

# Betons Termiske Egenskaber

Arkitektoniske muligheder & udfordringer



# Concrete has no Limits?



FUTURE  
CONCRETE  
STRUCTURES

SUSTAINABILITY  
ENERGY & EMISSIONS



AESTHETICS  
FUNCTION



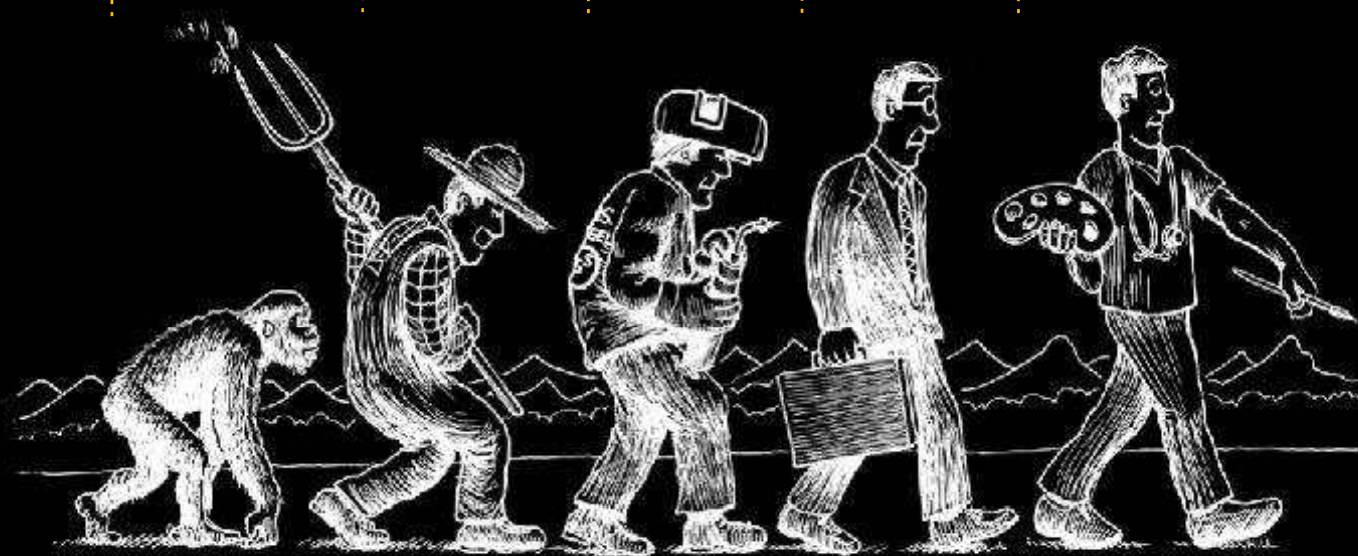
FLEXIBILITY  
INDIVIDUAL



**Creative Man Society**

**Dream Society**

**Industrial Society**





Dansk Betondag  
2009

**HiCON**  
HIGH PERFORMANCE CONCRETE

© 2005 Build-A-Bear Workshop



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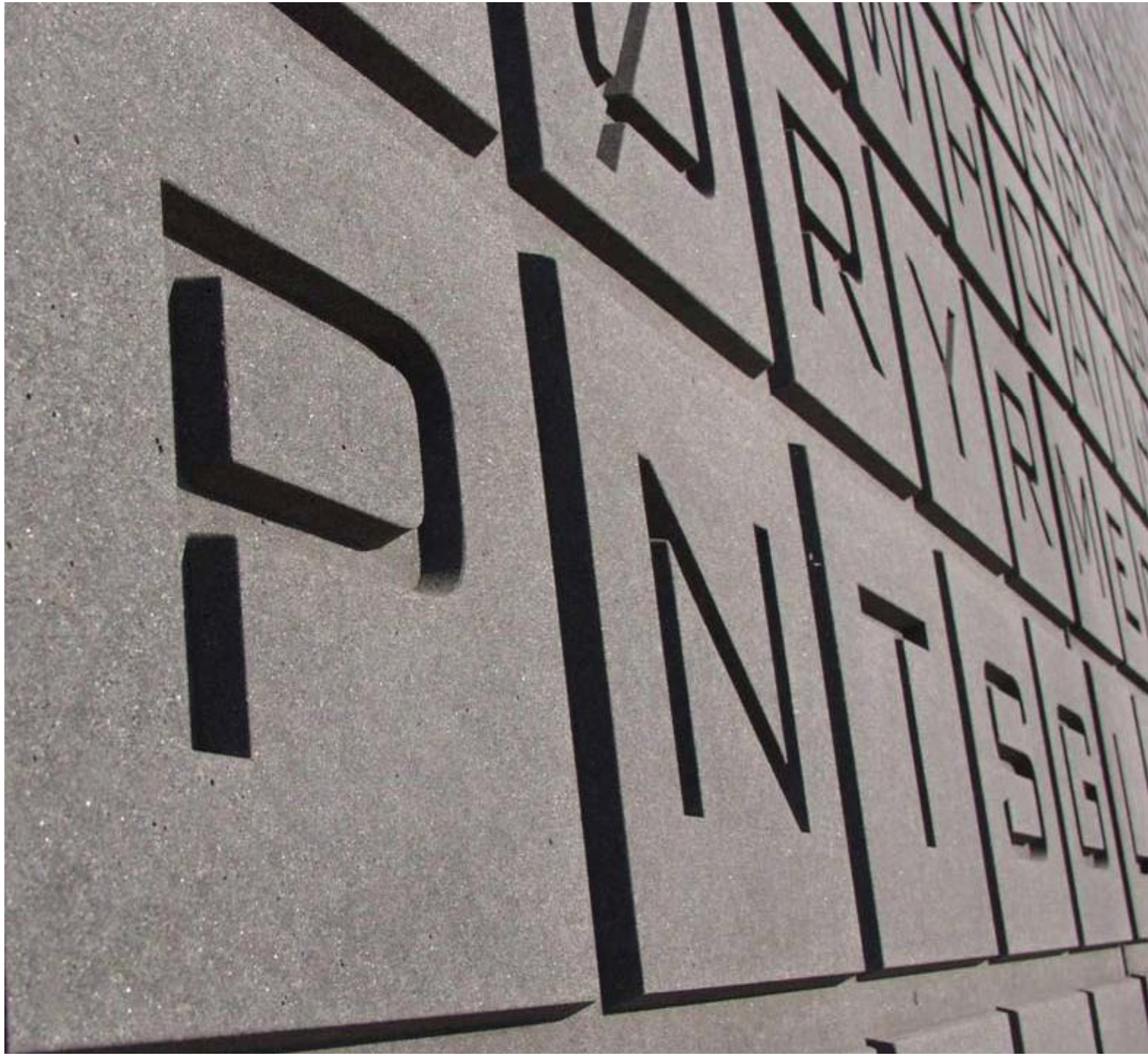
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HIGH PERFORMANCE CONCRETE

