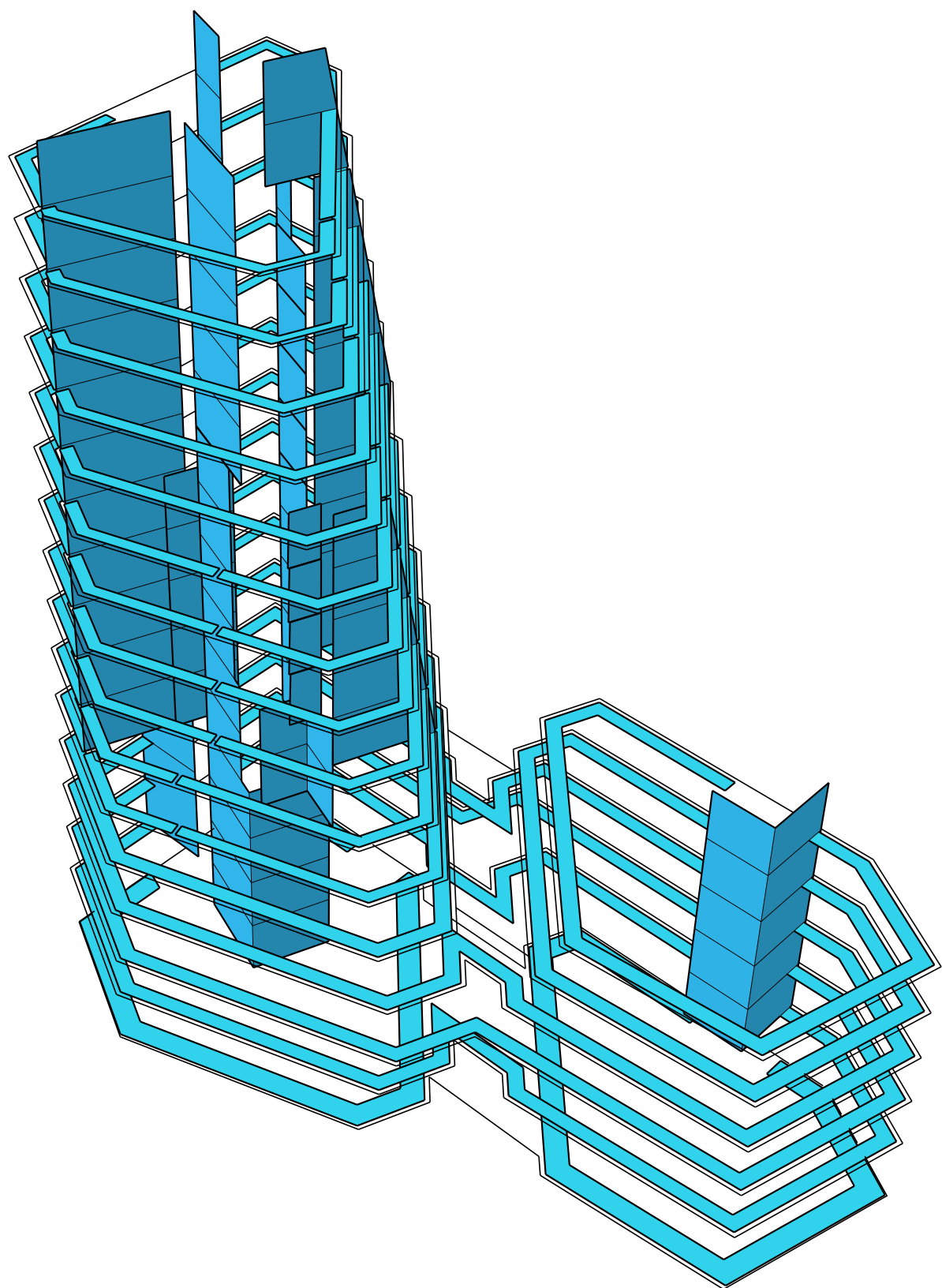


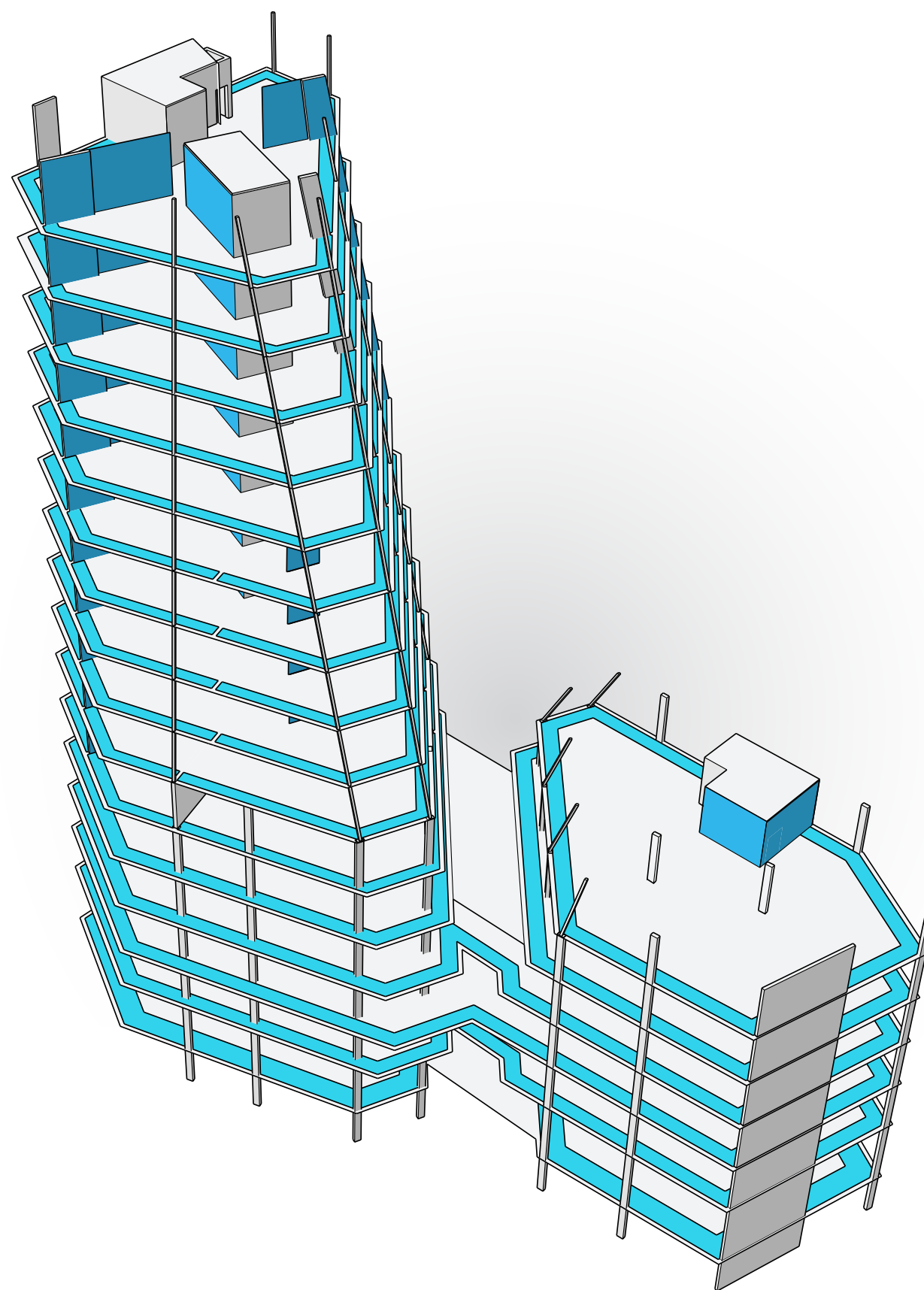


MATERIAL MULTIPLICITY

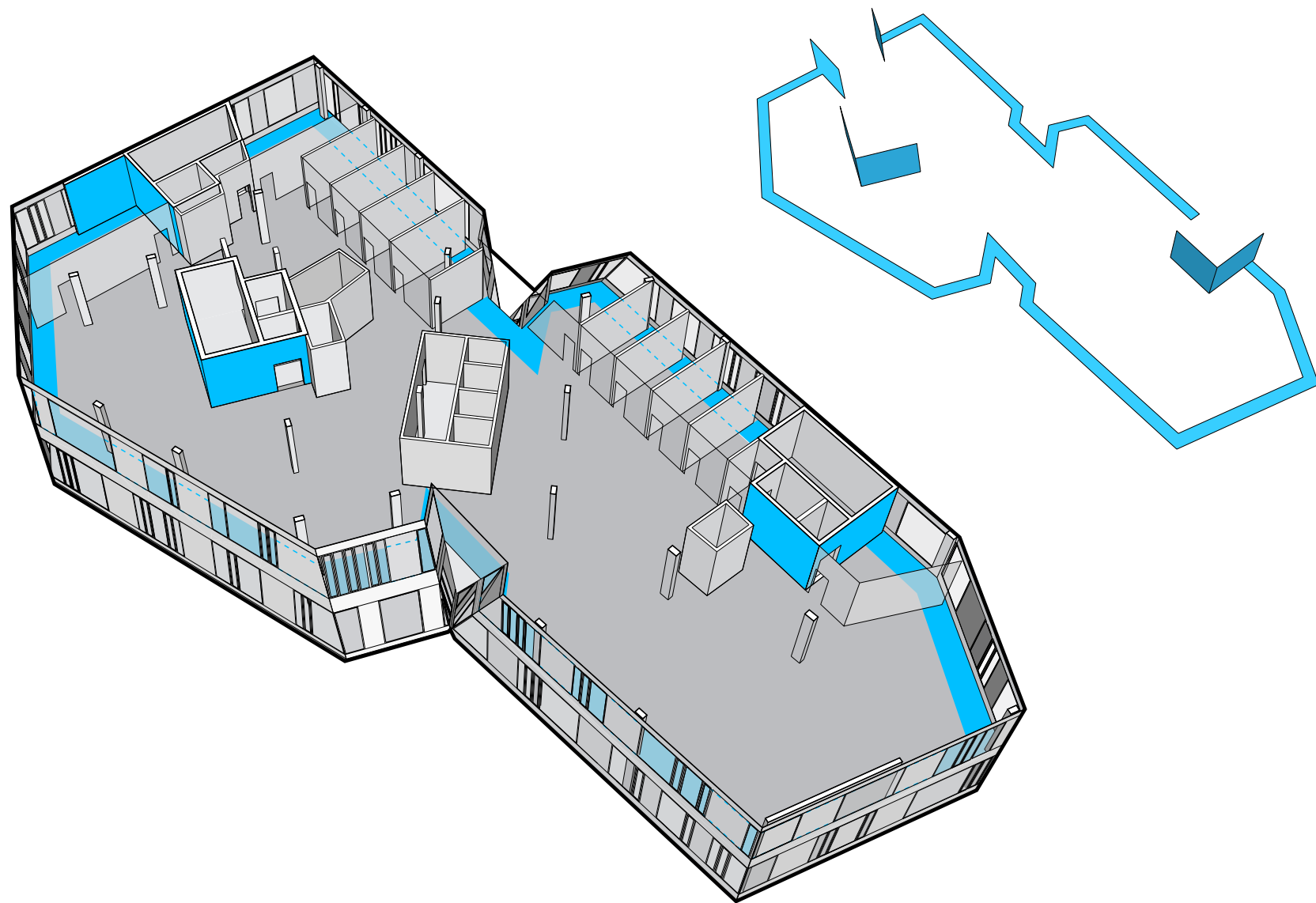
A photograph of a room with a vaulted wooden ceiling and white walls. Several black, featureless mannequins are positioned in the room, some standing on the floor and others appearing to be suspended or floating. The room has several small, barred windows. The text "MATERIAL MULTIPLICITY" is overlaid in the center.



