

# **Expansiveness and Security through Materials and Design**

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Thesis submitted to the faculty of the Virginia Polytechnic Institute and State University in partial fulfillment of the requirements for the degree of

**Master of Architecture**

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## **Expansiveness and Security through Materials and Design**

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### **(ABSTRACT)**

This is a youth hostel designed to provide maximum functional comfort and efficiency in a relatively confined space. Because of its narrow floor plan, the windows are made large to make the rooms seem bigger and frame the view to the outside by drawing the viewer's eye out from the dense interior creating expansion to the outside. The orientation of the structure allows natural light to fill almost the entire interior and invites the cityscape to become a part of the interior spaces. In addition to the balconies on the berthing floors, the core of the structure supplements the idea of expansiveness by extending up and out to the gathering area on the roof where everyone can congregate and enjoy the outside view of the City of Roanoke.

In my travels and staying in youth hostels throughout Europe, a high level of security wasn't always provided so I wanted to create spaces that provide security and convenience for the traveler and the traveler's belongings. The design of the bed units provides security and easy access for stowing and securing personal effects in the compartments located within while larger luggage and other belongings can be secured in lockers found in the locker rooms on the shower floors. I wanted to provide an additional sense of security for those traveling alone so there are berthing and shower floors designated for women and berthing and shower floors designated for men with designated restrooms located on each berthing floor.

## **Acknowledgements**

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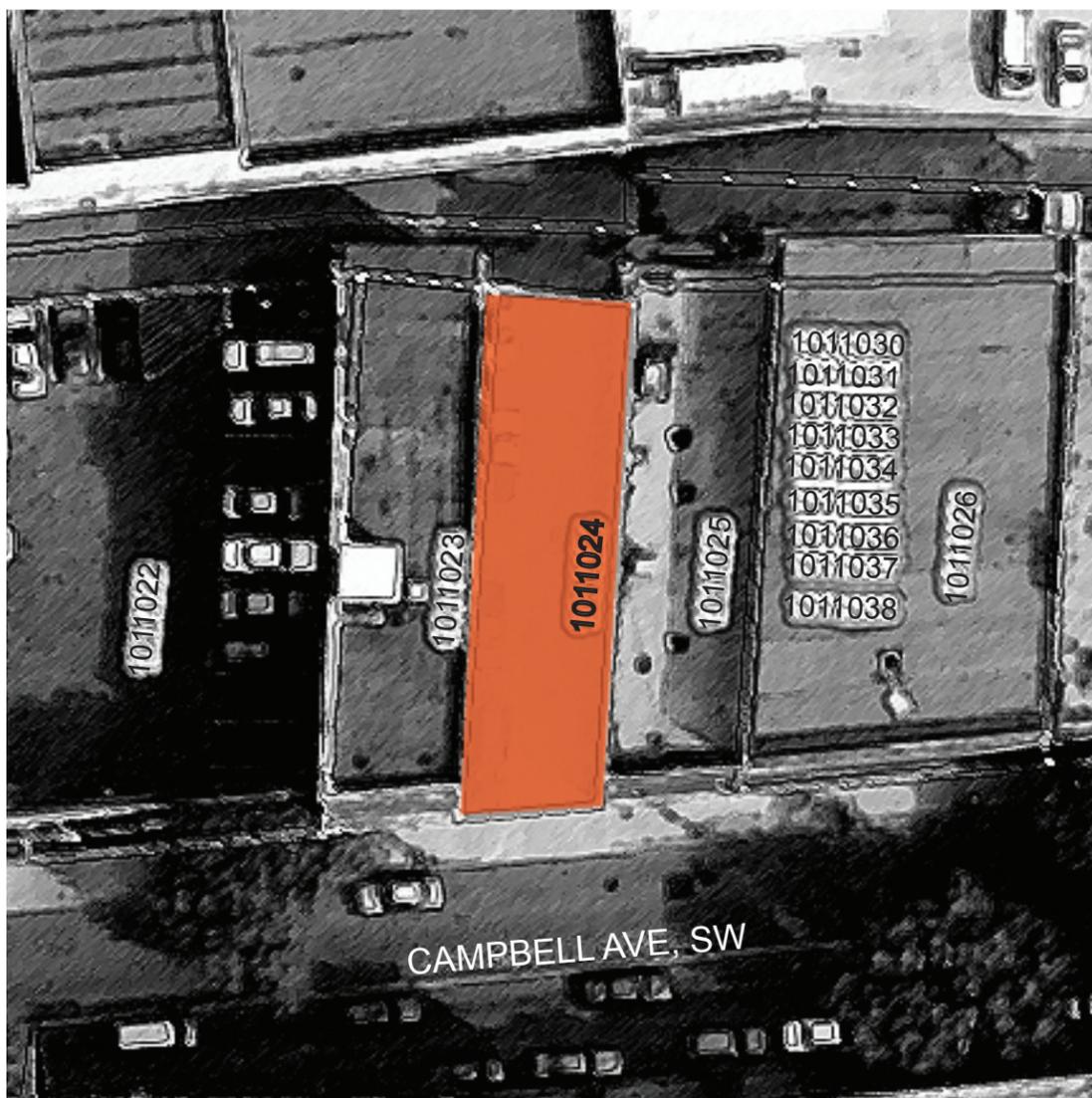
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SITE:  
VACANT LOT SITUATED ON CAMPBELL AVENUE, SW. ROANOKE, VIRGINIA



0 82ft



0 164ft

120'

**GATHERING AND SITTING AREA 8F**

105'

**BERTHING SPACES AND RESTROOM FOR WOMEN 7F**

90'

**SHOWER ROOM AND LOCKER ROOM FOR WOMEN 6F**

75'

**BERTHING SPACES AND RESTROOM FOR WOMEN 5F**

60'

**BERTHING SPACES AND RESTROOM FOR MEN 4F**

45'

**SHOWER ROOM AND LOCKER ROOM FOR MEN 3F**

30'

**BERTHING SPACES AND RESTROOM FOR MEN 2F**

15'

**FRONT DESK/LOBBY VENDING, PHONES AND RESTROOM 1F**

0'

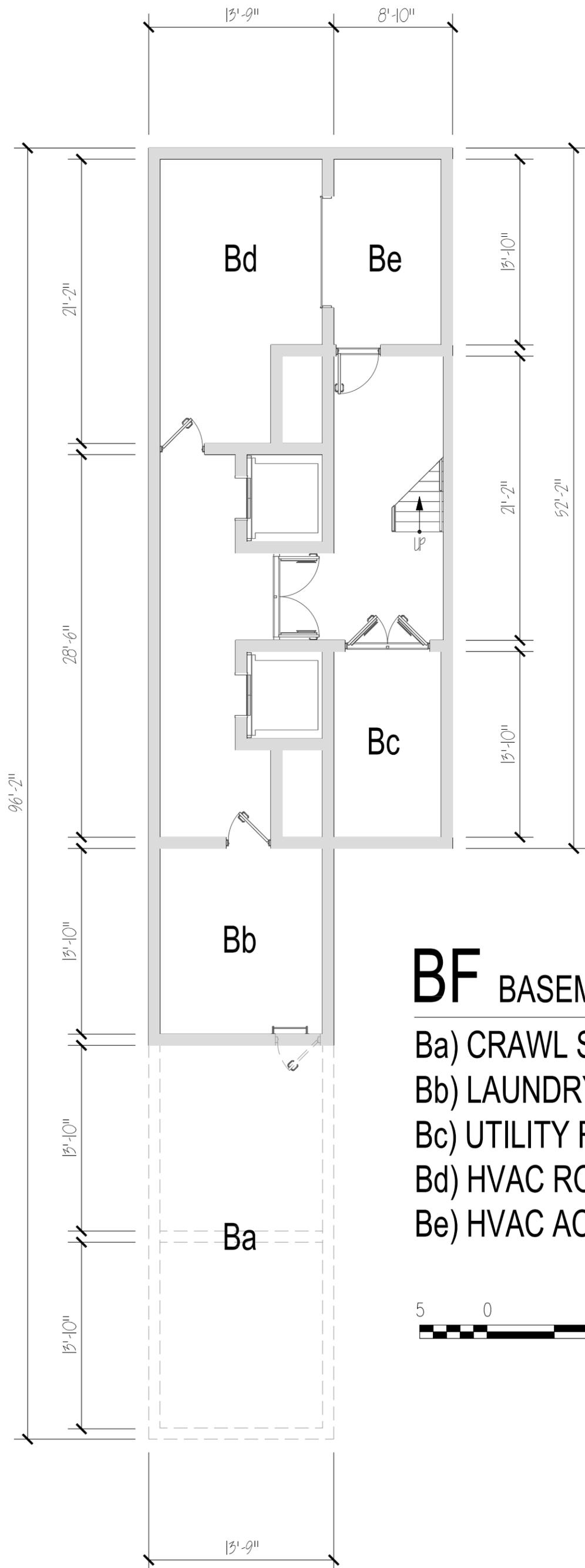
**LAUNDRY ROOM UTILITY ROOM HVAC ROOM BF**

