

Chris Rayen

From: Chris Rayen
Sent: Tuesday, April 9, 2024 2:34 PM
To: Chris Rayen
Cc: Chris Rayen
Subject: 9 Channel Center Street window film

Hello, Rachel.

Thanks for meeting with me today. As discussed, we feel that we need to apply some film to the interior of the glass on the front left of the building. It is a dentist's office, and there is a hygienist and an operator where she works directly in front of those 18 sashes. For privacy from the sidewalk traffic, we would like to apply the vinyl film on the bottom row of windows, approximate size of the sash is 28 inches wide x 24 inches tall. As you can see in the photo, there are 6 lower sashes.

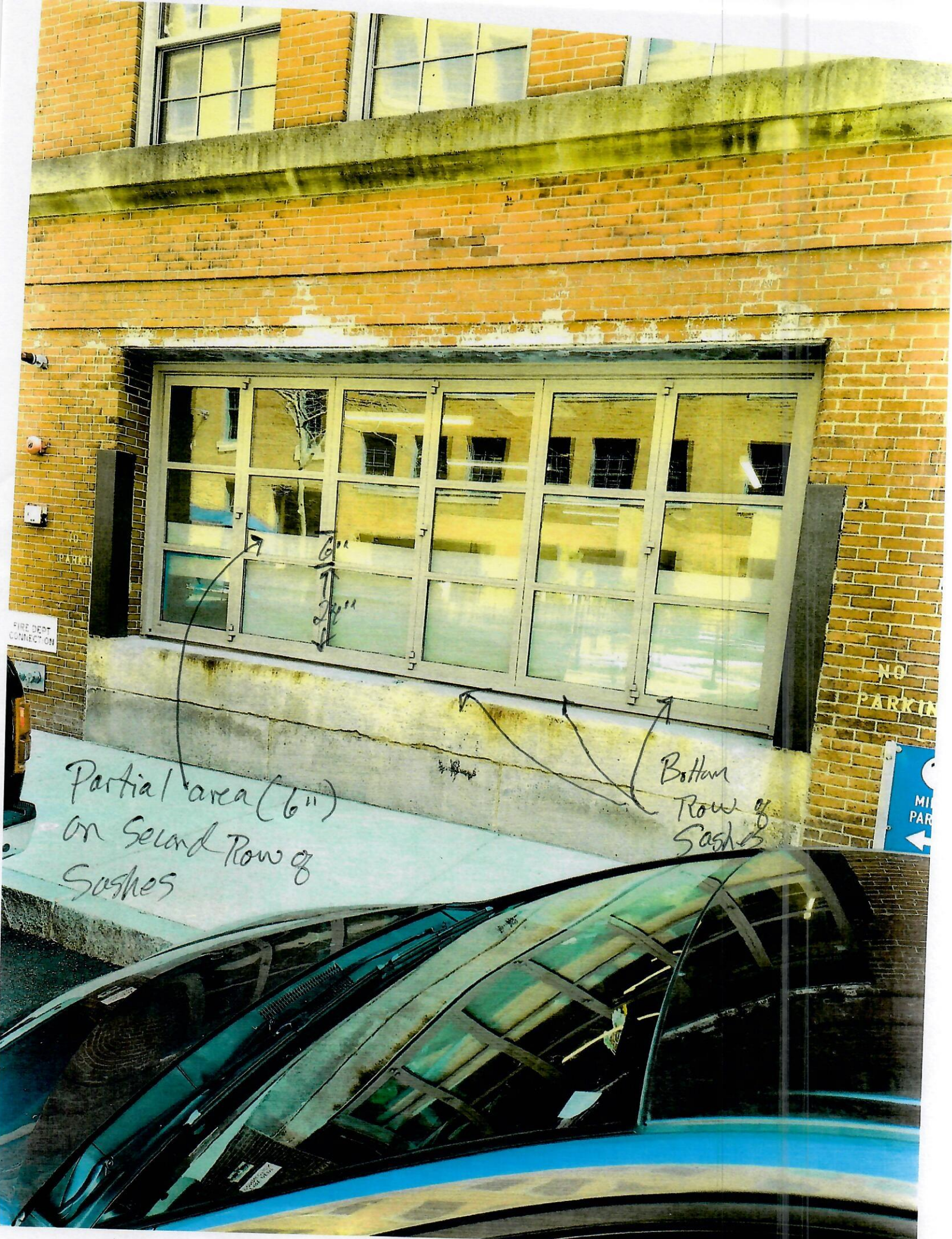
In addition, we would also seek permission to apply another piece of the vinyl on the bottom 6 inches of the next sash up. At the foot of the dental chair, there is a monitor attached to the wall, which allows the dentist or hygienist to show the patient images of their teeth. This next 6 inches of film will block someone on the sidewalk from seeing the top of the monitor.

