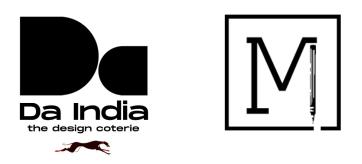


RAJASTHANI LIME PLASTERING



DA India and Masons Ink team had an immersive Thappi and Araish workshop in Bagalur along with several enthusiastic participants under the mentorship of the Lime Plaster Artisan from Rajasthan, Mohammed Rafik Muwal. In this 2-day workshop, the team and the participants got to try their hand at Thappi and Araish plastering techniques. This is a document prepared by Masons Ink Studio summarising the various contents and processes attempted.

Bagalur, Tamil Nadu

March, 2023

THAPPI PLASTER

Thappi is a base layer plaster made from Surkhi followed by any kind of lime plaster finish. It gets its name from the wooden tool, Thappi used in the process of application.

MATERIALS USED:

- 1. Surkhi
- 2. Sand
- 3. Slaked Lime
- 4. Water

TOOLS USED:

- 1. Bandli
- 2. Trowel
- 3. Wooden Floater
- 4. Aluminium Channel
- 5. Thappi

PROCESS:

1. Preparing the mix

a. Mix sieved Surkhi, Sand and Slaked Lime in the ratio given below

Surkhi (2 Bandlis) + Sand (0.5 Bandli) + Lime (1 Bandli)

- b. Add Water (1 mug at a time) to the mixture and prepare a wet paste.
- c. Leave the mixture for 1-2 days (maximum 3 days) depending on the weather before plastering.
- d. Add the admixtures {fenugreek water (methi), jaggery (gud) water} just before plastering.

- If readymade Surkhi isn't available, one's own batch of Surkhi can be prepared by breaking down burnt clay bricks (good ones) with a hammer and crushing the bits into a powder. The powder must be sieved to get fine Surkhi.
- The Surkhi and Sand must be passed through a 3-4 mm sieve (P Sand was used in this case).



2. Preparing the admixtures



a. Mix the Jaggery (*gud*) and Fenugreek (*methi*) seeds with water in the ratio given below and leave it for 4 days before adding to the Surkhi mix

Jaggery (1 kg) + Water (5 litres)

Fenugreek seeds (1 kg) + Water (10 litres)

Things to note:

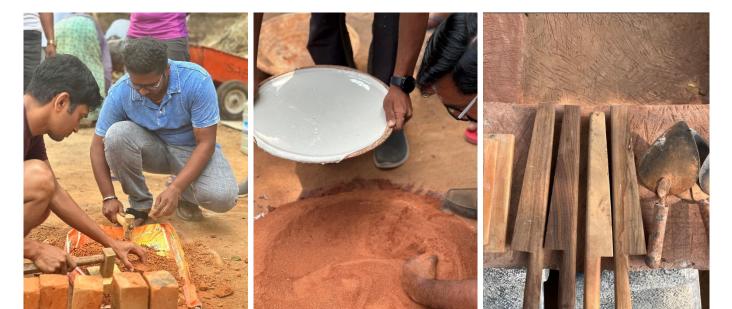
- Gall Nut (Kadukai) can also be used instead of Fenugreek (Methi) seeds.

3. Thappi

- a. Start wetting the wall/ surface 1 day before plastering is done such that the other side also gets soaked. This is done to ensure the surface does not absorb water from the prepared mixture over the surface which may lead to the mix drying out before being worked upon.
- b. Apply the prepared mix onto the damp wall/surface using a wooden trowel. The plaster layer applied to the surface must be 1 1.25" thick with no air gaps between the surface and the plaster.
- c. As it starts to dry, use an aluminium channel (*matta kamba*) to level the plaster layer applied and remove the excess.
- d. Use a wooden floater in circular motion to further level the plaster layer.
- e. Wet the Thappi (tool) and hit the plaster layer in criss-crosses using the edge of the tool gently for 3 days.

- After 3 days of Thappi (hitting the surface with the tool) the surface must ring like a good brick upon hitting.
- The more the surface is hit the stronger the Thappi plaster gets and lesser are the chances of having cracks.
- No water is to be added to the surface after Thappi is done.





Breaking Brick into Surkhi

Adding Lime to Surkhi mixture

Tools used in this process - Wooden Thappi, Trowel, Wooden Floater



Applying Thappi plaster using a trowel

Levelling the surface using an aluminium channel

Using a Wooden Floater to smoothen the surface





Thappi Plaster Finish

Thappi Plaster on The Hobbit House water tank

ARAISH

Araish translates to 'mirror'. It is a shiny, water tight finish layer done over the Thappi plaster which has now become one of the costliest plastering techniques.