-15'



**EAST ELEVATION**

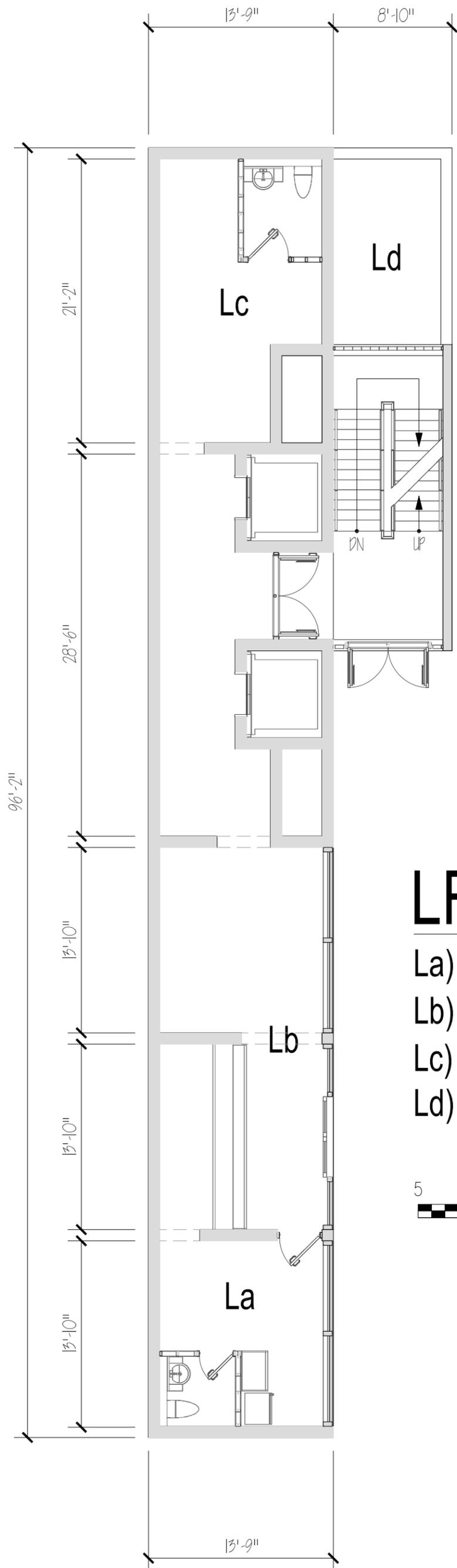




## BF BASEMENT

- Ba) CRAWL SPACE
- Bb) LAUNDRY ROOM
- Bc) UTILITY ROOM
- Bd) HVAC ROOM
- Be) HVAC ACCESS





## LF LOBBY

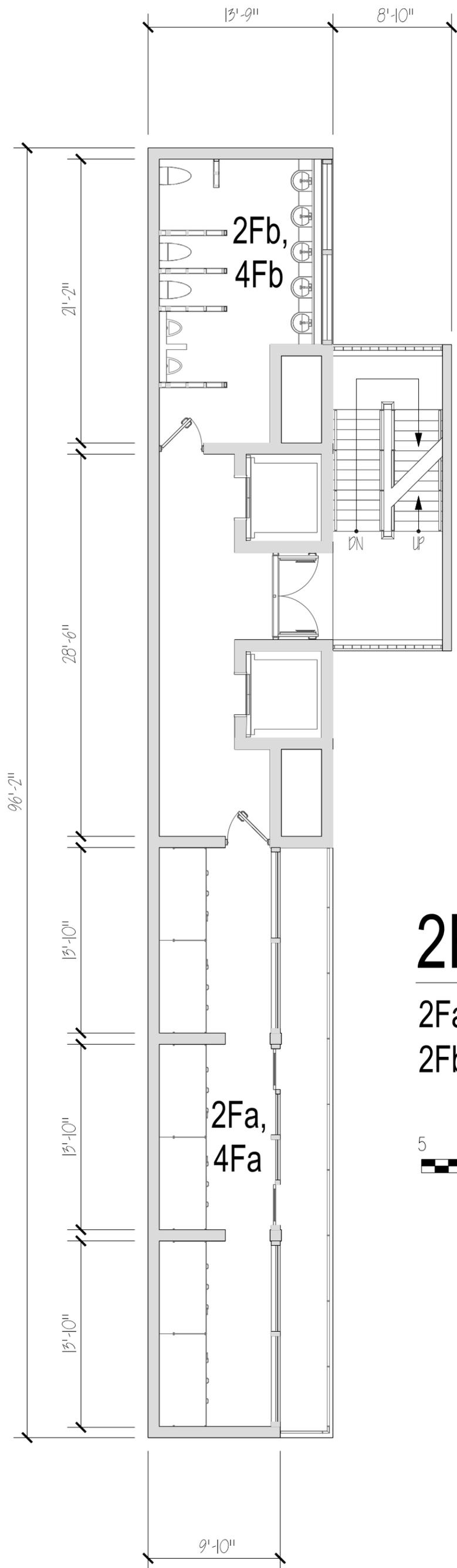
La) BREAK ROOM AND RESTROOM

Lb) FRONT DESK/LOBBY

Lc) VENDING, PHONES AND RESTROOM

Ld) OPEN TO BELOW (HVAC ACCESS)