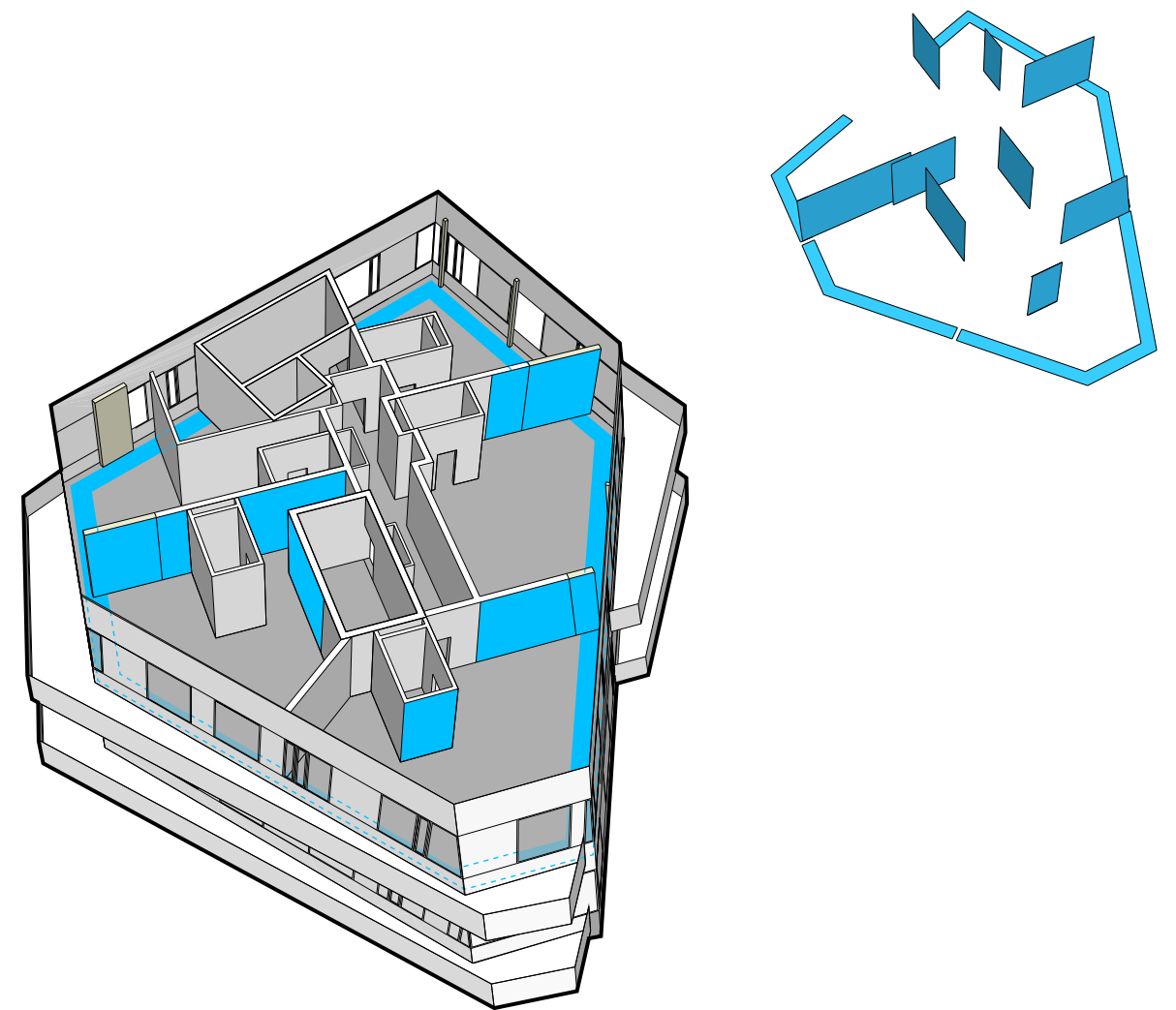
Aktive overflater



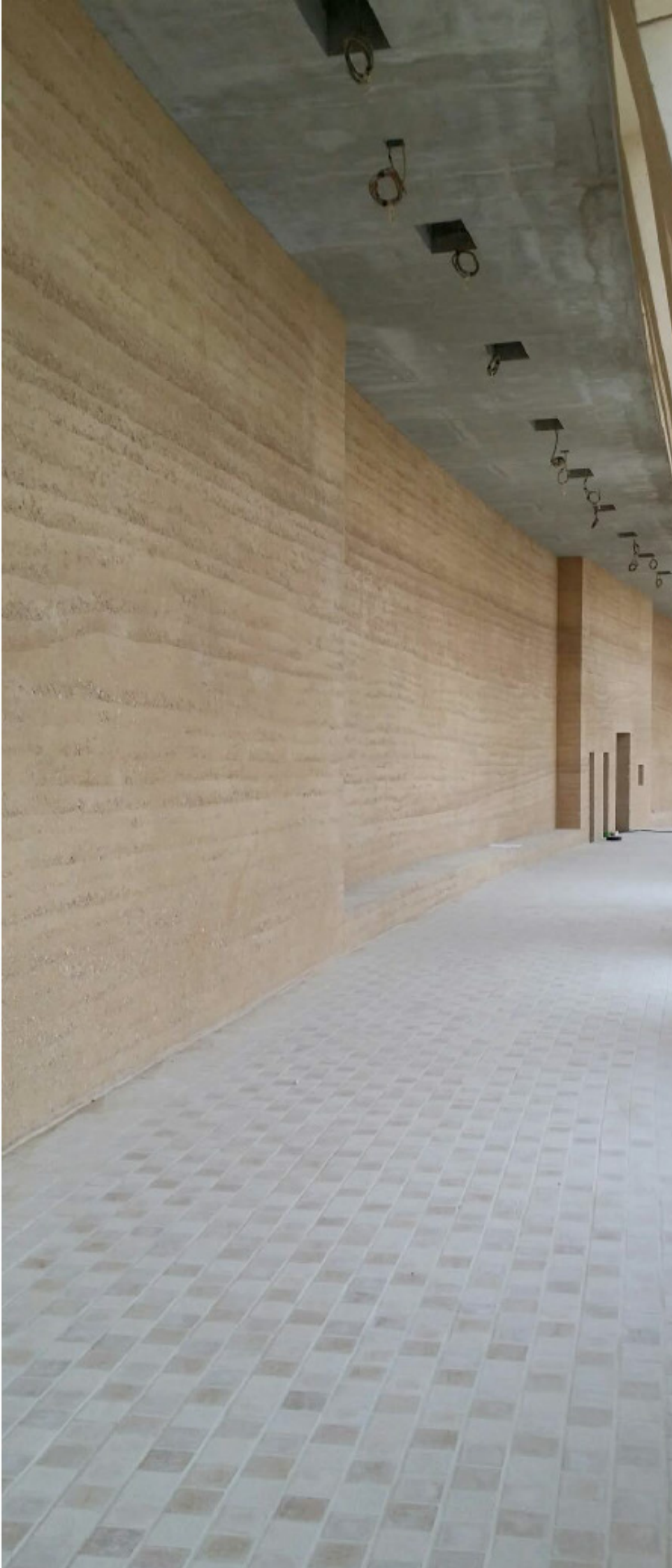
Passiv og aktive overflater



