

REPEATING MISTAKES

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LAND USE AND BUILDING ACT

1 §

General objective of the Act

The objective of this Act is to ensure that the use of land and water areas and building activities on them create preconditions for a favourable living environment and **promote ecologically, economically, socially and culturally sustainable development.**

The Act also aims to ensure that everyone has the right to participate in the preparation process, and that planning is high quality and interactive, that expertise is comprehensive and that there is open provision of information on matters being processed.



YIT

YIT

ROUTA
styroplast



ENERGY EFFICIENCY

LIFE-CYCLE ASSESSMENT

CARBON FOOTPRINT

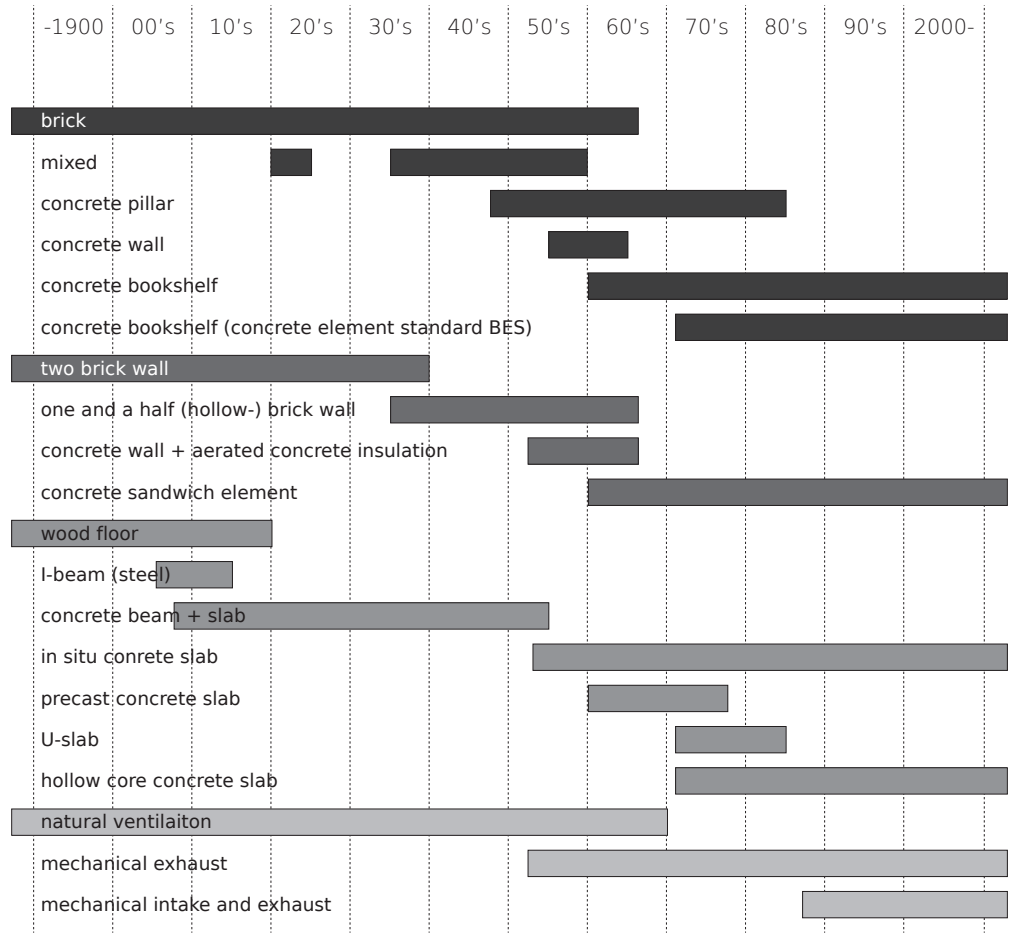
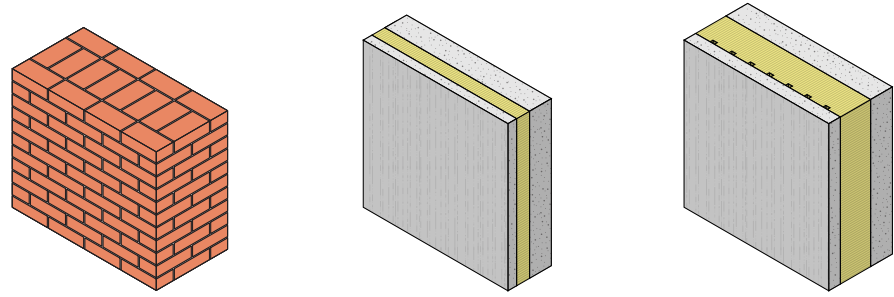
CIRCULAR ECONOMY

RECYCLING

SMART TECHNOLOGY

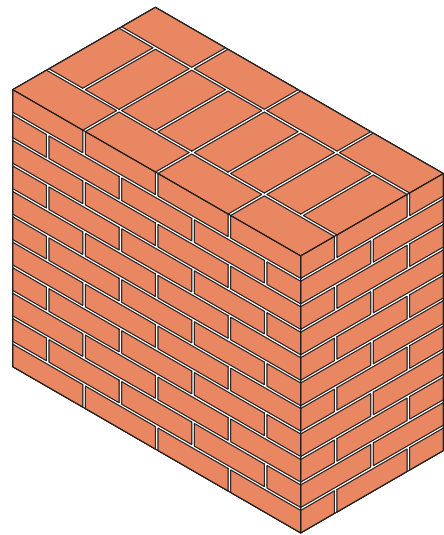
WOOD CONSTRUCTION

ZERO ENERGY BUILDING

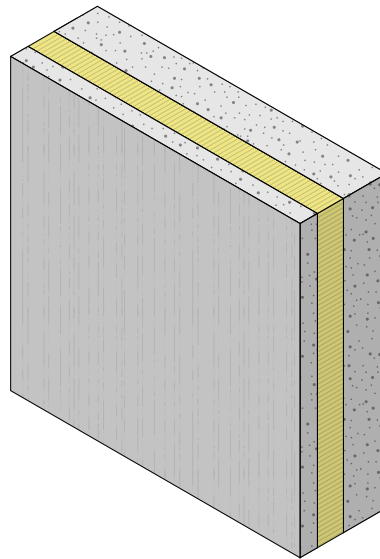


TYPICAL SOLUTIONS IN APARTMENT BUILDINGS █ loadbearing structure █ outer wall █ floor █ ventilation