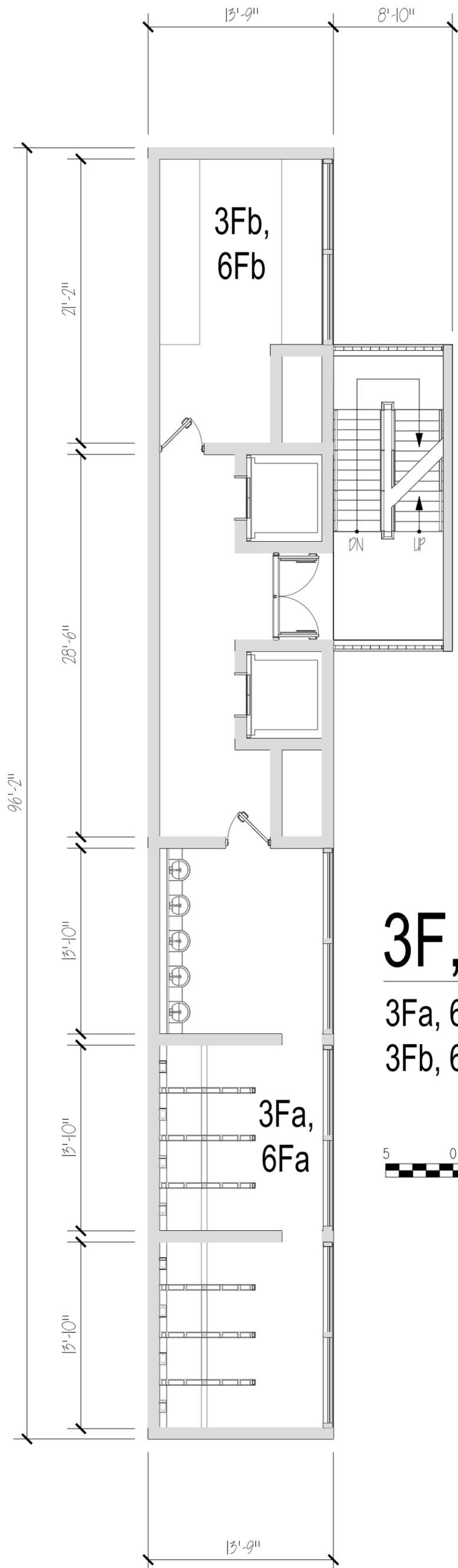


## 2F, 4F BERTHING FLOORS FOR MEN

2Fa, 4Fa) BERTHING SPACES

2Fb, 4Fb) RESTROOMS



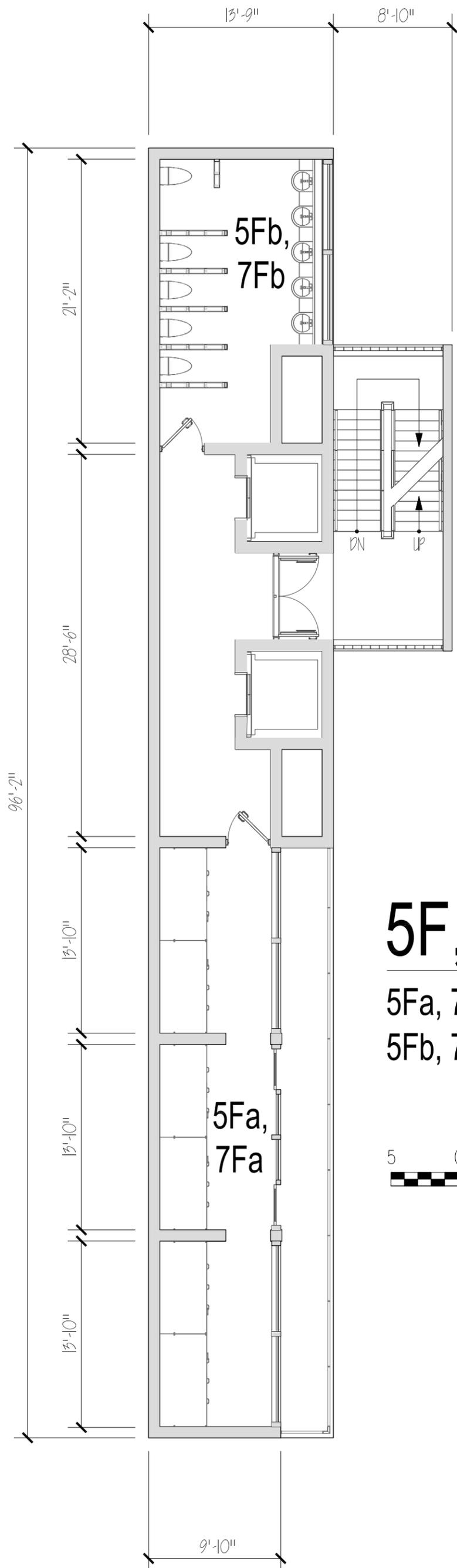


