

[MISFIT] FIT

[Misfit]fit is a new six-storey, 32,000 square foot boutique office building situated on a small vacant site in Toronto's Liberty Village. Seeking to build upon the rich lineage of Toronto's precast concrete history, the proposal provides an alternative to the pervasive glass curtain wall project. The building's program is comprised of four floors of flexible office space, retail at grade, and a rooftop sculpture garden/event space.

As Liberty Village continues its redevelopment, it's critical to ask the question: how does one add to this unique building fabric without simply producing what is there, or reverting to a glass office building which so brashly departs from the character of the area? To propose an answer to this, we looked both within the larger building context of Toronto and within the district itself.

The first step to operating within the context of the site was to study Toronto's precast concrete project and its history in the city's development. Despite the prevalence of this construction method it's been met with great apprehension. So often the mass-produced panels are organized in a highly rigid manner, producing a static pattern of solid and void. Designed with the intention of producing a continuous, modulated surface, the aesthetic ultimately results in a monotonous and monolithic volume. Combined with the weightiness of concrete, the building becomes static, and heavy - a dead weight.

Looking through the lens of Liberty Village and its wealth of architectural character, we seek to revitalize the precast project. The brick details found within the historical factory buildings produce dual readings of continuity and discontinuity of surface, especially present around window and door openings, at rooflines, and along lines of vertical structure. Here, the complexity of coursing techniques becomes intensified, pronounced, and ornamental as bricks protrude and shift in a

variety of ways. Importantly, these details depend on a certain balancing act between elements; there can be slippage, but not too much. These moments of activation are important in comparison to the dead weight common amongst traditional precast projects.

While upholding the paramount value of precast concrete's economy of repetition, the [Misfit]fit leverages advanced fabrication techniques and reusable moulds in order to move the project beyond just pure repetition. The panelling system focuses on three main characteristics: panel-to-panel discontinuity, stacking and repetition, and tenuous equilibriums. Individual panels are designed hermetically without regard for the overall aggregation or adjacent units. As panels are confronted with one another, their incompatibility is abrupt and glaringly obvious, allowing each element to be read independently against the larger mass. Individual edges and profiles are pronounced, reading not as a singularity but as a rough stacking of objects that have found their equilibrium. Furthering this effect, the corner condition becomes emphasized as a location where panel profiles are fully exposed with discontinuities clear. Apertures are created with the removal of units, a process divorced from the stacking logic which allows for infinite flexibility. The overall aggregation is produced through a vertical repetition where each row is shifted in relationship to one another. Here, similar panels relate imperfectly but just enough to hold together an overall sense of movement. This process breaks decidedly from the traditional strategy of repetition and homogeneity in the precast project, as well as the contemporary parametric practice of continuous surfaces, both of which pursue the perfect match and produce the monolithic volume. Here the imperfect and tenuous characteristics of the misfit produce new perceptual, formal and spatial effects.



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[Misfit]fit is a new six-storey, 32,000 square foot boutique office building situated on a small vacant site in Toronto's Liberty Village. Seeking to build upon the rich lineage of Toronto's precast concrete history, the proposal provides an alternative to the pervasive glass curtain wall project. The building's program is comprised of four floors of flexible office space, retail at grade, and a rooftop sculpture garden/ event space.

As Liberty Village continues its redevelopment, it's critical to consider how this can be done appropriately - sensitive to the historical character of the neighbourhood. As one of Toronto's oldest settled districts, Liberty Village grew primarily as an industrial area, with many large manufacturing companies erecting factories near the train line. While many of these companies have since left with the decline of industrial activity, they've left behind their vast, architecturally distinct brick buildings to be repurposed as lofts and creative office space. With such high demand to develop in the area, additional construction is inevitable. The question is, how does one add to this unique building fabric without simply producing what is already there, or reverting to a glass office building which so brashly departs from the character of Liberty Village? To propose an answer to this, we looked both within the larger building context of Toronto and within the district itself.

The first step to operating within the context of the site was to study Toronto's precast concrete project and its history in the

city's development. From iconic buildings such as the University of Toronto's Medical Sciences Building built in 1969, to lesser-known municipal and educational facilities, this construction method has been leveraged for its efficiency by a vast number of buildings across the city, becoming an integral part of its aesthetic identity. Despite this, it's been met with great apprehension, with local writers describing some as "oppressive" and "brutalist." In many cases these sentiments are hard to argue; so often the mass-produced panels are organized in a highly rigid manner, producing a static pattern of solid and void. Designed with the intention of producing a continuous, modulated surface, the aesthetic ultimately results in a monotonous and monolithic volume. Combined with the weightiness of concrete, the building becomes static, and heavy - a dead weight. As a seemingly stagnant project, precast concrete construction has been largely overlooked for decades and replaced by the lightness of glass and steel for the vast majority of institutional and commercial buildings. Perhaps, however, the time is right to revive this project, learning from the reception and reading of past methods, and exploring new ways to once again harness the liveliness of concrete and the efficacy of mass production.

