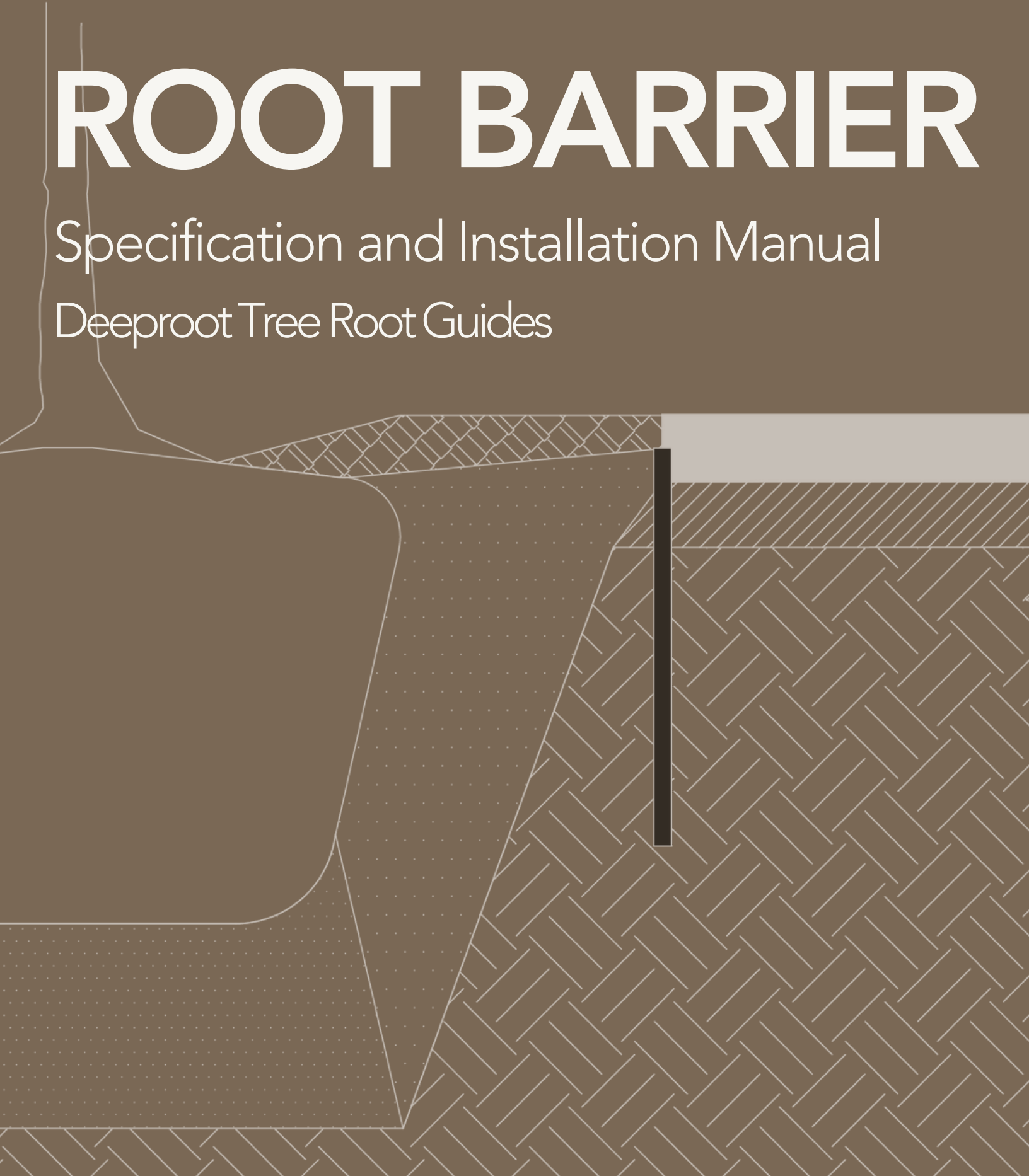




# ROOT BARRIER

Specification and Installation Manual

Deeproot Tree Root Guides



Thank you for choosing DeepRoot for your project.

DeepRoot Tree Root Barriers are mechanical guides that redirect tree roots down and away from hardscapes, preventing costly root damage to pavement while preserving the health and beauty of mature trees. DeepRoot Tree Root Barriers can be used on both new plantings and existing trees.

