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CENTRO 

mais
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Programa Operacional Regional do Centro

 **PORTUGAL**
2020

 **QR**
QUADRO
DE REFERÊNCIA
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2014-2020

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SIBDUROFLEX 400
FLEXIBLE THIN-FILM COATING
WITH NATURAL AGGREGATE

SOCIEDADE INDUSTRIAL DE BRITAGEM DE PEDRA

sib

SIBDUROFLEX 400

With non-slip, exible properties, hardness and variety of colours, combined with its low thickness and application time, **SIBDUROFLEX 400** is the ideal thin-film coating for asphalt and concrete pavements in new construction and rehabilitation work.

SIBDUROFLEX 400 Continuous

SIBDUROFLEX 400 Continuous is composed of a base layer of MMA and is covered with a coloured, natural aggregate: a proven combination that provides a natural, durable and stable appearance.

Due to its mechanical and aesthetic properties, this product can be used in heavy traffic lanes, alerting drivers to the presence of possible hazards, as well as for personal projects, town entrances, urbanizations, parks, etc.

SIBDUROFLEX 400 Preformed Platelet

SIBDUROFLEX 400 preformed Platelet is designed to obtain a realistic representation of flooring tiles, stone and cobblestone, achieving a natural and lasting appearance with extraordinary properties of hardness and exibility to withstand intense and heavy vehicular traffic.

SPECIFICATIONS:

It is applied in a thin film of 2, 4, 6 or 8mm, depending on the choice of aggregate.

Adhesion to pavement, ready to reopen to traffic in 60 minutes.

Resists the passage of 6 million heavy vehicles. Frost resistant, slip resistant and flexible.

SRT sliding coecient: 0.65 to 0.75 depending on the aggregates used.

COMPOSITION:

Flexible MMA resin from two components and rapid hardening.

Aggregates chosen by colour, hardness and flow of vehicular or pedestrian trac.

For roads:

Bauxite, quartz and porphyry that must stand up to intense traffic.

For islands, footpaths, parks, promenades:

marbles that are more pleasing to the eye, softer and suitable for polishing and more aesthetic for use with pedestrian traffic.

APPLICATION IS PERFORMED IN TWO STAGES:

A uniform lm or resin is applied: 4kg to 6kg depending on the substrate.

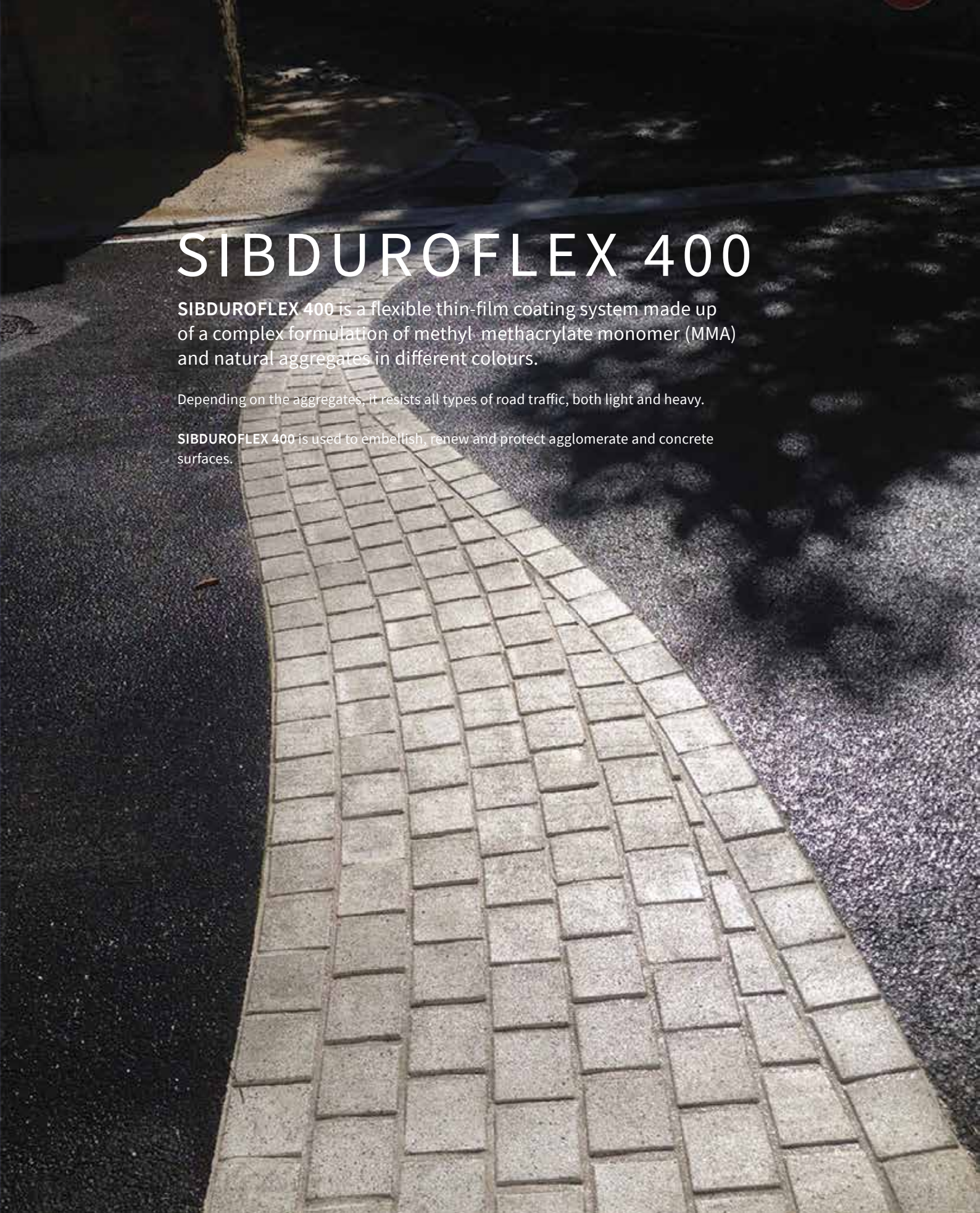
The 100% natural aggregate is spread over this layer immediately, using quartz, marble or silica, chosen on the basis of the desired colour, hardness or particle size. The choice of colours can be used to create dierent geometric shapes Using prefabricated slabs.

