

SECTION 02945

PLANTING ACCESSORIES

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Landscape edging for straight-line and curvilinear borders between turf and planting beds, mulch beds, stone/rock beds, and aggregate pathways, tracks, and drives.

1.02 REFERENCES

- A. ASTM B 221 (ASTM B 221M): Standard Specification for Aluminum and Aluminum - Alloy Extruded Bars, Rods, Wire, Shapes, and Tubes.
- B. ASTM B 209-01 (ASTM B 221M): Standard Specification for Aluminum and Aluminum - Alloy Sheet and Plate.
- C. AAMA: American Architectural Manufacturer's Association for aluminum finishes.

1.03 SUBMITTALS

- A. Submit manufacturer's product data.
- B. Submit 3 inch (76 mm) long edging sample of specified size and colors.

1.04 DELIVERY, STORAGE, AND HANDLING

- A. Deliver to location as instructed by Contractor in manufacturer's package showing no signs of damage to product.
- B. Investigate delivered damaged packages and if product is damaged, Contractor to not accept and have product returned and replaced. Store boxed products on flat surface and protect from water exposure.

1.05 WARRANTY

- A. 15-year limited material warranty for manufacturing defects in workmanship or material.

PART 2 PRODUCTS

2.01 MANUFACTURERS

- A. PermaLoc Corporation, 13505 Barry St, Holland, MI 49424, USA, telephone: (800) 356-9660, (616) 399-9600, fax (616) 399-9770, e-mail: info@permaloc.com, web site: www.permaloc.com

2.02 MANUFACTURED UNITS

- A. Medium Duty Straight Profile Edging.

1. Description: PermaLoc ProLine extruded aluminum landscape edging for straight-line and curvilinear applications in corrugated straight profile. Section shall have loops on side of section to receive stakes spaced approximately 2 to 3 feet (610 mm to 915 mm) apart along its length.
2. Size: 1/8 inch x 4 inches (3.2 mm x 102 mm).
3. Thickness: 1/8 inch (3.2 mm) gage section at 0.050 inch (1.27 mm) thick with 0.125 inch (3.18 mm) exposed top lip.
4. Length: 8 and 16 feet (2.44 and 4.88 meters).
5. Connection Method: Section ends shall splice together with an interlocking stakeless snap-down design.
6. Finish:
 - a. Natural Mill Aluminum
 - b. Black DuraFlex Painted.
 - c. Green DuraFlex Painted.
 - d. Bronze DuraFlex Painted.

B. Heavy Duty Straight Profile Edging.

1. Description: PermaLoc CleanLine extruded aluminum landscape edging for straight-line and curvilinear applications in corrugated straight profile. Section shall have loops on side of section to receive stakes spaced approximately 2 to 3 feet (610 mm to 915 mm) apart along its length.
2. Size:
 - a. 1/8 inch x 3 inches (3.2 mm x 76 mm)
 - b. 1/8 inch x 4 inches (3.2 mm x 102 mm)
 - c. 3/16 inch x 4 inches (4.8 mm x 102 mm).
 - d. 1/8 inch x 5-1/2 inches (3.2 mm x 140 mm).
 - e. 3/16 inch x 5-1/2 inches (4.8 mm x 140 mm).
3. Thickness: 1/8 inch (3.2 mm) gage section at 0.072 inch (1.83 mm) minimum thick with 0.135 inch (3.4 mm) exposed top lip and 3/16 inch (4.8 mm) gage section at 0.116 inch (2.95 mm) minimum thick with 0.187 inch (4.75 mm) exposed top lip.
4. Length: 16 feet (4.88 meters). Selected products in 8 foot (2.44 meters) sections.
5. Connection Method: Section ends shall splice together with an interlocking stakeless snap-down design.
6. Finish:
 - a. Natural Mill Aluminum
 - b. Black DuraFlex Painted.
 - c. Green DuraFlex Painted.
 - d. Bronze DuraFlex Painted.
 - e. Organic Black Anodized.

