



Century Products

The Leader In Hardscape Protection



**Helping Trees Live
In Urban America**





Throughout urban America cracked driveways, buckled sidewalks and roadways, damaged home foundations, and patios are the results of conflict between hardscapes and tree roots.

Century Products "Root Barriers" are cost effective mechanical barriers that redirect root growth downward, eliminating the surface rooting that damages expensive hardscapes and creates safety hazards.

Why Use Century Products?

Century Products is today's leader in hardscape protection from evasive tree roots in the urban forest. Century has been working with architects and landscape professionals in reducing the liabilities throughout the industry. Century "Root Barriers" carry an ISA certified arborist endorsement and is a proven product. By using Century "Root Barriers" you will eliminate the high liability problem of cracked and buckled sidewalks, which in turn creates major liabilities for government agencies, cities and private industry. Century "Root Barriers" are available in various configurations from the durable CP panels to the versatile CR-PE Dual Purpose Root & Water Barrier Rolls. All products are designed to meet and exceed all standard specifications, as well as being cost effective.

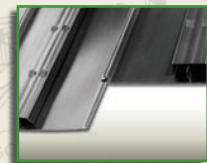
Even the most innocuous looking plants may have aggressive root systems causing catastrophic damages to hardscapes, creating high liability issues for trip and fall hazards. Century Products is primarily known for its deep watering panels (DWP) and innovative slope guards. The DWP root barrier panel delivers deep watering and aeration directly to the root ball zone. Slope guards protect hillsides and newly planted trees from costly erosion hazards.



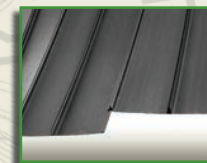
Tree Ties



CR-PE Dual Purpose Root/
Water Barrier Rolls



DWP Deep Watering Panels



CP Series Panels



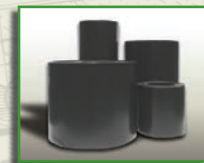
DWP-RS Deep Watering Panels
with Root Stabilizers



Slope Guards



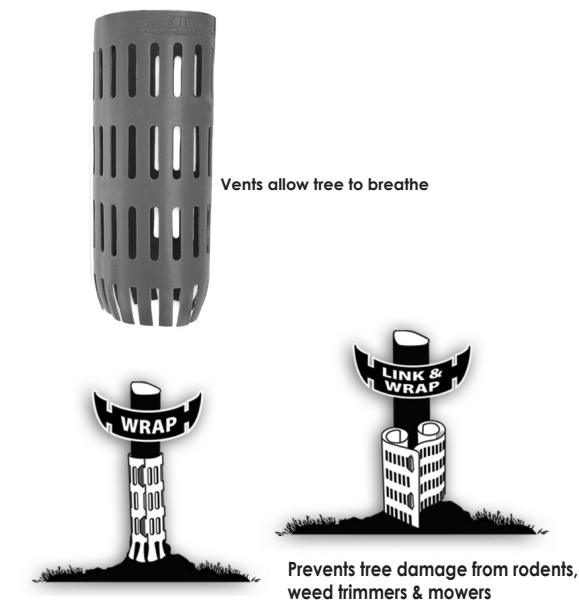
Tree Guards



Water/Bamboo Barrier Rolls

Century Tree Guard:

Manufactured from a durable high density and lightweight polyethylene material. The Tree Guard is designed to prevent tree trunk damage from rodents, weed trimmers, and mowers. They are made with perforated vents to ensure proper ventilation to the tree trunk. The Tree Guard is designed to expand with the tree trunk as the tree grows. With an integrated tabbed connection, you can connect two or more tree guards for larger trees.



Features:

- Prevents damage from rodents, weed trimmers, and mowers
- Durable High Density Polyethylene material
- Made from 50% recycled plastic
- Convenient Tab Connections
- Perforated to insure proper ventilation
- Expands with tree growth

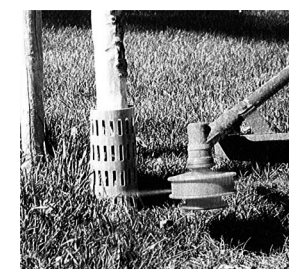
SPECIFICATIONS

MATERIAL	Lightweight High Density Polyethylene
THICKNESS	.050"
SIZE	Height: 9" Diameter: 8"

U.S. Standard
For Technical or Field Support, please call: 714.632.7083

Tolerances may vary in order to maintain the integrity of post-consumer materials, and assure the material structure. We make no other warranties, express or implied, and specifically disclaim the warranty of merchantability or fitness for a particular purpose.

with Tree Guard



without Tree Guard



CR-PE Multi-Purpose Root & Water Barrier Molded rolls :

Manufactured from durable polyethylene material, the CR-PE Roll first features a natural water barrier with an integrated & flared molded 90 ° root deflecting ribs preventing costly damage to both hardscapes and pavements from root and/or water damage. Reduces construction cost on materials for projects up to 50% over standard root barrier panels with maximum protection.



Linear Application: For root pruning of existing trees or in planting situations where one or more trees are in close proximity to hardscapes.
-OR-
Surround Application: For new tree planting or when the hardscape encircles the planter

FEATURES:

- Most versatile & advanced root barrier on the market today.
- Reduces cost by half by combining two products in to one effective Water and Root barrier
- Prevents water from seeping under pavements & roadways
- Integrated & Flared Molded 90° root deflecting ribs self interlocking connection.
- Ease of installation: ribs provide stabilization during installation

MD = Machine Direction
TD = Transverse Direction

SPECIFICATIONS (Polyethylene)

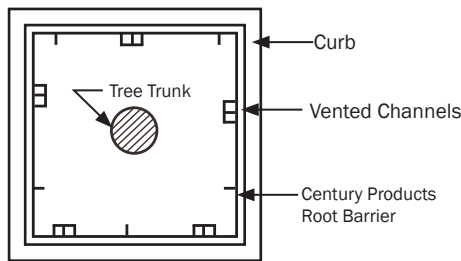
CR-PE Series: CR-PE12-20, CR-PE18-20, CR-PE24-20, CR-PE36-20.

