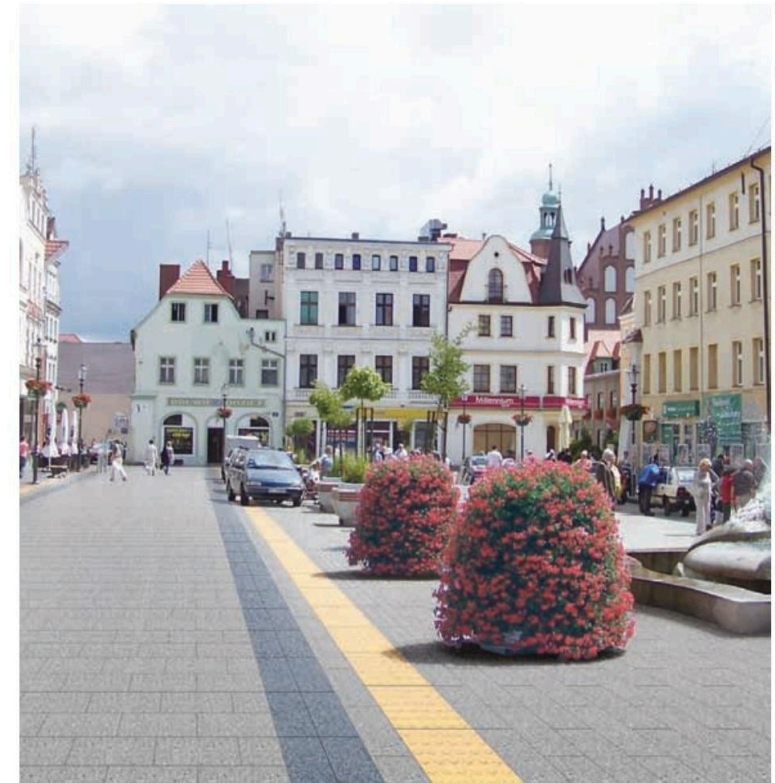


**MAKE SPONGE  
CITIES COME TRUE**



**MONTILE SDN BHD**  
NO.4, Jalan TSB 3,  
Taman Industri Sungai Buloh,  
47000 Sungai Buloh, Selangor.  
Tel : +603 6150 6307

**MONTILE** 



功能特点 | Functional characteristics

CONTROL OF THE TOTAL AMOUNT OF RAINWATER RUNOFF

对雨水径流总量的控制

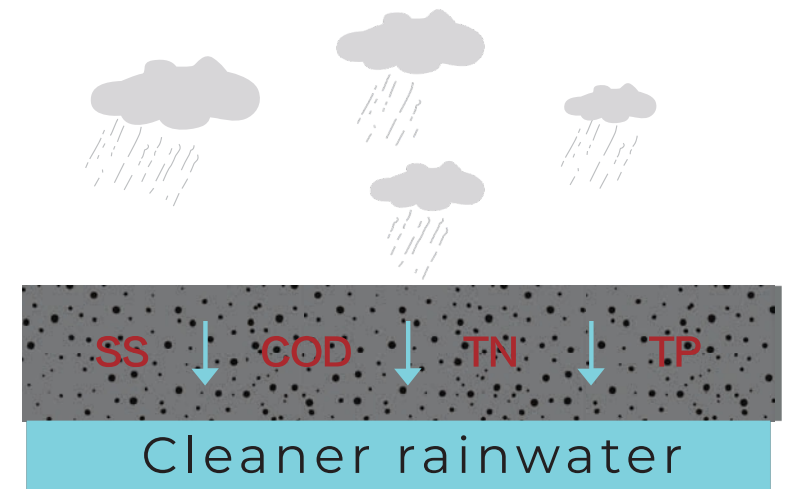
Compared with the impervious road, it uses pervious pavement which allows rainwater to quickly penetrate the surface, so as to delay the surface runoff time and reduce the total runoff. As the porosity of the product is large, its water permeability effect rate can reach 20mm / s or more, capable of coping with 60mm / h rainfall.



