

MATERIAL SEALER "原 材 寶"

Basic Working Principle

It is believed that you must have come across so many renowned buildings in town, which are covered by beautiful marbles or granites. The masonry is inevitably with water stains appearing on its surface. To remove these water stains is practically difficult and costly. To replace the moisten masonry costs much more. The masonry will be impaired by the ingression water and eventually lost its beauty. All these problems on masonry can be completely solved by the hi-tech product Material Sealer before the masonry are laid.



Material Sealer is a high performance masonry protector. The constituents in the product react chemically with the carbon dioxide in the air forming an insoluble resin to protect the masonry surface. The complete chemical reaction takes about 24 hours. Besides that, the **Material Sealer** can penetrate into the masonry substrate to a certain extent, depend solely upon the surface porosity of the substrate. The ultimate goal is that the treated masonry can be protected forever once it's been treated.

Owing to the simple application and high protection performance, this product has been widely accepted by the end-users. Its application is so wide that it can be used in industry, commercial and residential.

Material Sealer is a water repellent, non-flammable, water-based and non-toxic. The method of application is so simple, you only need to use a sponge (or sprayer depending on the working circumstances) rubbing it on any masonry surface, wait until the surface is completely dried. Then the function of waterproofing, moisture barrier and anti-rotten exists. **Material Sealer** will not alter the colour of the masonry, structure and other physical properties. In fact after the **Material Sealer** treatment, the masonry surface is more clear and cleaner (voids being sealed off) and with the glamorous natural finish.

Examples of use

Sandstone	Granite	Marble
Fish hatcheries	Paving stones/bricks	All bricks (e.g. red, YTONG etc.)
Factory/plant flooring	Granaries and Patios	Gas/oil service stations
Asphalt roofing surface	Cindercrete block	Brick buildings without rendering
Garage pad	Asphalt shingles	Concrete buildings
Pools	Driveways	Sewage plants



As a surface treatment product, **Material Sealer** has the following general applications:

- All bricks (e.g. red, grey, green, YTONG, lightweight etc.) after treated by Material Sealer, will immediate be waterproofed as well as reduced its water absorbility.
- For pedestrian pavement, sidewalk or driveway, Material Sealer can prolong its durability. The main reason is because the freeze-thaw effect has been greatly minimized. For driveways with heavy traffic, if the water repellency effect is to be maintained in high degree, it should be treated again at a certain time interval.
- For the processing of natural masonry such as limestone, sandstone, pre-casted and ceramics,
 Material Sealer can stop the white alkaline coming out from the masonry surface. Also it can improve the weatherability of the masonry
- For roofing asphalt materials after treated by the **Material Sealer**, the asphalt surface can become stain resistance, as well as to improve the adhesion between the floor tiles and the asphalt.
- Material Sealer can absorb the natural mineral such as Perlite to reduce the water absorbility of the substrate
- Material Sealer can behave as a moisture barrier by sealing off the concrete surface, gloss-surface tiles or decorative tiles etc. so that the moisture cannot penetrate through the voids on their surfaces.

Advantages & Function

- For general applications on masonry, brick, pavement etc., one application will be sufficient.
- Material Sealer will not alter the colour of the treating substrate as well as its texture. It will also not alter the physical properties of the substrate.
- After the **Material Sealer** treatment, water and moisture cannot seep through the substrate. The substrate dampness is improved. By then the substrate will be mold-free and fungal-free. No pitting, rutting and dusting will be occurred on the treated surface.
- It is so simple in the method of application. No thinning is required. You may spray, brush, roll or any other form of application. To choose the best method is entirely depending on the working environment.
- Owing to the fact that there is a good water repellency ability on the treated surface, therefore this is actually improving the coefficient of friction between the walking materials (shoes, tyres etc.) and the treated surface. The degree of safety has been increased for the pedestrians and running vehicles. Experimental results indicate that the wet coefficient of friction is increased and therefore it is highly suitable for walking (Australian Standard).
- In winter conditions, the surface voids have been completely sealed off by the **Material Sealer** and therefore there will be no entrapped moisture inside. This enables the easier removal of snow and ice.
- The impermeable layer formed by the **Material Sealer** does not allow the penetration of grease, oil, acids, alkaline and salts.
- The impermeable layer of the **Material Sealer** also enables easy cleanup of spills or dirt with mild soap and water.

