

Title (en)
BALLISTIC RESISTANT PANEL

Title (de)
SCHUSSSICHERE TAFEL

Title (fr)
PANNEAU RÉSISTANT AUX BALLES

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Application
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Abstract (en)
[origin: WO2017021143A1] The invention pertains to a ballistic-resistant panel comprising - an inorganic strike face with a thickness of at least 1 mm, the strike face comprising one or more of a metal sheet and a sheet of a ceramic material, - a ballistic-resistant moulded article below the strike face, the moulded article comprising a HDPE-based layer comprising a compressed stack of sheets comprising reinforcing tapes having a tensile strength of at least 1.0 GPa, a tensile modulus of at least 40 GPa, and a tensile energy-to-break of at least 15 J/g, the direction of the tapes within the compressed stack being not unidirectional, and a high-density polyethylene (HDPE) as matrix material. It has been found that the combination of an inorganic strike face and ballistic resistant moulded article comprising a layer based on HDPE as matrix material results in a ballistic resistant panel with improved back face deformation and further advantageous properties.

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