



StyleSetts Traffic Calming Solutions



STYLESEAL

Covering New Ground

For more information call our Technical Team on

01536 267172

www.styleseal.co.uk

Why Choose Stylesetts?

Why Choose Stylesetts?

Stylesetts from Styleseal Ltd are the modern day, ideal alternative to traditional granite setts.

The main advantages of Stylesetts being:

Quick to apply

Quick to open to traffic

The primary benefit of Stylesetts is their speed of application compared with traditional methods. Less disruption to traffic – less disruption to local businesses – less disruption full stop!

- StyleSetts are designed to withstand modern day trafficking and flex with movement in the substrate.
- StyleSetts are aesthetically pleasing and fit with a variety of different applications.
- StyleSetts are surface mounted onto bituminous or concrete surfaces – No excavation required.
- StyleSetts reduce inconvenience to road users, with most sections being possible to complete and open to traffic in under a day.
- StyleSetts have an improved Skid Resistance Value compared with traditional granite setts.
- StyleSetts accurately replicate the look of granite setts with a wide variety of shapes available.
- StyleSetts are lightweight and easy to handle.
- StyleSetts are hand applied and have no requirement for heavy or purpose built installation equipment.
- StyleSetts can be easily re-instated in the event of utility trench works being required.



STYLESEAL

Covering New Ground

For more information call our Technical Team on

01536 267172

www.styleseal.co.uk

Stylesett Placement Rumble Strips

Stylesetts offer a rapid, durable and aesthetic solution to Rumble Strips design

Stylesetts are surface mounted onto any existing bituminous or concrete surface and have been designed to withstand the weight of trafficking from delivery vehicles and buses in town and city centres making them the ideal solution to provide decorative rumble strips with a tactile vibration.

The Stylesett range includes a selection of chamfered edged Stylesetts allowing vehicles smooth passage both onto and off the rumble strip whilst eliminating pedestrian trip hazards.

Stylesetts can be sold either as individual setts or in specific installation packs. Our rumble strip package comes in either the single lane 3.5m long x 0.47m deep or for full carriageway width rumble strips 7.0m long x 0.47m deep.



