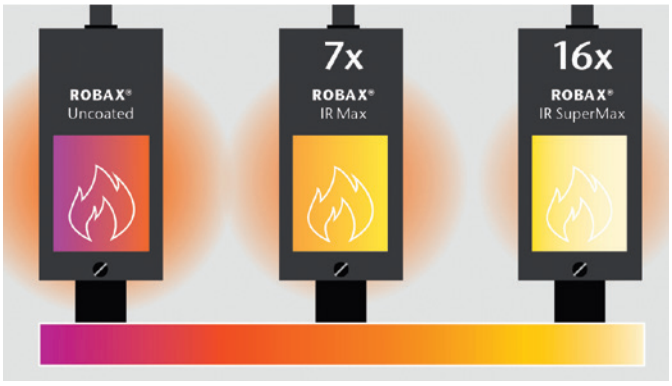
ROBAX® IR SuperMax

Our most efficient heat-reflective coating

Fire-viewing panels with extremely efficient heat-reflective coating IR SuperMax



Cumulative reflection of heat radiation for a wavelength range of 800 to 8,000 nm

Technical Data	
Maximum usable area	1,055 mm x 535 mm
Glass thickness	4 and 5 mm
Recommended application	Wood, pellet and gas fireplaces
Effect of coating	Reflects up to 16 times more heat than uncoated ROBAX® (for further benefits of the coating please see backside of this data sheet)
Reflection	60–80 % (for the wavelength of 3,500 nm)
Installation	Coated side facing away from fire
Color impression of coating	In reflection the surface of the coated ROBAX® IR SuperMax panel appears slightly greenish or pink mirrored, depending on the viewing angle.
Shape	Flat cut-to-size sheets
Surface structure	Both sides smooth
Decoration	Yes (pure black, mystic black, opaque black; mystic & opaque black also in combination with logo in matte stone grey); logos in polar white, satin silver, tin grey; special ROBAX® IR SuperMax logo
Cleaning	Uncoated side: SCHOTT ROBAX® Dry Wiper Coated side: soft cloth

Thermal Characteristics	
Temperature resistance	Up to 550 °C (1,022 °F) = 600 hours
Thermal shock resistance	T_{max} ≤ 700 °C (1,292 °F) *
Resistance to temperature differences (RDT)	T_{max} ≤ 700 °C (1,292 °F) *

Chemical Characteristics	
Acid resistance	Min. Class S2 (acc. to DIN 12116)**
Alkaline resistance	Min. Class A1 (in line with ISO 695)**
Hydrolytic class	HGB 1 (acc. to ISO 719)**

*Only applies to material, not to the coating
**Valid for glass-ceramic substrate

SCHOTT ROBAX®

Key benefits of ROBAX® IR SuperMax

ROBAX® IR SuperMax is at the forefront of the development of heat reflective coatings and completes the SCHOTT ROBAX® Smart Heat portfolio.

- New, unique IR coating on the outside of the viewing panel
- Up to 16 times higher reflection of heat radiation back into the combustion chamber than uncoated ROBAX® panels
- Significantly higher temperatures inside the fireplace possible
- Drastical improvement of efficiency of combustion process
- For the first time, energy-efficient fireplaces with larger viewing windows possible now
- The larger the surface area of installed panels, the more sense it makes to use ROBAX® IR SuperMax.
- Due to increased heating of the inside of the glass-ceramic panel, the surface of the panel is less subject to soot buildup. This pyrolysis-like effect allows for an unclouded, clear view of the fire and significantly reduces the cleaning effort.
- Lower heat radiation into living space prevents overheating and ensures noticeably more comfortable room temperatures, especially in well-insulated low-energy and passive houses

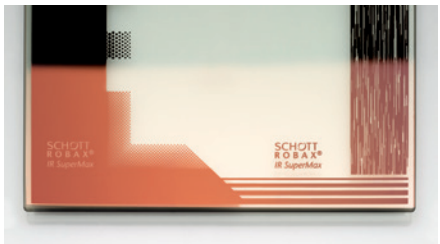
Due to the colorful reflection of the coating (= result of optimization of coating regarding IR reflection) the end customer in the showroom can see that the panel and thus the fireplace is of very high quality.

- Distance between wall and fireplace, or fireplace and furniture can be shortened drastically, thus resulting entirely new design options
- Reduction of emissions possible
- Coating helps to limit the effects of user errors (e.g. incorrect airflow or too little fuel)
- Effect of catalyst in fireplace can be significantly improved
- No degradation of the coating (when used according to our recommendations) over the entire life cycle of the fireplace.

The effects mentioned here are largely dependent on the design of the respective fireplace and the usage habits. We therefore strongly recommend to test whether ROBAX® IR SuperMax can achieve the desired result before committing to serial production. SCHOTT ROBAX® offers comprehensive application services. Please contact us.

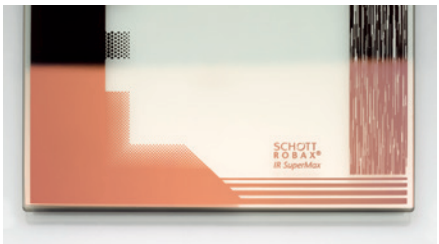
Decoration colors

ROBAX® IR SuperMax is available with the following decoration colors:



mystic black/opaque black

(Logo on the left also in color matte stone grey)



pure black

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