Functional characteristics | 功能特点  
CONTROL OF RAINWATER RUNOFF POLLUTION  
对雨水径流污染的控制



The permeable pavement has a large porosity, capable of filtering and adsorbing the infiltration of rainwater, and it has a certain effect of removing the SS [1], COD [2], TN [3], TP [4] in waste water. These features enable the permeable road surface to have higher capability of controlling rainwater runoff pollution, reducing the degree of early rain pollution.



Schematic diagram of how permeable bricks filter and absorb pollutants in rainwater

[1] SS: suspended solid, meaning the concentration of suspended solid, in mg/L

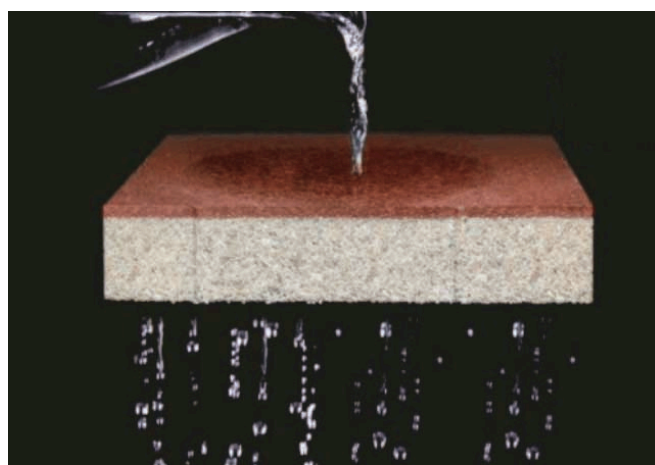
[2] COD: Chemical oxygen demand, refers to the content of reducing substances in water include various organic substances nitrites, sulfides and ferrous salts.

[3] TN: Total nitrogen content, which includes all nitrogen containing compound in the solution, namely nitrite nitrogen, inorganic salt nitrogen, dissolved nitrogen and most organic nitrogen containing compounds.



功能特点 | Functional characteristics  
**GROUNDWATER REPLENISHMENT AND RAINWATER PURIFICATION**  
**地下水的补充及雨水净化**

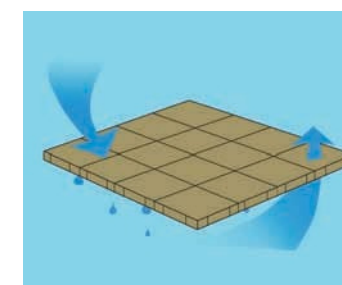
Rainfall is the main source of groundwater. Impervious water pavement blocks the infiltration of rainwater, as a result the groundwater cannot be effectively replenished and it causes the groundwater level to drop down; meanwhile, through the drainage system, the road surface runoff carries a large number of pollutants into the natural water, increasing environmental pollution problems. The osmotic structure of pervious pavement can purify the surface water before it is delivered into the groundwater soil, which not only maintains the stability of the groundwater level, but also ensures the safety quality of groundwater.



Functional characteristics | 功能特点  
**WEAKEN THE CITY "HEAT ISLAND EFFECT" AND "HEAT DRYING PHENOMENON"**  
**减弱城市“热岛效应”和“热干化现象”**

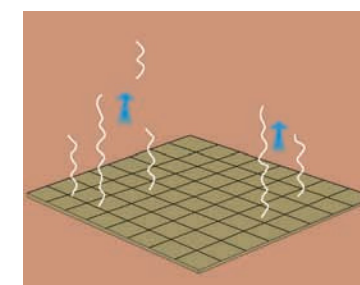


After solar radiation, impervious pavement will retain and reflect a lot of solar energy, which exacerbates the city "heat island effect". At the same time as the surface humidity and evaporation decrease, the air is increasingly dry, resulting in the city "hot drying phenomenon". Pervious pavement has the porous structure. After being irradiated by the sun, the capillary water in the soil can be transported out of the ground surface through transpiration, carrying away a lot of heat and reducing the surface humidity. Meanwhile, the water vapor generated through this process increases the air humidity, reducing the dust and haze above the ground, which effectively reduces the city "heat island effect" and "hot drying phenomenon".



