COMPLEX PROJECTS
THE TEMPLE OF MUSIC

Graduation presentation

Job Vogel

november/07/2024

1st mentor: Jelmer van Zalingen
2nd mentor: Edyta Milczarek
3rd mentor: Rico Heykant

Complex Projects
Architecture MSc 3 & 4
Tu Delft

contents

INTRODUCTION
CONCEPT
IMPLEMENTATION
CONCLUSION

contents

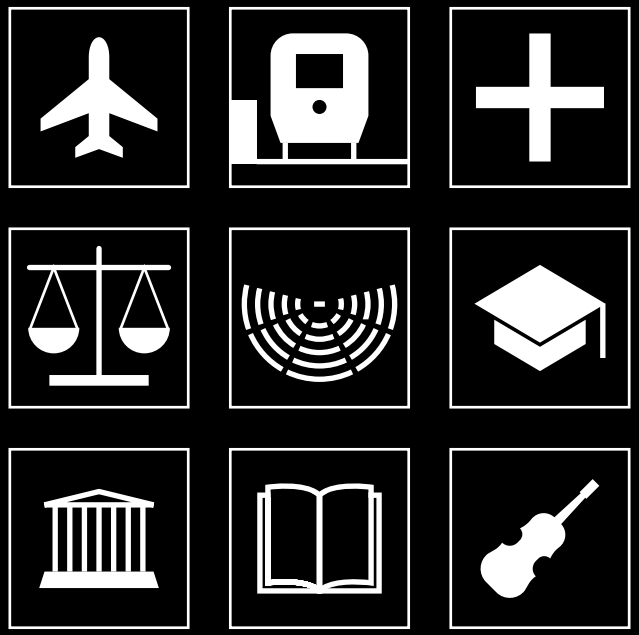
INTRODUCTION

CONCEPT

IMPLEMENTATION

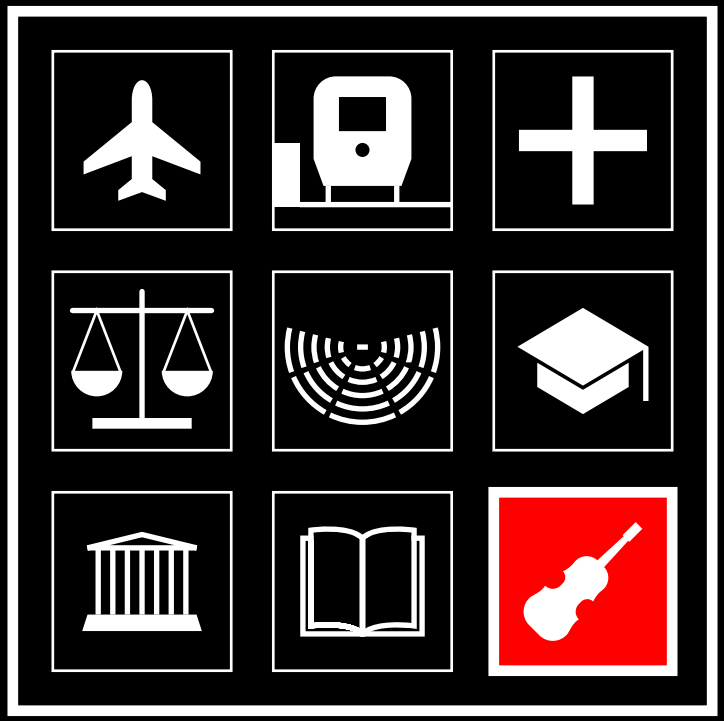
CONCLUSION

9 BUILDING TYPES



OPERA

MATERIAL GROUP



BERLIN

* Brandenburger Tor, BER.

introduction

OPERA HOUSE

Teatro alla Scala, MIL.

4 OPERA HOUSES

Staatsoper Unter der Linden

Deutsche Oper Berlin

Komische Oper Berlin

Neuköllner Oper

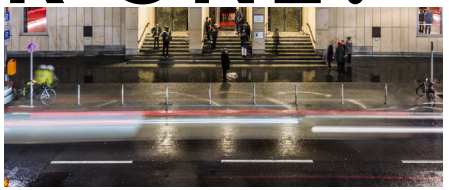
* "Opera," n.d.

4 OPERA HOUSES

ANOTHER ONE?

Staatsoper Unter der Linden

Deutsche Oper Berlin



Komische Oper Berlin

Neuköllner Oper

* “Opera,” n.d.

FREDERICK II THE GREAT

MUSICAL CAPITAL BERLIN

* Exner (2010)

WHAT IS OPERA

THEATRE + ORCHESTRA^2 = OPERA

WHAT IS OPERA

$$[\text{THEATRE} + \text{ORCHESTRA}^2 = \text{OPERA}]^2$$

EFFORT

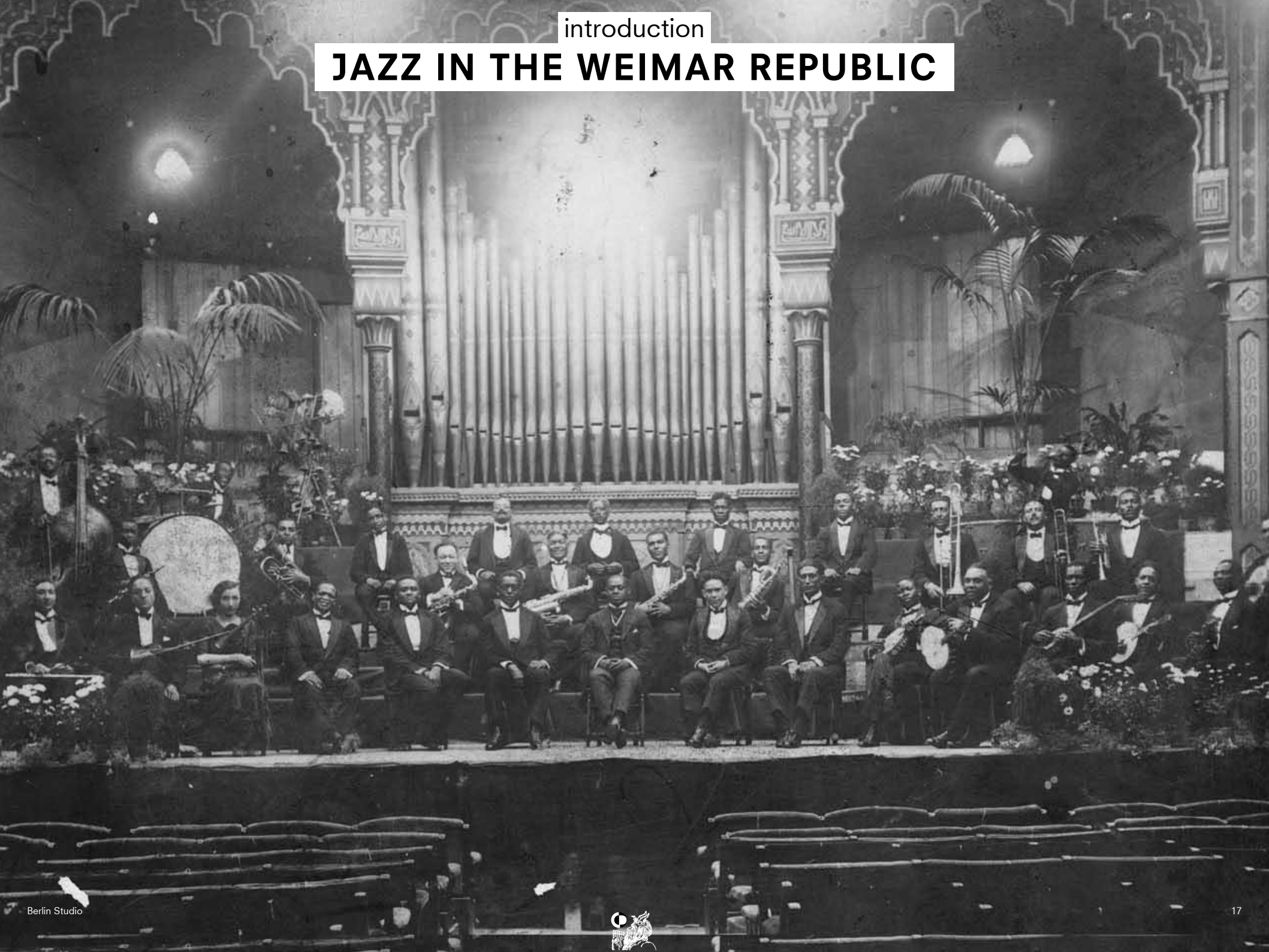
OPERETTA

THÉÂTRE DE LA GAITÉ
Tous les Soirs
ORPHÉE
aux
ENFERS
OPÉRA-FEERIE
en 4 Actes & 12 Tableaux
Paroles de
H. CREMIEUX
Musique de
J. OFFENBACH
IMP. J. CHÉRET, 18, R. BRUNEL, PARIS.

SPREAD

* Abbate and Parker (2012)

JAZZ IN THE WEIMAR REPUBLIC



WWII

* Thacker (2017)

introduction

WALL

* Thacker (2017)

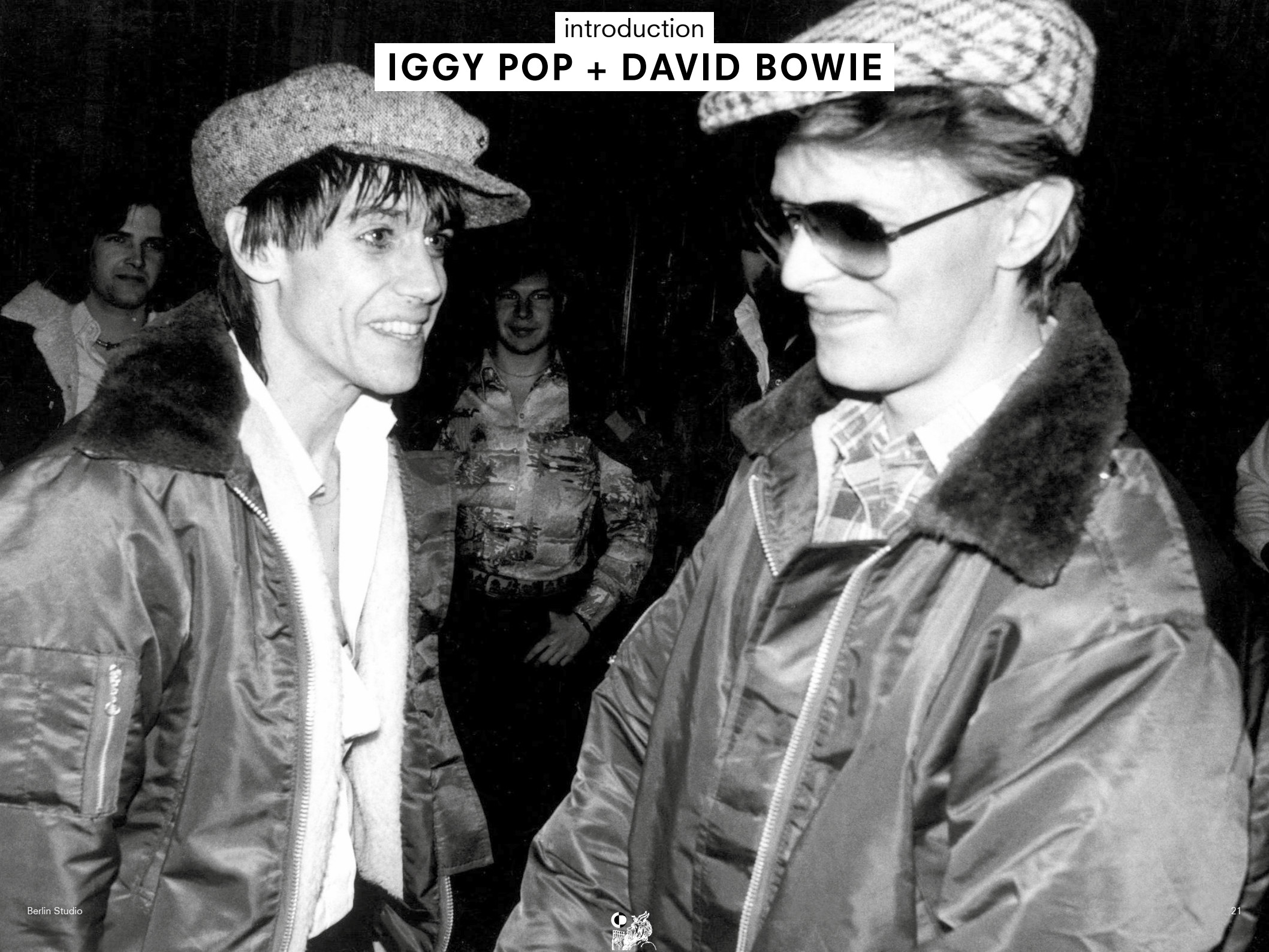
introduction

GDR ANARCHY

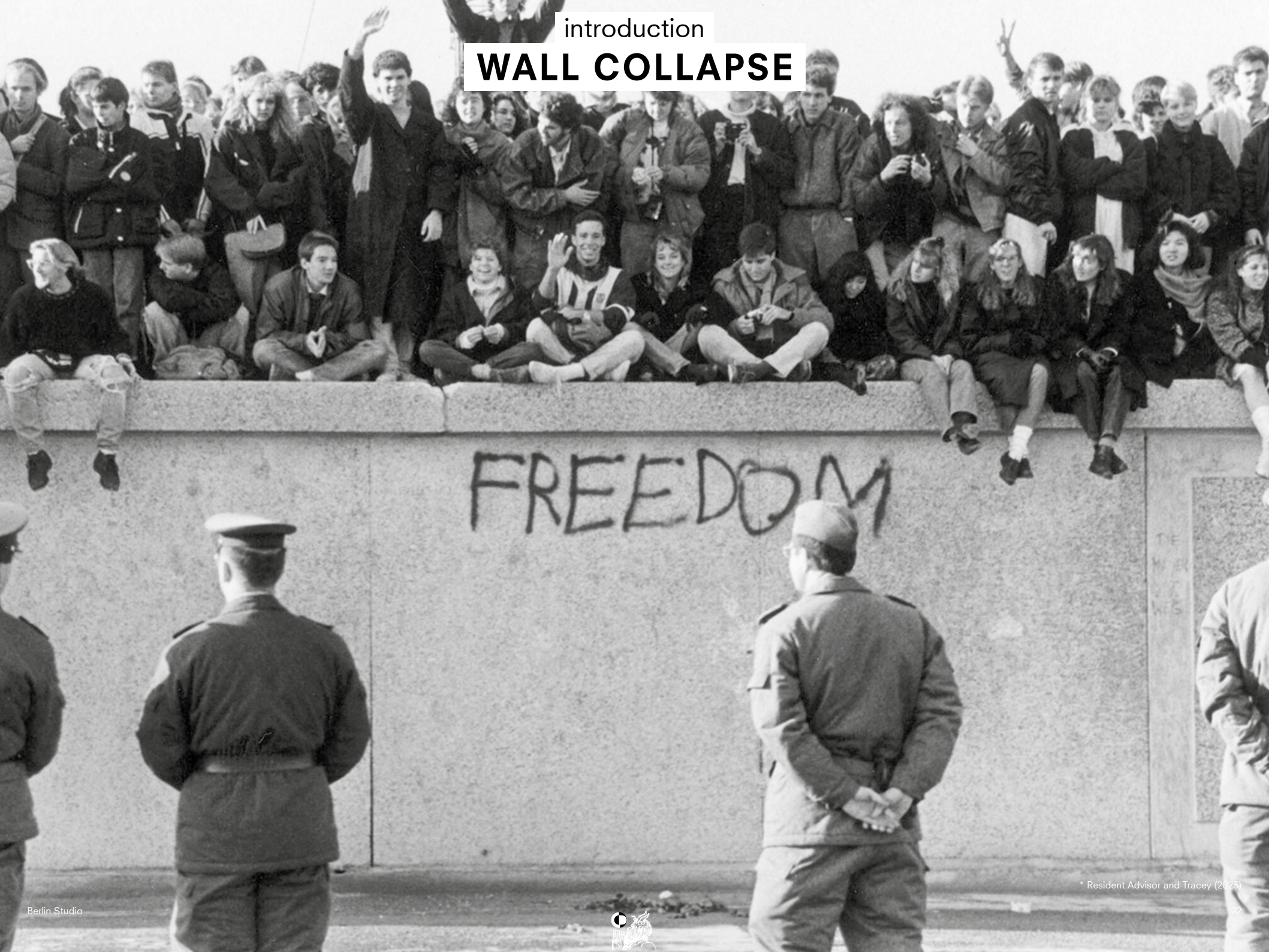
Berlin Studio

* Mohr (2019)
* Welsh (2019)

IGGY POP + DAVID BOWIE



WALL COLLAPSE



* Resident Advisor and Tracey (2023)

EASY SQUATTING

* Künzel and Praller (2012)

WERTHEIM WARENHAUS

* Groove Magazin Berlin, n.d.

* Groove Magazin Berlin, n.d.

TRESOR

* Groove Magazin Berlin, n.d.

CURRENT BERLIN

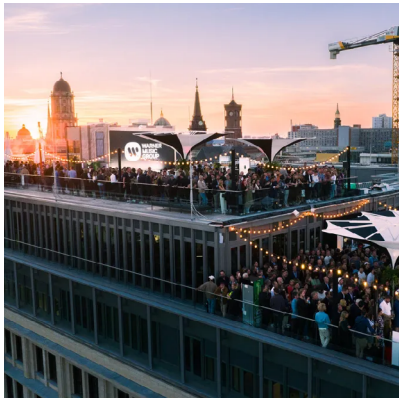
vibrant nightlife

jazz bars

opera

spontanious events

record labels



renomated musical brands

streaming/ broadcasting

most infamous club [Berghain]

notorious artists

BERLIN IS IN DANGER

(LeJarde 2023)

Berlin club Re:mise announces closing parties

Between November 16th and 20th, the venue will host Stella Zekri, Esther Dune and many more.

Arielle Lana LeJarde, 5 november 2023

Re:mise in Berlin has revealed its final events.

(Schmitz 2023)

Berlin's famed nightclubs, losing customers, face an uncertain future

Rob Schmitz, 3 november 2023

BERLIN — For those who haven't experienced it, a night at a club in Berlin can be reduced to a math equation whose first variable is the best club you've been to.

"Berlin nightlife is, let's say, what you've experienced, multiply that by 10," says Zak Khutoretsky, otherwise known by his DJ pseudonym, DVS1.

(Dawson 2020)

Griessmuehle: Berlin mourns the loss of yet another club

Ahead of the venue's final party this weekend, protesters, organisers, and activists reflect on its legacy and the future of the city's nightlife

Brit Dawson, 31 january 2020

(Scaturro 2020)

With the closure of another club space, the scene that revived Berlin is being lost

The dance community helped reunify East and West Germany in the 1990s, but gentrification is slowly killing it

Michael Scaturro, 15 march 2020

I was in bed when my friend Alfonso called me. "It's the last party at Griessmuehle," he said. "It's the last Cocktail there. Throw on some clothes. We're going."

(Braun 2023)

Berlin club culture battles 'highway to hell'

The extension of the A100 freeway through central Berlin would destroy numerous nightlife institutions. But the club scene has joined with climate activists to halt its construction.

Stuart Braun, 9 september 2023

(Skinner 2022)

Berlin's iconic Berghain club rumoured to be closing down

The techno venue was founded in 2004

Tom Skinner, 18 october 2022

Berlin's Berghain nightclub is rumoured to be permanently closing by the end of this year.

The legendary establishment, which was founded in 2004, is one of the most famous clubs

(Ross 2023)

Popular Berlin nightclubs face "extreme" threat from controversial motorway expansion, say Clubcommission

The planned 17th stage of the A100 motorway would impact iconic venues such as ://about blank, Club OST, and Wilde Renate

Gemma Ross, 16 may 2023

A number of popular Berlin nightclubs could face closure if a proposed new motorway extension were to be given the green light, as the Bundesautobahn 100 looks to run through nightlife areas in Mitte, Charlottenburg, Tempelhof and Neukölln.

The Bundesautobahn 100 (also known as the A100) is currently in its 16th stage of construction, which has been underway since 2013 and is due to cost around €700 million when finalised, and looks to increase its "ring" around the city.

The nearing 17th stage, which will cost the city an estimated further €800 million, could wipe out 21 cultural institutions if it were to run through Storkower Strasse in Ostkreuz, according to Berlin's Clubcommission.

Local politicians have given no concrete statement over whether the development will go ahead, despite plans for the 17th stage having been proposed as far back as 1935, reportedly leaving local institutions in "limbo" — unable to secure guaranteed planning permission from the city and at risk of surging rent were the plans to be scrapped.

The extension has become a contentious issue among both local and national politicians; the left-leaning Alliance90 (or "The Greens") and the SPD oppose the expansion, while centre and right-leaning parties such as the CDU, FDP and AfD are supportive of the 17th stage.

Nightlife venues that stand to be impacted if the plans were to go ahead are ://about blank, Club OST, Salon Zur Wilden Renate, ELSE, OXI, and newly opened venue Club M01 — while local bar Zuckerzauber, skatepark E-LOK, independent cinema Zukunft, and cocktail bar Krass Böser Wolf could also face closure.

"In total, there are about 21 cultural venues that are in the area of this continuous autobahn construction, which is extremely threatening," Lutz Leichsenring of Berlin's Clubcommission tells Mixmag.

"On the other hand, if they do decide not to build the autobahn, there is also a threat because the real estate value will rise and landlords might aim for more profitable real estate, such as residential or office buildings. So in any case, if they build it or not, we need to have a plan or vision for this area."

Leichsenring explains that another property across the Spree River is also intertwined with the

(Rogers 2020)

Protesters and Politicians Rally to Protect Berlin's Clubs

Nightclubs have a unique role in the city's culture and economy. But real estate investors and infrastructure projects have put many venues at risk.

Thomas Rogers, 24 january 2020

BERLIN — On Wednesday afternoon, about 300 protesters gathered in front of a municipal building in the southeast of Berlin, dancing and holding signs. "All clubs are beautiful," one placard said; "The day I stop dancing is the day I stop breathing," read another.

Accompanied by loud techno music, they had come to protest the impending closure of Griessmuehle, a well-known nightclub. As has happened to numerous Berlin venues in recent years, the club is being evicted because new owners plan to redevelop the site.

Several politicians addressed the crowd, including Martin Hikel, the mayor of the Neukölln district, where the protest took place. "There is a consensus among parties that club culture should be protected," he told the demonstrators, adding that there was "the political will" to take action on the issue.

Berlin is known for its freewheeling club scene, but in the last decade, that culture has come under increasing pressure from real estate investors and infrastructure projects. The situation is complicated by an acute housing shortage, and the city's dramatic economic growth. In recent years, many formerly abandoned spaces have been redeveloped as offices and apartments, and real estate prices have soared.

According to the Club Commission, a group dedicated to promoting and protecting Berlin's night life, about 100 clubs have closed over the past decade, and about 25 venues are currently under threat. There's even a German word for it, "clubsterben," or "club dying," that has entered the mainstream lexicon.

A growing number of politicians from across the political spectrum have taken up the cause, partly to protect the venues' unique role in the city's cultural fabric, but also because the clubs are moneymakers for the broader economy. According to a study by the Club Commission, tourists visiting Berlin for its club scene contributed 1.5 billion euros, or about $1.66 billion, to the capital's economy in 2018. The clubs have also played a large role in attracting young workers for the city's start-up scene, which many politicians see as crucial to Berlin's economic growth.

In an interview, Lutz Leichsenring, a spokesman for the Club Commission, said, "It's easier to attract start-ups to Berlin than to Munich and Hamburg. And that's not because we have better shopping options."

In recent years, as gentrification has driven a rise in disputes between venues and residents, and led to many closures, other major cities have started initiatives to protect club culture. Amsterdam,

(Moen 2022)

Berghain Might Be Closing for Good

Word on the street is that Berlin's infamous nightclub Berghain might be closing its doors for good by the end of this year.

Matt Moen, 18 october 2022

Speculation that the legendary nightlife institution might be shuttering at some point in the near future has been circulating since the club's in-house record label and booking agency, Ostgut Ton, abruptly closed earlier this month. According to several inside sources, the "world capital of techno" is set to close permanently by the end of 2022 almost two full decades after it first opened its doors in 2004.

"The Berghain is closing forever – the final end will come this year," one source said to Faze Magazine. "One of the founders has already been paid out and is said to be staying in the countryside in Brandenburg," another source told the German outlet. "The others simply 'don't feel like it' anymore and have other life plans in mind."

Apparently once the venue's current owners wash their hands of the place, there aren't any future plans for someone else to take over. "Continuing to exist as an art location does not appear to be an option. And so this chapter should finally be closed."

So far Berghain's current owners have yet to comment or release an official statement addressing the speculation. Berghain previously closed its doors in March 2020 during the onset of the COVID-19 pandemic, operating as an art gallery while nightlife worldwide ground to a halt.

Before that, Berghain had been best known as one of the world's most exclusive club with a notoriously selective bouncer — who gained his own form of cult-like figure status in the process — that made getting let in a badge of pride for those select few (as Claire Danes once famously gushed about on Ellen back in the day).

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Griessmuehle: Berlin mourns the loss of yet another club

Ahead of the venue's final party this weekend, protesters, organisers, and activists reflect on its legacy and the future of the city's nightlife

january 2020

(Bryant 2024)

Berlin's Famous Club Scene Faces the End of the Party

The closing of renowned clubs Watergate and Renate spells trouble for the city's nightlife.

Chris Bryant, 27 September 2024

Berlin is synonymous with unbridled hedonism, throbbing techno and intense parties that go on for days. But the fun will soon be over for two of the capital's most famous venues — Watergate and Wilde Renate — which are set to permanently close, in part due to rising costs.

Enterprising club promoters have long defied predictions of the techno scene's imminent demise — there's even a German word for it, "Clubsterben," or club death. But Berlin shouldn't ignore the plight of an industry that contributes around €1.5 billion ($1.7 billion) annually to the local economy, is a magnet for young tourists, startups and creative types, and whose cultural significance was recently recognized by Unesco.

"I always thought Clubsterben was bullshit — clubs just adapted and moved to a new area — but it feels different this time. Watergate and Renate are big names," Jens Schwan, founder of Berlin music guide The Clubmap and co-founder of techno parade Zug der Liebe, told me. "The boom years are over. And after corona, many clubs missed the opportunity to reinvent themselves."

The Party's Over

(Skinner 2022)

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BERLIN IS IN DANGER

“THERE ISN’T MUCH OF A SCENE LEFT THESE DAYS.”

“There Isn’t Much of a Scene Left These Days. […]“ (2021)

PRESERVE CULTURE

RESEARCH QUESTION

“Do modern nightclubs have structural and social similarities with old-fashioned opera houses?”

ANSWER

NO

Staatsoper Unter der Linden

Deutsche Oper Berlin

Komische Oper Berlin

Neuköllner Oper

A MUSICAL ARTS CENTRE!

THE TEMPLE OF MUSIC

~~INTRODUCTION~~

CONCEPT

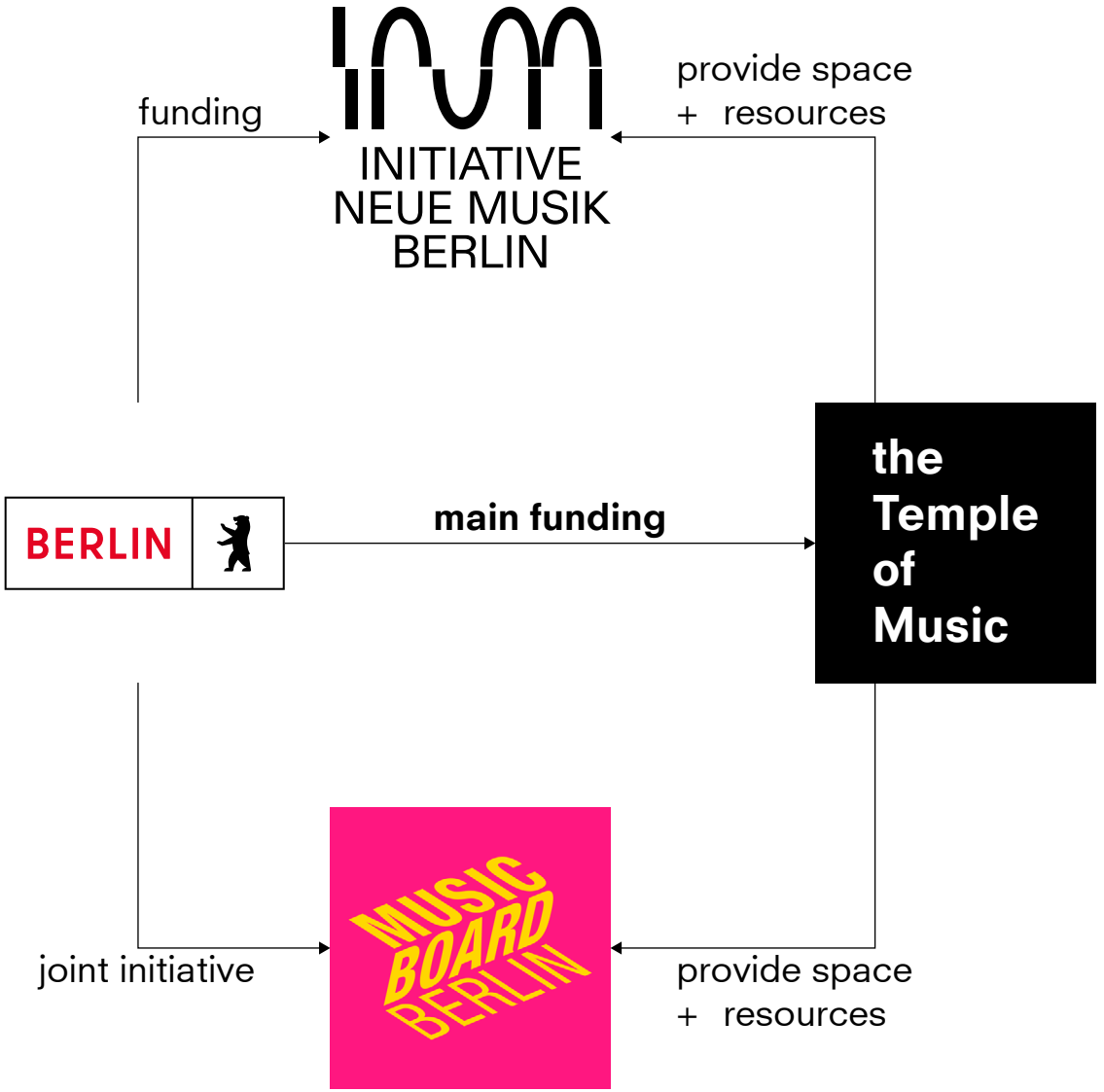
IMPLEMENTATION

CONCLUSION

WHO PAYS FOR THIS?

concept

STAKEHOLDER DIAGRAM



concept

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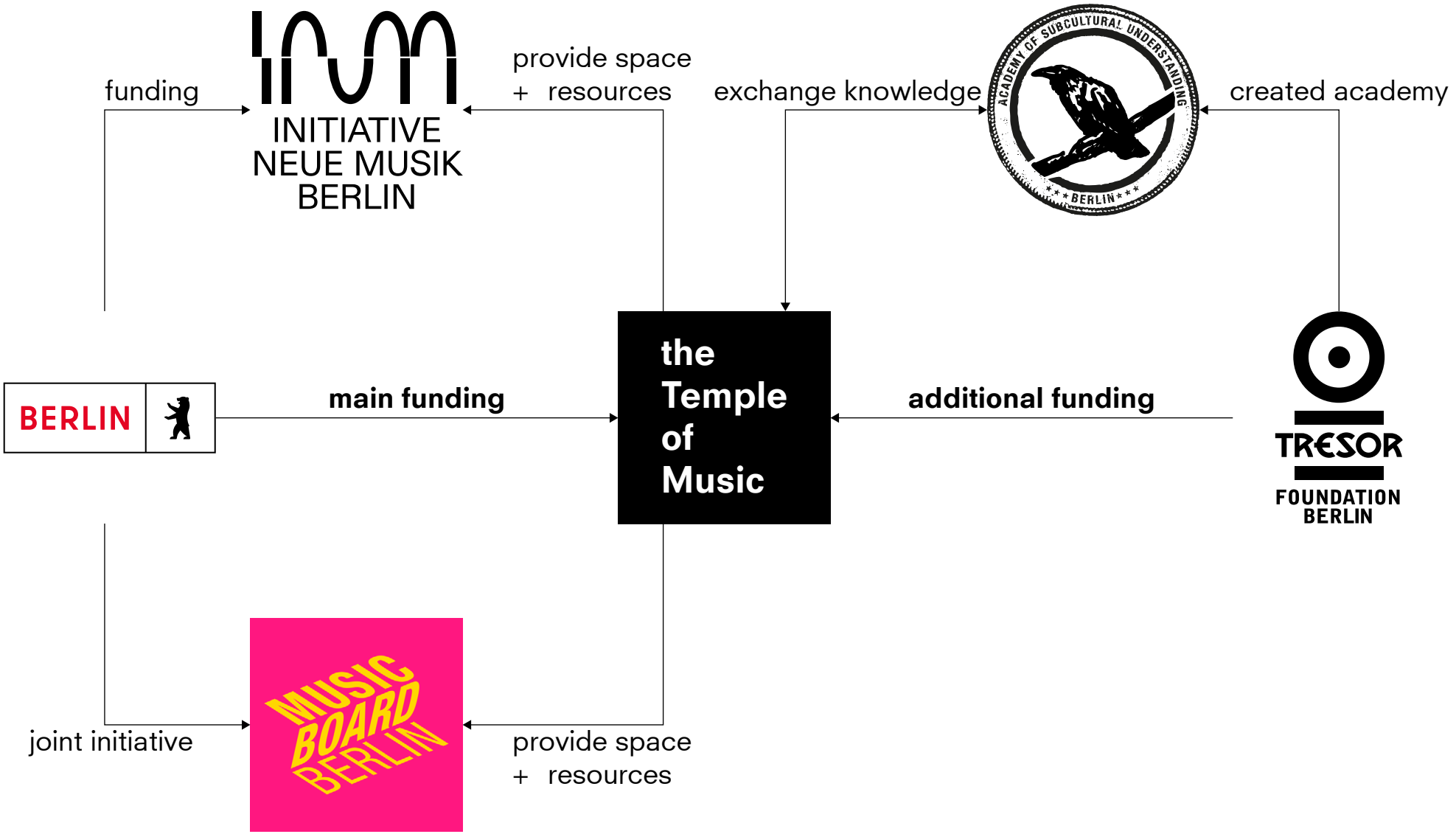

concept

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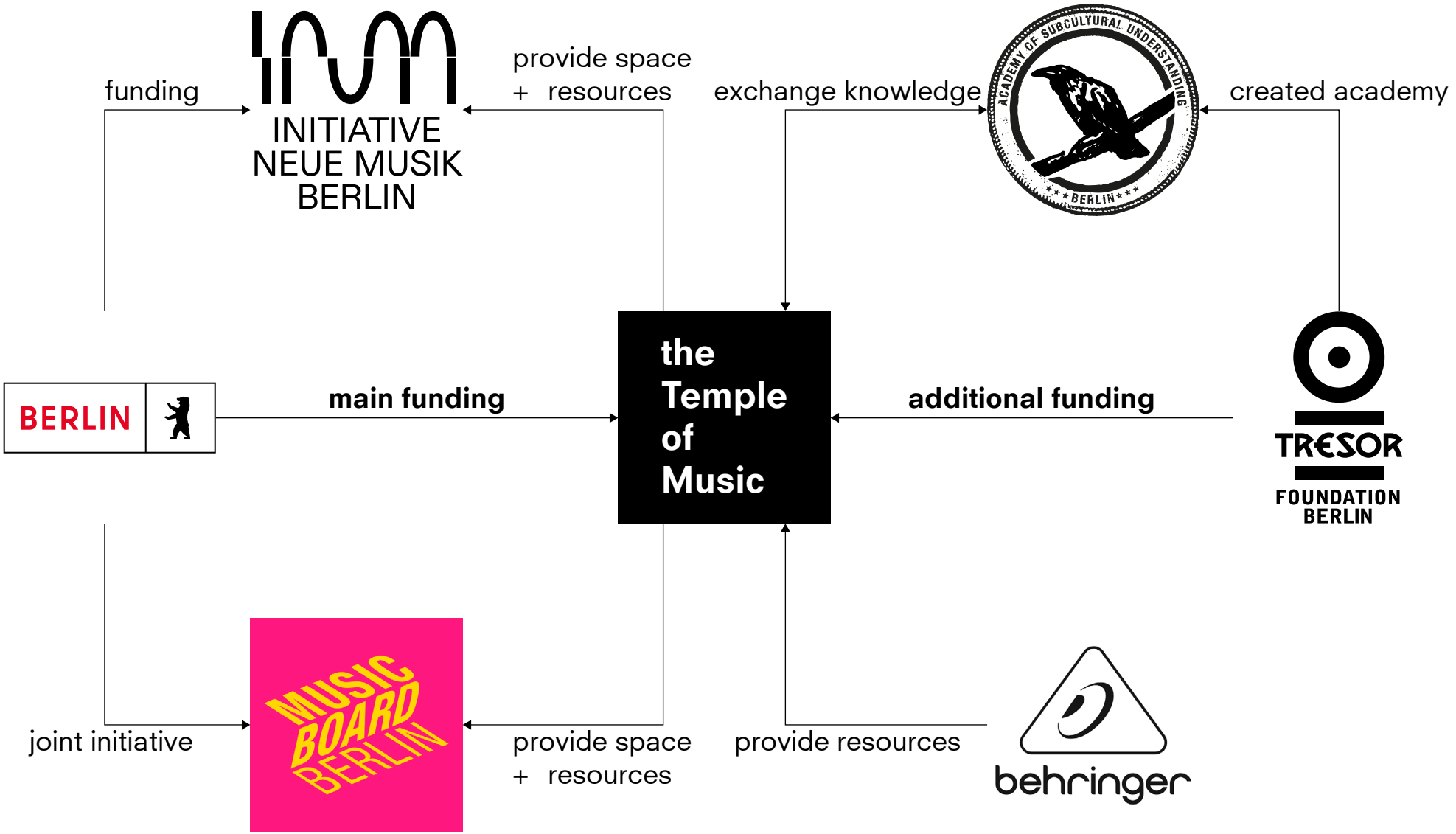
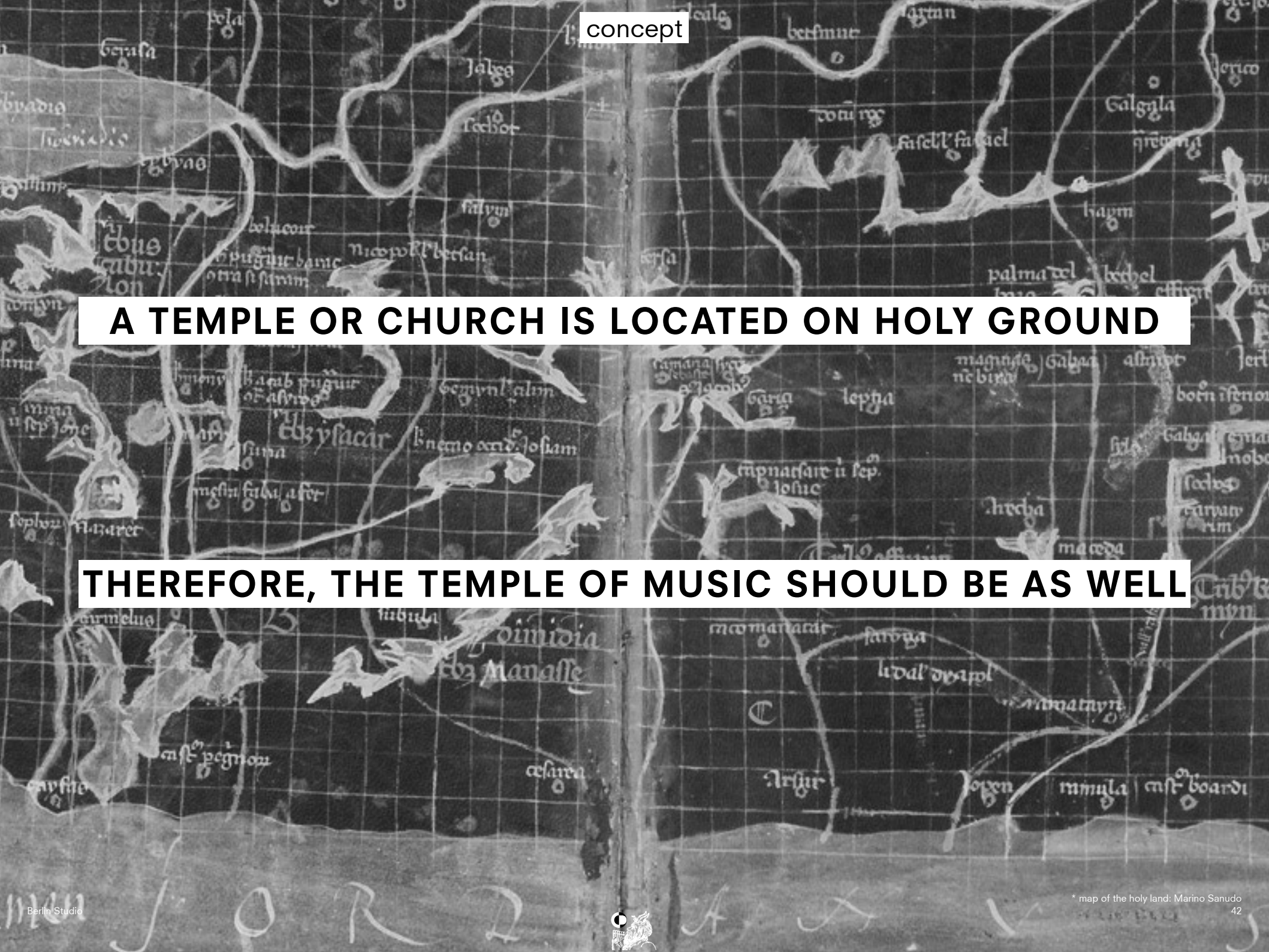


WHERE?



A TEMPLE OR CHURCH IS LOCATED ON HOLY GROUND

THEREFORE, THE TEMPLE OF MUSIC SHOULD BE AS WELL

* map of the holy land: Marino Sanudo

HOLY GROUND

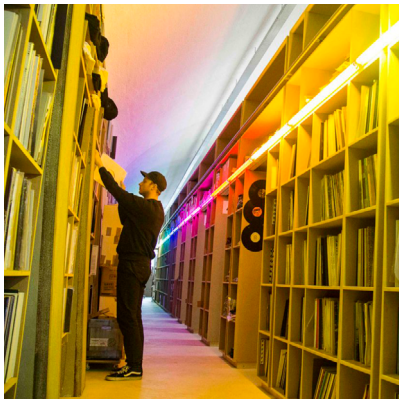
WHAT IS HOLY GROUND IN THIS CONTEXT?

concept

‘HOLY‘ PHENOMENONS + SITES

clubs

record stores



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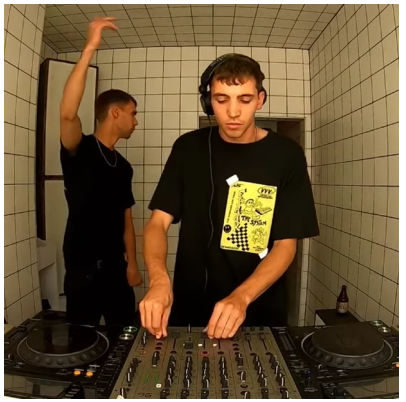
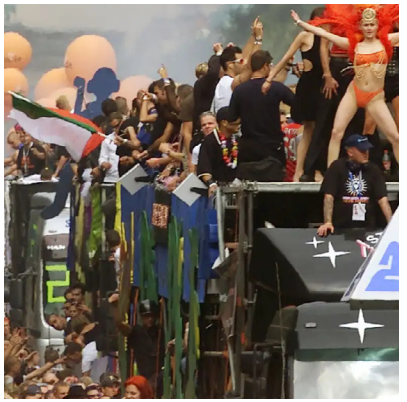


Love Parade



Berlin wall

David Bowie + Iggy Pop

Tresor

jazz bars

concert halls

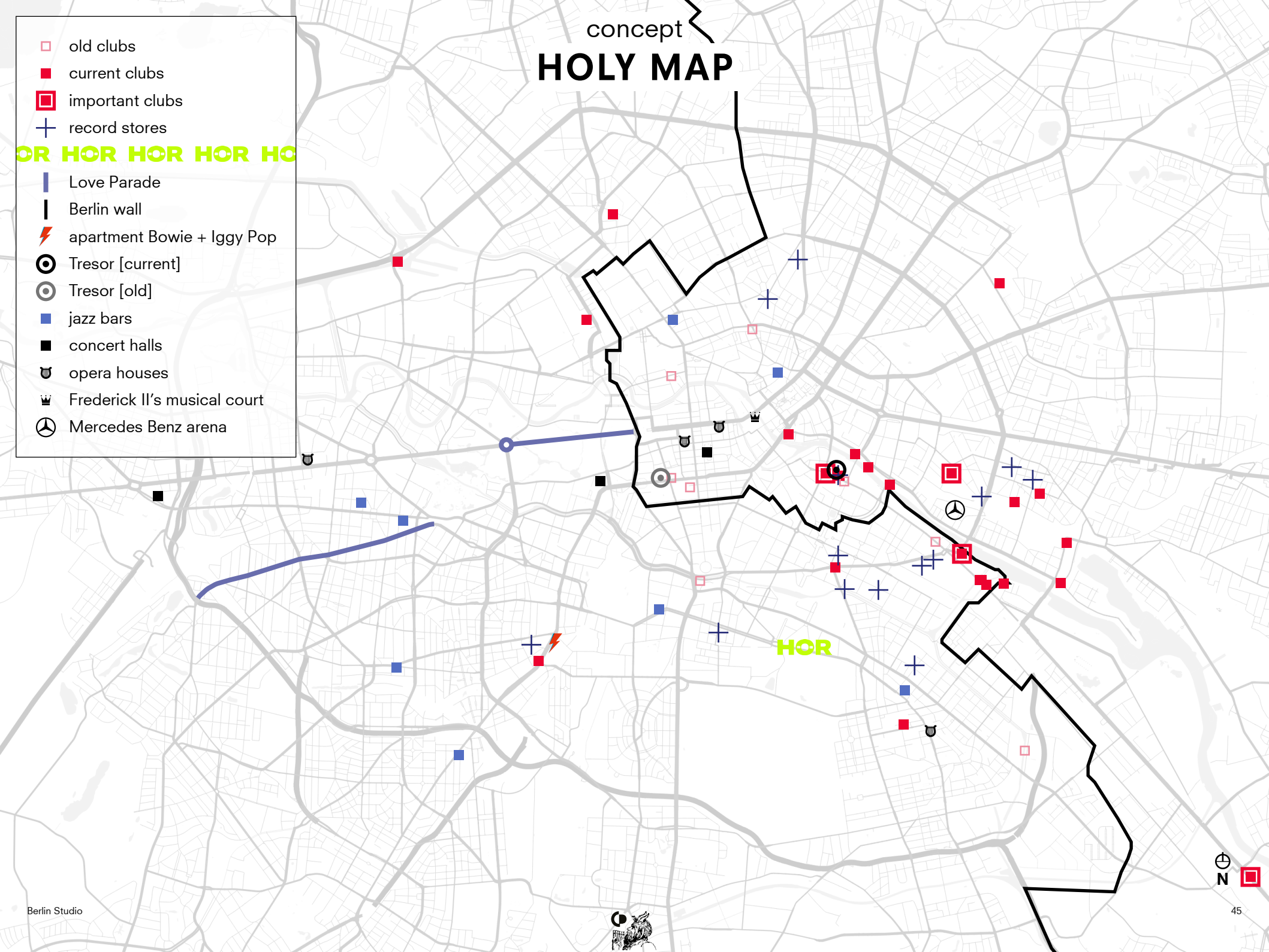
opera houses

Frederick II’s musical court

Mercedes Benz arena

concept

HOLY MAP



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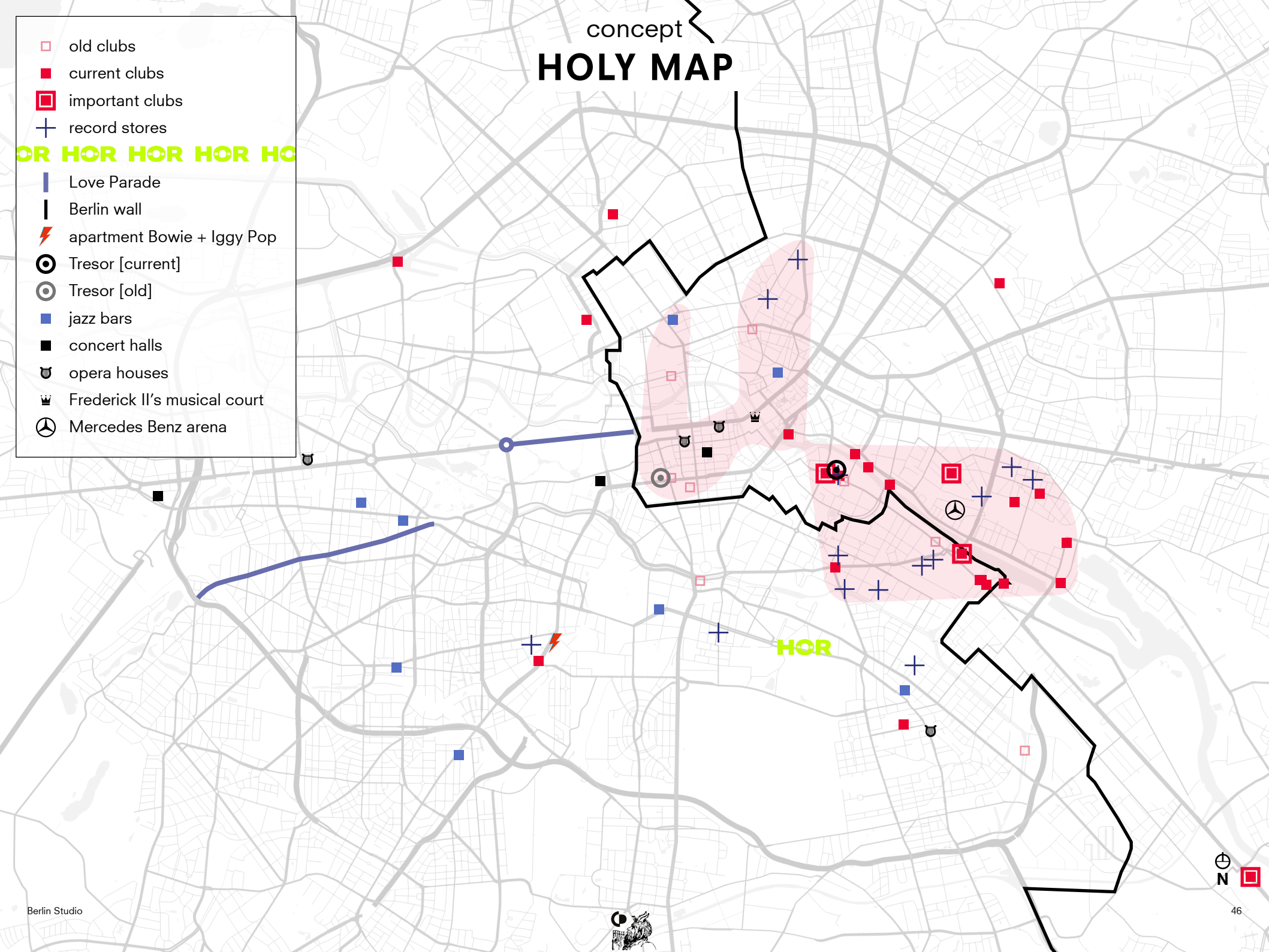


concept

AMBITION

complex projects

material group

“Completely abandon carbon positive materials and on-site construction methodologies, to set a new standard.”

concept

GROUP REQUIREMENTS

complex projects

material group

site requirements

railroad waterway

1/3 reuse

prominence

concept

GROUP REQUIREMENTS

complex projects

material group

site requirements

railroad waterway

1/3 reuse

prominence

building requirements

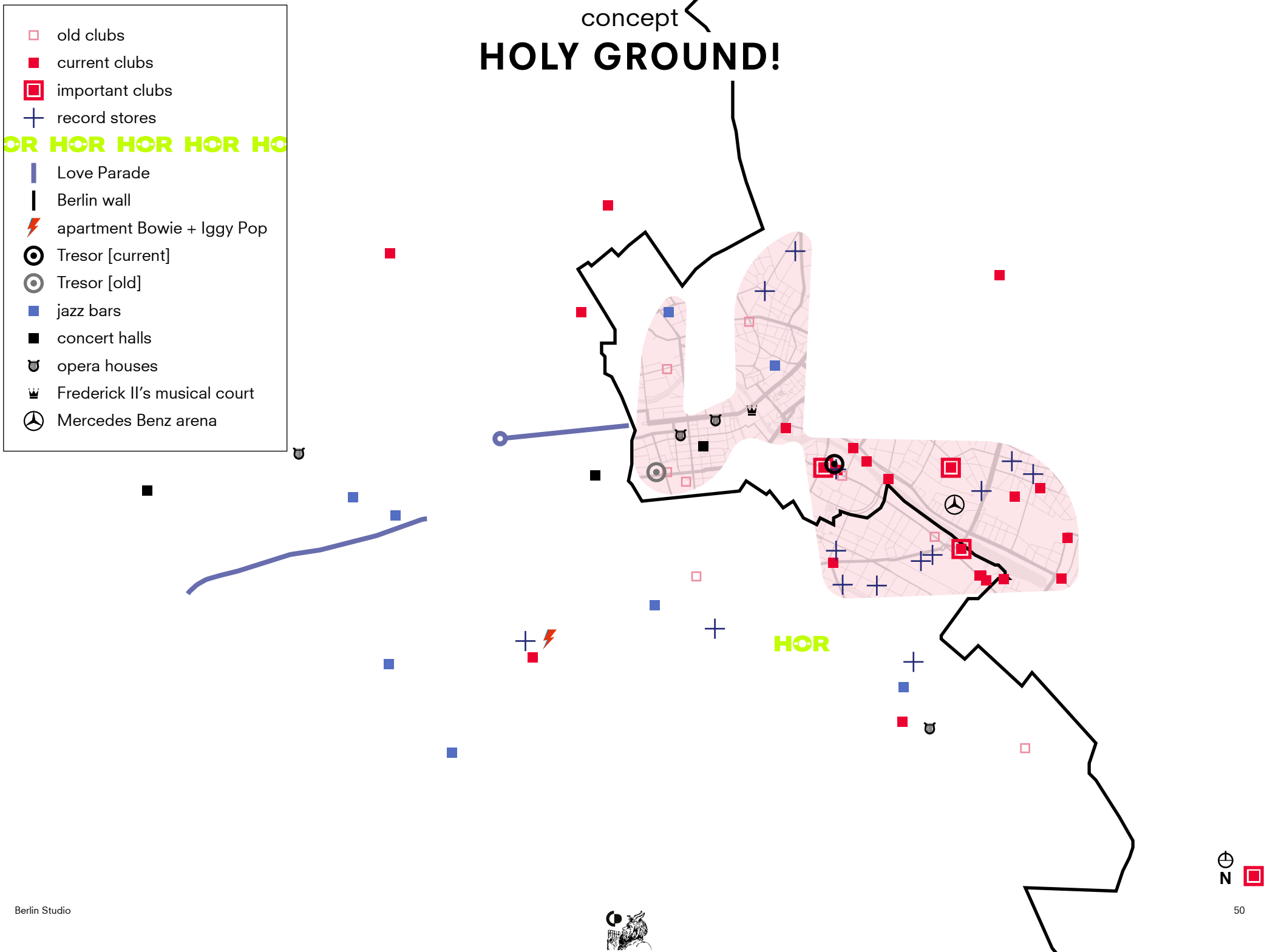
material atlas

material hub

material index =40

concept

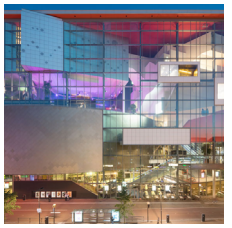
HOLY GROUND!



