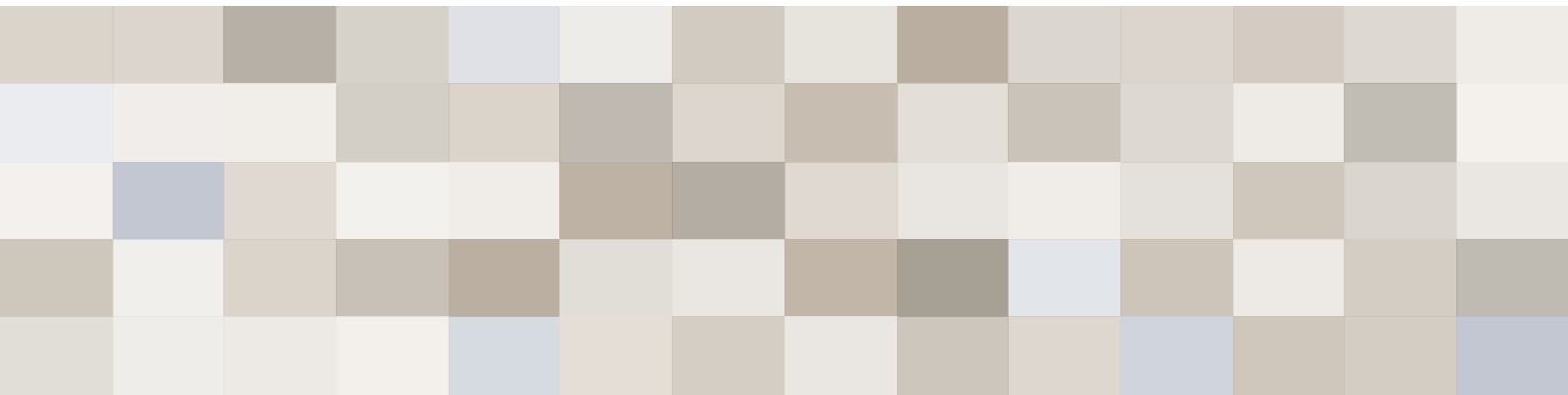
LULO
TILE

INSTALLATION & CARE GUIDE

Moroccan Zellige
100 × 100 mm

Everything you and your tiler need to know before the first tile goes on the wall — and how to look after it for the next thirty years.

PREPARED FOR	PRODUCT	EDITION
Lulo Tile customers	Handmade Zellige, Fez	August 2026



START HERE

Read this first — then give it to your tiler

Zellige is not a manufactured tile. Every piece is hand-formed from Fez clay, sun-dried, hand-glazed and fired in a traditional kiln, then chiselled to size by hand. It is one of the most beautiful surfaces you can put in a house — and it behaves nothing like a pressed ceramic. Almost every problem we see comes from one root cause: the tile was ordered, quoted or laid as though it were a normal 100 × 100.

FORMAT	THICKNESS	BODY	USE
100 × 100 mm	~13 mm	Terracotta	Walls
Hand-chiselled square	Nominal — varies piece to piece	Glazed, non-vitreous, porous body	Interior vertical surfaces

The seven things that matter most

1. **Order it all at once, with 15% over.** Not 10% — zellige is culled on site, not just cut, and a later top-up will not match. Allow more if you intend to cherry-pick; see opposite.
2. **Zellige is a wall tile.** We do not recommend it for floors, and it should not be specified for shower floors or any wet-area floor in Australia.
3. **Every box must be blended before setting.** Never lay straight out of a carton, one box at a time.
4. **Your tiler must back-butter every single tile.** No exceptions, and never a pre-mixed adhesive in a wet area.
5. **Match the grout to the tile.** Contrasting grout draws the eye to every chip and every irregular edge.
6. **It looks wrong until it is grouted.** Do not panic at the halfway point. See page 3.
7. **Budget more time.** Zellige takes materially longer to lay than porcelain. An under-quoted tiler is the single best predictor of a disappointing result.

What we are, and what we are not

Lulo Tile supplies the tile. We are not installers, and this guide is not a substitute for a licensed tiler's judgement on your particular job. What we can do is tell you exactly what we know about this material — where it works, where it fails, and what a good installation looks like.

If your tiler has not laid zellige before, that is fine. Plenty of excellent tilers haven't. Give them Part Two of this guide before they price the work, not after.

