

## **BASE***habitat*

International Summer School
on earthen and bamboo construction

# Workshops

## Adobe + Earth Blocks

Franco Noriega and Zoé Tric (amàco)

## **Rammed Earth**

Dominik Abbrederis and Max Weidacher

## Earth + Fibres

Becky Little and François Streiff

## Straw + Reed

content still has to be defined!



# Adobe+Earth Blocks

## amàco Gian Franco Noriega, Zoé Tric

amàco, atelier matières à construire, is a center of research, training and experimentation of matter. The project aims to upgrade and disseminate knowledge revealing in a sensitive way the inner qualities of natural materials, such as sand, clay, water and fibers, related to building arts. Approaching matter through science and more subjective concepts, such as materiality and aesthetics, amàco seeks to take part of an environmental paradigm shift, stimulating creativity through the re-connection of emotion and intellect in construction practices.

The project brings together insights of different disciplines to integrate different perceptions and to foster and inspire new contemporary practices. Exploring preconceptions of the idea of progress and innovation, *amàco* is inspired by the experience of nature and its genius of simplicity.

Artists, architects, engineers, scientists, philosophers, researchers and others, participate in an interdisciplinary and experimental project that revolves around four interacting areas: science, art, technique and architecture.

*amàco* is based in France and is supported by four institutional partners:

- :: Grands Ateliers, educational center for research and experimentation in construction
- :: ENSA Grenoble, school of architecture
- :: INSA Lyon, school of engineers
- :: ESPCI ParisTech, school of physicians and chemists

Initially born as a pedagogical project, amaco has evolved from higher education to training and global accompaniment of active or future construction professionals.



**Pavillon** Fibres et Adobes Prototype building, France 2014

**Abris à vélos** | *Bicycles shelter* building prototype France 2015

Workshop Jeux d'adobes mud bricks prototypes International 2013 – today

**Architecture Biennale Lyon** ephemeral installation France 2017

Scénographie de l'exposition « Pour l'intelligence de la main® » Venise, Italy, 2018

Muséum d'Orléans pour la biodiversité et l'environnement Exhibition pedestals Orléans, France, 2021

#### Curve

Rammed earth furnishings Saint Denis, France, 2021

### **BAP!2022**

Model in molded clay Versailles, France, 2022











## **Workshop Content**

Main objective of the workshop is to explore and test the building potential of earth bricks in contemporary architecture and design. Through theoretical inputs and practical experimentation with this ancient building technique, participants will go through a creative process of learning by doing.

Participants will design and build with a particular brick imagined to innovate and responds to an architectural need. They will experience and acquire masonry skills through the construction of a small-scale building prototype.

These are some of the topics that will be emphasized:

- :: Overview of *mud bricks* building culture: inspirations from vernacular to contemporary architecture.
- :: Evolution of production practices and building methods with earthen bricks.
- :: Understanding earth material physical qualities and building properties.





## **Workshop Motivation**

amàco teaching method is based on experimentation and hands-on approach. As a pedagogical project we emphasize aesthetics and emotion as creative vectors to instill curiosity in participants for natural materials architectural potentials. We believe that these methods foster openmindedness and pleasure of learning. We give a priority to teamwork to encourage knowledge exchange and interdisciplinary to develop a collective intelligence.

Moreover, amàco principal motivation is to build and disseminate in a big scale a scientific and an eco-friendly technical building culture. In that matter, we are specialized in developing building techniques using local materials like earth and natural fibers. Every workshop we take part is an opportunity to put into practice our teaching methods, to experiment and to exchange with other participants around the question that animates us: How to think and build our environment?







# Rammed Earth

## Dominik Abbrederis, Max Weidacher

Dominik Abbrederis was born in Feldkirch/Austria. After a three-year apprenticeship in a sports shop he travelled and worked as skiing and surfing instructor. He attended an outdoor guide training in Switzerland and dedicated some years to social work with children in Austria and Portugal.

By coincidence he met Martin Rauch and worked four years in his company Lehm Ton Erde. Taking part in numerous construction projects, he got to know various rammed earth techniques and their particularities. To gain a deeper understanding of earth as a building material, he attended the advanced training Fachkraft Lehm in Germany. Since 2016 he is part of the team of BASEhabitat as a construction manager. In 2021 he started his own company DADO Claywork. https://da-do.at

Max Weidacher is a craftsman and designer based in Vienna, Austria. He graduated as an architect at the Academy of Fine Arts Vienna in 2012. During his studies he spent one year in Ahmedabad, India, studying at CEPT University and traveling. From 2015-2017 he studied at BASEhabitat, working on a housing project by in Bihar, India.