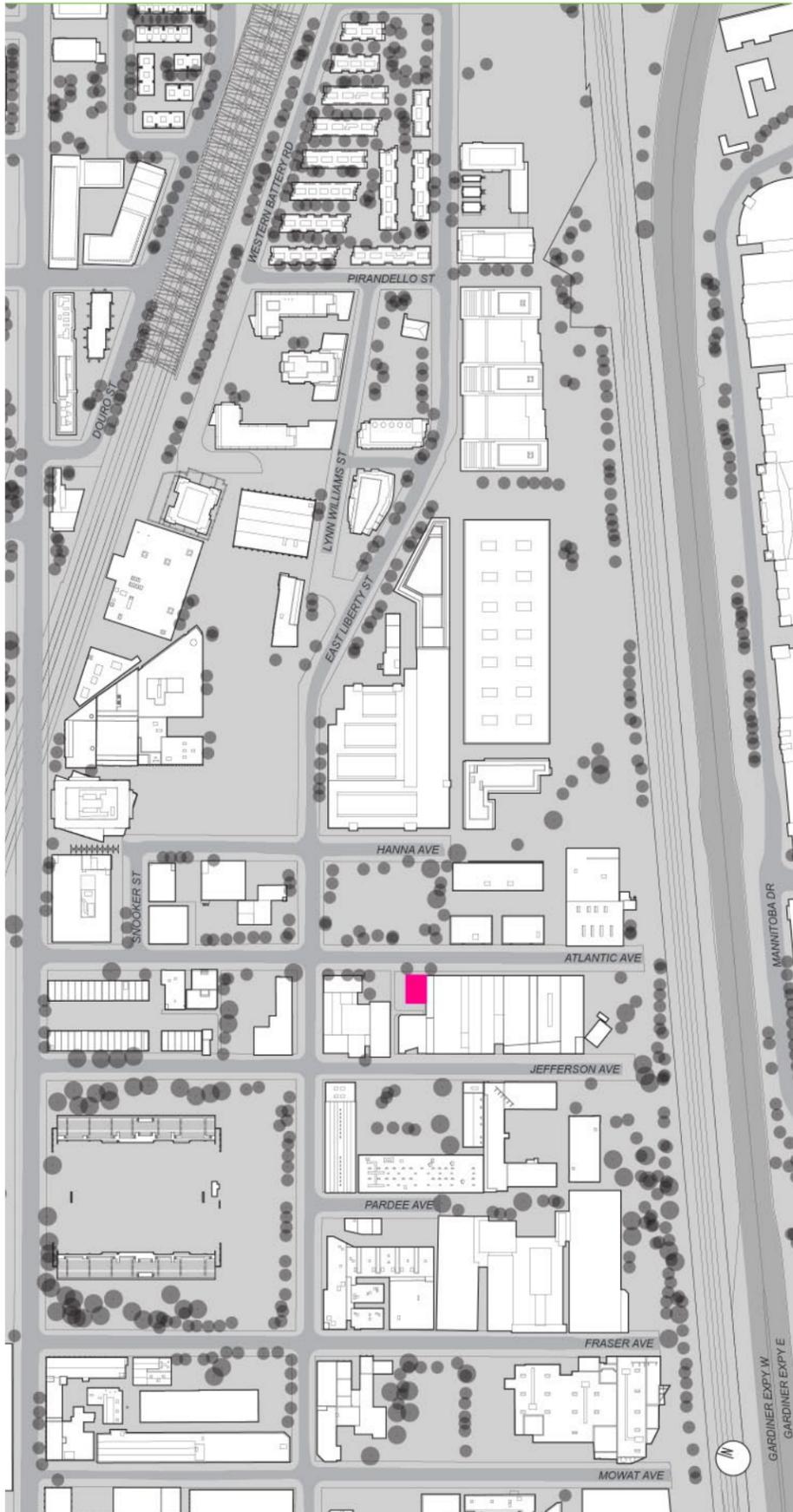
Looking through the lens of Liberty Village and its wealth of architectural character offers fertile means for this revitalization. The brick details found within the historical factory buildings produce dual readings of continuity and discontinuity of surface, especially present around window and door openings, at rooflines, and along lines of vertical

structure. Here, the complexity of coursing techniques becomes intensified, pronounced, and ornamental as bricks protrude and shift in a variety of ways. Importantly, these details depend on a certain balancing act between elements - there can be slippage, but not too much. These moments of activation are an important diversion from the dead weight common amongst traditional precast projects.

While upholding the paramount value of precast concrete's economy of repetition, the [Misfit]fit leverages advanced fabrication techniques and reusable moulds in order to move the project beyond just pure repetition, while steering clear of mass customization. The panelling system focuses on three main characteristics: panel-to-panel discontinuity, stacking and repetition, and tenuous equilibriums. Individual panels are designed hermetically without regard for the overall aggregation, and without regard for adjacent units. As panels are confronted with one another, their incompatibility is abrupt and glaringly obvious, allowing each element to be read independently against the larger mass. Individual edges and profiles are pronounced, reading not as a singularity but as a rough stacking of objects that have found their equilibrium. Furthering this effect, the corner condition becomes emphasized as a location where panel profiles are fully exposed with discontinuities clear. Apertures are created with the removal of units, a process divorced from the stacking logic which allows for infinite flexibility. The overall aggregation is produced through a vertical repetition where each row is shifted in relationship to one another. Here, similar panels relate imperfectly

