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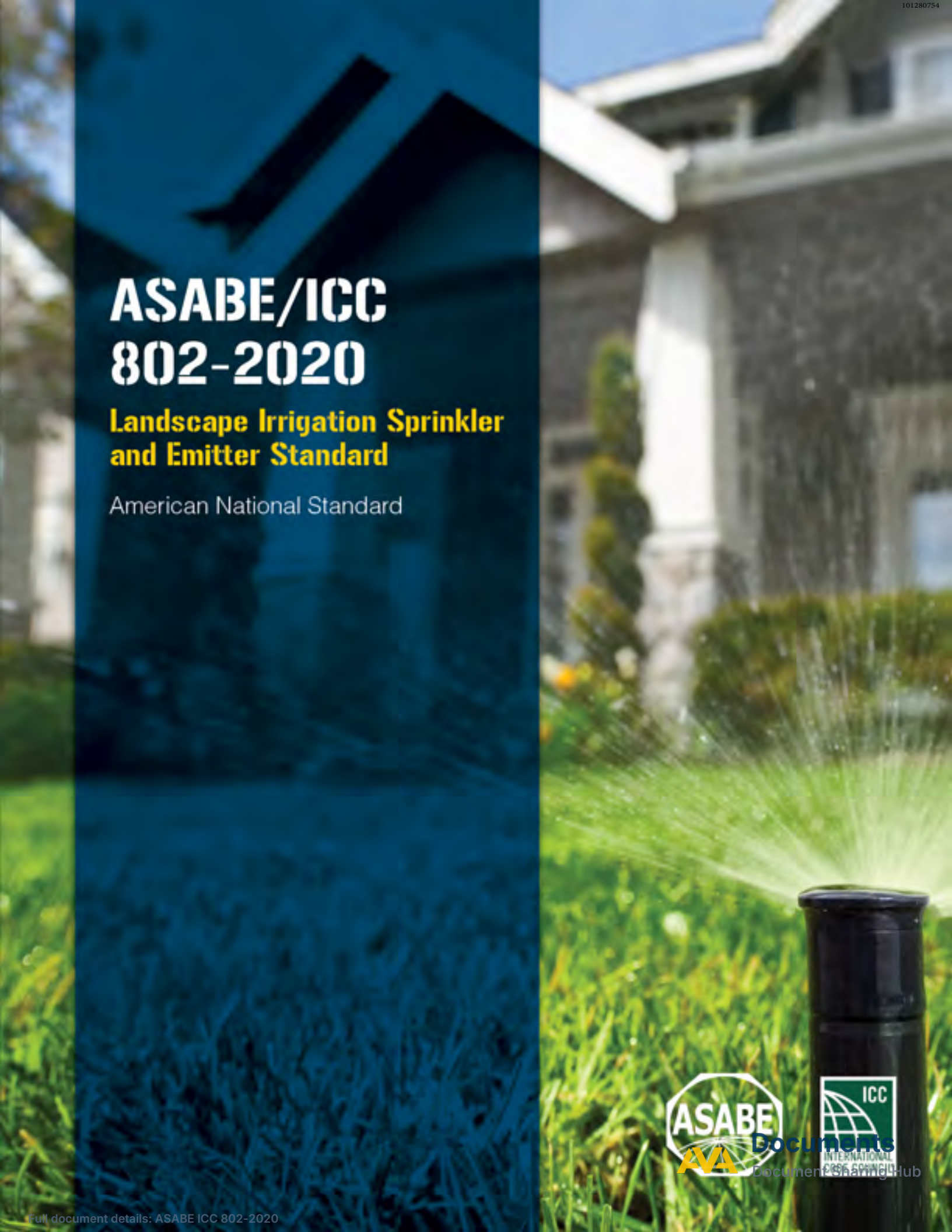
ASABE/ICC 802-2020

Landscape Irrigation Sprinkler and Emitter Standard

American National Standard



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Landscape Irrigation Sprinkler and Emitter Standard

American National Standard

International Code Council
500 New Jersey Avenue, NW, 6th Floor
Washington, D.C. 20001

Approved November 5, 2020

American National Standards Institute
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Consensus is established when, in the judgement of the ANSI Board of Standards Review, substantial agreement has been reached by directly and materially affected interests. Substantial agreement means much more than a simple majority, but not necessarily unanimity. Consensus requires that all views and objections be considered, and that a concerted effort be made toward their resolution.

