

**GENERAL NOTES:**

1. SPECIFIED TREE ROOT BARRIERS ARE A MECHANICAL BARRIER AND ROOT DEFLECTOR TO PREVENT TREE ROOTS FROM DAMAGING HARDSCAPES AND LANDSCAPES. ASSEMBLE IN 24 INCHES LONG PANELS WITH RIDGED LOCKING MECHANISMS (JOINER STRIPS OR MALE/FEMALE) TO LINE THE PERIMETER OF THE TREE WELL (SURROUND PLANTING STYLE) OR FOR LINEAR APPLICATIONS DIRECTLY BESIDE A HARDSCAPE ADJACNET TO ONE SIDE OF THE TREES (LINEAR PLANTING STYLE).
2. DIMENSIONS ARE APPROXIMATE, SUBMIT SAMPLE FOR ENGINEERS APPROVAL PRIOR TO INSTALLATION.

**A. MATERIALS**

1. THE CONTRATCOR SHALL FURNISH AND INSTALL TREE ROOT BARRIERS AS SPECIFIED. THE TREE ROOT BARRIERS SHALL BE BLACK, INJECTED MOLDED OR EXTRUDED MODULAR COMPONENT MADE OF HIGH DENSITY POLYPROPYLENE OR POLYETHYLENE PLASTIC OF MINIMUMN 0.08 INCH WALL THICKNESS IN PANELS 24 INCHES BY 18 INCHES DEEP; PLASTIC SHALL BE RECYLEABLE AND CONTAIN ULTRA-VIOLET INHIBITORS. EACH PANEL SHALL HAVE: NOT LESS THAN FOUR RAISED ROOT DEFELECTING RIBS PROTRUDING .5 INCH AT 90 DEGREES RUNNING THE LENGTH OF THE PANEL SPACED 6 INCHES APART. EACH PANEL SHALL HAVE AN INTEGRAL RIDGED LOCKING MECHANISMS.
2. THE BASIC PROPERTIES OF THE MATERIAL SHALL BE:

TEST	ASTM TEST METHOD	VALUE COPOLYMER POLYPROPYLENE	VALUE HOMOPOLYMER POLYETHYLENE
TENSILE STRESS AT YIELD	D638	3800 PSI	3800 PSI
ELONGATION AT YIELD	D638	6.3%	10.0%
TENSILE MODULUS	D638	N/A	155,000
FLEXURAL MODULUS	D790B	155,000 PSI	N/A
NOTCHED IZOD IMPACT	D256A	7.1	0.4 – 4.0
ROCKWELL HARDNESS R. SCALE	D785A	68	68
FLEXUAL MODULOUS 73 PSI	0790	N/A	145,000
HARDNESS	D2240	N/A	P66

**B. CONSTRUCTION AND INSTALLATION**

1. THE CONTRACTOR SHALL INSTALL THE TREE ROOT BARRIER WITH THE NUMBER OF PANELS AND IN THE MANNER SHOWN. THE VERTICAL ROOT DEFLECTING RIBS SHALL BE FACING TOWARDS THE TREE AND TOP OF THE PANEL SHALL BE .5 INCH ABOVE SOIL GRADE AND AT LEAST 1 INCH BELOW TOP OF HARDSCAPE SUCH AS PAVER, CURB OR SIDEWALK. PANELS SHALL BE CONNECTED BY RIDGED LOCKING MECHANISMS TO FORM A CIRCLE AROUND THE TREE WELL OR WHERE SPECIFIED JOINED IN A LINEAR FASHION AND PLACED ALONG THE ADJACENT HARDSCAPE.
2. EXCAVATION AND SOIL PREPARATION SHALL CONFORM TO THE DRAWING.
3. IN THE CASE OF SURROUND STYLE PLANTING, THE TREE ROOT BARRIER SHALL BE BACKFILLED ON THE OUTSIDE WITH .75 INCHES TO 1.5 INCH GRAVEL OR CRUSHED ROCK AS SHOWN ON THE DRAWINGS. NO GRAVEL IS REQUIRED FOR A LINEAR PLANTING.

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REV NO.	DATE	BY	APPR
1	8/08	RAW	MHA
2	7/14	RAW	MHA
3	3/16	RAW	MHA
4	9/21	RAW	MHA

**PUBLIC WORKS – STREETS AND TRANSPORTATION**

APPROVED BY: *M.H. Sedalla*  
ENGINEER MANAGER

APPROVED DATE: 9/1/2021



<p>ROOT BARRIER GENERAL NOTES</p>	<p>STANDARD PLAN NUMBER</p> <p>T03-22B</p>
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