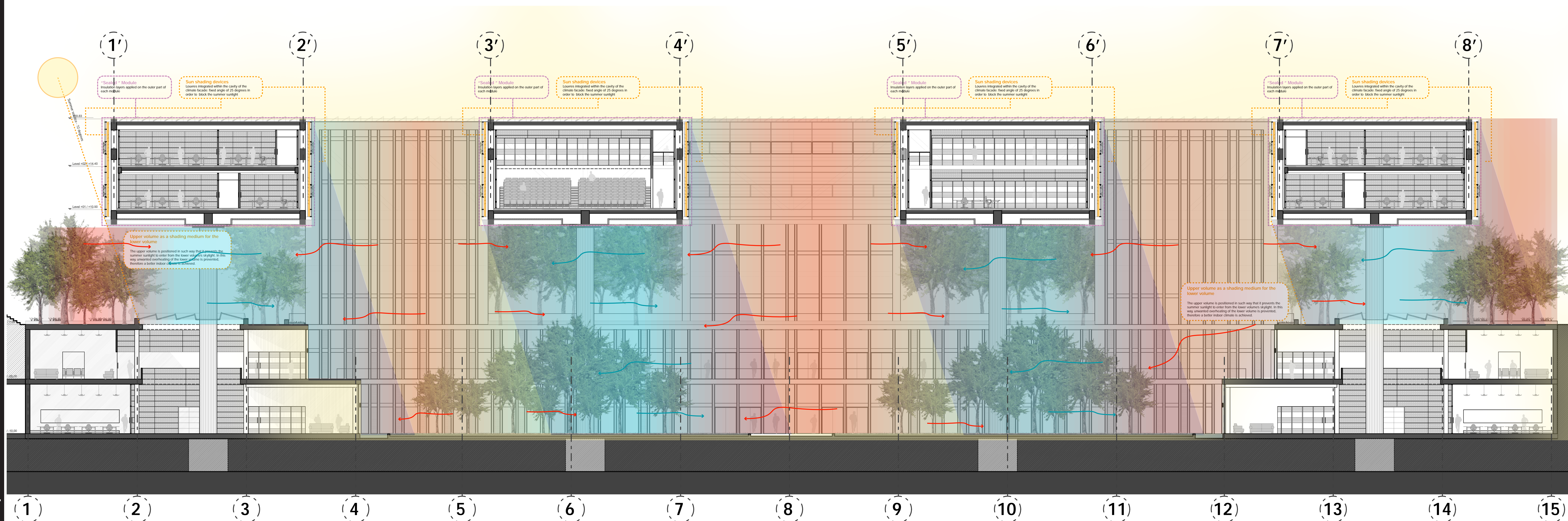


Climate design: Summer Situation | Longitudinal Section - Scale 1:125



Climate design: Summer Situation | Longitudinal Section - Scale 1:125
Shaded courtyard and air movement due to temperature difference

Concrete Core Activation

Hollow slab floor system with integrated hydronic pipes for cooling of the floor mass. A special cross section permits the placement of a water bearing pipe register into the lower third of the slabs, activating the storage capacity for heating and cooling of the room.

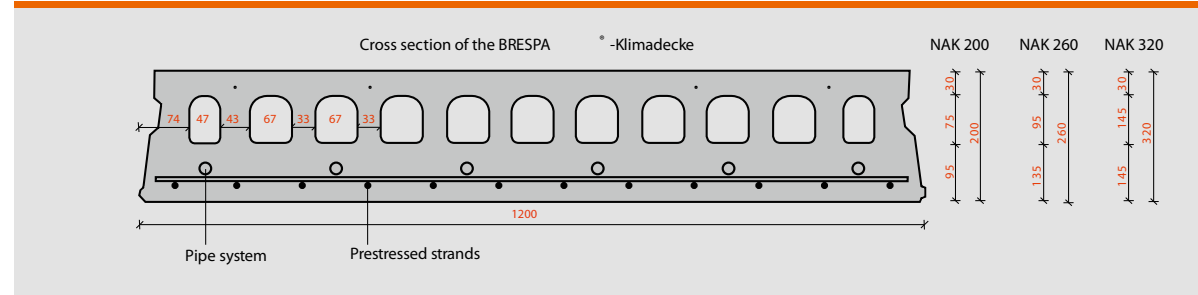
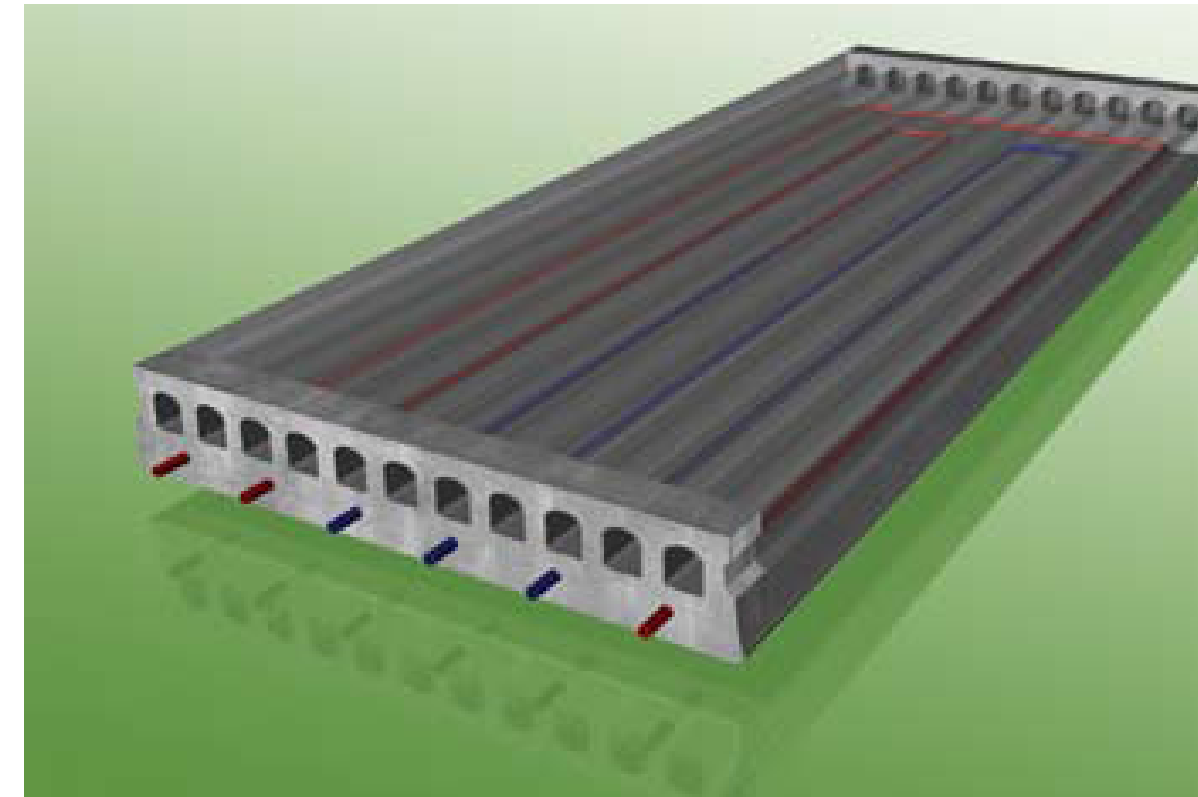
A tempered water-glycol solution (16° - 26°) is circulating in the pipes, adjusting according to the need of the temperature of the concrete. The large surface area of the floor detracts warmth out of the room air.

