

mixing said pre-wetted aggregate material with water, normal weight coarse and fine aggregate material, and at least one cementing agent forming a wet concrete mixture;

curing said wet concrete mixture.

16. The process for making concrete of claim **15** wherein said at least one organic water soluble diffusive transport modifying material has a molecular weight of at most 1,000 g/mol.

17. The process for making concrete of claim **15** wherein said at least one organic water soluble diffusive transport modifying material is present in a pore solution in an amount suitable to reduce the ion diffusivity coefficient by at least 20%.

18. The process for making concrete of claim **15** wherein said at least one organic water soluble diffusive transport modifying material is present in a pore solution in an amount suitable to increase the viscosity by at least 25%.

19. The process for making concrete of claim **15** wherein said at least one organic water soluble diffusive transport modifying material is present in a pore solution in an amount suitable to decrease electrical conductivity of a 0.1 mol KCl/kg water solution by about at least 20%.

20. The process for making concrete of claim **15** wherein a pore solution has at least 5% by weight of said at least one organic water soluble diffusive transport modifying material.

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