**CLERAIN Technology**  
**ecological ceramic permeable brick**

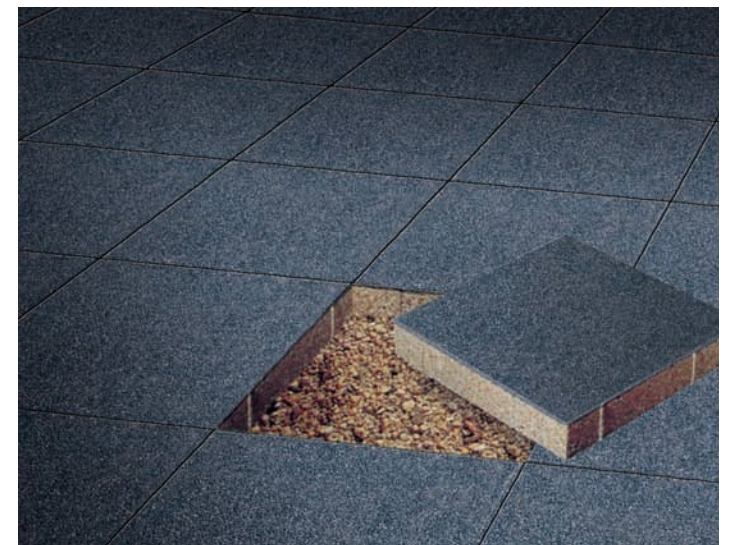
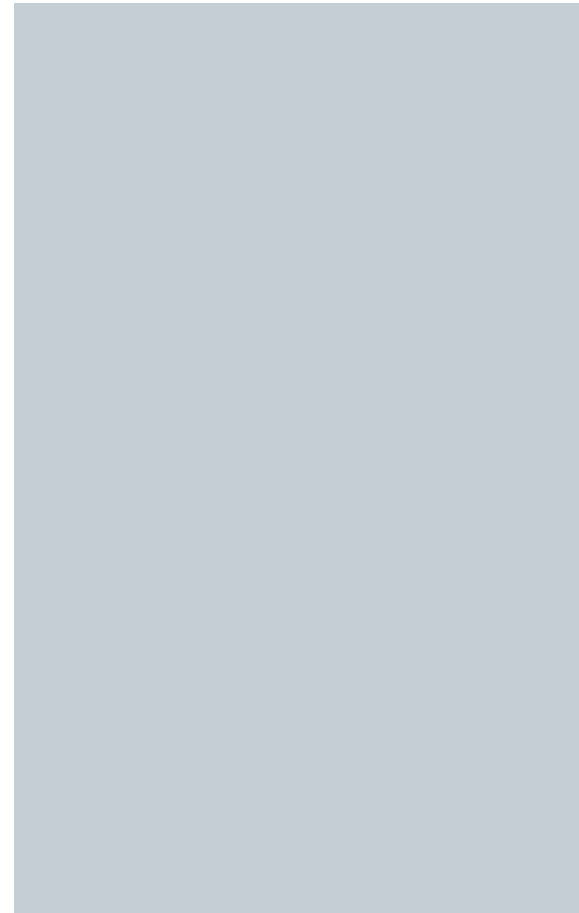
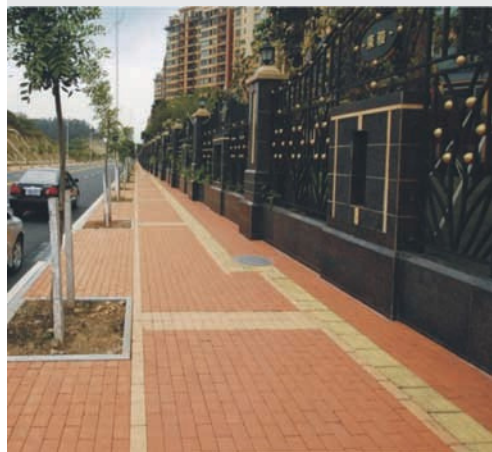
CRET Technology ecological ceramic permeable brick, Reduces ambient temperature, Restores natural water storage capacity to prevent groundwater depletion, and Improves the living environment of vegetation. Regulates the humidity of the atmosphere, purifies the air, and restores the water circulation system above the ground.