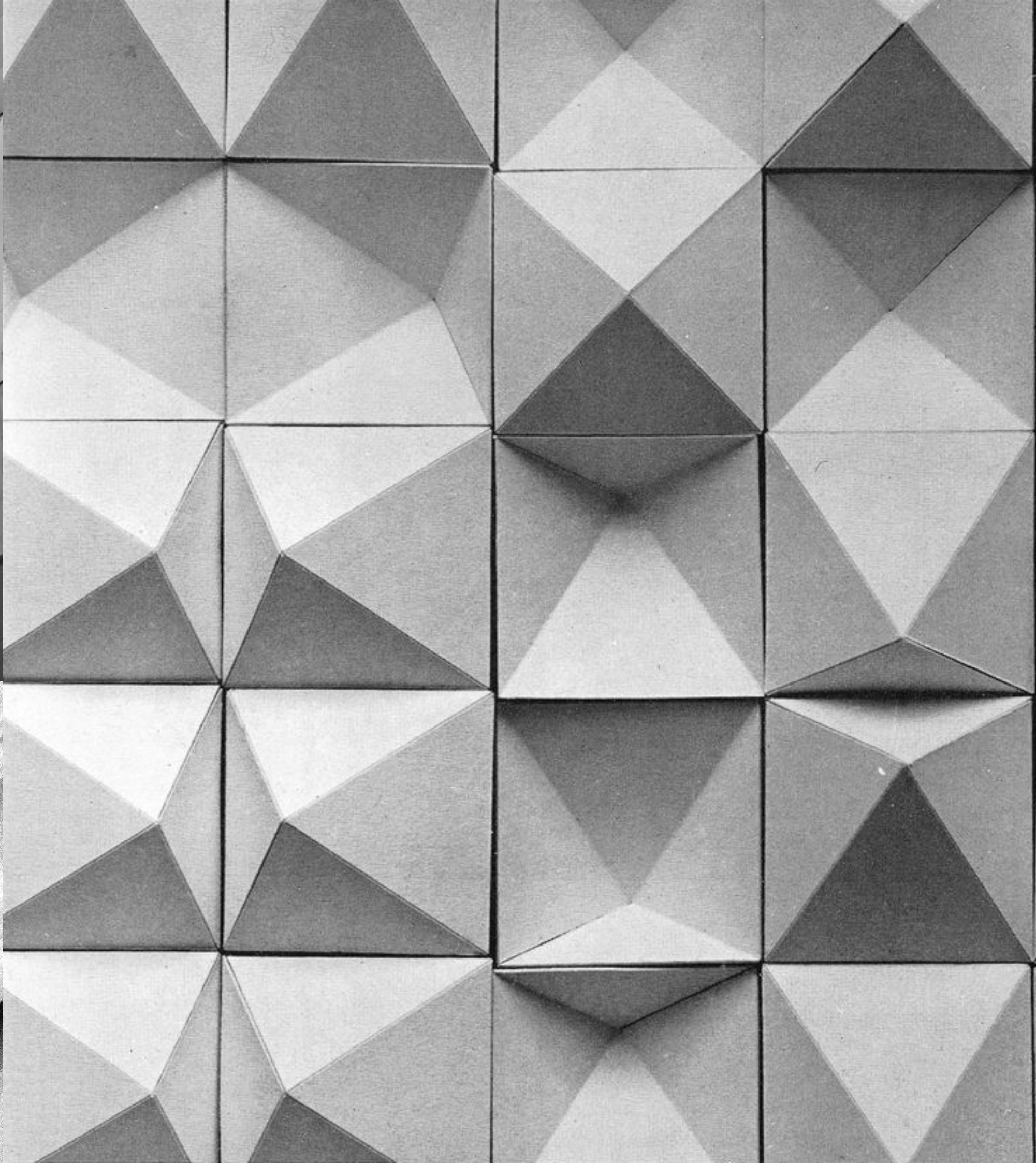
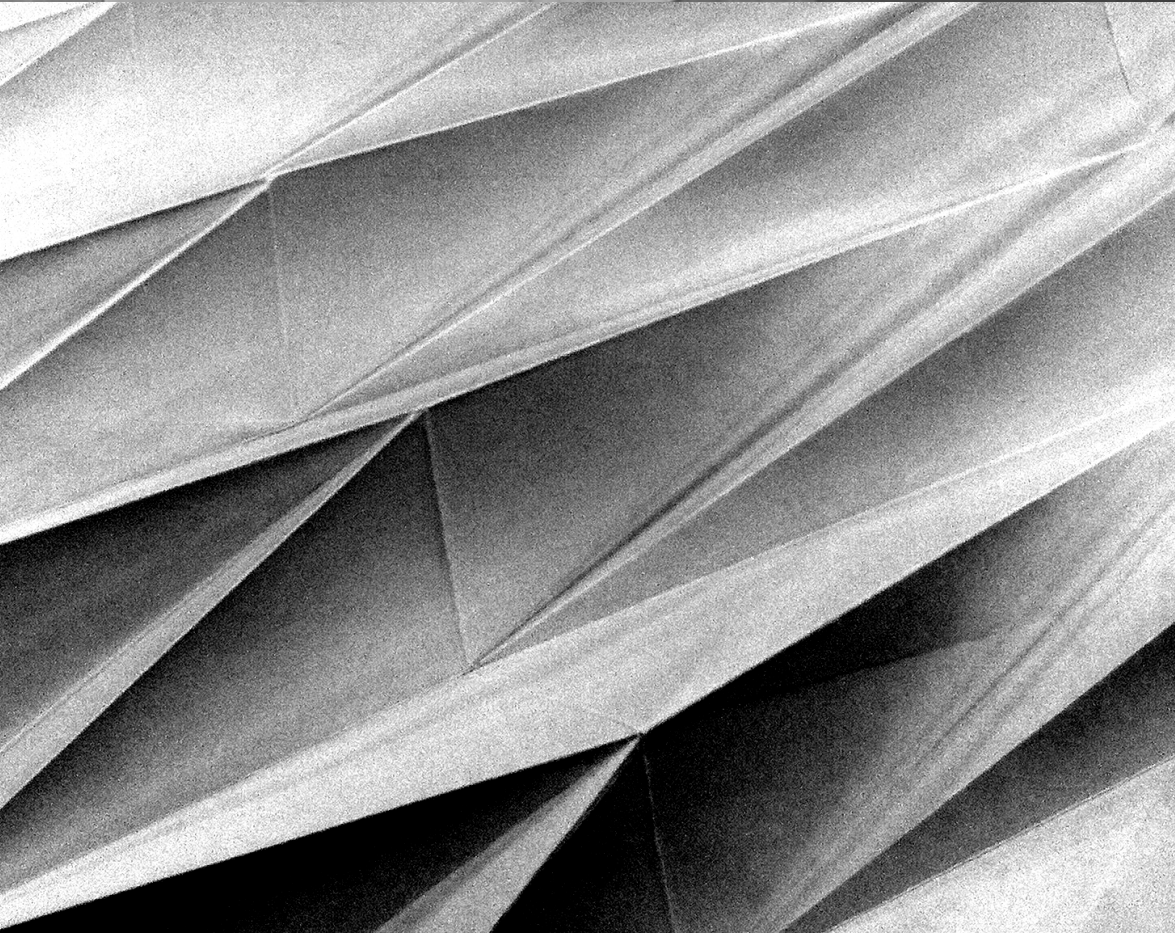
Aktive overflater - kontor
 Fremhevet i vegger og gulv
 $\text{BRAm}^2/0,25$ 25%

