
Audi e-tron – Acoustics

Relaxed atmosphere: aeroacoustics and soundproofing

Another great strength of the e-tron body is the high vibrational and acoustic comfort. Those areas where forces are channeled into the body, particularly the connection of the axles, play an important role: Due to their high local rigidity they are resistant to excitations from the assemblies and the road.

Absorbing and insulating materials are used in the Audi e-tron to effectively reduce solid-borne and airborne sound. Design-related openings and cavities within the body are sealed and filled systematically. Textile fabric and microfiber fleeces line the wheel arches to absorb noise. Relevant areas are also coated with a special material, thus reducing the vibration of the metal sheets. On the firewall, a complex multilayer structure dampens the sound penetration from the front-end to the interior. In the rear-end too, this kind of design of the new vehicle architecture with additional rear-axle drive is also taken into account. Furthermore, the electric motors are enclosed in noise-reducing capsules. Even the underbody paneling is designed accordingly. In the interior, specifically configured components, such as foam-backed carpets, ensure minimal noise in the Audi e-tron.

The second important factor for the relaxed atmosphere on board the Audi e-tron is the advanced aeroacoustics. As a rule, wind noise becomes the overriding component in any car from a speed of 85 km/h (52.8 mph). With the Audi e-tron, however, it remains very low and barely reaches the occupants thanks to intensive finishing touches on door seals, exterior mirrors and water-catching strips. The passengers can talk to each other comfortably even at high speeds. The windshield comes standard with double glazing. Audi also offers acoustic glazing for the side windows as an option.

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