

The living pond



African forest elephant group

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1

intro

2

sustainability concept

3

construction

4

details

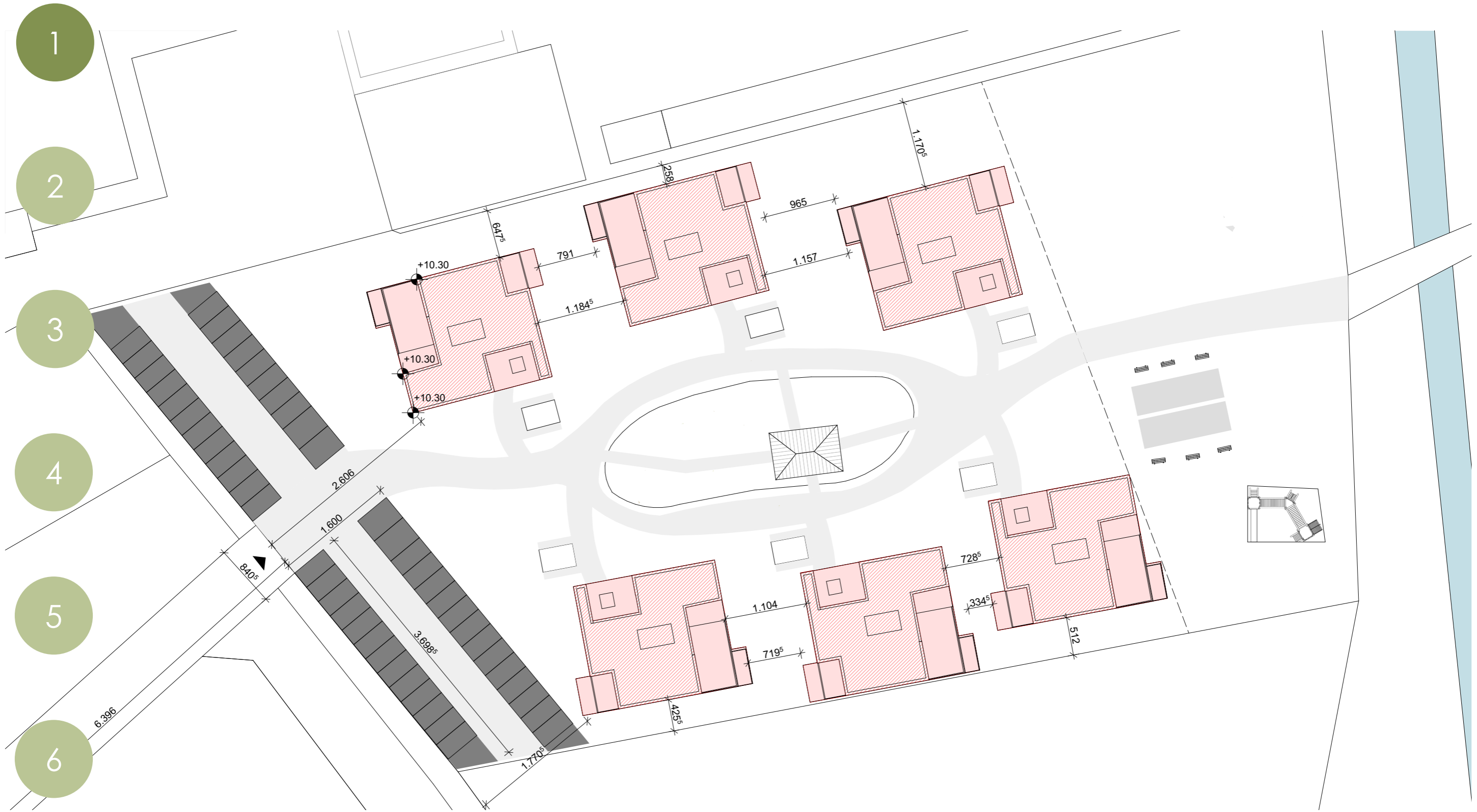
5

statics

6

outro

site plan



sustainability concept

1

- Flexible internal walls

2

- Most of the components can be disassembled
- facade can be easily repaired

3

- mostly modular construction

- green roof

4

- collecting rainwater pond

- solar panels

5

- district heating

6

floor plans

1

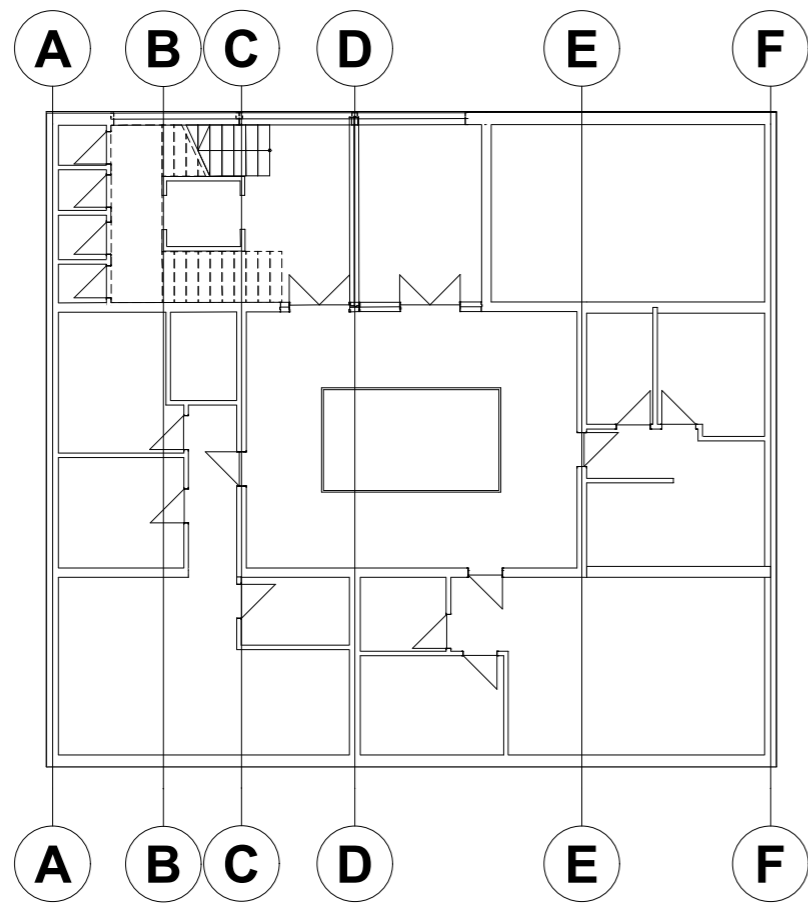
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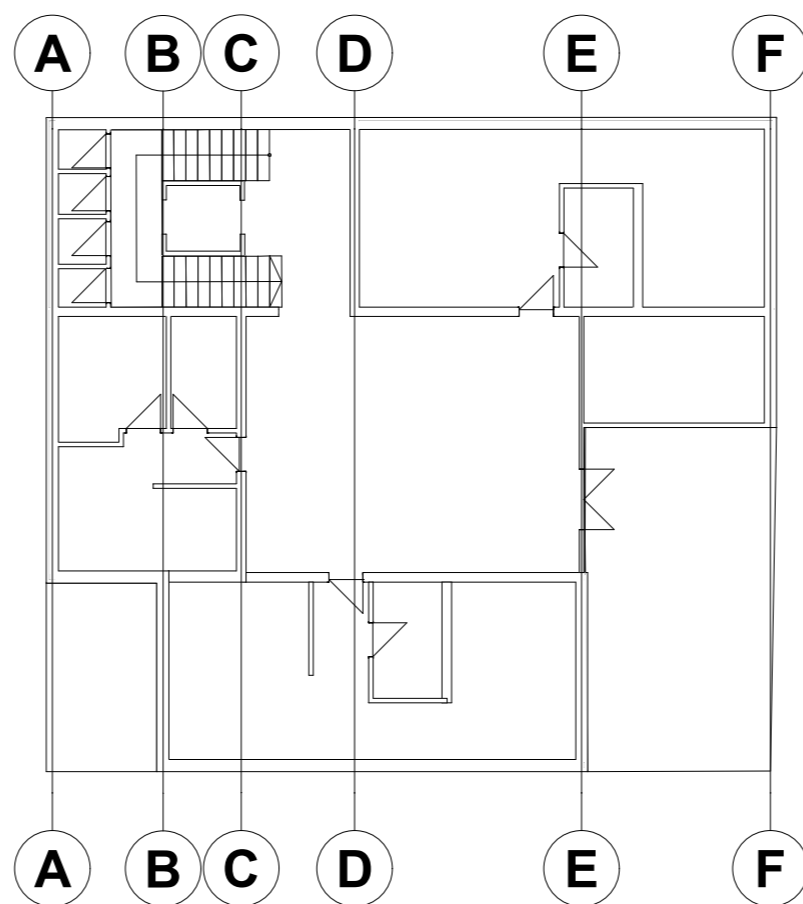
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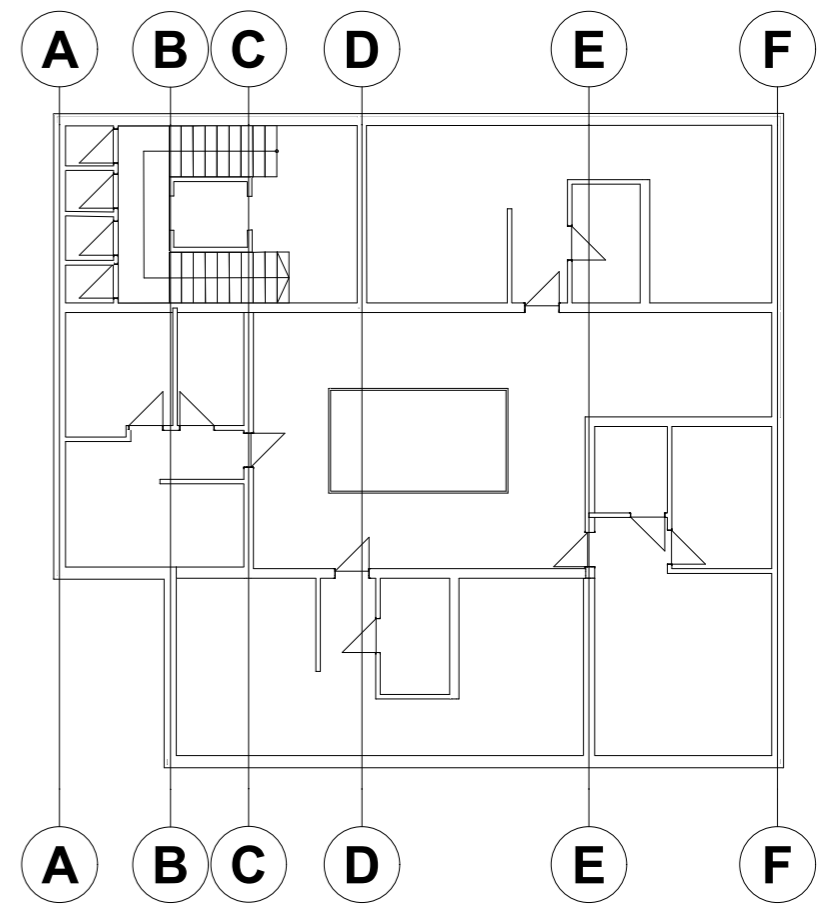
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1. floor



