



# TURF GRADE ESCOTT ZEOLITE

**PERMANENTLY IMPROVES TURF SOILS AND TURF QUALITY**

**Enables better turf growth through water & nutrient retention permanently**

**Improves Cation Exchange Capacity (CEC) of sand soil profiles. Attracts & retains nutrients for use by turf grasses**

**Holds & slowly releases water & nutrients as the turf demands. Reduces nutrient loss through leaching**

**Improves the value gained from fertilisers applied and saves money on fertiliser**

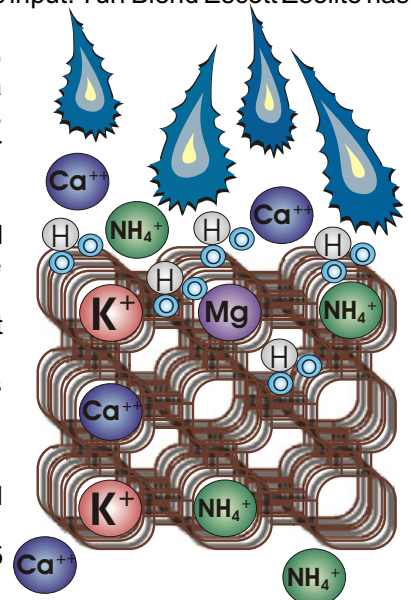
**Improves water retention and capillary hold higher in the profile but does not affect hydraulic conductivity**

**Does not break down in the soil providing permanent benefit**

Sand profiles in turf grass applications have a very low cation exchange capacity and do not hold water or nutrients very efficiently. The free draining nature of the profile leads to leaching of nutrients away from the root zones of the plants. Turf Blend Escott Zeolite prevents this by holding water in the profile and attracting and holding nutrients because of its large internal pore structure and cation exchange capacity. Escott Zeolite holds 26% of its volume in water and has a particular cationic affinity to attract and hold ammonium (NH<sub>4</sub><sup>+</sup>) the key form of nitrogen that provides quality deep green leaf colour and potassium, calcium for cell strength and magnesium. Once included in the profile Escott Zeolite will recharge when fertilisers are applied and release nutrient as plants demand creating a smooth longer term availability of nutrients. ATRI Research concluded that fertiliser costs could be reduced by 67% to maintain turf quality with a 5% Zeolite inclusion.

Premium Turf Blend Escott Zeolite is sized at 0.5 - 1.6mm and Sports Turf 0.5-2mm to mix with sand and ensures that high amendment rates will not affect the hydraulic conductivity of soils nor will it lead to the accumulation of sodium. \*Handreck & Black Third Edition. The Standard Ag & Hort grade 0.5-2mm is also been used in turf very effectively and more economically.

Turf Blend Escott Zeolite is a natural mineral mined in Australia (part of a group of hydrated aluminosilicates) and therefore an organic input. Turf Blend Escott Zeolite has a very open framework with a network of pores with an internal surface area of 450m<sup>2</sup>/gram which trap and exchange valuable nutrients. It carries a negative charge balanced by freely moving cations with positive charges. This provides an ideal trap for positive cations like nitrogen rich ammonium; potassium, calcium and magnesium which are then released when demanded by plants. Turf Blend Escott Zeolite increases the Cation Exchange Capacity (CEC) of your turf soil and has a CEC of meq/100g of 120. Turf Blend Escott Zeolite is not acidic. In fact it is marginally alkaline and its use with fertilisers can help buffer soil pH levels thus reducing the need for lime applications.



Premium Turf Blend Escott Zeolite has been used successfully on golf courses, bowling greens and sports turfs around Australia the world for over 15 years and will improve the performance of your turf.



