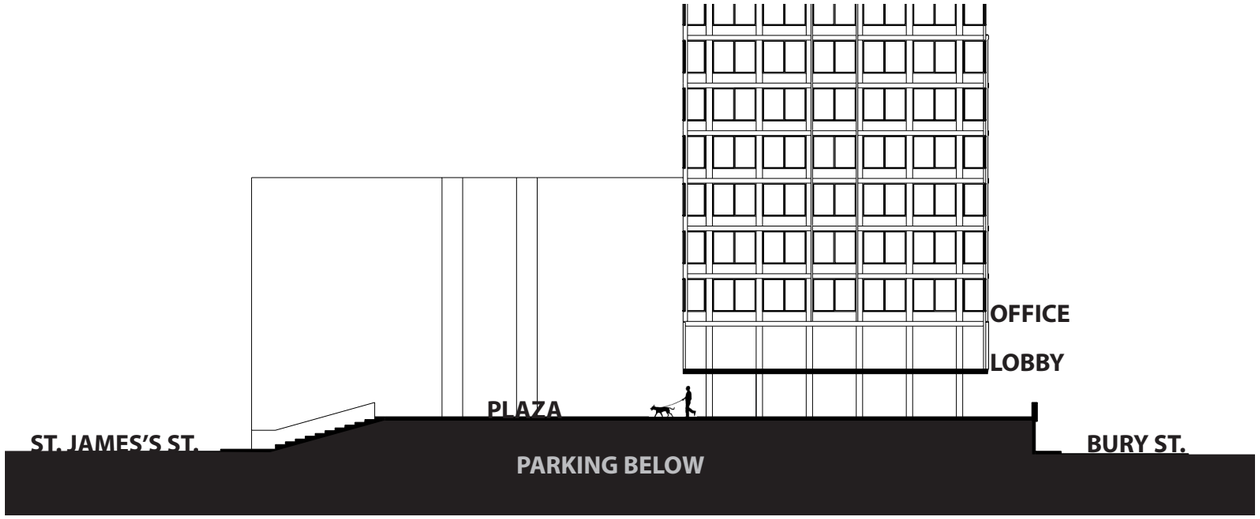
6. (1969). The Economist Building. *Architects Journal.* 551-564



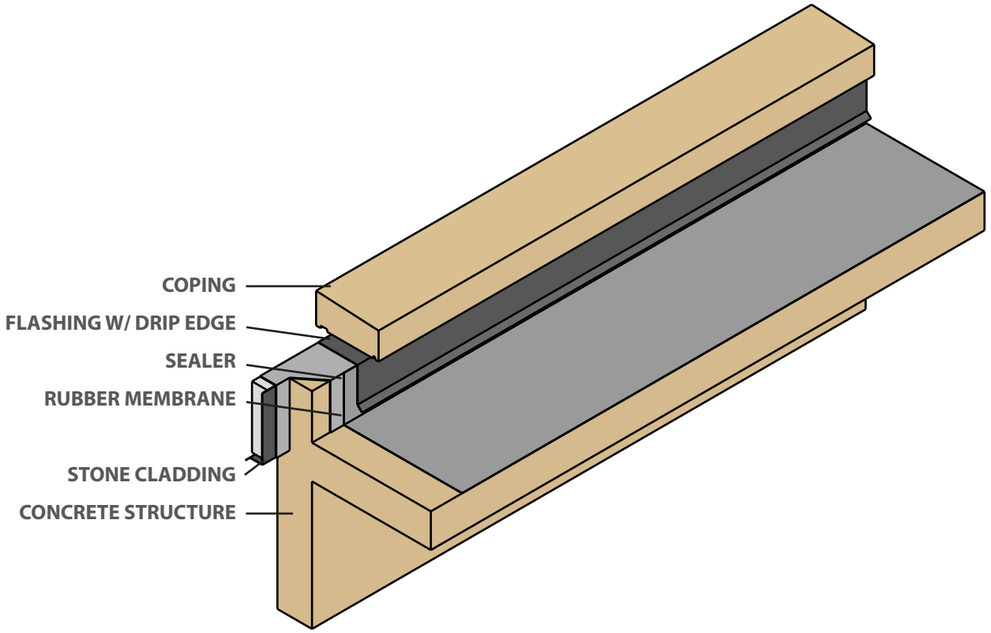
BUILDING SECTION
1/16" - 1'-0"



