

COLOR MATCH AND INTERCOAT ADHESION FOR REPAIR ENAMELS**Application**

This procedure is used to determine the acceptability of production enamels for repair color matching and intercoat adhesion of repair coat to original coat.

Apparatus and Materials Required**Mechanical Convection Oven**

Capable of maintaining a constant temperature of 180 +/- 2 °C.

Test Panels

Steel body skin panels: Per ASTM D 609 or 150 x 300 mm having a surface finish of 1.35 - 0.45 microns Ra.

Masking Tape and Paper

Color Matching Device - according to FLTM BI 109-01.

Reference Ford Laboratory Test Methods

BI 103-02	Preparation of Panels for Paint Tests
BI 106-02	Intercoat Adhesion Test
BI 109-01	Color Matching with Artificial Light

Conditioning and Test Conditions

All test values indicated herein are based on material conditioned in a controlled atmosphere of 23 +/- 2 °C and 50 +/- 5 % relative humidity for not less than 24 h prior to testing and tested under the same conditions unless otherwise specified.

Date	Action	Revisions
2001 03 19	Revised	Editorial – no technical change A. Cockman
1990 12 04		

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Procedure

1. Prepare a panel as described in FLTM BI 103-02, Method "C".
2. Allow panel to cool to 23 +/- 2 °C and rebake for ten minutes at 140 +/- 2 C metal temperature or as specified in the Engineering Materials specification. Care must be taken to avoid touching the panel test surface with hands.
3. Allow panel to cool to 23 +/- 2 °C and mask upper half of the panel and respray the unmasked area with the original material under identical conditions to a dry film thickness of 40 +/- 10 microns. Remove masking paper and tape, flash-off test panel for 3 minutes and bake according to the Engineering Materials Specification.

Evaluation

1. After cooling to room temperature, compare repaired area with the unrepaired area of the panel for color match with each other, according to FLTM BI 109-01.
2. Age repaired panel for 16 h at 45 +/- 2 °C, or 72 h at 23 +/- 2 °C and check intercoat adhesion according to FLTM BI 106-02.

Chemicals, materials, parts, and equipment referenced in this document must be used and handled properly. Each party is responsible for determining proper use and handling in its facilities.