

# De M4H-Buffer

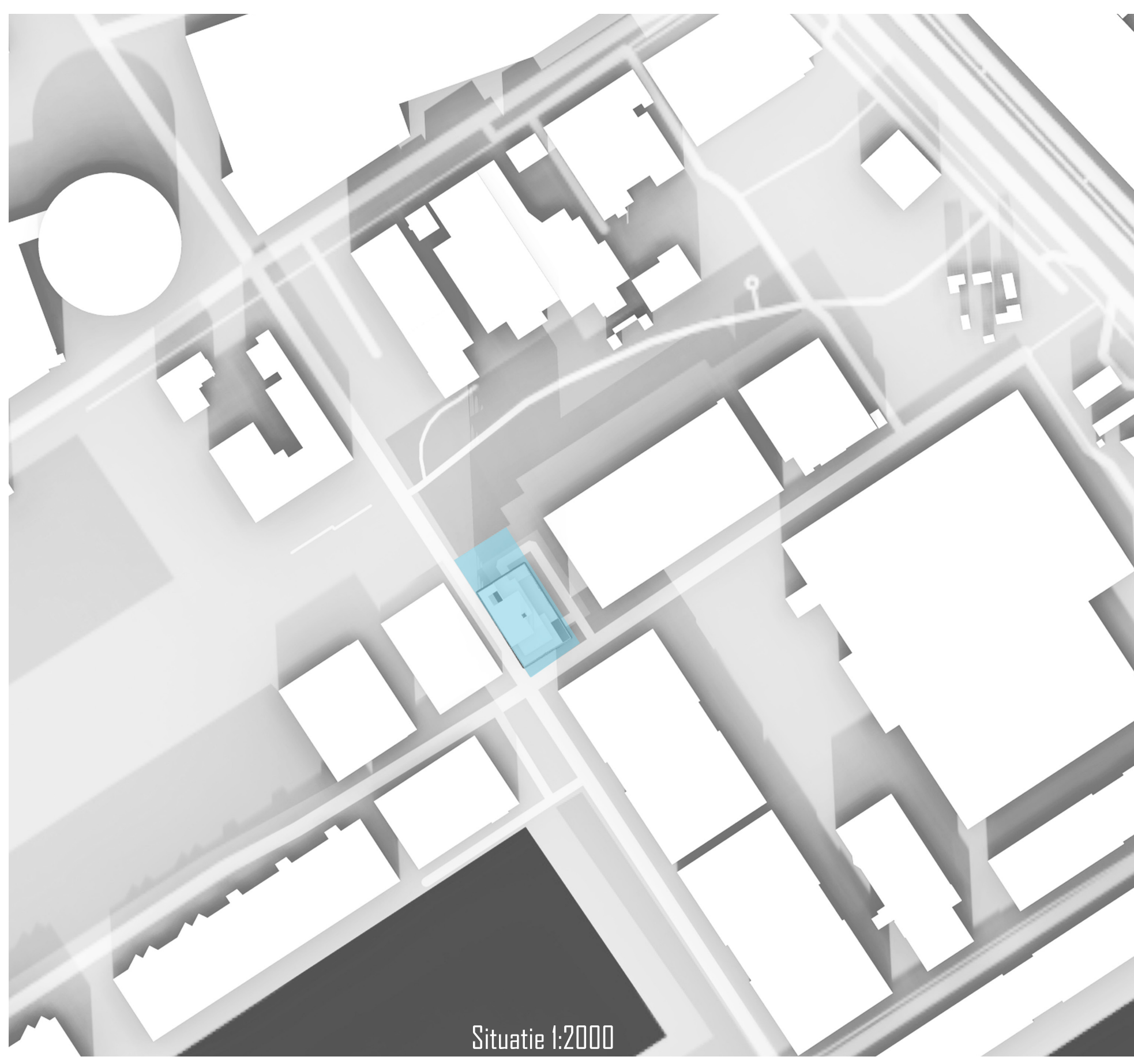
## CATASTROFE

Wereldwijd extreme weersomstandigheden

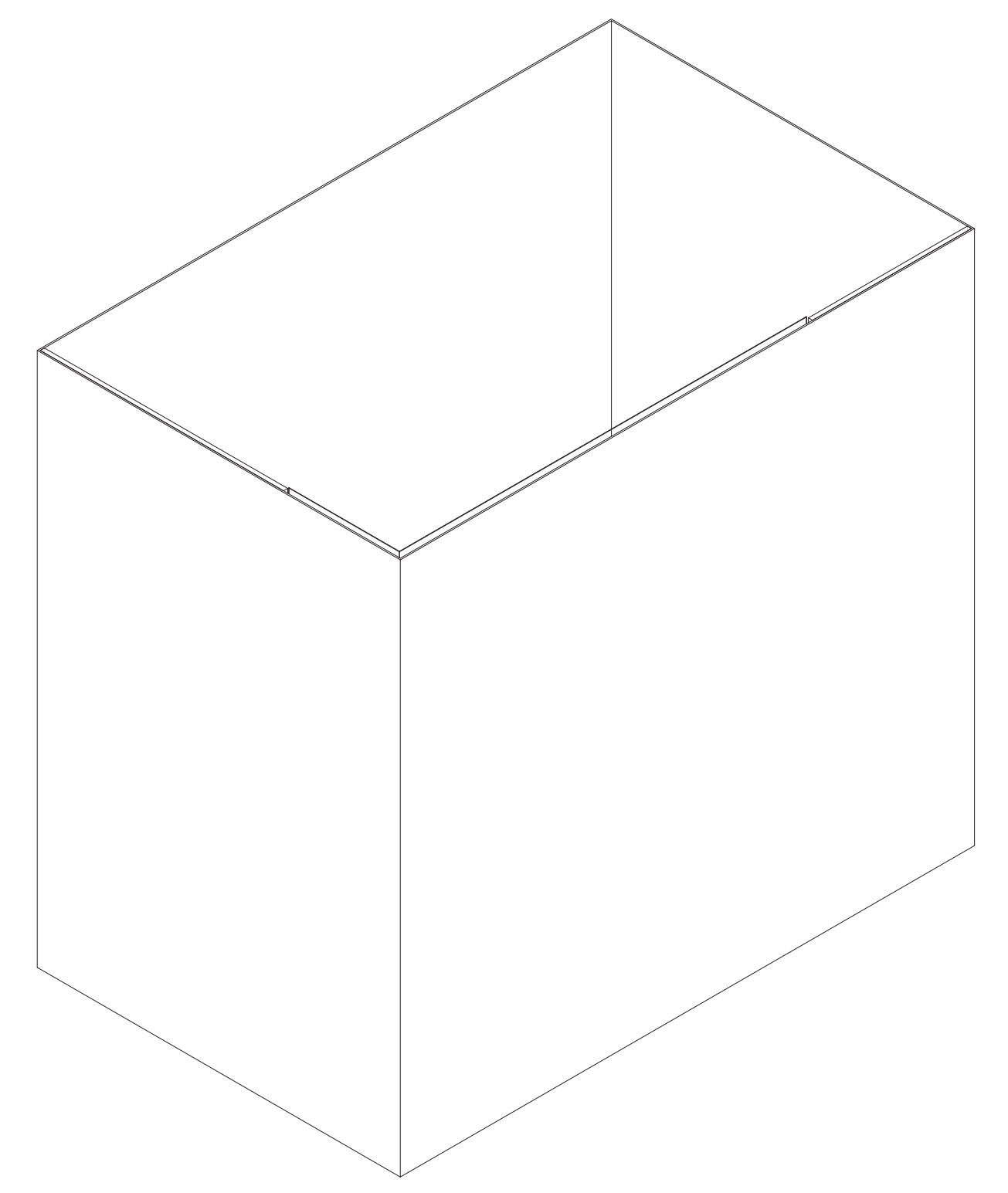
- hogere pieken waterstand rivieren
- Langere periode van droogte

