



## **MINOR PLANNING PERMIT – ARTIFICIAL TURF FOR DWELLING, 1 UNIT DETACHED; DUPLEX; OR DWELLING, 2 UNITS ATTACHED USES**

Applications must contain the following items in the format described. Applications will not be accepted if required items are missing or incomplete.

1. **Application Fee** - refer to the application form
2. **Letter of Intent and Owner Authorization Form** – a written description of the application request as well as land owner signatures
3. **Site Plan** – in a format, size, and scale to accurately depict the nature of the request.
4. **Samples/Illustrations of all Colors and Materials** – sample of artificial turf or accurate color photos of artificial turf to be used
5. **Evidence of PFAS-Free Construction** – Available from manufacturer

This is a general list of requirements. The attached examples may not include each element of the list. However, each element should be reviewed for inclusion on a submittal.

### **SITE PLAN SHOULD INCLUDE:**

- North arrow, written and graphic scale, names and addresses of site, applicants, and owners
- Property lines, driveway location(s), and footprint of the existing home.
- Location and dimensions of all structures
- Location and dimensions of all non-permeable areas (sidewalks, patios, etc.)
- Current structures on the property such as fences, densely planted vegetation, screening, patios, porches, sheds, etcetera.
- Building setbacks (dimensions from the building, including cantilevers and decks, to all four property lines)
- Dimensions between structures (including between artificial turf and impervious surfaces, building foundations, and property lines)
- Easements
- Artificial turf location(s) and square footage calculations in those locations. The calculation must include the area eligible for installation (front yard as described in this packet and in Section 18-616)
- Any required three- and eight-foot buffers between artificial turf and impervious surfaces

## ARTIFICIAL TURF REGULATIONS

Artificial turf is allowed in specific locations in Thornton and must meet all applicable regulations. The full regulations for artificial turf are found in Section 18-616. The design and installation of all artificial turf areas shall comply with the front, side, and rear yard landscaping requirements for Dwelling, one Unit Detached, Duplex, or Dwelling, two Units Attached uses.

- **What:** Artificial turf is a man-made substitute for organic turf, lawn, or sod which effectively simulates the appearance of a well-maintained lawn. Thornton has specific buffering, material, installation, and maintenance requirements for the construction of new artificial turf lawns.
- **Where:**
  - Allowed on lots developed with a detached, Duplex, or two units attached dwelling.
  - Prohibited on all other lots or tracts unless other requirements detailed in Section 18-616 are met.
  - Neighborhoods within the Planned Development Legacy or Planned Development Overlay Zoning Districts may have different guidelines. Contact [City Development](#) if the zoning is Planned Development Legacy or Planned Development Overlay for these regulations. You can check what the zoning is for a property by looking at the [Zoning Information](#) map.

### **In rear yard and side yards which are visually shielded or obscured from public places (see Section 18-616(b)):**

- i. Artificial turf allowed with no limitations.

### **All other areas:**

- i. Artificial turf shall not exceed 25% of the landscape area.  
(Front and side yards not occupied by driveways, sidewalks, patios, decks, buildings, or other structures)

- **Buffering:**

- The following minimum buffer areas are required between the edge of the artificial turf and the specified location:
  - Three feet from all property lines. Artificial turf may extend to the front property line if a minimum three-foot buffer is installed between the artificial turf and the sidewalk along a street.
  - Eight feet from the front wall of any building, and three feet from all other building walls or impervious surfaces when located outside of rear landscape area.
  - Three feet from the trunk of any deciduous tree, and no closer than the dripline of any evergreen tree.
- Buffers shall be permeable, consisting of wood mulch, gravel, or rock a maximum of two inches in diameter, or other approved permeable materials.
- Living plant materials are required when artificial turf is installed on the lot outside of the rear landscape area.
  - For the first 750 square feet of artificial turf, or fraction thereof, one tree equivalent is required.

- For each additional 250 square feet of artificial turf, or fraction thereof, one-half tree equivalent is required.
- Required living plant materials shall be located on the lot outside of the rear landscape area.
- Required living plant materials may consist of:
  - Existing plant materials meeting the requirements of Section 18-613(c) and (d);
  - New plant materials installed in accordance with Section 18-613(c) and (d); or
  - A combination of existing and new materials.