# 3F, 6F SHOWER FLOORS (MEN, WOMEN)

3Fa, 6Fa) SHOWER ROOMS

3Fb, 6Fb) LOCKER ROOMS



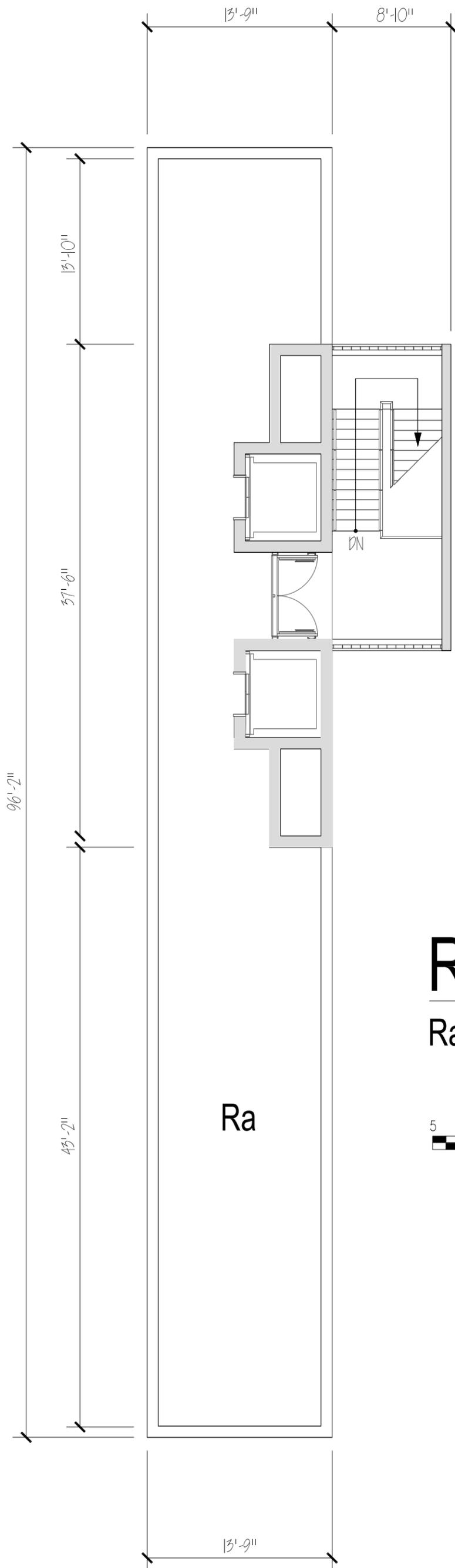


## 5F, 7F BERTHING FLOORS FOR WOMEN

5Fa, 7Fa) BERTHING SPACES