The film is called "dusted crystal" and I have enclosed a specification sheet.

I look forward to hearing from you.

Sincerely,

Chris Rayen



Partial area (6")
on second Row of
Sashes

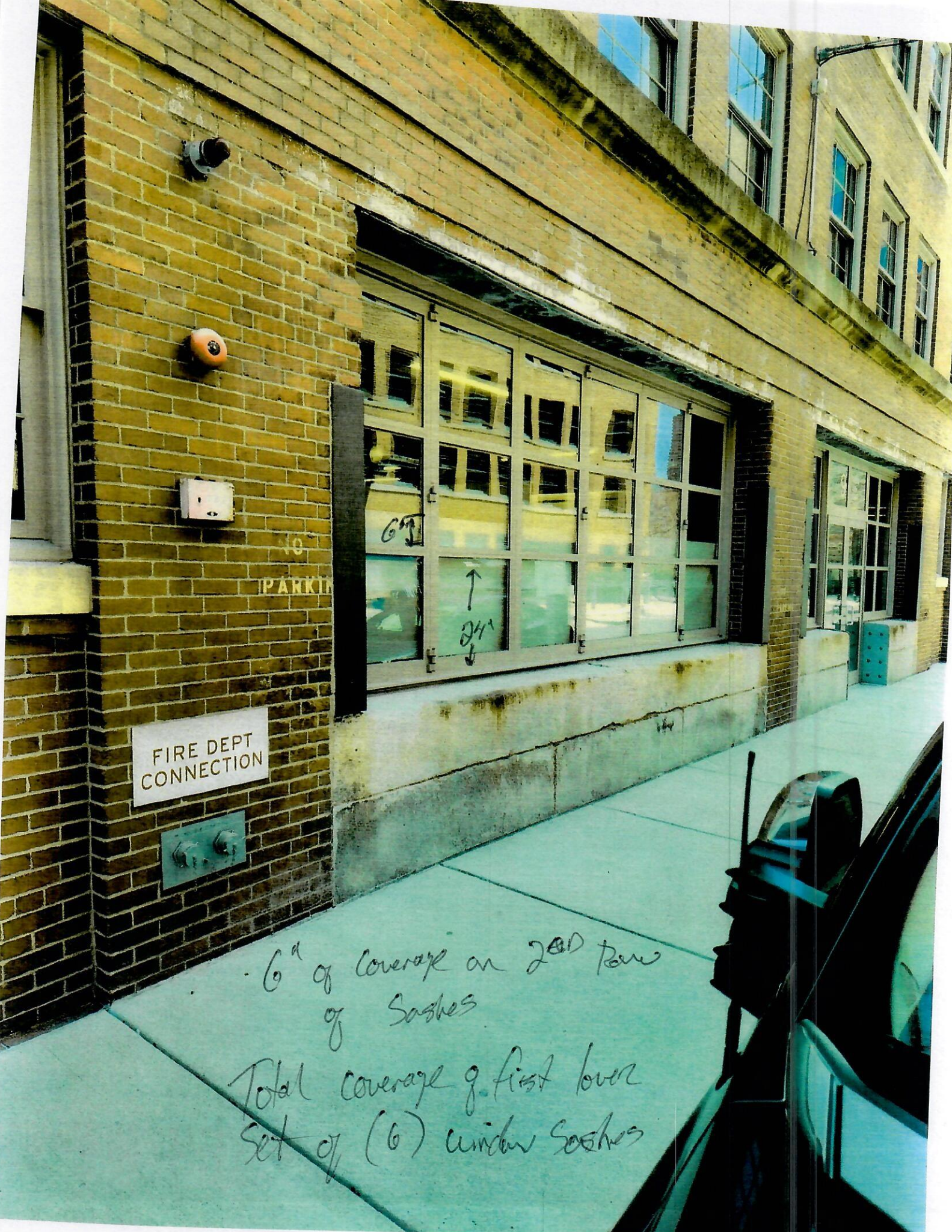
6"
2nd

Bottom
Row of
Sashes

FIRE DEPT
CONNECTION

NO
PARKING

MI
PAR
←



FIRE DEPT
CONNECTION

6" of coverage on 2nd row
of Sashes
Total coverage of first lower
Set of (6) window Sashes

