

Public Review Draft

Proposed Addendum b to Standard 189.1-2023

Standard for the Design of High-Performance Green Buildings Except Low-Rise Residential Buildings

First Public Review (February, 2024)
(Draft Shows Proposed Changes to Current Standard)

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(This foreword is not part of this standard. It is merely informative and does not contain requirements necessary for conformance to the standard. It has not been processed according to the ANSI requirements for a standard and may contain material that has not been subject to public review or a consensus process. Unresolved objectors on informative material are not offered the right to appeal at ASHRAE or ANSI.)

Foreword

As climate change and aridification continue to impact water resources, it becomes important to consider conservation measures from every possible angle. Turfgrass is one of the highest water use plants commonly found in landscapes in the built environment. This has been demonstrated by numerous studies that have been conducted since Denver Water pioneered the concept of replacing turfgrass with other plantings in the 1980s. Research in the 1990s and 2000s demonstrated that the concept saved significant water and that savings occur in a variety of environments (as shown by utility studies, the Bureau of Reclamation's National Xeriscape Demonstration Project and the Alliance for Water Efficiency's Landscape Transformation Study), with the most savings typically found in arid settings where significant irrigation volumes are required to sustain grass.

One highly effective way that jurisdictions can save water with minimal impact is by prohibiting non-functional irrigated turfgrass in new or improved development. Broadly, non-functional grass is purely or dominantly decorative turfgrass, found along streets and in medians and traffic circles, in parking areas, in the landscaping of businesses, and at vehicular entryways.

As the drought in the western United States has worsened, municipalities, states, and whole regions have started efforts to remove or reduce the amount of non-functional turfgrass in existing developments to reduce water demands. Standard 189.1 can complement and inform these efforts by providing communities with an option stopping the spread of new non-functional turfgrass within their jurisdiction and should do so in a timely manner.

This draft addendum creates a Jurisdictional Option (JO) that prohibits future non-functional turfgrass where this is of concern. It should be noted that while it is envisioned communities in arid areas will be the most interested in this particular JO, water shortages can occur for reasons other than being in a dry environment, such as water system treatment and distribution limitations or source water impairment. As such, this may be of interest to a significant set of AHJs.

[Note to Reviewers: This addendum makes proposed changes to the current standard. These changes are indicated in the text by underlining (for additions) and ~~strikethrough~~ (for deletions) except where the reviewer instructions specifically describe some other means of showing the changes. Only these changes to the current standard are open for review and comment at this time. Additional material is provided for context only and is not open for comment except as it relates to the proposed changes.]

Addendum b to 189.1-2023

Revise Section 3 by adding the following:

Definitions

...

turfgrass, functional: *turfgrass* that is within areas designated for any of the following:

- a. recreational use by the public
- b. dedicated sports fields
- c. driving ranges
- d. burial grounds
- e. vegetated pavers
- f. vegetated roofs
- g. minimum fire apparatus access as required by the AHJ in accordance with the International Fire Code
- h. animal exercise and relief

turfgrass, non-functional: *turfgrass* that is not *functional turfgrass*

...

Revise Table 4.2 with new JO

Table 4.2 Requirements Determined by the Jurisdiction (Normative in the IgCC)

Section	Section Title, Description and Directives	Jurisdictional Requirement
<u>6.3.1.3</u>	<u>Irrigation of Non-functional turfgrass</u>	<input type="checkbox"/> No

Add Section 6.3.1.3 and renumber subsequent sections

[JO] 6.3.1.3 Irrigation of Non-functional turfgrass. The installation of an irrigation system for *non-functional turfgrass* in new development and *improved landscapes* shall be prohibited.

~~6.3.1.3~~ **6.3.1.4 Irrigation System Controls.** Where any irrigation system for the project site uses an...

[...]

Exception to ~~6.3.1.3~~ 6.3.1.4: Temporary irrigation systems used exclusively for the *landscape establishment period*.

[...]