MATERIALS USED:

- 1. Slaked Lime
- 2. Lime water
- 3. Marble Dust

TOOLS USED:

- 1. Traditional Stone Grinder
- 2. Brush
- 3. Pebble (cut and polished)
- 4. Small Wooden Floater
- 5. *Nela* (special trowel)
- 6. Powder of Singharaj stone
- 7. Any kind of semi-precious stone

PROCESS:

1. Preparing the mix

- a. Sieve the marble dust through a kitchen sieve and throw away the lumps because they may have impurities in them.
- b. Sieve the Slaked Lime through a muslin cloth and throw away the lumps.
- c. Approximately add lime water to the lime in order to bring to a milkshake consistency
- d. Add marble dust to the lime mix in the ratio given below

Lime mix (1 bandli) + Marble Dust (1 bandli)

e. Keep this mix for 1 day wrapped in a tarpaulin/plastic sheet for the marble particles to get softened by the lime.

- Use gloves while working with lime as it dries out the hands.
- Do not add fresh water to the mixture.
- There is no need to measure the amount of lime water being added, stop adding limewater once the required consistency is achieved.



- After 2 days the mixture will get too dry and will be difficult to use
- No dust must get into the mixture.

2. Grinding the mixture

- a. Clean the grinding stone and the gloves well with water.
- b. Take the mixture onto the stone and start grinding it without rolling the pestle.
- c. Keep adding little amounts of lime water if the paste gets too dry.
- d. After the mixture reaches a *kajal* like consistency, take it out into a container and keep the ground paste in lime water so that it doesn't harden.

Things to note:

- Use gloves while working with lime as it dries out the hands.
- Make sure no dust enters the paste while it is being ground.
- Colour pigments can be added during this process into the paste and ground nicely.

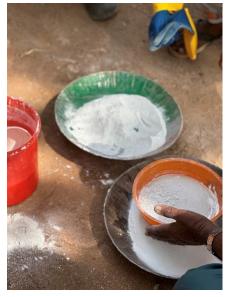
3. Applying Araish

- a. Brush off the dust from the surface on which the finish plaster must be applied.
- b. Soak the surface with enough water so that the water from the plaster mix is not absorbed by the surface.
- c. Take the paste out of the container carefully and strain it off the excess lime water using a muslin cloth.
- d. Using a small wooden floater apply a thin layer of the paste evenly over the surface.
- e. Brush the surface with some lime water which would add to the strength of the plaster.
- f. Next, go over the surface gently using one's hand in circular motion which will allow the lime water to get into the paste.
- g. Using a *nela* (treated) even out the wet surface further with a little pressure.
- h. Once the surface is almost even, using the cut and polished pebble stone start setting the surface by rubbing it gently such that after some time the stone would glide on the surface.
 Continue this process till the texture of the surface starts to change.
- i. Keep cleaning the stone.
- j. Dust the powder of *Singharaj* stone over the surface once the texture changes to add the shine.
- k. Use any kind of semi-precious stone to polish the surface more.
- 1. Powder of *Singharaj* stone can be put 3 4 times over the course of polishing.
- m. Keep burnishing the surface with the pebble and the semi-precious stone till the desired shine is achieved.



- Araish is done one month after Thappi plaster.
- This process must be done in the shade.
- If Araish is being done on a large and plain surface, a larger wooden floater maybe used to apply the first coat of the paste which can be followed by using the small trowel for burnishing.
- Very thin and even layer must be applied to avoid cracks in the finish.
- The small trowel must not be used on dry surface else it might blacken the surface.
- While burnishing if any parts of the plaster come off, apply the paster over it and let it dry before polishing it again.
- Do not lift the pebble perpendicularly to the surface as it may cause the plaster to come off. Instead lift it while gliding it along the surface gently.
- Araish does not need any kind of maintenance, if one feels the shine is wearing off, use a soft cloth and soap water to gently clean the surface and the finish will be as good as new.
- If pigmented mix is being used, ensure that the entire mix is prepared in one go to not have any difference in the shade.





Sieving the Marble dust



Adding Lime water to the marble dust and lime mixture



Grinding the mixture on a stone grinder into a paste



Applying a thin layer of the paste over the surface using a small trowel and levelling it with hand and trowel



Burnishing the surface using stone



Tools used in this process







Araish Finish



