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**TESTING OF
SURE CAVITY
DRAINAGE SYSTEM**

**Prepared for:
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The test results contained in this report pertain only to the samples submitted for testing and not necessarily to all similar products.

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TESTING OF SURE CAVITY DRAINAGE SYSTEM

INTRODUCTION:

This report presents the results of Restricted Drainage tests conducted on samples of Sure Cavity Drainage System. The testing was authorized by Mr. John Koester of Masonry Technology Incorporated on July 3, 2006. The testing and data analysis were completed on July 26, 2006.

The scope of our work was limited to conducting Restricted Drainage tests on the samples submitted and reporting the results.

SUMMARY OF RESULTS:

Wall ID	Time to Stop Draining, hr	Observations
A	00:25:00	Dripping stopped top of Wall starting to dry, some water bled through scratch coat. Collected 1.580 Kg of water
B	00:08:30	Dripping stopped and collected 4.896 Kg of water. Some water missed the collection pan
C	00:02:45	Dripping stopped and collected 5.668 Kg of water. Some water missed the collection pan
D	00:05:20	Dripping stopped and collected 6.389 Kg of water. No water missed the collection pan
E	00:08:40	Dripping stopped and collected 6.233 Kg of water. No water missed the collection pan

Dripping stopped is defined as less than one drop in 30 sec.

SAMPLE IDENTIFICATION:

The samples were identified as A through E. Construction details follow. Walls were assembled May 24-26, 2006 and used in previous drainage efficiency testing under project 76501.

WALL A Configuration, by layers

1. Plywood
2. "Double D" Paper
3. Metal Lath
4. Scratch Coat
5. ½" Vented Weep Screed

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SAMPLE IDENTIFICATION Continued:

WALL B Configuration, by layers

1. Plywood
2. "Double D" Paper
3. 3/16" SURE CAVITY
4. Metal Lath.
5. Scratch Coat
6. ½" Vented Weep Screed

WALL C Configuration, by layers

1. Plywood
2. "Double D" Paper
3. 3/16" SURE CAVITY
4. WOW Weep
5. Brick Mold Detail
6. Metal lath
7. Scratch Coat

WALL D Configuration, by layers

1. Plywood
2. "Double D" Paper
3. 10mm SURE CAVITY
4. Metal lath
5. Scratch Coat
6. ½" Vented Weep Screed

WALL E Configuration, by layers

1. Plywood
2. "Double D" Paper
3. 10mm SURE CAVITY
4. Wow Weep
5. Brick Mold Detail
6. Metal Lath
7. Scratch Coat

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TEST METHOD:

The samples were constructed and then allowed to cure at standard room temperature of 72 ± 5°F for at least 28 days prior to testing. Testing was done according to modified proposed ASTM Standard “Standard Test Method for Determining the Drainage Efficiency of an Interior Drainage System of an Exterior Wall when a Scratch Coat of Mortar is Placed Against the Drainage System During the Construction Phase”. The modification was restriction of the funnel opening from four feet (4’) to one and three quarter inches (1 ¾”) in the center. A waterproof flashing membrane was used to restrict the funnel. The funnel cavity volume was determined to be 2.344 gallons and therefore the amount of water to use (3/4 of funnel volume) was 6.65Kg.

CALIBRATED TEST EQUIPMENT:

Sartorius Balance, model CISLI-U, ID PT 161-012, calibrated 3/06

UNCALIBRATED TEST EQUIPMENT and SUPPLIES:

Holcim Mortar Mix
Jumbo Tex Weather-Resistive Barrier
Stopwatch
Workforce 16’ tape measure
Dewalt variable speed cordless drill/driver
Assorted hand tools
Lumber and general hardware
Pail and water
FortiFlash waterproof flashing membrane

TEST DATA:

WALL A

Elapsed Time Observations

2:30	Water leaking from edges
3:10	Water dripping from weep holes in bottom center of wall.
3:30	Water weeping through face of wall, running across scratch coat to edge of wall.
6:30	Trough empty.
12:00	Dripping slowed, 45% of face damp.
15:00	Almost stopped dripping, water in lower outside observation hole on right side.
25:00	Stopped dripping, wetness at top of wall starting to dry. Collected 1.580 Kg water, much missed catch pan.

