Release UKB Effective November 2007

## 3M<sup>TM</sup> Scotchcal<sup>TM</sup> Lustre Overlaminate 3645

## **Description**

3M<sup>TM</sup> Scotchcal<sup>TM</sup> Lustre transparent Overlaminate 3645 when laminated to 3M<sup>TM</sup> Controltac<sup>TM</sup> *Plus* Graphic Film Series 162 or 3M<sup>TM</sup> Controltac<sup>TM</sup> *Plus* Graphic Film IJ162-10 or 3M<sup>TM</sup> Controltac<sup>TM</sup> *Plus* Graphic Film RG162-10 is designed for making durable, removable graphics for floors

#### Advantages

- Scuff resistant protection
- Outstanding resistance to dirt and other environmental factors and wear from high foot traffic.
- Graphics for floors made with these films can be used on a variety of sealed, smooth floor surfaces including waxed vinyl, sealed concrete, marble, terrazzo, ceramic, and finished wood floors.
- Warranted for 6 months 1 year (see Warranty section)

## **Applications and End Uses**

Scotchcal lustre overlaminate 3645 when laminated to Controltac *Plus* graphic film 162 or Controltac *Plus* graphic film IJ/RG162-10 is designed for making durable, removable graphics for floors. The following types of graphics are warranted:

 Interior floor graphics that are screen or piezo ink jet printed using 3M inks and laminated with overlaminate 3645

### **Limitations of End Uses**

We do not normally warrant other applications, but please contact us to discuss your needs or let us suggest other 3M products.

Specifically, we do not warrant this film for the following:

- Graphics used for purposes other than floor graphics
- Graphics regularly subjected to gasoline vapours or spills
- Exterior applications

#### **Product Line**

Please contact the 3M Sales Office for stock availability and lead times.

Product Number	Colour / Pattern
SC162-10 IJ 162-10 RG162-10	White
162-114	Transparent

## **Main Characteristics**

Property	Description	
Film Type	Calendared film	
Film Opacity	Transparent	
Adhesive type	Permanent, pressure sensitive	
Adhesive colour	Clear	
Thickness (film plus adhesive)	300 –350micron	
	(0.3 to 0.350mm)	
Liner	78 pound, bleached kraft paper	
Suitable application surface	Flat surfaces	
Suitable application	3M <sup>TM</sup> Controltac <sup>TM</sup> Plus	
substrates	Graphic Film Series 162 &	
	3M <sup>TM</sup> Controltac <sup>TM</sup> Plus	
	Graphic Film IJ/RG162-10	
Application	10°C to 38°C	
temperature range*		

<sup>\*</sup>For applications nearing the minimum temperature range, please contact your local technical service representative to confirm suitability of application

# **Chemical and Physical Properties**

Values given are typical and are not for use in specifications. If a custom specification is desired, a request should be submitted through your sales representative. The data given below is for unprinted film

Property	Metric Units	
Tensile strength (minimum)	2.0kg/cm	
Dimensional stability	0.4mm	
Lamination temperature	10° to 38°C	
range		



FLOOR COATING AND FINISHING

MATERIAL CLASSIFIED BY

UNDERWRITERS LABORATORIES INC.® AS

TO SLIP RESISTANCE ONLY

4R14

#### Skid Resistance

Overlaminate film 3645 has been tested following the principles of BS 7976-2:2002 results are shown

Test Method	Results		
BS 7976-2:2002	Dry Surface	Wet Surface	
ВЗ 7976-2.2002	Skid reading	Skid reading	
TRRL/4S slider	118	25	
4S type slider	77	33	

## **Flammability**

3M<sup>TM</sup> Scotchcal<sup>TM</sup> Lustre Overlaminate 3645 laminated to 3M<sup>TM</sup> Controltac<sup>TM</sup> *Plus* Graphic Film Series 162 or 3M<sup>TM</sup> Controltac<sup>TM</sup> *Plus* Graphic Film IJ/RG162-10 has been tested to ASTM E 648-94a, "**Standard US Test** Method for Critical Radiant Flux of Floor-Covering Systems Using a Radiant Heat Energy Source." The results show that the composite meets the requirement of the National Fire Protection Association, Class I Interior Floor Finish as defined in the NFPA 101, "Life Safety Code."

#### Warranty

Only a Scotchprint<sup>®</sup> Graphics Authorised Manufacturer or 3M<sup>TM</sup> MCS<sup>TM</sup> Qualified Manufacturer can produce 3M<sup>TM</sup> MCS<sup>TM</sup> Warranted Graphics. The warranty period is based on field experience and exposure tests. When the graphics are processed and used according to the 3M recommendations, they should have the performance life shown in the table below. The actual performance depends on the:

- Correct combination of film and ink
- Ink formulation
- Drying methods
- Selection and preparation of the substrate
- Application methods
- Exposure conditions
- Cleaning methods

When film 162/RG/IJ162-10 is laminated with overlaminate 3645 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.