STYLESEAL

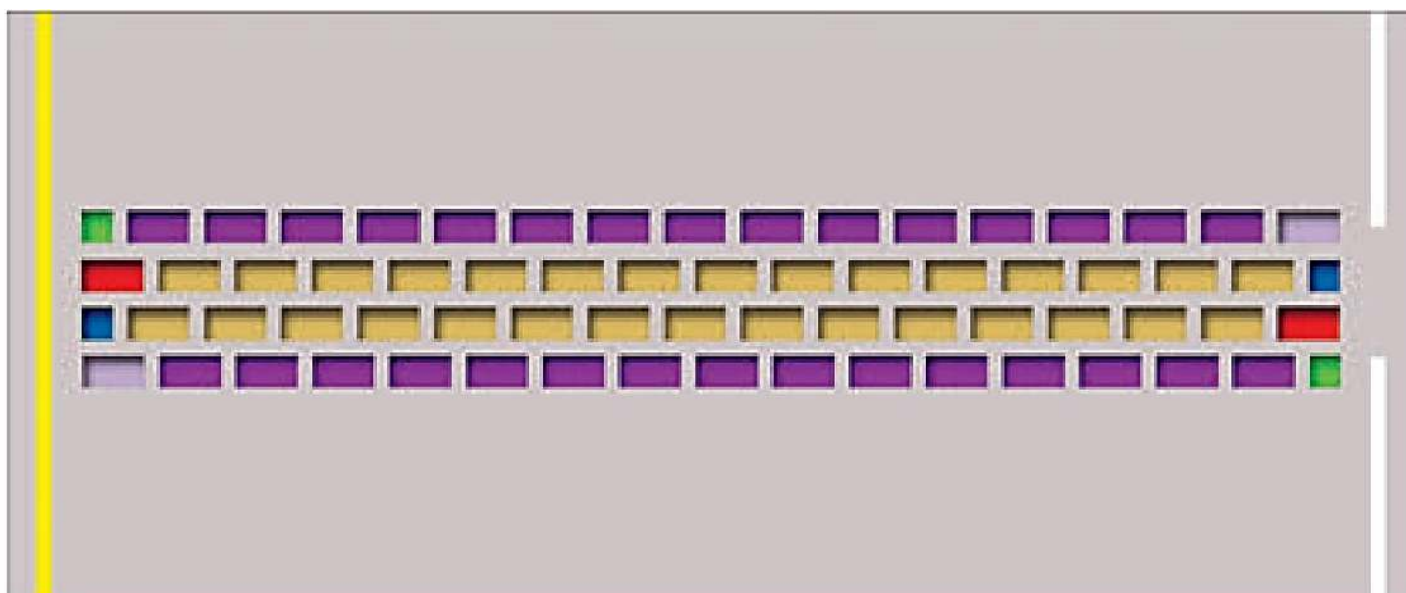
Covering New Ground

For more information call our Technical Team on

01536 267172

www.styleseal.co.uk

Stylesett 3.5x0.45m Rumble Strip



Rectangle Long Edge Chamfer



Rectangle



Rectangle Corner Chamfer High Top Right



Square Chamfer



Rectangle Short Edge Chamfer



Square Corner Chamfer



STYLESEAL

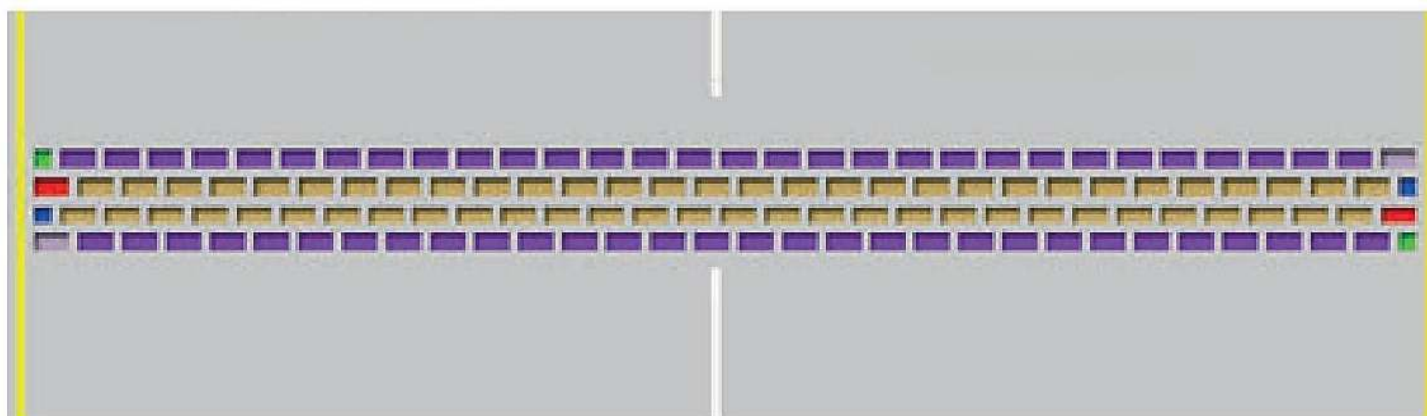
Covering New Ground

For more information call our Technical Team on

01536 267172

www.styleseal.co.uk

Stylesett 7m x 0.47m Rumble Strip



Rectangle Long Edge Chamfer



Rectangle Corner Chamfer High Top Right



Rectangle Short Edge Chamfer



Rectangle



Square Chamfer



Square Corner Chamfer



STYLESEAL

Covering New Ground

For more information call our Technical Team on

01536 267172

www.styleseal.co.uk



Stylesett Placement Speed Tables

Stylesetts the durable attractive option for Speed Tables.

