

LLumar[®] Decorative Textured Frost Series

Note: Click on "Show/Hide ¶" button to reveal "Specifier Notes" throughout section. Delete this text when editing is complete.

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. The General Conditions, Supplementary Conditions, and Division 01 – General Requirements apply.

1.2 SECTION INCLUDES

- A. Decorative films
- B. [Insert item description.]

1.3 RELATED SECTIONS

- A. Section 08 80 00 - Glazing: Substrate for application of decorative film.
- B. Section [xxxxx] – [Section Title]: [Include brief description of work specified in another section that is related to the work of this section.]

1.4 REFERENCES

- A. ASTM International (ASTM):
 - 1. ASTM E903 - Test Method for Solar Absorptance, Reflectance, and Transmittance of Materials Using Integrating Spheres.

1.5 DEFINITIONS

- A. Visible Light Transmittance: The ratio of the amount of visible light (380-780 nm) that is allowed to pass through a glazing system to the amount of visible light falling on the glazing system. The value is expressed as a percentage.
- B. Diffuse Visible Light Reflectance (exterior): The percentage of visible light falling on a flat, non-mirrored surface that is neither transmitted nor absorbed, but scattered backwardly at random angles from that surface. This value is also known as "non-specular reflectance".
- C. Privacy Film Rating: This number, between 0 (clear) and 10 (opaque), represents the relative difficulty an observer has in identifying the nature and character of an object located on the opposite side of the window, with the observer and the object both located at least 2 feet from the pane upon which the product has been installed.

- D. Textured Frost Series: Choose any style from Textured Frost Series to enhance clear glass with subtle texture. This elegant selection of films offers a refined look and adds privacy while maintaining an open feel, allowing in an abundance of light to interior spaces.

1.6 PERFORMANCE REQUIREMENTS

- A. Provide a decorative film with the % Visible Light Transmitted and Privacy Rating as shown in Section 2.2.

1.7 SUBMITTALS

- A. Submit under provisions of Section [01 33 00] [_____].
- B. Product Data: Submit for each product specified indicating:
 - 1. Performance properties.
 - 2. Preparation and installation instructions and recommendations.
 - 3. Storage and handling recommendations.
- C. Samples: For each type of decorative film specified, two (2) samples, 12 inches square.
- D. Qualification Data: Submit documentation indicating qualifications of decorative film supplier.
- E. Operation and Maintenance Data: Submit for decorative film to include in maintenance manuals.
- F. Warranty: Submit sample special warranty specified in this section.

1.8 QUALITY ASSURANCE

- A. Supplier Qualifications: A qualified supplier that has a minimum of 10 years of documented experience supplying decorative films similar to the film used for this project.
- B. Installer Qualifications: A firm that is authorized by decorative film supplier to install film in accordance with guidelines set forth by the supplier.
- C. Source Limitations: Obtain each type of decorative film from same supplier.
- D. Mock-ups: Build mock-ups to verify selections made under sample submittals and to evaluate surface preparation techniques and application workmanship.
 - 1. Construct mock-ups in the location and of the size indicated or, if not indicated, as directed by Architect.
 - 2. Approved mock-ups may become part of the completed work if undisturbed at time of Substantial Completion.
- E. Pre-installation Conference: Conduct conference at project site to discuss methods and procedures relating to installation of the decorative films.

1.9 DELIVERY, STORAGE AND HANDLING

- A. Deliver, store and handle materials in supplier's protective packaging.

- B. Store and protect materials according to supplier's written recommendations to prevent damage from condensation, temperature changes, direct exposure to sun, or other causes.

1.10 SITE CONDITIONS

- A. Ambient Conditions: Maintain temperature, humidity, and ventilation within limits recommended by supplier.

1.11 LIMITED WARRANTY

- A. Limited Warranty: Certain restrictions apply. The Limited Warranty can be viewed in full by [clicking here](#).

