



# Scotchcal™ Overlamine Film 3648

## Description

### Advantages

- Thick, scuff resistant protection
- For graphics for floors
- Dimensionally stable
- Short term – 3 months

### Applications and End Uses

3M™ Scotchcal™ Overlamine Film 3648 is designed to provide a durable overlamine for a variety of films. These types of applications are warranted by the 3M™ MCS™ Warranty:

- Application to 3M™ Scotchcal™ Film Series 164 to make either a Scotchprint® Graphics for Floors or 3M™ MCS™ Graphics for Floors (See Product Bulletin 164 for details)

## Characteristics

Property	Description
Film	Clear, 6 to 7 mil (0.15 to 0.18 mm)
Thickness (film with adhesive)	7 to 7.5 mil (0.17 to 0.19 mm) Clear
Adhesive	Clear, pressure sensitive
Liner	78 pound, bleached kraft paper

## Effective Performance Life

When film 164 is laminated with overlamine film 3648 in accordance with 3M recommended procedures, the following performance may be expected. The performance statements are based upon foot traffic experience in the field. Graphics may be damaged by pallets or heavy equipment such as fork-lifts; minor edge chipping is unavoidable. This type of damage is not covered by 3M's warranty. Performance depends upon preparation of the floor before application, the exposure conditions, the maintenance of the graphics, and the condition of the floor.

**Durability:** Interior floors – 3 months

## Application and Fabrication

This Bulletin does not contain detailed application and fabrication procedures for this product. Refer to 3M Related Literature on page 2 for further information.

The film may be scrubbed, cleaned and waxed during routine maintenance of the floor. Refer to Instruction Bulletin 5.26, Application and Maintenance for Graphics for Floors. Refer to Instruction Bulletin 5.19 for Lamination for Graphics for Floors.

### Premasking and Prespacing

Overlamine film 3648 does not require a premask or prespace tape for application.

## Shelf Life and Storage

The shelf life of unfabricated overlamine film 3648 is 2 years from receipt from 3M. Fabricated film should be applied within 1 year of lamination.

Film and graphics must be stored in a clean area, free from excessive moisture and direct sunlight, with ambient temperatures of 100°F (38°C) or less.

## Physical Properties


The values given are typical for Scotchcal overlamine film 3648 and are not for use as specifications.

### Physical Properties

Property	English Units	Metric Units
Tensile strength (minimum)	11 inch pounds	2.0 kg/cm
Dimensional stability	0.015 inches	0.4 mm

Note: For the full product names of the 3M products listed on this page, please see page 1.

## Health and Safety

 <b>Caution</b>
When handling any chemical products, read the manufacturers' container labels and the Material Safety Data Sheets (MSDS) for important health, safety and environmental information.
To obtain MSDS sheets for 3M products:
<ul style="list-style-type: none"> <li>• By fax, call 1-800-364-0768 in the US and Canada or 1-650-556-8417 for all other locations.</li> <li>• Electronically, visit us at <a href="http://www.3M.com">http://www.3M.com</a>, then select MSDS search.</li> <li>• By mail, or in case of an emergency, call 1-800-364-3577 or 1-651-737-6501.</li> </ul>
When using any equipment, always follow the manufacturers' instructions for safe operation.

## Warranty and Limited Remedy

### Graphics for Floors

Please refer to Product Bulletin 164 dated September, 2000 or later.

### Vertical Graphics

*The following is made in lieu of all other express or implied warranties, including any implied warranty of merchantability or fitness for a particular purpose:* Overlaminated 3648 is warranted to be free of defects in materials and manufacture at the time of shipment and to meet the specifications stated in this Product Bulletin. 3M will replace or refund the price of any 3M materials that do not meet this warranty within the specified time periods. See the worldwide 3M™ MCS™ Warranty bulletin, which gives the terms and limitations of the warranty.

**These remedies are exclusive. In no case shall 3M be liable for any direct, indirect, or consequential damages, including any labor or non-3M materials charges.**

## 3M Related Literature

Listed below is related 3M technical literature that may be of interest. You may view and print these Bulletins from our website at [www.scotchprintgraphics.com](http://www.scotchprintgraphics.com), or order them via our Fax-on-Demand (FOD) system. Call one of these phone numbers to order the desired bulletins, and specify the FOD document number provided in the chart.

United States or Canada: 1-800-364-0768  
International: 1-651-732-6506

Subject	Bulletin No.	FOD No.
<b>Product Bulletins</b>		
Films and sheetings Order an index from the Fax-on-Demand system to identify the FOD No. for the film or sheeting bulletins you need.		
Controltac <i>Plus</i> film 164	164	1011
Laminating graphics for floors	5.19	7019
Applying/maintaining graphics for floors	5.26	7026
<b>Warranties</b>		
Worldwide 3M™ MCS™ Warranty Packet (includes all Commercial Graphics MCS Warranties)		9503
Worldwide 3M™ MCS™ Warranty Overview-Folder		9504

## 3M

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