Gevolgen Nederland:

- Rivieren buiten hun oevers, afvoerput van EU
- Langere periode van regen en droogte
- Afwisseling van wateroverschot en watertekort



Situatie 1:2000



volume tank

DOEL: het water tijdens de piek opslaan en gecontroleerd lozen, het water **BUFFEREN**



Gevel noord/west



Zuidgevel 1:200

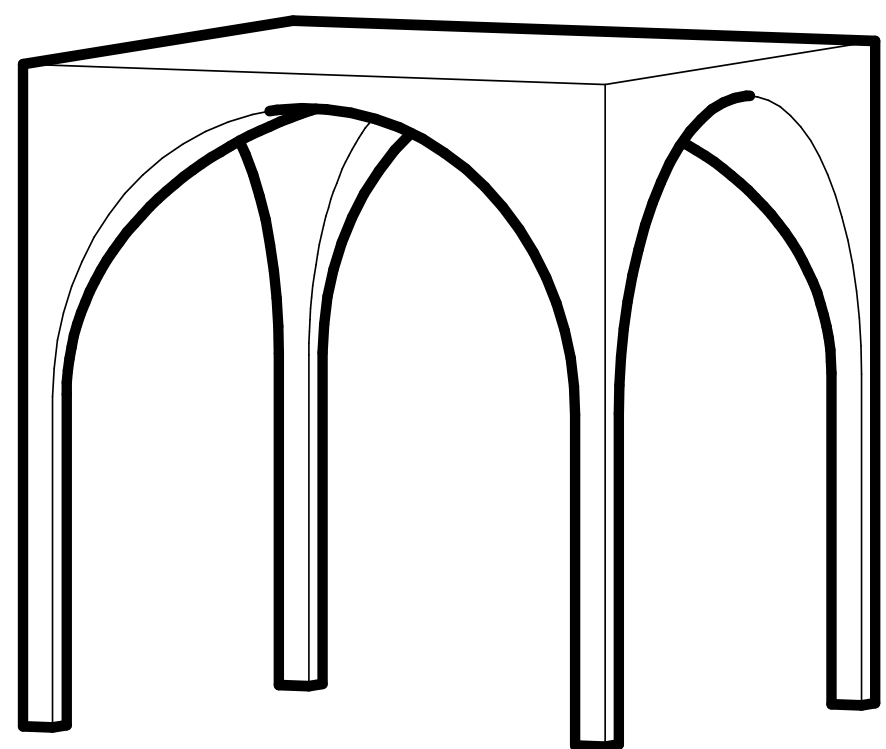


Oostgevel 1:200

## Constructie

Krachten water:

- 1m water = 1 verdieping
- 10KN/m<sup>2</sup> per verdieping
- 10KN/m<sup>2</sup> per 1m water
- dus 10KN/m<sup>3</sup> water



Betonkolommen formaat:

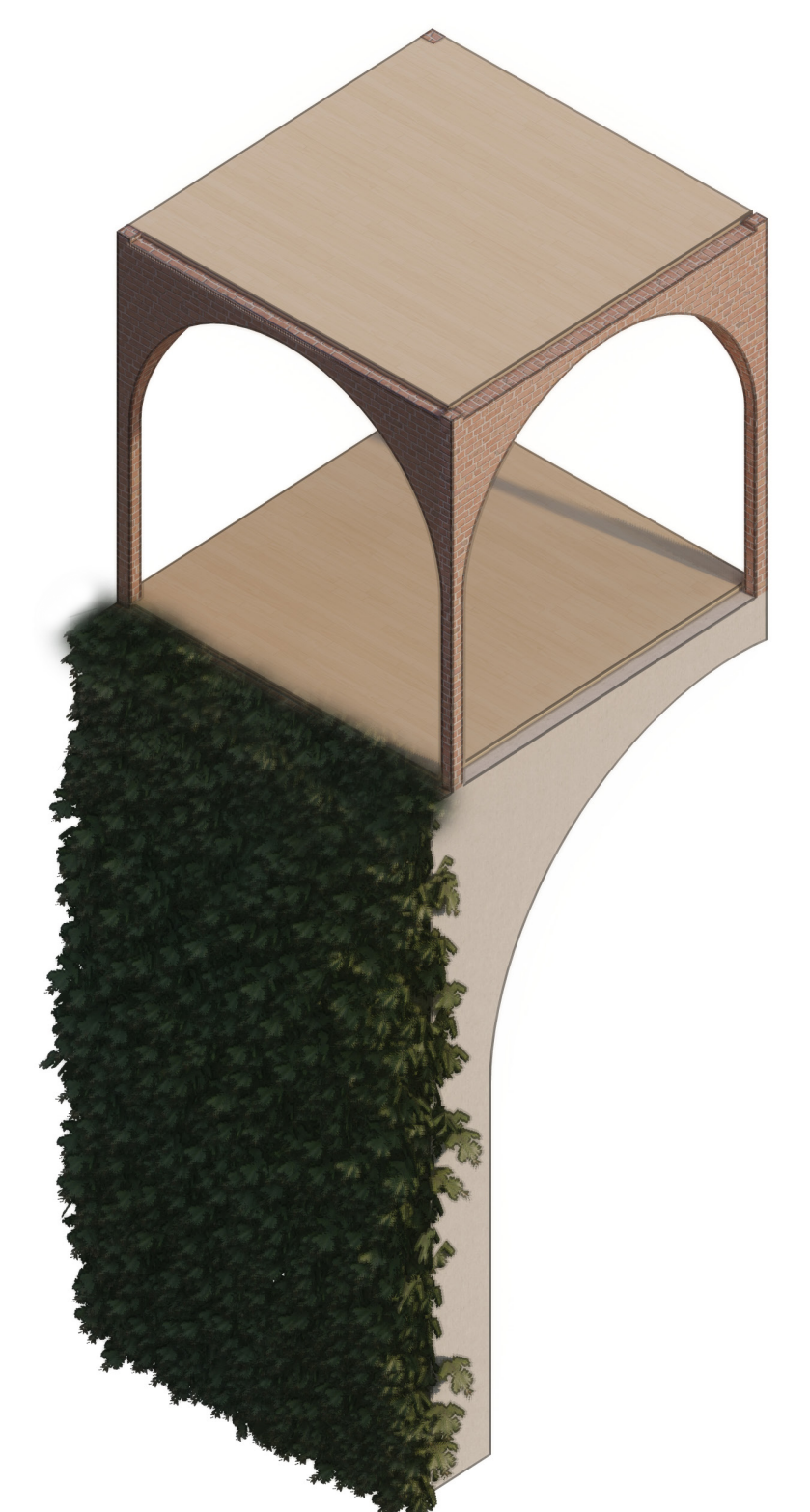
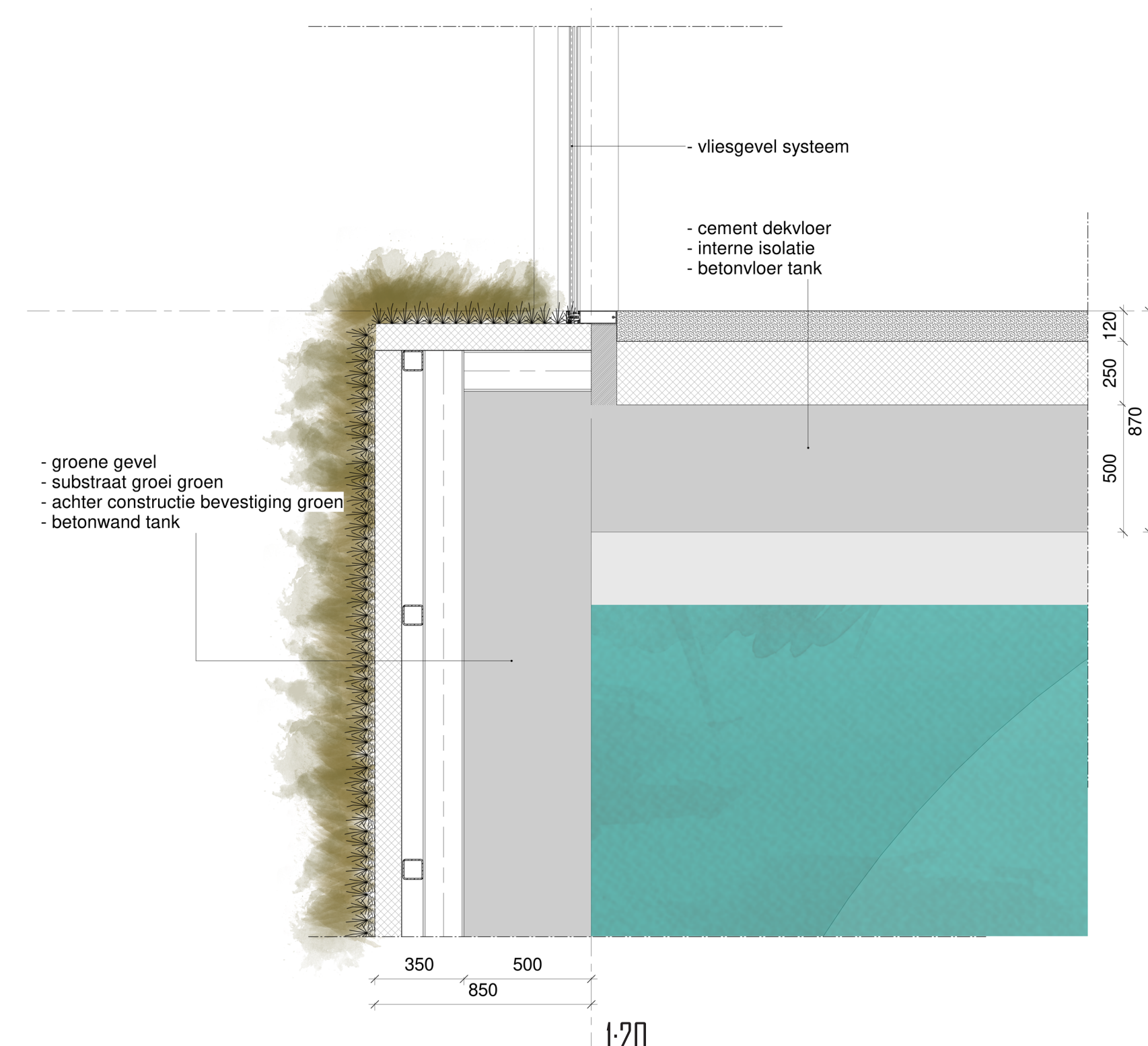
$$A = F/15, (A = \text{oppervlakte in mm}^2, F = \text{belasting in newton})$$

$$A = (10000N * wm^3 + 10000N * am^2) / 15$$

(wm<sup>3</sup> = aantal kubieke meter water boven de kolom)