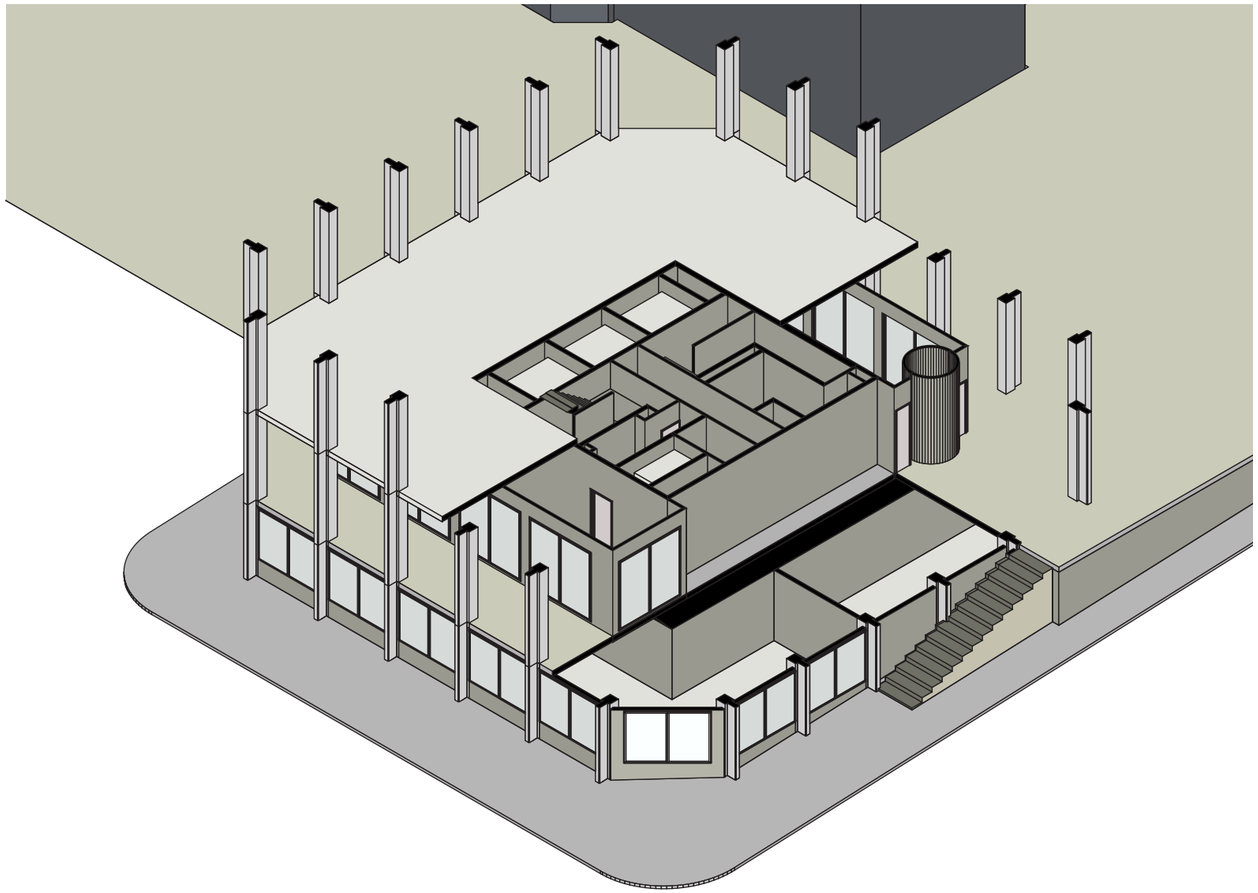
INTEGRATION CONDITION: BUILDING MEETING THE GROUND
JEREMY BARNARDY: PLAZA BETWEEN BUILDINGS HIGHLIGHTING STRUCTURE



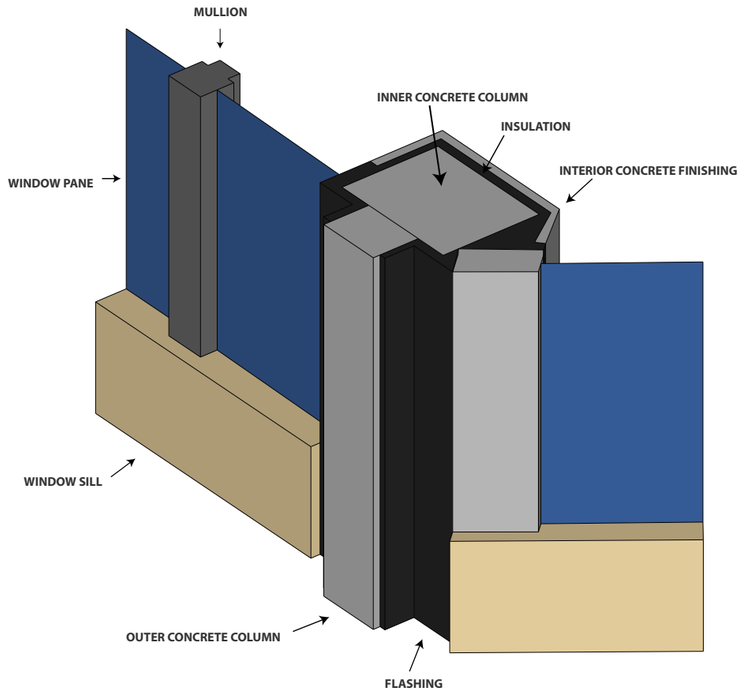
ORGANIZATION OF SITE



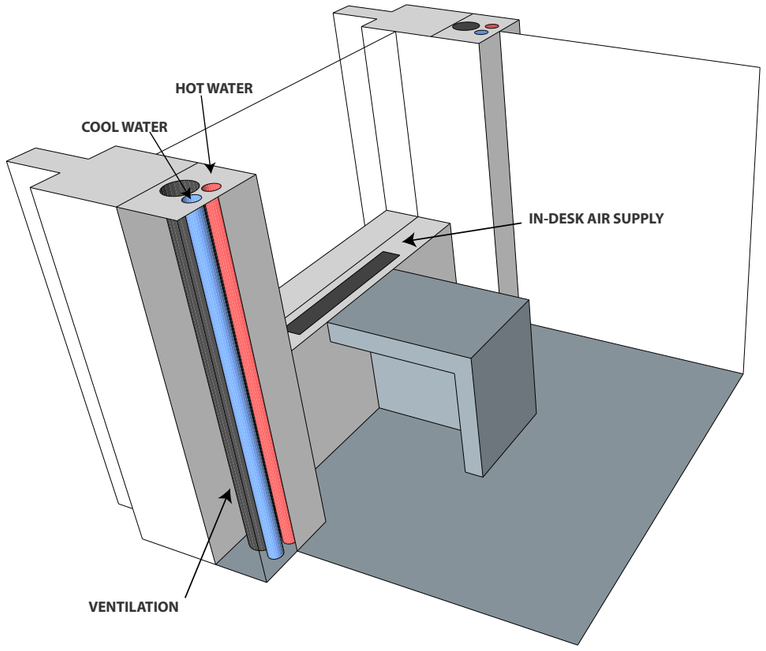
INTEGRATION CONDITION: HOW THE BUILDING MEETS THE SKY
ERICA HWAY: PARAPET CONDITION



