

# ARCHITEK ASSURED GREEN ROOFS

## GROW MEDIUM

The proper blend of high quality organic matter and tough horticultural aggregates, Architek's Grow Media have proven the test of time in green roofs most challenging environments. The use of engineered grow media in all green roof assemblies is critical in assuring the functionality and performance of green roof systems over the long-term. Using low-grade top soil and other fine organic materials will lead to the geo-textile layers being compromised and render the drainage layers non-functional. This is the leading factor to green roof failures. Hence the GRP team at Architek recommends using FLL standard grow media on all green roof build-ups.

### KEY FEATURES:

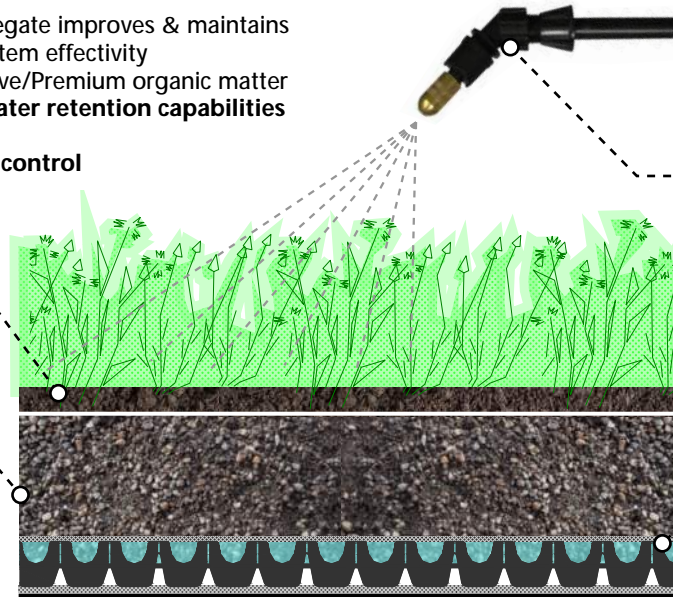
1. **Drainage** - Mineral Aggregate improves & maintains greenroof system effectivity
2. **Microorganisms** - Effective/Premium organic matter
3. **Maximum porosity & water retention capabilities**
4. **Blower Truck Suitability**
5. **Constant care & quality control**

### Optional Compost Top Layer

- Beneficial fungi
- Beneficial Bacteria

### Architek Grow Media

- Lava Rock
- Pumice
- Sand
- Organic Matter



### Microorganism Spray

- Complete soil food web
- Enhanced/Drainage
- Enhanced drought resistance
- Nutrient Cycling

### Greenroof Build-Up

- proper Grow media sustain the effectiveness of the build up system

Properties	Extensive Mix	Semi-Intensive Mix	Intensive Mix
Vegetation	Mix of Sedums / Plugs / Perennials	Mix of Sedums / Plugs / Flowers & Herbs	Shrubs, Bushes & Trees
Composition	Mineral Aggregates, Blond Peat*, Sand & Compost	Mineral Aggregates, Blond Peat*, Sand & Compost	Mineral Aggregates, Blond Peat*, Sand & Compost
Granulometric Distribution	2/8 mm - 2/12 mm	4/8 mm - 8/16 mm	4/8 mm - 16/32mm
Mineral Aggregate Total Volume	55%-70%	55%-70%	55%-70%
Organic Matter Total Volume	18%	25%	35%
Dry Bulk Density	800-900 kg/m3	800-900 kg/m3	800-900 kg/m3
Wet Bulk Density	1100-1200 kg/m3	1200-1400 kg/m3	1300-1500 kg/m3
Water Permeability	0.001-0.12 cm/sec	0.001-0.12 cm/sec	0.0005-0.05 cm/sec
Volumetric Water Retention	35-60%	40-60%	45-60%
Water Requirement	low	medium	high
pH Level	6.0-8.5	6.0-8.5	6.0-8.5
Salt Content	<3.5 g/l	<3.0 g/l	<2.5 g/l
Nitrate + Ammonium (mg/l)	≤ 80	≤ 80	≤ 80
Phosphorus (mg/l)	≤ 200	≤ 200	≤ 200
Potassium (mg/l)	≤ 700	≤ 700	≤ 700
Magnesium (mg/l)	≤ 200	≤ 200	≤ 200

\* **Note:** Blond Peat used in interior hardiness zones for water retention