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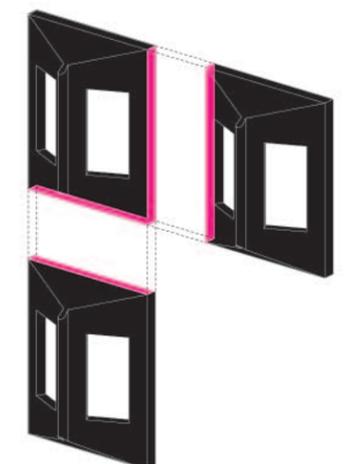
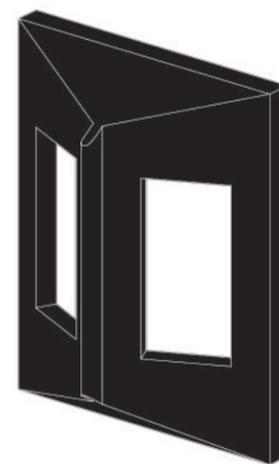
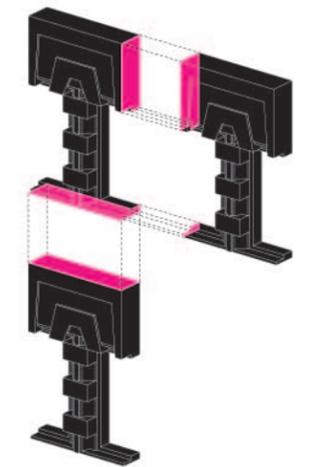
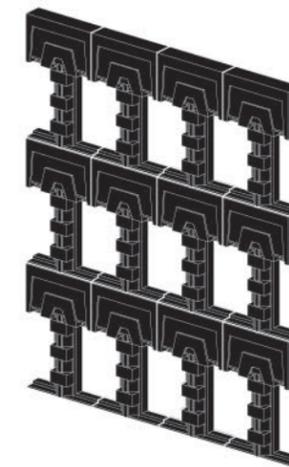
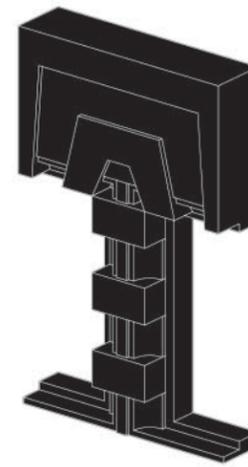
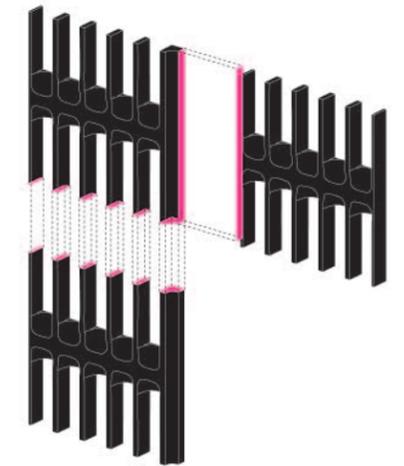
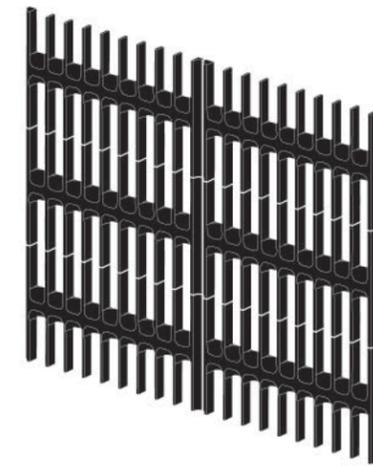
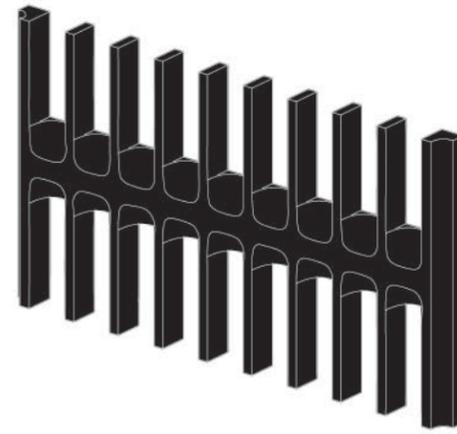
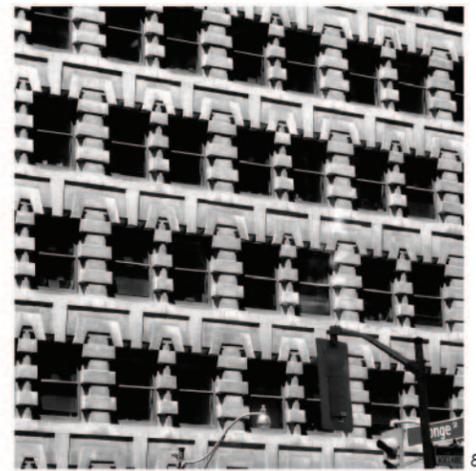




MICRO SITE / LIBERTY VILLAGE

Building within a district with distinct architectural presence like Liberty Village necessitates a sensitive response. A former industrial zone, it's rawness and grit is palpable, in drastic contrast to the slick sheen of Toronto's slew of new glass and steel construction popping up all across the city. Instead, its buildings offer a dense catalogue of the possibilities of brick construction, highly expressive of the weight and coarseness of masonry, and importantly, of the technique of stacking. If we look beyond just the elaborate surface variation and ornamentation of brick

cladding -- which, at the scale of an office building, has grown largely out of practice -- we can distill the character of the buildings as exhibiting ideas of equilibrium: surfaces normalize and intensify, and unify and split, breaking down the overall mass into constituent moments which stand in tension. This principle can perhaps be applied to a more economical building method which takes advantage of contemporary fabrication and installation processes, and still fits with the character of the place.