The use of speed tables on our highways has been proven as an effective tool to slow vehicle speeds in high density pedestrian areas. Historically, paving materials such as block paving have been used to create these areas resulting in lengthy traffic delays owing to the laying and preparation times. Additionally minimum heights required by the nature of materials used can lead to damage to vehicles and complaints of excessive noise levels

Stylesetts offer highway designers the option of a natural stone effect finish which is in keeping with heritage areas whilst satisfying local business by keeping traffic delays to an absolute minimum as there is no need to recess the setts. They are also only approx. 20mm tall so potential damage to vehicles is significantly limited.

Our range of chamfered edged Stylesetts allowing vehicles smooth passage both onto and off the speed table whilst eliminating pedestrian trip hazards. Stylesetts can be sold either as individual setts or in specific installation packs. Our speed table package comes in either the narrow lane 1.35m wide x 2.1m long or for wider speed tables 1.9m wide x 3.10m long.



STYLESEAL

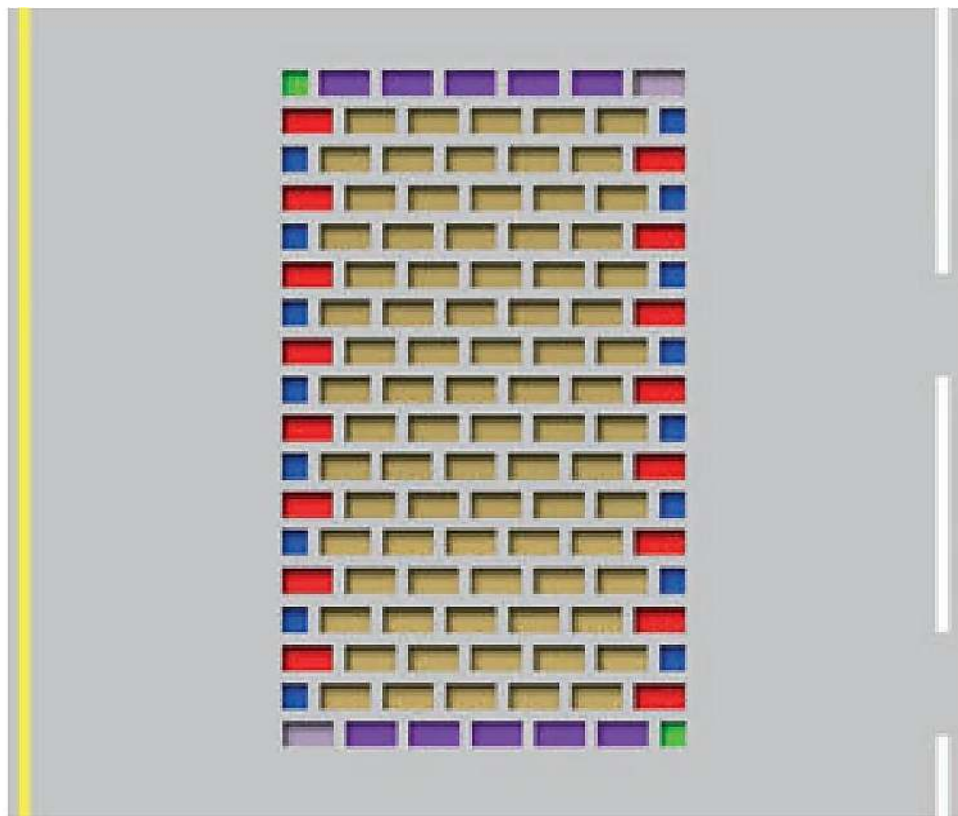
Covering New Ground

For more information call our Technical Team on

01536 267172

www.styleseal.co.uk

Stylesett Placement Narrow Speed Table



Rectangle Long Edge Chamfer



Rectangle



Rectangle Corner Chamfer High Top Right



Square Chamfer



Rectangle Short Edge Chamfer



