



Rail vehicles

Everything quiet?  
Enjoy your ride!



#### The HANNO advantages at a glance

- Simultaneous thermal and sound insulation
- Optimum acoustic and thermal climate
- Travel comfort and customer friendliness:  
Wind and vibration noise hardly penetrates into the train compartment, even at high speeds
- Relaxed and satisfied passengers
- Many years of experience ensure the highest level of expertise

Further information: See back page



## Rail vehicles

# HANNO products for trains and trams

### No rattling, no shaking, no clattering, no droning

The highly effective HANNO products for soundproofing, sealing and thermal insulation keep noise in rail vehicles to a minimum.

In order to meet the special requirements of fire protection these materials are flame-retardant and tested in accordance with EN 45545.

- Do you want to get your guests to their destination in a relaxed manner?
- Do you want to construct free and not have to deal with pending bans?
- Do you want to construct sustainably and not leave an eternal footprint on the environment?
- Do you want to be innovative and set standards?



HANNO manufactures die-cut foam parts for noise protection and thermal insulation in trains and trams.

You can rely on HANNO and our innovative products:



#### Hanno®-Tect

Flame-retardant, lightweight, sound-absorbing and thermally insulating – Hanno®-Tect is available in many product variants (e.g. with an aluminum foil, oleophobic / hydrophobic adjustable).



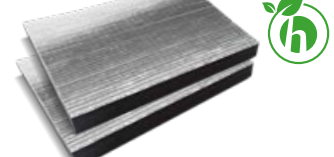
#### Hanno®-Tect-F-free

Reliably sound-absorbing, hydrophobic and completely free of PFAS.



#### Hanno®-Tect-G+phob

Our proven Hanno®-Tect with all the excellent properties and additionally hydrophobic and oleophobic. Self-adhesive and can be laminated with an aluminum foil.



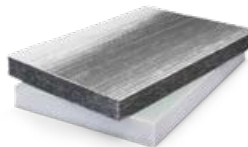
#### Hanno®-PE 16 P HF AL

Polyethylene foam with particularly high hydrolysis resistance and chemical resistance. Laminated with an aluminum foil. Can be self-adhesive. Also available with a dimpled structure in the DRY version.



#### Hanno®-Tect-o-phob

An open-cell melamine resin foam. Hydrophobic and oleophobic. Ultra-flexible and lightweight (7 kg/m³). Also available laminated with an aluminum foil.



#### Hanno®-Fiber 20 and 30

All-round product with excellent properties. This polyester fiber fleece with different densities can optionally be self-adhesive and equipped with an aluminum foil.



#### Hanno®-Fiber 20 H and 30 H

Sound insulation element made of a special hydrophobic polyester fiber fleece with very good airborne sound absorption. It can be self-adhesive and equipped with aluminum foil.



#### Hanno®-Redusoft DI 150 FR

Hanno®-Redusoft is resistant to hydrolysis and permanently elastic for years. This makes Redusoft an excellent choice for dust, moisture and sound sealing.

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