PRECAST PANELS IN TORONTO

- 1. Alan Brown Building / 77 Elm Street
- 2. CAMH / 250 College Street
- 3. Manulife Financial Building / 250 Bloor Street East
- 4. Roberts Library / 130 St. George Street
- 5. U of T Medical Sciences Building / 1 King's College Circle
- 6. Westin Harbour Castle Hotel / 1 Harbour Square

- 7. 488 University Street
- 8. Lumsden Building / 6 Adelaide Street East
- 9. OISE Building / 252 Bloor Street West

FACADE PANELS

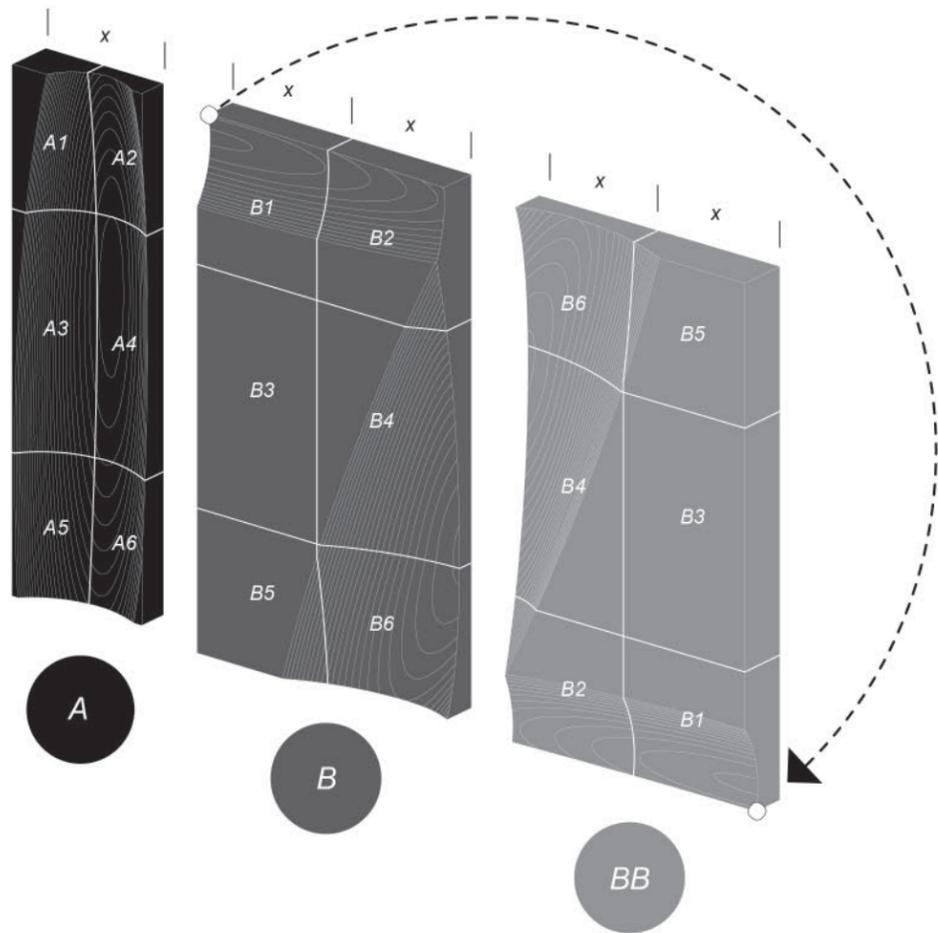
The precast system leverages mass production methods to fabricate complex geometries in a cost-effective manner. In most cases openings are integrated into each panel.

PANEL ORGANIZATION

Panels are organized according to a repetitive grid with little or no shifting, giving a highly coherent appearance once aggregated.

PANEL FIT

Panel modules are designed such that edge faces do not vary in geometry between top and bottom or between sides, allowing for continuity across the facade.