Square Corner Chamfer



STYLESEAL

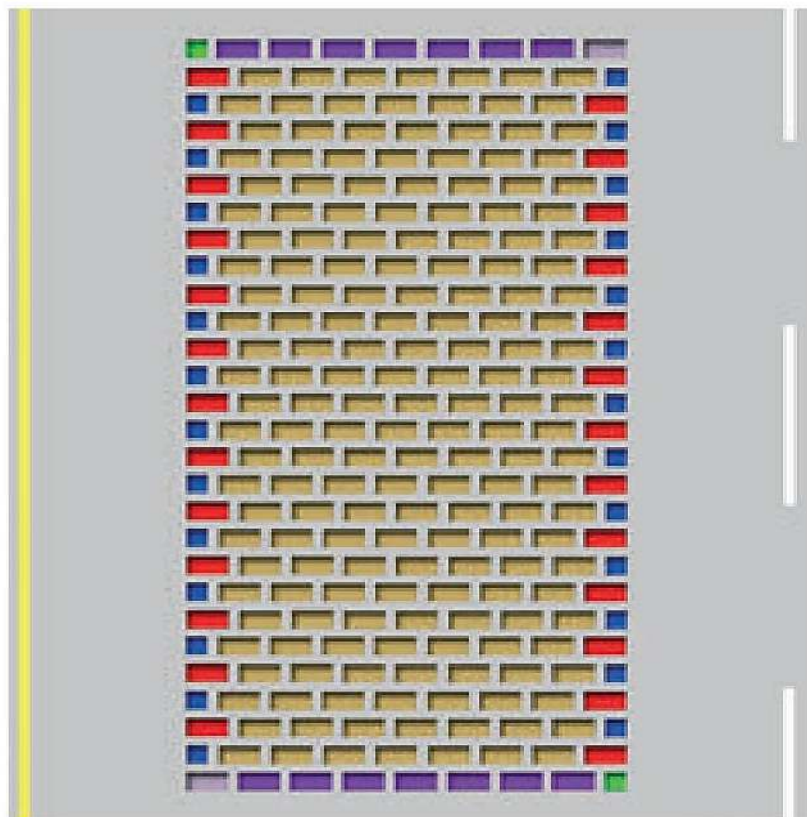
Covering New Ground

For more information call our Technical Team on

01536 267172

www.styleseal.co.uk

Stylesett Placement Wide Speed Table



Rectangle Long Edge Chamfer



Rectangle Corner Chamfer High Top Right



Rectangle Short Edge Chamfer



Rectangle



Square Chamfer



Square Corner Chamfer



STYLESEAL

Covering New Ground

For more information call our Technical Team on

01536 267172

www.styleseal.co.uk

Slip / skid resistance of Quicksett resin bound granite setts

1.0 Introduction

Client: **StyleSeal Ltd**

Report No. TTR / 12 / 1366

Thameside Test & Research Ltd was commissioned by StyleSeal Ltd to assess the slip resistance of their Stylesett resin bound granite setts.

2.0 Samples and Initial Measurements

Three types of setts were submitted:

Silver Grey Granite (40/60) comprising 40% 1 to 3 mm aggregate and 60% 2 to 5mm aggregate cast in resin.

Silver Grey Granite (60/40) comprising 60% 1 to 3 mm aggregate and 40% 2 to 5mm aggregate cast in resin.

Silver Grey Granite Bauxite as the 60/40 with a small quantity of 1 to 3mm Guyanan Calcined Bauxite incorporated in the wearing surface.

All three types had been sandblasted after casting to remove the encapsulating resin and expose the aggregate.

The three types were tested for slip resistance as supplied and then subjected to an accelerated polishing procedure to assess the in-service slip resistance.

