

“KEEPING PACE” - #28

SUMP PUMP:

Sump pumps can be a real problem when they cease working. A new design is shown below in which the manufacturer has added a backup to the electric motor. The idea was to use city water pressure in a venturi device to suck water from the basement in case the electric power failed. Unfortunately, the device does not work. In my tests, the device put more water into the basement than it took out. When pea gravel covered the inlet to the electric motor, this device activated and water flooded the basement of a new office building under construction. Before we arrived, the building owner and others were quite upset, because they thought ground water in the area had caused the flooding. They thought that such a situation would be very difficult to correct. When I explained how the backup to the sump pump caused the loss and that the building's water meter indicated that thousands of gallons of water had flowed into this building, even though it was unoccupied, they were greatly relieved.



Frederick F. Franklin, P.E.
Forensic Engineer