An invisible difference. An **audible improvement.**

Create quieter cabin spaces with Saflex® Q series advanced acoustic interlayers.

High-quality interior acoustics are playing an increasingly important role in the automotive industry and in how brands define their cabin experience. Today's consumers are demanding quieter passenger cabins across all vehicle price points. As advanced technologies such as Bluetooth®, voice-activated commands, onboard navigation systems, and sophisticated audio equipment gain adoption, noise reduction plays a key role in enabling the desired brand experience and connectivity that consumers are seeking.

In the past, windscreens and side windows were problematic in terms of noise propagation. To solve the issue, car manufacturers are turning to Saflex advanced acoustic interlayers in automotive glass.

Saflex Q series is an advanced tri-layer polyvinyl butyral (PVB) interlayer that reduces noise level by 4.7 dB versus a standard windscreen and 5.9 dB compared to tempered side windows within the medium frequency range (1,000–5,000 Hz).

Saflex Q Series advanced acoustic interlayers are especially effective within the frequency of human key voice recognition ranges (2,000–6,000 Hz), reducing sound transmission by 4.8 dB over this range. In other words, consumers can hear a difference—and that can speak volumes about brand experience and perceived quality.

Sound reasons to choose Saflex

Improved acoustic comfort
Reduces noise level by up to 4.7 dB versus standard laminated glass

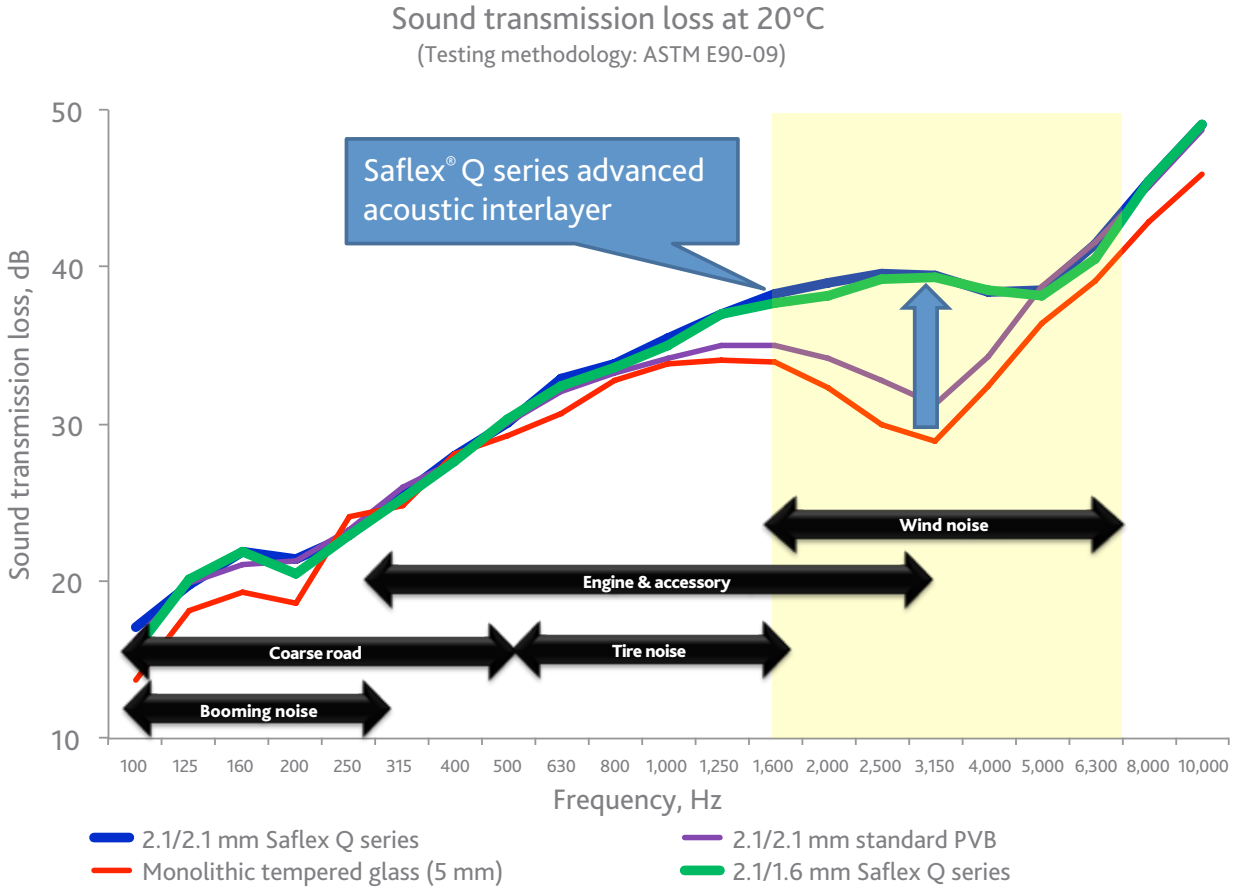
Reduces weight
Enables the use of thinner glass configurations with minimal comprise to cabin acoustics

UV protection
Blocks over 96% of harmful UV radiation

Avoids retooling costs
Can be substituted into a vehicle's existing glass with no need for expensive redesign

Compatible with other formulations
Available in solar heat (IR) blocking, gradient band, and head-up display (HUD)

Saflex Q series will greatly improve overall sound transmission loss by up to 4.7 dB in the critical wind noise region.



Lightweighting without **loud noises.**

In response to regulatory and consumer demand for greater fuel efficiency, automakers rely on every opportunity to reduce overall vehicle weight. Saflex Q series helps reduce the negative trade-offs of typical weight reduction efforts by enabling improved acoustics, even in thinner glass configurations.

Saflex Q Series enables improved acoustics in when paired with thin glass.

For a typical windscreen, the reduction of glass thickness from 2.1/2.1 mm to 2.1/1.6 mm would result in a weight savings of 1.7 kg (3.7 lb) or 11%. In a standard windshield, this would result in an acoustic performance loss of 0.6 dB over the full frequency range (200–10,000 Hz). However, when Saflex Q interlayers are used in the thinner configuration, the weight reduction can be achieved while still improving acoustic damping over the standard windshield by 1.2 dB over the same frequency range.
The addition of acoustic front side glass (2.1/2.1 mm) can enable a further reduction of 1.1 kg (2.4 lb) while improving sound transmission loss through the side windows by 3.3 dB versus 5-mm tempered glass. Across all glazing positions, Saflex technology allows automakers to use thinner glass without sacrificing cabin comfort.

Lightweighting also helps auto manufacturers meet global environmental regulations for lower CO2 emissions, including the Kyoto Protocol, the Economic Commission for Europe (ECE), and U.S. Corporate Average Fuel Economy (CAFE) standards.

Applications

- Windscreen
- Side window
- Sunroof
- Back glass
- Quarter glass

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For more information,
visit us online at **automotive.saflex.com**

Trust the experts.

Around the world, automotive engineers trust Eastman when performance and safety are critical concerns. The reason is simple: Saflex interlayer technology delivers advanced glazing performance for demanding applications, meeting exacting specifications and targets. The industry counts on Eastman for technical and development expertise—making Eastman a global leader in PVB interlayers for automotive applications.

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Eastman Corporate Headquarters
P.O. Box 431
Kingsport, TN 37662-5280 U.S.A.

U.S.A. and Canada, 800-EASTMAN (800-327-8626)
Other Locations, +(1) 423-229-2000

www.eastman.com/locations

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