> ORDERING, IN ONE LINE
>
> **Measure the area, add 15%, and order the whole lot in a single order.** That 15% covers cuts, transit breakage and the pieces culled on site, and it assumes the tile is laid as supplied.
>
> If you want a more uniform wall and intend to **cherry-pick the most characterful pieces out, allow 25–30% instead** — you are then paying for the tiles you reject. Either way, order the whole job at once: colour is consistent in overall impression from batch to batch, but there are always differences between batches, so a second order placed later is a different tile.

TALK TO US BEFORE YOU COMMIT

If you are tiling a shower, a floor, an external wall, a benchtop, or anything behind a heat source, call us first. Some of those are a straight no. Others depend on detail we would rather discuss than guess at.

> *No one expects perfection with zellige. It's just not in the nature of the tiles.*
>
> MICHAEL PANZARINO, LULO TILE

SECTION ONE

What you have bought

This section exists so that nothing in the delivery is a surprise. Please read it before you open the boxes, and please read it before you stand in front of a half-tiled wall.

The characteristics of a handmade tile

The following are inherent to zellige. They are the reason the surface looks the way it does, and they are not defects.

CHARACTERISTIC	WHAT YOU WILL SEE	HOW PRONOUNCED
Colour & tone variation	A range of tones within a single colour — some pieces deeper and more saturated, some lighter and more translucent. This is what gives a zellige wall its depth.	Significant
Size variation	Each tile is chiselled by hand. No two are exactly 100 × 100. Edges are not straight and corners are not square.	Significant
Undulating face	The surface is not flat. It rises and falls, which is precisely why light moves across a zellige wall the way it does.	Significant
Crazing	Fine hairline cracks in the glaze, formed as the tile cools. More pronounced on darker and deeper glazes. Crazing continues to develop slowly over the life of the tile — new lines appearing months or years later are normal.	Significant, colour-dependent
Pitting & pinholes	Small pits in the glaze, occasionally through to the clay body beneath.	Moderate to significant
Edge chipping	Small nicks and losses along the chiselled edges. Grout fills most of these.	Moderate
Thickness variation & lippage	Tiles vary in thickness, so adjacent tiles will not sit perfectly flush. A finished zellige wall has a visible, tactile surface relief.	Moderate to significant
Warping	Slight bowing from the firing process, most visible before grouting.	Moderate

> **ABOUT SAMPLES**
>
> A sample shows you the *character and range* of a colour. It is not, and cannot be, a colour match to the batch that will arrive on site. Ask us for several pieces rather than one, look at them in the actual room and the actual light, and if an exact match to something is critical to the job, tell us before you order so we can talk through what is realistic.

What is *not* normal — tell us

Please contact us on delivery, before installation begins, if you find:

- Tiles broken clean through in transit
- A quantity shortfall against your order or docket
- A colour that is plainly not the colour ordered
- A proportion of unusable pieces well beyond the culling allowance in this guide
- Anything that simply looks wrong to you — a photo and a phone call costs nothing

Do it before the tile goes on

Claims are far easier to resolve before the tile is on the wall. Once a tile has been fixed it is deemed accepted, which is the standard position across the industry — so please treat the unpacking, blending and inspection described overleaf as a single job, done before your tiler starts.

Nothing in this guide limits your rights under the Australian Consumer Law. The consumer guarantees — including that goods are of acceptable quality and match their description — apply to everything we sell and cannot be excluded. This section is here to describe the product accurately and in advance, so you can decide with your eyes open whether a handmade tile is the right choice for your project.

SECTION TWO

Where zellige can go — and where it can't

APPLICATION	VERDICT	WHY
Kitchen splashback	**Yes**	The classic application. Watch only for a cooktop or oven that vents heat directly onto the splashback — see below.
Bathroom & powder room walls	**Yes**	Excellent, over a compliant substrate.
Shower walls	**Yes**	Provided the waterproofing behind it is done properly and to standard by a licensed waterproofer. See Part Two.
Feature walls, niches, fireplace surrounds	**Yes**	Where zellige is at its best — a small area of it goes a long way.
Laundry, butler's pantry, bar backs	**Yes**	As for any interior wall.
Internal floors	**Not recommended**	We have seen it done. We advise against it. The tile has no tested slip rating, the glaze is not made for foot traffic, and the natural lippage between hand-made tiles is a trip and comfort issue underfoot.
Shower floors & wet-area floors	**No**	Australian wet-area floors require a slip-resistance classification tested to AS 4586. Zellige carries no such rating, and a glazed, undulating surface is not a candidate for one.
Benchtops & horizontal work surfaces	**No**	The clay body behind the glaze is porous, and the crazing gives liquids a path into it. Staining will be permanent.
Directly behind or above a heat vent	**No**	Where an oven or cooktop vents hot air straight onto the wall surface, use a metal splash in that zone.
Pools, spas, submerged & waterline	**No**	Not a submerged-application product. We do not warrant it in this use.
External walls	**Ask us**	Possible in a mild, frost-free coastal climate and a sheltered position. Not for alpine or highland areas where the wall will freeze — water in a porous body plus frost destroys the tile. Talk to us about the specific site.
Steam rooms	**Ask us**	Constant saturation on a porous body. Case by case, and only with a fully engineered wet-area build-up.
Over underfloor / in-wall heating	**Ask us**	Achievable with the right flexible adhesive system and movement provision. Tell us at quote stage.