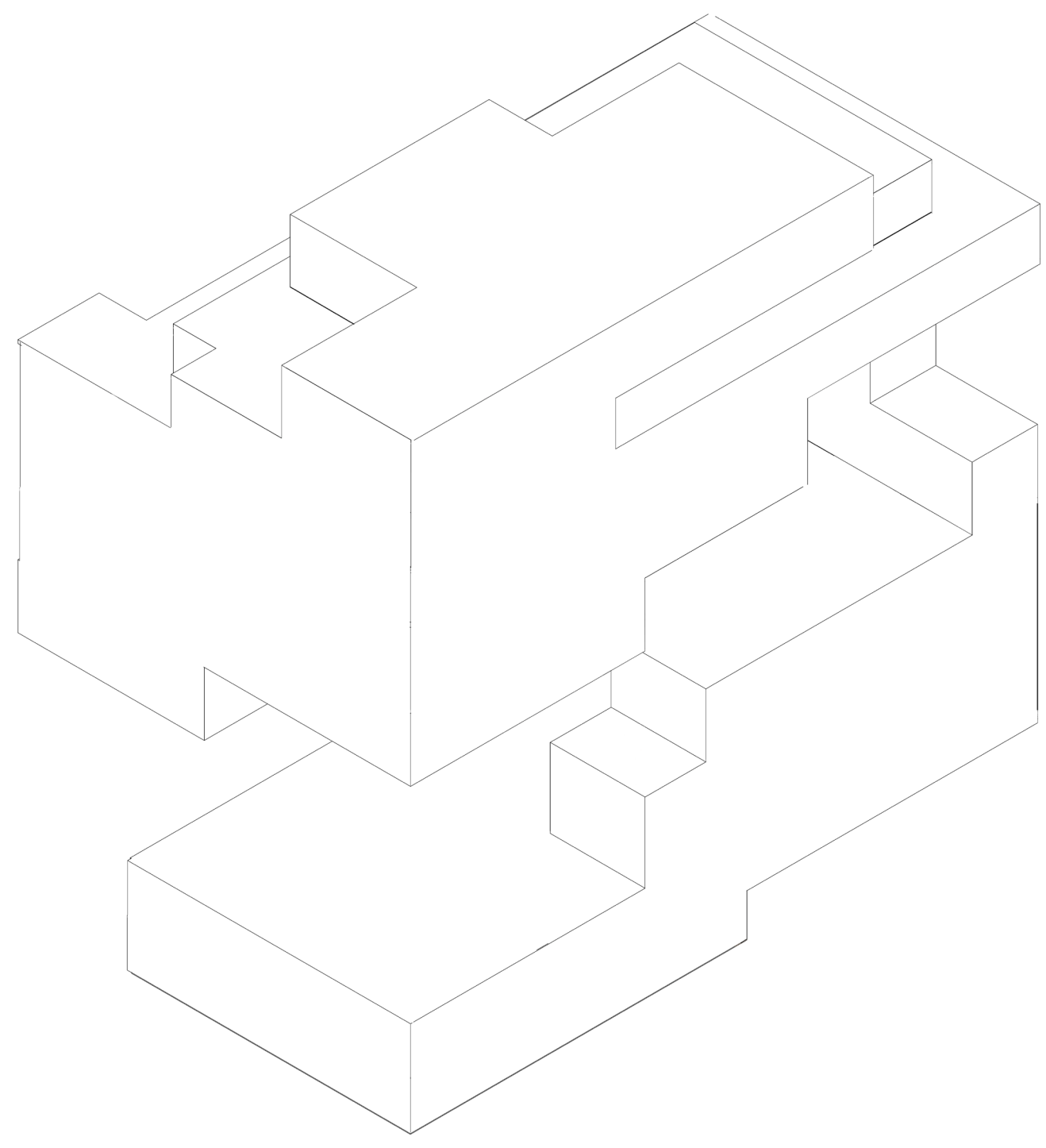
(am<sup>2</sup> = aantal vierkante meter vloer boven de kolom)