concept

OPERAS ANALYSED

Opera Garnier, PAR
TPAC, TAI
Staatsoper, BER
Tivoli Vredenburg, UTR
Concertgebouw, AMS



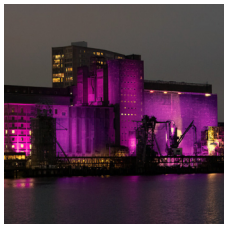
concept

TEMPLES ANALYSED

Kölner Dom, COL
Borgund Stave Church, BOR
Basilica Sancti Petri, ROM
Church of the Resurection, JER
Pantheon ROM
Hagia Sophia, IST
Umayyad Mosque, DAM
Laxminarayan Mandir, DEL
Kinryu-an Senso-Ji, TOK
Taipei Confusius Temple, TAI

MUSIC VENUES ANALYSED

Maassilo, ROT
Berghain, BER
Club LAAK, HAG
Watergate, BER
De School, AMS
PIP, HAG
RSO Berlin, BER
Tresor, BER
Fabric, LON



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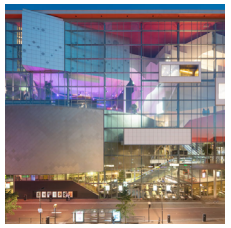

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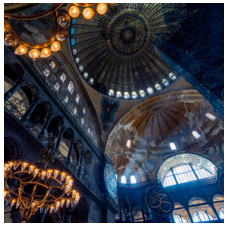
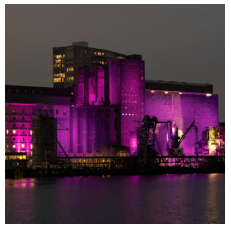
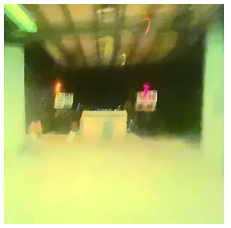
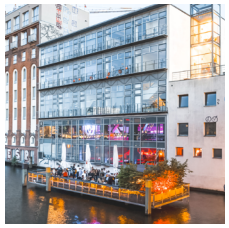
Hagia Sophia, IST
Umayyad Mosque, DAM



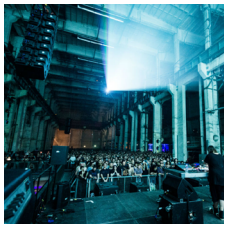
Laxminarayan Mandir, DEL
Kinryu-an Senso-Ji, TOK
Taipei Confusius Temple, TAI
Maassilo, ROT
Berghain, BER
Club LAAK, HAG







Watergate, BER
De School, AMS
PIP, HAG
RSO Berlin, BER
Tresor, BER
Fabric, LON



concept

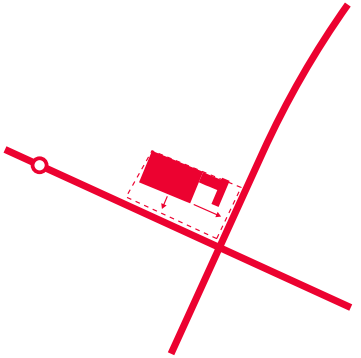
RESEARCH METHOD

project selection

check satalite location

produce vector map

analyse vector map



view results

draw conclusion

N

concept

CONCLUSION

building

railroad

important road

view axis

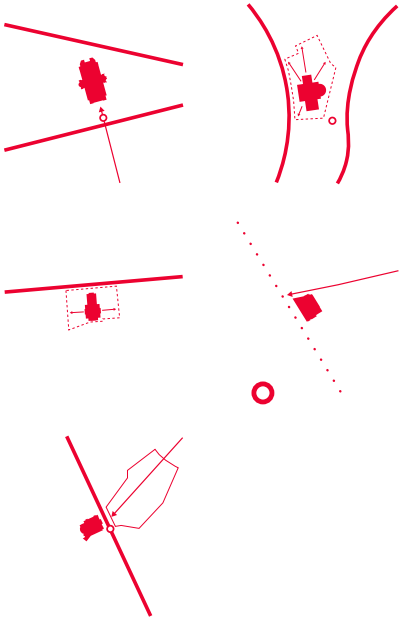
transit station

water (way)

park/ square

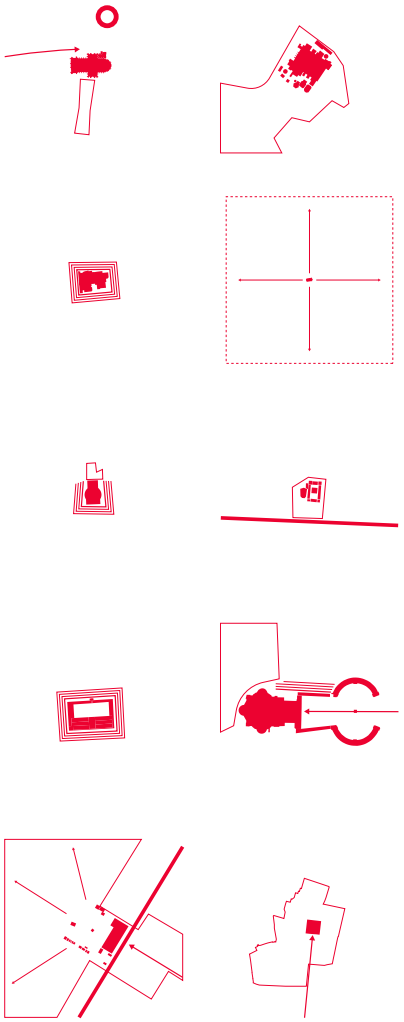
large space

enclosed



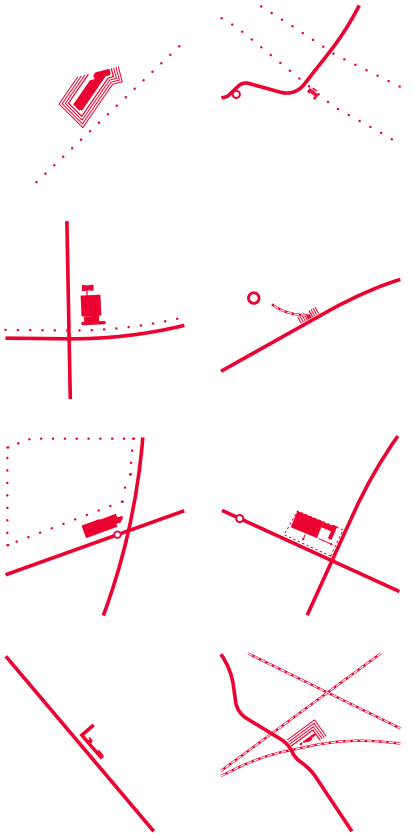
opera

view axes
major roads



temples/ churches

square/ enclosed
old
new



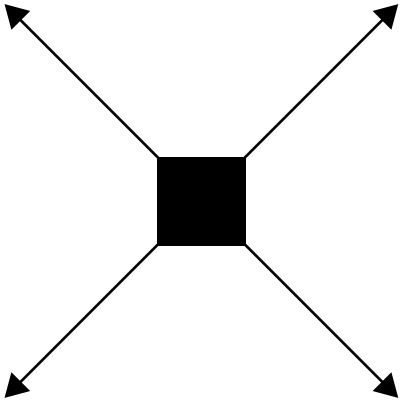
nightclubs

major road,
waterway, railway
repurposed
noise
industrial

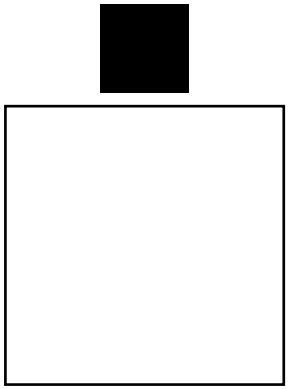
N

PROJECT IMPLEMENTATION

view axes



free space



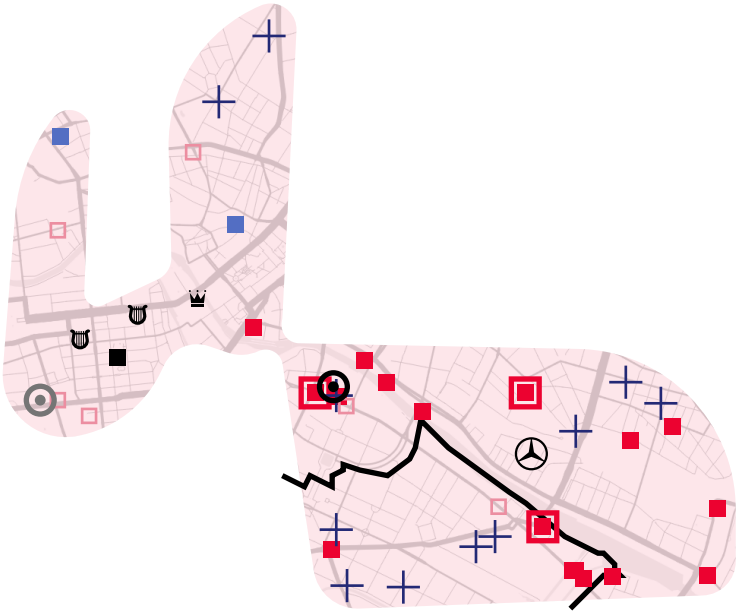
square

waterway, railway

concept

HOLY MAP

- old clubs
- current clubs
- important clubs
- record stores
- HOR HOR HOR HOR HO
- Love Parade
- Berlin wall
- apartment Bowie + Iggy Pop
- Tresor [current]
- Tresor [old]
- jazz bars
- concert halls
- opera houses
- Frederick II's musical court
- Mercedes Benz arena



N

concept

HOLY MAP

- old clubs
- current clubs
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- HOR HOR HOR HOR HO
- Love Parade
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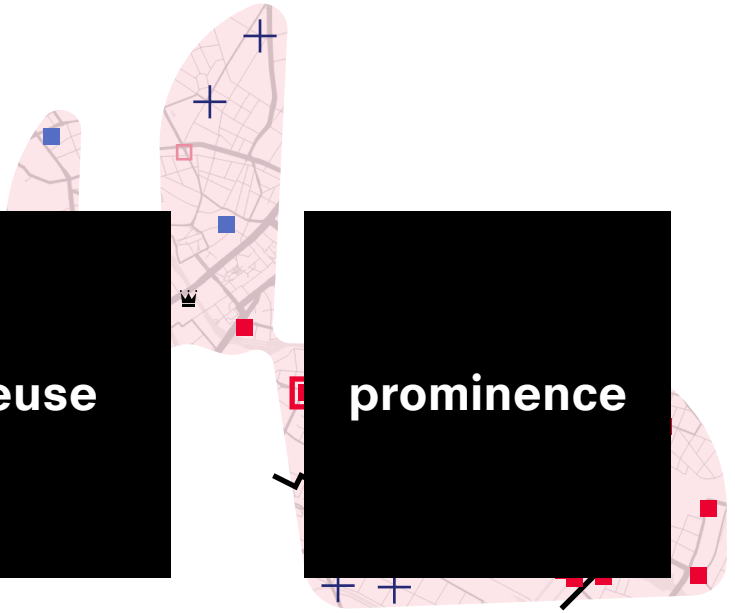
- Tresor [old]
- jazz bars
- concert halls
- opera houses
- Frederick II's musical
- Mercedes Benz arena

railroad waterway

1/3 reuse

prominence



N

concept

LOCATION

- old clubs
- current clubs
- important clubs
- record stores
- HOR HOR HOR HOR HO
- Love Parade
- Berlin wall
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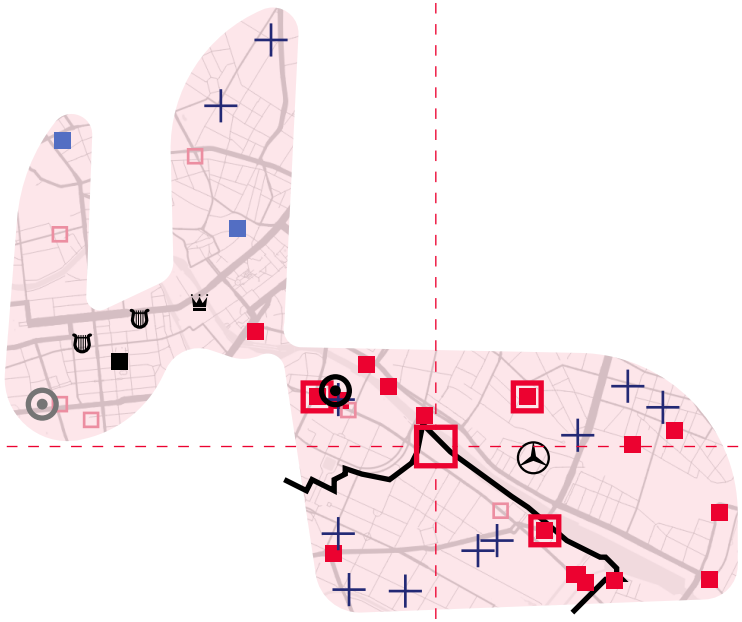


N

concept

LOCATION

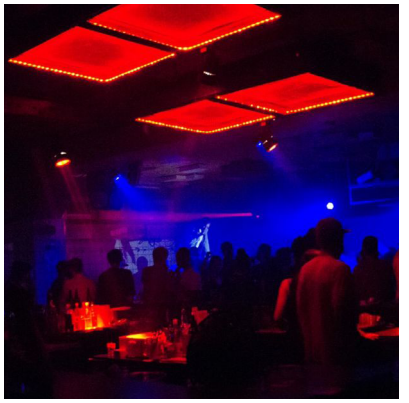
concept

KÖPENICKER STRAßE

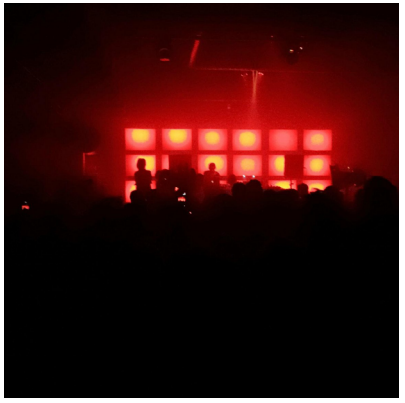
UFO

Planet

Kater Holzig



OHM



Tresor

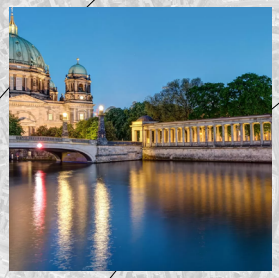
KitKatClub

Hard Wax

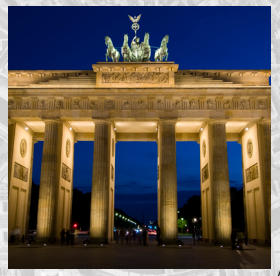
Re:Mise

concept

LOCATION

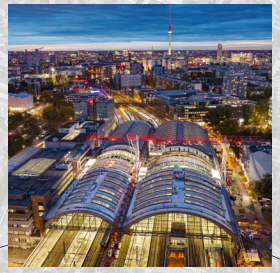


Museumsinsel



Brandenburger Tor

Fernsehturm



Ostbahnhof

Berghain

3,5km

3km

2km

1km

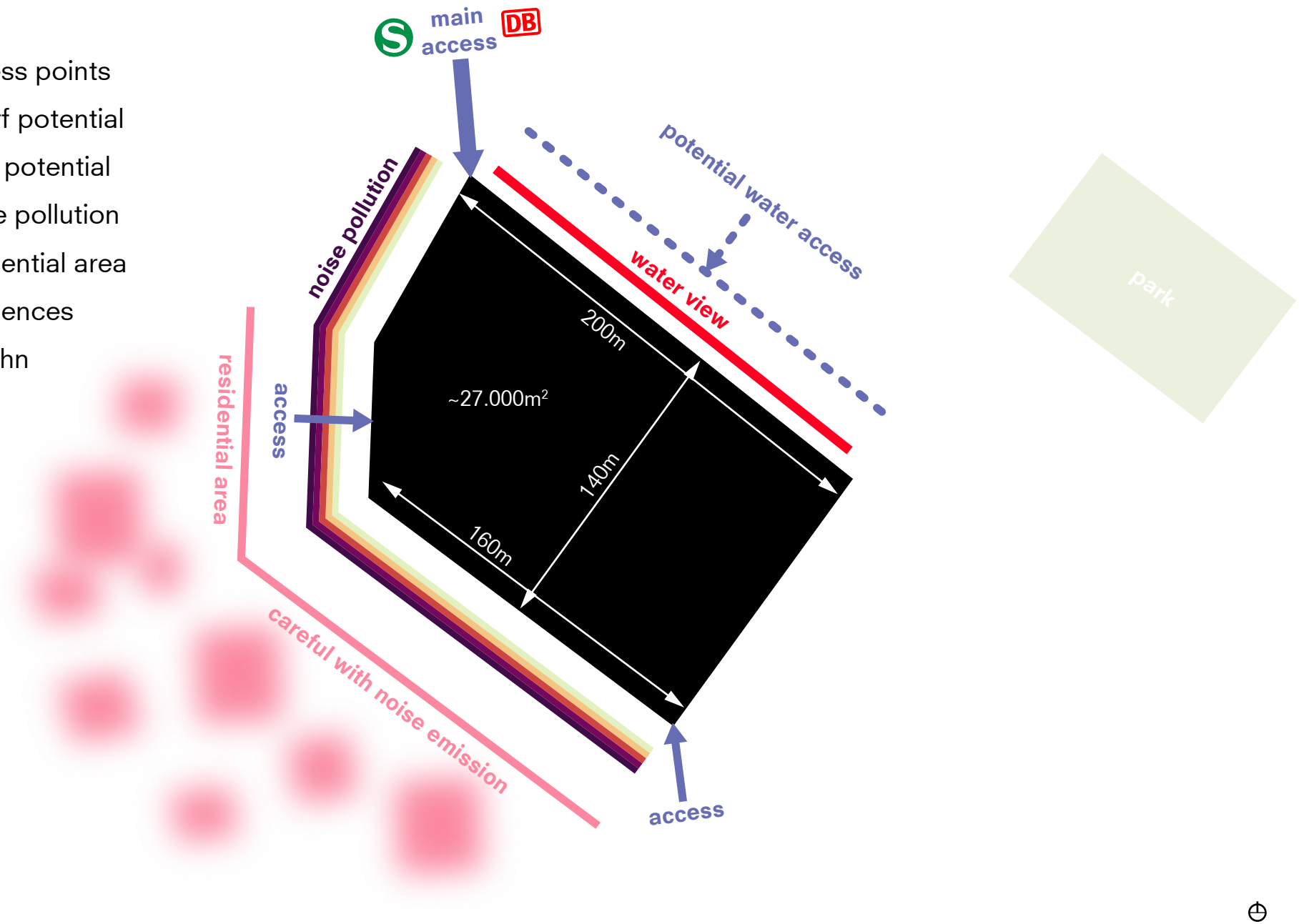
0,5km

N

concept

PUBLIC TRANSPORT

plot
access points
wharf potential
view potential
noise pollution
residential area
residences
S-bahn
DB
park



TEMPLE OF MUSIC?

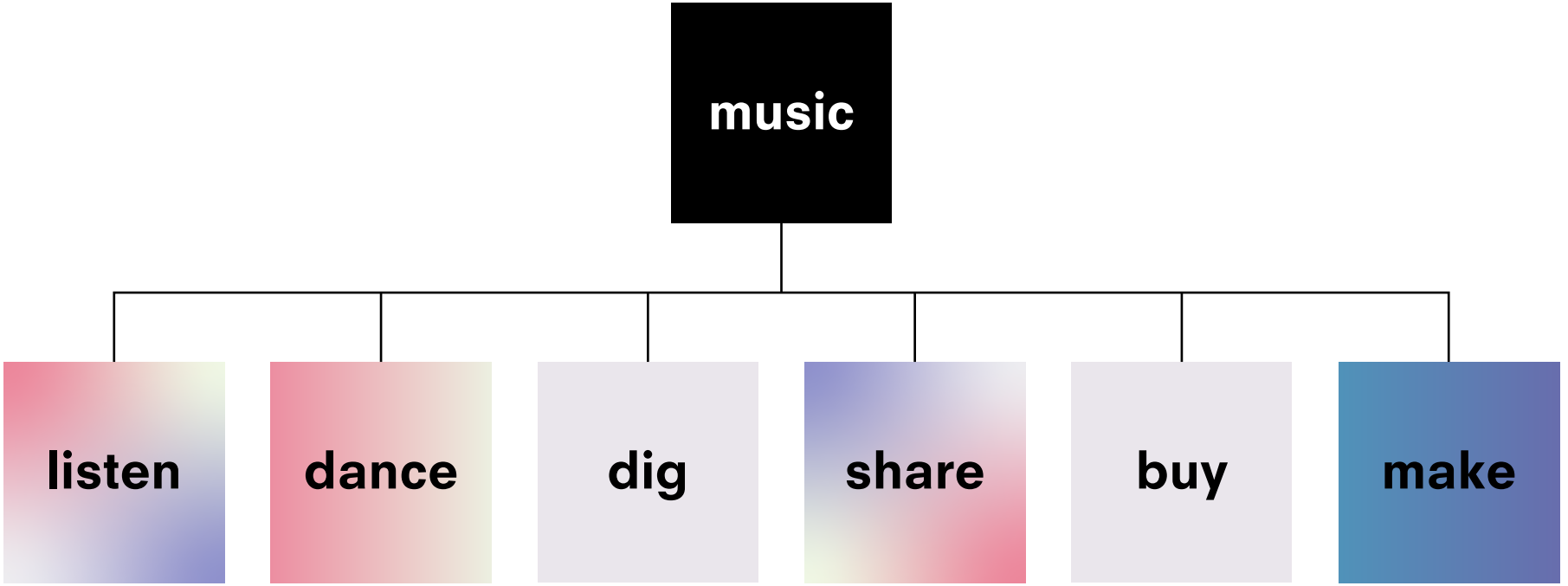
concept

BERLIN IS ABOUT MUSIC

music

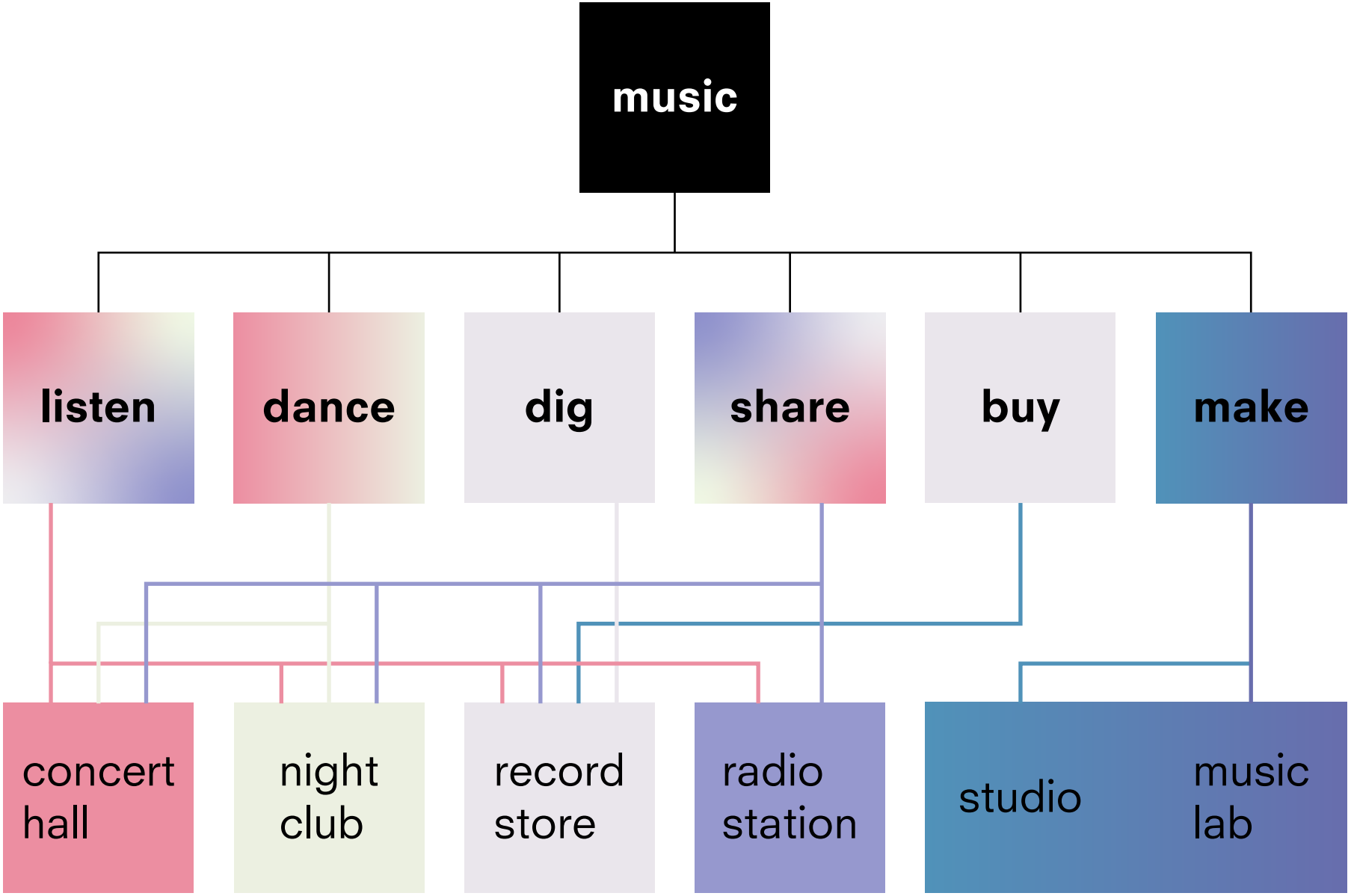
concept

WHAT IS MUSIC ABOUT?



concept

CORRESPONDING FUNCTIONS



concept

BUILDING FUNCTIONS

music

Temple of Music

concert hall

night club

record store

radio station

studio

music lab

concept

AIM

to facilitate 24+ hours of music related entertainment and activities

the program needs elaborate hospitality features

such as: sleeping/ resting accomodation
bathrooms
resting/ lounge areas
lockerrooms

concept

AIM

to facilitate 24+ hours of music related entertainment and activities

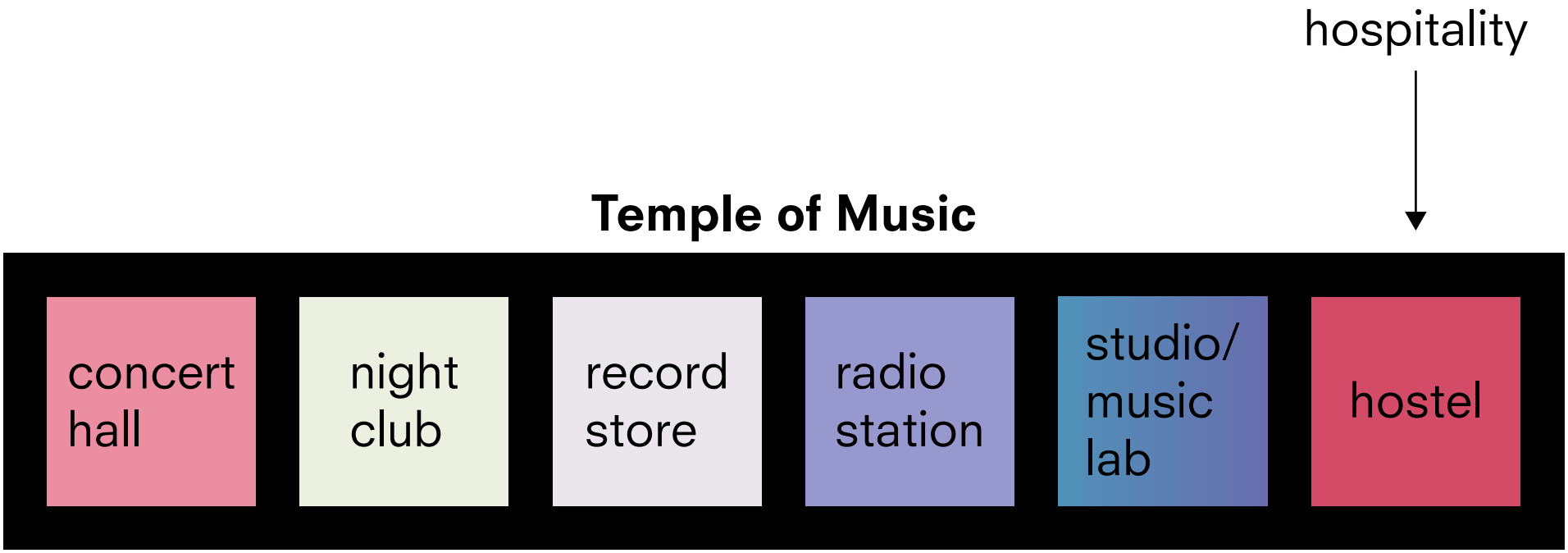
the program needs elaborate hospitality features

such as: sleeping/ rest accomodation
bathroo
rest lounge areas
lo kerrooms

HOSPITALITY

concept

ADD HOSPITALITY



concept

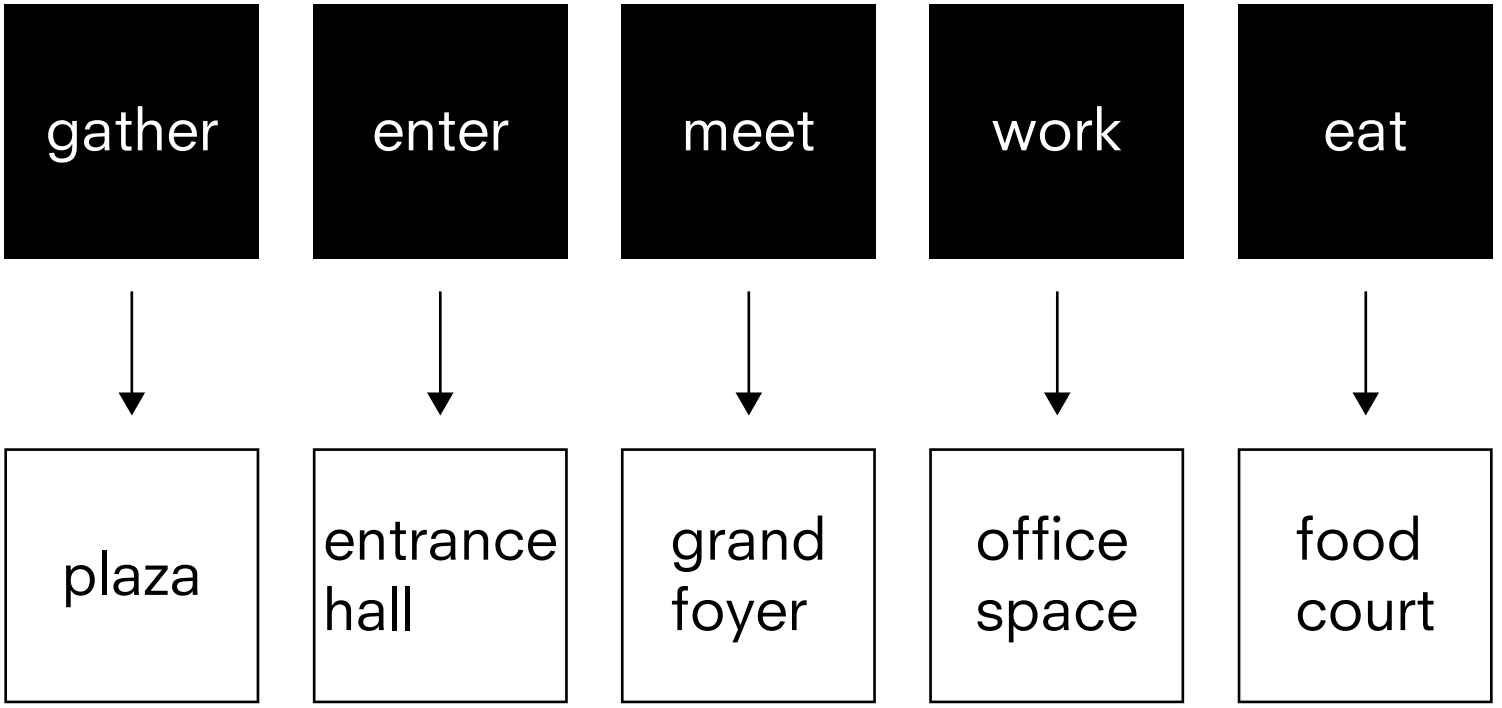
SUPPORTING FUNCTIONS?

at the Temple of Music all the users/ people need to:

gather | enter | meet | work | eat

SUPPORTING FUNCTIONS

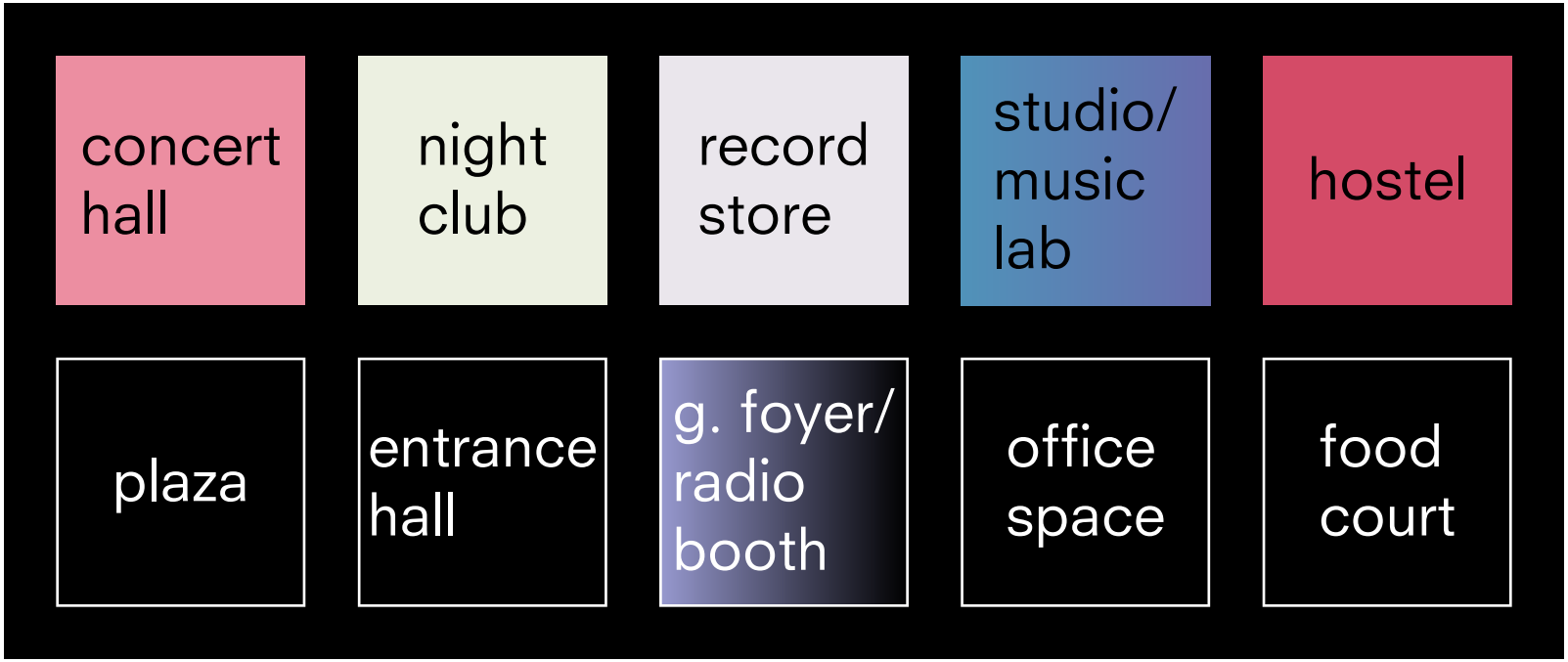
at the Temple of Music all the users/ people need to:



concept

UPDATE

Temple of Music



concept

ALL FUNCTIONS

33.200 m²

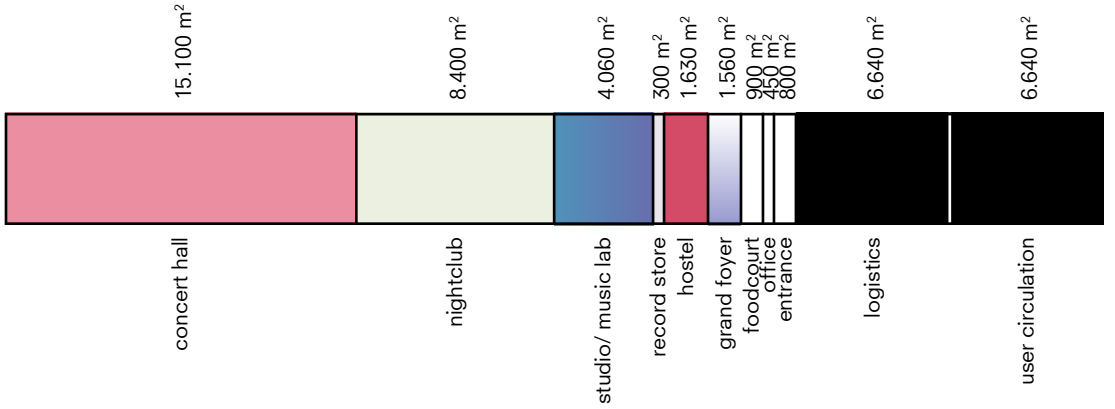
studio/ music lab	nightclub	concert hall	foodcourt	grand foyer	hostel	office	record store	entrance hall
4.060 m²	8.400 m²	15.100 m²	900 m²	1.560 m²	1.630 m²	450 m²	300 m²	800 m²

logistics	user circulation
20%	20%
20% of 33.200 m² 6.640 m²	20% of 33.200 m² 6.640 m²

46.480 m²

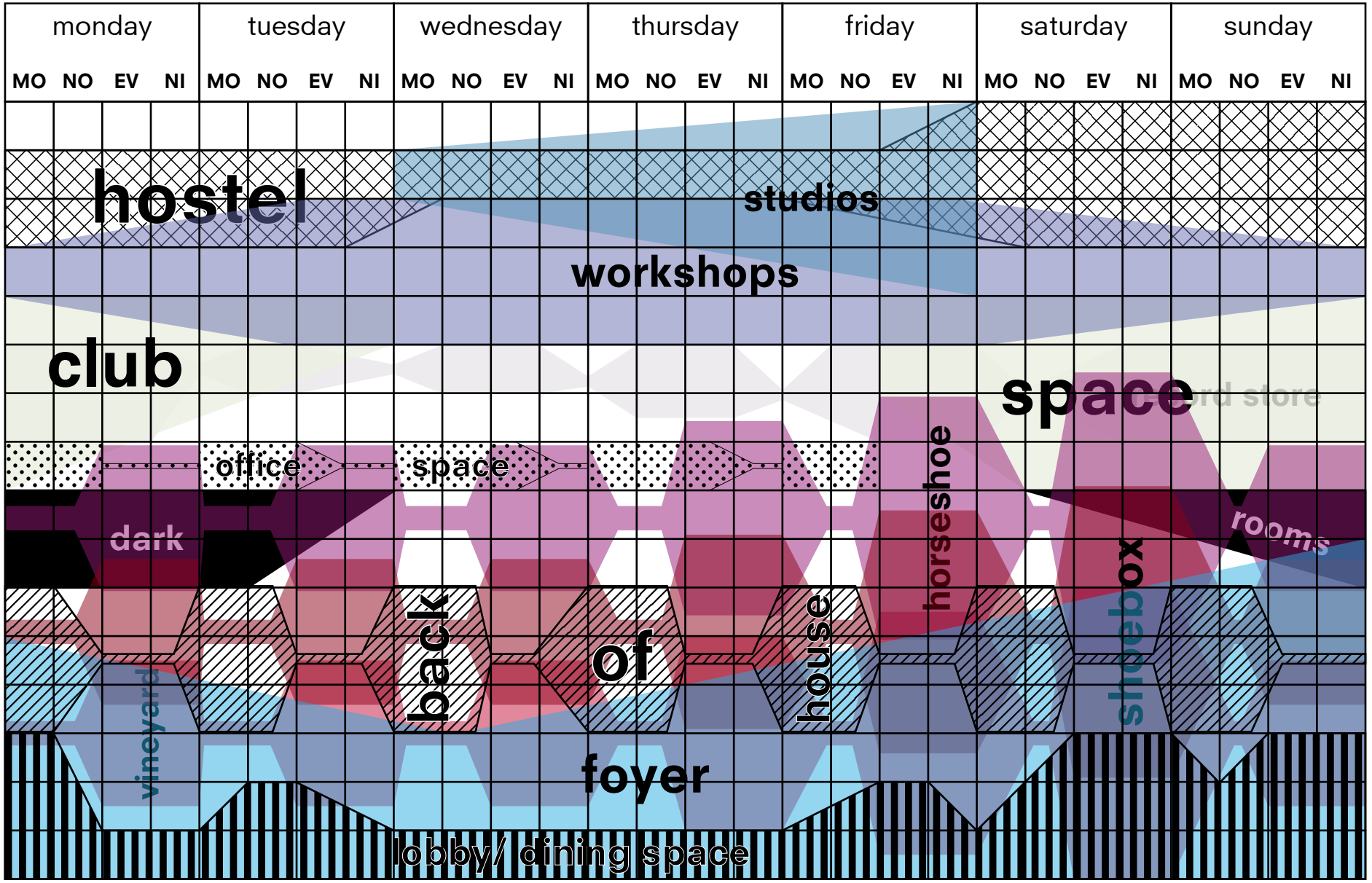
~

46.500 m²



concept

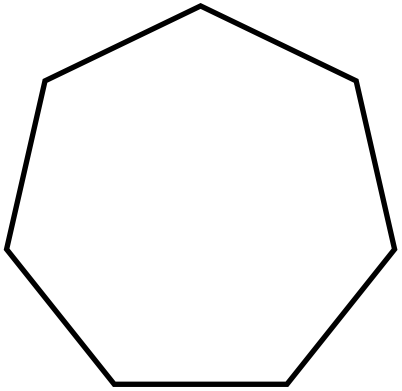
TIMETABLE



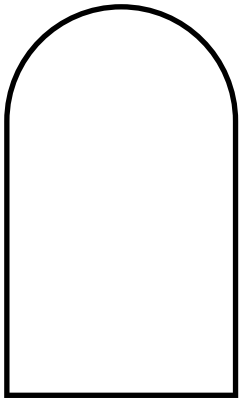
concept

MULTIPLE AUDITORIUMS

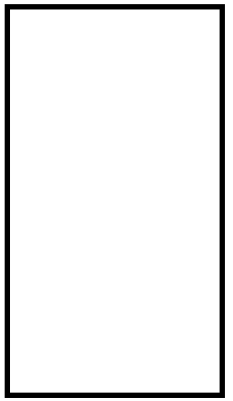
Temple of Music



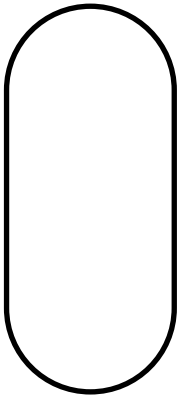
vineyard



horseshoe



shoebox



club space

concept

BERLIN PHILHARMONIC

Berlin Studio

* Philharmonic, BER.

concept

BERLIN PHILHARMONIC

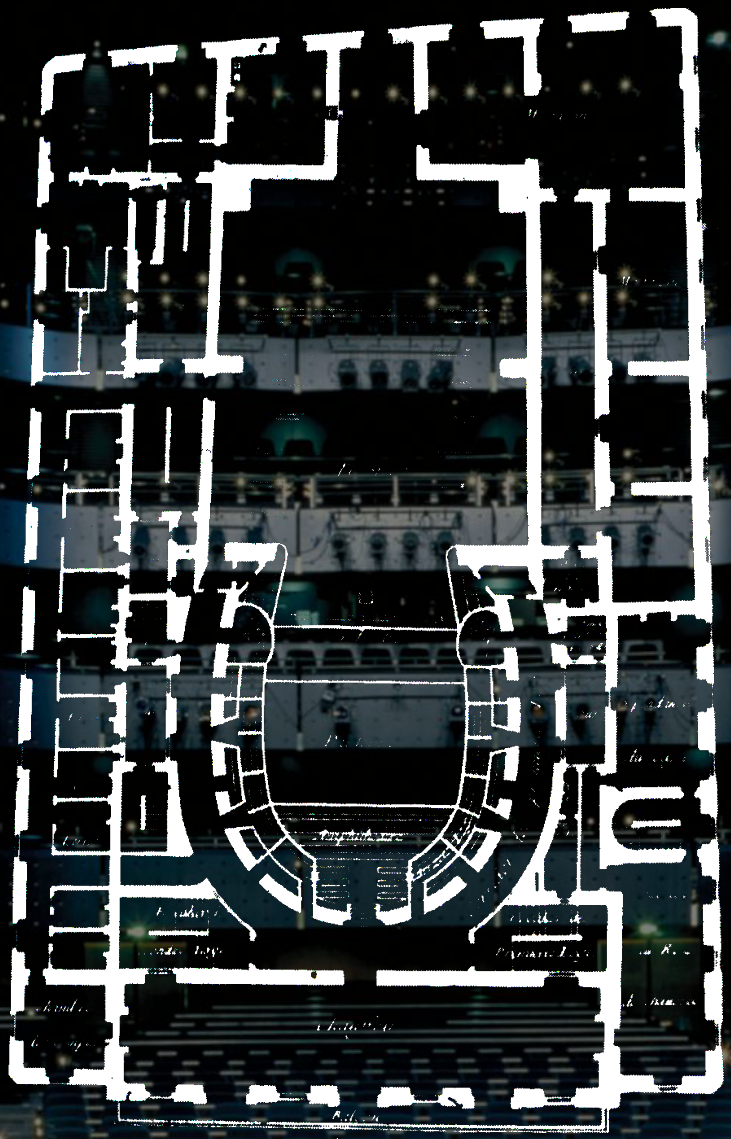
* floorplan of Philharmonic, BER.
* Philharmonic, BER.

concept

OPERA LYON

concept

OPERA LYON



* floorplan of Opera Lyon, LYO.
* Opera Nouvel, LYO.

concept

CONCERTGEBOUW

Berlin Studio

* Concertgebouw, AMS.

concept

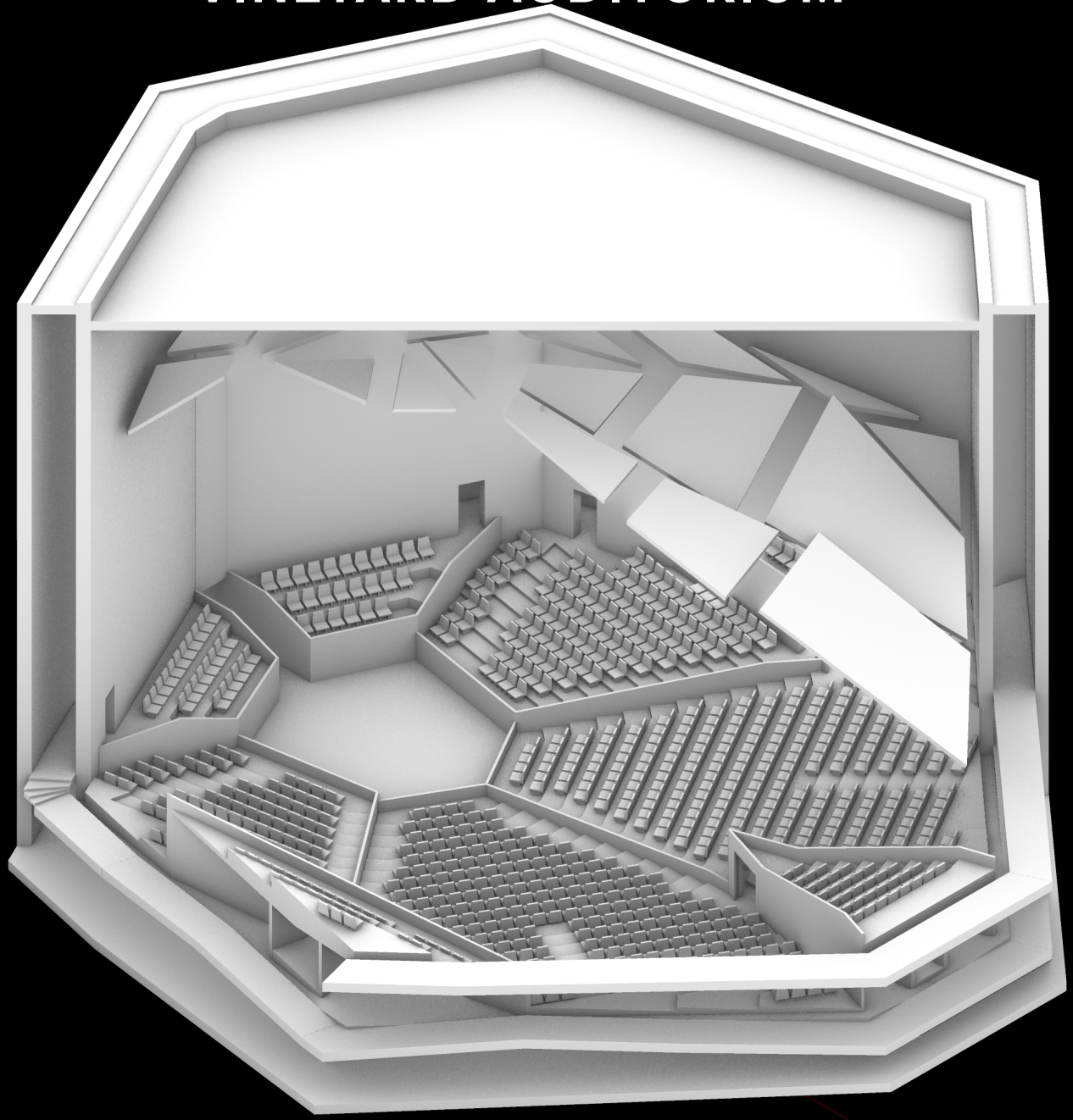
CONCERTGEBOUW

Berlin Studio

* Concertgebouw, AMS.