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2009



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SUSTAINABILITY  
ENERGY & EMISSIONS

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Required Interior Temperature  
Actual Exterior Temperature

$31 \pm 1^\circ\text{C}$   
 $3 - 42^\circ\text{C}$

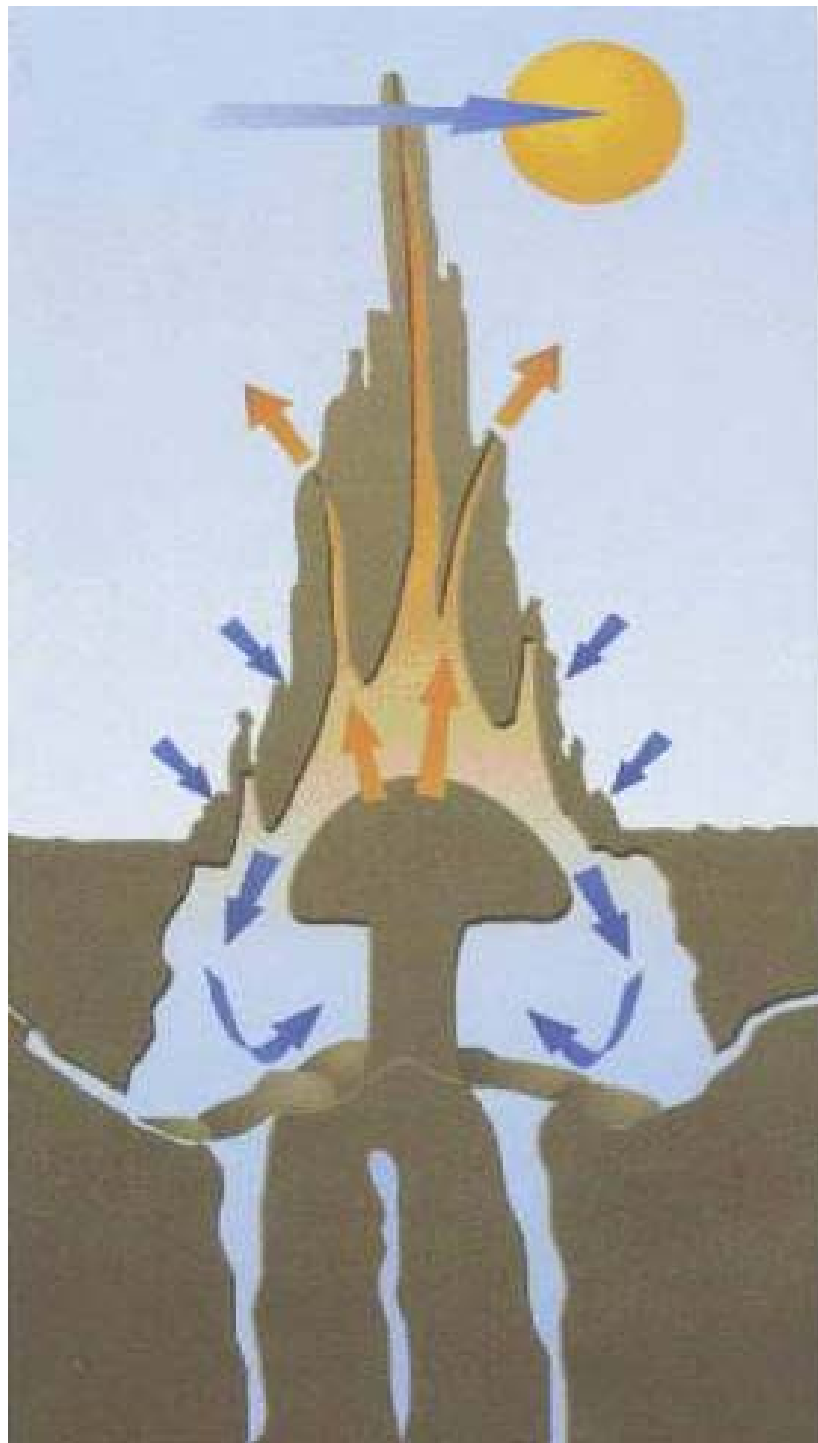
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HIGH PERFORMANCE CONCRETE



- Natural Airflow / Ventilation
- High Thermal Mass

# Exposed Thermal Mass

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## Exposed Thermal High Mass

