

Pumice in Green Roof Systems



Green roof systems are becoming increasingly popular for commercial, governmental, and private residential buildings for a number of reasons:

1. **Environmental** - In urban areas they help purify the air by converting carbon dioxide into oxygen and by trapping pollutants.
2. **Building performance** - A green roof system helps insulate a building during both heating and cooling season, which for large buildings can mean considerable savings.
3. **Political** - In the current international climate, it is good practice to actively promote a green image.

With this increase in popularity the choice of substrate has become more and more important. Pumice is a natural, lightweight, volcanic aggregate widely used in horticulture, plant cultivation, and green roof systems.

The porous nature and rounded particle shape of this material enables optimum drainage, improves soil aeration and promotes strong root growth making it an ideal substrate. This allows for frequent watering without reducing the quantity of air available to the roots.

The insulating properties of lightweight pumice make it ideal for roof systems by helping reduce heating costs in winter and assisting with cooling during summer. Also this property increases the temperature of the plant food favouring plant nutrition and growth.

The absorbency of pumice allows it to retain moisture and nutrients, and then gradual release the moisture thus enables a considerable reduction in irrigation time.

Pumice mixed with topsoil helps maintain physical and structural stability, preventing compaction and improving exploited/poor soil performance.

The low density of pumice allows plant displays to be installed on roofs and interior structures that otherwise could not support the additional weight of plants and soil.

Pumice requires very little if any maintenance, which is ideal for roof systems where regular access is either difficult or not practical.

The use of pumice in green roof systems provides:

- **Optimises drainage**
- **Retains moisture and nutrients**
- **Promotes strong and evenly distributed root growth**
- **Improves soil aeration**
- **Acts as a soilbuilder**
- **Improves exploited/poor soil performance**
- **Long life growing potential**
- **Environmentally friendly**

CR Minerals provides a complete line of pumice products from 1-¼ inch x ½-inch decorative lightweight landscaping rocks to granular and fine particles materials.

To place an order or obtain additional information, please contact CR Minerals at 505-428-2940, or contact your local distributor