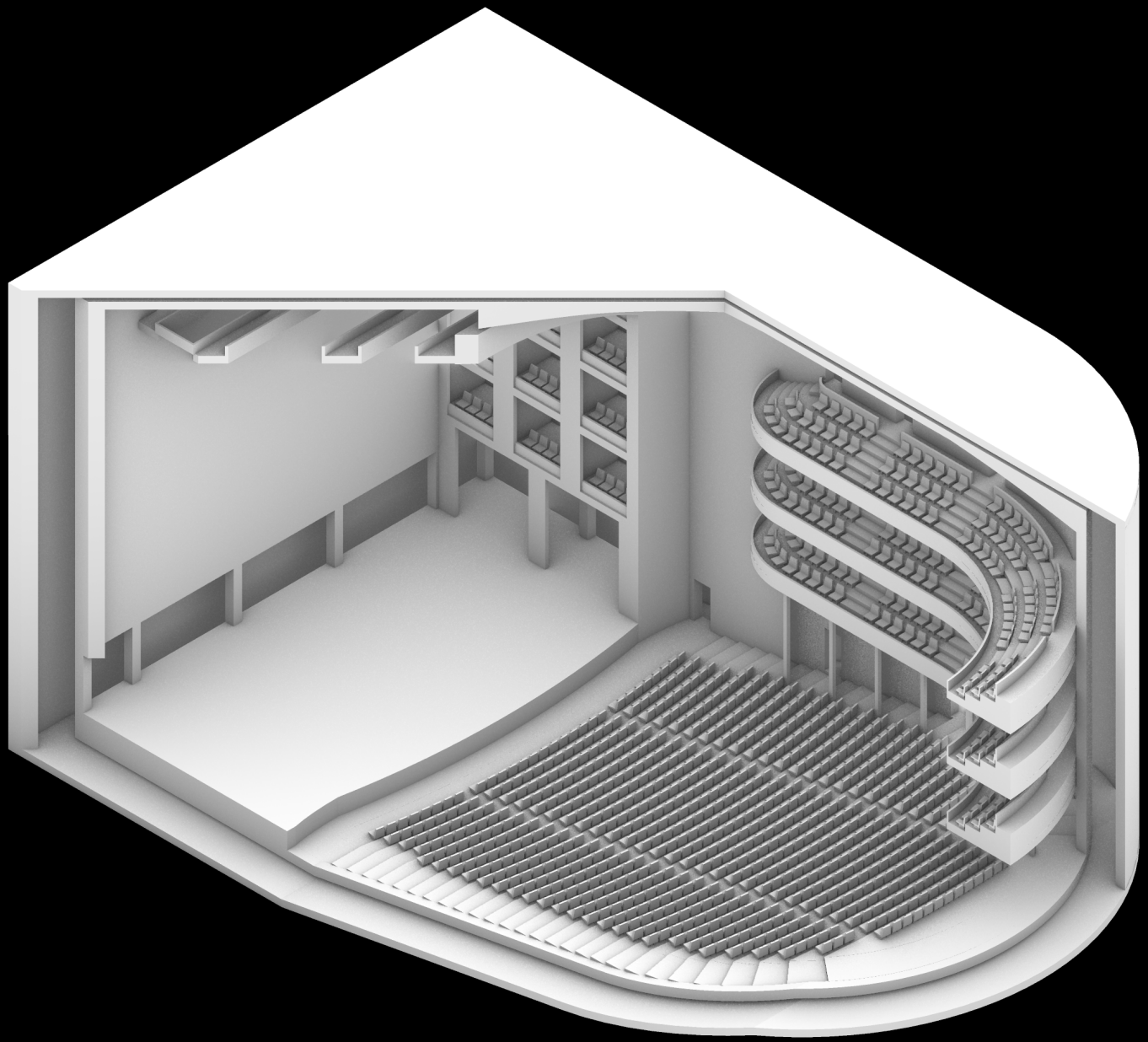
concept

VINEYARD AUDITORIUM



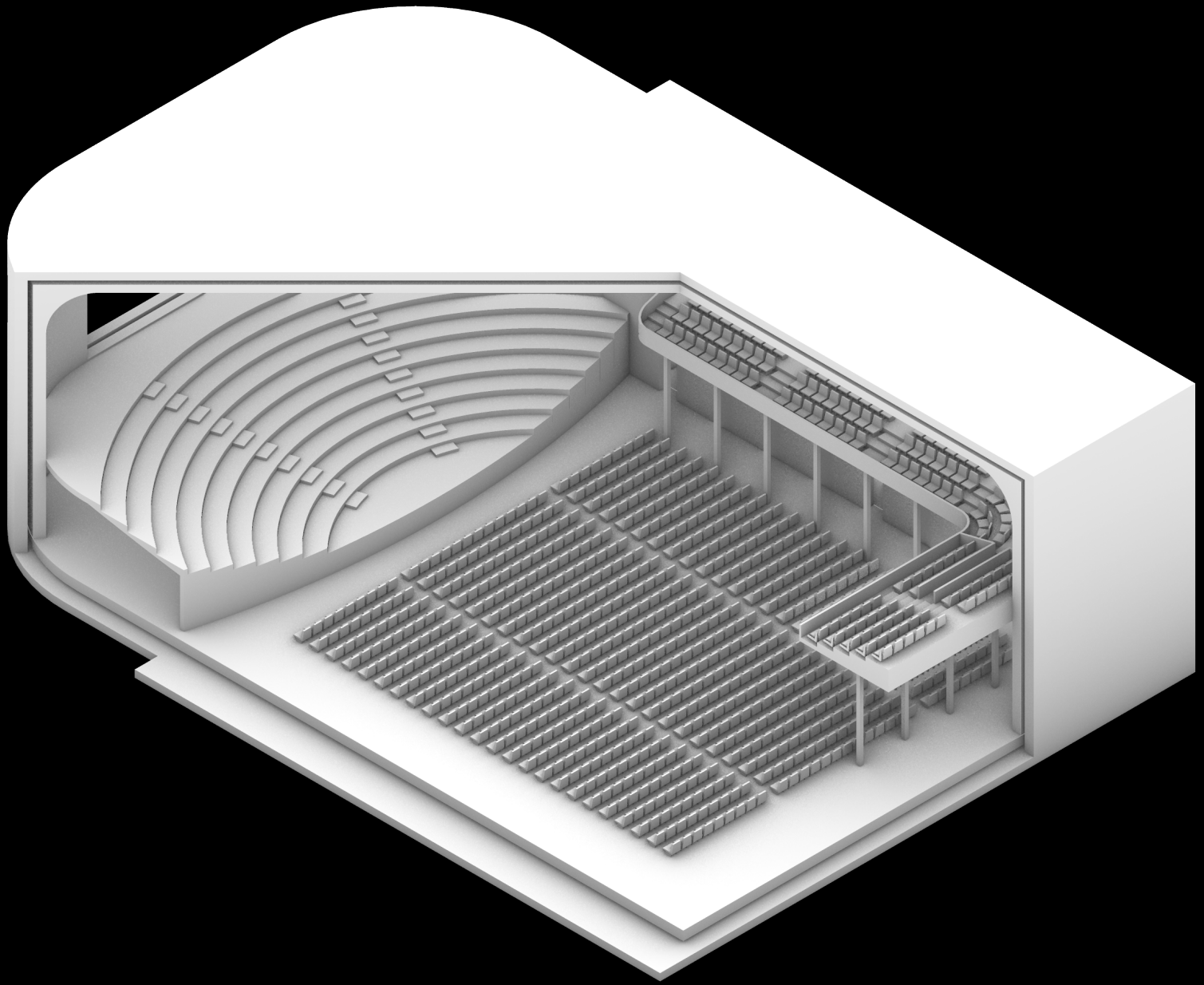
concept

HORSESHOE AUDITORIUM



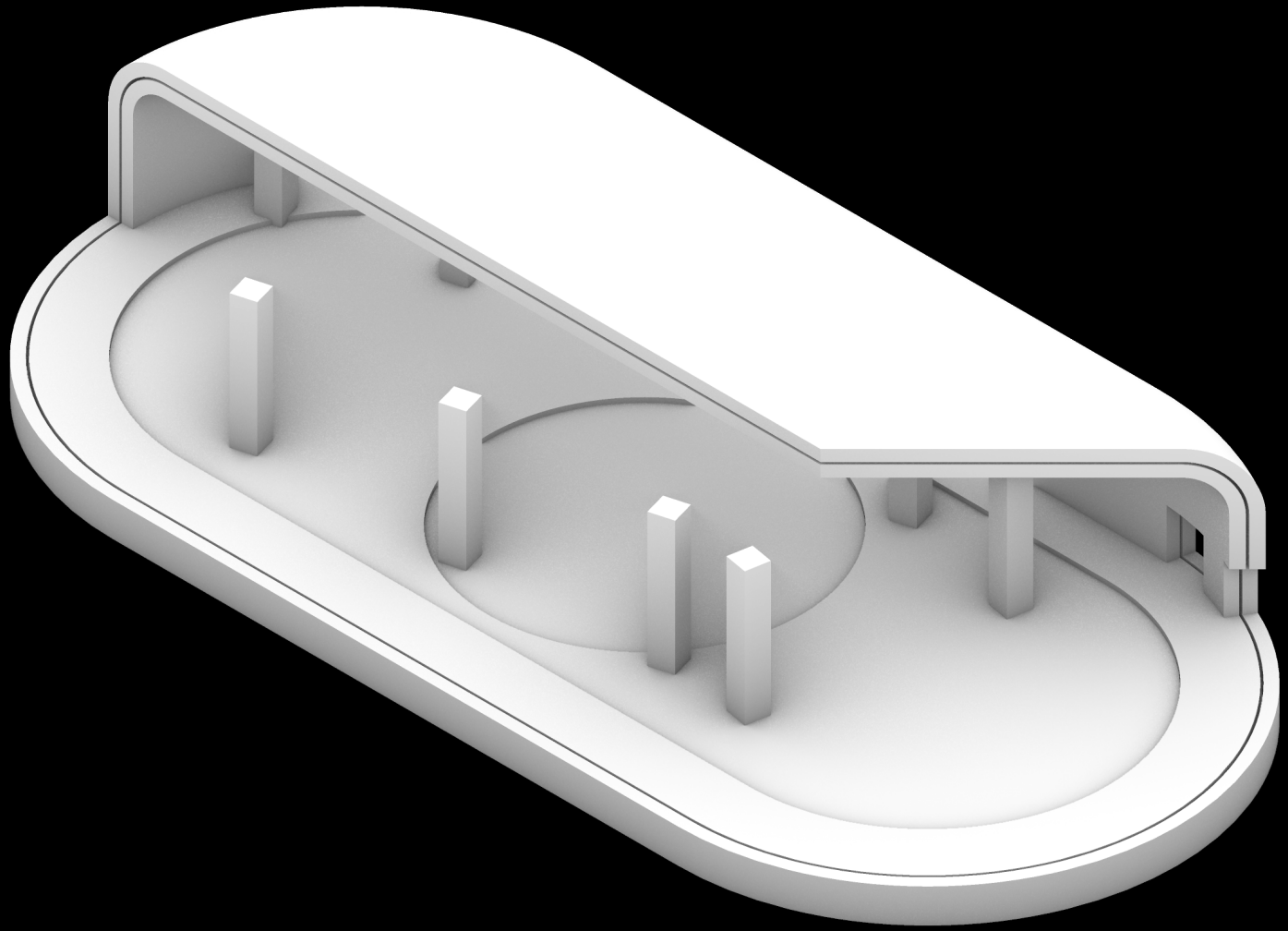
concept

SHOEBOX AUDITORIUM



concept

CLUB SPACE



concept
TRESOR

Berlin Studio

* Tresor, BER.

concept

ALL FUNCTIONS WITH AREA

33.200 m²

studio/ music lab 4.060 m²	nightclub 8.400 m²	concert hall 15.100 m²		foodcourt 900 m²	grand foyer 1.560 m²	hostel 1.630 m²	office 450 m²	record store 300 m²	entrance hall 800 m²
recording studios 240 m²	toilets 400 m²	main auditorium 2.000 m²	foyer 400 m²	dining area 200 m²	dj booth 10 m²	lobby 150 m²	toilets 100 m²	retail space 100 m²	coat check 200 m²
workshop 2.400 m²	smoking area 400 m²	auditorium 6.000 m²	educational spaces 800 m²	square 400 m²	broadcasting tower x m²	locker room 100 m²	kitchenette/ break room 50 m²	storage/ archive 200 m²	rec./ tick./ box office 100 m²
control room 120 m²	locker room 200 m²	setup areas 1.000 m²	rehearsal rooms 800 m²	kitchen 100 m²	server room 50 m²	storage 100 m²	office space 300 m²		hall 500 m²
lounge 400 m²	lounge 800 m²	control room 250 m²	green room 800 m²	storage 100 m²	bar 50 m²	laundry facility 200 m²			
foyer 200 m²	artist lounge 100 m²	storage 1.000 m²	artist toilet 500 m²	toilets 100 m²	kitchen 50 m²	sleeping acc. 500 m²			
storage 400 m²	hall 6.000 m²	meeting rooms 400 m²	dressing rooms 250 m²		storage 200 m²	bathrooms 500 m²			
toilets 300 m²	bar 300 m²	toilets 500 m²			hall 1.000 m²	toilets 80 m²			
	storage 200 m²	lobby 400 m²							

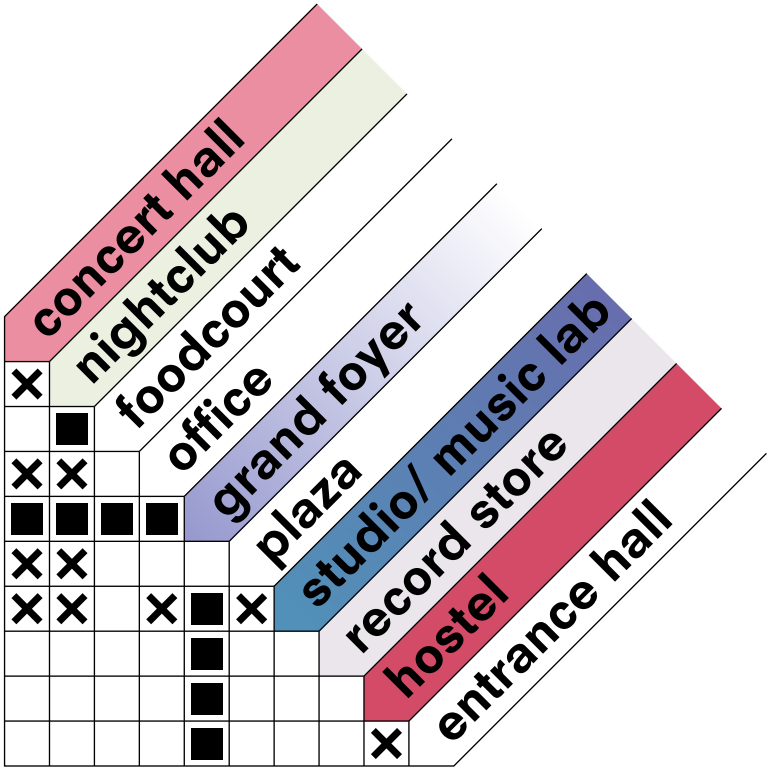
concept

RELATION SCHEME

■ should relate

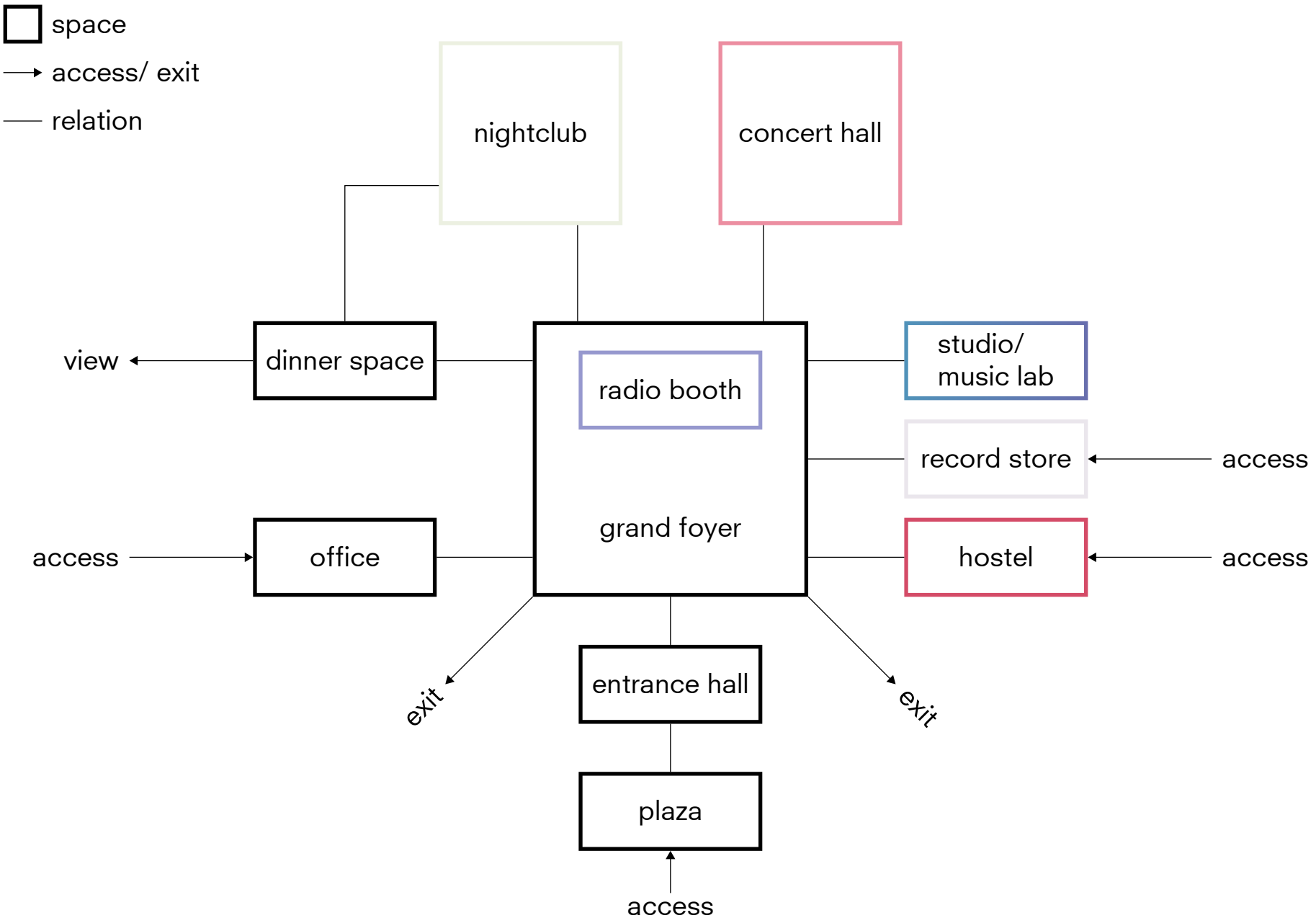
✕ shouldn't relate

□ doesn't matter



concept

BUBBLE DIAGRAM



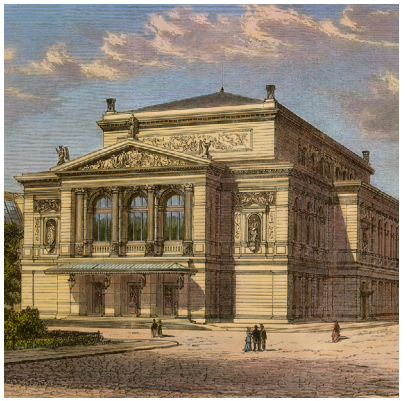
concept

MASSING REFERENCES

Opera Garnier

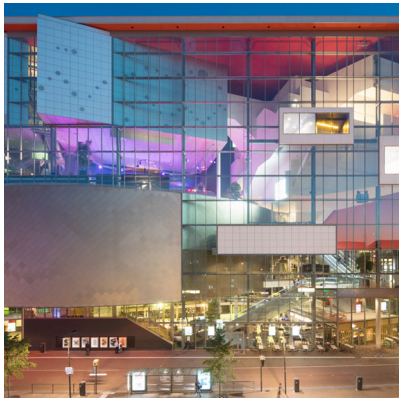
Hungarian State Opera

Neues Gewandhaus Leipzig



TPAC

Tivoli



Casa da Musika

Berghain

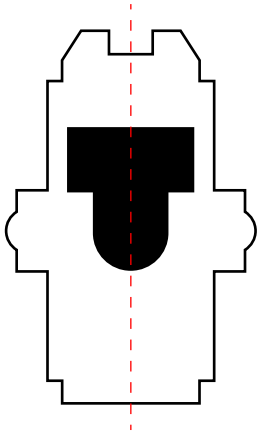
Maassilo

Tresor

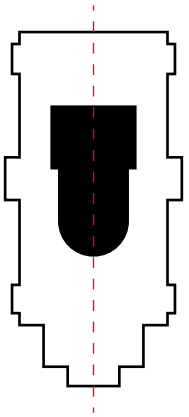
concept

KEY SPACE CONFIGURATION

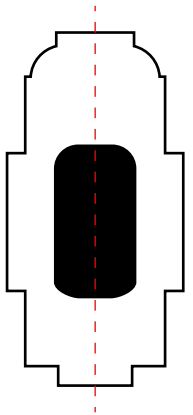
Opera Garnier



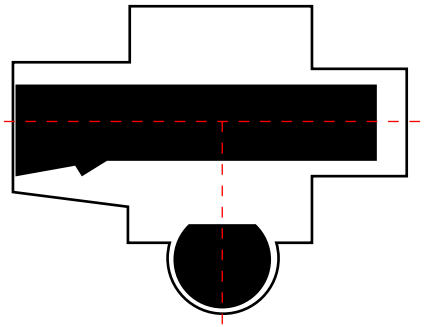
Hungarian State Opera



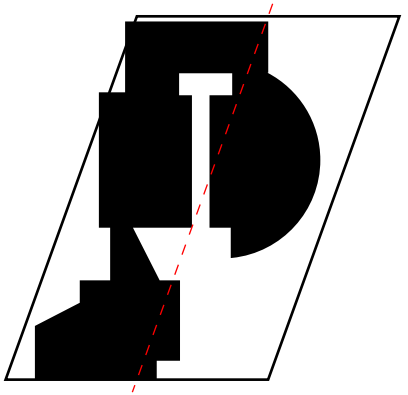
Neues Gewandhaus Leipzig



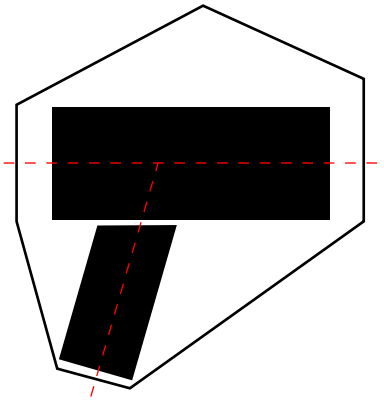
TPAC



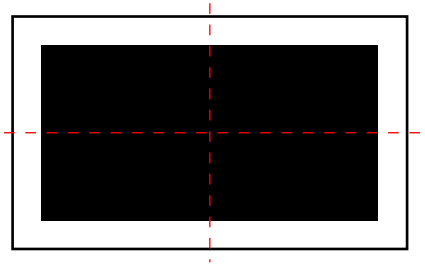
Tivoli



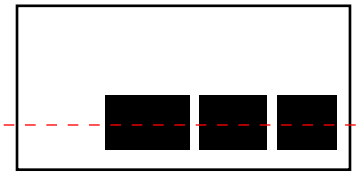
Casa da Musika



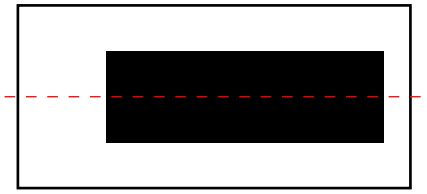
Berghain



Maassilo

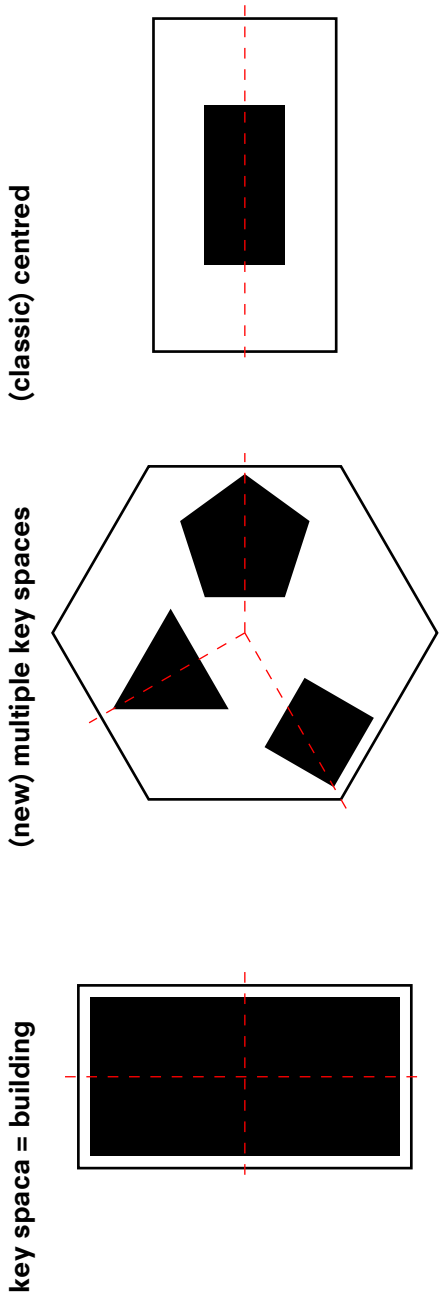


Tresor



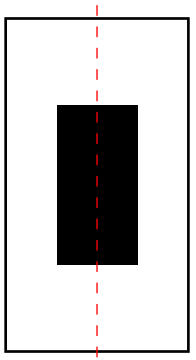
concept

ABSTRACTION

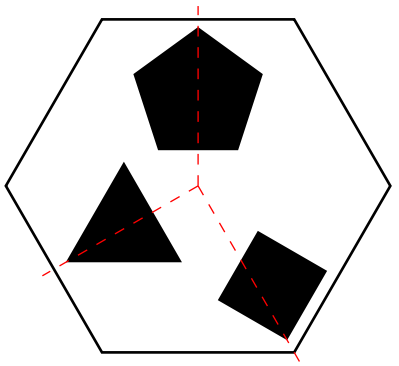


concept

COMBINATION



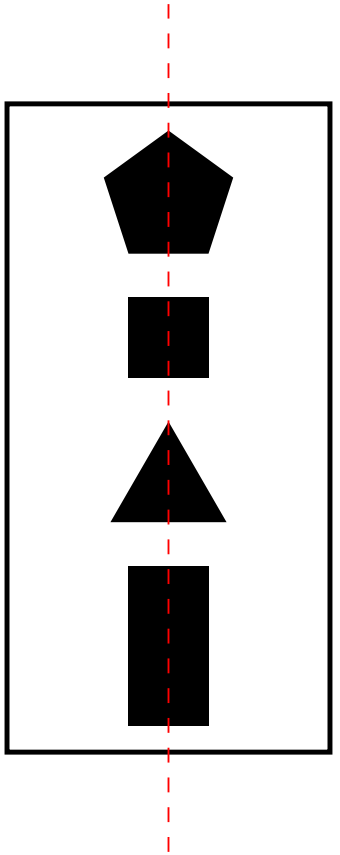
old configuration



new configuration

concept

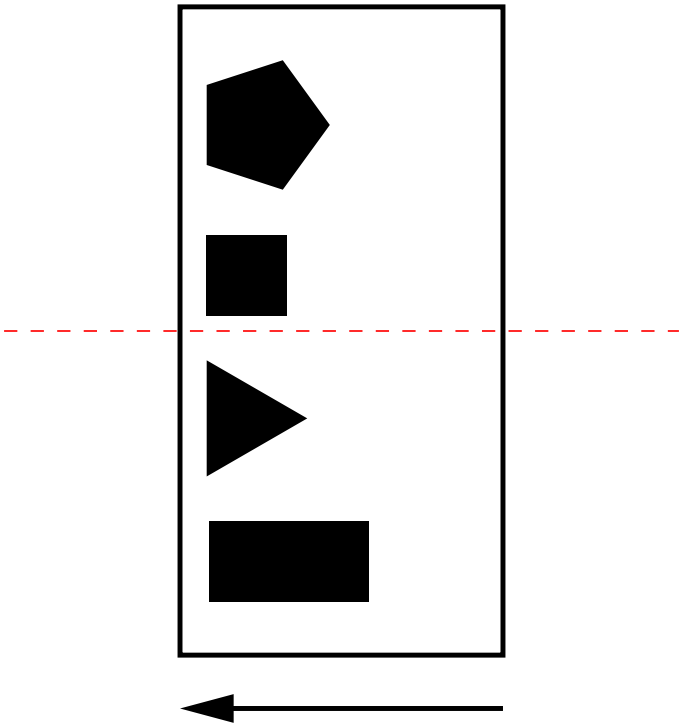
COMBINATION



building configuration

concept

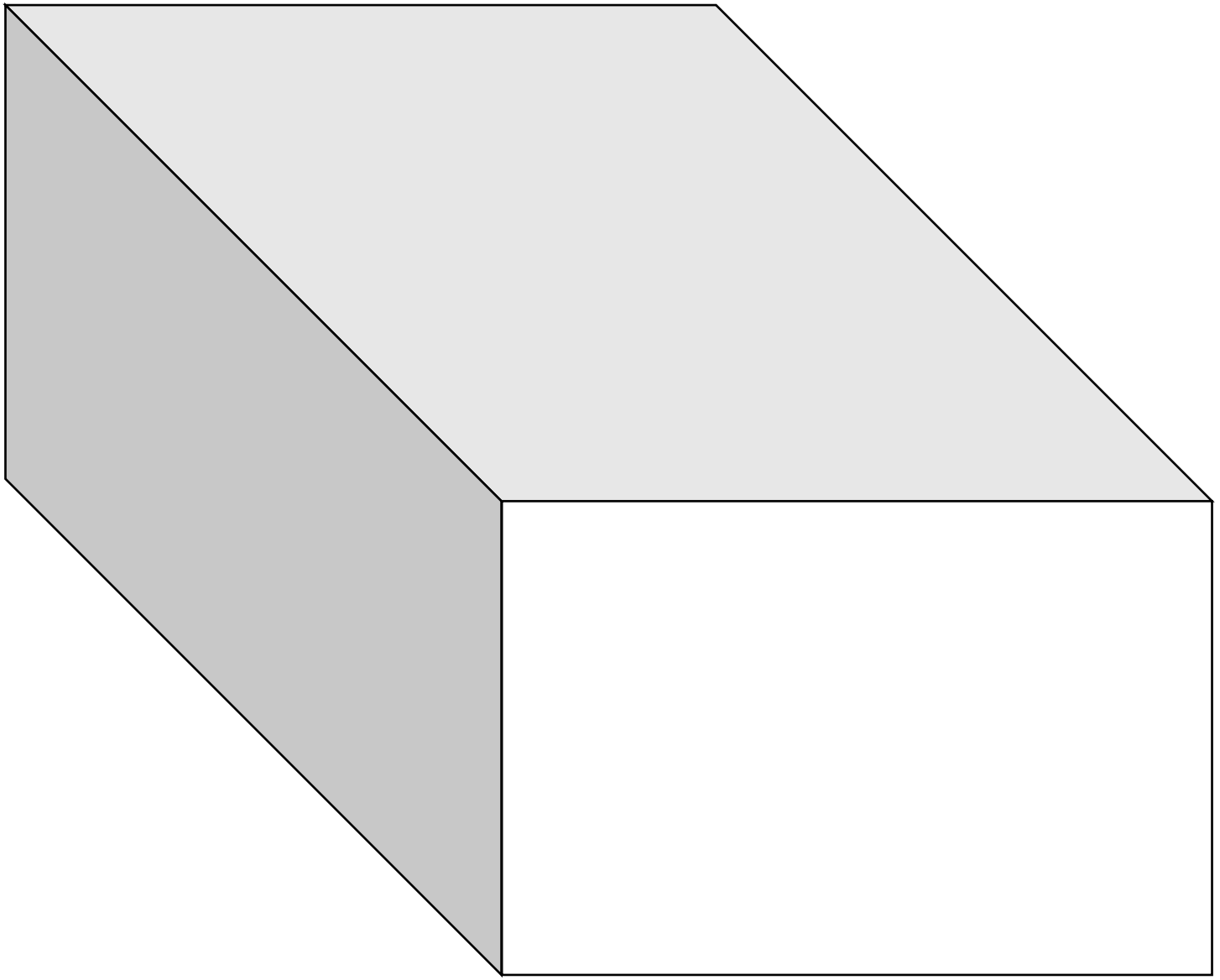
SLIDE



updated configuration

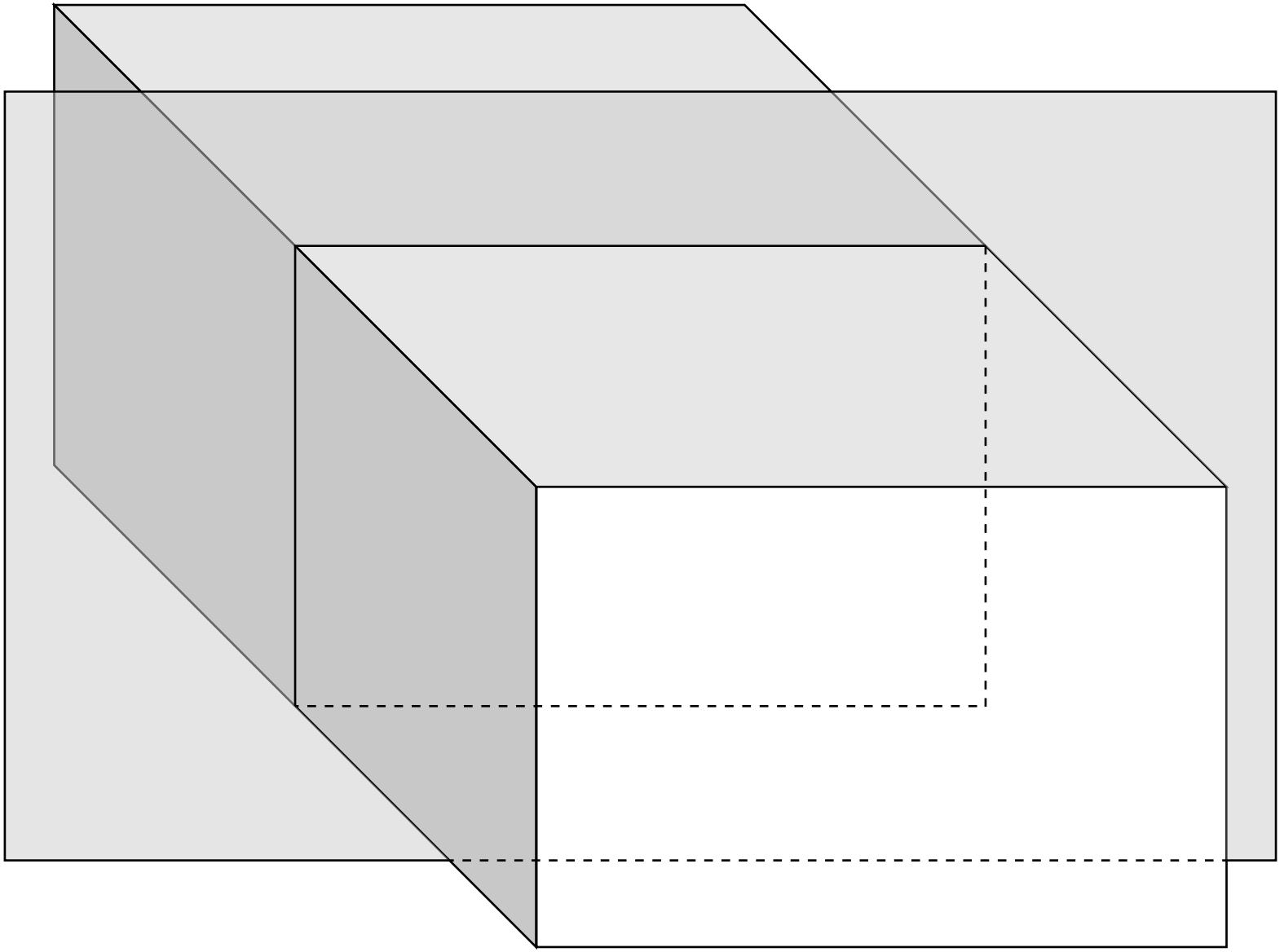
concept

MONOLITH



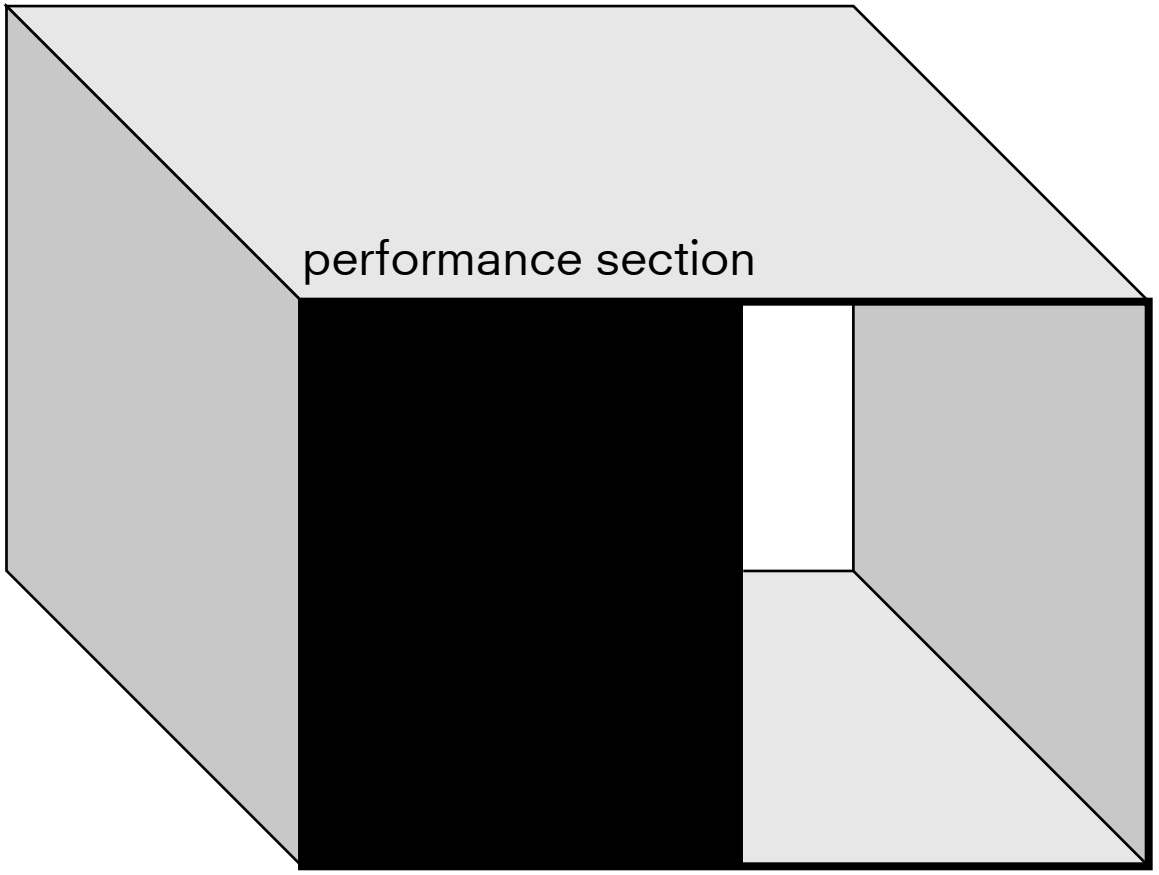
concept

CUT



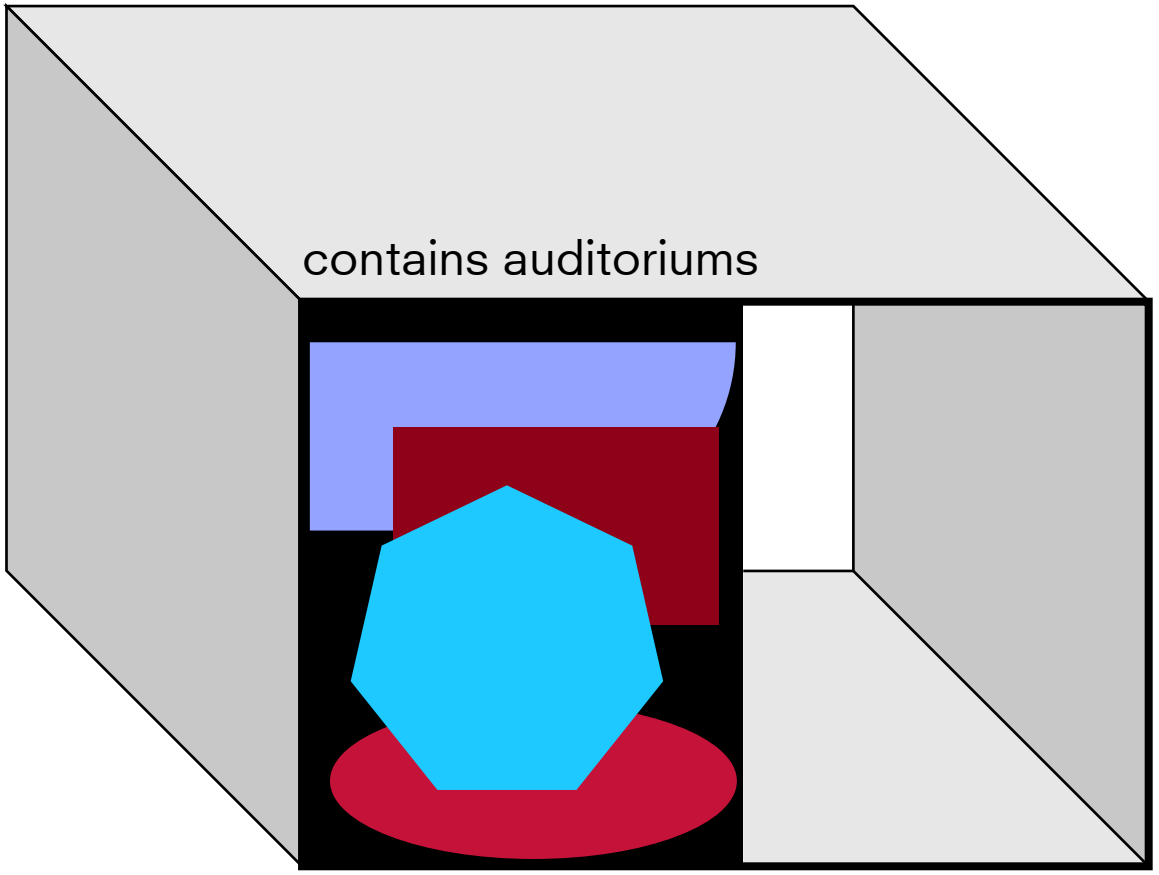
concept

INTERNAL CONCEPT



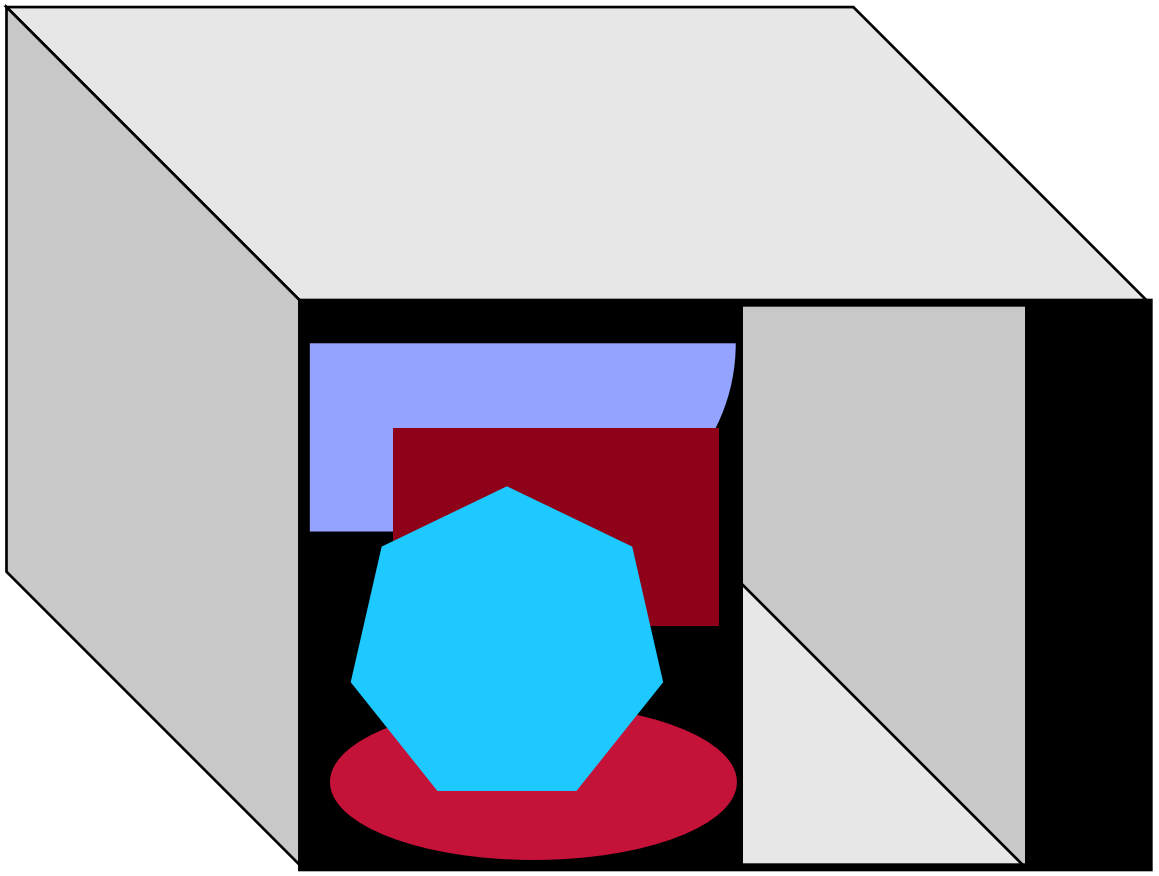
concept

INTERNAL CONCEPT



concept

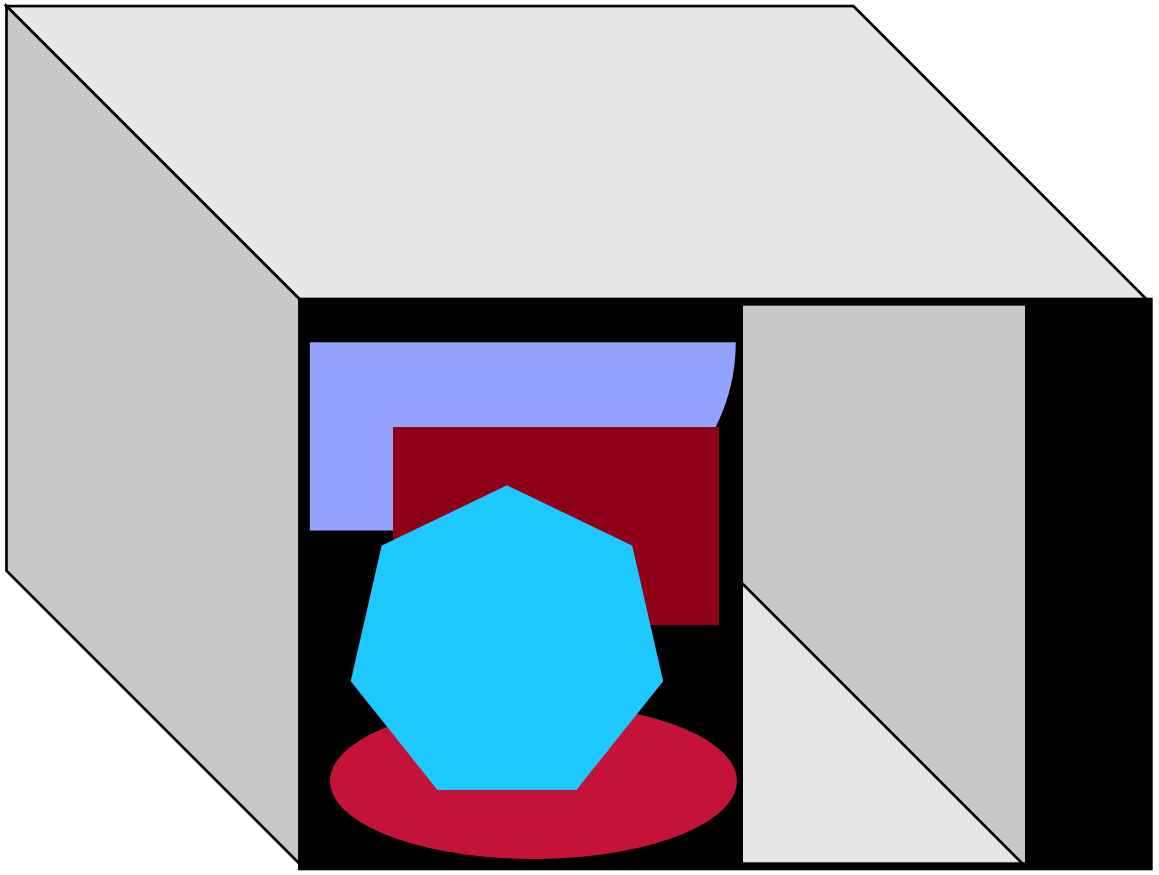
INTERNAL CONCEPT



supportive
section

concept

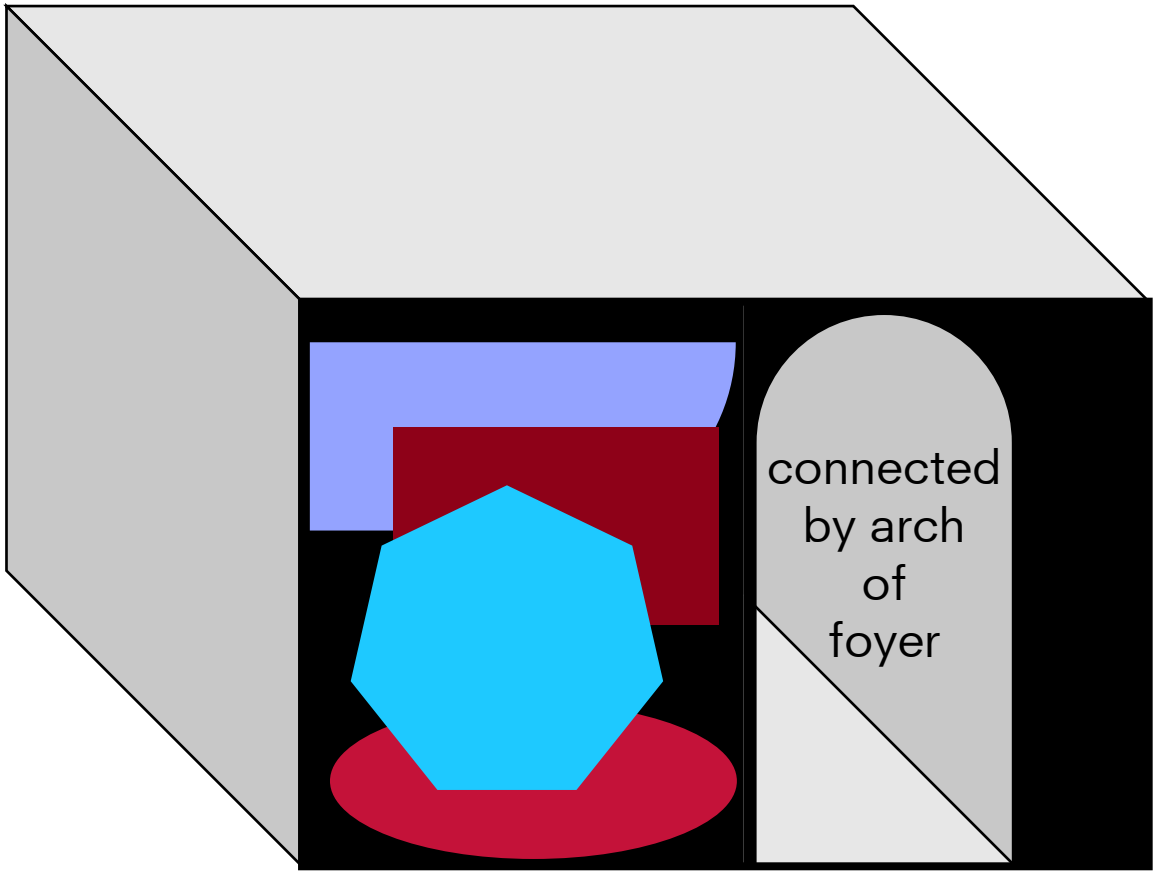
INTERNAL CONCEPT



contains
hostel
record store
office
studio spaces
workshops

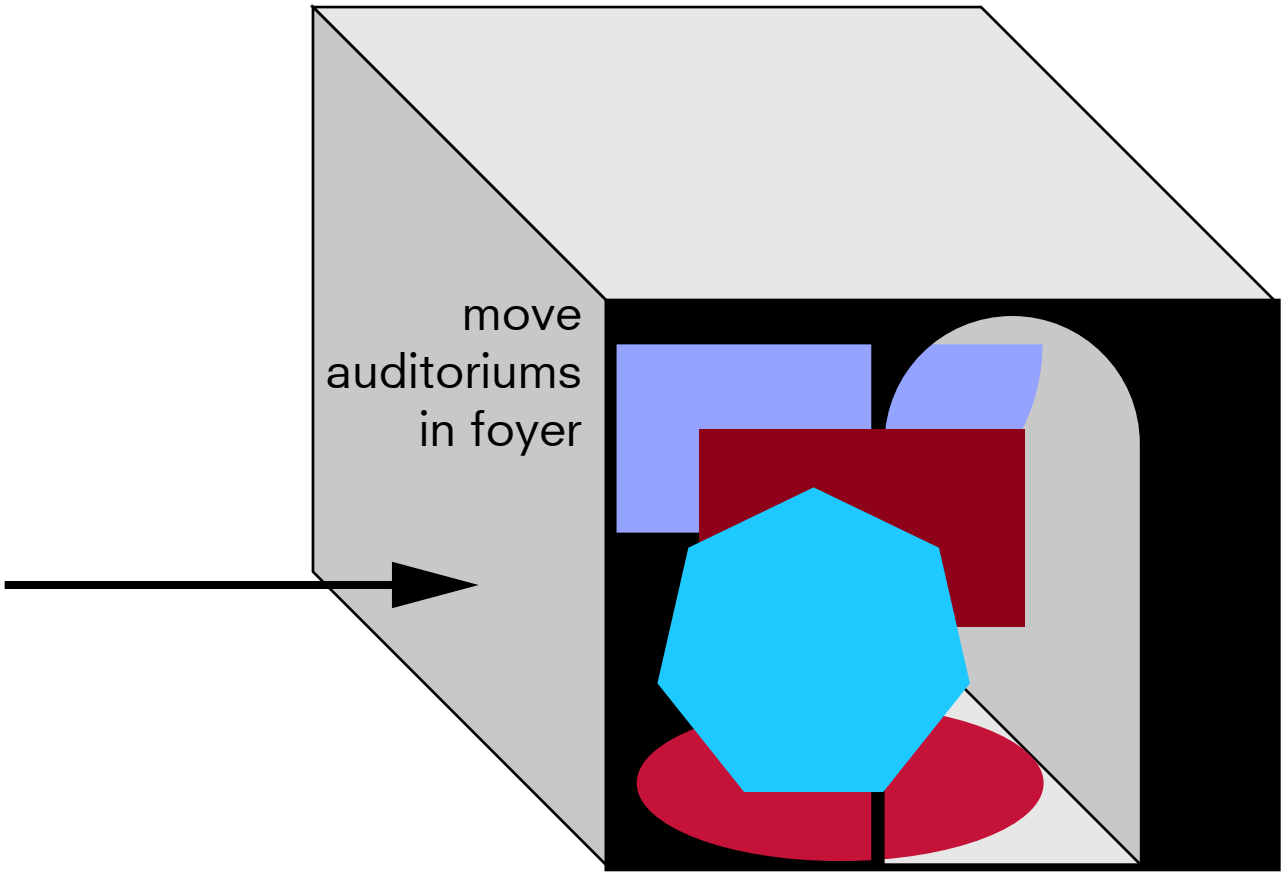
concept

INTERNAL CONCEPT



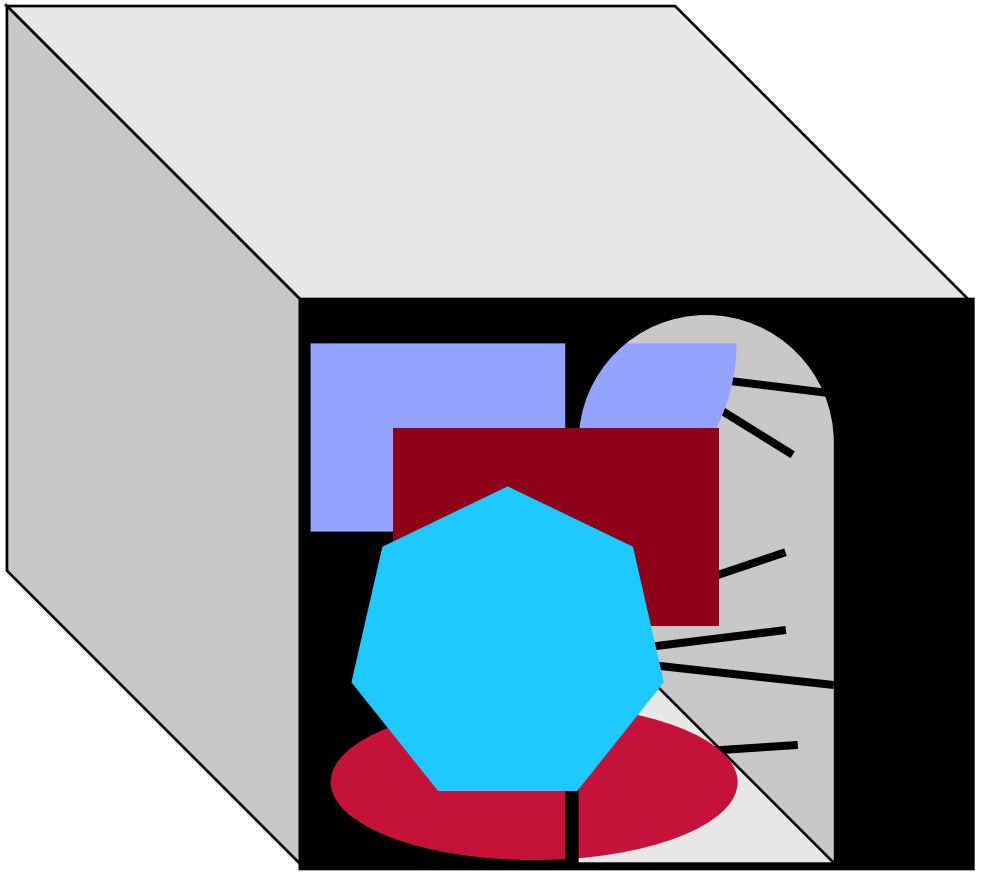
concept

INTERNAL CONCEPT



concept

INTERNAL CONCEPT



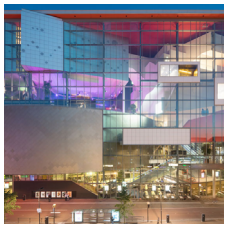
connect
with
walking bridges

concept

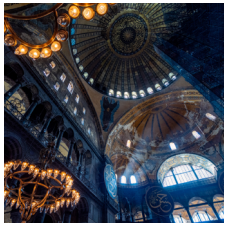
FOYER

PROJECTS ANALYSED

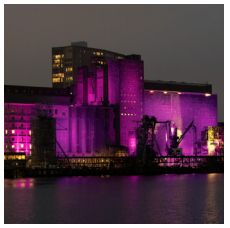
Opera Garnier, PAR
TPAC, TAI
Staatsoper, BER
Tivoli Vredenburg, UTR
Concertgebouw, AMS
Kölner Dom, COL