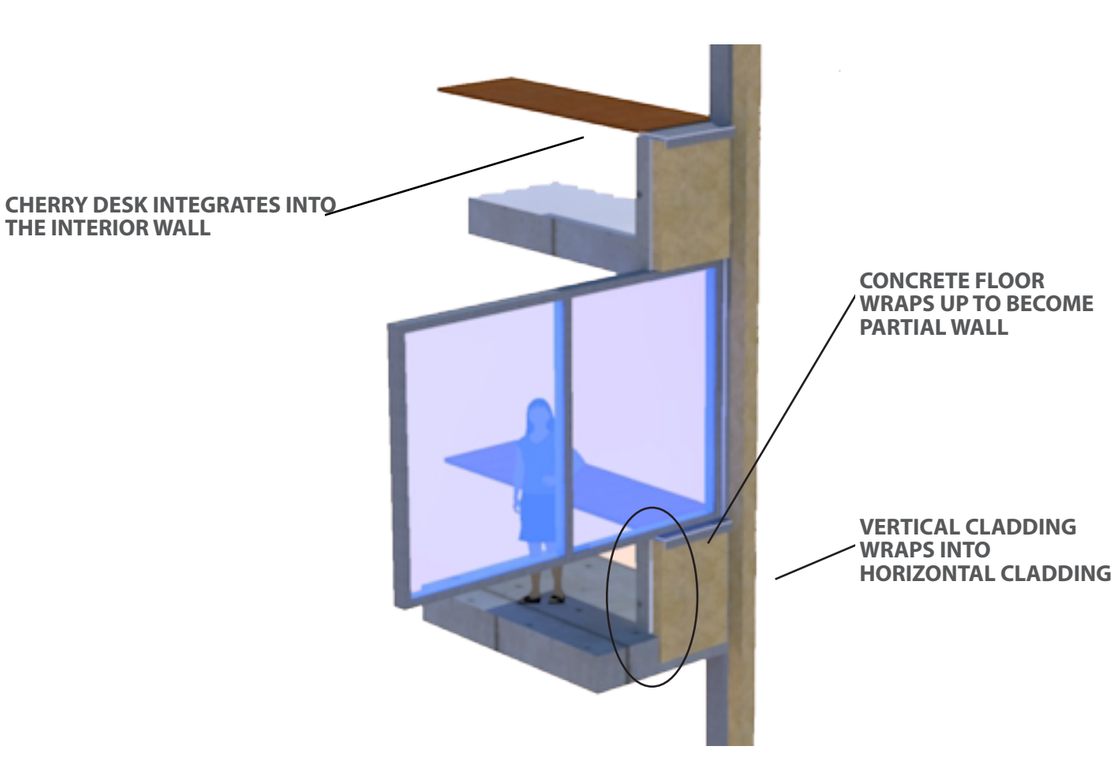
INTEGRATION CONDITION: HOW THE BUILDING MEETS THE GROUND
ERICA HWAY: PLAZA RAISED ABOVE GROUND LEVEL