Below is a visual representation of Tree Equivalents or TE. Following that are possible locations to install artificial turf on some standard lot configurations. These are not complete site plans, but visual aids.

### Required Tree Equivalents in Front Artificial Turf Area

#### Living Plant Materials

- Requires existing or new plant materials located in the front / publicly visible side area.
- First 750 square feet (or fraction) of artificial turf: One Tree Equivalent (TE)
- Each additional 250 square feet (or fraction) of artificial turf: One-half Tree Equivalent

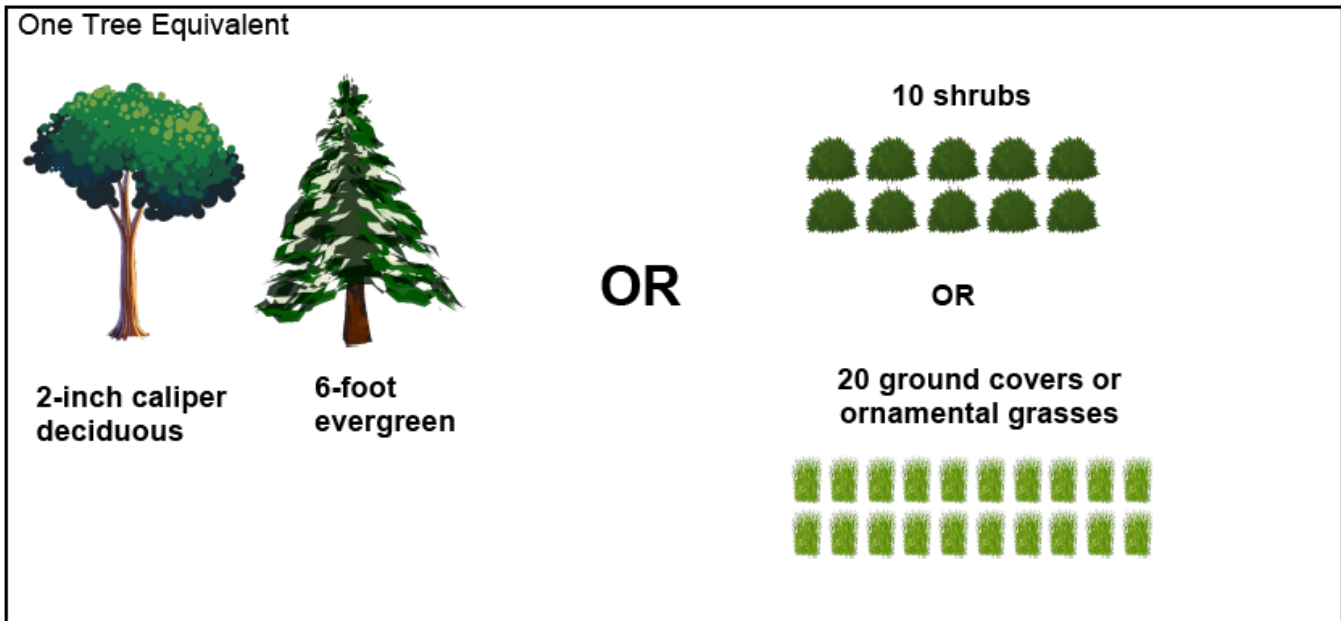
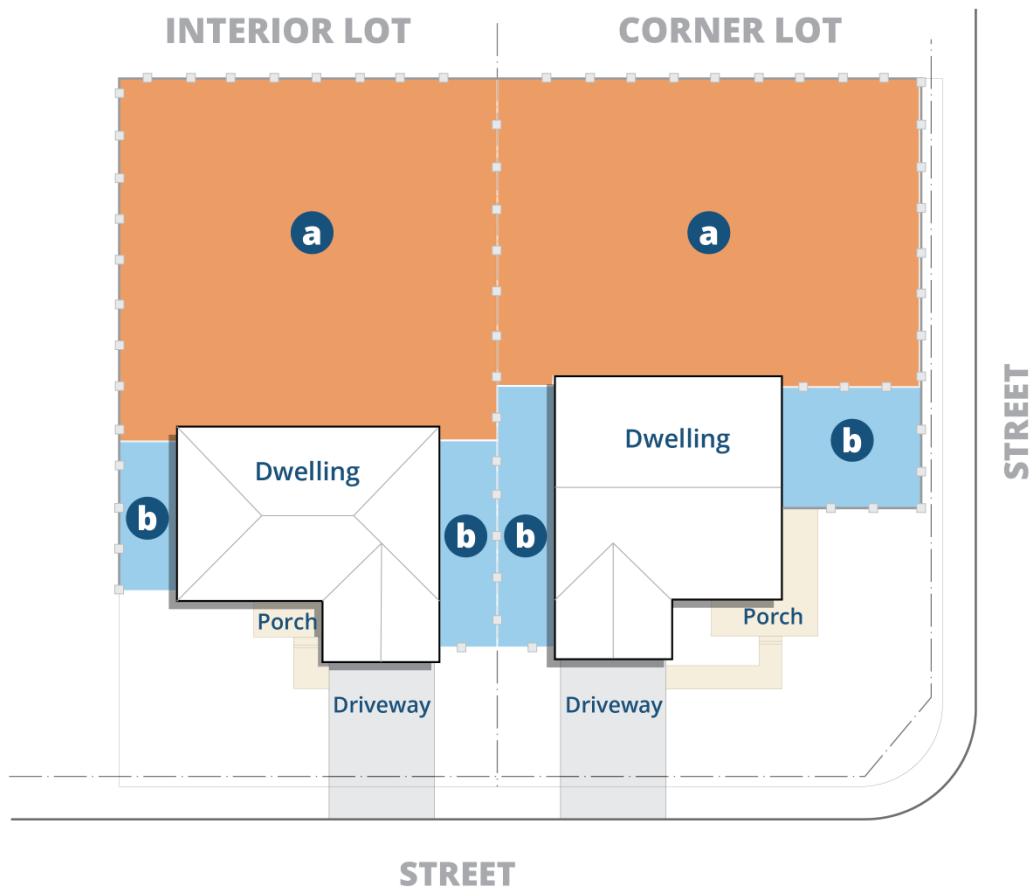