Integrated & Flared Molded 90° root deflecting ribs with self interlocking connection.
Material: Polyethylene with ultraviolet inhibitors.
Thickness: .040" / .060"

MATERIAL	Polyethylene			
THICKNESS	.040" / .060"			
PROPERTIES	ASTM TEST METHOD	VALUE POLYETHYLENE COPOLYMER (.040")	ASTM TEST METHOD	VALUE POLYETHYLENE COPOLYMER (.060")
MD Break Strength (psi)	D638	4238 psi	D638	2950 psi
TD Break Strength	D638	3278 psi	D638	3463 psi
MD Break Elongation	D638	725%	D638	603%
TD Break Elongation	D638	607%	D638	676%
Puncture Strength	D4833	111 lbs.	D4833	158 lbs.
MD Tear Strength	D1004	46 lbs.	D1004	64 lbs.
TD Tear Strength	D1004	42 lbs.	D1004	60 lbs.
Hydrostatic Resistance (psi)	D75, Procedure A	403 psi	D75, Procedure A	615 psi
MULTI-AXIAL TENSILE PROPERTIES	D75, Procedure A			
Maximum Stress (psi)		1954 psi	D5617 Procedure A Centerpoint Deflection Verses Pressure	1954 psi
% Elongation @ Rupture		31.1%	D5617 Procedure A Centerpoint Deflection Verses Pressure	31.1%

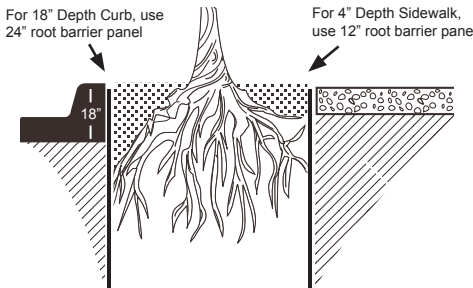
U.S. Standard
For Technical or Field Support, please call: (714) 632-7083

TREE WELL APPLICATION

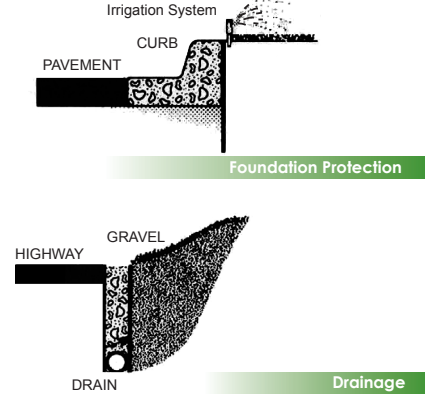


* If planting adjacent curb, gutter & sidewalk, 24" material is recommended to contain roots.

LINEAR APPLICATION



DUEL PURPOSE WATER/BARRIER



CR-PE SERIES Dual Purpose Water/Root Barrier Molded Rolls

The **Century CR-PE Series Dual Purpose Water/Root Barrier Molded Rolls** are manufactured in 20' segments with integrated 90° flared root deflecting ribs and also available in custom lengths up to 100' with a flexible top safety edge for pedestrian safety. The barrier is cut to specified height (12" to 48") and installed in a linear application directly along the hardscape or cut to length as needed for surround application, to encircle the root ball. The ends are connected using the self-connecting molded rib. Use staples Century sealant or equal, to secure connection.

I. SPECIFICATIONS

- The Dual Purpose barrier shall be **CR-PE Series** man-ufactured by Century Products, 1144 N. Grove Street, Anaheim, CA 92806, (714) 632-7083 or approved equivalent.
- The barriers are black molded root barrier rolls man-ufactured from 50% recycled polyethylene plastic with ultraviolet inhibitors. Available in .040" (1.02mm) & .060" (1.52mm) thickness.
- Barriers available in standard 20' lengths and up to 100' various depths(12" to 48") as specified. Each roll shall have vertically integrated & flared molded 90° root deflecting ribs protruding 1/2-3/4" from wall and placed 6-8" apart. A root impervious molded self-connecting end provides easy assembly using staples, Century sealant, or equal.

II. INSTALLATION

- Cut desired length of molded roll material and install directly alongside hardscapes for linear planting.
- Connecting: For use when utilizing as a **dual purpose water/root barrier** or surround application. Connect the ends by overlapping two 6" (15cm) sections with the leading rib cut directly down the middle glue the surface using Century sealant or 1" two-sided tape: See figure 2 & 3. For surround, install by encircling the root ball.
- When necessary use an umbrella Cement nail to tack up barrier **** must be used above grade or water line.
- Vertical integrated & flared molded 90° flared root deflecting ribs are always facing the root ball.
- Always install the root barriers 1-2" above the grade to prevent root penetration above the barrier.
- Prepare your installation as shown in the illustrations. (Assemble barrier as shown in fig. 1)
- Recommended for linear or surround planting applications. Back fill with existing native soil. If necessary for drainage, use gravel or crushed rock. Avoid backfill less than 3/4" or greater than 1 1/2". Finish to grade. Do not distort barrier during installation.
- Technical Questions? Contact Century Products at 714. 632.7083 for assistance.

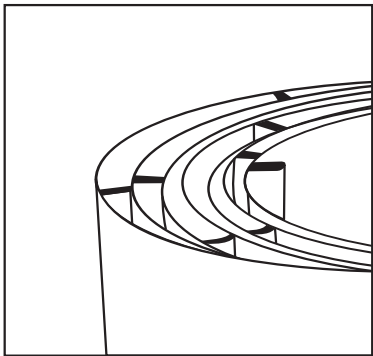


Fig. 2

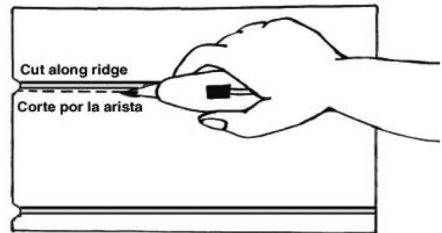
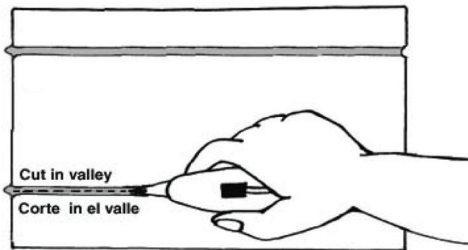
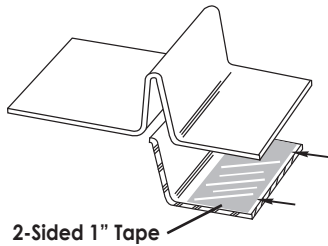
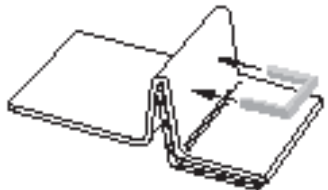


Fig. 3

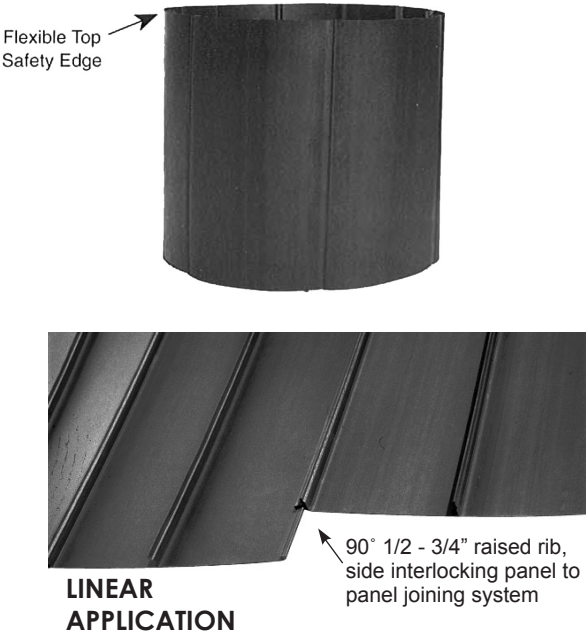


Staple or Tape
STAPLES 2" APART



CP-Series Root Barrier Panels:
Manufactured from durable polyethylene material. Century Products panels feature 90° root deflecting ribs and self interlocking panel to panel connection that eliminates joiner strips and gluing. As well as being a root impervious barrier, the CP-Series panels direct roots downward to prevent costly damage to surrounding hardscapes and landscapes. These versatile panels can be used in linear and surround applications. The CP-Series panels are designed to reduce maintenance costs and liabilities for government agencies, cities, and private industry.

