

English

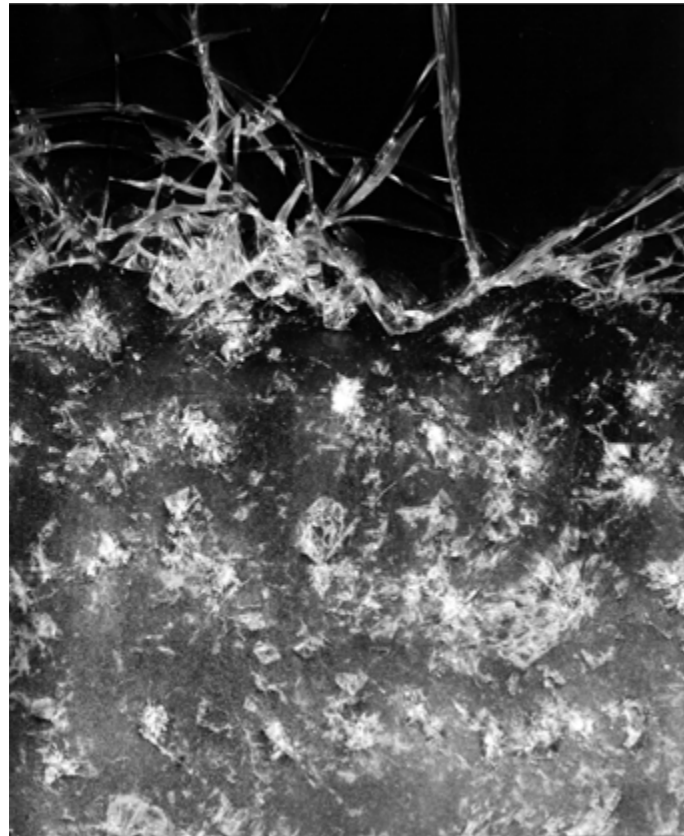
# Pummel test standards

***kuraray***

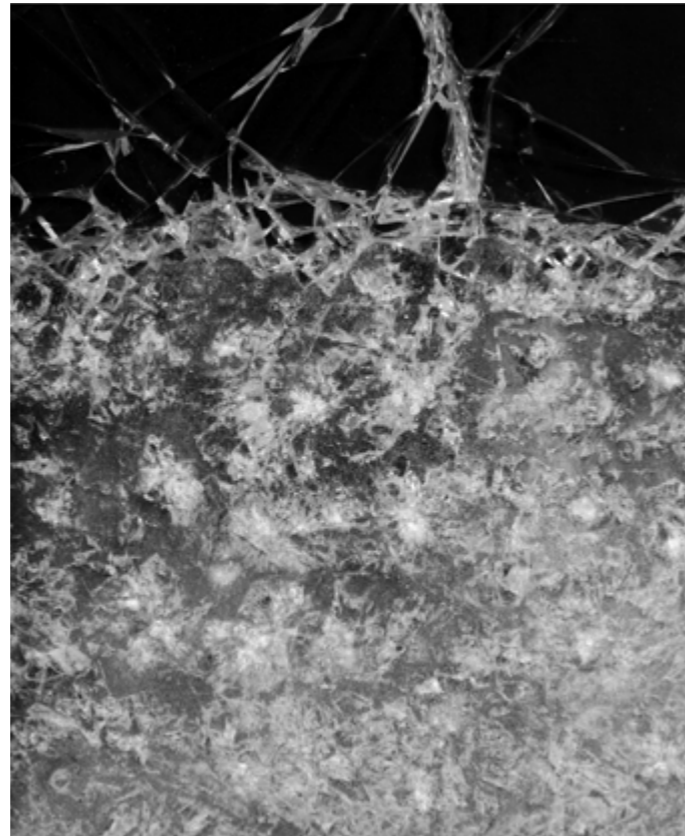
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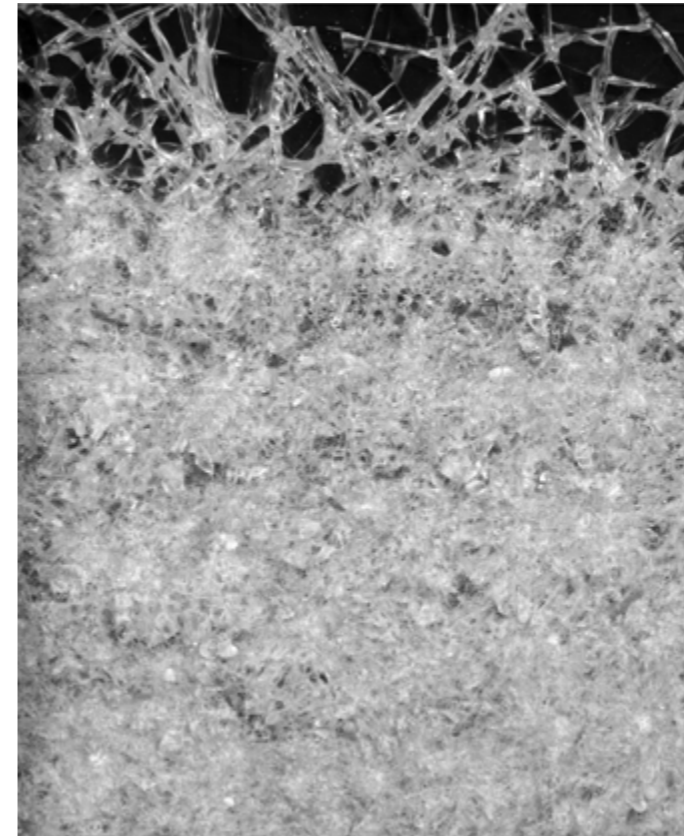
**PUMMEL STANDARD 2**



