



MOROCCAN ZELLIGE TILE INSTALLATION GUIDE

A Comprehensive Guide for DIY Homeowners & Professional Installers

BEFORE YOU BEGIN

Zellige tiles require specialized knowledge and techniques that differ significantly from standard ceramic or porcelain installation. We strongly recommend working with a tile professional who has direct experience with handmade Moroccan tiles. Attempting installation without proper expertise often leads to disappointing results and wasted materials.

PLEASE NOTE

Reno Source provides these tiles and installation guidance, but cannot assume responsibility for the installation process itself or any issues that arise during or after installation. Following these guidelines carefully will help ensure the best possible outcome for your project.

1. OVERVIEW

Zellige (pronounced zell-EEJ) is a form of terra cotta tilework that originated in Morocco over a thousand years ago. Artisans in Fez continue to produce these tiles using techniques passed down through generations—hand-forming each piece from local clay, applying glazes made from natural minerals, and firing in wood-burning kilns.

The result is a tile with extraordinary visual depth. Glazes pool and shift during firing, creating surfaces that catch and reflect light in complex ways. No two tiles are identical, and this variation is central to zellige's appeal. When installed properly, a zellige surface has a luminous, almost liquid quality that machine-made tiles simply cannot replicate.



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Natural Variations to Expect

Your order will include tiles with a range of characteristics inherent to authentic zellige:

- Surface texture: slight waves, dimples, and undulations in the glaze
- Color variation: shifts in tone and depth between tiles, even within the same color
- Dimensional differences: thickness can vary up to 1.5 mm; edges are intentionally irregular
- Crizzling: fine web-like patterns in the glaze—this is a prized characteristic, not a flaw
- Minor imperfections: small chips, pits, or glaze variations on roughly 15–20% of tiles

These qualities are what make zellige distinctive and beautiful. If you prefer a uniform, machine-made look, zellige may not be the right choice for your project.

UNGLAZED ZELLIGE

This guide primarily addresses glazed zellige. If you're installing unglazed (natural) zellige, look for sections marked "UNGLAZED" for critical differences in the process.

2. TOOLS & MATERIALS

Required Tools

- Notched trowel (1/4" × 1/4" or 3/16" × 3/16" V-notch)
- Flat margin trowel for back-buttering
- Rubber grout float
- Clean bucket for soaking tiles
- Mixing bucket and paddle drill attachment
- Wet saw with diamond blade
- Tile nippers
- Levels (both 2-foot and 4-foot)
- Measuring tape and marking pencil
- Sponges and clean cloths
- Eye protection and dust mask

Materials

- White thinset mortar: A flexible, medium-bed white thinset is essential. Never use gray thinset—it can show through the translucent glaze and alter appearance.
- Unsanded grout: Required for zellige's narrow joints. Mapei Keracolor U or similar quality unsanded grout.
- Penetrating sealer: For wet areas and all unglazed installations. We recommend Fila MP90 Eco Plus.
- Appropriate substrate: Cement board, concrete, or drywall (backsplashes only).
- Waterproof membrane: Required for shower walls, floors, and other wet installations.



3. STEP-BY-STEP INSTALLATION

Step 1: Inspect Your Order

- Check for shipping damage: open all boxes and inspect for breakage. Document damage immediately.
- Verify quantities before your installer begins.
- Spread tiles from multiple boxes to see the full spectrum of variation.
- Contact us with questions before installation begins—once installed, we cannot address concerns about tile characteristics.

Ordering the Right Amount

Order at least 15% more than your measured square footage for cuts, waste, breakage, and future repairs. If you prefer a more curated, uniform appearance, order 20–25% extra so your installer can be more selective.

Step 2: Surface Preparation

The substrate must be structurally sound, flat, clean, and dry.

1. Structural stability: The substrate must be rigid with no flex or movement.
2. Flatness: Level to within 1/8" over 10 feet. Use leveling compound to correct dips or high spots.
3. Cleanliness: Remove all dust, paint, oil, or anything that could prevent adhesion.
4. Dryness: Moisture in the substrate can cause adhesion failure and white mineral deposits (efflorescence).

Wet Area Preparation

For showers, tub surrounds, and other areas with direct water exposure: apply a waterproof membrane over the entire area, use waterproof cement board, seal all seams, corners, and penetrations, and allow waterproofing to cure fully.

Step 3: Layout Planning

Have a detailed conversation with your installer about the look you're hoping to achieve. Zellige can be installed to emphasize its handmade character or for a cleaner, more uniform appearance.

- Lighting matters: direct natural light makes tiles brighter; shadowed light makes them deeper and more muted. View tiles in the actual space before finalizing.
- Grout color has major impact: matching grout creates a seamless look; contrasting grout highlights individual tiles.
- Perform a complete dry layout: blend tiles from all boxes, position tiles with pronounced characteristics where they complement, plan cuts around obstacles.

PRO TIP

Photograph your dry layout before setting tiles. This provides a reference if tiles get shuffled during installation.



