WEAVER GENERAL CONSTRUCTION COMPANY
3679 S. Huron St., Suite 404
Englewood, CO 80110
Phone: (303) 789-4111 FAX: (303) 789-4310

SUBMITTAL TRANSMITAL

June 22, 2011
WGC Submittal No: 03300-008.B

PROJECT: **Harold Thompson Regional WRF**
Birdsall Rd.
Fountain, CO 80817
Job No. 2908

ENGINEER: **GMS, Inc.**
611 No. Weber St., #300
Colorado Springs, CO 80903
719-475-2935 Roger Sams

OWNER: **Lower Fountain Metropolitan Sewage Disposal District**
901 S. Santa Fe Ave.
Fountain, CO 80817
719-382-5303 James Heckman

CONTRACTOR: **Baker Concrete Construction**
1904 Jasper Street
Aurora, CO 80011
937-536-9000 Nick Dewald

SUBJECT: Resubmittal - Grout - Verticoat Supreme - Tie hole patch material

NOTE: BCCI is submitting "Verticoat Supreme" to be used instead of the approved Materflow 713 grout. Masterflow 713 is a flow able grout used in situations that require formed areas like machinery base plates. It can be damp packed into the tie holes but due to all the plasticizer in the grout it will have the tendency to droop or sag. Verticoat Supreme is made for vertical applications and will not sag after being placed.

SPEC SECTION: 03300 – Cast-In-Place Concrete

PREVIOUS SUBMISSION DATES: 2/16/11

DEVIATIONS FROM SPEC: ___ YES _X_ NO

CONTRACTOR'S STAMP: This submittal has been reviewed by Weaver General Construction and approved with respect to the means, methods, techniques, & safety precautions & programs incidental thereto. Weaver General Construction also warrants that this submittal complies with contracted documents and comprises on deviations thereto:

Contractor's Stamp:	Engineer's Stamp:
Date: 4/22/11 Reviewed by: H.C. Myers (X) Reviewed Without Comments ( ) Reviewed With Comments ENGINEER'S COMMENTS:_____	

Letter of Transmittal/Submittal

BAKER CONCRETE CONSTRUCTION expect more

FROM:

Baker Concrete Construction
1904 Jasper Street
Aurora, CO 80011
303.367.8111
Nick Dewald 937.536.9000

TO:

John Jacob/Leslie Brown
Weaver General Construction Co.
3679 South Huron St., Suite 404
Englewood, CO 80110
john@weavergc.com / leslie@weavergc.com

DATE	*06/22/11*	JOB NUMBER	*9921*
ATTENTION	*John Jacob/Leslie Brown*		
RE:	*Harold Thompson Regional WRF*		
TR#	*03300-020*		
SM#	*03300-008B*		

We are sending you: *ATTACHED* via *EMAIL* the following: *SPECIFICATION*

COPIES	DATE	PAGES	Description
1	*6/22/2011*	*2*	*Grout - Verticoat Supreme - Tie hole patch material*

THESE ARE TRANSMITTED as noted below:

FOR APPROVAL

REMARKS *BCCI is submitting "Verticoat Supreme" to be used instead of the approved Materflow 713 grout. Masterflow 713 is a flow able grout used in situations that require formed areas like machinery base plates. It can be damp packed into the tie holes but due to all the plasticizer in the grout it will have the tendency to droop or sag. Verticoat Supreme is made for vertical applications and will not sag after being placed.*

COPY TO *File*

SIGNED: Nick Dewald
Baker Concrete Construction, Inc.

If enclosures are not as noted, kindly notify us at once

Verticoat Supreme

Single Component, Vertical/Overhead Repair Mortar w/ Corrosion Inhibitor

Description

Verticoat Supreme is a one component, microsilica and latex modified, non-sag repair mortar. Formulated to provide protection against corrosion. This cement based product is designed for trowel applied vertical and overhead repairs requiring high performance.

Primary Applications

- Vertical and overhead repairs
- Resurfacing of damaged/deteriorated concrete
- Marine structures, tunnels and dams
- Parking structures & bridges
- Parapet walls
- Above and below grade applications

Features/Benefits

- One component for easy mixing and handling
- Excellent freeze/thaw resistance for difficult climates
- High bond strength provides excellent adhesion
- Microsilica and latex modified
- Contains an integral corrosion inhibitor
- Low permeability helps protect rebar from corrosion
- Normal setting times increase workability and reduce waste
- Can contribute to LEED points.

