

A low porosity sheet material comprising an arrangement of elongated void structures, each of the elongated void structures including one or more substructures, a first plurality of first elongated void structures and a second plurality of second elongated void structures, each of the first and second elongated void structures having a major axis and a minor axis, the major axes of the first elongated void structures being perpendicular to the major axes of the second elongated void structures, the first and second pluralities of elongated void structures being arranged in an array of rows and columns, each of the rows and each of the columns alternating between the first and the second elongated void structures, wherein a porosity of the elongated void structures is below about 10 %.