CLAIMS

1. A gypsum board having two opposed faces, in which a fibrous mat is embedded in one of the faces of the board, the fibrous mat comprising fibres that are bound by a polymeric binder, in which the polymeric binder is substantially formaldehyde-free, the length of the fibres is greater than 20 mm, and the diameter of the fibres is greater than 14 μm, in which the polymeric binder is hydrophilic.

2. A gypsum board according to Claim 1, in which the fibrous mat is wholly embedded in the face of the board.

3. A gypsum board according to Claim 1, in which the fibrous mat is partially embedded in the face of the board.

4. A fibrous mat comprising fibres that are bound by a polymeric binder, in which the polymeric binder is substantially formaldehyde-free, the length of the fibres is greater than 20 mm, and the diameter of the fibres is greater than 14 μm, the mat being for embedding in gypsum to provide a gypsum board according to Claim 1, 2 or 3, in which the polymeric binder is hydrophilic and is selected from the group consisting of: acrylate polymers; methacrylate polymers; acrylate-methacrylate copolymers; styrene acrylic copolymers; styrene-methacrylate copolymers; styrene butadiene copolymers; and mixtures thereof, in which the polymeric binder further comprises a hydrophilic additive selected from the group consisting of: polysorbate surfactants, polyoxyethylene sorbitan monolaurate, and non-ionic surfactants copolymers of polyoxyethylene and polyoxypropylene.

5. A fibrous mat according to Claim 4, in which the fibrous mat comprises glass fibres.

6. A fibrous mat according to Claim 4 or 5, in which the diameter of the fibres is greater than 15 μm, preferably greater than 16 μm.

7. A fibrous mat according to Claim 4, 5 or 6, in which the length of the fibres is greater than 22 mm, preferably greater than 23 mm.

8. A fibrous mat according to any of Claims 4 to 7, in which the mat is a non-woven mat.