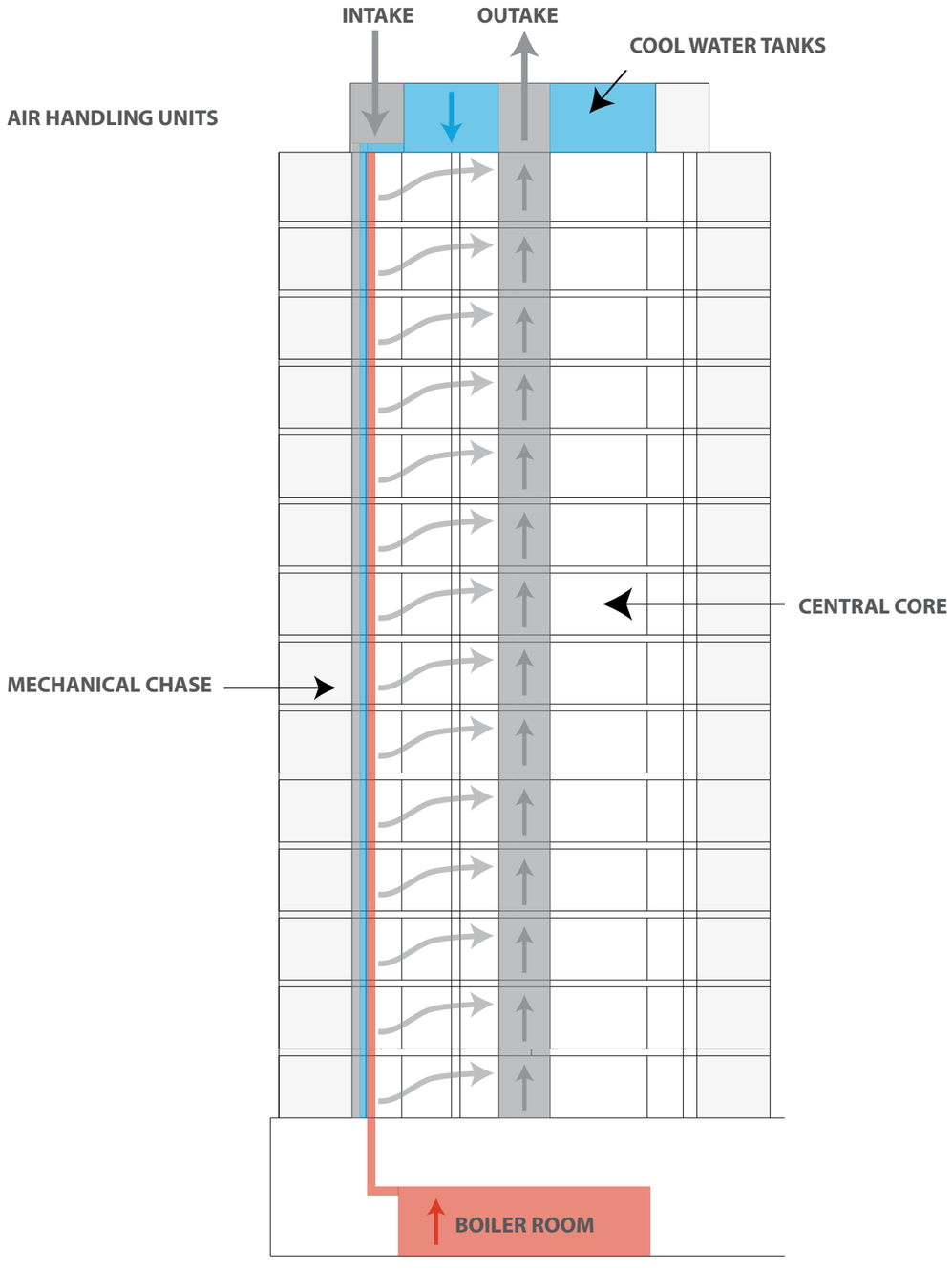
INTEGRATION CONDITION: HOW THE BUILDING TURNS A CORNER
KYLE PALZER: MULLION AND COLUMN CONNECTION



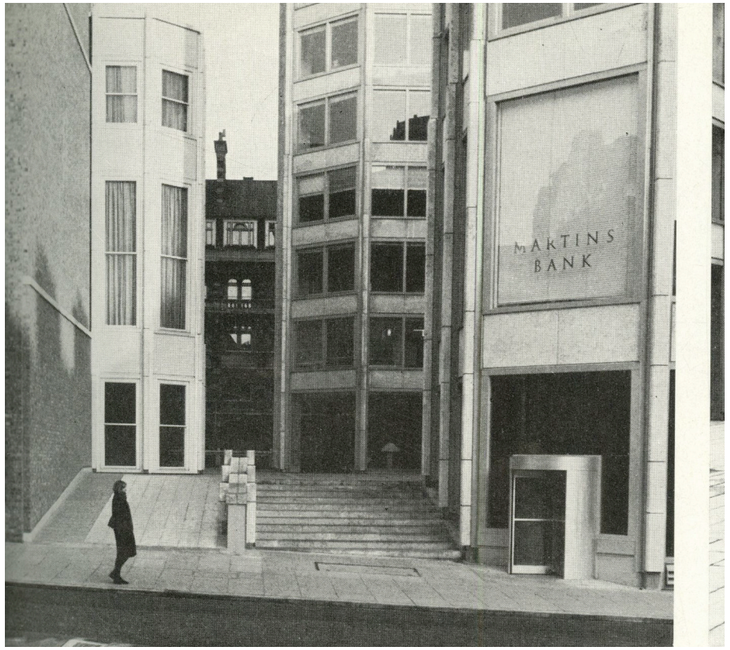
INTEGRATION CONDITION: HOW THE BUILDING FORMS AN OPENING
KYLE PALZER: INTEGRATED MECHANICAL SYSTEMS AND WORK SPACE