2. floor



3. floor

components

1

2

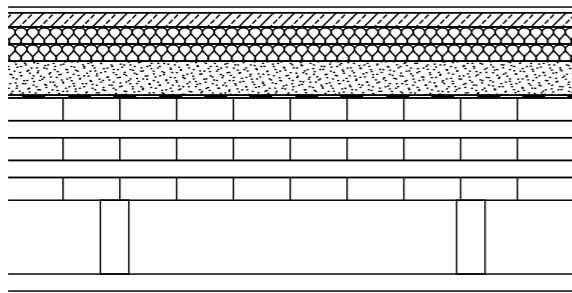
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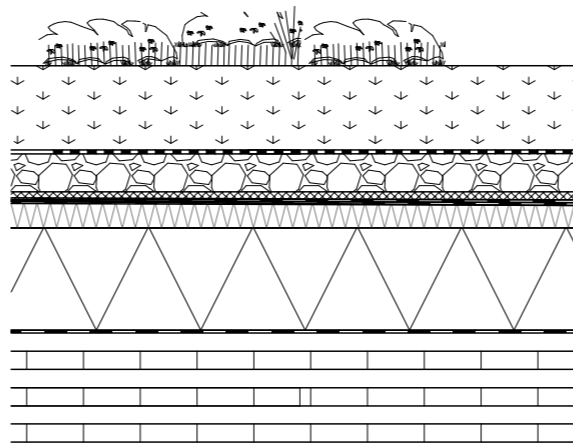
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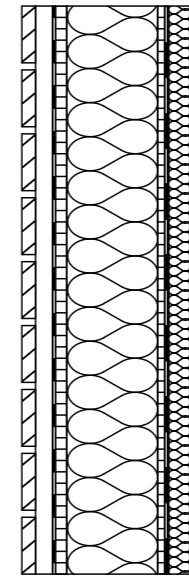
Floor



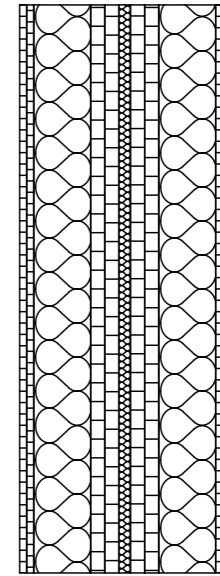
roof



external wall



Compartment Wall between Apartments



section

1

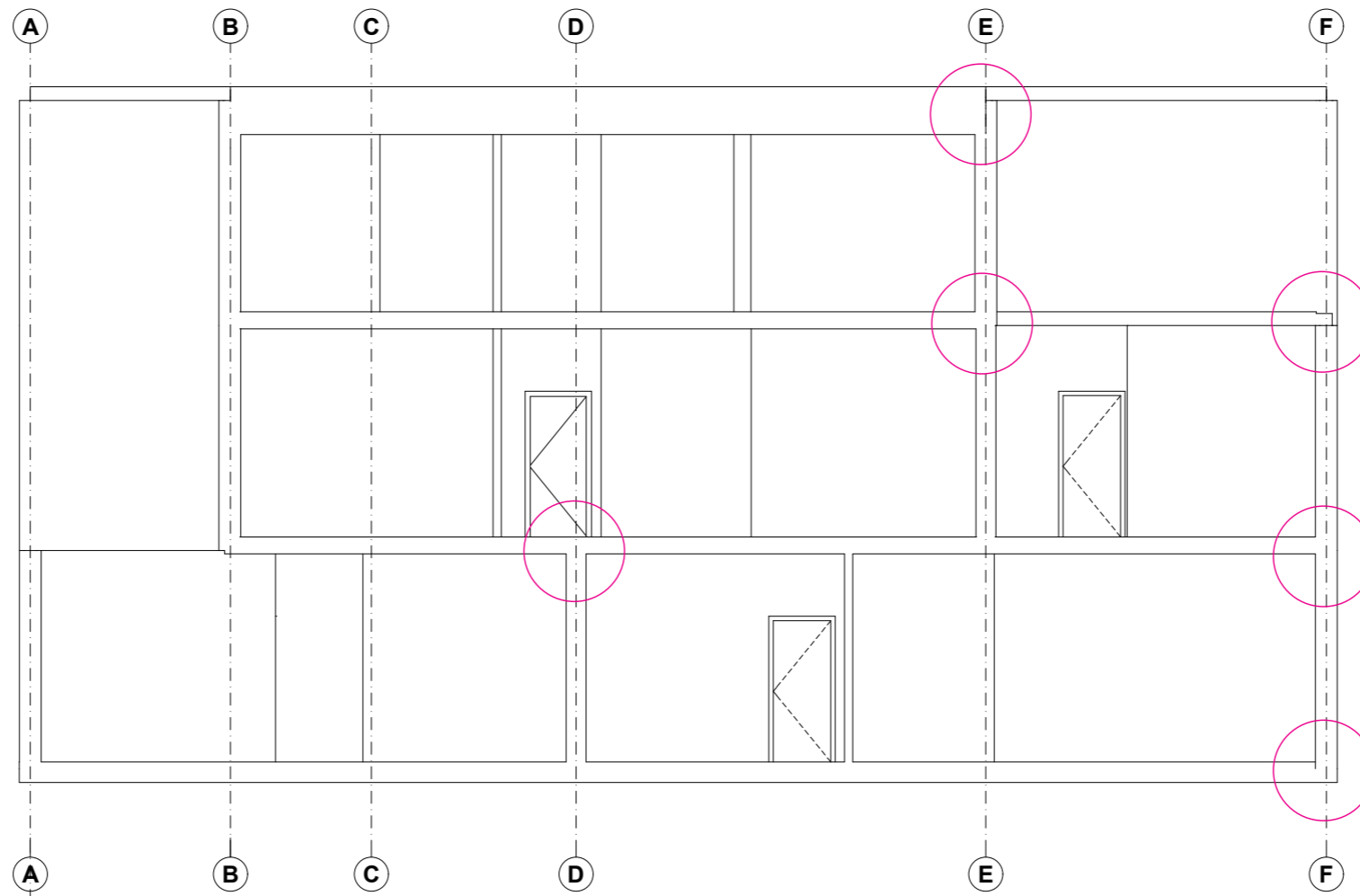
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3

4

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6



roof plan

1

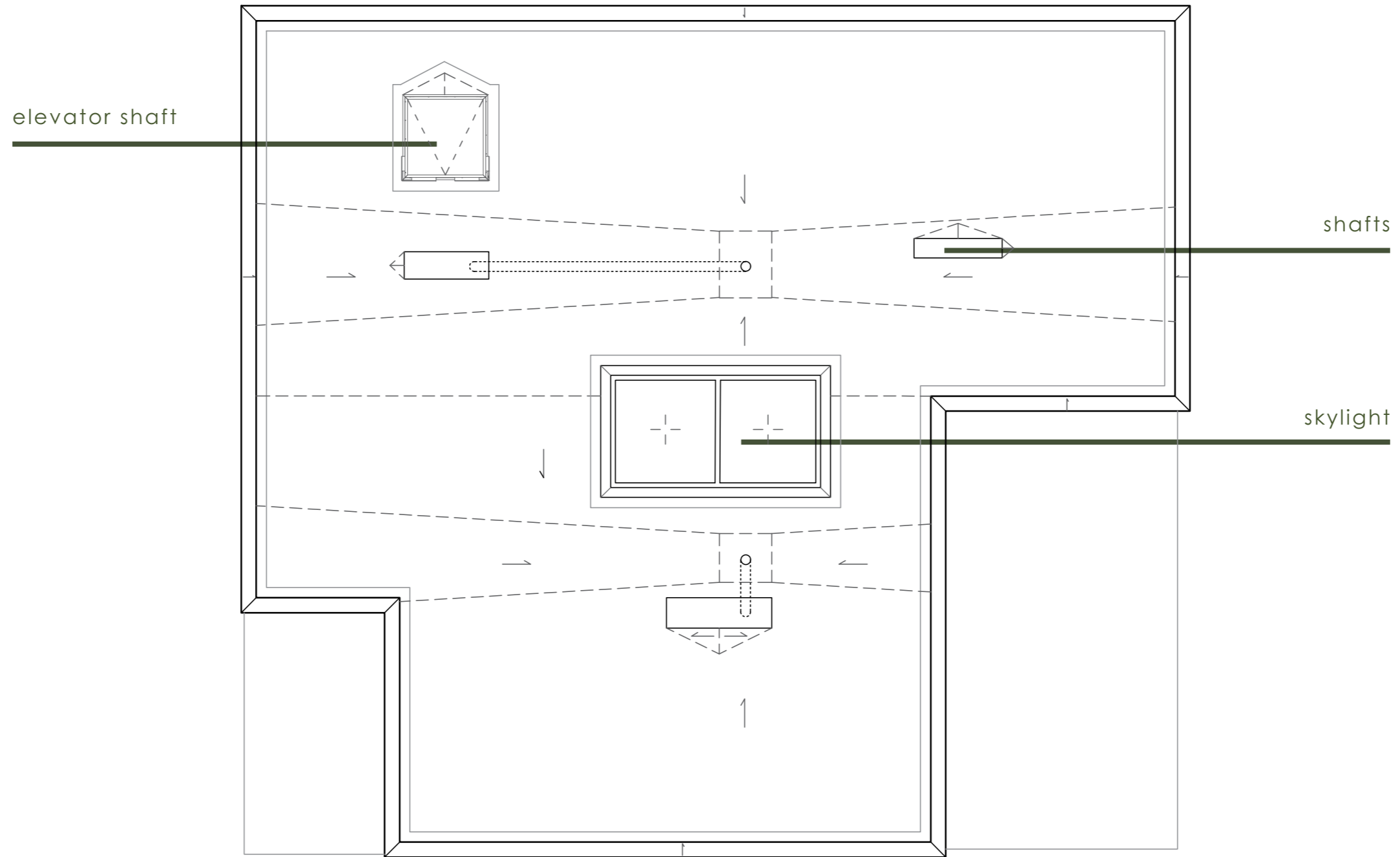
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3