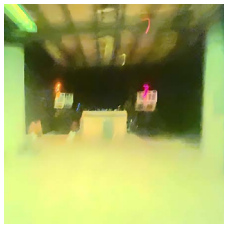


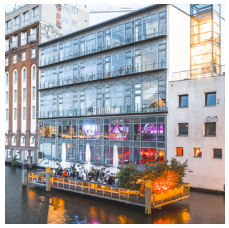
Borgund Stave Church, BOR
Basilica Sancti Petri, ROM
Church of the Resurection, JER
Pantheon ROM
Hagia Sophia, IST
Umayyad Mosque, DAM



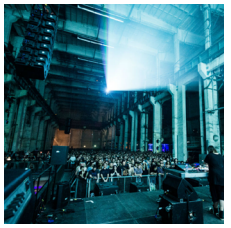
Laxminarayan Mandir, DEL
Kinryu-an Senso-Ji, TOK
Taipei Confusius Temple, TAI
Maassilo, ROT
Berghain, BER
Club LAAK, HAG







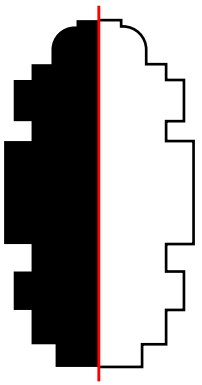
Watergate, BER
De School, AMS
PIP, HAG
RSO Berlin, BER
Tresor, BER
Fabric, LON



concept

MASSING AMBITIONS

symmetry

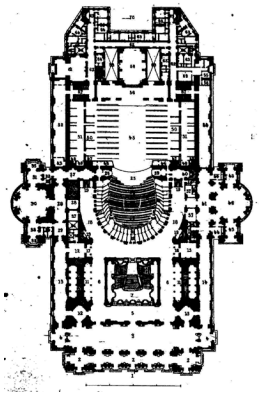


monolithic

grandeur

introvert

classic shape

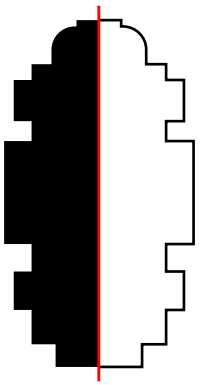


plinth/ lifted

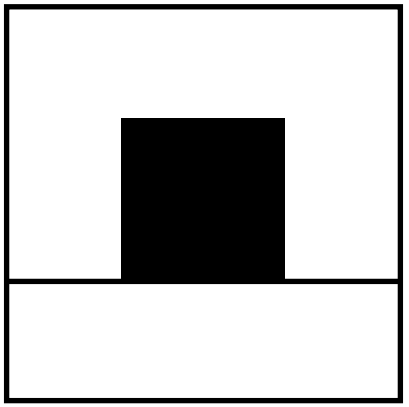
concept

MASSING AMBITIONS

symmetry



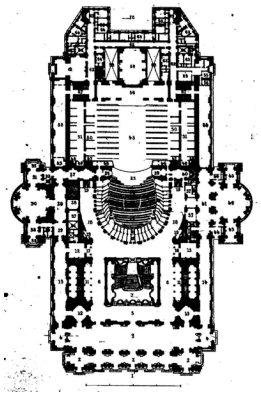
monolithic



grandeur

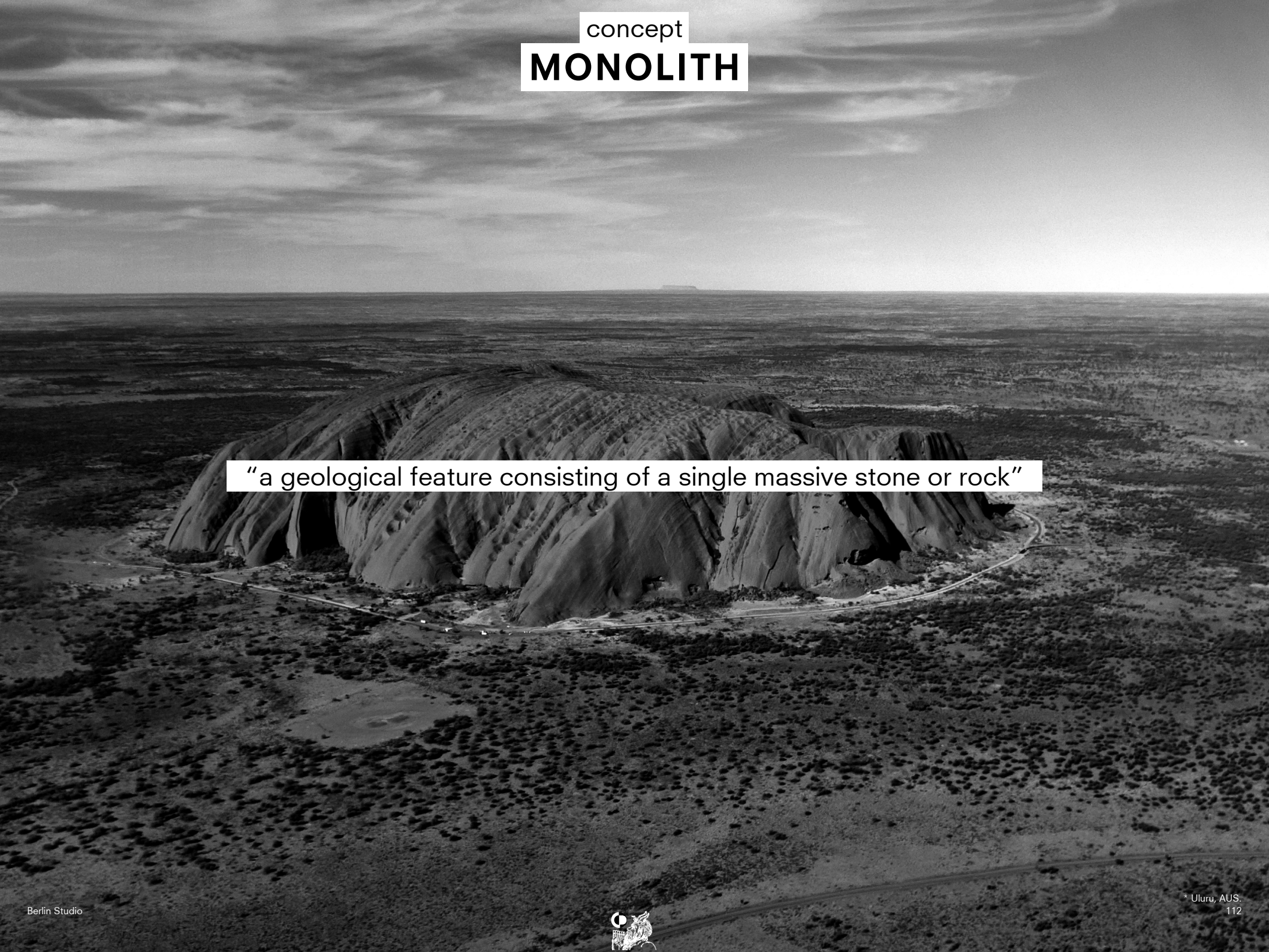
introvert

classic shape



plinth/ lifted

concept
MONOLITH



"a geological feature consisting of a single massive stone or rock"

* Uluru, AUS.

BRICK MONOLITH

* Shakespearean theatre, GDA.

concept

MONOLITH

CONCRETE MONOLITH

* flak tower VI, WIL 114

concept

MONOLITH

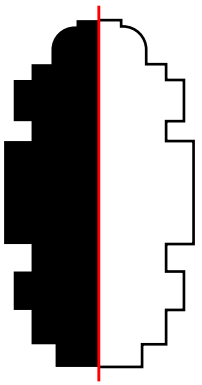
GLASS MONOLITH

* Delftse Poort, ROT 115

concept

MASSING AMBITIONS

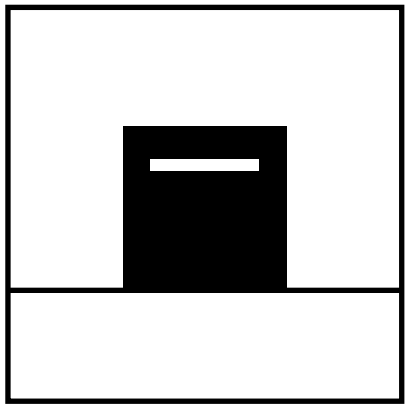
symmetry



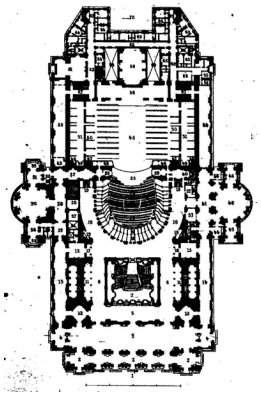
monolithic

grandeur

introvert



classic shape



plinth/ lifted

SHROUDED MONOLITH

* L'Arc de Triomphe, Wrapped, Christo, Jeanne-Claude, PAR.

concept

FACADE

concept

STEEL MESH

concept

MONOLITH

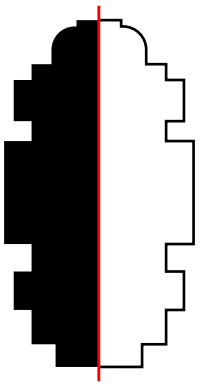
concept

DRAPED WITH CLOTH

concept

MASSING AMBITIONS

symmetry

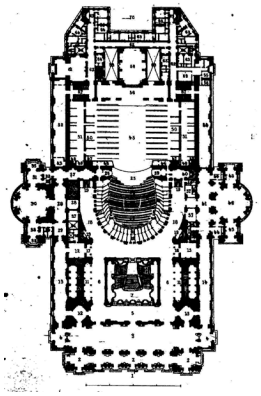


monolithic

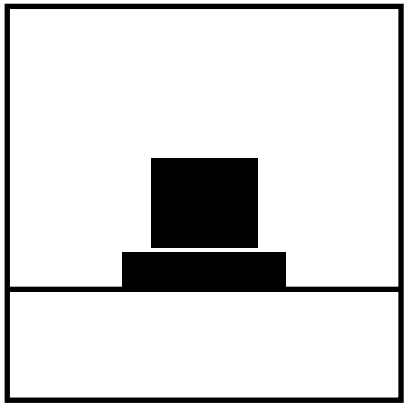
grandeur

introvert

classic shape

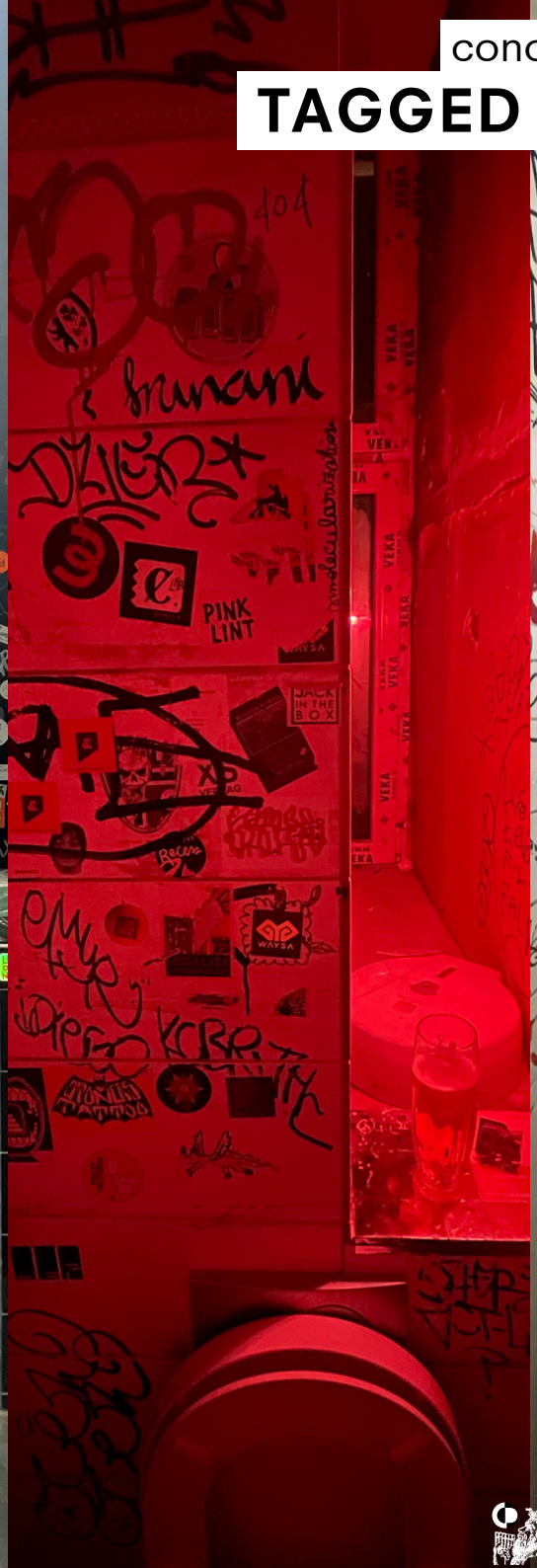


plinth/ lifted



concept

TAGGED TOILETS



concept

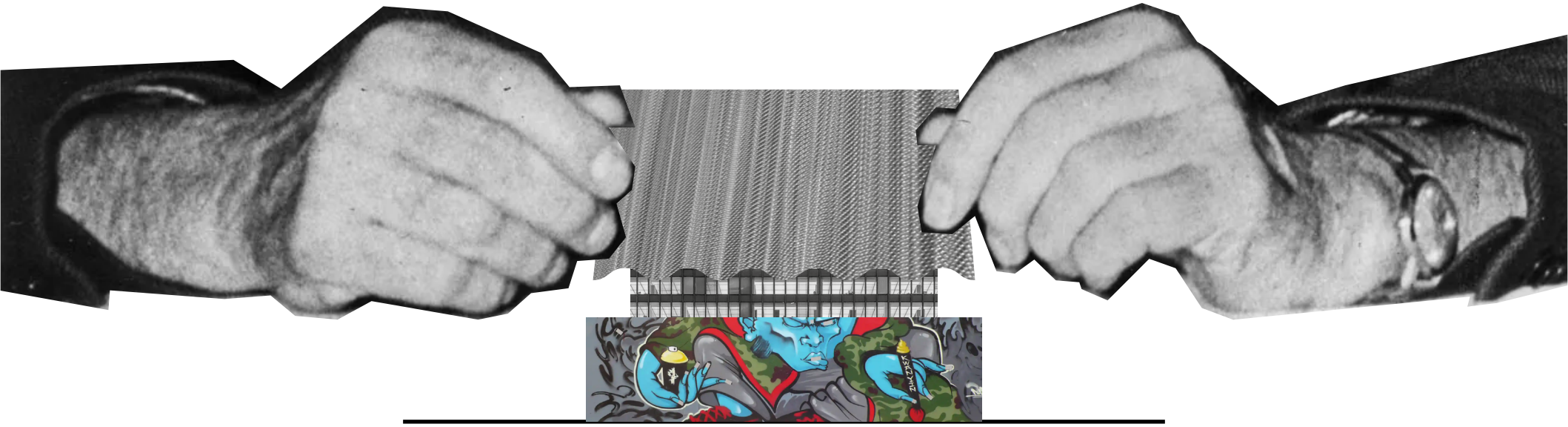
SPRAYED STREETS

Berlin Studio

* google streetview

concept

SET ON PLINTH



~~INTRODUCTION~~

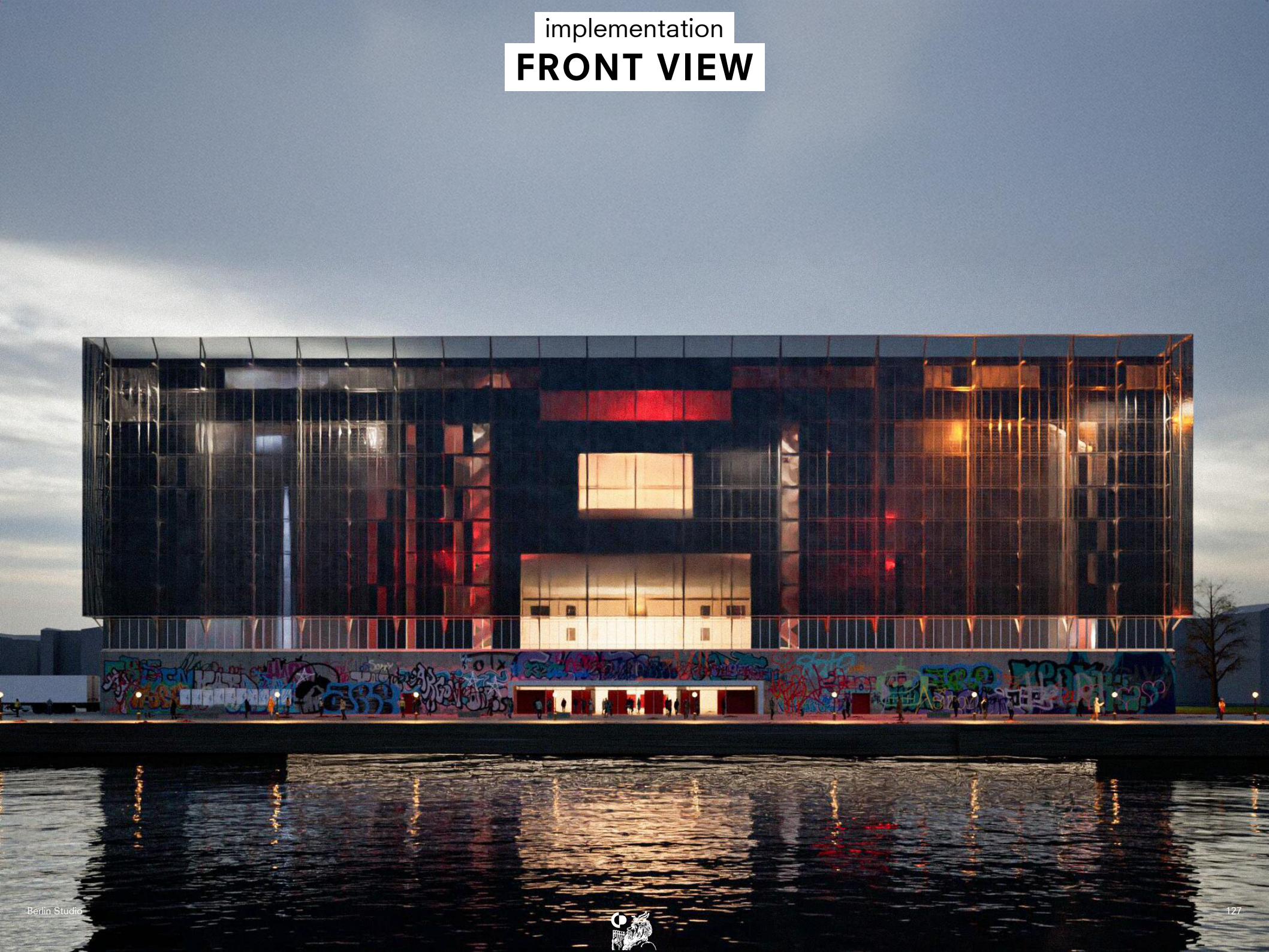
~~CONCEPT~~

IMPLEMENTATION

CONCLUSION

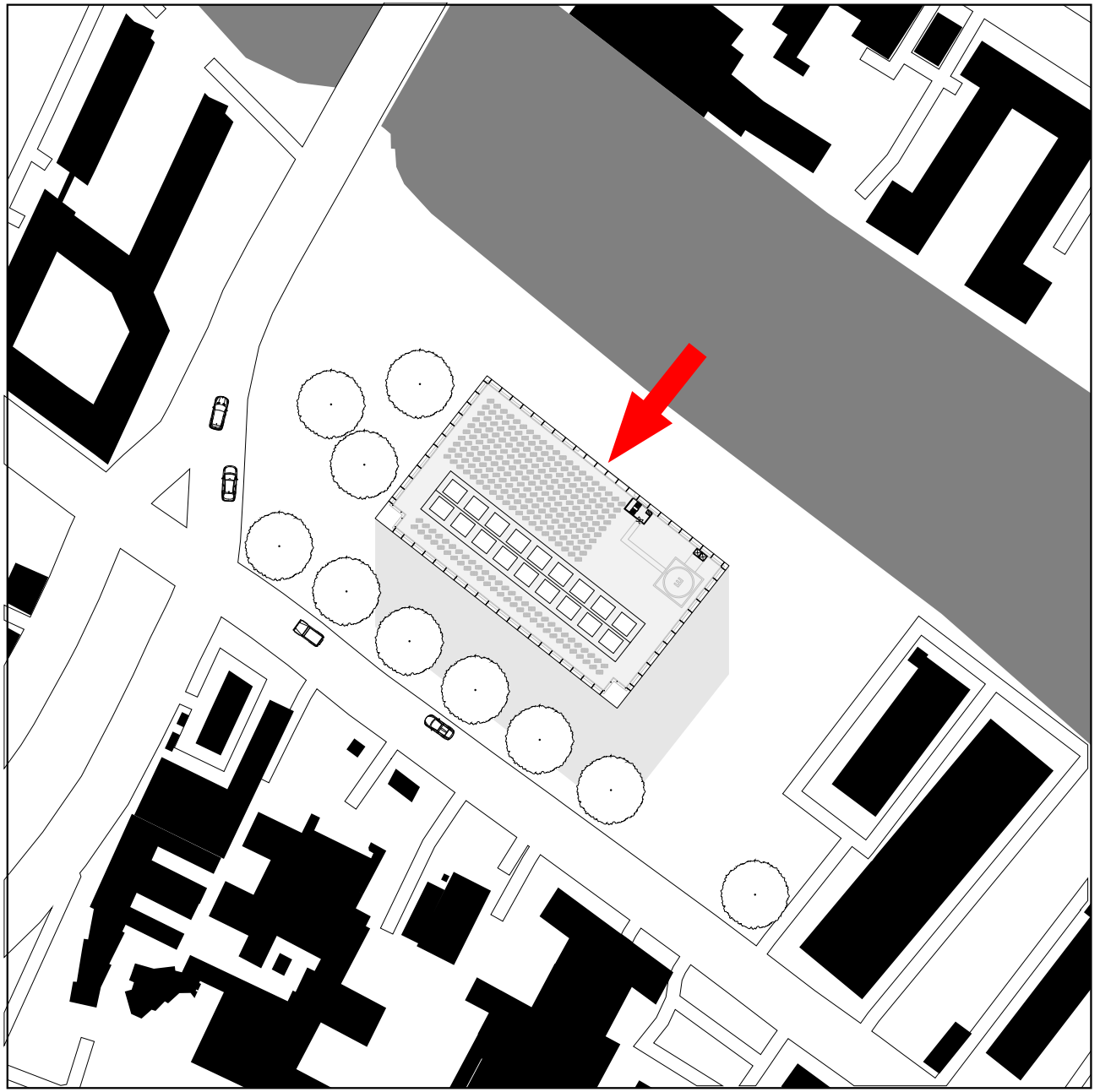
implementation

FRONT VIEW



implementation

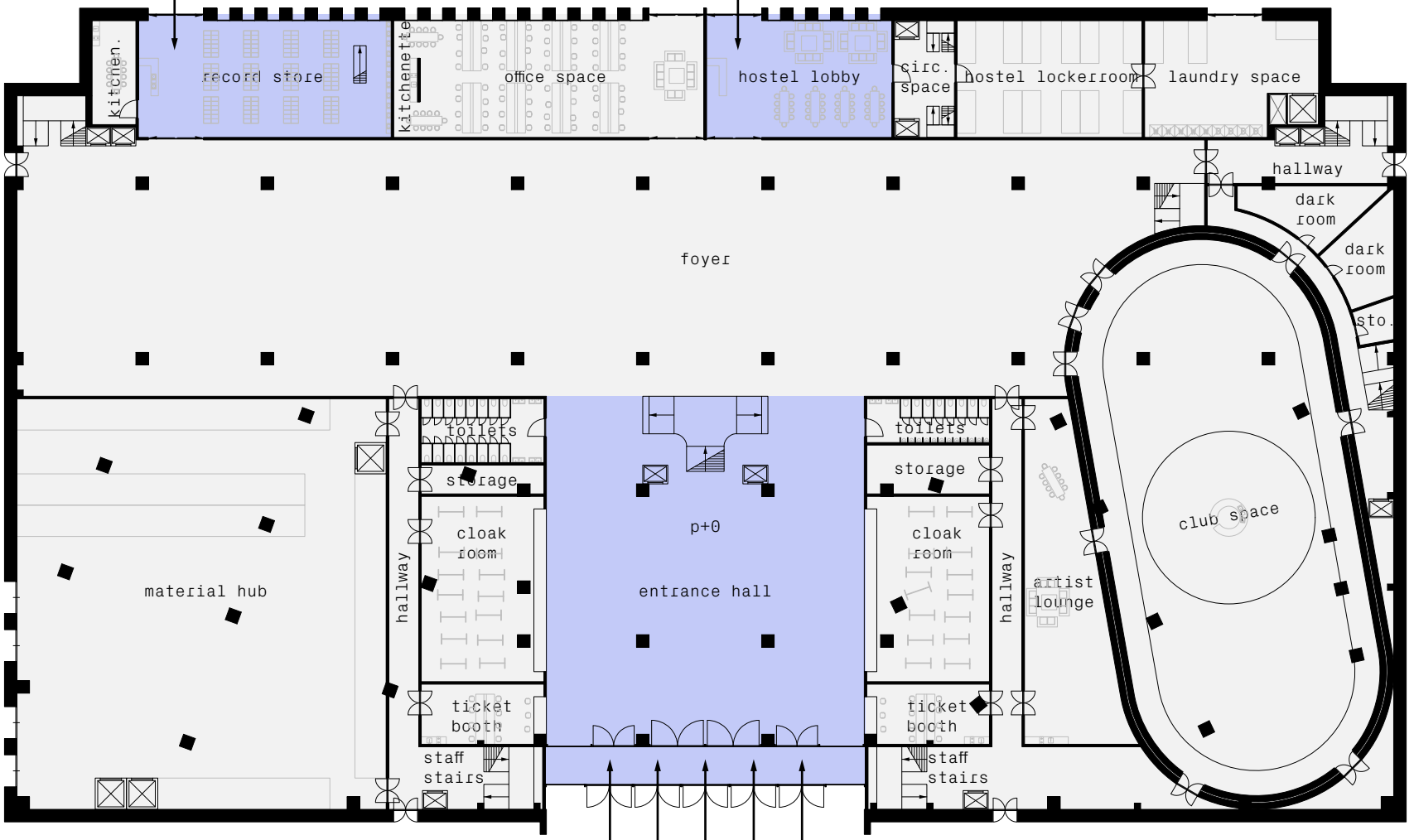
SITE PLAN



50m 20m 20m 10m

implementation

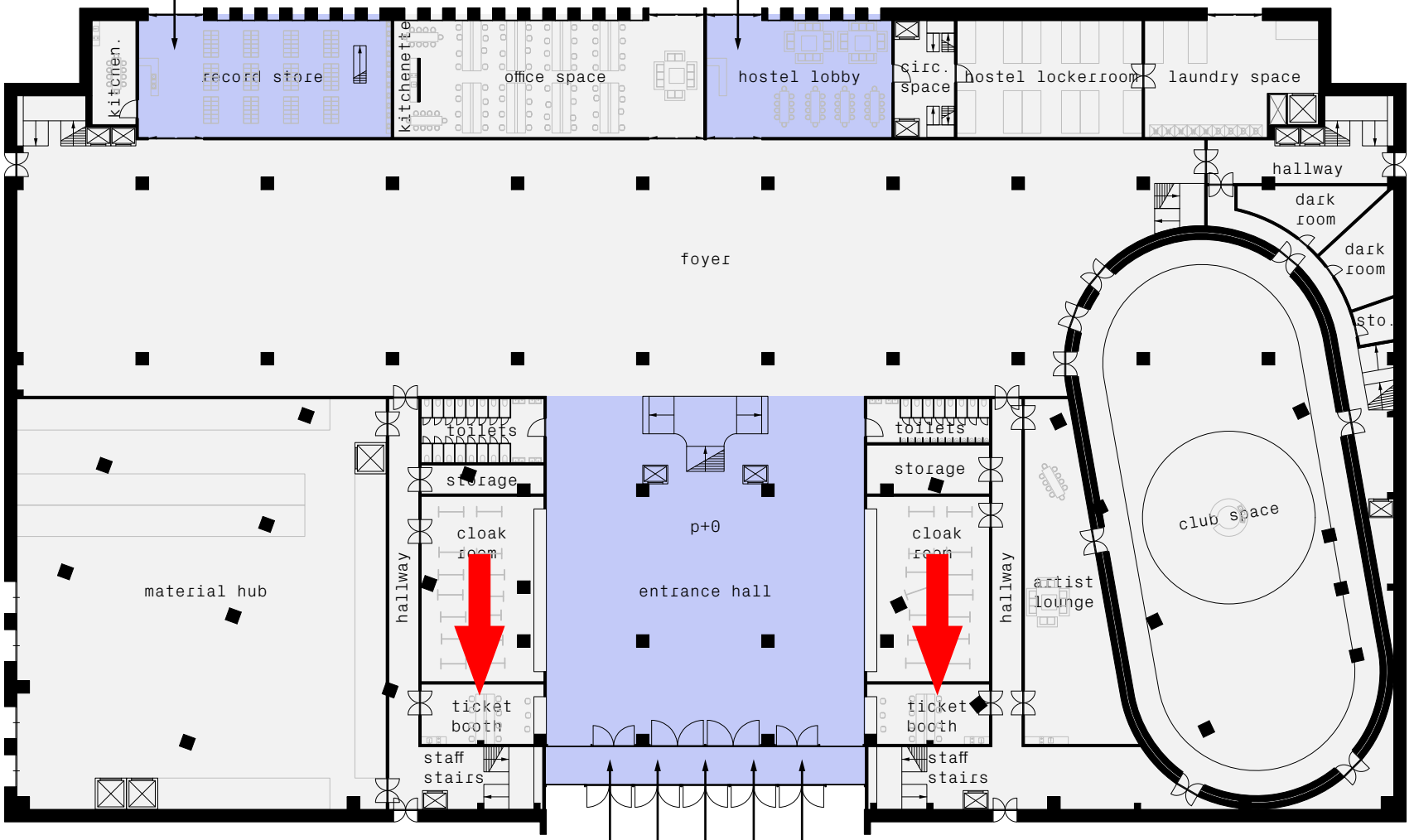
ENTRANCES

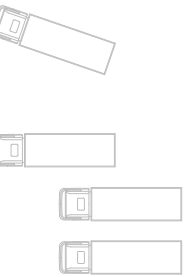


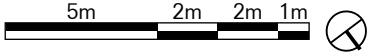
5m 2m 2m 1m

implementation

ENTRANCES

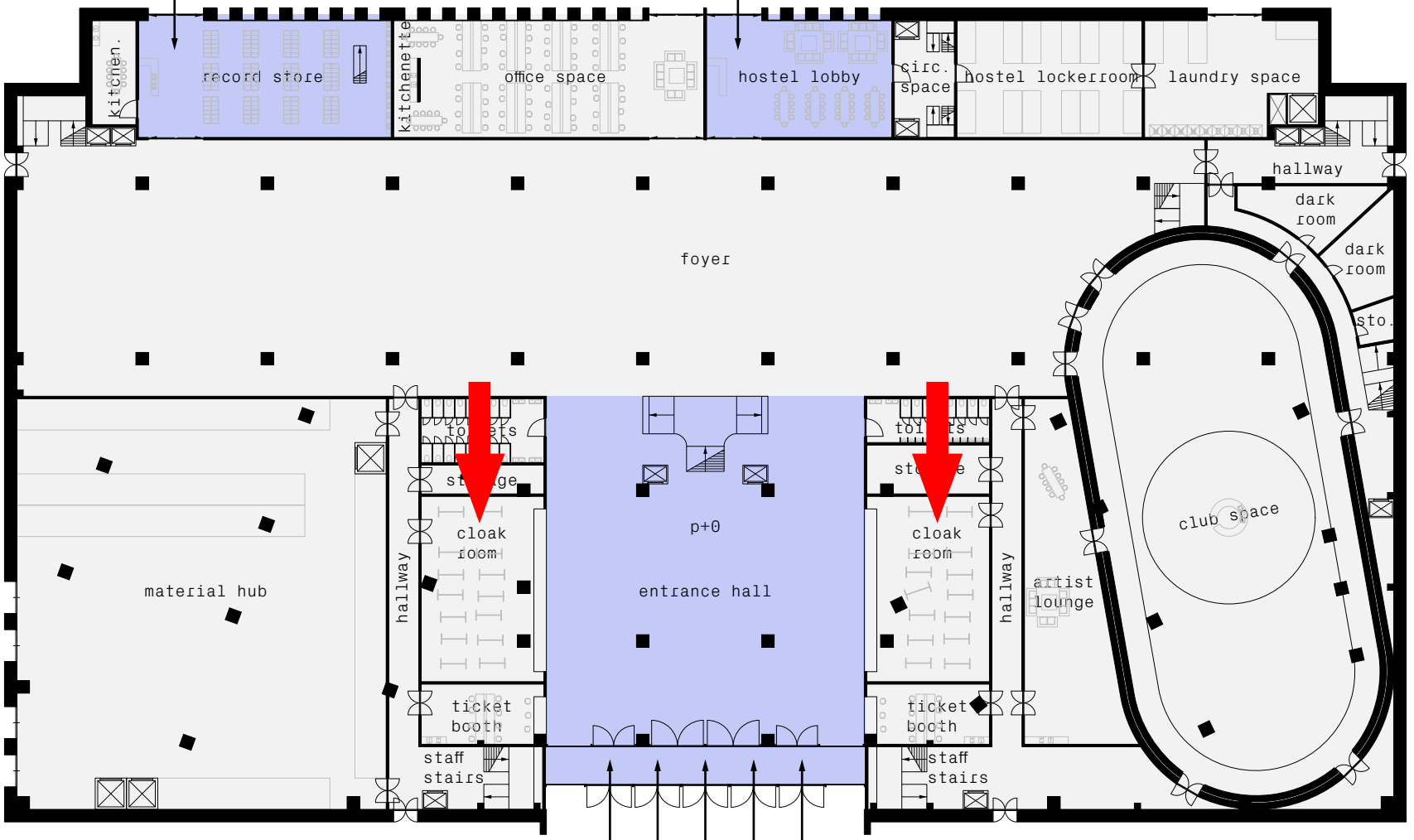






implementation

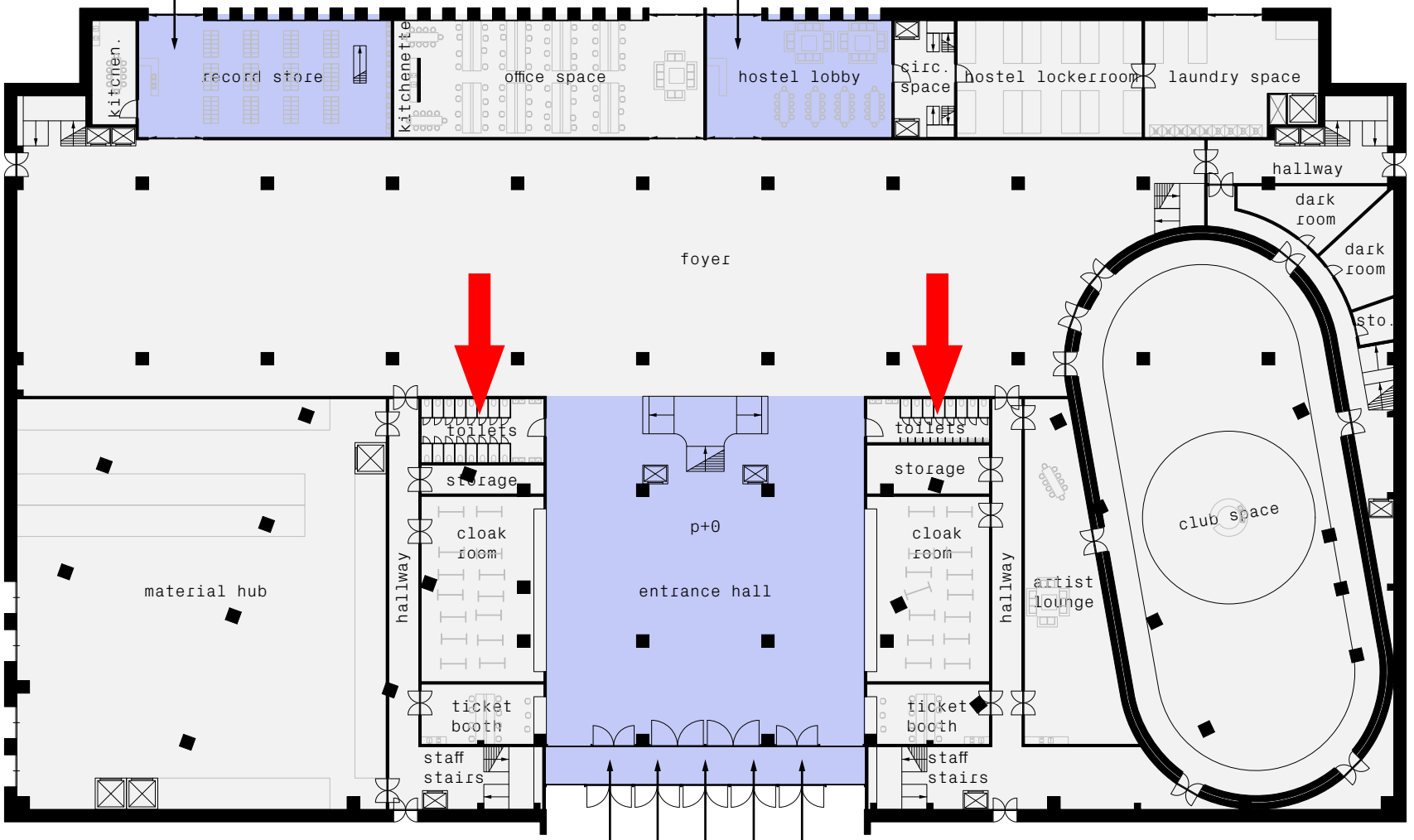
ENTRANCES



5m 2m 2m 1m

implementation

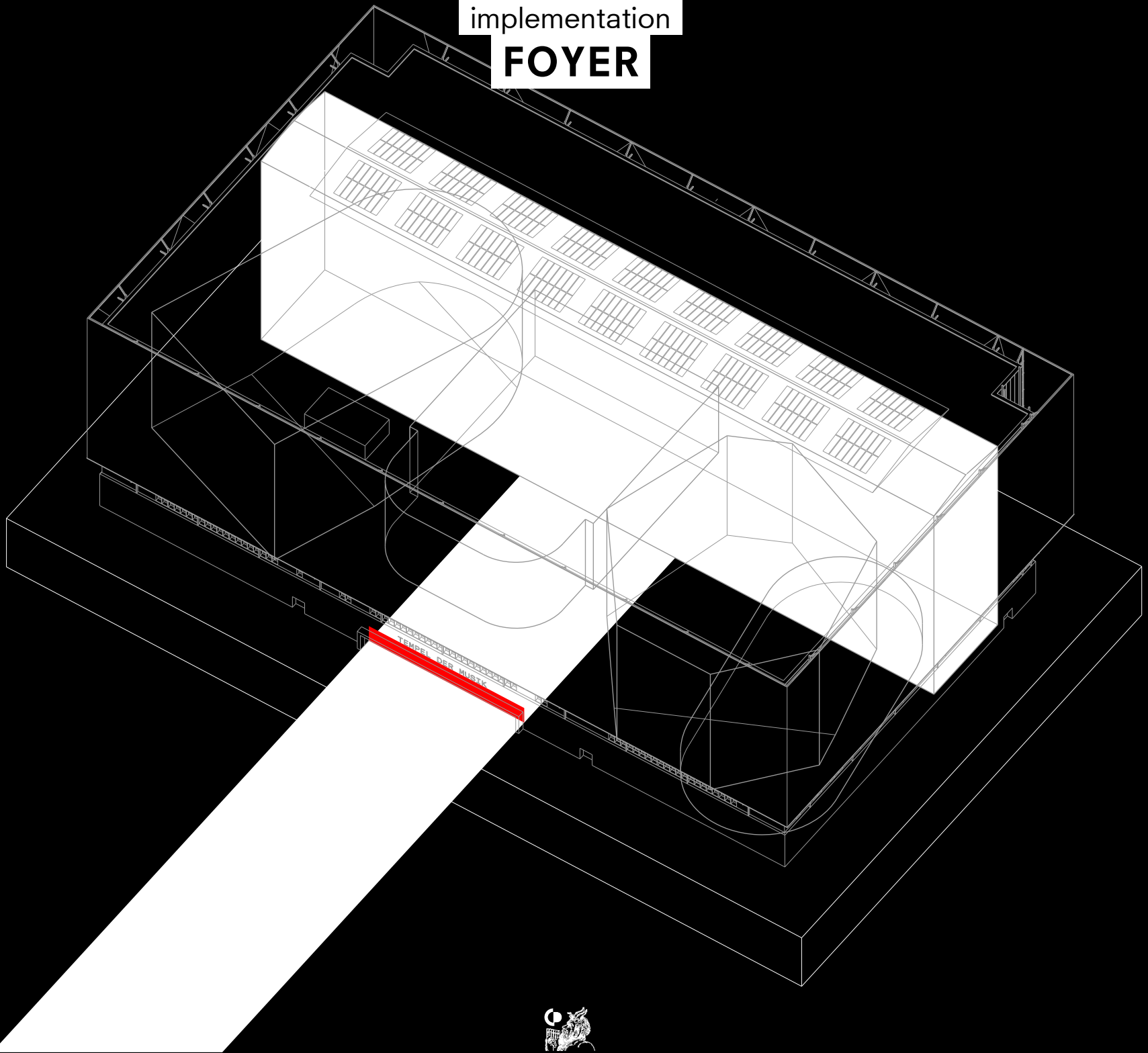
ENTRANCES



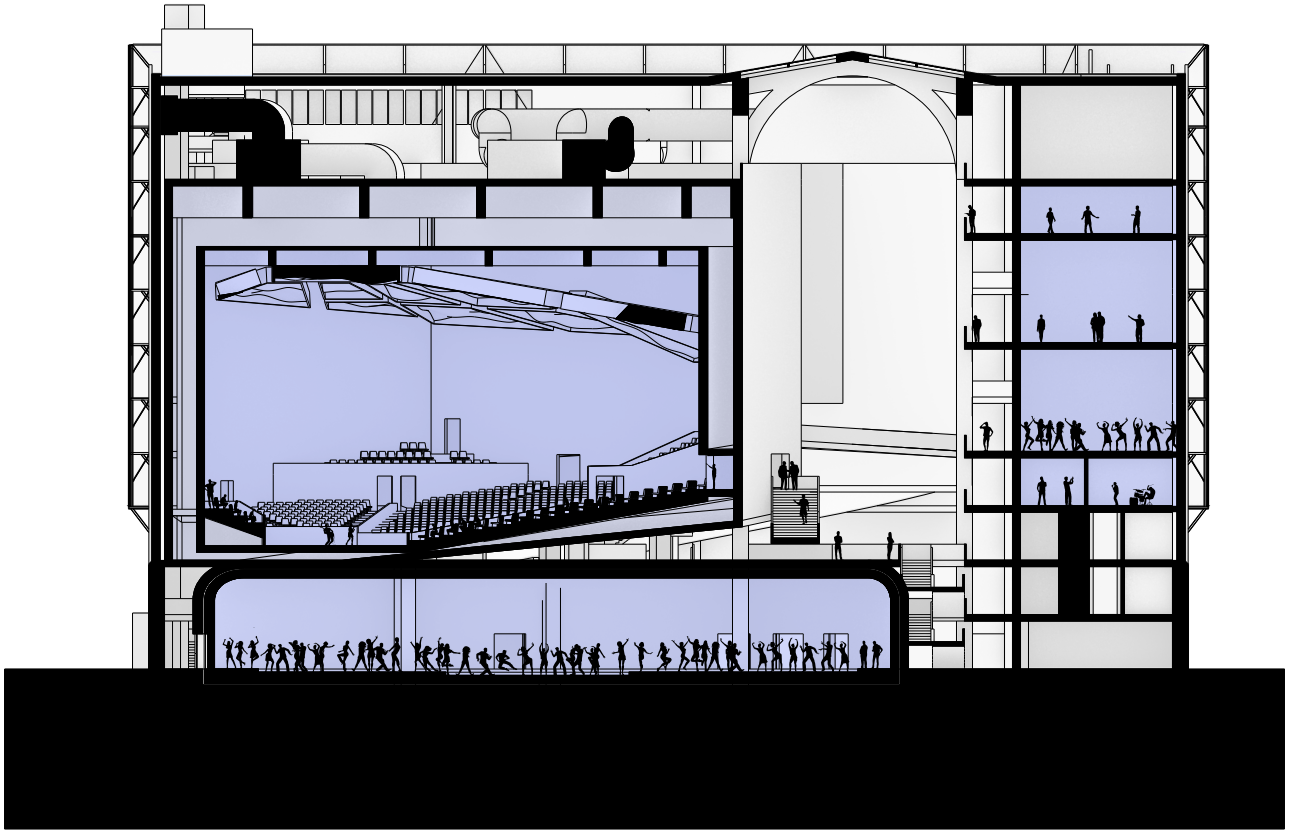
5m 2m 2m 1m

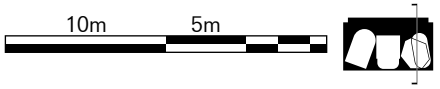
implementation

FOYER



SECTION CC’