Technical Information

Typical Engineering Data

Working Time ..... 30 minutes
Set Times 70°F (21°C) ASTM C266
Initial Set ..... 1 hour
Final Set ..... 2 1/2 hours

Unit Weight ..... 115 lb/ft³ (1836 kg/m³)

Compressive Strength*
ASTM C109 modified, 2" (50 mm) cubes

1 day	2,500 psi (17.2 MPa)
3 days	4,000 psi (27.6 MPa)
7 days	5,500 psi (37.9 MPa)
28 days	6,200 psi (42.7 MPa)
56 days	6,700 psi (46.2 MPa)
6 months	7,200 psi (49.6 MPa)

Bond Strength (shear) ASTM C882 (modified)

1 day	1,000 psi (6.9 MPa)
3 days	1,500 psi (10.3 MPa)
7 days	1,900 psi (13.1 MPa)
28 days	2,100 psi (14.5 MPa)
56 days	2,700 psi (18.6 MPa)

Direct Tensile Bond Strength

1 day	175 psi (1.2 MPa)
7 days	250 psi (1.7 MPa)
28 days	310 psi (2.1 MPa)

Tensile Bond Strength
CAN A23.2-6B (28 days)..... greater than concrete

Flexural Strength* ASTM C348

1 day	400 psi (2.8 MPa)
3 days	500 psi (3.4 MPa)
28 days	650 psi (4.5 MPa)
56 days	800 psi (5.5 MPa)

Linear Shrinkage* ASTM C157 50% RH @ 73°F(23°C)

3 days	-0.01%
7 days	-0.01%
14 days	-0.02%
28 days	-0.04%
56 days	-0.05%

Sulfate Resistance* ASTM C1012

28 days	+0.005%
56 days	+0.009%

Chloride Permeability* ASTM C1202

7 days	1000 coulombs (very low)
28 days	900 coulombs (very low)
56 days	700 coulombs (very low)

Freeze/Thaw Resistance* ASTM C666 Procedure A
500 cycles Relative Durability Modulus.....100%

Appearance: VERTICOAT SUPREME is a free flowing powder designed to be mixed with water. After mixing and placing, the color may initially appear darker than the surrounding concrete. While this color will lighten up substantially as the VERTICOAT SUPREME cures and dries out, the repair may always appear somewhat darker than the surrounding concrete.

The Euclid Chemical Company
19218 Redwood Rd. • Cleveland, OH 44110
Phone: [216] 531-9222 • Toll-free: [800] 321-7628 • Fax: [216] 531-9596
www.euclidchemical.com
An RPM Company

Packaging/Yield

VERTICOAT SUPREME is packaged in 50 lb (22 kg) moisture resistant bags. **Yield:** 0.48 ft^3 (0.014 m^3) per bag when mixed with 2.75 qts (2.6L) of water.

Shelf Life

2 years in original, unopened package.

Coverage

One unit of VERTICOAT SUPREME will cover approximately 11.5 ft^2 (1.1 m^2) when placed at an average depth of 1/2" (13mm).

Directions for Use

Surface Preparation: Concrete surfaces must be structurally sound, free of loose or deteriorated concrete and free of dust, dirt, paint, efflorescence, oil and all other contaminants. Mechanically abrade the surface to achieve a surface profile equal to CSP 6 - 8 in accordance with ICRI Guideline 310.2. Properly clean profiled area. **Priming:** Clean and prime exposed steel with DURALPREP AC. Concrete should be primed with a spray or brush coat of DURALPREP AC. Alternately, a Saturated Surface Dry (SSD) concrete surface can be primed with a scrub coat of VERTICOAT SUPREME. The repair must be made before the scrub coat dries out.

Mixing: Single bags may be mixed with a drill and "jiffy" type mixer. Use a paddle type mortar mixer for large jobs. All materials should be in the proper temperature range of 60°F (16°C) to 90°F (32°C). Add the appropriate amount of water for the batch size 2.5 to 3.0 qt (2.4 to 2.8 L)/bag and then add the dry product. Mix for 3 to 5 minutes. Do not mix more material than can be placed within 20 minutes.

Placement: Place in 1/4" to 2" (6 to 50 mm) lifts. Trowel into place and allow to stiffen before the next lift. If additional lifts are required after material has hardened, score the surface before proceeding to the next lift.

Finishing: Finish the repair material to the desired texture. Do not add additional water to the surface during the finishing operation. Use EUCOBAR finishing aid.

Curing and Sealing: Curing is required. Cure with a Euclid Chemical high solids, water based curing compound. (NOTE: A SOLVENT BASED CURING COMPOUND SHOULD NOT BE USED ON THIS PRODUCT). Under hot, windy or direct sunlight situations, apply a second coat of curing compound after the first has dried. If a curing compound is not desired, wet cure for a minimum of three days.

Clean-Up

Clean tools and equipment with water before the material hardens.

Precautions/Limitations

- Do not allow repairs to freeze until the material has reached a minimum of 1000 psi (7 MPa) compressive strength [approximately 3 days at 40°F (4°C)].
- In adverse temperatures, follow ACI recommendations for hot/cold weather concrete practices.
- Use only potable water for mixing.
- Minimum application thickness 1/4" (6 mm).
- Minimum surface and ambient temperature 45°F (7°C) and rising at time of application.
- For optimum results, condition material to 65°F to 85°F (18°C to 29°C), at least 24 hours prior to use.
- Do not use a solvent based curing compound on this product.
- In all cases, consult the Material Safety Data Sheet before use.

Rev. 10.09