Figure 18-616.1. Artificial turf area maximums.

Figure note: The letters in Figure 18-616.1 refer to the standards described in Section 18-616(b)(1).



Section 18-616 will contain all regulations concerning Artificial Turf, but below are the most relevant sections for residential artificial turf installations:

#### Type/Materials:

- Artificial turf products shall have a minimum eight-year warranty against fading.
- Artificial turf must be a green color, similar to natural grass.
- Artificial turf shall be of a type known as cut pile infill and shall be manufactured from polypropylene, biobased products, nylon, polyester, polyethylene, or a blend of polypropylene, biobased products, nylon, polyester, or polyethylene fibers stitched onto a meshed or hole-punched backing made of similar materials.
- Biobased products are derived from plants and other agricultural, marine, and forestry materials, and may be certified as a USDA BioPreferred product.
- Hole-punched backings shall have holes spaced in a uniform grid pattern with spacing not to exceeding four inches by six inches on center.
- Backings shall be designed to drain at a minimum rate of two inches per hour.
- The use of indoor or outdoor carpeting in lieu of artificial turf, mulch or other plant material is not permitted

## **PFAS-free requirements:**

- All artificial turf, infill, and other manufactured products used in the installation of artificial turf shall be free of per- and poly-fluoroalkyl substances (PFAS).
- PFAS-free means that at least one of the following requirements have been met:
  - The manufacturer or distributor has publicly stated that the product is made without the intentional use of PFAS in a statement referring to all members of the class of PFAS using language such as “PFAS-free,” “fluorocarbon-free,” “per- and poly-fluorinated compounds-free,” and similar. “PFC-free” shall not be sufficient to satisfy this requirement.

The statement must explicitly address which product or products it applies to, and ambiguous statements will not be accepted.
  - The product has been tested and shown to be PFAS-free. Testing sufficient to satisfy this requirement may have been carried out at the manufacturer’s request or as a part of an independent investigation by a non-governmental organization, research laboratory, or other entity not affiliated with the company. Testing completed by the manufacturer does not satisfy this requirement. Testing results must be published online and must indicate the test method used and the specific product tested. Third-party certifications are not valid as “PFAS-free” unless the testing evaluates total organic fluorine and results are publicly available.
- Documentation evidencing that the proposed product is PFAS-free shall be submitted at the time of permit application and approval of such documentation is at the sole discretion of the director or designee.

