

# Earthship Series #1

Retrofit & Building with Natural Materials # Clay

Permalab 25.09.2020 - 27.09.2020

Come and join us at **Permalab**, for a 3 day workshop where we are building a multi functional space using different types of earth techniques and gain a detailed overview into the Earthship systems.

In this workshop we will use the existing structure as a case study to conceptualise and practice self sustainability in buildings.

This is the first of a series of workshops that are being developed to give a deep practical and theoretical understanding about Earthship & Natural Buildings.

### Hands-On Work Topics: (approx. 6 Hours a day)

- \* How to make clay bricks
- \* Selecting and testing soils for clay bricks
- \* Building with clay bricks
- \* Earth plaster: how to build and apply plaster
- \* How to implement Earthship Systems in an ex- isting house
- \* Building Bottle Bricks (earthship technique)

## Classroom & Discussion Topics: (approx. 2 Hours a day)

### Introduction to the Earthship Principles:

- \* Passive solar heating & Natural cooling
- \* Solar and Wind energy
- \* Rainwater catchment
- \* Grey & black water treatment
- \* Food Production
- \* Building with natural and recycled Materials Retrofitting

### Building with Earth

- \* Brief history of clay
- \* Selecting and testing soils for the mix- pros & cons
- \* Drainage principles & impermeability
- $^{*}$  Overview of the different techniques with earth: Rammed Earth / Wattle & Daub / Clay Bricks / Super- adobe / Cob / Cordwood

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Price: 120€

(if you cannot afford this workshop but truly would like to participate you can send us an email explaining your situation and we will find a solution according to availability )

#### Price Includes:

3 Healthy sustainable delicious meals a day + healthy snacks

Free Camping (private rooms available with extra cost)

1 Party

1 Free consultation for your project

#### The Teacher:

Dipl. Ing. Sara Serodio is an Architect and Earthship expert. After completing her training at the Earthship Academy she worked for Earthship Biotecture under Michael Reynolds during 4 years on several projects.

In 2016 she moved to Brasil to deepen her knowledge in natural building techniques at TIBA Institute, led by the architect Johan van Lengen "The barefoot Architect". Since then she has been working on Earthship inspired projects around Europe.

For information and registration please send us an email to:

eu.earthship@gmail.com