/ up to 12 m span

/ healthy and pleasant room climate for working places

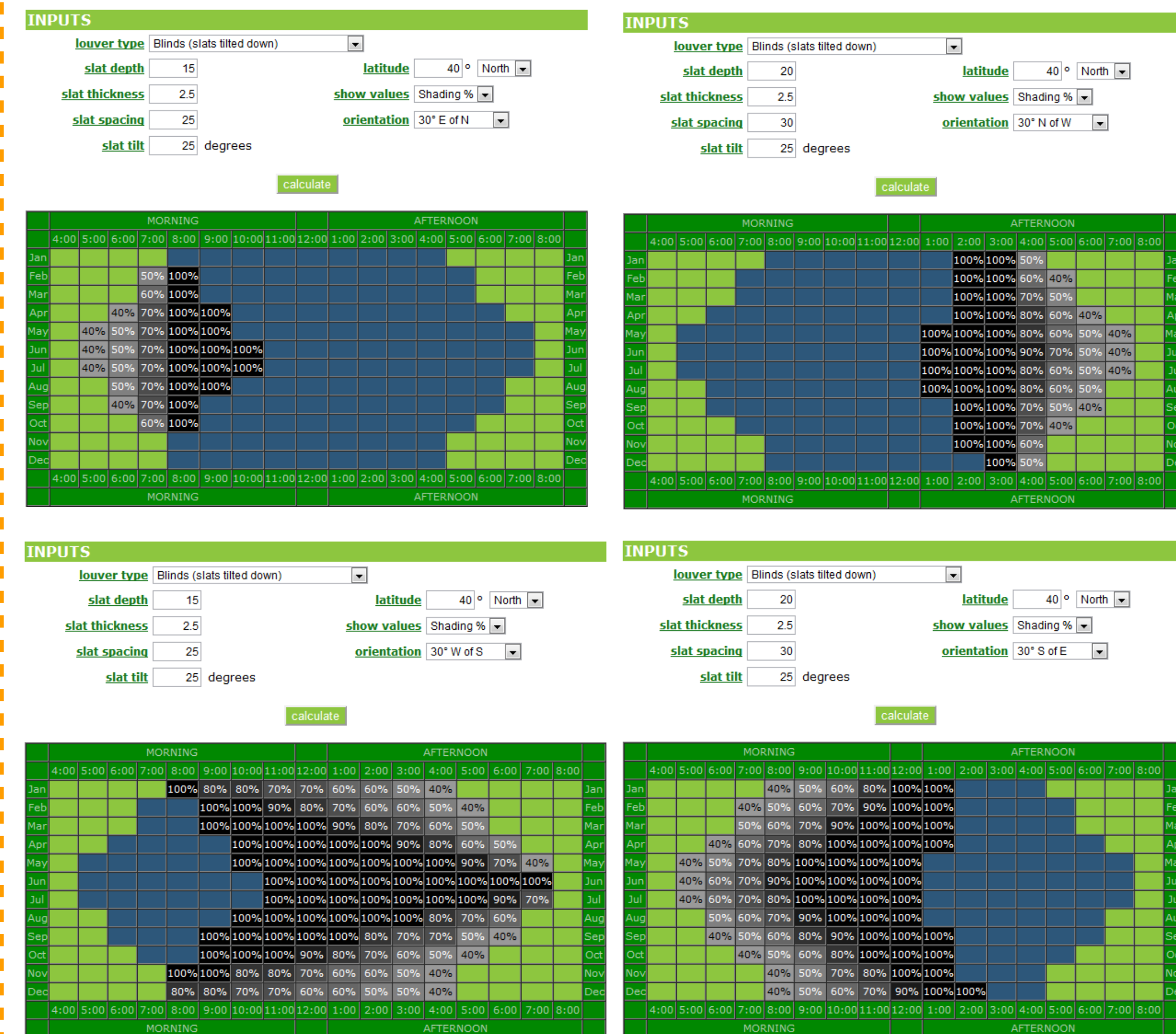
/ sustainable use of building materials, applying prestress and hollow core technology

/ balanced application of renewable low temperature energy



Louvers for sun shading

Sun study performed in order to specify the right angle/distance/length of the horizontal louvers.



Acoustic panels

A coverage of 60% with sufficient distance between panels and appropriate mounting depth will secure both acoustic performance and thermal efficiency. Some general statements are summarized in the table below.

Covering with acoustic ceiling	No ceiling(exposed structure)	30% covering	60% covering	100% wall to wall ceiling
Acoustic performance	N/A	Weak acoustic solution. Requires acoustic wall panels.	Works in most cases. Acoustic wall panels are a useful complement.	Optimal
Thermal efficiency	Optimal	Works in most cases	Limited influence on thermal efficiency	N/A
Ecophon statement	N/A	Unsecure. Too little absorption	Optimal. Works well. Acoustic wall panels are recommended.	N/A

N/A: Not Applicable

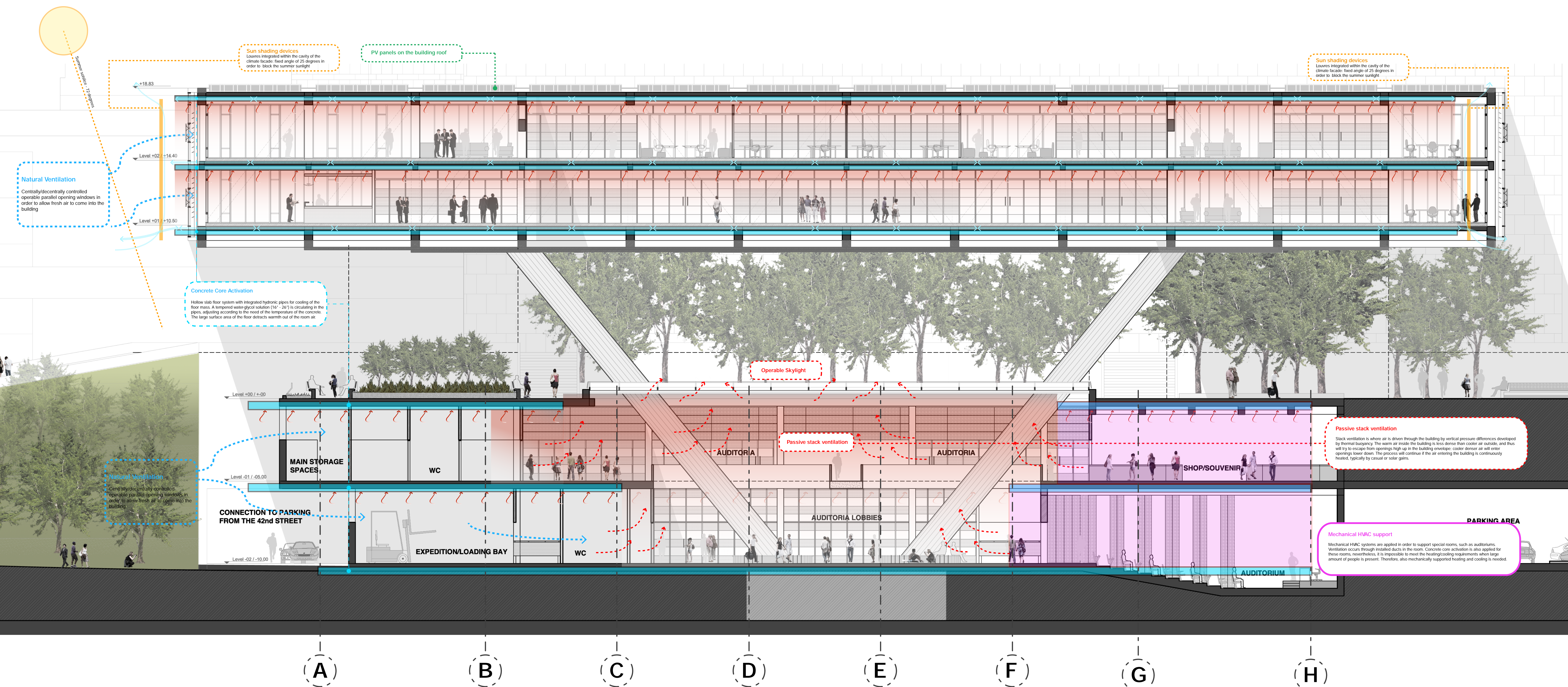
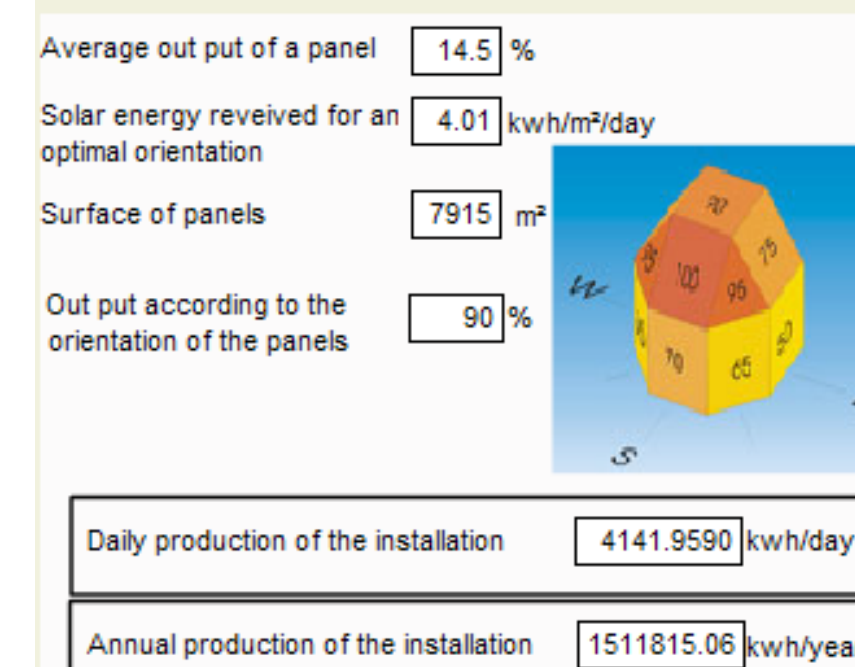
PV panels on the building roof