Coverage

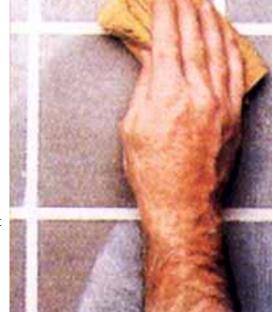
1 litre of **Material Sealer** covers 20 m² ~ 25 m² on smooth surface. (e.g. tiles, marbles, granites etc.)



Remarks on Application

- 1. Shake well before use. No thinning is required. Use as supplied.
- Chemical reaction will be taken place on some substrates such as glass, glazed surface or aluminium. Before application, cover these materials by used newspaper. The main reason is because of etching effect. In case of accidental contact, rinse thoroughly with water immediately.
- 3. For application on smooth surface, it is recommended to use a sponge for a very thin application. Do not attempt second coating. More attempts might form a layer of white crystal on the surface. If that happens, remove the residual **Material Sealer** immediately before it goes dry and hard with water or moisten cloth.
- 4. **Material Sealer** is not a grouting material or filler. It cannot be used to repair any visible cracks on the substrate surface. It is also not suitable to use on uncured or previously sealed asphalt.
- 5. **Material Sealer** is a water-based product and therefore if it was frozen thaw out completely and shake well before using. Freezing will not harm the product. For winter applications, do not apply below 5°C.
- 6. After the application for 30 minutes, walking traffic can be allowed on the substrate surface. If this can be avoided, allow the surface to be fully dry before the traffic.
- 7. All equipment can be washed and cleaned by clean water after use. No goggles and/or breathing apparatus are necessary during application process.

We strongly recommend that **Material Sealer** be applied to a small test area first.



Preparation of Surfaces

- 1. For normal surfaces and/or new concrete applications, clean by Neutra Clean solution and power wash. Leave the treating surface fully dry before **Material Sealer** treatment.
- 2. For concrete surfaces only, we recommend that a deep penetration moisture barrier such as Tru-Seal solution be applied first to aid in the bonding of **Material Sealer**.
- 3. Any surface treatment such as paint or coating (other than the Tru-Seal solution) must firstly be removed for **Material Sealer** to be effective. Remove by scraping, grinding and/or apply suitable coating removers.

NOTE: While the harmful oil residue will be removed, stains from used motor oil may be permanent.

- 4. For normal application, use a sponge to rub lightly on smooth surfaces. This method is also suitable for dark colour substrate surfaces. For light colour and rough surfaces, spraying or brushing/rolling could be more suitable.
- 5. Allow the **Material Sealer** to be air-dried about 30 mins. The surface can then be water-tested.
- 6. Clean up equipment with water.



原材寶--(原材料保護液)

產品原理和簡介

原材寶是一種高效能之原材料防護液。產品中之化學物,跟空氣中之二氧化碳結合, 形成一種不溶於水的樹脂,整個變化在24小時內完成。此外,<mark>原材寶並能滲入石材、水泥</mark> 燒面之磁磚、磁磚縫、陶瓦、矽酸鈣板、石膏板、磚塊、混凝土、天然石塊、加工石材、 石雕、洗石、抿石、塹石等人行步道、停車層板等各種材質,滲透深度視乎其材質表面密 度之孔隙率而定。

原材寶是一種抗水劑,不助燃,水溶性和無毒。應用方法異常簡單,只需用海棉(或噴霧器)塗上處理面,待表面全乾後便能防止石材等各種材質滲漏,防潮和防腐。原材寶也不會改變石材之顏色,組織和其他特性。使用後表面更鮮明清澈,具有天然石材之光澤。

