



BASE*habitat*
International Summer School

Workshops

Adobe + Earth Blocks

Franco Noriega and Margot Lacombe
(*amàco*)

Rammed Earth

Dominik Abbrederis and Max Weidacher

Earth + Fibres

Becky Little and François Streiff

Straw + Reed

Angelo Ferrara and Christian Ditlefsen



Adobe+Earth Blocks

***amàco* Gian Franco Noriega, Margot Lacombe**

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, *amàco* has evolved from higher education to training and global accompaniment of active or future construction professionals.



Photo: amàco

Selection of Projects

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



Photos: amáco



Photos: BASEhabitat



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.



Photo: BASEhabitat Philipp Steiner

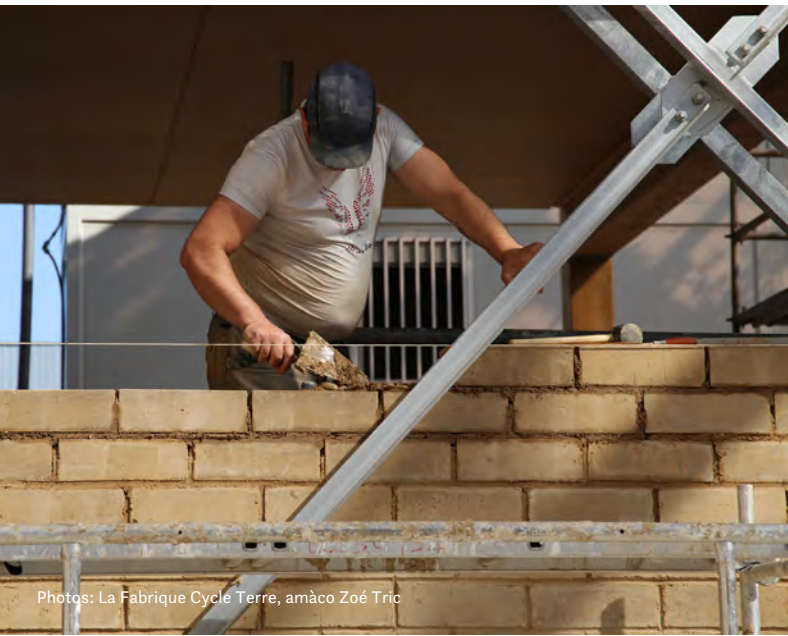
Workshop Motivation

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 open-mindedness 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?



Photo: BASEhabitat Stefanie Hueber





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 co-founded 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

Selection of Projects

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



Photo: BASEhabitat Stefanie Hueber

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 90s. 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.

www.rebearth.co.uk

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 bio-sourced materials.

www.cobbauge.eu



Selection of Projects

Becky Little – *Rebeearth*

Errol cob shelter

Arc Architects

Rebeearth and the local community

Errol, Scotland 2017

Repairs to historic cob, daub and turf buildings

Rebeearth

Scotland 1992 - 2020

Various homes and offices in Fife

Rebeearth 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

Rebeearth

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



Selection of Projects

Francois 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 | 16 | 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 parti-
cipative 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



Photo: BASEhabitat Stefanie Huebel

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 build wall elements for a partition wall at the Kuchl campus, which will remain on site.

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



Photo: BASEhabitat Stefanie Hueber

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

Angelo Ferrara and Christian Ditlefsen

Angelo Ferrara is an architect and carpenter specialising in the construction of buildings using wood, straw and natural materials. He was born in Sicily, where he grew up playing on the street, making most of his childhood toys out of used wooden planks. After completing his university studies in Italy and Portugal, he travelled and worked in Spain, Brazil and Slovenia. He has been living in Austria for over ten years. Together with his partner, he founded CaravanAtelier, an architecture studio and small construction company with a multidisciplinary approach. Under one roof, in Krems an der Donau, Caravanatelier lives and designs its architecture, paints fabrics with natural pigments and manufactures wooden furniture. CaravanAtelier has been invited several times to take part in practical training workshops for students and has had the opportunity to talk about its passion for building at conferences and presentations.

<https://www.caravanatelier.com>

Christian Ditlefsen is a Danish master thatcher based in Aarhus, Denmark. He's been working with thatched roofs since 2015 and in 2018 he won the SkillsDenmark as a thatcher. He's since then worked for and with different Danish master thatchers on various projects. Christian was the secretary in Stråtagets Kontor, the national branch office for thatched roofs until it closed in 2024. He's now part of the thatching information website.