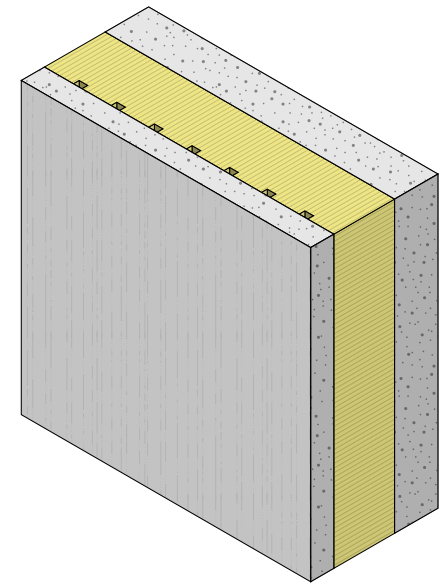
Typical wall structure before the advent of industrial construction



Typical wall structure after the advent of industrial construction



Typical wall structure after the promotion of sustainable development became the general objective of The Land Use and Building Act.





★ HEEER ★





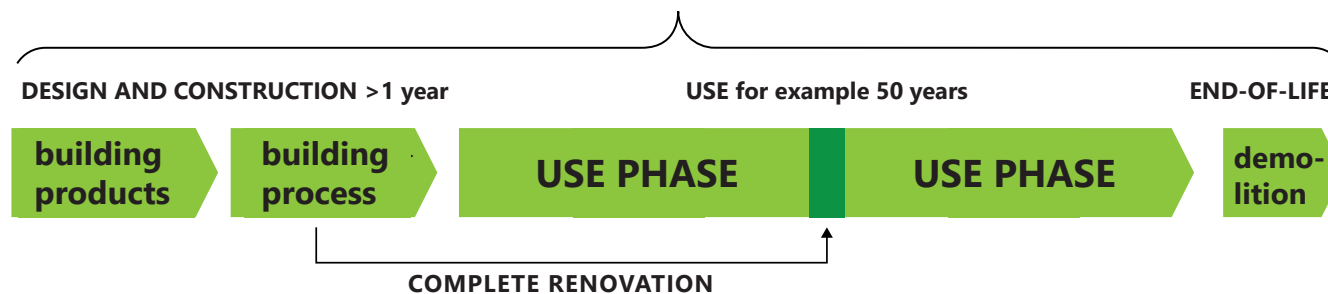




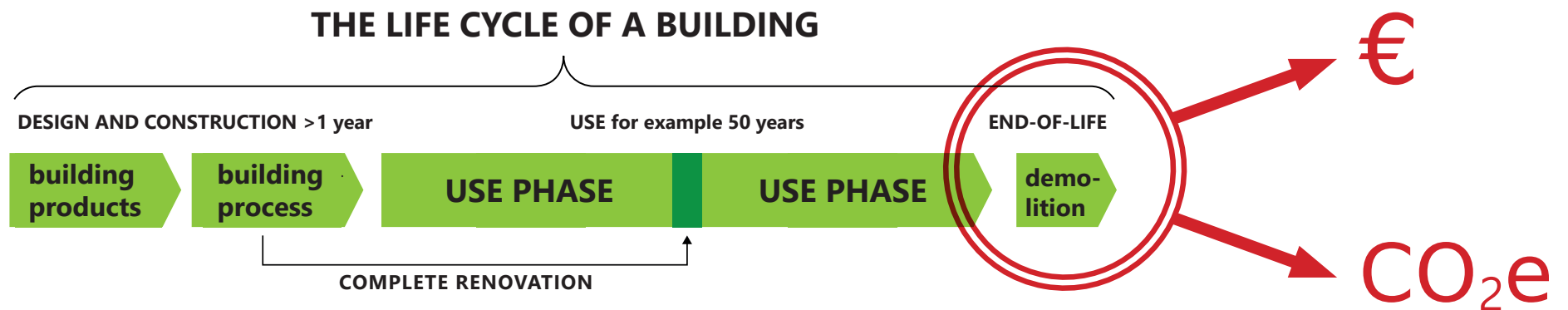
CATEGORY	INDICATIVE WORKING LIFE (years)	EXAMPLES
1	10	TEMPORARY STRUCTURES
2	10-25	REPLACABLE STRUCTURAL PARTS
3	15-30	AGRICULTURAL AND SIMILAR STRUCTURES
4	50	BUILDING STRUCTURES AND OTHER COMMON STRUCTURES
5	100	MONUMENTAL BUILDING STRUCTURES + CIVIL ENGINEERING

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THE LIFE CYCLE OF A BUILDING



