

# Stampflehm – Baustoff der Zukunft

(Rammed Earth - Building Material of the Future)

Vortrag online 02.03. 2021

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6824 Schlins

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L E H M

HANDWERK

T O N

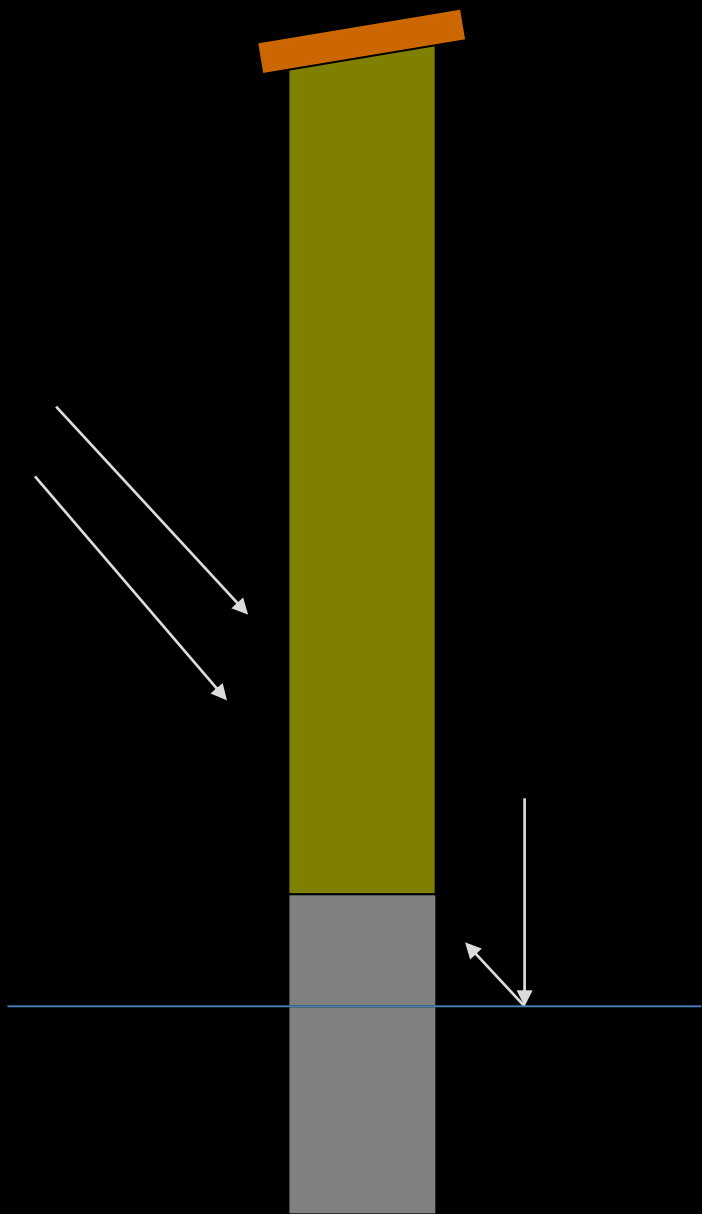
SCHÖNHEIT

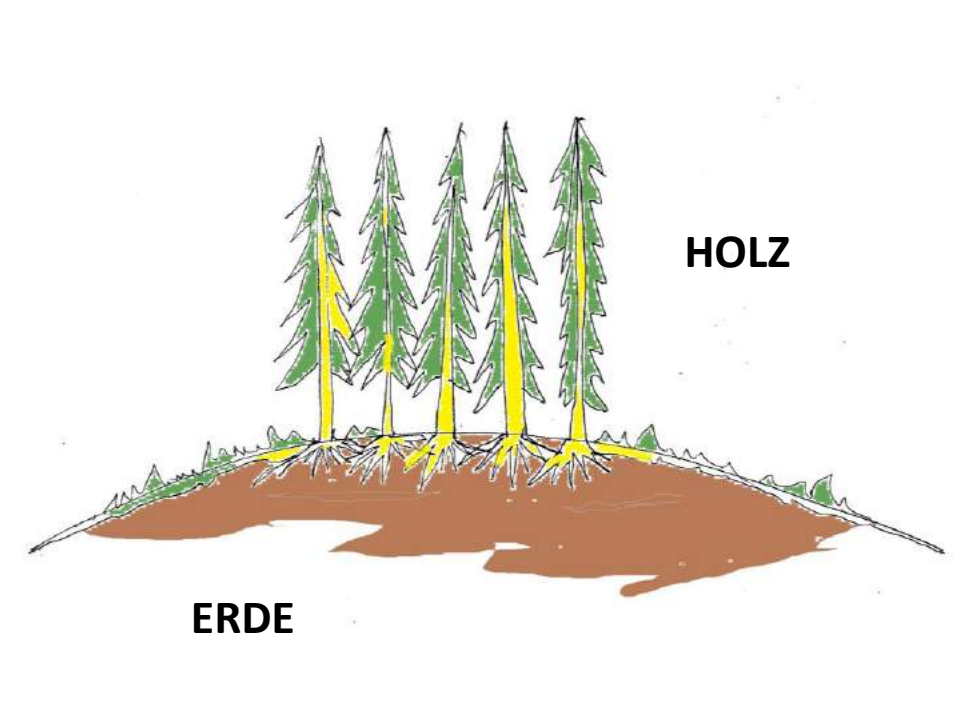
E R D E

ÖKOLOGIE













Die  
**Pisé = Baukunst,**

in ihrem ganzen Umfang,

oder

vollständige und faßliche Beschreibung  
**des Verfahrens,**

aus bloßer gestampfter Erde, ohne weitere Zuthat, Ge-  
bäude und Mauerwerk von aller Art wohlfeil, dauerhaft,  
feuerfest, und sicher gegen Einbruch aufzuführen.

---

Aus dem französischen Original.

des

Herrn Cointereauy

bearbeitet und mit Zusätzen versehen

von

Christian Ludwig Seebast,

Professor der Philosophie bei der Universität zu Leipzig,  
und des dasigen kleinen Fürstencollegii Collegiat.

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Zweiter Theil.

Mit Kupfern.