implementation

GRAND HALL

implementation

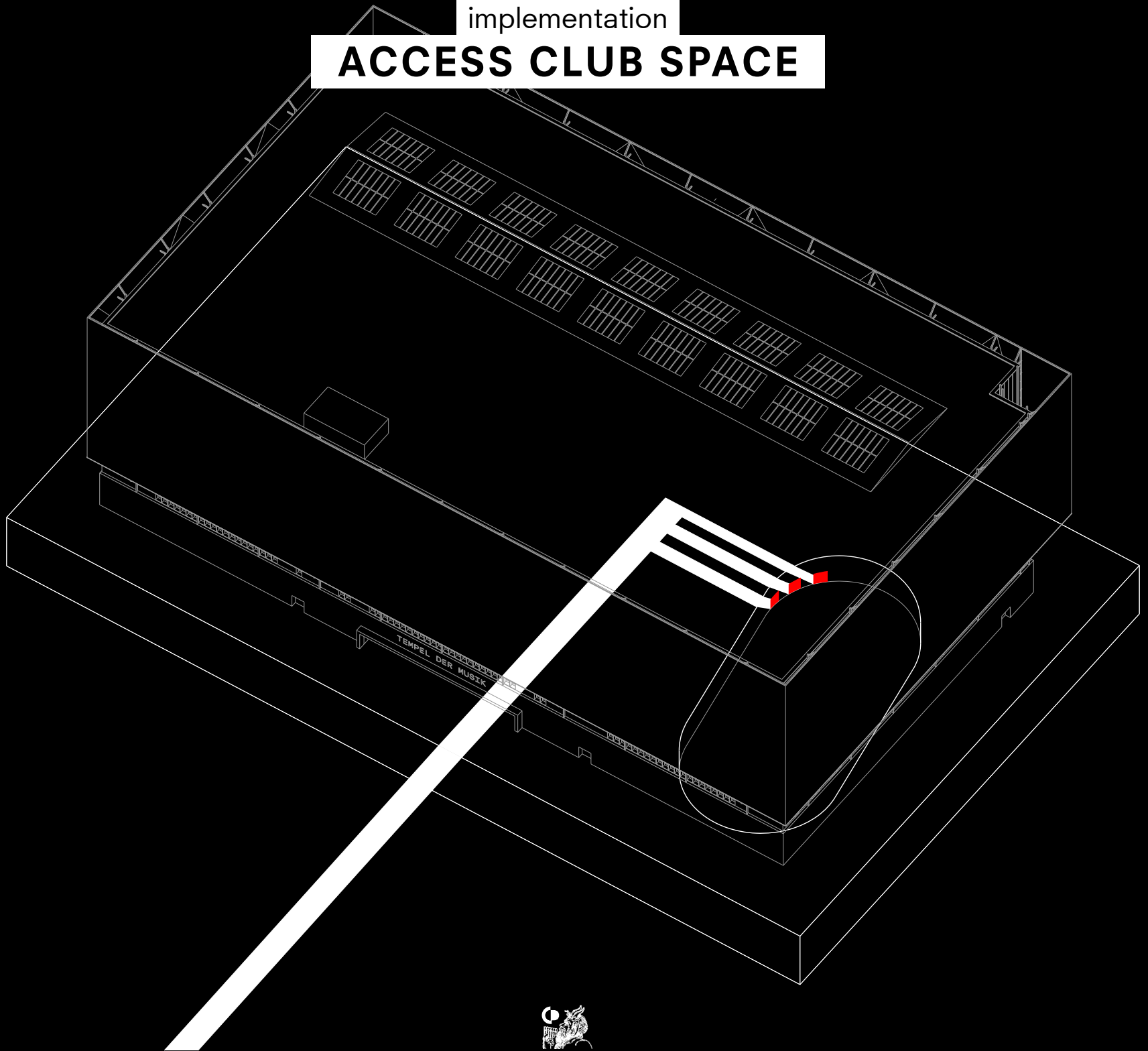
ART EXHIBITION

implementation

PARTY

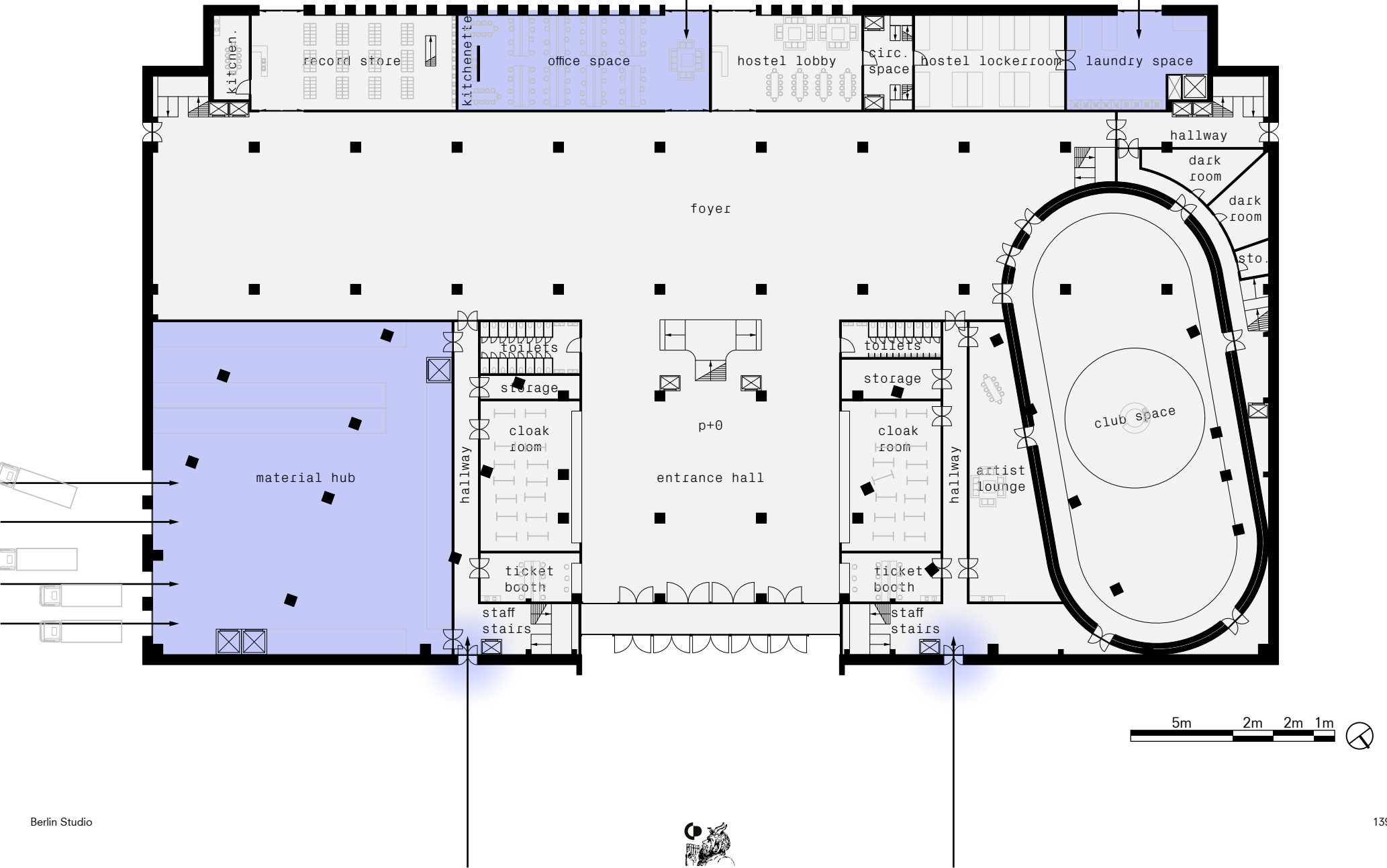
implementation

ACCESS CLUB SPACE



implementation

STAFF ENTRANCES

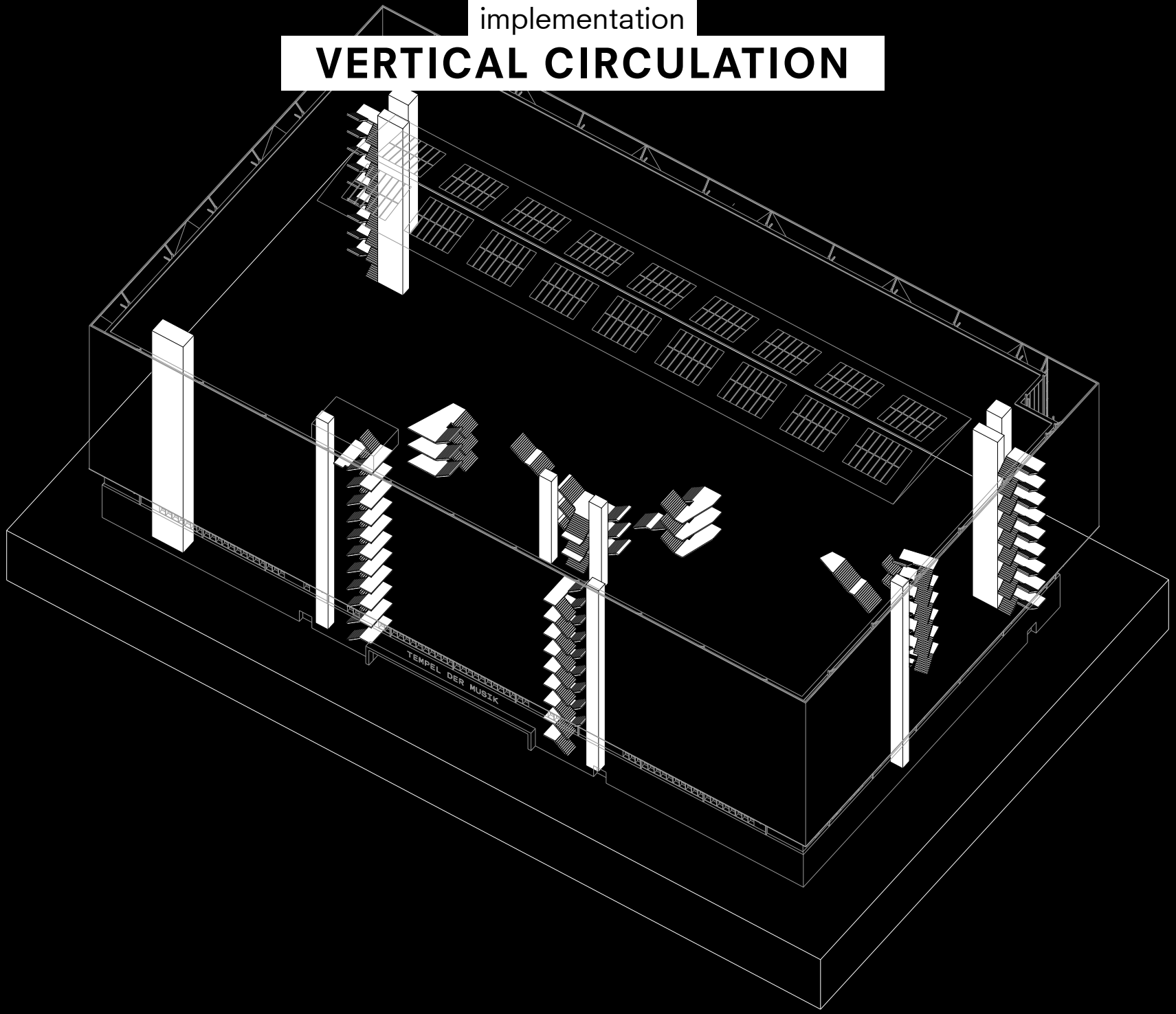


implementation

[EMERGENCY] EXITS

implementation

VERTICAL CIRCULATION

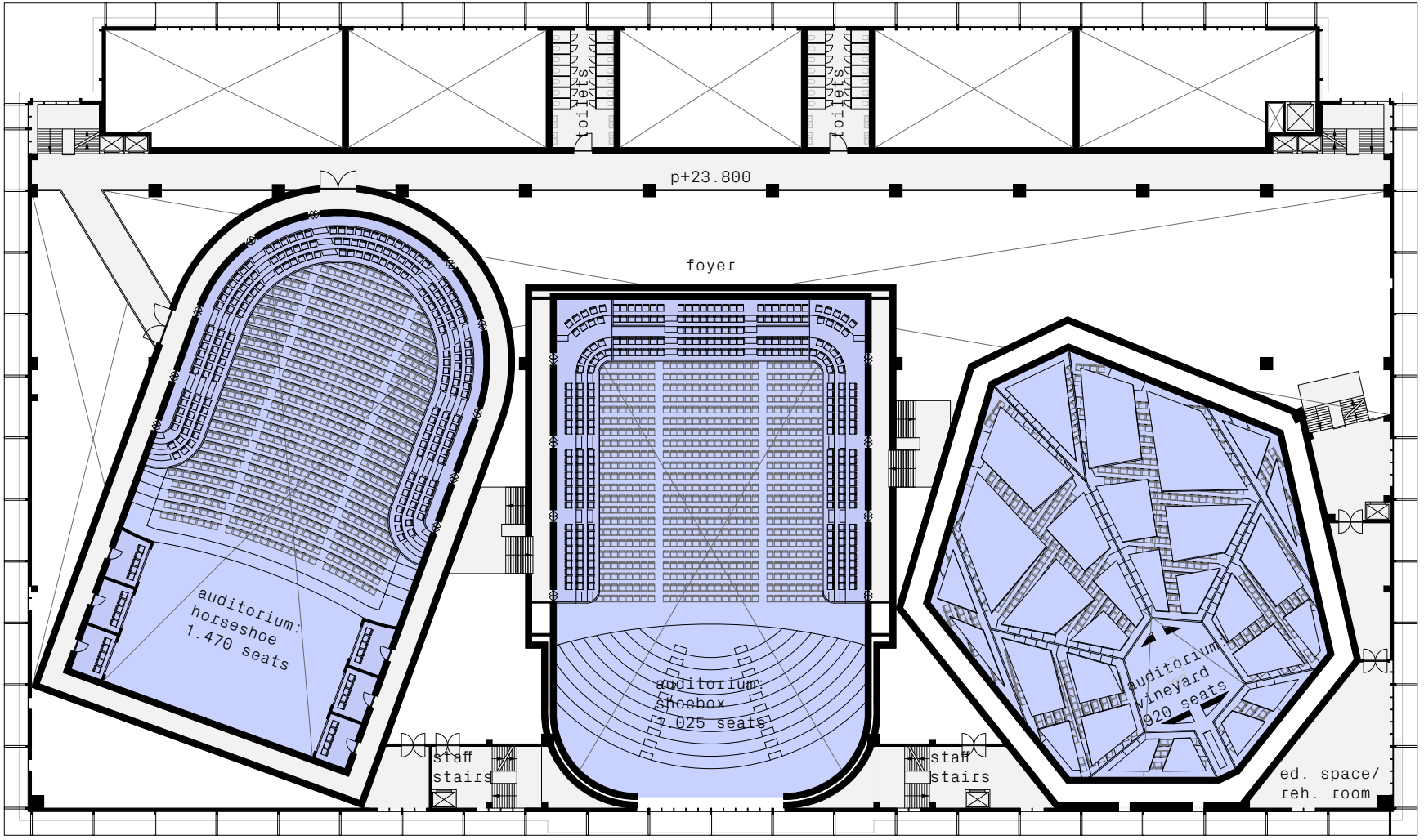


implementation

MAIN STAIRS

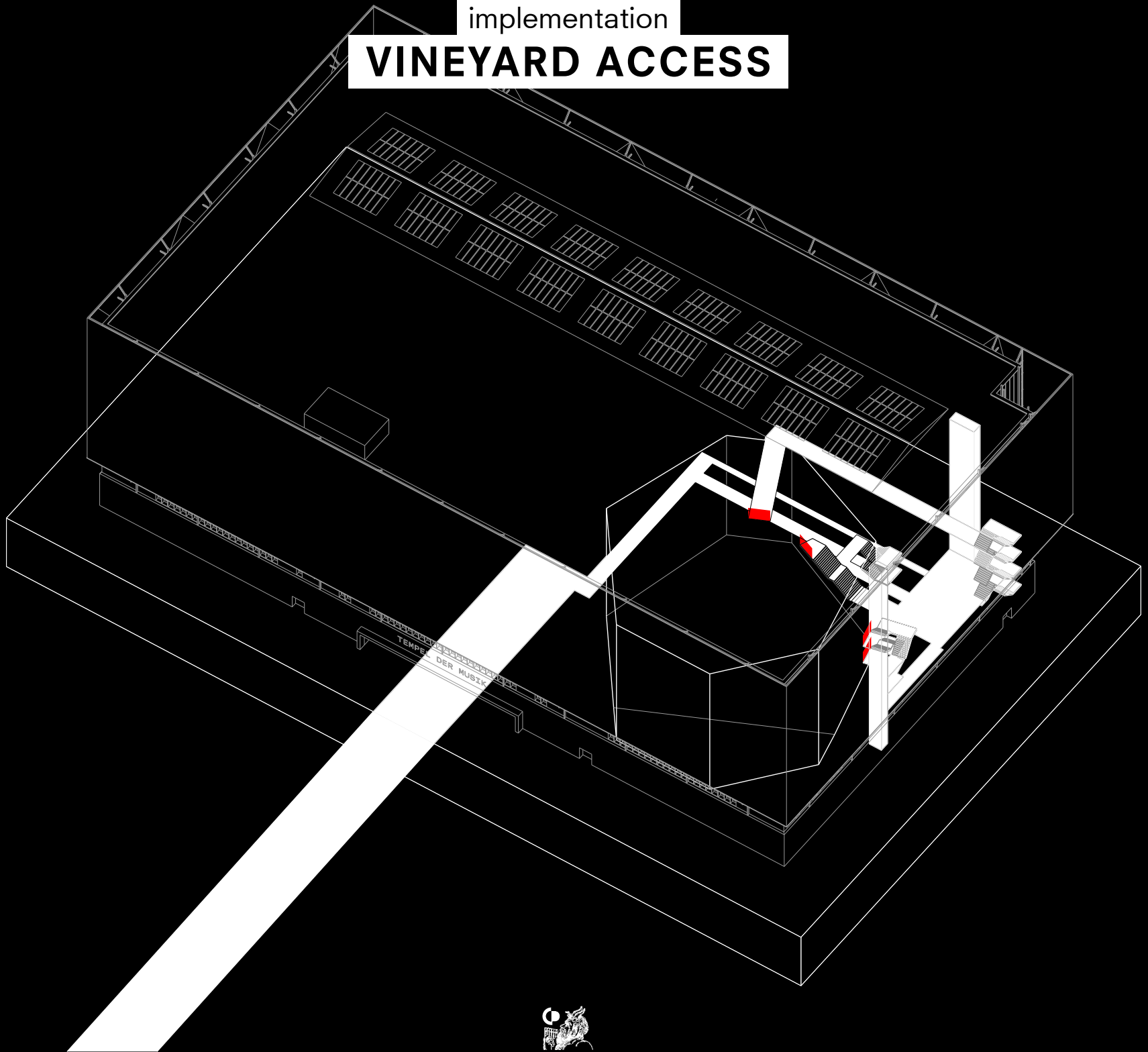
implementation

... TO AUDITORIUMS



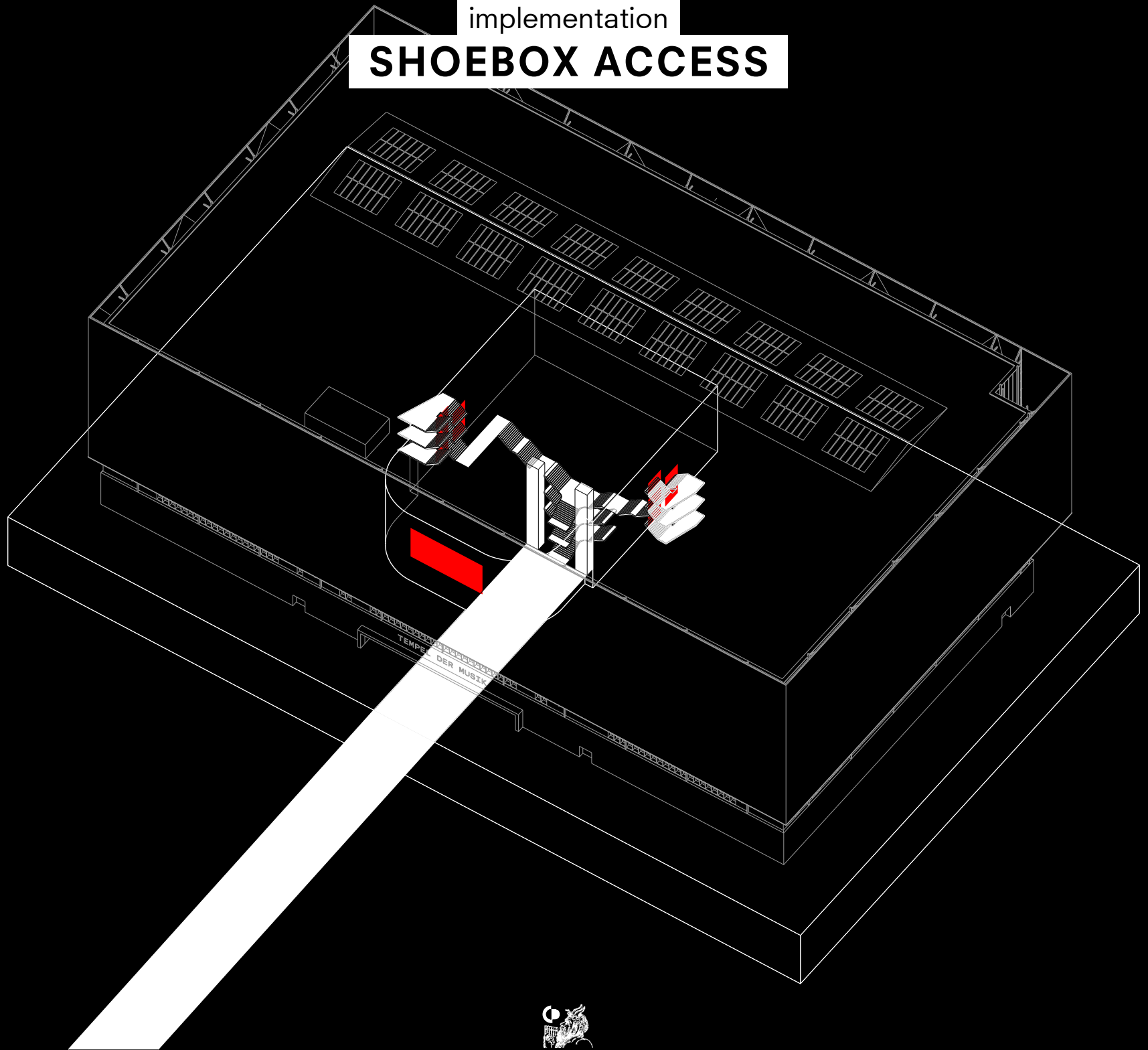
implementation

VINEYARD ACCESS



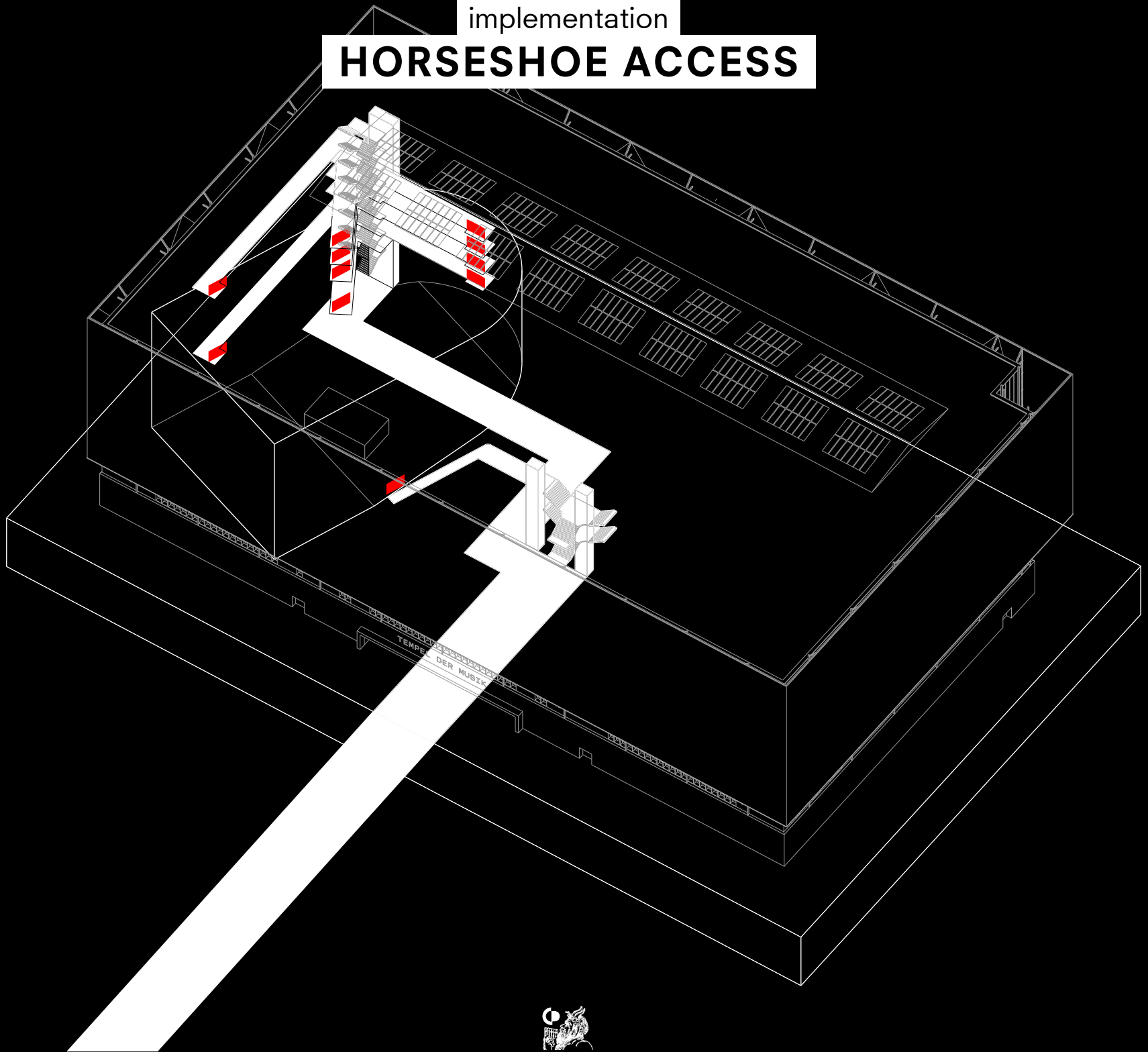
implementation

SHOEBOX ACCESS



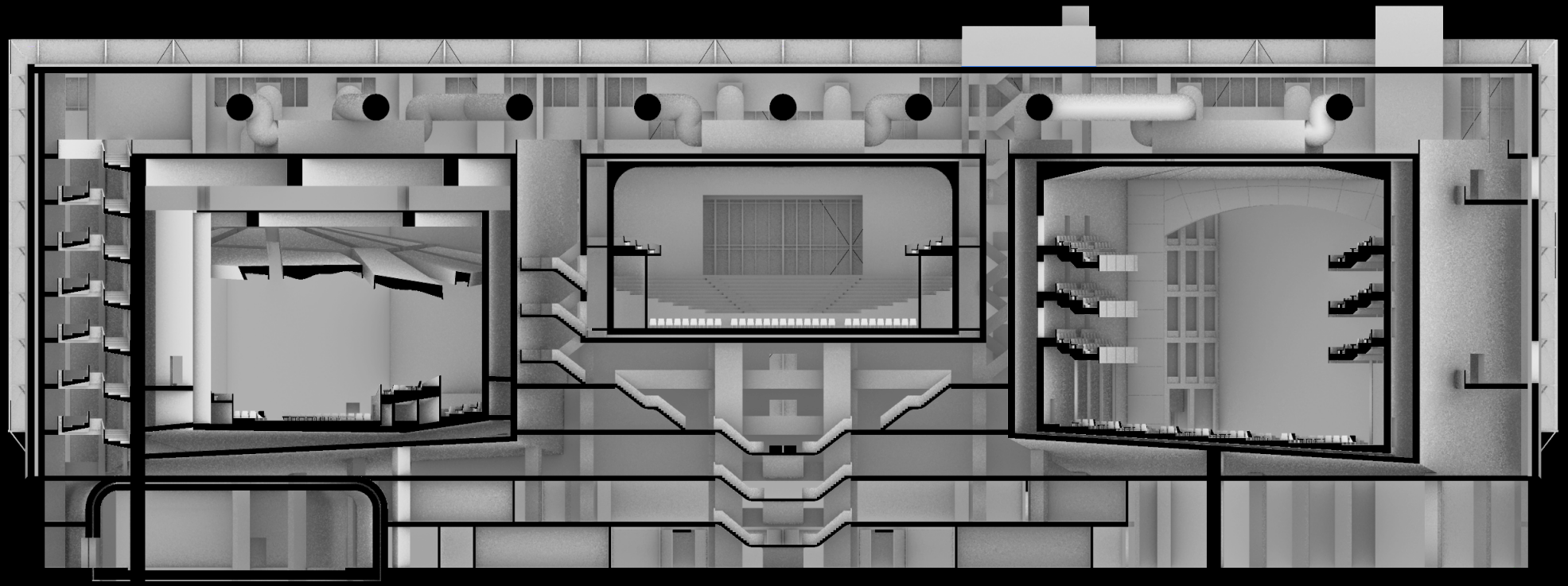
implementation

HORSESHOE ACCESS



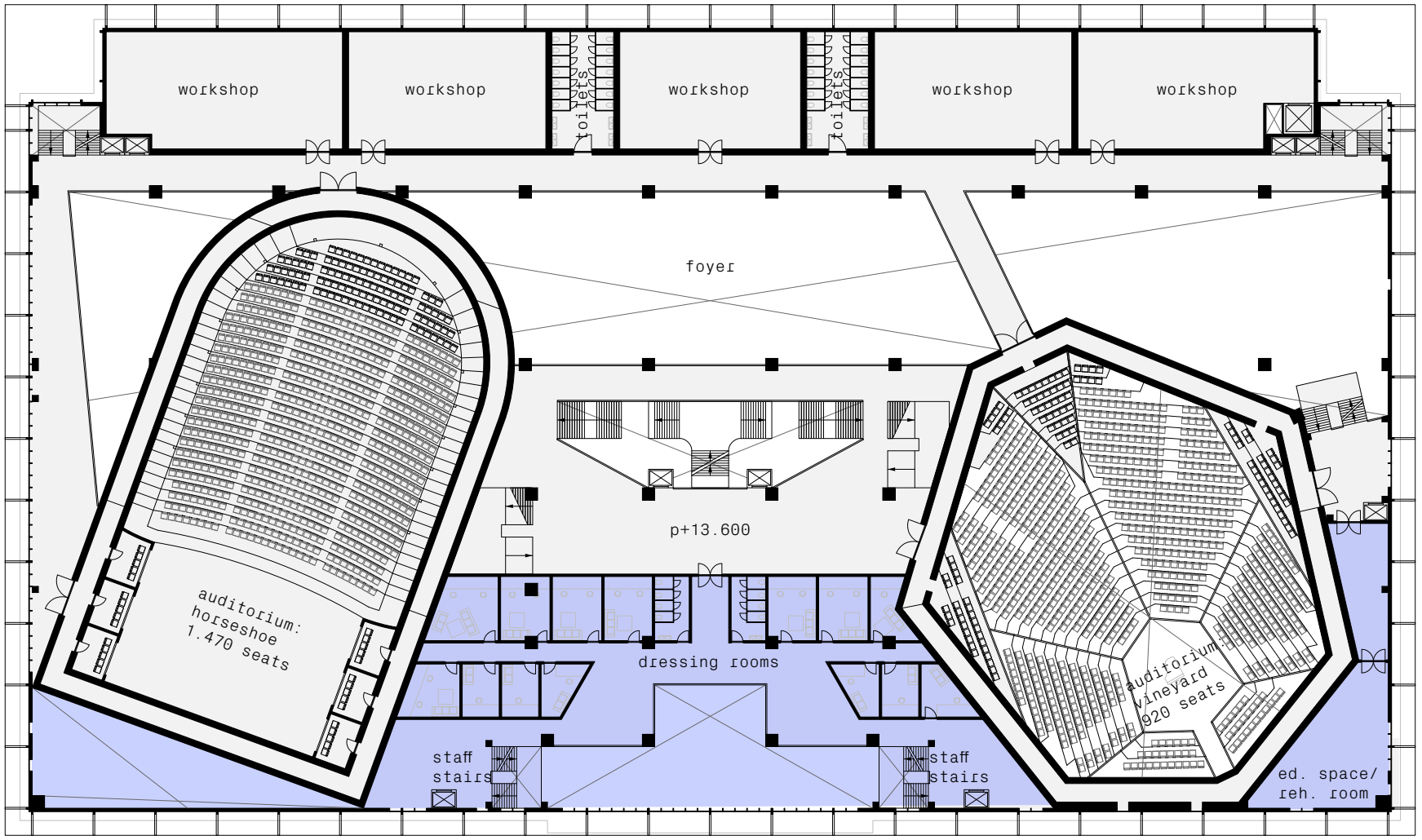
implementation

CONFIGURATION



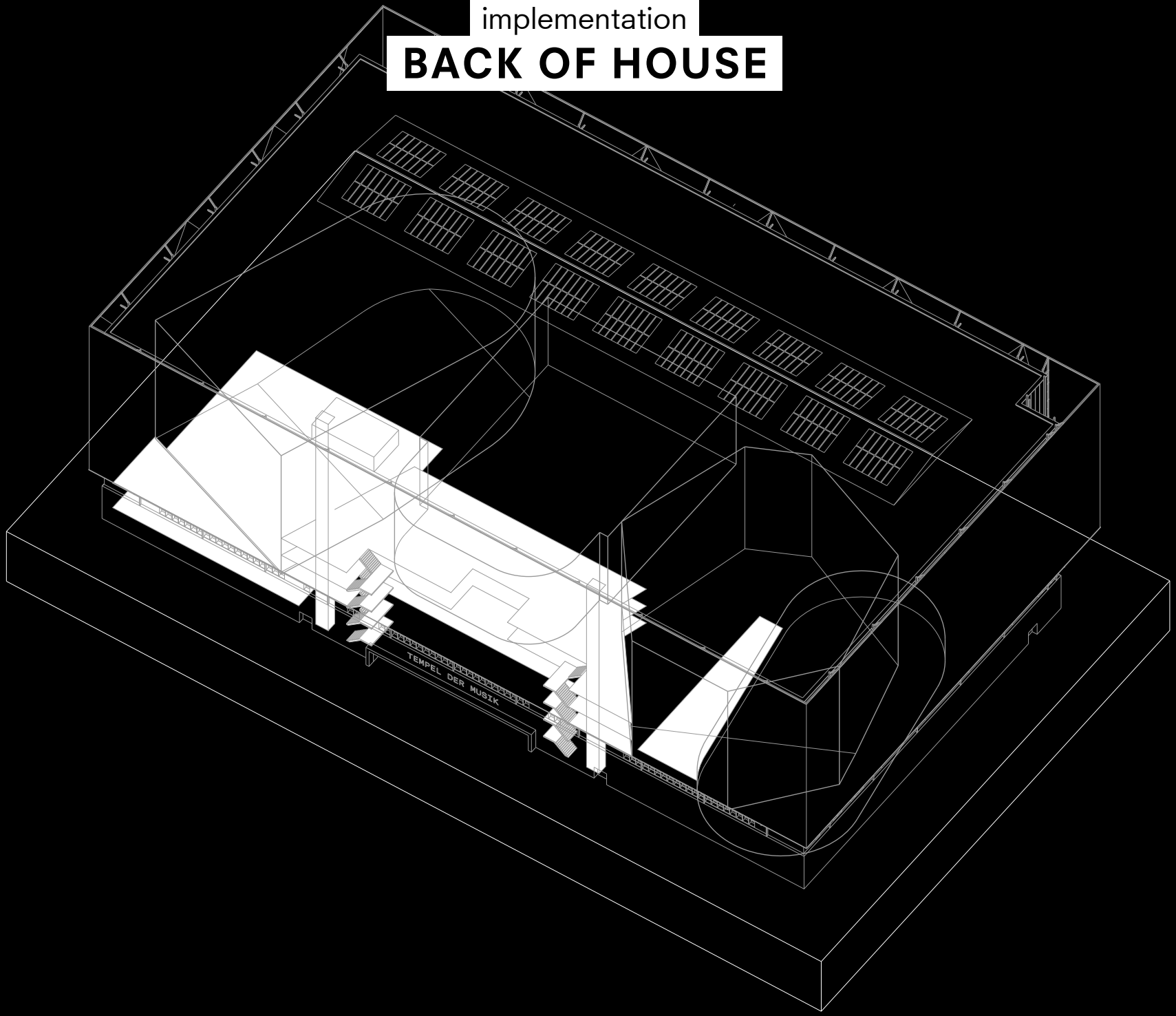
implementation

BACK OF HOUSE



implementation

BACK OF HOUSE



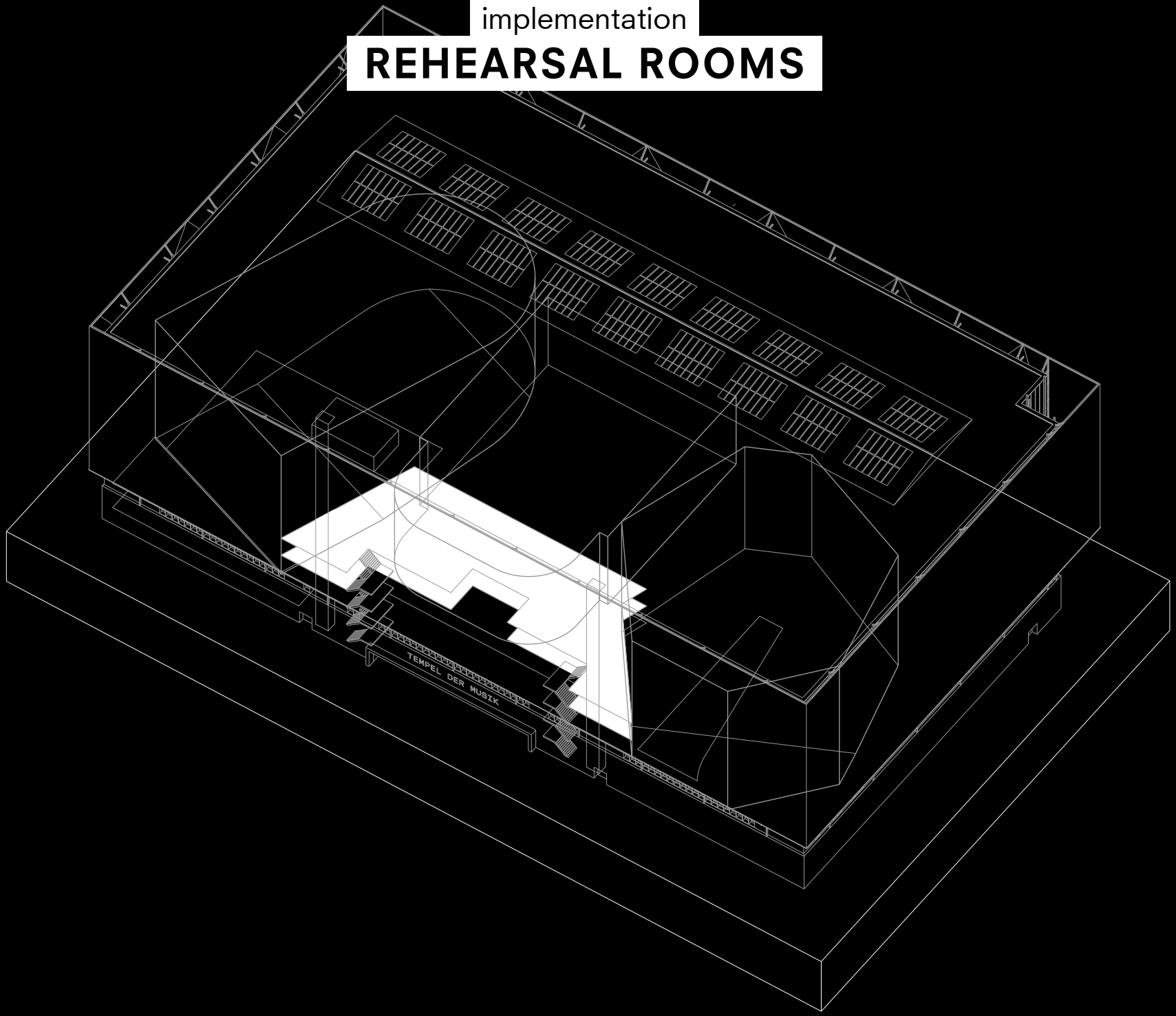
implementation
VOID

implementation

DRESSING ROOMS

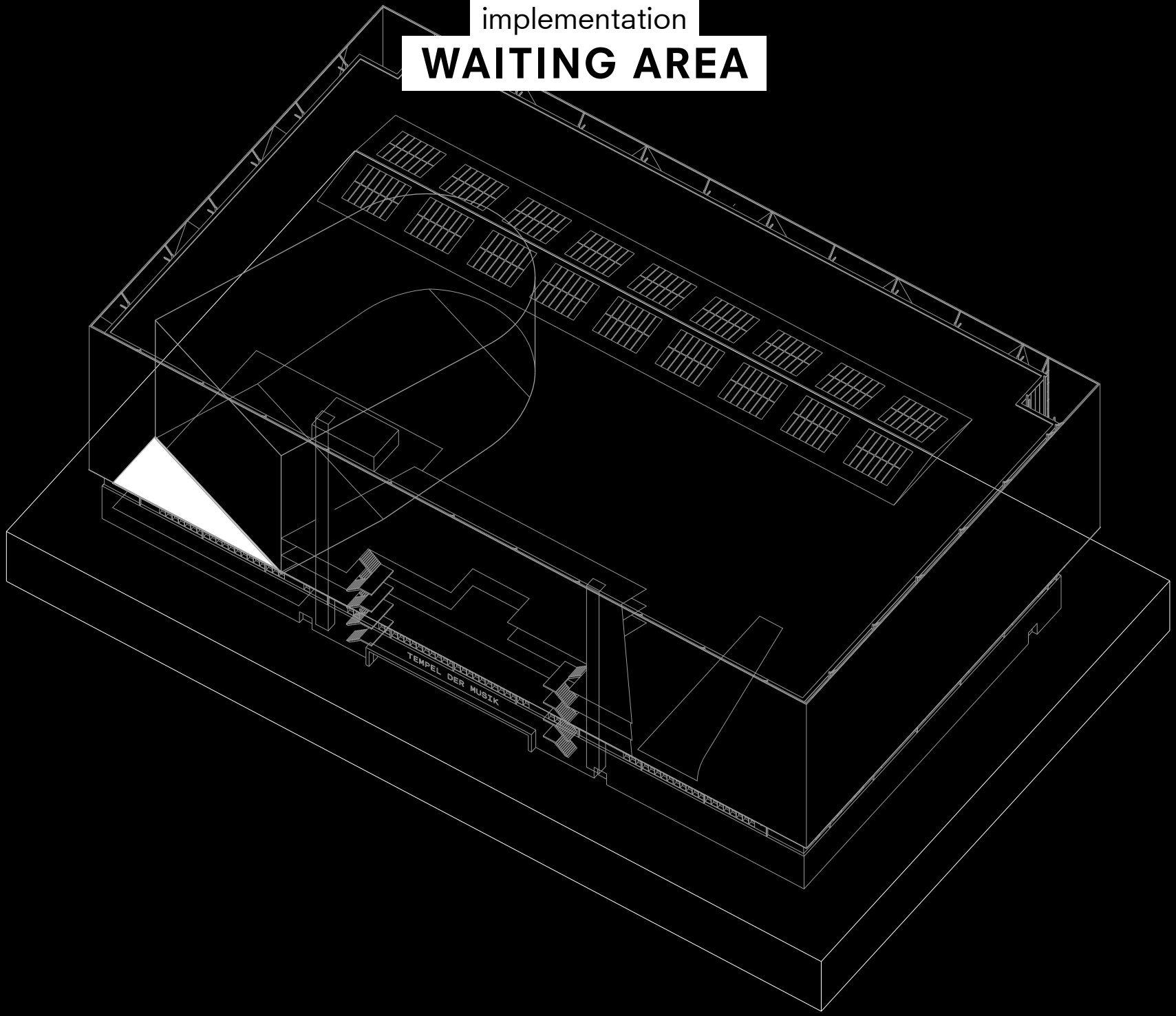
implementation

REHEARSAL ROOMS



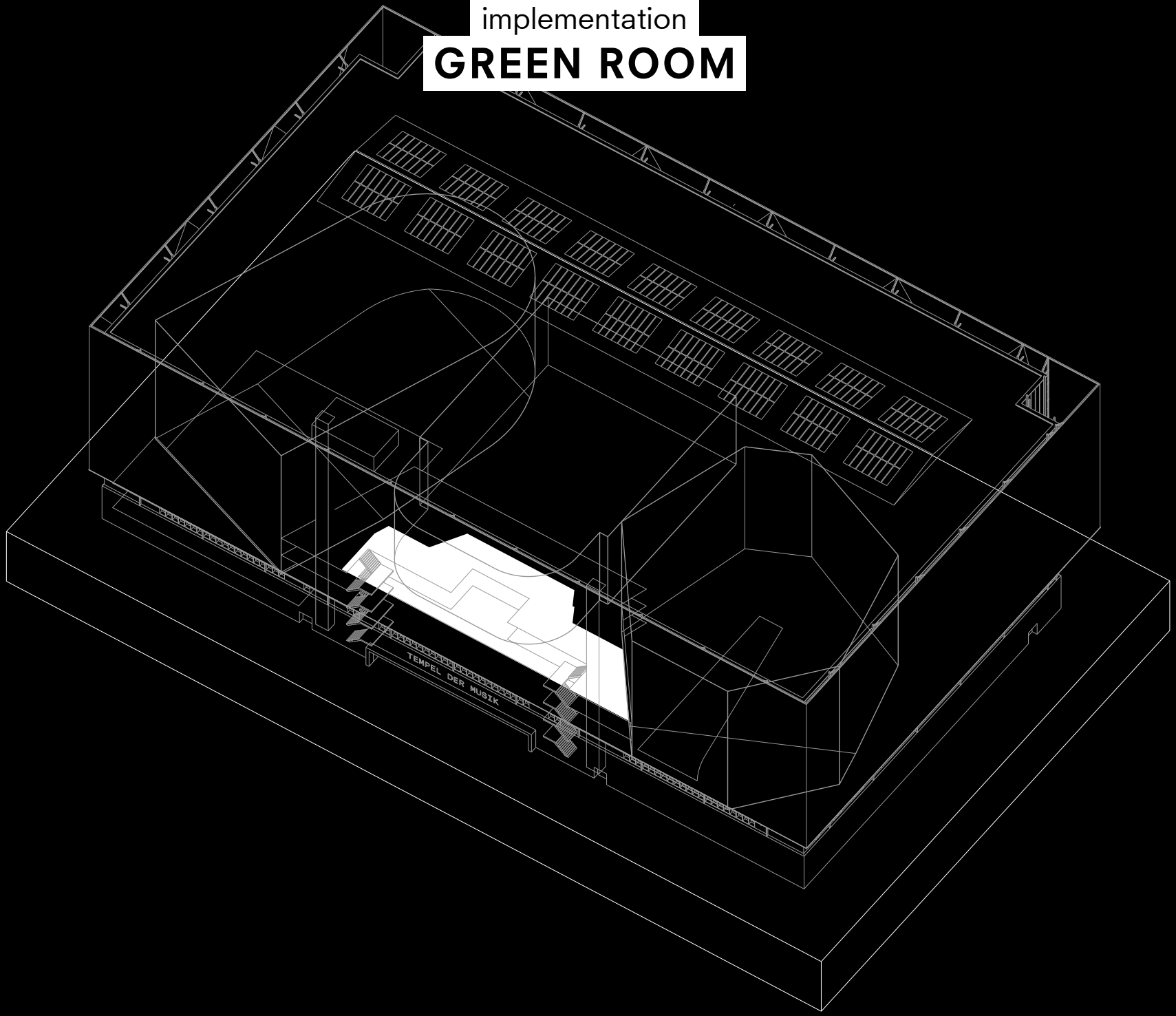
implementation

WAITING AREA



implementation

GREEN ROOM



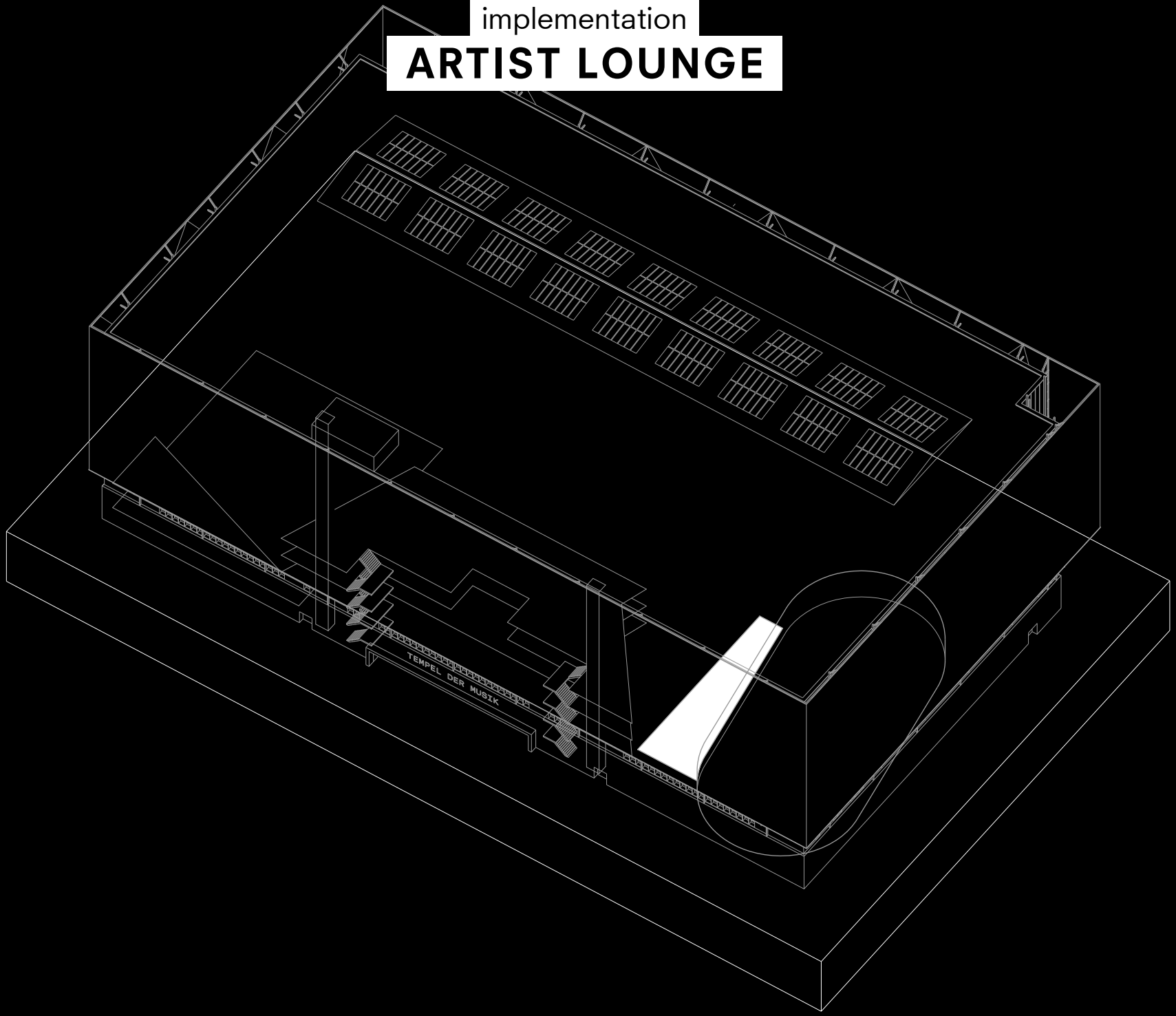
implementation

GREEN ROOM

* green room Teatro Real, MAD.