- *Can Reduce Energy Consumption*

- For heating

Energy reduction up to 10%

- For cooling

Energy reduction up to 100%

- Reduces construction cost for technical installations

- Better interior comfort



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**Bang & Olufsen**

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# Bang & Olufsen

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**Bang & Olufsen**

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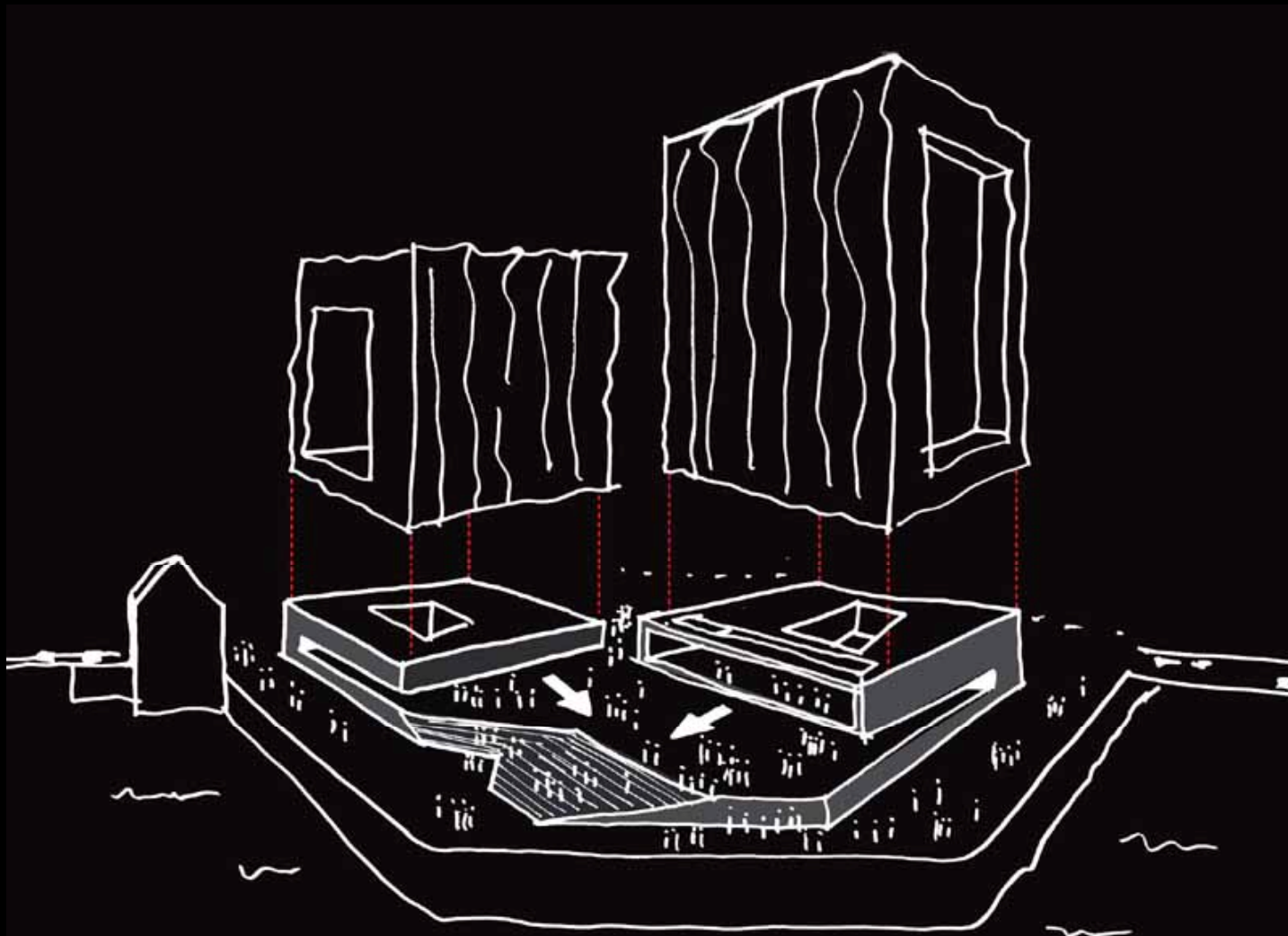
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# SPIEGEL magazine