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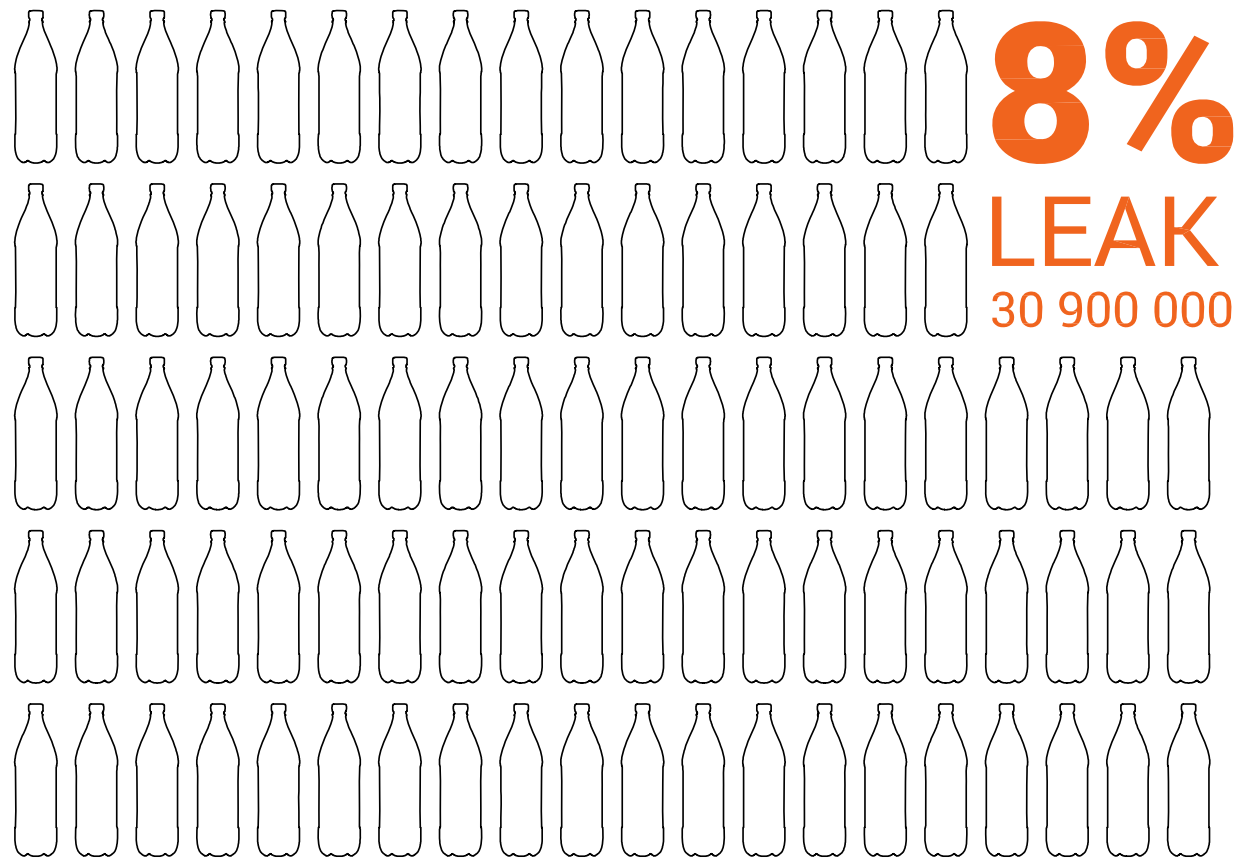