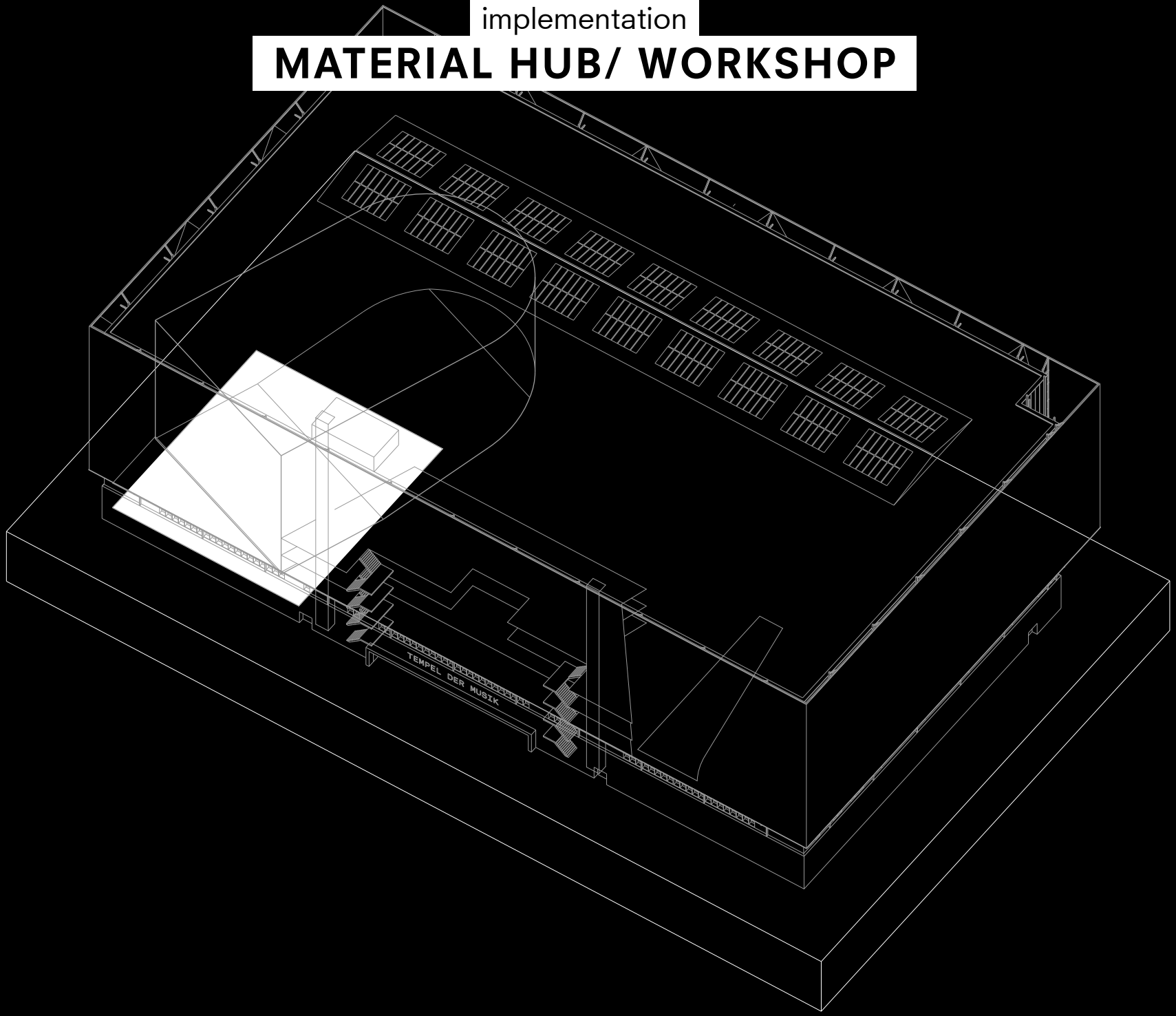
implementation

ARTIST LOUNGE



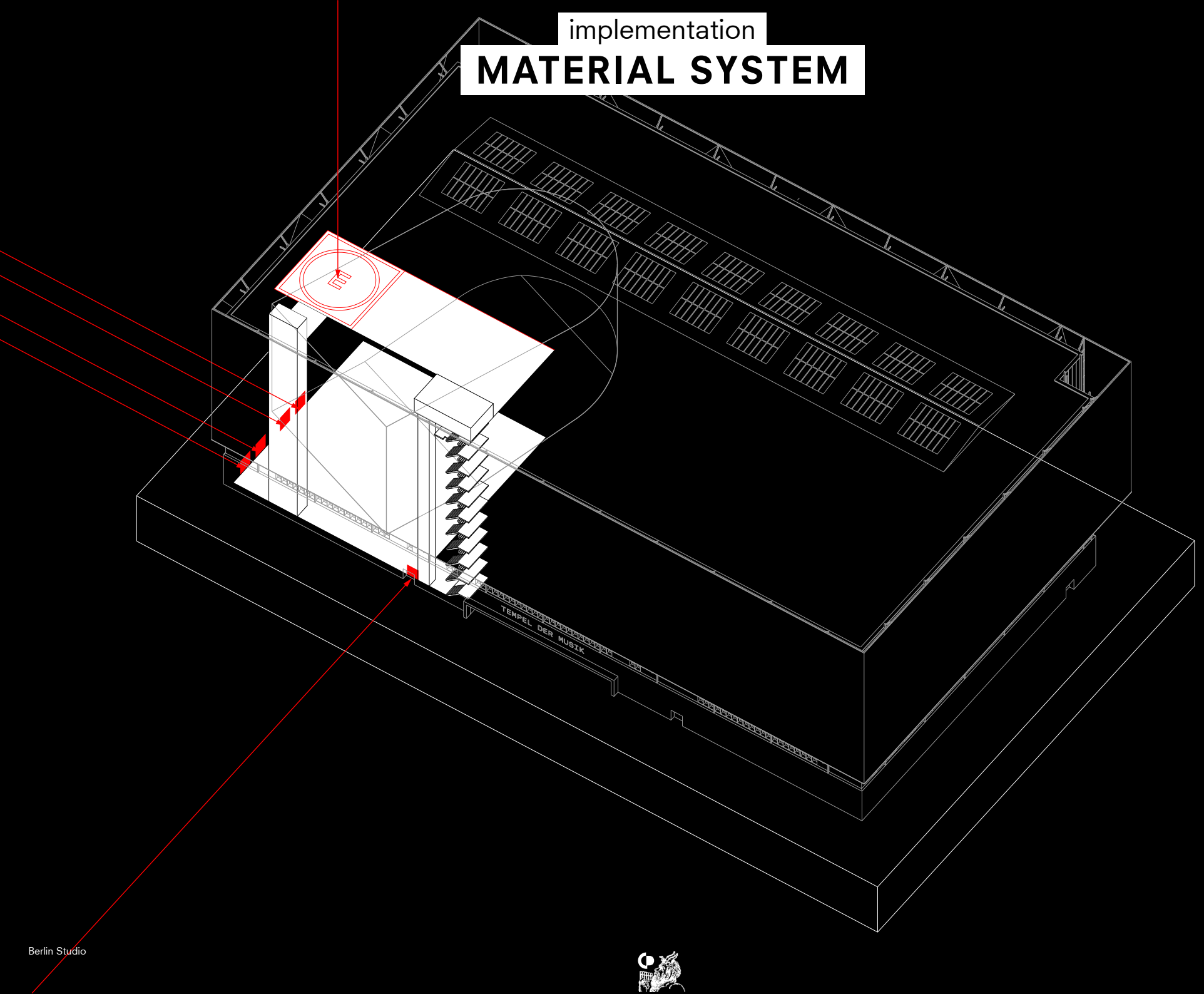
implementation

MATERIAL HUB/ WORKSHOP



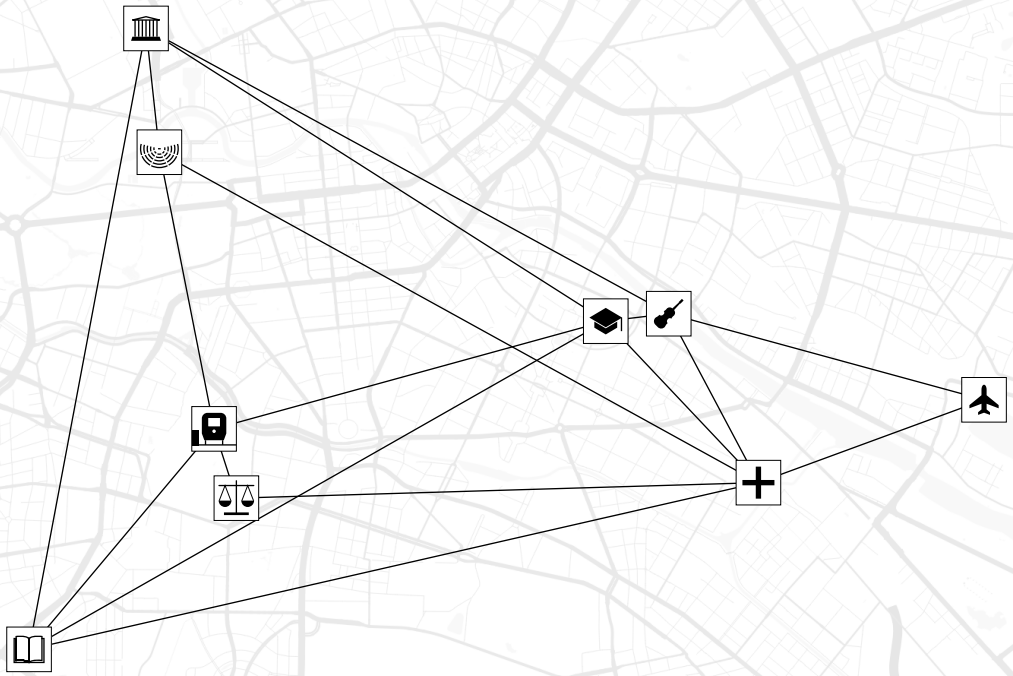
implementation

MATERIAL SYSTEM



implementation

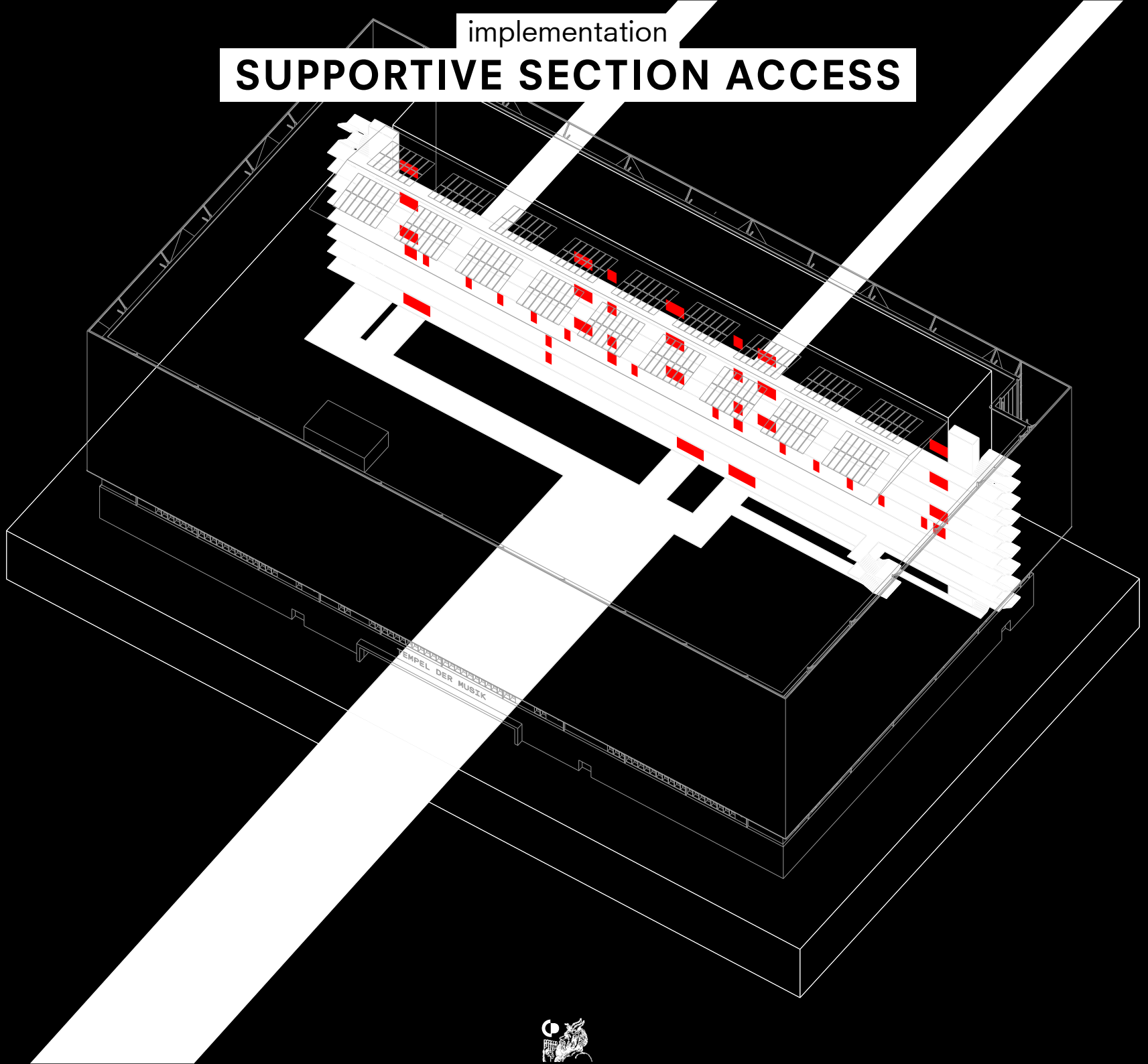
MATERIAL NETWORK



N

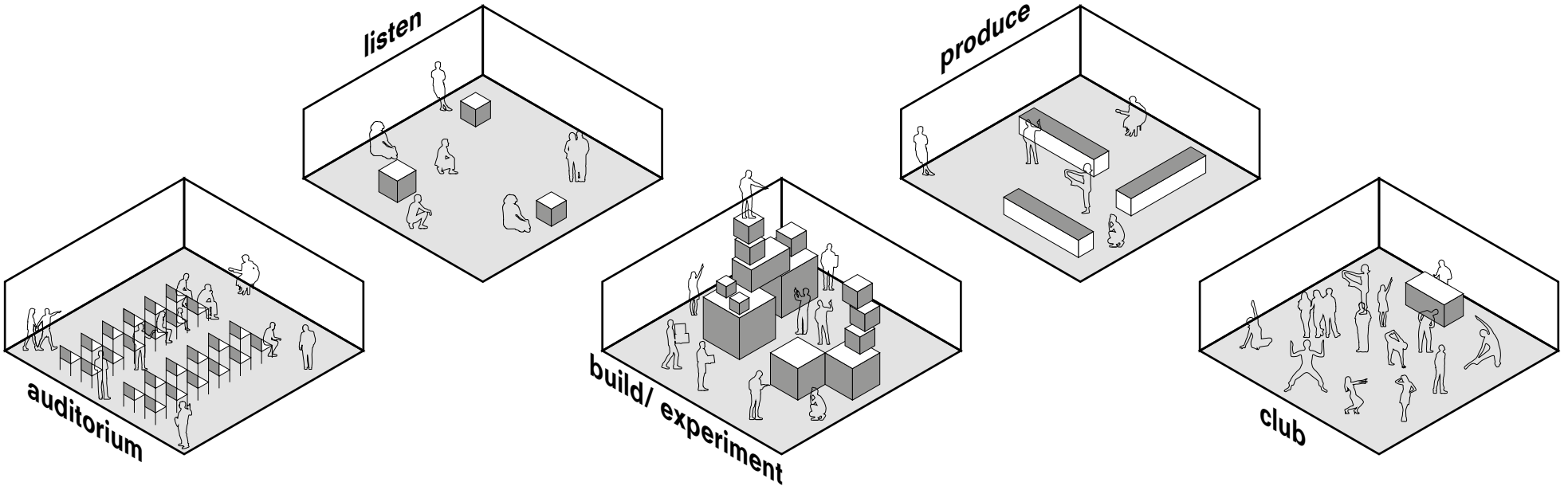
implementation

SUPPORTIVE SECTION ACCESS



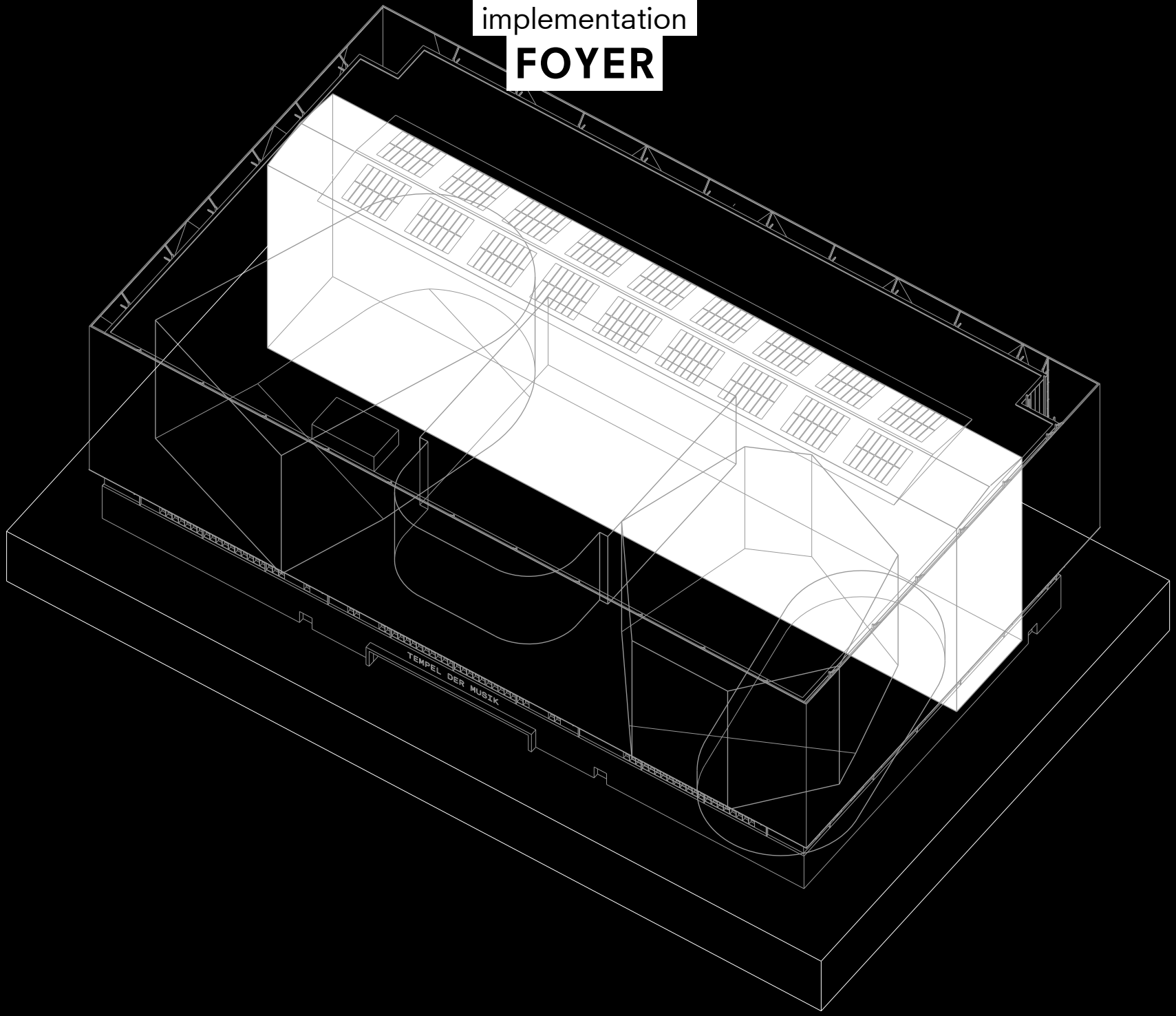
implementation

WORKSHOPS



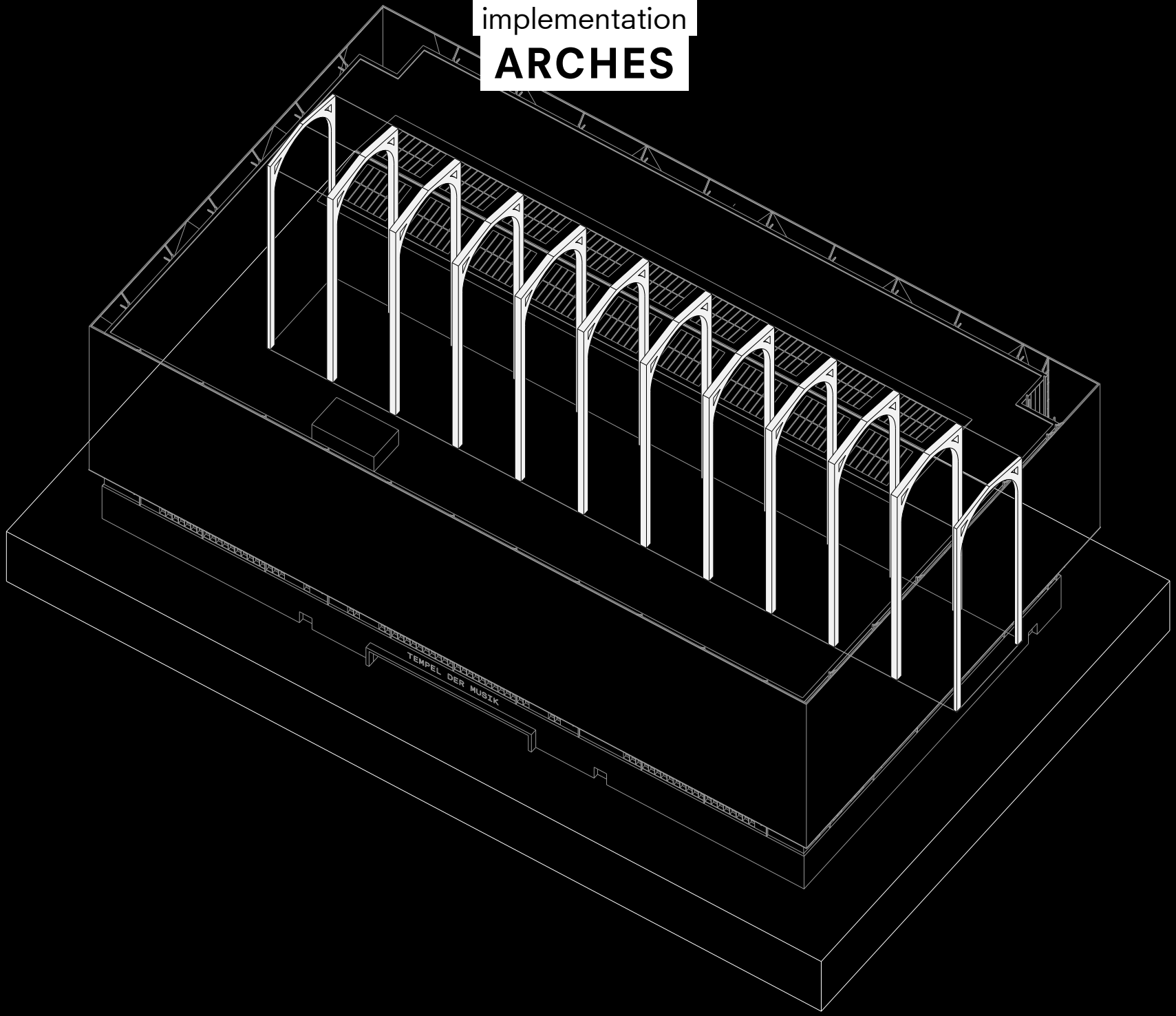
implementation

FOYER



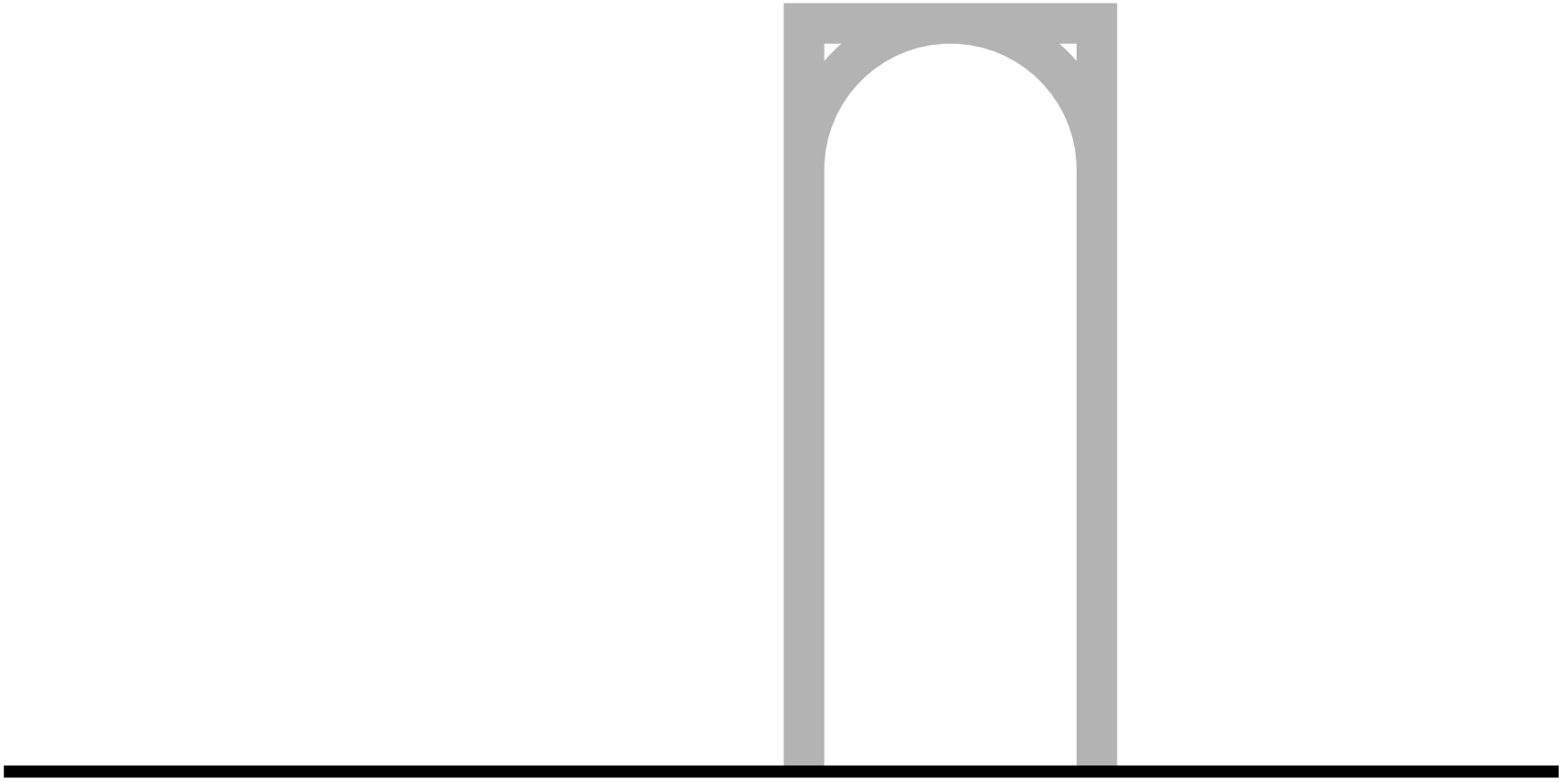
implementation

ARCHES



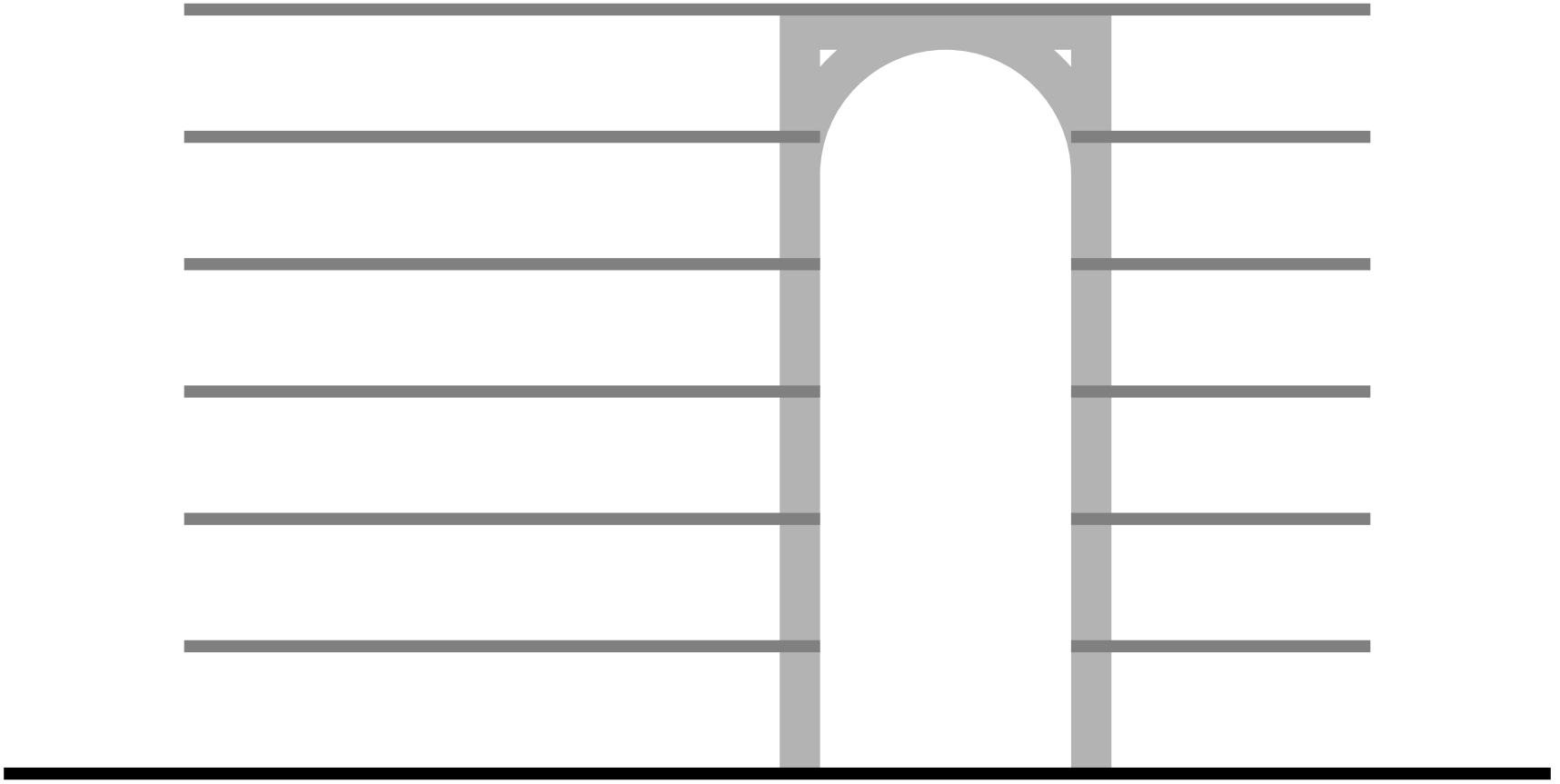
implementation

ARCH



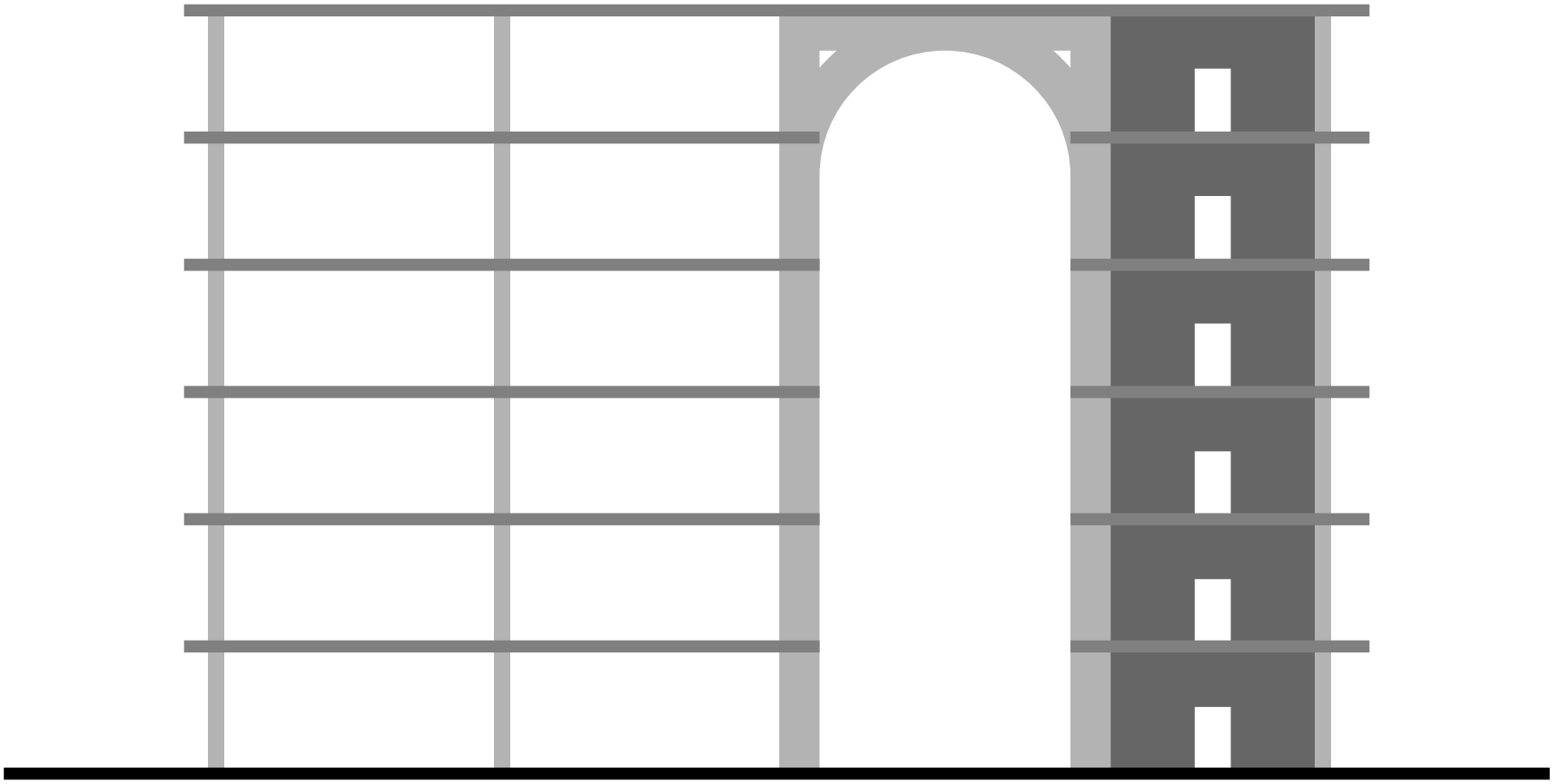
implementation

FLOORS



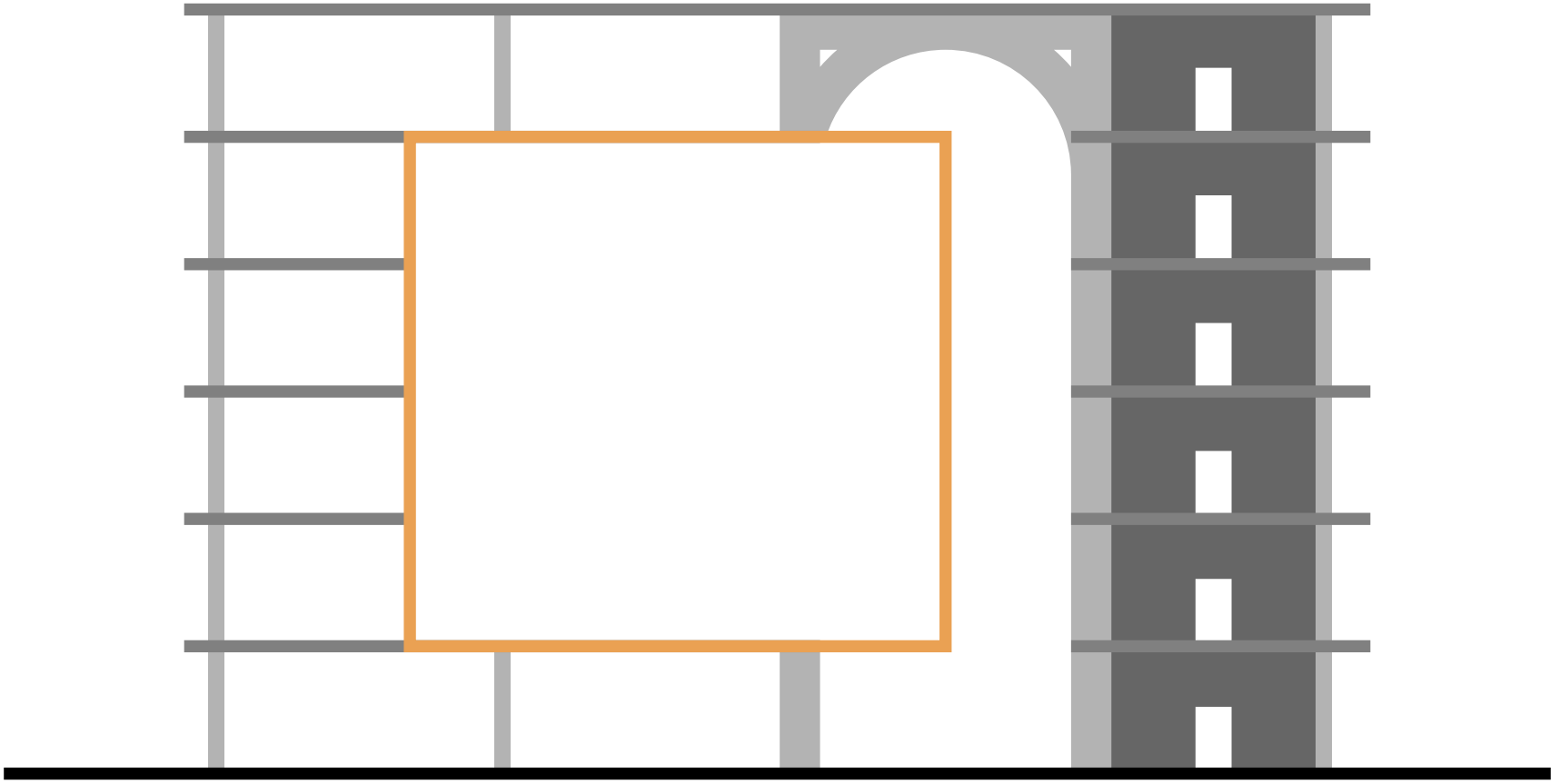
implementation

COLUMNS + WALLS

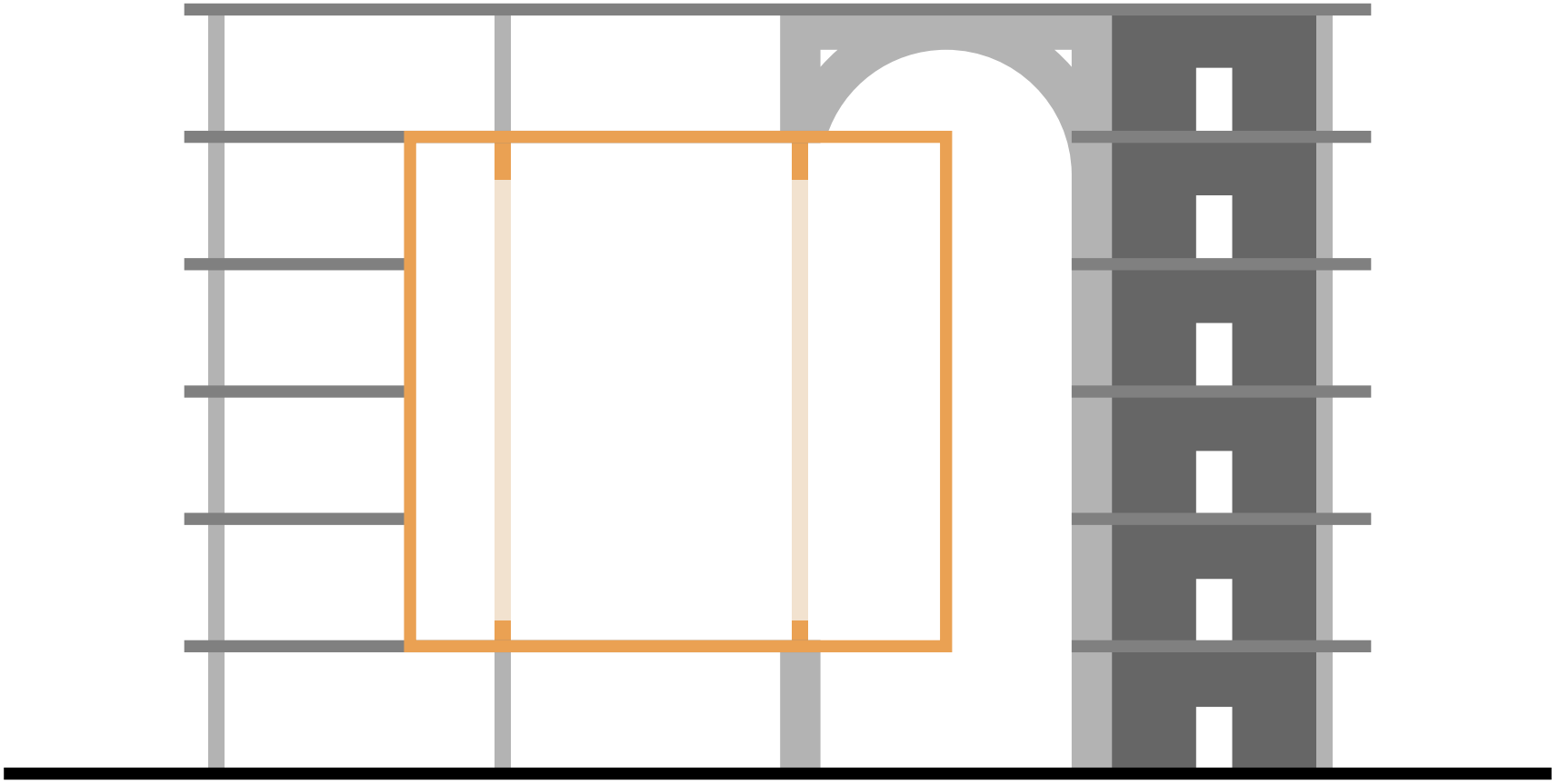


implementation

AUDITORIUM

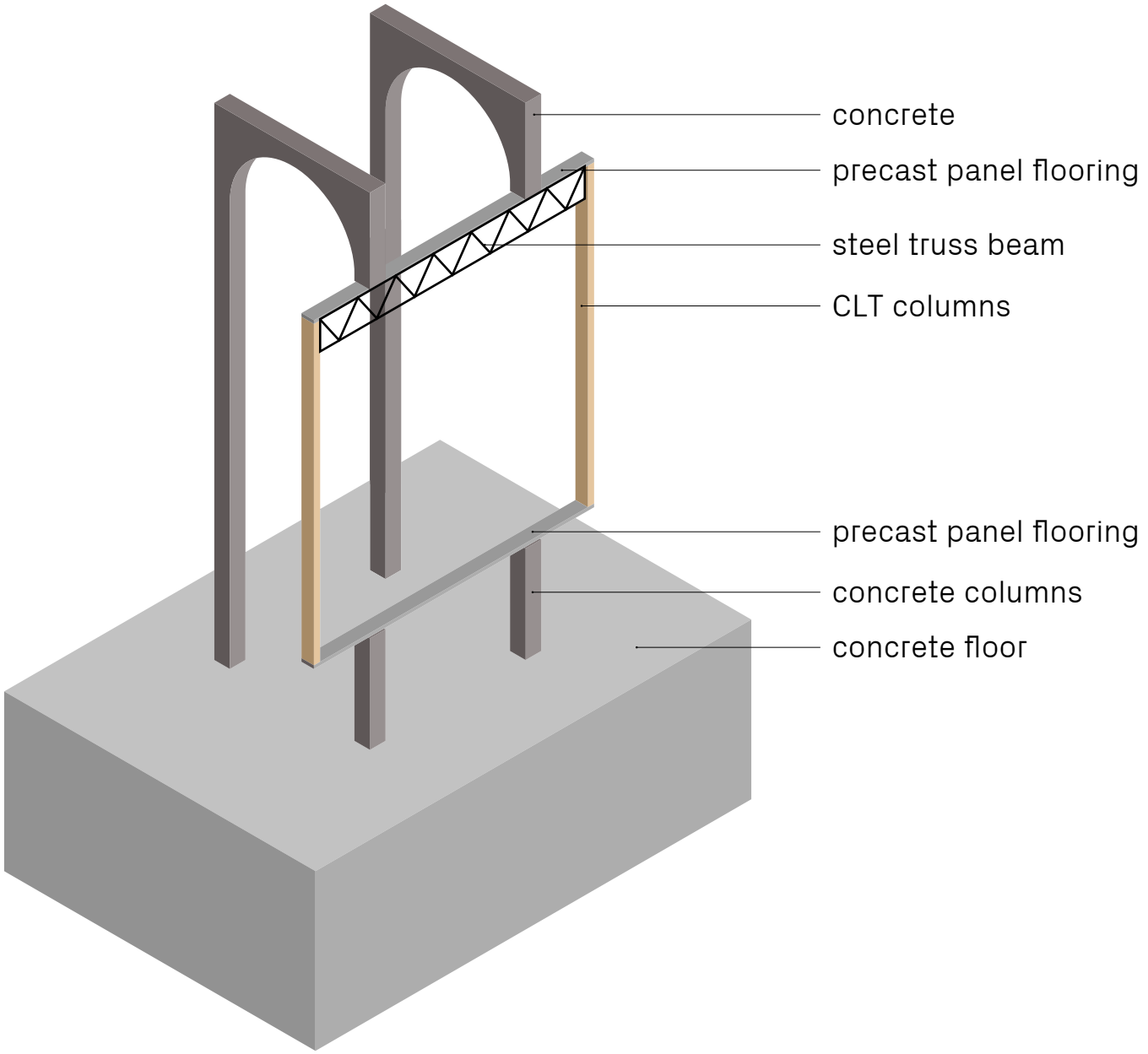


AUDITORIUM CONSTRUCTION



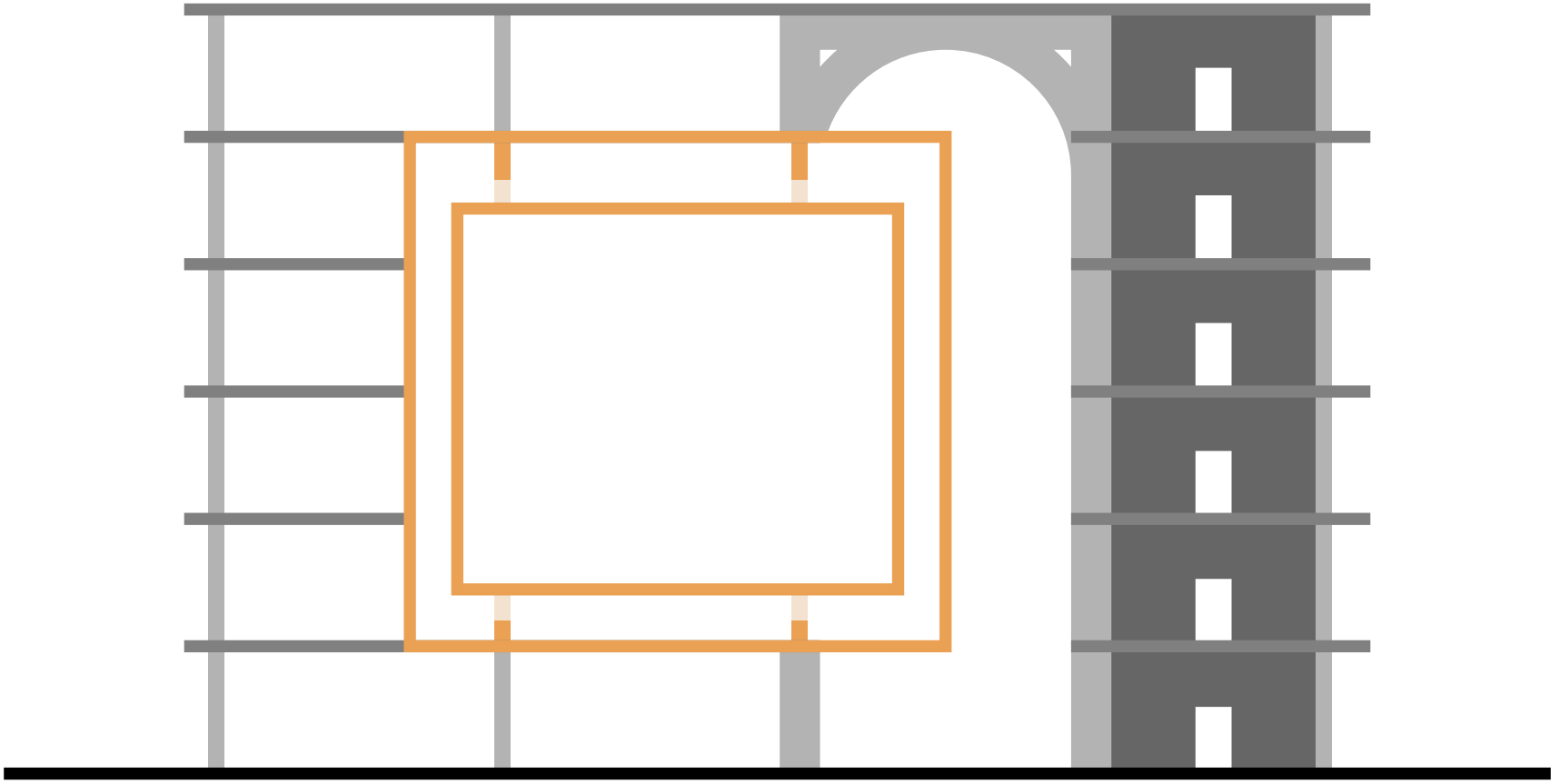
implementation

ISO VIEW



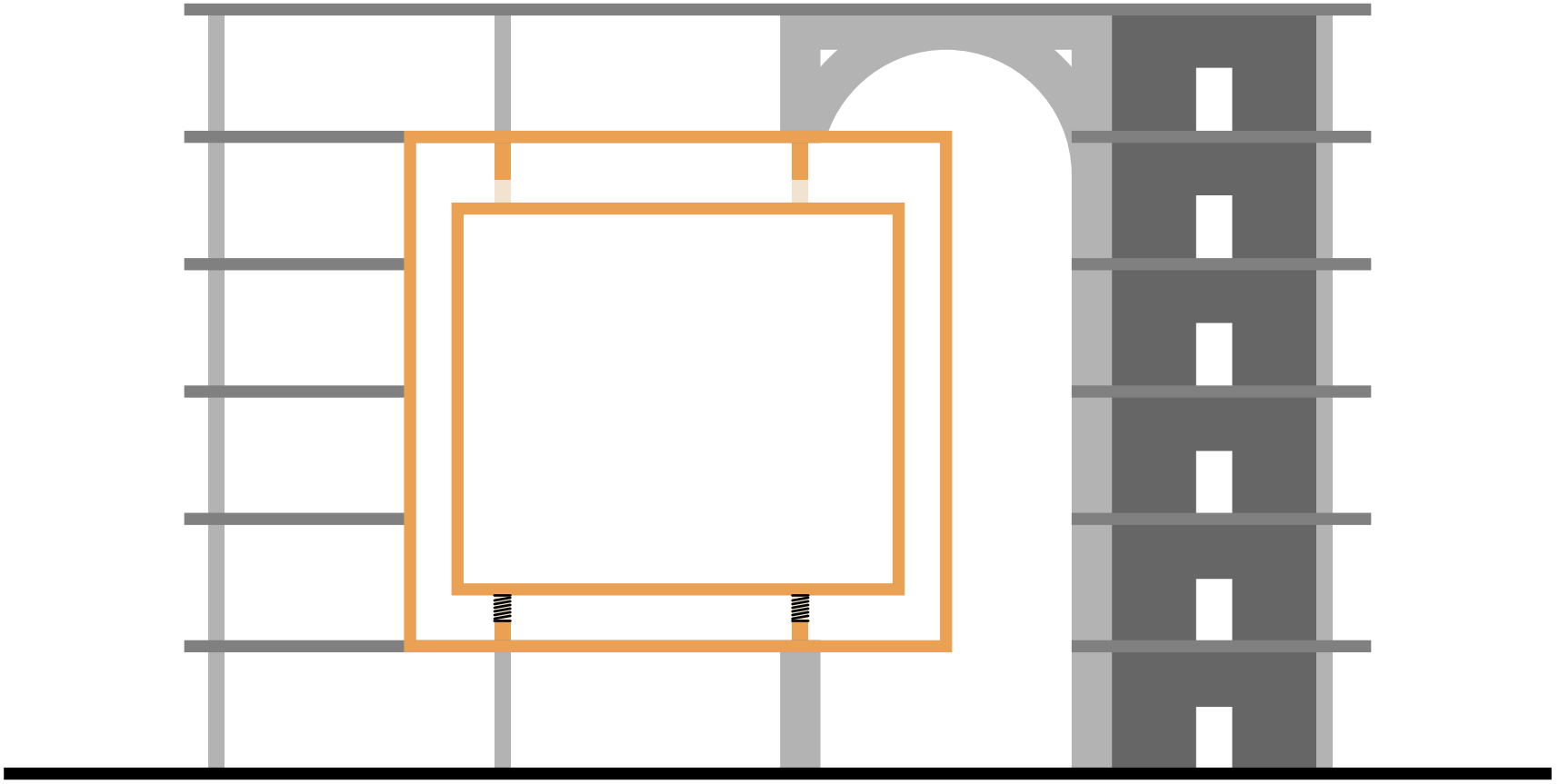
implementation

INNER SHELL



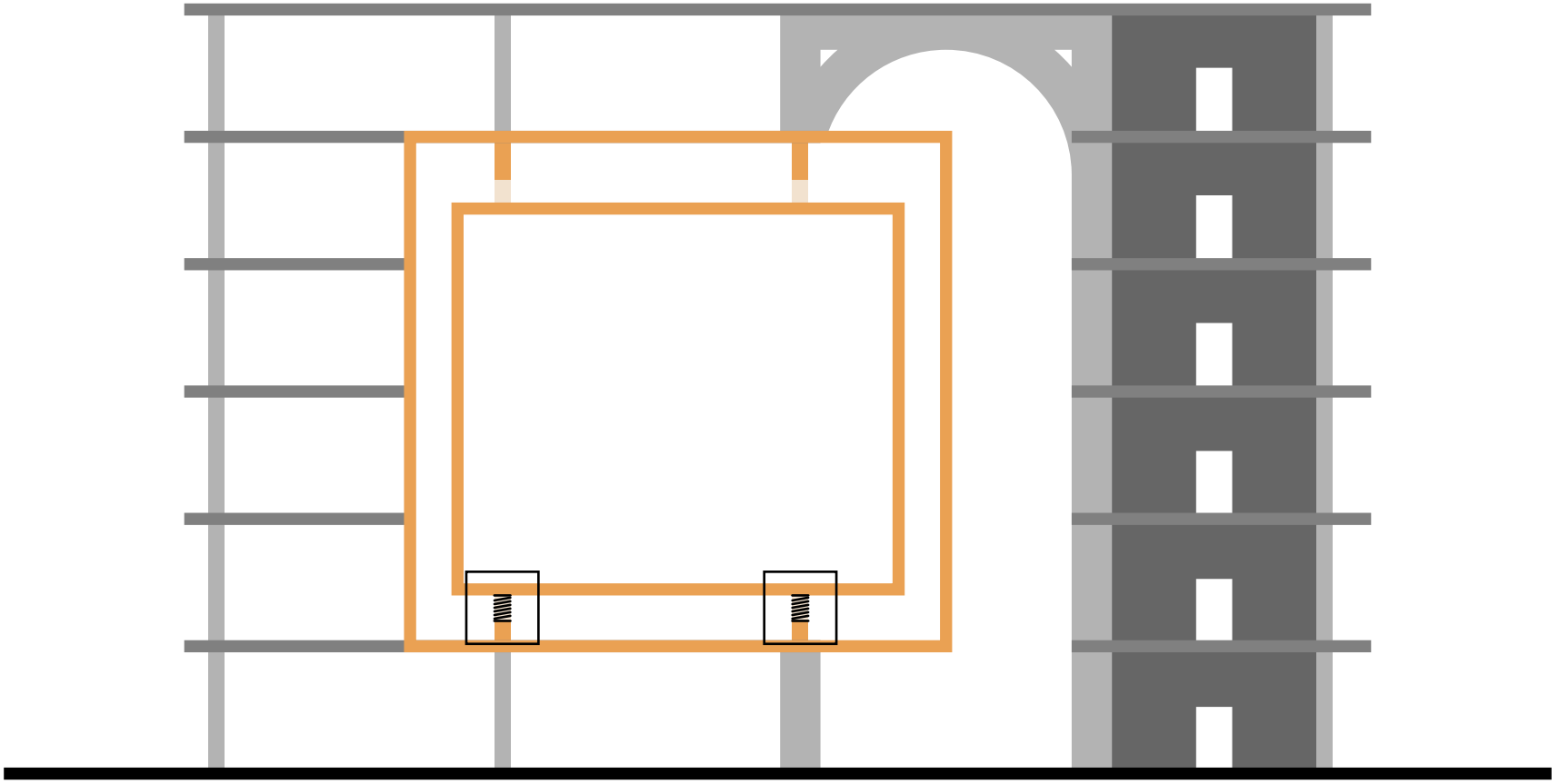
implementation

SPRING CONNECTION



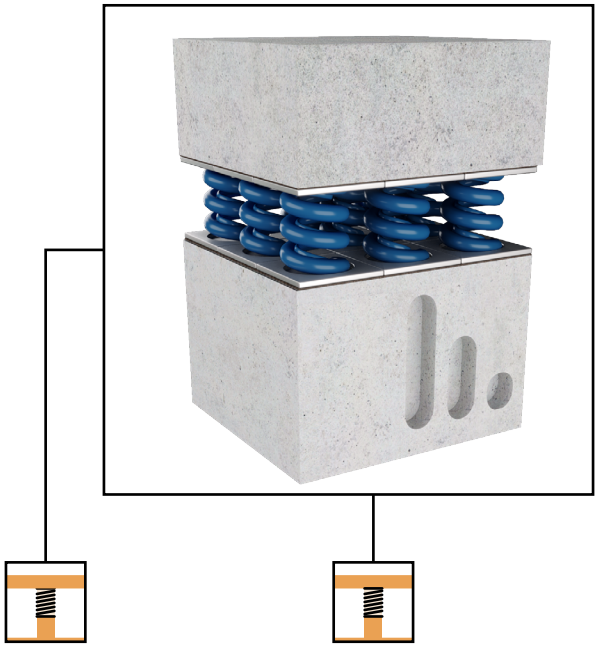
implementation

SPRING CONNECTION

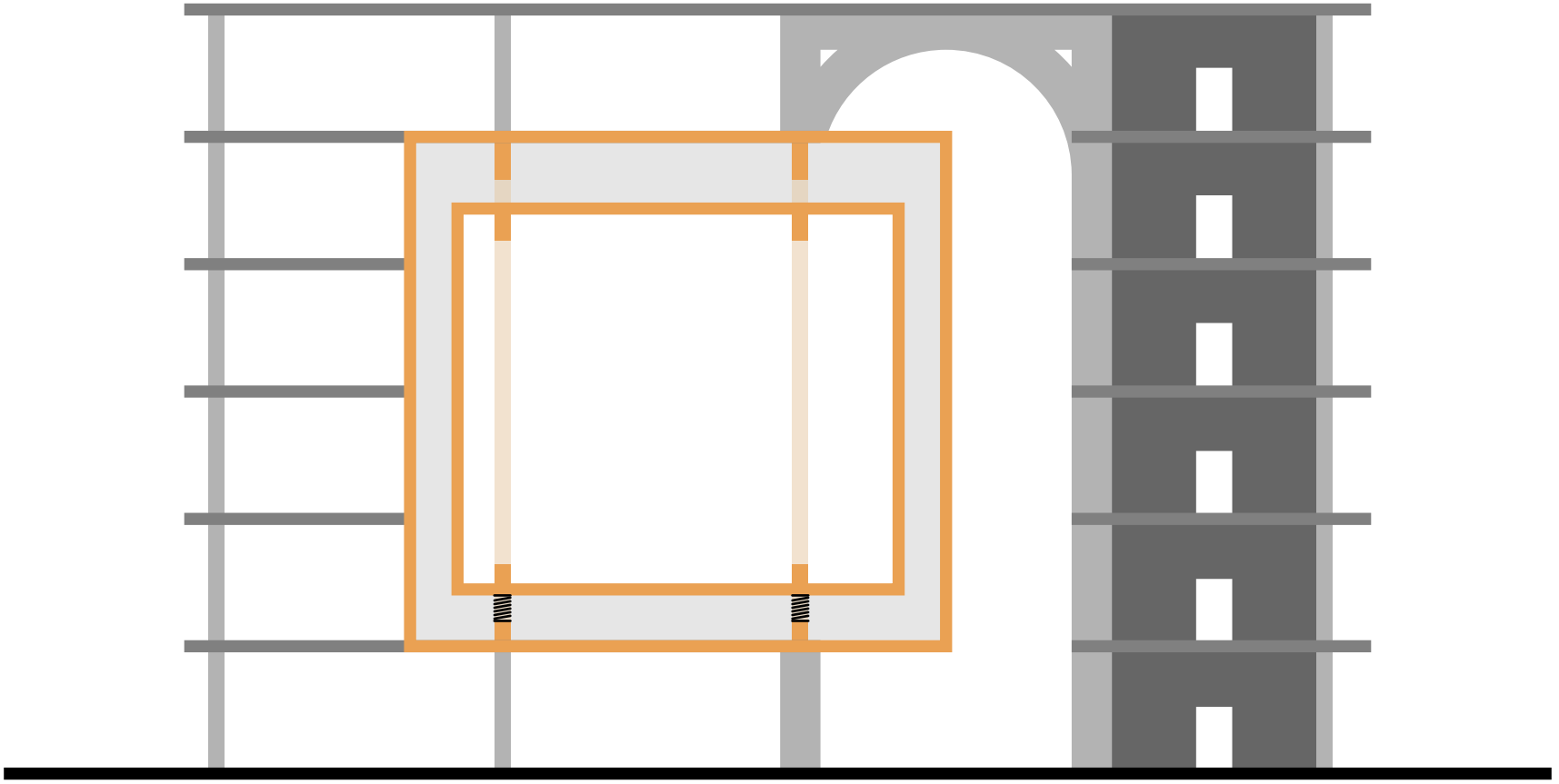


implementation

SPRING CONNECTION

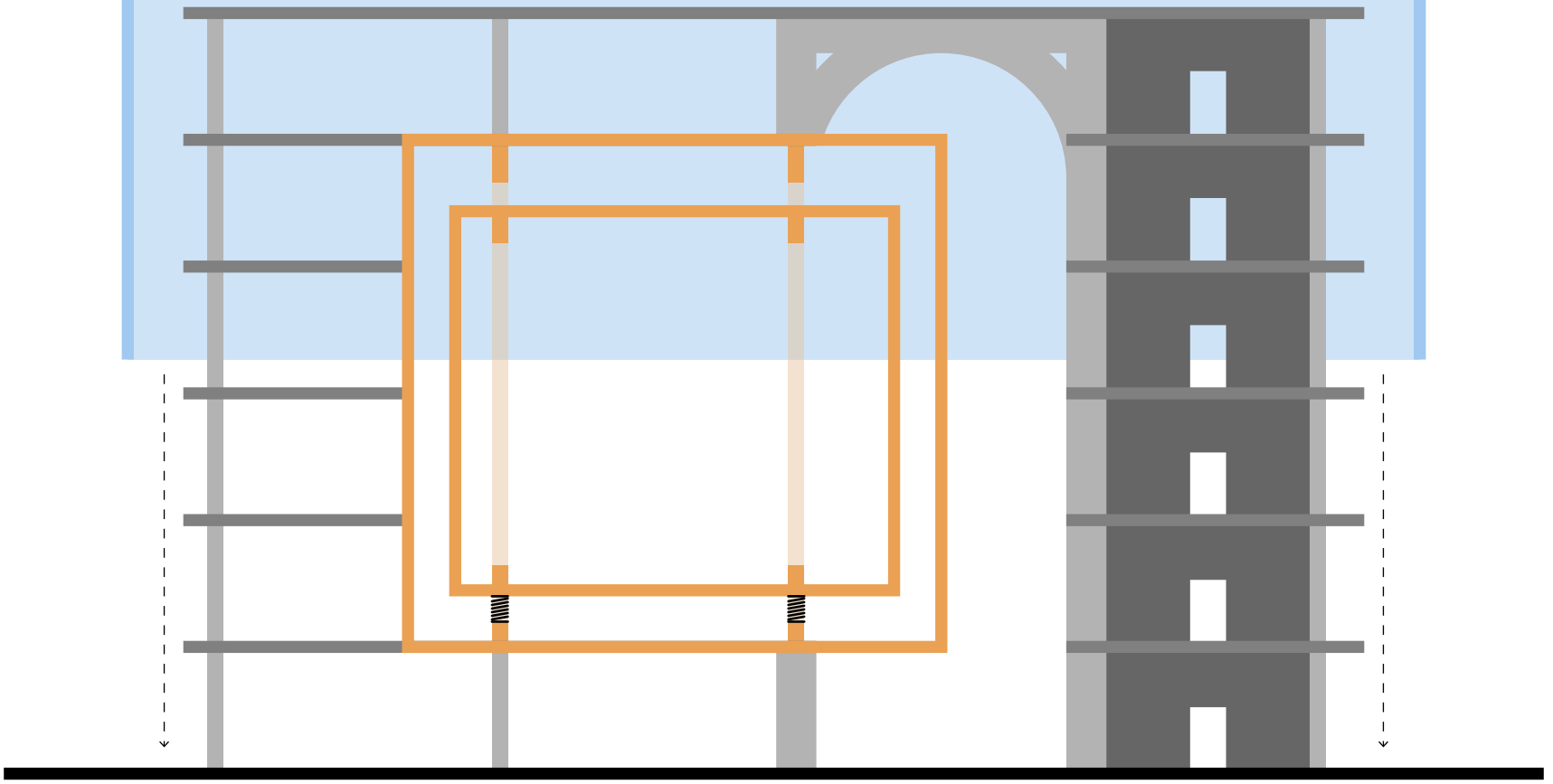


INNER SHELL CONSTRUCTION + CIRCULATION

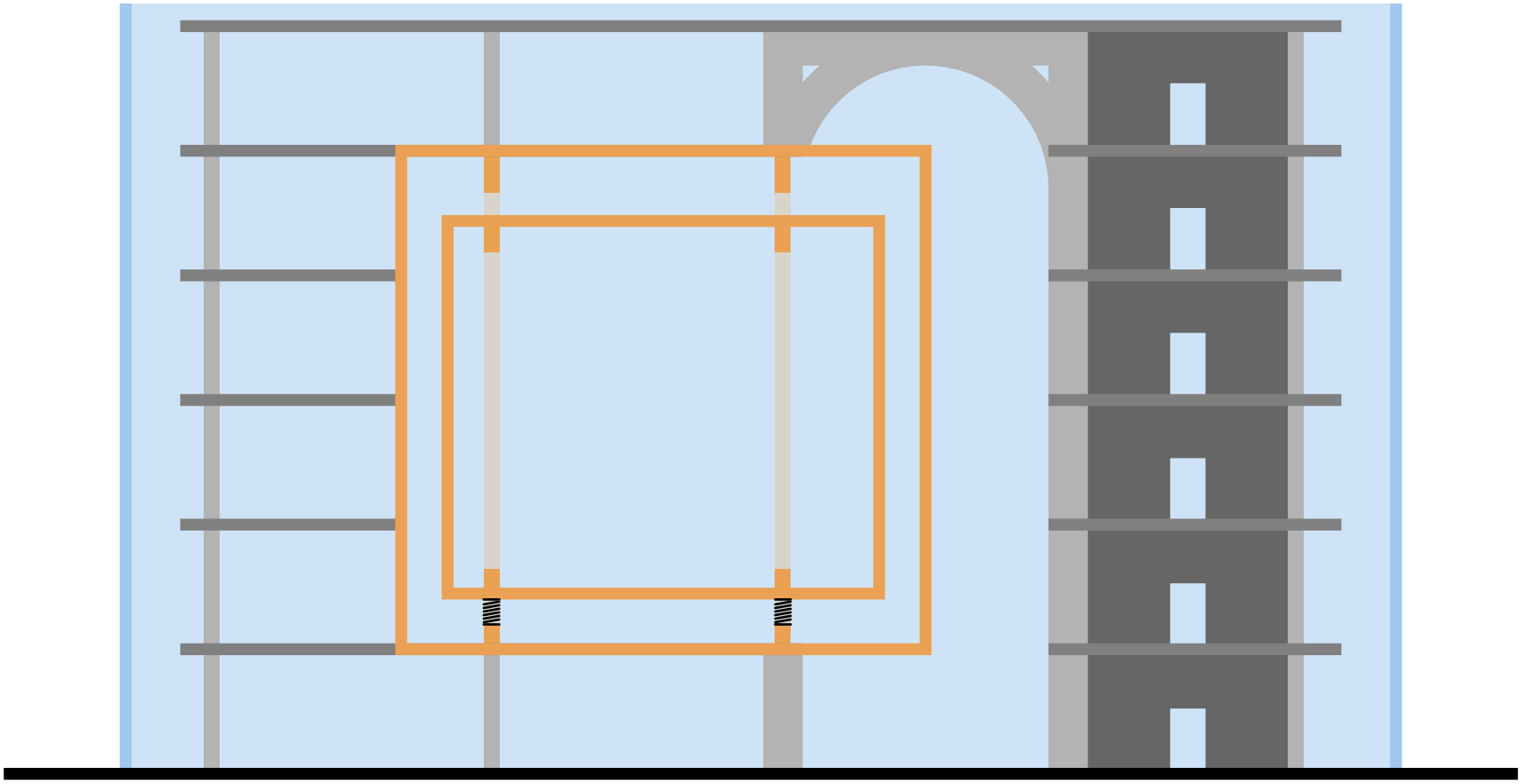


implementation

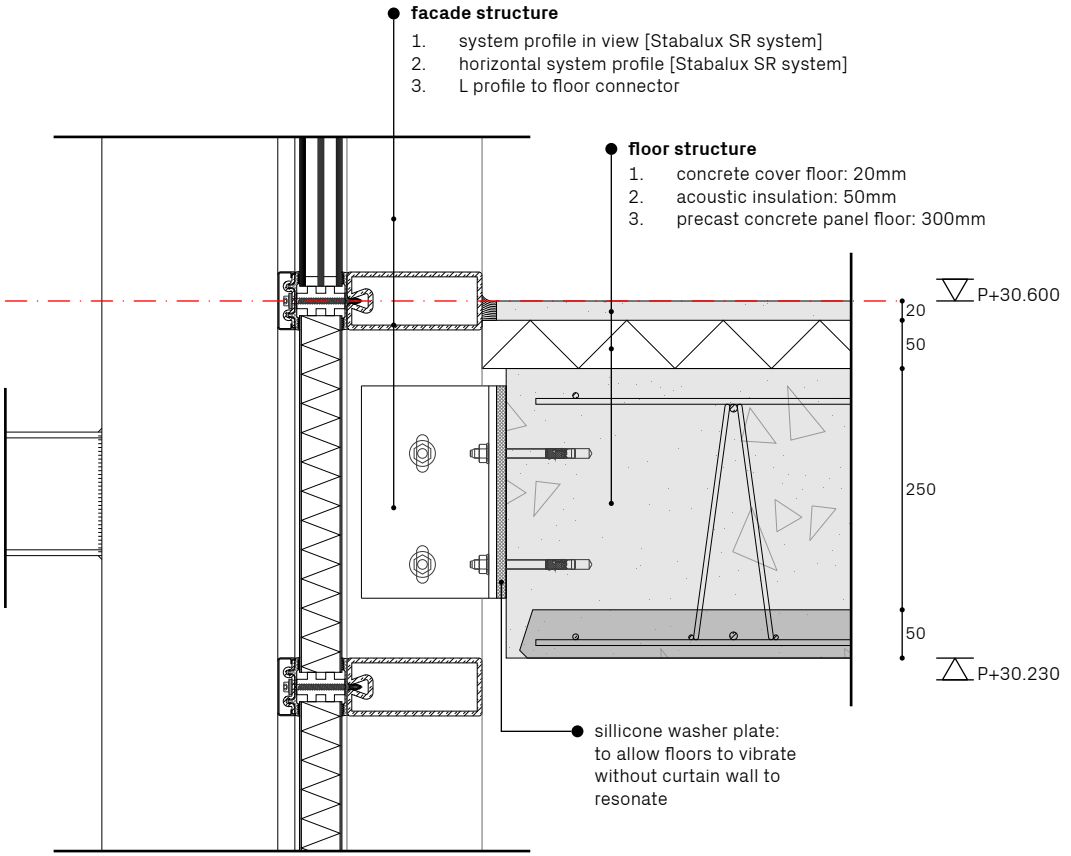
FACADE



FACADE



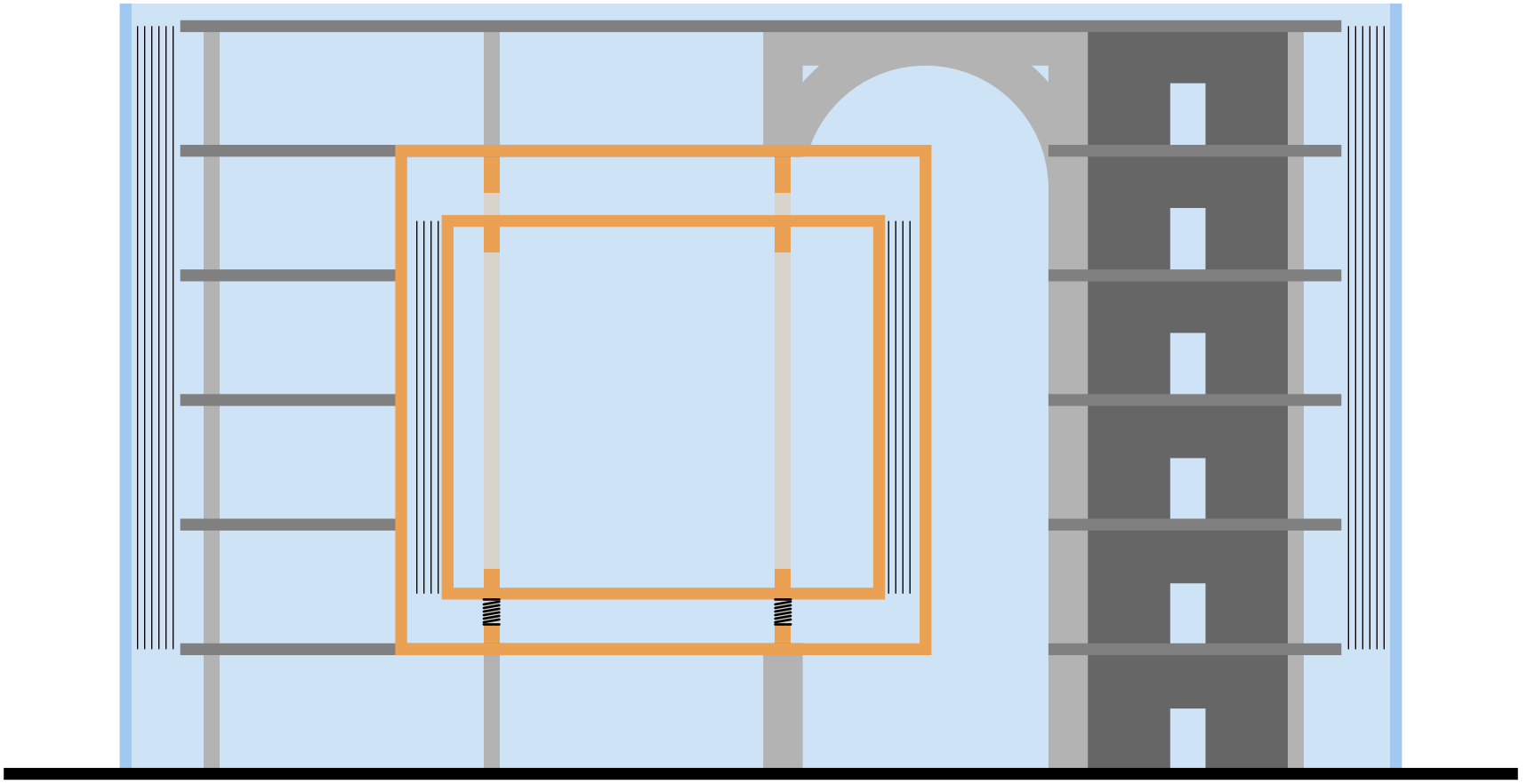
SILLICONE ATTACHMENT



200mm 50mm 50mm

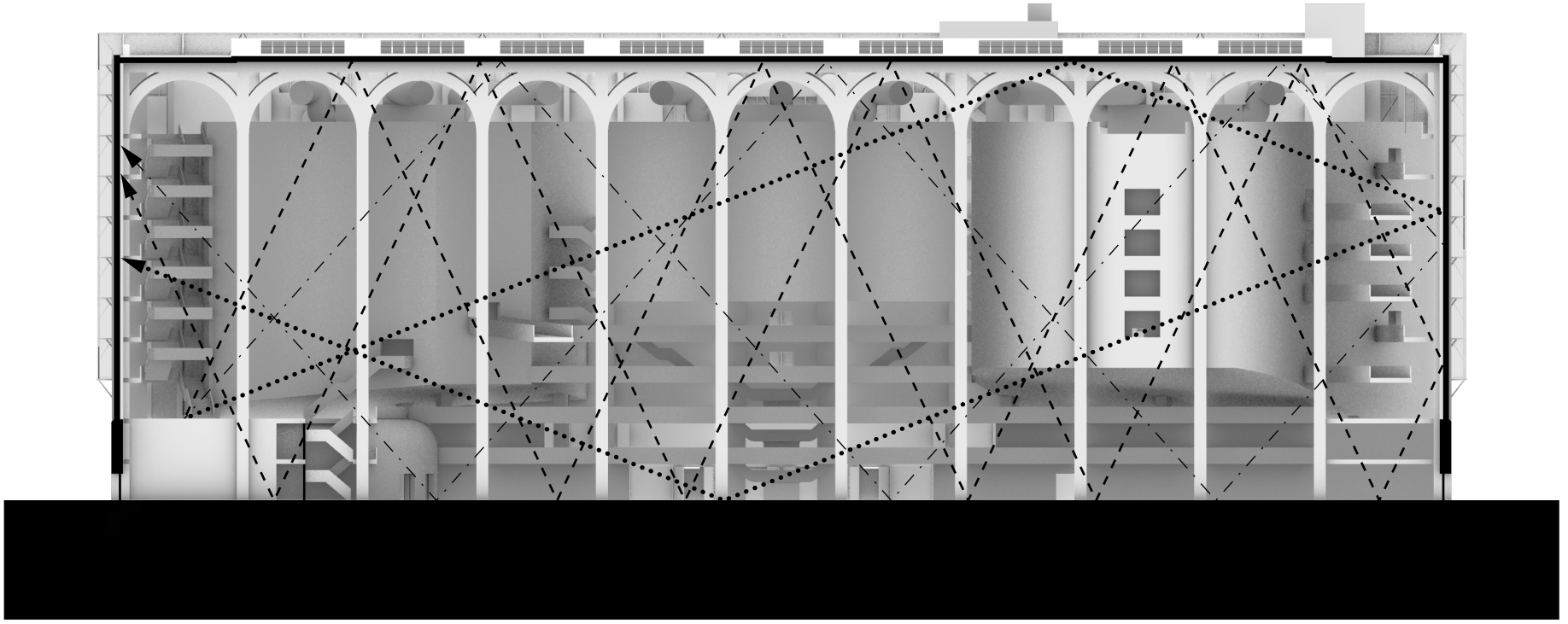
implementation

VIBRATIONS



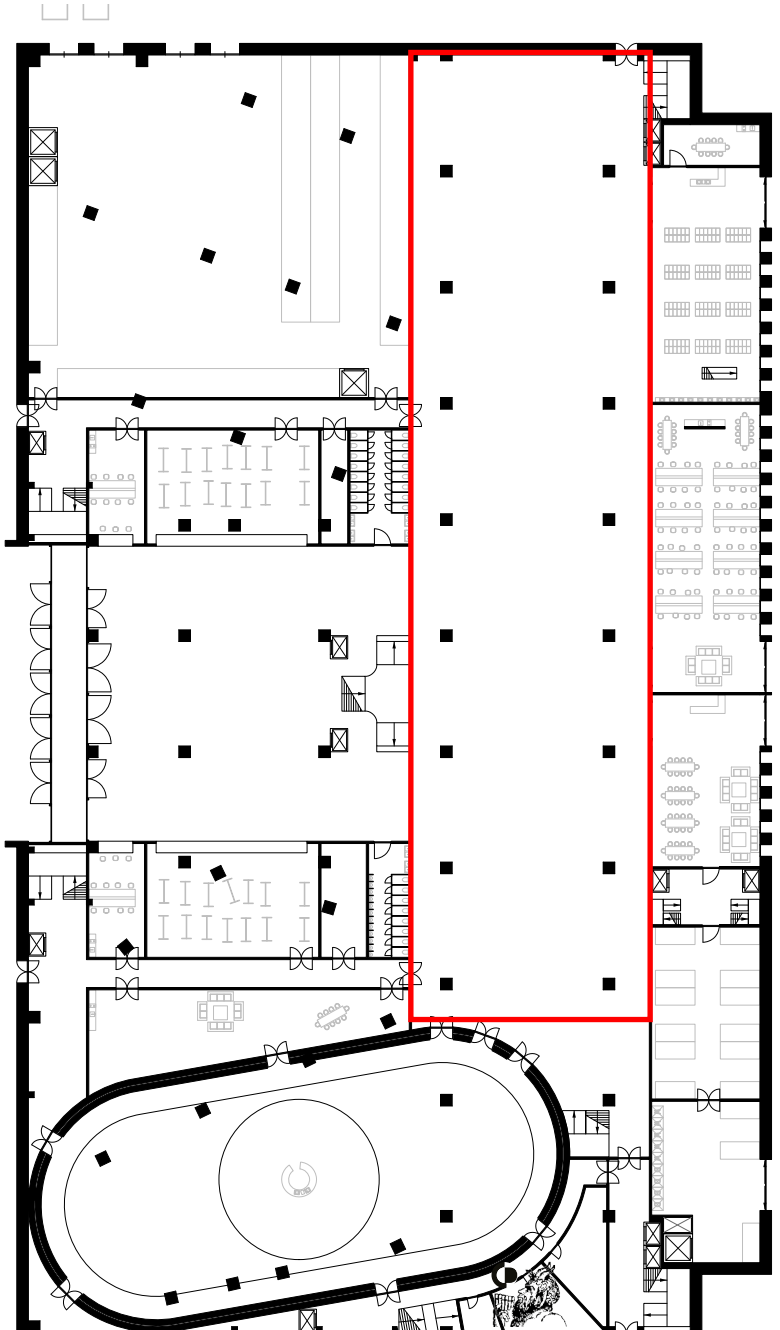
implementation

FOYER ACOUSTICS



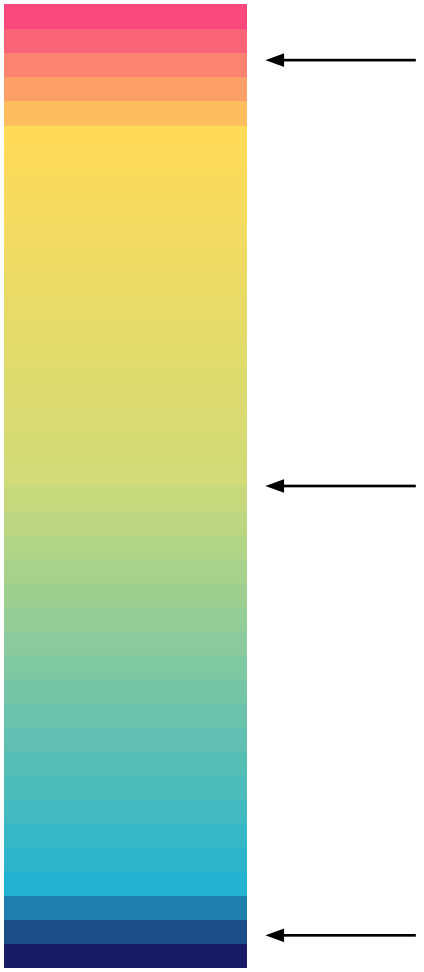
implementation

ORIENTATION



IDEAL SITUATION HEAT MAP

IDEAL SITUATION HEAT MAP

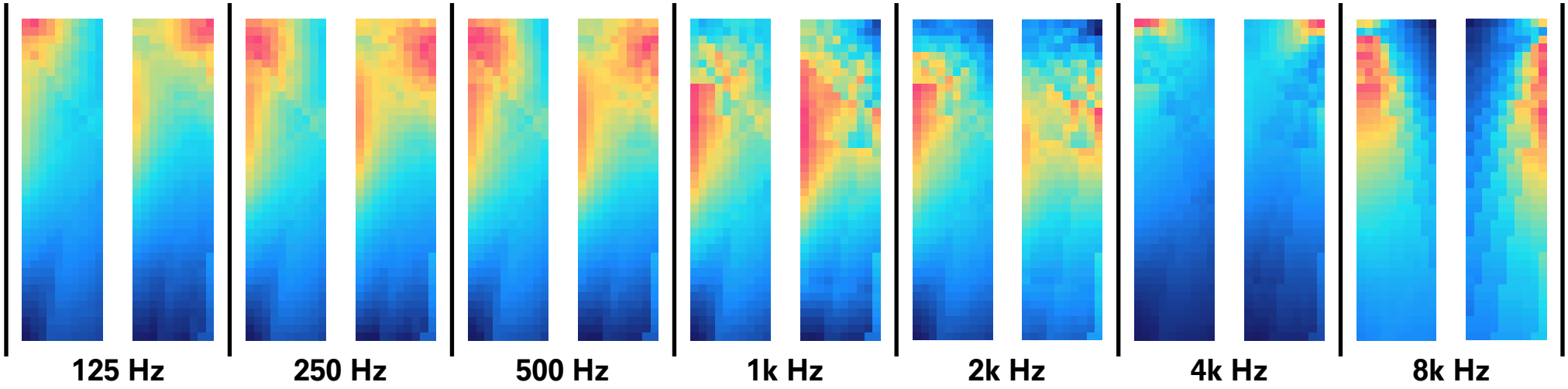


loud because in front you want to have louder noise

fairly constant and gradually decreasing dB levels

low dB level because the back is supposed to be less noisy

SIMULATION HEAT MAPS

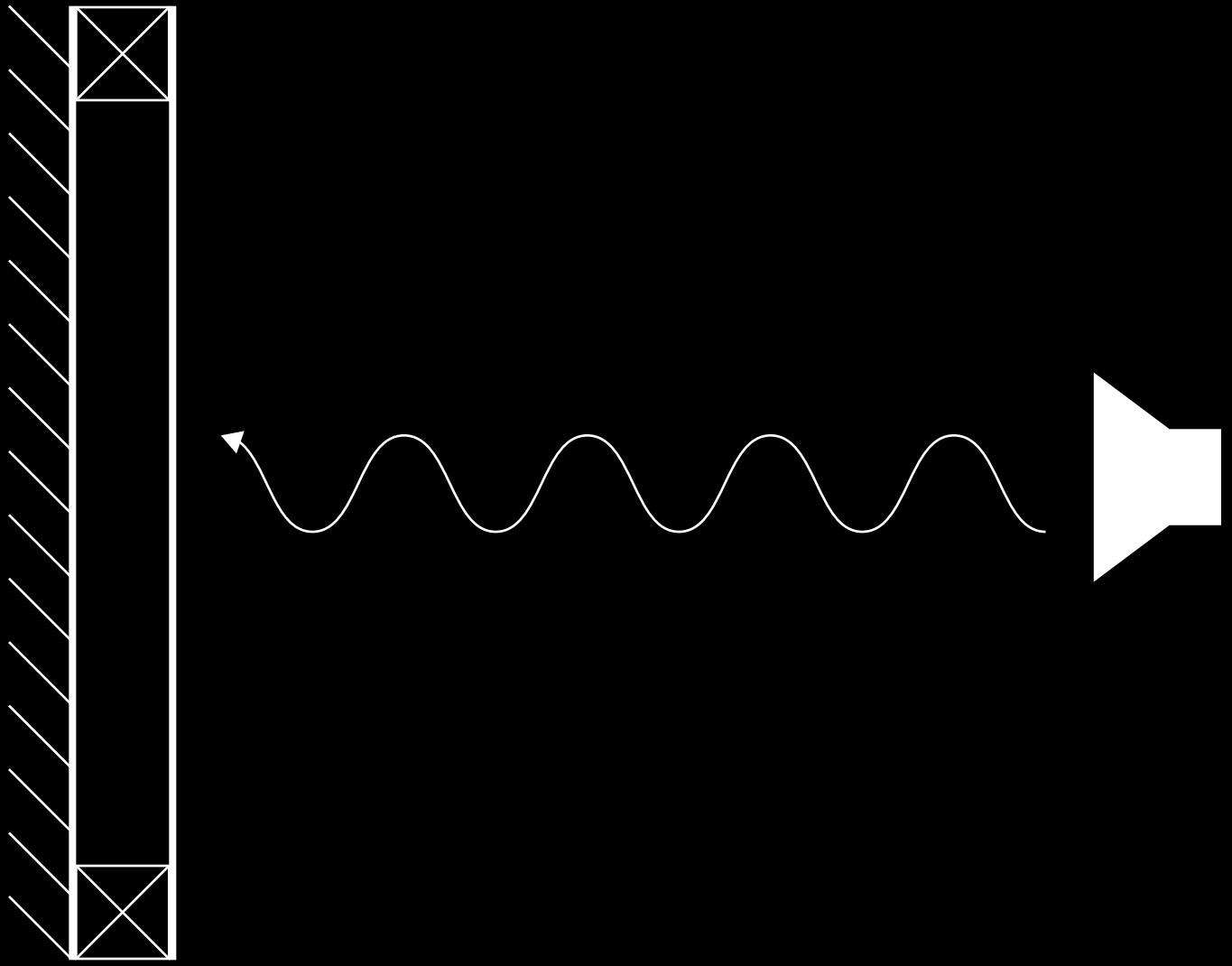


implementation

ACOUSTIC PANELING

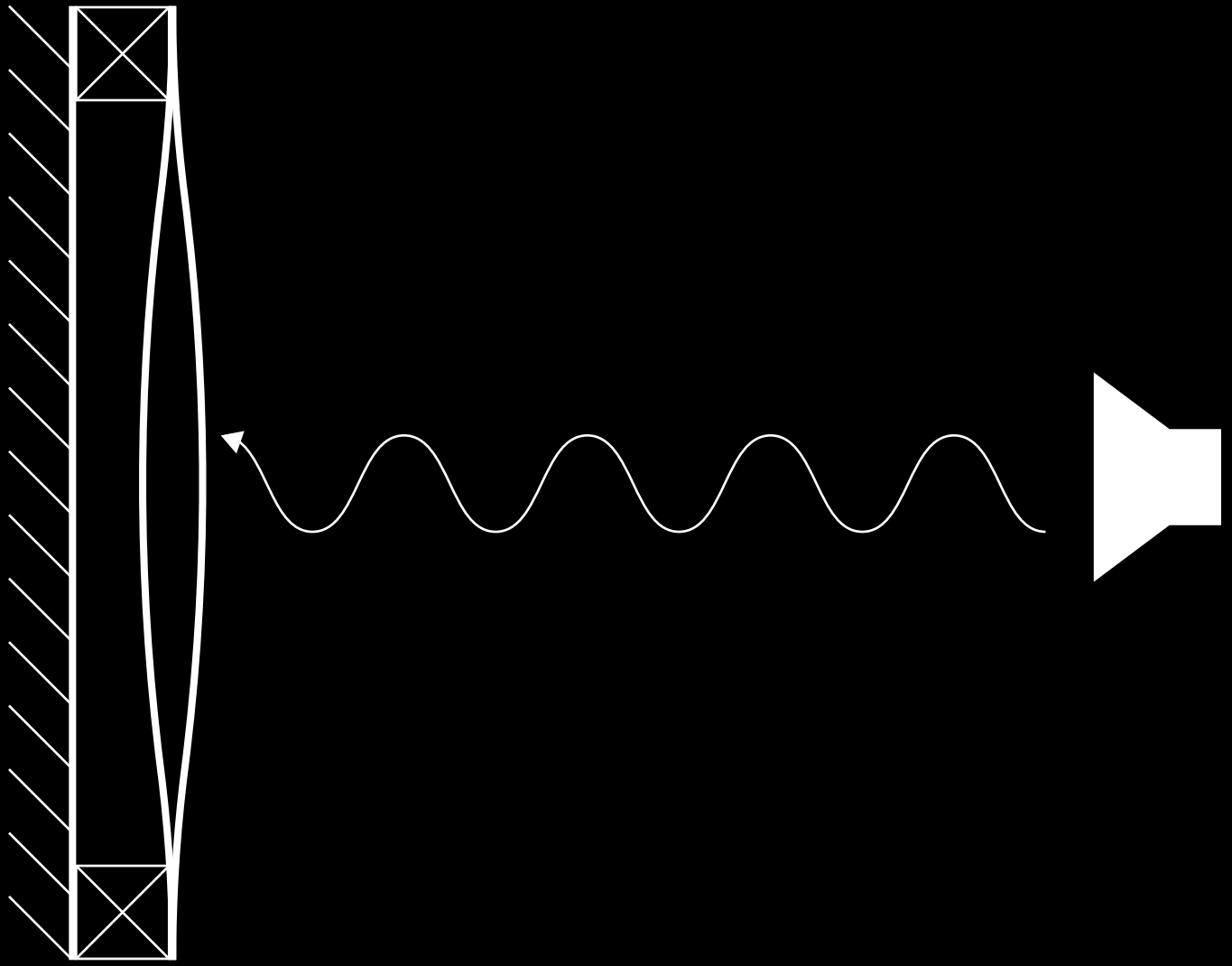
implementation

SOUND CONTACT



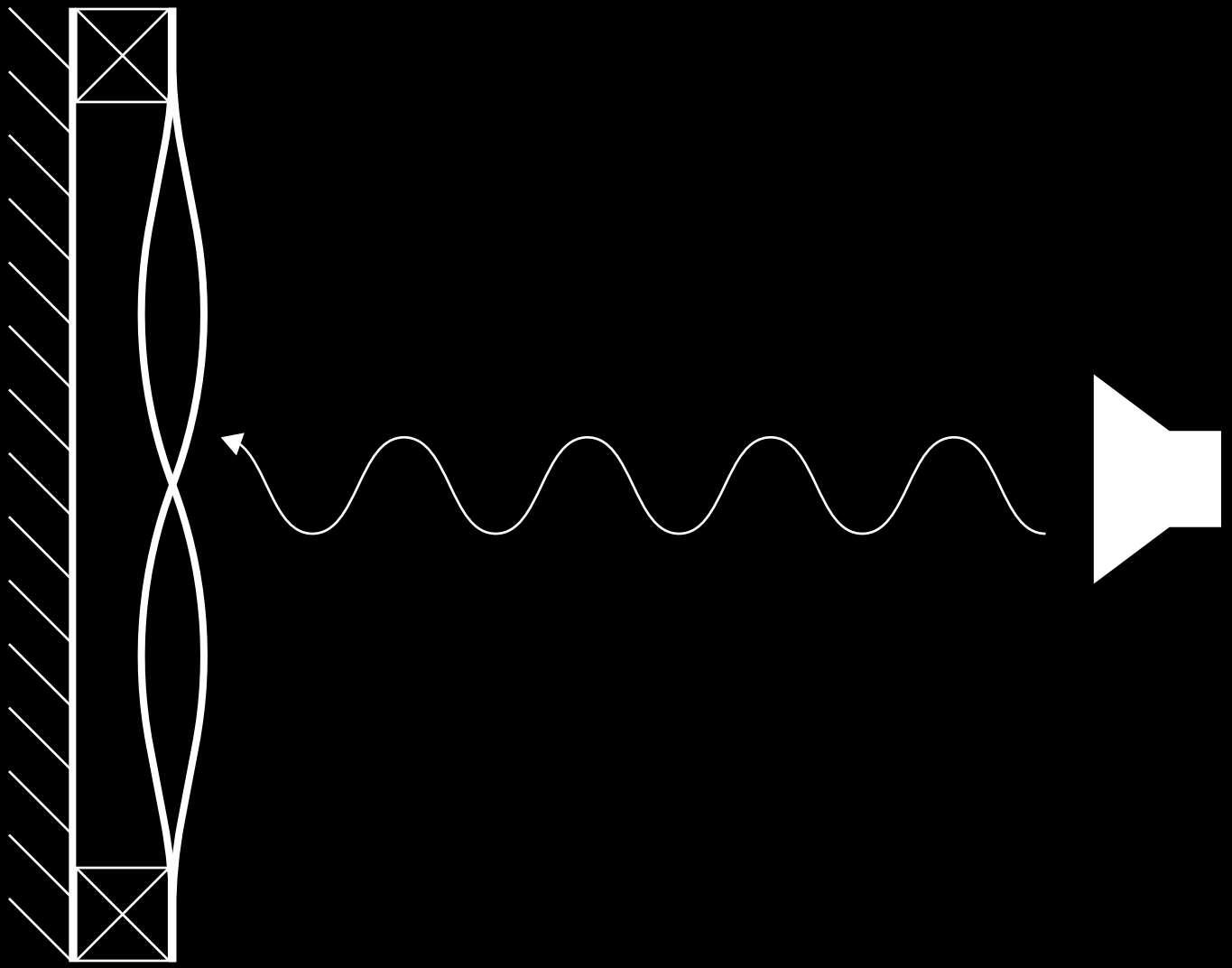
implementation

RESONANCE



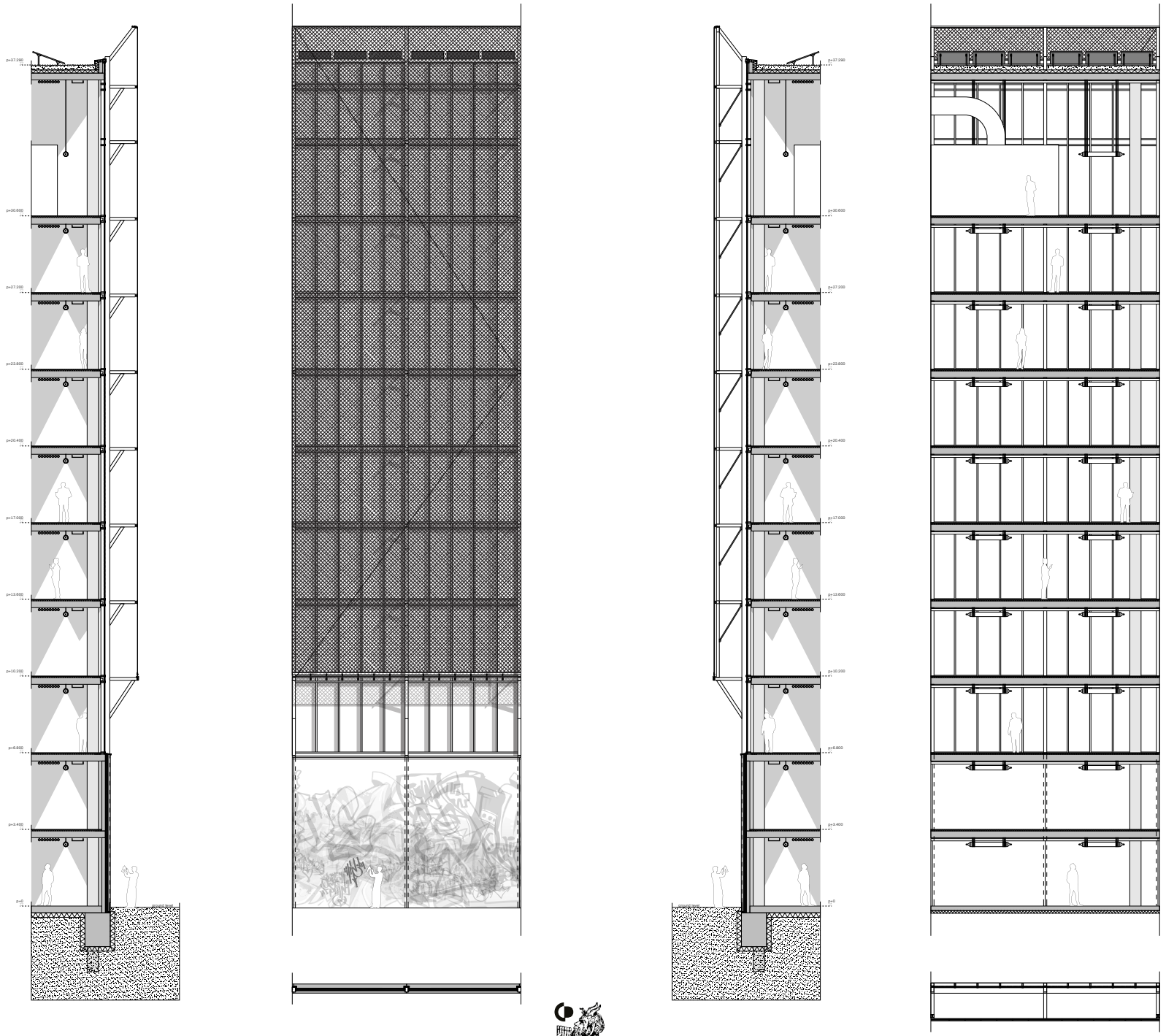
implementation

RESONANCE



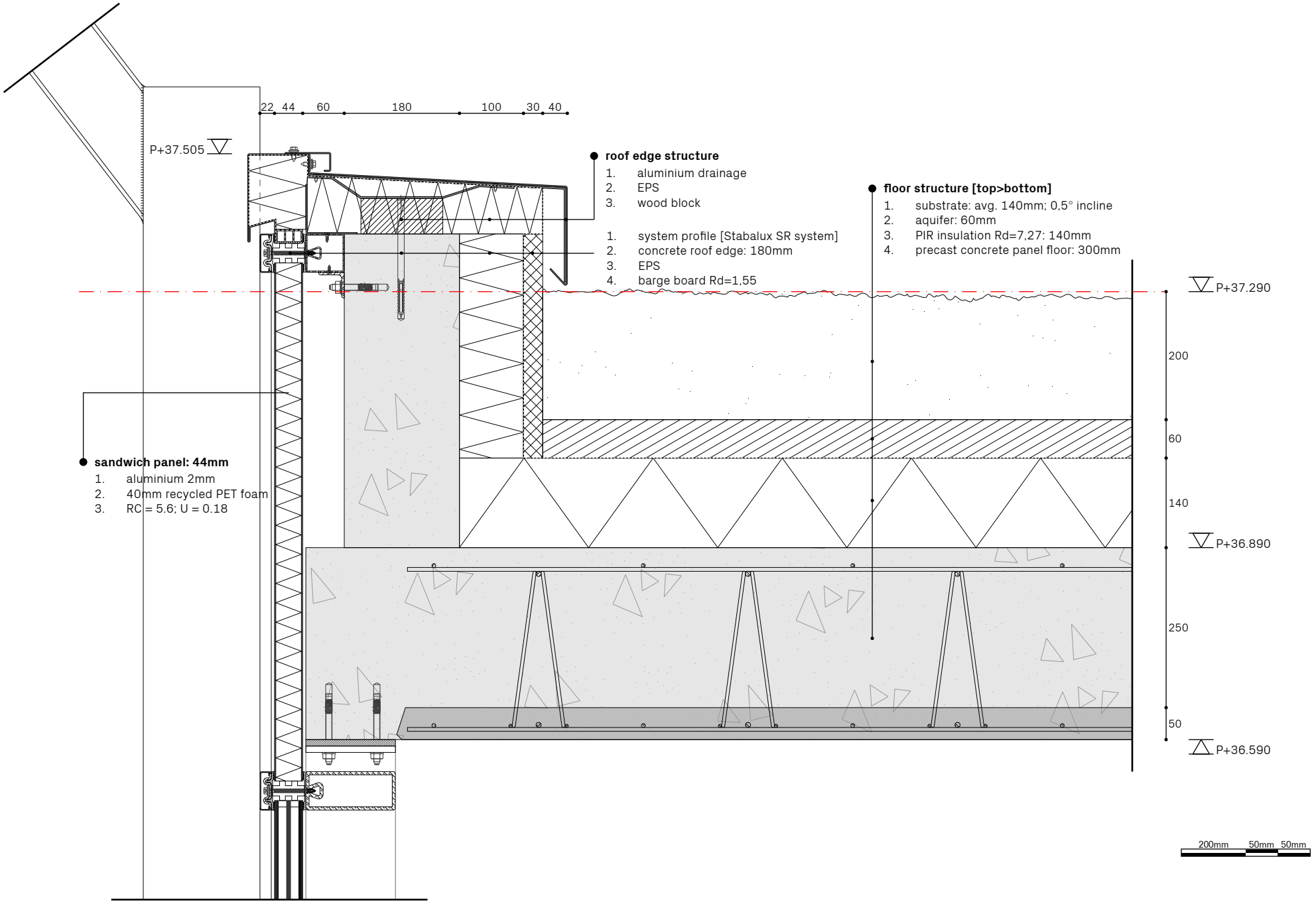
implementation

FACADE



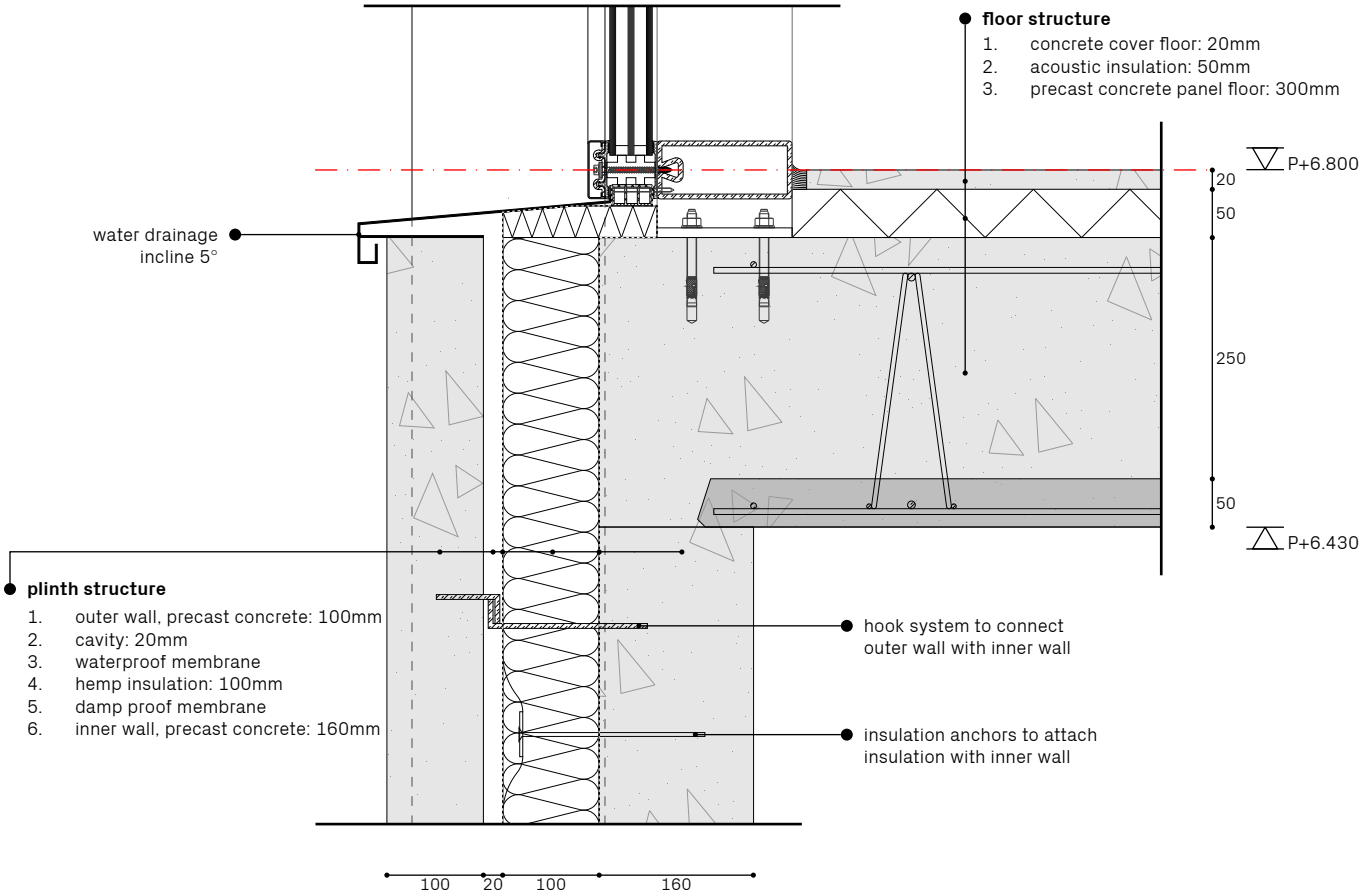
implementation

ROOF DETAIL



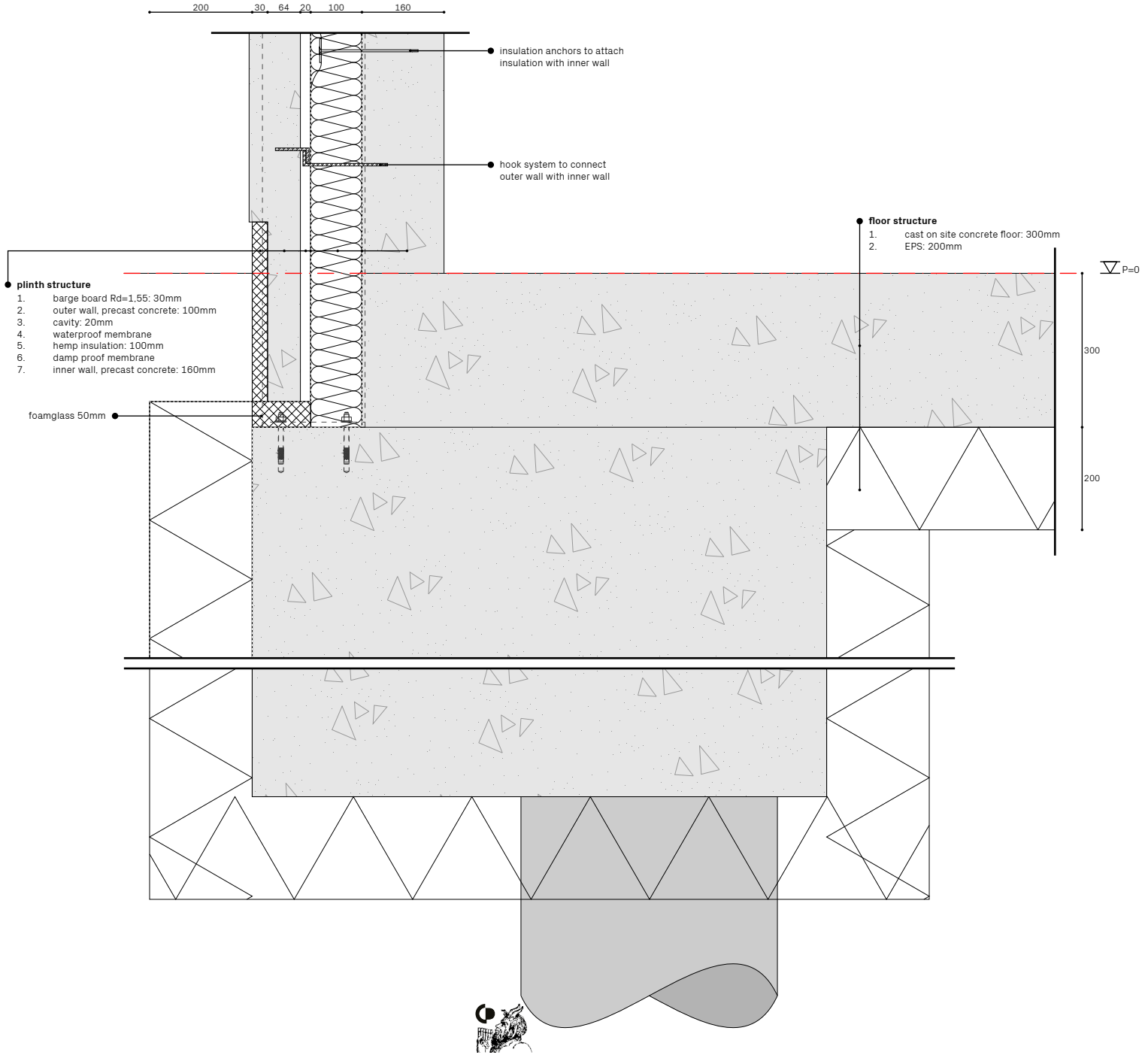
implementation

PLINTH DETAIL



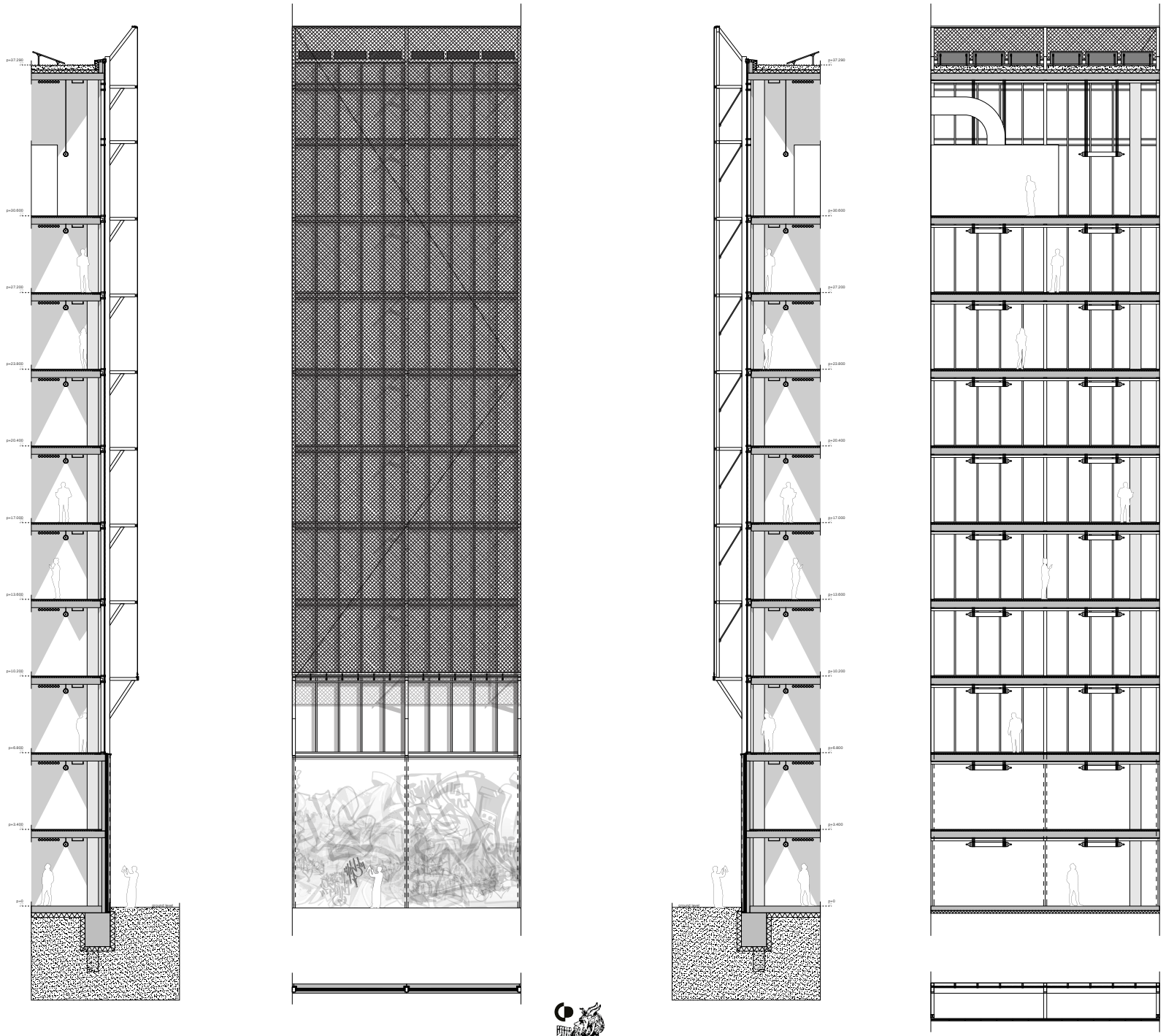
200mm 50mm 50mm

FOUNDATION DETAIL



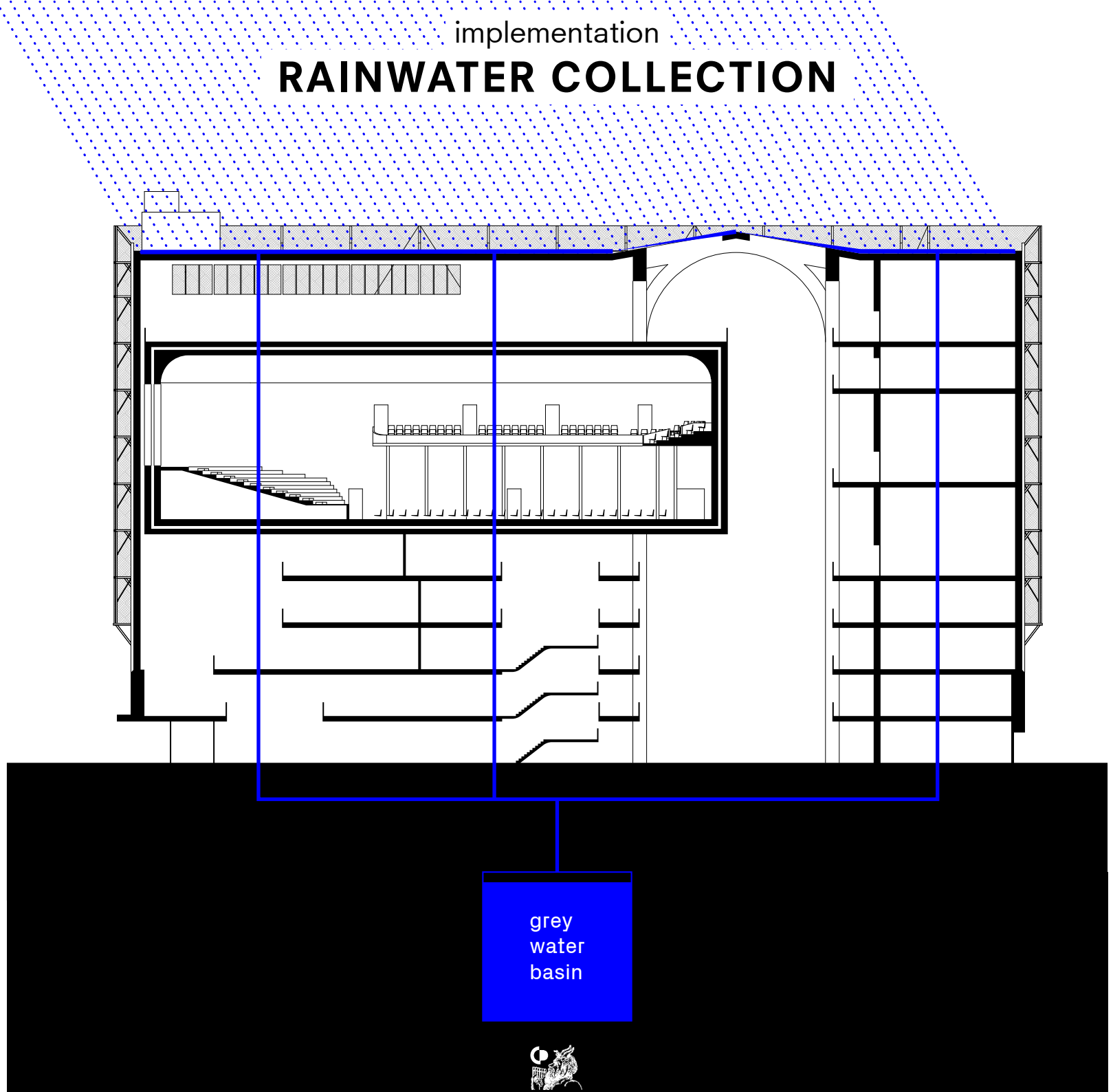
implementation

FACADE



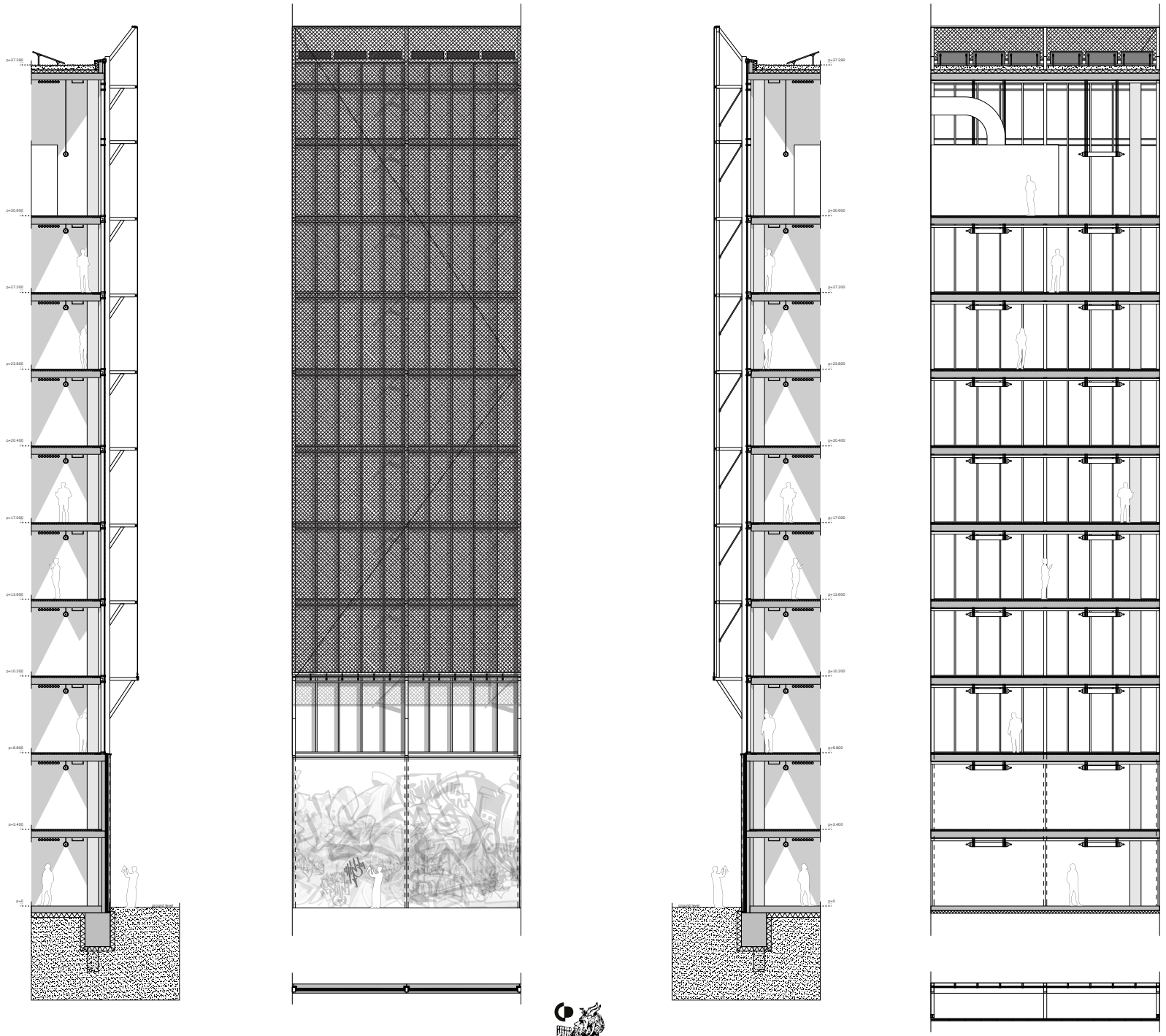
implementation

RAINWATER COLLECTION



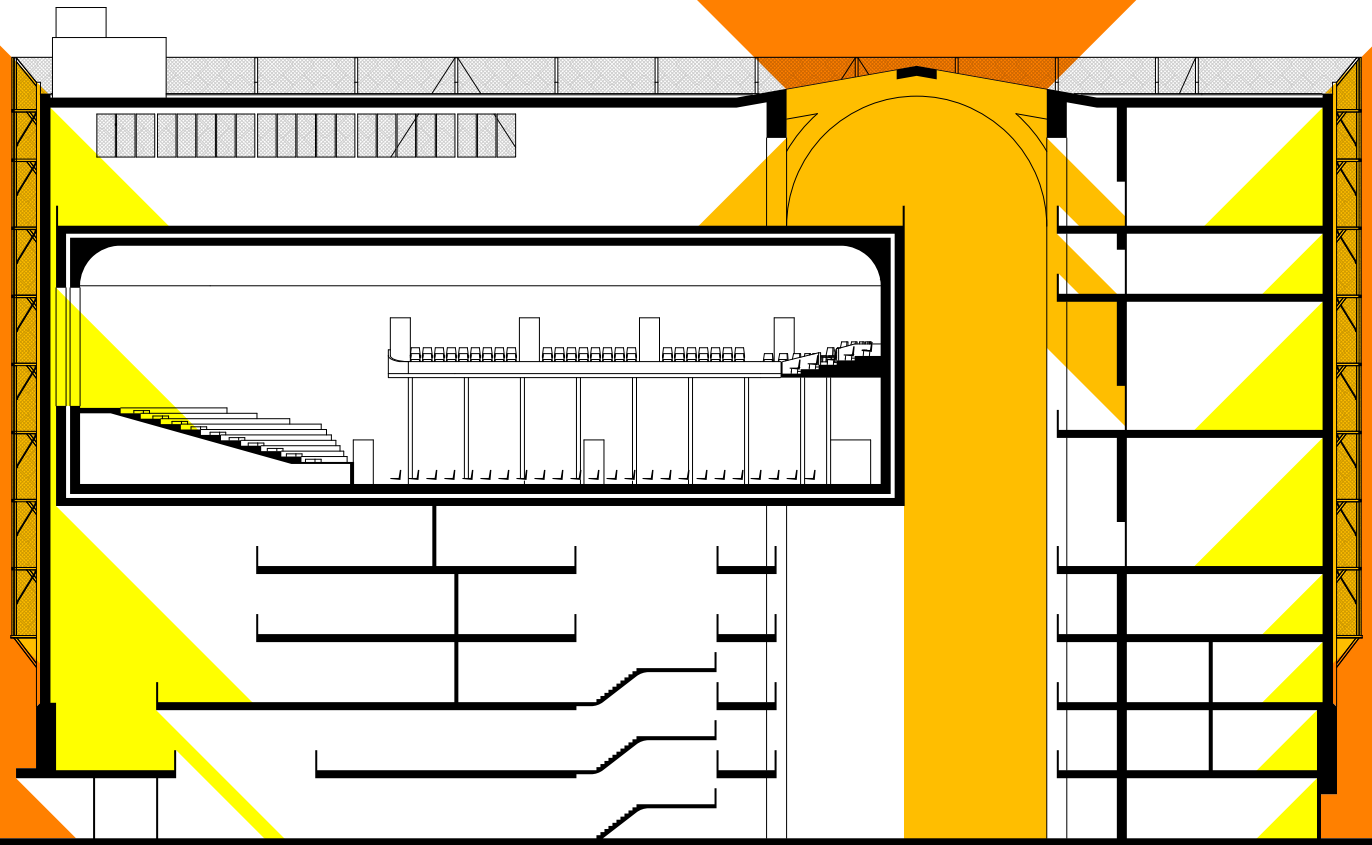
implementation

FACADE



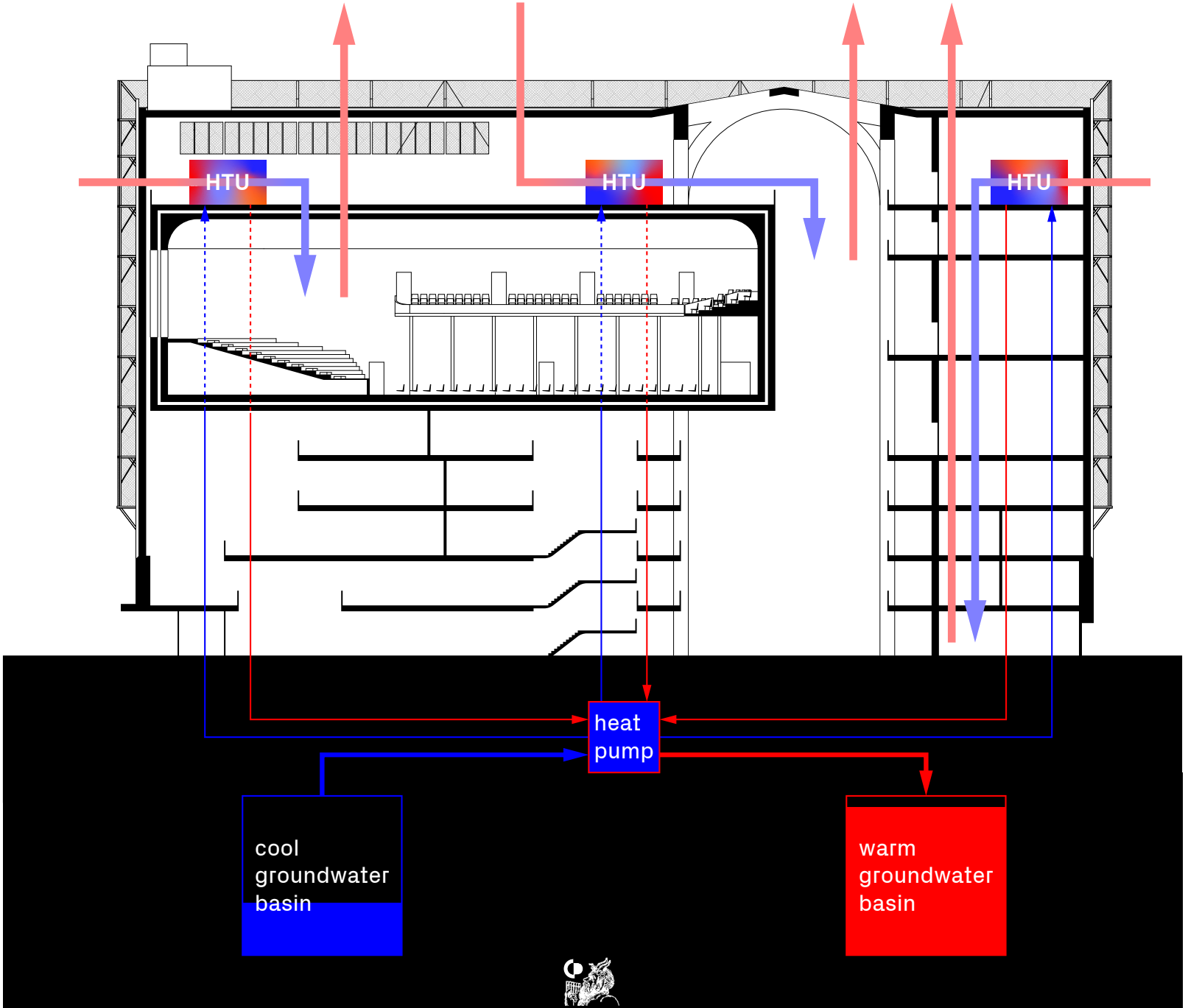
implementation

SUN PROTECTION



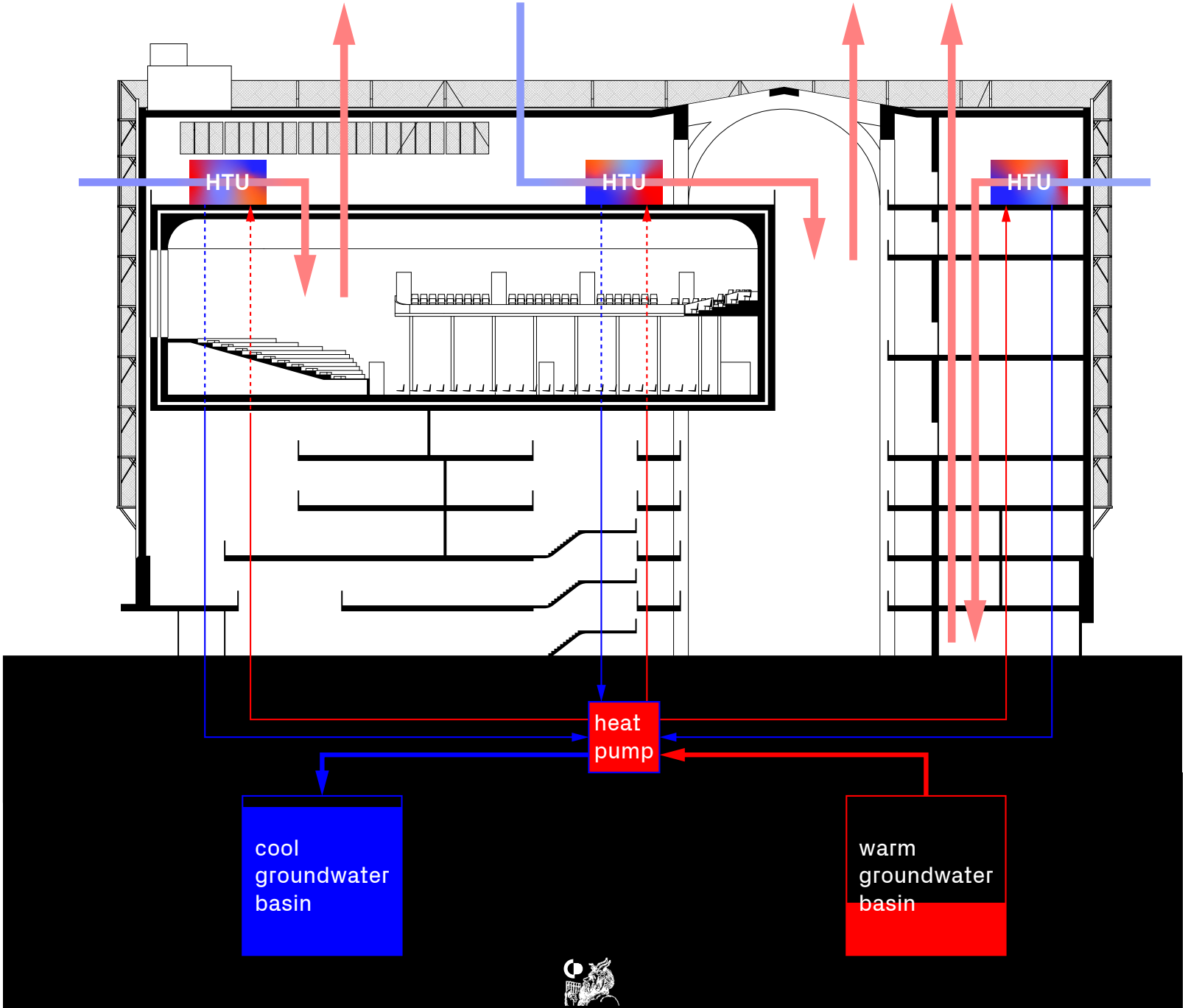
implementation

SUMMER CLIMATE CONTROL



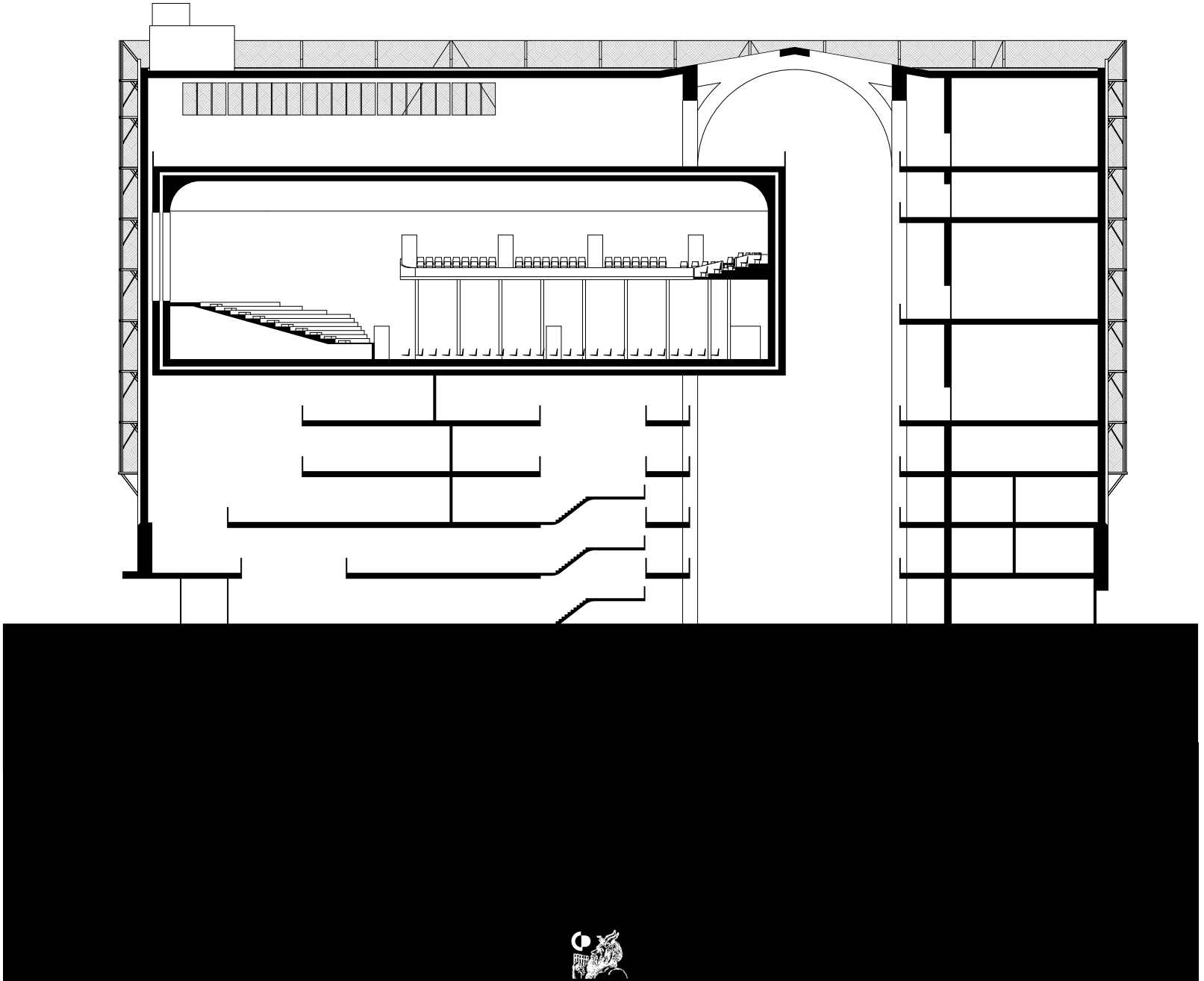
implementation

WINTER CLIMATE CONTROL

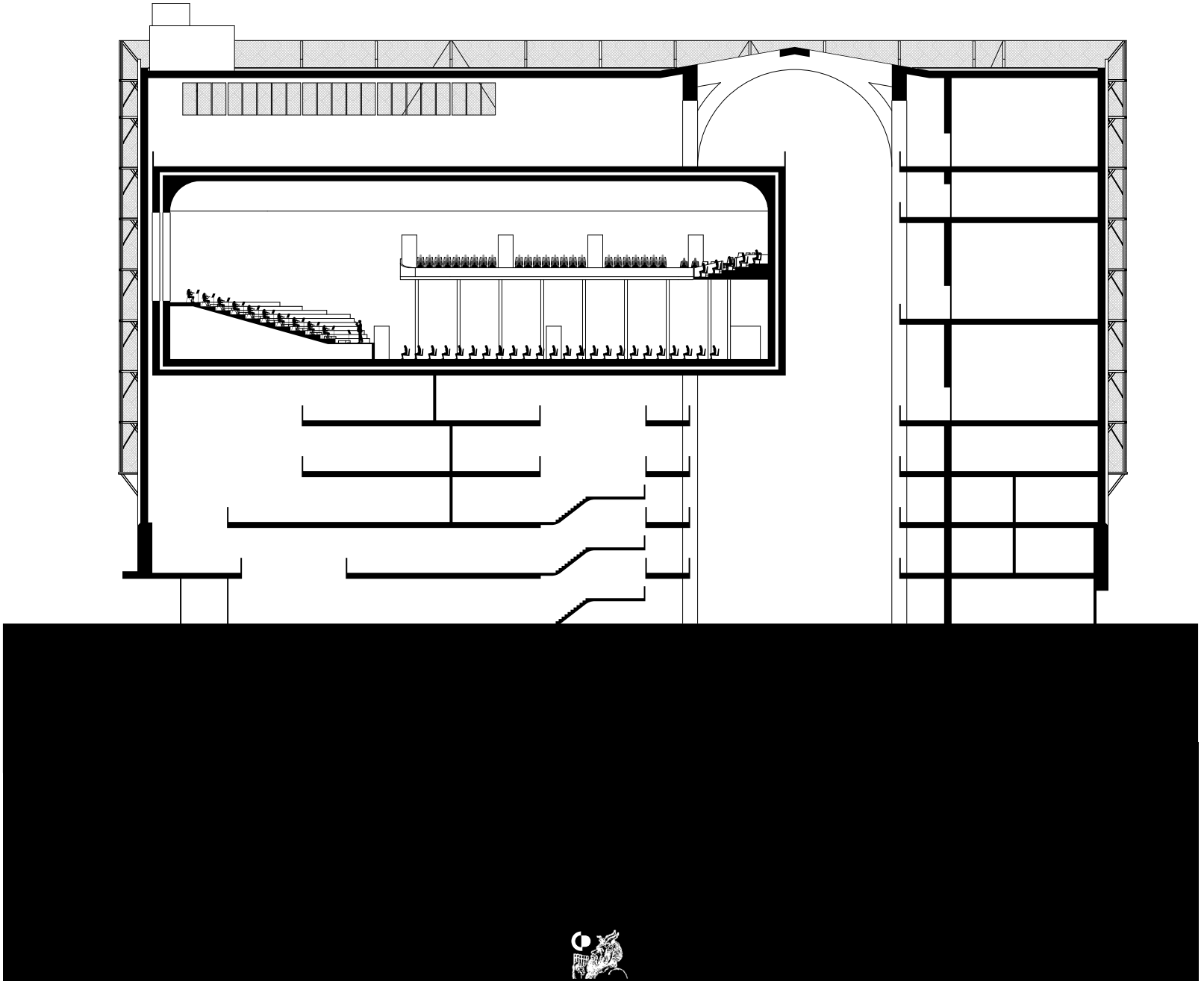


implementation

SECTION

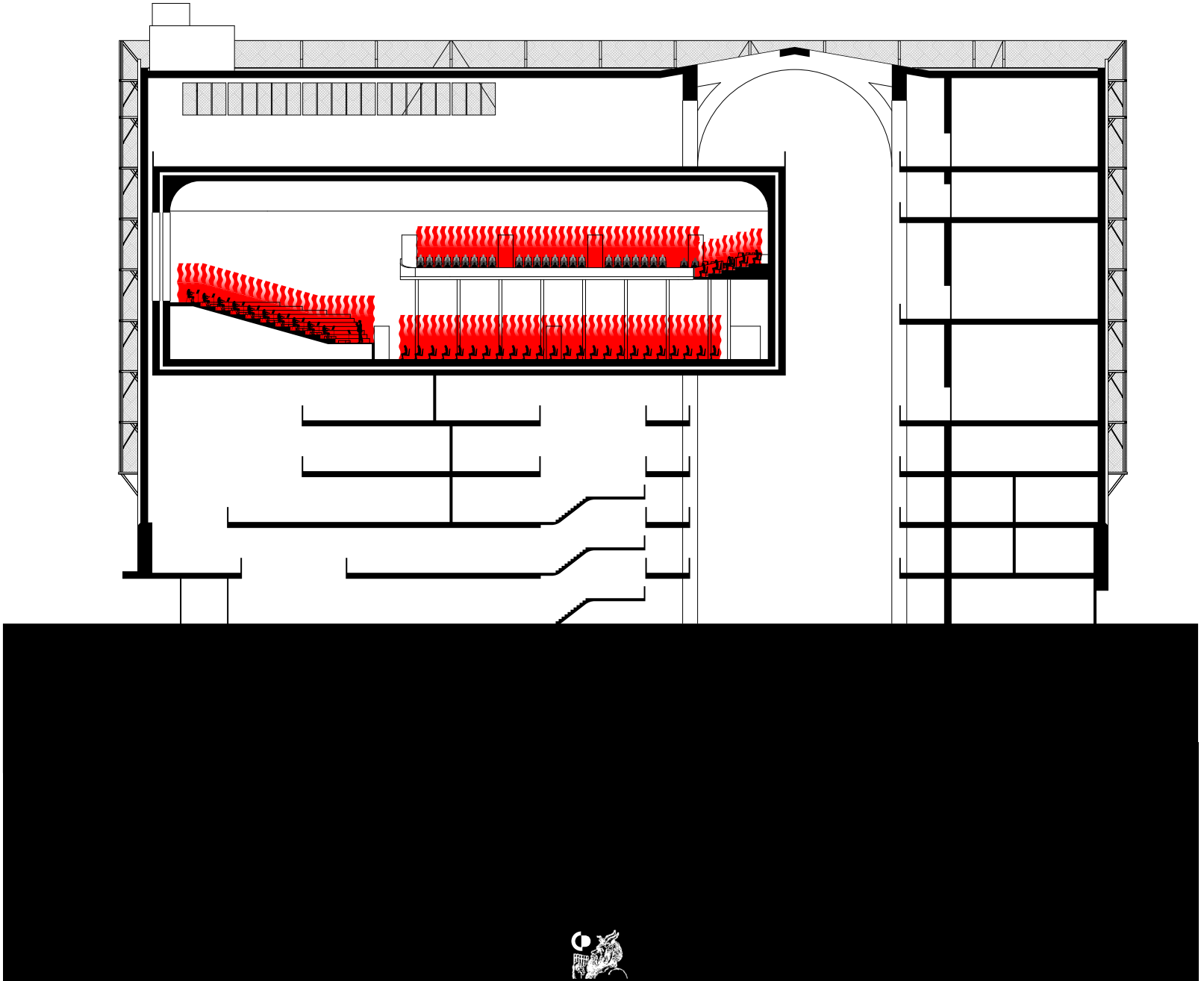


FULL AUDITORIUMS



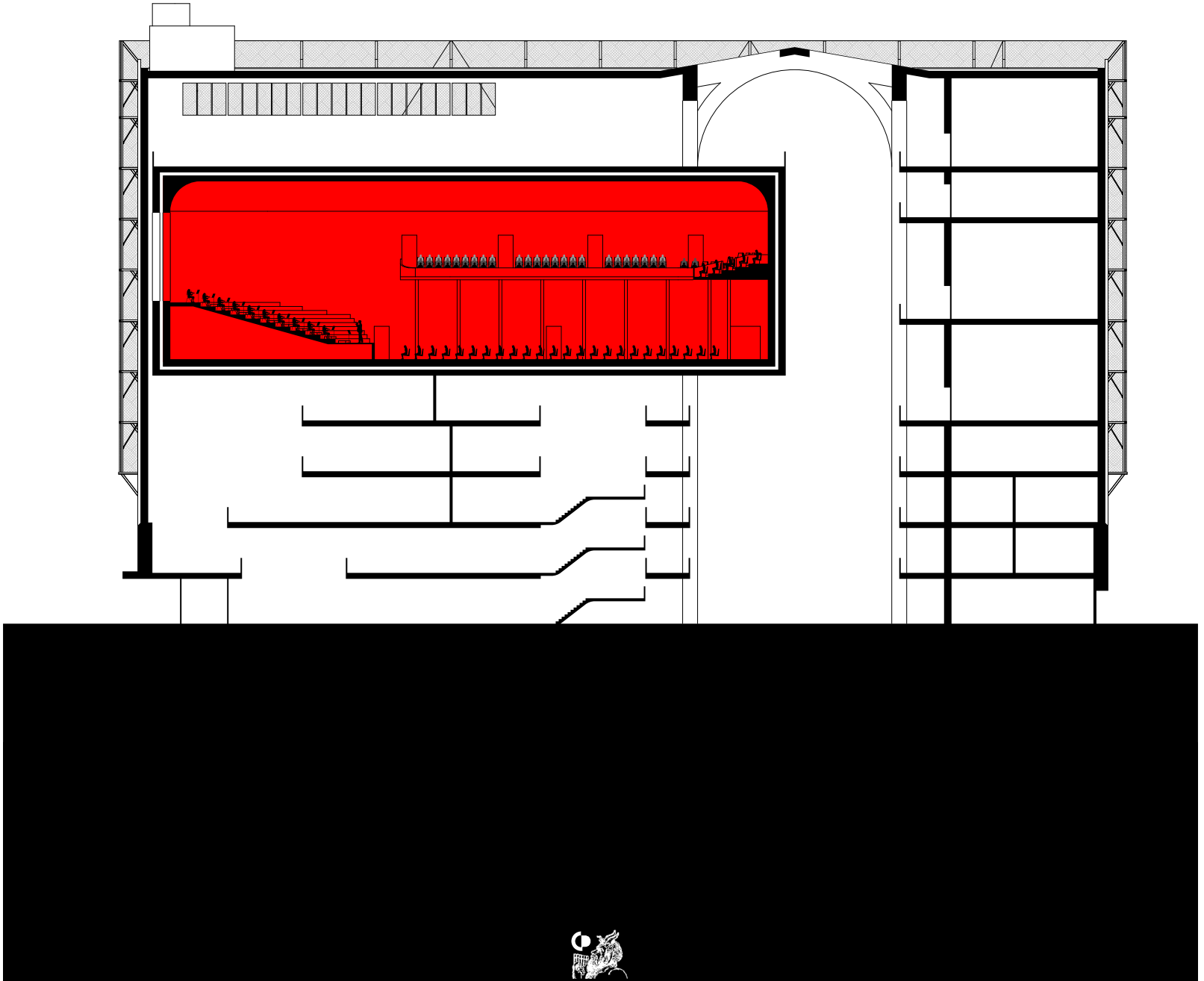
implementation

PEOPLE = HOT



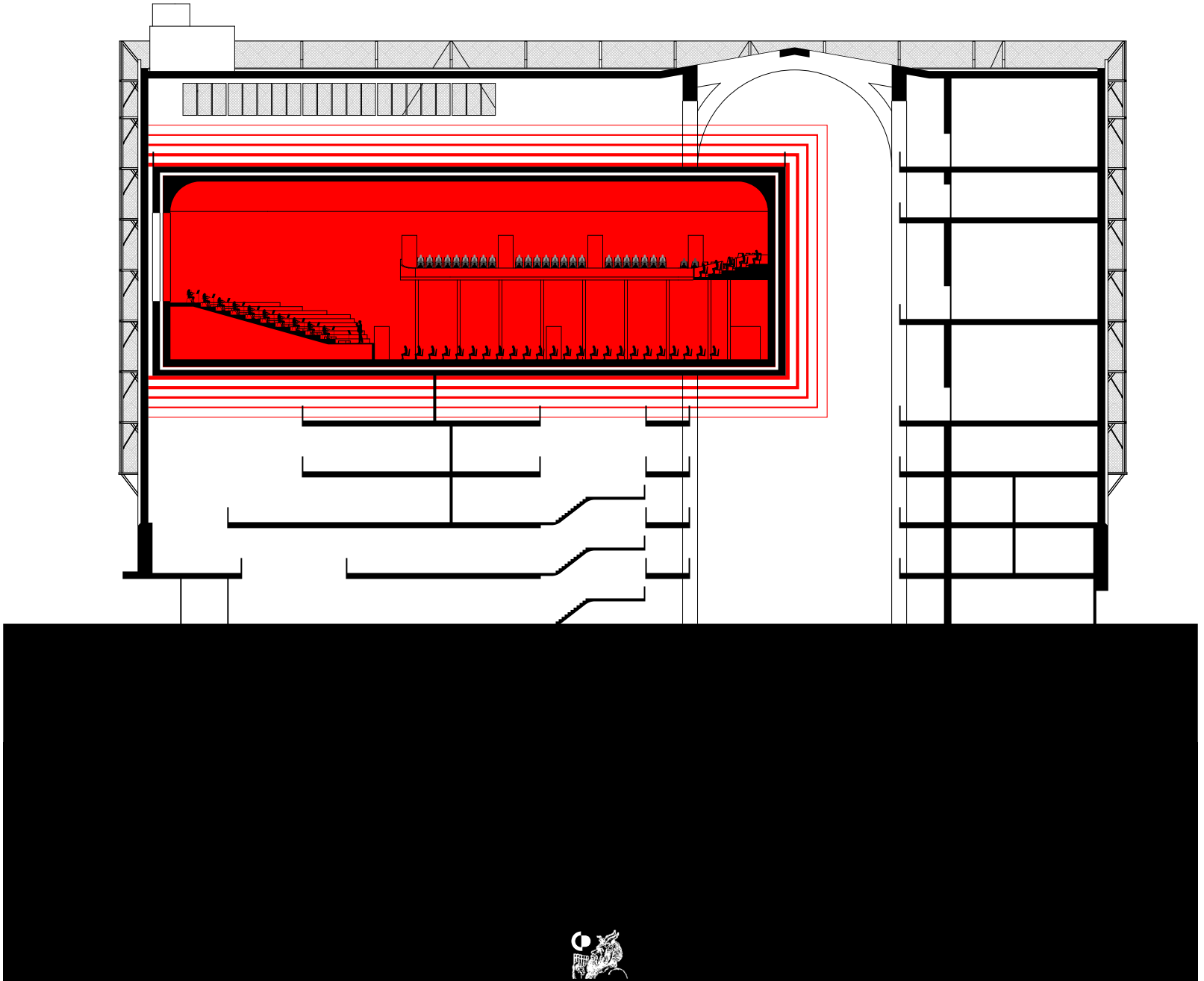
implementation

ENTIRE SPACE = HOT

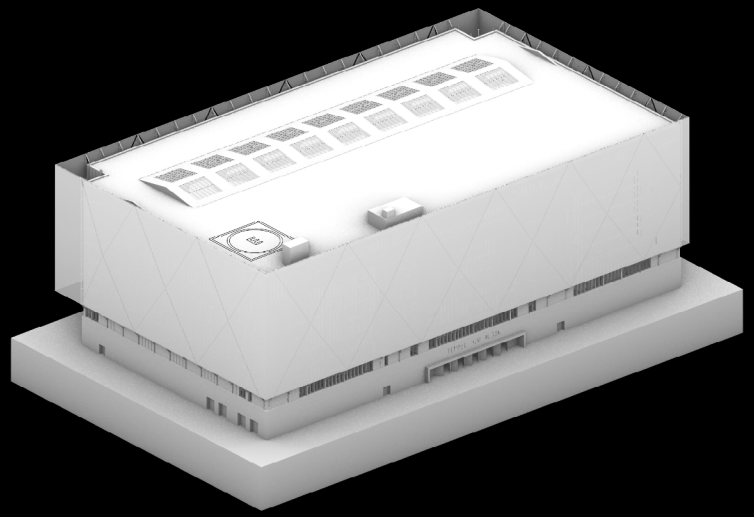


implementation

HEAT RADIATES

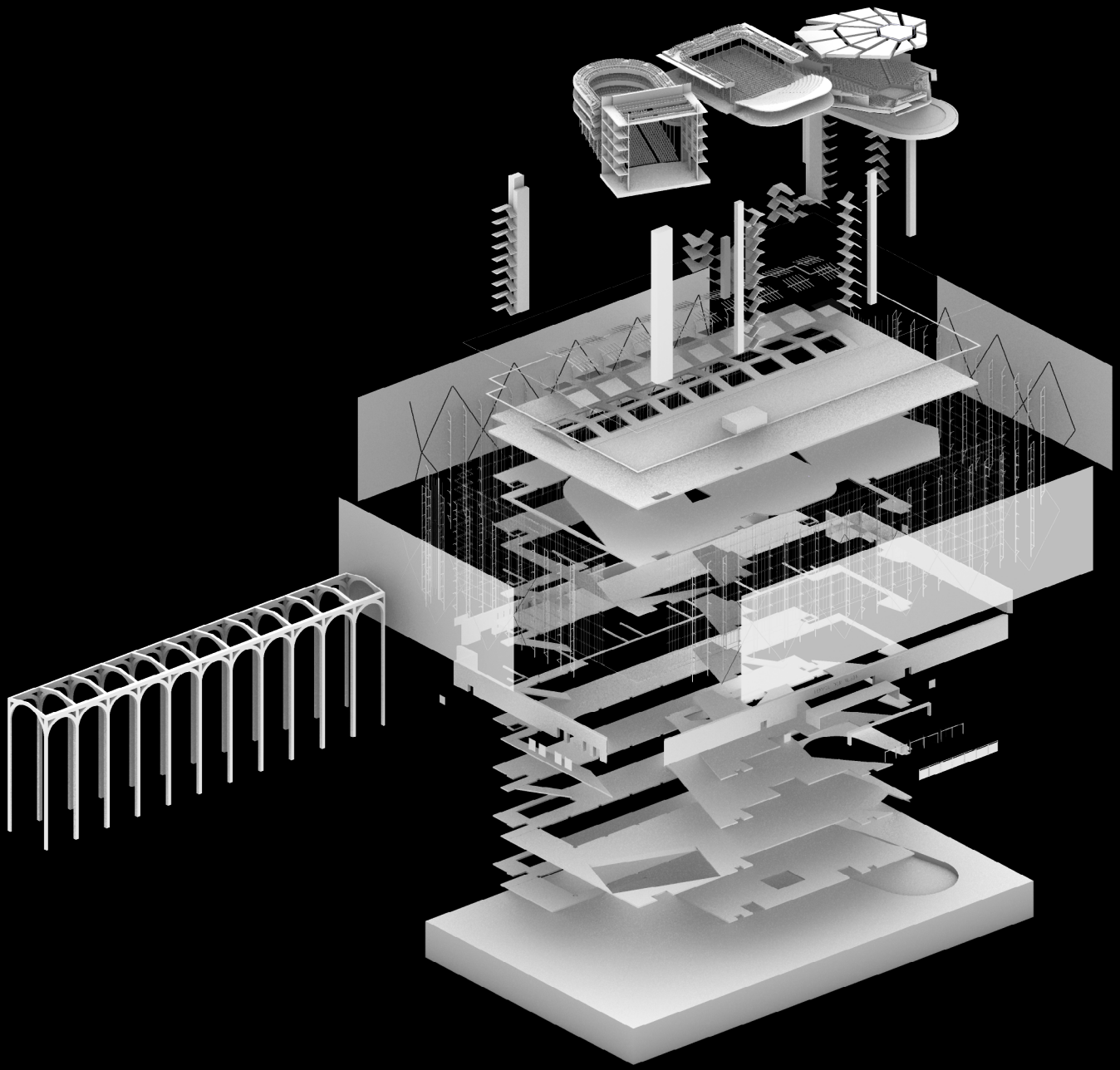


MATERIAL INDEX



implementation

MATERIAL INDEX



implementation

INITIAL SCORE

GFA	35.000m^2
average floor height	3m
building volume	25.000m^3
footprint	6.800m^2
FSI	5.15

layers	elements	type [atlas]	atlas score	coefficient	volume [m^3]	percentage	material credit
foundation	foundation	concrete	24	0,79	2.623	11,4%	9
construction	columns	concrete	24	0,79	1.840	8,0%	6
	floors	concrete	24	0,79	11.685	50,8%	40
facade	glass	glass	74	0,35	84	0,4%	0
	window frames	steel	24	0,79	34	0,2%	0
	ex. cladding	aluminium	10	0,91	15	0,1%	0
	insulation	PIR	7	0,94	292	1,3%	1
	in. cladding	aluminium	10	0,91	15	0,1%	0
	roof	bitumen	4	0,96	2.651	11,5%	11
interior	walls	concrete	24	0,79	3550	15,4%	12
	doorframes	steel	24	0,79	2	0,0%	0
	balustrade	steel	24	0,79	208	0,9%	1
total					**22.998**	**100,0%**	**80**
benchmark							**40**

POTENTIAL IMPROVEMENT

GFA	35.000m^2
average floor height	3m
building volume	25.000m^3
footprint	6.800m^2
FSI	5.15

