

CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2005
 DateRun: 05/27/2005
 Experimenters: Jason Marshall
 ClientType: Environmental Service Firm
 ProjectNumber: Project #1
 Substrates: Wood
 PartType: Coupon
 Contaminants: Coatings
 Cleaning Methods:
 Analytical Methods: Light Meter
 Purpose: To evaluate gloss of various floor finishes.

Experimental Procedure: To determine the amount of "shine" the floor finishes created, baseline gloss readings were made on uncoated wood coupons. A SPER Scientific Light Meter 840021 measuring Foot Candles from the surface to represent gloss readings. Three readings were made for each coupon, in the middle, and at both ends. The three coupons that were to be coated with the same finish were then averaged and recorded as the product average baseline. The same procedure was followed to determine the finished coupon average after the three coats were applied and allowed to cure for 24 hours. The finished coupon average and the baseline average were then compared to determine the increase or decrease in gloss. Results for the Gloss readings were compared for the various floor finishes.

Results:

	Initial Baseline						Final					Average Difference	
	Coupon	Middle	End 1	End 2	Average	Product Average	Middle	End 1	End 2	Average		Final Ave - Initial Ave	Product Difference
Capitol Polyurethane Gloss	22	6.90	7.24	7.06	7.07	6.91	7.08	7.31	7.22	7.20	7.23	0.14	0.32
	23	6.94	6.78	6.55	6.76		7.21	7.74	6.92	7.29		0.53	
	24	6.89	6.72	7.15	6.92		7.10	7.16	7.35	7.20		0.28	
	37	7.41	7.57	6.81	7.26	6.82	7.64	7.76	7.05	7.48	7.07	0.22	0.25
	38	6.70	6.91	6.80	6.80		6.77	7.09	6.87	6.91		0.11	
	39	6.46	7.00	5.72	6.39		6.76	7.48	6.23	6.82		0.43	
	52	6.53	6.71	6.20	6.48	6.46	6.75	7.37	6.60	6.91	6.85	0.43	0.39
	53	6.53	6.66	6.41	6.53		6.72	6.85	6.84	6.80		0.27	
	54	6.58	6.36	6.16	6.37		7.06	6.86	6.56	6.83		0.46	
Pro Finisher Water Based Polyurethane for floors	25	7.03	6.72	6.43	6.73	6.62	7.12	7.04	6.68	6.95	7.02	0.22	0.41
	26	6.46	6.28	6.03	6.26		7.14	6.60	6.25	6.66		0.41	
	27	7.05	7.16	6.39	6.87		7.77	7.63	6.98	7.46		0.59	
	40	7.06	7.31	6.83	7.07	6.34	7.72	7.62	7.06	7.47	6.86	0.40	0.52
	41	6.12	5.99	5.51	5.87		6.76	6.34	6.23	6.44		0.57	
	42	6.13	6.55	5.56	6.08		6.68	7.00	6.37	6.68		0.60	
	55	6.51	6.56	6.21	6.43	6.29	7.11	7.10	6.85	7.02	7.19	0.59	0.90
	56	6.49	6.68	6.68	6.62		7.88	7.80	7.16	7.61		1.00	
	57	5.90	5.78	5.80	5.83		6.63	7.30	6.92	6.95		1.12	
Pro Finisher Water Based Sanding Sealer	28	6.31	6.27	6.39	6.32	6.48	7.28	7.03	6.93	7.08	7.00	0.76	0.52
	29	6.31	6.39	6.41	6.37		6.62	6.77	6.60	6.66		0.29	
	30	6.89	6.93	6.42	6.75		7.28	7.24	7.28	7.27		0.52	
	43	6.28	6.63	6.13	6.35	6.38	6.62	7.06	6.78	6.82	6.86	0.47	0.48
	44	6.30	6.06	5.82	6.06		6.75	6.55	6	6.43		0.37	
	45	6.85	6.96	6.42	6.74		7.66	7.43	6.89	7.33		0.58	
	58	5.38	5.34	5.50	5.41	5.66	6.56	6.34	5.66	6.19	6.35	0.78	0.68
	59	5.70	5.81	5.25	5.59		6.03	6.19	6.21	6.14		0.56	
	60	6.32	6.02	5.65	6.00		7.32	6.77	6.05	6.71		0.72	
Quide SA Aqua Deva Metro	31	6.22	6.48	6.32	6.34	6.56	6.80	6.70	7.03	6.84	6.98	0.50	0.42
	32	6.97	6.85	6.66	6.83		7.30	7.24	7.25	7.26		0.44	
	33	6.15	6.58	6.84	6.52		6.55	6.85	7.11	6.84		0.31	

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46	7.18	6.71	5.97	6.62	6.54	8.37	7.39	6.2	7.32	7.28	0.70	0.74
47	6.75	6.87	6.27	6.63		7.16	8.03	7.25	7.48		0.85	
48	6.41	6.45	6.25	6.37		6.83	7.46	6.85	7.05		0.68	
61	5.76	5.34	5.36	5.49	5.69	7.29	7.05	6.48	6.94	7.30	1.45	1.61
62	5.57	5.84	5.53	5.65		6.92	7.60	7.33	7.28		1.64	
63	6.05	5.53	6.19	5.92		7.68	7.89	7.44	7.67		1.75	

Averages

	Averages		
Floor Finishes	Initial	Final	Delta
Capitol Polyurethane Gloss	6.73	7.05	0.32
Pro Finisher Water Based Polyurethane for floors	6.42	7.03	0.61
Pro Finisher Water Based Sanding Sealer	6.18	6.74	0.56
Quide SA Aqua Deva Metro	6.26	7.19	0.92

Summary:

Conclusion:

All products increased the floors light reflectance. Aqua Deva had the greatest improvement, followed by Pro Finisher Water Based Polyurethane. The water based products had improvements greater than the oil based floor finish.