

Guide Specification
Section 129200 Interior Planters
Section 129333 Manufactured Planters
Section 328400 Planting Irrigation

Thermoplastic Planter Liners

1.0 GENERAL

1.1 WORK INCLUDED

- A. Provision of thermoplastic planter liners

1.2 RELATED WORK

- A. Section 033000 Cast-in-Place concrete
- B. Section 061000 Rough Carpentry
- C. Section 062000 Finish Carpentry
- D. Section 129333 Manufactured Planters

1.3 SUBMITTALS

- A. Product Data: Manufacturer's standard catalog cut sheets.
- B. Samples: As required for color selection only.
- C. Shop Drawings: For custom applications, showing critical sizes and dimensions for installation and integration with other work.

1.4 DELIVERY, STORAGE AND HANDLING

- A. Inspect planter liners after delivery for signs of damage during transit.
- B. Protect planter liners from damage during storage and handling.
- C. Store planter liners indoors, in their original packaging. Do not expose thermoplastic planter liners to temperatures during storage where material will exceed 150° F. Do not store planter liners in stacks more than 5 units high. Do not stand or walk on planter liners.

1.5 PROJECT CONDITIONS

- A. Contractor to provide adequate structural support for planter liner units.
- B. Protect units from damage by adjacent work.

2.0 PRODUCTS

2.1 ACCEPTABLE PRODUCTS/MANUFACTURERS

- A. Thermoplastic Planter Liners, manufactured by Tournesol Siteworks, 30955 San Antonio St., Hayward, CA 94544 Tel: (800) 542-2282 FAX (510) 471-6243 info@tournesolsiteworks.com

2.2 THERMOPLASTIC PLANTER LINERS

- A. Construction Type I: Modular units of unibody construction, having no seams or welded joints. Liner units shall be impervious to long term soil moisture corrosion.¹
 - 1. High Impact Polystyrene Plastic (HIPS)² - Standard color: black. For custom applications where other colors are required, manufacturer shall paint flanges for drop-in application or the full unit for exposed application. Fire retardant material also available for critical applications. Material to have integral UV inhibitors to prolong unit life.

2. Linear Low Density Polyethylene Plastic (PE)³ - PE normally used for very large custom applications. Standard color: gray, other colors to be integrally incorporated by manufacturer into liner as required. Material to have integral UV inhibitors to prolong unit life.

B. Construction Type II: Modular units consisting of welded rigid wall sections. Liner units shall be impervious to long term soil moisture corrosion.

1. Stress-Relieved Polypropylene Plastic (PP)⁴ - Standard color: black. For custom applications, other colors to be integrally incorporated by manufacturer into liner. Material to have integral UV inhibitors to prolong unit life. Each unit to be individually leak tested by manufacturer prior to delivery.

C. Finish: Smooth semi-gloss; factory finished.

D. Sizes: Modular units trimmed to size by manufacturer as required to fill specified areas. Custom fabricated sizes if necessary. Maximum sizes:

HIPS planter liners - 66"L x 36"W x 16"D

PE planter liners - 120"L x 48"W x 40"D

PP planter liners - 120"L x 48"W x 48"D

2.3 PLANTER LINER ACCESSORIES

A. For PE Liners - factory-installed drainage fitting. 3/8" to 3"NPT female thread available. 1 to 3 fittings per unit, evenly spaced. Welded unit ensures reliable seal. Location of fitting on liner must be specified in advance.

B. For HIPS, PE and PP Planter Liners - field installed drainage/irrigation connection fitting⁵. Thread-by-thread thermoplastic drainage adapter, 1/2", 3/4", and 1" NPT female thread available standard, large available upon request. Contractor to locate drainage hole, drill as necessary, and install drainage adapter.

3.0 EXECUTION

3.1 PREPARATION

A. Prior to planter liner fabrication, the contractor shall verify as-built dimensions of planter receptacles ensure proper size, fit and quantity required.⁶

B. Unless liners have drainage fittings as in 2.3.A, drainage holes to be located and made by contractor in the field to fit to drainage system.

3.2 INSTALLATION

A. Install planter liners to allow for easy removal if necessary.

B. Provide continuous basal support.

C. Install liners level to permit adequate drainage and irrigation.

¹ Frequently a problem with galvanized metals, fiberglass or copper liners leading to leaking planters.

² HIPS is a lightweight, rigid material, and makes for planter liners that are appropriate for decorative, drop-in installations. The units are manufactured to tolerances ± 0.25 " unless specified otherwise.

³ PE planter liners are typically larger in size and more durable than HIPS liners, but are not designed to be used in decorative, drop-in installation unless specified as such. PE liners are manufactured to ± 0.25 " tolerances.

⁴ PP welded planter liners require no tooling, and so are especially appropriate for unusual shapes, small quantities, and applications where HIPS and PE liners are impractical. They are not typically designed to be used in decorative, drop-in installation unless specified as such. As with other liners, PP welded liners are manufactured to ± 0.25 " tolerances unless specified otherwise.

⁵ Drainage Adapter fittings utilize a rubber grommet to form a mechanical seal with the wall of the planter liner. Additional sealant coverage may be specified to ensure long-term reliability. Typically hose bib connections are threaded into fittings to attach flexible drainage tubing, or hard-plumbed drainage lines are directly attached.

⁶ Field verification of actual planter receptacle size is frequently overlooked by the contractor, and can lead to delays and additional cost if neglected.