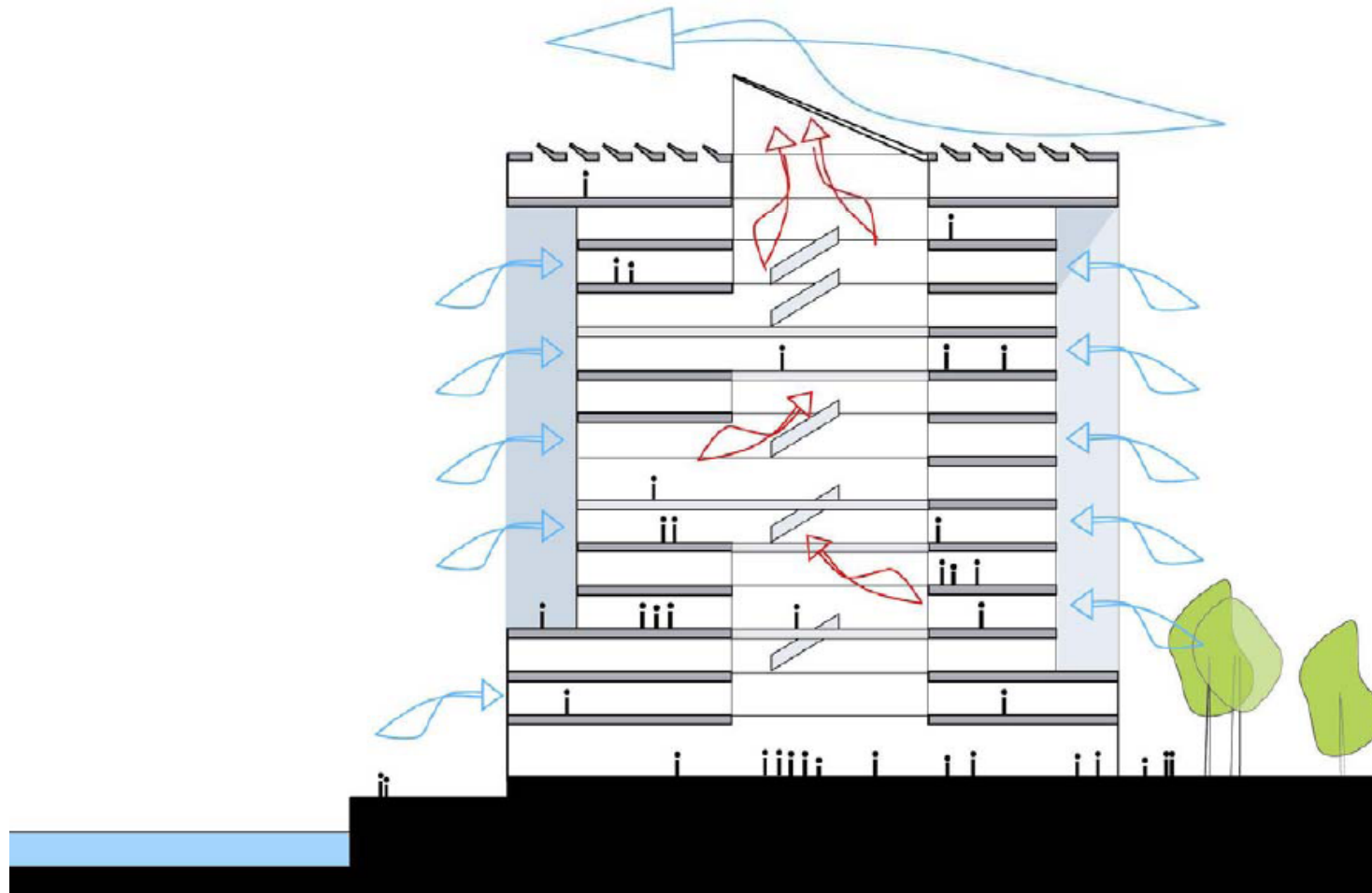
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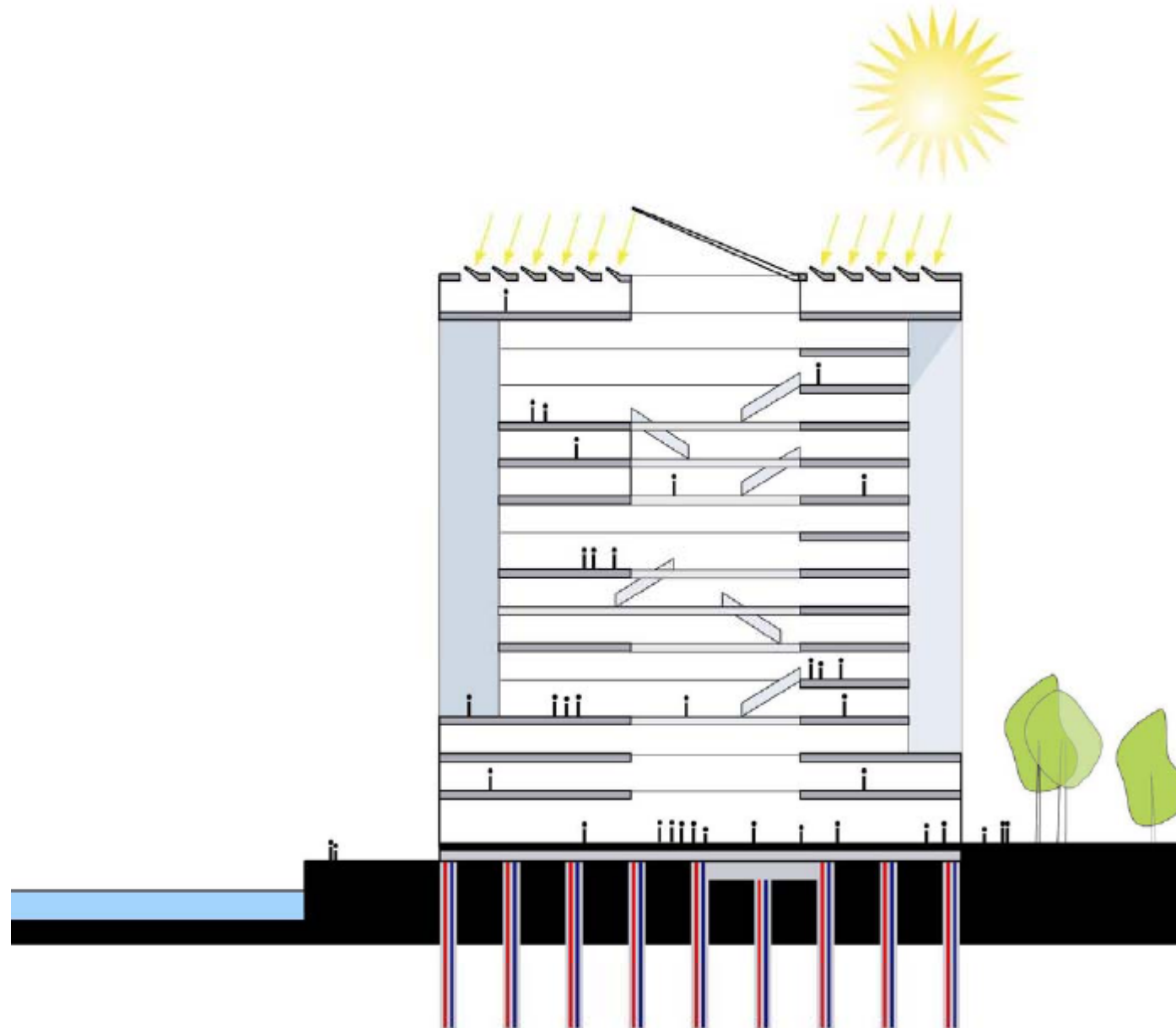
# SPIEGEL magazine



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**SPIEGEL magazine**



**SPIEGEL magazine**

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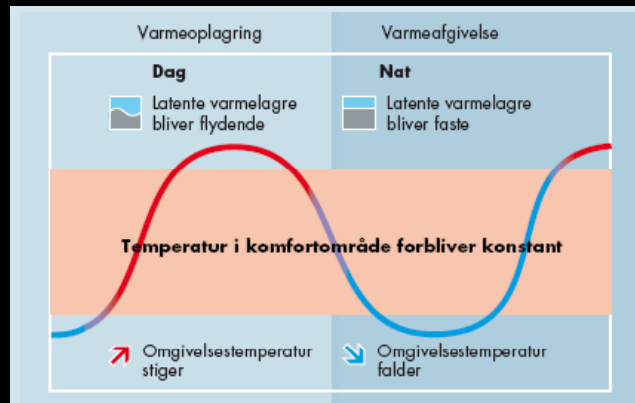
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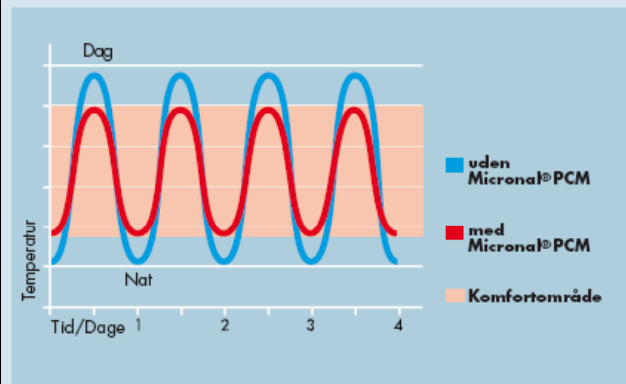
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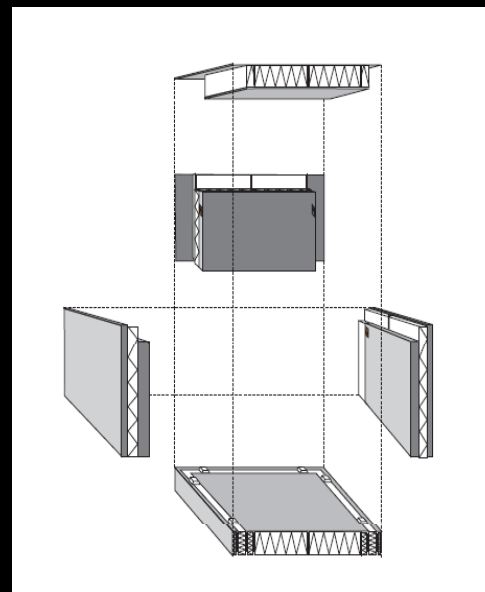
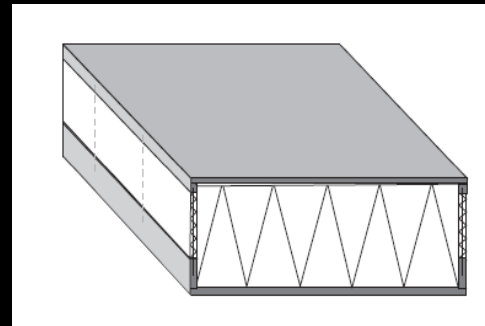