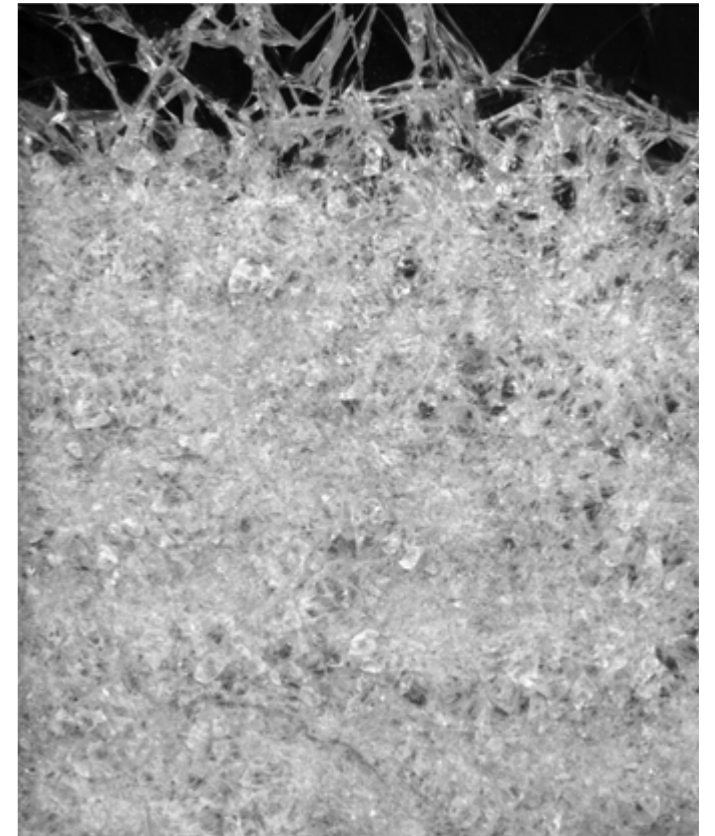
**PUMMEL STANDARD 3**



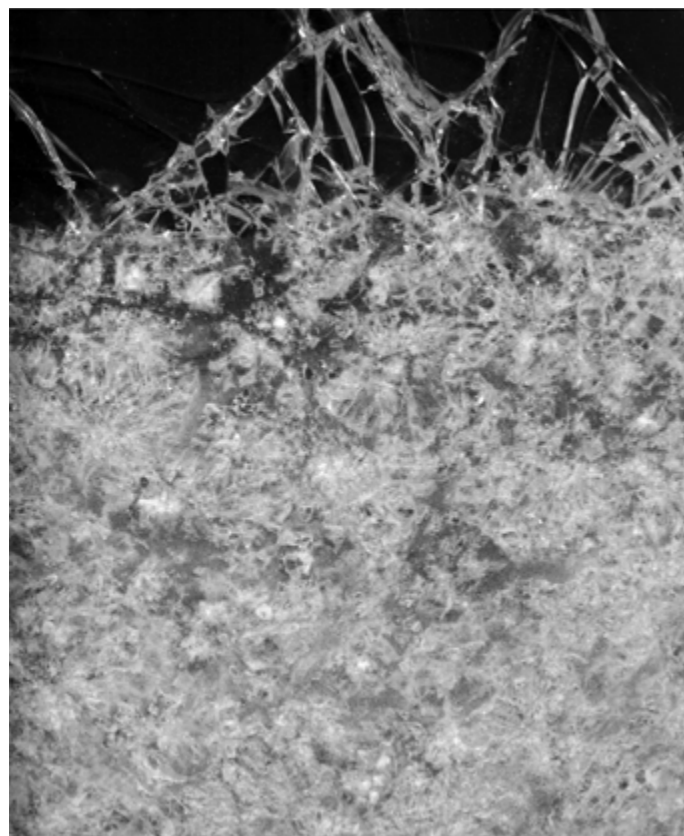
**PUMMEL STANDARD 6**



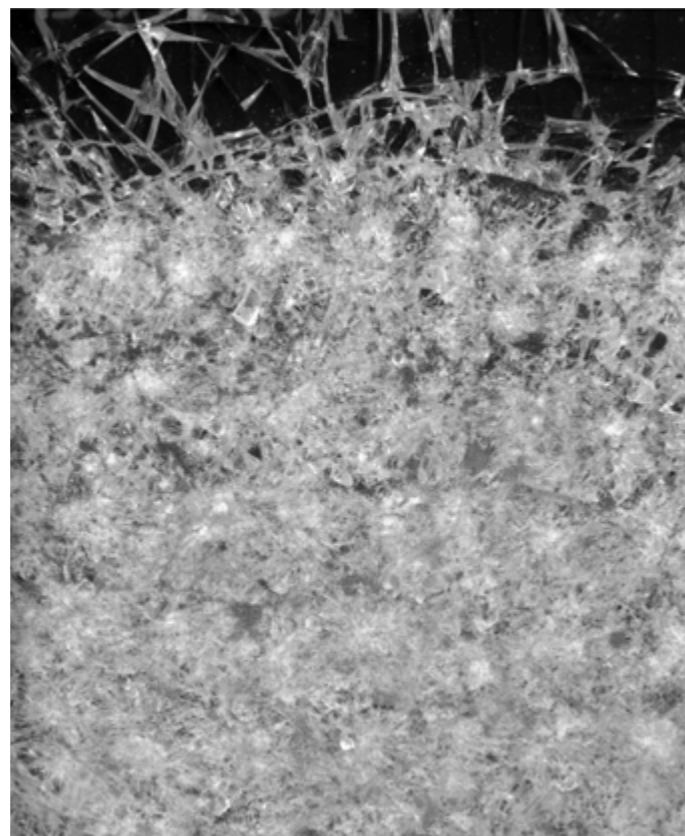
**PUMMEL STANDARD 7**



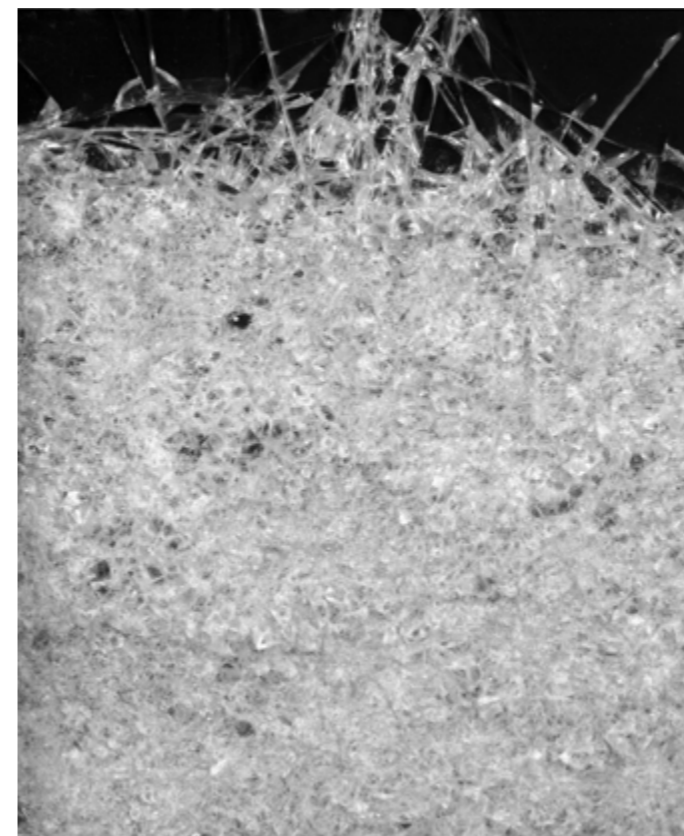
**PUMMEL STANDARD 4**



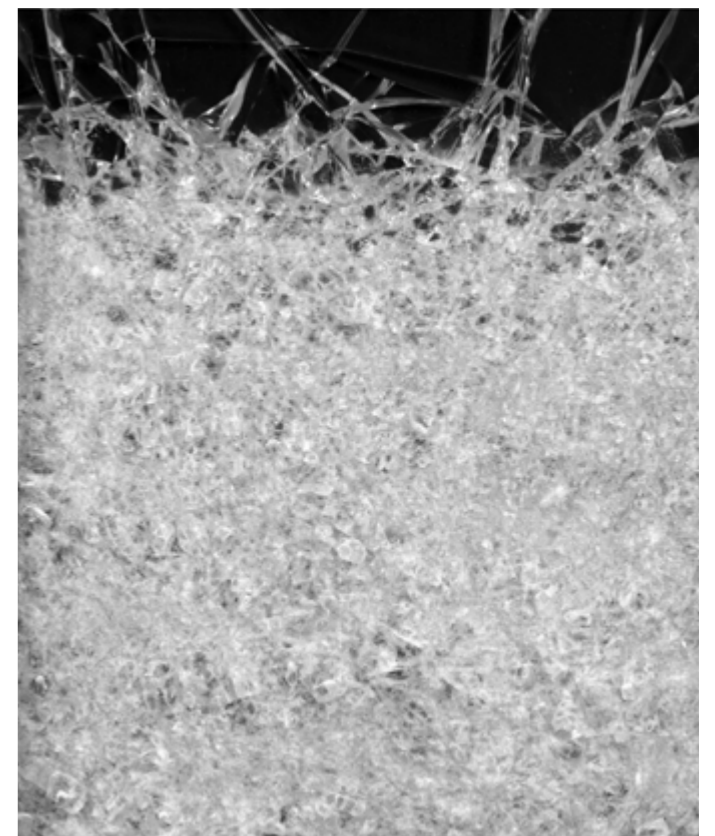
**PUMMEL STANDARD 5**



**PUMMEL STANDARD 8**



**PUMMEL STANDARD 9**



# Pummel definition & procedure

## Pummel definition

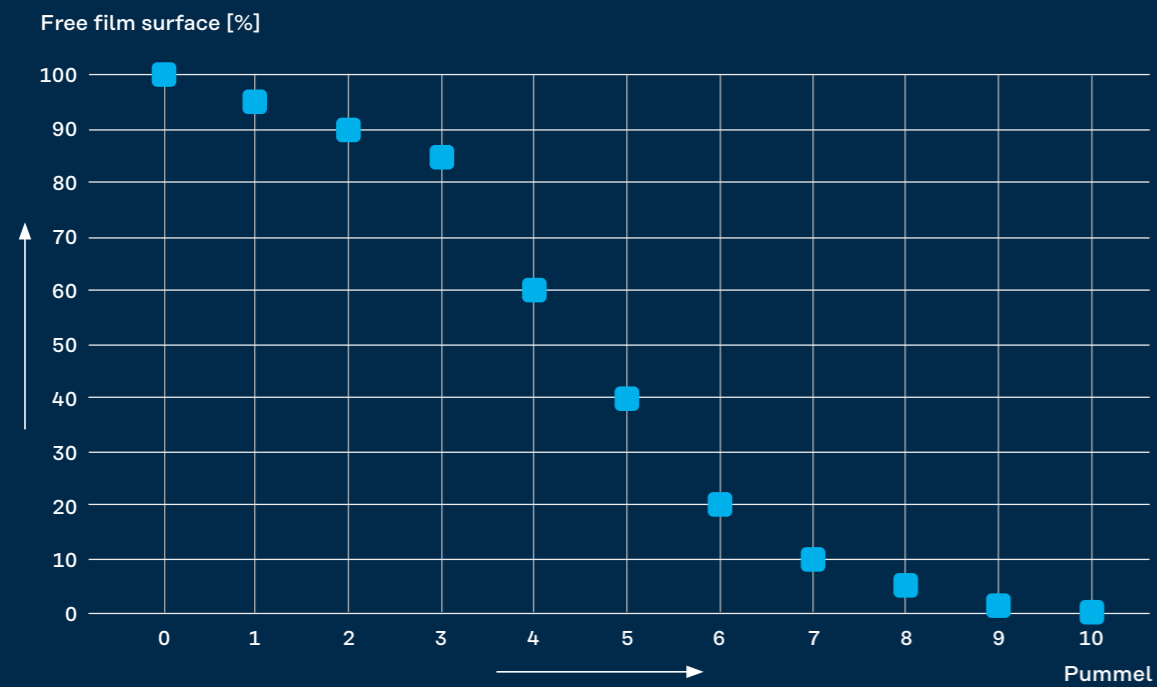


FIG 1 • Ref.: U.S. Patent 4 144 376 - R. Beckmann et al.

## PUMMEL PROCEDURE FOR LAMINATES WITH SENTRYGLAS® IONOPLAST INTERLAYER

- Testing is done at room temperature (22°C or 72°F). Allow laminate to equilibrate to room temperature.
- Pummel on an anvil flat at a 0° angle with a flat headed hammer of 0.5 kg (16 ounce).
- Hit in a row at 1.25 cm (½ inch) intervals, use an interval of 2 cm (¾ inch) in between the rows.
- Compare the pummeled laminate to pummel standard pictures.

## PUMMEL PROCEDURE FOR PVB LAMINATES

- Cool a laminate for 3 hours at -18°C (0°F).
- Pummel on an anvil at a 5° angle with a flat headed hammer of 0.5 kg (16 ounce).
- Hit in a row at 1.25 cm (½ inch) intervals, use an interval of 2 cm (¾ inch) in between the rows.
- Let the pummeled laminate condition (till dew is evaporated) and compare to pummel standard pictures.

