

New European Bauhaus Academy

Week 3: Application
Techniques and Surface
Finishes

Volute Studio



**Circular
Bio-based
Europe**

Joint Undertaking

 Bio-based Industries
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Learning Objectives

By the end of this module, you will:

- Understand how to apply base and finish coats using recycled plaster
- Learn the correct tools and layering techniques
- Explore three different surface finishes: matte, textured, and polished
- Understand timing, layering, and setting to ensure durability and beauty

Tools & Materials Needed

- Trowels (small and large)
- Hawk
- Sponge float
- Mixing buckets
- Measuring scale
- Water spray bottle
- Protective gloves and mask
- Recycled plaster mix (from previous module)
- Optional: Pigments, additives, fibers

Understanding Layers

- Base Coat: Creates a uniform surface
- Scratch Coat: Adds texture for grip
- Finish Coat: Final visual appearance
- Optional: Skim coat for extra smoothness
- Tip: Always allow proper drying between coats

Applying the Scratch Coat

Mix to peanut butter consistency

Apply with firm pressure using a trowel

Score horizontal lines (keying) for next layer

Dry time: 12–24 hours depending on humidity

Application Technique – Base Coat

Wet the surface lightly

Apply mix with trowel using firm pressure

Keep thickness between 3–5mm

Work in horizontal or vertical strokes

Leave some texture for the next coat to grip

Application Technique – Finish Coat

Wait until base coat is dry or partially cured

Mix finish coat with optional pigments

Apply a thin, even layer (1–2mm)

Use sweeping motions with trowel

Mist lightly to allow easier smoothing

Optional: Add texture using sponge float or brush

Surface Finishes – Overview

- **Matte Natural:** Lightly polished, breathable
- **Textured Earthy:** Use sponge, burlap, or comb
- **Polished Burnished:** Compressed with metal trowel for shine
- Advanced: Create intentional layering and depth (Velatura look)

💡 Choose a finish based on light, space, and durability

Troubleshooting Common Mistakes

- Cracks from applying too thick or too quickly
- Peeling due to poor substrate prep
- Inconsistent texture due to overworking the surface
- Dry edges—always mist surface if working time is extended

✖ Pro Tip: Always test small patches before full wall application.

Tips for Working with Recycled Plaster

Always remix small batches to control consistency

Use within 1 hour of remixing

Let dry naturally—no heat guns or blowers

Pigments may act differently – test first

If cracking appears, adjust binder ratio or add fine fibers

Texturing Techniques

Knife Marks: Hand-troweled lines

Brush Drag: Use dry brush for subtle striations

Pressed Texture: Press cloth, leaves, or tools into damp surface

Sand Additives: Add coarser aggregates for grit

Pigmentation Methods

Mix powdered pigments directly into plaster (natural oxides)

Apply pigment washes after drying

Layer thin coats for depth

Caution: Test for color change after drying

Burnishing & Compression

Use clean trowel to compress surface

Can be done while plaster is “pulling” (partially set)

Burnishing brings out pigment richness and a slight sheen

Not recommended for coarse textured finishes

Common Mistakes and How to Avoid Them

- Overworking the surface → cracking or polish spots
- Applying too thick → shrinkage cracks
- Applying to dry substrate → poor adhesion

✖ **Pro Tip:** Mist surface lightly before each layer

This Week's Practice Assignment

- Apply both a **base coat** and a **finish coat** on a test surface

Choose ONE finish:

matte, textured, or burnished



Looking Ahead

Natural vs synthetic pigments

Working with oxides and clays

Adding texture with aggregates & fiber

Creating consistent coloration in recycled plaster



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