Linear Application: For root pruning of existing trees or in planting situations where one or more trees are in close proximity to hardscapes.
-OR-
Tree Well Application: For new tree planting or when the hardscape encircles the planter



Features:

- Flexible Top Safety Edge
- Versatile barrier for linear or surround applications
- Manufactured with recycled plastic
- Raised 90° extruded root deflecting ribs
- 90° 1/2 - 3/4" raised rib, side interlocking panel to panel joining system
- Adjustable anti-lift polyethylene panels which can be separated into 1' (30cm) sections

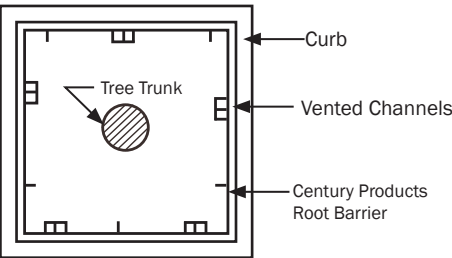
SPECIFICATIONS

CP-SERIES: CP12-2, CP18-2, CP 24-2, CP36-2, and CP48-2.
90° 1/2- 3/4" raised rib, side interlocking panel to panel joining system.
Material: Polyethylene with ultraviolet inhibitors.
Thickness: .080"

MATERIAL	Polyethylene	
THICKNESS	.080"	
PROPERTIES	ASTM TEST METHOD	VALUE POLYETHYLENE COPOLYMER
Tensile Stress @ Yield	D638	4100 TO 4300 PSI
Elongation @ Break	D638	40%
Tensile Modulus of Elasticity	D638	150,000 PSI
Flexural Stiffness	-	-
Cantilever Beam	D747	125,000 PSI
Tensile Impact	D1822	50Ft. lbs/in ²
Environmental Stress	-	-
Crack Resistance	D1693	1 Hr.
Hardness, Shore D	D2240	68

U.S. Standard
For Technical or Field Support, please call: 714.632.7083

TREE WELL APPLICATION



LINEAR APPLICATION



Backfill is native soil or 3/4" gravel for drainage.

CP-SERIES Root Barrier Panels

Century CP-Series Panels are pre-assembled in 2' (61 cm) long segments which can be combined to create various lengths of barrier to fit your application.

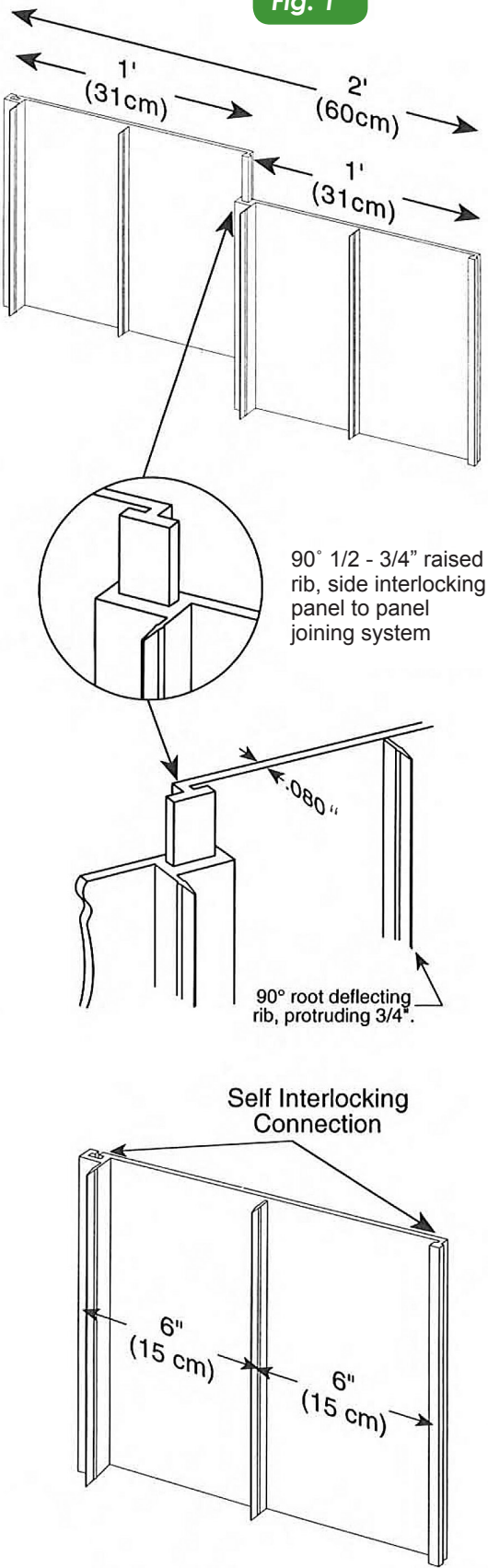
I. SPECIFICATIONS

- The root barrier shall be **CP-Series** manufactured by Century products, 1144 North Grove St., Anaheim, CA 92806, (714)632-7083, or approved equivalent
- The barriers are black, extruded, modular panels manufactured using recycled polyethylene plastic with ultraviolet inhibitors and .080" (2.16 mm) in thickness. Each panel has vertical 90° root deflecting ribs protruding 1/2 - 3/4" in height. The ribs have a minimum thickness of .080" and are placed 6" (15mm) apart. An integrated 90° 1/2-3/4" raised rib, side interlocking panel to panel joining system provides for an instant assembly by sliding one panel into another.

II. INSTALLATION

- The specified number of panels shall be joined together and placed along hardscapes to create a linear style planting application or connected to encircle the root ball for surround installation.
- Always install the panels 1"-2" above grade to avoid root penetration above the barrier. (When adjacent to concrete, top of root barrier must be 1/2" above grade)
- Prepare your installation as depicted in illustrations. (Assemble panels as shown in Figure 1.)
- Recommended for linear or tree well planting applications. Back fill with existing native soil. If necessary for drainage, use gravel or crushed rock. Avoid backfill less than 3/4" or greater than 1 1/2". Finish to grade. Do not distort barrier during installation.
- Technical Questions? Call Century Products at 714. 632.7083 for assistance.