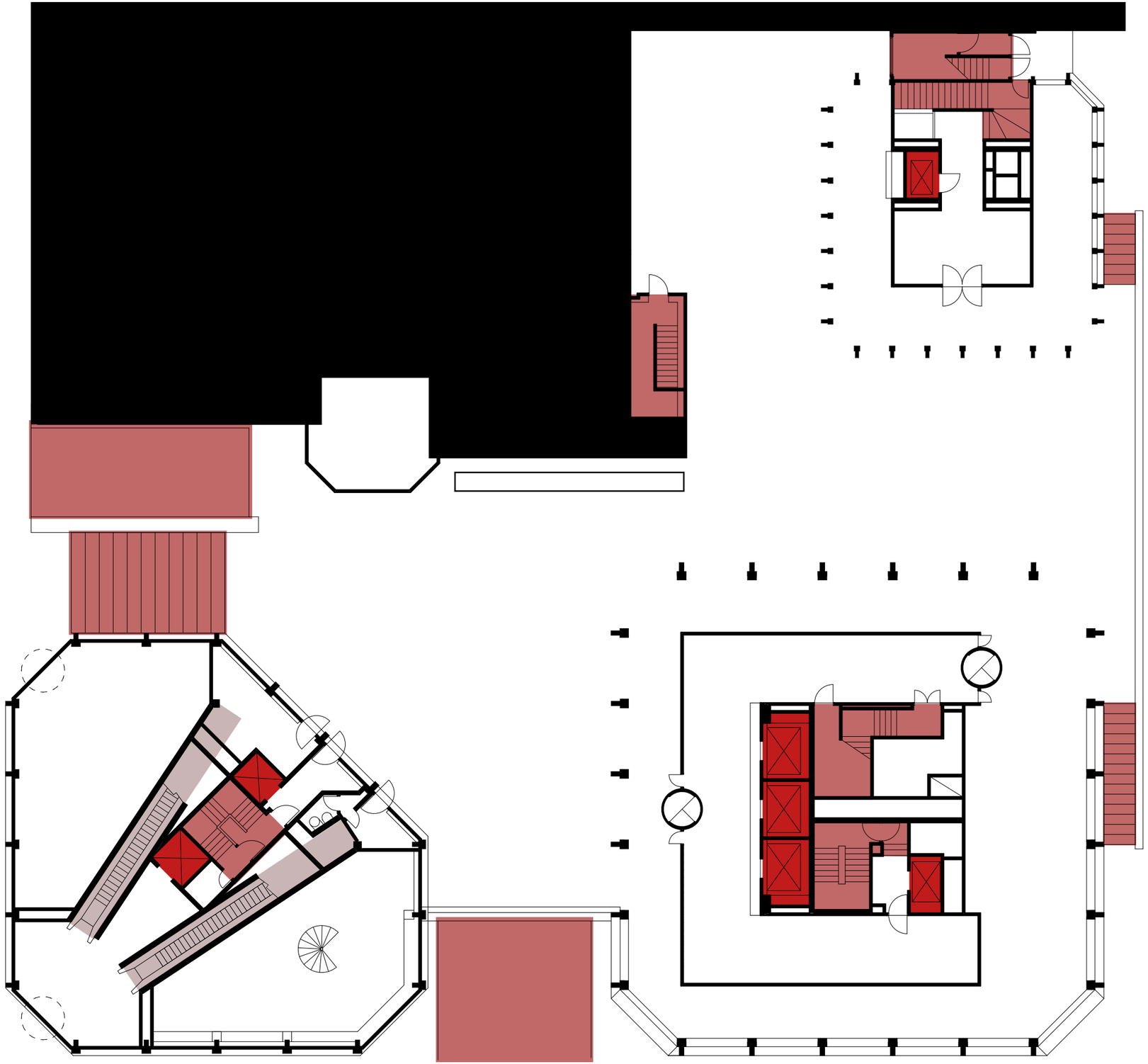
INTEGRATION CONDITION: HOW THE WALL MEETS THE FLOOR
JEREMY BERNARDY



INTEGRATION CONDITION: HOW THE BUILDING MEETS THE SKY
KYLE PALZER: INTEGRATED MECHANICAL SYSTEMS

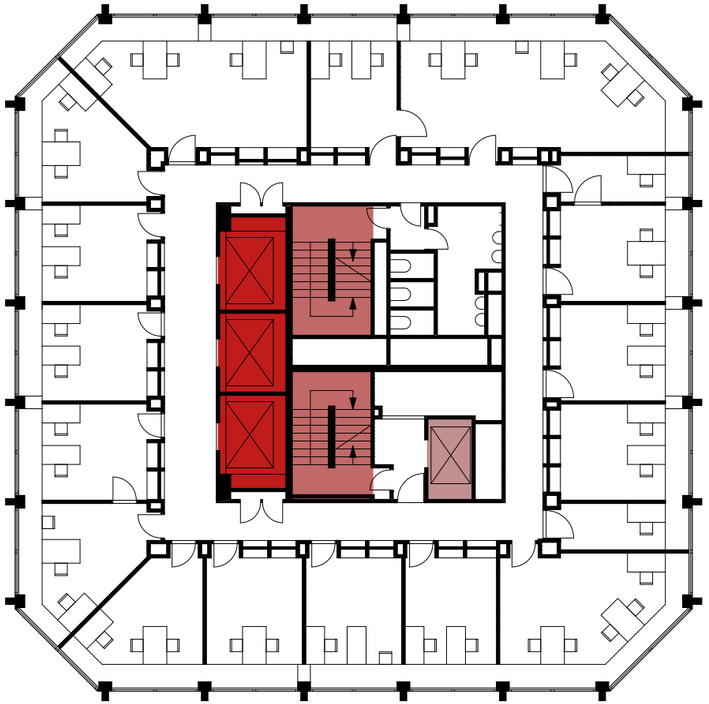


PLAZA ENTRY FROM ST. JAMES'S ST.