Virkning af latente varmelagre



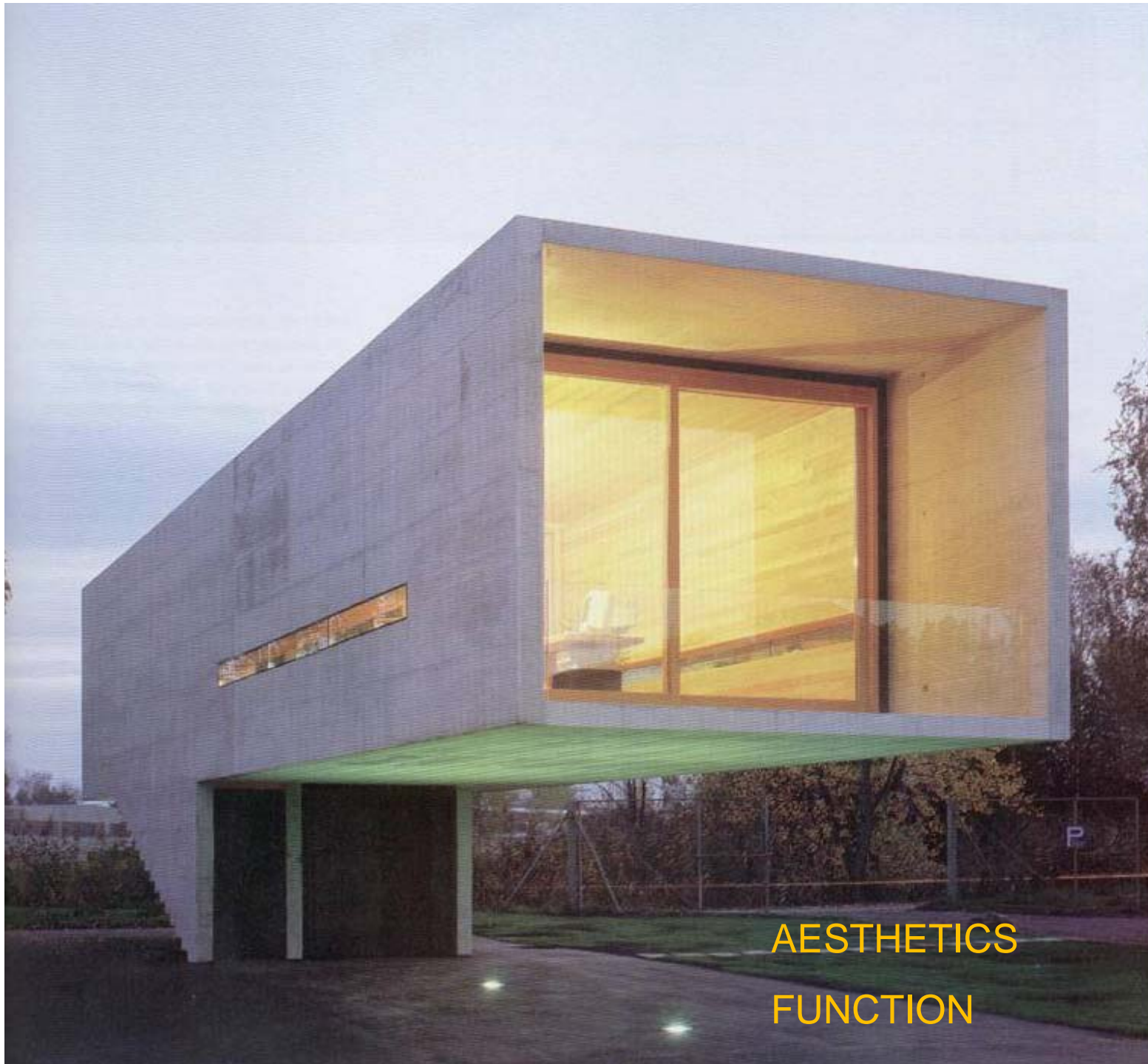
Optimeret rumtemperatur gennem aktiv klimakontrol:  
latente varmelagre udjævner temperturudsving