A NOTE ON THE UNGLAZED "CLAY" COLOUR

Most of our zellige range is glazed. The unglazed Clay finish is a different proposition: it is **extremely porous — it drinks water** — and it is difficult to keep clean in a kitchen. If you love the look, it needs sealing before grouting and ongoing maintenance, and it is not a low-effort surface. Please speak to us before specifying it in a kitchen or a wet area.

> *Zellige can look really crappy until it's grouted. It integrates itself once that grout is in there.*
>
> ON WHAT A HALF-FINISHED ZELLIGE WALL LOOKS LIKE

This is worth repeating, because it is the single most common moment of alarm. An ungrouted zellige wall looks uneven, gappy and badly done — even when it has been laid by an excellent tiler. The joints are visibly inconsistent, the lippage is stark, and the eye goes straight to every irregular edge. Once the grout goes in, all of it resolves and the wall reads as one surface. If you are worried at the ungrouted stage, send us a photograph before you have a difficult conversation with your tiler.

LULO
TILE

PART TWO

For the tiler

Hand this section over before the job is priced. Everything below is what separates a zellige installation that ages beautifully from one that has to come off the wall.

01 Confirm the substrate and, in wet areas, that waterproofing is complete, cured and compliant before any tile goes up.

02 Unpack and blend every box across the whole job. Cull as you go.

03 Set out on a true 100 mm grid — not to a fixed joint width.

04 White polymer-modified adhesive, back-buttered on every tile, full coverage.

05 Wet saw only. A snap cutter will destroy this tile.

06 Grout tone-matched to the tile body. Unsanded — never sanded — and no epoxy.

07 Clean haze off immediately — it will not come off later.

08 Flexible sealant at every movement and corner joint, never rigid grout.

2.1

Substrate, waterproofing & compliance

Before anything goes on the wall

- The background must be sound, dry, clean, dust-free and rigid — fibre cement sheet, render, or a compliant tile underlay. Plasterboard is acceptable only in a dry area such as a splashback outside the wet zone.
- **Flatness matters more here than on a normal job.** The joint on a zellige wall is effectively closed, so there is no joint width available to absorb substrate deviation, and any hollow or hump in the wall is amplified by a tile that already undulates. Bring the wall to at least the tolerance you would accept for large-format work; skim or float it if it isn't there.
- Set out and check the wall for square and plumb before starting. Zellige will not hide a wall that runs off.

WET AREAS

Waterproofing sits behind the tile and does the work. Zellige is a finish, not a barrier — the body is porous and water will reach the membrane.

- Waterproofing must comply with **AS 3740:2021** and the **National Construction Code**, and be installed by an appropriately licensed waterproofer.
- Under NCC Housing Provisions Part 10.2, the shower floor including any hob or step-down must be waterproof; **shower walls must be waterproof to not less than 1800 mm above the floor substrate**; wall junctions and joints within the shower must be waterproof for not less than 40 mm either side; and wall/floor junctions and penetrations within the shower must be waterproof.
- The membrane must be complete and fully cured before tiling starts.

STANDARDS & LICENSING

Tiling work in Australia is carried out to **AS 3958:2023, Installation of ceramic and stone tiles** (incorporating Amendment 1:2024), which superseded AS 3958.1 and AS 3958.2. Waterproofing is to **AS 3740:2021**.

In NSW, a contractor licence is required for any residential building or trade work — including tiling and including waterproofing — **valued at more than $5,000 in labour and materials including GST**. Waterproofing is a separately defined class of work: confirm the licence actually covers it. Thresholds and licence classes differ in other states; check your own regulator.