1790





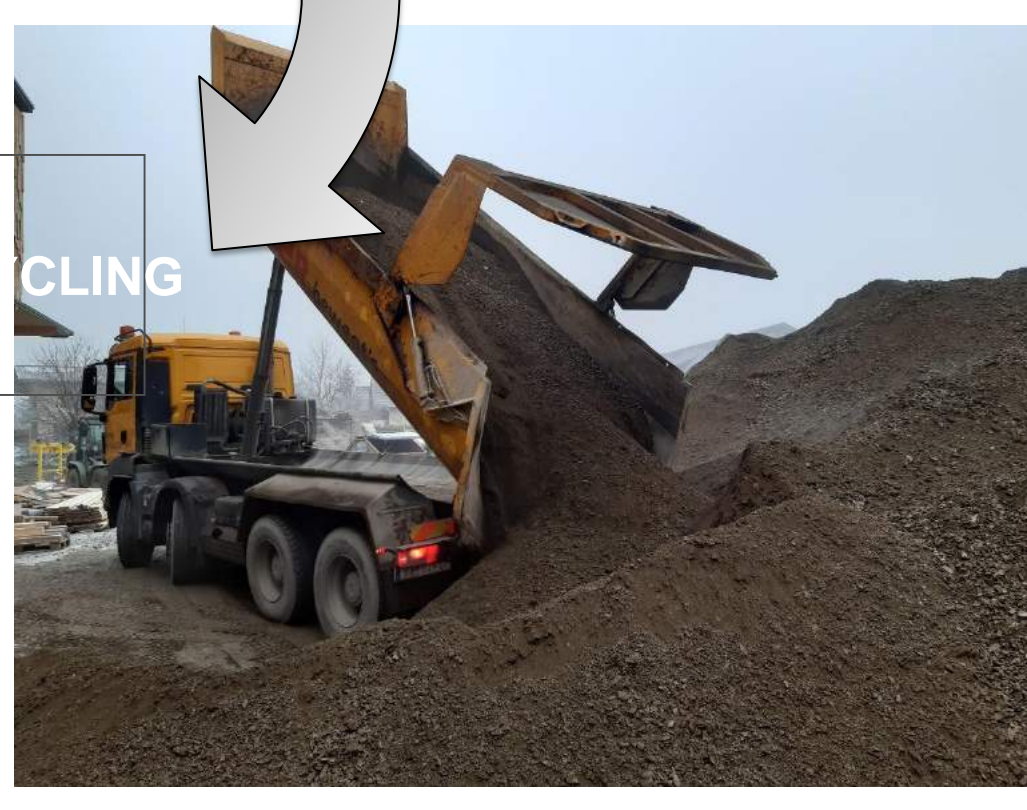
**EXCAVATION**



**PREPARATION / BUILDING**



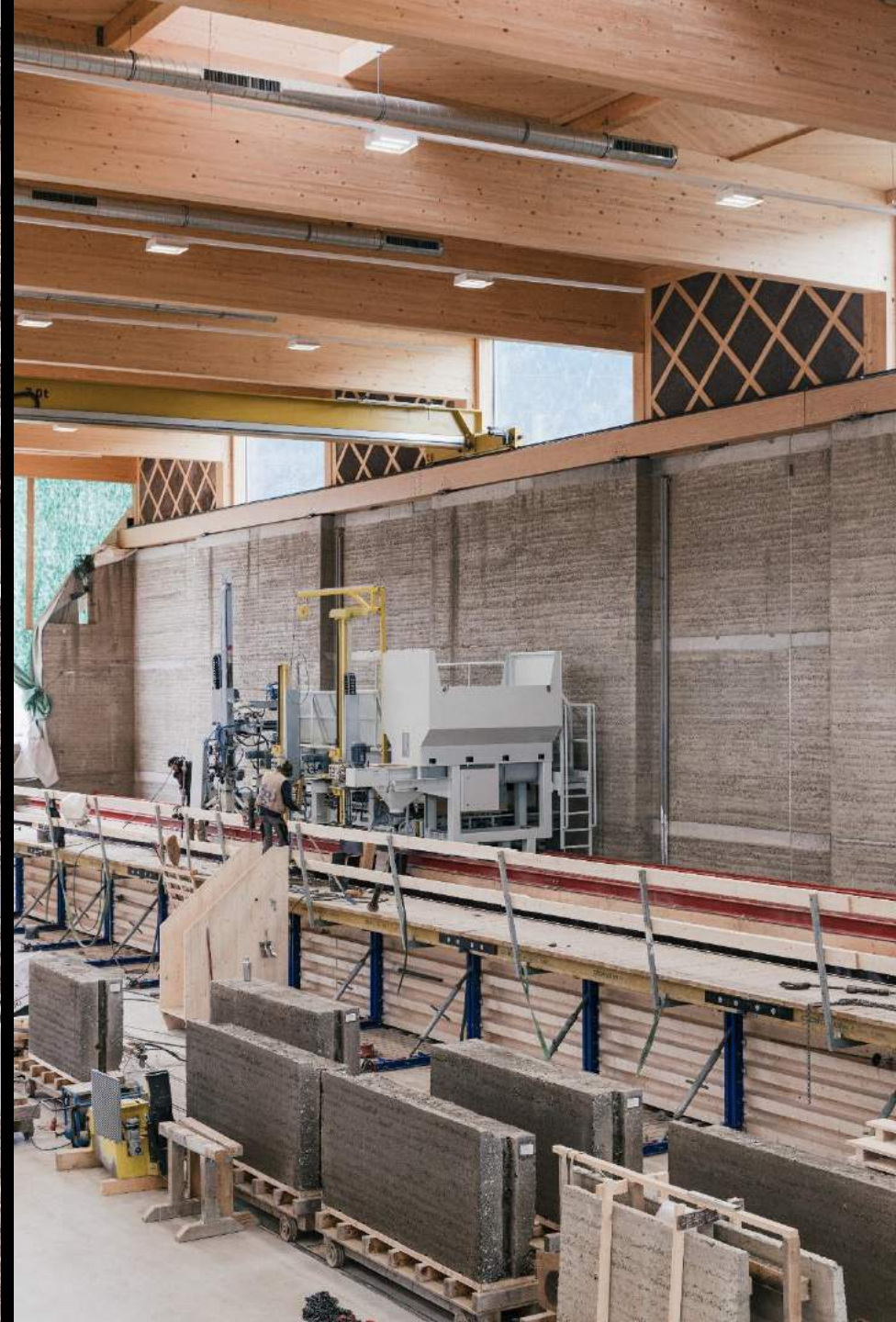
**RECYCLING**













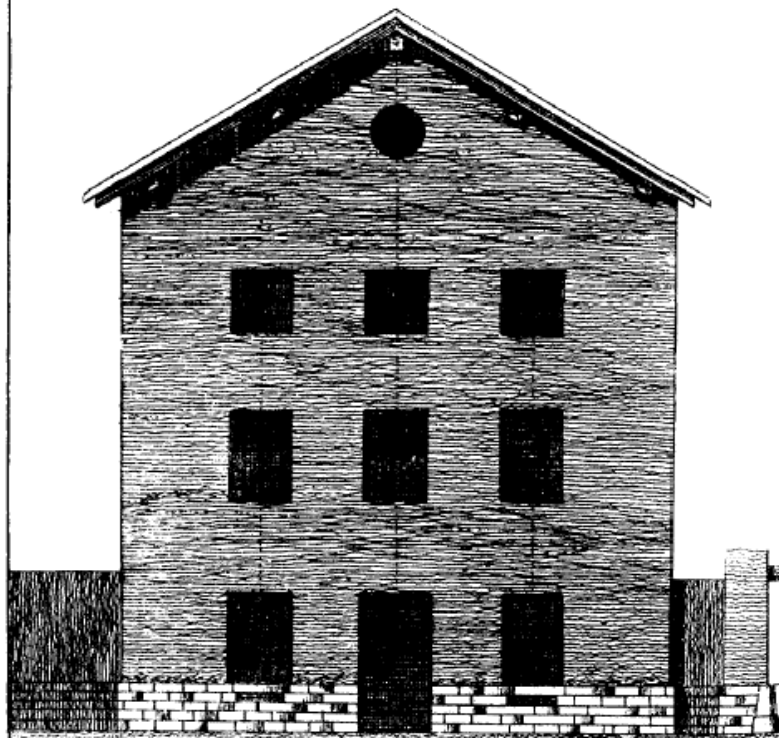






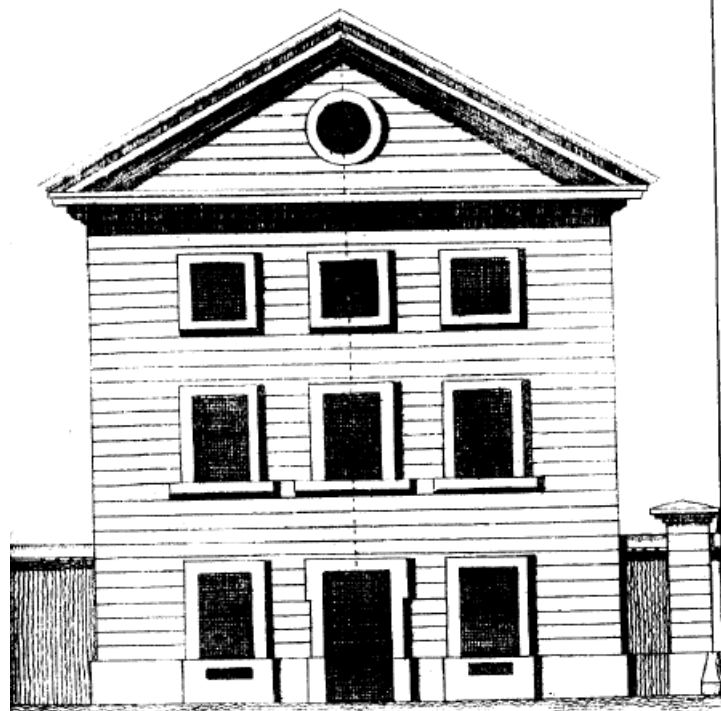


No. 12.