Total covered area: 7915 square meters

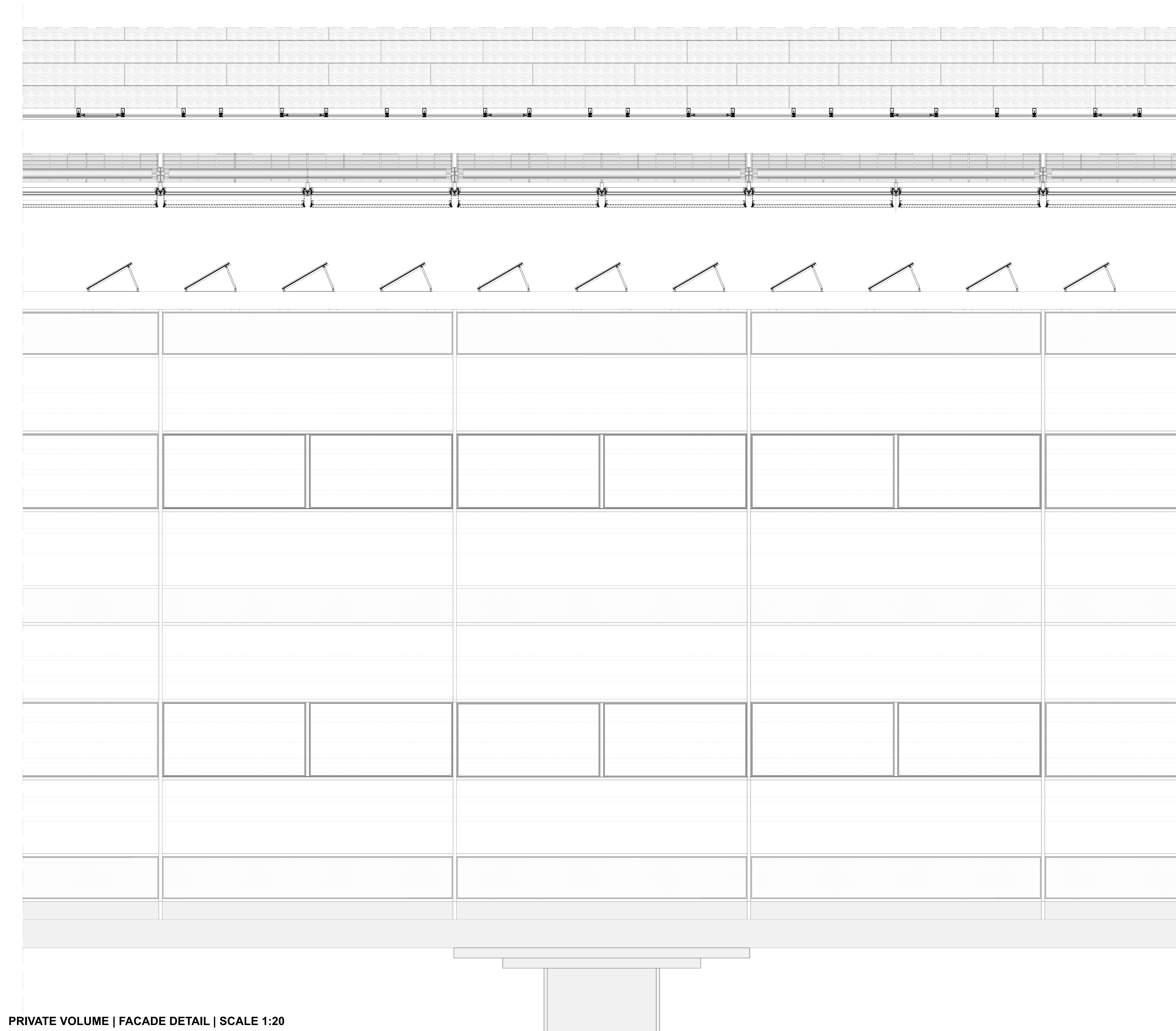
Panels of 6x6 monocrystalline cells
Daily energy production: 4142 kWh/day
Annual production: 1.51 million kWh/year

Building energy demand: 170 [kWh/year]/sqm - 4.5 million kWh/year

PV panels energy needs coverage: 34% annually

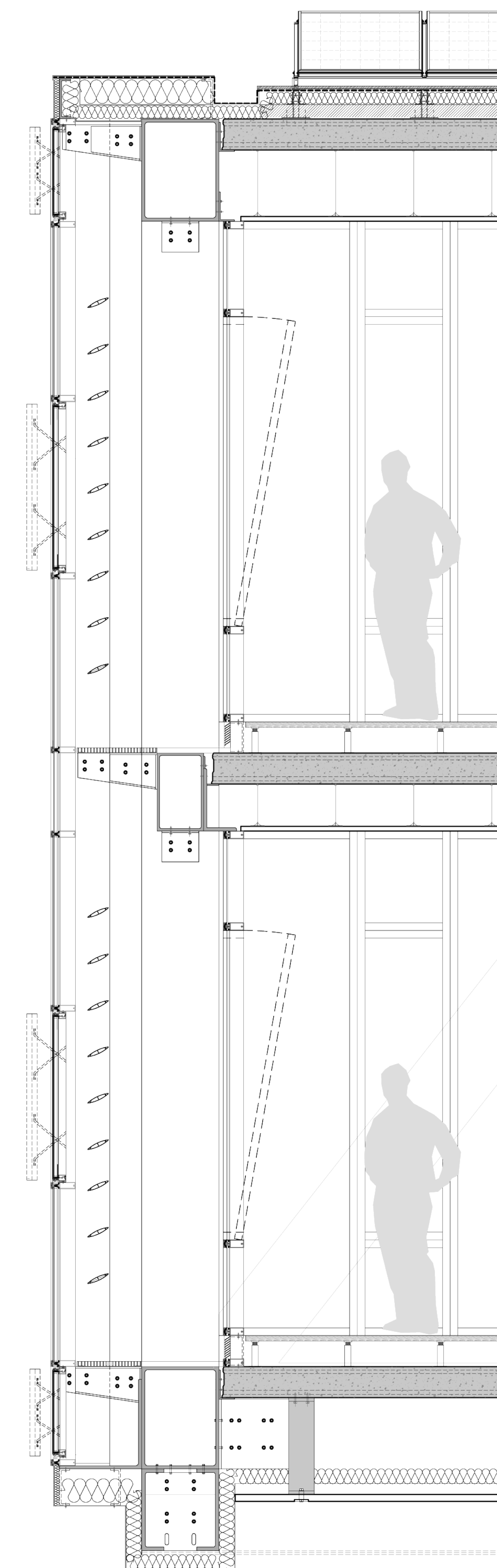


Climate design: Summer Situation | Perpendicular Section through double height lobbies - Scale 1:100