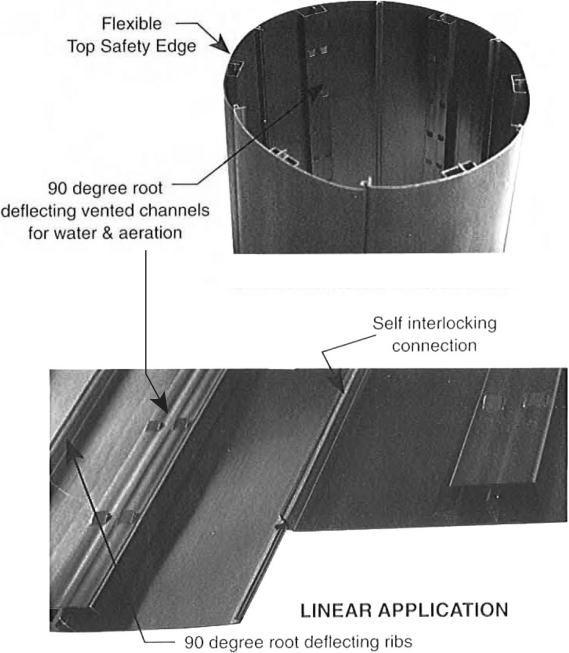
Fig. 1



DWP-Series Deep Watering Panels:

Incorporates 90° ribs with deep watering channels with aeration vents. Vents are located along the channel facing the root ball zone. The system is designed to use up to 30% less water by evenly distributing water and nutrients directly into the root ball zone and base of the barrier while deflecting roots downward away from the hardscape. The DWP-Series can be used in both linear and surround applications.

Linear Application: For root pruning of existing trees or in planting situations where one or more trees are in close proximity to hardscapes.
-OR-
Tree Well Application: For new tree planting or when the hardscape encircles the planter



Features:

- Flexible Top Safety Edge
- Versatile barrier for water conservation used in linear or Tree Well Applications
- Manufactured with recycled plastic
- Raised 90° root deflecting ribs and vented deep watering channels for aeration and equal water distribution to root ball and barrier base
- 90° 1/2-3/4" raised rib, side interlocking panel to panel joining system
- Adjustable anti-lift polyethylene panels which can be separated into 1' (30.5 cm) sections

SPECIFICATIONS

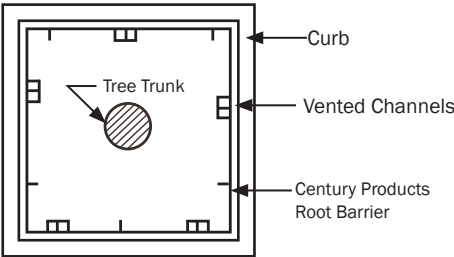
DWP-Series: DWP12-2, DWP18-2, DWP24-2, DWP36-2, and DWP48-2
90° 3/4" raised rib, side interlocking panel to panel joining system
Material: Polyethylene with ultraviolet inhibitors
Thickness: .080"

MATERIAL	Polyethylene	
THICKNESS	.080"	
PROPERTIES	ASTM TEST METHOD	VALUE POLYETHYLENE COPOLYMER
Tensile Stress @ Yield	D638	4100 TO 4300 PSI
Elongation @ Break	D638	40%
Tensile Modulus of Elasticity	D638	150,000 PSI
Flexural Stiffness	-	-
Cantilever Beam	D747	125,000 PSI
Tensile Impact	D1822	50Ft. lbs/in ²
Environmental Stress	-	-
Crack Resistance	D1693	1 Hr.
Hardness, Shore D	D2240	68

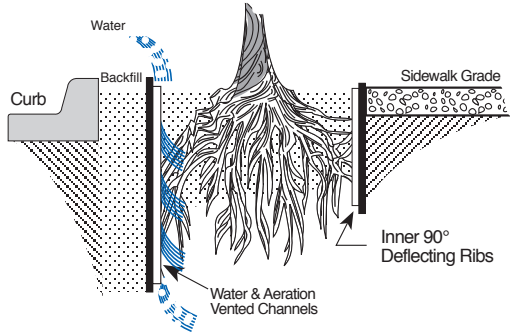
U.S. Standard
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TREE WELL APPLICATION



LINEAR APPLICATION



DWP-SERIES Root Barrier Panels

The **Century DWP-Series Deep Watering Panels** are pre-assembled in 2' (61cm) long segments. The segments can be combined to create various lengths of barrier. The vented water channels located on the inside of the panel are designed to provide water and aeration directly and evenly to the root zone.

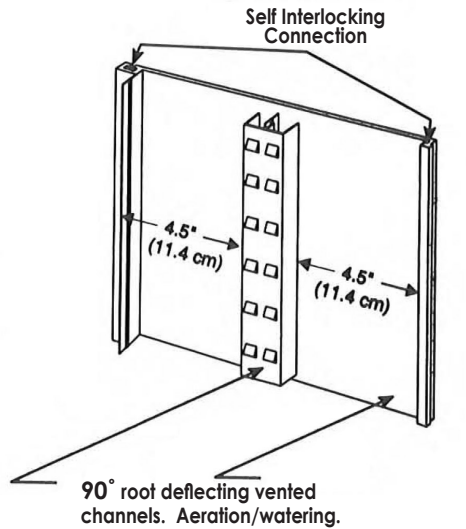
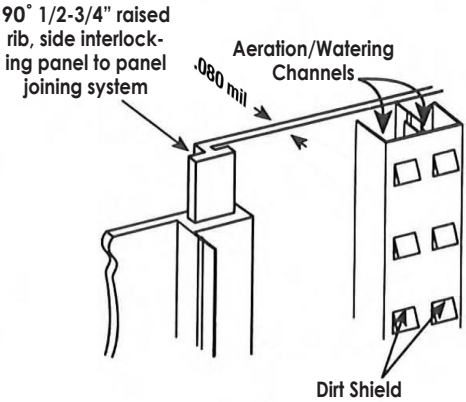
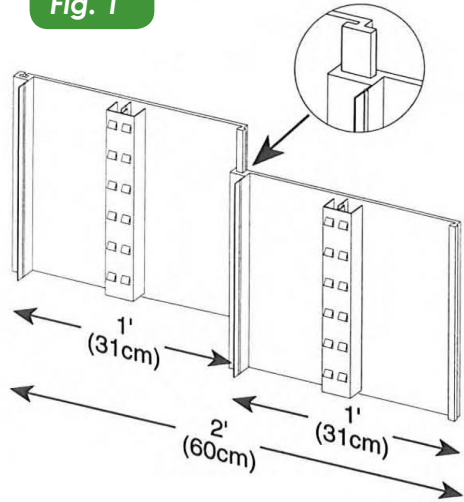
I. SPECIFICATIONS

- A. The root barrier shall be **DWP-Series** manufactured by Century Products, 1144 N Grove Street, Anaheim, CA 92806, (714) 632-7083, or approved equivalent.
- B. The barriers are black molded modular panels manufactured using recycled polyethylene plastic with ultraviolet inhibitors and .080" (2.16mm) in thickness. Each panel has vertical 90° root deflecting ribs and vented channels for deep watering and aeration protruding 3/4" in height. The ribs have a minimum thickness of .080 (2.16mm) and are placed 4 1/2" (11.4 mm) apart. An integrated 90° 1/2-3/4" raised rib, side panel to panel joining system for instant assembly by sliding one panel into another.