Warranted durability: 12 months – see exception below

**Exception:** Graphics for floors exposed to heavy foot traffic (more than 1,000 people per day) are warranted for 6 months

**Note:** for interior use only.

#### **Fabrication**

This bulletin does not contain detailed printing, processing or application procedures for the subject products. The appropriate Instruction Bulletin(s) may be obtained by contacting your 3M sales representative or 3M Technical Service.

## Premasking/Prespacing

Scotchcal lustre overlaminate 3645 does not require a premasking or prespacing tape for application.

## **Application**

Refer to the Instruction Bulletin 5.26 for application and maintenance of 3M graphics for floors. Refer to Instruction Bulletin 5.19 for Lamination for 3M Graphics for Floors.

## **Maintenance and Cleaning**

Use a cleaner designed for high-quality painted surfaces. The cleaner must be wet, non-abrasive, without strong solvents, and have a pH value between 3 and 11 (neither strongly acidic nor strongly alkaline).

### **Shelf Life**

The shelf life of the film is 2 year and should be applied within 2 years of the receipt of film if unprocessed. Processed film should be applied within 1 year of processing and within 2 years of receipt of the film.

## **Health & Safety**

Refer to the package label and the Material Safety Data Sheet for health, safety, and handling information on the products referenced in this bulletin. For 3M products, if necessary, you may contact our Toxicology/Product Responsibility Department on 01344 858000.

## **Important Notice to Purchaser**

The 3M products described in this publication are covered by a 3M warranty and limitation of liability.

3M's warranty provides that if 3M finds that goods are defective in material or workmanship they will be replaced or the price refunded at 3M's option but note that 3M does not accept liability for other direct losses (except for personal injury or death) or consequential losses relating to defective products or from information supplied by 3M.

Purchasers and users of 3M products, and not 3M supplying companies, are always solely responsible for deciding on the suitability of the 3M product for their required or intended use.

## **Related 3M Literature**

Listed below is related 3M Technical Literature which may be of interest:

Subject	Product Bulletin	Instruction Bulletin
3M <sup>™</sup> Controltac <sup>™</sup> Plus		
Graphic Film Series 162	162	-
3M <sup>TM</sup> Controltac <sup>TM</sup> <i>Plus</i> Graphic Film IJ/RG162- 10	IJ/RG162	-
Laminating of 3M graphics for floors	-	5.19
Application and maintenance for 3M graphics for floors	-	5.26
Scoring and cutting	-	4.1

## **Glossary of Terms**

#### Matched Component System<sup>TM</sup> or MCS<sup>TM</sup>

The system pursuant to which Finished Graphics are produced by a Graphic Manufacturer using only 3M Products and components and manufactured in accordance with 3M's Product or Instruction Bulletins, 3M Specification Document and using 3M Approved Technologies.

#### Permanent Adhesive

Films with a permanent adhesive can be difficult to remove and will often require heat and/or chemicals for effective removal.

## **Technical Assistance**

For help on specific questions relating to 3M Commercial Graphics Division Products, contact your local Technical Service Representative.

Commercial Graphics Department 3M United Kingdom PLC Customer Technical Centre Cain Road Bracknell Berkshire RG12 8HT

Tel: 01344 857850 Fax: 01344 857939

## **Sales Assistance**

For literature, samples and stock availability on 3M Commercial Graphics Division Products, contact your local Sales Office Representative.

Commercial Graphics Department 3M United Kingdom PLC 3M House, 28 Great Jackson Street, Manchester, M15 4PA

Tel: 0161 237 6394 Fax: 0800 378 127

Commercial Graphics Department 3M United Kingdom PLC 3M Centre, Cain Road Bracknell, Berkshire RG12 8HT Tel: 01344 857850 Fax: 01344 857939 e-mail: commgraphics.uk@mmm.com www.3m.com/uk/graphicsolutions Commercial Graphics Department 3M United Kingdom PLC 3M House, 28 Great Jackson Street Manchester M15 4PA Tel: 0161 237 6394 Free Fax: 0800 378127 e-mail: commgraphics.uk@mmm.com www.3m.com/uk/graphicsolutions Commercial Graphics Department 3M Ireland (Dublin) Adelphi Centre, Dun Laoghhaire County Dublin, Ireland Tel: +353 1 280 3278 Fax: +353 1 280 3509 e-mail: commgraphics.uk@mmm.com www.3m.com/uk/graphicsolutions