.71 of the value for rectangular chimneys.

To determine the greatest pressure at the edges the wind should be assumed to act in a diagonal direction. The specifications allow the theoretical opening of the joints to the center of gravity of the section, thus neglecting the tensile stresses. The compressive stresses should be determined for wind pressures of 26 and 31 pounds per square foot. The weight of the material per unit of volume should be that of the actual material used. The allowable unit stresses were fixed as follows: For common brick work laid in lime mortar (1:3), 100 pounds per square inch; for hard burnt bricks, having a compressive strength of at least 3,160 pounds per square inch, laid in cement-lime mortar (1 cement, 2 lime, 6 to 8 sand), 171 to 214 pounds per square inch. For the stronger stones and mortar richer in cement, higher stresses are allowable, but a factor of safety of 10 must always be provided for, and in no case should the greatest pressure exceed 316 pounds per square inch for a wind pressure of 26 pounds per square foot. If higher unit stresses be deemed allowable, they should be justified by test on blocks of masonry. The allowable compressive stress on the foundation is, for unrammed concrete 85 to 114, and for rammed concrete, 142 to 214 pounds per square foot. The allowable bearing pressure on the soil for the assumption of 26 to 31 pounds per square foot wind pressure is, as a rule, 61 pounds and, exceptionally, 82 pounds per square inch, equal respectively to very nearly 4½ and 6 tons per square foot.