Product Description

3M™ Dusted and Frosted CRYSTAL Glass Finishes (the “Products”) offer the designs of sandblasted (dusted) or etched (frosted) glass, at a fraction of the cost. On a user test and approve basis, you can digitally print on the Products for both customization and personalization options. These Products have a permanent, pressure-sensitive adhesive and a translucent polyester liner for easy cutting. They are available in a Dusted Crystal finish in translucent white and a Frosted Crystal finish in translucent white and gold. The Products can be used in applications on the surface of interior glass, interior perimeter glass (the “Interior Applications”), and vertical exterior glass (the “Exterior Applications”)

i IMPORTANT NOTE

Please refer to the 3M™ CRYSTAL Installation Guide for additional information on wet application.

Featured Benefits

- Achieve the look of sandblasted or etched glass
- Create custom cut shapes to promote your brand and design
- Provide privacy in interior or exterior spaces while maintaining an open feel
- Easy application - wet application method virtually eliminates air bubbles, simplifying and speeding application
- Expected Performance Life is 15 years for interior applications on non-perimeter glass (see Warranty).

Product Characteristics

The values in these tables are typical, and are based on test data deemed reliable but are not warranted.

Characteristic	Value	
Material	Film	Vinyl
	Adhesive	Pressure-sensitive acrylic, permanent
	Release Liner	Silicone-coated polyester
Thickness	Film + Adhesive	3.2 mils (81 microns) - 7725SE-314 Dusted Crystal White 4.7 mils (120 microns) - 7725SE-324 Frosted Crystal White
	Release Liner	3.5 mils (89 microns)
Maximum Roll Size	60 in. x 150 ft. (152 cm x 46 m) - 7725SE-314 Dusted White & 7725SE-324 Frosted Crystal White 48 in. x 150 ft. (122 cm x 46 m) - All colors	
Maximum Weight	62 lb. (29 kg) (approx.) 60 in. x 150 ft. roll 49 lb. (23 kg) (approx.) 48 in. x 150 ft. roll	
Products	7725SE-314: Dusted Crystal White VE16709: No Logo Liner Dusted Crystal White 7725SE-324: Frosted Crystal White VE14704: Smooth Frosted Crystal White 7725SE-331: Smooth Frosted Crystal Gold	

Product Performance

The values in these tables are typical, and are based on test data deemed reliable but are not warranted.

Characteristics	Value	
Adhesion 24 hours after application *	Acrylic, Glass, and Polycarbonate 4 lb./in. (18 N/25mm)	
Fire Resistance	When used in Interior Applications on glass, Products have Class A rating per ASTM E84 Test Method, as defined by NFPA 101 “Life Safety Code”	
VOC Emissions Test	Compliant as low emitting per CA Specification 01350, tested per CDPH Standard Method V1.1-2010.	
Tensile Strength Minimum	Dusted Crystal	Frosted Crystal
	5 lb./in. at 73°F (23N / 25mm at 23°C)	3.5 lb./in. at 73°F (15N / 25mm at 23°C)

* Test specimens were applied to the substrate and conditioned at 68 F (20 C), then peel tested at 180 degree at a tensile speed of 12 inches (300 mm) per minute.

3M™ Dusted and Frosted CRYSTAL Glass Finishes

Optical Performance Characteristics

The optical values are calculated as theoretical values and compiled with existing data. The values in these tables are typical, and are based on test data deemed reliable but are not warranted.

Characteristic		Dusted CRYSTAL	Frosted CRYSTAL
Shading Coefficient *		0.93	0.82
Solar Heat (%)	Reflectance *	7%	10%
	Transmittance *	76%	64%
	Absorbance *	17%	26%
Visible Light (%)	Reflectance *	8%	12%
	Transmittance *	85%	72%
UV (%)	Transmittance *	27%	20%

* As measured on 6mm clear glass.