II. INSTALLATION

- A. The specified number of panels shall be joined together and placed along the hardscapes to creating a linear planting application or connected to outline the tree well/planter.
- B. Root deflecting ribs and water aeration channels are always installed facing the root ball.
- C. Always install the panels 1"-2" above grade to avoid root penetration above the barrier.
- D. Prepare your installation for surround planting applications as depicted in the illustrations. (Assemble barrier as shown in figure.1)
- E. Recommended for linear or surround planting applications. Back fill with existing native soil. If necessary for drainage, use gravel or crushed rock. Avoid backfill less than 3/4" or greater than 1 1/2". Finish to grade. Do not distort barrier during installation.
- F. Technical Questions? Call Century Products at 714. 632.7083 for assistance.

Fig. 1



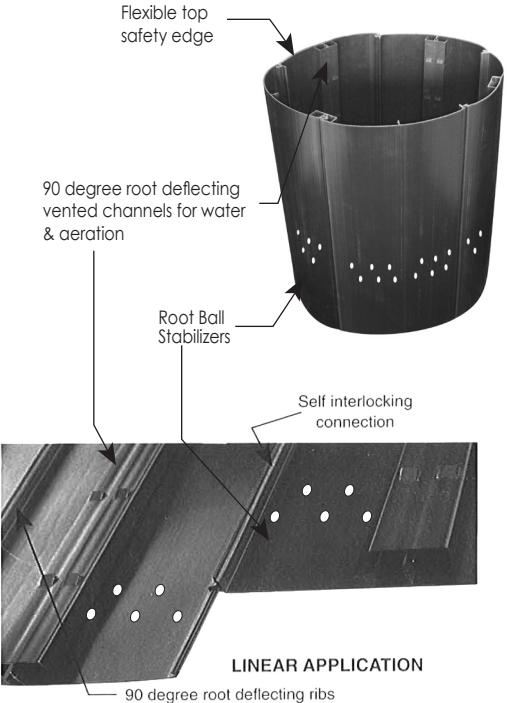
DWP-RS Series Deep Watering Panels:

Incorporates 90° ribs with deep watering channels with aeration vents. Vents are located along the channel facing the root ball zone. The system is designed to use up to 30% less water by evenly distributing water and nutrients directly into the root ball zone and base of the barrier while deflecting roots downward away from the hardscape. A series of holes called "Root Ball Stabilizers" located at the bottom 20% of the barrier, allow tree roots to anchor themselves through the barrier providing additional stabilization to planted trees. The DWP-RS Series can be used in both linear and surround applications.

Linear Application: For root pruning of existing trees or in planting situations where one or more trees are in close proximity to hardscapes.

-OR-

Surround Application: For new tree planting or when the hardscape encircles the planter



Features:

- Flexible Top Safety Edge
- Versatile barrier for water conservation used in linear or surround applications
- Manufactured with recycled plastic
- Raised 90° root deflecting ribs and vented deep watering channels for aeration and equal water distribution to root ball and barrier base
- 90° 1/2-3/4" raised rib, side interlocking panel to panel joining system
- Adjustable anti-lift polyethylene panels which can be separated into 1' (30.5 mm) sections
- "Root Ball Stabilizers" Stabilizing holes are located at the bottom 20% of the barrier allowing the roots to anchor themselves through the barrier
- The holes both restrict the external growth of roots, and provide additional stability

SPECIFICATIONS

DWP-RS Series: DWP-RS12-2, DWP-RS18-2, DWP-RS24-2
90° 3/4" raised rib, side interlocking panel to panel joining system
Material: Polyethylene with ultraviolet inhibitors
Thickness: .080"

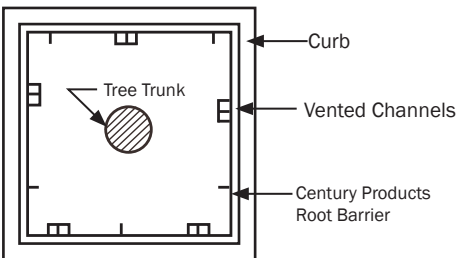
MATERIAL	Polyethylene	
THICKNESS	.080"	
PROPERTIES	ASTM TEST METHOD	VALUE POLYETHYLENE COPOLYMER
Tensile Stress @ Yield	D638	4100 TO 4300 PSI
Elongation @ Break	D638	40%
Tensile Modulus of Elasticity	D638	150,000 PSI
Flexural Stiffness	-	-
Cantilever Beam	D747	125,000 PSI
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Crack Resistance	D1693	1 Hr.
Hardness, Shore D	D2240	68

U.S. Standard

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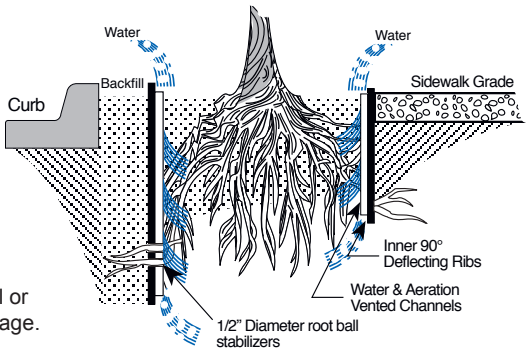
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TREE WELL APPLICATION



Backfill is native soil or 3/4" gravel for drainage.

LINEAR APPLICATION



DWP-RS SERIES Root Barrier Panels

The **Century DWP-RS Series Deep Watering Panels** are pre-assembled in 2' (61cm) long segments. The segments can be combined to create various lengths of barrier. The vented water channels located on the inside of the panel are designed to provide water and aeration directly and evenly to the root zone.

