

GRASSHOPPER®

SAND-FILLED SYNTHETIC GRASS

Charles
LAWRENCE
SPORTS SURFACES



Charles Lawrence Surfaces Ltd offers a wide range of sand-filled synthetic grass pitch systems under the **Grasshopper®** brand, designed for hockey, football and other sports including tennis.

HOCKEY

Sand-filled synthetic grass laid on a porous rubber shockpad has become the surface of choice for many school, university, club and community hockey pitches because of its economic initial price, its consistent playing characteristics, its weather-resistance, its low maintenance needs compared to natural turf, and its ability to withstand many hours of continuous play.



Sand-filled surfaces are approved by the governing body of the game, the FIH (Fédération Internationale de Hockey), for matches up to international level apart from world-level competitions and qualifying tournaments. For clubs requiring an FIH-approved pitch, Charles Lawrence Surfaces Ltd offers two FIH-certificated sand-filled surfaces to complement its specialised unfilled and sand-dressed hockey surfaces. These are backed by many other surfaces designed to meet the varied needs of school and community buyers.

FEATURES & BENEFITS

Very intensive level of use while retaining top-quality playing characteristics.

Fast-draining carpet surface playable in virtually all weathers.

Relatively low initial cost combined with a very low maintenance requirement.

Comfortable cushioned surface with secure foot grip minimises risks of injury.

Engineered base using civil engineering 'best practice' provides stability and long life.

Multi-purpose options give flexibility and maximise economic return.

GRASSHOPPER® SAND-FILLED SYNTHETIC GRASS

FOOTBALL

The benefits for football are similar. Used for school and community pitches, sand-filled synthetic grass offers consistent, enjoyable play despite very intensive use in all but the most severe winter weather. Dual-purpose pitches, quickly convertible between hockey and football and usually marked with two sets of permanent play lines, can be built to order.

STABLE AND DURABLE PITCH SYSTEMS

Grasshopper® sand-filled pitches are built on an engineered base consisting of one or two courses of porous macadam laid on foundations of crushed rock. A continuous porous rubber shockpad, formed in situ and usually 15mm thick, is then laid over the macadam by a specialist paving machine. Finally the synthetic grass carpet that forms the playing surface is laid over the shockpad and filled with graded silica sand. This form of construction gives a durable, stable, fast-draining pitch which is comfortable and secure to run on and produces carefully calculated ball/surface and player/surface interactions.

THE CHOICE OF CARPET

The carpet is the main variable within the system. All carpets are manufactured for us by approved suppliers under our ISO 9001:2000 Quality management System. We offer a variety of yarn styles and a choice of pile lengths including 19mm and 23mm. The shorter pile lengths are suitable for hockey and tennis, whilst the longer pile lengths are suitable for hockey and football. The yarn styles are polypropylene for durability and economy, and polyethylene for additional player comfort and performance.

Pile Carpet	Yarn	Pile		
		Length (mm)	Density (stitches/m ²)	Weight (g/m ²)
Grasshopper® HF23P (FIH)	PP	23	18,900	940
Grasshopper® HF23L	PE	23	18,900	1000
Grasshopper® HT19P (FIH)	PP	19	21,420	850
Grasshopper® HT19L	PE	19	21,420	920

please note values are approximations only and are subject to design change.

TENNIS

For tennis, a dual-purpose tennis/hockey surface can be supplied, which is also suitable for football. The tennis playing characteristics are similar to those of our Grasshopper® range of tennis surfaces.



MAINTENANCE & RENEWAL

Routine Maintenance:

Regularly remove loose debris and clean away deposits. Brush or drag pitch regularly to redistribute sand and prevent compaction. Inspect surface annually to monitor sand levels and for growth of moss or weeds.

Professional Maintenance:

Power grooming every few months will clean the surface layer of sand and hinder moss growth. Apply moss/weedkiller as necessary. Contra-brushing may be beneficial every 1-2 years. after typically 5-7 years, rejuvenate the pitch: this patented process removes dirt filtered out by the carpet and sand, restoring porosity and playing characteristics. After typically 10 or more years, renew the carpet on the existing porous shockpad and engineered base.