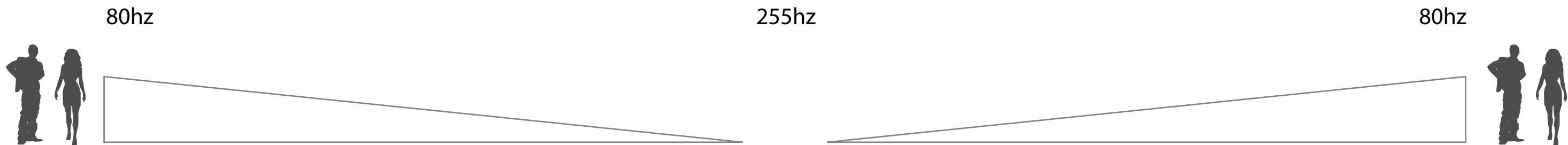


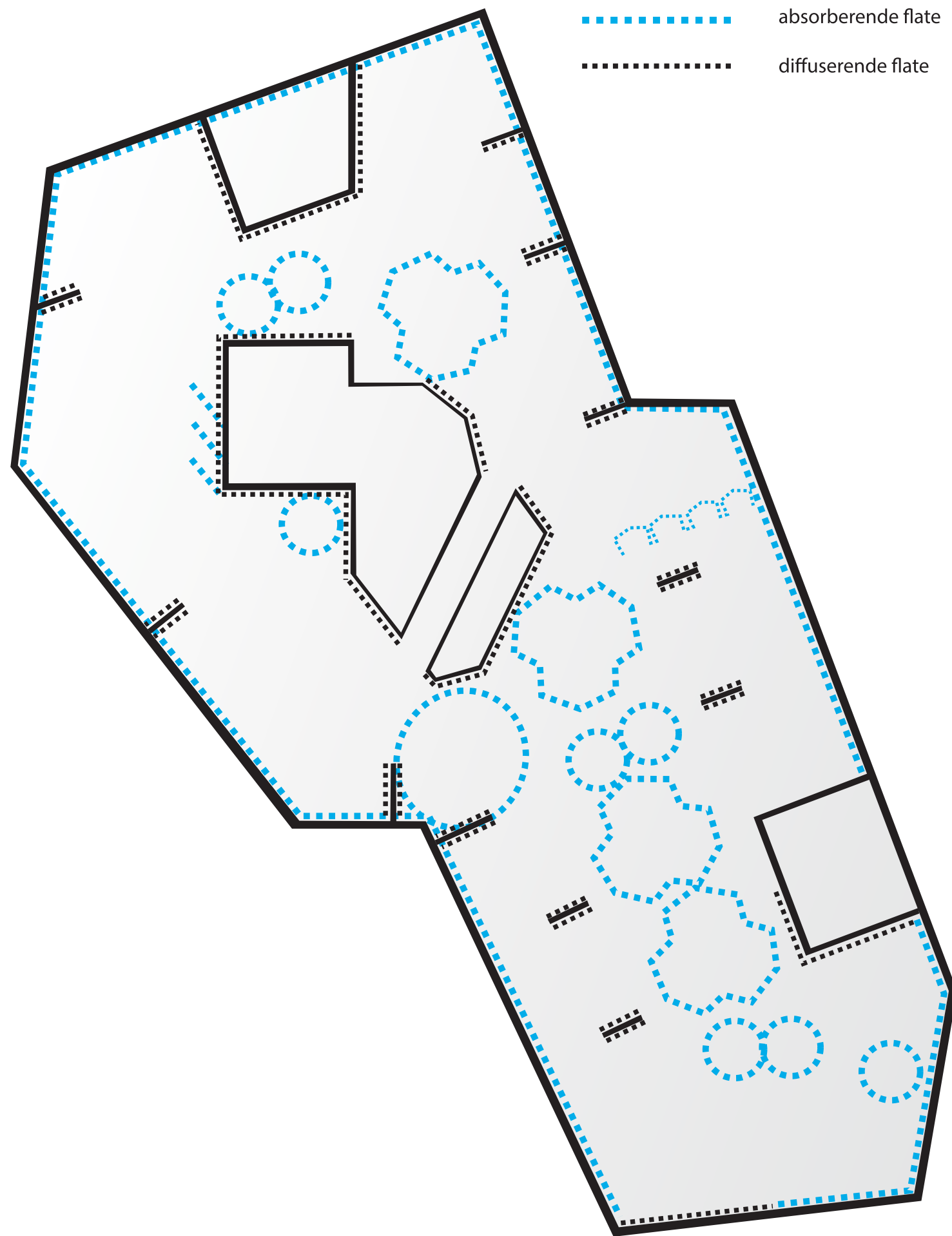
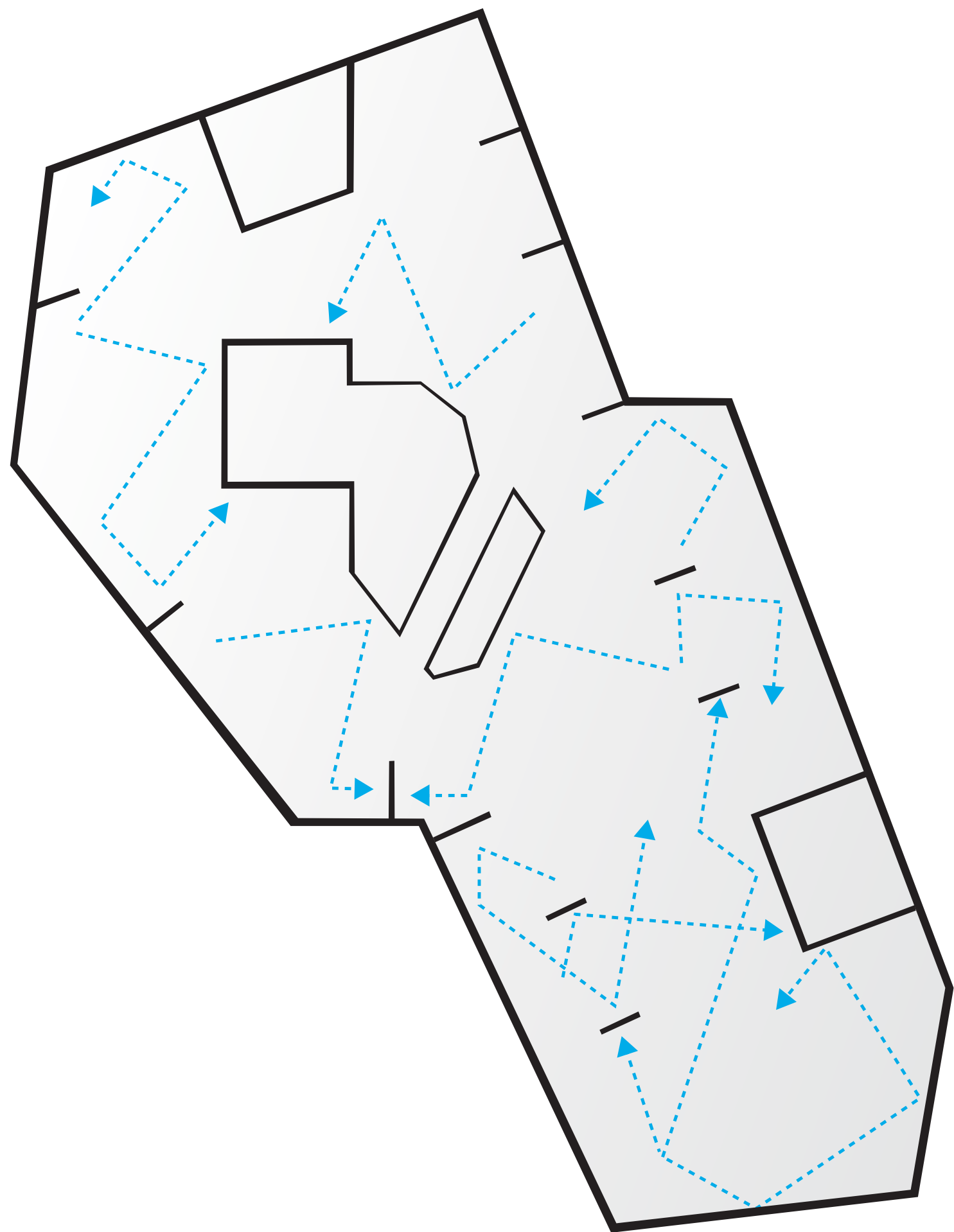
Aktive overflater - bolig
 Fremhevet i vegger og gulv
 $\text{BRAm}^2/0,5$ 50%



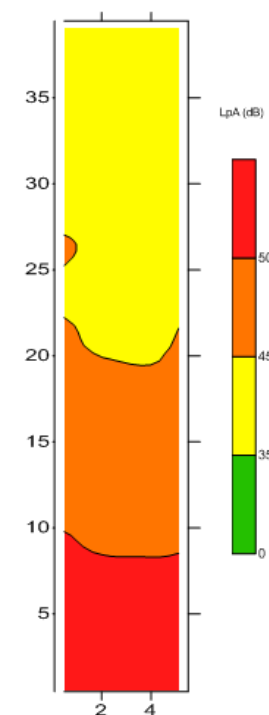
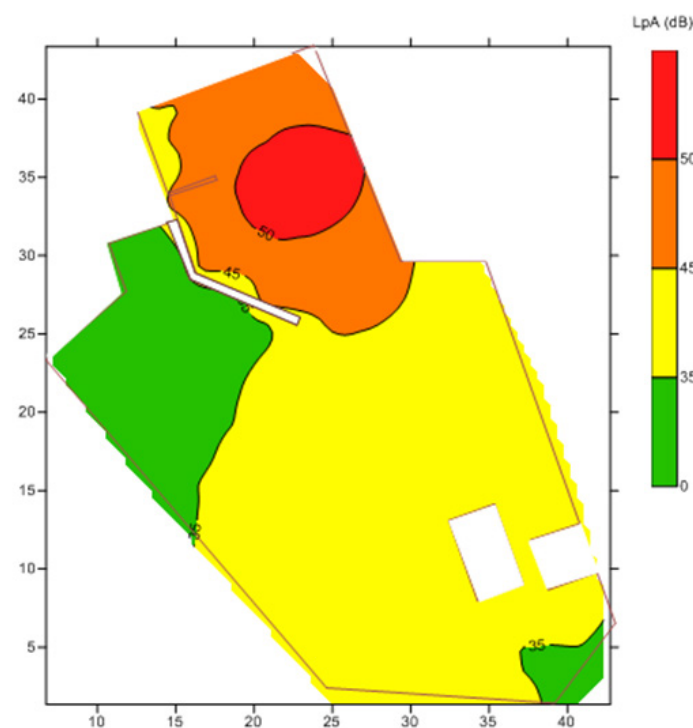