## **Installation and maintenance:**

- Artificial turf shall be installed in accordance with the manufacturer's specifications, including the following:
  - Sod or existing groundcover shall be removed prior to installation of any artificial turf.
  - Artificial turf shall be installed over a compacted aggregate material that is a minimum of three inches deep, which may be a combination of coarse and fine material layers separated by a geotextile per the manufacturer’s specifications.
  - The specified base material(s) system must be able to contain a minimum of one-half inch of precipitation prior to generating sheet flow runoff.
  - Artificial turf shall be anchored at all edges and seams.
  - All artificial turf seams shall be glued and not sewn.
  - An infill medium consisting of clean washed sand and/or ground shells, or other approved mixture may be brushed into the fibers to ensure that the fibers remain in an upright position and to provide ballast that will help hold the turf in place and provide a cushioning effect. Infill is not required if the artificial turf manufacturer does not recommend or require its use
- Artificial turf shall be maintained in a manner to mimic healthy living turf. General maintenance requirements are specified in Section 18-619 of the Code. In addition, the following

maintenance activities are required for artificial turf, as described in 18-616(e):

- Cleaning, sanitizing, brushing, and removal of debris. Cleaning shall be done with biodegradable products.
  - Hand raking of worn turf areas on an as needed basis.
  - Repairing of depressions to maintain an even visual surface.
  - Brushing back any loose infill that has been washed or moved off the turf.
  - Regular maintenance to eliminate any odors, flat or matted areas, weeds, looseness at edges, seams, or elsewhere.
  - Replacement of the artificial turf when maintenance or repair is unable to simulate a healthy living turf.
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- The landscaped buffer may be located on the property with the artificial turf or on existing adjacent landscaped HOA common area or city property, or in some combination thereof.

## Letter of Intent and Owner Authorization Form

Application Date: \_\_\_\_\_

Property Address or Parcel Number:

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Letter of Intent:

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Land Owner Authorization:

Land Owner: \_\_\_\_\_ Telephone: \_\_\_\_\_

Address of Land Owner: \_\_\_\_\_ Email: \_\_\_\_\_

Land Owner Signature: \_\_\_\_\_ Print Name: \_\_\_\_\_

Land Owner Authorization:

Land Owner: \_\_\_\_\_ Telephone: \_\_\_\_\_

Address of Land Owner: \_\_\_\_\_ Email: \_\_\_\_\_

Land Owner Signature: \_\_\_\_\_ Print Name: \_\_\_\_\_

NOTE: If there are more than two owners, a letter/letters containing their signatures must be attached to the application authorizing the applicant to act on behalf of the identified owner(s). All communications will be sent to the applicant. The signature of the property owner acknowledges their awareness of the request being made on their behalf and authorizes the identified applicant to represent the owner in the request being made to the City of Thornton.

## HOW TO APPLY FOR AN ARTIFICIAL TURF PERMIT

1. Log in to the CityView Portal: [CityView Portal](#)
  - If you have used our portal before, please log in with your existing credentials.
  - If you are **new** to the portal, please [Register for a CityView Portal Account as an Individual Homeowner or Third Party](#). For **Contractors**, please [Register for a CityView Portal Account as a NEW Contractor](#)
2. Once you have registered and logged in, go to the CityView Portal home, and select “Apply for a Planning Permit” under the Planning header.
3. Choose Minor Planning Permit from the drop-down menu.
4. Input your project information and click Next Step when complete.
  - **Project Descriptive Name:** subdivision name or project name
  - **Comments:** enter the scope of work or describe the project
5. Input the location of the project. If you do not have a specific address, try finding the location using “Find location in map”. Click Next Step.
6. Check the contacts and be sure the applicant is your contact or company information. Click Next Step if it is shown correctly.
7. Upload the required application documents (see above). Click Next Step. Please note: **your submittal will be considered incomplete if any required documents are missing.**
8. Review the information you have provided and click “Submit Application”. If any information is incorrect or missing, follow the previous steps to edit the application accordingly. Once you submit your application, it will be entered into our system and placed in the queue for processing.
9. When your submittal is accepted by a planner, you will receive an email notifying you that the permit is ready for the fee. You will need to log in to your CityView Portal account to make an online payment. If you have any questions or concerns, please contact our office at 303-538-7295 or at [pod.info@thorntonco.gov](mailto:pod.info@thorntonco.gov) and one of our staff will be happy to assist you.