

For all displays on the sunny side: CONTURAN® IR Protect

The laminated cover glass SCHOTT CONTURAN® IR Protect combines perfect display protection with optimum visibility.

Displays have to handle extreme demands particularly in outdoor applications. Even in unfavorable light and weather conditions or strong solar radiation, they should allow easy recognition, operate perfectly and, above all, not overheat, especially since closed display systems develop heat themselves during operation. Excessively high temperatures could significantly shorten the display life or lead to a sudden “black screen” – with all the associated negative consequences for the providers and users of the digital displays.

Due to such risks and requirements, SCHOTT is extending its range of display and cover glasses to include a solution that offers comprehensive protection: CONTURAN® IR Protect greatly reduces both infrared (IR) and ultraviolet (UV) radiation and supports to prevent excessive heat build-up as well its consequences, such as display damage or failure. Thanks to effective anti-reflective coating and excellent transmission in the visible light spectrum, the glass offers a clear, almost reflection free view of displayed contents. Constructed as robust laminated safety glass, CONTURAN® IR Protect also meets the safety requirements for glazing in public areas.

Due to these advantages, the product is particularly suitable for use in digital signage displays such as rail travel destination indicators and public information boards as well as free standing, interactive touch terminals.

Crystal clear, low reflection displays – with CONTURAN®

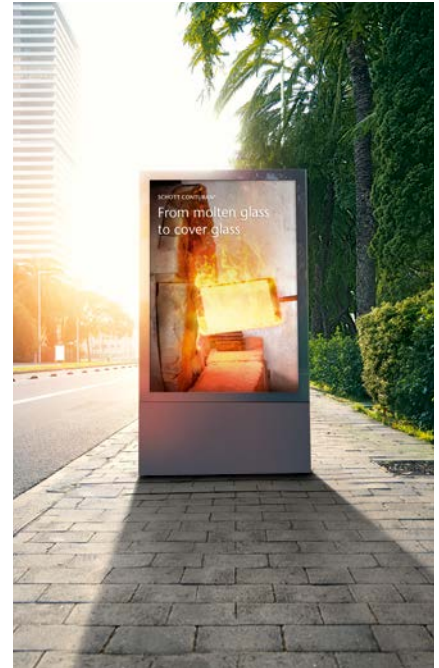
CONTURAN® is an anti-reflective float glass with an optical interference coating on either one or both sides. In a special dipping process, several metal oxide layers each only nanometers thick are applied. As a result, this coating design prevents optical reflections by 90% normally caused by sunlight or artificial light on the glass surface. With a final reflection below <1% the glass appears nearly invisible. And at the same time, CONTURAN® offers the best visibility with a transmission of more than 98%. It offers the optimal prerequisites for reading information on display panels even in difficult light conditions.

IR Protect: 80% less IR transmission

CONTURAN® IR Protect combines its anti-reflective properties with effective protection against infrared radiation. This filter effect is produced by a special film solution, which is introduced into the glass laminate. It provides the absorption and reflection of the relevant IR spectrum and significantly reduces heat in the display system compared to laminates without special IR protection.

This IR protection leaves the reflections unaffected and only slightly affects transmission. In addition, 99% of ultraviolet (UV) radiation is filtered out by the special structure of the glass composite – an advantage over monolithic glass, which generally does not have a particular UV protection.

The lower temperatures achieved in closed systems of outdoor displays is thanks to the IR protection. It enables fewer risks of failure and also lowers demands on active or passive cooling systems. With correspondingly smaller cooling units, the overall size of the display system can be reduced, this can lead to further cost savings.



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Specifications and options

CONTURAN® IR Protect is primarily constructed as a laminated safety glass with two flat glass panes and integrated IR foil, offering corresponding breakage, break-down and splinter protection. **Maximum dimensions** are 1,520 mm x 3,250 mm, **standard thicknesses** are 6.76 mm, 8.76 mm and 10.76 mm. On request, alternative specifications can be achieved. CONTURAN® IR Protect can be manufactured with all glass substrate types of the CONTURAN® family. SCHOTT also offers a wide range of processing options, such as toughening and semi-toughening, printing or bending.

Advantages at a glance

- Protection against IR radiation and reduced heat load for displays
- Reduction of IR transmission of more than 80%
- High visible light transmission of >91%
- Reduction of distracting reflections to <1%
- Less downtime and longer life
- Cost savings due to less required cooling
- High UV protection of 99%
- Versatile specifications and finishing



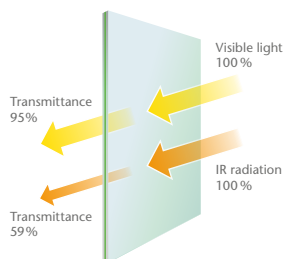
Specifications CONTURAN® IR Protect		
Max. dimensions	1,520 mm x 3,250 mm	
Thickness	min. 6.76 mm	
Glass Type	CONTURAN® Protect*	CONTURAN® IR Protect*
Reflection	< 1%	< 1%
Transmission T_{VA}	~ 95%	~ 91%
IR Transmission (780–1400 nm)	~ 69%	~ 33%
IR Transmission (780–2500 nm)	~ 59%	< 12%

*2 x 3 mm float glass as base substrate

Applications

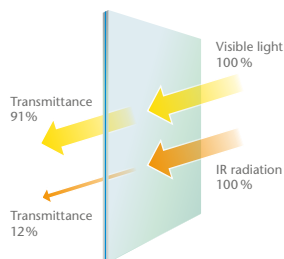
- Digital signage displays
- Public information boards
- Rail Travel destination indicators
- Interactive info terminals

CONTURAN® Protect



— Standard PVB foil

CONTURAN® IR Protect



— IR Protect foil

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