> #### THE HONEST POSITION ON TOLERANCES
>
> Tiling standards are written around tile manufactured to a modular tolerance — typically within a couple of millimetres. Zellige is not manufactured to a tolerance at all; it is chiselled by hand, and the variation between pieces is an order of magnitude larger.
>
> The consequence is that a zellige wall cannot deliver the consistent joint width and lippage limits that a standard would apply to a pressed tile, and no installer should be asked to promise it. That is a deliberate, understood departure that comes with choosing this material — and it is why the setting-out method on the next page matters so much. What the standards *do* govern without exception is the part that fails wet: substrate, waterproofing, adhesive coverage and movement joints. Those are not negotiable.

MOVEMENT JOINTS

Provide movement joints in accordance with AS 3958:2023. In practice, for wall tiling this means joints at storey heights and between roughly 3 m and 4.5 m apart vertically, over any structural movement joint, where the tiling abuts a different material, at the perimeter against restraining surfaces, and — critically for bathrooms — **at the vertical internal corners of the shower**.

Movement joints are a minimum 6 mm wide and filled with a flexible sealant, never with grout.

2.2

Unpack, blend, cull

This is the most important twenty minutes of the job, and it is the step most often skipped. Colour banding caused by laying box-by-box cannot be fixed after the fact.

1. **Open every box for the job at once.** Not the first box, then the next.
2. **Lay the tiles out and shuffle them together** across all boxes so light, mid and deep tones are distributed evenly. Keep mixing as you work — take from a blended pile, never from a single carton.
3. **Cull as you go into three piles:** good faces for the eye-level field; heavily marked or chipped pieces for cuts, ends and low-visibility runs; and genuinely unusable pieces, which is what the overage allowance is for.
4. **Dry-lay a section** — around a square metre — before setting anything, so the client can see the actual blend and the actual joint behaviour and agree to it.
5. **Do not cherry-pick out all the character** unless the client has specifically asked for it and paid for the extra overage. Removing every mark produces a flat, oddly lifeless wall.

DO NOT SOAK THE TILES

Some overseas guides suggest briefly wetting zellige before setting. We don't recommend it here. Use a good polymer-modified adhesive, which is formulated to cope with an absorbent body, rather than introducing water into the assembly. Never soak the unglazed Clay finish — you risk efflorescence.

2.3

Adhesive

Type	Polymer-modified cementitious adhesive, C2 class, S1 deformable where there is movement, heating or a membrane behind.
Colour	**White. Always.** The glaze and body are translucent enough that a grey adhesive shadows through and dulls the colour — worst on the pale and translucent glazes.
Bed	Run a slightly deeper bed than you would for a flat tile, so thickness variation can be taken up in the adhesive rather than shown as lippage.
Never	Pre-mixed tub adhesive or mastic in any wet area. It re-emulsifies and the job fails inside a year.
Back-buttering	**Every tile, without exception.** Fill the keying pattern flat with a margin trowel, then set. Aim for effectively full, void-free coverage.
Mixing	Mix, slake, remix. Don't add water at the remix.

Voids behind a handmade tile are not a cosmetic issue. The body is porous and non-vitreous; a void in a wet area is a reservoir, and a void anywhere is an unsupported point under a tile that is already thin in places.

ADHESIVE AND GROUT SYSTEM

We specify **Kerakoll** — Biogel adhesive and Fugabella grout — as a complete system, and we stock Fugabella. Any equivalent quality system is fine; what is not fine is a builder's-merchant grey powder and a tub of premix. Follow the manufacturer's own data sheet for open times, coverage and cure.

2.4

Setting out — the 100 mm grid

> *It needs to be gridded out on 100 × 100 repeating intervals — and if a grout line opens up, then so be it.*
>
> MICHAEL PANZARINO, LULO TILE

This is the whole method, and it is the opposite of how a tiler is trained to work.

The instinct with a 100 × 100 tile is to set a fixed joint — 2 mm spacers, say — and let the courses fall where they fall. With zellige that fails, because the tiles are not 100 mm. Every under-size tile pulls the course in and every over-size tile pushes it out, the error accumulates, and by the third metre the wall is visibly running off. The joints look even; the wall is crooked.

Do it the other way round. **Fix the grid and let the joint move.**

- Set out true 100 mm centres, horizontally and vertically, across the whole wall.
- Place each tile to the grid, centred in its 100 mm cell.
- **The joint that results is very tight — effectively closed in places, and up to about 1.5 mm at its widest.** Tiles will butt hard against one another, sometimes quite hard. That is correct, and it is what a zellige wall is meant to look like.
- The joint varies from tile to tile as a consequence of the grid, not as a decision. Don't chase a consistent one.
- The wall stays square, the courses stay true, and the eye reads the overall order rather than the individual gap.

