

Methods for Calculating the Inclination of the Round Section Towers

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SUMMARY

Determination of the inclination from verticality, using geodetic methods, can be done in more ways, depending on the position of the observation points. The paper will show the most common approaches for calculating the position for the tower center at each level using measurement made from two observation points or three observation points. The most common way is the determination of the directions toward the center of the tower as the average of horizontal directions tangent to the tower and then of the transverse deviations on each direction through composition of the resulting vectors, determining the inclination at each level of the tower. Another way is by determining the position using forward intersection of the horizontal directions toward the center of the tower and then calculating the deviations for each observed level.

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