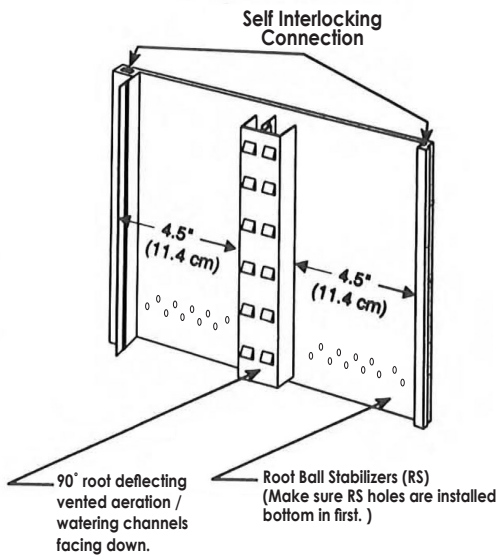
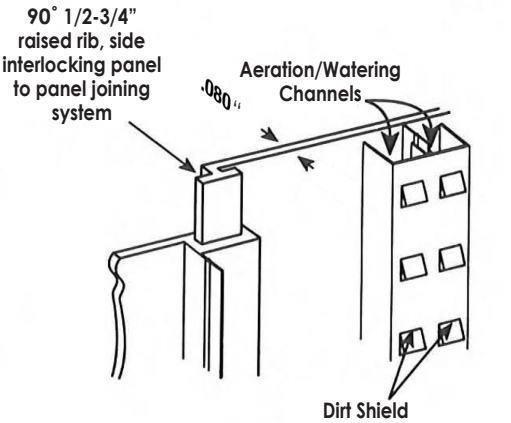
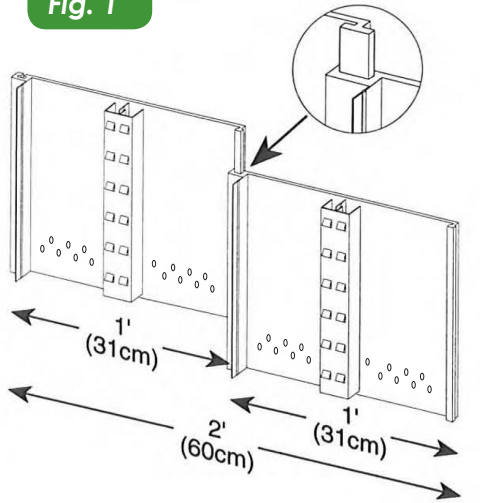
I. SPECIFICATIONS

- A. The root barrier shall be **DWP-RS Series** manufactured by Century Products, 1144 N Grove Street, Anaheim, CA 92806, (714) 632-7083, or approved equivalent.
- B. The barriers are black molded modular panels manufactured using 50% recycled polyethylene plastic with ultraviolet inhibitors and .080" in thickness. Each panel has vertical 90° root deflecting ribs and vented channels for deep watering and aeration protruding 7/8" in height. The ribs have a minimum thickness of .080" and are placed 4 1/2" (11.4cm) apart. A series of holes called "Root Ball Stabilizers" are located at the bottom 20% of the barrier. An integrated 90° 1/2-3/4" raised rib, side panel-to-panel joining system for instant assembly by sliding one panel into another.

II. INSTALLATION

- A. The specified number of panels shall be joined together and placed along the hardscapes to creating a linear planting application or connected to encircle the root ball for surround planting.
- B. Root deflecting ribs and water aeration channels are always installed facing the root ball.
- C. Always install the panels 1-2" above grade to avoid root penetration above the barrier.
- D. Prepare your installation for tree well applications as depicted in the illustrations. (Assemble barrier as shown in figure.1)
- E. Recommended for linear or tree well applications. Back fill with existing native soil. If necessary for drainage, use gravel or crushed rock. Avoid backfill less than 3/4" or greater than 1 1/2". Finish to grade. Do not distort barrier during installation.
- F. Technical Questions? Call Century Products at 714. 632.7083 for assistance.

Fig. 1

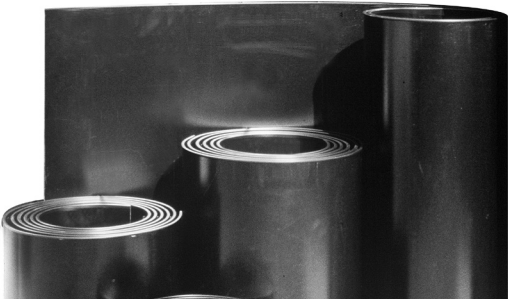


Century Water Barrier:

Manufactured from durable polyethylene material and is available in various gauges and depths. The Water Barriers are available in pre-cut rolls or custom made to order roll sizes.

Caution: Water Barrier will not turn tree roots downward for subsequent lateral growth. If Water Barrier is to be used near a tree please consult a local arborist.

Custom sizes & thicknesses are available.



Using the **Century Water Barrier** as a Bamboo Barrier is a very effective way to delay the growth and spread of invasive Bamboo species. The flat smooth surface of the barrier acts as a wall or root stop which directs the rhizome downward and prevents rampant growth. Since the rhizome cannot penetrate the barrier it will be directed to grow downward along the surface of the barrier. This action will prevent unwanted spread and growth while containing the Bamboo species.



Features:

- Available in various sizes; 100 lb. rolls or cut to size
- Made from 50% recycled plastic
- Durable High Density Polyethylene material
- Easy overlap connection

Sizes

SIZE	Height & Thickness	Height x Length
0.040	12" x 0.040	12" x 200'
	18" x 0.040	18" x 200'
	24" x 0.040	24" x 200'
	30" x 0.040	30" x 200'
	36" x 0.040	36" x 200'
	48" x 0.040	48" x 200'
0.060	12" x 0.060	12" x 200'
	18" x 0.060	18" x 200'
	24" x 0.060	24" x 200'
	30" x 0.060	30" x 200'
	36" x 0.060	36" x 200'
	48" x 0.060	48" x 200'

SPECIFICATIONS

MATERIAL	High Density Polyethylene
THICKNESS	0.040" & 0.060"
COLOR	Black
TENSILE STRENGTH PSI	3850
FLEXURE STIFFNESS PSI	120,000
VICAT SOFTENING POINT (C)	127
LOW TEMPERATURE BRITTLENESS	-76

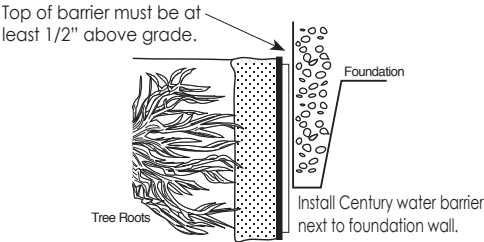
MD = Machine Direction
TD = Transverse Direction

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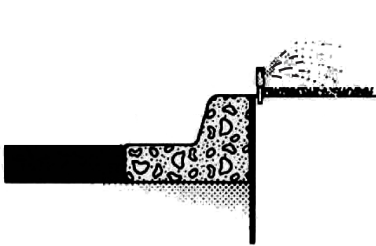
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Typical Applications:

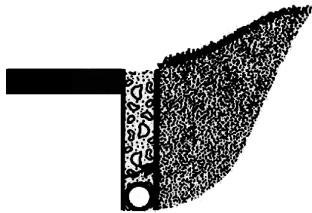
- Golf green liners
- Irrigated median plantings
- Drainage
- New foundation protection



