

GOLF COURSES AND LAWNS

Superior Turf Management All Around The Course

AxisDE or Axis Ceramic: All-natural solutions for managed, green golf courses. Improve the performance of your greens and fairways and enjoy immediate benefits for turf establishment by incorporating 5% - 10% of Axis (by volume) into the root zone. Permanent performance means water savings, improved infiltration rates, control of excess water, reduced compaction and tolerance of recycled and salty water. Axis conforms to USGA particle size specifications and has negligible breakdown over repeated freeze and thaw cycles.

Leading golf course architects around the world have found Axis to be indispensable for top-level golf courses, especially in places with limited rainfall or salty irrigation water. Many golf courses also use Axis to treat walk-off areas, tees and other turf areas subject to heavy foot and cart traffic. Additionally, Axis is widely used in flower beds, as backfill around new plantings and in container plants such as those located on patios and entry areas.

The same benefits Axis brings to professional golf courses can also help the lawn at your business or home. Axis allows air and water to penetrate compacted clay soil and enable deep roots to grow. In sandy soils, Axis adds much-needed water holding capacity and makes that water available back to the plants as needed.

In both cases, you can water more deeply and less often and also make the most of any natural rainfall. As a result, customers have documented water savings of 30% and more by using Axis on their lawns.

LANDSCAPING AND GARDENS

Both Axis products reduce compaction and increase water and air permeability of the soil. These products increase plant available water, firm up soggy soils, loosen hard-to-work soils, provide better drainage and aid in nutrient transfer. Independent research has shown that 93% of the water absorbed by Axis is available to the plants, more than TWENTY TIMES higher than other soil amendment products. In areas with inadequate natural rainfall and limited water available for irrigation, Axis products provide a way to achieve a consistent green turf with less irrigation.

Axis benefits for landscaping:

- Improves root growth and microbial activity
- Resists compaction
- Balances air and water in soil
- Increases infiltration of nutrients
- Buffers soil temperature
- Increases plant available water
- Improves drainage
- Stable under temperature extremes
- Removes undesirable salts

SPORTS TURFS

With heavy play and practice schedules, soccer and football fields easily become compacted, resulting in worn or bare turf areas. By adding porosity to the soil with Axis, even the hardest native soils can be amended to allow turf to recover more quickly and respond faster to regular maintenance. Additionally, improved soil allows fertilizers and pesticides to be more effective, sometimes at lower rates, to produce a better playing surface.

World Cup Quality Soccer Fields

The J. Village World Cup Soccer Training facility in Japan is composed of 11 soccer fields. Each was constructed with Axis. Prior to construction, Axis was chosen as the most efficient and cost effective amendment. The result is one of the world's largest single applications of inorganic soil amendments.

Axis is also used in professional soccer stadiums across Europe, including: Hamburg, Germany; Lens, France and several others. More are being added each year as turf managers discover the benefits of Axis for high traffic environments and fast grow-in.

Football Fields

Axis is designed to help football fields hold up to the toughest conditions of daily football practice. Comparative soil analysis showed it to have significantly higher available water and infiltration rates. Axis showed a significant cost savings, while demonstrating superior soil performance.

ROOFTOP GARDENING

Rooftop gardening is an attractive and energy-saving alternative to a conventional rooftop. Rooftop gardens can keep buildings cooler, save energy, extend the useful life of the roof and add beauty and usable space. Elaborate rooftop gardens are where the garden actually becomes the roof. Specially designed layers separate the garden from the "hard" roof, provide drainage, supply nutrients and even add contours. This type of rooftop garden is referred to in the industry as a "green roof system."

Axis has the right properties necessary for beautiful rooftop gardens:

- Low bulk density 25 lbs. per cubic foot for DE and 38 lbs. per cubic foot for Clay
- Extremely porous 82% porous to maintain infiltration and drainage
- Reduces irrigation High percentage of plant available water
- Does not decompose Soil volumes installed remain constant
- Transfers air & water Plants respond with more vigor and rootmass
- Distributes moisture evenly Axis increases hydraulic conductivity
- Blends easily with other soil components Works great with sand & organics





"I had twelve solid weeks of NFL players practicing on my fields, with not one bare spot at the end of the season. Why would anybody in their right mind choose anything other than Axis in their root zone mix... it's a no brainer."

Spin Martin, Head Groundskeeper, University of Tulsa

(quote used with permission from our distributor, Envirotech)

Talk to your distributor or EP Minerals sales representative today about AxisDE & Axis Ceramic. For more information, call (800) 366-7607 or visit www.epminerals.com.

