



PILKINGTON

Technical Information

ATS-100W
2004/04/07

This index gives brief summaries of the technical bulletins available on our web site at:
www.pilkington.com

<u>Bulletin Number</u>	<u>Title</u> (unless otherwise noted Bulletins are 1 or 2 pages long)	<u>Current Date</u>
ATS-100 W	BP Literature & ATS Bulletins Index	2004/03/25
ATS-104	Protecting Flat Glass Surfaces How to protect float glass from water, alkali, chemical and physical damage during shipment, storage and installation. (4 pages)	2002/03/06
ATS-112	Preventing Moisture Stains on Stored Glass Controlling ambient atmospheric conditions to prevent surface damage, from condensation or humidity, to glass during long term storage. (3 pages)	2002/03/06
ATS-113	Field Applied Plastic Films and Coatings on Vision Glass Assessing the risks of thermal fracture and other issues associated with field applied solar control or clear plastic films to previously installed vision glass.	2002/03/06
ATS-114	Butt Joint Glazing Edgework Requirements Nine line drawings of cut edge quality issues to be considered and specified when installing exposed edge or butt joint edge glazing. (4 pages)	2002/03/06
ATS-116	Glass and Energy Definitions and descriptions of key window energy control (heat loss & gain) terms including: Solar Heat Gain Coefficient, Shading Coefficient, U-Value, etc., and how these factors are used specify heat gains and losses through a window. (4 pages)	2002/03/06

ATS-117	Hand Washing Pilkington Eclipse™ Reflective Glass and Pilkington Mirropane E.P.™ Transparent Mirror.	2002/03/06
	Guidelines for hand cleaning the reflective surfaces without creating damage by use of razor blades, abrasives or aggressive chemicals.	
ATS-121	Pilkington Eclipse™ Reflective Glass Thermal Stress Guidelines	2002/03/06
	Reflective glass can often be used in the annealed form and will adequately resist solar induced thermal stress provided basic guidelines are followed. When higher performance is required, using spectrally selective reflective glass and Low-E coatings the outer light of an insulating unit will often need to be heat treated. (3 pages)	
ATS-122	Glass Selection	2002/03/06
	Twelve important aspects of glass properties which need to be considered at the glass selection stage of window design. (4 pages)	
ATS-123	Thermal Stress	2002/03/07
	The factors and glass breakage mechanisms which need to be considered when evaluating thermal stress. See ATS-139 or the web site program for evaluation methods. (3 pages)	
ATS-124	Spandrel Panel Glazing	2002/03/07
	Spandrel panel design options are discussed to help select the most effective option in terms of appearance, performance and durability.	
ATS-125	Pilkington Mirropane E.P.™ Transparent Mirror Guidelines	2002/03/07
	Lighting Ratios and the calculation of Observation and Masking Ratios are explained to ensure correct installed performance of Transparent Mirrors or 'Two-Way' Mirrors. (4 pages)	
ATS-126	Guidelines When Using Lawn Sprinklers	2002/03/07
	The repeated glass wetting and evaporation of glass, especially with 'hard' water can cause glass maintenance problems if appropriate guidelines are not followed.	
ATS-128A	Glass Specification Guidelines	2000/10/04
	Sample specification formats for use with Pilkington NA Inc products.	
ATS-129	Properties of Soda-Lime-Silica Float Glass	2002/04/07
	Basic characteristics needed for thermal and mechanical engineering analysis of glass installations.	

ATS-130	Pilkington Eclipse™ Reflective Glass Glazing Guidelines	2002/03/06
	Eclipse Reflective Glass is generally glazed with the coating on the #2 surface. Particular glazing and cleaning details need to be followed when it can be glazed #1 surface reflective.	
ATS-133	Machine Cleaning Pilkington Energy Advantage™ Low-E Glass	2002/03/06
	Washing machine operation settings and recommended detergents are given for optimum results.	
ATS-135	Handling, Inspecting and Fabricating Pilkington Energy Advantage™ Low-E Glass	2000/10/04
	Instructions for unpacking and packing, surface identification, inspection, cutting, washing, heat treating, laminating and insulating glass fabrication are given for the hard pyrolitic coated product. (3 pages)	
ATS-136	Guidelines for Prevention of Thermal Stress Breakage in Annealed Glass	2000/10/04
	When a thermal stress analysis such as the web site program or ATS-139 suggests that annealed glass can be used the basic guidelines listed here must still be followed.	
ATS-137-2	Appearance of Installed Energy Advantage™ Low-E and Solar E™ Glass	2003/11/19
	Understanding the coating structure and appearance in varying lighting conditions. (3 pages)	
ATS-138	How Pilkington Energy Advantage™ Low-E Glass Works	2001/04/17
	By selectively transmitting and reflecting different wavelengths of visible and invisible radiant energy significant savings can be made. The graphs in this bulletin clearly demonstrate the physics of steady-state heat transfer through Low-E coated glass.	
ATS-139	Thermal Stress for Pilkington Glass Combinations	2004/03/10
	A simple graphical decision tree is used to combine the answers to questions on glass type, shading, location, and frame details to give a quick thermal stress analysis and the possible need to heat treat the glass. (15 pages)	
ATS-139 Addendum	Thermal Stress for Pilkington Eclipse Advantage™ Low-E Glass	2004/03/10
ATS-141	Glazing Choice Can Affect Fading of Home Furnishings	2000/10/04
	Both the ultra violet radiation and visible light in sunlight cause fading of fabrics and organic materials. This bulletin shows how the LBNL program Window 4.1 can be used to give a more accurate measure of fading control with appropriate glass and coatings than by simply using UV transmission values alone.	
ATS-143	Hand Cleaning Pilkington Energy Advantage™ Low-E Glass and	2001/04/05

Pilkington Solar E™ Solar Control Low-E Glass

Techniques and materials for optimum hand cleaning of the hard pyrolytic coatings are listed.

