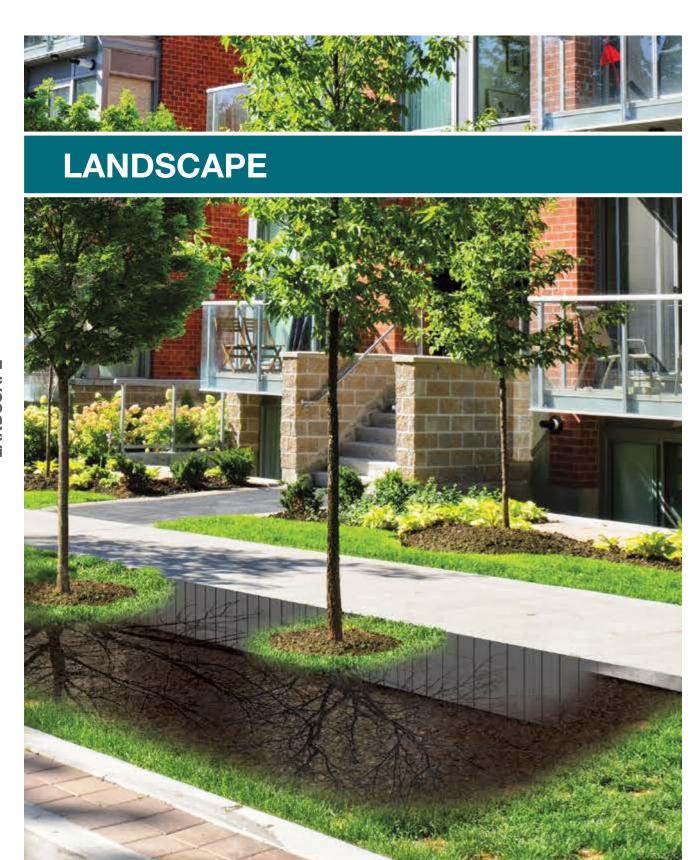
Preconstruction Conference- Contractor's Questions

**Question No. 1:** "Could you provide a detail for the 18" high Root Barrier per bid item #8110225?"

Answer: See attached detail for Root Barrier pay item. Contractor is not required to used brand provided.

Substitutions must be equal or greater and must be submitted to engineer for review prior to use.





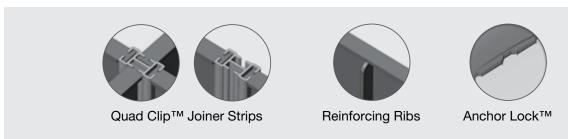
#### **ROOT BARRIER PANELS**



Root barrier products direct root growth from shrubs and trees downward, dramatically decreasing the roots' potential to clash with and penetrate nearby hardscapes, walls, or building foundations. The use of NDS root barriers for residential and non-residential landscapes protects many communities and homeowners against the high cost of reparations due to cracks in foundations and buckled sidewalks and driveways.

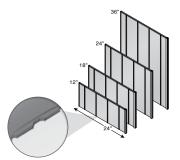
#### Modular EP Series Root Barrier Panels

EP Series Root Barrier Panels are made from injection molded High Impact Polypropylene (HIPP) with a unique factory installed joiner strip that eases installation. EP Series Panels include a "T" top edge to prevent root overgrowth and an Anchor Lock™ external flange at the base to lock panels in the ground. Suitable for all planting installations, EP Series Root Barrier Panels are available in 12", 18", 24" and 36" depths.



## Specifications

EP Series Root Barrier Panels by NDS include factory installed independent joiner strips. Each Barrier is a minimum of 0.090 inches thick and is made of up to 50% post consumer High Impact Polypropylene (HIPP) with U.V. inhibitors to ensure longevity. Barrier Panels have 1/2" raised vertical ribs running perpendicular to the panel and are 6" on center. All EP Series Panels feature a 3/8" wide "T" top edge and an external ground anchoring base flange that is 1/8" in width.



Part No.	Description	Color	Pkg. Qty.	Wt. Ea. Lbs.	Product Class
EP-1250	12" x 24" Root Barrier Panel	Black	25	1.80	50LP
EP-1850	18" x 24" Root Barrier Panel	Black	25	1.56	50LP
EP-2450	24" x 24" Root Barrier Panel	Black	25	2.12	50LP
EP-3650	36" x 24" Root Barrier Panel	Black	25	3.20	50LP
Includes 1 Joiner Strip per panel					

## Recommended Installations

Surround Application:	Linear/Root Pruning Application:
Panels placed around root ball, at a sufficient distance to allow proper backfill of materials.	Panels placed directly adjacent to the hardscape being protected.

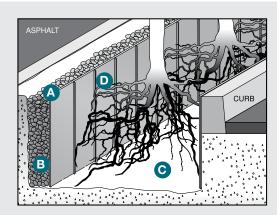


#### **ROOT BARRIER PANELS**

## Root Barrier Sheet Material

Manufactured from durable HDPE, Root Barrier Sheet Material creates a water and root barrier to prevent costly damage to pavements, roads, and building foundations caused by water and roots. The 20-foot-long sheets of material are ideal for linear style planting applications, and are equally suited for individual tree planting use. Root Barrier Sheet Material is available in 12", 18", and 24" depths to meet a variety of applications.

- A Finished Grade
- B 3"- 4" of 3/4" Gravel
- C Amended Soil
- D Sheet Material



# Specifications

Root Barrier Sheet Material by NDS is manufactured from up to 50% recycled HDPE with U.V. inhibitors with a thickness of 0.040-0.060". Barriers feature vertically integrated and flared molded 90° root-deflecting ribs that protrude 1/2" from wall and are placed 6-8" apart. A root impervious molded end provides easy assembly using staples or a sealant design to bind to HDPE (a dual-sided solvent-based tape).



Part No.	Description	Color	Pkg. Qty.	Wt. Ea. Lbs.	Product Class
SM-1220	12" x 20 ft. Roll	Black	1	10.00	50LP
SM-1820	18" x 20 ft. Roll	Black	1	14.00	50LP
SM-2420	24" x 20 ft. Roll	Black	1	18.00	50LP
SM-3620	36" x 20 ft. Roll	Black	1	22.00	50LP

## Recommended Installations

Surround Application:	Linear/Root Pruning Application:
Cut desired length of molded roll material. Connect the ends by overlapping two 6" sections with the leading rib cut directly down the middle. If using a sealant to seal the ends, utilize a dual-sided solvent-based tape (like that sold by Tuff Industries, Inc.). Install by placing the Sheet Material around root ball at a sufficient distance to allow proper backfill – the vertical integrated root-deflecting ribs should always be facing the root ball.	Cut desired length of molded roll material and install directly adjacent to hardscape being protected