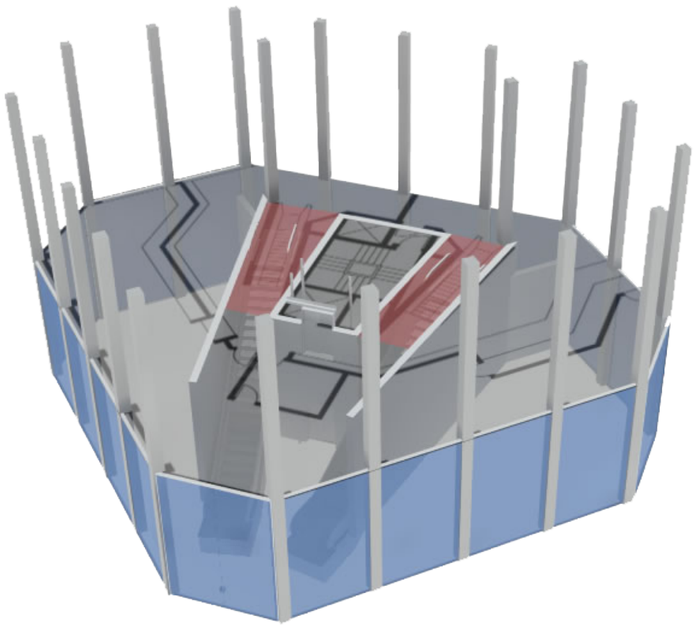


PLAZA LEVEL FLOOR PLAN HIGHLIGHTING CIRCULATION ZONES
1/16" = 1'-0"

