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Project 09CA48861

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REPORT
on
Floor Coating and Finishing Materials
Under the
CLASSIFICATION PROGRAM
O.W. Hubbell and Sons Inc
Yorkville, NY

 Classified Company: O.W. Hubbell and Sons Inc

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DESCRIPTION

PRODUCT COVERED:

USC - Walkway Construction Materials, WCM; Galvagrit Coating.

GENERAL: This is a molten metal alloy of aluminum and iron that is spattered onto steel surfaces to improve their slip resistance characteristics. Surface is rough/gritty like course sand paper.

TECHNICAL CONSIDERATIONS (NOT FOR FIELD REPRESENTATIVE USE):


This product is Classified as to slip resistance hazards only.

See ILL. 1 for reference application information.

MARKING:

Listee Name and/or trade name and product designation on containers.
TITLE: GALVAGRIT™ COATING ON GALVANIZED STEEL SURFACES

SCOPE: This specification covers the performance qualities and application of a slip resistant coating material over steel surfaces and then hot dipped galvanized.

Product Description:
Galvagrit™ is an anti-slip steel surface covering 100% of substrate consisting of a random matrix with a surface hardness of at least 35 on the Rockwell "C" scale and a bond strength to the steel of at least 6,000 psi, and then hot dipped galvanized. The anti-slip surface has a minimum coefficient of friction of 0.6.

Process:
Slip resistant material shall be applied to bare steel shall be a thermal spray coating (metalizing). This is a coating produced by a process in which molten or semi-molten particles are applied by impact onto a steel substrate. This results in a lenticular or lamellar grain structure resulting from the rapid solidification of small globules, flattened from striking a cold surface at high velocities. The product is then galvanized, fusing the friction resistant coating.

Materials:

Slip Resistant Material:
Materials shall be iron Base Hardfacing Alloys of Iron and Aluminum. The aluminum content shall be 5.5%, 2.0% Carbon, 0.8% Manganese with the remainder being iron by weight. The alloy shall have a Rockwell Hardness Scale of HRC 35. The wire used shall have a diameter of 1/16 in. (1.6 mm).

Galvanizing:
All materials to hot dipped galvanized shall be galvanized in accordance with ASTM A 123. Only the dry-kettle (pre-fluxing) process shall be used. An American Galvanizers Association trained Master Galvanizer shall be on the premises during the hot dipped galvanizing process.

Surface Preparation:
The steel surface shall be clean and free of oils and grease before they are metalized. The surface shall be grit blasted to SSPC Surface Preparation Specification 10. The piece shall be metalized within 6 hours of blasting. Oils and grease shall be removed by use of an aqueous alkaline solution and/or hand or power tool cleaning.

Galvagrit™ Cost Application
The metalizing applicator shall be capable of providing 400 info spray arc or 100 psi compressed air, a deposition rate of 10 lbs/hr/100A and a deposit efficiency of 70%. Typical wire Coverage is 0.6 oz/sq.ft/mil with a typical hardness of HRC 35 and bond strength of 6000 psi.
TEST RECORD NO. 1

SAMPLES:

A sample of the walkway construction materials as indicated below and constructed as described herein, was submitted by the manufacturer for examination and test.

Galvagrit Coating by O.W. Hubbell and Sons, Inc.

GENERAL:

Test results relate only to the items tested.

The following tests were conducted.

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<thead>
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<th>Slip Resistance Characteristics (WCM)</th>
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This was evaluated as a WCM material per guidance from the Primary Designated Engineer.

The test methods and results of the above tests have been reviewed and found in accordance with the requirements in UL 410 Standard for Safety for Slip Resistance of Floor Surface Materials dated October 25, 2006.

Test Record Summary:

The results of this investigation, including construction review and testing, indicate that the products evaluated comply with the applicable requirements in UL 410 Standard for Safety for Slip Resistance of Floor Surface Materials dated October 25, 2006 and, therefore, such products are judged eligible to bear UL's Mark as described on the Conclusion Page of this Report.
CONCLUSION

Samples of the product covered by this Report have been found to comply with the requirements for slip resistance of surfaces hazards only covering the category and the product is found to comply with UL's applicable requirements. The description and test result in this Report are only applicable to the sample(s) investigated by UL and does not signify the product(s) described as being covered under UL's Follow-Up Service Program. When covered under UL's Follow-Up Service Program, the manufacturer is authorized to use the UL Classification Mark on such products which comply with UL's Follow-Up Service Procedure and any other application requirements of Underwriters Laboratories Inc. The Classification Mark of Underwriters Laboratories Inc. on the product, or the UL symbol on the product and the Classification Mark on the smallest unit container in which the product is packaged, is the only method to identify products investigated by UL to published requirements and manufactured under UL's Classification and Follow-Up Service.

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