DeepRoot also produces different types of protection for specialty applications, including utilities, retaining walls, foundations, and other similar types of infrastructure.

For root protection in vertical or horizontal applications, such as shielding underground utilities, see our Utility Root Protection Barriers.

For containment of invasive species like bamboo, please see our Bamboo Barrier.

For moisture control applications (30 mil – 80 Mil thickness), please see our Water Barrier.

Specifying DeepRoot Tree Root Barriers for your project is simple. This installation guideline will help you do the following:

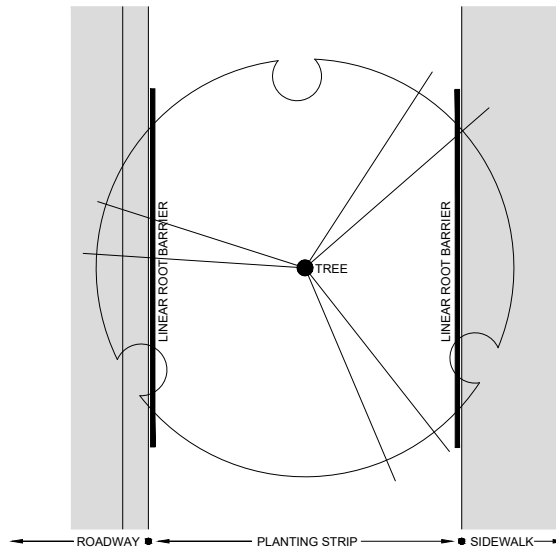
1. Select the Tree Root Barrier Application
2. Select the Tree Root Barrier Product and Depth
3. Calculate the Number of Tree Root Barrier Panels Required for Your Application
4. Install your Tree Root Barrier

Use this installation guideline in conjunction with the DeepRoot Tree Root Barrier standard details, technical specifications, and technical sheets to meet all your Tree Root Barrier design and installation needs.

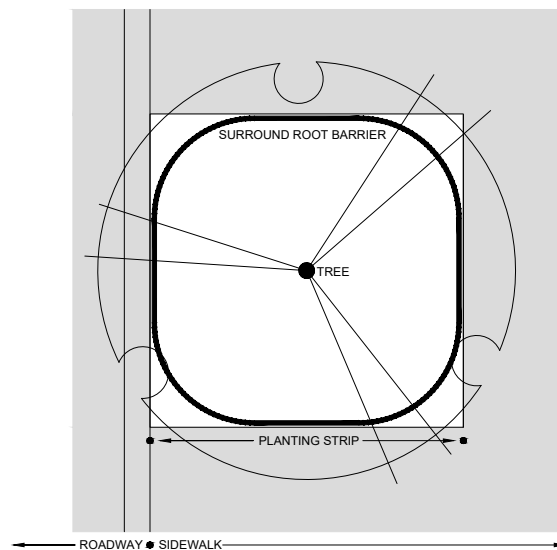


# 1. SELECT THE TREE ROOT BARRIER APPLICATION

There are two primary applications for DeepRoot Tree Root Barriers: Linear and Surround. Both of these applications are for use adjacent to pavement. Linear applications are appropriate for long, continuous planting strips adjacent to pavement. Surround applications are appropriate for smaller tree openings within pavement.



○ ROOT BARRIER - LINEAR APPLICATION  
NOT TO SCALE



○ ROOT BARRIER - SURROUND APPLICATION  
NOT TO SCALE

DeepRoot Tree Root Barriers can also be used for specialty applications. Contact DeepRoot for support with custom applications.

## 2. SELECT THE TREE ROOT BARRIER PRODUCT AND DEPTH

There are two lines of DeepRoot Tree Root Barrier. The first line of DeepRoot Tree Root Barrier consists of the following products:

### UB 12-2, UB 18-2, AND UB 24-2

The product depth is selected based on the depth of the adjacent pavement profile. Select a product depth that is at least as deep as the complete pavement profile depth (pavement depth + aggregate base depth). These DeepRoot Tree Root Barriers are available in the following dimensions and offer the following design features:

TREE ROOT BARRIER TYPE	DEPTH	WIDTH	WALL THICKNESS
UB 12-2	12" (30 cm)	24" (61 cm)	0.080" (2.03 mm)
UB 18-2	18" (45 cm)	24" (61 cm)	0.075" (1.905 mm)
UB 24-2	24" (61 cm)	24" (61 cm)	0.080" (2.03 mm)

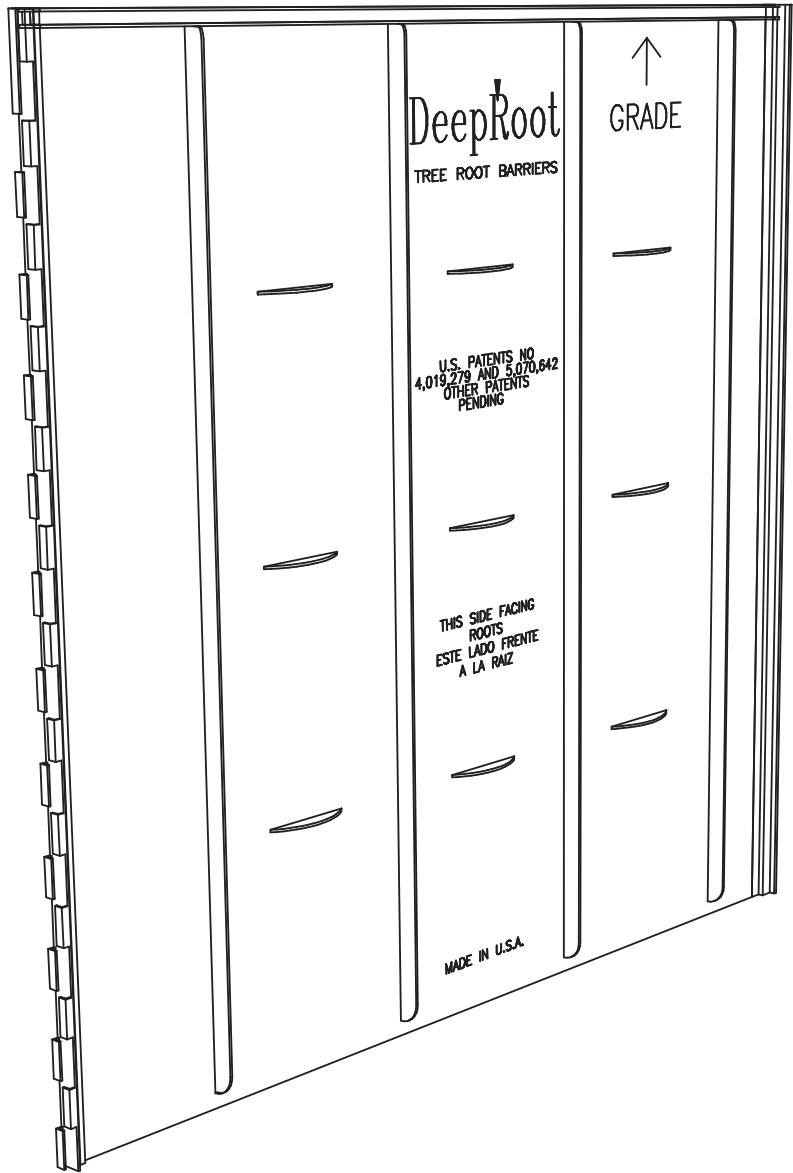
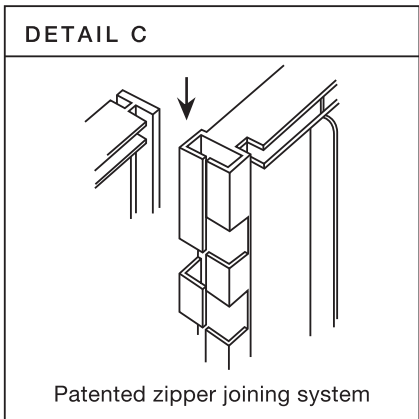
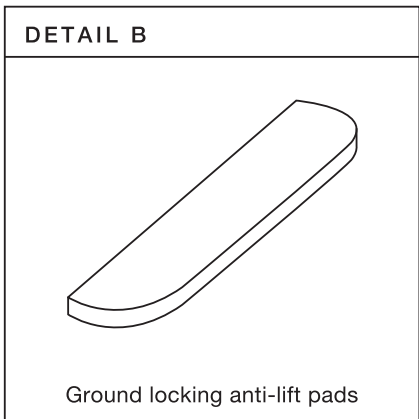
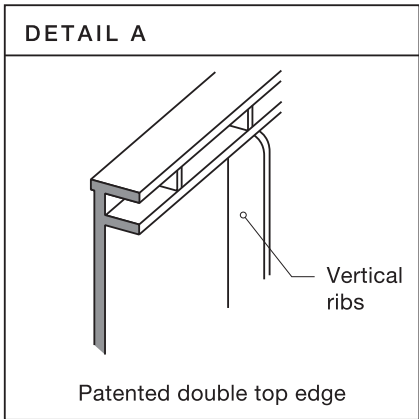
UB 12-2, UB 18-2, and UB 24-2 Tree Root Barrier features:

