

# Thermal and Acoustical Systems

## dBCore® gradient density insulation



**dBCore® gradient density insulation** is an engineered all polyester (PET) thermal and acoustic insulation for interior automotive applications which provides significant sound quality and comfort improvements without the need of heavy weight barriers or foams.

**dBCore® gradient density insulation** has excellent moldability, is available with a variety of integrated surface facings and is fully recyclable with recycled material content. Acoustic performance is delivered through tuned airflow resistance engineered to provide high acoustic absorption in the mid to high frequencies. Lightweight composite offers a substantial weight savings over traditional decoupled mass systems.

### Applications:

- Undercarpet Systems
- Dash Inners
- Rear Seat / back panel Insulation
- Localized Insulation

### Acoustic Performance:

### Typical Properties:

<b>Thickness (Range)</b>	4 – 30 mm
<b>Surface Weight (Range)</b>	1050 – 1550 g/m <sup>2</sup>
<b>Tensile Strength (ASTM D5034)</b>	Mach. Dir – 52 N/cm <sup>2</sup> Cross Dir – 83 N/cm <sup>2</sup>
<b>Tear Strength (ASTM D5733)</b>	Mach. Dir – 196 N/cm Cross Dir – 65N/cm
<b>Fogging (SAE J1756)</b>	1 hour – 98% 16 hour – 98%
<b>Flammability (SAE J369)</b>	Self Extinguishing
<b>Temperature Resistance</b>	Continuous - 175° C Intermittent – 204° C

- Polyester fiber core material in white or grey
- Tuned acoustic constructions available for improved absorption performance in specific frequencies

