



A user manual for wood-fired kilns

switchasia



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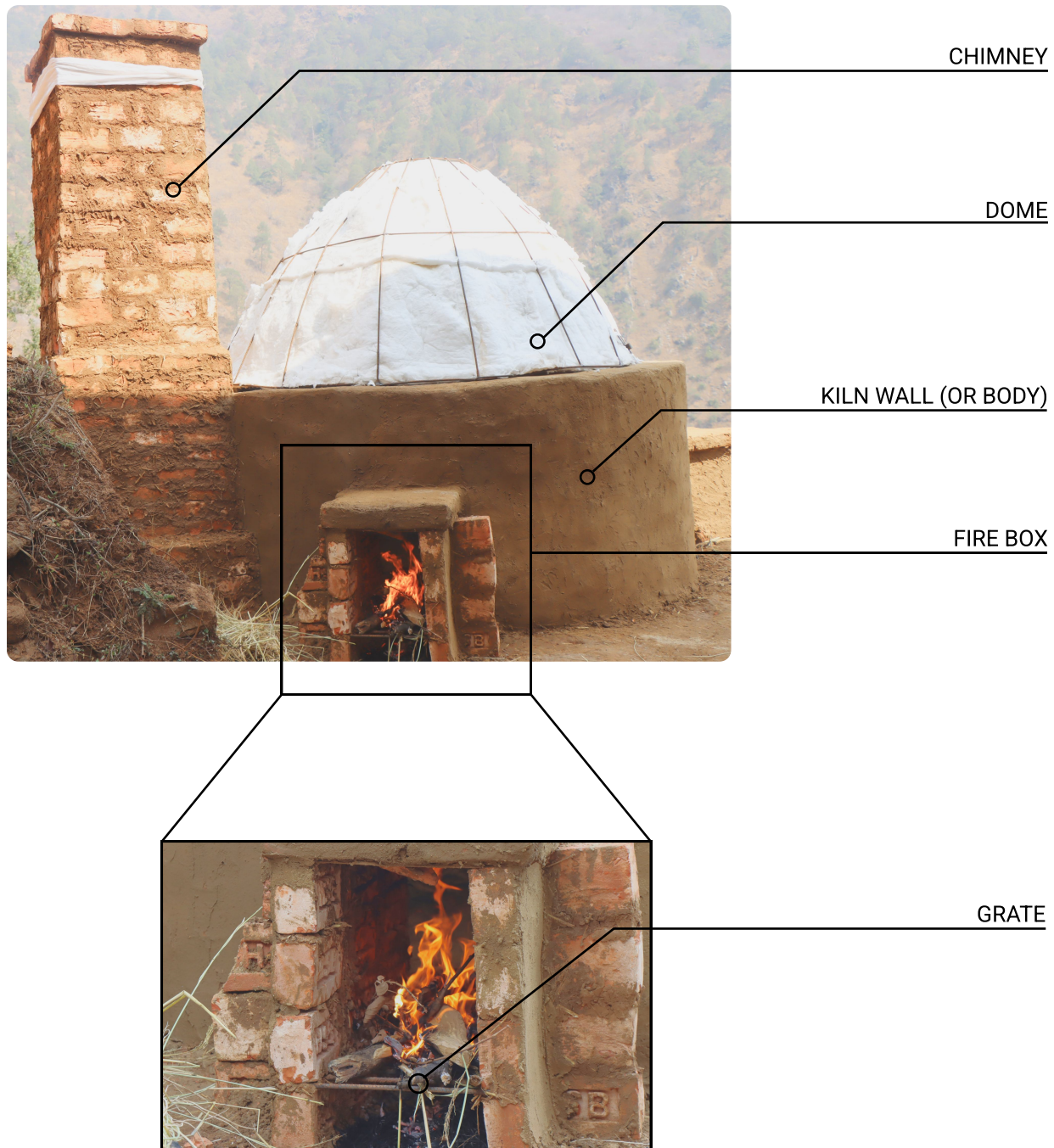
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Introduction

Parts of the kiln

Understanding the various parts of the kiln is integral to understanding its operation. So, let's look closer at the various parts of a standard wood-fired kiln.



An enlarged view of the grate inside the fire box

⚠ CAUTION!

During and after the firing process, please keep anyone, especially children, away from the kiln place. Place caution notices around the kiln, so people can be alerted.

Steps for usage



1

Arrange the clay pots inside the kiln, ensuring they fill approx. 75% of the kiln space. Leave some space between the clay pots to allow for proper airflow during firing.

Ensure that the passage to the chimney is not blocked. This practice helps distribute heat evenly and prevents hot spots, ensuring that the pots are fired uniformly and minimizing the risk of damage during the firing process.

2

Carefully place the dome over the kiln, ensure that the dome is properly aligned and securely placed to create a seal. To create the seal, a plaster made from mud/clay can be used.



3

Initiate the firing process by starting a slow fire in all 3 fireboxes of the kiln. Firewood should be placed above the grate in the firebox. Adjust the fire rate as needed to maintain a steady and controlled increase in kiln temperature.

