

RedRock Stonewool Grow Blocks and Slabs: Hydration Best Practices



RECOMMENDED HYDRATION METHODS

RedRock stonewool products can be hydrated using several methods, depending on scale and setup. The goal is full saturation to achieve a neutral starting pH (around 5.5–6.5) and optimal water-holding capacity.

METHOD	DESCRIPTION
Soaking (Submersion)	Ideal for small batches of blocks or cubes. Submerge in a prepared solution for 30 seconds to 24 hours (longer for larger blocks). This method expels air bubbles effectively and ensures thorough wetting. Gently press down to remove trapped air but avoid compressing the media.
Hand Watering (Overhead)	Suitable for slabs or larger quantities. Pour solution evenly over the top surface using a water wand or hose with a water breaker attachment. Apply until saturation is achieved (see below). This mimics rainfall and promotes downward wicking.
Drip Irrigation	Recommended for commercial or automated systems. Use emitters to slowly and uniformly saturate stonewool. Run for 15–30 minutes (depending on flow rate) or until target runoff is reached. This method is efficient for slabs and prevents over-compaction.

For all methods, use room-temperature solution (18–22°C / 65–72°F) to avoid shocking the media.

PRODUCT OVERVIEW

RedRock stonewool grow blocks and slabs are high-quality stone wool (rockwool) growing media designed for hydroponic and soilless cultivation. These inert substrates provide excellent water retention, aeration, and root support for plants like vegetables, herbs, and ornamentals.

Proper hydration is essential before planting to stabilize pH, remove air pockets, and ensure even moisture distribution. Failure to hydrate correctly can lead to uneven wetting, pH imbalances, or poor root establishment.

WATER QUALITY AND PREPARATION

Use clean, preferably reverse osmosis (RO) or distilled water to minimize contaminants. Initial hydration solution should include a low-strength nutrient mix (EC 0.5–1.0 mS/cm) to buffer the media.

- **pH Adjustment:** Stone wool naturally has a high pH (7.0–8.0). **Adjust the hydration solution to pH 5.2–5.8 using phosphoric acid or a pH down product. Test and adjust the solution before use and monitor runoff pH—it should stabilize near 5.8–6.2. Avoid plain tap water without adjustment, as it may not neutralize the media effectively.**
- **Avoid:** High chlorine tap water (let stand 24 hours if using) or hard water with excessive minerals (> 150 ppm), which can cause nutrient lockout.

ACHIEVING SATURATION AND RUNOFF

Aim for **full saturation** where the media holds 70–80% of its weight in water, providing a balance of moisture and oxygen.

PRODUCT TYPE	WATERING / SATURATION GUIDELINES
RedRock Blocks/Cubes	Saturate until no air bubbles escape and the substrate feels heavy and uniformly damp. Target 10–20% runoff (e.g., for a 1L block, apply 1.1–1.2L solution).
RedRock Slabs	Flood from the top until water drains from the bottom slab openings. Achieve 15–25% runoff to flush excess salts and ensure even horizontal wetting. Slabs hold more water, so monitor for pooling. It is a common practice to flood the slab, let it sit, and then cut drainage slits to flush.

Excessive runoff (>30%) wastes solution; insufficient (<10%) leaves dry spots. Weigh dry vs. saturated media if precision is needed (saturated weight ≈ 4–5x dry weight for blocks).

WAITING PERIOD BEFORE PLANTING



After hydration:

- **Allow 2–4 hours of drainage for blocks to let excess water exit while retaining moisture.**
- **For slabs, wait 4–24 hours to stabilize and equalize moisture across the slab.**
- **Plant when the media is moist but not dripping—surface should feel like a wrung-out sponge. Do not let it dry out completely, as re-wetting dry stone wool is challenging.**

Test readiness by pressing a finger into the media; it should yield without releasing water.

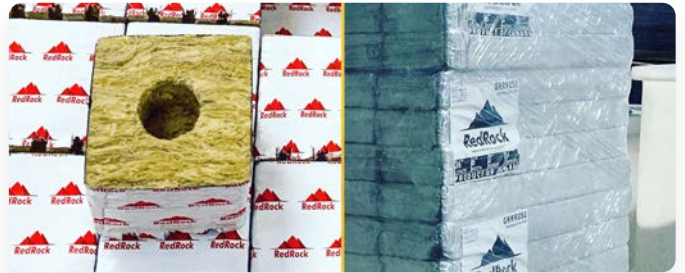
GET TO KNOW THE PRODUCT



It is important to have your team document the following:

- **DRY WEIGHT** of the product
- **SINK TEST** How long does it take your grow block to submerge when placed on water
 - **Do this for several blocks documenting sink time to check uniformity**
- **WET WEIGHT** of the product (Weigh once dripping has stopped)
- **MONITOR DRY BACK** due to free drainage and document Water Holding Capacity (WHC) over time to set expectations
- **DETERMINE IRRIGATION SETPOINTS** to establish initial irrigation, follow-up feedings, duration and frequency, when to reach saturation, total irrigation volume, runoff irrigation volume.

ADDITIONAL TIPS



- **Storage:** Keep unused products wrapped and dry in a cool, dark place. Hydrate only what you'll use within 1–2 weeks.
- **Troubleshooting:** If media dries unevenly, re-soak partially. For pH drift, flush with fresh solution. Try adding a wetting agent if all else fails.
- **Environmental Factors:** Hydrate in a shaded area to prevent algae growth. In humid environments, ensure good airflow to avoid mold. If algae or mold develops use a light H₂O₂ and PPA solution such as Kchemical PeraShield 5.6% or BioSafe ZeroTol 2.0. Check label instructions and compatibility prior to use.
- **Sustainability:** Reuse hydration runoff if pH/EC is stable. Discard if contaminated.

Following these practices ensures optimal root development and vigorous plant growth as well as consistent and uniform harvests. For custom applications or troubleshooting, contact RedRock support.