
Quantum Cloaking Film Specifications

This document provides comprehensive details on the Quantum Cloaking Film, its material properties, installation guidelines, optical features, and warranty. The film is a revolutionary solution for cloaking LED/LCD displays for privacy and design applications.

1. Supported Video Displays

Recommended Use

Quantum Cloaking Film is optimized for horizontally mounted LCD and LED video displays that are **40 inches or larger**. The film cloaks the light emitted from displays to provide privacy and limit screen visibility when viewed from certain angles.

Compatibility Testing

For other video displays (especially those smaller than 40 inches or non-standard displays), it is strongly recommended to test a sample piece of the film on the device. Compatibility may vary depending on the brightness, pixel density, and orientation of the screen.

2. Known Incompatible Video Displays

Quantum Cloaking Film is not designed for:

- Smartphones and tablets.
- Apple video display products, including iPads, MacBooks, and certain iMac models.

Incompatibility stems from unique screen designs, pixel layouts, and technologies not conducive to cloaking effects.

Best practices recommend using our plexiglass sample which has Q Film mounted to it to evaluable compatibility, orientation and functionality.

3. Roll Dimensions

Standard Roll Sizes

- 48 inches x 100 feet linear

- 56.25 inches x 100 feet linear
 - 60 inches x 100 feet linear
 - 70.25 inches x 100 feet linear
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4. Film Thickness

- **Overall Thickness:** 6.5 mils (thousandths of an inch).
This includes:
 - **Adhesive Side Liner**
 - **Protective Outer Liner**
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5. Material Composition

Film Chemistry

The base material is **Cellulose Triacetate**, a highly durable and transparent polymer commonly used in optical applications.

Adhesive Layer

- Material: **Polyethylene Terephthalate (PET)**.
 - **Adhesive Thickness:** 1.75 mils.
 - The adhesive is designed to bond seamlessly to glass while allowing moisture to evaporate during curing.
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6. Optical Properties

Quantum Cloaking Film is engineered to balance privacy and light management effectively. Below are the detailed optical properties:

Property	Value
UV Transmission	<1%
Infrared Transmission	92%

Property	Value
Solar Energy Transmission	65%
Solar Energy Reflection	9%
Solar Energy Absorption	25%
Solar Energy Rejection	32%
Visible Light Transmission	41%
Visible Light Reflection	6%
Visible Light Glare Reduction	54%

7. Fire Rating

Quantum Cloaking Film complies with the **ASTM E84 Class A** fire safety rating, making it suitable for commercial and residential applications. Class A indicates low flame spread and smoke development.

8. Installation Guidelines

Proper installation is critical to ensure optimal performance and durability of the Quantum Cloaking Film.

Curing and Drying

- The adhesive layer requires **2 to 4 weeks** to cure completely, depending on environmental conditions.
- During this period, moisture trapped between the film and glass evaporates gradually.
- Use a felt-covered card to remove excess water and air bubbles during installation.

Cleaning Post-Installation

- Recommended cleaner: **Novus #1 Plastic Polish** applied with a microfiber cloth.
- Avoid abrasive cleaning tools or ammonia-based cleaners, as they may damage the film's surface.

Installation Orientation

- **For Displays 40 Inches and Larger:** Apply the film vertically to the glass.
- **For Older LED/LCD Displays:** Apply the film horizontally.
- **Railroading:** The film can also be applied at a **45-degree angle** for specialized design requirements.

Environmental Conditions

- **Temperature Range for Application:** Between **50°F and 90°F**.
 - **Humidity:** N/A
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9. Warranty

Quantum Cloaking Film comes with a **5-year warranty on interior glass/polycarbonate not exposed to sunlight and a 3-year warranty on building envelope glass/polycarbonate**, covering:

- Material defects.
- Delamination under normal use conditions.

Warranty Conditions

- Proper installation according to the manufacturer's guidelines is mandatory.
- Application on **non-approved (contact us for approval prior to installation) or uneven substrates** voids the warranty.
- **Exclusions:** Labor costs, removal costs, and shipping charges are not covered under the warranty.

Claim Process

To file a warranty claim:

- Contact the manufacturer at info@quantumcloakingfilm.com.
 - Provide proof of purchase and detailed photos of the issue.
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10. Contact Information

For more details, technical support, or warranty claims, contact Quantum Cloaking at:

- **Phone:** 1 (833) 611-3456 (US/Canada toll-free)
- **Email:** info@quantumcloakingfilm.com
- **Address:**
Quantum Laminates
9200 rue Meilleur
Suite 207
Montreal, Quebec
Canada H2N 2A9
- **Emergency Phone Number:** 514-777-2705
- **Additional Contact Information:** info@quantumcloakingfilm.com

For additional specifications or purchasing inquiries, visit quantumcloakingfilm.com.