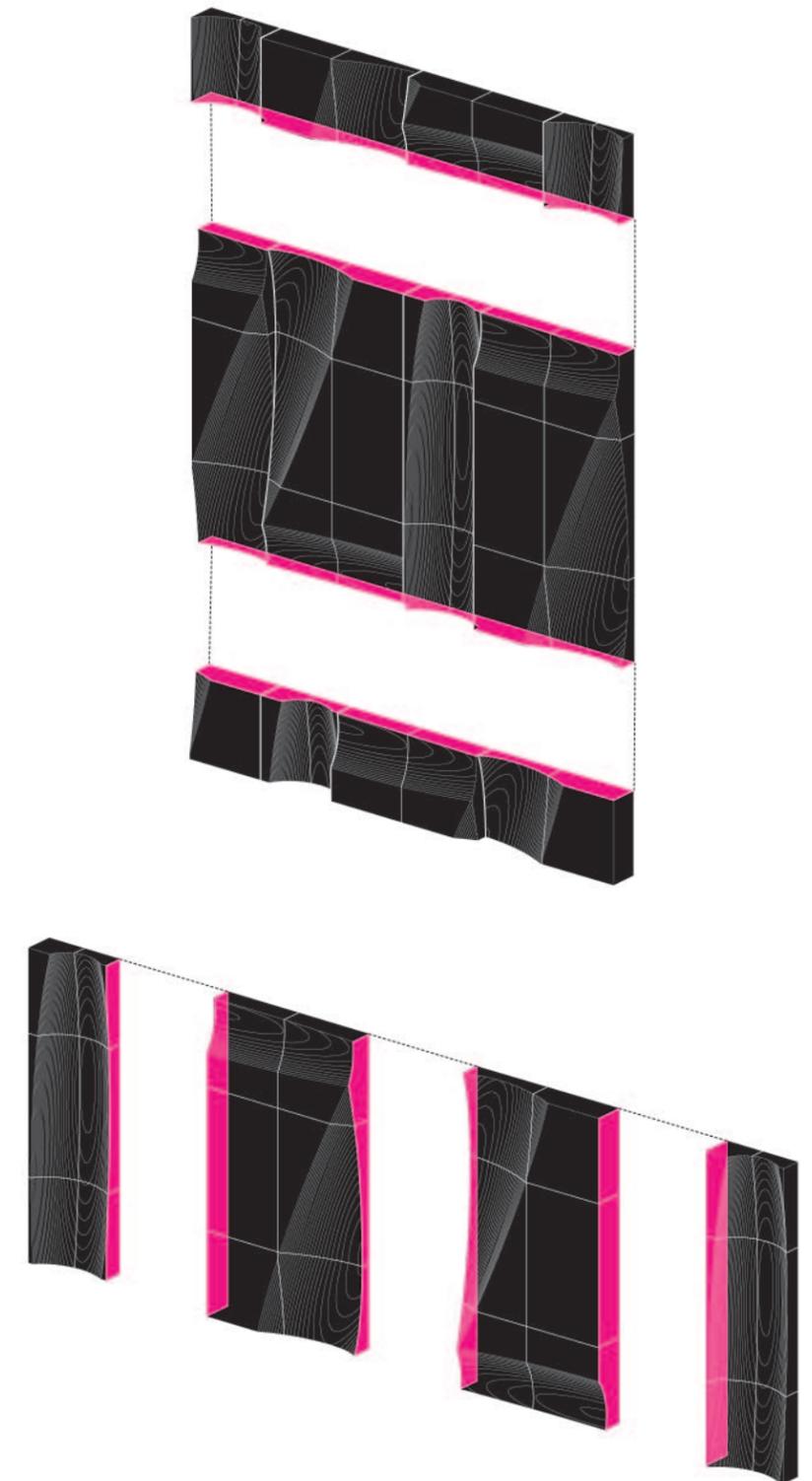
FACADE PANELS

The facade is composed of a patterning of two distinct panels: Panel A, and Panel B. Panel BB is added by rotating Panel B 180 degrees. To permit maximum flexibility for integrating openings into the facade, each of the two panels is split into six sub-panels.



PANEL ORGANIZATION

The panels are laid out in a regular pattern on the facade, shifting horizontally by three panel subdivisions on each level (3x). From this base layout, individual sub-panels are selectively removed to provide for openings.



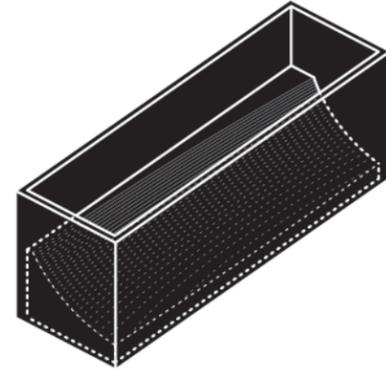
PANEL [MIS]FIT

The carved panels result in a highly varied profile from top to bottom and side to side, as well as between the two different panel modules. Because of this, the facade doesn't read as a continuous surface, but as an accumulation of individual objects, revealed by the misalignment between them.



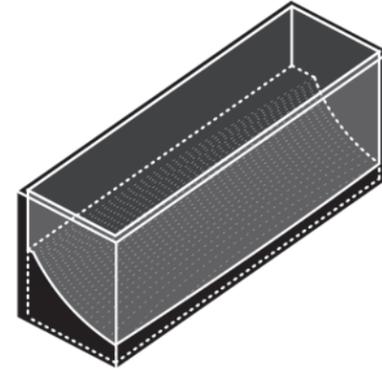
STEP 1 / MILL POSITIVE PANEL

Each subpanel is milled and finished to produce a positive volume.



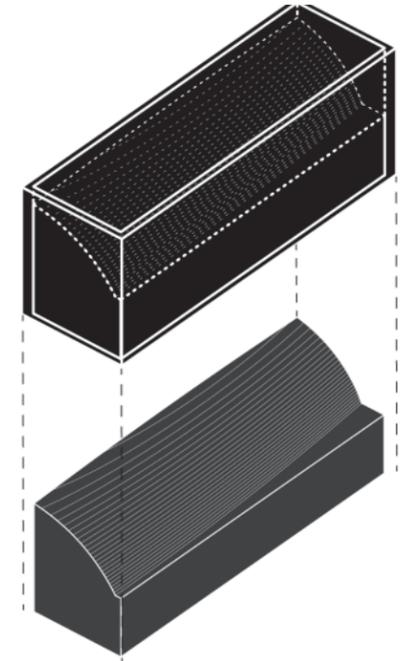
STEP 2 / PREPARE FORMLINER MOULD

The subpanel is boxed in on its four sides up to a standard height.



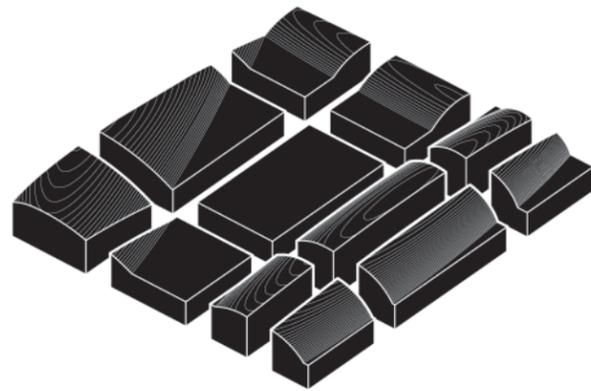
STEP 3 / POUR RUBBER FORMLINER

Liquid rubber is poured into the mould to create a negative formliner of the subpanel.