4

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6



details

attics - elevator shaft

1

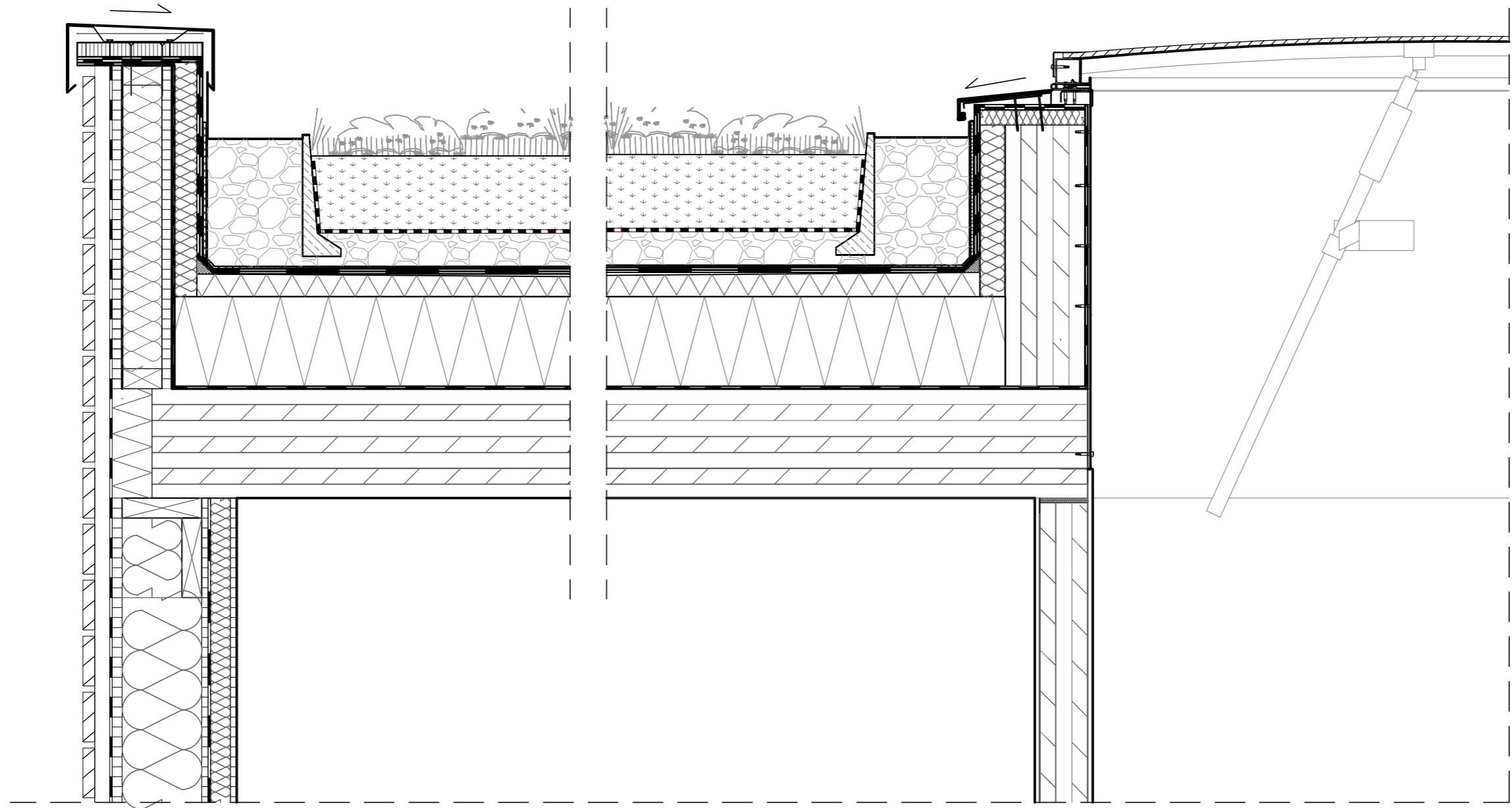
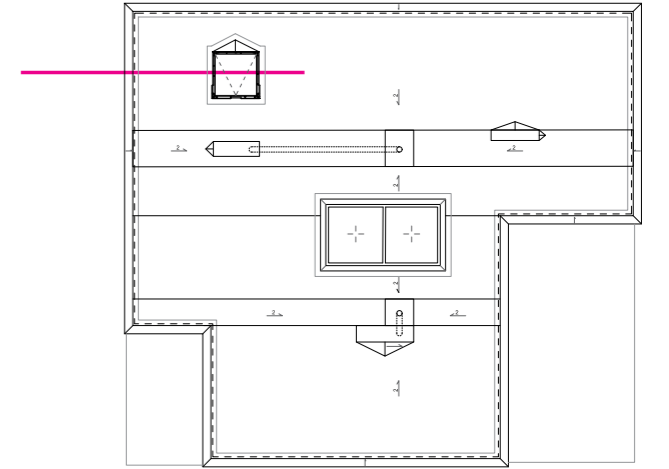
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3

4

5

6



details

terrace

1

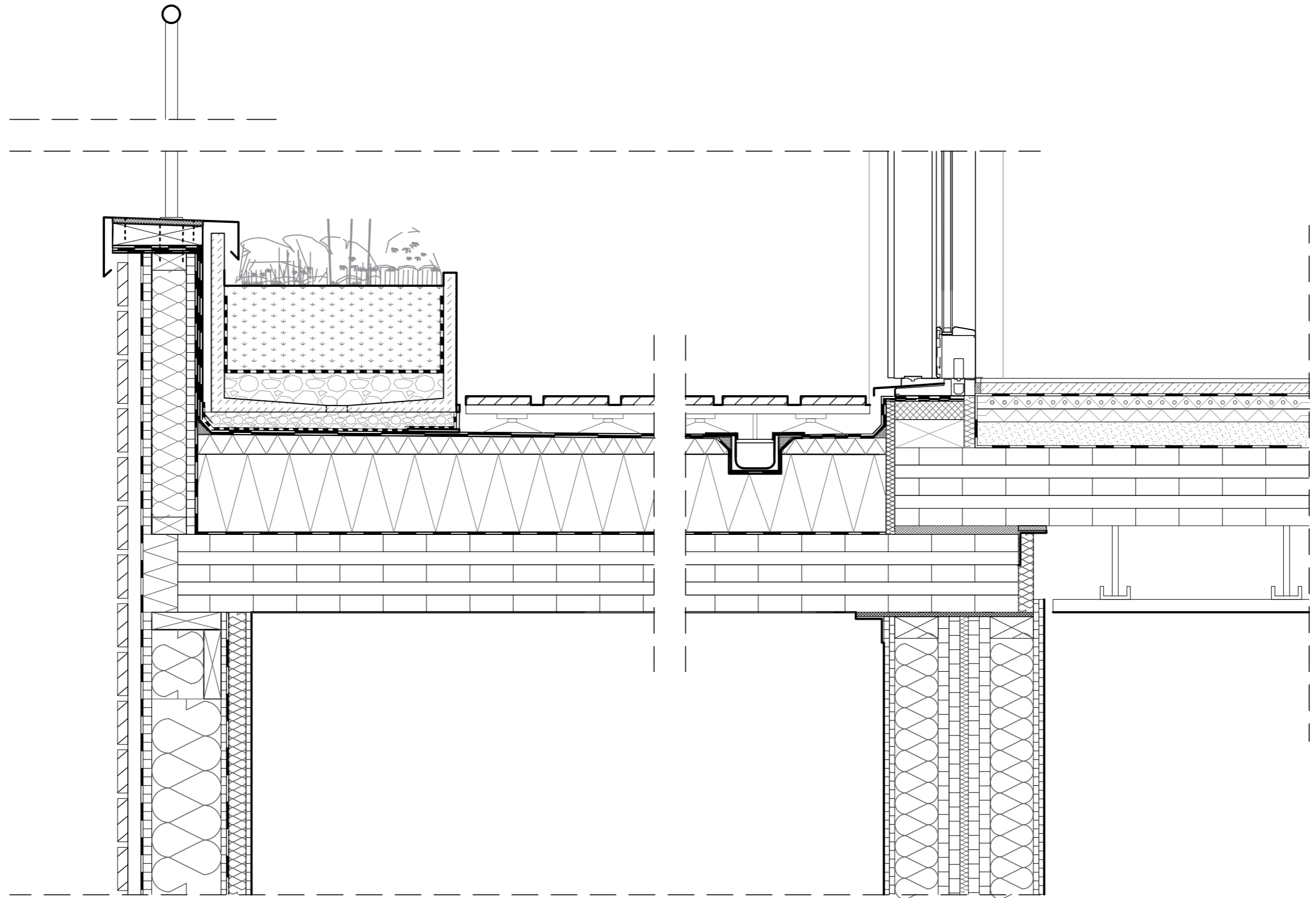
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5

6



details

terrace

1

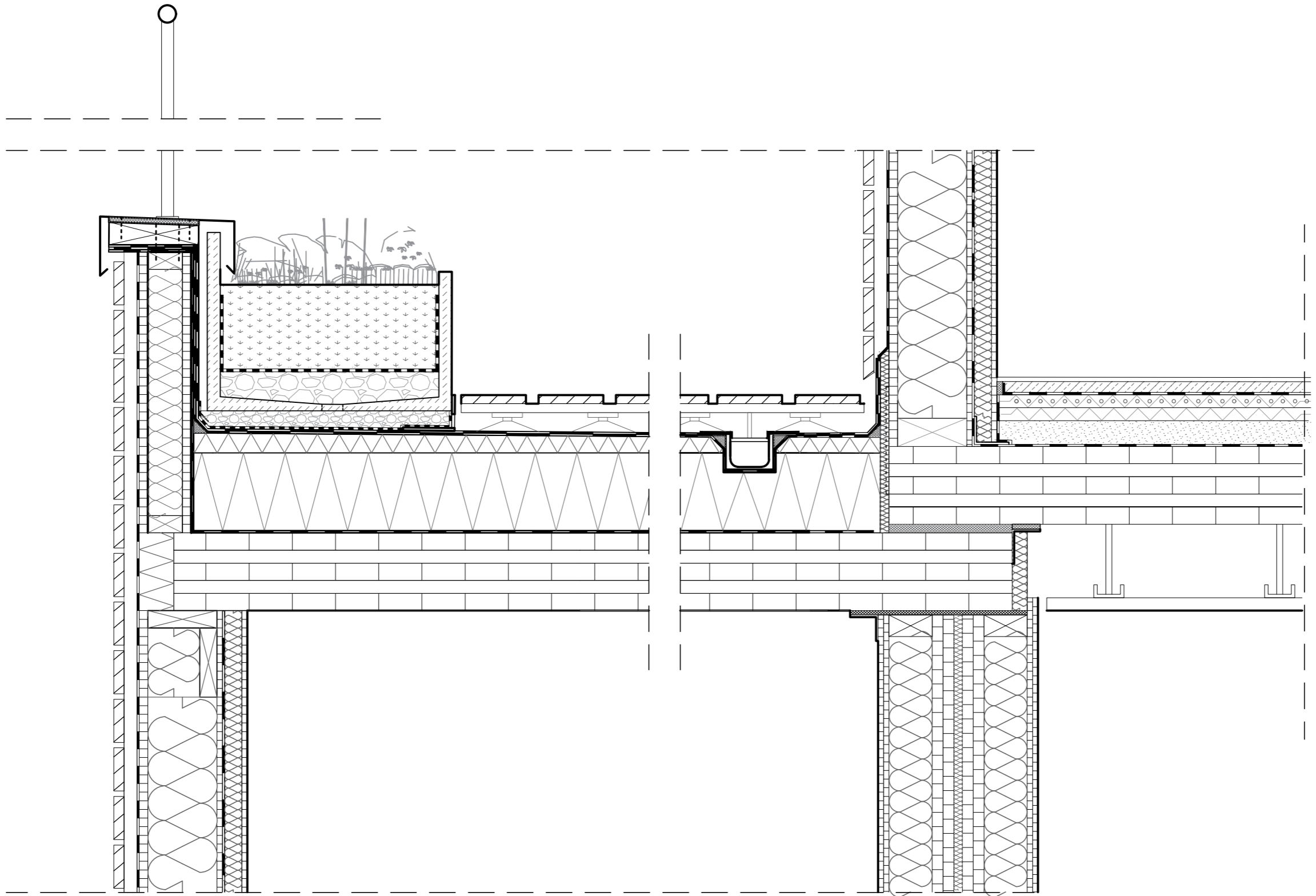
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3