layers	elements	type [atlas]	atlas score	coefficient	volume [m^3]	percentage	material credit
foundation	foundation	concrete	24	0,79	2.623	11,4%	9
construction	columns	concrete	24	0,79	1.840	8,0%	6
	floors	concrete	24	0,79	11.685	50,8%	40
facade	glass	glass	74	0,35	84	0,4%	0
	window frames	steel	24	0,79	34	0,2%	0
	ex. cladding	aluminium	10	0,91	15	0,1%	0
	insulation	PIR	7	0,94	292	1,3%	1
	in. cladding	aluminium	10	0,91	15	0,1%	0
	roof	bitumen	4	0,96	2.651	11,5%	11
interior	walls	concrete	24	0,79	3550	15,4%	12
	doorframes	steel	24	0,79	2	0,0%	0
	balustrade	steel	24	0,79	208	0,9%	1
total					**22.998**	**100,0%**	**80**
benchmark							**40**

implementation

IMPROVED SCORE

GFA	35.000m^2
average floor height	3m
building volume	25.000m^3
footprint	6.800m^2
FSI	5.15

layers	elements	type [atlas]	atlas score	coefficient	volume [m^3]	percentage	material credit
foundation	foundation	reclaimed concrete	71	0,37	2.623	11,4%	4
construction	columns	concrete	24	0,79	1.840	8,0%	6
	floors	reclaimed concrete	71	0,37	11.685	50,8%	19
facade	glass	glass	74	0,35	84	0,4%	0
	window frames	steel	24	0,79	34	0,2%	0
	ex. cladding	reclaimed aluminium	75	0,34	15	0,1%	0
	insulation	hemp	69	0,39	292	1,3%	0
	in. cladding	reclaimed aluminium	75	0,34	15	0,1%	0
	roof	organic soil	52	0,54	2.651	11,5%	6
interior	walls	reclaimed concrete	71	0,37	3550	15,4%	6
	doorframes	steel	24	0,79	2	0,0%	0
	balustrade	steel	24	0,79	208	0,9%	1
total					**22.998**	**100,0%**	**42**
benchmark							**40**

implementation

FUTURE USE

“The most sustainable building is the one you don’t build”

(LeJarde 2023)

Berlin club Re:mise announces closing parties

Between November 16th and 20th, the venue will host Stella Zekri, Esther Dune and many more.

Arielle Lana LeJarde, 5 november 2023

Re:mise in Berlin has revealed its final events.

(Schmitz 2023)

Berlin's famed nightclubs, losing customers, face an uncertain future

Rob Schmitz, 3 november 2023

BERLIN — For those who haven't experienced it, a night at a club in Berlin can be reduced to a math equation whose first variable is the best club you've been to.

(Dawson 2020)

Griessmuehle: Berlin mourns the loss of yet another club

Ahead of the venue's final party this weekend, protesters, organisers, and activists reflect on its legacy and the future of the city's nightlife

january 2020

(Bryant 2024)

Berlin's Famous Club Scene Faces the End of the Party

The closing of renowned clubs Watergate and Renate spells trouble for the city's nightlife.

Chris Bryant, 27 September 2024

Berlin is synonymous with unbridled hedonism, throbbing techno and intense parties that go on for days. But the fun will soon be over for two of the capital's most famous venues — Watergate and Wilde Renate — which are set to permanently close, in part due to rising costs.

Enterprising club promoters have long defied predictions of the techno scene's imminent demise — there's even a German word for it, "Clubsterben," or club death. But Berlin shouldn't ignore the plight of an industry that contributes around €1.5 billion ($1.7 billion) annually to the local economy, is a magnet for young tourists, startups and creative types, and whose cultural significance was recently recognized by Unesco.

"I always thought Clubsterben was bullshit — clubs just adapted and moved to a new area — but it feels different this time. Watergate and Renate are big names," Jens Schwan, founder of Berlin music guide The Clubmap and co-founder of techno parade Zug der Liebe, told me. "The boom years are over. And after corona, many clubs missed the opportunity to reinvent themselves."

The Party's Over

(Skinner 2022)

in's iconic Berghain club rumoured to losing down

hno venue was founded in 2004

inner, 18 october 2022

erghain nightclub is rumoured to be permanently closing by the end of this year.

dary establishment, which was founded in 2004, is one of the most famous clubs

(Moen 2022)

Berghain Might Be Closing for Good

Word on the street is that Berlin's infamous nightclub Berghain might be closing its doors for good by the end of this year.

Matt Moen, 18 october 2022

Speculation that the legendary nightlife institution might be shuttering at some point in the near future has been circulating since the club's in-house record label and booking agency, Ostgut Ton, abruptly closed earlier this month. According to several inside sources, the "world capital of techno" is set to close permanently by the end of 2022 almost two full decades after it first opened its doors in 2004.

