

### RWS Series - Root Watering System

#### Primary Application

The Rain Bird RWS Root Watering System enables vital water, air, and nutrients to bypass compacted soil and directly reach tree and shrub root systems. Its grate retainer accepts standard 4" flat or atrium drainage grates, and its patented basket weave canister allows ground installation to a depth of 36". This system is intended for use with water dispensing devices, such as a bubbler head or an emitter. This system can be customized by the end user to meet their required irrigation needs or can be purchased with an optional pre-installed 1401 bubbler and ACV-050 check valve.

#### Benefits

- Patented basket weave canister design —
  - Promotes tree and shrub health by allowing nutrients to reach feeder roots in areas with compacted soil or thick lawns.
  - Releases trapped gases that may increase plant stress.
- Ideal for urban settings —
  - Subterranean watering encourages roots to remain below surface.
  - Less prone to damage, and grate locking feature protects against vandalism.
- Compatible with either drip tubing systems or customized irrigation hardware, and can be purchased with pre-assembled bubbler/check valve option that provides a 1/2" male NPT connection to lateral lines.
- Saves assembly labor versus home-made systems.
- Fits all standard 4" grates (black round grate optional).

#### Models

**RWS** — 4" x 36" (10,2 cm x 91,4 cm) system for 1/4" (6,4 mm) flexible tubing or customized irrigation hardware added by the end user.

**RWS-B** — 4" x 36" (10,2 cm x 91,4 cm) system with bubbler, 1/2" (15/21) male NPT inlet.

**RWS-BC** — 4" x 36" (10,2 cm x 91,4 cm) system with bubbler and check valve, 1/2" (15/21) male NPT inlet.

**RWS-G** — 4" x 36" (10,2 cm x 91,4 cm) system with grate for 1/4" (6,4 mm) flexible tubing or customized irrigation hardware added by the end user.

**RWS-BG** — 4" x 36" (10,2 cm x 91,4 cm) system with bubbler and grate, 1/2" (15/21) male NPT inlet.

**RWS-BCG** — 4" x 36" (10,2 cm x 91,4 cm) system with bubbler, check valve, and grate, 1/2" (15/21) male NPT inlet.

#### Specifications

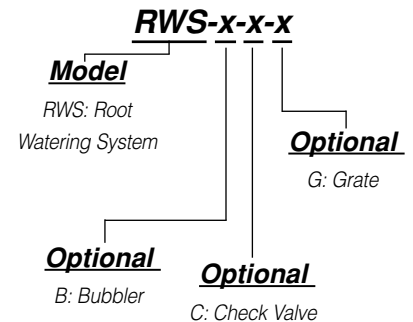
The Rain Bird root watering device will consist of a grate retainer constructed from high-grade polymer with UV-resistant thermoplastic inhibitors. The grate retainer will accept and secure standard 4" (10,2 cm) flat or atrium drainage grates, and will fasten standard 1/4" (6,4 mm) flexible tubing. The grate retainer will house the basket weave canister. The grate retainer will also secure an optional pre-assembled hard-piping system consisting of bubbler, check valve, and nipple.

The basket weave canister will be a high-grade polymer rigid mesh cylinder 34" in length.

The optional pre-installed grate will be a 4" (10,2 cm) round grate constructed



#### How to Specify/Order:



with black structural foam with UV-resistant inhibitors.

The optional pre-installed bubbler will be a Rain Bird 1401 series pressure compensating bubbler (0.25 gpm, 0,2 l/s) with full circle trickle pattern. It will have a maximum 760-micron filter screen pre-installed ahead of the bubbler.

The optional pre-installed check valve will be a Rain Bird ACV-050 series check valve, field adjustable from 5' to 32' (1,5 m to 9,8 m) of pressure head, and factory adjusted to 12' (3,7 m) of pressure head.

The RWS-B, RWS-BC, RWS-BG and the RWS-BCG models will include



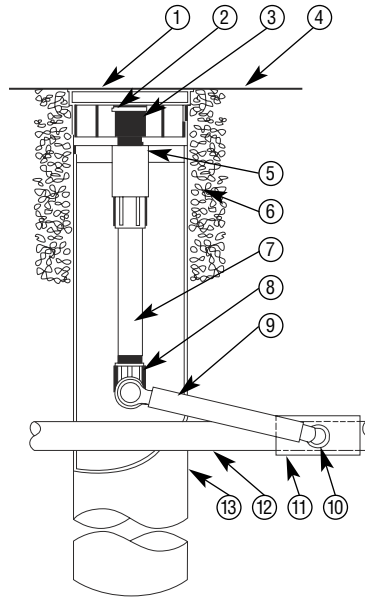
pre-installed swing pipe, spiral barb fittings, and a 1/2" nipple.

The pre-installed swing pipe will be a Rain Bird SP-100 series flexible black tubing constructed of virgin linear low density polyethylene material. The 12" (30,5 cm) tubing will have a wall thickness of 0.085" (2,16 mm) and nominal inside diameter of 0.490" (12,45 mm).

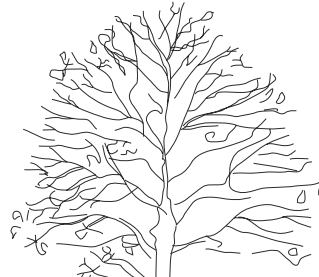
The pre-installed spiral barb fittings will be a Rain Bird SBFE and SBE series. The fittings will have a maximum operating water pressure of 80 psi (5,5 Bars) and 8 gpm (0,50 l/s), and provide a 1/2" (15/21) male NPT inlet for installation to lateral lines.

The pre-installed 1/2" (15/21) nipple will be Schedule 80 PVC construction.

The Root Watering System shall be as manufactured by Rain Bird Corporation, Glendora, CA.



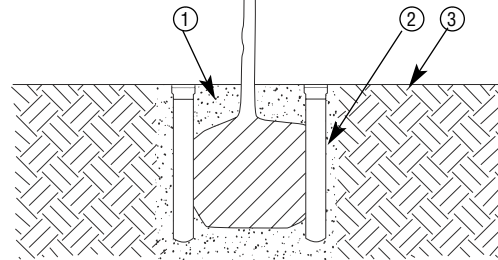
- ① 4-INCH GRATE
- ② BUBBLER
- ③ ROOT WATERING SYSTEM:  
RAIN BIRD RWS-BCG  
(INCLUDES BUBBLER, CHECK  
VALVE AND GRATE)
- ④ FINISH GRADE
- ⑤ CHECK VALVE
- ⑥ OPTIONAL PEA GRAVEL  
FOR SANDY SOILS
- ⑦ 1/2-INCH PVC SCH 80 NIPPLE
- ⑧ 1/2-INCH 90-DEGREE ELBOW
- ⑨ SWING PIPE, 12-INCH  
SWING ASSEMBLY
- ⑩ 1/2-INCH MALE NPT INLET
- ⑪ PVC SCH 40 TEE OR EL
- ⑫ LATERAL PIPE
- ⑬ 4-INCH BASKET WEAVE CANISTER



- ① OPTIONAL PEA GRAVEL  
FOR SANDY SOILS
- ② ROOT WATERING SYSTEM:  
RAIN BIRD RWS-BCG  
(INCLUDES BUBBLER, CHECK  
VALVE AND GRATE)
- ③ FINISH GRADE

NOTE:

POSITION UNITS EVENLY SPACED AROUND  
ROOT BALL. INSTALL PRODUCT WITH TOP  
EVEN WITH GROUND SURFACE.



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