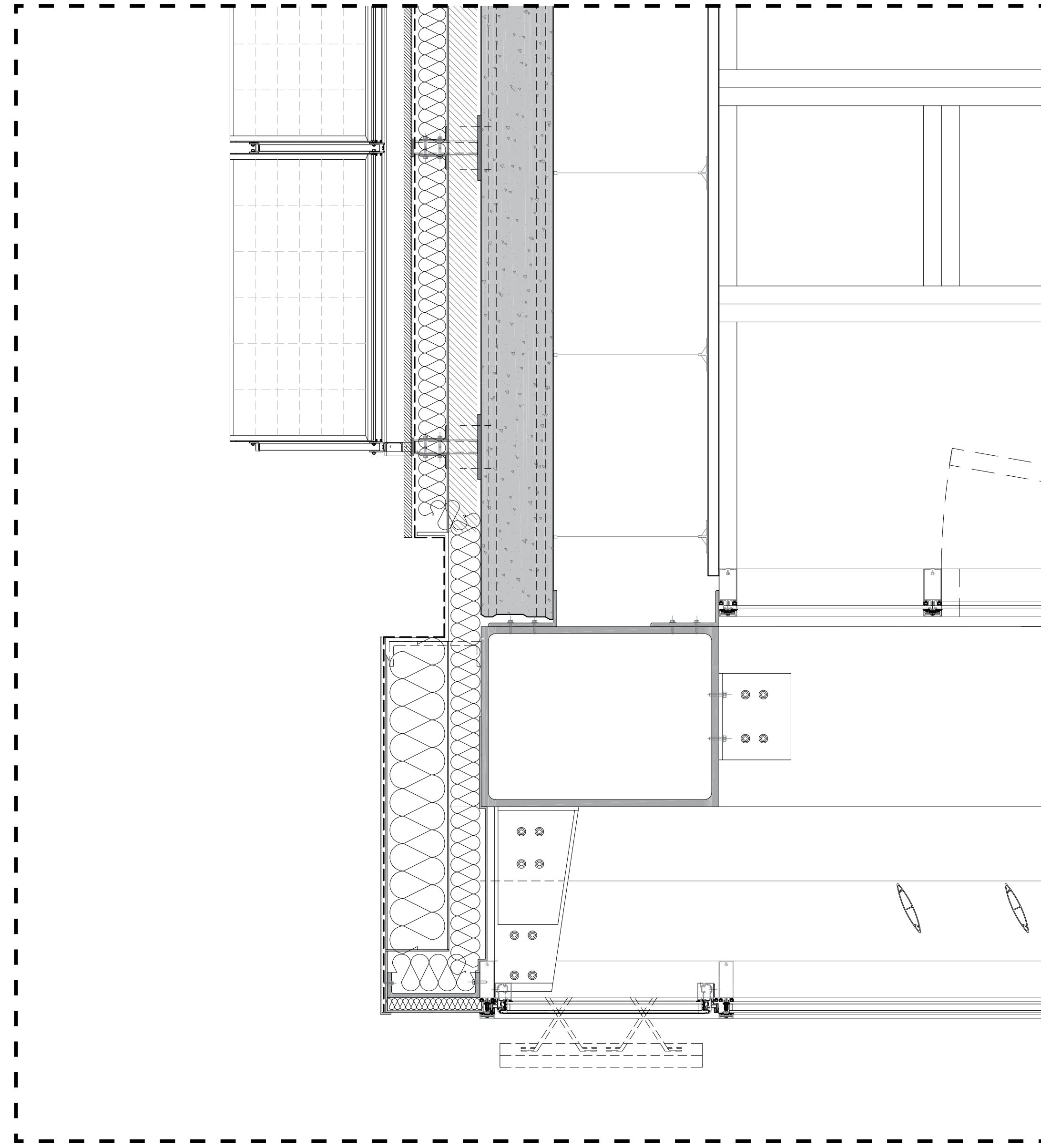


PRIVATE VOLUME | FACADE DETAIL | SCALE 1:20

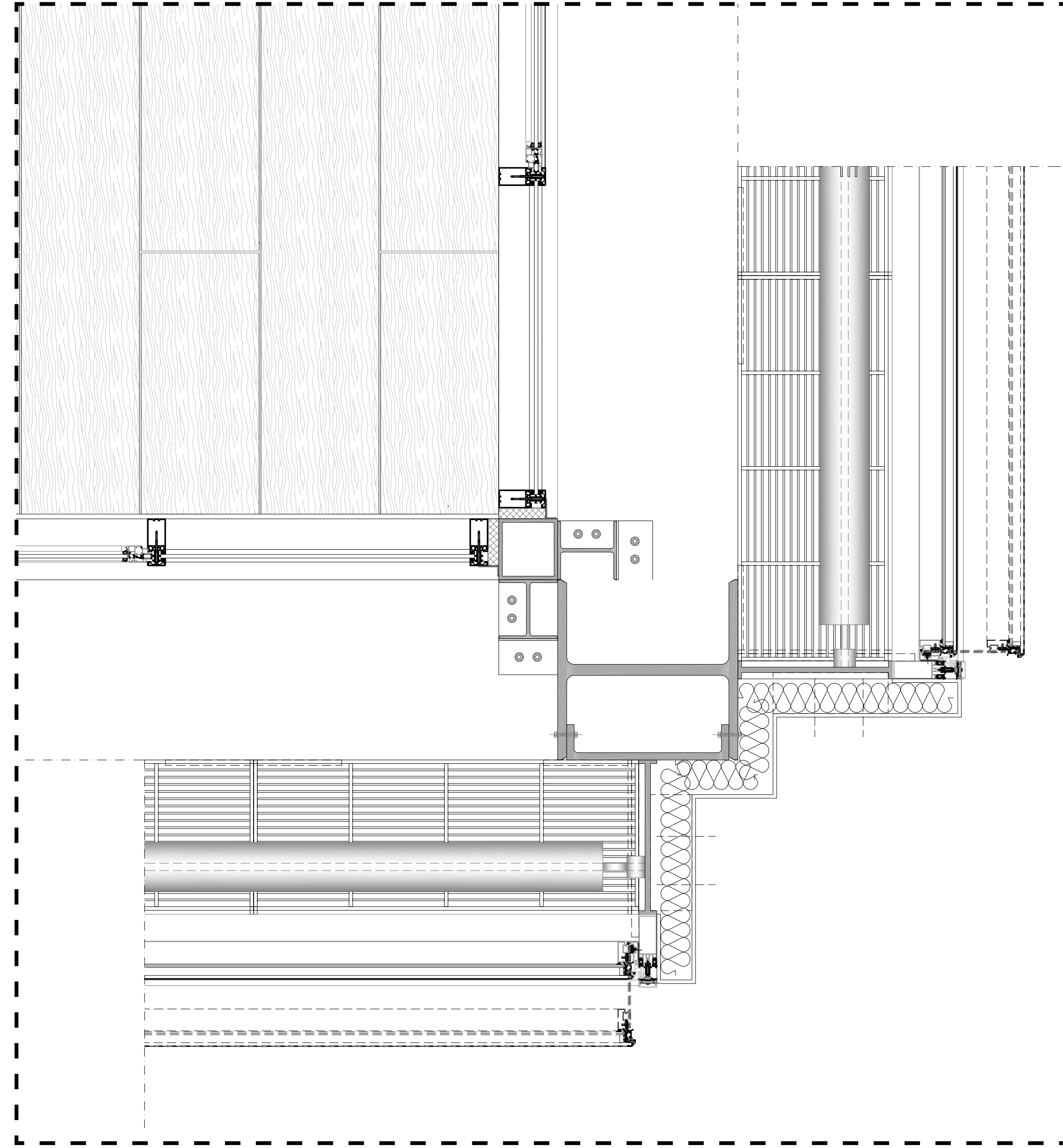
PRIVATE VOLUME
FACADE PLAN DETAIL | SCALE 1:20