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TEST DATA Continued:

WALL B

Elapsed Time Observations

0:14 Water dripping from weep holes in bottom of wall.
1:00 Damp spots appearing on face of wall.
1:57 Trough empty.
8:30 Stopped dripping. 4.896 Kg water collected, much missed catch pan.

WALL C

Elapsed Time Observations

0:19 Water dripping from weep holes in bottom of wall.
1:10 Very small damp spots appearing on face of wall.
1:45 Trough empty.
2:45 Dripping Stopped. 5.668 Kg of water collected, much missed catch pan.

WALL D

Elapsed Time Observations

0:10 Water running from holes in weep screed.
1:02 Trough empty.
1:20 Water flow from weep screed reduced to drip.
1:35 Small damp spots in face of wall.
5:20 Stopped dripping. 6.389 Kg water collected, none spilled.

WALL E

Elapsed Time Observations

0:06 Water running from weep holes in weep screed.
1:18 Trough empty, three dime sized damp dots appeared on face of wall.
8:40 Stopped dripping. 6.233 Kg water collected, none spilled.

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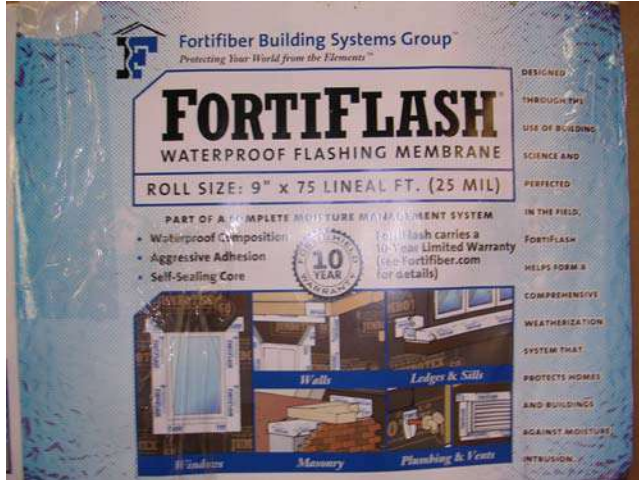
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PHOTOS:



Waterproof Flashing Membrane



Gap left in funnel after membrane installation



Panel A face



Panel A Edge

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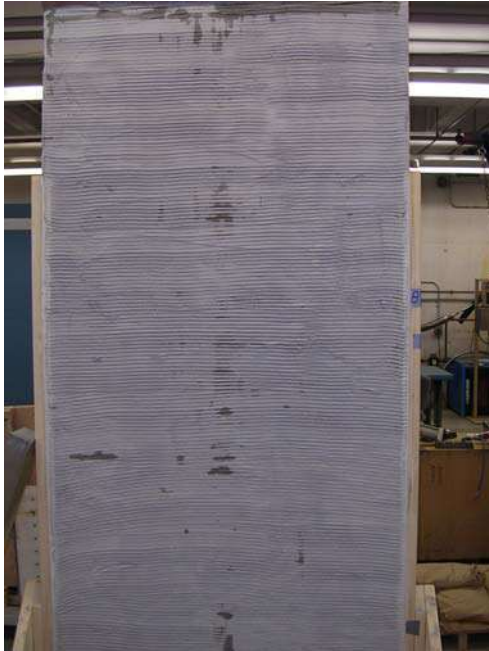
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PHOTOS Continued:



Typical water spotting of Panels B - E



Typical flow from panels B through E

REMARKS:

The test materials not consumed in testing were taken by the customer.

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