*Prokes Pise*

No. 11.



*Verziertes Pise.*



















Haus Rauch

2005 - 2008

Roger Boltshauser & Martin Rauch



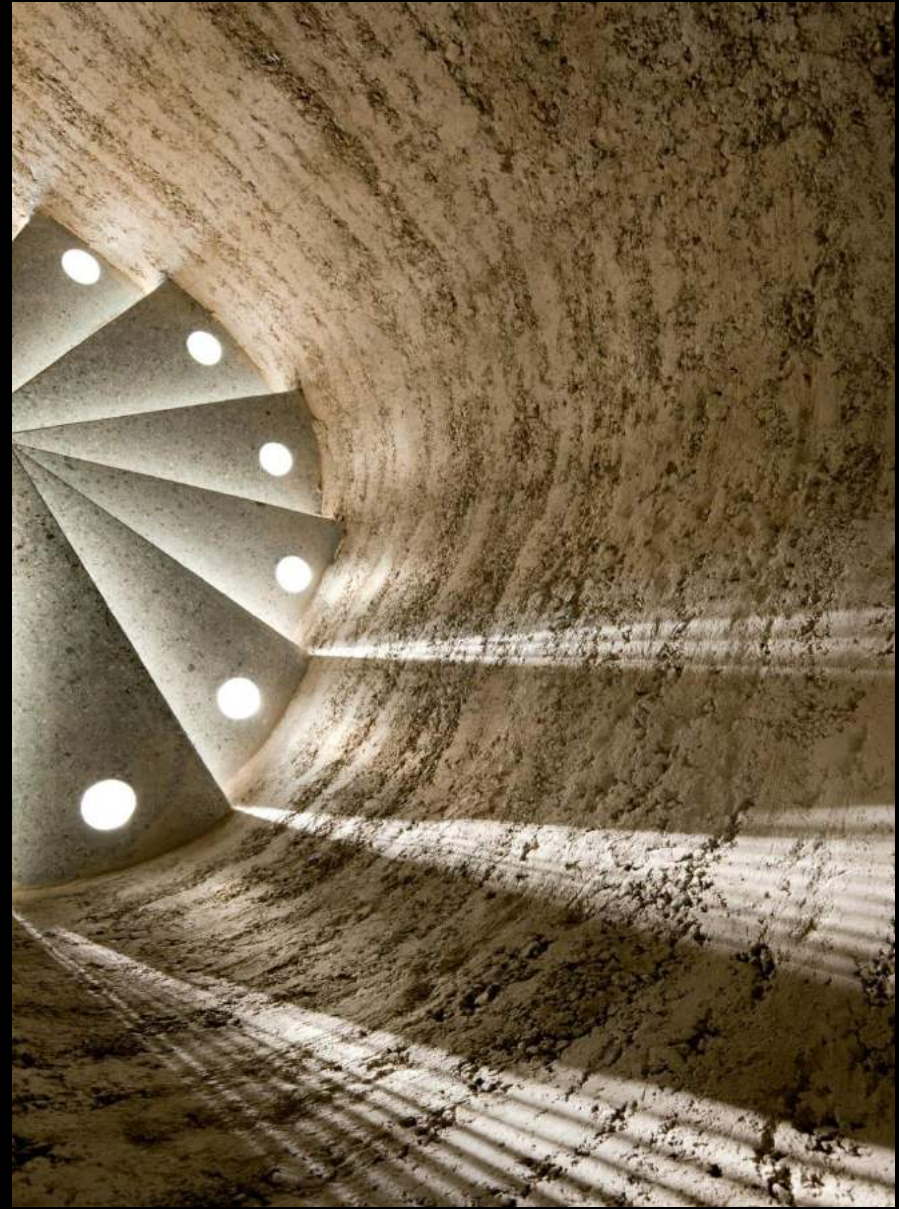
























© Albrecht Schnabel





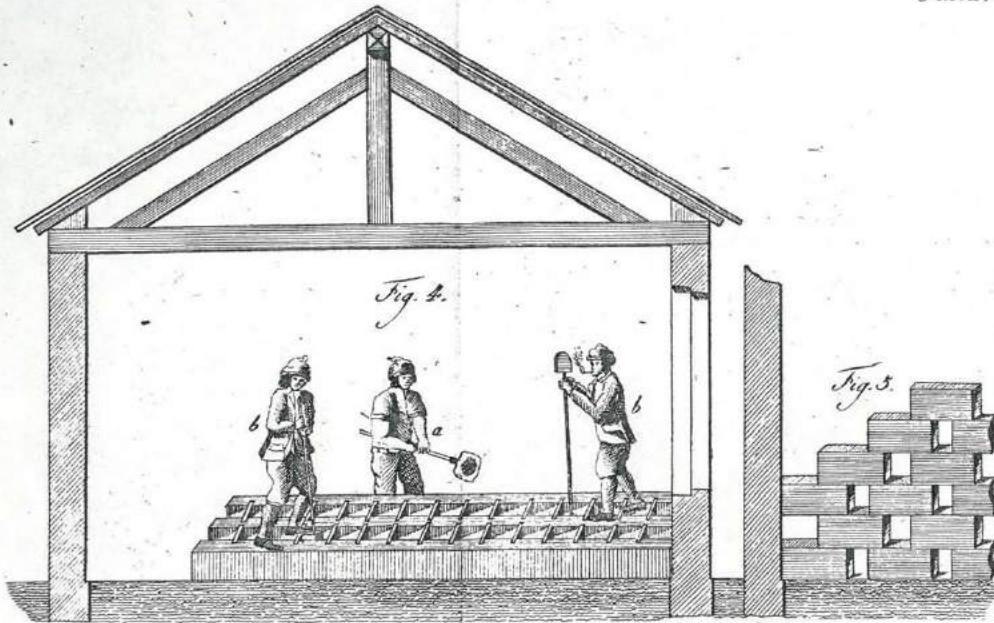




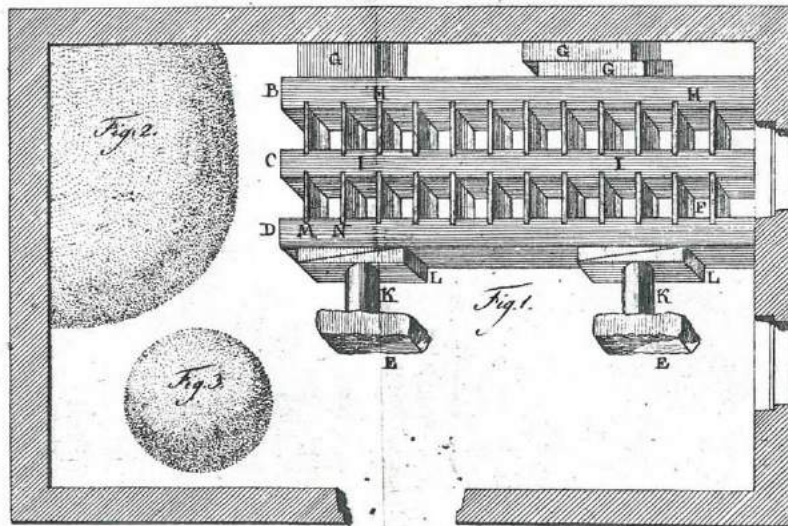








Vorfertigung von Wänden



From on site construction...  
to Prefabrication technique

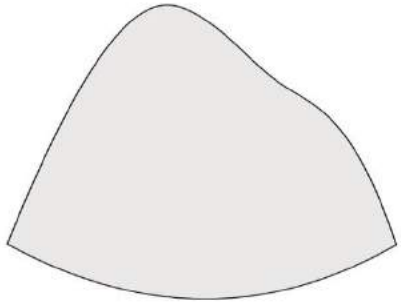
Illustration excerpt from

« Pise Baukunst »