Maintain the temperature of the slow firing till the kiln it reaches up to 400°C over 15 ~ 20 minutes. Gradually increase the heat to the desired temperature according to your firing schedule by adding more firewood in the firebox. Adjust the firing rate as needed to maintain a steady and controlled increase in temperature throughout the firing process.



4

After initiating the firing process, close the fireboxes' mouths with the metal doors. This helps control the airflow and heat distribution within the kiln, contributing to a more controlled and efficient firing process.

Ensure that the space below the grill is not blocked, so that fresh air intake (from below) is not obstructed. To increase the temperature of the firing, remove the metal doors from the mouth of the fireboxes to add more wood. Keep the inspection door open during the entire firing cycle.

Wear appropriate protective gear such as heat-resistant gloves and goggles to prevent burns or other injuries.

5

Control the heating and temperature inside the kiln by adjusting the chimney opening by either a thick wooden plank or a metal sheet. Place the chosen material over the chimney opening to regulate airflow and heat retention. Experiment with different positions or angles to achieve the desired temperature inside the kiln. Monitor the temperature closely and make adjustments as needed to maintain a consistent firing environment.

Be cautious while handling the wooden plank or metal sheet to avoid burns, and ensure it is securely positioned to prevent accidents during the firing process. Be also careful to not slip down.



6

Periodically check the colour of the pots through the inspection door of the kiln during the firing process. When the pots have attained the desired red colour, or when desired temperature inside the kiln is attained, firing can be stopped. Once the firing is stopped, allow the kiln to cool down slowly until the pots are at approx. 400° C and then remove the dome.

Carefully remove one layer of pots, place the dome back on the kiln so as to keep the remaining pots at a suitable temperature. Apply the lacquer to the pots that were taken out. Then remove one more layer of pots for applying lacquer. Follow this sequence until the kiln has been completely emptied.