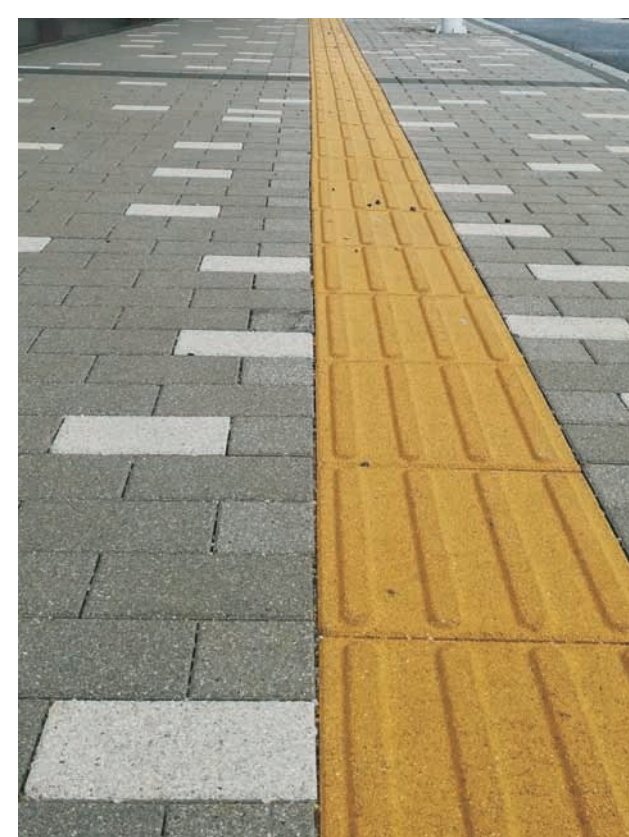
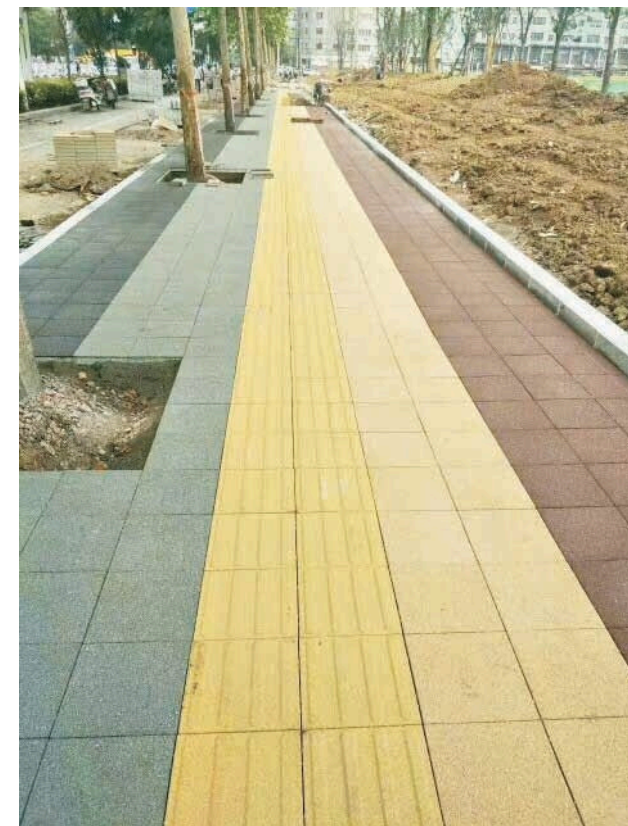