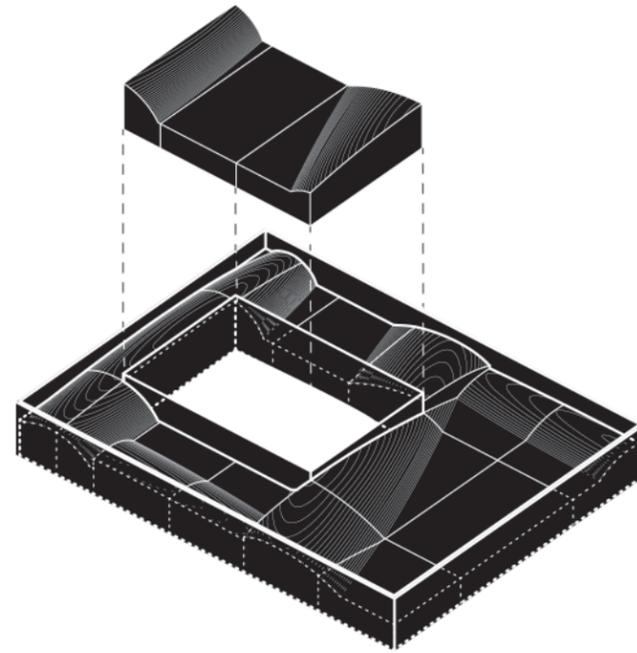
STEP 4 / REMOVE FORMLINER

Once the rubber has set, all formwork is removed and discarded. This formliner can be re-useable up to 50 times.



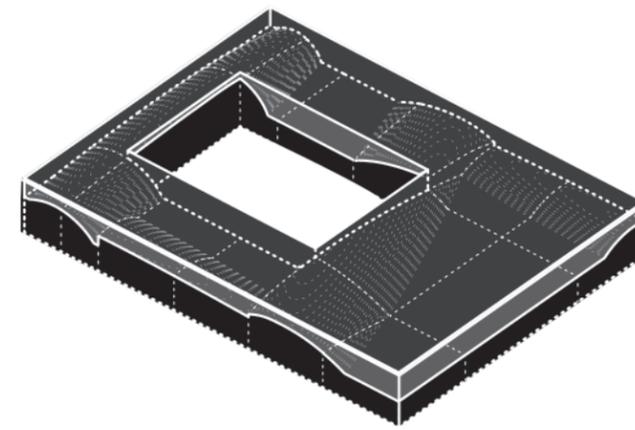
STEP 5 / ASSEMBLE FORMLINERS

The facade is laid out in a repeating pattern of the 12 individual subpanels. To create larger panels, the subpanels can be arranged together to minimize the number of individual pours.



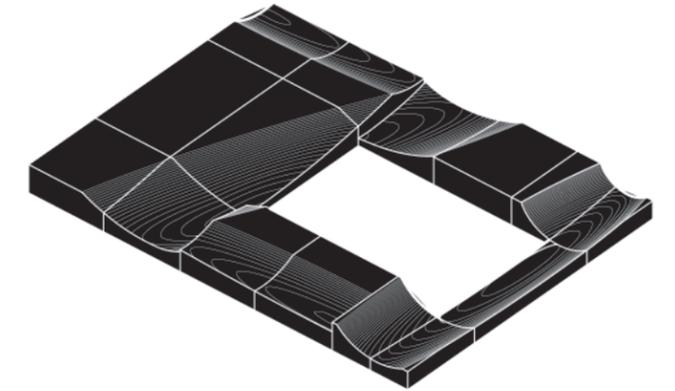
STEP 6 / PREPARE PANEL MOULD

Once the subpanels have been arranged as needed, they are enclosed on all four external edges, and internally as necessary to accommodate openings.