Foundation Protection

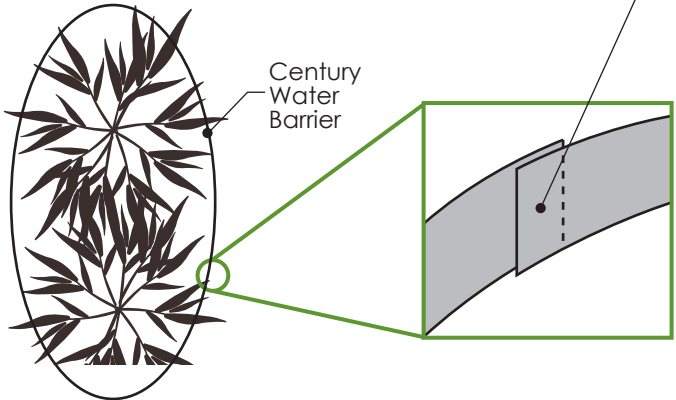


Median Protection



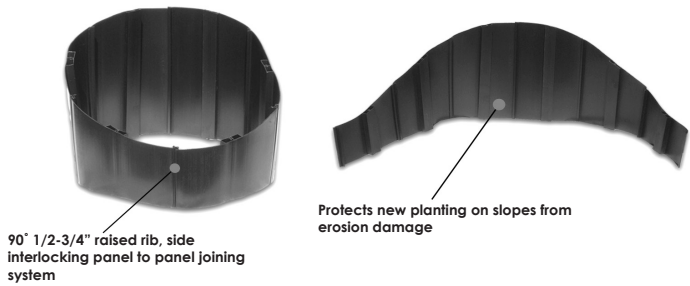
Drainage

Use as Bamboo Barrier



Century Slope Guard:

Manufactured from a polyethylene material and is designed for planting on steep slopes. Landscape professionals installing new plantings on steep slopes have traditionally been confronted with unique problems. Trees are planted with care and attention to aeration, soil compaction, and fertilization. Unfortunately, the water so vital for new plantings also has the bad habit of washing the soft soil and fertilizer at the base of the tree away and eroding the bank above into the new planting area. The Century Slope Guard was designed to meet stringent industry requirements while being a cost effective tool you can rely on to continue protecting your new plantings after you leave the job site. The installed barrier provides your new plantings with a trim and professional border which is as good looking as it is functional.



Features:

- Flexible Top Safety Edge
- Versatile barrier for water conservation used in linear or surround applications
- Manufactured with recycled plastic
- 90° 1/2-3/4" raised rib, side interlocking panel to panel joining system
- Adjustable anti-lift polyethylene panels
- Designed for planting on steep slopes

SPECIFICATIONS

Slope Guard: SG1G, SG5G, SG15G, SG24B, SG36B, SGCUSTOM

90° 3/4" raised rib, side interlocking panel to panel joining system

Material: Polyethylene with ultraviolet inhibitors

Thickness: .080"

MATERIAL	Polyethylene	
THICKNESS	.080"	
PROPERTIES	ASTM TEST METHOD	VALUE POLYETHYLENE COPOLYMER
Tensile Stress @ Yield	D638	4100 TO 4300 PSI
Elongation @ Break	D638	40%
Tensile Modulus of Elasticity	D638	150,000 PSI
Flexural Stiffness	-	-
Cantilever Beam	D747	125,000 PSI
Tensile Impact	D1822	50Ft. lbs/in ²
Environmental Stress	-	-
Crack Resistance	D1693	1 Hr.
Hardness, Shore D	D2240	68

U.S. Standard

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Slope Guards

The **Century Slope Guards** are pre-assembled. Designed to retain hillside integrity preventing erosion from smothering the root ball zone & prevent heavy watering from cupping out newly planted trees and shrubs.

I. SPECIFICATIONS

- The root barrier shall be **Slope Guard** manufactured by Century Products, 1144 N Grove Street, Anaheim, CA 92806, (714) 632-7083, or approved equivalent.
- The barriers are black molded modular panels manufactured using recycled polyethylene plastic with ultraviolet inhibitors and .080" (2.16mm) in thickness. Each panel has vertical 90° root deflecting ribs and vented channels for deep watering and aeration protruding 3/4" in height. The ribs have a minimum thickness of .080" and are placed 4 1/2" (11.4mm) apart. An integrated 90° 1/2"-3/4" raised rib, side panel to panel joining system for instant assembly by sliding one panel into another.

II. INSTALLATION

- Root deflecting ribs and water aeration channels are always installed facing the root ball
- The top side of the slope guard is to be installed a minimum of 3"-4" above grade
- The bottom side of the slop-guard is to be a minimum of 3" - 4" above grade
- The aspect ratio of the top edge height to the bottom edge height does not change with the gradient of the slope. See install instruction #2. (Maximum size limit of 36" box tree)
- Prepare your installation for slope guard protection as depicted in the illustrations.
- Backfill with existing native sole. If necessary for drainage, use gravel or crushed rock. Backfill level with top of root ball structure, do not distort barrier during installation.
- Technical Questions? Call Century Products at 714. 632.7083 for assistance.

Fig. 1

90° 1/2-3/4" raised rib, side interlocking panel to panel joining system

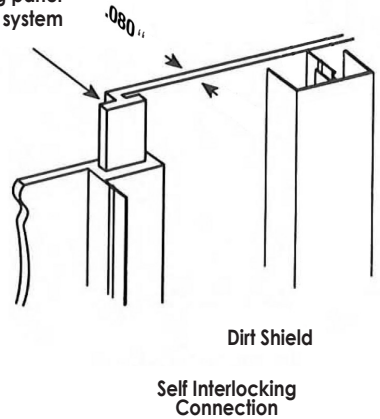
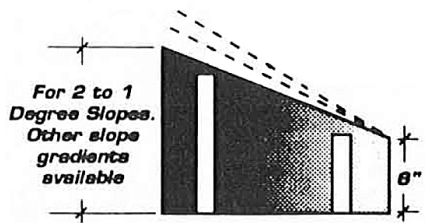
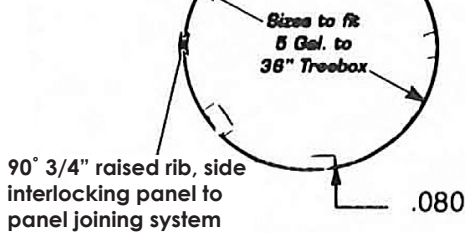


Fig. 2

(no gluing required)



Century Universal Tree Ties:

The *Century Universal Tree Ties* are used for staking and supporting newly planted trees that require staking to prevent breakage of limbs from strong winds. In addition they strengthen the trunk by providing support and allows the trunk to move slightly from side to side. This allows the trunk to build reaction wood and to build strength with time. Universal size fits 18 to 32 inches.

The *Century Universal Tree Ties* also will expand with the growth of the trees and will not girdle, scar or damage the bark on the trunk. Our Century Universal Tree Tie will continue to work effectively, and efficiently until the tree, required no additional support.

The *Century Universal Tree Ties* are not only a **GREEN Product**, but it is very affordable, it does not bind the tree trunk, and comes in a case pack of 150 pcs. The Century Universal Tree Ties are made of recycled durable Black UV Coated Vinyl Plastic tubing. They are currently available in 32" C/L (cut lengths). For smaller shrubs & trees, simply cut to desired length.