..... absorberende flate
..... diffuserende flate

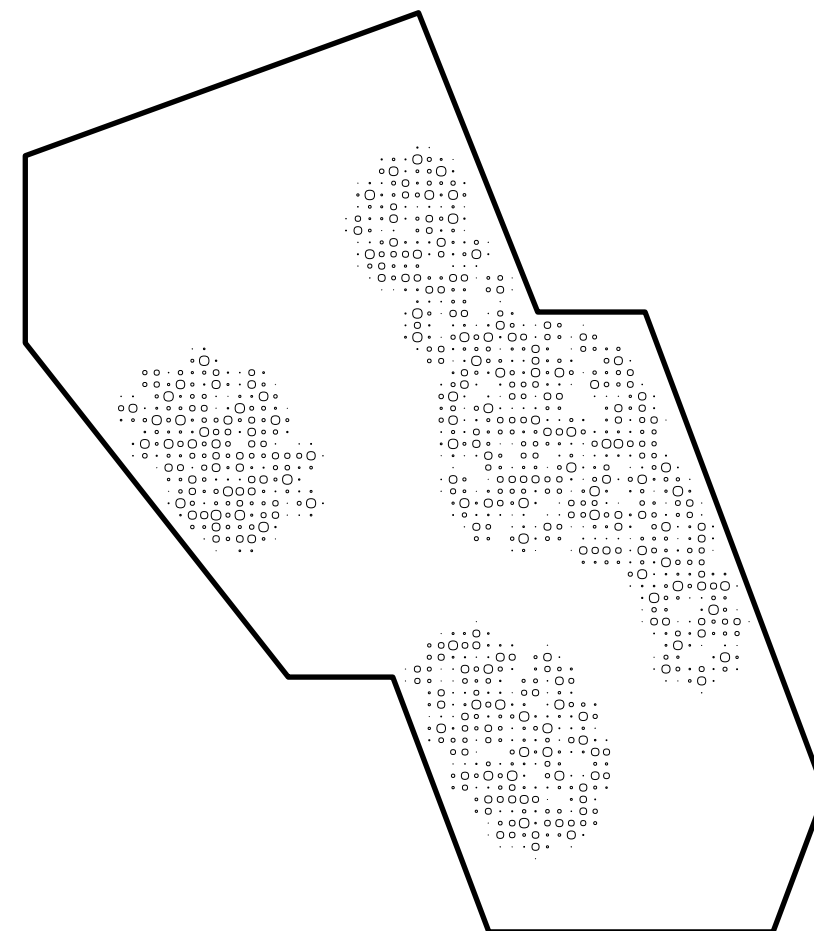
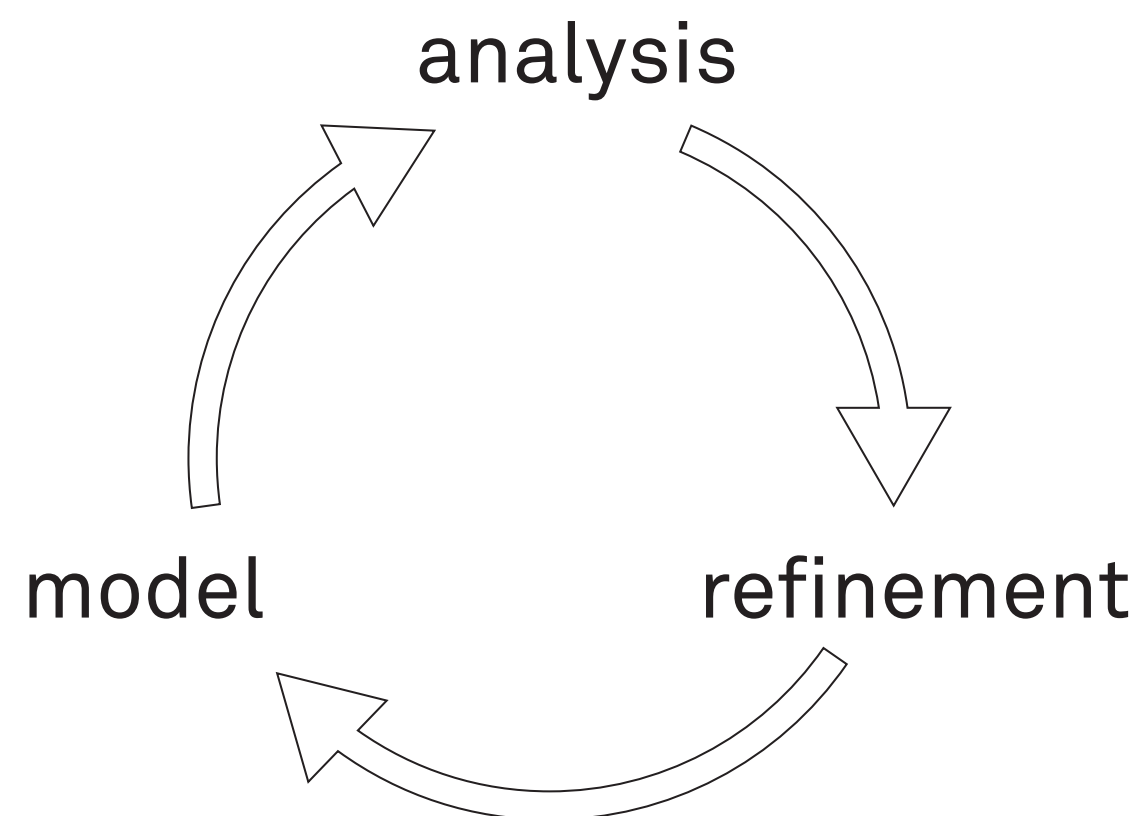
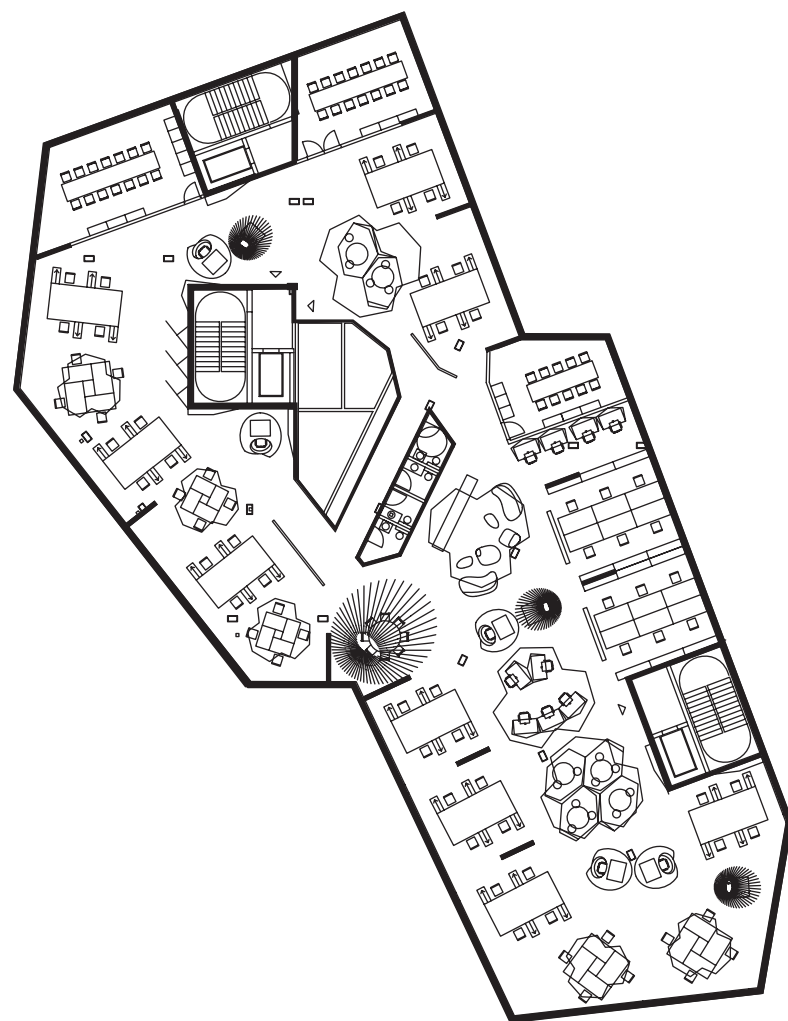
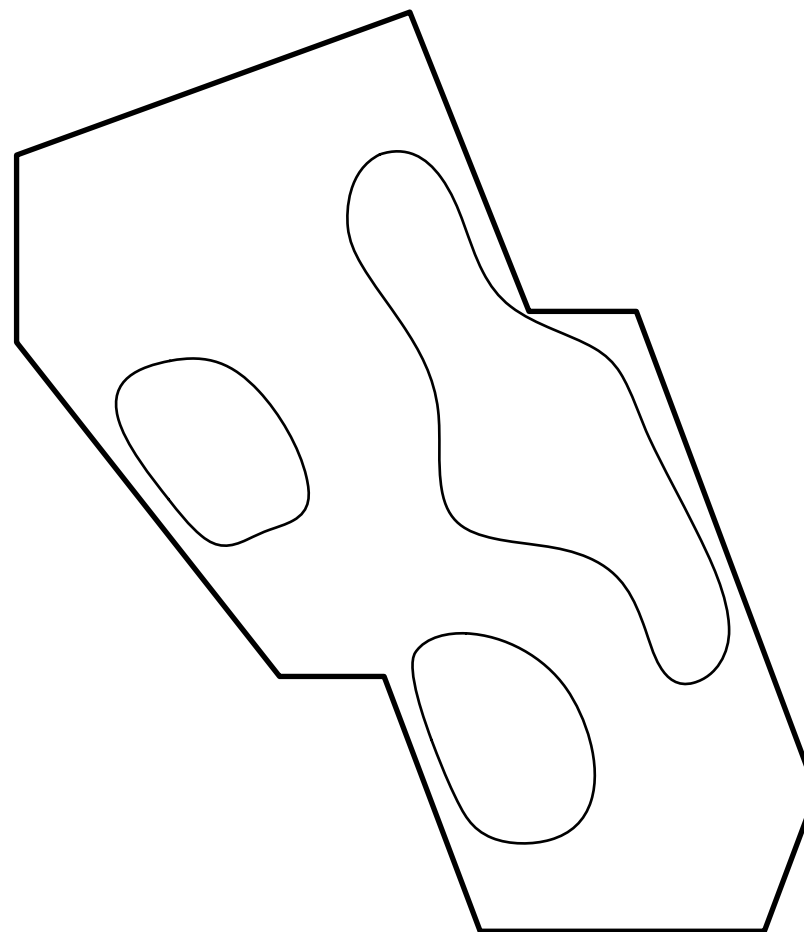