- 90-degree ribs direct roots downward and away from hardscapes.
- Tool-free assembly using sliding zipper joiner panels to achieve the desired length.
- Double-top edge improves strength, safety, and appearance while preventing root overgrowth.
- UV inhibitors protect against sun damage.
- Rounded edges allow for safe and easy handling.
- Sizing adjusted in 2-foot modules.

UB 12-2, UB 18-2, and UB 24-2 Tree Root Barrier Materials:

- Constructed from high-quality, 90% recycled, injection-molded co-polymer polypropylene.
- Manufactured in ISO 9001-Certified facilities.

Made in the USA.



## 2. SELECT THE TREE ROOT BARRIER PRODUCT AND DEPTH

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The second line of DeepRoot Tree Root Barrier is made up of the following products:

### UB 36-2 AND UB 48-2

These DeepRoot Tree Root Barrier products are often used for Specialty Applications. The product depth is selected based on the specific needs of the application. Select a product depth appropriate to the specialty application. These DeepRoot Tree Root Barriers are available in the following dimensions and offer the following design features:

TREE ROOT BARRIER TYPE	DEPTH	WIDTH	WALL THICKNESS
UB 36-2	36" (91 cm)	24" (61 cm)	0.080" (2.03 mm)
UB 48-2	48" (122 cm)	24" (61 cm)	0.080" (2.03 mm)

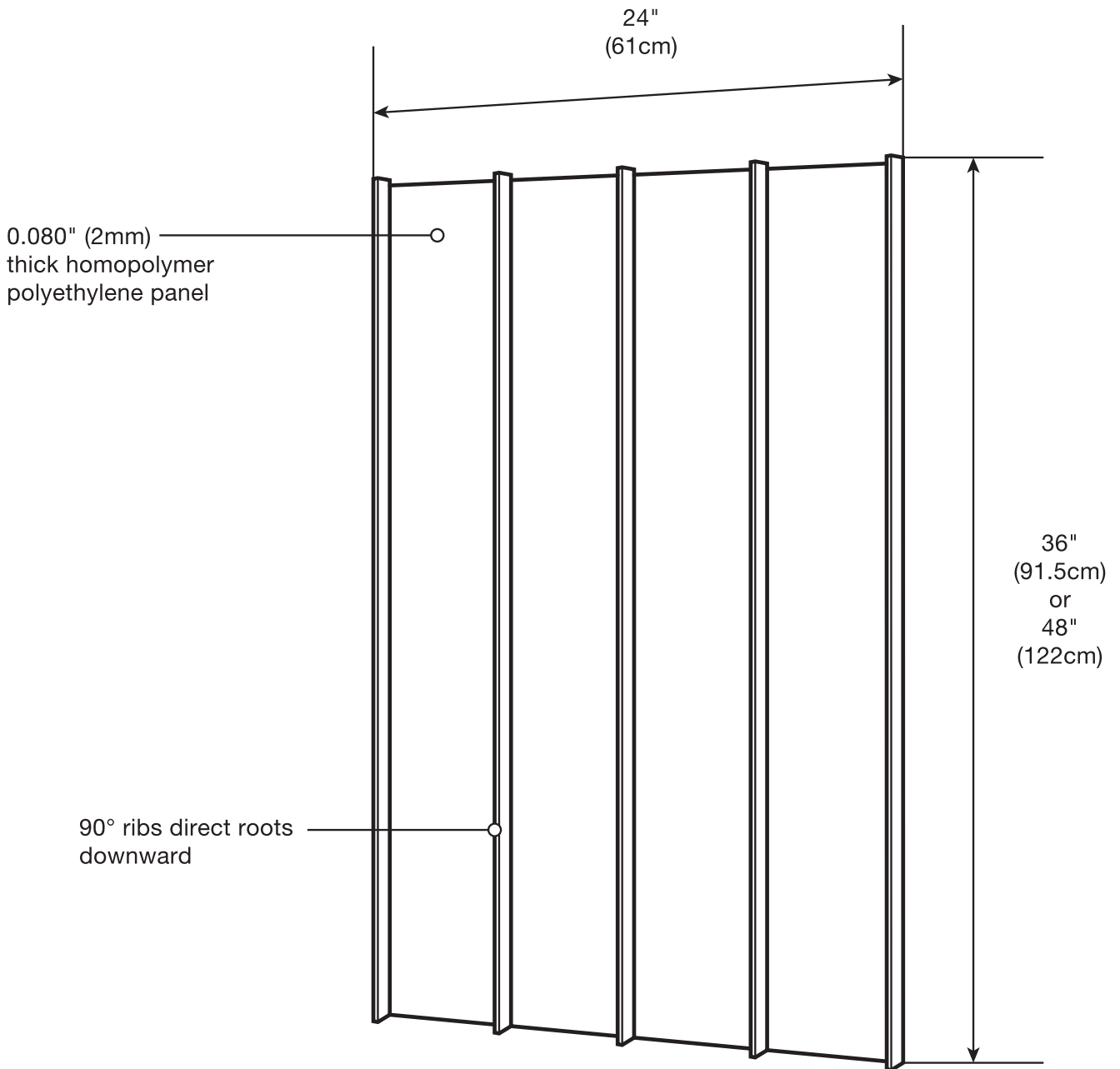
UB 36-2 and UB 48-2 Tree Root Barrier features:

- ½ inch raised 90-degree ribs direct roots downward and away from hardscapes.
- Instant assembly, panels slide together to achieve the desired length.
- UV inhibitors protect against sun damage.
- Sizing adjustable in 1-foot modules.

UB 36-2 and UB 48-2 Tree Root Barrier Materials:

- Constructed from high-quality, 100% recycled, homopolymer, extruded, polyethylene.
- Manufactured in ISO 9001-Certified facilities.

Made in the USA.



### 3. CALCULATE THE REQUIRED AMOUNT OF TREE ROOT BARRIER FOR YOUR APPLICATION

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The amount of DeepRoot Tree Root Barrier needed for your project depends on your application, which includes linear, surround, or specialty applications.

#### **LINEAR APPLICATIONS**

For linear applications, calculate the number of panels based on the projected mature canopy of the tree species in the planting strip. This may require a continuous line of DeepRoot Tree Root Barrier.

$$\text{Diameter of Mature Tree in Feet} + 2 \text{ Feet} / 2 =$$

*Total Number of DeepRoot Tree Root Barrier Panels per Edge of Planting Strip*

#### **SURROUND APPLICATIONS**

For surround applications, calculate the number of panels based on the dimensions of the tree opening as follows:

$$\text{Perimeter of Tree Opening (in feet)} - 2 \text{ Feet} / 2 =$$

*Total Number of DeepRoot Tree Root Barrier Panels per Tree Opening*

#### **SPECIALTY APPLICATIONS**

For Specialty Applications, calculate the number of panels based on the project goals. If a continuous barrier is required, note that UB 12-2, UB 18-2, and UB 24-2 come in 2-foot modules, while UB 36-2 and UB 48-2 can adjust to 1-foot modules.

