

ENB-13.14 - Plan Review for Amateur Radio Tower Antenna Structures

PLAN REVIEW FOR AMATEUR RADIO TOWER ANTENNA STRUCTURES

Administrative Rule Adopted by Bureau Pursuant to Rule-Making Authority
ARB-ENB-13.14

Policy:

To allow plan review engineering approval without engineering analysis and certification of those tower structures and foundations where adequate information from the manufacturer is provided to determine code compliance.

Procedure:

A) All building permit applications are to be approved by Planning and Zoning and Engineering Plan Review.

B) Minimum plans and information for engineering review are as follow:

1. A site plan showing the location of the antenna support and other buildings on the site (see attached sample).
2. A building permit data summary sheet. (See attached sample.)
3. Other data required by Title 24, Chapter 10, Section 070 (c) of the City Code as follows:

a) Prefabricated antenna support structures:

Applications for permits for such structures shall be submitted with a copy of the manufacturer's specifications for the antenna support structure and details of footings, guys and braces. The proposed maximum cross-sectional area of the antenna(s) to be attached to the antenna support structure shall be described by submission of manufacturer's specifications where available, or by applicant prepared diagram where such specifications are unavailable. Documented antenna support structures shall not require submission of an engineer's analysis in the following circumstances:

- i) When manufacturer's data, or the application of standards promulgated by a nationally recognized standards organization demonstrate that the antenna support structure with the proposed antenna installed in substantial compliance with the manufacturer's instructions, is able to withstand a minimum wind velocity of 80 M.P.H. at the standard height of 30 feet unless a different minimum wind load standard is mandated by the UBC, in which case the standard mandated by the UBC shall apply; or
- ii) When computations prepared by the applicant in accordance with recognized mathematical and engineering principles and formulae demonstrate from interpolation of manufacturer's specifications that the antenna support structure, with the proposed antenna attached, is able to withstand the applicable wind load standard referred to above, when the antenna support structure is installed in a particular manner. Where such extrapolated data is submitted in support of application for permit for a documented antenna support structure, the Director may require submission of computations, stress diagrams, computer data and such additional data required by the Director, sufficient to show the correctness of the plans and compliance with the structural provisions of Title 24 of the City Code. Data required by the Director may include a brief summary of all basic assumptions, design methods, structural systems, loading, lateral, bracing systems, and a table of contents of the computations.

b) Undocumented and unique antenna support structures:

Where a permit application is for an antenna support structure which is not documented, or for a unique antenna support structure, the Director may require the submission of such plans, specifications, and other data as are minimally necessary to ensure compliance with the structural provisions of Title 24 of the City Code and the wind load standard referred to above, based upon a case by case review. Such data to be required shall include the submission of an engineering analysis.

- 4) The fee or fees are prescribed by City Code.

Examples of documented antenna support structures are attached.

[Figure 1 Building Permit Check List](#)

[Figure 2 Sample Site Plan](#)

HISTORY

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