## Principe detail

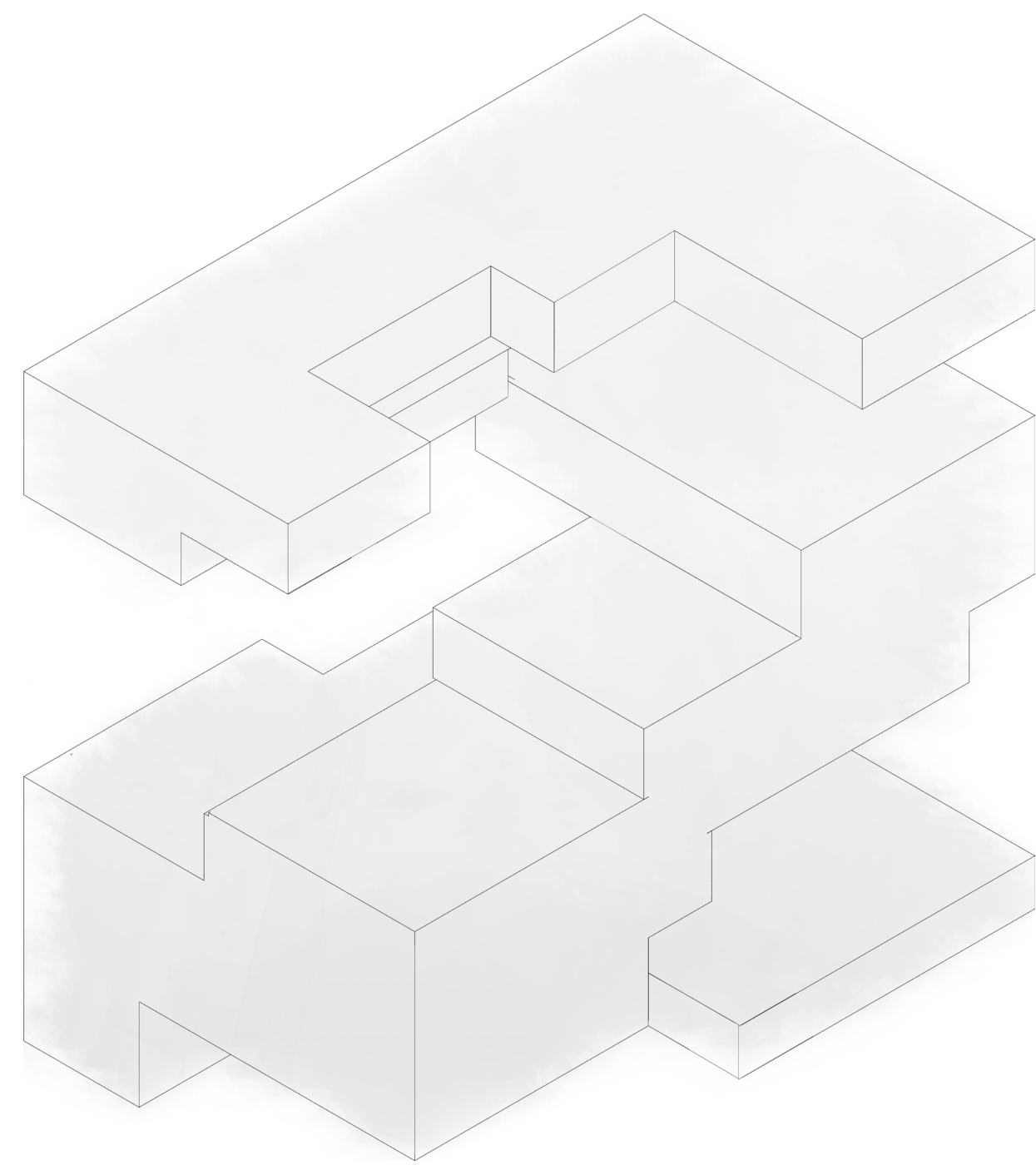


gevellfragment

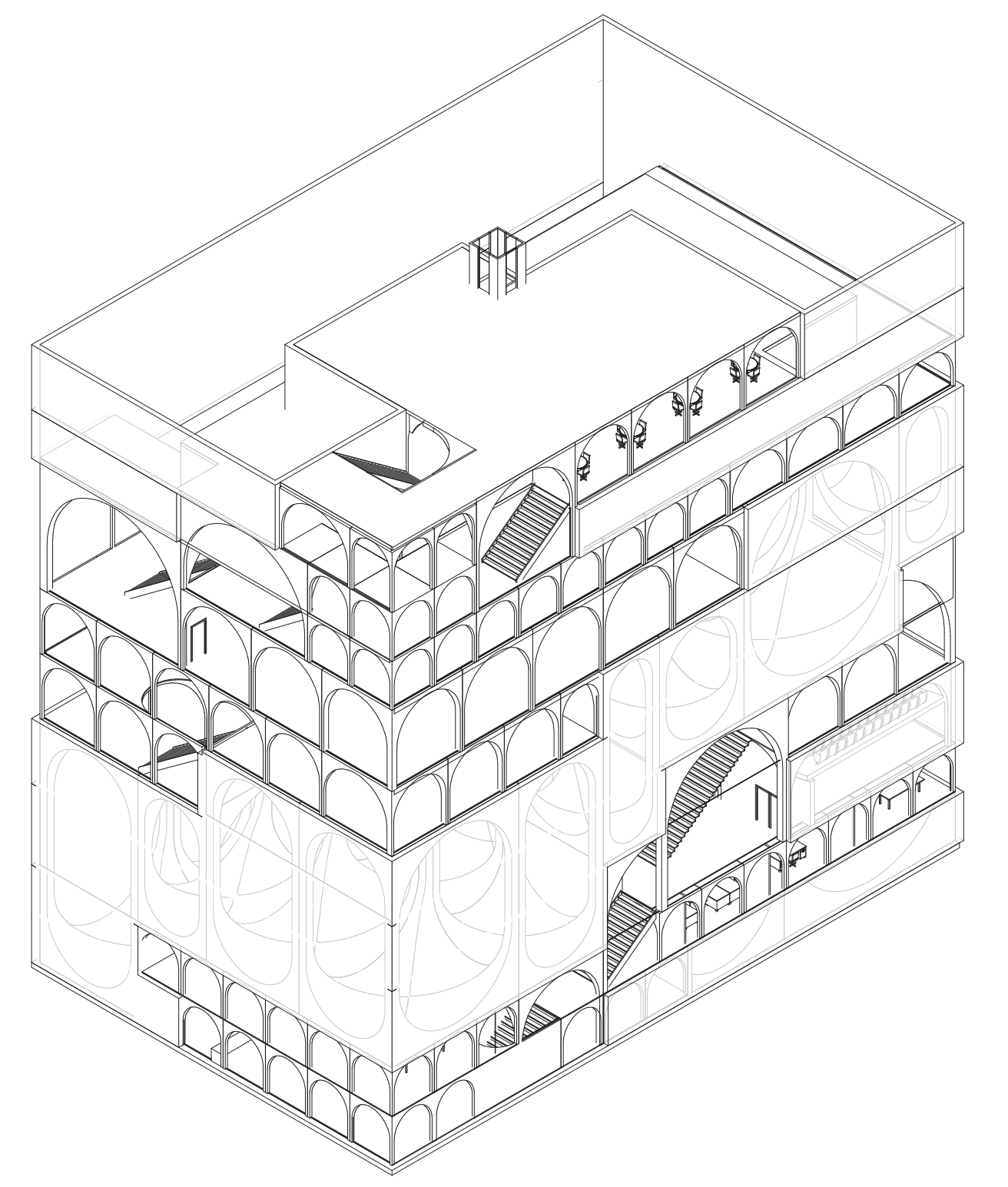




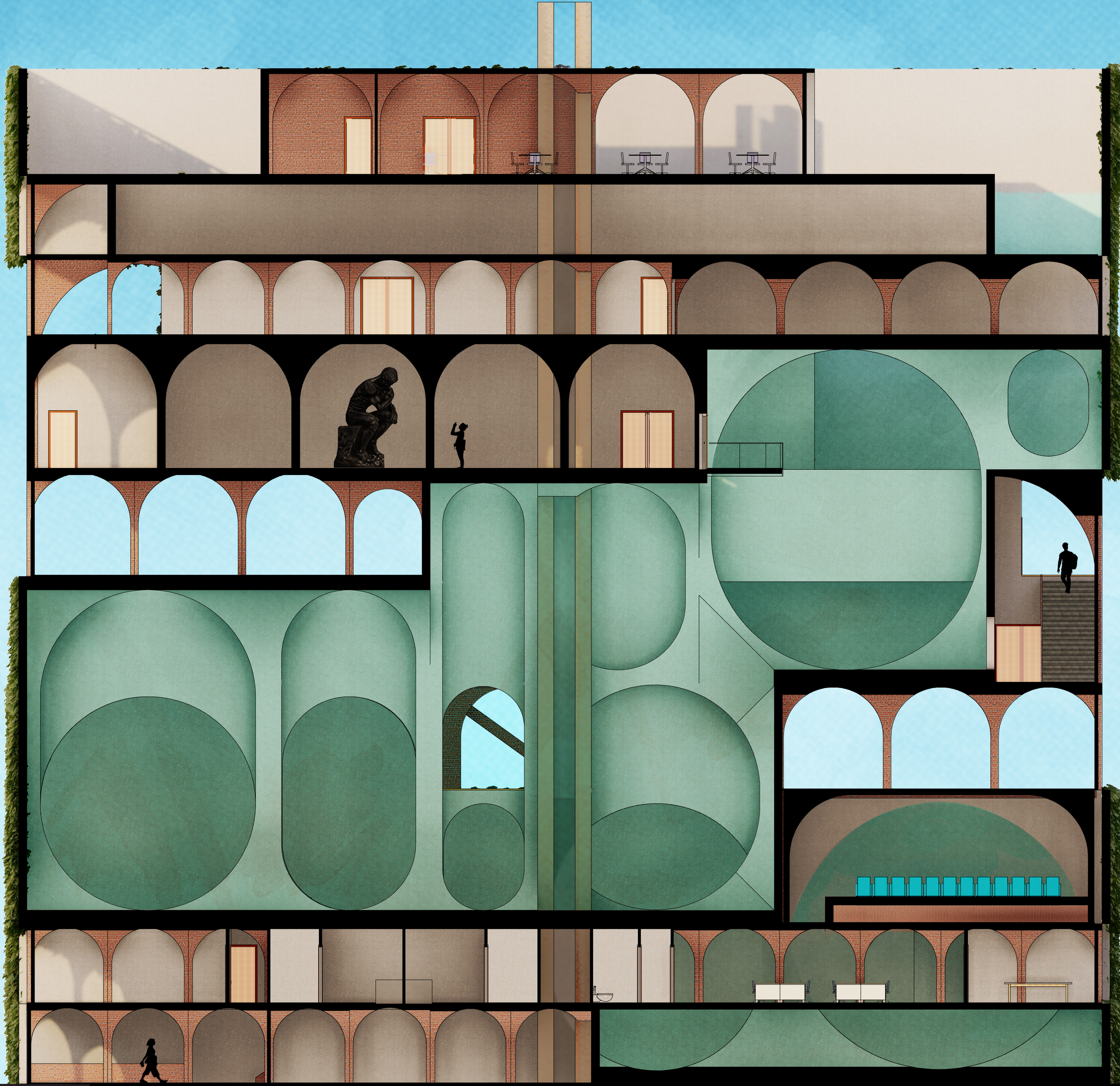
