

**"INDEXED"**  
AP 16'53**RETURN TO MARSHALL LABORATORY LIBRARY**Philadelphia Laboratory  
February 3, 1950MEMORANDUM REPORT #M-283REFERENCE COPY  
NOT FOR CIRCULATIONHIDING OVER SEALED SURFACES  
TOWN & COUNTRY HIGH HIDING FLAT (621-702)

An informal complaint was made on the hiding of 621-702 by Mr. Blackwell (painting contractor) and Mr. Peoples (Manager - Mammelle's paint store). Mr. Blackwell followed our label direction, "If the surface is porous apply du Pont Primer Sealer". A laboratory study arising from this complaint has shown that sealed surfaces return less hiding than porous surfaces. Competition does not recommend sealing prior to application of one coat flats.

We should consider changing our recommendation quoted above to read "When flat is tinted seal surface with du Pont Primer Sealer".

Details:History of Test

This was the first time Mr. Blackwell had used 621-702 as it had just recently been released. The ceiling was painted 5 years ago with our white flat. The ceiling was one which Mr. Blackwell and our salesman Stacey Jones judged could be done with one coat of 47 flat and would yield a good job with one coat of any of the competitive flats.

The ceiling was primed with a mix of Primer Sealer and 47 flat (375-847). In applying 621-702 (B#834236) (B#834327) no reduction was made for the first portion of the ceiling. When the painters complained of heavy brushing, the paint was reduced to proper painting consistency.

Laboratory Tests

A retain sample of Batch #834236 was found to hide 940 sq. ft./gal. at a contrast ratio of .917. This is up to standard. A qualitative comparison of this batch with #834327 showed the latter to be up to standard also.

621-702 has more hiding power over a porous surface than it has over a sealed surface. A panel was prepared with a dark porous substrate adjacent to a comparatively lighter sealed substrate. This gives the sealed surface an advantage over the porous surface. The panel was coated with 621-702 reduced for brushing. The better hiding over the darker porous substrate is easily seen by eye and reflectometer readings are listed below.

|                              | Substrate brightness | 621-702 brightness |
|------------------------------|----------------------|--------------------|
| Porous substrate (Spec-Easy) | 54.2% reflectance    | 84.5% reflectance  |
| Sealed surface (Ovalite)     | 61.5% "              | 82.7 "             |
| White on white               |                      | 85.4 "             |

If the sealing coat had been omitted, Mr. Blackwell's work at the Cadillac display room might have been acceptable.

The following competitors' labels contain no recommendation for sealing except spackle spots although holdout tests show that they have (where indicated) poorer holdout than 621-702.

|                          |          | <u>Holdout</u> |
|--------------------------|----------|----------------|
| B.P.S. Flatlux           | SR-43161 | Fair           |
| Pittsburgh Wallhide      | SR-42107 | Bad            |
| Nat'l. Lead Co.-Wonsover | SR-41623 | --             |
| Sonneborne Wondercoat    | SR-41641 | Bad            |
| Valon                    | SR-41885 | --             |
| Benj. Moore Saniflat*    |          | Poor           |
| 621-702                  |          | Fair - Good    |

\* Benj. Moore does recommend a 3 coat system for new plastered walls. The first coat is primer sealer.

PHILADELPHIA LABORATORY

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