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FOREWORD

Introduction

In 2010, upon direction from the ICC Board of Directors, the ICC Standards Council appointed a consensus committee to develop a standard to cover the performance, design and testing of turfgrass and landscape irrigation sprinklers. In 2012, ICC and ASABE agreed to collaborate to develop the standard, dual-designating it as an ASABE/ICC standard. ASABE provided permission to incorporate material from several ASABE standards related to irrigation into the standard in order to coordinate the content of the standards.

Development

This is the 2020 edition of the American Society of Agricultural and Biological Engineers (ASABE)/International Code Council® (ICC®) *Landscape Irrigation Sprinkler and Emitter Standard*. This standard was developed by the ICC Consensus Committee on Landscape Irrigation Emission Devices (IS-IEDC) that operates under ANSI-approved ICC Consensus Procedures for the development of ICC standards. Both ICC and ASABE are approved by ANSI as Accredited Standards Developers; however, this standard was developed under ICC's ANSI-approved Standard Development Procedures alone.

The meetings of the IS-IEDC Consensus Committee were open to the public and interested individuals and organizations from across the country participated. Views and objections were solicited through several public comment periods. All views and objections were considered by the consensus committee and an effort was made toward their resolution. A vote by the consensus committee approved this standard.

The technical content of currently published codes and documents on sprinklers was reviewed and considered by the committee. While there were many similarities among the practices and documents reviewed, there were marked philosophical differences that were considered by the committee. The requirements in ASABE/ICC 802—2020 are based on the intent to establish provisions consistent with the scope of the ICC family of codes and standards that adequately protect public health, safety and welfare; provisions that do not necessarily increase construction costs and provisions that do not unnecessarily restrict the use of new materials, technologies or designs.

Adoption

ASABE/ICC 802—2020, *Landscape Irrigation Sprinkler and Emission Standard* is available for reference and use by jurisdictions and codes internationally. Its use within a governmental jurisdiction is intended to be accomplished through adoption by reference in accordance with proceedings establishing the jurisdiction's law.

Interpretations

Requests for interpretations on the provisions of ASABE/ICC 802—2020 should be addressed to: ICC, Central Regional Office, 4051 Flossmoor Road, Country Club Hills, IL 60478.

Maintenance—Submittal of Proposals

All ICC standards are revised as required by ANSI. Proposals for revising this edition are welcome. Please visit the ICC website at www.iccsafe.org for the official "Call for Proposals" announcement. A proposal form and instructions can also be downloaded from www.iccsafe.org.

ICC, ASABE, its members and those participating in the development of ASABE/ICC 802—2020 do not accept any liability resulting from compliance or noncompliance with the provisions of ASABE/ICC 802—2020. Neither ICC nor ASABE have the power or authority to police or enforce compliance with the contents of this standard. Only the governmental body that enacts this standard into law has such authority.

International Code Council Consensus Committee on Landscape Irrigation Emission Devices (IS-IEDC)

Consensus Committee SCOPE: The Landscape Irrigation Emission Devices Standard Consensus Committee (IS-IEDC) shall have primary responsibility for minimum requirements to safeguard the public health, safety and general welfare along with product performance, design, durability and testing requirements for landscape irrigation emission devices. The requirements contained in the International Codes pertaining to these situations shall be coordinated with the standards developed by the IS-IEDC Consensus Committee.

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FOREWORD

This standard was processed and approved for submittal to ANSI by the ICC Consensus Committee on Landscape Irrigation Emission Devices (IS-IEDC). Committee approval of the standard does not necessarily imply that all committee members voted for its approval.

