

88 Church Street, Rutland, VT 05701
Ph: 802 775 1065, Fax: 802 775 1369

Vermont Quarries Corp.

Fax

To: YAMASAKI ASSOCIATES, Inc. **From:** Luca Mannolini

Attn: John Mufareh **Pages:** 1 + 3

Fax: 248 267 5313 **Date:** 2/13/07

Re: Static Coefficient Friction Test **CC:** Todd Robertson

Urgent **For Review** **Please Comment** **Please Reply** **Please Recycle**

Dear John,

I am sending you copies of the results of the Static Coefficient Friction Test . This test is also known as ASTM 1028. It is the test used to evaluate the slip resistance of any kind of floor and its finish.

The marble that I sent to TESTWELL LAB. to be tested is Royal Danby. I hope that this Danby marble is still the first choice to be used for the paving of the Federal Reserve job. I sent three sets of marble samples having three different finishes. The three finishes are: honed, brushed and bush hammered.

Even though all three types of marble finishes exceeded the minimum requirement for Static Coefficient of Friction the ' honed ' was the best of the three (slightly better than the brushed). In the U.S., a surface is considered to be slip resistant if the static coefficient of friction is 0.5 or higher. Sometimes this coefficient is recommended to be 0.6 or higher, from the American with Disabilities Act (ADA).

Please let me know if I can be of any further assistance,

Sincerely,



Luca Mannolini



TESTWELL LABORATORIES, INC.
CORPORATE HEADQUARTERS: 47 HUDSON STREET, OSSINING, N.Y. 10562
PHONE: (914) 762 - 9000 F AX: (914) 762 - 9638

LABORATORY TESTING OF DIMENSION STONE

CLIENT: Vermont Quarries
PROJECT: Laboratory Testing of Stone
SAMPLES: Marble Tiles – Royal Danby
SAMPLE FINIS: Honed Finish
SAMPLED BY: Client
DELIVERED BY: Client (UPS)


REPORT#: ML-04/PJZ-001
PROJECT#: PJZ-001AA
DATE RECEIVED: 1/31/07
DATES TESTED: 2/05/07
REPORT DATES: 2/09/07

PAGE 1 of 1

Table 1: Results of Static Coefficient of Friction Test (ASTM C1028).

Type of Surface	Sample 1	Sample 2	Sample 3	Average
Dry Surface as Received	0.72	0.73	0.78	0.74
Wet Surface as Received	0.67	0.69	0.69	0.68
Dry Surface After Cleaning	0.76	0.75	0.81	0.77
Wet Surface After Cleaning	0.72	0.75	0.72	0.73

TESTWELL LABORATORIES, INC.



Kaspa! R. Thumma, Eng.Sc.D, P.E.
Vice President/Lab Director
KRT/SK



TESTWELL LABORATORIES, INC.
CORPORATE HEADQUARTERS: 47 HUDSON STREET, OSSINING, N.Y. 10562
PHONE: (914) 762 - 9000 FAX: (914) 762 - 9638

LABORATORY TESTING OF DIMENSION STONE

CLIENT: Vermont Quarries
PROJECT: Laboratory Testing of Stone
SAMPLES: Marble Tiles - Royal Danby
SAMPLE FINISH: Brushed Finish
SAMPLED BY: Client
DELIVERED BY: Client (UPS)

REPORT#: ML-06/PJZ-001
PROJECT#: PJZ-001AA
DATE RECEIVED: 1/31/07
DATE TESTED: 2/12/07
REPORT DATES: 2/12/07

PAGE 1 of 1

Table 1: Results of Static Coefficient of Friction Test (ASTM C1028).

Type of Surface	Sample 1	Sample 2	Sample 3	Average
Dry Surface as Received	0.78	0.81	0.82	0.80
Wet Surface as Received	0.67	0.61	0.65	0.64
Dry Surface After Cleaning	0.83	0.83	0.80	0.82
Wet Surface After Cleaning	0.63	0.65	0.71	0.66

TESTWELL LABORATORIES, INC.

Kaspal R. Thumma, Eng.Sc.D, P.E.
Vice President/Lab Director
KRT/SK



TESTWELL LABORATORIES, INC.
CORPORATE HEADQUARTERS: 47 HUDSON STREET, OSSINING, N.Y. 10562
PHONE: (914) 762 - 9000 FAX: (914) 762 - 9638

LABORATORY TESTING OF DIMENSION STONE

CLIENT: Vermont Quarries
PROJECT: Laboratory Testing of Stone
SAMPLES: Marble Tiles - Royal Danby
SAMPLE FINISH: Bush Hammered
SAMPLED BY: Client
DELIVERED BY: Client (UPS)

REPORT#: ML-05/PJZ-001
PROJECT#: PJZ-001AA
DATE RECEIVED: 1/31/07
DATE TESTED: 2/05/07
REPORT DATES: 2/09/07

PAGE 1 of 1

Table 1: Results of Static Coefficient of Friction Test (ASTM C1028).

Type of Surface	Sample 1	Sample 2	Sample 3	Average
Dry Surface as Received	0.71	0.73	0.76	0.73
Wet Surface as Received	0.55	0.54	0.57	0.55
Dry Surface After Cleaning	0.72	0.76	0.73	0.74
Wet Surface After Cleaning	0.58	0.56	0.53	0.56

TESTWELL LABORATORIES, INC.

Kaspal R. Thumma, Eng.Sc.D, P.E.
Vice President/Lab Director
KRT/SK