CLEANING LABORATORY EVALUATION SUMMARY

SCL #:	2005
DateRun:	06/20/2005
Experimenters:	Jason Marshall
ClientType:	Environmental Service Firm
ProjectNumber:	Project #1
Substrates:	Wood
PartType:	Coupon
Contaminants:	Coatings
Cleaning Methods:	
Analytical Methods:	Performance Test
Purpose:	To evaluate drying times for additional floor finishes.

Experimental Procedure:

The moisture content at the time of testing will influence results due to the hydroscopic nature of the base materials. Therefore, efforts must be taken to ensure that the moisture content and temperature remain constant during the evaluation period. Ideally, the sample floor should be kept at 65+/-1% relative humidity and 68+/-6 F.

During laboratory testing, conditions were slightly drier, 40% relative humidity, but the temperature was within the given temperature range ~70 F).

The flooring material supplied was Hardwood flooring made from Red Oak. The boards were ¾" thick, 2 ¼" wide and cut into 8" sections. Some pieces of the flooring had to be sanded prior to making initial thickness readings to remove residual packing tape adhesive.

Three coupons were coated with a supplied floor finish according to the manufacturers' specifications. The finish was applied using a 1" Pure Bristle 1500 paint brush. To ensure consistent coating application, the finish was leveled off using a 10 mils Precision Gage & Tool Co Dow Film Caster. Three coats were used for each floor finish as this was common number of coating layers suggested by the various manufacturers. Each coating layer was allowed to dry for 2 hours prior to the application of the next coat. Completed coupons were allowed to sit for a minimum period of 24 hours before performance evaluations were conducted.

During the sample preparation with floor finish, drying times were monitored. Observations were made after the first coat at every 10 minutes until the finish was dry to the touch. The amount of drying completed during each time interval was estimated and recorded. Subsequent coats were analyzed in the same manner. Drying times for each finish were compared to each other.

Results:

Observations made were based on the approximate area that looked and felt dry.

First Coat	10	20	30	40	50	60
Capitol Hydro 202 Satin	60	80	95-100	100		
AFM Safecoat Polyureseal BP Satin	40	90	100			
AFM Safecoat Polyureseal BP Gloss	20	60	85	95	95-100	100
Second Coat	10	20	30	40		
Capitol Hydro 202 Satin	40	80-90	100			
AFM Safecoat Polyureseal BP Satin	40-60	85	95-100	100		
AFM Safecoat Polyureseal BP Gloss	25	80	95	100		
Third Coat	10	20	30	40		
	40	80	95	100		

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Capitol Hydro 202 Satin						
AFM Safecoat Polyureseal BP Satin	30	65	80	100		
AFM Safecoat Polyureseal BP Gloss	40	65	85	100		

Summary:

Conclusion: All three products had similar dry times. Only one product need over 40 minutes to dry during the first coating. Additional coats did not dry as fast as the products in the previous set of floor finishes.