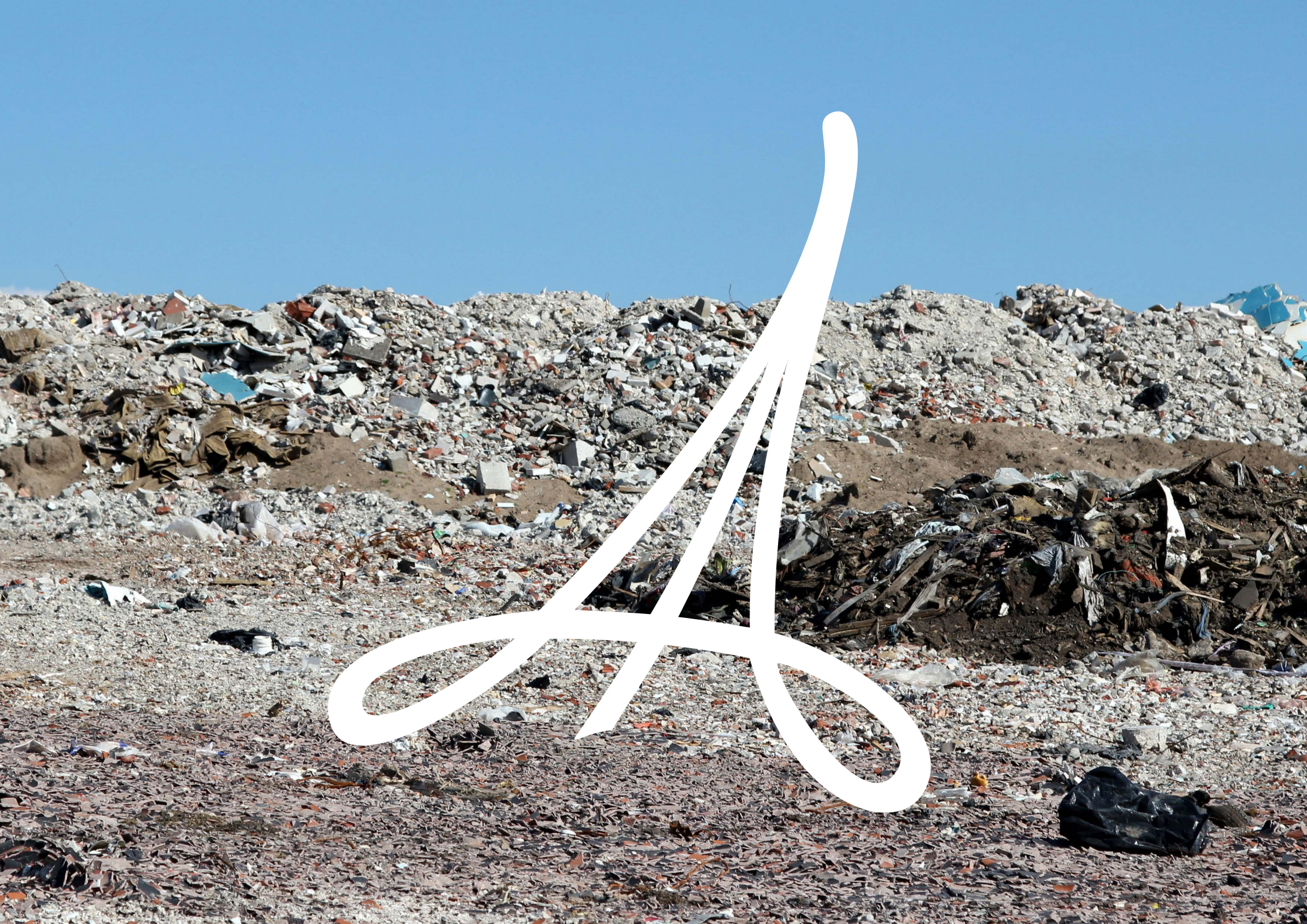


THE UNSPOKEN SIDE OF CIRCULAR ECONOMY

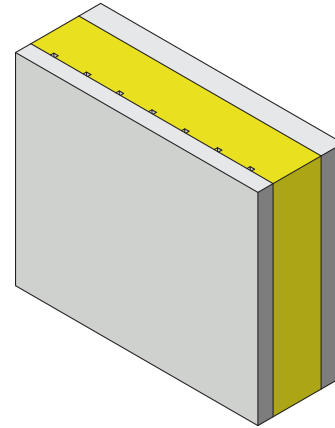
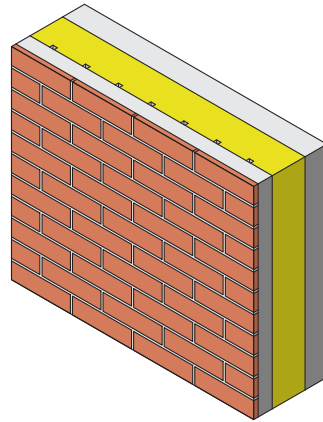
- MATERIALS TOO COMPLEX TO RECYCLE
- ENERGY SOURCES CANNOT BE RECYCLED
- INPUT EXCEEDS OUTPUT
- ALL MAN-MADE SYSTEMS ARE TEMPORARY
- NO LOOP CAN BE FULLY CLOSED

RECYCLING
RATE
92%

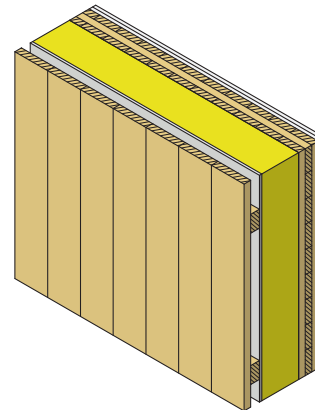
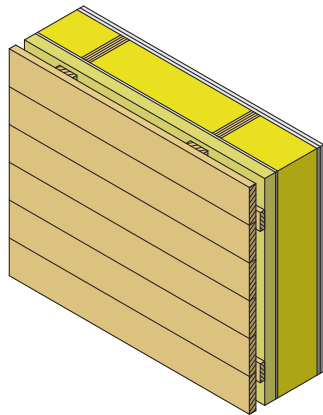




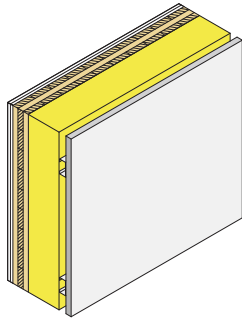




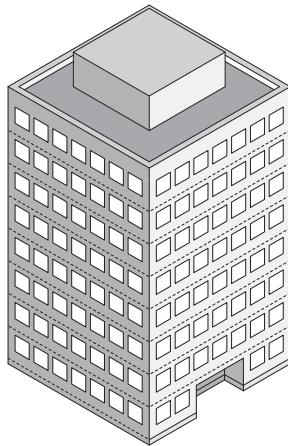
TODAY



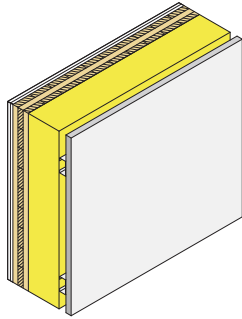
CONTEMPORARY
WOOD CONSTRUCTION
1 m²



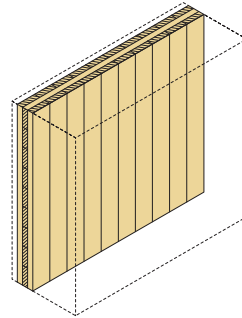
CONTEMPORARY
WOODEN MULTI-STOREY BUILDING
2000 gross m²



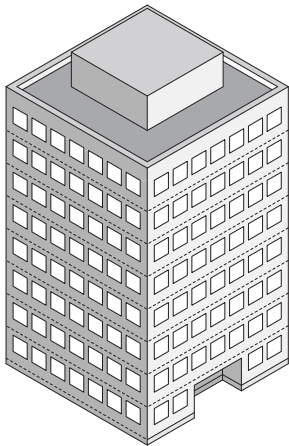
CONTEMPORARY
WOOD CONSTRUCTION
1 m²



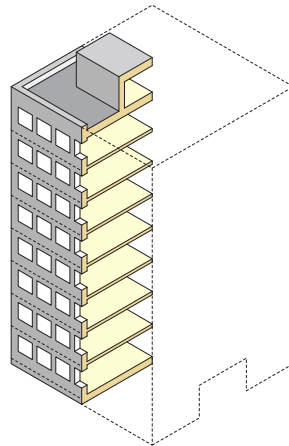
WOOD
CONTENT
15–32 %



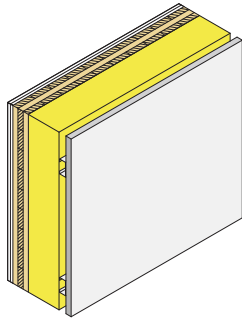
CONTEMPORARY
WOODEN MULTI-STOREY BUILDING
2000 gross m²



