Irrigation Industry Association of British Columbia

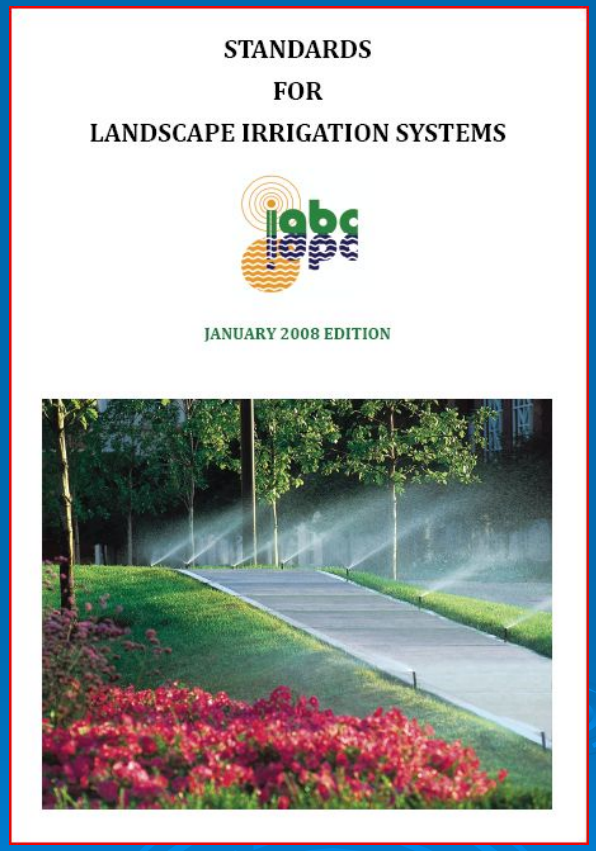
Standards for Landscape Irrigation Systems

Overview

Current IIABC Standards

Available on the IIABC website

- Design
- Materials
- Installation
- Maintenance
- Inspection and Testing



Standards - General Information

- Scope of work
- Quality Assurance
- Submittals
- Site Condition
- Regulations

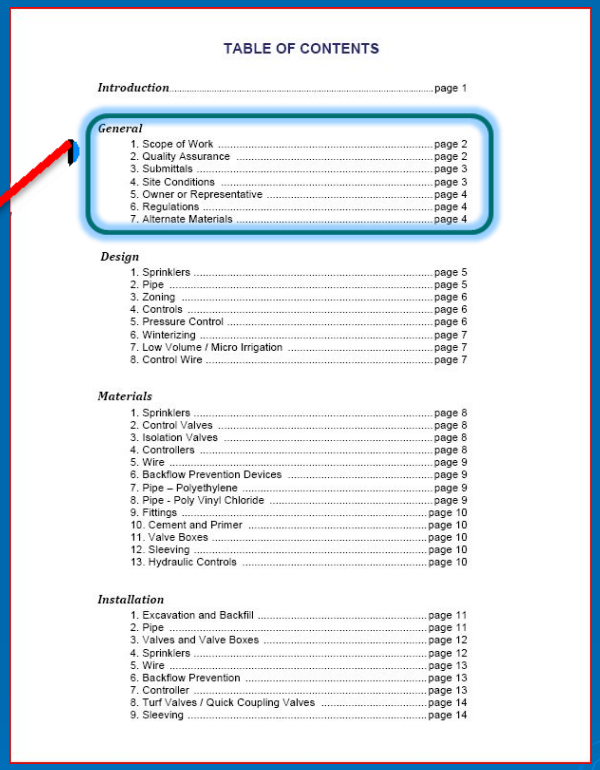


TABLE OF CONTENTS

Standards - Design

- Sprinklers and Pipe
- Zoning and Controls
- Pressure Control
- Winterizing
- Low Volume – micro
- Control wire

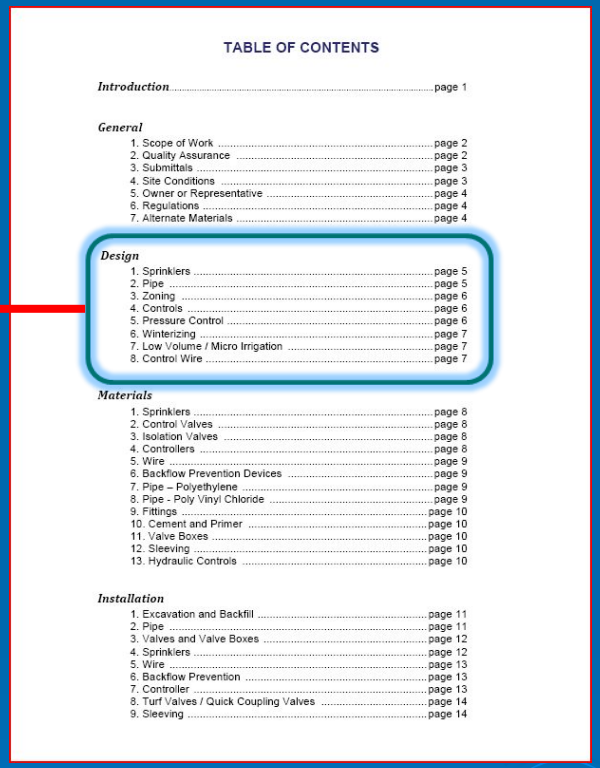


TABLE OF CONTENTS

Standards - Materials

- Sprinklers
- Valves
- Controllers and Wire
- Backflow prevention devices
- Pipe and fittings
- Cement and primer
- Valve boxes and sleeving