Brug af PCM i tynde skaller af beton



Lette modulboliger som sandwich elementer

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AESTHETICS  
FUNCTION

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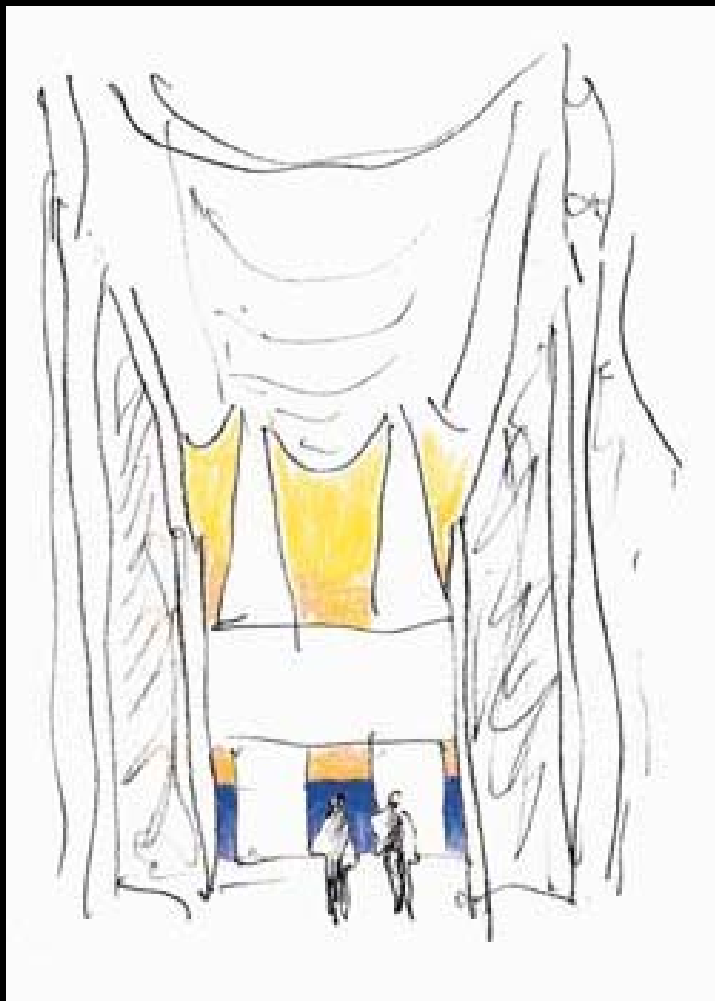
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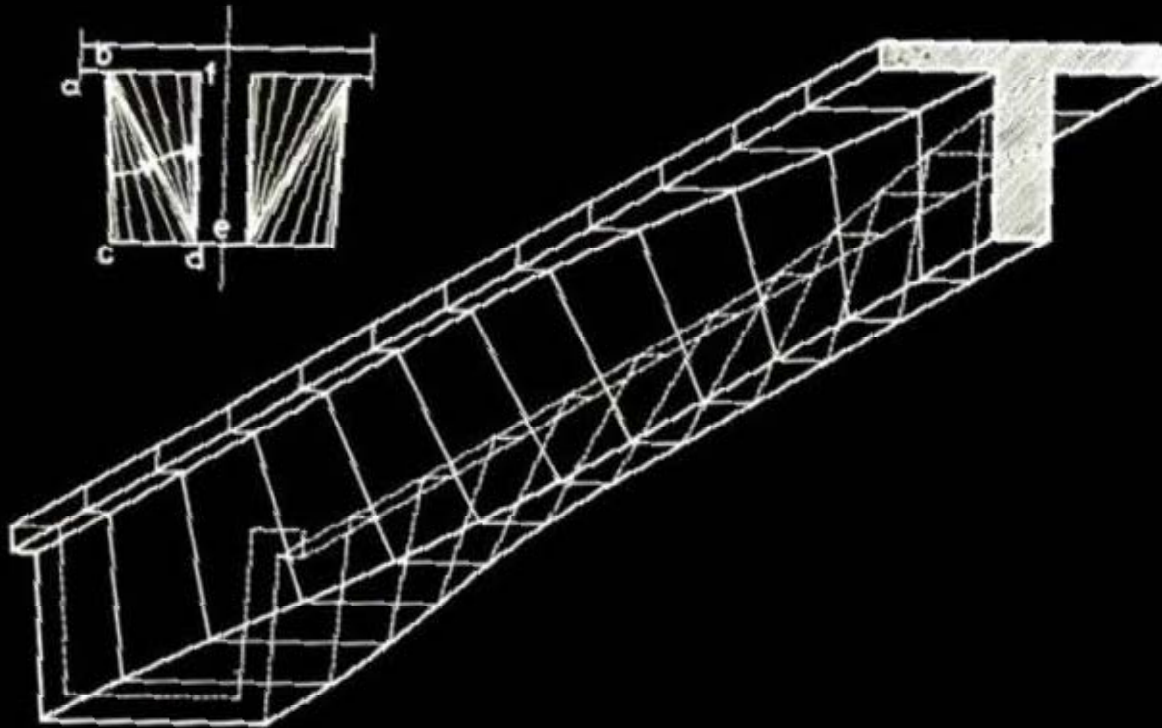
## THE CONCOURSE BEAM