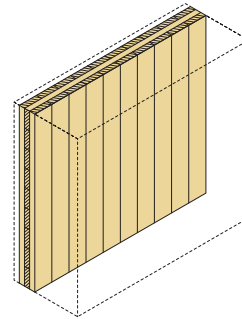
WOOD
CONTENT
15–32 %



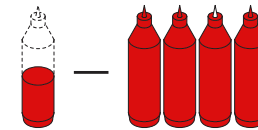
CONTEMPORARY
WOOD CONSTRUCTION
1 m²



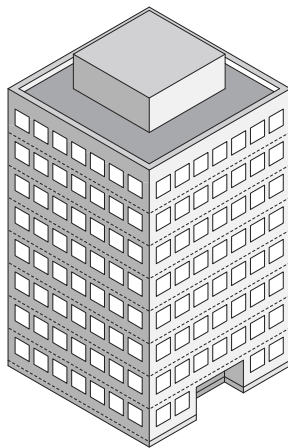
WOOD
CONTENT
15–32 %



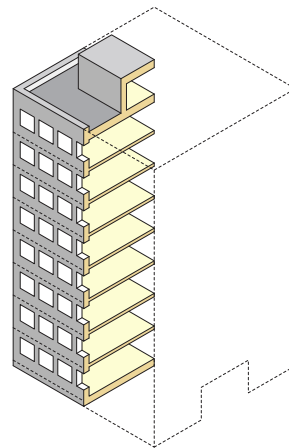
GLUE CONTENT
1–8 %
(0,5–4 kg)



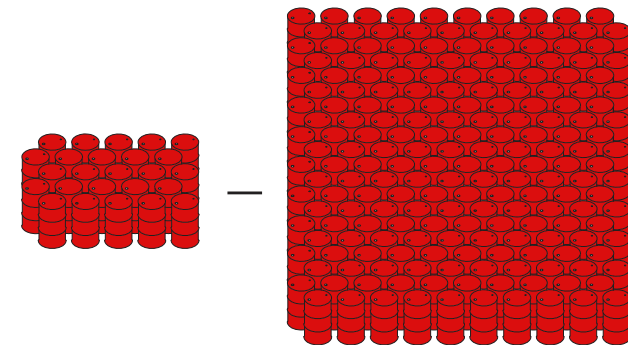
CONTEMPORARY
WOODEN MULTI-STOREY BUILDING
2000 gross m²



WOOD
CONTENT
15–32 %



GLUE CONTENT
1–8 %
(5000–40000 kg)





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Traditional log wall. Logs can contain 65 kg/m³ bound water at RH 75 %.



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Traditional sawdust insulated wall. Sawdust can contain 19 kg/m³ bound water at RH 75 %.



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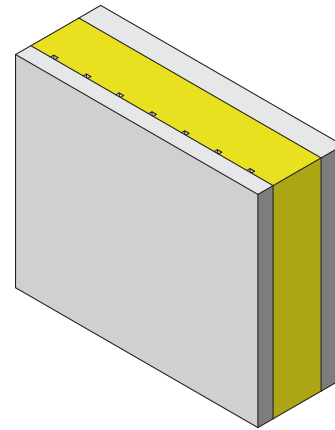
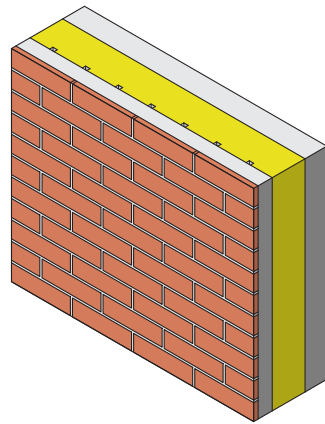
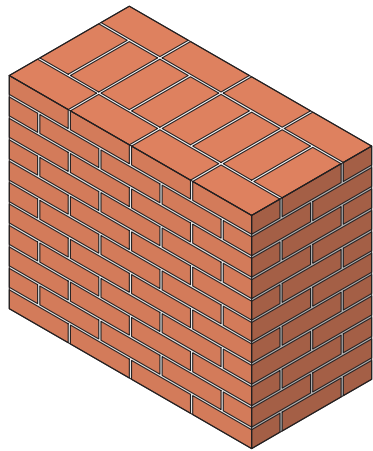
Contemporary cellulose fibre insulated wall. Cellulose fibre insulation (37 kg/m³) can contain 4,1 kg/m³ bound water at RH 75 %.



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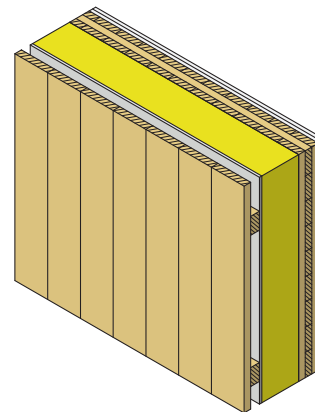
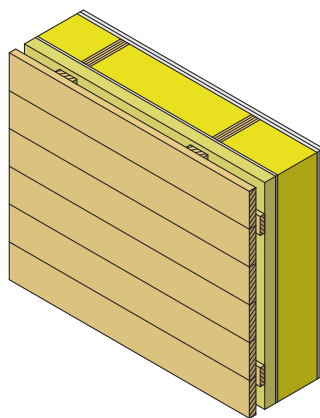
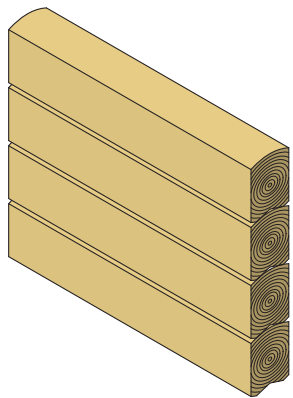
Contemporary mineral wool insulated wall. Mineral wool insulation can contain 0,36 kg/m³ bound water at RH 75 %.

