Antenna and Wireless Communication Facilities
Building Code & UDC/Zoning Code Requirements

UDC/Zoning Code Requirements
Find the Duluth Unified Development Code (UDC) at: http://www.duluthmn.gov/community-planning/land-use-zoning-applications/zoning-regulations/ 
Use specific standards for wireless communications facilities are found in UDC Section 50-24.4.E.

A special use permit (SUP) is required for all new towers and facilities, for modification of existing towers and facilities where there is a visible change to physical and visually discernable components of the facility, for new or visible changes to antennas, cables, equipment shelters, landscaping, fencing, for changes to parking or to access, for co-location, including equipment upgrades, and for changes in colors or materials.

A Special Use Permit is not required for the replacement of any components of a wireless facility where the replacement is identical to the component being replaced or for any matters that involve the normal repair and maintenance of a wireless facility without adding, removing or changing anything, nor is a Special Use Permit required for upgrades or changeouts of equipment or antennas where the replacement is of similar size and appearance.


Prior to submitting an application for a special use permit, you must discuss your proposal at a pre-application meeting with Planning staff. Call the Planning office at (218) 730-5580 to schedule a pre-application meeting.
Make sure to get a Pre-App Verification at this meeting; you will need to submit this with your application.

Following the procedures in the UDC Application Manual, submit a complete application for a special use permit to the Land Use Technicians in Construction Services, Room 100 of City Hall at the address listed above. Incomplete Applications Will Not Be Accepted.

Fees and deposit required for special use permit:

☐ The special use permit fee for a new tower is $5,350.43.
☐ For modification or co-location of an existing tower or facility, the fee is $2,674.70.
☐ In addition, the applicant will be required to deposit $9,095.63 into an escrow account for the technical evaluation of the permit by a consultant.

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For modification or co-location of an existing tower or facility, the fee is $2,674.701.
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Fees are payable to the City of Duluth and must accompany the SUP application.

Building Permit Requirements

New and replacement antennas not requiring a tower structure, a concrete foundation and not located on a building roof, do not require a building permit.
All new and replacement antennas having a tower structure, a concrete foundation, a new or replacement equipment shelter or located on the roof of a building require a building permit. The permit cost will be based on the valuation of the new antenna, equipment shelter (if any), its new support structure or any modification to an existing support structure.

Submit applications for building permits to the Land Use Technicians in Construction Services, Room 100 of City Hall at the address listed above. Land Use Technicians can be reached by phone at 218/730-5240. Visit the Construction Services’ website for information, checklists, forms and fee information: http://duluthmn.gov/construction-services-inspections/permits/.

When a special use permit is required, complete documentation of the special use approval must be filed with the application for a building permit.

When a building permit is required, a structural analysis of the antenna mount, foundation or supporting structure (building roof) may be warranted in addition to the items listed below. This determination will be decided on a case by case basis.

Design of support and anchoring for antenna and wireless communication facilities shall be in accordance with Minnesota State Building Code. See specific requirements for design for effects of radial ice in MN Rules 1303.1800.

In addition to the applicable items listed on the Plan Intake Checklist, the following information about new antennas requiring a permit will be required:

- Complete project address.
- Antenna height above its base and antenna base height above grade.
- Antenna surface area.
- Antenna design wind load (mph) and corresponding design pressure (psf). TIA/EIA-222, MSBC 3108.4 and antenna design wind exposure category, MSBC 1609.4
- Antenna weight.
- Antenna support structure (foundation, pole, tower, water tower, building roof, etc.).
- Antenna mounting method to support structure.
- Antenna guy wire requirements (if any).
- Antenna support structure analysis (may be required).
- Antenna connection (mounting) to base structure (antenna rad center).
- Antenna base structure connection to supporting structure.
- Equipment shelter foundation plans and details.
- Submittal requirements for prefabricated equipment shelters:
  - A statement that the work to be performed under the permit is to include the installation of a certified industrialized/modular building in accordance with the provisions of the Uniform Administrative Procedures (UAP) and will be labeled accordingly.
  - Schematic floor plan layouts and typical elevations showing the arrangement and layout of the specific building to be manufactured and installed wherein the manufacturer references the building approvals of the evaluation agency.
  - Each industrialized/modular building that is certified pursuant to the Uniform Administrative Procedures, shall have permanently attached thereto, a certification label. There shall be one (1) certification label per module. The label shall bear a serial number, the words “see data plate,” and the statement, “This label certifies that this building has been manufactured in accordance with an approved building system and compliance assurance program under the auspices and approval of the Industrialized Building Commission.” The label shall be permanently attached to the faceplate of the main electrical panel, or if not practical, near the building entry, or in another easily accessible.
  - A Manufacture’s Data Plate shall be provided for each industrialized/modular building. The data plate shall be permanently attached in the vicinity of the certification label.