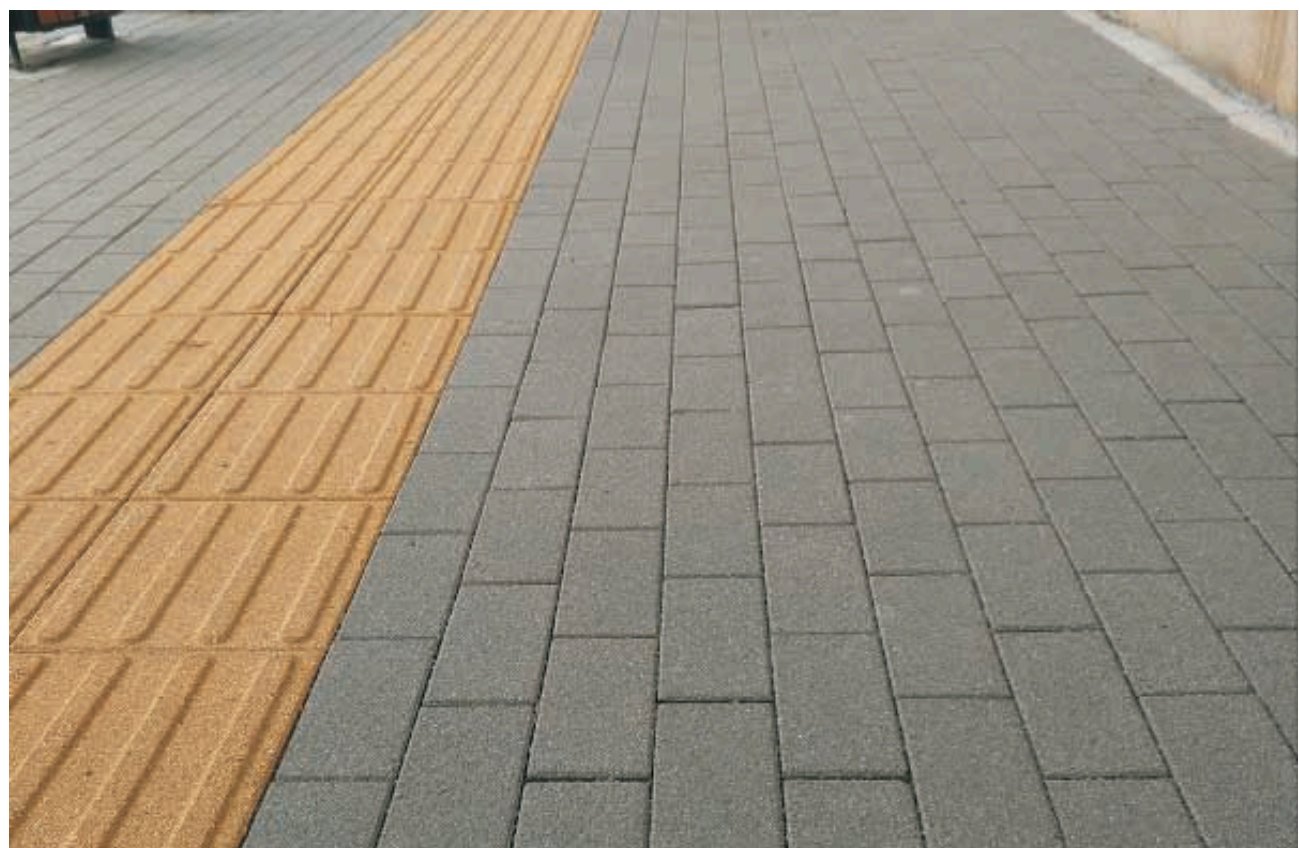
**Ordinary square brick**