## Correlation of pummel to CSS for PVB laminates

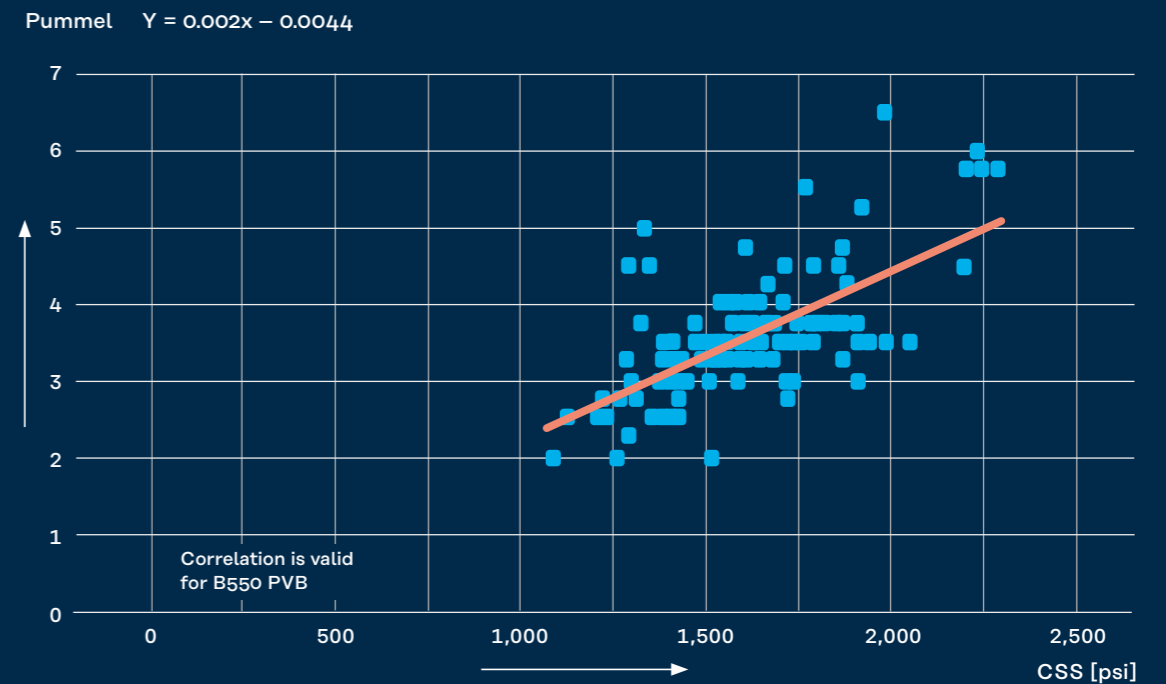


FIG 2 •

### Correlation pummel/CSS to ball drop