

WAVETRAP

YOUR TRANSPARENT ELECTROSMOG SHIELD

WAVETRAP is a transparent glass product from WAVE by AGC designed to protect indoor environments by blocking unwanted electromagnetic fields from a wide range of sources and across multiple frequency ranges.

Key Benefits



NO IMPACT ON AESTHETICS

WAVETRAP is invisible to building occupants.



NO IMPACT ON GLAZING PERFORMANCE

WAVETRAP does not affect the insulating or thermal performance of glazing. Additional functionalities can still be added.



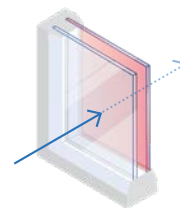
OPTIMISED SHIELDING PERFORMANCE

WAVETRAP delivers superior shielding performance in line with the client's specifications.

There is a growing demand to block unwanted electromagnetic radiation from entering indoor environments, be it for privacy, wellness or electromagnetic compatibility (EMC) reasons. Not only can WAVETRAP glazing be deployed as one component in a shielding system designed to prevent electromagnetic radiation from entering a building, but it can also be used indoors to provide shielding between separate spaces. As a customisable solution, clients can choose which type of signal they want to attenuate the most.

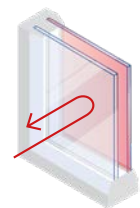
WAVETRAP leverages AGC's decades of experience and expertise in the production and processing of flat glass and antenna engineering to meet client's shielding needs across a multiple frequency ranges.^{1,2}

Standard Glazing



⊗ Low shielding

WAVETRAP



⊙ Excellent shielding

¹ Generic WAVETRAP solutions are available. Please contact us to request the relevant datasheets.

² WAVE by AGC provides custom WAVETRAP glazing specially tailored to your needs.

WHAT PROBLEM DOES WAVETRAP SOLVE?



WAVETRAP provides protection from electromog. It is the ideal solution for anyone seeking digital silence and a quiet environment.



WAVETRAP supports cyber security by serving as a physical barrier that prevents digital eavesdropping.



WAVETRAP's electromagnetic compatibility ensures that sensitive and even critical electronic systems can work smoothly and efficiently (e.g. healthcare and lab systems).

PERFORMANCE¹

	ESI - Electromagnetic Shielding Index ²						LT [%]	LR ext [%]	SF [%]	U _g [W/(m ² .K)]	Thickness [mm]
	Sub-1 GHz		Cellular		WLAN						
	[dB]	[%]	[dB]	[%]	[dB]	[%]					
Laminated glass											
WAVETRAP S10	50	99.7	37	98.6	27	95.5	69	7	68	5.4	9.5
WAVETRAP S10-A	64	99.9	55	99.8	47	99.6	63	9	57	3.5	9.5
Double glazing											
WAVETRAP D33	43	99.3	50	99.7	51	99.7	63	12	31	1.0	33
WAVETRAP D33-A	51	99.7	55	99.8	58	99.9	53	10	31	1.0	33
Triple glazing											
WAVETRAP T49	45	99.4	50	99.7	59	99.9	58	14	28	0.5	49
WAVETRAP T55-A	51	99.7	55	99.8	64	99.9	48	12	29	0.5	55
Comparison with common glazings											
Clear single glass	2	20.6	2	20.6	3	29.2	90	8	88	5.8	4
Insulating glass*	24	93.7	32	97.5	44	99.4	82	12	64	1.1	24

*4-16-4 (iplus 1.1 in #3 - with 90% Argon)

¹ This performance overview is provided solely to assist the client in evaluating the performance of the glass configuration defined in this report. It does not replace an official Declaration of Performance and, consequently, may contain some variations, although AGC has made every effort to verify the reliability of this simulation tool. This document is for information purposes only and in no way implies acceptance of an order by AGC Group.

² The Electromagnetic Shielding Index rates the shielding effectiveness of a shielding system or material over a desired frequency range. The Sub-1 GHz range includes frequencies from 200 to 1000 MHz, and covers UHF broadcasts, TETRA, LoRa, SigFox, and low-band cellular.

