



Installation and care guide

HANDMADE SANDSTOCK BRICKS



Thank you for choosing handmade sandstock bricks.

This guide provides advice on laying, jointing, cleaning and ongoing care to help achieve a beautiful and durable finish.

Following these recommendations will ensure your brickwork ages gracefully and retains its timeless character for years to come.



The character of handmade bricks

No two handmade bricks are ever exactly alike. Each brick bears the unique character and craftsmanship of the artisan who created it.

As a result, slight dimensional variation is both normal and expected, typically within a tolerance of ± 5 mm from the nominal size. Colour variation is equally characteristic. Our handmade bricks are fired using traditional bull trench kilns, a time-honoured process that produces subtle tonal differences from brick to brick and from batch to batch.

These natural variations are not imperfections. They are the hallmark of authentic handmade bricks, giving every project depth, individuality and timeless character that simply cannot be replicated by mass-produced alternatives.



1. Laying guide – overview

Careful preparation and good workmanship are the key to a successful outcome. The following guidelines are recommended for all handmade sandstock brickwork.

- Flush, shallow raked or half-round joints
- Do not wet-sponge joints or brickwork
- Blend from multiple pallets
- Do not lay in extreme heat or cold
- Dry brushing is the best cleaning technique
- Sensible face selection
- Protect unfinished walls from the rain



Laying: best practice and common mistakes

BEST PRACTICE

- Ensure damp proof course is in place before laying.
- Keep bricks clean and free from excess mortar during construction.
- Use clean water for mixing mortar and for cleaning.
- Dry brush once mortar is no longer tacky but still workable.
- Allow mortar to fully cure before any further cleaning.

COMMON MISTAKES

- Laying with overly wet or dry bricks.
- Deep raked joints.
- Dry brushing while mortar is still tacky.



2. Blending from multiple pallets

To achieve a natural, well-balanced brick wall with even colour distribution, always blend bricks from multiple pallets.

STEP 1 Work across all the pallets at the same time, taking a few bricks from each pallet in rotation. Taking from at least 6 pallets is ideal, but the more the better.

STEP 2 Lay bricks from the blended mix, continuing to draw from at least 6 pallets throughout the entire build.

If your build is smaller than 6 pallets, draw from all available pallets.



3. Mortar and joints

We highly recommend either a flush, very shallow (e.g. 1 mm) raked joint or half-round joint.

Do not wet-sponge the joints or the brickwork.

This will smear a thin film of mortar over the brick face.

In coastal areas or areas that can experience sub-zero temperatures, flush joints are best.



4. Cleaning: pressure washing

PRESSURE WASHING

- Low pressure washing is effective for general cleaning.
- Maximum pressure 1000 PSI.
- Use a diffuse spray.
- Minimum distance 300 mm.
- Keep the spray moving. Avoid concentrating in one area.

CLEANING DO'S

- Pre-wet the wall first.
- Test a small area first.
- Use a fan spray.
- Keep 300 mm distance.
- Rinse thoroughly.



Cleaning: common mistakes

COMMON MISTAKES

- Using a concentrated jet.
- Allowing acid to dry on the brick surface.
- Cleaning before mortar has cured.
- Holding nozzle too close.
- Too high a pressure.

Always begin with the least aggressive cleaning method.



Professional cleaning recommendation

For the best results, we recommend that brick cleaning is carried out by a contractor accredited by Think Brick Australia.

Accredited contractors have demonstrated knowledge and experience in the correct cleaning of masonry and use of appropriate products, equipment and technique to protect your brickwork.

NOTE: These recommendations are general in nature. Always comply with relevant Australian Standards and seek professional advice when required.



Vanadium staining

The clays used to make light coloured bricks (e.g. ivory bricks, off white bricks, cream bricks, grey bricks) often contain Vanadium. On occasion yellow/green/red-brown staining may appear on light coloured clay bricks. This is known as vanadium staining. This staining is a natural by-product of clay products and is not harmful. Typically the stain will appear if excessive acid is used in the cleaning process, if the mortar mix is excessively wet or if the bricks get excessively wet (during construction).