Functies



Tank



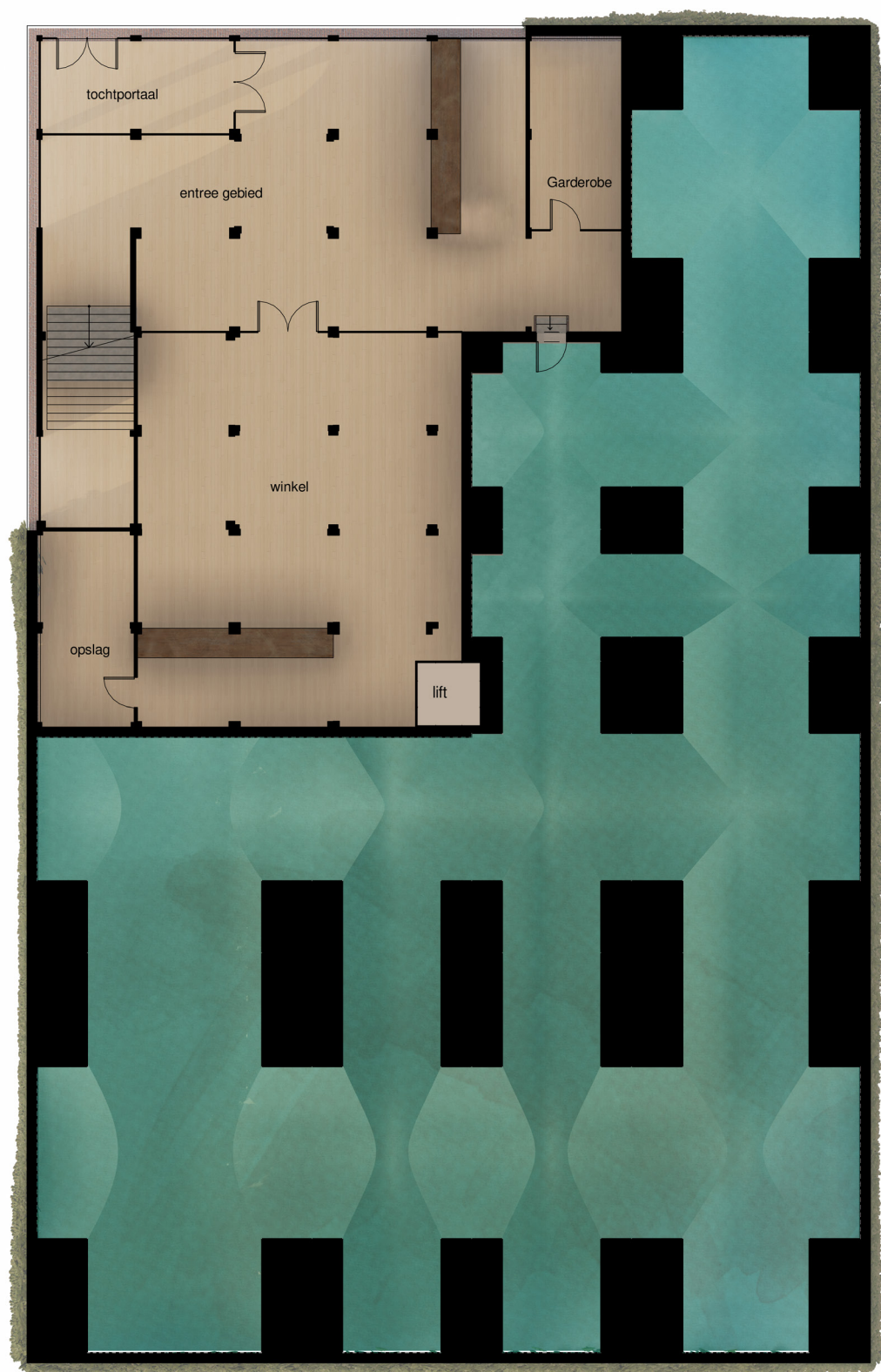
Totaal



Doorsnede 1:100



Routing 1:500



Begane grond 1:200