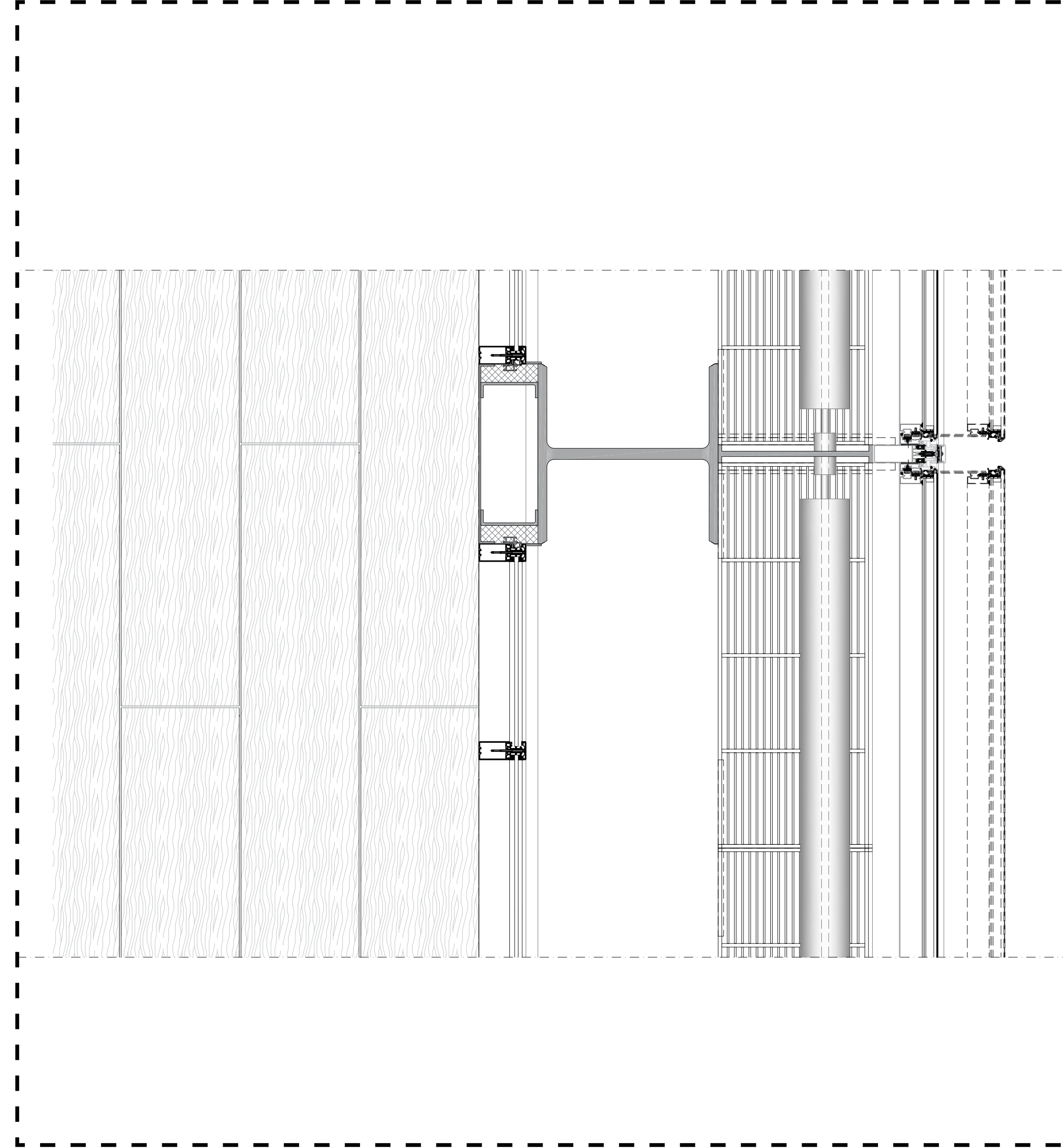
PRIVATE VOLUME
FACADE SECTION DETAIL | SCALE 1:20