ATS-144	Manual Washing of Clear and Tinted (Non-Reflective Coated) Glass	2000/10/04
	Standard washing instructions for manual removal of typical in-service (during fabrication and when installed) contaminants.	
ATS-145	Handling, Inspecting & Fabricating Pilkington Gold Eclipse™ Reflective Glass	2003/06/12
	Specific instructions for unpacking and packing, inspection, cutting, washing, heat treating, laminating and insulating glass fabrication are given for the gold color pyrolytic coated product. (5 pages)	
ATS-146	Rating Windows for Energy Efficiency	2000/10/04
	The annual energy usage of windows across Canada is compared by use of an ER number calculated from the effects of heat loss (U-Factor), beneficial solar heat gains (SHGC), and air leakage.	
ATS-147	Pilkington Energy Advantage™ Low-E Glass Windows Reduce Annual Fuel Costs	2000/10/04
	This bulletin shows that the use of Low-E glass in residences always saves energy.	
ATS-148	Plant Growth Behind Pilkington Energy Advantage™ Low-E Glass and Pilkington Solar E™ Solar Control Low-E Glass	2001/04/05
	The use of clear Low-E coated glass has negligible effect on the visible light needed for plant growth.	
ATS-149	Interference Fringes in Insulating Glass	2000/10/04
	Two different types of faint fringe pattern can occasionally be seen in double glazing. One can be prevented, the other is a result of the extreme flatness and high optical quality of window glass. (4 pages)	
ATS-152	Handling, Inspecting, Fabricating & Glazing Blue-Green, EverGreen™ and Arctic Blue™ Pilkington Eclipse™ Reflective Glass	2000/12/04
	Specific instructions for unpacking and packing, inspection, cutting, washing, heat treating, laminating and insulating glass fabrication are given for these Eclipse pyrolytic coated products. (6 pages)	
ATS-153	Guidelines for Bending Pilkington Eclipse™ Reflective Glass	2000/10/06
	Fabrication details for short duration glass bending processes for Eclipse	

reflective glass.

ATS-157	The Appearance of Quench Marks in Heat Strengthened and Tempered Glass	2000/10/04
	Tempered glass can have visible shadowy spots when polarized light is present. These spots are a normal result of the quenching process and do not indicate any fabrication error (4 pages)	
ATS-158	Strength of Pilkington Texture Glass	2000/10/04
	The strength reductions caused by the stress concentration effect of the texture patterns are quantified.	
ATS-160	Tempering Pilkington Optiwhite™ Low Iron Glass	2003/05/22
	The very high transparency of this glass requires a slightly longer furnace time to reach tempering temperature before quenching.	
ATS-162	Single Glazing With Pilkington Energy Advantage Low-E™ Glass and Pilkington Solar E™ Glass	2000/10/04
	Single glazing, or non-sealed double glazing, is only possible with such a hard, durable, Low-E coating. Significant energy savings for heat loss and unwanted solar heat gain are achieved compared to non-coated glass. Details for installation and maintenance are listed.	
ATS-163	Handling, Inspecting and Fabricating Pilkington Solar E™ Solar Control Low-E Glass	2003/05/22
	Specific instructions for unpacking and packing, inspection, cutting, washing, heat treating, laminating and insulating glass fabrication are given for Pilkington Solar E Solar Control Low-E Glass. (3 pages)	
ATS-164	How Pilkington Solar E™ Solar Control Low-E Glass Works	2001/04/05
	Significant cooling energy savings can be made by selectively transmitting and absorbing different wavelengths of visible and invisible radiant energy. The graph in this bulletin clearly demonstrates the physics of steady-state heat transfer through Pilkington Solar E Glass.	
ATS-166	Maintenance and Hand Cleaning of Pilkington Activ™ Self-Cleaning Glass	2003/10/23
	Detailed instructions and recommended cleansers for the first surface coated glass.	

ATS-168	Handling, Inspecting and Fabricating Pilkington Activ™ Self-Cleaning Glass	2003/05/21
	<p>Specific instructions for unpacking and packing, inspection, cutting, washing, heat treating, laminating and insulating glass fabrication.</p>	
ATS-169	Pilkington Activ™ Self-Cleaning Glass Glazing Guidelines	2003/05/22
	<p>Handling and glazing material recommendations.</p>	
ATS-170	Handling, Inspecting, Fabricating and Installing Pilkington Optifloat Satin™ Translucent Float Glass	2003/03/09
	<p>Specific instructions for unpacking, re-packing, inspection, cutting, washing, heat treating, and installing Satin Translucent Glass.</p>	
ATS-171	Optics 5 and Window 5 Procedures	2003/10/31
	<p>Step-by-step instructions on how to Laminate glasses and create, import and export the resulting performance data.</p>	
ATS-176	Handling, Inspecting, Fabricating & Glazing Clear, Blue-Green, Bronze, Grey, EverGreen™ and Arctic Blue™ Pilkington Eclipse™ Advantage™ Reflective Low-E Glass	2003/10/20
	<p>Specific fabrication and usage instructions.</p>	
ATS-178	Cleaning Pilkington Optifloat Satin™ Translucent Float Glass	2003-10-27
	<p>Detailed procedure for removal of dirt deposits from the finely textured surface.</p>	
ATS-179	Handling, Inspecting and Fabricating Pilkington TEC™ Glass	2004-01-04
	<p>Specific fabrication and handling instructions. (4 pages)</p>	

ATS-180

**Hand Washing
Pilkington Mirropane T.M.™ Transparent Mirror**

2004-03-25

ATS-181

**Hand Washing Pilkington
Eclipse Advantage™ Reflective Low-E Glass**

2004-03-25