5Fb, 7Fb) RESTROOMS

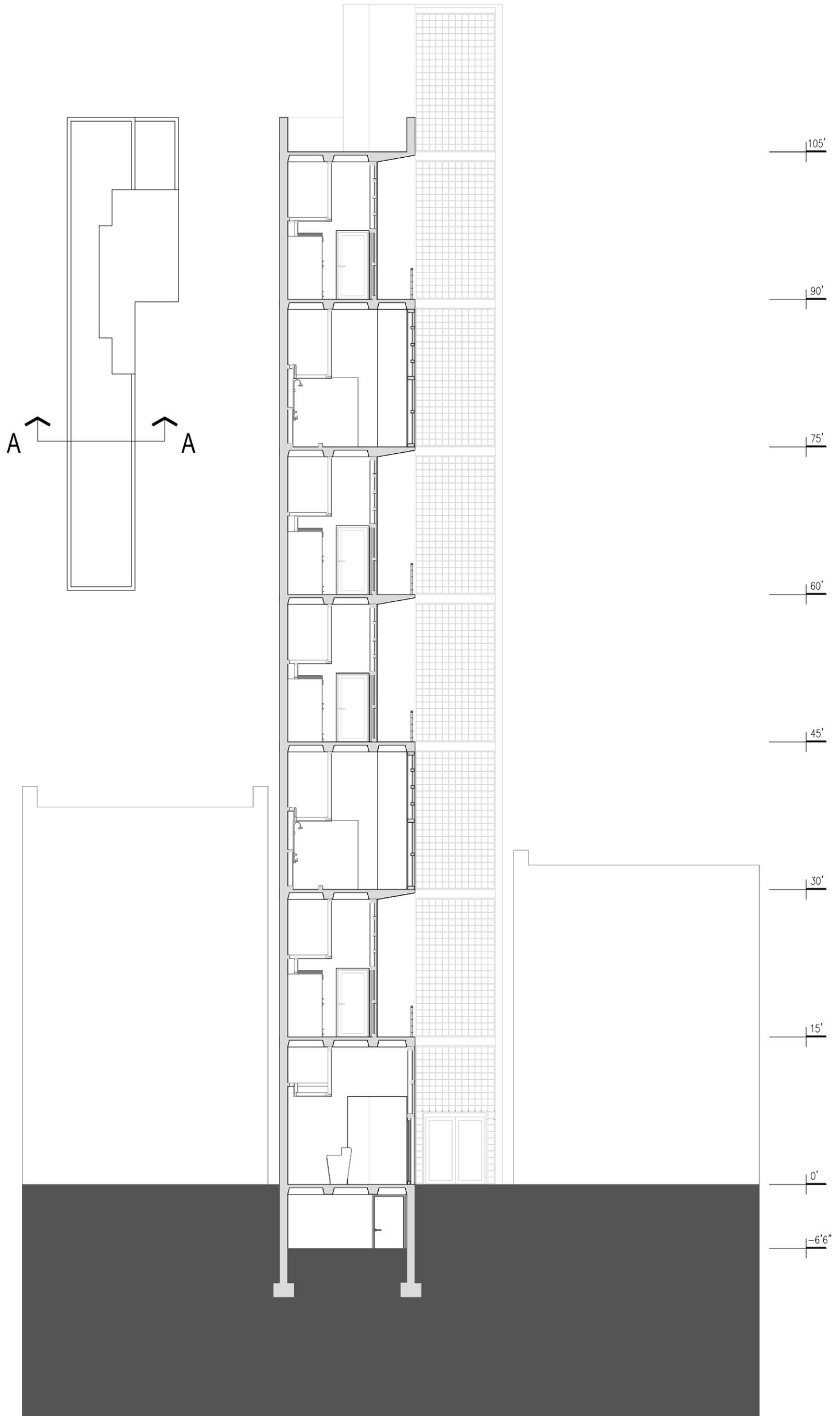




**RF** ROOF TERRACE

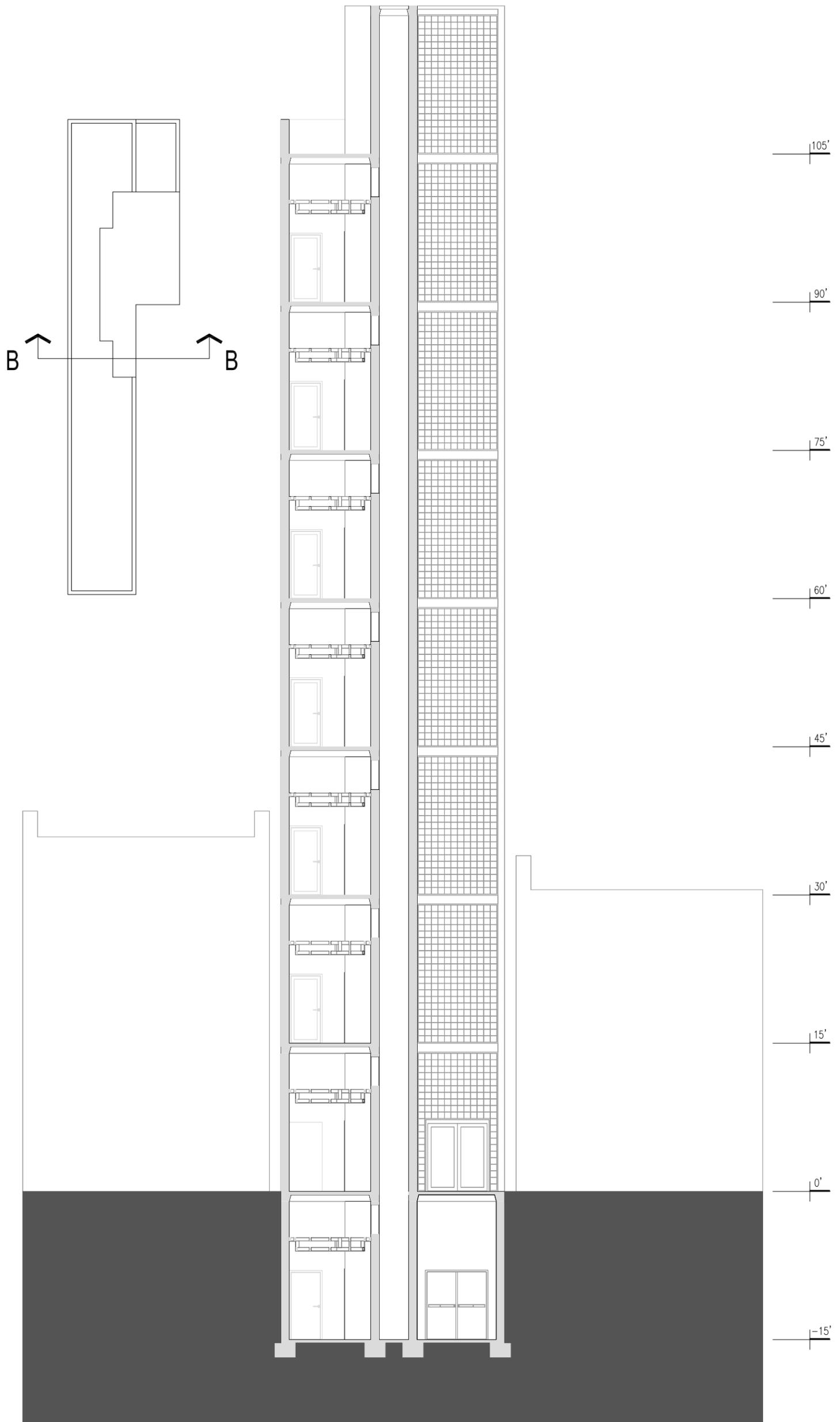
Ra) GATHERING / SITTING AREA