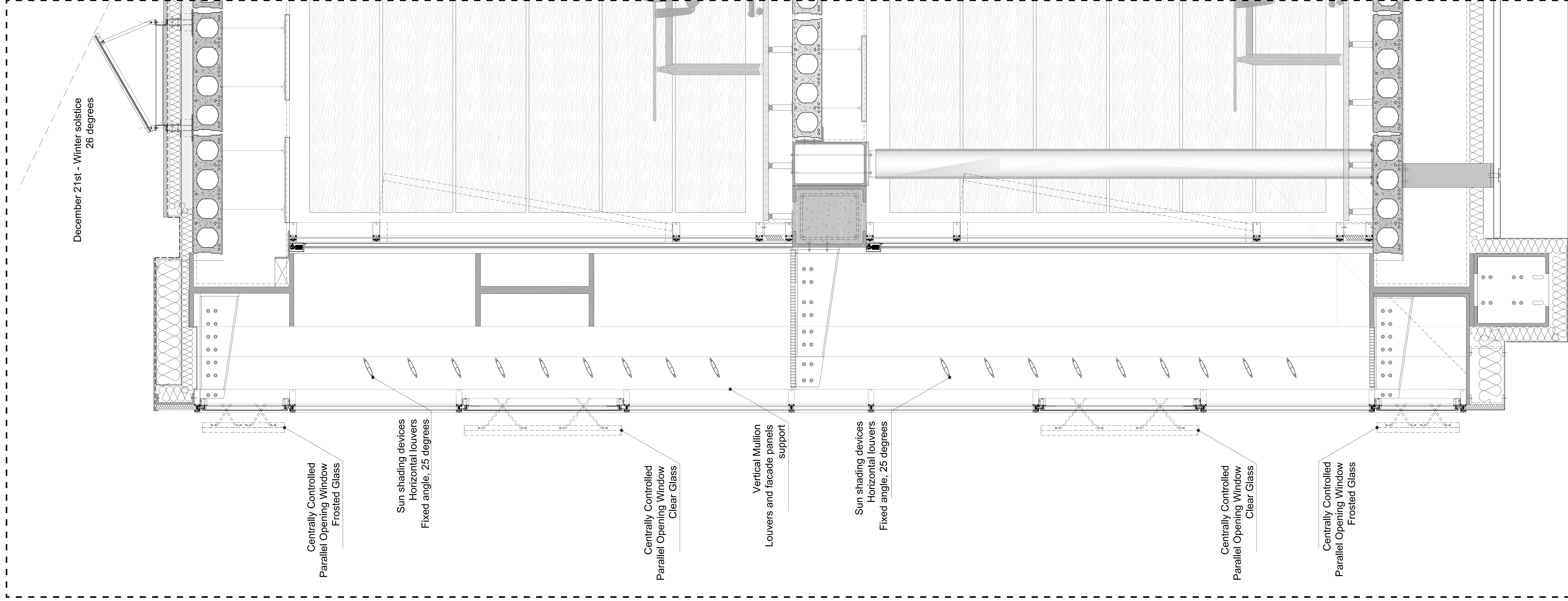
PRIVATE VOLUME | FACADE DETAIL | PARAPET AND ROOF PV PANELS
SCALE 1:10



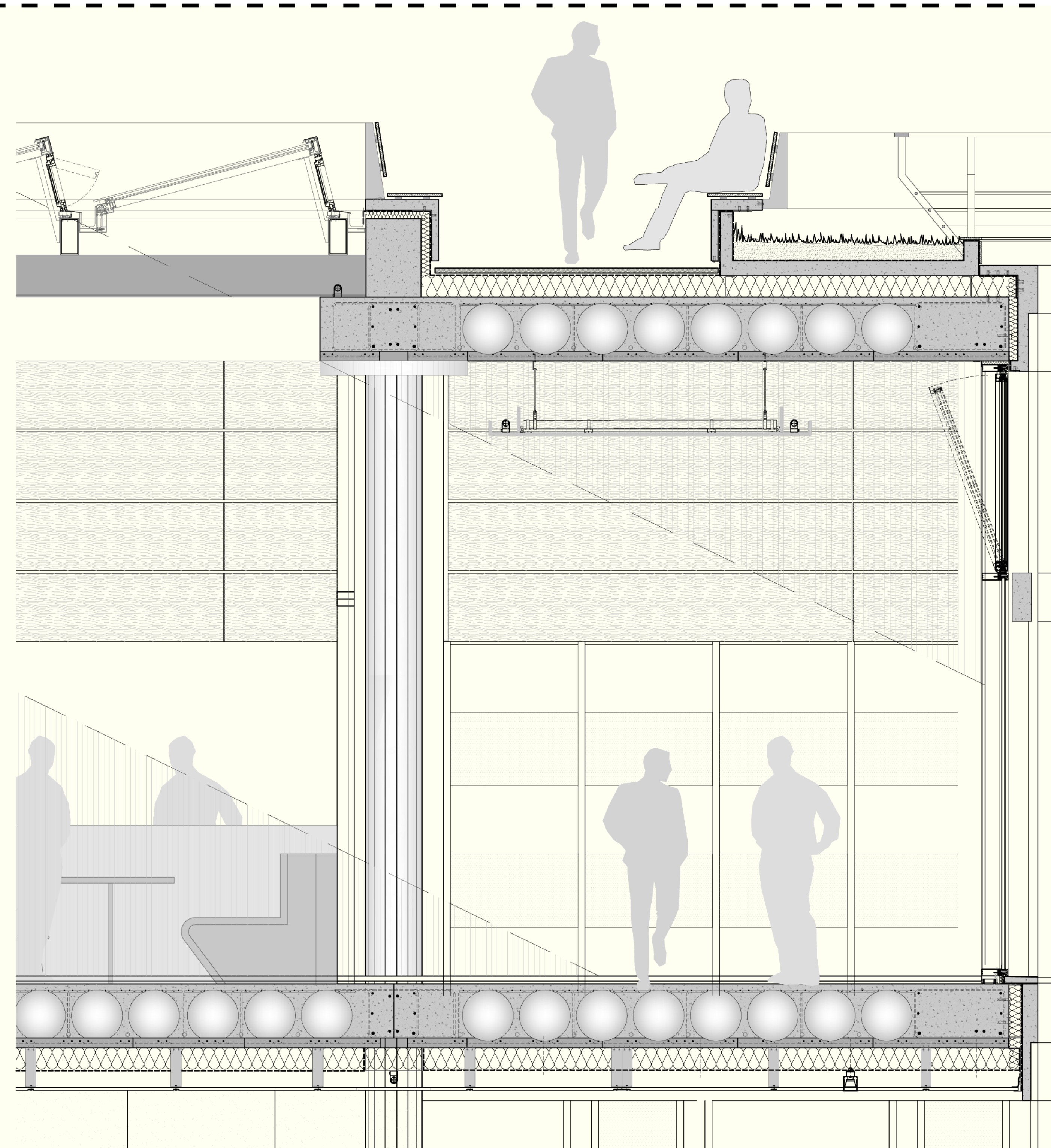
PRIVATE VOLUME | FACADE DETAIL | OUTER CORNER DETAIL
SCALE 1:10



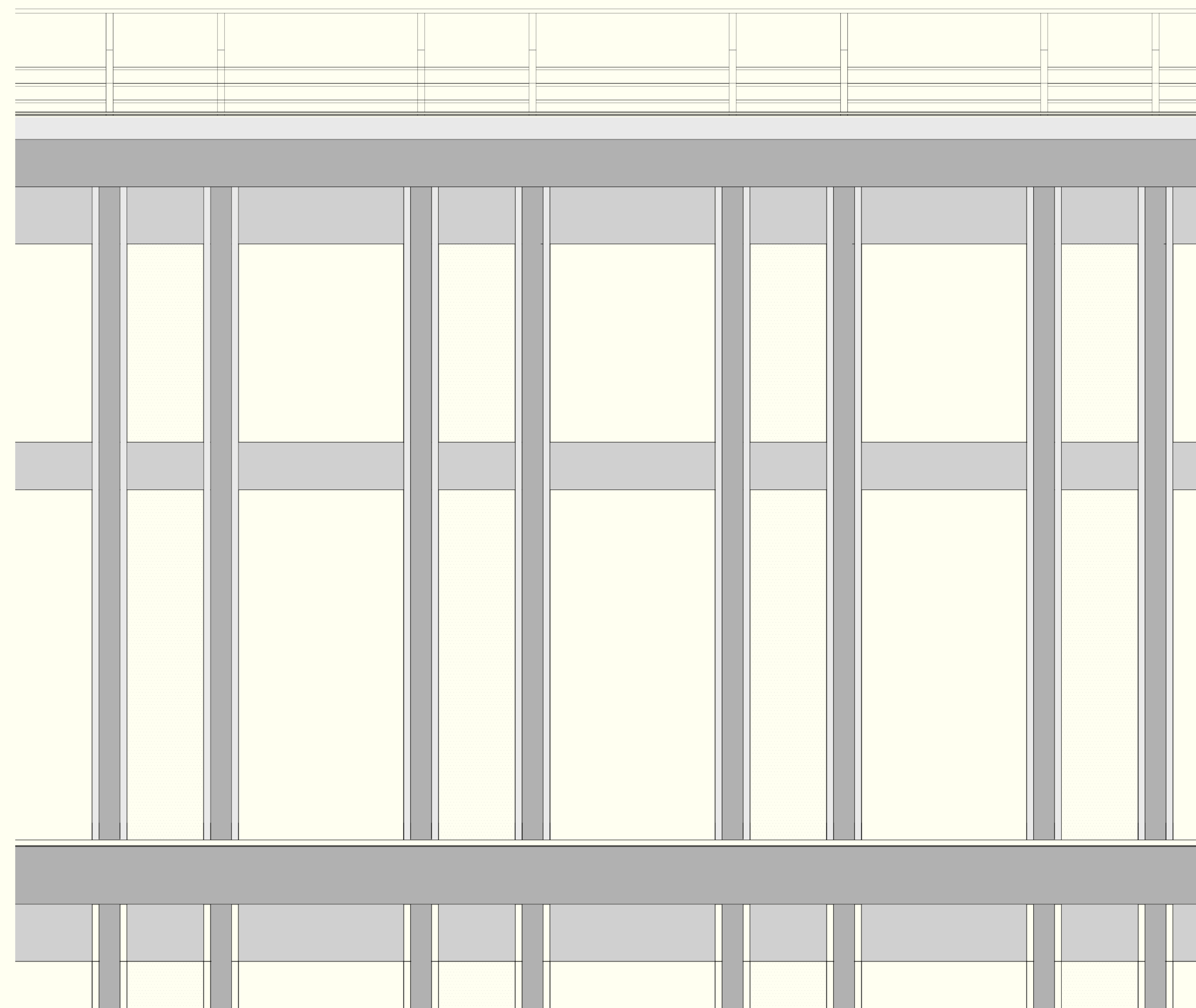
