



The essential guide to Top Dressing



understanding top dressing

What is top dressing?

It is the application of a sand or blend of sand, silt, clay and compost to an established lawn or playing surface.*

The exact composition of the dressing will depend on the purpose and the type of surface on which it is to be used.

10 reasons why we top dress

To restore a level surface

To increase soil aeration

To change the texture of the soil, especially the particle size distribution

To improve drainage

To repair divots

To protect newly seeded areas and to encourage germination

To improve grass health

To improve drought tolerance

To control and reduce the amount of thatch (OM) in the rootzone

To fill in joints on newly laid turf

* Source: **Sports Turf & Amenity Grassland Management**, Stewart Brown 2005

when & how to apply topdressing

In a sports turf environment, topdressings are traditionally used at the end of the playing season as part of the annual maintenance programme. Some clubs/venues, however, will top dress on a more regular basis throughout the season to repair badly worn areas and/or to improve the drainage in specific areas.

Application of a topdressing can be carried out by hand or machine depending on the size of the area to be treated

Application by hand followed by brushing in. Brushing gets the topdressing into the base of the grass sward.

Mechanical top dresser

The pitch of the rotors applying the dressing can be set to ensure the dressing reaches the base of the grass sward, dispensing with the need to 'brush in' post-application.

A quick way to identify your soil type

A quick way to tell what type of soil you have is to wet your thumb and fore finger and rub some of the topsoil between them:



Sandy soil has a gritty element – you can feel sand grains within it, and it falls through your fingers. It cannot be rolled to make a sausage shape. If it is not a coarse sand and perhaps a sandy loam it may stick together better



Clay soil has a smearing quality, and is sticky when wet. It is easily rolled into a long thin sausage and can be smoothed to a shiny finish by rubbing with a finger. If it is not a heavy clay it won't get quite as shiny and be as easy to make a sausage



Pure silt soils are rare, especially in gardens. They have a slightly soapy, slippery texture, and do not clump easily

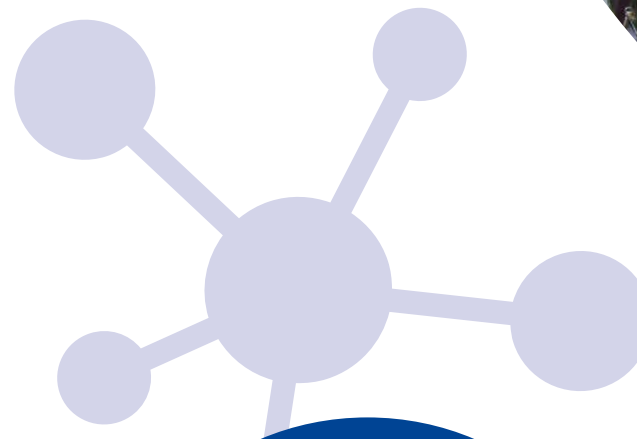
Topdressing testing

Top dressing is a critical turf maintenance operation and to obtain its full benefit the right type of topdressing should be used. One of the key factors in determining what type of topdressing material should be used is the construction profile of the sports surface to be top dressed.

For sand-based profiles, the recommendation is that the topdressing material should be compatible with the existing rootzone, based on its particle size and hydraulic properties. For soil-based profiles, a wider choice of topdressing materials can generally be chosen.

The choice of what topdressing material to use, however, should be based on the turf maintenance objectives and compatibility with the underlying rootzone or soil.

It is recommended that the existing soil or rootzone profile is assessed, preferably by an appropriate soil testing laboratory, to ensure that an appropriate topdressing is selected. Therefore, this essential testing is often carried out as part of a wider turf autonomic assessment, that not only assess the textural class or particle size of the material, but also measures the soil chemical environment.



topdressing testing & analysis



Testing of in situ soil and rootzones and, in particular, topdressing materials typically comprises the following variables:

- **Particle size distribution** - the size (diameter) of the individual components making up the material.
- **Soil pH** - this describes how acid or alkaline the material is based on a 1-14 scale, where 1 is extremely acidic, 14 is extremely alkaline, and 7 is neutral pH.
- **Electrical conductivity** - this characteristic is used to measure salinity of a soil and is based on the relative amount of dissolved nutrients in a material.
- **Organic matter content** - typically measured as percentage by loss on ignition, where organic materials are burnt off at high temperature in an oven.
- **Plant available nutrients** - measurement of nutrients such as K, P, Ca, Mg etc that may be available to the grass plant.
- **Contaminants or phytotoxic elements** - elements or compounds that may be undesirable to humans or plants, such as heavy metals like As, Cd, Ni etc.
- **Presence of physical contaminants** - this usually involves measuring the presence of undesirable foreign objects in the material such as glass, stones, twigs, plastic etc.