He completed his architecture studies at the Vienna University of Technology in 2024 with a collaborative applied research project in rural Uganda.

Parallel to his academic projects, he has worked as a craftsman on various construction sites around the world and conducted workshops on earthen building techniques. Focusing on circular economy in art, design and architecture he cofounded the studio zirkacirca.com.

#### **Visiting Expert Martin Rauch**

Martin Rauch founded the company Lehm Ton Erde Baukunst GmbH 1999, in Schlins, Austria. In cooperation with Basehabitat he led several international workshops also in Bangladesh, South Africa and Austria. Since 2010 he is honorary professor from the UNESCO chair for Earthen Architecture. www.lehmtonerde.at



### **Dominik Abbrederis**

## Production- and Building Manager with Lehm Ton Erde

Ricola Herb center, Basel, Switzerland 2012-2013

Swiss Ornithological Centre Switzerland 2013-2014

ETH Earth Dome Zurich, Switzerland 2014

King Abdulaziz Center Saudi Arabia 2014-2015

#### **Personal Projects**

La Bodega, Mexico 2013-2014 Housing Project, Benin 2015-2016 Interior Design, Paraguay 2014 Rammed-earth oven, Austria 2015

#### **Construction Management**

at different sites all over the world with BASEhabitat since 2016.

#### **DADO Claywork**

various projects with rammed-earth, clay plaster, light loam, adobe and clay casein in Vorarlberg, Austria since 2021.

### Max Weidacher

## Project Cooperation for Lehm Ton Erde

Reconstruction St. Martha Church Nürnberg, Germany 2018

Mochi Restaurant Vienna, Austria 2021

## Project Site Management for Lehm Ton Erde

Columbarium St. Elisabeth Bremen, Germany 2019

Hotel Adler Extension St. Ulrich, Italy 2022

rami ceramic studio, furniture for a co-making space, Vienna, Austria 2020

rami tea, conversion of a tea house Vienna, Austria 2022

Carried Maps, with Daniel Stuhlpfarrer, exhibition, Vienna, Austria 2023

For Example Bowa Hill, with Benedikt Maas, applied research, Vienna, Austria 2024



## **Workshop Content**

The new location for the Summer School gives us the opportunity to build something that can stay: a rammed earth wall on the premises of Wissenscampus Kuchl. That's why this year's workshop will be organized as a two-week ongoing construction site!

Through the building process, we will cover the topics of material composition and preparation, layout and formwork construction, formwork filling, compacting and protocolling, as well as retouching and finishing. To ensure that all participants can engage in the entire process, the construction will be divided into two phases — week one and week two - which will come together as a whole in the end.

In addition to the practical aspects of construction and the use of various tools, we will also learn how to organise ourselves as a group and coordinate work processes on the construction site.



## **Workshop Motivation**

We are looking forward to continuing our series of workshops at this year's Summer School. Sharing skills, knowledge and experiences, we are happy to learn with and from each other.

Not only is it another occasion to meet people with all kinds of backgrounds, but it also gives us a chance to pass on a bit of our passion for rammed earth and its potential.

To us, working as a team and with our hands is a truly satisfying experience. We will have a great time ramming some earth together.





# Earth+Fibres in Structures and Surfaces

## **Becky Little and François Streiff**

Becky Little is a craftsperson who has worked with earth since the early gos. With a background in conservation she has wide experience of mudwalling (cob), earth mortars, wattle and daub, light earth, turf building and clay finishes in both repairs and new build.

Her company *Rebearth* also carries out materials and historic research, skills training and social impact projects.

As an artist she creates with local natural materials to explore themes of transformation, diversity and rewilding in a holistic and multi-disciplined approach. Her current body of work explores "The spaces in between" and combines elements of basketry, textiles and pottery with architecture and design.

François Streiff is architect for the Regional Nature Park of the Marshes of Cotentin and Bessin in Normandy. He has been working for more than twenty years on the preservation of wattle and daub and cob heritage and traditional raw earth and fibers techniques.

The action of the Park is as much today on the support and guidance of trained professionals, as in the training of architects and engineers.

