



### 5. How Heat Works in Your Oven

Thermal mass and insulation are the two primary components of a brick oven, and are the source of its ability to absorb and hold heat for cooking. An oven's thermal mass describes the part of the oven that is heated and provides heat to the oven chamber, while insulation describes the oven's ability to stop heat from escaping, or leaking, from the oven—where it is lost.

Heat, like most things in nature, likes equilibrium. If the inside of your pizza oven is hot and the outside edge is still cool, nature will balance the two by moving heat from

the hot spot to the cool spot – eventually making everything equally warm. Because of this, it is a good idea to saturate your oven with as much heat as possible before you start to cook.

The graphic below shows how heat is retained in a pizza oven, and how by filling the entire mass of the oven dome and floor with heat, a well-insulated pizza oven can cook pizza virtually indefinitely.

A barrel vault oven, by contrast, is designed to hold enough heat to bake multiple batches of bread from a single firing, and must be managed in a different manner.