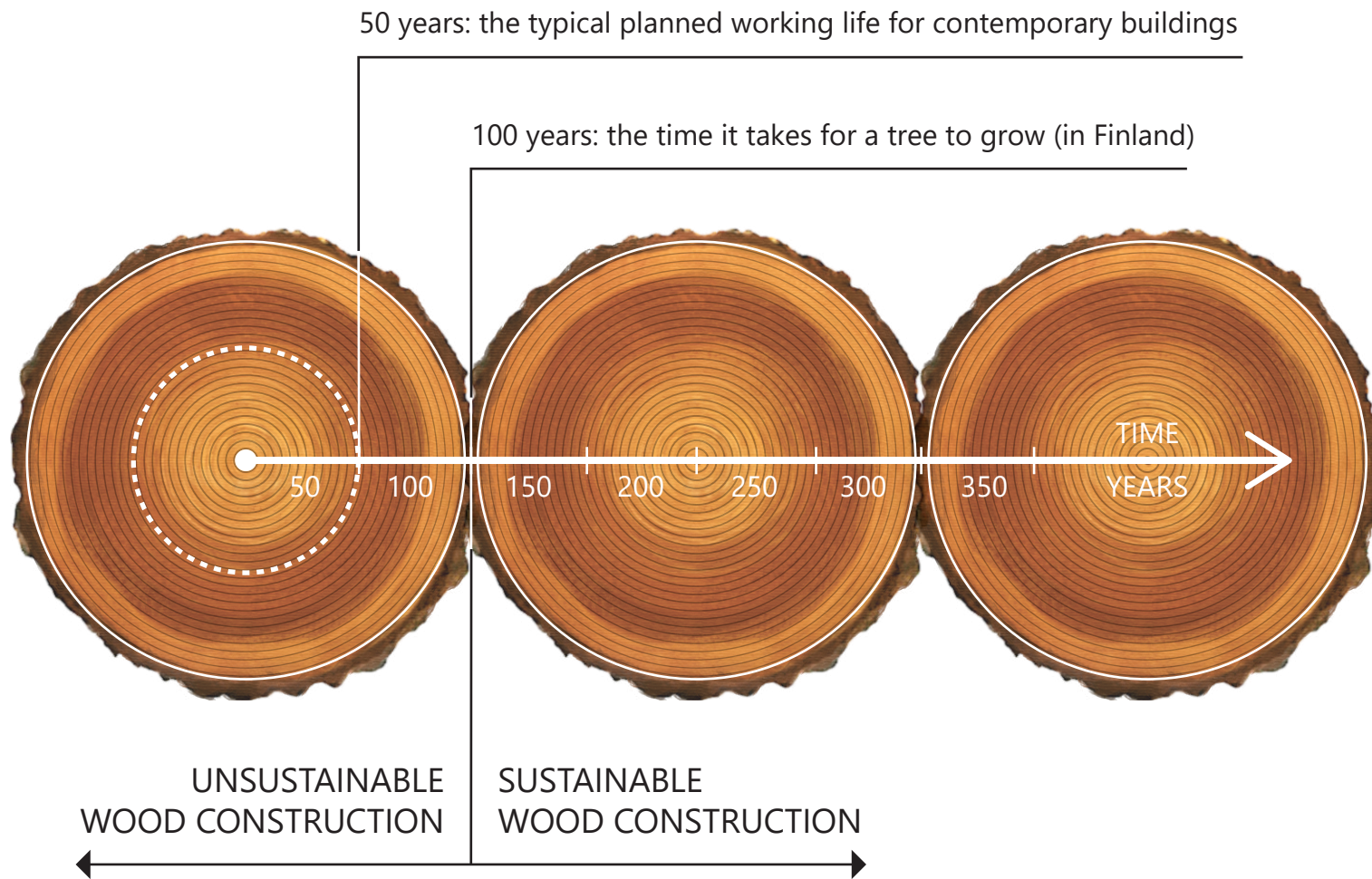




YESTERDAY

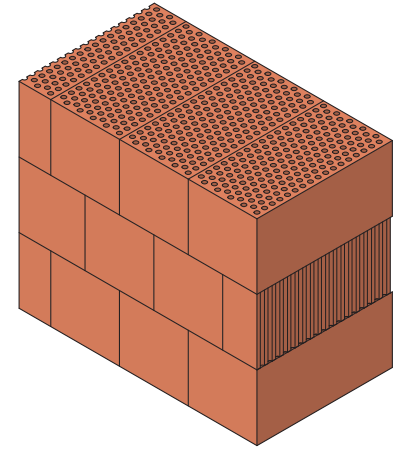
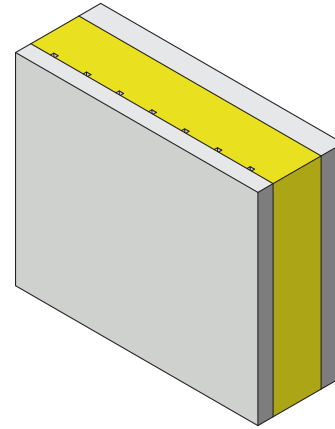
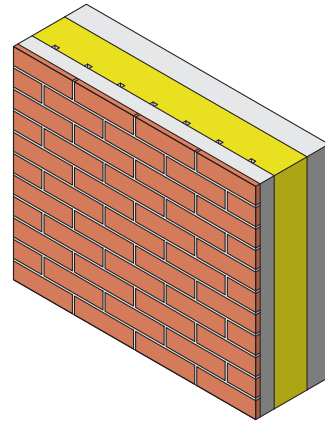
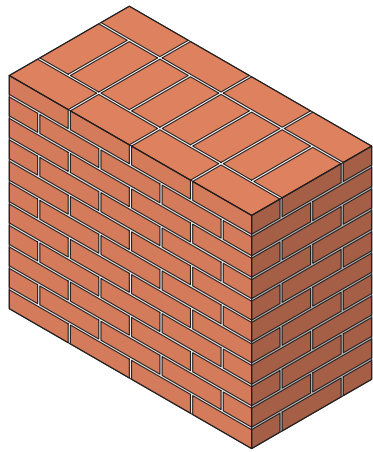
TODAY