It is important to understand and accept that vanadium staining is a natural process of clay products and is most obvious in light coloured bricks. Methods can be used to help minimise vanadium staining but if you are concerned about this process we would advise against the use of light coloured bricks.



Vanadium: prevention and cleaning

WAYS TO LIMIT VANADIUM EFFLORESCENCE

Using a stiffer mortar mix.

Keeping brickwork dry during construction.

Over time Vanadium efflorescence will disappear through natural means if exposed to the elements.

These stains can be removed by using a solution of oxalic acid and water and must be followed by a neutralising wash, such as a sodium bicarbonate solution, to avoid serious secondary staining down the track. It is important to always follow the safety instructions and warnings on any labels of chemicals used.



Iron staining

The most typical source of iron staining is from iron liberated from the sand used in the mortar mix, this liberated iron is absorbed by the brick and evaporates at the brick surface leaving behind a pink to reddish discolouration. Oxalic acid and water can be used to remove iron staining.



General staining

White bricks are, by their nature, more susceptible to showing dirt, stains and environmental marking than darker coloured bricks. Choosing white bricks means accepting this characteristic as a normal part of the product's appearance over time.

Staining can result from a range of natural and environmental sources, including oils and tannins from overhanging trees, airborne pollen, dust, general urban pollution, stormwater runoff, and other contaminants that are present in the surrounding environment. These factors affect all exterior building materials to some degree, however they are naturally more visible on lighter coloured surfaces. Regular cleaning and maintenance will help preserve the appearance of white brickwork, but some level of visible weathering should be expected throughout the life of the building.



Sealing and ongoing care

While sealing white/light coloured brickwork is not a requirement, it is a sensible option that should be considered, particularly in areas exposed to heavy vegetation, high levels of airborne contaminants, or where maintaining a consistently clean appearance is a priority. A quality breathable masonry sealer can help reduce the absorption of staining agents and make future cleaning easier. Sealing will not prevent all staining, nor does it eliminate the need for maintenance, but it can provide an additional level of protection and simplify ongoing care.



Damp proof course

- All bricks are porous to some degree. They absorb moisture and can wick water through the masonry. Damp-proof courses (DPCs) are installed to create a physical barrier that prevents moisture from the ground travelling upward through the brickwork.
- When a DPC is missing, incorrectly installed or bypassed, rising damp can occur. This can lead to unsightly staining, efflorescence, brick fretting, and in persistently damp conditions, mould growth.



DPC: clearance and visibility

- Under the National Construction Code (NCC), DPCs must be correctly positioned in relation to the surrounding ground and finished surfaces. As a general requirement:
- The DPC should be located at least 150 mm above the adjacent finished ground or landscaping level, subject to the specific construction and paving conditions.
- The DPC should remain visible and unobstructed, allowing its position and clearance to be readily checked.
- Landscaping, garden beds, soil, mulch, paving, paths, decking or subsequent building work should never bridge or bypass the DPC, as this can provide moisture with a pathway around the barrier.



DPC: construction and landscaping

- Unfortunately, incorrectly installed DPCs and landscaping that later bridges or bypasses the DPC occur far too often. These mistakes may not cause obvious problems immediately, but they can result in persistent and expensive moisture-related issues over the longer term.
- Make sure your DPCs are installed correctly, at the correct height and remain visible throughout construction and landscaping. Pay particular attention when final ground levels, paving and garden beds are being established. A correctly installed DPC can only do its job if nothing is allowed to bypass it.
- Raising landscaping, paving or concreting against the brickwork after construction will effectively defeat the DPC and create the very rising-damp problem the building was designed to prevent.



DPC: placement above the slab

- To achieve the required clearance above the finished ground level, the DPC will typically need to be installed several brick courses above the slab, rather than simply at the point where the brickwork meets the slab. If it is installed at the slab/brick interface, this means you need to have the slab exposed (i.e. the slab will be above the landscaping level).
- In many situations, installing two DPCs can be an excellent approach: one at the slab/brickwork interface and a second DPC higher in the wall at the appropriate level above the finished ground or landscaping. This provides an additional line of defence against moisture movement and reduces the risk of the damp-proofing being compromised by future paving, landscaping or changes in ground levels.
- The important point is that the effective DPC must remain correctly positioned, visible and above anything that could bridge it.