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# THE CONCOURSE BEAM



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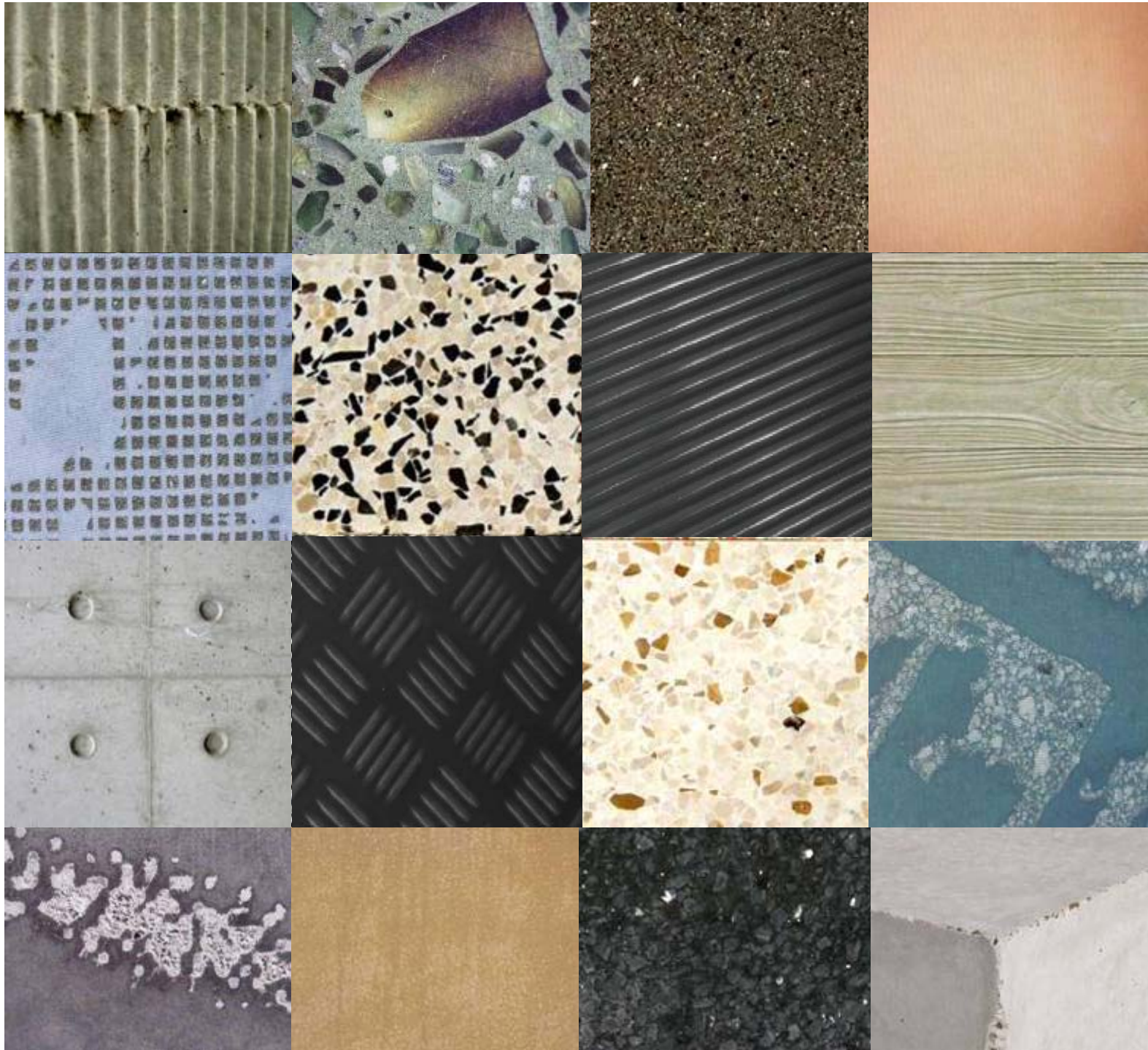
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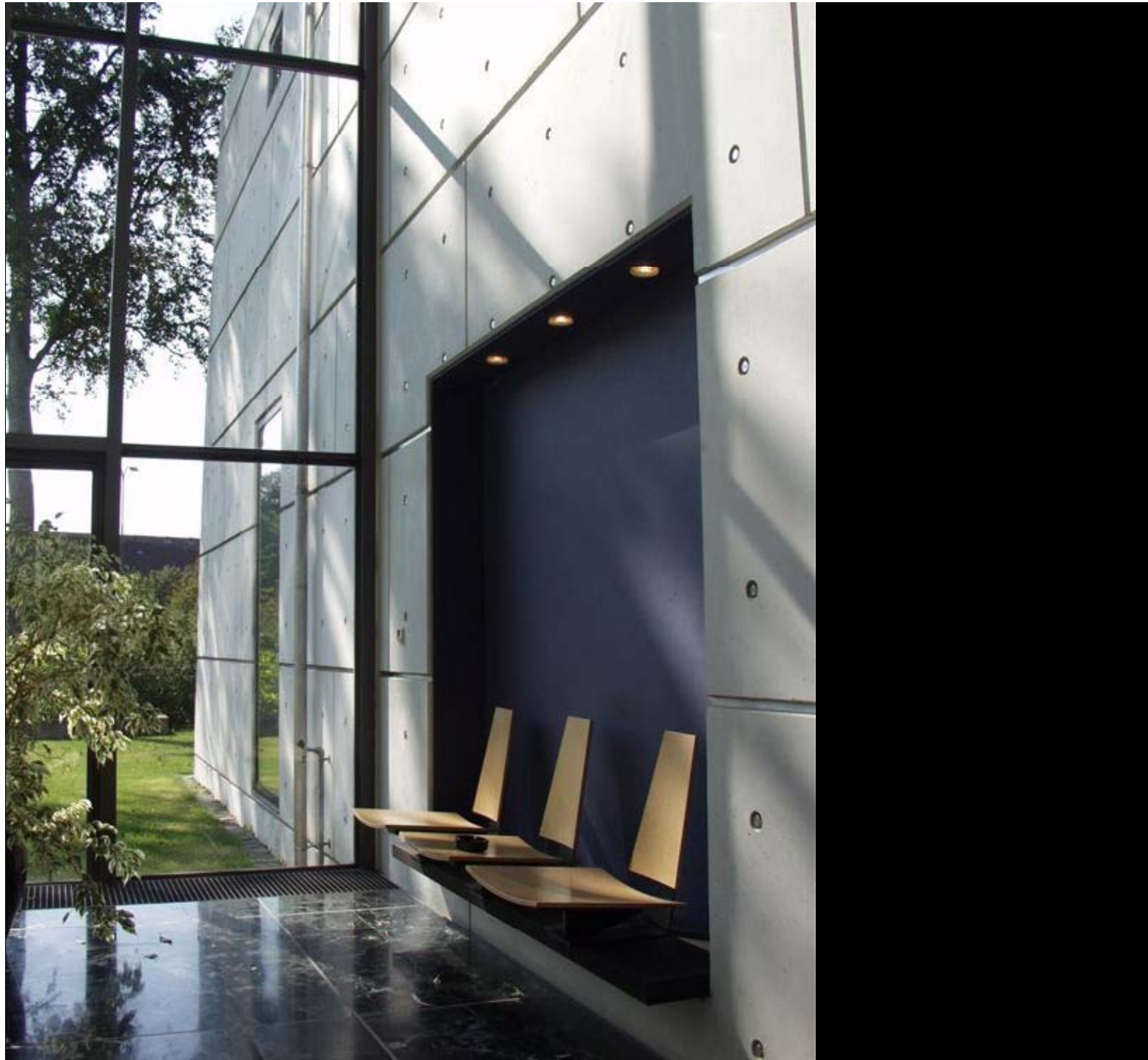