**Kensington Oval Barbados**



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# TURF GRADE ESCOTT ZEOLITE

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**Premium Turf Grade Escott Zeolite 0.5-1.6mm** Bulk Density 1.13 g/cc  
**Sports Turf Grade Escott Zeolite 0.5-2mm** Bulk Density 1.22 g/cc

Graded to suit mixing with sand, Premium Turf Grade Escott Zeolite is matched perfectly to sandy soils, so it won't change the hydraulic conductivity of soils, even at high amendment rates. Escott Turf Zeolite is one of the hardest zeolite's in the world (7 Mohs) and won't crush in the profile and block drainage. It is naturally loaded with calcium, magnesium, potassium and is low sodium so it will not damage grass. It can exchange and hold about 2% of its own weight in pure ammonium. Around 23 Kg can hold the Nitrogen in 1 Kg of urea

- Cation exchange capacity of 120meq/100g
- pH of 7.6
- Total Porosity 42.4%
- Micro porosity 26.6%
- Macro porosity 15.8%
- Water holding by Volume 26.6%
- Water holding by Weight 21.8%

### Construction with zeolite

Incorporate at 5-10% of sand profile in the root zone of turf and greens

### Renovation at Coring

As Premium Turf Grade Escott Zeolite does not break down over time, the CEC of sandy soils can be gradually improved by mixing with sand at coring. Mix zeolite at 10-20% with sand.

### Top Dressing

Apply at 200g/m<sup>2</sup> ( 2 tonnes per hectare)

The efficiency of NPK fertilisers can be increased by the inclusion of Premium Turf Grade Escott Zeolite at 10%-20%. Escott Zeolite will also remove ammonia odour from organic fertilisers.

### Used Around the World

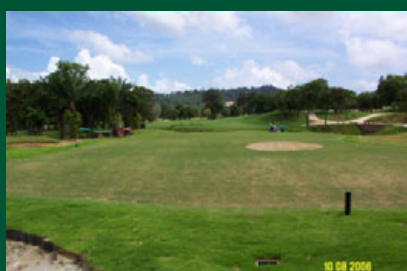
Escott Premium Turf & Sports Turf Zeolite has been used successfully around Australia for fifteen years and internationally on projects, including

- The Fiji Marriott Golf Resort
- The Shek O Country Club in Hong Kong
- The Lakes Course at Blue Canyon Thailand
- The Kensington Oval in Barbados

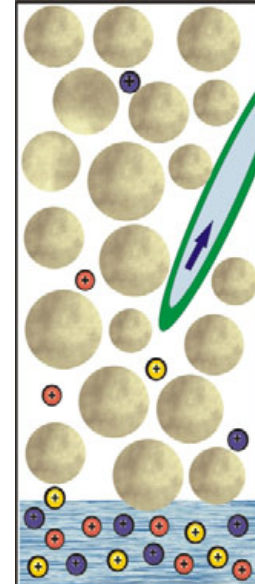
Ask us how we can help save you water and fertilisers for world class results with less inputs



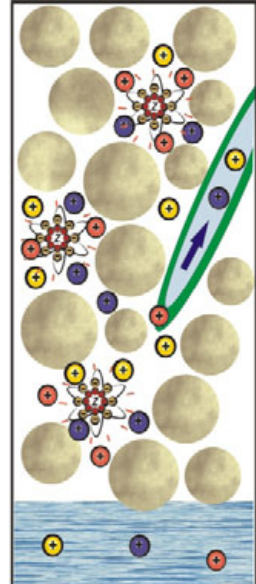
Blue Canyon: Lakes Course Thailand



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Without Zeolite



With Zeolite

### Comparison of soil amendment

Soil Amendment	Cation Exchange Capacity	
	By Weight meq/per 100g	By Volume meq/litre
Sands	<5	<50
Clay Soils	10 - 30	100 - 300
Bark/Sawdust	10 - 20	50 - 100
Organic Manures	20 - 40	100 - 200
Peat	100 - 150	200 - 300
Escott Zeolite	120	1920

When compared by volume required for CEC improvement Escott Turf Zeolite is unparalleled.