Massive surface water loss, Resulting in waterlogging, Temperature unable to be reduced above the ground, Blocks the ground and makes the city hot.

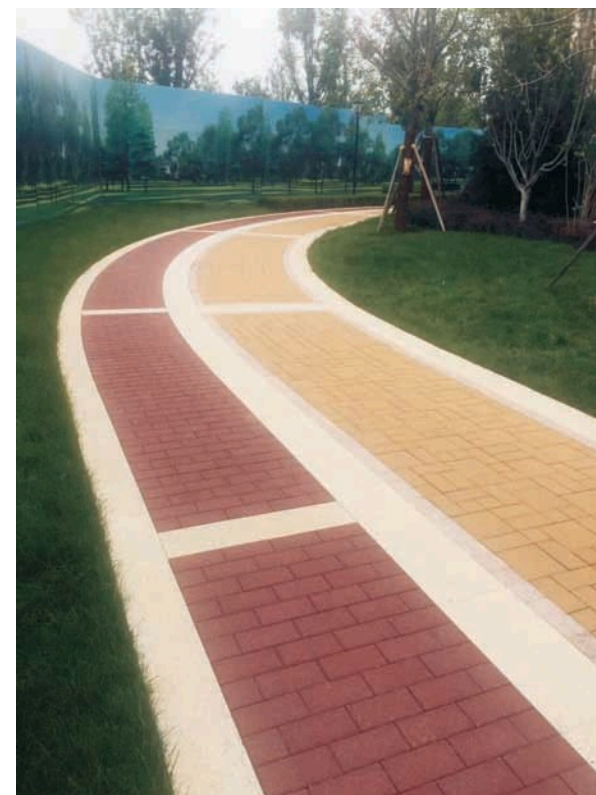
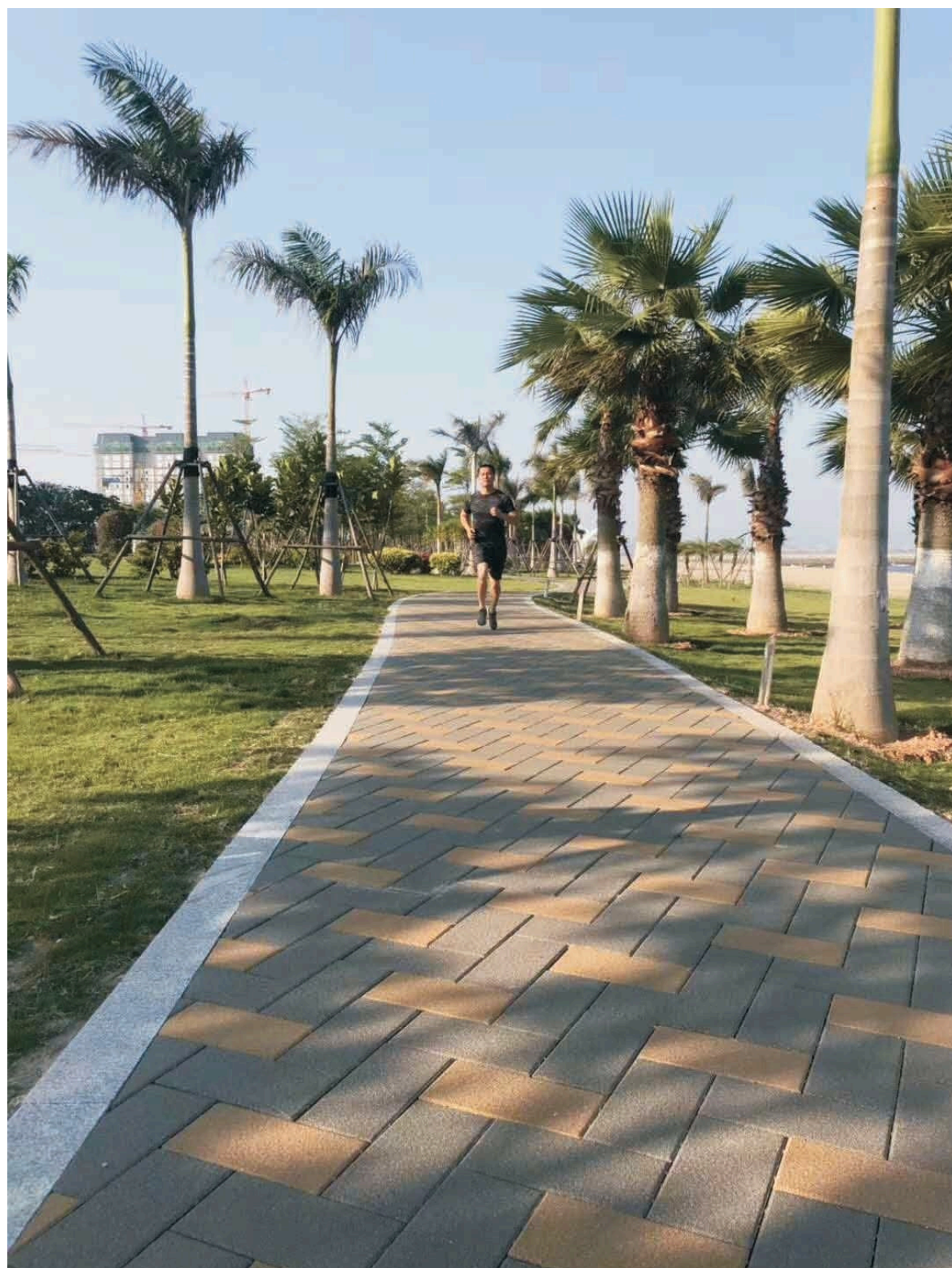
The smooth hard ground surface causes glare phenomenon due to directional reflection. Impounded surface water also generates this phenomenon, which might cause traffic accidents when irradiated by car headlights at night. By virtue of its large porosity structure, pervious pavement reduces the ground water impound situation, prevents the glare problem, and provides an ideal driving environment. Pervious pavement also has the ability to absorb noise, creating a quieter and more comfortable urban environment.