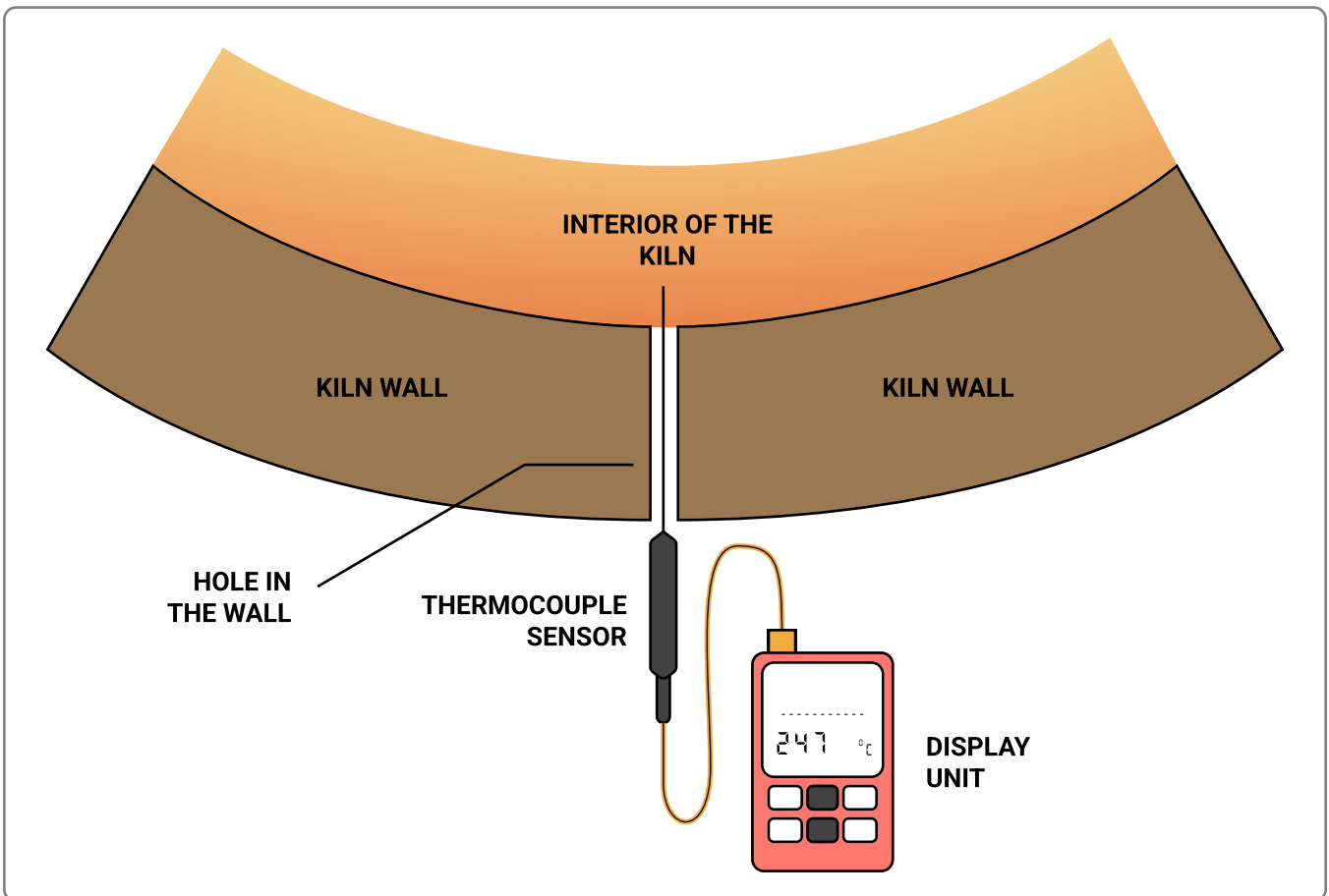


7

To check the inside temperature of the kiln during the firing process, a pyrometer with a thermocouple may be used.

Insert the thermocouple into the kiln through a small hole in the kiln wall, ensuring that the tip of the thermocouple is just level with the inner surface of the kiln wall.

The following illustration depicts how the pyrometer may be used:

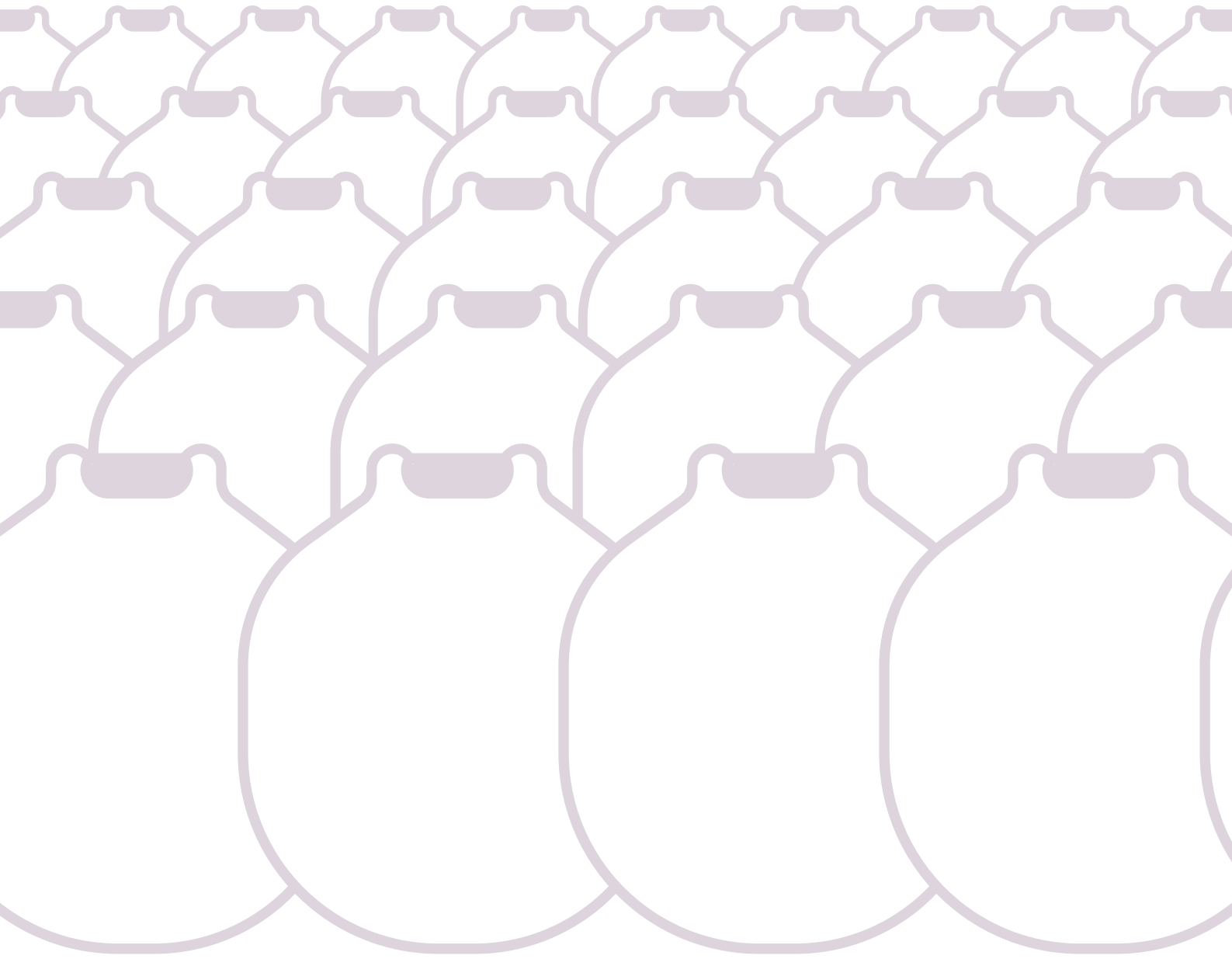


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