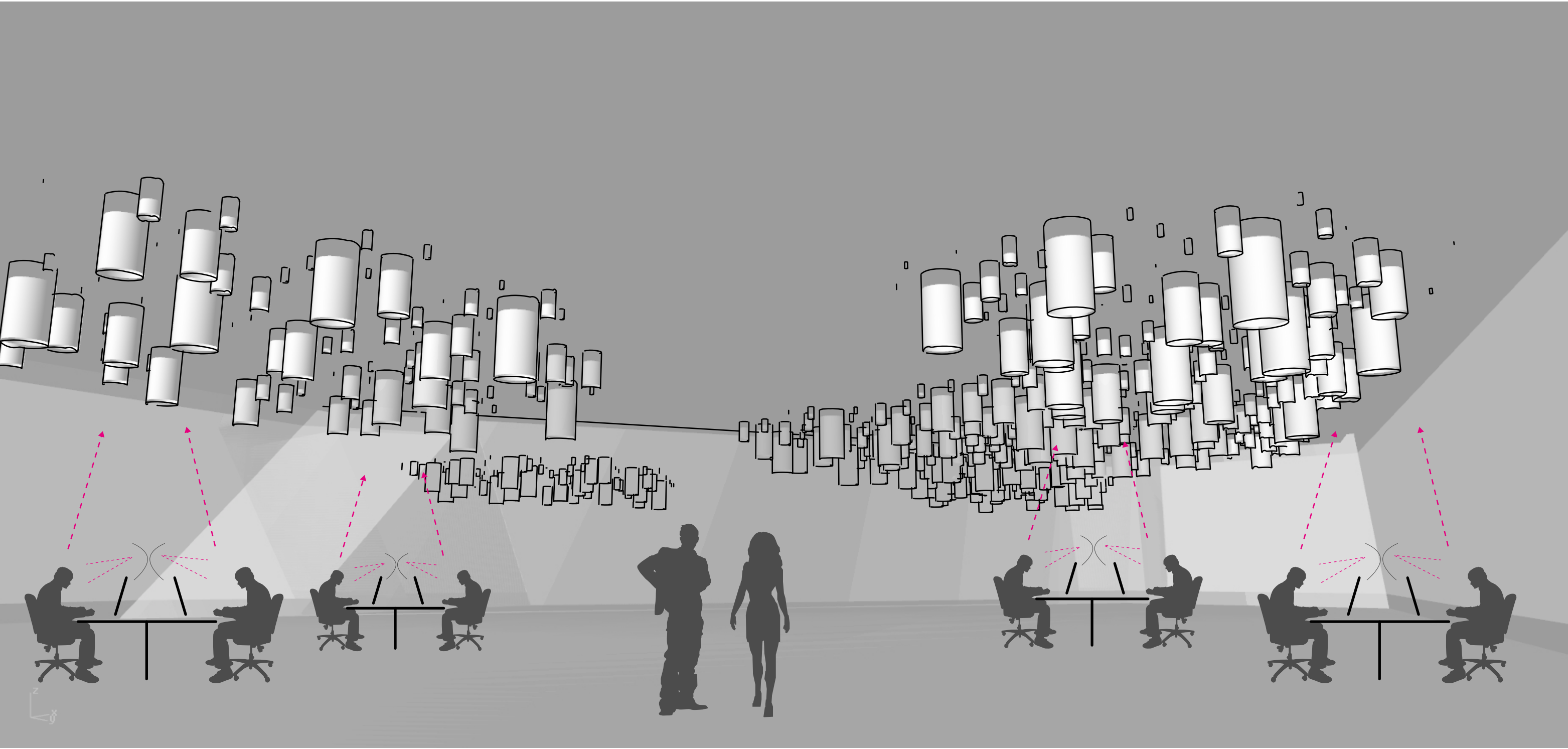
Bygningsdel	Overflate/ Materiale	Spredningsfaktor
Fasader (innside)	20 % lydabsorbenter jevnt fordelt, resten harde flater	Ingen spredning, glatte flater
Himling under dekker	50 % tildekking med lydabsorbenter, 50 % eksponert betong	Stor spredning
Kjernevegger	20 % lydabsorbenter jevnt fordelt, 100% spredende elementer	Medium spredning
Gulv med møblering	Spredt møblering, belegg på gulv	Stor spredning pga møblering

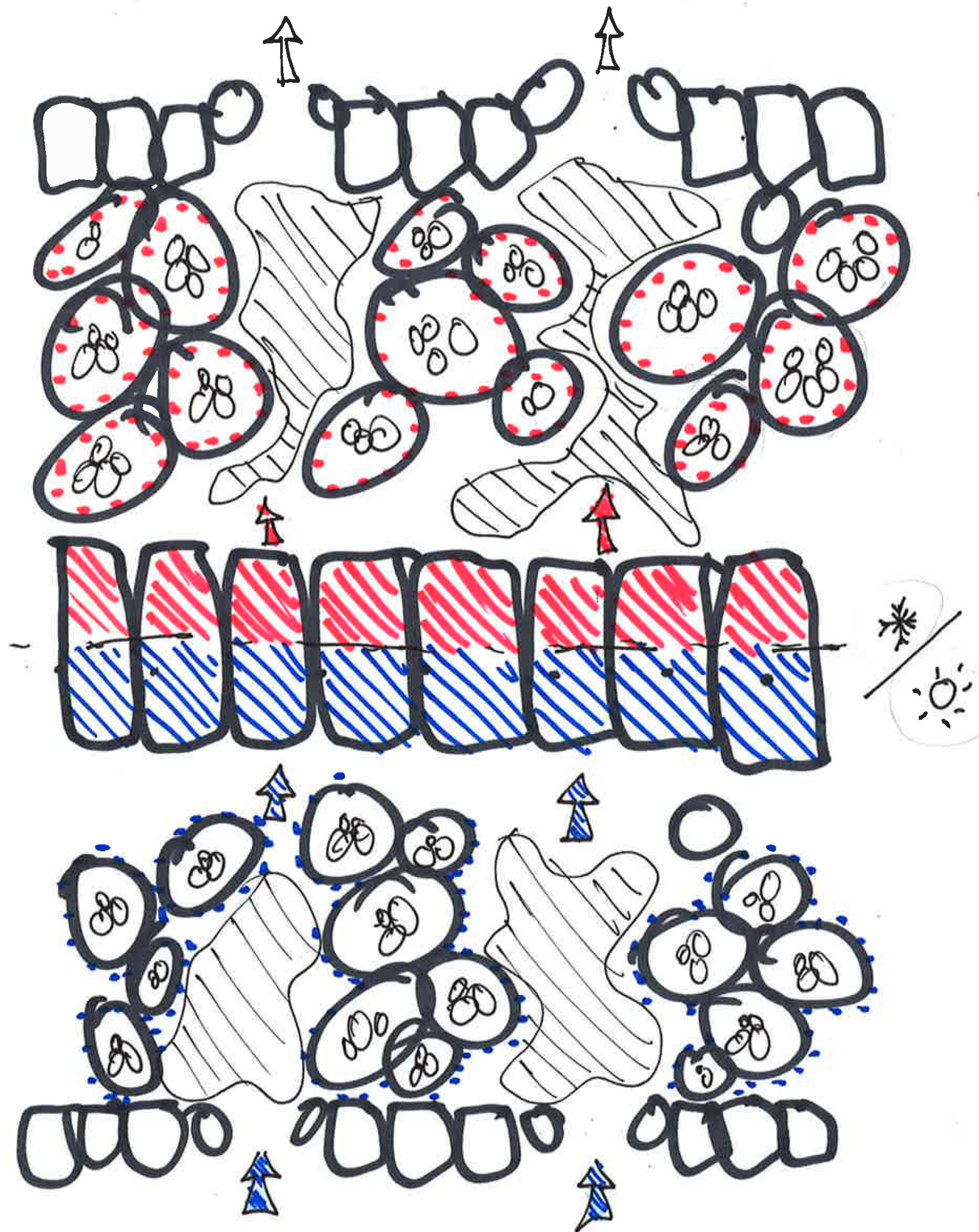
Bygningsdel	Overflate/ Materiale	Spredningsfaktor
Fasader (innside)	20 % lydabsorbenter fordelt over vindusbånd, resten harde flater (gips/vindu)	Ingen spredning, glatte flater
Himling under dekker	100% lydabsorbenter	Ingen spredning, glatte flater (T-profil)
Kjernevegger	Harde flater (gips/glass)	Ingen spredning, glatte flater
Gulv med møblering	Spredt møblering, teppe på gulv	Stor spredning pga møblering