相信閣下途經很多著名建築,皆有發現極多之昂貴大理石,石材等都出現水印,要清除該水印頗困難,但更換則會花費不菲。這問題全部可以在大理石或石材在舖砌前接受**原材實**處理後便可解決。

作爲一種表面處理物料,原材寶具有以下一般用途:

- * 所有磚塊(紅磚,砂磚,青磚,YTONG,輕砂磚等)經處理後,皆會增加其防水功能,兼 且減少其吸水性。
- * 在行人路面或車道上,處理了**原材寶**後可增加其耐用性,主要原因是減低了凍溶影響。 在多車之路面。
- * 在製造或生產天然石材,例如石灰石(Limestone),砂岩(Sandstone),預製件(Precast)和瓷塊(Ceramics),經**原材寶**處理其表面後可減低白堊暴露於表面,更加增強石材受天氣變化之影響。
- * 天面之磚塊瀝青等材料,受了原材寶之處理後,表面能增強其抗污漬能力,兼且改善了磚塊和瀝青之聯結性。
- * 可增強吸收天然礦物組合(例如 Perlite),來減低材質之吸水性。
- * 混凝土塊,光面或裝飾面瓷磚等,經處理後材面被封閉,藉以阻擋水氣穿透。

優點及功能

- * 對一般石/磚材,或行人路面,只需處理一次。
- * 不影響處理面之顏色和結構,也不影響其材質物理性能。
- * 經原材寶處理後,水和水氣不能穿透,故此達到防霉和細菌滋生。
- * 施工絕對容易,不用稀釋。用噴,抹,掃或任何方式施工均可。施工方法要視乎施工 環境來取決。



* 由於材面之防水功能改善,故此也改善了磨擦系數,對行人和行車之安全提高。

施工程序

- 1. 處理面必須乾淨,無砂塵和砂礫,假若表面有污漬或油脂,要先噴上清油劑(例如:超力 寶 Pro-Cleaner),在 30 分鐘後用清水沖淨。
- 2. **等待處理面完全乾燥**。施工環境絕對會影響其乾燥時間。故此可用電風扇或鼓風機改善環境。此外,施工時應盡量安排勿在猛烈太陽下,皆因蒸發率較滲透率爲快,效果不佳。戶外施工可安排早上或晚上清涼時才做。
- 3. 施工時可採用噴霧或塗抹方式。在混凝土面一般皆採用噴霧法。於平面(或光滑)石材, 採用硬海棉在表面塗抹便可
- 4. 完成施工後,等待30分鐘(視乎環境情況),處理面便自然風乾。
- 5. 如放少量清水於其表面觀察,可見到非常漂亮之水珠浮在表面,這表示抗水層已完成, 原材寶已發揮其作用,但化學反應全部停止則需 24 小時。該水珠現像並不是檢定之標 準,日後它表面張力會受磨擦而減弱。

技術指引

- 1. 使用前請先搖勻。
- 2. 原材寶爲一化工產品。配方已調好,不需要任何稀釋或混合其他物品使用
- 3. 本產品不是填充劑,不可以用來填充或密封肉眼可見之材面裂紋。
- 4. 假若**原材寶**使用太多,而停留在石材表面,會留下白色膠狀晶體。一旦此情況出現, 可在其未變硬前用清水洗掉。
- 5. 此產品爲水性,故此施工要在5℃以上。如結冰時,可待溶解後再搖勻才使用,其性能 自會回復。
- 6. 在施工後約30分鐘時間,可以在施工面行走。如可避免的話,待其全面乾涸才行走。
- 7. 所有施工設備,在施工完畢後用清水洗淨。施工時不用用帶眼罩,呼吸器等輔助設備。

備註

- 1. 本產品不適用於玻璃或鋁容器儲存,皆因會有侵蝕現像。
- 2. 施工時若接觸了玻璃或鋁表面,待產品未乾前用清水沖洗。