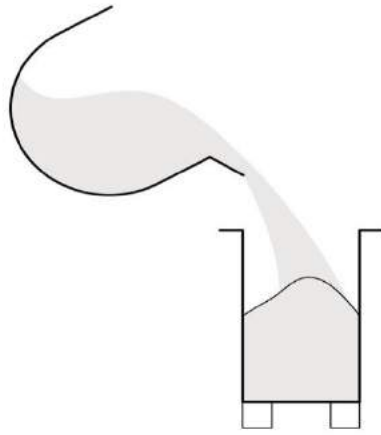
Christian Ludwig Seebaß\_

From Cointéreaux

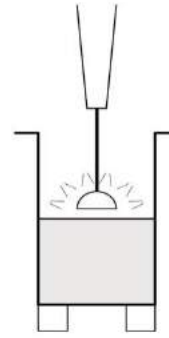




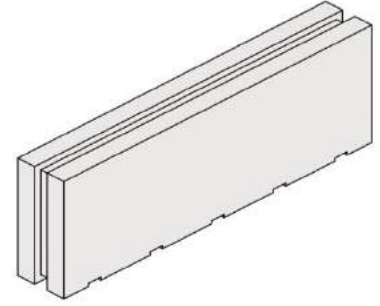
100% earth



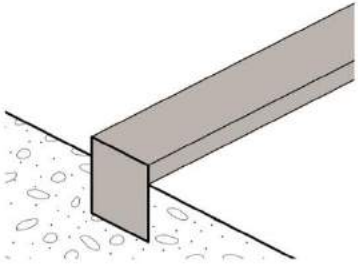
Fill formwork



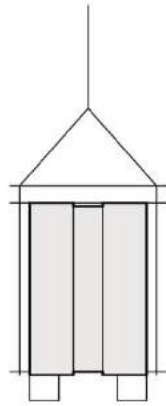
Ramming



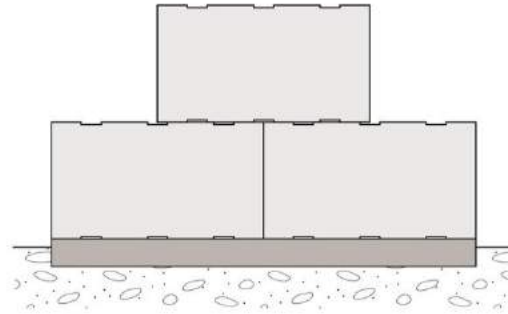
Prefab Element



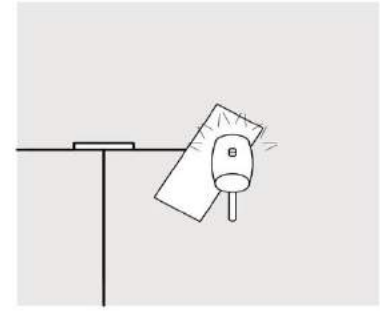
Concrete foundation



Transporting



Installation



Manual touching up

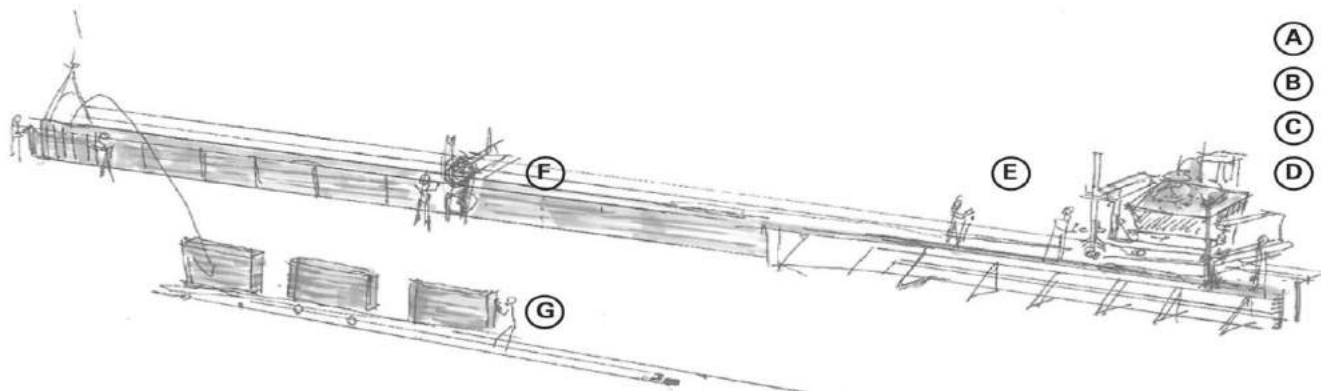
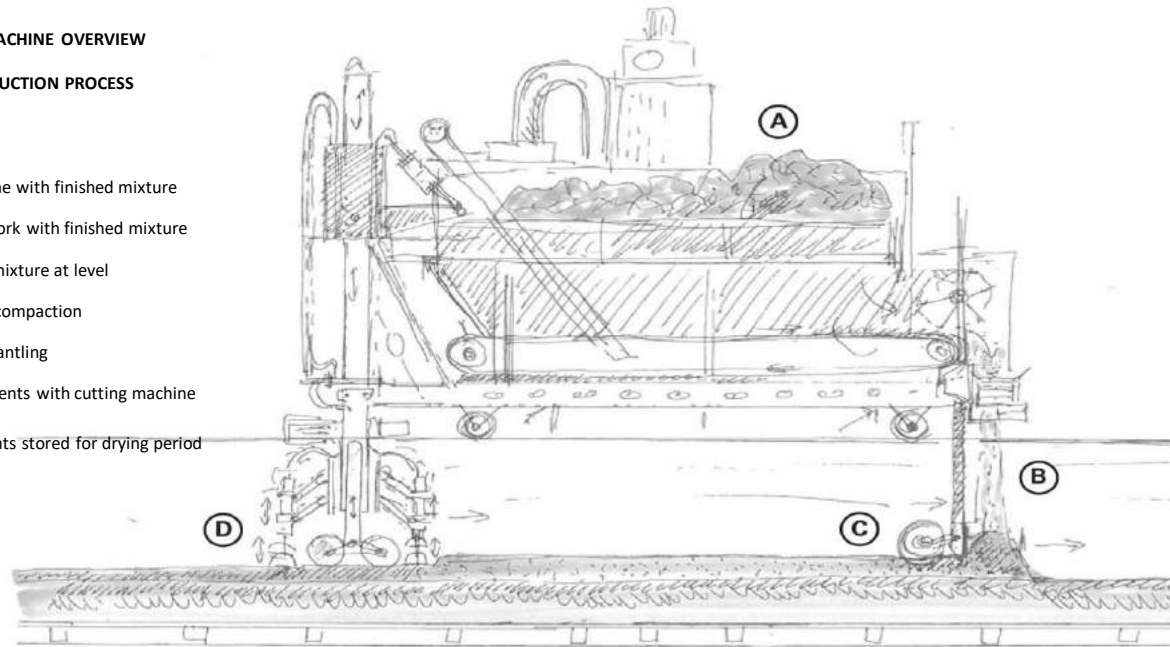