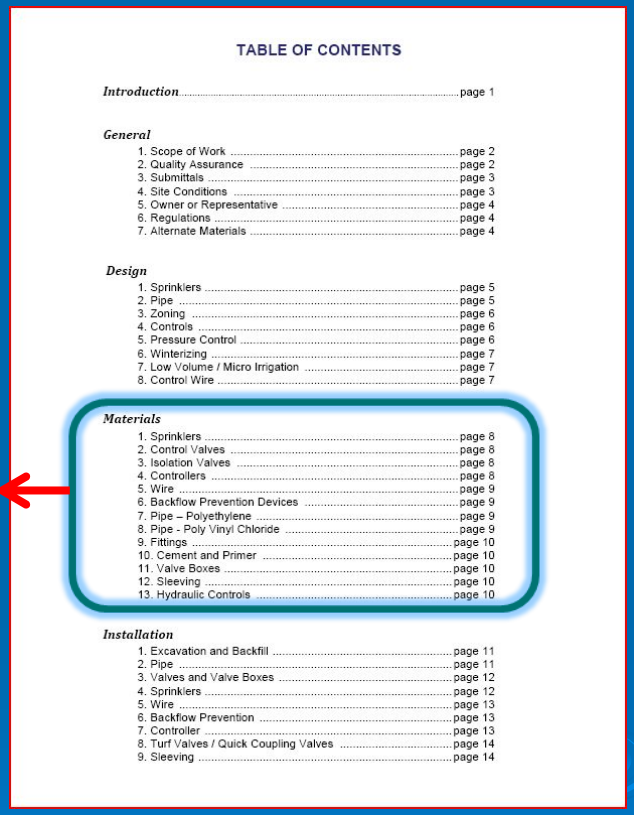


TABLE OF CONTENTS

Standards - Installation

- Excavation and backfill
- Pipe
- Valves, valve boxes and wire
- Sprinklers
- Wire
- Backflow Prevention
- Controller

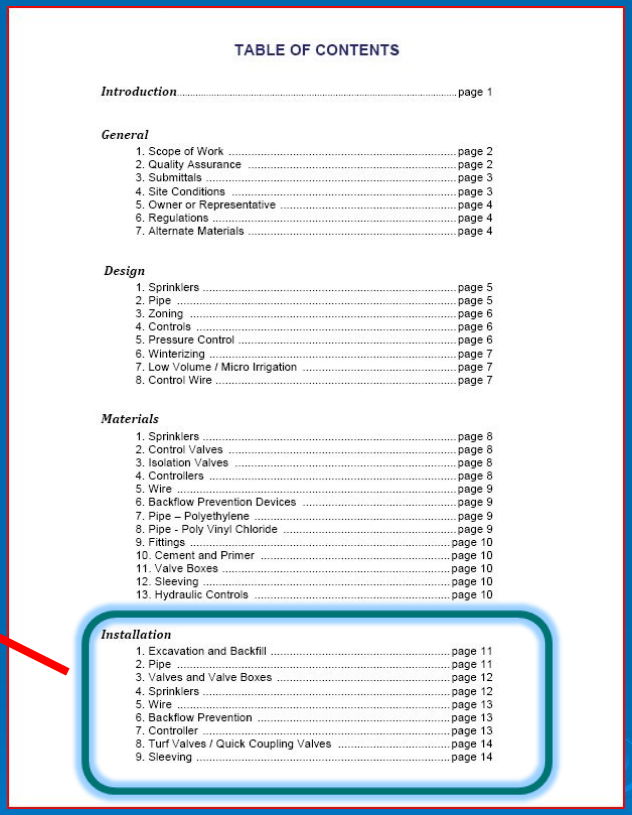
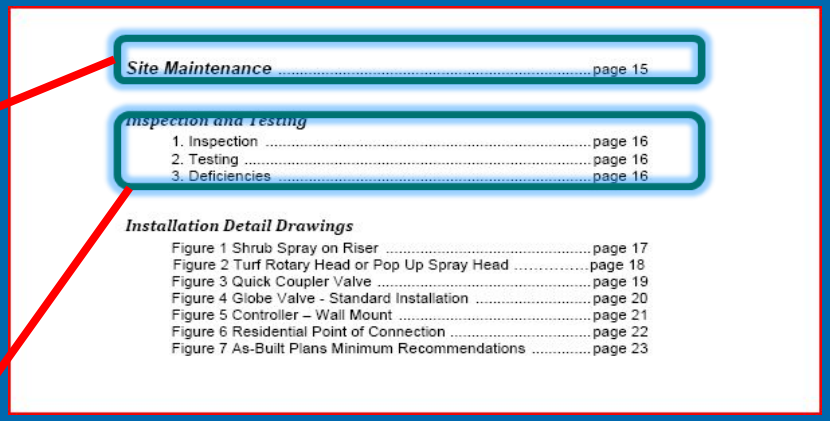