“ Testing should be undertaken by a reputable laboratory to recognised test methods ”



terminology

Explanation of relevant terms



Aeration

Penetration of the soil profile to allow soil air to be replaced by air from the atmosphere, resulting in improved drainage and deeper rooting

Anaerobic soil

Soil that contains an inadequate amount of oxygen

Bulk Density

The weight of a certain volume of soil

Clay

Particles with a diameter of less than 0.002mm

Hydraulic conductivity

The rate of water flow through the soil profile

Organic Matter

Material within the soil that consists of decaying and decayed organic remains of plants and decaying soil animals

Sand

Particles with a diameter of 0.063mm - 2mm

Silt

Particles with a diameter of 0.002mm - 0.063mm

Soil

A blend of sand, silt, clay and organic matter

Soil porosity

The amount of pore spaces within a soil. This is primarily influenced by the soil structure

Soil structure

The arrangement of the soil particles and aggregates

Soil texture

The different proportions of sand, silt, clay and organic matter

Thatch

Layers of fibrous material found in turf

Type of aeration

Slit tines / Hollow cone tines / rotary blades

Vertidrain

A pedestrian or tractor-powered implement used for aeration. It comprises a series of hollow or solid tines that punch into the ground causing shattering of the soil profile to aid drainage and root growth

Water filled porosity

The amount of pore spaces within a soil that are filled with water

Water retention

The holding onto water by a soil

Selecting the right topdressing

When selecting a topdressing you should consider the following:

Why are you top dressing?

Do you want to primarily improve drainage?

Do you want to improve the health of the turf?

Choose a dressing that is compatible with the existing soil type

If in any doubt ask an independent agronomist or consultant



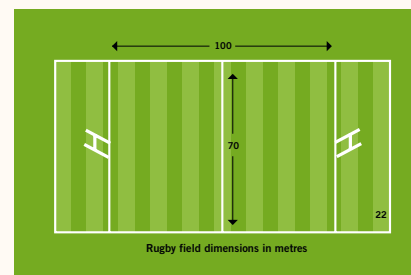
For best results topdressing should be applied as part of a routine maintenance programme during and at the end of the season

A good maintenance programme should include fertiliser application, aeration and over-seeding.

Further advice on maintenance plans is available from the IOG or STRI.

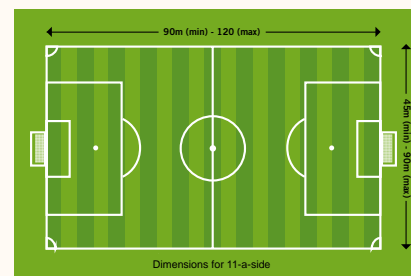
How to calculate what you need?

