

TINTING FILM AND ITS APPLICATIONS

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In our paper we would like to touch upon such a thing as tinted glass. In our life, sometimes it seems that this thing is necessary. Those who live in a megalopolis or among high-rise buildings constantly see dark panoramic windows. Or, for example, in cars. Now we propose to plunge a little into the history of the creation of tinting film.

Despite the fact that almost all technologies and materials have a creator, it was not possible to find the one who came up with the tinting. It is known that initially the shading film was installed on the windows of buildings and this happened in the middle of the last century.

The appearance of tinting films was a real breakthrough. The application procedure was simplified at times, the prices for the procedure immediately decreased and car pasting became available to many categories of citizens.

The attitude to tinting also gradually changed - they began to appreciate the practical side of the issue, protecting their salon from burnout and extra eyes, and themselves from the risk of getting into an accident due to blinding sunlight. However, the first films were very different from modern ones. Some were so dark that they led to ridiculous collisions due to the fact that drivers simply saw the road very poorly [1].

It is not surprising that the first prohibitions on pasting cars with tinting film appeared quite quickly. However, over time, the view on the question changed, because the films protected the eyes from sunlight and oncoming headlights and, with moderate dimming, did not interfere, but helped drivers.

The legislative framework was adjusted and tinting was allowed with the condition that the light transmittance should be at least 70%.

Tinting protects the interior of the car from burnout. The main cause of burnout and damage to the upholstery of the car is ultraviolet radiation. Tinting of auto glass is a guarantee of the safety of items in the cabin. The panel, covers, and equipment receive excellent protection from overheating, burnout, and discoloration.

Moreover, the tinting protects the driver and passenger in the front seat during an accident. In the event of a collision, the glass on which the film is applied does not break into small pieces and does not cause bodily injury. Such glasses can easily withstand the impact of a brick thrown at close range.

What does the tinting film consist of? The first thing to pay attention to: its flexibility. The basis of the film is a layer of polyester with a thickness of 20 microns. It is a kind of polarizer. (Polarization is a physical phenomenon in which a natural ray of light is divided into ordinary and extraordinary.) Next comes a layer of 1-2 molecules of refractory metals, which serves as a kind of protection against rotting of the tinting film [2].

In conclusion, we would like to say that tinting is very useful and makes the driving by car more comfortable and safe that increase the driver's concentration and may also influence the driving process.

References

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