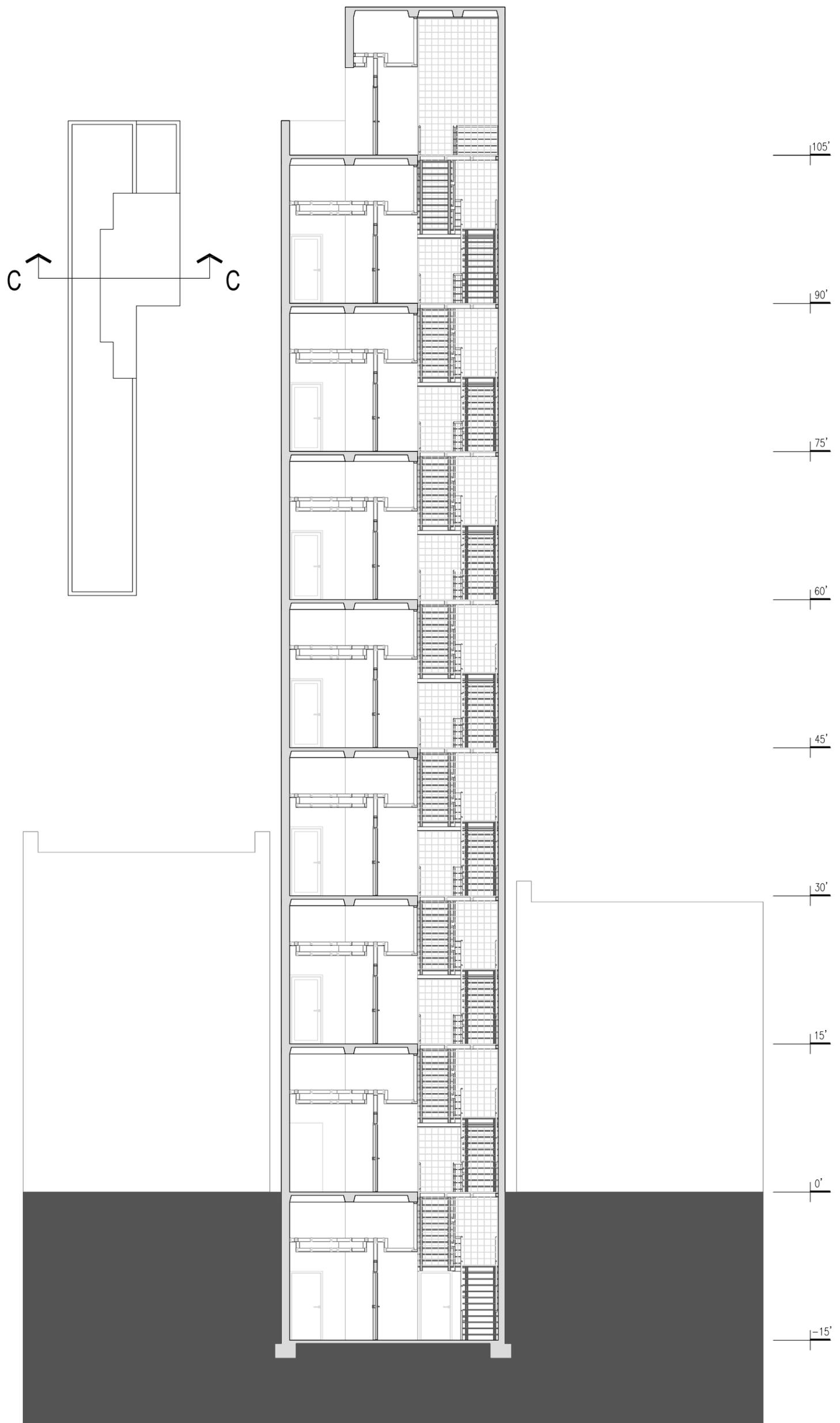




SECTION A-A

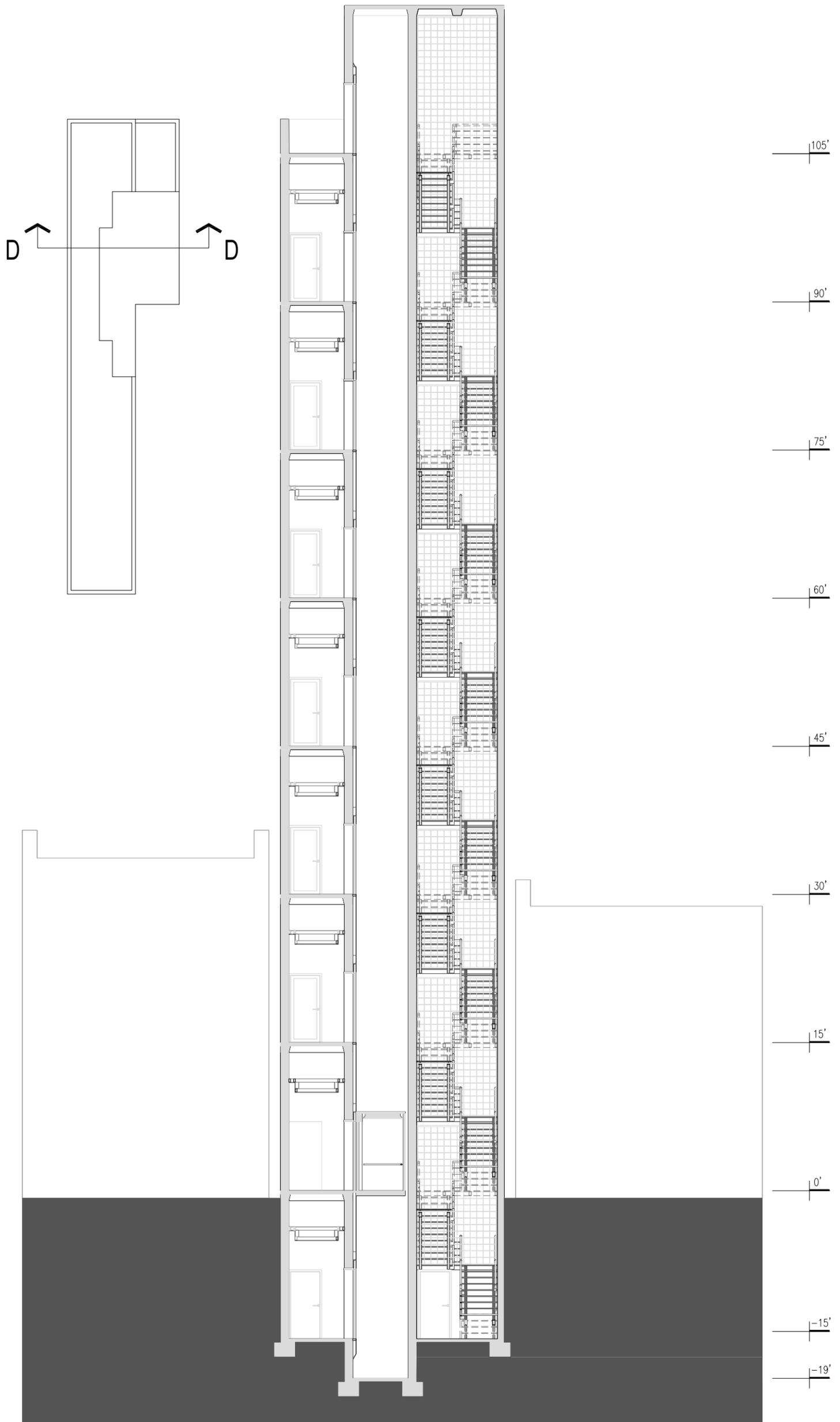






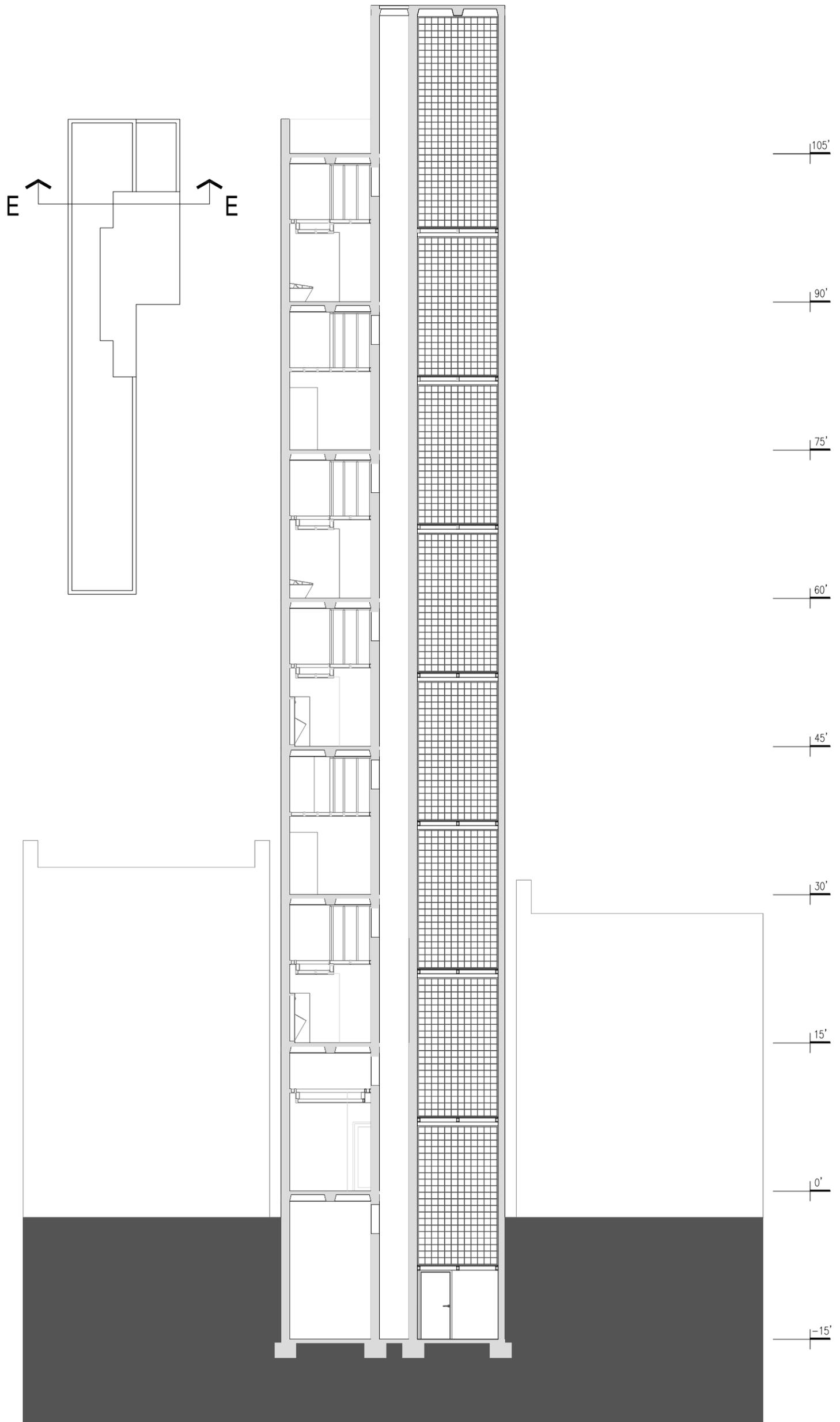
SECTION C-C

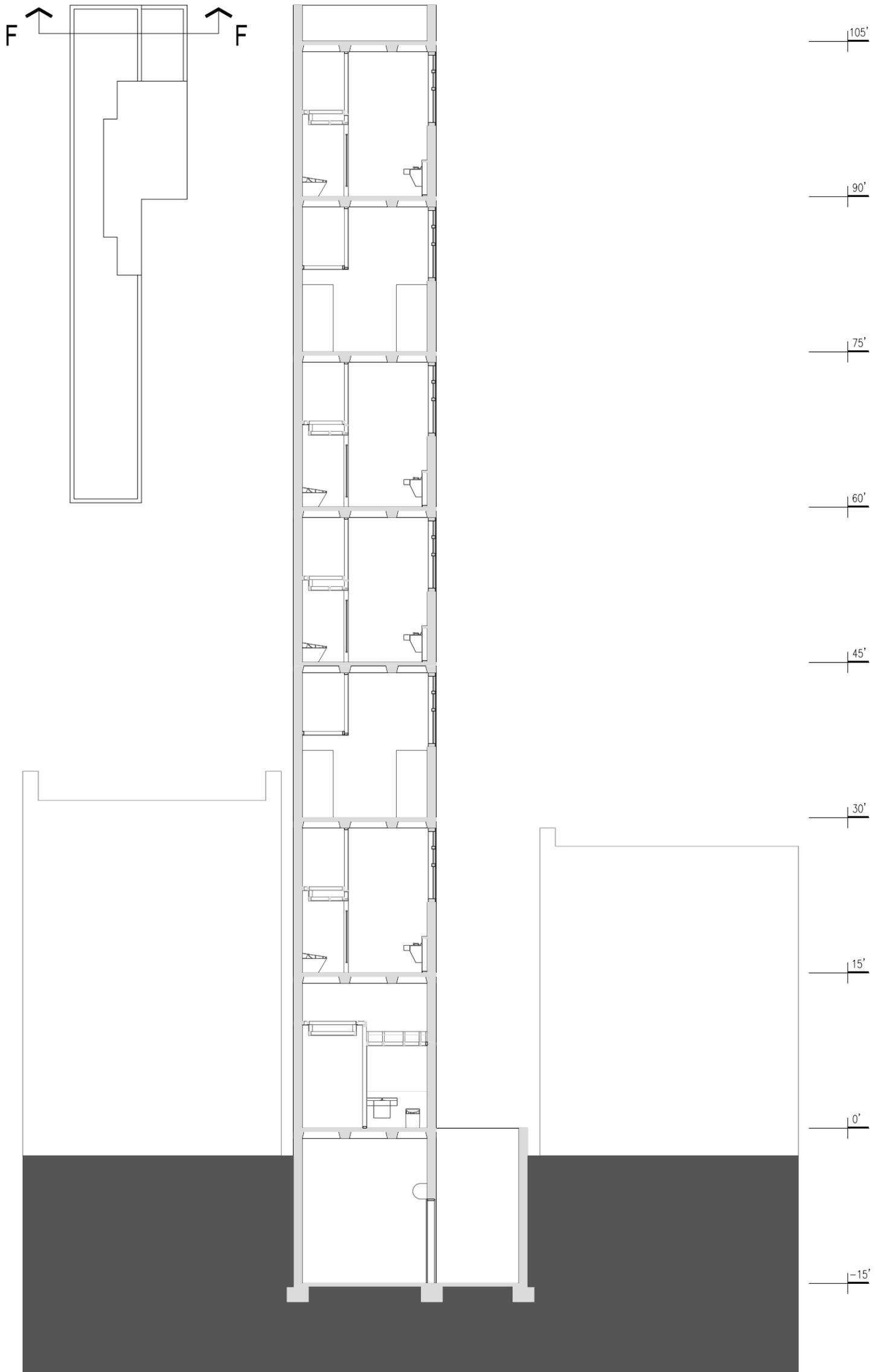