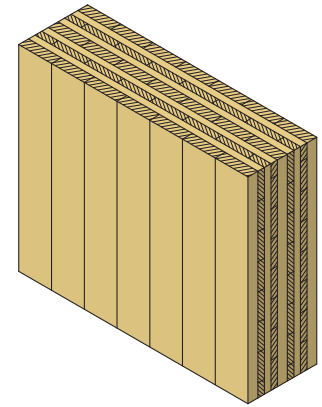
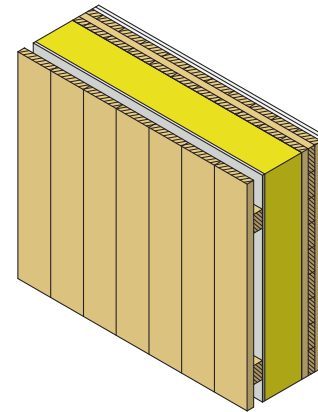
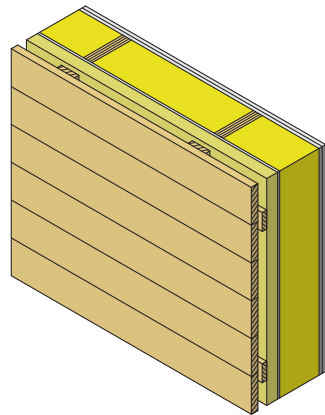
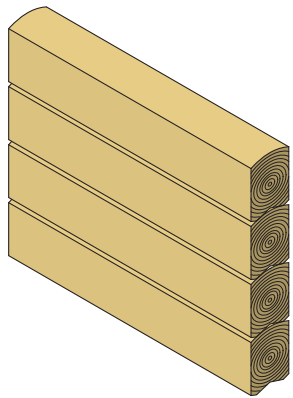


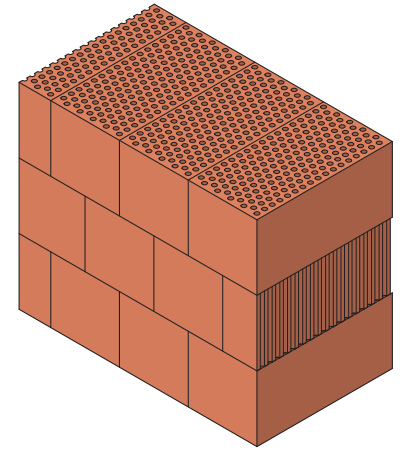
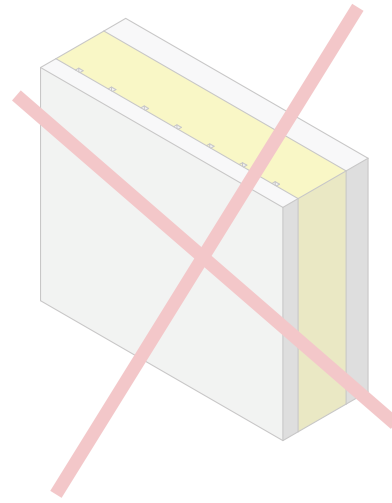
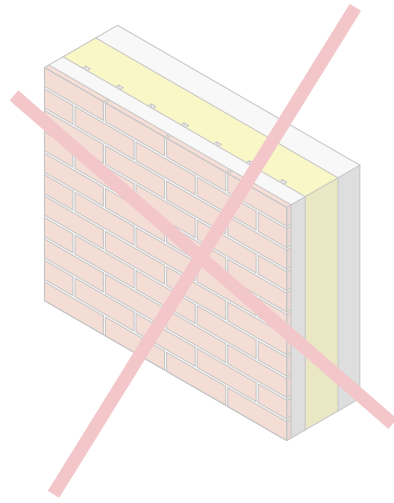
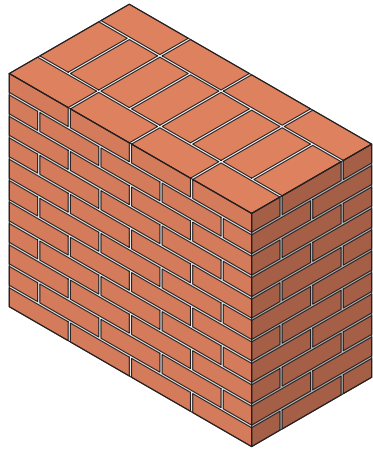


YESTERDAY

TODAY

TOMORROW

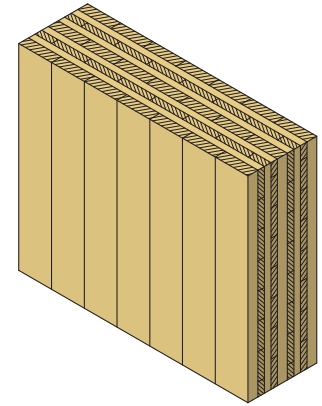
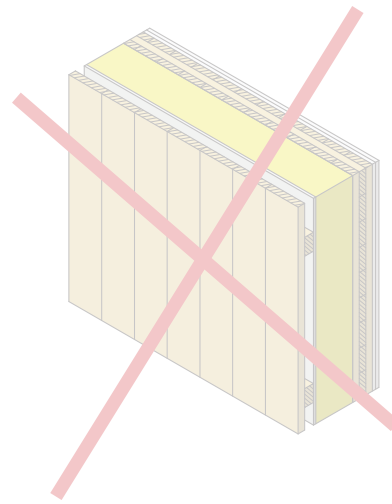
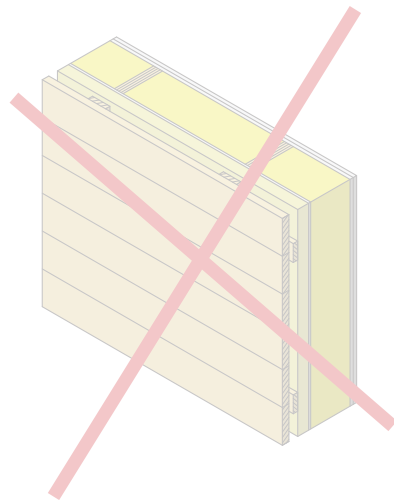
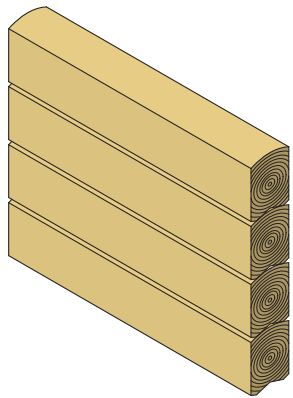