STEP 7 / POUR CONCRETE PANEL

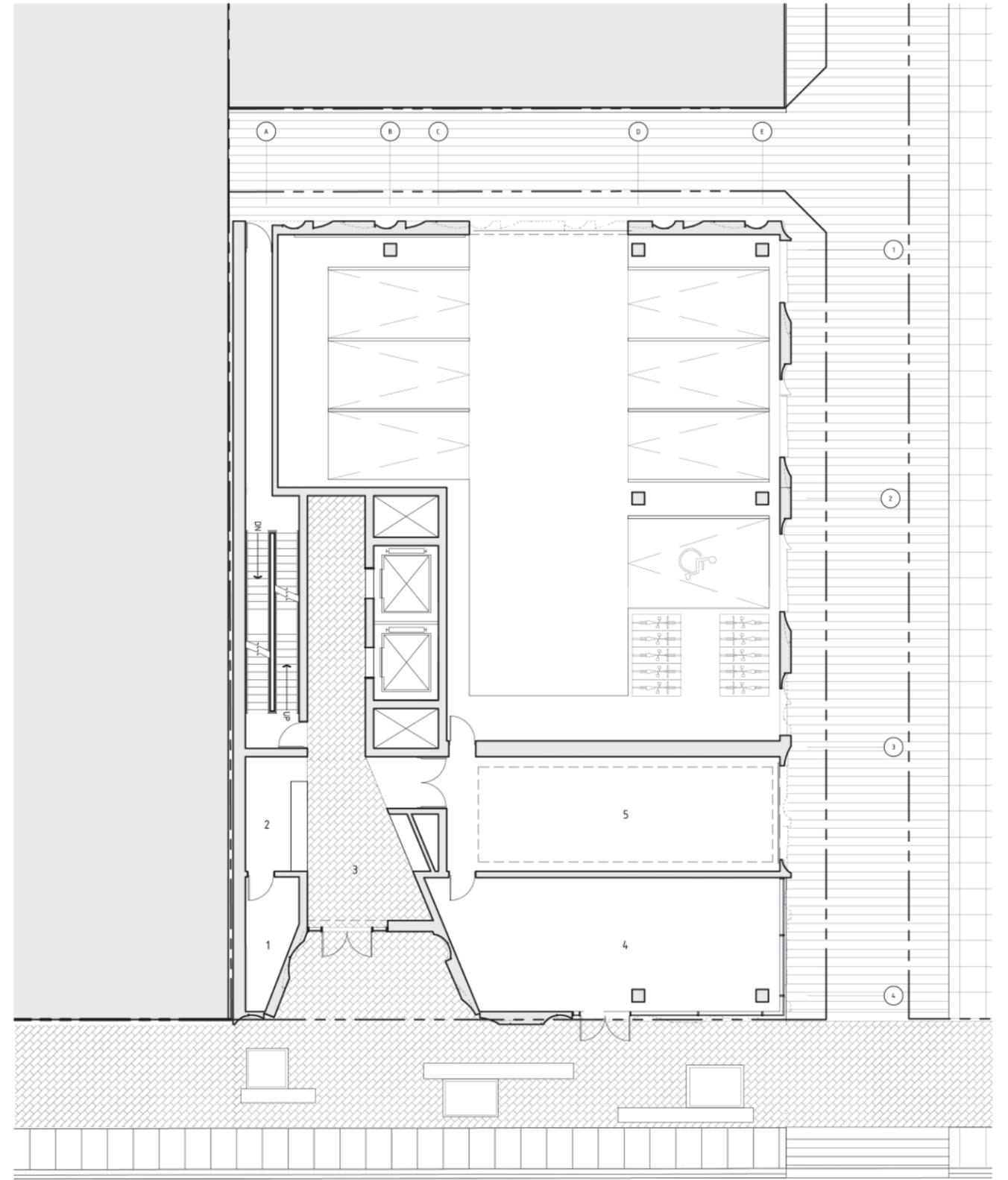
Concrete is poured into the mould up to a minimum coverage of 2". While wet, reinforcement is added, and the remaining concrete is poured in.



