

Baseline Window	Secondary Window Addition		AERC Product Ratings over Baseline Window*			
	WinSert Unit	Mount Type	U-factor (Btu/hr·ft²·°F)	Solar Heat Gain Coefficient (SHGC)	Visible Transmittance (VT)	Air Leakage (AL) (cfm/ft²)
SINGLE PANE Clear Glass, Aluminum Frame	--	--	1.12	0.72	0.77	2.0
	WinSert Lite	Inside Mount	0.55	0.38	0.52	0.06
	WinSert Lite	Overlap Mount	0.47	0.41	0.57	
	WinSert Plus	Inside Mount	0.28	0.35	0.51	0.06
	WinSert Plus	Overlap Mount	0.21	0.38	0.55	
	WinSert Plus Ultra	Inside Mount	0.27	0.28	0.46	
	WinSert Plus Ultra	Overlap Mount	0.19	0.30	0.49	
DOUBLE PANE Clear Glass, Aluminum Frame	--	--	0.68	0.67	0.71	2.0
	WinSert Lite	Inside Mount	0.41	0.39	0.48	0.06
	WinSert Lite	Overlap Mount	0.33	0.42	0.52	
	WinSert Plus	Inside Mount	0.25	0.35	0.47	0.06
	WinSert Plus	Overlap Mount	0.18	0.37	0.51	
	WinSert Plus Ultra	Inside Mount	0.24	0.28	0.42	
	WinSert Plus Ultra	Overlap Mount	0.16	0.30	0.46	

*Simulated over existing single pane (AERC 1 Baseline Window D) or double pane (AERC 1 Baseline Window F) baseline windows

A recently patented technology that incorporates an innovative use of thin glass technology and high performance, insulated fiberglass frames, **WinSert®** is Alpen's newest product line alongside its windows and glass. The super-insulating window inserts attach directly to the interior of existing windows without any drilled holes or penetrations of the building. The result is reduced energy impact on the existing structure, a dramatic reduction in installation time, and elimination of almost all disruption for building occupants. The high performance components combined with 'thin glass' rather than traditional window glass presents a huge opportunity to reduce embodied carbon in the built environment.

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WinSert Lite utilizes a super-insulated, low profile fiberglass frame in combination with an ultra-lightweight piece of thin glass laminated to a customized performance film.

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SINGLE PANE Clear Glass, Aluminum Frame	--	--	1.12	0.72	0.77	2.0
	WinSert Plus	Inside Mount	0.28	0.35	0.51	0.06
	WinSert Plus	Overlap Mount	0.21	0.38	0.55	
	WinSert Plus Ultra	Inside Mount	0.27	0.28	0.46	
	WinSert Plus Ultra	Overlap Mount	0.19	0.30	0.49	
DOUBLE PANE Clear Glass, Aluminum Frame	--	--	0.68	0.67	0.71	2.0
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	WinSert Plus	Overlap Mount	0.18	0.37	0.51	
	WinSert Plus Ultra	Inside Mount	0.24	0.28	0.42	
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WinSert Plus utilizes a super-insulated, low profile fiberglass frame coupled with insulated glass, which is composed of 'thin glass', a piece of low-emissivity coated glass, a warm edge spacer and either Argon or Krypton gas fill in a high performance micro insulated glass unit (IGU).

The Attachments Energy Rating Council (AERC) is an independent, public interest, non-profit organization whose mission is to rate, label and certify the energy performance of window attachments such as blinds, shades, shutters, and storm windows. AERC is made up of a diverse set of stakeholders, which include product and component manufacturers, non-profit organizations, government bodies, testing labs and utility companies. Partially funded by the U.S. Department of Energy (DOE), AERC provides accurate and credible information about the energy performance of window attachments, which helps the public—including homeowners, architects and builders—make informed decisions when it comes to buying window attachment products. To learn more about AERC certification or the AERC Energy Improvement Program, visit www.aercenergyrating.org.