# ► Pedestrian Walkway



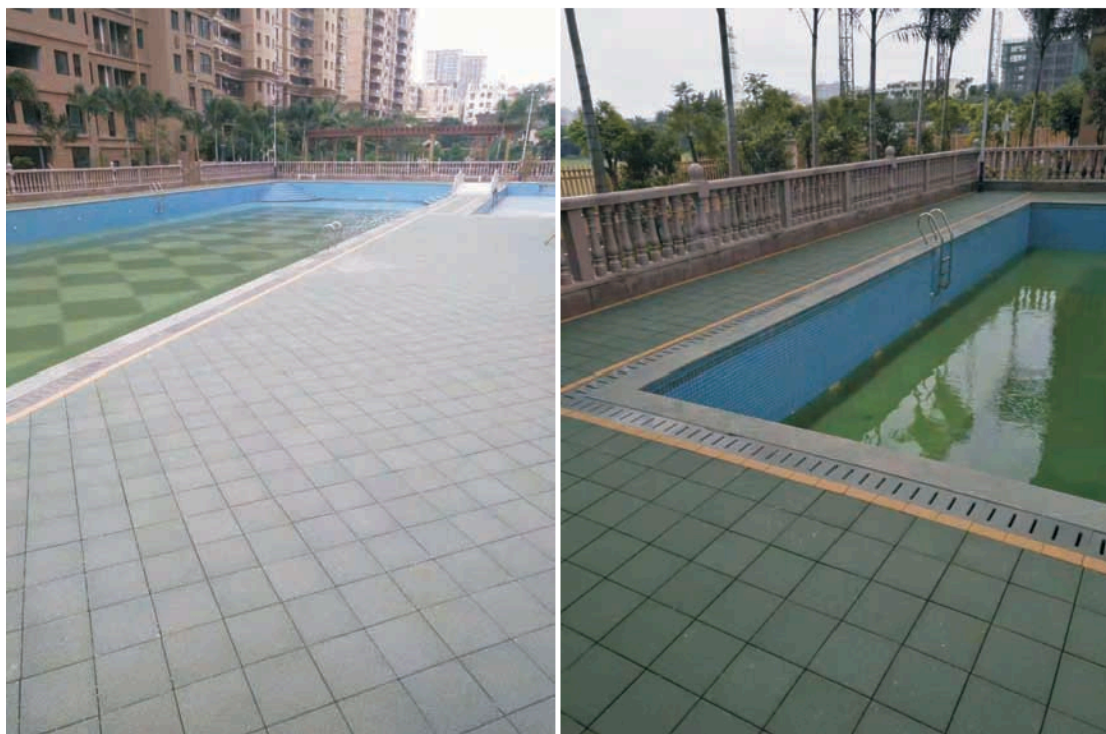
## ► Park Pathway



► Public Square



## ► Poolside



## ► Parking Lot





CR-002



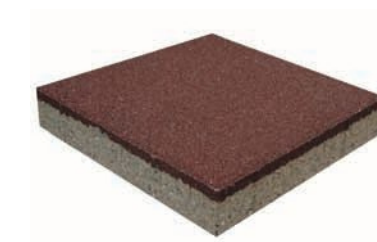
CR-003



CR-004



CR-005



CR-007



CR-009



CR-013 (WARNING)



CR-014 (DIRECTIONAL)

corresponding colour of all the regular size

Size (mm)	weight / pc (kg)	( m <sup>2</sup> )	( tier / pallet )	( m <sup>2</sup> / pallet )	( kg / pallet )
600*300*55	17.8	0.18	3	15.12	1512
300*300*55	8.92	0.09	15	14.58	1458
300*150*55	4.57	0.045	15	14.58	1458
400*200*55	7.81	0.08	15	18.24	1824
200*200*55	3.9	0.04	18	15	1500
200*100*55	1.89	0.02	15	15	1500

(items of products & corresponding colours)

CR-001 (original)	CR-002 (white)	CR-003 (grey)	CR-004 (dark grey)
CR-005 (red)	CR-006 (red brown)	CR-007 (india red)	CR-008 (blue)
CR-009 (yellow)	CR-010 (coffee)	CR-013 (WARNING) (yellow)	CR-013 (DIRECTIONAL) (yellow)

SIZE:

- 100\*100\*55mm
- 200\*200\*55mm
- 300\*150\*55mm
- 200\*100\*55mm
- 400\*200\*55mm
- 600\*300\*55mm
- 400\*400\*55mm

## Technical Parameters

technical index type	technical index parameter and performance	GB/T25993 -2010) international grade
permeation coefficient	permeation coefficient $\geq 2.0 \times 10^{-2}$ cm/s	grade A qualified
permeation rate kg/ (h.m <sup>2</sup> )	$\geq 800$ kg/ (h.m <sup>2</sup> )	grade A qualified