4

5

6



details

balcony

1

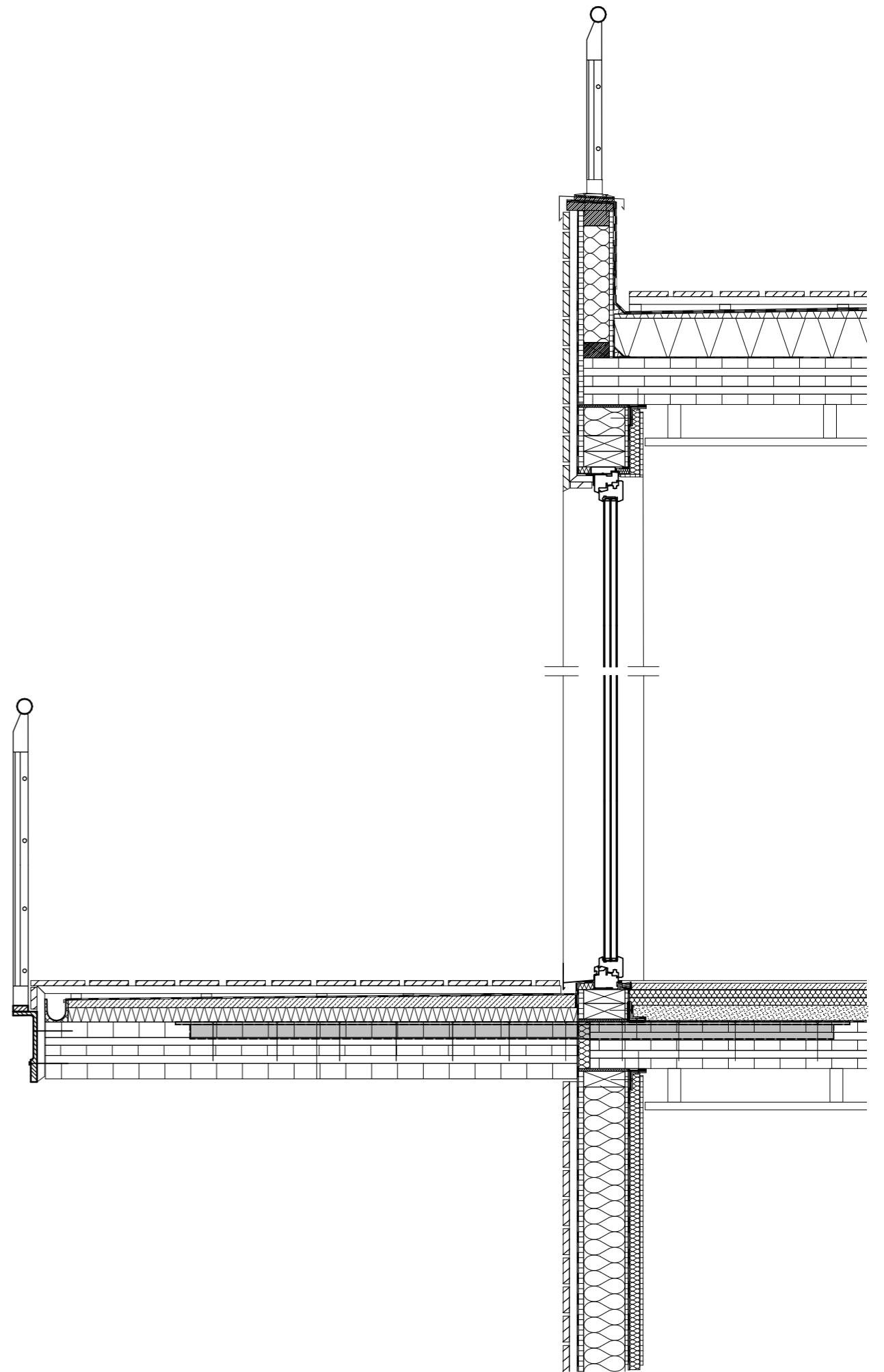
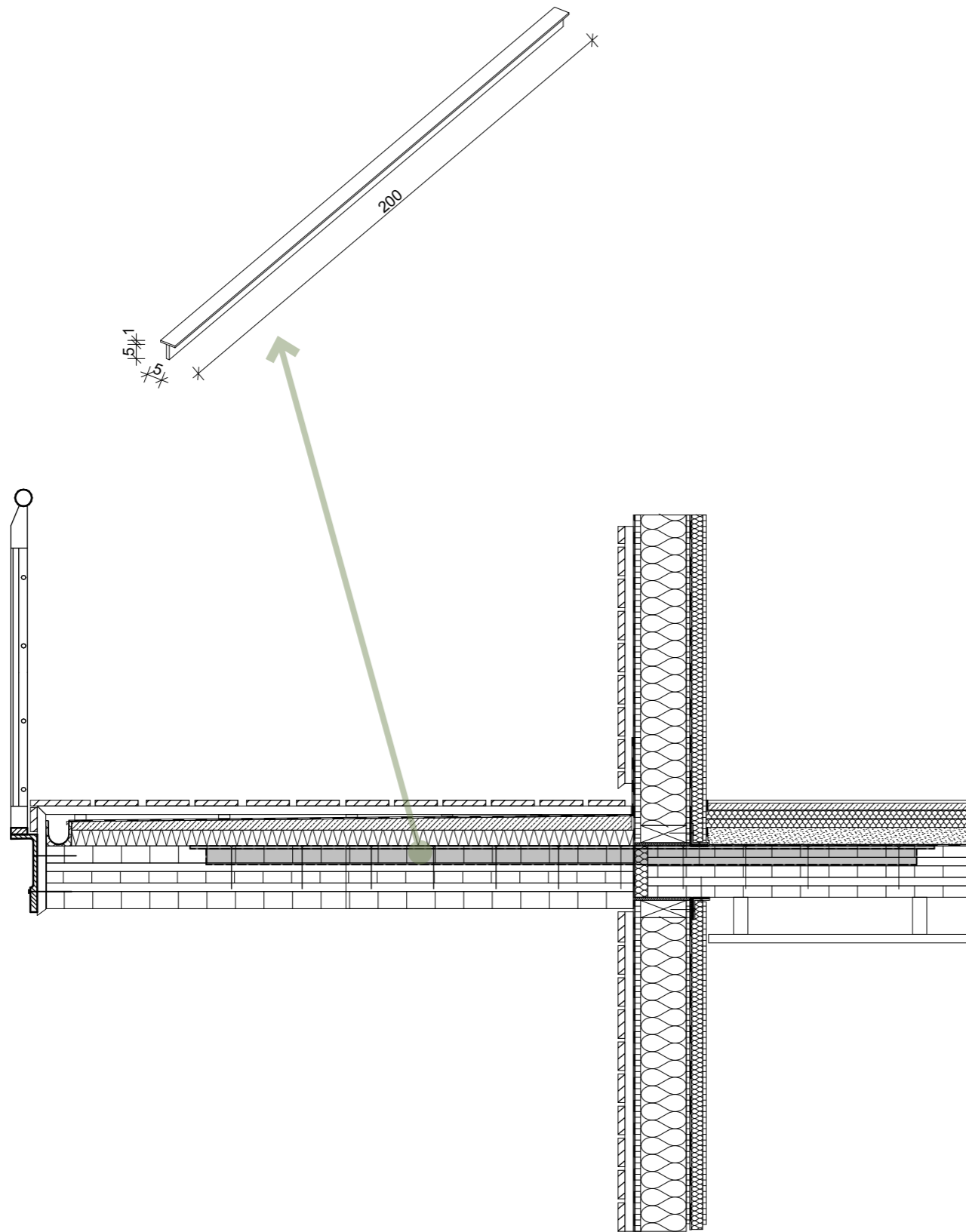
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6



details

compartment wall

1

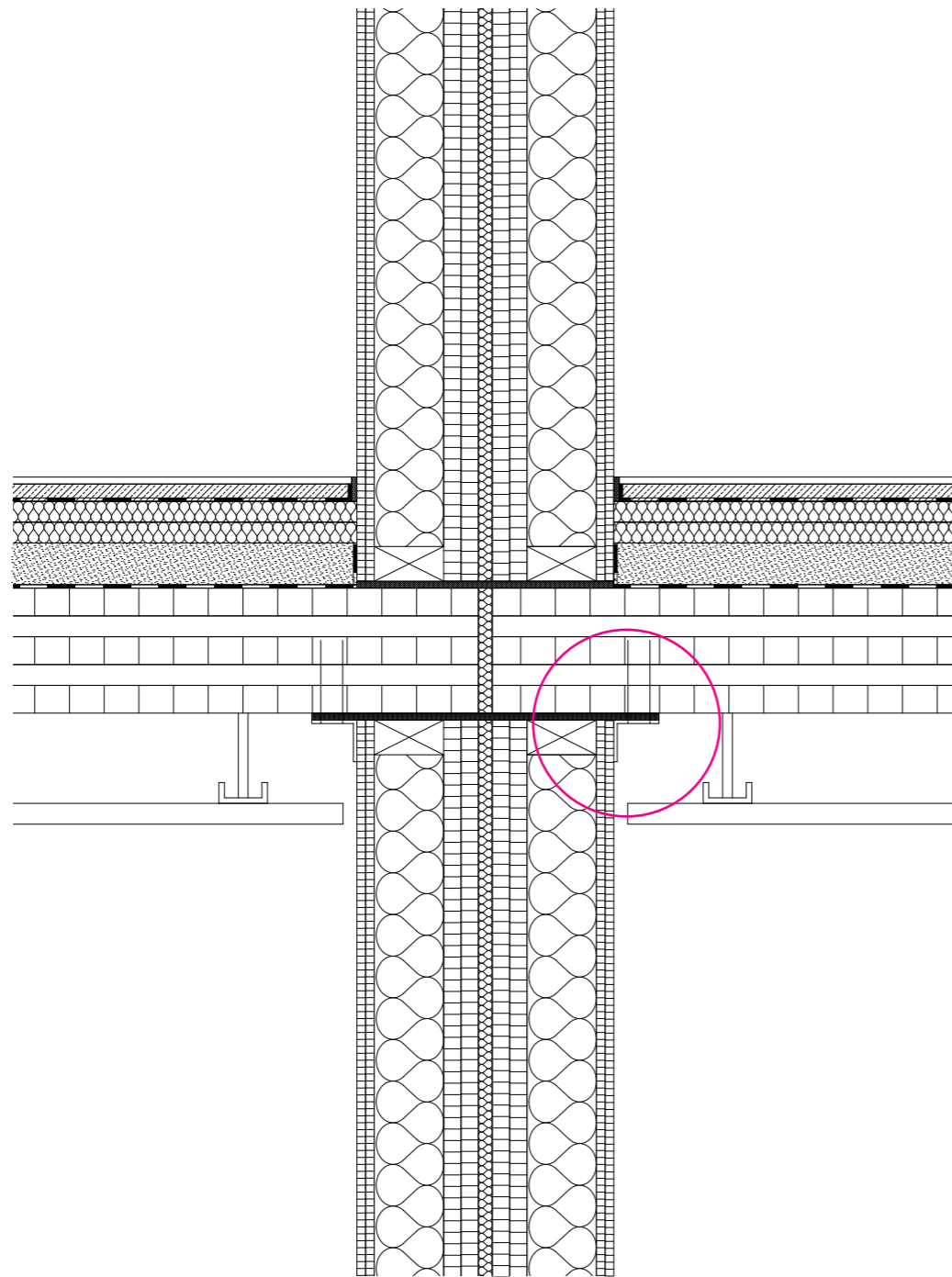
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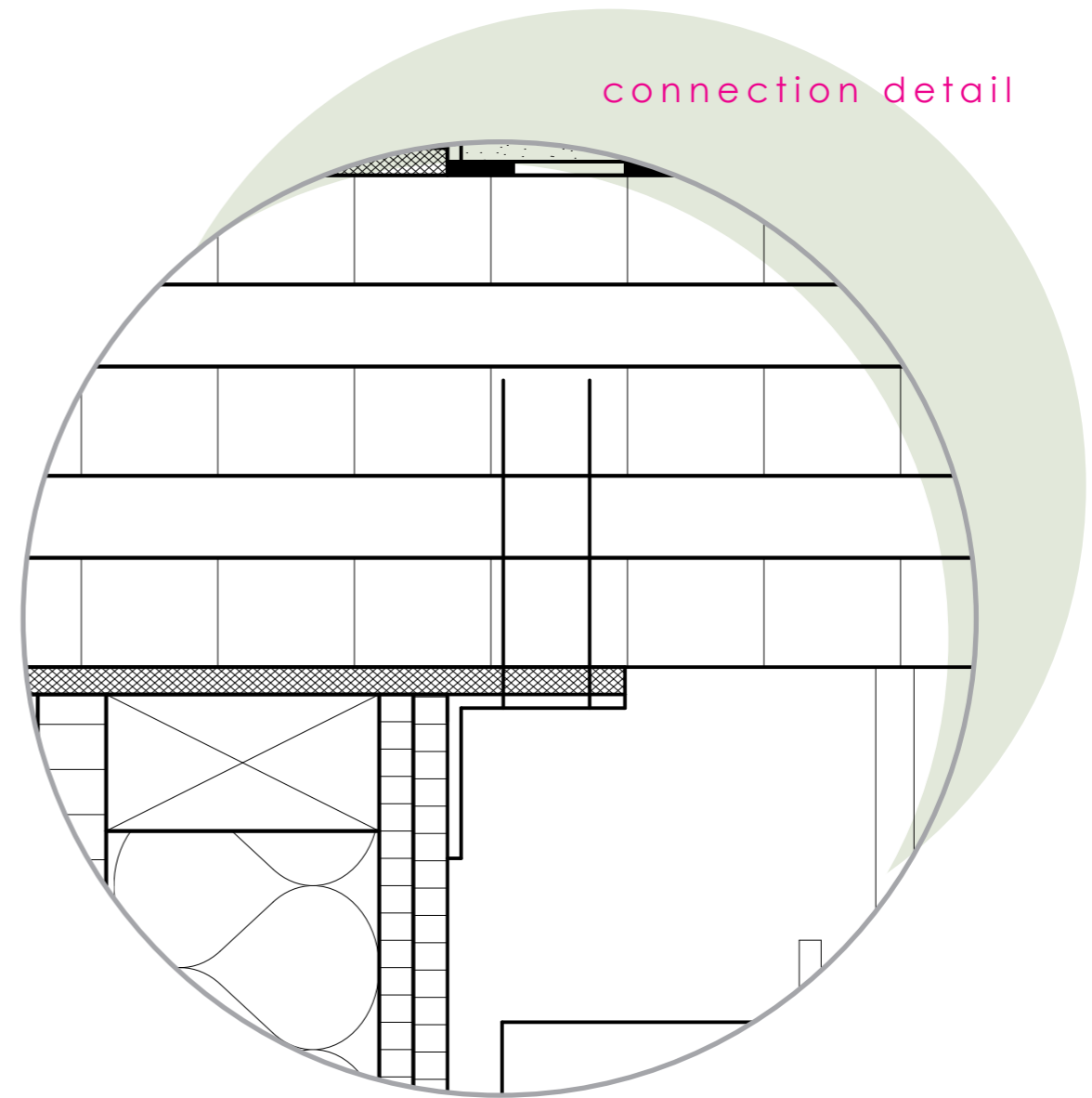
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5