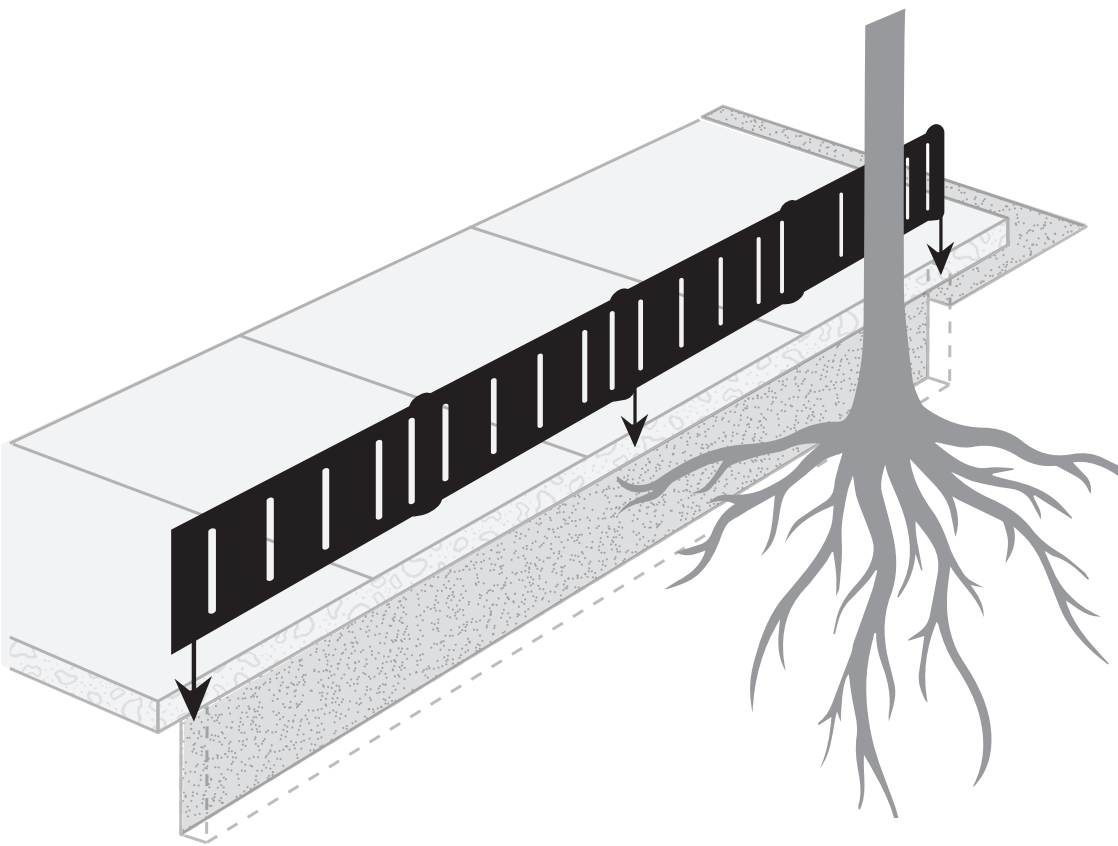
#### **NOTE**

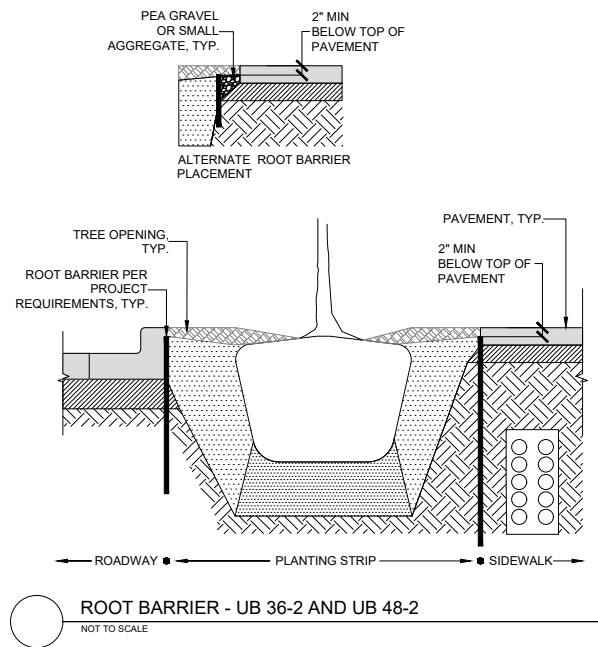
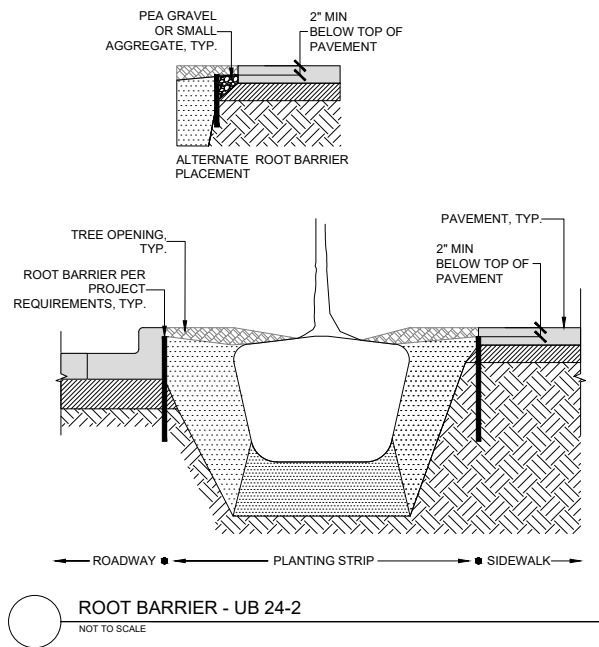
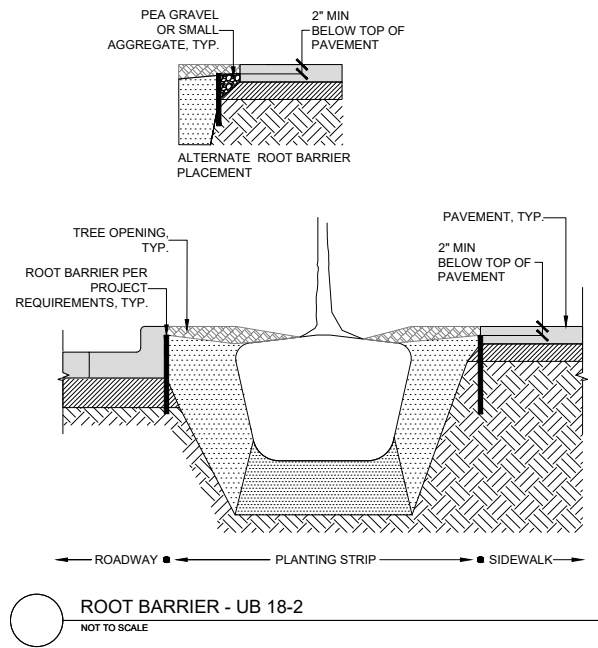
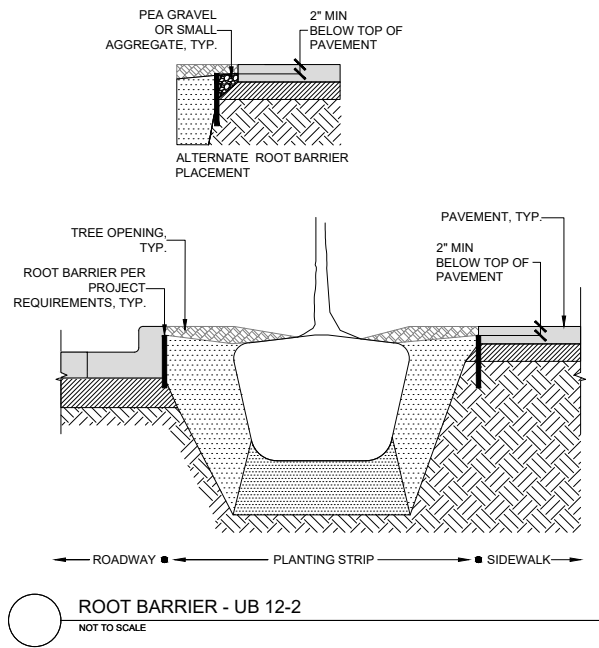
DeepRoot Tree Root Barrier products can be used in combination where projects require varying depths of protection.

## 4. INSTALL YOUR TREE ROOT BARRIER

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1. Inspect each DeepRoot Tree Root Barrier for damage before placement. Reject any cracked or chipped units.
2. Layout the DeepRoot Tree Root Barrier according to the Project plans and specifications, if applicable. UV inhibitors protect against sun damage.
3. Install the DeepRoot Tree Root Barrier system strictly according to the manufacturer's instructions, as specified herein, and according to the Project plans and specifications for linear, surround, or specialty applications, as applicable. If requirements conflict or contradict, adhere to the more stringent requirements.