Typical measurements



Rugby Pitch

- Length 140m
- Width 70m



Football Pitch

- Length 90m - 120m
- Width 45m - 90m

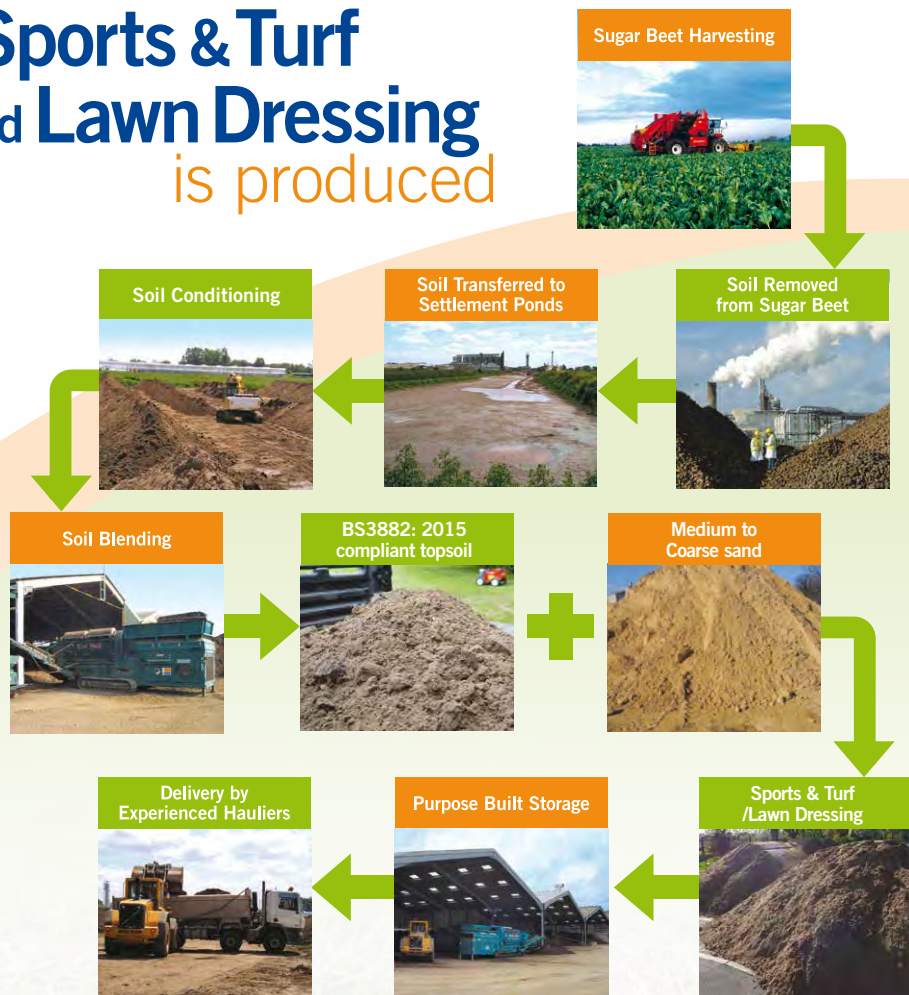


Measure the dimensions of the area to be treated and multiply the Length x Width to get the square metres to be treated.

Multiply the square metres of the area to treat by the square metres rate you wish to apply. Divide this total by 1,000 to give the tonnes needed.

Typical rates of application are:
 Rugby/Football - 50 t to 100 t/pitch
 Golf Greens - 15kg/m²
 Fairways and lawns - 10kg/m²

>> How British Sugar Sports & Turf and Lawn Dressing is produced



STRI Statement

Soil scientist Dr Christian Spring BSc (Hons), PhD:

“ Sports & Turf is suitable for use on natural soil constructions and offers the advantage of providing nutritional benefit to the turf, as evidenced by turf green-up seen on test plots in Autumn 2016 ”



INSTITUTE OF GROUNDSMANSHIP

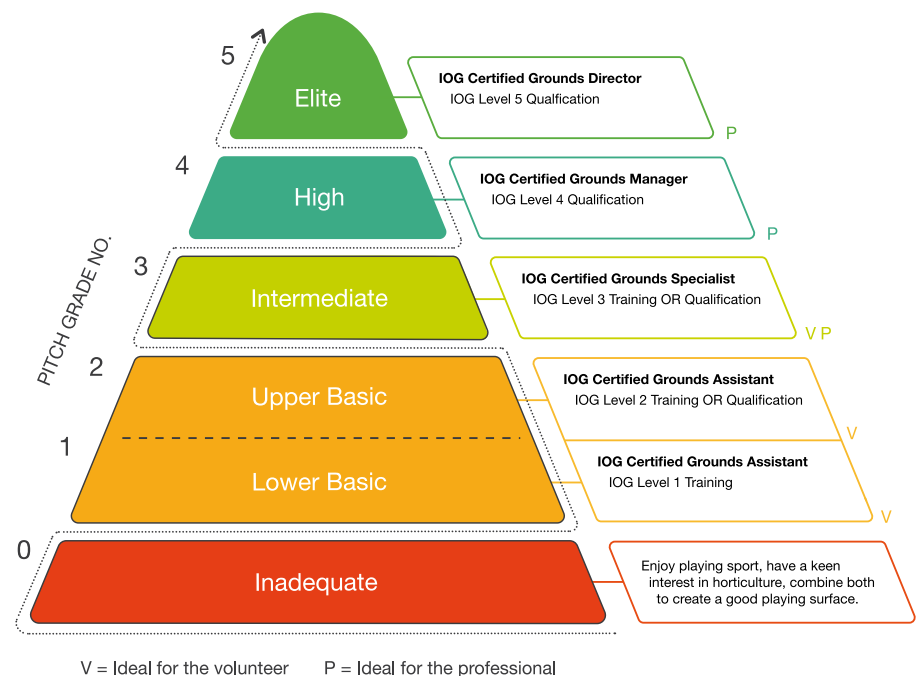
Pitch Grading Framework

The objective of the IOG pitch grading framework is to raise playing surface standards 'from the Ground Up'

The framework will benchmark the quality of playing surfaces in the UK – complemented by an education framework to help those responsible to continually improve standards.



