

March 29, 2008

KA Project No. 136-08013

Dave Henry
ADVANCED SURFACE SYSTEMS
1042 Willow Creek Road, Suite 432
Prescott, AZ 86301

Re: Concrete Paver Analysis

Dear Dave,

Per your request and authorization we are pleased to present testing results from the proprietary concrete mix and paver samples provided. Batches of fresh concrete were mixed here at our laboratory on February 7, 2008 in accordance with ASTM C192. Samples for compressive and flexural strength determination were created from the fresh concrete in accordance with ASTM C39. Testing for compressive strength was performed in accordance with ASTM C39/C1231. Testing for flexural strength was determined in accordance with ASTM C78. Test coupons were also cut from completed pavers for Freeze/Thaw analysis in accordance with ASTM C1262, Slip Resistance in accordance with ASTM C1028 and absorption in accordance with ASTM C140. Test results follow:

CONCRETE COMPRESSIVE STRENGTH

Sample ID	Test Date	Age	Area (in)	Load (lbs)	Strength (psi)
80224-A	2/10/08	3 day	12.56	105,130	8,370
80224-B	2/14/08	7 day	12.56	126,600	10,080
80224-C	3/06/08	28 day	12.56	139,020	11,070
80224-D	3/06/08	28 day	12.56	139,910	11,140

CONCRETE FLEXURAL STRENGTH

Sample ID	Test Date	Age	Length (in)	Width (in)	Depth (in)	Load (lbs)	Strength (psi)
80225-A	2/14/08	7 day	22.0	6.0	6.0	11,590	1,181
80225-B	2/14/08	7 day	22.0	6.13	6.0	11,840	1,180
80225-C	3/06/08	28 day	22.0	6.0	6.0	13,770	1,403
80225-D	3/06/08	28 day	21.0	6.0	6.0	13,200	1,283

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FREEZE/THAW ANALYSIS

Test Coupon	A	B	C	D	E
Initial Weight	211.2 g.	252.1 g.	243.6 g.	245.5 g.	254.5 g.
Interval 1 Weight Loss	0.2 g. (0.1 g.)	0.2 g. (0.1 g.)	0.1 g. (0.05 g.)	0.3 g. (0.15 g.)	0.2 g. (0.1 g.)
Interval 1 Percent Loss	.09 % (.045 %)	.08% (.04 %)	.04 % (.02 %)	.12 % (.06 %)	.08 % (.04 %)
Interval 2 Weight Loss	0.4 g. (0.2 g.)	0.5 g. (0.25 g.)	0.3 g. (0.15 g.)	0.6 g. (0.3 g.)	0.4 g. (0.2 g.)
Interval 2 Percent Loss	.19 % (.10 %)	.20 % (.10 %)	.12 % (.06 %)	.24 % (.12 %)	.16 % (.08 %)
Interval 3 Weight Loss	0.5 g. (0.25 g.)	0.7 g. (0.35 g.)	0.6 g. (0.3 g.)	0.8 g. (0.4 g.)	0.7 g. (0.35 g.)
Interval 3 Percent Loss	.24 % (.12 %)	.28 % (.14 %)	.25 % (.12 %)	.33 % (.16 %)	.28 % (.14 %)

- Coupons were tested in a 3 percent saline solution.
- One interval consisted of 10 freeze/thaw cycles
- Coupons averaged .625 inches in thickness.
- Per section 9.1 of the ASTM test method raw results must be modified because the test samples were less than 1.25 inches in thickness. Modified results are presented in parentheses and in bold immediately to the right of the actual measurements.

ABSORPTION ANALYSIS

Average Percent Absorption = 4.45%

SLIP RESISTANCE ANALYSIS

Static coefficient of friction for dry surface = 0.89
Static coefficient of friction for wet surface = 0.65

Should you have any questions on data or information contained herein please feel free to give our offices a call at (602) 265-7090. Thank you for the opportunity to be of service.

Respectfully,
KRAZAN & ASSOCIATES, INC.



William B. Throne
Vice President of Arizona Operations

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