**FILLING SYSTEM MACHINE OVERVIEW**

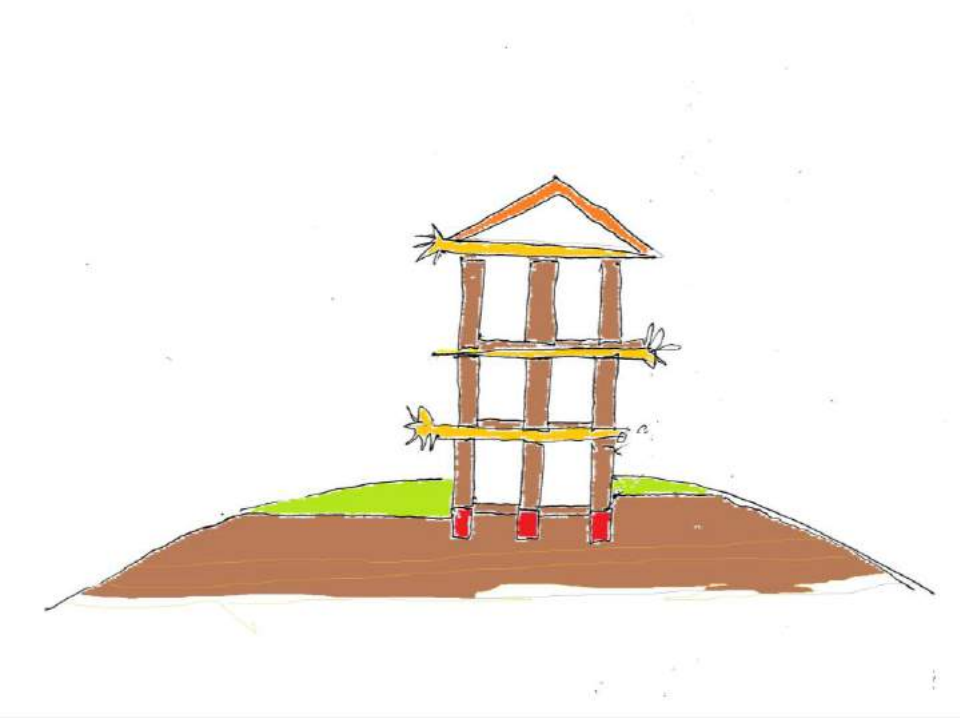
**AND PREFAB PRODUCTION PROCESS**

**Legend**

- A = Filling of machine with finished mixture
- B = Filling of formwork with finished mixture
- C = Adjustment of mixture at level
- D = Ramming until compaction
- E = Formwork dismantling
- F = Splitting in elements with cutting machine
- G = Finished elements stored for drying period















4600 kg

















**Ricola Kräuterzentrum**

Laufen, Switzerland; 2012- 2013

Arch.: Herzog & de Meuron

Façade subplanning: Martin Rauch



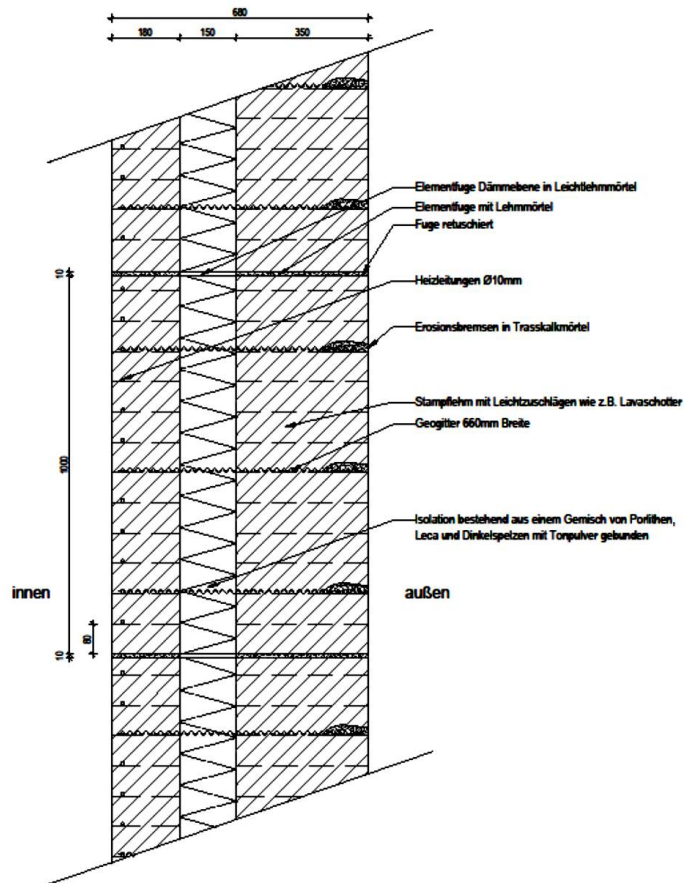






**Alnatura Campus** Darmstadt, Germany, 2016 – 2018 **Architecture** Haas Cook Zemmrich Studio 2050





LEHM TON ERDE Baukunst GmbH

Prinzipschnitt Wandaufbau M1:10















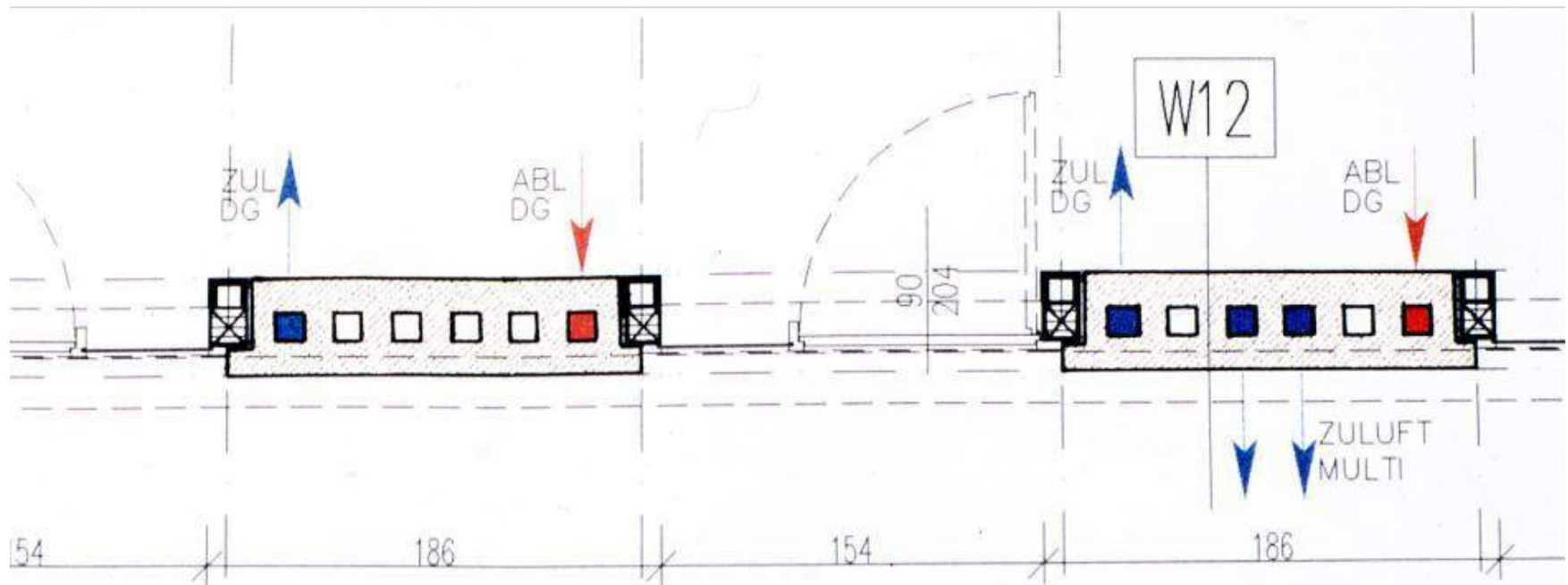
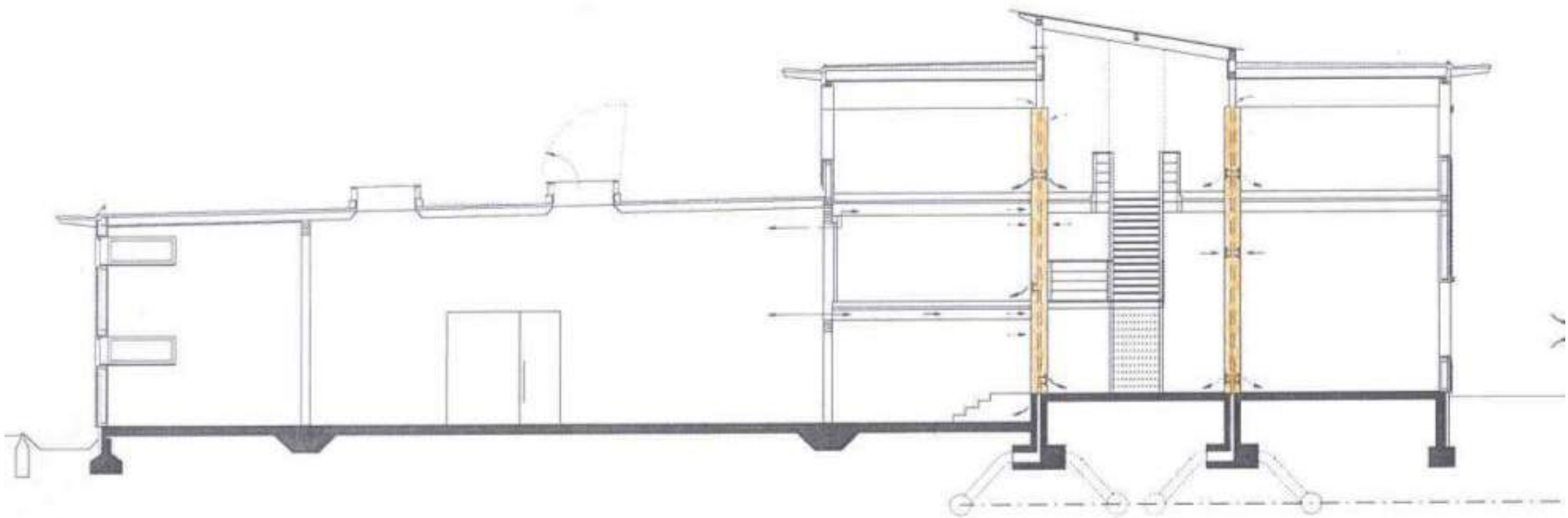




