We show that the random-phase model for the electronic wavefunctions gives very reasonable agreement with recent computations of the conductivity for amorphous Si. Furthermore the model also yields the double-sign anomaly in the Hall coefficient observed experimentally, which we have also confirmed by computer simulation. In addition we provide a simple explanation of a computer experiment performed by Weaire and Hobbs in 1993 in which amorphous Si behaves very much like crystalline Si. We argue that this result is not in contradiction with the Hall anomaly.