



Greenhouse Uses

An overview of Land Use Code and Building Code Requirements




June 2022 – Updated to 2021 I Codes

Building Code The Building Codes **classify** how a **building is occupied** (based upon the proposed use) and **regulate** how a structure is **constructed** or **converted** from one use to another. These rules may differ from the LUC.

Please refer to Page 2 for more details.

Land Use Code: The Larimer County **Land Use Code** (LUC) regulates how **land and structures** can be **used**. Allowed uses are listed in the **LUC** under each zoning district. Agricultural and personal greenhouses are allowed by-right. Refer to **LUC** section 3.2, Tables of Allowed Uses.

Prior to construction, you may want to discuss your plans with the County Planning Division to find out how land use regulations apply to your specific situation. If a building permit is needed, you must obtain one prior to starting construction.

Type of Use	Use Examples	Building Permit Requirements (details on page 2)	Other Considerations
Agricultural Use 	Farms Growing Greenhouses Nurseries Tree Farms	A building permit is not required for greenhouse structures when there are no utilities and the public has no access to a shade cloth* or maximum 6-mil, single-layer plastic structure. Buildings with impervious membranes that exceed 200 sq. ft. in floor area or containing utilities require permits.	See page 2 for additional building code requirements when the public has access to the structure.
Commercial/ Retail Use 	Garden Supply Centers Greenhouses that include Offices, Sales, Processing, Packaging, Exhibitions, Classes, Events or other uses	If the public has access, a permit is required. If the public has no access, a permit is still required for any utilities (heating, plumbing, electrical, gas) or if the greenhouse is over 200 sq. ft. in floor area and constructed of impervious materials such as wood, metal or glass (anything beyond shade cloth or maximum 6 mil, single layer plastic)	See page 2 for additional building code requirements when the public has access to the structure.
Personal Use 	Hot houses Enclosed gardens	A building permit is not required for personal use greenhouses when there are no utilities, the public has no access , and the building is either a shade cloth* or maximum 6-mil, single-layer plastic structure or does not exceed 200 sq. ft. in floor area.	Be sure to check with your HOA for any covenant restrictions that might apply to greenhouses.

DISCLAIMER: This handout should not be used as a substitute for codes and regulation. The applicant is responsible for compliance with all code and rule requirements, whether described in this document. Refer to the Larimer County Land Use Code online at: <https://www.larimer.gov/planning/regulations>

Greenhouse Definition and Occupancy

A Greenhouse is defined in the 2021 International Building Code (IBC) as “A structure or thermally isolated area of a building that maintains a specialized sunlit environment used for and essential to the cultivation, protection or maintenance of plants.”

Greenhouse structures built with impervious membranes like wood, metal, glass, or plastic laminate must meet minimum building code requirements.

Greenhouses used for purposes other than growing plants only shall be classified for their intended use (sales, exhibits, classes, etc.) and follow building code rules for the designated occupancy classification.

Membrane and Shade Cloth Structures

***Shade Cloth** - A special cloth used to protect plant material or livestock/fowl from the sun, mostly found in greenhouse uses, bird and livestock farms.

Shade Cloth Structure - A permanent or portable framed structure to provide shade for livestock or plants that are adversely affected by heat from the sun or are excluded from natural shade. A shade cloth structure can mean any permeable cloth material or plastic that is a single layer of 6 mil (about .15 millimeters) or less in thickness, typically erected for 180 days or less.

Membrane Structure - *Air-supported, air-inflated, membrane-covered cable, membrane-covered frame and tensile membrane structures*, collectively known as *membrane structures*, which are erected for a period of 180 days or longer in a calendar year. Membrane structures erected for less than 180 days may need approval from the local Fire Department.

A membrane structure endures abuse from the wind because the cover material acts as a solid surface and is not permeable. Membrane structures usually have a poly-reinforced fabric covering [PVDF (fluorinated polymer) or PTFE (Teflon) coated fabric] that is applied in tension over the frame.

Is a Building Permit Required?

Building permit requirements depend on the size, construction, and use of the structure. All structures must comply with Land Use Code requirements including building setbacks for the property’s zoning district, lot coverage and flood plain regulations.

- Yes** Permanent membrane structures require a building permit. Section 3102 of the IBC and Section 3103 of the International Fire Code apply.
- Yes** Regardless of use, a building permit is required for utilities (heat, plumbing, gas, electrical)
- Yes** Structures built with impervious membranes that exceed 200 sq. ft. in floor area.
- Yes** Structures that allow public access.
- No** Shade cloth structures with no utilities and no public access.
- No** Private use greenhouses 200 sq. ft. in floor area



Septic System - Public Sewer - Water Lines

- If the greenhouse has a drain or sink, you may be required to connect to a sanitation system.
- Backflow prevention devices may be required to prevent the possibility of contaminating the water system.
- Water treatment systems may be necessary if certain chemicals or pesticides are used.

Engineered Stamped Drawings

The Building Division will require drawings and load calculations stamped by a Colorado registered engineer proving the structure will meet required wind and snow load ratings for the area.

Most greenhouse manufacturers can provide structural drawings and load ratings prior to ordering the product. Once submitted, the drawings and plans must be reviewed and approved by the County Building Division and other departments before a building permit can be issued.

We recommend you review structural components and load ratings with building staff prior to purchasing a pre-built greenhouse and/or applying for your permit.

When the Public has Access

Structures for use by the public have more stringent Building Code requirements than structures used for growing plants or personal use only.

In case of an emergency like a fire, structures used by the public must be designed to reduce the fire danger.

Building Codes may require:

- a second ‘exit’ door
- installation of illuminated exit signs at each doorway
- structural or fabric changes to meet minimum fire-spread, snow and wind load requirements
- fire suppression sprinklers or fire-rated construction to separate different occupancies
- Accessibility for people with disabilities
- Bathroom facilities

Size Limitations and Open Space

Building size limits depend on construction type, open space around the building, sprinklers, and occupancy. Larimer County had adopted IBC Appendix C, allowing for larger agricultural, growing-only greenhouses.

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