3.0

Test Methods

The initial skid resistance value (SRV) was determined using the method described in BS 7932:2003. The specimens were then subjected to the accelerated polishing procedure in which the test specimens are placed wearing surface downwards on a standard rubber annulus, mounted on a cast iron lap. The specimens are loaded so that the contact stress under the specimens is $(2276 \pm 10) \text{N/m}^2$. The lap is rotated at $(29 \pm 1) \text{rpm}$ and a mixture of emery abrasive and water fed between the loaded specimen and the rubber annulus. A coarse emery abrasive is used for the first 700 revolutions, after which the specimens and the rubber annulus are washed clean and a further 700 revolutions are carried out using a fine emery abrasive. At the end of this second cycle, the specimens are removed, washed clean and the (polished) skid resistance value determined.

The apparatus is illustrated at Figure 1.

Slip / skid resistance of StyleSetts resin bound granite setts

Client: **StyleSeal Ltd**

Report No. TTR / 12 / 1366



Figure 1 The accelerated polishing machine

4.0 Test Results

All SRV measurements were made in the wet condition. The test results are summarised at Table 1.

Table 1 StyleSett test results

Product	SRV Unpolished	SRV Polished
StyleSett SGG 40/60		
Specimen 1	79	45
Specimen 2	74	42
Mean	77	44
StyleSett SGG 60/40		
Specimen 1	34	45
Specimen 2	79	47
Mean	57	46
StyleSett SGG BX		
Specimen 1	76	55
Specimen 2	84	62
Specimen 3	80	55
Specimen 4	77	56
Mean	79	56

Slip / skid resistance of StyleSetts resin bound granite setts

Client: **StyleSeal Ltd**

Report No. TTR / 12 / 1366



Figure 2 StyleSett Silver Grey Granite (40/60) – After polishing



Figure 3 Stylesett Silver Grey Granite (60/40) – After polishing

Slip / skid resistance of StyleSett resin bound granite setts

Client: **StyleSeal Ltd**

Report No. TTR / 12 / 1366



Figure 4 StyleSett Silver Grey Granite (Bauxite) – After polishing

5.0 Discussion

The initial SRV is a measure of the slip resistance of a newly installed sett, however this does not take into account the effect of the setts being laid in courses on the road pavement. This would increase the volume of surface drainage paths and edges between the setts, both of which are likely to have a beneficial effect on slip resistance. These benefits would be to some degree offset by a reduced contact area and corresponding reduction in SRV. The results obtained from the accelerated polishing test simulate the in-service SRV. The polishing procedure has been designed to impart a polishing action equivalent to that caused by vehicular traffic at a level of 250 commercial vehicles per day in a straight line with no heavy braking, i.e. a value similar to that obtained on a roadstone aggregate subjected to the polished stone value (PSV) test.

The slip resistance properties of the StyleSett products are compared with typical values of other paving products at Table 2.

Slip / skid resistance of Stylesett resin bound granite setts

Client: **StyleSeal Ltd**

Table 2 Comparison of typical slip /skid resistance of paving units			
Material	Surface Finish	Unpolished SRV	Polished SRV
Concrete paver	Dry cast	60	45
Concrete flag	Vacuum pressed	62	43
Granite (new)	Sawn	37	22
Granite (new)	Flame textured	68	43
Granite (new)	Bush hammered	76	52
Granite sett (old)	Worn	n/a	15-22
Granite kerb (old)	Worn (picked)	n/a	21
Stylesett SGG BX	Sandblasted	79	57
StyleSett SGG 40/60	Sandblasted	77	44
StyleSett SGG 60/40	Sandblasted	80	46

Report No. TTR / 12 / 1366

It should be noted that granite with a sawn finish is not generally used as paving products, and is included only for comparison. The values of SRV for the worn granite products are as a result of in-service polishing and weathering, not accelerated polishing in the test apparatus.

BS EN 1342:2001 Setts of natural stone for external paving: Requirements and test methods, gives no guidance on acceptable values of SRV, due to differing national requirements.