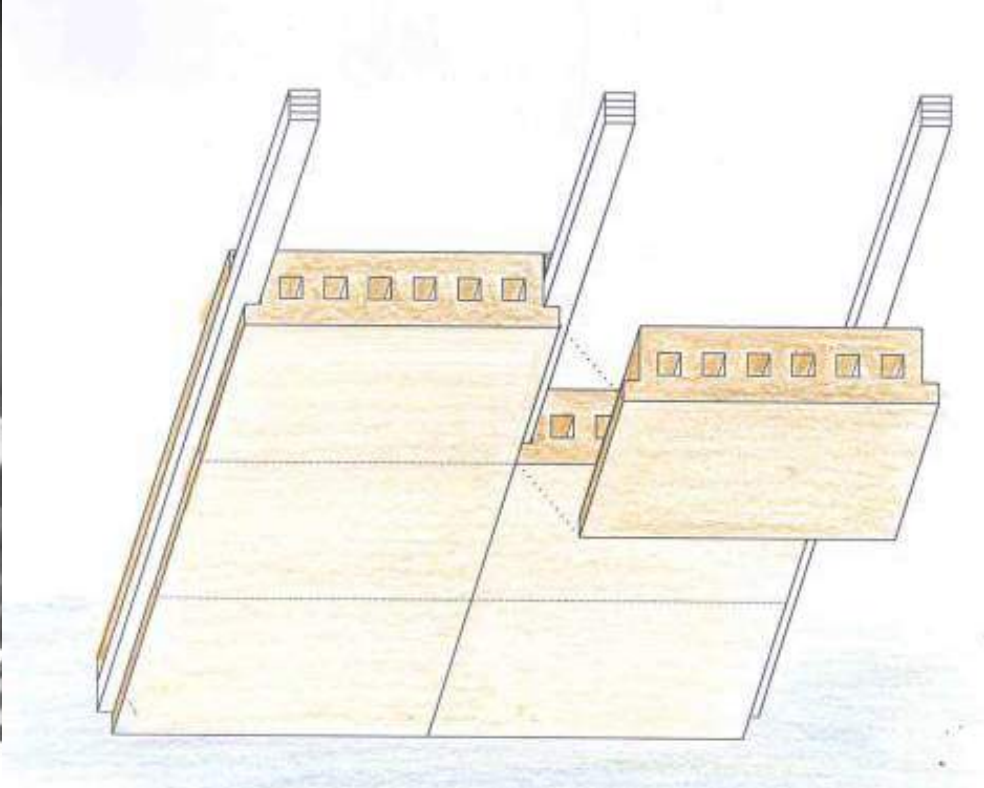
Druckerei Gugler Pielach, Austria, 1998 – 1999