Representatives on the Consensus Committee are classified in one of three voting interest categories, General Interest (G), User Interest (U) and Producer Interest (P). The committee has been formed in order to achieve consensus as required by ANSI Essential Requirements. At the time it approved this standard, the IS-IEDC Consensus Committee consisted of the following members:

Michael Dukes, **PhD** (U), University of Florida, Institute of Food and Agricultural Sciences, Gainesville, FL

Andie Lorenz, **CBO** (U), City of West Richland Moses Lake, WA

Timothy Malooly (U), Water in Motion Inc., Plymouth, Minnesota

Randy Pearson, **PE** (P), The Toro Company, Riverside, CA

Ryan Smith, **CBO** (G), City of Columbia Heights, Columbia Heights, MN

Greg Steele (P), Rain Bird Corporation, Azusa, CA

Stephanie Tanner, CEM (G), US EPA-Water Sense Program, Washington, DC

Samuel Thayer (P), Maxijet, Inc./Mister Landscaper, Inc., Dundee, FL

Daniela Urigwe (U), Energy Solutions, Oakland, CA

Secretary: **L. Fred Grable, PE,** Senior Staff Engineer, International Code Council, Inc., Country Club Hills, IL

Voting Membership in Each Category

Category	Number
General (G)	3
User (U)	3
Producer (P)	3
TOTAL	9

Interest Categories

General Interest: Individuals assigned to the General Interest category are those who represent the interests of an entity, including an association of such entities, representing the general public, or entities that promulgate or enforce the provisions within the committee scope. These entities include consumers and government regulatory agencies.

User Interest: Individuals assigned to the User Interest category are those who represent the interests of an entity, including an association of such entities, which is subject to the provisions or voluntarily utilizes provisions within the committee scope. These entities include academia, applied research laboratory, building owner, design professional, government nonregulatory agency, insurance company, private inspection agency and product certification/evaluation agency.

Producer Interest: Individuals assigned to the Producer Interest category are those who represent the interests of an entity, including an association of such entities, which produces, installs or maintains a product, assembly or system subject to the provisions within the committee scope. These entities include builder, contractor, distributor, laborer, manufacturer, material association, standards promulgator, testing laboratory and utility.

NOTE—Multiple Interests: Individuals representing entities in more than one of the above interest categories, one of which is a Producer Interest, are assigned to the Producer Interest. Individuals representing entities in the General Interest and User Interest categories are assigned to the User Interest.

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CHAPTER 1

ADMINISTRATIVE PROVISIONS

SECTION 101
PURPOSE

101.1 Purpose. This standard is intended to establish minimum requirements for landscape irrigation emission devices to ensure adequate safety and performance, specify testing methods used to quantify product performance to enable component selection and specification in irrigation systems, and promote uniformity in classifying, rating and marking landscape irrigation emission devices.

SECTION 102
SCOPE

102.1 Scope. This standard shall apply to sprinklers and emitters intended to dispense water from landscape irrigation systems onto a landscape.

SECTION 103
APPLICABILITY

103.1 Applicability. This standard shall apply to sprinklers and emitters designed by the manufacturer for utilization within landscape irrigation systems. This standard shall not apply to sprinklers and emitters for use exclusively within agricultural irrigation systems or hose-end watering products or valve-in-head devices.

SECTION 104
CONVENTIONS

104.1 Conventions. Dimensions that are not stated as "maximum or minimum" are absolute. All dimensions are subject to conventional industry standards.

104.2 Units. Dimensions that are not stated shall be provided in inch/pound format with SI (metric) units provided in parentheses. References to gallons refer to U.S. gallons.

SECTION 105
REFERENCED DOCUMENTS

105.1 Reference documents. The codes and standards referenced in this standard shall be considered part of the requirements of this standard to the prescribed extent of each such reference. Chapter 5 contains a complete list of all referenced standards.

SECTION 106
MATERIALS

106.1 Materials. Landscape irrigation emission devices shall be resistant to UV degradation or oxidation without adversely impacting performance.

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