PRIVATE VOLUME | FACADE DETAIL | INNER FACADE MEETING WITH
TRUSS | SCALE 1:10



PRIVATE VOLUME | FACADE DETAIL | VERTICAL SECTION
SCALE 1:10

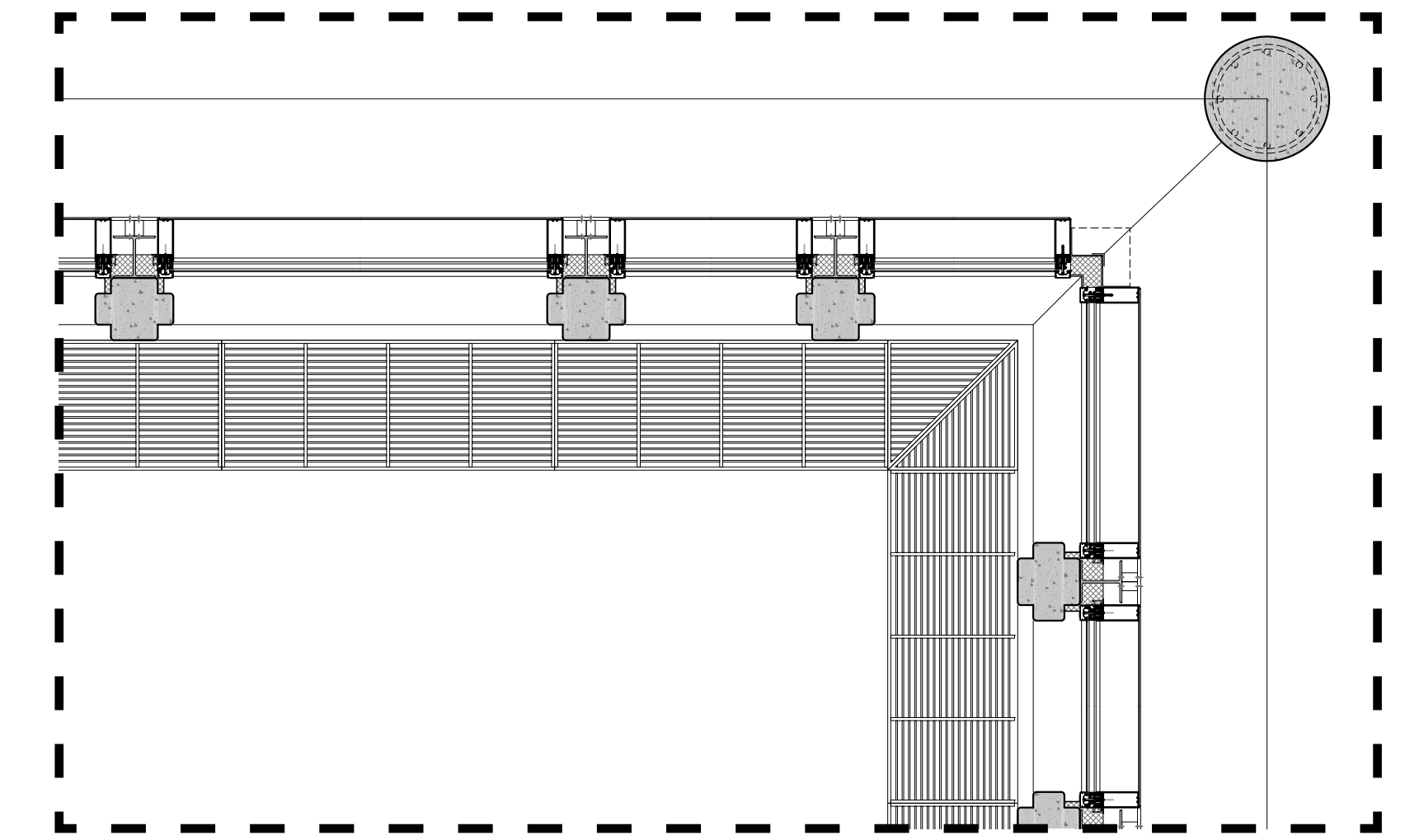
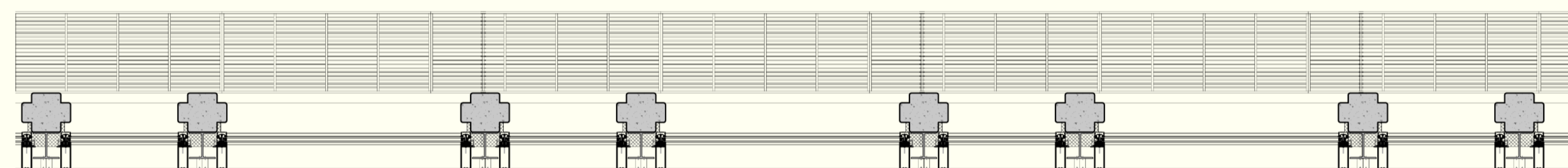