Arch.: Ablinger, Vedral & Partner













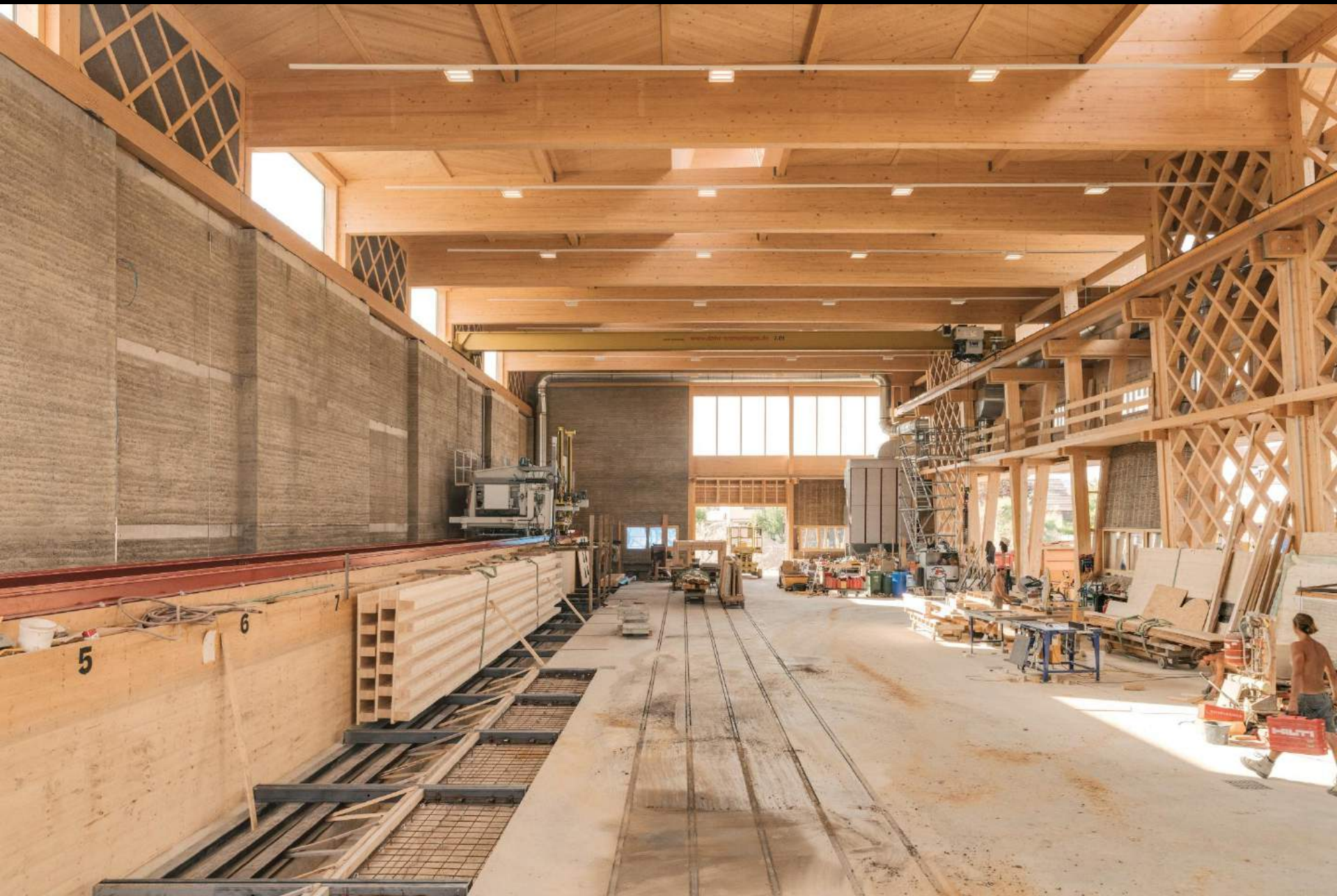




ERDEN Werkhalle Schlins

Architektur Martin Rauch LEHM TON ERDE Baukunst













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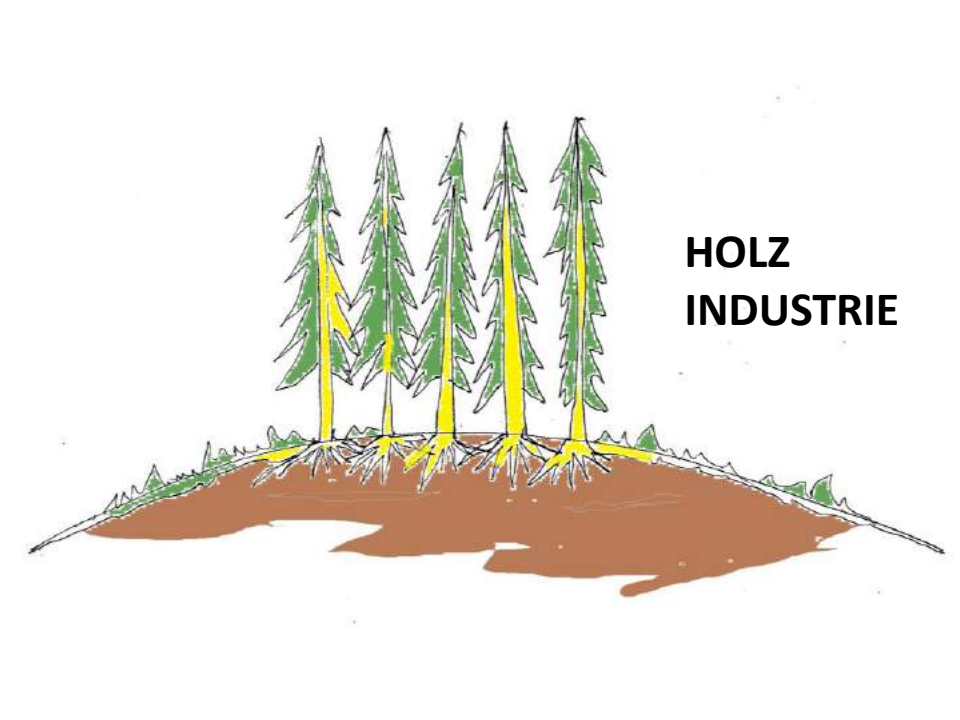


















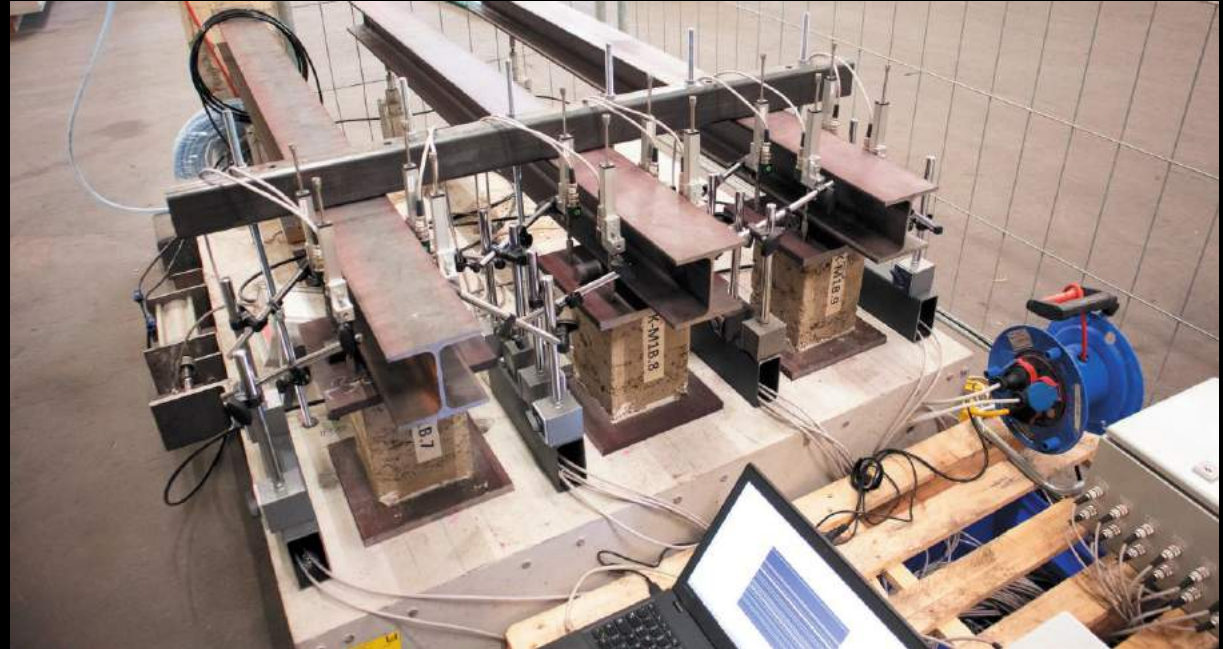




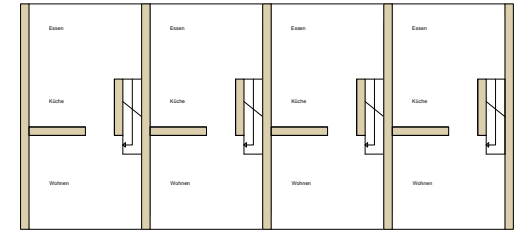
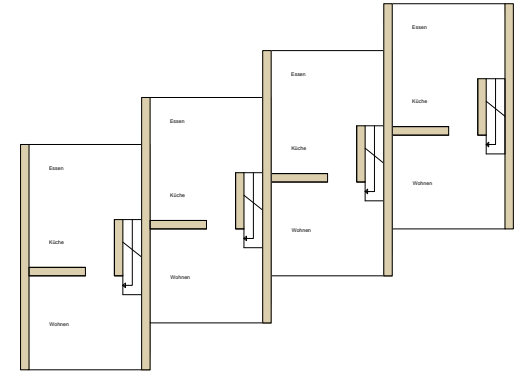
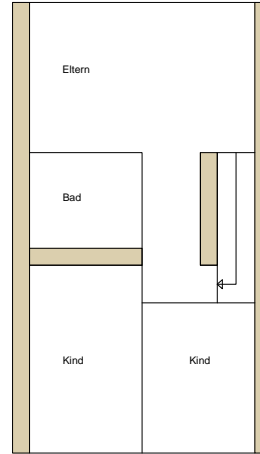
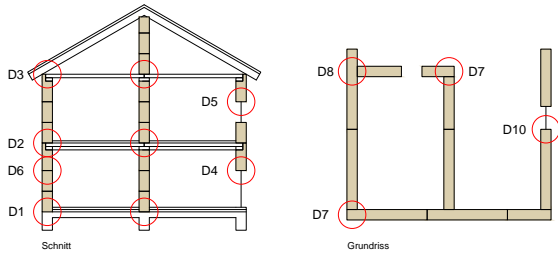


Tragwerksplanung

Prüflabor und Inspektionsstelle



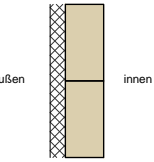
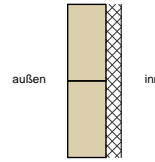
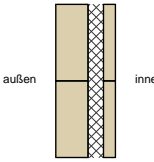
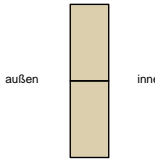
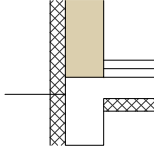
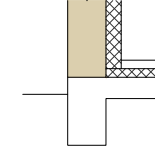
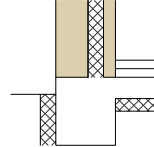
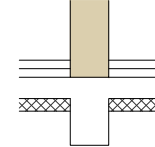
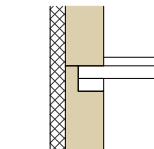
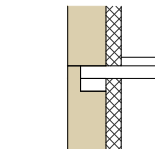
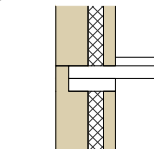
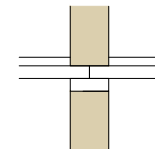
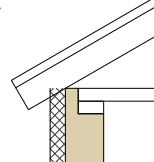
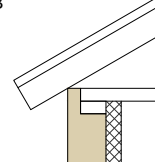
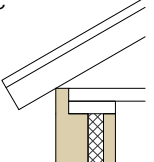
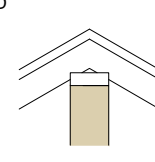
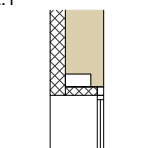
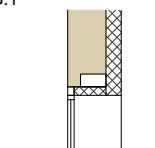
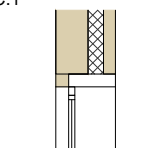
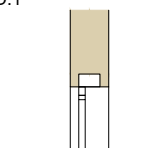
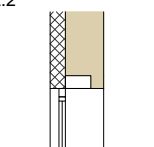
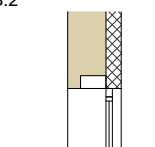
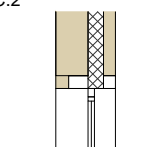
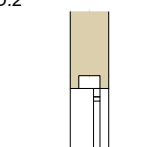
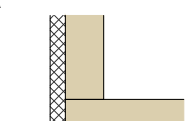
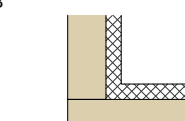
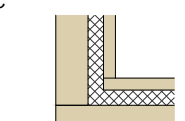
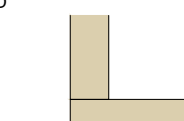