6



connection detail



details

external wall

1

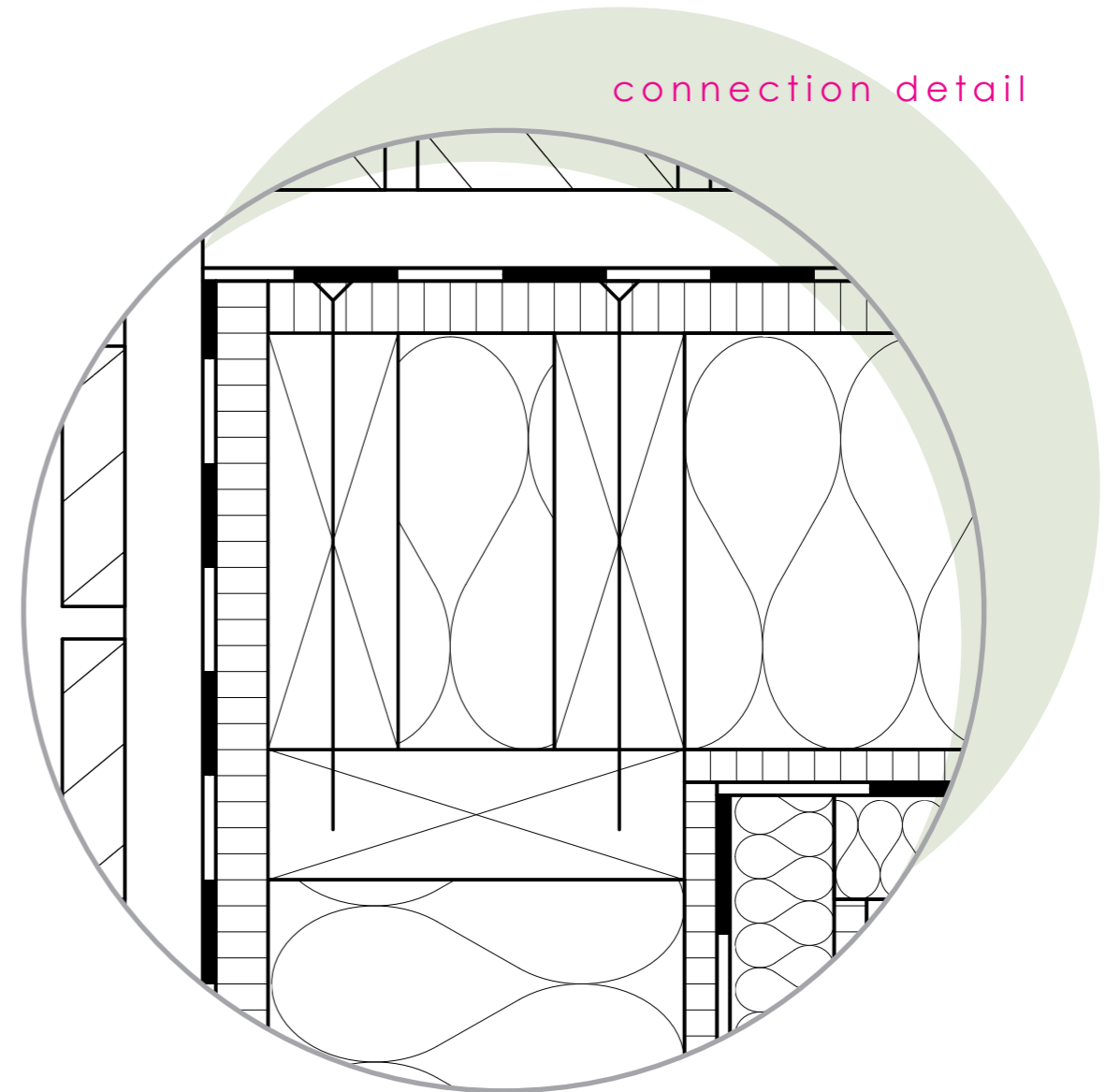
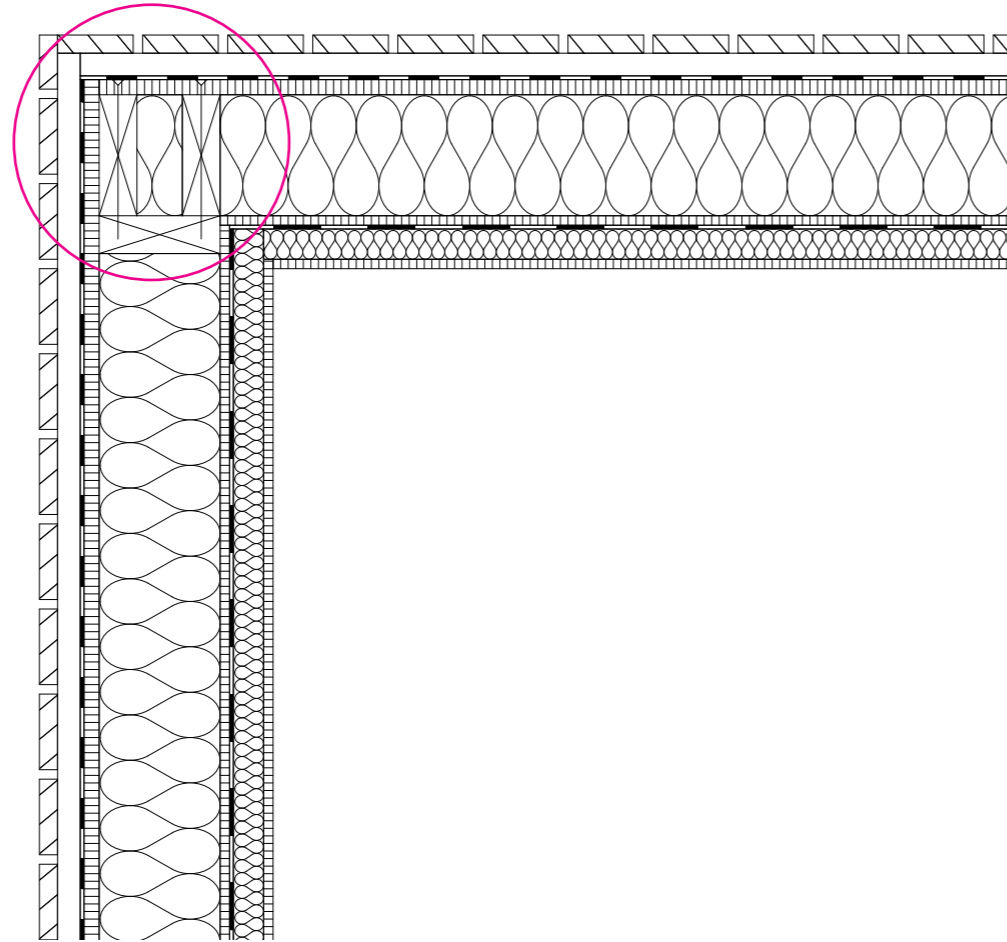
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3