Eerste verdieping 1:200

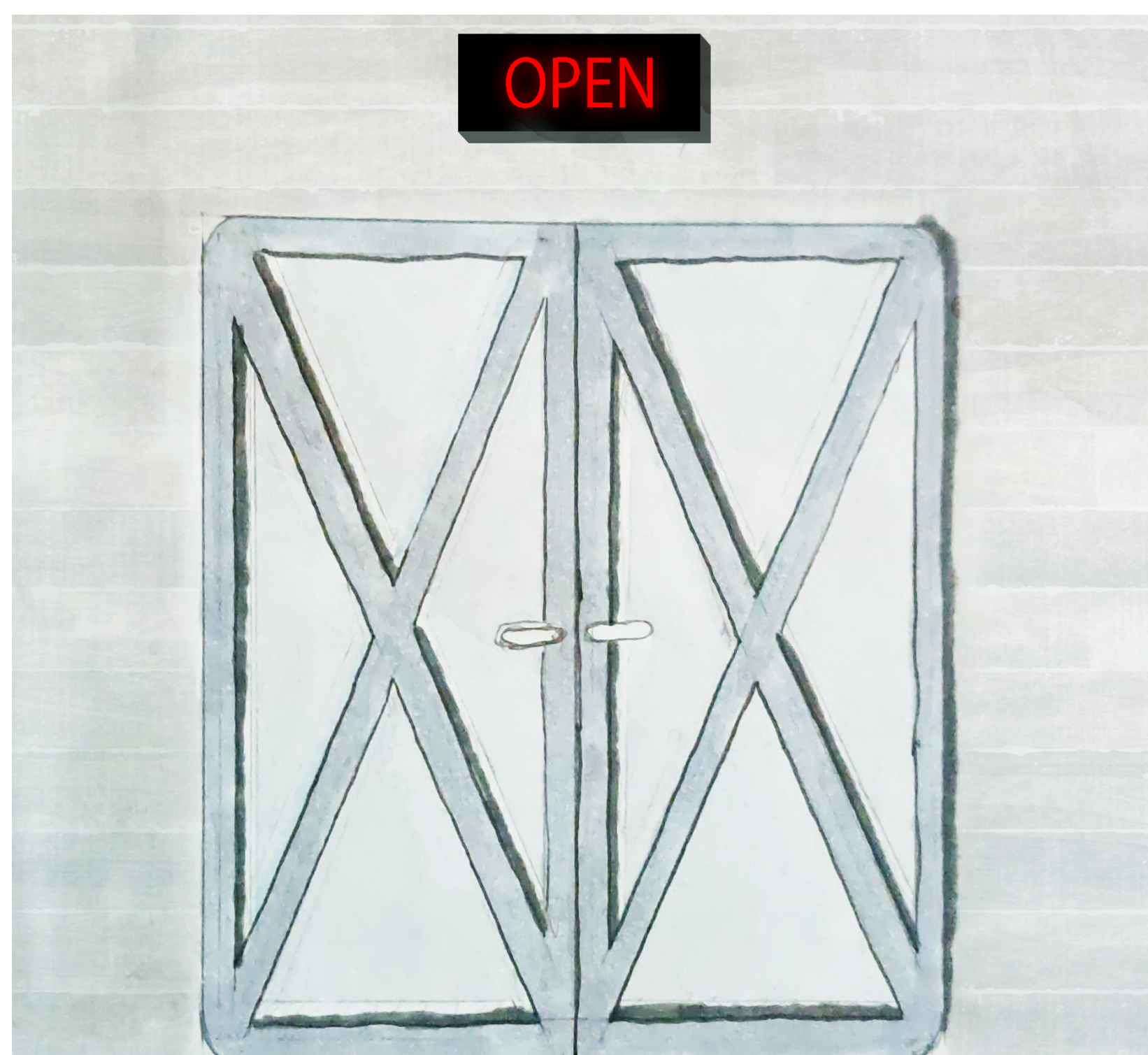


Vierde verdieping 1:200

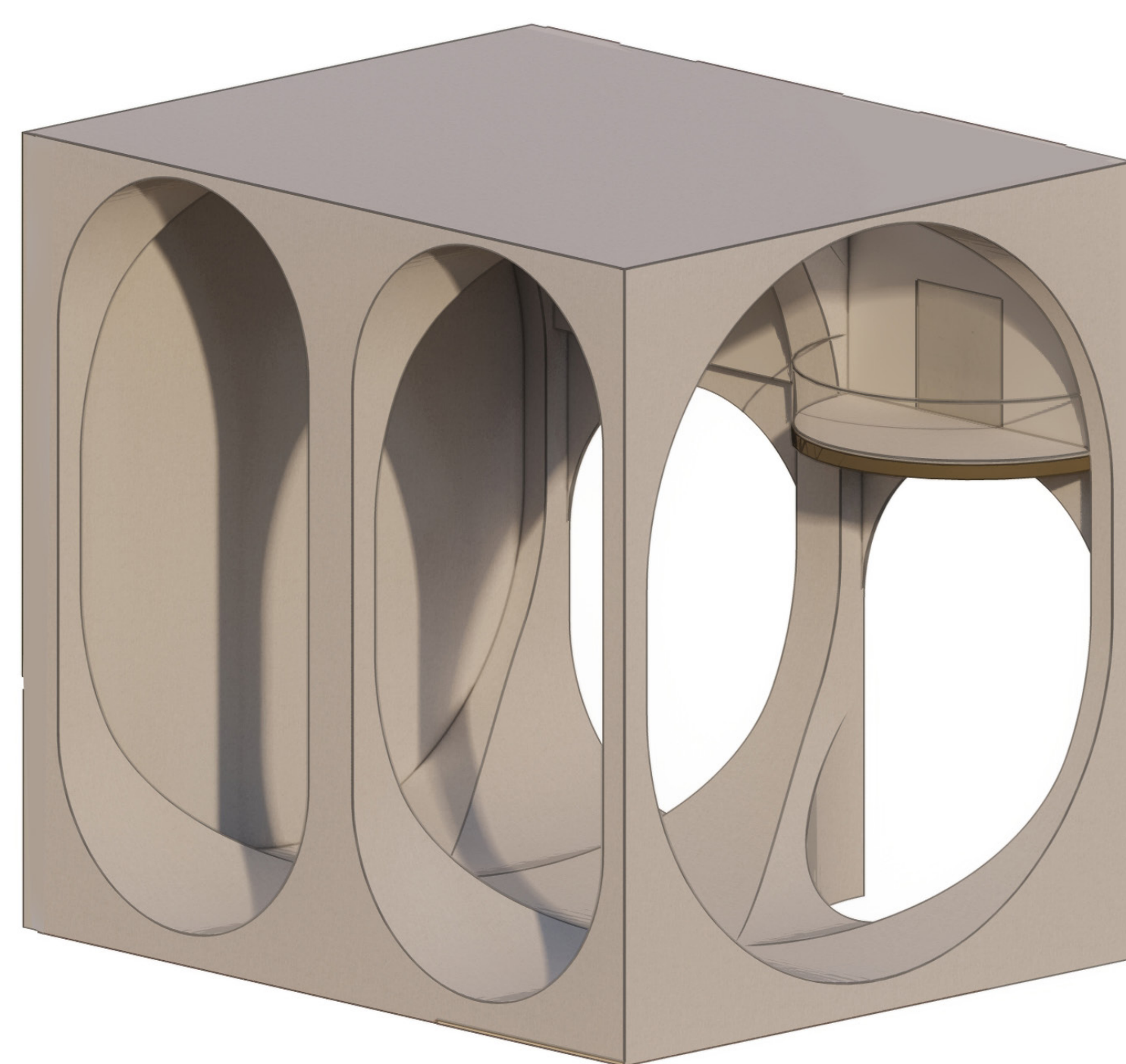