compressive strength (Mpa)	between C40-C50	Rf4.5 qualified
breaking strength (Mpa)	6-9Mpa	Rf4.5 qualified
freeze-thaw resistance The freezing-thawing cycle in hot summer and cold winter areas 25 times.	single block quality loss rates $\leq 5\%$ Depth of loss after freezing $\leq 5$ mm Appearance compound requirement	grade A qualified
	Strength loss rate $\leq 20\%$	grade A qualified
wear-resisting performance (mm)	milling pit length $\leq 35$	grade A qualified
non-slip value (BPN)	$\leq 60$	grade A qualified
water retention (G/cm <sup>3</sup> )	$\geq 0.18$	
density	1830kg/m <sup>3</sup>	
resistance to weathering	resistance to weathering no fade	
corrosion	resistance to acid and alkali	
Environmental protection	The raw material of the product is the waste ceramics (it belongs to the solid waste and recycle economy), the finished products don't contain heavy metal, or there is no harm to the environmnet or human body.	
products diversity	The specifications are varied, the colors are rich and natural.	
Process characteristics	High pressure molding, high temperature porcelain, clean energy.	

## General Construction

Ecological ceramic permeable brick construction convenience

The construction method of ecological ceramic permeable brick is the same as the interlocking brick construction method in principle.