Spacers have very little to do on a joint this tight, and crosses are useless here in any case — there is no straight edge for them to bear on. Work to the grid by eye. What is not acceptable is a fixed spacer dictating the setout.

Because the joint is so tight, squeeze-out is the enemy. Adhesive pushed up into a closed joint leaves no room for grout to get down into it. Rake the joints out as you go, while the adhesive is still soft.

HANDLING

- Place tiles, don't slide them — sliding causes lippage and drags adhesive into the joint.
- Adjust while the adhesive is still open; a tile that has grabbed at the wrong height stays wrong.
- Trust your eye over the level. On this tile the level will sometimes say yes when the wall plainly reads no.
- Keep joints clear of squeeze-out as you go. Rake it out while it is soft.

2.5

Cutting & edges

- **Wet saw with a continuous-rim diamond blade.** Slow feed.
- **Not a snap cutter.** Score-and-snap relies on a flat body of even thickness. Zellige is neither, and the crazed glaze sends the break somewhere unpredictable. Breakage rates are high enough to matter at this price.
- Ease sharp cut arrises with a rubbing stone.
- A cut edge exposes the raw clay body. Keep cuts to internal corners and concealed edges wherever possible; if a cut edge must be exposed, seal it.

EXTERNAL CORNERS AND TERMINATIONS

A mitred corner can look very good, but know what it leaves you with: the tile is **extremely thin at the mitred arris, and the edge is sharp**. Think hard before specifying it on a shower reveal, an island end, or anywhere someone brushes past it.

Our preference is a 12 mm angle in whatever material suits the room. It protects the edge and it removes the problem entirely — and rather than reading as a compromise, it can be made a feature by matching it to the tapware and hardware. **PVD stainless steel is your friend here.**

TIME AND PRICING

Zellige takes considerably longer per square metre than porcelain — the blending, the culling, the individual placement and the constant adjustment all cost time. Price it accordingly. An under-quoted zellige job is the most reliable predictor of a bad one, and this is worth saying to the client at quote stage rather than absorbing later.

2.6

Grouting

Choosing the grout

Cure first	Let the adhesive cure fully before grouting — allow 48 hours where you can. There is more water in this assembly than usual.
Type	**Unsanded. Not negotiable.** Zellige is butted very tight, and sand simply bridges and blocks a joint that narrow — the grout then sits on the surface instead of being forced down into the joint. Sand will also scratch the glaze.
Epoxy	**Avoid.** It sets fast, it is unforgiving, and on a pitted and crazed surface it lodges in the pits and craze lines and is effectively impossible to remove once cured.
Colour	Match, or go one shade off. Never contrast.

WHY GROUT COLOUR IS THE BIGGEST AESTHETIC DECISION ON THE JOB

A contrasting grout outlines every tile — which means it outlines every chip, every irregular edge and every place where a hand-chiselled corner isn't square. A tone-matched grout lets the wall read as one surface and the character sit in the glaze where it belongs.

The useful trick: **match the grout to the colour of the clay body at the tile's edge, not to the glaze on its face.** The joint sits against the biscuit, not against the glazed surface, and that is what the eye compares it to.

Make up two or three grout boards, let them dry properly, and look at them on the actual wall in the actual light before committing. Wet grout is not the colour of dry grout.

Grouting, step by step

1. **If the grout is dark, or the tile is a deep or heavily crazed glaze, pre-seal the tile first** with a penetrating sealer and let it cure before grouting. Craze lines and pits will take up dark pigment and hold it permanently. Test first on a spare tile.
2. **Force the grout down into the joint, don't just pass over it.** The joints are very tight and the face undulates, so work from several directions and press hard enough to fill the joint to its full depth rather than bridging across the top of it.
3. **Clean as you go — do not let it haze off.** On a pitted, crazed, undulating surface, dried grout haze keys into the texture and is extremely difficult to remove. It is not like wiping a flat glaze.
4. Wipe diagonally across the joints with a clean, well-wrung sponge, changing water often.
5. Buff the residual film with a clean dry cloth once the grout has firmed.
6. **Never use an acidic haze remover on zellige.** Acid attacks the glaze and travels straight into the body through the crazing.

> **SILICONE**
>
> Use a **neutral-cure** silicone at movement joints, internal corners and wall/floor junctions. Acetic-cure ("vinegar smell") silicone contains acid and has no place near this material or near any stone on the same job.