PART 2 - PRODUCTS

2.1 SUPPLIER

- A. Basis-of-Design Product: The design for decorative films is based on LLumar® Decorative Films supplied by Eastman Performance Films, LLC., 575 Maryville Centre Drive, St. Louis, Missouri 63141; Telephone: 800-851-7781 (Option 2); <https://northamerica.llumar.com/contact-llumar>; Web Site: www.llumar.com.
- B. Representative: [Insert contact information.]
- C. Substitutions will be considered, subject to compliance with requirements of this section, under provisions of Section 01 60 00.

2.2 DECORATIVE TEXTURED FROST FILMS

- A. Decorative Film: LLumar® Brushed Crystal Film (NRMV BC) with the following performance characteristics when applied to the interior surface of single-pane, 1/8-inch clear glass:

% Visible Light Transmission - range	86
% Diffuse Visible Light Reflectance (exterior) - range	12
Privacy Film Rating - range	6
Thickness without Liner	.005
Film Construction	Vinyl

- B. Decorative Film: LLumar® Frosted Glass Film with the following performance characteristics when applied to the interior surface of single-pane, 1/8-inch clear glass:

% Visible Light Transmission - range	88
% Diffuse Visible Light Reflectance (exterior) - range	9
Privacy Film Rating - range	5
Thickness without Liner	0.004
Film Construction	Vinyl

- C. Decorative Film: LLumar® Frosted Sparkle Film with the following performance characteristics when applied to the interior surface of single-pane, 1/8-inch clear glass:

% Visible Light Transmission - range	73
% Diffuse Visible Light Reflectance (exterior) - range	19
Privacy Film Rating - range	9
Thickness without Liner	0.004
Film Construction	Vinyl

- D. Decorative Film: LLumar® Sandblast Film with the following performance characteristics when applied to the interior surface of single-pane, 1/8-inch clear glass:

% Visible Light Transmission - range	87
% Diffuse Visible Light Reflectance (exterior) - range	9
Privacy Film Rating - range	7
Thickness without Liner	0.005
Film Construction	Vinyl

- E. Decorative Film: LLumar® Satin Crystal Film (NRMV SC) with the following performance characteristics when applied to the interior surface of single-pane, 1/8-inch clear glass:

% Visible Light Transmission - range	89
% Diffuse Visible Light Reflectance (exterior) - range	9
Privacy Film Rating - range	6
Thickness without Liner	0.005
Film Construction	Vinyl

- F. Decorative Film: LLumar® Satin Crystal Clear Film (RMS PS2) with the following performance characteristics when applied to the interior surface of single-pane, 1/8-inch clear glass:

% Visible Light Transmission - range	90
% Diffuse Visible Light Reflectance (exterior) - range	9
Privacy Film Rating - range	6
Thickness without Liner	0.004
Film Construction	Vinyl

2.3 DECORATIVE FILM ACCESSORIES

- A. General: Provide accessories either manufactured by or acceptable to Decorative film supplier for application indicated, and with a proven record of compatibility with surfaces contacted in installation.
- B. Pressure Sensitive Adhesive: This adhesive is characterized by its tacky nature and its ease of installation.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine substrates for compliance with requirements and for conditions affecting performance of Decorative film including glass that is broken, chipped, cracked, abraded, or damaged in any way.
- B. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 PREPARATION

- A. Comply with supplier's written instructions for surface preparation.
- B. Clean substrates thoroughly prior to installation.
- C. Prepare substrates using methods recommended by film supplier to achieve the best results for the substrate under project conditions.
- D. Protect window frames and surrounding surfaces to prevent damage during installation.

3.3 INSTALLATION

- A. Install in accordance with supplier's written instructions.
- B. Install with no gaps or overlaps.
- C. If seamed, make seams non-overlapping.
- D. Do not remove release liner from film until just before each piece of film is cut and ready for installation.
- E. Custom cut to the glass with neat, square corners and edges to within 1/8-inch of the window frame.
- F. Remove air bubbles, blisters, and other defects. Be careful to remove "fingers" to eliminate any contamination or excess water pockets. It is crucial to remove as much water as possible during installation.