Zesde verdieping 1:200

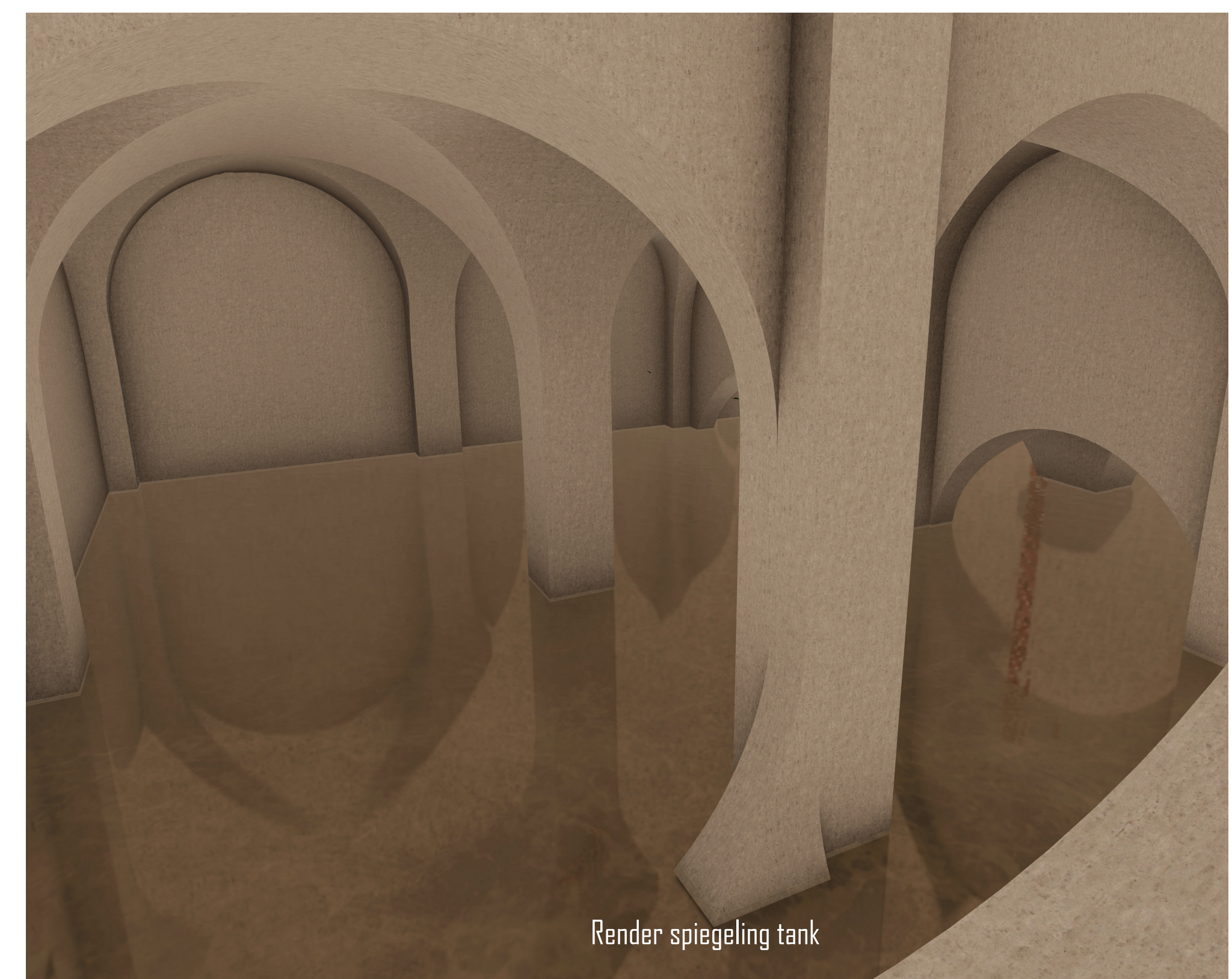
### Entree Tank



Aanzicht toegang balkon



Fragment balkon



Render spiegeling tank