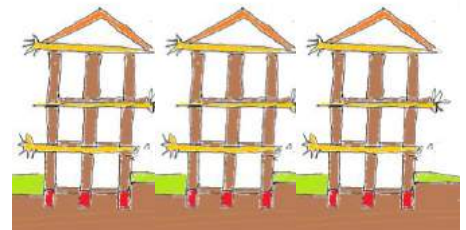
**Bauteilkatalog Tragende Stampflehmwand**

Wandtypen	<b>A</b> außen innen Dämmung außen	<b>B</b> außen innen Dämmung innen	<b>C</b> außen innen 2-schalig mit Kerndämmung	<b>D</b> außen innen innen ohne Dämmung
Details Schnitt	D1A	D1B	D1C	D1D
D1 Sockel	D2A	D2B	D2C	D2D
D2 Decke	D3A	D3B	D3C	D3D
D3 Dach	D4A.1	D4B.1	D4C.1	D4D.1
D4.1 Sturz	D4A.2	D4B.2	D4C.2	D4D.2
D4.2 Sturz	D7A	D7B	D7C	D7D
Details Grundriss	D7A	D7B	D7C	D7D
D7 Ecke	D8A	D8B	D8C	D8D
D8 T-Anschl.	D8A	D8B	D8C	D8D

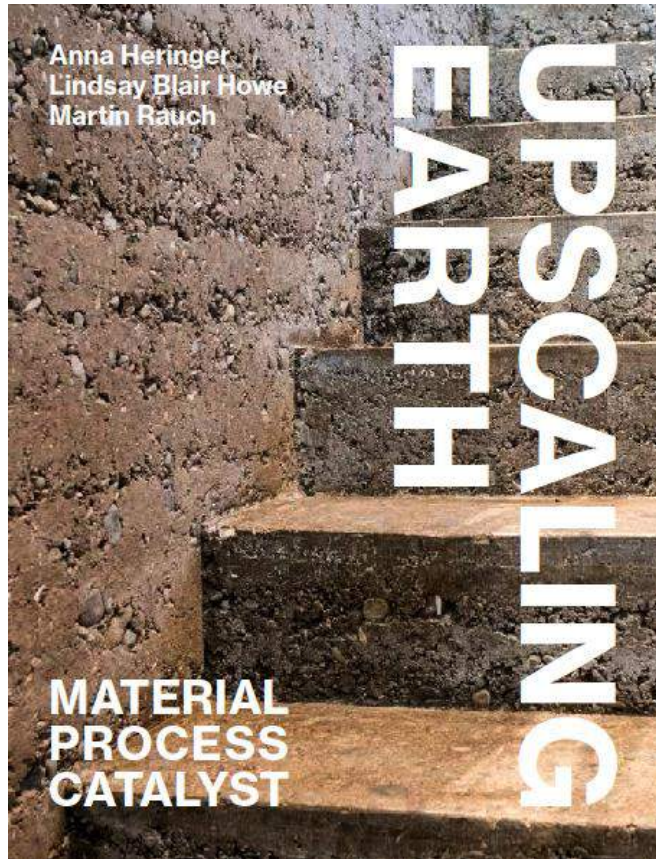


Wandtypen	<p style="text-align: center;"><b>A</b></p>  <p style="text-align: center;">außen      innen</p> <p style="text-align: center;">Dämmung außen</p>	<p style="text-align: center;"><b>B</b></p>  <p style="text-align: center;">außen      innen</p> <p style="text-align: center;">Dämmung innen</p>	<p style="text-align: center;"><b>C</b></p>  <p style="text-align: center;">außen      innen</p> <p style="text-align: center;">2-schalig mit Kerndämmung</p>	<p style="text-align: center;"><b>D</b></p>  <p style="text-align: center;">außen      innen</p> <p style="text-align: center;">innen ohne Dämmung</p>
Details Schnitt	<p>D1A</p> 	<p>D1B</p> 	<p>D1C</p> 	<p>D1D</p> 
D1 Sockel	<p>D2A</p> 	<p>D2B</p> 	<p>D2C</p> 	<p>D2D</p> 
D2 Decke	<p>D3A</p> 	<p>D3B</p> 	<p>D3C</p> 	<p>D3D</p> 
D3 Dach	<p>D4A.1</p> 	<p>D4B.1</p> 	<p>D4C.1</p> 	<p>D4D.1</p> 
D4.1 Sturz	<p>D4A.2</p> 	<p>D4B.2</p> 	<p>D4C.2</p> 	<p>D4D.2</p> 
D4.2 Sturz	<p>D7A</p> 	<p>D7B</p> 	<p>D7C</p> 	<p>D7D</p> 
Details Grundriss	<p>D7A</p>	<p>D7B</p>	<p>D7C</p>	<p>D7D</p>
D7 Ecke				

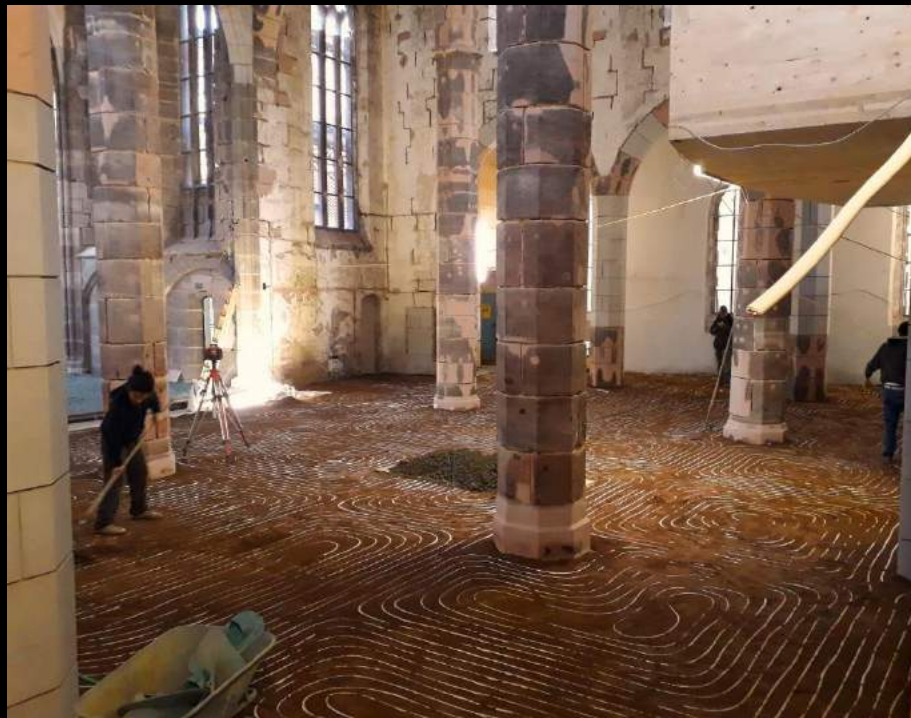


















Danke für die Aufmerksamkeit

MARTIN RAUCH

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