performance for PVB laminates

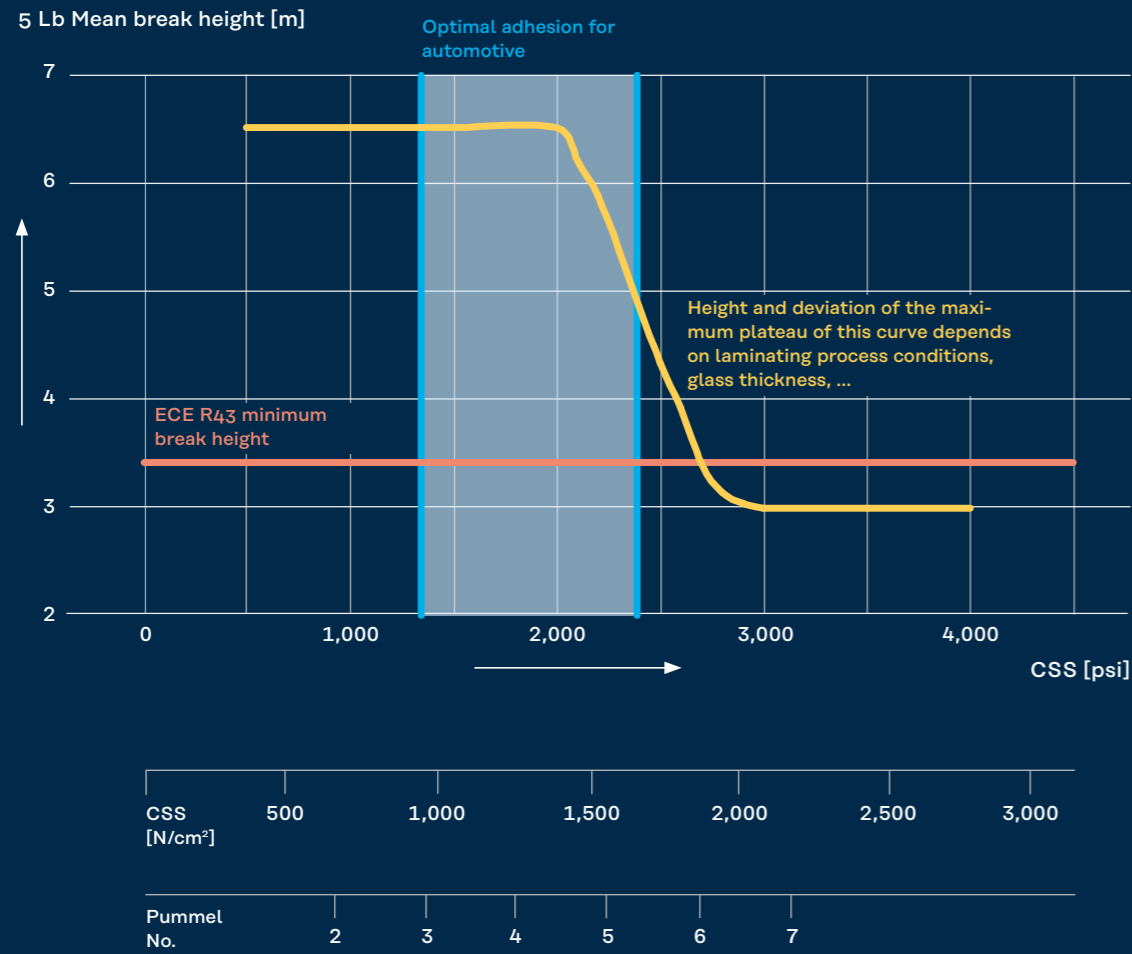


FIG 3 •

# Contact



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