<https://www.stråtags-info.dk>

Christian has been part of the DDS (the scouts and guides of Denmark) since he was a kid, doing several different value-based leader training workshops and courses for volunteer leaders and trainers.

He founded his company Dit Tæk to be able to spend more time with his family, and from time to time be a stay-at-home-dad, whilst choosing to freelance on different exciting thatching projects as well as working on own projects. This has also made it possible for him on occasions to focus more on educating, knowledge sharing, and doing workshops.

<https://www.dittaek.dk>



Photo: Christian Ditlefsen

Selection of Projects

Angelo Ferrara

Das Jutes Haus Vienna (AT), 2024
a project by Sandbichler Architekten
Small house with wooden frame structure,
jute insulation and earth floor screed.

Strohflö Murstetten (AT), 2022
a project by Juri Troy Architects.
A weekend house, with wooden frame
structure, insulation with straw bales and
earth and hemp screed.

Courtyard House Summerau (AT), 2018
project and construction management.
family house, with a wooden frame, straw
bale insulation and clay plaster.

Summer School Skyhill Bârz (RO), 2019
workshop leader and construction of
'Immensity in a room', a temporary
pavilion made of recycled wood and straw-
bales.

Summer School Hello Wood (HU) 2017
workshop leader and construction of
'Caravansera', a temporary pavilion made
of wood and fabric

Christian Ditlefsen

Molio since 2023
teaching about use of thatched roofs on
the education, certified sustainability
counsellor,

Tankevækkende Tækkeri (DK) 2024
Thoughtful Thatching at the Cultural
Week in Skive

Høst til Hus (DK), 2022
Harvest to House with DJERNES&BELL

Kulturnatten København (DK), 2022
The Cultural Night Copenhagen - thatching
demonstration in the House of Industry

Kanonbåden, the Canon Boat (DK)
a thatched, floating museum at Randers
Fjord, with Østjysk Tække- & Tømrerfirma

Fløjstrup
private project, rethinking the thatched
roof of a half-timbered house near Aarhus
(with Hemmed Tækkefirma ApS)

Sikkerhedsstyrelsen at the Danish Safety
Technology Authority, teaching about
thatched roofs to more than 400
construction experts



Workshop Content

Can a thousand-year-old craft be relevant in modern architecture? - Let's find out with our own hands!

In this workshop you will have the opportunity to learn hands-on what lies behind the beautiful exterior of a thatched roof and how straw walls are constructed.

In the part of reed, we'll work in small groups and try the Danish way of thatching – traditional and modern. You'll learn to understand the process of thatching and the secrets behind a long-lasting construction.

Through his firm believes of constructing, maintaining and repairing thatched roofs in ways to make them last as long as possible, Christian will undertake the education and supervision of the workshop with a deep and humble respect for the old craft and with young eyes looking for new ideas and possibilities. With a playful and hands-on approach, we'll discover the possibilities in working with reed on different constructions and enjoy the environmentally friendly material.

In the part of straw, we will build several wall samples, trying out different construction techniques, within wooden frames. You will learn to understand straw bales, their density and moisture and build test walls, including installation layers and earth plaster. Participants will benefit from Angelos experience as architect and craftsman.

Together, we are planning to create a small pavillion, with straw walls and a thatched roof.



Photo: Flavia Matei

Workshop Motivation

I love when I'm able to combine my passion for thatching with my passion for people.

This will be my first time in Austria and I'm excited to participate in this year's summer school in beautiful and new surroundings.

I'm looking very much forward to working together with new exciting people who through reed-clapping and straw-stacking will inspire one another.

I hope to be able to share my love for thatching and reeds and my beliefs in the sustainability of circular, organic building methods so, together, we might be able to make the world a better place one straw at a time.

Christian Ditlefsen



Photo: Christian Daschek



Photo: Christian Daschek



Photo: Christian Daschek

Workshop Motivation

With the eyes of an architect and the hands of a craftsman, I've been able to explore the potential of straw, wood and many other natural and sustainable materials.

I am convinced that a practical and participatory approach, like the one proposed in the workshop, is fundamental for spreading a culture of construction that is more aware of and respectful of the environment.

I am happy to guide participants in learning construction techniques that combine tradition with innovation, transmitting to them a passion for manual work, attention to detail and sustainability.

I can't wait to get to work with you, you who support the adoption of construction practices that respect the environment and are able to face the challenges related to climate change!

Angelo Ferrara



Photo: Angelo Ferrara



Photo: Flavia Matei



Photo: Angelo Ferrara



Photo: Angelo Ferrara





Photo: Ruud Conijn

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.

