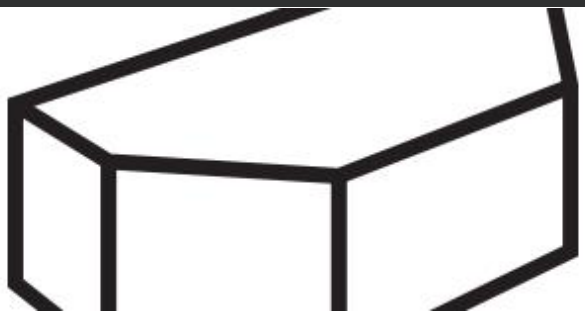
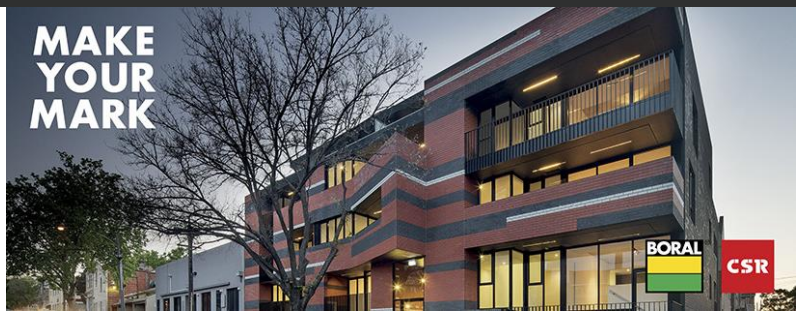




DOUBLE CANT

Shapes

BRICK DETAILS

Size	Shapes

RELATED BRICKS

SUITABLE PAVERS

SUITABLE STONES



CLEANING GUIDE
For PGH Bricks & Pavers

PGH BRICKS & PAVERS™

The appearance of a brick building can be permanently spoilt by employing poor cleaning techniques or by the use of the wrong cleaning agent. For this reason, it is important to ensure that the correct cleaning methods are utilised. Brick cleaning should only be undertaken by a trained professional.

A hydrochloric acid solution is commonly used to remove mortar stains from clay brickwork. Any acid used incorrectly can damage the brick or cause unsightly staining and can be more difficult to repair.

Cleaning vanadium stains with hydrochloric acid may turn the salts black and make them more difficult to remove. It is essential that any vanadium salts are removed prior to hydrochloric acid being applied. Refer to the Industry Cleaning Guide, Think Brick Australia, for instructions.

SAFETY PRECAUTIONS

Hydrochloric acid is extremely corrosive. The manufacturer's instructions and safety precautions should always be followed when using acids and other proprietary cleaning chemicals. Always wear protective clothing and protective equipment such as gloves, safety glasses, etc. and avoid breathing the vapours.

STEPS

1 AS BRICKS ARE LAID

Minimise the need for cleaning by ensuring the majority of mortar residue is cleaned as the bricks are laid. Cover completed brickwork to protect it from splatter. Laying bricks using the correct ratios for mortar will aid cleaning.

2 WHEN TO CLEAN AFTER BRICKLAYING

Bricks should be cleaned within 2 to 14 days of being laid, except for Glazed bricks that should be cleaned as they are laid.

The slurried range of bricks should be cleaned by brushing them with a soft broom at the end of the day followed by scrubbing off any mortar the next day with a hand brush and plenty of water.

3 PREPARATION

1) Mask and protect adjacent metal, glass, wood and plastic surfaces which may come in contact with the cleaning agent as recommended by the manufacturer of the proprietary cleaner. Special care should be taken with window frames, aluminium dampcourses and gutters.
2) Gently scrape off excess mortar using either a metal or wooden scrape.
3) **Ensure brickwork is saturated with water** for the duration of the clean and is saturated prior to applying the acid solution.

4 CLEANING

1) Use the correct ratio of hydrochloric acid and water:
   - Light coloured bricks - 1 part hydrochloric acid to 20 parts water
   - Dark coloured bricks - 1 part hydrochloric acid to 10 parts water
   - Queensland bricks - bricks manufactured in Queensland, especially light-coloured bricks, may be more susceptible to acid burn due to large amounts of iron oxide present in the raw materials. Greater care should be taken.
   - Glazed bricks - should **not** be cleaned with acid solution. Wipe the glazed surface with a damp towel, rinsing the towel thoroughly as each area is cleaned. If particles are hard to remove, repeat this process.
2) Test the effectiveness of the acid solution by sampling a small unseen section of brickwork. Under no circumstance should more than 1 part hydrochloric acid to 10 parts water be used. It is better to scrub more vigorously than to use more acid.
3) Apply the acid solution with a masonry cleaning brush, soft brush or a low-pressure (less than 40psi) sprayer.

4 CONT.

4) Allow the solution to remain on wall for 3 - 6 minutes before scrubbing.
5) Never allow the acid solution to dry out on the brickwork as it can result in white staining. This is particularly the case for smooth faced bricks or bricks with highly contrasted mortar. When cleaning, try not to work in direct sunlight.
6) Only treat small areas of brickwork at a time ie. no more than a nine square metre section.

5 RINSING

1) Always begin at the highest point and work down the wall.
2) Pressure cleaning equipment can be used to rinse the wall if the precautions are adhered to:
   a. Keep the pressure below 1,000psi (6,800kPa)
   b. Use a wide fan spray nozzle, not a turbo head (at least 15° fan nozzle)
   c. The nozzle should be no closer than 500mm from the wall at all times
   d. Avoid cleaning the joints. If the surface or joints are showing signs of damage, reduce pressure or increase the distance to the wall.
3) Ensure the acid solution is neutralised as you clean each section.

   For the slurried range of bricks, the surface can be easily damaged with excessive water pressure. Adjust water pressure and distance to the wall to ensure slurry surface remains undamaged.

   For Dry Press bricks, pressure cleaning equipment should not be used. The acid solution should be removed by hand with a sponge, soft brush or broom.

   For Glazed bricks, pressure cleaning equipment should not be used. Rinsing regularly, hand clean with water using a damp sponge applied in a circular motion.

6 NEUTRALISING

1) Light coloured bricks should be rinsed with a neutralising solution instead of water, as some stains may appear over time if cleaning acids are not completely neutralised.
2) For bricks requiring neutralisation, a bicarbonate solution in the following proportions should be applied
   - 10 grams of washing soda per litre of water or
   - 50 grams of bicarbonate of soda per litre of water
3) Leave on the wall.

For more cleaning information, ask for a copy of the "Brick Cleaning Supplement" brochure from PGH Bricks & Pavers™ or refer to the Industry Cleaning Guide, Think Brick Australia, "Industry Cleaning Guide", available at www.thinkbrick.com.au