

REMOVING TANNIN BLEED (LEACHING STAINS) – FROM GRC PLANTERS & GRC STREET FURNITURE

■ What is Tannin Bleed?

Wood is a natural material that contains a variety of different water-soluble substances which are technically called extractives and one type of these is polyphenols or tannins. These tannins contribute to the natural colour of the wood and when the timber is wet, they can dissolve and leach. If the leached tannins drip onto a concrete surface, the tannin will react with the concrete's alkaline surface to form an unsightly red/brown stain. This stain is called tannin leaching.

■ How to Remove Tannin Bleeding

Tannin bleeding is generally easy to remove from GRC products. However, the removal process will often also remove any sealant that had previously been applied to the GRC surface. Therefore, once the tannin leaching has been removed, an appropriate concrete sealant will also need to be applied to the cleaned surface.

Materials required:

- A bucket
- A soft brush
- Access to plenty of water
- CUTEK Restore – this is a cleaning agent that can be used on concrete surfaces and is easily found in hardware stores.

Steps required to remove tannin Bleeding (Leaching): -

- a. Ensure the area with the bleeding stain is dry and clear of any dirt, loose concrete, or glass fibres.
- b. Wet the stained area.

- c. Mix a solution of 10% "CUTEK Restore" and 90% water in a bucket.
- d. As a precautionary measure to test the effectiveness of the solution, initially use the solution on a small portion of the stained area. Preferably this should be an area that is normally less visible e.g., the back or side of the GRC product. Only leave the solution on the surface until the stain diminishes. Then wash the area with clean water and a soft brush.
- e. Once you are happy with the test result, apply the solution to the rest of the stained area.
- f. Do not leave with the intention of coming back later. Different types of tannin and different amounts of staining require different amounts of time for the solution to do the job. However, you do not want the solution to be left on the GRC surface too long because it could damage the surface.

■ Replacement of External Sealant

The process of removing tannin bleed stain from GRC products will also remove their external sealant. However, the external sealant is important in avoiding freeze/thaw cracking and moss or algae build up on the planter surface. Therefore, it is recommended that the planters should be re-sealed after removal of the tannin bleed stain with one of the following sealants: -

- "SureSeal Ezy-As 1-2-3" or,
- "SureSeal Graffiti Seal" if the planters have been externally sealed with a graffiti protecting sealant.

■ Addressing the Cause of Tannin Bleeding

Since tannin is one of woods natural integrated substances that contribute to its natural look and appeal, it is not practical to completely eradicate the tannin from wood. Therefore, there is always going to be some tannin bleeding when GRC benches have natural timber tops. However, it is possible to minimise this issue by using pre-weathered timber.

Satu Bumi typically uses either Teak or Blackbutt timber for the timber elements of its benches and other street furniture. All this timber is typically pre-weathered before and after the application of a high quality wood protection system which will minimise tannin bleeding but not eliminate it.

Therefore, the removal tannin bleeding should be built into the maintenance plan for the timber tops used on all GRC products. This requirement will reduce over a relatively short period of time but will ensure the products remain aesthetically pleasing.

■ Disclaimer

The information in this document is provided in good faith. However, Satu Bumi assumes no responsibility for the results of the practical application of this information unless the application is provided directly by Satu Bumi employees or parties contracted directly by Satu Bumi.

sales@satubumi.com.au
+61 (03) 5292 1001
satubumi.com.au

Last edited: 12th of May, 2023