"The Berghain is closing forever – the final end will come this year," one source said to Faze Magazine. "One of the founders has already been paid out and is said to be staying in the countryside in Brandenburg," another source told the German outlet. "The others simply 'don't feel like it' anymore and have other life plans in mind."

Apparently once the venue's current owners wash their hands of the place, there aren't any future plans for someone else to take over. "Continuing to exist as an art location does not appear to be an option. And so this chapter should finally be closed."

So far Berghain's current owners have yet to comment or release an official statement addressing the speculation. Berghain previously closed its doors in March 2020 during the onset of the COVID-19 pandemic, operating as an art gallery while nightlife worldwide ground to a halt.

Before that, Berghain had been best known as one of the world's most exclusive club with a notoriously selective bouncer — who gained his own form of cult-like figure status in the process — that made getting let in a badge of pride for those select few (as Claire Danes once famously gushed about on Ellen back in the day).

With the closure of another club space the scene that revived Berlin is being l

The dance community helped reunify East and West Germany 1990s, but gentrification is slowly killing it

Michael Scaturro, 15 march 2020

I was in bed when my friend Alfonso called me. "It's the last party at Griessmuehle," he the last Cocktail there. Throw on some clothes. We're going."

Popular Berlin nightclubs face "ex threat from controversial motorw expansion, say Clubcommission

The planned 17th stage of the A100 motorway would i venues such as ://about blank, Club OST, and Wilde R

Gemma Ross, 16 may 2023

A number of popular Berlin nightclubs could face closure if a proposed new m were to be given the green light, as the Bundesautobahn 100 looks to run thro in Mitte, Charlottenburg, Tempelhof and Neukölln.

The Bundesautobahn 100 (also known as the A100) is currently in its 16th sta which has been underway since 2013 and is due to cost around €700 million looks to increase its "ring" around the city.

The nearing 17th stage, which will cost the city an estimated further €800 mill 21 cultural institutions if it were to run through Storkower Strasse in Ostl Berlin's Clubcommission.

Local politicians have given no concrete statement over whether the develop despite plans for the 17th stage having been proposed as far back as 1935, repo institutions in "limbo" — unable to secure guaranteed planning permission f risk of surging rent were the plans to be scrapped.

The extension has become a contentious issue among both local and natio left-leaning Alliance90 (or "The Greens") and the SPD oppose the expansio right-leaning parties such as the CDU, FDP and AfD are supportive of the 17t

Nightlife venues that stand to be impacted if the plans were to go ahead are OST, Salon Zur Wilden Renate, ELSE, OXI, and newly opened venue Club bar Zuckerzauber, skatepark E-LOK, independent cinema Zukunft, and cockt Wolf could also face closure.

"In total, there are about 21 cultural venues that are in the area of this c construction, which is extremely threatening," Lutz Leichsenring of Berlin tells Mixmag.

"On the other hand, if they do decide not to build the autobahn, there is also real estate value will rise and landlords might aim for more profitable r residential or office buildings. So in any case, if they build it or not, we nee vision for this area."

Leichsenring explains that another property across the Spree River is also i

THE TEMPLE OF MUSIC

THE TEMPLE OF RESIDENCES

THE TEMPLE OF UNIVERSITIES

THE TEMPLE OF MOVIES

THE TEMPLE OF SERVERS

~~INTRODUCTION~~
~~CONCEPT~~
~~IMPLEMENTATION~~
CONCLUSION

RESEARCH QUESTION

“Do modern nightclubs have structural and social similarities with old-fashioned opera houses?”

DANCING

Berlin Studio

* ballroom Casa de Gobierno, BUE.
* Trouw, AMS.

conclusion

PROMOTION

* opera poster
* Spielraum poster

OUTFITS

Berlin Studio

* opera outfits
* Berghain outfits

ARCHITECTURE

Berlin Studio

* Palais Garnier, PAR.
* Berghain, BER.

TEMPEL DER MUSIK

TEMPEL DER MUSIK

conclusion

TEMPEL DER MUSIK

TEMPEL DER MUSIK

COMPLEX PROJECTS
THE TEMPLE OF MUSIC

Graduation presentation

Job Vogel

november/07/2024

1st mentor: Jelmer van Zalingen
2nd mentor: Edyta Milczarek
3rd mentor: Rico Heykant

Complex Projects
Architecture MSc 3 & 4
Tu Delft