

# SOCCER



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# INNOVATION IN ARTIFICIAL GRASS

## Natural grass as a reference point

A good natural grass pitch is actually the ideal surface for soccer players. The mission before Happy Feet was therefore clear: the artificial grass must resemble natural grass as closely as possible. The result: we have succeeded in developing a turf with which the ball behaviour remains good in the longer term and on which the player feels at home. This was achieved by combining the good characteristics of the monofilament polypropylene (PP) fibres with those of the fibrillated polyethylene (PE) fibres and improving the substructure.

## Innovative artificial grass

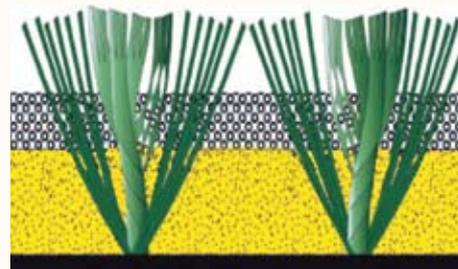
At the core of the innovation is the development of a monofilament PE fibre to which a fibrillated PE fibre is added using a special twining technique. The new twine has a dtex of no less than 15,000. Due to its great thickness, it is very UV resistant. The combination unites the benefits of two types of fibre. Polyethylene (PE) is preferable in artificial grass because of its good heat-conducting characteristics. This means that the risk of burns from a sliding tackle is low. Monofilament fibre springs back more readily. This makes the ball roll better over the grass. Soccer players can get their feet under the ball more easily.

## PE combi-fibre

Due to the application of the special PE combi-fibre, the good natural playing characteristics of a monofilament PE fibre and the excellent coverage of the fibrillated fibre in the field are optimised. Monofilament PE yarn is thick and does not split. It bounces back well, due to which the ball speed is more comparable with that of natural grass. The fibrillated part of the twine ensures a good coverage of the dispersed rubber layer. The rubber is hardly displaced and maintenance costs can be limited. The HF Soccer is currently the absolute summit in artificial grass for soccer.

## Technical description

- Sliding tackle friendly polyethylene fibre.
- Unique fibre combination: fibrillated and monofilament fibres entwined.
- Playing characteristics also in the longer term due to the monofilament yarn.
- Less risk of compaction and displacement of the rubber due to the fibrillated yarn.
- 15,000 dtex (maximum on the market at present).
- 100–200 microns (maximum yarn thickness, due to which a higher UV resistance and wear resistance is achieved).
- Very natural appearance, even after further fibrillation: damage to the yarn is excluded, which extends durability.
- Increased stability due to the fiberglass incorporated into the backing;
- the newest developed e-layer with a very good shock absorption for the player.
- An artificial grass pitch with all the good characteristics of natural grass. Happy Feet has approached that ideal very closely by combining the expertise of companies with knowledge of agricultural and civil engineering and artificial grass. A new twine and a different construction method were combined to ensure better ball behaviour, optimal use of space and a playing surface on which it is a pleasure to play; HF Soccer.



**Innovation in artificial grass: HF Soccer**  
Happy Feet soccer fields meets the demands of the soccer player and the highest standards of the Fifa (two star) easily.



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