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BUILDING AND SAFETY
201 NORTH FIGUEROA STREET
LOS ANGELES, CA 90012

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RAYMOND CHAN
EXECUTIVE OFFICER

Paragon Building Products, Inc.
2895 Hammer Avenue
Norco, CA 92860

Attn: Randy Sherve
(951) 549-1155

RESEARCH REPORT: RR 25504
(CSI # 04060)

Expires: December 1, 2010
Issued Date: July 1, 2009
Code: 2008 LABC

GENERAL APPROVAL - Paragon Type S Masonry Mortar, Hard Fast Plastic Grout (PL), Hard Fast Flowable Grout (FL), P-77 Plastic Grout (PL) and P-77 Flowable Grout (FL) Non-Shrink Grout

DETAILS

Hard Fast Plastic Grout (PL) is a mixture of water and pre-mixed Hardfast Non-Shrink Grout. The amount of water used on the mix for the entire testing program to obtain consistency was 15% by weight.

Hardfast Flowable Grout (FL) is a mixture of water and pre-mixed Hardfast Non-Shrink Grout. The amount of water used on the mix for the entire testing program to obtain consistency was 18% by weight.

P-77 Plastic Grout (PL) is a mixture of water and pre-mixed P-77 Non-Shrink Grout. The amount of water used on the mix for the entire testing program to obtain consistency was 15% by weight.

P-77 Flowable Grout (FL) is a mixture of water and pre-mixed P-77 Non-Shrink Grout. The amount of water used on the mix for the entire testing program to obtain consistency was 15.8% by weight.

Paragon Type S Masonry Mortar is to be used for the construction of Masonry Units. The Hard Fast and P-77 Non-Shrink Grout is to be used for setting bearing plates, setting column base plates and similar uses.

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The approval is subject to the following conditions:

1. The Type S Masonry Mortar shall be proportioned in accordance with Table 2103.8 of the 2008 City of Los Angeles Building Code.
2. The masonry mortars shall be delivered in weatherproof bags. The bags shall be identified by a label indicating the manufacturer's name, product name, mortar type compressive strength at 7 days and 28 days, net weight, and the minimum and maximum water required.
3. No admixtures shall be used with masonry mortar.
4. There shall be no intermixing of mortars of different deliveries, i.e., mixed in different batches.
5. The mortars shall not be applied at temperatures below 40°F.
6. The mortar shall not be used for foundation or concrete flatwork.
7. No mortar with elapsed time of 90 minutes or more after initial mixing shall be used.
8. Tests and sampling shall be conducted as follows:
 - a) Samples shall be taken from every production batch.
 - b) Each sample shall be tested for conformance to Section 4.1 of ASTM C144 with regard to sand gradation.
 - c) Compressive strength tests shall be conducted monthly on a random basis. Specimens shall be cast in two-inch cube molds using recommended water amounts when mixing. 28-day compressive strength test results must exceed minimums set by U.B.C. Standard No. 21-15.
 - d) All test data shall be documented according to batch numbers.
 - e) All of the above information shall be kept on file with the manufacturer and shall be available to the Department of Building and Safety upon request.
 - f) Tests by a licensed testing agency shall be required per Section 91.2105.3 if higher stresses are used in the design of the masonry.
9. Grouting procedure shall be in accordance with the manufacturer's instructions, a copy of which shall be available at the job site.
10. The allowable bearing stress of the grout shall not exceed the allowable bearing stress of the concrete supporting the column base or bearing plate.

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11. Special inspection is required by reinforced concrete, steel or reinforced masonry deputy inspector with controlled activity in drilled in anchor bolts where the design compressive strength exceeds 2500psi at 28 days.
12. The products shall be delivered to the construction site in sealed containers identified by the manufacturer's name and product designation
13. This report shall not be used for setting anchor bolts.

DISCUSSION

This approval is based on tests conducted in accordance with UBC Standard No. 21-15 for Masonry Mortar and ASTM C-1107 for non-Shrink Grout.

Addressee to whom this Research Report is issued is responsible for providing copies of it, complete with any attachments indicated, to architects, engineers and builders using items approved herein in design or construction which must be approved by Department of Building and Safety Engineers and Inspectors.

This general approval of an equivalent alternate to the Code is only valid where an engineer and/or inspector of this Department has determined that all conditions of this approval have been met in the project in which it is to be used.

YEUAN CHOU, Chief
Engineering Research Section
201 N. Figueroa St., Room 880
Los Angeles, CA 90012
Phone - 213-202-9812
Fax - 213-202-9942

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