## LINEAR APPLICATION INSTALLATION

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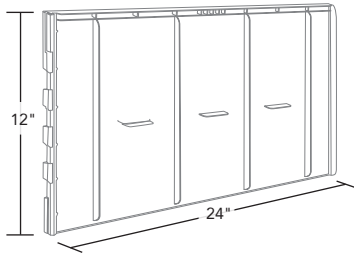
1. See DeepRoot standard Tree Root Barrier details and technical specifications for additional installation guidelines.
2. Dig or trench to a depth based on the selected DeepRoot Tree Root Barrier product depth plus 2 inches and as close to the face of the pavement profile as possible.
3. Place the DeepRoot Tree Root Barrier in the trench with the vertical ribs facing toward the tree and as close to the pavement profile as possible.
4. Keep the top edge of the DeepRoot Tree Root Barrier at least 2 inches below the top of the pavement surface.
5. Backfill against the DeepRoot Tree Root Barrier to maintain a clean, smooth fit to the adjacent pavement profile. The backfill may include aggregate or pea gravel.

## SURROUND APPLICATION INSTALLATION

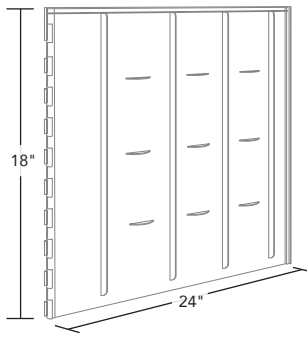
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1. See DeepRoot standard Tree Root Barrier details and technical specifications for additional installation guidelines.
2. Assemble the appropriate number of DeepRoot Tree Root Barrier panels, ensuring the vertical root deflecting ribs face inward toward the tree.
3. Dig or trench to a depth based on the selected DeepRoot Tree Root Barrier product depth plus 2 inches and as close to the shape of the assembled Tree Root Barriers as possible.
4. Place the DeepRoot Tree Root Barrier in the trench with the vertical ribs facing toward the tree and as close to the pavement profile as possible.
5. Keep the top edge of the DeepRoot Tree Root Barrier at least 2 inches below the top of the pavement surface.

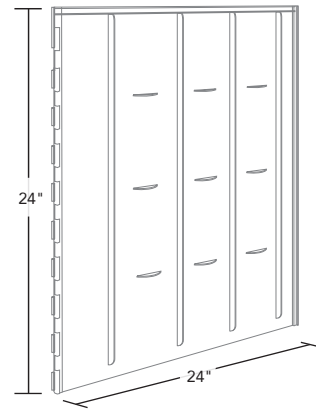
PRODUCT #	DESCRIPTION	WEIGHT	QUANTITY	TOTAL LINEAR FEET
UB 12-2	12" x 24" panel	43 lbs.	40 panels	80 feet
UB 18-2	18" x 24" panel	43 lbs.	26 panels	52 feet
UB 24-2	24" x 24" panel	43 lbs.	20 panels	40 feet
UB 36-2	36" x 24" panel	45 lbs.	14 panels	28 feet
UB 48-2	48" x 24" panel	45 lbs.	10 panels	20 feet



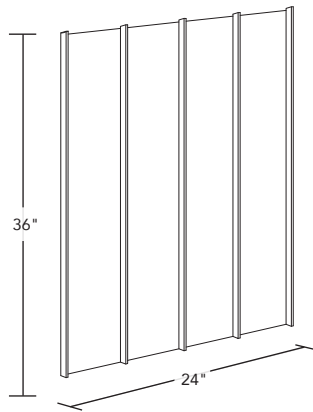
UB 12-2



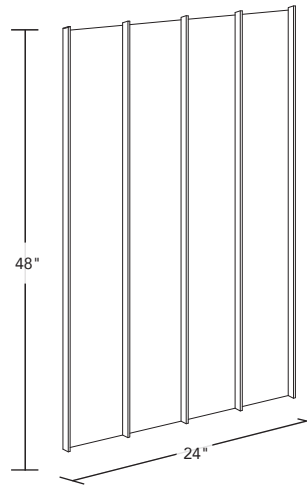
UB 18-2



UB 24-2



UB 36-2



UB 48-2

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