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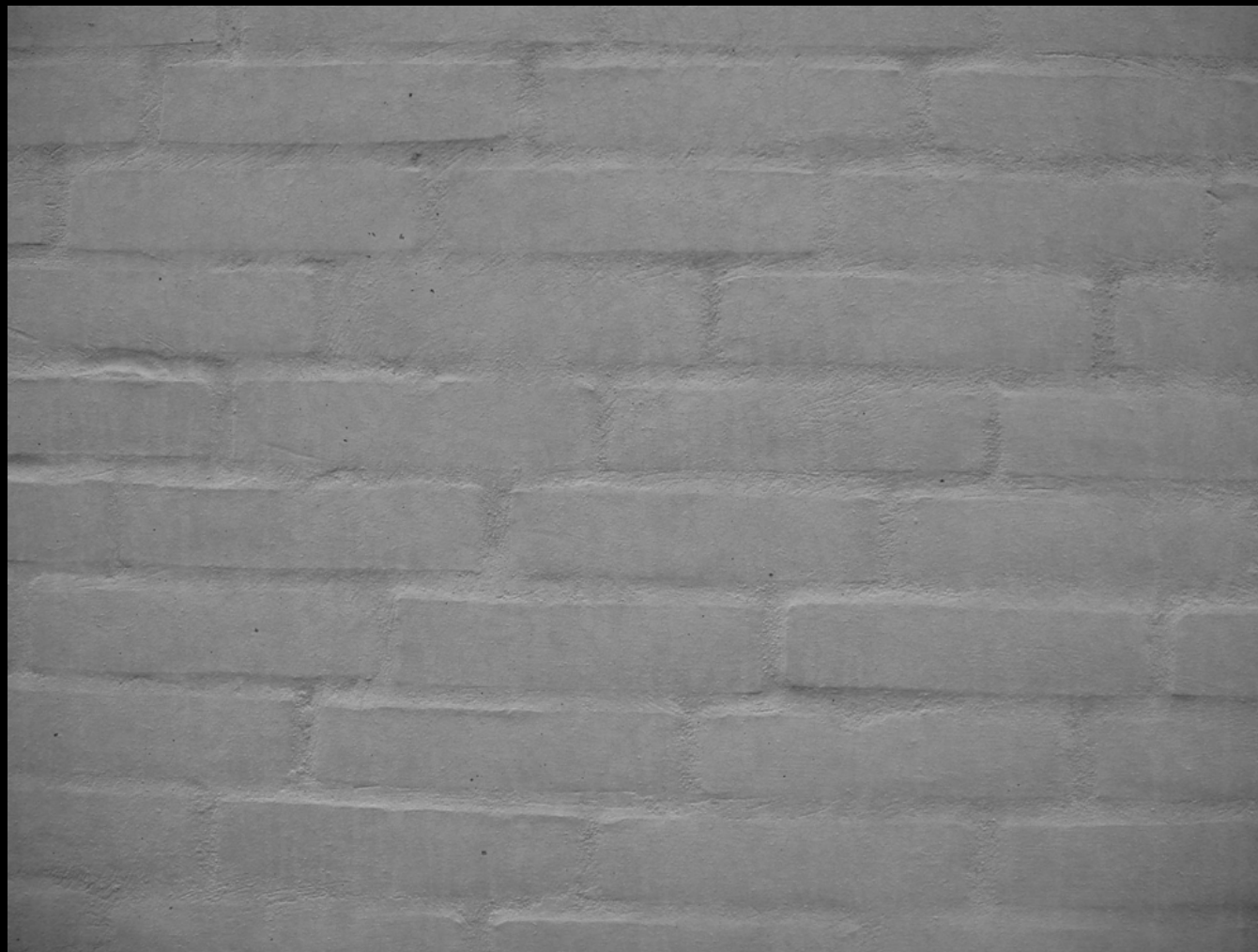
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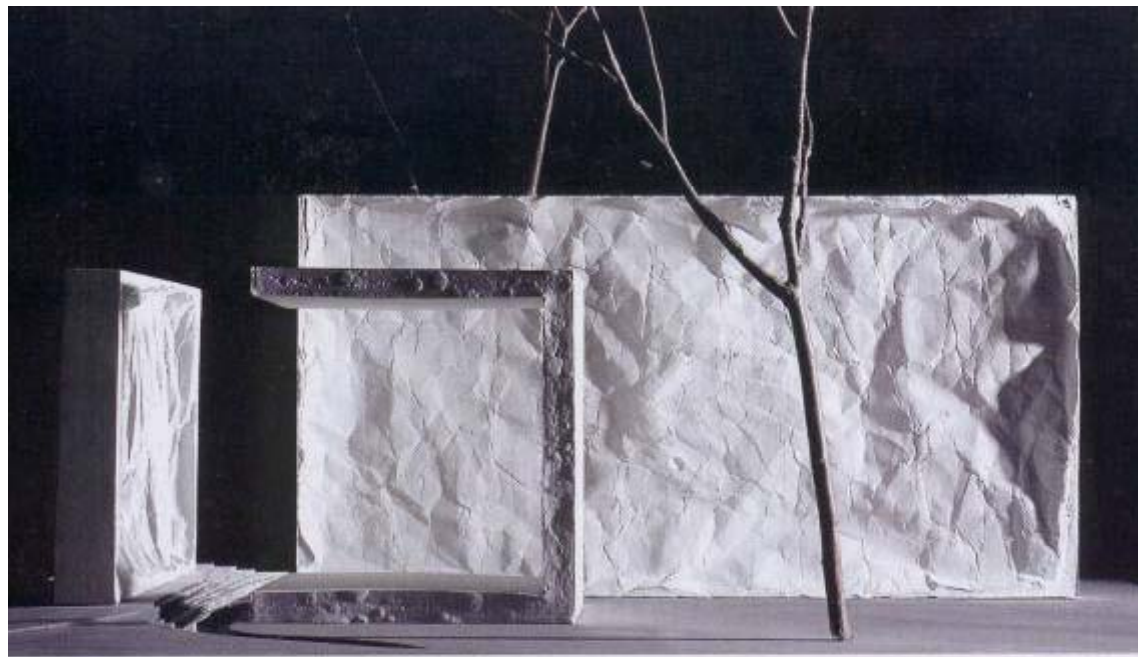
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