PGH RIGIDpave™ instruction manual

4. Slurry Installation (cont)

The slurry should be broomed and hosed into the joints. The slurry should be broomed in two directions until all the joints are filled. It is important to ensure that all joints are filled. A low volume garden hose at domestic water pressure should be used. The hose should be held at a 45° angle to the pavement keeping the slurry wet but not washing out the joints. When working on a sloping site, (approximately 3:1 or greater) work from the bottom to the top.

When all the joints are full, any excess slurry should be removed by broom.

Dry clean sand (2 shovels per square metre) should be spread over the pavement. This sand is then broomed off thereby removing most of the cement slurry residue from the pavers. This is repeated until 90 percent of surplus slurry is removed and sand is only slightly dirty.

The area should be washed with a fan jet hose to remove any fine cement residue from the pavement. This must be done immediately after the above operation starting at one corner. Run-off can be captured using a dry sand bank.

Depending on surface texture and vitrification of the pavers a clean finish may be achieved without further cleaning. If cleaning is required a dilute hydrochloric acid solution (1:20) can be used. (Ensure that the use of such acid is appropriate and permitted under environmental standards).

5. Trafficking

The pavement can be trafficked once the concrete base is 7 days old and the grout has had 72 hours to cure.

6. Maintenance

It is important to maintain the integrity of the slurry filled joints. This is the same as the requirement to maintain sand filled joints in a flexible pavement.

Sales & Technical Assistance

Please phone **131 579** or visit www.pghclay.com.au

Important Information: *CSR Building Products trading as CSR Bricks & Pavers are made from clay and, as a result, have a natural variation in colour, texture, composition and size. We do not warrant that our clay products will match any sample, display wall or brochure. Pavers with the same batch number should be used on a single project.*

Disclaimer: *CSR Building Products trading as CSR Bricks & Pavers cannot and does not warrant the strength of any structure comprising its clay pavers and other components and strongly advises users to consult a qualified structural engineer before selecting any clay paver products and structural system. It is recommended that any work should be carried out by a registered professional.*

Warning: *Bricks and pavers contain crystalline silica. Cutting or grinding these products creates dust, which may be hazardous and should not be inhaled. Please ensure that when cutting or grinding, an approved mask (respirator) is worn. Contact* **131 579** *to obtain a copy of the Material Safety Data Sheet (MSDS).*

PGH BRICKS & PAVERS BE SURE WITH CSR

Laying instructions

The PGH RIGIDpave™ method is a revolutionary new way to lay driveways that will save you time and labour.

The rigid method is fast and simple. The pavers are laid onto a reinforced concrete base, with a sand and cement slurry swept over the pavers and washed in to fill the voids. This makes road base, sand, screeding, compacting and sinking gravel sub-bases things of the past.

The system is virtually maintenance free for your customers – no weeds, no ants and no need to keep filling gaps with sand when the sub-base settles.

Made from clay and shale, our non-slip pavers are naturally colourfast and sealed with Pavegard™.

Overview of method

- Concrete base.
- Perimeter pavers fixed with adhesive to hardened concrete base.
- Pavers in the body of the pavement laid directly onto hardened concrete base. Pavers are laid with a 1-2mm gap between units.
- Sand/cement slurry is swept and washed over pavement to fill voids around pavers.
- Excess slurry is removed from pavement surface.

Construction Details

1. Excavation:

The site should be excavated in a manner to allow the sub grade to be self draining. If fill is required to bring finished heights to desired levels it should be a granular fill of road base quality or similar to allow for good compaction.

2. Concrete base

The following table shows the Specification for the concrete base:

RECOMMENDED CONCRETE BASE SPECIFICATION FOR LIGHT TRAFFIC APPLICATIONS

Site Classes	Minimum Slab Thickness	Minimum Concrete Grade	Minimum Reinforcing Fabric Ref No	Further Requirements
A	80	N20	SL52	Nil
S	80	N20	SL62	Compact Surface to Min 95%
M	100/80	N20	SL62/52	Compact Surface to Min 98%
H	150	N25	SL82	Provide suitable sub-base
E	150	N25	SL82	Provide suitable sub-base

Table prepared by P. Boles of Incode Pty Ltd, Queensland based Structural Engineers.

