

arconnect®



RADIO TRANSPARENCY FOR THERMAL INSULATION GLAZING

■ BETTER RECEPTION, LESSER ELECTROSMOG – WITH THE INNOVATIVE COATING ARCONNECT®

Be it in your own home, in office buildings or in public institutions, modern thermal insulation glazing attenuates cellular frequencies to such an extent that in many indoor spaces, the reception of data and telephone calls is often only possible to a very limited extent. This prompted arcon® to develop arconnect® – an innovative, radio-frequency transparent coating – in collaboration with the Fraunhofer Institute. This coating enables the transmission of all common cellular frequencies, including the new 5G standard.

The coating is durable and maintenance-free. What's more, you can also retrofit arconnect® on existing window installations without any problem. Tests have shown that with arconnect®, the transmission of mobile-radio signals increases by a factor of 1000 in a double-glazing insulating glass

compared to a conventional thermal insulation glazing. If you are using a modern triple glazing, the transmission of mobile-radio signals improves, in fact, by a factor of 10,000. Besides, the thermal insulation properties of the insulating glass remain almost completely intact. Also, its strength is not reduced by the coating.

Another great advantage of arconnect®: this technology helps reduce electrosmog inside the building. Since the coating guarantees high transmission values, smartphones and tablets need to ramp up their output power to a considerably lesser degree in order to receive data. This reduction in output power and energy consumption also conserves the battery, which ultimately helps in extending the running time of the mobile device.

YOUR KEY BENEFITS AT A GLANCE

- Optimized reception of broadband data – even with 5G
- Easy to retrofit, maintenance-free and durable
- All thermal insulation and low-energy requirements can be met
- Reduction of indoor electrosmog
- Available as float glass or laminated safety glass (LSG)
- Can be easily fabricated to any size
- Longer battery life



The fine, almost invisible structure of arconnect® in detail: It enables improved transmission of mobile-radio signals in thermal insulation glazing and thus significantly improved mobile-radio signal reception indoors.



The innovative, radio-frequency transparent coating arconnect® enables optimum reception of mobile-radio data signals in buildings with thermal insulation glazing. arconnect® is designed in such a way that the insulating properties of the glass remain virtually unchanged and all low-energy requirements for thermal insulation can be met without any problem. arconnect® also helps reduce electromog and extend the battery life of mobile devices.

TECHNICAL DETAILS – AN OVERVIEW

Basic Glass	Glass Construction			EN 410					EN 673	Thickness**
	Outer/Cavity/Mid/Cavity/Inner	Light Transmission*	Light Reflection external*	Light Reflection internal*	g-Value*	Colour Rendering Index R *	Ug-Value (90% Argon)			
	mm	%	%	%	%		W/(m²K)	mm		
arconnect® N10 //										
Floatglas	4 16 :4	70	22	23	51	97	1,2	24		
arconnect® N10 ///										
Floatglas	4: 14 4 14 :4	56	32	32	37	95	0,7	40		
arconnect® N34 //										
Floatglas	4 16 :4	82	12	12	65	98	1,2	24		
arconnect® N34 ///										
Floatglas	4: 14 4 14 :4	74	15	15	54	97	0,7	40		

* The specified functional values have been determined in accordance with the relevant and applicable testing standards and legal requirements, as per the testing dimensions and testing conditions required or described therein. Formats and combinations deviating from these, like, for instance, glass-thickness modifications due to building statics, can lead to change in individual functional values. The specified values refer solely to glass elements. The values for components depend largely on the frame construction.

** Tolerance depends on type.

■ WE'RE HERE TO HELP.

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