SECTION D-D

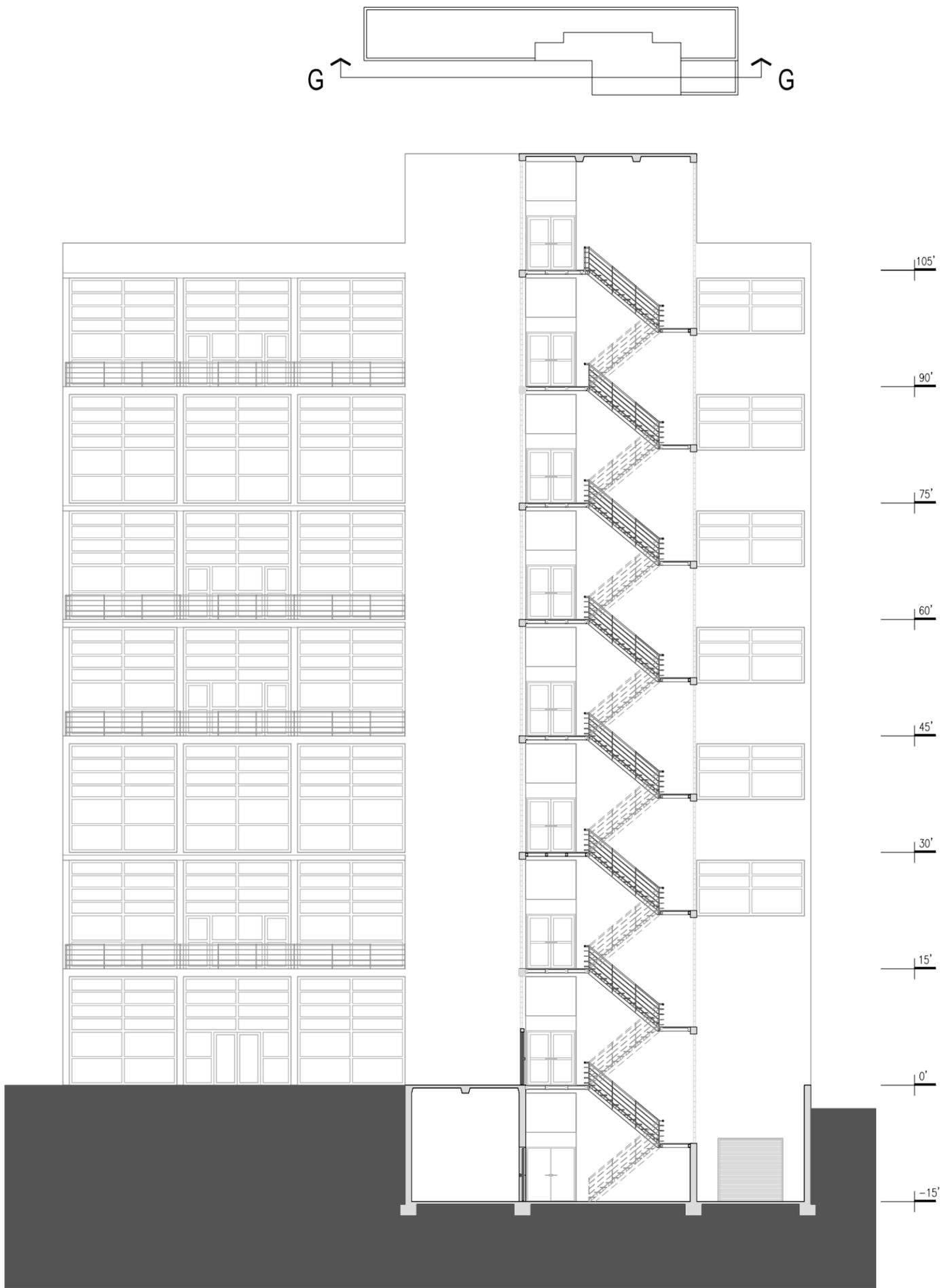






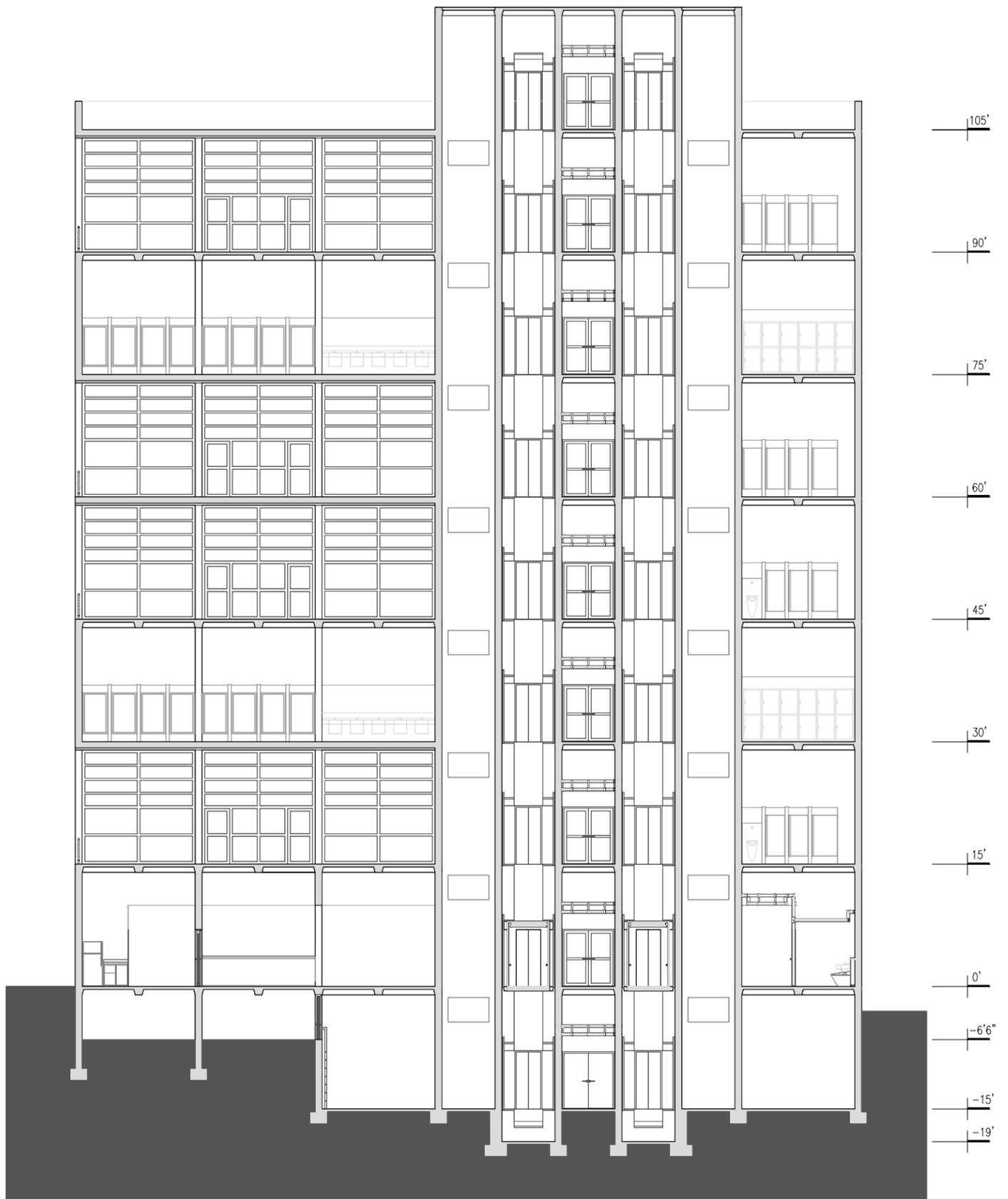
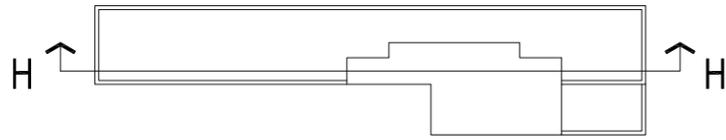
SECTION F-F