TOMORROW

TODAY

TOMORROW

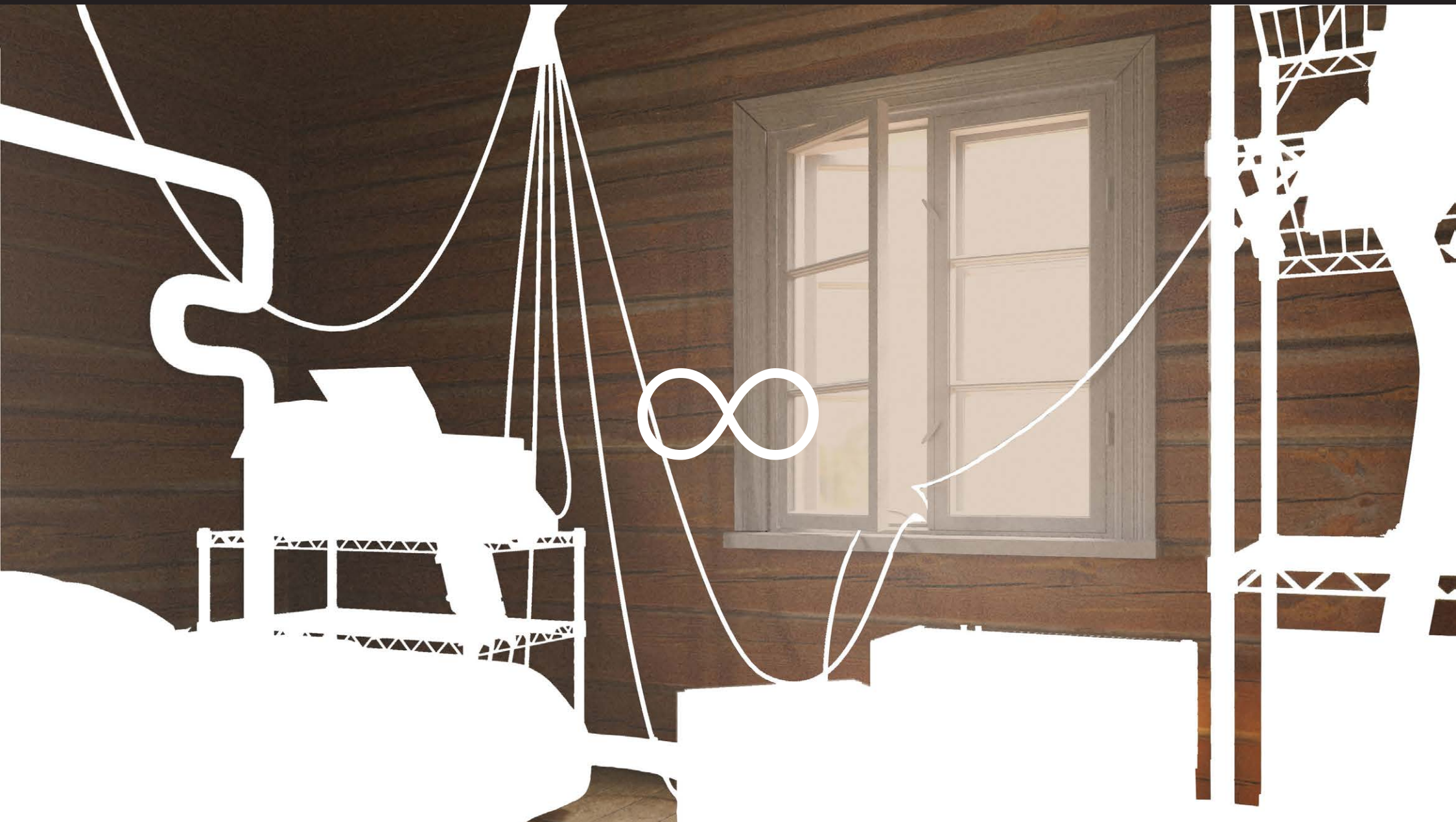


A rustic wooden interior, likely a workshop or a small room. The walls are made of dark, horizontal wooden planks. A window with a grey frame and multiple panes is set into the wall, with one pane slightly open. To the left, a table is covered with a red and white striped cloth. In the foreground, a wooden bench is visible. On the floor to the right, there are several stacks of terracotta pots. The overall atmosphere is warm and traditional.

1900

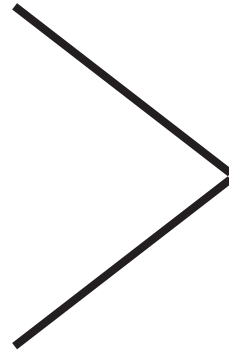
A photograph of a room with dark wood-paneled walls. A window with a grey frame is in the center, showing a bright outdoor scene. Several red cables are draped across the room, some hanging from the ceiling and others connected to a metal wire rack on the right. In the foreground, there are two glass terrariums containing green plants. To the left, a bed with a white sheet is visible, and a metal rack holds a green board with illegible text and a piece of equipment with red lights. The number '2100' is overlaid in white in the center of the image.

2100



NEW BUILDINGS

OLD BUILDINGS

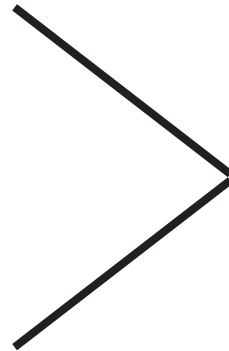


= BUILDINGS



NEW CONSTRUCTION

RENOVATION



= CONSTRUCTION

THE KEY QUESTIONS IN CONSTRUCTION:

IS IT REALLY NECESSARY?

DO WE KNOW:

- WHAT SUBSTANCES BUILDINGS CONSIST OF?
- WHERE DO THESE SUBSTANCES COME FROM?
- WHERE DO THEY END UP?
- IN WHAT TIME?

IS IT SUSTAINABLE?

(= CAN IT BE REPEATED INDEFINITELY?)

YIT

YIT

ROUVA
styroplast

INSULATION
EMISJEST

INSULATION
EMISJEST



YES

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