The Century Universal Tree Tie is adjustable 18"-32"



Features:

- Simple, Durable, Versatile, Inexpensive
- Created to meet the demands of the environment
- Self-locking component
- Allows for quick installing and removal
- Available in 32" lengths that can be trimmed to any specific length
- Made from recycled flex PVC

SPECIFICATIONS

MATERIAL	Recycled Flex PVC	
PROPERTIES	ASTM TEST METHOD	VALUE POLYETHYLENE COPOLYMER
Tensile Stress @ Yield	-	1750 PSI
Specific Gravity (± .02)	-	1.40
100% Modulus	-	900 PSI
Elongation (%)	-	290
Low Temperature Brittleness	-	-25° F
Hardness, Shore A	-	Instantaneous - 78 10 Second Delay - 73

U.S. Standard
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Century Universal Tree Tie

The **Century Universal Tree Ties** are manufactured of either virgin flexible vinyl or 40% post consumer recycled material ISA endorsed meeting ASTM D-412 standards for tensile and elongation strength. They are designed to protect the Cambium layer of the tree. This New design enables ease of use & maximum durability. Manufactured with a double back locking configuration. For extra support secure with one galvanized nail to prevent slippage. Tree ties shall elongate with the tree growth preventing damage to the tree and are available in Black.

HOW TO USE CENTURY TREE TIES

Single Stake

A single stake should be placed on the side of the prevailing wind. The tree should be supported with a minimum of two Century Universal Tree Ties. Use either the standard or figure eight tying method.

Double Stakes

One stake should be placed on the side of the prevailing wind with the other stake on the opposite side of the tree. The tree should be supported with four Century Universal Tree Ties to assure a straight, firm position. Use either the standard or figure eight tying method.

Standard Tie

Wrap Century Universal Tree Tie around the tree trunk and the stake to form a loop. Tie with the double-back locking configuration or secure with a galvanized nail driven through the Century Universal Tree Tie and into the stake to prevent slippage.

Figure Eight Tie

Wrap Century Universal Tree Tie around the tree trunk and the stake twisting to form a figure eight. Tie with the double-back locking configuration. Secure with a galvanized nail driven through the Century Universal Tie and into the stake to prevent slippage for extra support.

Location Guideline

Step 1.

Cut the nursery provided supports away from the young tree.

Step 2.

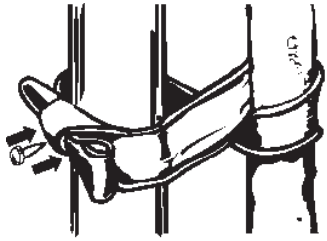
To determine the best place to install Century Universal Tree Tie, hold the tree trunk at different points to find the spot where the top does not bend over. Install the Century Universal Tree Tie 6" taller than this height.

Step 3.

The first Century Universal Tree Tie should be placed 6" higher than the spot on the trunk where your hand previously determined support for the top.

Step 4.

Trees should be secured with at least two Century Universal Tree Ties to assure a straight, firm hold.



The Figure 8 Century Universal Tree Tie is adjustable 18"-32"



The Figure 8 Double Post Application



Single Tree Ties



Easy Assembly

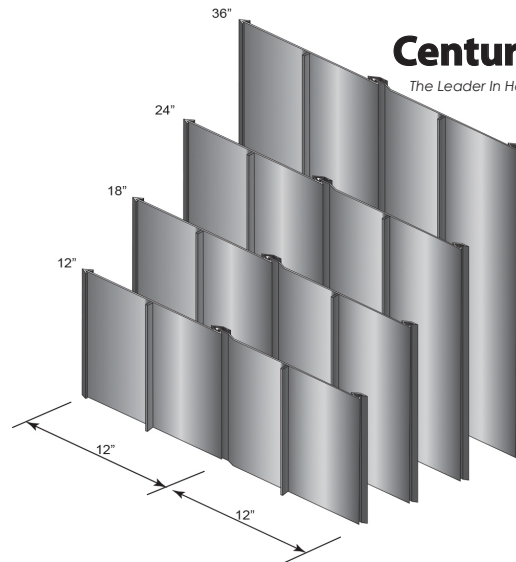
CPU-Series Utility Grade Root Barrier Panels

Exclusively designed for maximum depth installation where protection of fiber optics, utility lines or sewer lines exceeds 4'-6' in depth. Manufactured from durable polyethylene material. Century Products panels feature 90° root deflecting ribs and self-interlocking panel to panel connection that eliminates joiner strips and gluing. As well as being a root impervious barrier, the CPU-Series panels direct roots downward to prevent costly damage to surrounding hardscapes and landscapes. These versatile panels can be used in linear and surround applications. The CPU-Series panels are designed to reduce maintenance costs and liabilities for government agencies, cities, and private industry.

Linear Application: For root pruning of existing trees or in planting situations where one or more trees are in close proximity to hardscapes.

-OR-

Tree Well Application: For new tree planting or when the hardscape encircles the planter.



INTERLOCKING JOINTS



Features:

- Flexible Top Safety Edge
- Versatile barrier for linear or tree well applications
- Manufactured with recycled plastic
- Raised 90° extruded root deflecting ribs, spaced 5 1/2" to 6" apart
- 90° 1/2" - 3/4" raised rib, side interlocking panel to panel joining system
- Adjustable anti-lift polyethylene panels which can be separated into 1' (30cm) sections

SPECIFICATIONS

CPU-SERIES: CPU12-2, CPU 18-2, CPU 24-2, CPU 36-2, CPU 48-2, CPU 60-2, and CPU 72-2 90° 1/2"-3/4" raised rib, side interlocking panel to panel joining system.
Material: Polyethylene with ultraviolet inhibitors.
Thickness: 0.080"

MATERIAL	Polyethylene	
THICKNESS	0.080"	
PROPERTIES	ASTM TEST METHOD	VALUE POLYETHYLENE COPOLYMER
Tensile Stress @ Yield	D638	4100 TO 4300 PSI
Elongation @ Break	D638	40%
Tensile Modulus of Elasticity	D638	150,000 PSI
Flexural Stiffness	-	-
Cantilever Beam	D747	125,000 PSI
Tensile Impact	D1822	50 Ft. lbs/in ²
Environmental Stress	-	-
Crack Resistance	D1693	1 Hr.
Hardness, Shore D	D2240	68

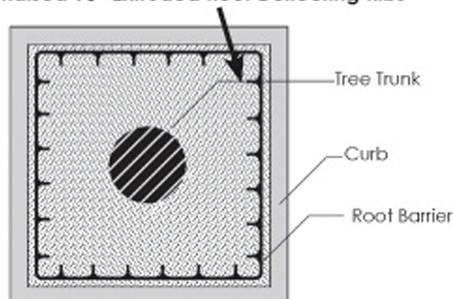
U.S. Standard

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TREE WELL APPLICATION

Raised 90° Extruded Root Deflecting Ribs



LINEAR APPLICATION