C. Heavy Duty L-Shaped Profile Maintenance Strip.

1. Description: PermaLoc PermaStrip extruded aluminum maintenance strip for straight-line and gentle curve applications in corrugated L-shaped profile having 1.2 inch (30.5 mm) horizontal base. Section shall have loops on side of section to receive stakes spaced approximately 2 to 3 feet (610 mm to 915 mm) apart along its length.
2. Size:
 - a. 1/8 inch x 3-1/2 inches (3.2 mm x 89 mm).
 - b. 3/16 inch x 3-1/2 inches (4.8 mm x 89 mm).
3. Thickness: 1/8 inch (3.2 mm) gage section at 0.060 inch (1.52 mm) thick with 0.200 inch (5.1 mm) exposed top lip and 3/16 inch (4.8 mm) gage section at 0.076 inch (1.93 mm) thick with 0.190 inch (4.8 mm) exposed top lip.

4. Length: 8 and 16 feet (2.44 and 4.88 meters).
5. Connection Method: Section ends shall splice together with horizontal 0.060 inch (1.52 mm) thick x 1 inch (25 mm) wide x 4 inches (102 mm) long aluminum sliding connector without requiring use of additional connection stakes.
6. Finish:
 - a. Natural Mill Aluminum
 - b. Black DuraFlex Painted.

2.03 STAKES

- A. Standard Gage Stake: 12 inch (305 mm) PermaLoc Standard Stake, aluminum, 0.10 inch (2.5 mm) thick x 11.81 inches (300 mm) long x 1.12 inches (28.4 mm) wide.
- B. Optional Heavy Gage Stake: PemaLoc Structural Stake, extruded aluminum, 0.125 inch (3.2 mm) thick with 0.25 inch (6.4 mm) round mid section, 1.25 inches (32 mm) wide in following lengths:
 1. 16" (406 mm)
 2. 18" (457 mm)
 3. 24" (610 mm)
- C. Stakes to interlock into section loops on face side of section. Requires 5 (or 8 for PermaStrip) stakes for each 16 feet (4.88 meters) section with total of 8 loops available or 3 stakes for each 8 feet (2.44 meters) section with total of 3 loops available.
- D. Finish: Shall be same as edging.

2.04 EDGING AND STAKE MATERIAL

- A. Edging: ASTM B 221 (ASTM B 221M), Aluminum 6063 alloy, T6 hardness.
- B. Stakes (12"(305 mm)): ASTM B 209-01 (ASTM B 209M), Aluminum 3004 alloy, H34 hardness.
- C. Stakes (16"(406 mm), 18" (457 mm), 24"(610 mm)): ASTM B 221 (ASTM B 221M), Aluminum 6063 alloy, T6 hardness.

2.05 EDGING AND STAKE FINISHES

- A. Each finish as previously specified in "Manufactured Units" and "Stakes" shall meet following minimum standards:
 1. Black DuraFlex Painted: Electrostatically baked on acrylic paint, AAMA 2603, color #PPG UC88182.
 2. Green DuraFlex Painted: Electrostatically baked on acrylic paint, AAMA 2603, color #PPG UC75168.
 3. Bronze DuraFlex Painted: Electrostatically baked on acrylic paint, AAMA 2603, color #PPG UC66912.
 4. Organic Black Anodized: Class II, 0.4 mils thick minimum, AA-M10C21A33.

PART 3 EXECUTION

3.01 PREPARATION

- A. Ensure that all underground utility lines are located and will not interfere with the proposed edging installation before beginning work.
- B. Locate border line of edging with string or other means to assure border straightness and curves as designed.
- C. Dig trench 1 inch (25 mm) deeper than set of edging bottom.

3.02 INSTALLATION

- A. Set edging into trench with top at ½ inch (12.7 mm) above compacted finish grade on turf side with side having loops for stakes placed on opposite side of turf (or on turf side for maintenance strip).
- B. Securely connect sections together in accordance with manufacturer's instructions. Drive stakes through edging loops with spacing in accordance with manufacturer's recommendations until locked into edging with stake top 1/8" (3.2 mm) below top of edging. Provide additional stakes, longer stakes, heavier gage stakes, or any combination of previously mentioned as necessary to firmly secure edging for permanent intended use.
- C. Where edging sections turn at corners and at angled runs, cut edging partially up through its height from bottom and turn back to desired angle to form rounded exposed radius.

3.03 BACKFILLING AND CLEANUP

- A. Backfill both sides of edging, confirm and adjust if necessary that sections are securely held together, and compact backfill material along edging to provide top of edging at ½ inch (12.7 mm) above yard finish grade.
- B. Cleanup and remove excess material from site.

END OF SECTION

May 1, 2003