Laboratory Report

Report Date: 3/6/13
Laboratory Project ID: 13-641

Customer: HP Spartacote, Inc.
810 Brickyard Circle #1
Golden, CO 80403
Contact: David Schneider

Sample Received:

Lab ID: **13-641.2112**

Description: One 4-inch by 6-inch panel, coated on one side, labeled: 3-Coat - Solid- w/ Clear

Testing Performed:

ASTM C1028 – Standard Test Method for Determining the Static Coefficient of Friction of Ceramic Tile and Other like Surfaces by the Horizontal Dynamometer Pull-Meter Method

Dates Tested: 2/28/13

13-641.2112

Dry Test Pull #	Force	Dry Coefficient of Friction	Wet Test Pull #	Force	Wet Coefficient of Friction
1	39	1.00	1	41	0.69
2	36	0.95	2	44	0.74
3	40	1.01	3	46	0.78
4	40	1.02	4	49	0.82
5	38	0.98	5	54	0.92
6	37	0.96	6	51	0.86
7	38	0.99	7	50	0.84
8	37	0.96	8	49	0.84
9	38	0.97	9	48	0.81
10	36	0.95	10	51	0.87
11	39	1.00	11	51	0.88
12	37	0.96	12	54	0.93

F_D (static coefficient of friction for dry surface): 0.98

F_W (static coefficient of friction for wet surface): 0.83

All test pulls performed on one panel

Sample Received:

Lab ID: **13-641.2113**

Description: One 4-inch by 6-inch panel, coated on one side, labeled: Full Chip System

Testing Performed:

ASTM C1028 – Standard Test Method for Determining the Static Coefficient of Friction of Ceramic Tile and Other like Surfaces by the Horizontal Dynamometer Pull-Meter Method

Dates Tested: 2/28/13

13-641.2113

Dry Test Pull #	Force	Dry Coefficient of Friction	Wet Test Pull #	Force	Wet Coefficient of Friction
1	36	0.92	1	38	0.64
2	36	0.92	2	38	0.63
3	39	0.97	3	40	0.66
4	38	0.95	4	38	0.63
5	38	0.94	5	40	0.67
6	37	0.94	6	40	0.66
7	41	1.00	7	41	0.68
8	38	0.96	8	36	0.60
9	38	0.96	9	43	0.71
10	38	0.95	10	41	0.68
11	40	0.99	11	36	0.60
12	39	0.96	12	40	0.67

F_D (static coefficient of friction for dry surface): 0.95

F_W (static coefficient of friction for wet surface): 0.65

All test pulls performed on one panel

Sample Received:

Lab ID: **13-641.2114**

Description: One 4-inch by 6-inch panel, coated on one side, labeled: Quartz

Testing Performed:

ASTM C1028 – Standard Test Method for Determining the Static Coefficient of Friction of Ceramic Tile and Other like Surfaces by the Horizontal Dynamometer Pull-Meter Method

Dates Tested: 2/28/13

13-641.2114

Dry Test Pull #	Force	Dry Coefficient of Friction	Wet Test Pull #	Force	Wet Coefficient of Friction
1	52	1.20	1	53	0.90
2	48	1.13	2	51	0.87
3	50	1.17	3	51	0.88
4	48	1.14	4	50	0.86
5	49	1.16	5	52	0.89
6	47	1.12	6	53	0.90
7	51	1.20	7	54	0.91
8	50	1.17	8	54	0.91
9	51	1.19	9	54	0.92
10	47	1.12	10	52	0.89
11	50	1.17	11	50	0.86
12	46	1.10	12	54	0.93

F_D (static coefficient of friction for dry surface): 1.16

F_W (static coefficient of friction for wet surface): 0.89

All test pulls performed on one panel

Reviewed By: Rebecca M. Walcott 2013.03.06 13:49:42 -05'00'

Rebecca M. Walcott, Product Testing Manager