



DENVER AMENDMENT PROPOSAL FORM FOR PROPOSALS TO THE 2019 DENVER BUILDING CODE AMENDMENTS AND THE 2021 INTERNATIONAL CODES

DENVER
THE MILE HIGH CITY

2021 CODE DEVELOPMENT CYCLE

1) **Name:** NORESKO, Kristen Salinas **Date:** 11/21/2021
Email: ksalinas@noresko.com **Representing (organization or self):** Denver

2) One proposal per this document is to be provided with clear and concise information.

Is a separate graphic file provided ("X" to answer): Yes or No

3) Highlight the code and acronym that applies to the proposal

<u>Acronym</u>	<u>Code Name</u>	<u>Acronym</u>	<u>Code Name</u>
DBC-AP	Denver Building Code–Administrative Provisions	IPC	International Plumbing Code
IBC	International Building Code	IRC	International Residential Code
IECC	International Energy Conservation Code	IFGC	International Fuel Gas Code
IEBC	International Existing Building Code	IMC	International Mechanical Code
IFC	International Fire Code	DGC	Denver Green Code

AMENDMENT PROPOSAL

Please provide all the following items in your amendment proposal.

Code Sections/Tables/Figures Proposed for Revision:

(New) 501.3.3.4 Landscape Design and Maintenance (Mandatory) (applies to all single-unit and duplex dwellings, multi-family, and commercial projects)

Proposal:

Revision New Text Delete/Substitute Deletion

501.3.3.4 Landscape Design and Maintenance. (Mandatory) New construction and major renovations of a one- or two- family dwelling, multi-family and commercial building projects shall meet all applicable requirements in Section 501.3.3.4.1-4.5.

501.3.3.4.1 Minimum Landscape Area. Minimums shall be in addition to all other landscape provided to satisfy the requirement of other City regulations. Landscape area is considered to be at grade or located on roofs.

A. New construction of a one- or two- family dwellings: Minimum landscaping area of 25% of the site’s net area shall be landscaped per the design requirements.

B. New multi-family building projects: Minimum landscaping area of 15% of the site’s net area shall be landscaped per the design requirements.

C. New commercial building projects: Minimum landscaping area of 10% of the site’s net area shall be landscaped per the design requirements.

501.3.3.4.2 Definitions and Minimum Sizes:

A. Tree Equivalent (TE): Minimum size of deciduous trees (1 TE) at time of planting shall be 2 inch caliper, measured 4 inches above the ground. Ornamental and flowering trees (1 TE) are at least 1- and 1/2-inches caliper measured 4 inches above the ground. Evergreen trees (1 TE) shall be a minimum of 5 feet in height. Tree substitution for 10 shrubs to one tree is available when trees are not practical. Up to 50% of the required trees may be substituted by shrubs.

B. Shrub Equivalent (SE): Minimum size of a shrub (1 SE) is defined as one large shrub (5 gallon), two medium shrubs (2 gallon), or four small shrubs (one gallon) at time of initial planting. Up to 50% of the required shrubs may be substituted by groundcovers and/or vines of equal size.

C. Other Minimum Sizes: Groundcovers and vines shall be at least 1-gallon size. Other shrub-like ground covers shall be five-gallon size.

501.3.3.4.3 Minimum Tree and Shrub Count: At least one (1)TE plus five (5) SE per every 500 SF of required minimum landscaping area, rounding down to the nearest whole number if below 0.49 and rounding up if above 0.50, shall be provided.

501.3.3.4.4 Landscape Design:

- A. **Plant Species Diversity:** Landscaping shall consist of annuals, perennials, groundcover, shrubs, trees, and/or grasses. A minimum of 10 species shall be planted on each one- or two- family dwelling residential lot. A minimum of 20 species shall be planted on multifamily and commercial project sites.
- B. **Plant spacing and clustering:** Group plants with similar water requirements to avoid over watering. Provide spacing appropriate for mature growth. Irrigation systems shall be zoned and set to align.
- C. **Evergreen Trees:** Evergreen Trees shall not be located within 8 feet of a public sidewalk.
Turf Placement: Turfgrass shall not be used on areas narrower than 4 feet or on slopes greater than 10%.