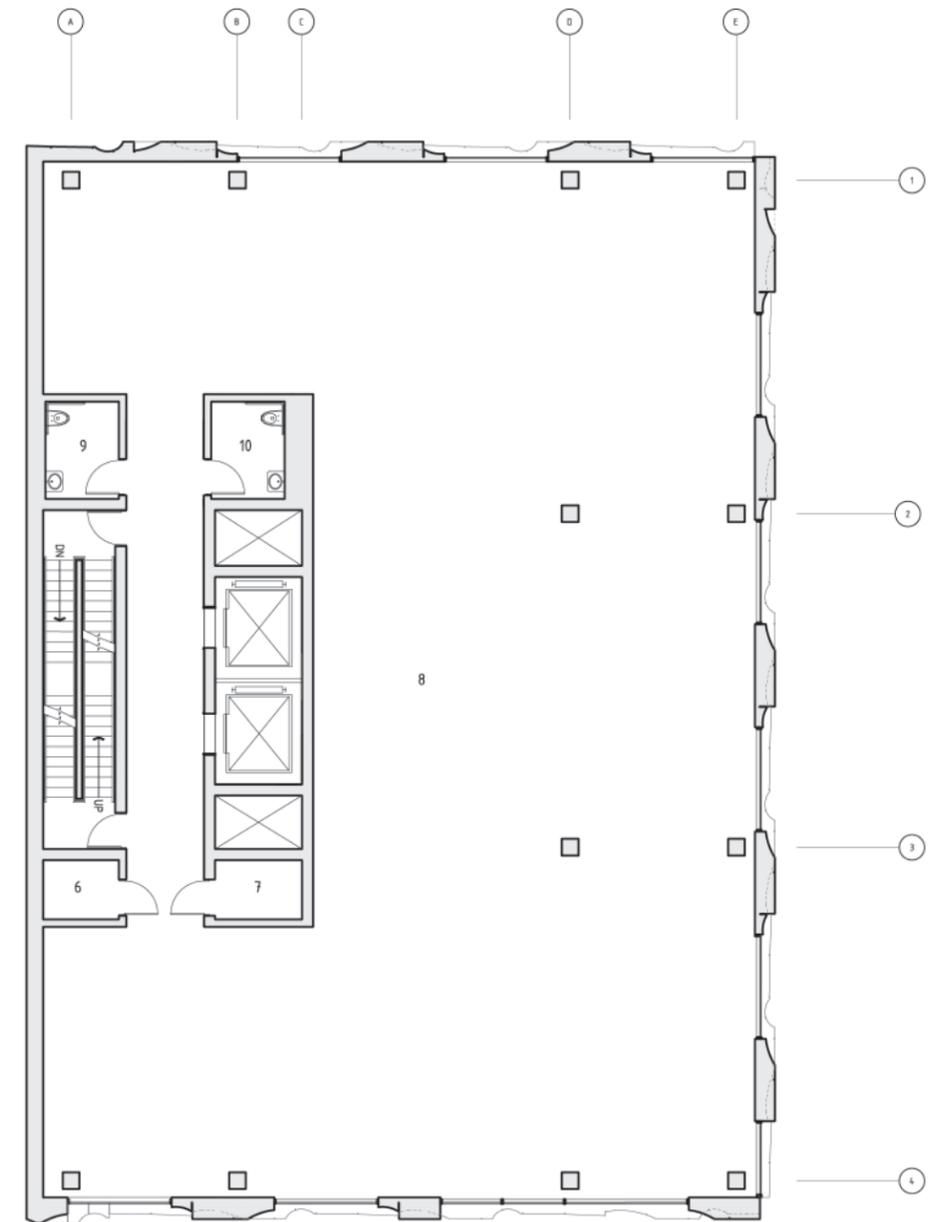
STEP 8 / REMOVE PANEL FROM MOULD

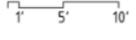
Once set, the formwork is removed and the concrete panel is set aside. The rubber formliners will be cleaned and reused for successive pours, repeating the same process.



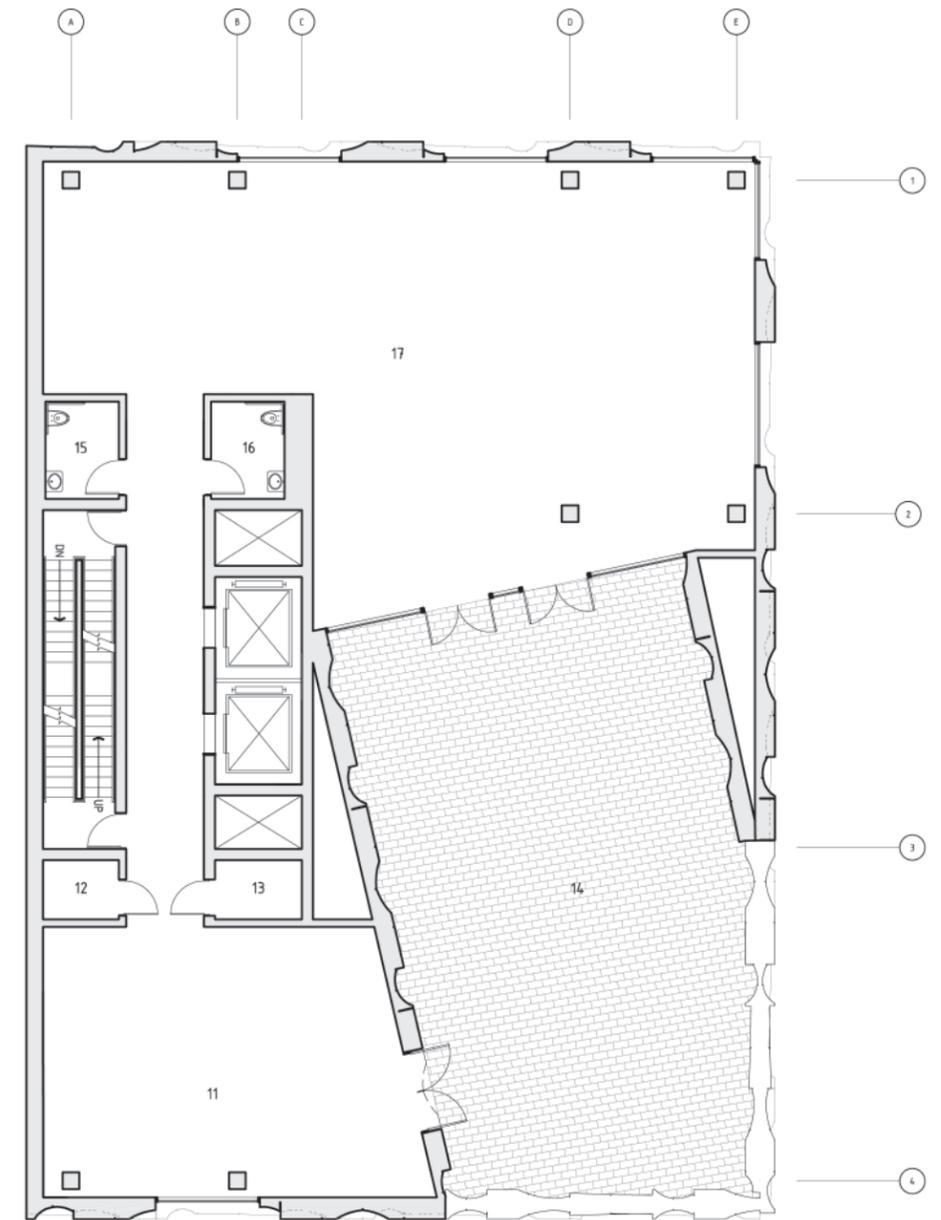


- 1 / STORAGE
 2 / CONCIERGE
 3 / MAIN LOBBY
 4 / CAFE
 5 / DELIVERY



- 

- 6 / COMMUNICATIONS ROOM
 - 7 / ELECTRICAL ROOM
 - 8 / OFFICE SPACE
 - 9 / RESTROOM
 - 10 / RESTROOM

STANDARD FLOOR PLAN



- 11 / CONFERENCE ROOM
 12 / COMMUNICATIONS ROOM
 13 / ELECTRICAL ROOM
 14 / ROOF PATIO
 15 / RESTROOM
 16 / RESTROOM
 17 / CONFERENCE ROOM

ROOF PLAN