PUBLIC VOLUME | FACADE SECTION DETAIL | SCALE 1:20

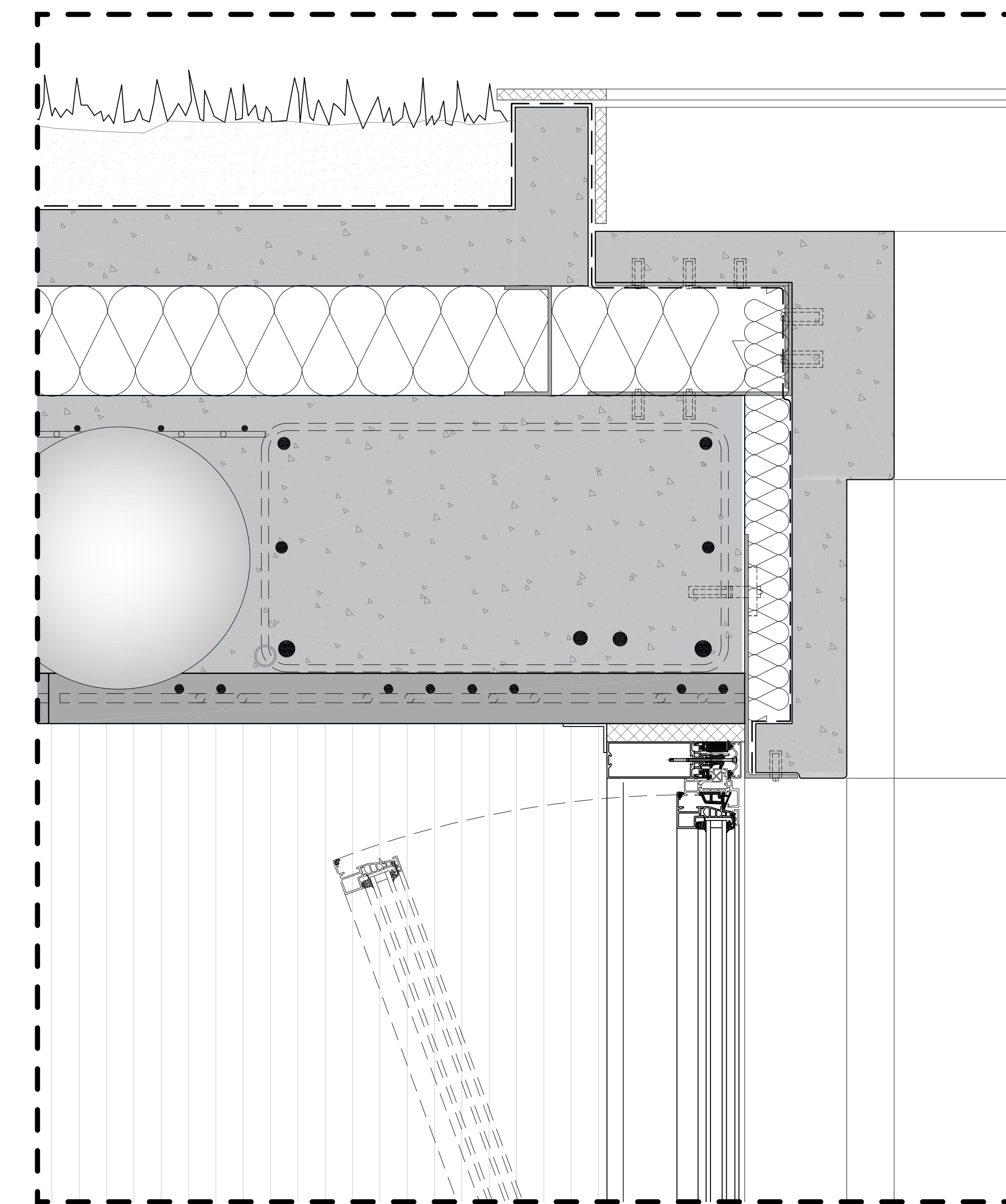


PUBLIC VOLUME | FACADE DETAIL | SCALE 1:20

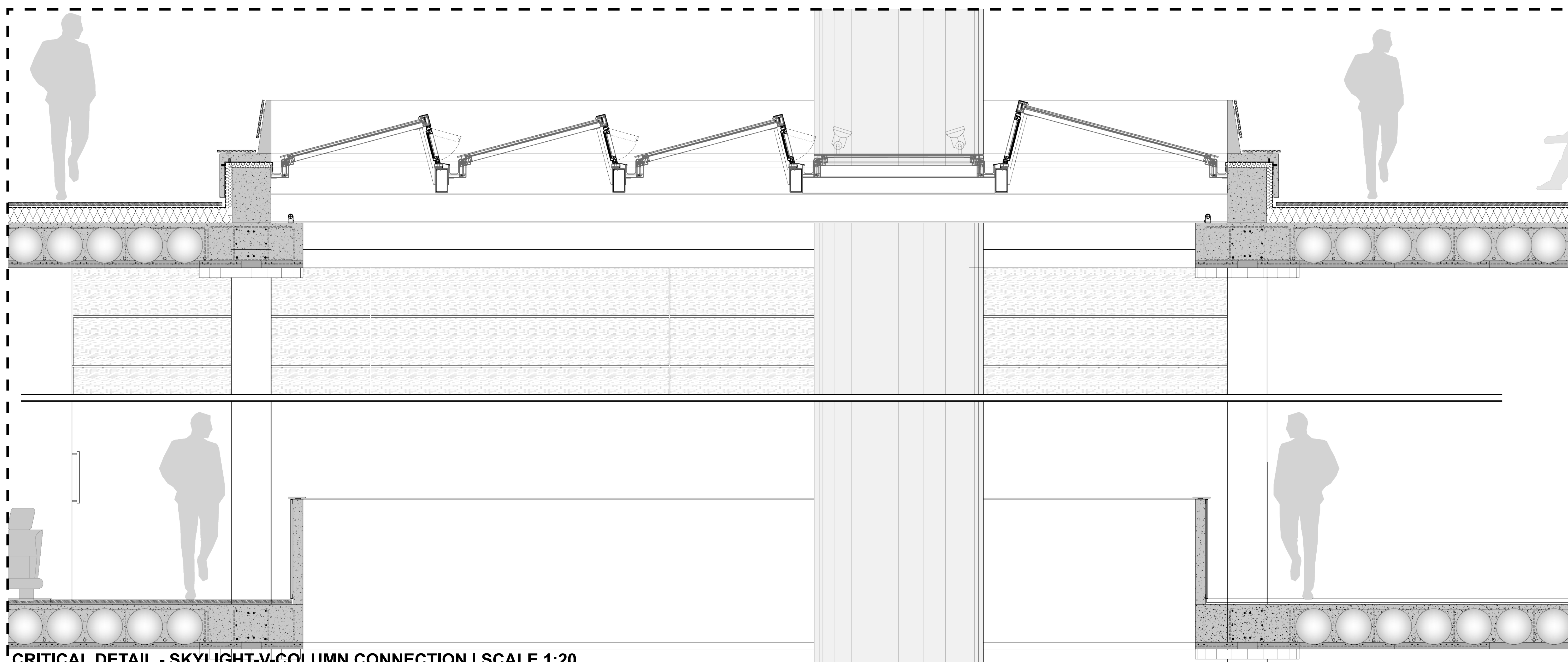
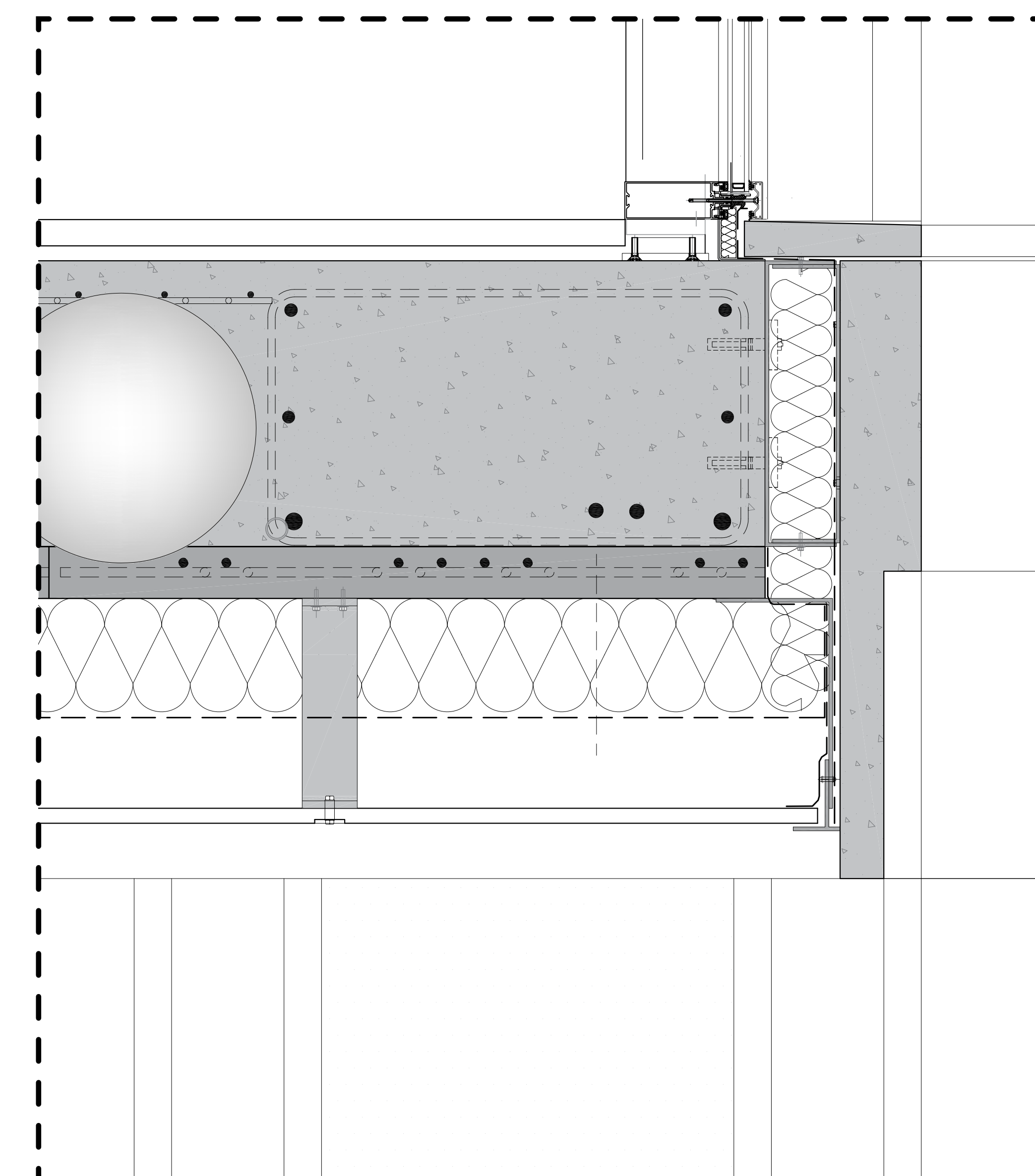
PUBLIC VOLUME
FACADE PLAN DETAIL | SCALE 1:20



PUBLIC VOLUME FACADE
CORNER DETAIL | SCALE 1:5



PUBLIC VOLUME FACADE - UPPER/LOWER PART | SCALE 1:5



CRITICAL DETAIL - SKYLIGHT-V-COLUMN CONNECTION | SCALE 1:20

UNITED NATIONS ENVIRONMENTAL COUNCIL

MANHATTAN MIDTOWN EASTSIDE, NEW YORK CITY

P5 PRESENTATION
DETAILS - FACADE FRAGMENT - OFFICES VOLUME DETAILED SECTRION - SCALE 1:20