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6



connection detail

details

facade

1

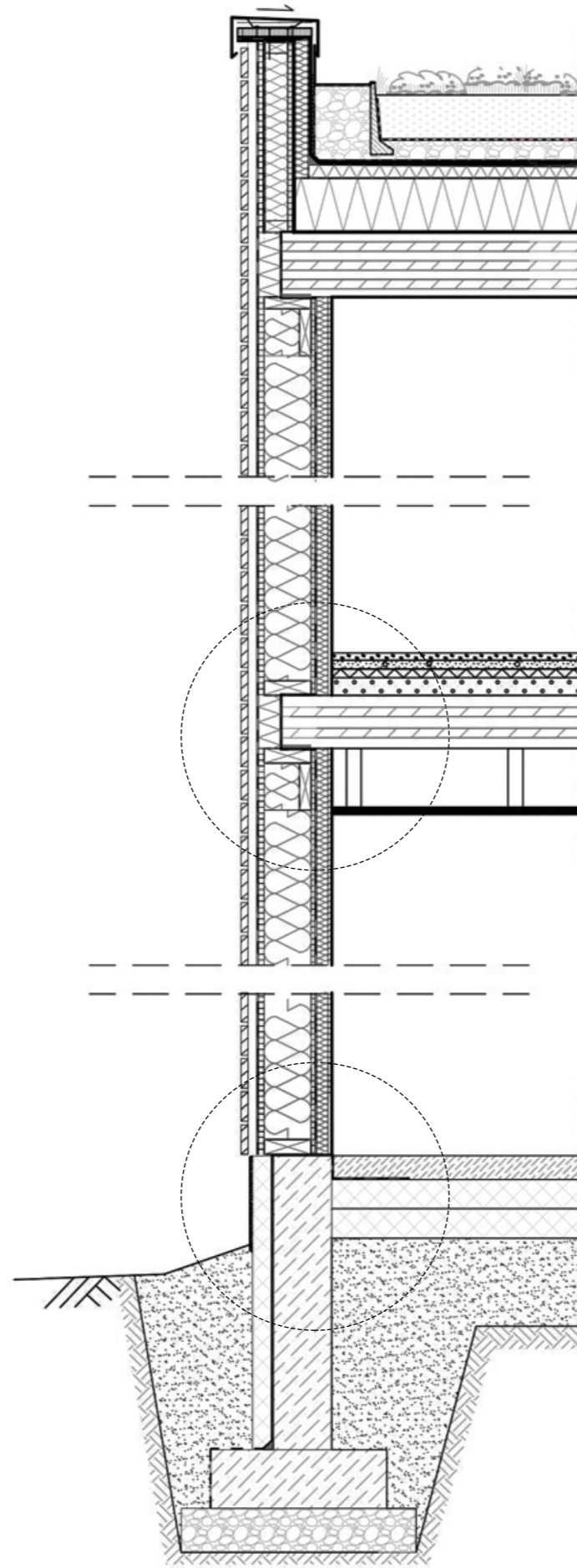
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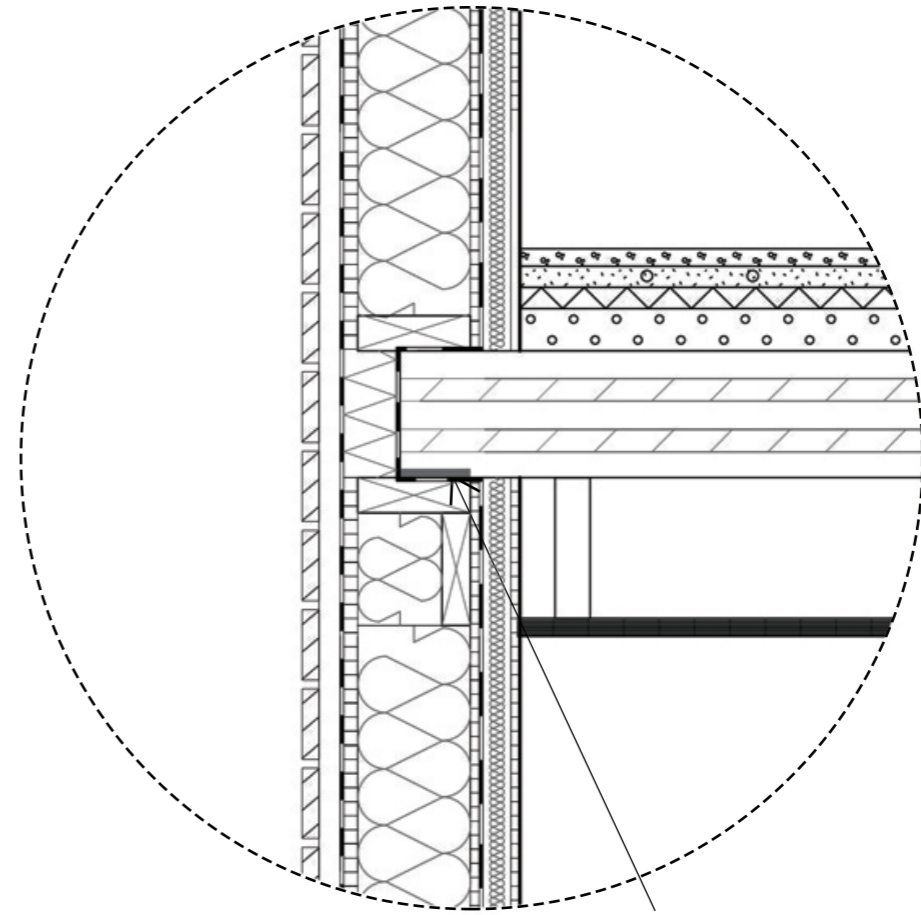
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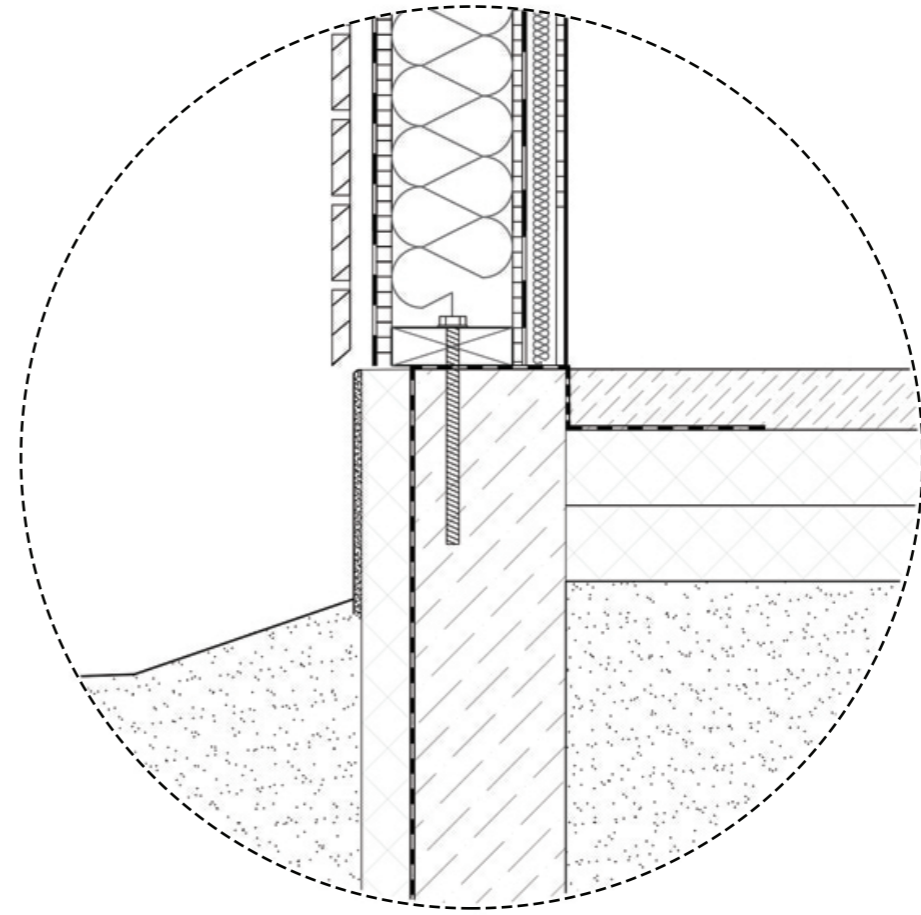


M:10



High performance sound-proofing strip XYLOFON

M:10



details

stairs

1

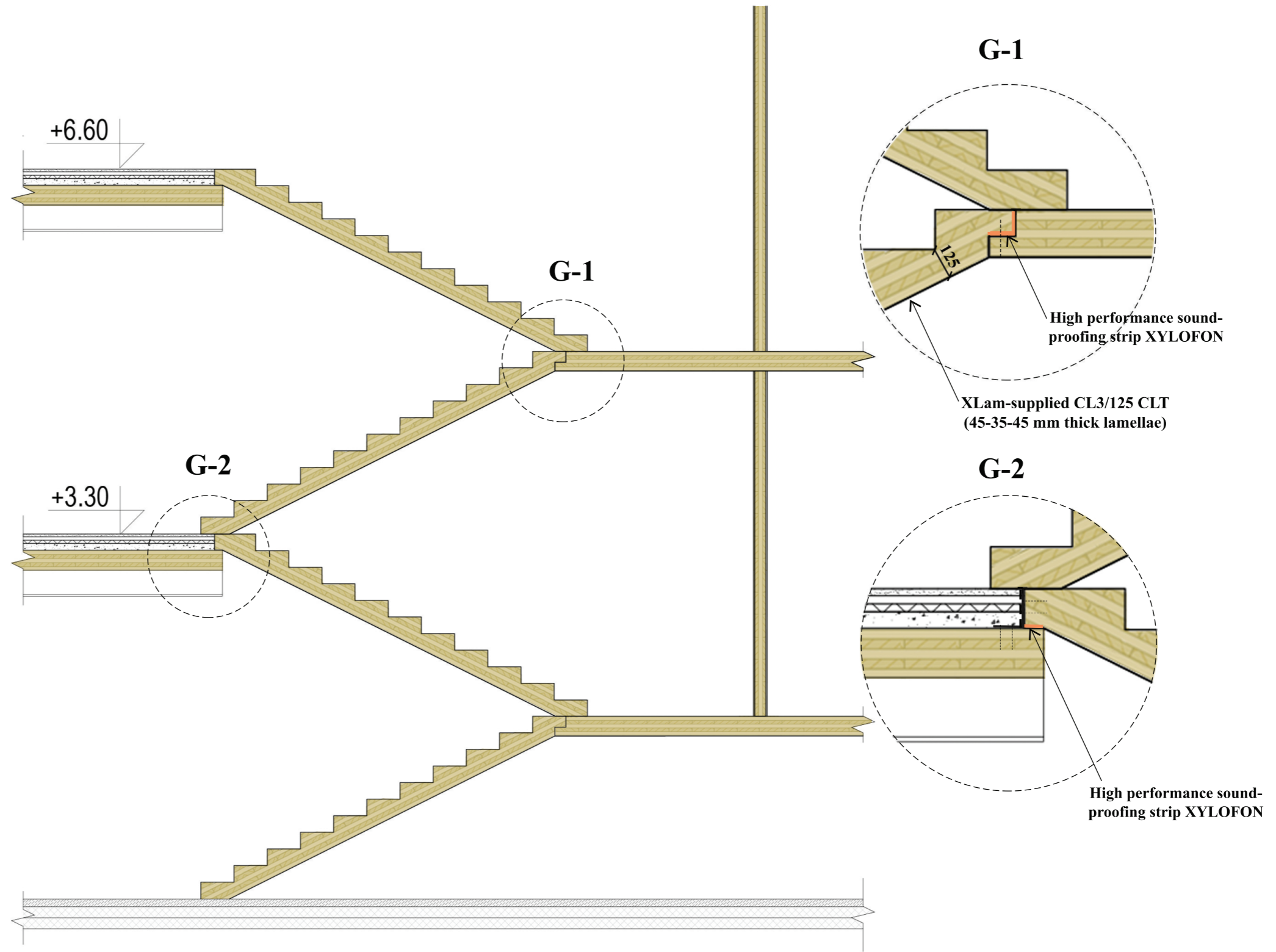
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5