The United Kingdom Slip Resistance Group (UKSRG) Guidelines Document September 2011, classifies SRV of between 25 and 35 as having a moderate slip potential and SRV greater than 36 as having low slip potential for pedestrian traffic.

British Standard BS 6717:2001 "Precast, unreinforced concrete paving blocks — Requirements and test methods" (now withdrawn) indicated that the slip resistance value, which was the lower value obtained from the unpolished and polished test values, should be minimum 35 for use in pedestrian areas and minimum 45 for use in vehicular areas. BS EN 1338:2003, which replaced BS 6717, gives no guidance as to minimum SRV, requiring the value to be reported and suitability to be determined by the designer.

For heavier traffic, the required polished SRV is numerically similar to the polished stone value (PSV) requirement given in Highways Agency document HD 36/06, Surfacing materials for new and maintenance construction, Table 3.1.

Using these criteria, the test results indicate that Stylesett 40/60 and Stylesett 60/40 would be suitable, in terms of slip resistance, for pedestrian use and low speed vehicular traffic.

Stylesett GUY BX would be suitable for higher speed vehicular traffic on low stress sites.

Requirements for individual sites would need to be verified by the designer.

Slip / skid resistance of Stylesett resin bound granite setts

Client: **StyleSeal Ltd**

Report No. TTR / 12 / 1366

6.0 Conclusions

The StyleSett product somewhat exceeds the skid resistance performance of worn granite products which it is intended to replace and gives test values comparable to or better than other types of modular paving.



STYLESEAL

Covering New Ground

For more information call our Technical Team on

01536 267172

www.styleseal.co.uk



Case Study

Why Choose Stylesetts?

Stylesetts from Styleseal Ltd are the modern day, ideal alternative to traditional granite setts.

The main advantages of Stylesetts being:

- Quick to apply
- Quick to open to traffic

The primary benefit of Stylesetts is their speed of application compared with traditional methods. Less disruption to traffic – less disruption to local businesses – less disruption full stop!

- StyleSetts are designed to withstand modern day trafficking and flex with movement in the substrate.
- StyleSetts are aesthetically pleasing and fit with a variety of different applications.
- StyleSetts are surface mounted onto bituminous or concrete surfaces – No excavation required.
- StyleSetts reduce inconvenience to road users, with most sections being possible to complete and open to traffic in under a day.
- StyleSetts have an improved Skid Resistance Value compared with traditional granite setts.
- StyleSetts accurately replicate the look of granite setts with a wide variety of shapes available.
- StyleSetts are lightweight and easy to handle.
- StyleSetts are hand applied and have no requirement for heavy or purpose built installation equipment.
- StyleSetts can be easily re-instated in the event of utility trench works being required.

Oxfordshire Highways



Styleseal were approached by Oxfordshire highways to provide a cost effective alternative to conventional rumble strip construction. Using its specialist knowledge of resin surface technology Styleseal proposed the Stylesett system.

A suitable location was selected by Oxfordshire highways and three test bays were applied to the road surface.

Design



Three rumble bays were designed by Oxfordshire Highways.

Bay 1 was inlaid into the road surface. The Stylesetts were placed in a uniform side by side formation and applied with Stylesett bedding compound, the joints were sealed with conventional hot bituminous cobbleseal.

Bay 2 was applied directly onto the road surface. The Stylesetts were placed in a stretcher bond formation with chamfered leading edges and applied with Stylesett bedding and jointing compound.

Bay 3 was inlaid into the road surface. The Stylesetts were placed in a stretcher bond formation and applied with Stylesett bedding and jointing compound.

Preparation



The inlaid surface bays 1 and 3 were milled out to enable the Stylesetts to be flush with the existing surface.
The surface applied bay 2 was thoroughly cleaned and applied directly to the surface course.

Application



Stylesetts applied by hand using the specialist Stylesett bedding and jointing compound.

Gallery