François is also teaching at the ESITC Caen on the techniques of historic building and raw earth building, and at the School of Architecture of Normandy in the field of Science and Technology for Architecture on sustainable building, especially in the use of geo and biosourced materials.

www.cobbauge.eu



Becky Little – Rebearth

#### Errol cob shelter

Arc Architects

Rebearth and the local community

Errol, Scotland 2017

# Repairs to historic cob, daub and turf buildings

Rebearth Scotland 1992 - 2020

#### Various homes and offices in Fife

Rebearth using daub, mud bricks, light clay|hemp, clay plaster, earth floors Fife, Scotland 2014-2020

## Clayfest, Workshops and Conference

EBUKI – Earth Building UK and Ireland organiser, speaker and trainer UK 2015-2021

#### Earth renders at the Chelsea Flower Show

Rebearth
London 2019

#### Cobbauge

EBUKI trainer and builder in an Interreg research project which aims to optimise the thermal efficiency of cob 2017 - 2020

#### Jump! Training for Change

EBUKI trainer. A European training for trainers project, about transformation and eco-building.
2019-2020

#### **TransFORMation**

facilitator and lead artist, project on and with the land raising awareness about sustainability of people and place, Fife 2020

### Terre, Femmes et Savoir-Faire

lead trainer 2022. A project to develop and promote women and training in earth construction, Lyons, France 2022

#### **Build School Fife**

workshops in traditional methods and modern applications with earth and fibre. Scotland 2021-2022



François Streiff

#### Resurrection of a Gallic Habitat

Archaeological Museum of Lattes Archaeologist Training 2010 | 2011

### **Energy Pavilion**

Meadow and Sheep Shelters
Demonstrative Projects 2013 | 15 | 17

### **Workshop Asterre**

Lyon Confluence Museum Ephemeral Installation 2016

#### Reverse the Curvature of the Earth

Experimental Constructions with ENSAN students 2015  $\mid$  16  $\mid$  17

#### Workshop Grains d'Isère

Ephemeral Constructions
GAIA France since 2014

#### Extension of the Park House

Technical Assistance of a Tertiary Building in wood | straw bales | cob | wattle and daub | clay plaster 2016

## National choreographic center in earth and straw

Supervision of the building in a participative workshop of a NCC within the framework of an artistic happening by the artist Claudia Triozzi - 2019

#### CobBauge experimental pavilion

Building of a prototype experimenting a new technology of mixes of earth and fibers within the CobBauge project 2019-2020



## **Workshop Content**

By experimenting with the nature and length of different fibres, the quality and composition of the soil, and changes in water content, we will show how these parameters can influence the design, construction, and aesthetics of earth building. We will discover together a rich and diverse spectrum of traditions and modern applications in cob, daub, light earth and plasters and the participants will make their own creative and sensory experience in structures and surfaces using local natural materials. We also have the opportunity to renovate the clay plaster of a local building to learn about repair and maintenance of earth.

Each method will be approached as an experiment to explore the nature of the different materials and methods and how they work together.

- :: traditional and contemporary building culture of daub, cob and clay plaster
- :: processing methods for earth and fibres mixes
- :: understanding the use of different earth and fibre mixes in structures and finishes



## **Workshop Motivation**

This workshop is for us a great opportunity to finally put hands (and feet) into a common construction. We have been crossing paths regularly for several years, which has allowed us to share our passion for these wonderful mixes of fibres, soils and water that have housed and still house so many people on every continent. We look forward to sharing what we have learnt about earth heritage and traditions and how it inspires us today to respond to the current challenges of eco-responsible construction.







# Straw + Reed

## Trainers to be confirmed

After four summer school editions with a workshop on bamboo construction, we decided to change the topic.
2025 we will integrate for the first time straw and reed.

There are many different plants around the world that are used in architecture. In this workshop, we will look at wall structures and roof constructions made from fibres such as straw and reed.

We are still finalizing the content of this new workshop!

As soon as everything is set up, you will find all the information here!



## Chose two favourite workshops...

- Each workshop takes place twice during the two summer school weeks.
- Each workshop lasts 4.5 days.
- Participants choose one workshop for the first week and one for the second week.
- The group size is between 20 and max. 25 people.
- During the workshop, several samples and elements are built on site, ranging from tests to real scale.

- After your successful registration, we will ask you for your preferences regarding the choice of workshops, and we will allocate participants to topics.
- There will be time for exchange between the different workshops. You will get an insight into the content of all the other workshops too.