6



static

static system

1

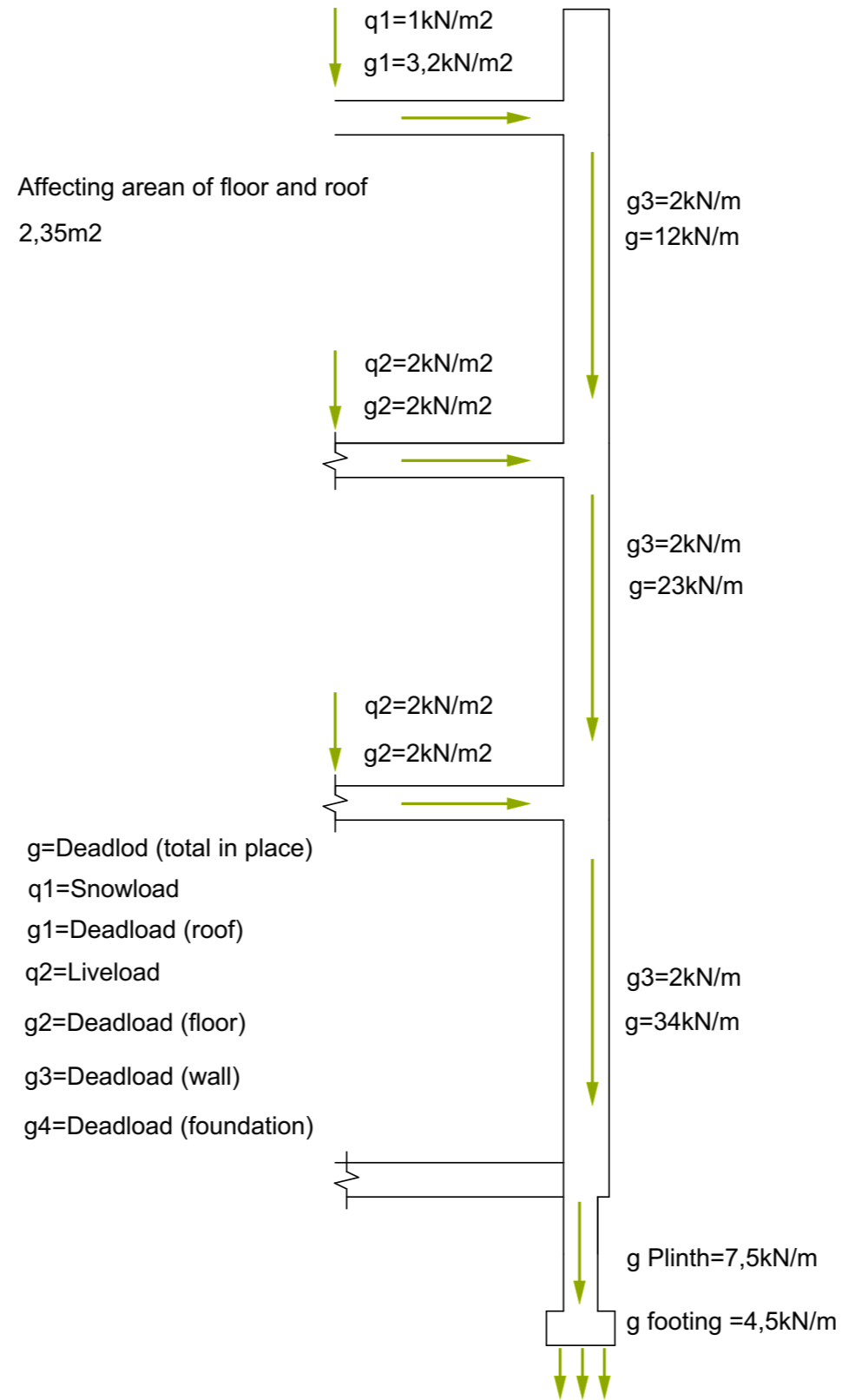
2

3

4

5

6



$$Ad = 1,15 \cdot g + 1,5 \cdot q_2 + 1,05 \cdot q_1$$
$$Ad = 83 \text{ kN/m}^2$$

static

foundation

1

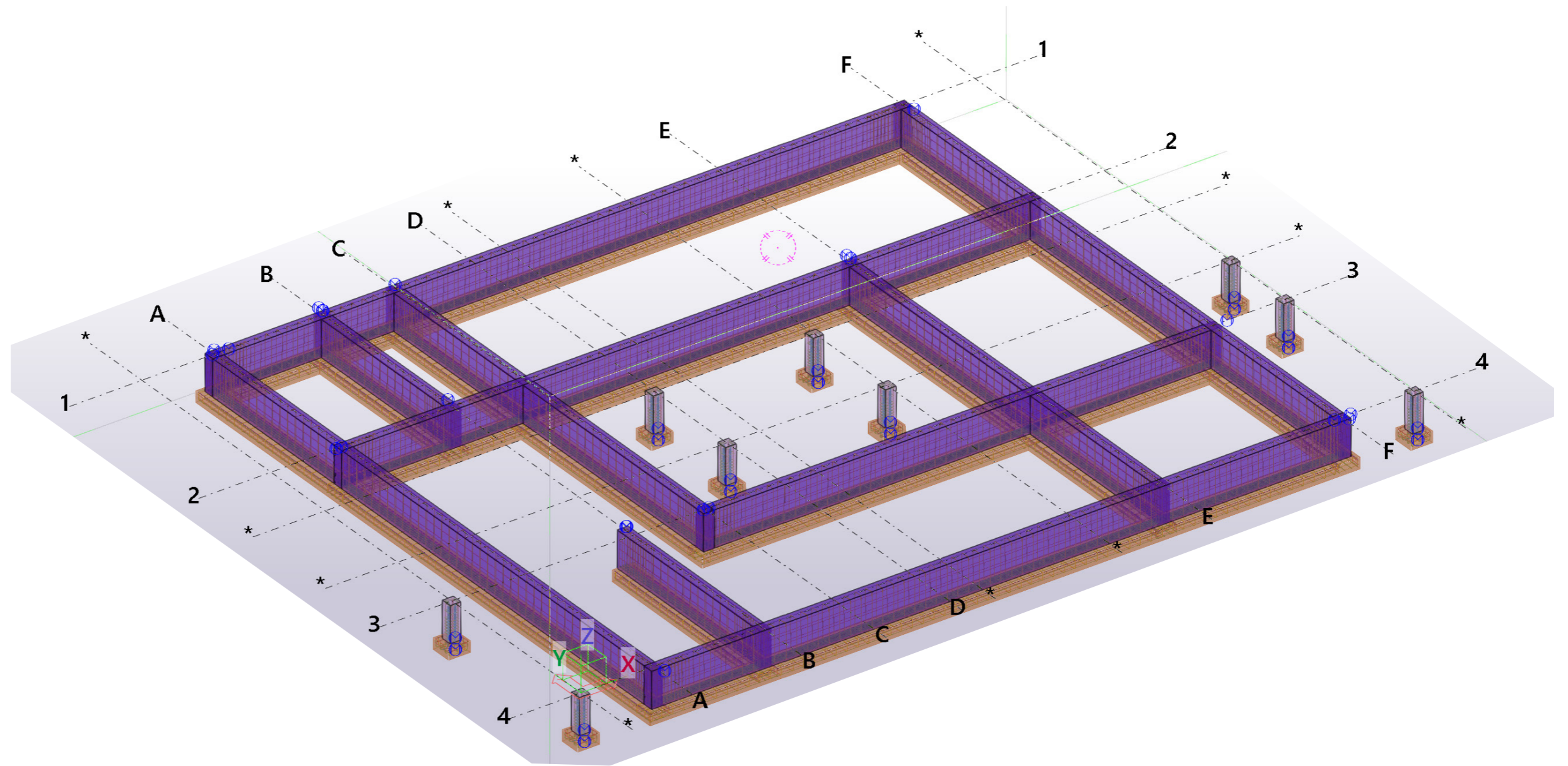
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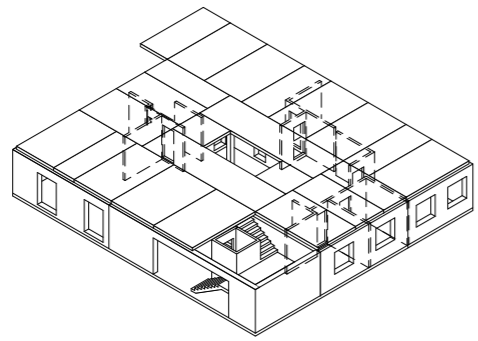
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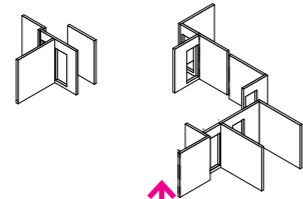
static

assembly sequence

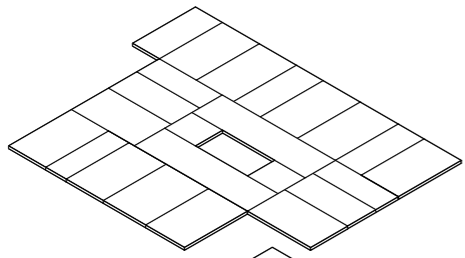
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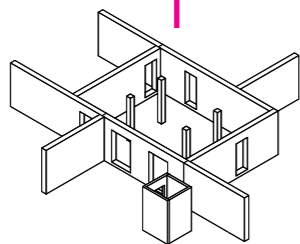
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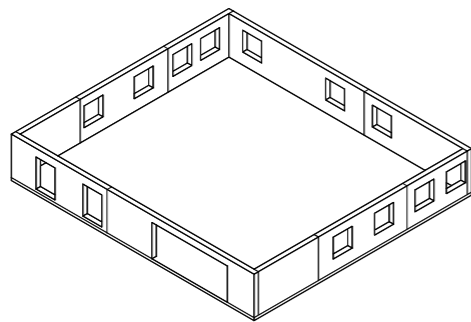
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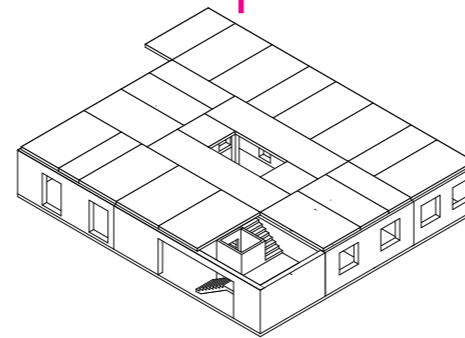
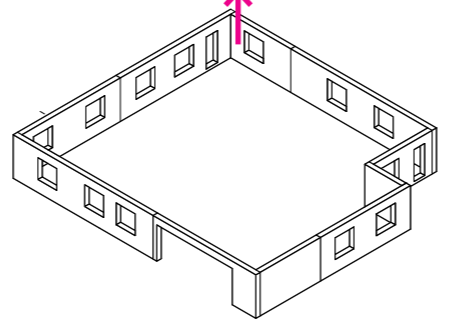
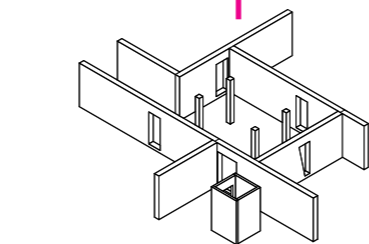
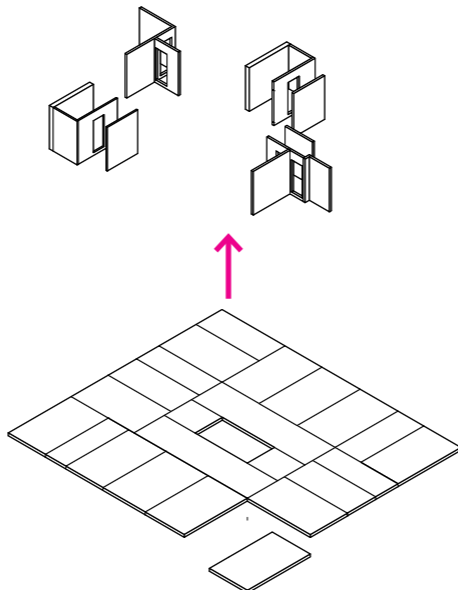


