

TINTBUYER.COM FREE GLOSSARY

APPEARANCE TERMS

Term	Definition
Color – Gold/Bronze	Films with positive b*; actual appearance varies along L* depending on whether the neutral colored film is light or dark.
Color – Neutral/Grey	Films with very small values for a* and b*; actual appearance varies along L* depending on whether the neutral colored film is light or dark.
Color Reflective	Films made by laminating colored films (typically brightly colored blue or green) to reflective silver films, creating a high heat-rejecting film that dramatically changes the appearance of the glass.
Dual Reflective	Tintbuyer.com defines as a difference in reflectivity between the two film sides (outside versus inside) <u>greater than 4%</u> .
L*a*b* Color Space	A precise 3-dimensional color system where L* is a “z” axis measure of “lightness”; a* and b* are the “x” and “y” axis measures. L* ranges from 0 (black) to 100 (white); a* ranges from negative (green) to positive (red); b* ranges from negative (blue) to positive (yellow).
Single Reflective	Tintbuyer.com defines as a difference in reflectivity between the two film sides (outside versus inside) <u>less than 4% and greater than 14%</u> visible light reflectance.

PERFORMANCE TERMS

Term	Definition
Emissivity (E)	The measurement of a film’s ability to reradiate absorbed energy. A lower “E” value will be more efficient and maintaining heat generated inside a space.
Glare Reduction	Reduction in visible light transmission after installing film compared to the visible light transmission of glass with no film.
Infrared	Although not officially defined by the window film industry, Tintbuyer.com delineates “near” infrared and “far” infrared as 780-2,500 nm and >2,500 nm respectively. Near infrared-blocking capabilities are important for reducing solar heat gain whereas far infrared-blocking capabilities are important for improving emissivity.
Luminous Efficacy	The ratio of visible light transmission to shading coefficient. Luminous efficacy greater than 1.0 is defined to be “spectrally selective”.
Shading Coefficient	The ratio of solar heat gain through a given glazing system to the solar heat gain of clear glass. (similar to Solar Heat Gain Coefficient). Lower is better when heat rejection is an important consideration.
Solar Heat Gain Coefficient	The ratio of solar heat gain through a given glazing system to the solar heat gain of clear glass. (similar to Solar Heat Gain Coefficient). Lower is better when heat rejection is an important consideration.
Total Solar Energy Absorbed	Percentage of total solar energy absorbed by a glazing system. Glass breakage due to application of window film is typically rare but solar absorption and uneven glass thermal expansion would contribute to potential for breakage.
Total Solar Energy Rejected	Percentage of total solar energy (heat) rejected by a glazing system. Higher is better when heat rejection is an important consideration.
Ultraviolet Rejected	Percentage of total ultraviolet (UV) radiation that is prevented from passing through a glazing system. Check Tintbuyer.com FREE GUIDES for more information about UV light, fading, and skin cancer.
Visible Light Reflected Exterior	Percentage of total visible light reflected by a glazing system to the outside.
Visible Light Reflected Interior	Percentage of total visible light reflected by a glazing system to the inside.
Visible Light Transmitted	Percentage of total visible light passing through a glazing system. Higher visible light transmission is important when trying to keep the appearance of the glass the same after film installation. Lower visible light transmission is important when glare reduction is important.

OTHER TERMS

Term	Definition
ANSI	The American National Standards Institute – a private non-profit organization that oversees the development of voluntary consensus standards for products, services, processes, systems, and personnel in the United States.
Ceramic	An inorganic, nonmetallic film.
CPSC	The Consumer Products Safety Commission – an independent agency of the U.S. government created to protect against unreasonable risks of injuries associated with consumer products.
Insulated Glass Unit (IGU) Seal Failure	Windows manufactured of two or more pieces of glass with a <u>sealed</u> airspace typically have desiccant to keep moisture out of the airspace. When the seal is broken, moisture can build up between the panes.
IWFA	The International Window Film Association has an industry mission of increasing consumer awareness and demand for all types of professionally-installed window film products.
NFRC	A nonprofit, public/private organization created by the window, door, and skylight industry that has developed a window rating system.
Radio Frequency (RF) Interference	The tendency of a film to interfere with radio frequencies (whether desired in the case of stopping electronic eavesdropping or undesired in the case of causing GPS or Tire Pressure Monitor malfunction) is an important consideration.
U-Factor	The measure of tendency for conductive heat transfer – window films in general have very little effect on U-Factor.