SIBDUROFLEX 400

SIBDUROFLEX 400 is a flexible thin-film coating system made up of a complex formulation of methyl methacrylate monomer (MMA) and natural aggregates in different colours.

Depending on the aggregates, it resists all types of road traffic, both light and heavy.

SIBDUROFLEX 400 is used to embellish, renew and protect agglomerate and concrete surfaces.



ON TEST

EXPERIENCE WITH HEAVY TRAFFIC
ON ROAD COATINGS WITH
THE FABAC MACHINE

Division of structures and materials for fatigue
resistance transport infrastructure group and
optimisation of structures.



TESTING PROGRAMME:

1. Construction coating 04/01/2008. 16 different resin coatings with aggregate are placed on a slightly deformable bituminous surface.

Test plate size: 2m x 1.90m

2. Load testing with the FABAC heavy traffic simulator. 4 million passes were made at 65KN between May and December 2008.

TESTING METHOD: In accordance with the LCPC quality manual and the manual from the division of structures and materials for transport infrastructure.

CONCLUSIONS: The sixteen samples of coloured coating installed on a slightly deformable pavement presented excellent durability after the passage of six million standard loads at 65KN. It showed no tear and very little loss of aggregate under traffic. The level of adhesion presented by all coatings after loads is good, since the coefficients revealed after the measure with the SRT are above 45, the limit value below which sliding surfaces are slippery. In fact, after the 6 million passes, 5 of the coatings showed a coefficient above 60, another 10 had a ratio of between 60 and 50, and one had a coefficient of 43. The cleaning of the plates after the passage of 6 million loads has allowed for the elimination of tyre remains embedded in the rough edges, and at the same time, it has allowed to significantly increase the SRT value of thirteen plates. Two plates had a slightly lower SRT value after cleaning, probably due to the release of some aggregates because of the effects of cleaning. These results lead to the conclusion that in terms of rigidity in the structure's surface adjacent to the experiment, it is fair to consider the performance good on surfaces with dense and heavy traffic equivalent to that of the tests. This traffic can be considered as heavy traffic, such as 200 passes by a bus per day for a period of thirty years. Light vehicles, as well as the weather, were not taken into account in these tests for that period.

Final report: May 2009,

Test supervisor: J. P. Kerzrého, Manager of the unit of fatigue resistance and structure optimisation: J. M. Balay

SUMMARY: Solidity, security, and speed. Resistance to the passage of 6 million heavy vehicles: low deformation and excellent durability. Very good braking performance at 50, 70 and 90km/h, higher than coatings from the same family. The SRT coefficients are above 45, limit value below which surfaces are slippery (between 50 and 70.7 after the passage of 6 million heavy vehicles). Reopened to traffic in 45 minutes.



SIBDUROFLEX 400

INTELLIGENT PAVING SOLUTIONS



TECHNICAL FEATURES

- Flexibility
- Impact resistant
- Abrasion resistant
- Resistant to sudden temperature changes
- Chemical resistance
- High degree of non-slip

ADVANTAGES

- Highly resistant to wear
- Custom design
- Speed of execution
- Can be used immediately (15 minutes)