



# Dry Roller Coat Foil

Series HSF100/200 and DRF300/400

Product Bulletin HSF 100/200 and DRF 300/400

April 2014

Replaces PB HSF 100/200 dated July 2007

## Description

3M™ Dry Roller Coat Foils are used with license plate sheetings to produce fully reflective vehicle registration plates. The foils are supplied in opaque colors as Series HSF 100 and DRF 300, transparent colors as Series HSF 200 and DRF 400 and with integrated 3M logo as Series HSF 100L and 200L, and DRF 300L and 400L. They are intended for use on 3M™ Preclear Reflective License Plate Sheeting.

## Application

Transparent and opaque dry roller coat foils are applied to a clean, embossed license plate by high quality roll-on dry roller coat machines providing adequate heat and pressure. Recommended application conditions are:

Minimum rubber roll temperature: 200°C (392°F)  
Maximum dry roller coat speed: 1.6m/min (5.25 ft/min)  
Pressure/gap width: setting to obtain good edge definition

Exact machine configurations, temperature, speed and pressure are the responsibility of the license plate shop. It is recommended to test the adhesion between the dry roller coat foils and license plate sheetings each time a new roll of foil is loaded on the machine. See adhesion test below.

## Adhesion Test

Allow dry roller coated license plate to cool to room temperature. Apply 3M transparent cellophane 610 tape to dry roller coated area, diagonally, covering at least two characters. Rub the tapes surface 3–4 times with the thumb to create a good bond between the tape and the dry roller coat foil. Peel at a 45° angle at a rate of about 30 cm/sec (1ft/sec) within one minute of tape application. For testing performed within one hour of dry roller coating, the tape should remove less than 15% of the foil. For testing performed after 24

hours of dry roller coating, the tape should remove less than 5% of the dry roller coat foil.

## Colors

Series HSF 100 Opaque Dry Roller Coat Foils	
HSF 100	White
HSF 102	Red
HSF 103	Green
HSF 105G	Black Gloss
HSF 105M	Black Matt
HSF 106	Dark Blue
HSF 112	Red
HSF 115	Purple
HSF 116	Brown
HSF 118	Ontario Blue

Series HSF 200 Transparent Dry Roller Coat Foils	
HSF 201	Medium Blue
HSF 202	Red
HSF 203	Green
HSF 213	Dark Green

Series DRF 300 Opaque Dry Roller Coat Foils	
DRF 300	White
DRF 302	Red
DRF 303	Green
DRF 305M	Black Matt
DRF 306	Dark Blue

Series DRF 400 Transparent Dry Roller Coat Foils	
DRF 402	Red
DRF 403	Green

Additional colors are under development. Consult your local 3M Sales/Technical Service representative with questions.

## Storage

3M™ Dry Roller Coat Foils should be stored in a cool, dry area, preferably at 64°F to 75°F (18–24°C) and 30–50% relative humidity and should be applied within one year of purchase. Rolls should be stored horizontally in the shipping carton. Partially used rolls should be returned to the shipping carton or suspended horizontally from a rod or pipe through the core.

## Health and Safety Information

Read all health and hazard, precautionary, and first aid statements found in the Materials Safety Data Sheet, and/or product label of chemicals prior to handling or use.

3M assumes no responsibility for any injury, loss or damage arising out of the use of a product that is not of our manufacture. Where reference is made in literature to a commercially available product, made by another manufacturer, it shall be the user's responsibility to ascertain the precautionary measures for its use outlined by the manufacturer.

### Important Notice

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## General Performance Considerations

Maximum durability of 3M™ Dry Roller Coat Foil will result, when it is applied according to 3M recommended application procedures. It is intended to offer the same durability (one to five years) as the 3M license plate sheeting to which it is applied. It will not fade, crack, peel, delaminate or lose adhesion and will retain an acceptable appearance, when viewed from normal viewing distances. As sheetings age and are subjected to normal cleaning, weathering and abrasion, there can be a gradual reduction in gloss and a slight color change.

## FOR INFORMATION OR ASSISTANCE CALL:

**1-877-777-3571**

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