



GRODAN STONE WOOL CHARACTERISTICS

What Is Grodan Stone Wool Made Of?

The main component of this inert substrate is in its name—stone wool is made from sustainably sourced basalt and chalk rock. Here's a quick rundown of how the stone is transformed into an airy “wool” that is ideal for root development and is 1/10 of the weight of a bag of potting soil:

First, the raw stone material is superheated to almost 3,000 degrees Fahrenheit. The molten rock is injected with air and spun into a fibrous yet light consistency resembling spun sugar. The material is treated with a hydrophilic binder to facilitate liquid absorption, which ensures the even distribution of water and nutrients upon use.

The stone wool is then cut into a graduated series of sizes and shapes—from small-sized starter plugs to larger Gro-blocks and slabs - each product is designed for different stages of crop production. The finished products are wrapped in a special film that blocks UV light and limits the growth of algae on the substrate surface.

The result is a unique, uniform, and inert growing medium that is sterilized of pathogens, including mold and mildew, free of pests, and boasts plenty of pore space for roots to grow and access water, nutrients, and oxygen. Clean stone wool is designed to retain water and air while promoting healthy drainage fertilizer balance from top to bottom - unlike soil-based media that are prone to compaction and can become hydrophobic (water-repelling) if allowed to dry out.





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How Does Stone Wool Differ From Other Growing Media?

The main difference between stone wool, coco coir, peat, and soil-based media is that stone wool is a wholly inorganic mineral-based substrate, not carbon-containing organic matter. It's made of natural stone, not coconut husks, bog-sourced peat moss, or the composted wood byproducts found in most potting soils.

Because stone wool is heated to such extreme temperatures (about 3,000 degrees Fahrenheit) during the manufacturing process, it's a hygienic, clean growing media free of pathogens and pests. It's also fully compatible with hydroponic and automated growing systems and crop-steering techniques that rely on precise irrigation timing and water content control.



Stone wool is the best-growing medium for indoor cultivation environments where the grower controls every aspect of the plants' lighting, nutrition, and hydration.

Stone wool products are designed for precision growing and are fully compatible with the sensors and automation tools utilized for data-driven cultivation strategies, offering unparalleled opportunity for optimal root-zone management.