501.3.3.4.5 Maintenance: All landscaping materials shall be mowed, trimmed, pruned, and maintained as often as necessary to keep a well maintained and healthy landscape. Replacement of damaged or dead plant materials shall occur within 30 days of such event during the growing season of April 1 to October 1. At all other times, replacement shall occur within 45 days of the start of the following growing season. In no event shall replacement time exceed one year. Trash, litter, and weeds shall be removed promptly within 30 days.

Supporting Information:

All proposals must include a written explanation and justification as to how they address physical, environmental, and/or customary characteristics that are specific to the City and County of Denver. The following questions must be answered for a proposal to be considered.

- Purpose: What does your proposal achieve?
This language extends the landscaping design requirements to new and large renovation projects for single family homes and duplexes, as well as sets requirements for landscape design for commercial projects. This measure provides continuity within the character of Denver landscaping and provides a network of plantings for pollinators, eliminates high water plants, and provide tree canopy to reduce heat island effect.
- Reason: Why is your proposal necessary?
Currently there are no landscaping requirements that cover single family homes and duplexes. This proposal addresses the gap in requirements that are typically included in other city ordinances, plus defines plantings for commercial projects.
- Substantiation: Why is your proposal valid? (i.e. technical justification)
In assembling conditions for this provision, we reviewed local Colorado residential landscaping ordinances and requirements for SFR and duplexes, to align the requirements with neighboring cities. A careful balance was created between giving the homeowner the ability to design their own landscaping and creating consistency with public landscaping and best practices. There is built in flexibility in these measures to allow for varying priorities.

Bibliography and Access to Materials (as needed when substantiating material is associated with the amendment proposal):

- City of Sunnyvale Landscaping Requirements: <https://sunnyvale.ca.gov/civicax/filebank/blobdload.aspx?BlobID=23595>
- City of Lakewood: <https://www.lakewood.org/files/assets/public/planning/development-assistance/pdfs/zoning-ordinance/article-6-residential-building-and-site-design-standards.pdf>
- City of Golden: https://www.cityofgolden.net/media/Section18.40.220_Landscaping_2nd%20Draft.pdf
- City of Broomfield:
- City of Colorado Springs: <https://coloradosprings.gov/sites/default/files/planning/landscape.pdf>
- City of Denver Water Wise Handbook: <https://www.denverwater.org/residential/rebates-and-conservation-tips/water-wise>
- CSU Extension Guides: <https://extension.colostate.edu/topic-areas/natural-resources/?target=publications#native>
Denver Zoning Code: https://www.denvergov.org/content/dam/denvergov/Portals/646/documents/Zoning/DZC/Denver_Zoning_Code_Article10_Design_Standards.pdf

Other Regulations Proposed to be Affected:

***For proposals to delete content from the 2019 Denver Green Code in conjunction with adding it to other mandatory Denver codes and/or regulations, only.**

Please identify which other mandatory codes or regulations are suggested to be updated (if any) to accept relocated content.

P34.3 Western Resource Advocates DGC Site Water Use Reduction 601.3.1

P34.6 Western Resource Advocates DGC Soil Amendments 501.3.4

P34.8 Western Resources Advocates DGC Landscape Design 601.3.1.1

Referenced Standards:

List any new referenced standards that are proposed to be referenced in the code.

Environmental Protection Agency (EPA) WaterSense
CSU Extension Native Plant Garden Guides

Impact:

How will this proposal impact cost and restrictiveness of code? ("X" answer for each item below)

Cost of construction: ___ Increase ___ Decrease _X_ No Impact
Cost of design: ___ Increase ___ Decrease _X_ No Impact
Restrictiveness: _X_ Increase ___ Decrease ___ No Impact