

MATERIALS / PAINTS

FNHA-2-J-001.18

OUTDOOR EXPOSURE - DURABILITY**1. SCOPE**

This test method is used to determine the relative and comparative durability of exterior coatings and pressure sensitive markings (decals) when exposed to outdoor weathering.

The evaluation is done in south Florida by exposing test panels facing south at a 45° angle.

2. REFERENCE STANDARDS

ASTM 1014 - Conducting Exterior Exposure Tests of Paints on Steel

86507636(FNHA-2-J-001.01) - Panel or Part Preparation

86507637(FNHA-2-J-001.02) - Color Measurement

86507638(FNHA-2-J-001.03) - Gloss

86507641(FNHA-2-J-001.06) - Dry Film Thickness

86513228(FNHA-2-M-095.20) - Pressure Sensitive Markings - Application Information and Instructions

86513232(FNHA-2-M-095.00) - Performance Requirements for Pressure Sensitive Markings

3. MATERIALS AND EQUIPMENT

3.1 Supply of 4" x 12" x .032" Bonderite 1000 panels.

3.2 Supply of paint and/or primer to be evaluated.

3.3 Supply of pressure sensitive markings to be evaluated and polyethylene application squeegee.

3.4 Glossmeter meeting requirements of 86507638 (FNHA-2-J-001.03)

3.5 Dry film thickness gauge meeting 86507641 (FNHA-2-J-001.06) Eddy current type.

3.6 Spectrophotometer meeting requirements of 86507637 (FNHA-2-J-001.02).

3.7 Laboratory circulating oven capable of maintaining 82° ± 3°F (180° ± 5°F).

3.8 Sponge or soft cloths.

3.9 Suitable material to be used to protect the back and edges of test panels such as tape, inhibitive primer, etc.

4. PROCEDURE - PAINT

4.1 Prepare five panels for each paint tested using the vendor recommended primer according to 86507636 (FNHA-2-J-001.01).

4.2 Force dry each primed and topcoated test panel at 82° ± 3°C for 30 minutes following the prescribed flash periods in the painting process.

4.3 Verify that all test panels are painted to the proper film thickness and record.

4.4 Allow all panels to age for 14-28 days at room temperature (20° ± 5°C) in a rack that allows air circulation around each panel.

4.5 Protect the back of the panels and edges with tape or primer and use a permanent method to identify the test panels.

4.6 Measure and record the gloss and spectrophotometer data for each paint.

					NAME	STD OUTDOOR EXPOSURE					
					 NEW HOLLAND			ENGINEERING SPECIFICATION			
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MATERIALS / PAINTS**FNHA-2-J-001.18**

4.7 Retain one of the five panels prepared for each paint in the laboratory for future reference and comparison.

4.8 Carefully pack three test panels for each paint being evaluated and send to:

South Florida Testing Service
17301 Okeechobee Road
Miami, FL 33015
(305) 824-3900 (phone)
(305) 362-6276 (fax)

Instruct the test service to expose each set of three panels for 9, 12, and 15 months and to return one at each interval.

One test panel will be exposed on the New Holland test rack at 45° facing south for reference and correlation with Florida panels.

NOTE: Panels made with premium finishes such as polyurethanes, etc. will be exposed for a longer duration and intervals (12, 18, and 24 months).

4.9 At each interval, when panels are returned, wash off the surface dirt by holding the panel under a stream of warm water and gently rubbing the surface with a sponge or soft cloth.

4.10 Place panels in a vertical rack and allow to dry.

4.11 Read and record the average gloss and spectrophotometer color data. Retain all panels for a minimum of one year after the completion of the test.

4.12 Check the panel on the New Holland rack after one year and each six months thereafter for gloss and color retention until the panel has been exposed for three years.

5. PROCEDURE - DECAL

5.1 Prepare sufficient panels for markings to be tested based on the size of the test markings.

5.2 Apply the markings using proper technique per 86513228 (FNHA 2-M-095.20).

5.3 Protect the back of the panels and edges with tape or primer and use a permanent method to identify the test panels.

5.4 Measure and record the gloss and spectrophotometer data for each color on the markings.

5.5 Retain one test panel prepared for each marking test specimen sent to Florida for exposure for future reference and comparison.

5.6 Carefully pack the test panels for markings being evaluated and send to:

South Florida Testing Service
17301 Okeechobee Road
Miami, FL 33015
(305) 824-3900 (phone)
(305) 362-6276 (fax)

Instruct the test service to expose one test panel for 9 months and to return upon completion. Expose second panel for an additional 6 months, for a total exposure of 15 months.

One duplicate test panel for each Florida test submission will be exposed on the FNH test rack at 45° facing south for reference and correlation with Florida panels.

NOTE: Tentative approval may be granted after the initial 9 months exposure based on appearance, color, fade, etc. Complete 15 months exposure is required to complete test.

5.7 When panels are returned, wash off the surface dirt by holding the panel under a stream of warm water and gently rubbing the surface with a sponge or soft cloth.

5.8 Place panels in a vertical rack and allow to dry.

 NEW HOLLAND	NAME				PART NUMBER	
	STD OUTDOOR EXPOSURE				86507653	
	ENGINEERING SPECIFICATION				REV. C	FRAME 2
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