



DURABRIC ACADEMY

Soil Stabilised Brick (SSB) Production
Training Course for Contractors &
Construction Entrepreneurs

26TH - 29TH SEPTEMBER 2017

LILONGWE, MALAWI

14 
TREES
Building better lives.





THE BUILDING SECTOR NEEDS YOU TO GROW GREEN




Especially in emerging markets there is a need for alternative building solutions substituting burnt clay bricks to halt construction-induced deforestation. For the nearly 3 billion people building with earth, an alternative is soil stabilized bricks (SSB) such as DURABRIC, our affordable, low-carbon alternative construction solution. It is a compressed earth stabilized block made of local earth, sand, cement and water. Thanks to its cement content and specific mix design DURABRIC does not require firing. As DURABRIC is made from local materials, it can be produced by small and medium sized enterprises and local workforce if appropriately trained.

BE PART OF THE SOLUTION - JOIN THE DURABRIC ACADEMY!

COMPARISON OF CONSTRUCTION MATERIALS

Typical comparison



Property	DURABRIC	Burnt clay bricks	Concrete blocks
			
Size	29 x 14 x 9	19 x 8,5 x 4,5	42 x 20 x 15 to 50 x 25 x 20
Weight	7.5Kg	3Kg	From 12 to 20Kg
Compressive strength	5 MPa to 7 MPa	Ave. 2 MPa (artisanal)	> 4 MPa
Water absorption	8% to 10%	Up to 20%	Up to 5%
Bricks per m ² of wall	30	50 (single layer) 100 (double layer)	8 to 10
CO ₂ emissions / m ³ building material	60kg	640kg	240kg
*Cost / m ² (base 100 = burnt clay bricks)	80 to 90	135 (double layer)	120 - 150

* construction cost for a 1m² wall using the most common techniques.

Learn from 14Trees, the first company that set up an industrial soil stabilized brick production site in Malawi; now working day and night in Lilongwe to meet the local demand for DURABRIC; and take advantage of building materials experts from LafargeHolcim's Research Center, the largest R&D facility in the industry.

At the end of the training, you will be able to:

- **Understand** the basics of brick production, mixed design of raw materials, soil preparation and curing.
- **Develop** and implement internal quality control procedures and audits
- **Implement** optimal job site organization and working procedures.
- **Sell** your product with the support of our sales and marketing guidelines for a successful business.
- **Create** access to housing, jobs for the unemployed and contribute to healthy forests - with DURABRIC.

WHAT YOU WILL LEARN

To ensure a long-lasting learning experience, you will have the opportunity to learn from our experts in face-to-face presentations, on-site demonstrations and practical working sessions. We want to give each participant maximum attention. Therefore, each academy class has a maximum capacity of 20 participants over a 4 day period.

	Morning	Afternoon
Day 1	<u>Participant Arrival and Registration (2pm)</u>	<u>Introduction to SSB Production</u>
Day 2	<u>Brick Production Training</u>	<u>Job-site Optimization</u>
Day 3	<u>Training for internal Quality Control</u>	<u>Brick Production Trail</u>
Day 4	<u>Best practices: Building with SSB</u>	<u>Departure of Participants</u>

YOUR PROFILE

You are a

- Private enterprise or business leader in the construction sector?
- Public representative in the area of building, construction or sustainable development?
- Professional from a university or civil society organization involved in construction?
- An NGO wanting to build with DURABRIC?

If you've answered one of these questions with yes, the DURABRIC Academy is right for you! 14Trees is taking a leading role in international efforts to foster **gender equality** within all our operations: **women are particularly encouraged to apply!**

The course will be held in **English**.

ABOUT 14TREES

14Trees, the joint venture between LafargeHolcim and CDC, the UK's development finance institution aims at accelerating the production and commercialization of DURABRIC - our low-carbon and affordable construction solution. With DURABRIC, 14Trees is building better lives.

YOUR APPLICATION

The deadline for submission of candidatures is 15th August 2017. Candidates must submit through the website the following documents:

- On-line application form, available on www.durabric.com or below
[DURABRIC Academy Application Form](#)
- Proof of Payment of \$1,500 (excl. VAT) into our account (bank details available after registration).
Early Bird Tickets are available until August 10th, 2017 for \$ 1,350.



To grant admission to the course, please send proof of payment to durabric@lafargeholcim.com. It will be used to verify that your payment was received in our account. Please note that admission will only be possible after we have received your payment.

INCOMPLETE APPLICATIONS WILL NOT BE CONSIDERED.

COST OF PARTICIPATION

The total cost of participation is US\$ 1,500. Register until July 31st and get an **Early Bird** ticket for \$1,350. This includes tuition fees, training materials, lunch during training days and transport between on-site and in-class training sessions. The figures quoted do not include the cost of travel between the participant's home country and the course venue. Participants are responsible for their own travel including visa for Malawi, subsistence costs cover and insurance while in Malawi.



LOCATION & LOGISTICS

The training will take place at the DURABRIC production plant in Lilongwe, Malawi. The nearest international airport is the Kamuzi International Airport (LLW) and has service from the following airports:

- Ethiopian Airlines from Addis Ababa
- Kenya Airways from Nairobi-Jomo Kenyatta
- Malawian Airlines from Blantyre, Dar es Salaam, Harare, Johannesburg-OR Tambo, Lusaka, Nairobi-Jomo Kenyatta & Zanzibar
- Proflight Zambia from Lusaka
- South African Airways from Johannesburg-OR Tambo

A shuttle service can be provided between the airport and Ufulu Gardens Lodge where the off-site training sessions will be conducted.

For further information , please contact

14Trees Team

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