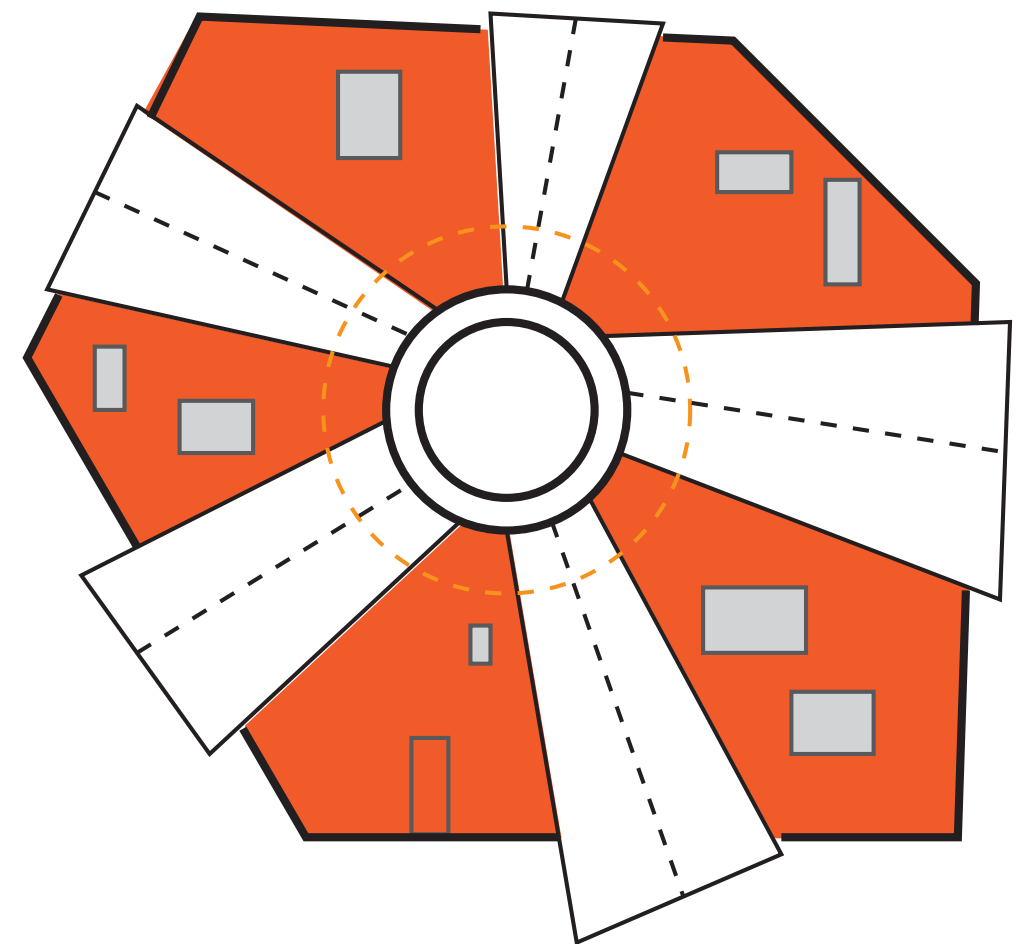
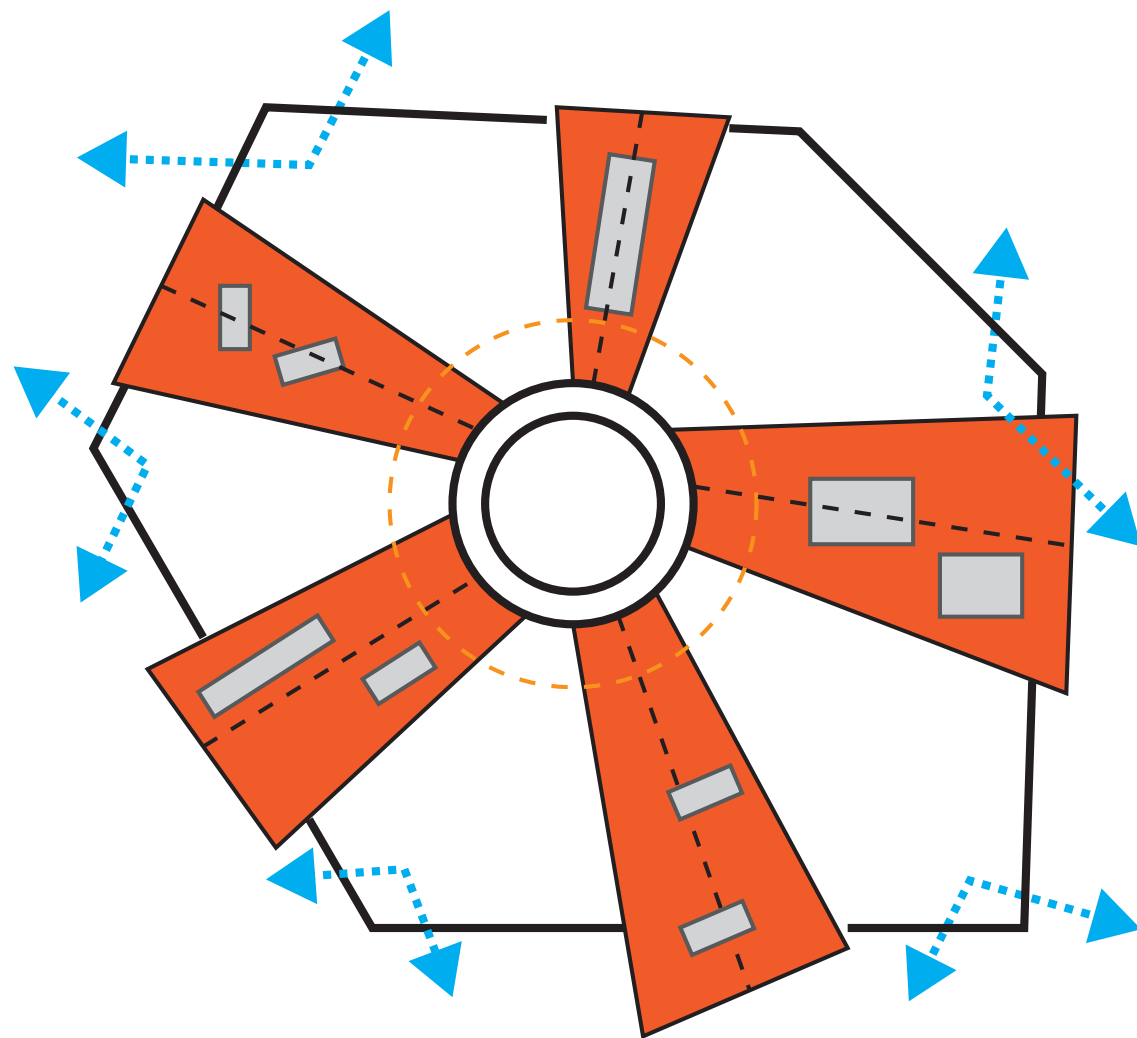
	Gullhaug Torg	Referanse
Sjenanseavstand	10 m	22 m
Privathetsavstand	40 m	46 m
Avstandsdempning	3,7 dB	3 dB
Lydnivå fra tale i 4 m avstand	51 dB	52 dB
Bakgrunnsstøy	35 dB	35 dB