Notes: 1. Refer to AS2870.1 Table 2.1 for description of various site conditions. 2. Refer to AS3798 for the preparation of the sub grade. 3. Provide the appropriate construction and control joints to minimise the effect of concrete shrinkage to the system.

- Flexible expansion material should be used in all joints to existing structures.
- All finished heights and profiles should adhere to relevant local authority requirements.
- All levels should provide run off.
- The final surface finish should be completed by a bull float and a final steel finish.
- Use of an edging tool is not required.

3. Paver Installation

Laying of pavers can commence once the concrete has hardened.

Pavers are laid in the main body of the pavement directly onto the hardened concrete base with a 1 to 2mm gap, using the desired laying pattern. For light vehicular applications 45° herringbone laying pattern is recommended. The table below shows the specification for pavers.

MINIMUM SPECIFICATION REQUIREMENTS FOR CLAY PAVERS

Intended application	Minimum Nominal thickness (mm)	Minimum Characteristic breaking load (kN)	Dimensional Category	Minimum Pendulum test result (BPN)
Vehicular (Axle loads 2.7t)	40	3	DPA2	50
Pedestrian only	40	2	DPO	No requirement

A header course of pavers is laid around the perimeter of the pavement. The header course is bonded to the concrete base using a commercial grade exterior use tile adhesive. This prevents the lateral displacement of the pavers within the perimeter. Pavers are to be laid without point contact between adjacent units.

Pave control joints are required to accommodate paver growth and thermal movements in the pavement. Pavers on either side of control joints should be bonded to the concrete base with flexible commercial grade exterior use tile adhesive similar to the perimeter header course.

Control joints shall be:

- inserted at 10m intervals,
- inserted at abutments to fixtures such as walls or fence posts,
- 10mm wide, rectangular in cross section, free of foreign matter,
- filled with compressible material.

4. Slurry Installation

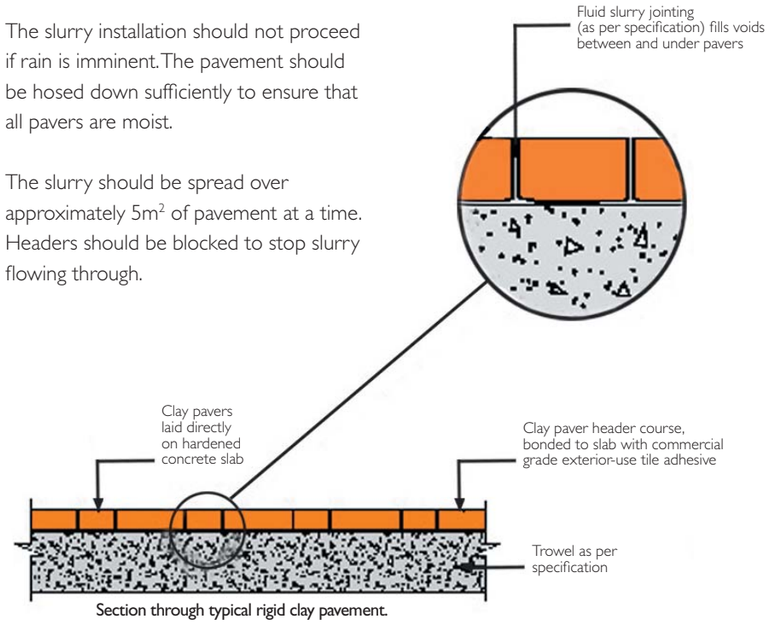
The slurry shall comprise 1 part GP cement to 2 parts sand. Water shall be added such that the slurry will flow.

The sand shall conform to the following grading:

Sieve Size	Cumulative Percent Passing
1.18 mm	95 - 100
600 microns	85 - 100
300 microns	30 - 95
150 microns	0 - 30
75 microns	0 - 10

The slurry installation should not proceed if rain is imminent. The pavement should be hosed down sufficiently to ensure that all pavers are moist.

The slurry should be spread over approximately 5m^2 of pavement at a time. Headers should be blocked to stop slurry flowing through.



Section through typical rigid clay pavement.