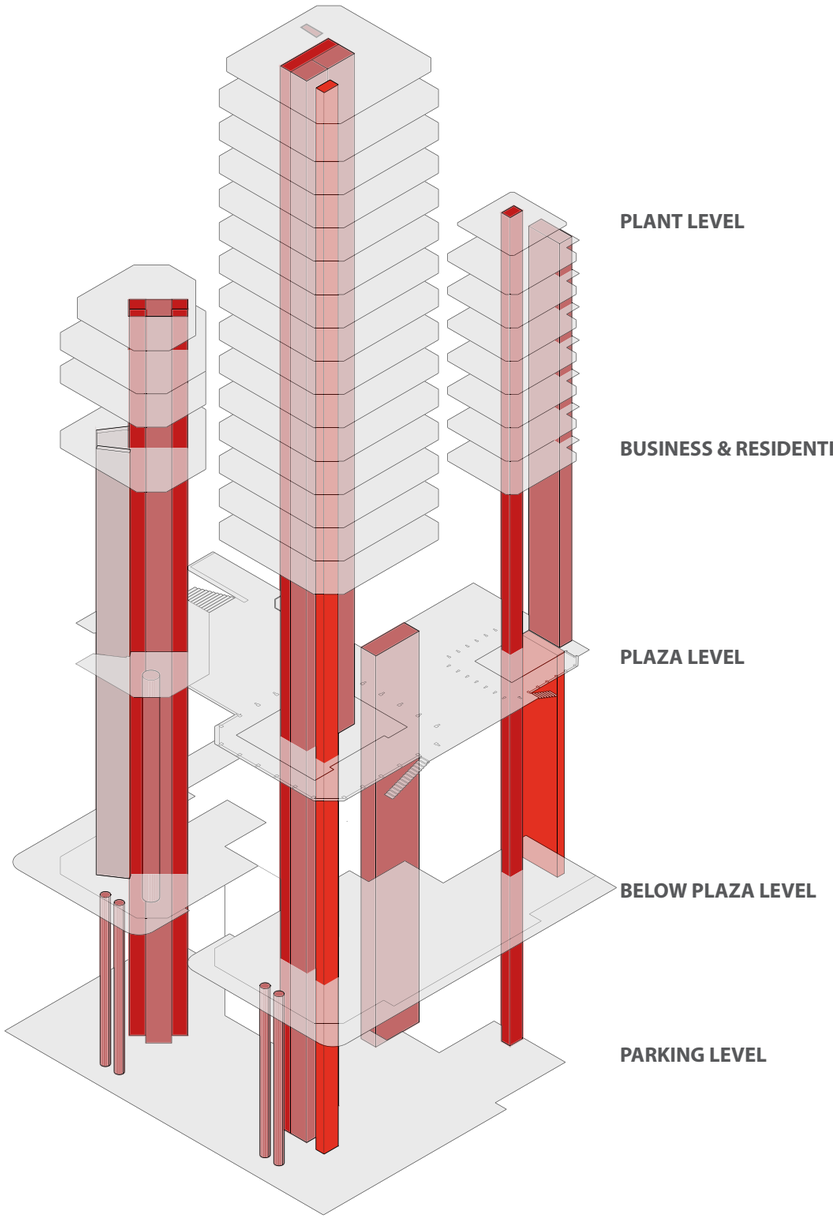
THE ECONOMIST BUILDING CIRCULATION



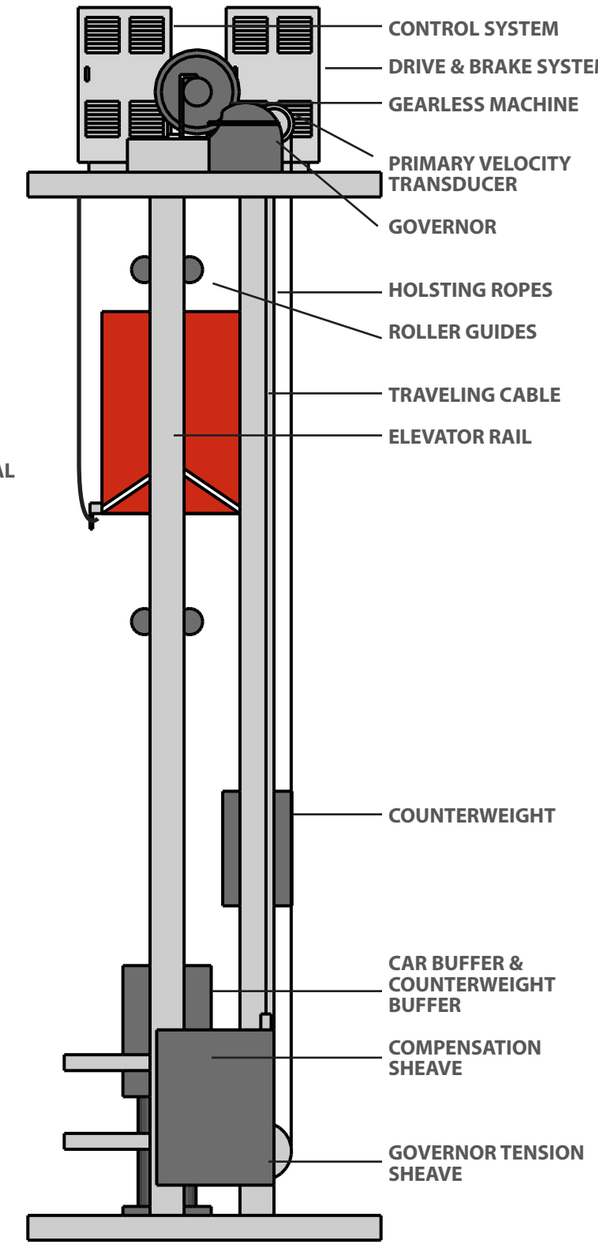
ECONOMIST BUILDING FLOOR PLAN HIGHLIGHTING CIRCULATION ZONES
1/16″ = 1′-0″



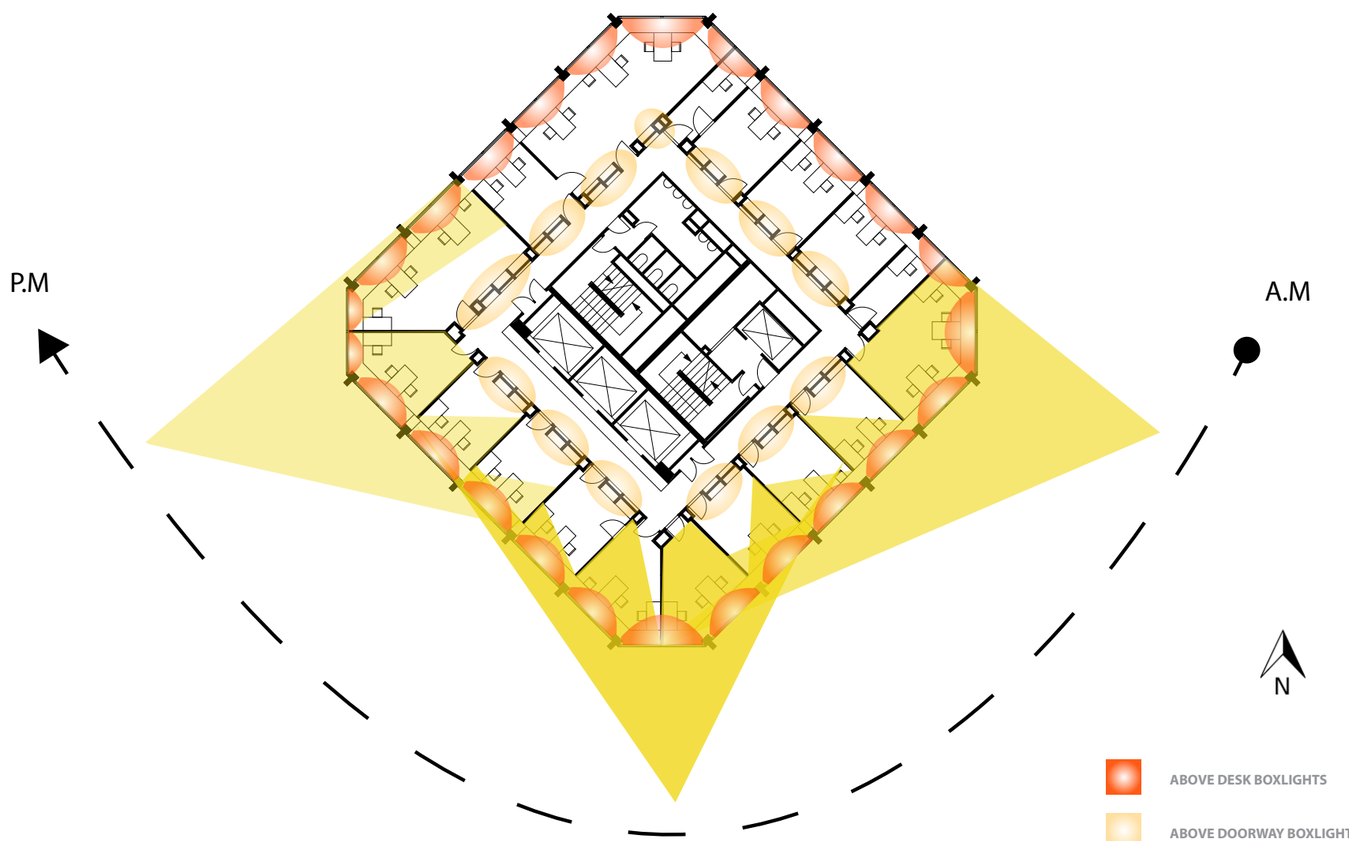
INTEGRATION CONDITION: OPENING IN THE FLOOR
JEREMY BERNARDY: ELEVATOR OPENING TO SECOND LEVEL