Resistance to Cleaners and Disinfectants

Glass finishes are wet applied to glass and allowed to dry for at least 48 hours. For wipe testing, the cleaner or disinfectant is applied to the sample to simulate routine use in a healthcare setting, and then wiped off with a cloth. For immersion testing, the sample is immersed in the cleaner or disinfectant for 10 minutes or up to 24 hours, then rinsed with water and allowed to dry. Any change in the surface of the glass finish is noted. Other cleaners and disinfectants with the same active ingredient are expected to perform similarly.

Cleaner or Disinfectant	Wipe Testing Result	Immersion Time	Immersion Testing Result
3M™ C. diff Solution Tablets Concentrate	No visible change	24 hours	No visible change
3M™ HB Quat Disinfectant Cleaner Concentrate #25A	No visible change	24 hours	No visible change
3M™ Neutral Quat Disinfectant Cleaner Concentrate # 23	No visible change	10 minutes	No visible change
Isopropyl Alcohol - 70% IPA/30% water	No visible change	24 hours	No visible change
3M™ MBS Cleaner Concentrate #41	No visible change	10 minutes	No visible change
3M™ Quat Disinfectant Cleaner Concentrate #5A	No visible change	24 hours	No visible change
3M™ RCT Disinfectant Cleaner Concentrate #40A	No visible change	24 hours	No visible change
Clorox® Bleach - 50% bleach/50% water	No visible change	10 minutes	No visible change

Product Use

The user is solely responsible for evaluating and determining whether these 3M Products are suitable and appropriate for any particular use or manufacturing process in which they may be used.

3M™ Dusted and Frosted CRYSTAL Glass Finishes

Application and Removal Guidelines

The values in these tables are typical, and are based on test data deemed reliable but are not warranted. See the 3M™ CRYSTAL Glass Finishes Installation Guide for additional information.

Characteristic	Value
Application Surface Type	Flat
Application Surface Material	Glass, acrylic, polycarbonate
Application Location	Interior and exterior applications.
Application Temperature	54°F - 100°F (12°C - 38°C) air and application surface
Application Method	Wet application
Applied Product Shrinkage	0.01 in. (0.3mm) maximum
Applied Product Exposure Temperature	-40°F - +149°F (-40°C - +65°C)
High Humidity Environments	Products are not recommended for Interior Applications where condensation consistently occurs.
Product Removal	Low heat, or 3M Adhesive Remover Citrus Base and scraper

NOTE: Removing the Product too quickly can result in excessive adhesive left on the substrate. If necessary, heat a small section of the film with a heat gun to soften the adhesive, peel back slowly, then heat and remove the next section.

Processing Options

Inkjet Printing

3M™ Dusted and Frosted CRYSTAL Glass Finishes may be inkjet printed or screen printed with UV-cured or solvent inks on a user test and approve basis. No warranty is made for the quality or durability of printed Product. 3M offers:

- No Logo Liner Dusted Crystal VE16709 for use with printing
- Smooth Frosted CRYSTAL VE14704 for use with application tape and cutting.
- Smooth Frosted Gold CRYSTAL 7725SE-331 for use with application tape and cutting.

Cutting

Based on electronic cutting and weeding evaluations that used Helvetica medium upper case, the recommended minimum cutting height for text is 0.375 in. (0.95 cm). Because of the differences in electronically controlled cutting equipment and font characteristics, users should determine their own cutting and weeding capability.

- Sharpness of the knife blade. Dull blades create a serrated look to the cut edge of the Product.
- Weight on the knife blade. The ideal weight slightly scores the liner. Too little weight does not cut completely through the film and adhesive. Excessive weight cuts the liner. It also causes the blade to drag, accelerating wear and eventually creating a serrated cut edge on the Product.
- Temperature and relative humidity are minor considerations, but avoid extreme or rapidly fluctuating conditions.
- Store the Product in the same environment as the cutting equipment.
- Consider the stroke width of characters, style of serifs or extensions, and small details of scanned or digitized artwork.

The minimum recommended stroke width is 0.040 in. (1.0 mm) when the Product will be exposed to cleaning or other physical stress.

Weeding

Please see the 3M™ Dusted and Frosted CRYSTAL Glass Finishes Installation Guide for details. An application tape can be laminated to the product to support the cut shapes. Please see the 3M™ Dusted and Frosted CRYSTAL Glass Finishes Installation Guide for recommended applications tapes.