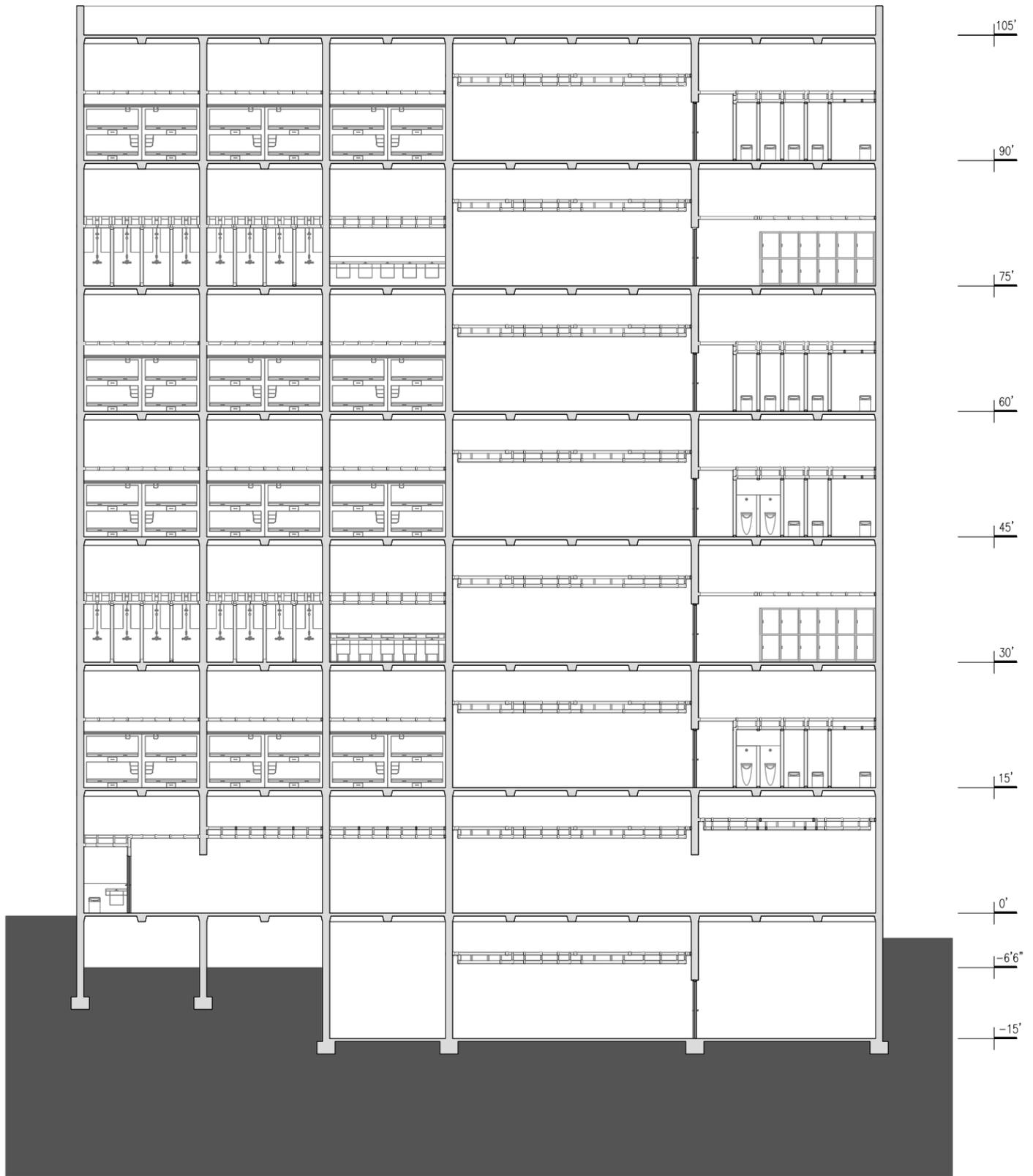
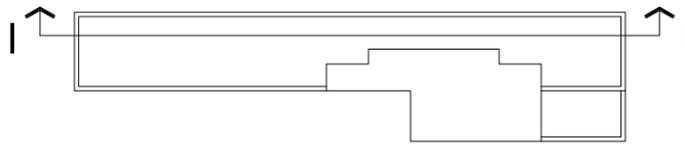




SECTION G-G







SECTION I-I





a



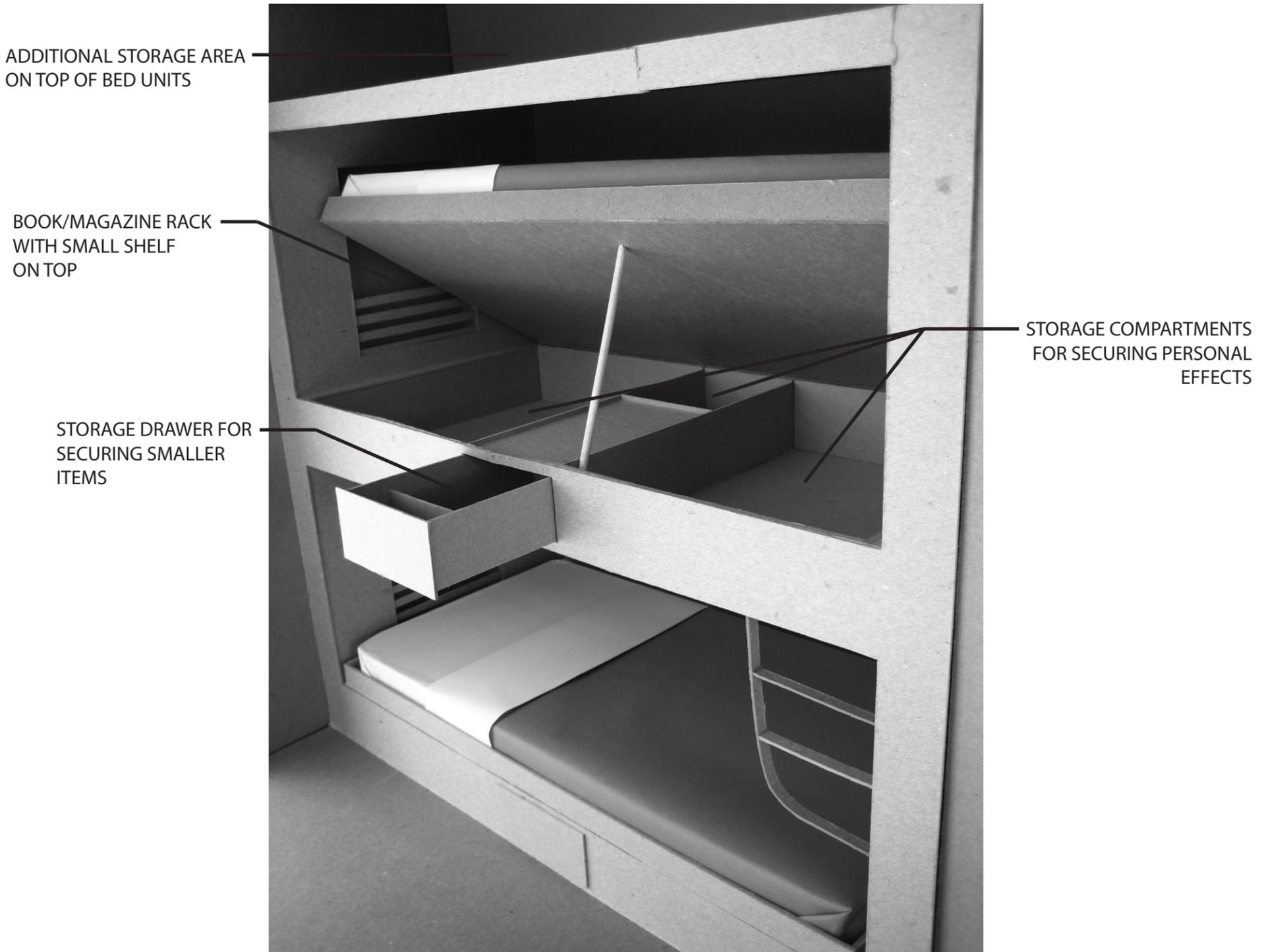
b

LIGHT STUDY WITH MODEL:

- a. NATURAL LIGHT  
9am JUNE 1
- b. ARTIFICIAL LIGHT  
STUDIO

DETAILS OF BED UNITS:

- c. MODEL OF BED UNIT STORAGE SECURITY
- d. PHOTO MONTAGE OF VIEW FROM BED UNIT



c

LARGE WINDOW MULLIONS IN FRONT OF BED UNITS  
FRAME THE VIEW CREATING EXPANSIVENESS TO THE OUTSIDE



d