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? WHY THE WEATHER ?

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EXPLODING BUILDINGS

If you want to find the pressure of the air it is not necessary to put a barometer outside the house, for indoors the pressure is practically the same. The most substantial building leaks some air even with doors and windows shut. Usually pressure does not change so fast that leakage of air will not equalize it inside and out. But when a tornado comes along, like a giant vacuum cleaner, then buildings are in danger of exploding. Within the rapidly rotating narrow funnel cloud the pressure is extremely low. When this cloud passes over a building, the sudden drop in pressure outside is enormous, and unless doors and windows are well open, the inside pressure of nearly 15 lbs. to the square inch or about a ton per square foot, cannot be reduced rapidly enough and may cause the building to explode. For this reason good tornado cellars always have a ventilator on top, otherwise the roof is likely to be blown off by inside pressure. Without an adequate ventilator a tornado cellar may be kept intact only if the weight on roof and door approach one ton per square foot. This is equivalent to a layer of loose soil over 10 feet thick. A narrow tornado cellar with strong roof - beams projecting into the ground far to either side would not have to be much below the surface for adequate strength.

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