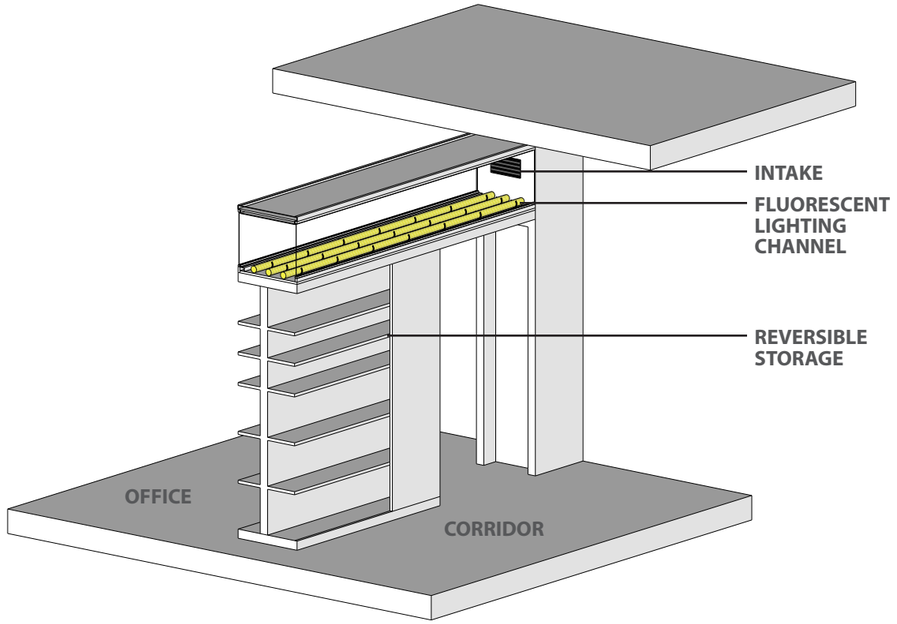
LOCATIONS OF VERTICAL CIRCULATION



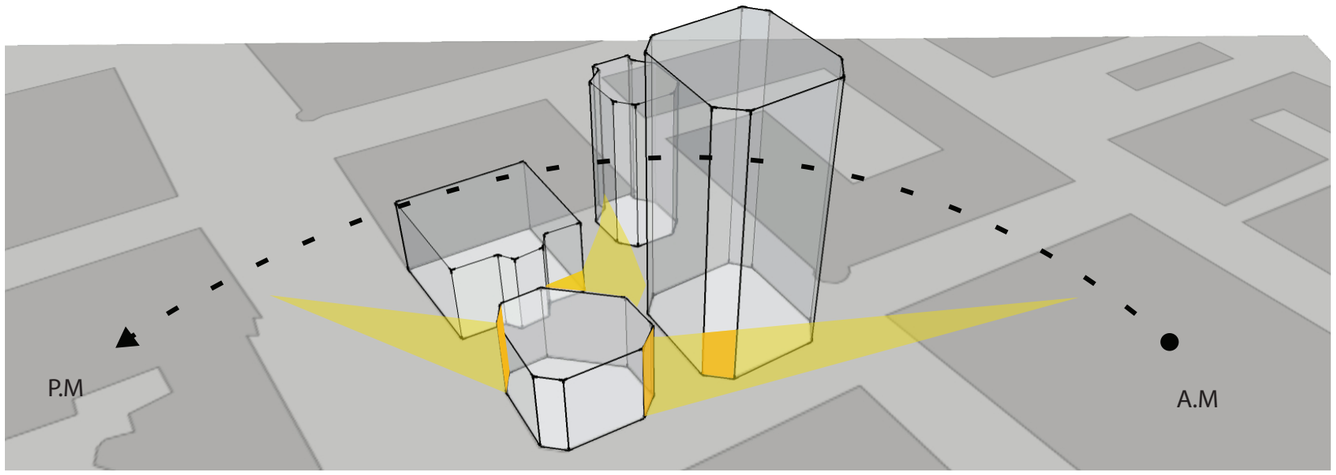
TYPICAL GEARLESS ELEVATOR



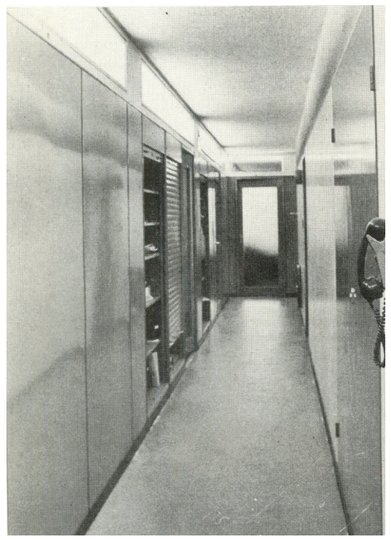
DESIGN FOR ALLOWING NATURAL LIGHT PENETRATION AND INTEGRATED ARTIFICIAL LIGHTING SYSTEMS



INTEGRATION CONDITION: HOW THE WALL MEETS THE FLOOR
ERICA HWAY: COMBINATION FLUORESCENT LIGHTING/SHELVING/VENTILATION SYSTEM



DESIGN FOR ALLOWING NATURAL LIGHT PENETRATION IN PLAZA



VIEW S OF INTEGRATED LIGHTING SYSTEM IN CORRIDORS