

## Chapter A-E 2

## COMPUTATION OF "TOTAL VOLUME"\*

A-E 2.01	Method	A-E 2.03	Plans and specifications
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**A-E 2.01 Method.** The method for computation of the "Total Volume" of a building is as follows: (1) DEFINITION OF "TOTAL VOLUME". The "Total Volume" (cube or cubage) of a building is the actual cubic space enclosed within the outer surfaces of the outside or enclosing walls and contained between the outer surfaces of the roof and six inches below the finished surfaces of the lower floors.

(2) INTERPRETATION. The above definition requires the cube of dormers, pent houses, vaults, pits, enclosed porches and other enclosed appendages to be included as a part of the cube of the building. It does not include the cube of courts or light shafts, open at the top, or the cube of outside steps, cornices, parapets, or open porches or loggias.

(3) SUPPLEMENTARY INFORMATION. The following items shall be listed separately: (a) Cube of enclosed courts or light shafts open at top, measured from outside face of enclosing walls and from six inches below the finished floor or paving to top of enclosing walls.

(b) Cube of open porches measured from outside face of wall, outside face of columns, finished floor and finished roof.

It is recommended that the following items also be listed separately:

(a) Square foot area of all stoops, balconies and terraces.

(b) Memoranda, or brief description, or caissons, piling, special foundations, or features, if any.

(4) EXPLANATION. The above specification of "Total Volume" is adopted as a method of conveying exact basic facts about a given building to all interested so that they may be subject to verification without misunderstanding.

**A-E 2.02 Plans and specifications for separate parts of buildings.** Plans and specifications for the first unit of a building that will equal or exceed 50,000 cubic feet total volume when completed require the services of an architect or professional engineer although the unit itself does not have 50,000 cubic feet total volume except those exempted by section 101.31 (10), Wis. Stats.

**A-E 2.03 Plans and specifications for repairs or alterations of buildings.** Plans and specifications for alterations in, or the remodeling of the whole, or any part of, a building having in excess of 50,000 cubic

\* This method of computing the volume of a building is as published in Appendix T of A. I. A. Document No. 239, May 25, 1928 by the American Institute of Architects, The Octagon, Washington, D. C.

feet total volume of space must be prepared by an architect or professional engineer except where such alterations or remodelings "do not affect health or safety or are exempted by Subsection 10 of Section 101.31". Any addition or alteration that changes the condition of load upon a building or the original disposition of strain, as upon a roof, floor, bearing partitions, column or wall or foundation, and also any important change in the means of entrance or exit to any or all parts, affects safety. Any addition or alteration that affects the lighting, heating, ventilation or sanitary provisions of the building affects health.