StreetPrint® Genuine Stamped Asphalt

Specification
PART 1 – GENERAL

1.1 DESCRIPTION

A. StreetPrint® Genuine Stamped Asphalt is a highly suitable solution for a wide variety of decorative pavement applications. Paved entranceways, parking lots, residential driveways, sidewalks, plazas, medians, and cross-walks are some examples of successful applications of StreetPrint.

B. StreetPrint Genuine Stamped Asphalt is executed by elevating the temperature of an asphalt pavement surface and then pressing a StreetPrint wire rope stamping template into the surface to replicate, in relief, the grout depressions common to hand-laid brick or cobblestone, or any other design as shown on the drawings or described in the specifications. The imprinted asphalt pavement surface is then coated with a coating or system of coatings specifically formulated for asphalt pavement.

C. StreetPrint Genuine Stamped Asphalt is a highly specialized process that requires the skill of a qualified applicator working with the proper StreetHeat asphalt heating equipment and applying highly specialized coating(s) designed specifically for application to asphalt pavement.

D. This specification will include guidance with respect to the minimum requirements/qualifications of the applicator, equipment and coating in the execution of this Work.

1.2 DEFINITIONS

A. “Qualified Applicator” is a contractor or applicator who has completed the StreetPrint Genuine Stamped Asphalt training and can provide certification and references upon request.

B. “Owner” means the Owner and refers to the representative person who has decision making authority for the Work.

C. “StreetPrint Genuine Stamped Asphalt” is asphalt that has been subjected to imprinting or stamping in a specific pattern using StreetPrint wire rope stamping templates.

D. The “Work” is the asphalt pavement texturing work contemplated in this bid submission and specification.

E. “Scuffing” is a “tear” of the asphalt pavement caused by an external force. Stationary vehicle tires turning on the pavement surface is a typical cause.
1.4 SUBMITTALS

The documents required as part of this bid submission are as follows:
A. Proof of Applicator’s ability. A copy of the current Applicator Agreement as provided to the proposed applicator issued by Integrated Paving Concepts in the execution of StreetPrint Genuine Stamped Asphalt. Failing that, at least 3 reference sites and written references from 3 previous customers for work performed by this Installer.
B. A list of the major equipment to be used in the execution of the Work. This list shall include StreetHeat asphalt heating equipment when texturing is being applied to existing asphalt, spray equipment, compactor(s) and StreetPrint wire rope stamping templates.
C. The name of the coating(s) and the coating supplier’s name.
D. Certified performance test results of the coating materials as outlined in Table 1.
E. Confirmation of coating color(s).

PART 2 – EQUIPMENT & PRODUCTS

2.1 EQUIPMENT

The following specialized equipment shall be used in the execution of the Work.
A. StreetPrint wire rope stamping templates are used to create the desired imprint pattern. Only use StreetPrint templates that have been supplied by the Integrated Paving Concepts who has the proven expertise in manufacturing these templates for this type of application.
B. StreetHeat asphalt reheat equipment specifically designed for StreetPrint Genuine Stamped Asphalt and is to be used in the execution of this work when being applied to existing asphalt. This primary asphalt re-heat equipment must cycle the heat application and must allow the equipment operator to check the pavement surface temperature during the heating process. These controls are necessary to enable the pavement temperature to be elevated gradually, giving the operator the ability to ensure that the pavement is not overheated or adversely affected. Heaters without these controls are strictly prohibited as the primary re-heat equipment.
C. Hand-held portable heating devices may be used only for areas where it is difficult to operate the StreetHeat asphalt heating equipment. These may not be used as the primary pavement re-heating device.
D. Finishing tools that are designed to enable the applicator to complete the imprinting of the asphalt pavement in areas which may be inaccessible to the StreetPrint wire rope stamping template such as curbs and manhole covers are permitted.

E. Vibratory Plate Compactors shall be used for pressing the StreetPrint wire rope stamping templates into the heated asphalt pavement to create the specified pattern.

F. Specialized coating application equipment must be used in the application of the coating and must meet the coating manufacture's application requirements to prevent equipment malfunction and/or poor application results. Integrated Paving Concepts recommends but not limited to StreetBond coatings for asphalt. For more information go to www.streetbond.com.

2.2 MATERIALS – COATINGS

Properly designed asphalt pavement coatings have been scientifically formulated to provide the optimal balance of performance properties for a durable, long lasting color and texture to asphalt pavement surfaces. Some of these key properties include wet wear durability, crack resistance, fade resistance, adhesion, and friction properties. These properties must be backed up by a Certificate of Analysis from an independent laboratory or an equal document that certifies these performance properties.