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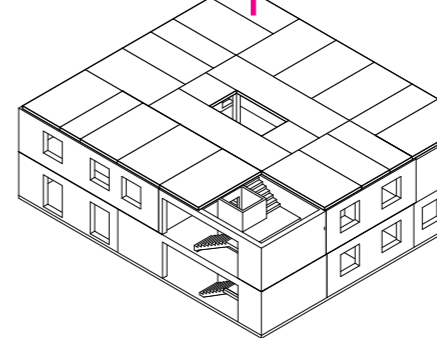
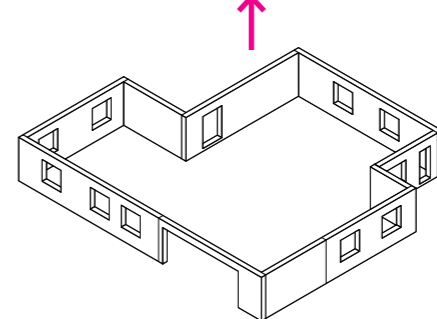
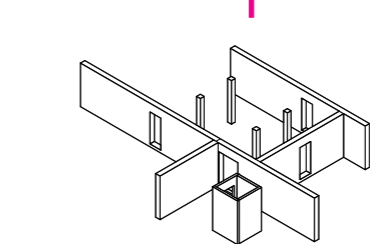
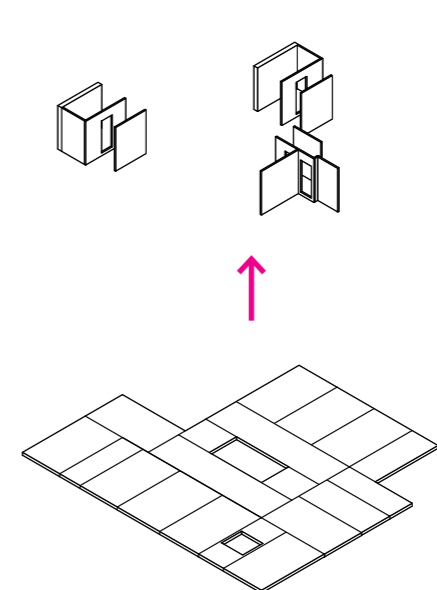


1. floor

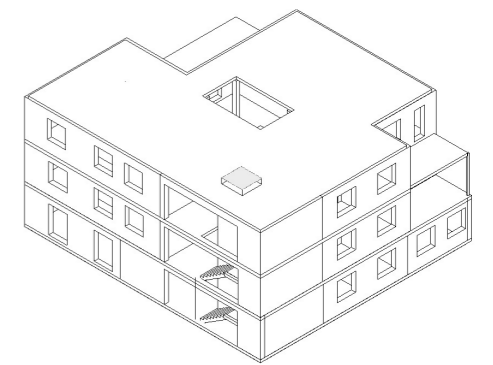
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2. floor



3. floor



static

element plan

1

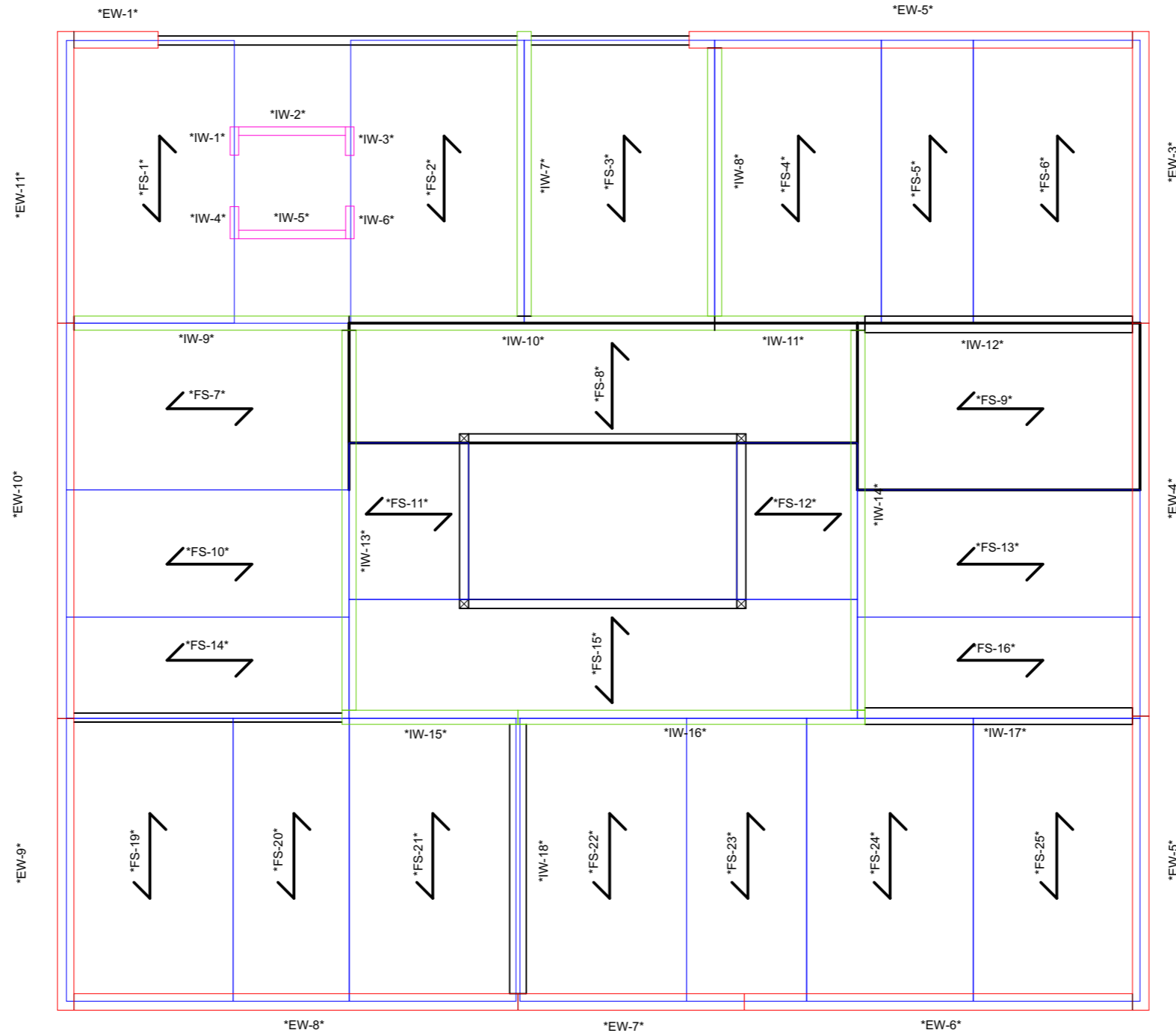
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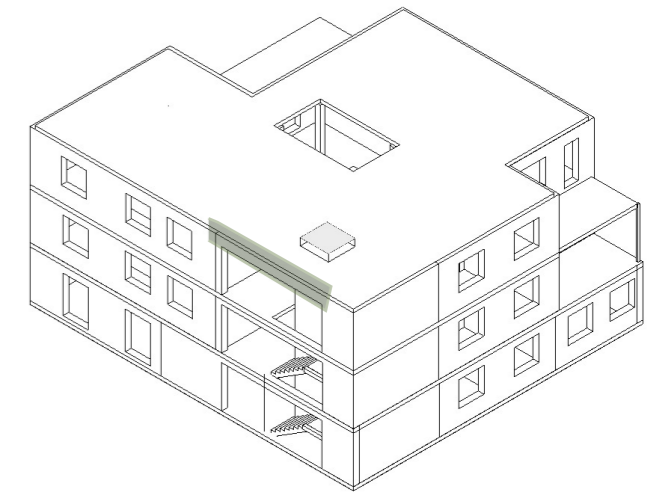
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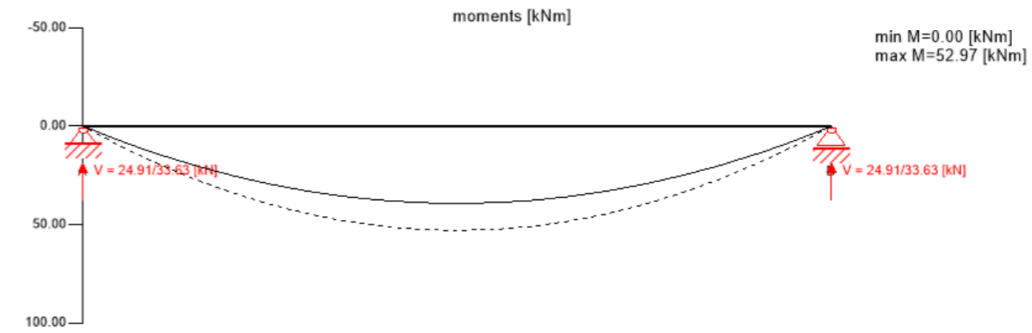
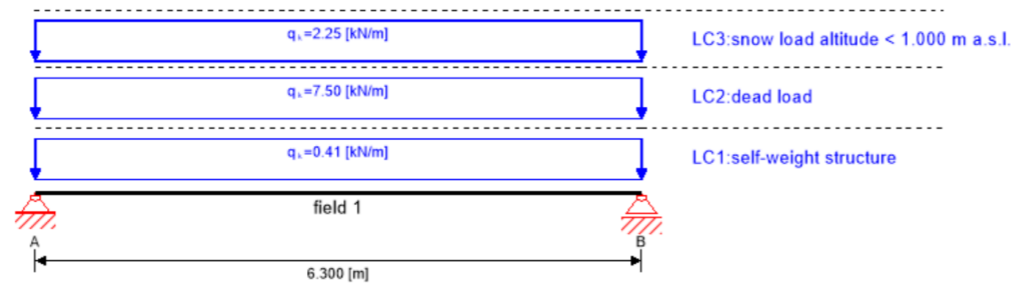


static

corridor beam



1



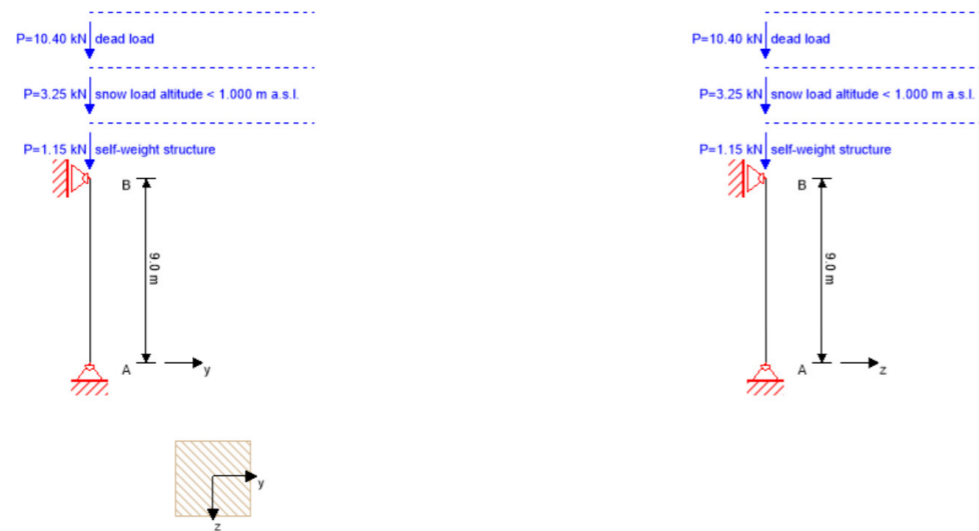
2

3

global utilization ratio								71 %			
ULS	71 %	ULS fire	19 %	SLS	56 %	SLS vibration	0 %	support	62 %	void	-1 %

corridor column

4



5

6

global utilization ratio				73 %
ULS	73 %	ULS fire	20 %	

Good luck team riga :)