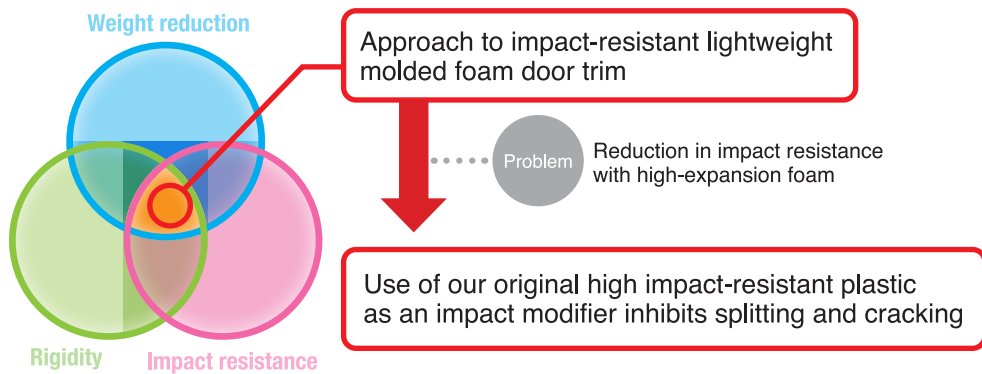


# Lightweight Molded Foam Door Trim with High Impact Resistance

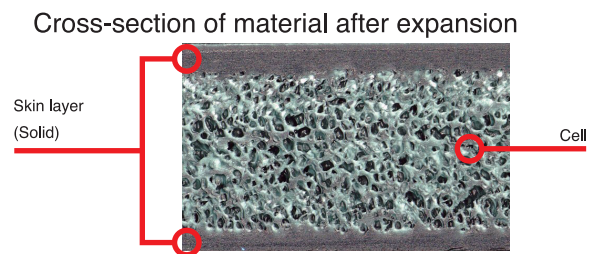
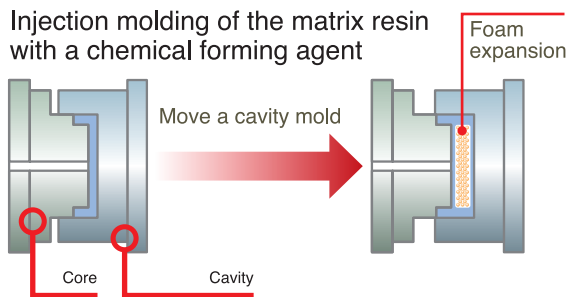
This door trim utilizes Toyota Boshoku's high impact-resistant plastic, a plastic material featuring world-class impact resistance. Our foam molding technologies enable us to create a door trim that reduces weight by approximately 20% compared to conventional base materials while maintaining high impact resistance.

Vehicle: TOYOTA CROWN

## Design concept



## Foam molding process



## Mechanism in suppressing splitting

During an impact, the soft rubber within the "salami" structure efficiently generates crazing\*, dispersing and absorbing the energy of the impact.

Craze: Generation of microscopic cracks when energy is input in an impact.

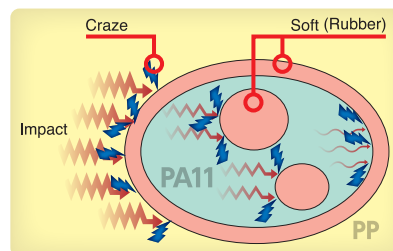
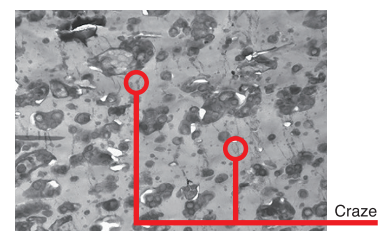


Illustration of impact absorption



Transmission electron microscope image of material after vehicle collision test

