Technical Specification for Pole Covers in Civil Engineering Projects

1. General Requirements

1.1 Scope

This specification outlines the requirements for the supply and installation of pole covers on street lighting, sign posts, and other relevant poles. The purpose is to enhance aesthetic appeal, provide protection, and improve visibility.

2. Product Description

2.1 Product Name

Spartan Model #0100

2.2 Manufacturer

Pole Covers www.polecovers.com

2.3 Material Specifications

- **Material:** High-Density Polyethylene (HDPE) Plastic, TriFlex 23TL Black
- **Color Options:** Black (standard); multiple colors available upon request
- **Retroreflectivity:** Available in multiple colors for enhanced night visibility

2.4 Dimensions

- **Maximum Assembled Height:** 90 inches
- **Maximum Assembled Width:** 18 inches (base)
- **Center Aperture:**
    - Round: 3 inches
    - U-Channel: 3 ⅛ inches

2.5 Weight and Thickness

- **Weight:** 12 lbs
- **Thickness:**
    - General: 0.125 inches
    - Circular Base: 0.2 inches

2.6 Temperature Rating

- **Operational Range:** -50°F (-46°C) to 180°F (82°C)

3. Product Features

3.1 Design and Installation

- **Shape:** Pole covers are cylindrical in shape, with outer diameters ranging from 4 inches to 18 inches, catering to different pole sizes commonly used in outdoor installations.
- **Snap Fit Design:** The product snaps around the pole and does not require ground attachment.
- **Set Screw:** Optional use of 5/16” 18-8 stainless steel flat head sheet metal screws for additional security.
- **Disassembly:** Can be disassembled using a flathead screwdriver.
- **Mounting Bracket Compatibility:** Accommodates 12-inch square and 9-inch triangular mounting brackets.
- **Texture:** The surface of the pole covers may feature a smooth finish or a textured pattern, depending on the design selected. Textured finishes offer improved grip and can help reduce the visibility of scratches and scuff marks.
- **Customization:** The design of pole covers allows for customization options such as logo imprints or embossing, enabling branding opportunities or identification of poles for specific purposes.

3.2 Durability and Safety

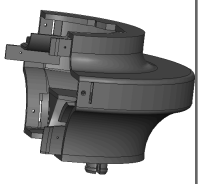
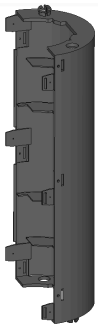
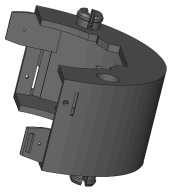
- **UV Stabilization:** All pieces are UV stabilized for enhanced longevity.
- **Impact and Shatter Resistance:** Designed to withstand impacts and prevent shattering.
- **Customization:** Parts can be customized based on specific application requirements.

3.3 Functional Features

- **Internal Space:** Provides space for running wires and placing other instrumentation.
- **Button Snap/Receiving Hole Design:** Features a 4-tine vertical button snap/receiving hole for secure assembly.

4. Component Breakdown

Part Number	Part Name	Pieces	Horizontal Tabs	Dimensions	Image
0101	23" Base	2	8	Height: 23” Width: 9”	

0102	23" Middle	4	6	Height: 23” Width: 2.25”	
0103	3" Top	2	3	Height: 3” Width: 2.25”	
0104	12" Spacer	2	6	Height: 12” Width: 2.25”	
0105	2" Spacer	6	2	Height: 2” Width: 2.25”	
0106	Rubber Shim	10	N/A	Height: 1” Width: 2”	

5. Installation Requirements

5.1 Preparation

- **Site Inspection:** Inspect poles for compatibility with the specified pole covers.
- **Pole Repair:** Ensure poles are upright and firmly affixed to the ground before installation.

5.2 Installation Procedure

1. **Snap Fit Assembly:**

    - Align the pole cover pieces around the pole.
    - Snap the pieces together, ensuring all button snaps are securely engaged.
2. **Set Screws (Optional):**
    - If additional security is required, insert 5/16” 18-8 stainless steel flat head sheet metal screws into the provided set screw holes.
3. **Mounting Bracket Installation:**
    - If existing poles are secured to the ground with a 12-inch square or 9-inch triangular mounting bracket, align the base with the bracket and secure appropriately.

5.3 Final Inspection

- Verify that all components are securely attached and properly aligned.
- Ensure that the pole cover does not impede any functional aspects of the pole, such as lighting or signage.
- Ensure the pole cover base is level with the ground.

6. Performance:

- **Weather Resistance:** Pole covers are engineered to withstand a wide range of weather conditions, including extreme temperatures, moisture, and UV radiation, without compromising their structural integrity or appearance.
- **Impact Resistance:** The durable construction of pole covers provides resistance to impact damage, preventing dents, cracks, or deformation caused by accidental collisions or vandalism.
- **Chemical Resistance:** Pole covers exhibit resistance to common chemicals such as acids, alkalis, and solvents, ensuring compatibility with various outdoor environments and applications.

7. Maintenance:

- **Cleaning:** Pole covers can be easily cleaned using mild detergent solutions and water, followed by rinsing and air drying, to maintain their aesthetic appeal and prolong their service life.
- **Maintenance Schedule:** Routine inspection and cleaning of pole covers are recommended to remove dirt, debris, stickers, and contaminants that may accumulate over time, preserving their appearance and protective properties. A paint thinner may be utilized to remove spray paint.

8. Quality Assurance

8.1 Manufacturer's Warranty

The manufacturer shall provide a warranty covering defects in materials and workmanship for a period of five (5) years].

8.2 Compliance

All products must comply with relevant industry standards and regulations.

9. References

This specification provides the necessary details for the integration of pole covers into civil engineering projects, ensuring both functional and aesthetic enhancements to regulatory, street lighting, signage, and other poles. For detailed product information, refer to the manufacturer's website: www.polecovers.com.