SEALING — THE SHORT ANSWER

Glazed zellige does not generally need sealing. It is a glazed finish and it cleans easily.

The two exceptions are worth knowing. **Pre-seal before grouting** where a dark or contrasting grout is going in, or where the glaze is heavily crazed, because the crazing is a direct path into a porous body. And **seal the unglazed Clay finish**, always — before grouting and thereafter on maintenance, because it is genuinely absorbent.

Use a non-enhancing penetrating sealer unless the client specifically wants the colour deepened. Test on a spare tile first.

SECTION THREE

Living with it — cleaning & care

Glazed zellige is an easy surface. You do not need a special product, a routine, or an annual treatment. You do need to keep three things away from it.

Everyday cleaning

- A soft sponge or microfibre cloth, warm water, and a **pH-neutral** cleaner. That is genuinely all.
- Wipe splashes off as they happen rather than letting them dry into the texture.
- Dry the surface after cleaning in a shower to reduce mineral marking from hard water.

What will damage it

- **Anything acidic** — vinegar, lemon-based cleaners, "shower power" style descalers, acidic grout-haze removers, tile-and-grout acid washes. Acid etches the glaze and travels into the clay body through the craze lines.
- **Bleach and ammonia.**
- **Abrasives** — scouring powders, steel wool, abrasive pads, magic-eraser type blocks. They dull the glaze permanently.
- **Steam cleaners.** Forcing hot vapour into a crazed glaze over a porous body is asking for trouble.

If in doubt, test any new product on an offcut before it goes near the wall. Keep a few spare tiles for exactly this reason — and for repairs.

How it will age

Crazing continues. The fine lines in the glaze do not stop at installation — they carry on developing slowly as the tile responds to moisture and temperature over the years. New craze lines appearing six months or six years after installation are not a fault, not an installation failure and not a product defect. They are the tile doing what a hand-glazed tile does.

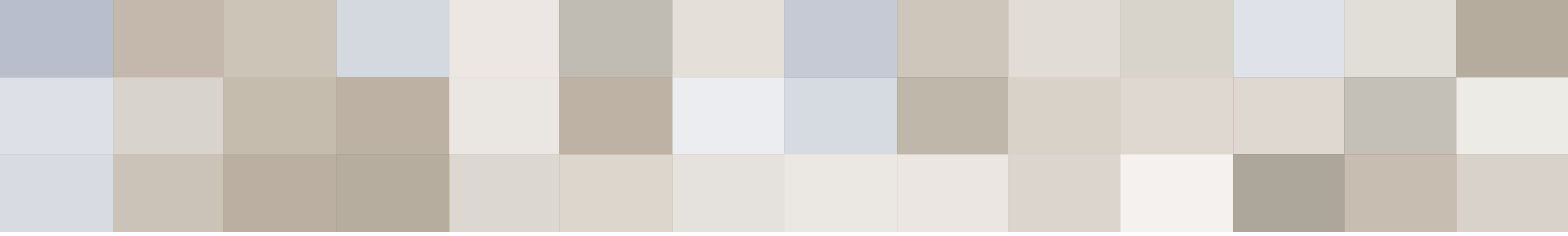
Colour deepens very slightly, the surface acquires a patina, and a zellige wall generally looks better at ten years than at ten days. That is the point of it.

KEEP SPARES

Put a box aside somewhere dry and note the colour and the order number. A future batch will not match, so the offcuts and leftovers from your own order are the only exact-match repair stock that will ever exist for your wall.

If something goes wrong later

Call us. If a tile is damaged, if the grout discolours, if something appears that this guide hasn't described — send a photograph and we will tell you honestly whether it is a product issue, an installation issue, or normal behaviour. We would much rather have that conversation than not.



LULO
TILE

SPEAK TO US

Michael Panzarino

Managing Director

0414 424 355

michael@lulotile.com.au

288 Sailors Bay Road
Northbridge NSW 2063

lulotile.com.au
instagram.com/lulotile

BEFORE YOU START

If you are tiling a shower, a floor, an external wall, a benchtop, or anything behind a heat source — call us before you order.

If something looks wrong on delivery, photograph it and call us **before** installation begins. Claims are far easier to resolve while the tile is still in the box.

This guide is provided as general information about a handmade product and is not a substitute for advice from your licensed tiler, waterproofer or builder, who remain responsible for the installation and for compliance with the National Construction Code and the applicable Australian Standards. Product characteristics described here are inherent to handmade zellige. Nothing in this document limits your rights under the Australian Consumer Law.