TABLE OF CONTENTS

Standards – Maintenance and Inspection

- Job site neat, and clean
- Scrap removed
- Reducing amount of open trench



- Inspection - done by owners representative
- Testing - covers landscape and meets design criteria
- Deficiencies are rectified

High Efficiency Irrigation Standard

- Current standards, while good, do not achieve the highest efficiency possible.
- Integrate landscape and irrigation professionals with irrigation system specifiers.
- Aid in the development of the most effective water saving practices.

Purpose of the Guideline

- There are a number of other programs such as LEEDS that request high efficiency without really defining what it means.
- Provide guidance in planning, designing, installing, maintaining and managing the most water conscience and effective irrigation systems available.
- Ensure landscape designs can be irrigated efficiently.
- Allow users to develop a comprehensive knowledge of landscape components that comprises an effective water conservation approach involving creating, developing and maintaining acceptable landscapes.

Components of the guideline

From initial planning of a new development or reinvigorating an existing area elements that are essential include:

Standard Items

- Initial planning, design, maintenance and management

New criteria not often considered:

- Setting a pre-development water budget
- Site Condition Evaluation
- Product and system performance
- Developing a site water allocation

High Efficiency Rating Tool

Product Rating Guide(template)

Minimum of 80% Rating Average across all Product Categories on Project

If Applicable enter a One (1) otherwise Leave as a Zero (0)

	Maximum	Eligible	
Controllers			
1 Four (4) Program Capability			
1 Season Adjustment % by Program			
1 Multiple Programmable Sensor Inputs			
1 Electrical Fault Detection and Reporting			
0 Flow Log Capabilities			
1 Ability to self adjust station run times from current climatic data			
	6	5	83%
Master Valves			
1 Slow Closing			
1 Slow Opening			
1 Low Amperage Draw			
1 Pressure Regulation			
1 Flow Control			
1 Top Serviceable			
1 Min. 220psi Rating			
	7	7	100%
Flow Sensors			
1 Reacts to High Flow			
1 Reacts to Low Flow			
1 Self Contained / Master Valve Activation Capable			
1 Low Voltage Wiring			
1 Top Serviceable			
	5	5	100%
Remote Control Valves			
1 Flow Control			
1 Pressure Regulation			
1 Top Serviceable			
1 Manual Operation by solenoid & atmospheric bleed			
1 Min. 200psi Rating			
0 Low Flow characteristics			
	6	5	83%
Pressure Regulators			
0 Static PSI at POC over 60 PSI			
1 Brass Pressure Regulator installed downstream of Backflow Device			
1 Pressure Gauge Installed along with Pressure Regulator			
	3	2	67%
Filters			
1 Main Filter installed at POC			
0 Automatic Self Flushing Filter			
1 Filter installed at individual RCV's			
	3	2	67%
Climate Sensors			
1 Rain Shut Down functional on all controllers			
1 Climate Adjustment of Station Run Times on all controllers			
0 Wind Shut Down functional on all controllers			
0 Freeze Shut Down functional on all controllers			
	4	2	50%
Soil Moisture Sensors			
0 Utilized in appropriate areas			
	1	0	0%
Rotors			
1 Zoned according to precipitation rate			
1 Factory Installed Check Valve			
1 Low Trajectory Nozzles			
	3	3	100%
Spray			
1 Pressure Regulated			
1 Factory Installed Check Valve			
1 30 ft Elevation Retention			
	3	3	100%
Rotating Nozzles			
1 Adjustable Arc			
1 Adjustable Radius			
1 Maintains Match Precipitation throughout all adjustments			
1 Dual Pop Feature			
	4	4	100%
Low Volume / Low Pressure Components			
1 Adhere to HEIS Details and Specifications			
	1	1	100%
Pipe			
1 Class 200 Lateral Piping			
1 Schedule 40 Mainline Piping			
1 Flow Rates below 5 fps			
	3	3	100%
Wire			
1 Single 14 gauge to each control valve, shared 14 or 12 gauge Common			
1 Gel Filled Enclosure for each splice			
	2	2	100%
Connections			
0 Triple Swing Joints on all Sprinkler Heads and Quick Couplers			
0 Threaded Schedule 80 Fittings on all Valve Assemblies			
	2	0	0%
		FAIL	PASS
Total Product Categories ➡		15	77%