

CANADA BRICK DIVISION, JANNOCK BRICK LIMITED

TECHNICAL SERVICES LAB

TEST: FREEZE THAW

DISTRIBUTION: J.J. PITT

TEST NO.: MDFT8902

J.P. STORER-FOLT
FILE

REFERENCE: MASONARY DECOR STAIN APPLICATION

PLANT: STREETSVILLE

DATE IN: 89.02.07

PANEL: DOVER BARK C.S.R.

DATE OUT: 89.05.05

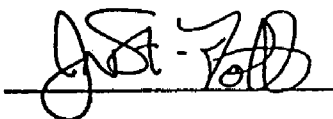
PROCEDURE: Whole brick samples with a different stain concentration on half of each of the five bricks tested were supplied by Masonary Decor. These samples were subjected to a Freeze Thaw test in accordance with procedures outlined in C.S.A./CAN A82.1-M87 standards.

RESULTS:

| SAMPLE NO. | % STAIN STRENGTH | % WEIGHT LOSS | NO. OF CYCLES COMPLETED | (P)ASS OR (F)AIL | COATING DEGRADATION |
|------------|------------------|---------------|-------------------------|------------------|---------------------|
| 1 | 100 | 0.16 | 50 | P | NOT DETECTED |
| 2 | 75 | 0.18 | 50 | P | NOT DETECTED |
| 3 | 50 | 0.29 | 50 | P | NOT DETECTED |
| 4 | 25 | 0.17 | 50 | P | NOT DETECTED |
| 5 | 5 | 0.17 | 50 | P | NOT DETECTED |
| AVERAGE | | 0.19 | | | |
| STD DEV | | 0.05 | | | |

COMMENTS:

1. Since maximum allowable weight loss is 0.5%, all brick exceed CSA/CAN A82.1-M87 AND ASTM C216-86 freeze thaw requirements.
2. No signs of coating degradation appeared at the stain concentrations used over the 50 freeze thaw cycle test period.



J.N. Storer-Folt,
Technical Services Lab Supervisor

CANADA BRICK DIVISION, JANNOCK BRICK LIMITED

TECHNICAL SERVICES LAB

TEST: FREEZE THAW
 TEST NO.: MDFT8904
 REFERENCE: MASONARY DECOR STAIN APPLICATION
 PLANT: STREETSVILLE
 PANEL: RED WIRE MODULAR

DISTRIBUTION: J.J. PITT
 J.P. STORER-FOLT
 FILE

DATE IN: 89.02.07
 DATE OUT: 89.05.05

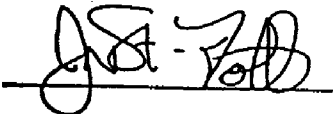
PROCEDURE: Whole brick samples with a different stain concentration on half of each of the five bricks tested were supplied by Masonary Decor. These samples were subjected to a Freeze Thaw test in accordance with procedures outlined in C.S.A./CAN A82.1-M87 standards.

RESULTS:

| SAMPLE NO. | % STAIN STRENGTH | % WEIGHT LOSS | NO. OF CYCLES COMPLETED | (P)ASS OR (F)AIL | COATING DEGRADATION |
|------------|------------------|---------------|-------------------------|------------------|---------------------|
| 1 | 100 | 0.03 | 50 | P | LESS THAN 1% |
| 2 | 75 | 0.02 | 50 | P | APPROXIMATELY 1% |
| 3 | 50 | 0.04 | 50 | P | NOT DETECTED |
| 4 | 25 | 0.01 | 50 | P | NOT DETECTED |
| 5 | 5 | 0.03 | 50 | P | NOT DETECTED |
| AVERAGE | | 0.03 | | | |
| STD DEV | | 0.01 | | | |

COMMENTS:

1. Since maximum allowable weight loss is 0.5%, all brick exceed CSA/CAN A82.1-M87 AND ASTM C216-86 freeze thaw requirements.
2. Approximately 1% of coating degraded for sample stained at 75% strength, the remaining samples showed no visible signs of coating degradation over the 50 freeze thaw cycle test period.



J.N. Storer-Folt,
 Technical Services Lab Supervisor

CANADA BRICK DIVISION, JANNOCK BRICK LIMITED

TECHNICAL SERVICES LAB

TEST: FREEZE THAW

 TEST NO.: MDFT8903

 REFERENCE: MASONARY DECOR STAIN APPLICATION

 PLANT: STREETSVILLE

 PANEL: BRONZINE HM MODULAR

DISTRIBUTION: J.J. PITT

 J.P. STORER-FOLT
 FILE

DATE IN: 89.02.07

 DATE OUT: 89.05.05

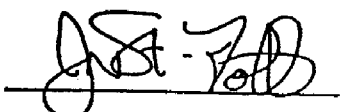
PROCEDURE: Whole brick samples with a different stain concentration on half of each of the five bricks tested were supplied by Masonary Decor. These samples were subjected to a Freeze Thaw test in accordance with procedures outlined in C.S.A./CAN A82.1-M87 standards.

RESULTS:

| SAMPLE NO. | % STAIN STRENGTH | % WEIGHT LOSS | NO. OF CYCLES COMPLETED | (P)ASS OR (F)AIL | COATING DEGRADATION |
|------------|------------------|---------------|-------------------------|------------------|---------------------|
| 1 | 100 | 0.11 | 50 | P | LESS THAN 1% |
| 2 | 75 | 0.12 | 50 | P | LESS THAN 1% |
| 3 | 50 | 0.14 | 50 | P | NOT DETECTED |
| 4 | 25 | 0.14 | 50 | P | NOT DETECTED |
| 5 | 5 | 0.12 | 50 | P | NOT DETECTED |
| AVERAGE | | 0.13 | | | |
| STD DEV | | 0.01 | | | |

COMMENTS:

1. Since maximum allowable weight loss is 0.5%, all brick exceed CSA/CAN A82.1-M87 AND ASTM C216-86 freeze thaw requirements.
2. Less than 1% of coating degraded for samples stained at full and 75% strength, the remaining samples showed no visible signs of coating degradation over the 50 freeze thaw cycle test period.



J.N. Storer-Folt,
 Technical Services Lab Supervisor