3.4 FIELD QUALITY CONTROL

- A. After installation, view film from a distance of 10 feet against a bright uniform sky or background. Film shall appear uniform in appearance with no visible streaks, wrinkles, banding, thin spots or pinholes.
- B. If installed film does not meet these criteria, remove and replace with new film.

3.5 CLEANING AND PROTECTION

- A. Remove excess mounting solution at finished seams, perimeter edges, and adjacent surfaces.
- B. Use cleaning methods recommended by film supplier.
- C. Replace films that cannot be cleaned.
- D. Protect installed products until completion of project.
- E. Touch-up, repair or replace damaged products before substantial completion.

END OF SECTION

EASTMAN



For inquiries inside the U.S. and Canada

Eastman Chemical Company
Advanced Materials - Performance Films
P.O. Box 5068
Martinsville, Virginia 24115
1-800-2LLUMAR
www.llumar.com

For inquiries outside the U.S. and Canada

Contact your regional technical services
representative or visit www.llumar.com.

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OBSCURA 10070 FR WB+BW

Product information

Application	Inside
System	Hanging, Sliding
Feature	Light deprivation / blackout, Energy saving
Flame retardant	Yes
Material	Polyolefin 66%, Polyester 34%
Pattern	Full plastic
Warranty	Warranty five (5) years under all types of greenhouse covering. See Svensson's limited warranty for all terms, conditions and exclusions in writing.

Properties	Value	Unit	Test Methods
Shading level in diffused light PAR**	99.9	%	Svensson method
Shading level in direct light PAR**	99.9	%	Svensson method
Energy saving	70	%	Svensson method
Width of strips	4	mm	
Weight	198	g/m ²	

* Width 50 mm

** PAR = 400 - 700 nm, accuracy +/- 1%

*** UV-light = 300 - 400 nm

This product image is for illustrative purposes only and may vary in appearance and design from the delivered product. Although the information in this data sheet has been composed with care, Svensson does not accept any liability in respect of its accuracy.

Further information concerning the product and its installation may be obtained from Svensson and its authorized distributors. Svensson's products and names are protected by patent and other intellectual property rights.

Products marked FR are flame retardant. No other products delivered by Svensson are flame retardant.

AB Ludvig Svensson is an ISO 14001/90001 certified company.

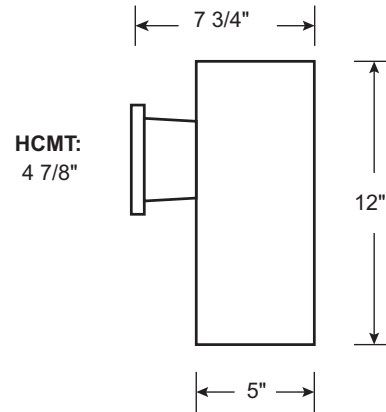
COMPOSITE **Trinidad Series 343**

DESCRIPTION

Incon Lighting's Trinidad 343 series is ideal for coastal areas. This fixture is Wildlife/Turtle ready with a certified screw in lamp (lamp not included). It is dark sky friendly and is easily re-lamped via open bottom.

FEATURES

- Black or White Finish
- Fade & Rust Resistant Composite Construction
- Open Bottom & Closed Top Design
- Dark Sky Compliant
- Wildlife & Turtle Ready (with certified lamp)
- Medium E26 Socket (PAR30 75W Max)
- Wall Mount Only
- Minimum Starting Temp -20°F
- UL Listed for Wet Locations



WATTAGE/LUMENS

E26 Medium Base

- LED A19 or PAR30 Ready (*Bulb Not Included*)
- 75W PAR30 Max

ORDERING GUIDE (Sample: 34301-E26)

Family	Lens Color	BASE COLOR	Wattage	CCT	Options
343	0 - Open Bottom	5 - Black	E26 - Medium Base	-	
		1 - White			

Specifications subject to change without notice

FEATURES



ADDITIONAL NOTES



PROJECT: _____

SCHEDULE: _____ DATE: _____

PREPARED BY: _____

NOTES: _____