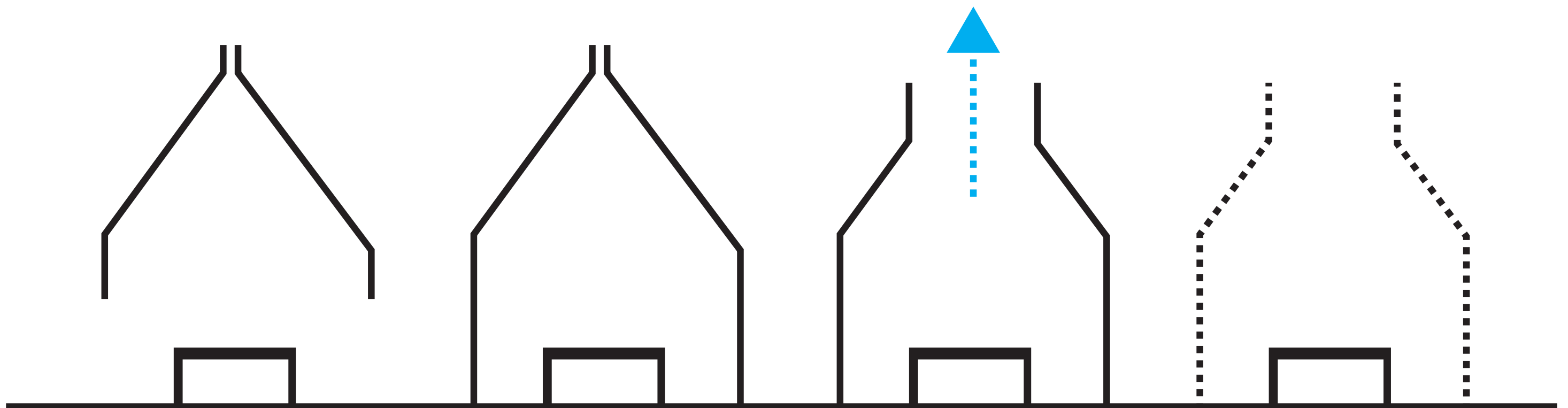


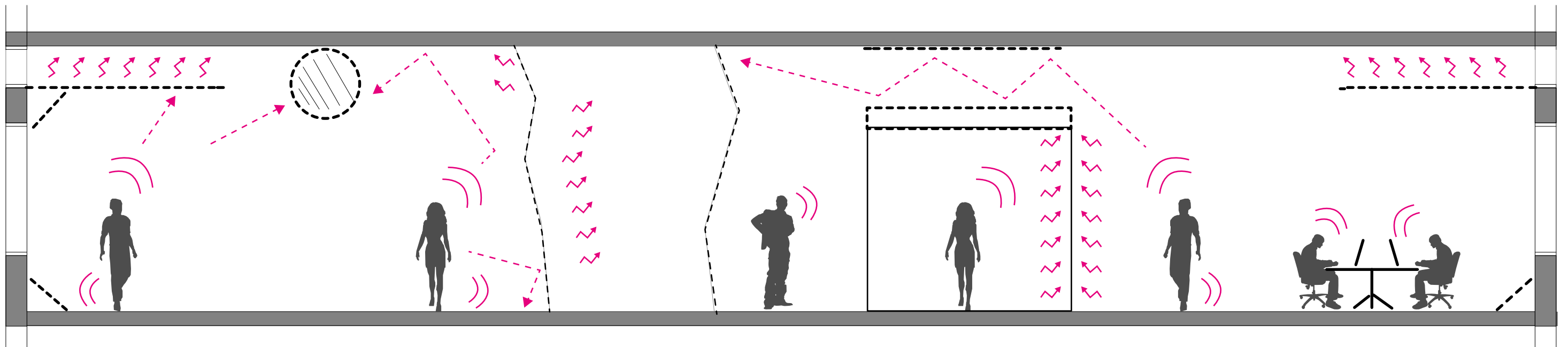
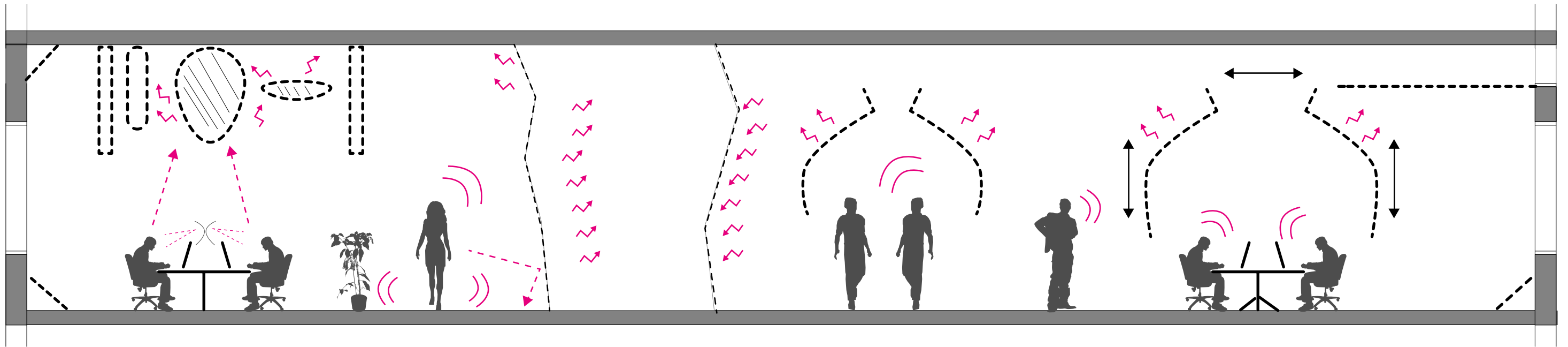




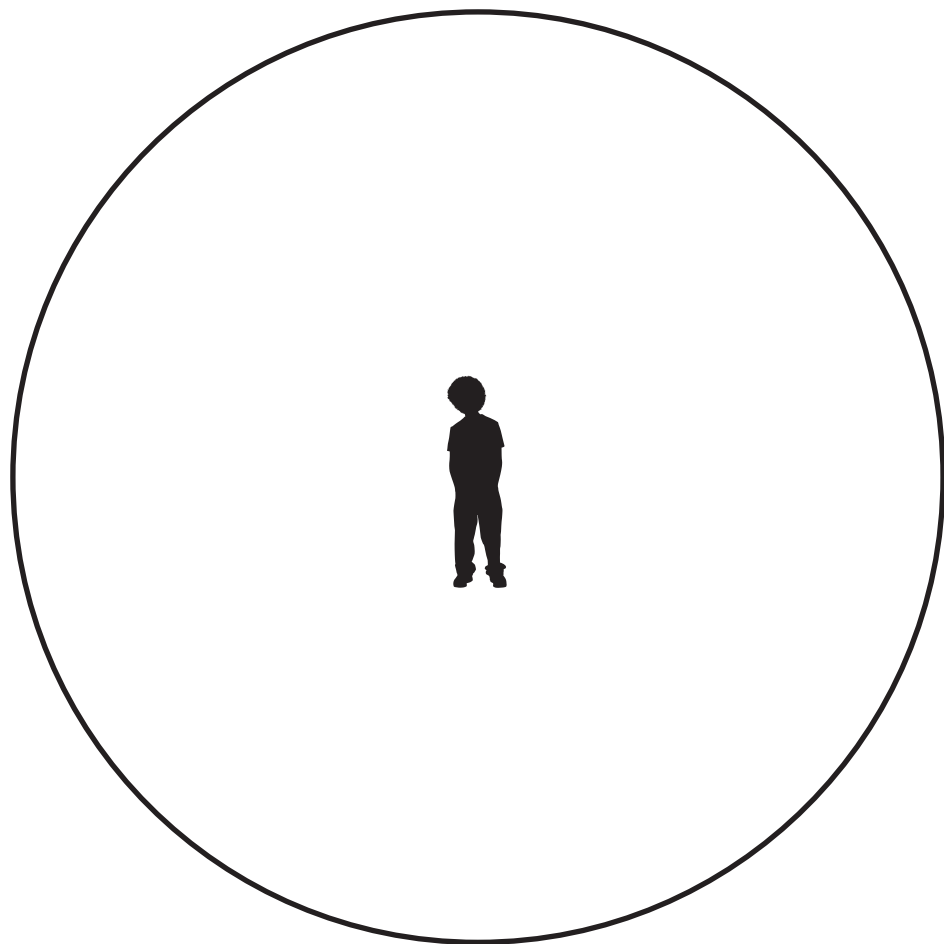


 Møterom/stillerom





GLOBAL



IMPERSONAL
SPACE HEATING
SPACE COOLING
SUB-OPTIMIZED

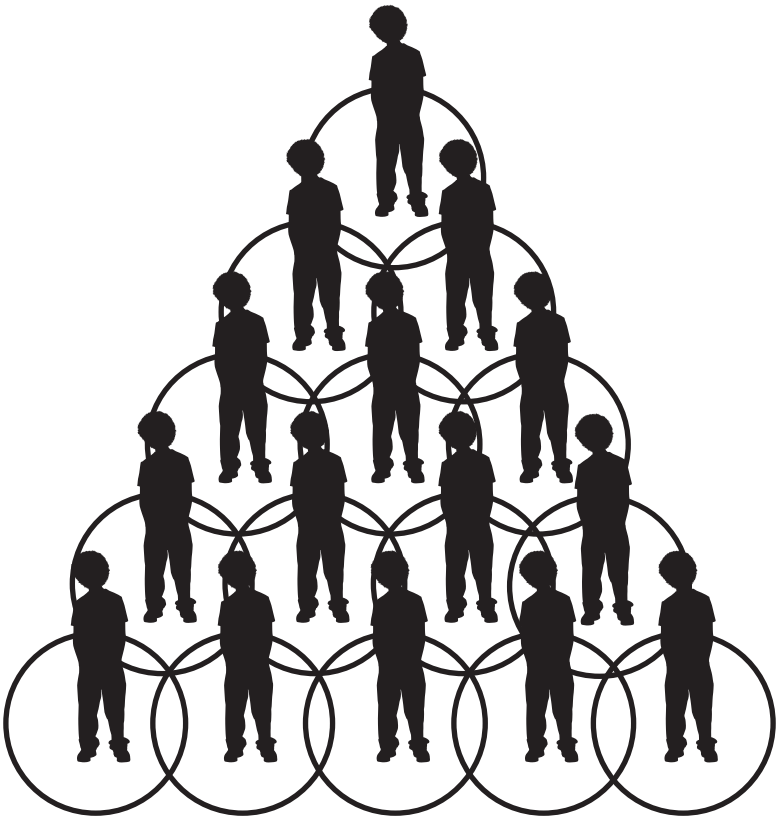
LOCAL



PERSONAL
NODE/TASK-BASED
INTELLIGENT
ECONOMIZED



AGGREGATED



PERSONAL
NODE/TASK-BASED
INTELLIGENT
ECONOMIZED



Snøhetta 

