**ARCHITECTURAL SPECIFICATION**

**CD Bollard**

**SECTION 10 26 13 – Corner Guards**

**SECTION 12 93 00 – Site Furnishing**

**SECTION 34 71 16 – Impact Attenuating Devices**

**PART I – GENERAL**

* 1. **SECTION INCLUDES**
1. This section covers the furnishing and installation of the CD bollard.
2. For further information, call the factory at +1 909.423.4143 and ask for the technical support department; or email information@alvaradomfg.com.
	1. **RELATED SECTIONS**
3. Section 017600 - Protecting Installed Construction
4. Section 129300 - Site Furnishing
5. Section 377116 - Impact Attenuating Devices
6. Section 102623.13 - Impact Resistant Wall Protection
7. Section 32300011 - Perimeter Security Barriers
	1. **QUALITY ASSURANCE**
8. Manufacturer shall be a company specializing in the supply of asset protection products with a minimum of 10 years’ experience.
9. Installer shall have a minimum of three years’ experience installing similar equipment, or shall supply a factory-trained supervisor during installation of the CD bollard.
	1. **SUBMITTALS**
10. Submit manufacturer’s descriptive literature for specified equipment, including options.
11. Provide dimensional layout, installation instructions, electrical and communication connections and anchoring instructions.
12. Provide shop drawings, if required.
	1. **DELIVERY, STORAGE AND HANDLING**
13. Deliver materials to job site in manufacturer’s packaging undamaged, complete with installation instructions.
14. Store off ground, under cover, protected from weather, construction activities and debris.
15. Use forklift and pallet jack equipment as required for moving.
	1. **PROJECT/SITE CONDITIONS**
16. All CD bollards must be installed on level concrete. Installation should be performed by a skilled installer following the manufacturer’s instruction.
	1. **WARRANTY**

Alvarado Manufacturing Co., Inc. warrants the CD bollard from defects in material or workmanship, for the period of ONE YEAR from date of shipment. Complete details of the warranty are available from Alvarado by request.

**PART II – PRODUCTS**

* 1. **MANUFACTURER**

Alvarado Mfg. Co., Inc. 12660 Colony Street, Chino, CA 91710.

* 1. **PRODUCT**
1. The CD bollard, no substitutions.
	1. **CONSTRUCTION**
2. Bollard: 11-gauge cold rolled steel, powder coated glossy black.
	1. **EQUIPMENT**

General: The Designed for heavy-duty case and fixture protection in store, backroom, and warehouse, the 60” high case protector can be filled with concrete to provide even greater reinforcement, stability and protection.

* 1. **FACTORY TESTING**
	2. Product shall be fully assembled and tested at the factory, to ensure proper operation.
	3. Inspect product finish. Touch up prior to shipment.

**PART III – EXECUTION**

* 1. **SITE EXAMINATION**
1. Inspection: Installer must examine the installation location and advise the Contractor of any site conditions inconsistent with proper installation of the product. These conditions include but are not limited to the following:
2. Floor must be level within the footprint of the post.

Installation shall not begin until unacceptable conditions are rectified.

1. Installation: Install bollard in accordance with manufacturer’s instructions.
2. Adjustment: Installer shall adjust bollard for proper performance.
3. Instruction: A factory trained installer shall demonstrate to the owner’s maintenance crew the proper operation and the necessary service requirements of the equipment.
4. Cleaning: Clean metal surfaces carefully after installation to remove excess caulk, dirt and labels.

**Note: this specification includes recommended options. Alvarado Mfg. Co., Inc. reserves the right to change this specification at any time without notice.**