The asphalt pavement coating must be environmentally safe and meet EPA requirements for Volatile Organic Compounds (VOC). Only use asphalt pavement coatings from qualified pavement coating suppliers who can provide proof of these required performance properties.

PART 3 - EXECUTION

3.1 GENERAL

The StreetPrint Genuine Stamped Asphalt shall be supplied and installed by a Qualified Applicator in accordance with the plans and specifications or as directed by the Owner. Do not begin the Work until confirmation of the Applicator’s qualifications is provided.
3.2 PRE-CONDITIONS – ASPHALT PAVEMENT

A highly stable asphalt pavement free of defects is a pre-requisite for the installation of StreetPrint Genuine Stamped Asphalt. Do not install StreetPrint on poor quality asphalt pavement.

3.2.1 Pre-requisites for new asphalt pavement

A durable and stable asphalt pavement mix design installed according to best practices over a properly prepared and stable substrate is a pre-requisite for all long-lasting asphalt pavement surfaces. The application of StreetPrint Genuine Stamped Asphalt does not change this requirement.

Generally, the asphalt pavement mix design for roadways as prescribed by the local jurisdiction will be sufficient for the application of a pavement texturing system.

3.2.2 Pre-requisites for existing asphalt pavement

Depending upon the condition and age, existing asphalt pavement may or may not be suitable for the successful application of StreetPrint Genuine Stamped Asphalt. Minimally, the asphalt pavement must be in excellent condition and not have any defects including cracks, ruts or potholes nor demonstrate any flushing, raveling or like deficiencies.

3.2.3 Pavement Marking Removal: recommended guidelines

Pavement markings may be removed by sandblasting, water-blasting, grinding, or other approved mechanical methods. The removal methods should, to the fullest extent possible, cause no significant damage to the pavement surface.

The Owner shall determine if the removal of the markings is satisfactory for the application of StreetPrint Genuine Stamped Asphalt. Work shall not proceed until this approval is granted.

3.2.4 Surface Preparation

The asphalt pavement surface shall be dry and free from all foreign matter, including but not limited to dirt, dust, de-icing materials, and chemical residue.
3.3 LAYOUT

Layout of the pattern for imprinting into the surface of the asphalt pavement shall be as per the drawings and specifications.

3.4 HEATING THE ASPHALT PAVEMENT

The Applicator shall use StreetHeat asphalt heating equipment as described in Section 2.3.
A. The optimal pavement temperature for imprinting the StreetPrint wire rope stamping template is dependent upon mix design, modifiers used in the mix, the age of the pavement and weather. The surface temperature of the pavement should not exceed 325°F as determined by an infrared thermometer reading taken after the heat is applied to the asphalt pavement.
B. In order to achieve the proper depth of imprint it is important to elevate the asphalt pavement temperature to a minimum depth of 1/2 inch (12.5mm) without burning the pavement surface. This can only be accomplished using asphalt reheat equipment that is specifically designed for this Work.

3.5 SURFACE IMPRINTING

A. The pavement surface shall be dry and free from all foreign matter, including but not limited to dirt, dust, de-icing materials, and chemical residue.
B. Once the asphalt pavement has reached imprinting temperature, the StreetPrint wire rope stamping templates shall be placed in position and pressed into the surface using vibratory plate compactors. The top of the template is to be flush with the surrounding asphalt pavement and can then be removed. Areas that have an imprint depth less than 3/8 inch shall be re-heated and re-stamped prior to applying the coatings. Hand tooling is a permitted method to achieve proper imprint depth in areas difficult to get at with the template.

3.6 APPLICATION OF ASPHALT PAVEMENT COATING GUIDELINES

The qualified applicator shall refer to the manufacturer’s pavement coating supplier’s recommendations for methods of application.

3.7 OPENING TO TRAFFIC

Minimally, the surface coating must be 100% dry before traffic is permitted. Refer to the asphalt pavement coating supplier’s guide.
PART 4 – MEASUREMENT AND PAYMENT

4.1 MEASUREMENT
The measured area is the actual area that has received the asphalt pavement texturing. No deduction will be made for the area(s) occupied by manholes, inlets, drainage structures, bollards or by any public utility appurtenances within the area.

4.2 PAYMENT
Payment will be full compensation for all work completed as per conditions set out in the contract. For unit price contracts, the payment shall be calculated using the measured area as determined above.