Claims:

1. A method for applying a fiber-containing building material, especially by means of 3D printing, comprising the steps of
   - providing a hydrous mineral binder composition, at least one aqueous accelerator and fibers,
   - feeding the hydrous mineral binder composition, especially by means of a pump, to a continuous mixer comprising
     - a drive,
     - a mixing region comprising at least one inlet and at least one dynamic mixing element and
     - a conveying region connected to the mixing region and comprising at least one conveying device and an outlet,

     the hydrous mineral binder composition being conveyed through the at least one inlet into the mixing region,
   - feeding the fibers into the mixing region of the continuous mixer,
   - feeding the at least one aqueous accelerator for the setting of the hydrous mineral binder composition into the mixing region of the continuous mixer,
   - mixing the at least one aqueous accelerator with the hydrous mineral binder composition and the fibers in the mixing region of the continuous mixer to give an accelerated fiber-containing mineral binder composition,
   - conveying the accelerated fiber-containing mineral binder composition by means of the conveying device to the outlet, and
   - applying the accelerated fiber-containing mineral binder composition, in particular layer by layer by way of a movable printing head, and wherein the dynamic mixing element comprises a stirring shaft having stirring elements, the stirring elements taking the form of pegs, and a distance between adjacent stirring elements being at least 60%, more preferably at least 80% of the length of the longest fibers.

2. The method as claimed in claim 1, wherein the hydrous mineral binder composition comprises at least one hydraulic binder, preferably a cementitious binder, more particularly Portland cement, calcium aluminate cement, calcium sulfoaluminate cement, or mixtures thereof.

3. The method as claimed in either of the preceding claims, wherein the fibers are selected from the group consisting of metal fibers, especially steel fibers or amorphous metal fibers, mineral fibers, especially glass fibers, basalt fibers or wollastonite fibers, natural fibers, especially cellulose fibers, hemp fibers, linen fibers or silk fibers, and polymeric fibers, especially carbon fibers, fibers of polypropylene, polyethylene, polyvinyl alcohol, polyamide, polyaramid, polyacrylonitrile or polyester, and mixtures thereof, preference being given to metal fibers, carbon fibers, fibers of polypropylene or fibers of polyvinyl alcohol, or mixtures thereof.

4. The method as claimed in any of the preceding claims, wherein the fibers are flexible, having a flexural rigidity more particularly of not more than 20 $N \cdot mm^2$, preferably not more than 10 $N \cdot mm^2$, more preferably not more than 1 $N \cdot mm^2$, very preferably not more than 0.2 $N \cdot mm^2$, the flexural rigidity in the case of flat fibers being based on the flexural direction requiring the least force for flexure.

5. The method as claimed in any of the preceding claims, wherein the fibers
a) are round and have a length of 5 mm to 100 mm, preferably of 8 mm to 60 mm, more preferably of 10 mm to 30 mm, most preferably of 12 mm to 20 mm, and a diameter of 5 µm to 500 µm, preferably of 7 µm to 300 µm, more preferably still of 10 µm to 250 µm, most preferably of 14 µm to 200 µm, or
b) are flat and have a length of 5 mm to 100 mm, preferably of 8 mm to 60 mm, more preferably of 10 mm to 30 mm, most preferably of 12 mm to 20 mm, a width of 5 µm to 2 mm, preferably of 10 µm to 1.5 mm, most preferably of 0.5 mm to 1.2 mm, and a height of 5 µm to 300 µm,

preferably of 7 µm to 250 µm, more preferably still of 10 µm to 200 µm, most preferably of 20 µm to 150 µm.

6. The method as claimed in any of the preceding claims, wherein one cubic meter of the fiber-containing hydrous mineral binder composition contains 0.4 to 25 liters of fibers, preferably 0.5 to 20 liters of fibers, more preferably of 1 to 15 liters of fibers, calculated with the apparent density of the fibers.

7. The method as claimed in any of the preceding claims, wherein the fiber-containing hydrous mineral binder composition is a fresh mortar having a slump of at least 170 mm, preferably of 200 to 380 mm, very preferably of 250 to 350 mm, determined according to DIN EN 1015-3 after the raising of the slump cone without lifts of the flow table.

8. The method as claimed in any of the preceding claims, wherein the aqueous accelerator comprises at least one compound selected from the group consisting of amino alcohols, alkali metal and alkaline earth metal nitrates, alkali metal and alkaline earth metal nitrites, alkali metal and alkaline earth metal thiocyanates, alkali metal and alkaline earth metal halides, alkali metal and alkaline earth metal carbonates, glycerol, glycerol derivatives, glycols, glycol derivatives, aluminum salts, aluminum hydroxides, alkali metal and alkaline earth metal hydroxides, alkali metal and alkaline earth metal silicates, alkali metal and alkaline earth metal oxides, crystallization nuclei, especially calcium silicate hydrate compounds in finely divided form, and mixtures thereof.

9. The method as claimed in any of the preceding claims, wherein the aqueous accelerator is metered in an amount in the range from 0.1 to 8 parts by weight, preferably 0.3 to 5 parts by weight, more preferably 0.5 to 2.5 parts by weight, calculated as solid without water, based on 100 parts by weight of mineral binder.

10. The method as claimed in any of the preceding claims, wherein the continuous mixer is mounted on a movable printing head.

11. The method as claimed in any of the preceding claims, wherein the conveying device takes the form of a screw conveyor having turns, a distance between adjacent turns of the screw conveyor being at least 40%, preferably at least 60%, more preferably at least 80% of the length of the longest fibers.

12. The method as claimed in claim 11, wherein the distances between adjacent turns of the screw conveyor are of substantially equal size and/or in that the conveying device comprises two to four turns.

13. The method as claimed in any of the preceding claims, wherein the fibers are provided in the hydrous mineral binder composition and/or in that the fibers are fed in the hydrous mineral binder composition to the mixer.

14. A shaped body produced with the method as claimed in any of the preceding claims.