Matching education to benchmarked pitch standards



Testimonials

The Peterborough Football & Sport Development Foundation (PFSDF)

Nene Valley Community Centre, Peterborough

Sports&Turf

Project details:

Supplied 80 tonnes of Sports & Turf and spread by local contractor Mel Pooley.

Sports & Turf was spread post over-seeding, which was carried out using a disc slit seeder to ensure good soil to seed contact. The Sports & Turf has been applied to open up the pitches' soil profile to improve drainage. Applying post seeding will also protect the seed from birds and help seed germination.

Sports & Turf is a blend of 80% medium and coarse sand with 20% British Sugar TOPSOIL. The sand is predominantly medium to coarse (67%) and sub angular in shape, which assists free drainage and promotes good integration into the surface of the turf.

The soil within the blend contains both phosphorous and potassium, which contributes to soil fertility and encourages healthy growth.



“ Mel reported that the **dressing flowed through the machine well and spread evenly** ”

LawnDressing

British Sugar TOPSOIL's Lawn Dressing is a high quality, sand based, multi-purpose dressing, designed for use on lawns.

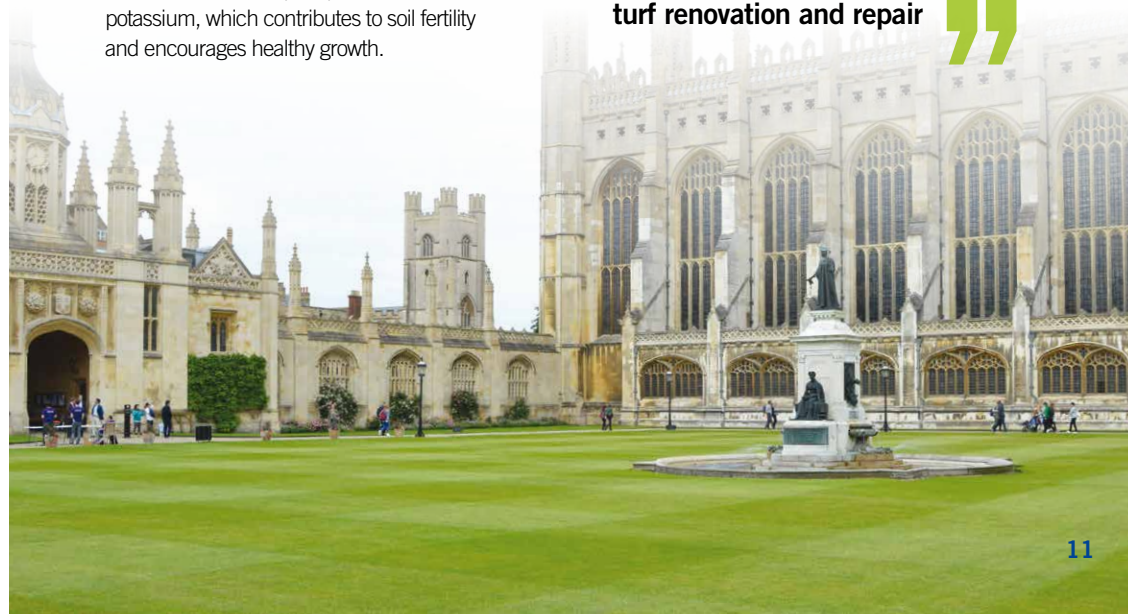
Lawn Dressing is a blend of 80% medium and coarse sand with 20% British Sugar BS3882:2015 compliant topsoil. Lawn Dressing's combination of specialist sand and soil is ideal for grass establishment and maintenance.

The sand is predominantly medium to coarse and sub angular in shape, which assists free drainage and promotes good integration into the surface of the lawn. The soil within the blend contains both phosphorous and potassium, which contributes to soil fertility and encourages healthy growth.

King's College, Cambridge

Senior Horticulturist at King's College, Cambridge – Steve Coghill – has been carrying out his own trials with Lawn Dressing on the formal lawns that grace the College grounds. Areas that had suffered from compaction and poor drainage received 40 tonnes of Lawn Dressing in the autumn of 2016 and Steve is delighted with the results so far:

“ British Sugar TOPSOIL's Lawn Dressing is a **fantastic dressing, promoting growth and helping improve drainage.** It is also an **excellent substrate for sports turf renovation and repair** ”



TOPSOIL

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More information can be found at:

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