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Step 4: Prepare and Set Tiles

Prepare the Tiles

Glazed zellige tiles should be briefly soaked in room temperature water for 1–2 minutes before installation. This removes dust and helps ensure proper adhesion.

UNGLAZED ZELLIGE

Never soak unglazed zellige. Water absorbed into the porous clay body can cause efflorescence—white mineral deposits that are extremely difficult to remove.

Apply Thinset

- Mix thinset per manufacturer directions to a thick, paste-like consistency.
- Spread thinset on the substrate using your notched trowel, working in small sections.
- Back-butter every tile with a thin layer of thinset—this is critical for handmade tiles.
- Comb thinset in consistent directions on both surfaces to eliminate air pockets.

Set the Tiles

- Press each tile firmly using the heel of your hand. Do not use a rubber mallet—the force can crack these delicate handmade tiles.
- Traditional zellige is installed with minimal spacing—joints of 1 mm or less. Maximum recommended joint width is 1/16”.
- Small wedge spacers can help maintain consistent minimal spacing.
- Some height variation between tiles is normal and expected—this undulating surface is characteristic of authentic zellige.
- Clean any thinset that squeezes up between tiles immediately.

Step 5: Cutting

Use a wet saw with a diamond blade for clean, precise cuts. Tile nippers work well for small adjustments. Always wear eye protection and work in a well-ventilated area.

Step 6: Curing

Allow thinset to cure completely—24–48 hours depending on conditions. Do not walk on floor tiles or apply pressure to wall tiles during this time.

Step 7: Grouting

Use unsanded grout mixed to a slightly more fluid consistency than typical to flow into the minimal spaces between tiles.

1. Work grout into joints using a rubber float held at an angle.
2. Move diagonally across tiles to avoid pulling grout out of joints.
3. Fill any pits or chips in the tile surface—grout will blend these imperfections into the overall pattern.



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4. Work in small sections. After 15–20 minutes, wipe excess with a damp sponge using diagonal strokes.
5. Polish with a soft dry cloth once the grout has hazed.

CRITICAL

Do not allow grout to dry on the tile surface. Zellige’s delicate glaze can be permanently damaged by dried grout, and removal often scratches the finish. Clean continuously as you work.

Step 8: Sealing

Glazed Zellige

- Dry locations (backsplashes, fireplace surrounds): No sealing required.
- Wet locations (showers, tub surrounds): Apply penetrating sealer after grout has fully cured (allow 28 days for wet areas).

Unglazed Zellige

UNGLAZED ZELLIGE

Unglazed zellige must be sealed **BEFORE** and **AFTER** grouting to protect the porous clay body. Before grouting: apply penetrating sealer and allow to dry completely. After grouting: apply a matte finish protective wax in thin coats. Re-seal every 1–2 years depending on wear and exposure.

4. TIPS & WARNINGS

Key Principles for Success

- Work with experienced professionals who understand handmade tiles.
- Blend tiles thoroughly from all boxes throughout installation.
- Take your time—zellige rewards patience and attention to detail.
- Clean as you work—dried thinset and grout are difficult to remove.
- Embrace the imperfections—they’re what make zellige extraordinary.
- Always use white thinset—gray can show through the translucent glaze.
- Keep spare tiles for future repairs—later batches may vary in color.

Troubleshooting

Issue	Likely Cause	Solution
Uneven surface	Inconsistent thinset application	Ensure back-buttering every tile consistently
Grout haze	Grout left on surface too long	Clean before drying; use grout haze remover on glazed tiles
White deposits (efflorescence)	Moisture through tile/grout	Allow to dry, brush away; may need multiple treatments



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Tiles releasing from wall	Insufficient thinset coverage	Back-butter all tiles; verify substrate prep
Excessive color variation	Not blending from all boxes	Mix tiles from every box throughout installation

5. CARE & MAINTENANCE

Routine Cleaning

- Wipe surfaces with a soft, damp cloth.
- Use mild, pH-neutral soap when needed.
- Dry with a soft towel to prevent water spots.

Products to Avoid

- Acidic cleaners: vinegar, citrus-based products will etch and dull the glaze.
- Bleach: can damage both tile and grout with repeated use.
- Abrasive tools: steel wool, scouring pads, and stiff brushes scratch the delicate glaze.
- Harsh chemicals: ammonia and strong solvents can damage the finish.

Long-Term Care

- Re-seal wet area installations annually or as needed.
- Check grout lines periodically and repair any cracks promptly.
- Address water damage or leaks immediately.
- Embrace the natural aging process—zellige develops a beautiful patina over time.

6. PRODUCT & LIABILITY INFORMATION

Reno Source provides quality zellige tiles and this installation guidance as a resource. However, responsibility for the installation process, material choices, and workmanship rests with the installer and homeowner. By proceeding with installation, you acknowledge that you have reviewed this guide and understand the unique characteristics and requirements of zellige tiles.

Reno Source • Finish Materials • Based in the USA
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