

Enka®Flex S15

Shockpad & Drainage Solutions for Synthetic Turf Systems

Product information

EnkaFlex is a light and flexible sandwich material composed of a core made from 3D entangled polymeric filaments enclosed on both sides by a heat-bonded, nonwoven filter fabric. EnkaFlex acts as a shock absorption and drainage layer and has been specially designed to meet the needs of infilled surfaces for multi-sport uses such as soccer, rugby, football, baseball or field hockey. The EnkaFlex shock pad is ideal for use on both engineered and dynamic bases. EnkaFlex is supplied in rolls of 0,95 m width (37.5") while the roll length will be tailor-made to fit the dimensions of the pitch.

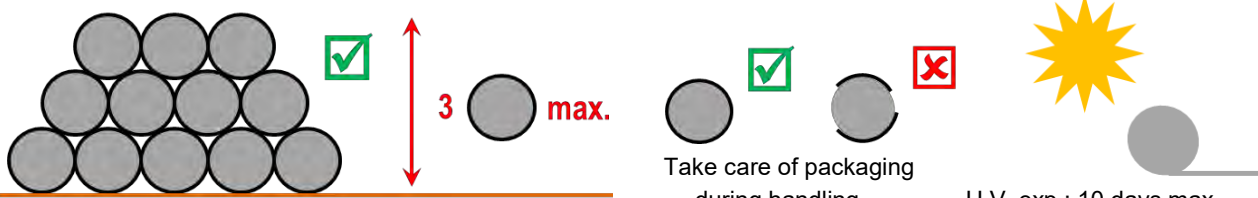
General info

These guidelines are provided for information only. Installation of EnkaFlex products must be executed under the code of good workmanship. Low & Bonar does not accept any liability for the design or construction of any facilities or actions of any parties employed, as a result of, or in connection with any information provided in this document.



Storage, roll dimensions, handling

All rolls are individually packed in black plastic bags. Indoor storage is recommended, but not mandatory, the rolls should be stored in the original wrapping on a dry, clean, and even surface. It is required to keep the rolls in those bags until immediately before use. At maximum EnkaFlex should be installed within ten days after unwrapping. Unwrapped rolls need to be covered against UV when exposed longer than ten days.



Rolls can be stored horizontally (3 rows max.) or vertically (1 row max.)

Appropriate devices must be used for unloading and handling the rolls, e.g. spreader bars with a steel tube through the central core, or fork-lift devices with a central pole.

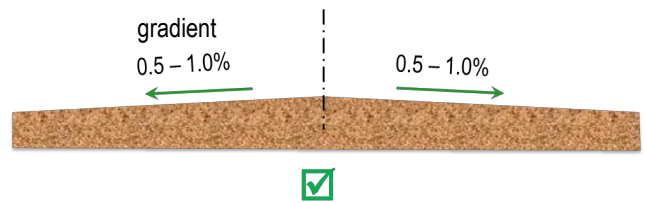
Typical roll dimensions including packaging: 1m wide (39-40") , roll diameter up to 1.2m (47-48") depending on roll length. Typical roll weight between 80 kg / 175 lbs up to 120 kg / 280 lbs depending on roll length.

Smoking or open fires are not permitted when handling EnkaFlex.

Preparation of Sub base

The EnkaFlex product range can be installed on any kind of sub-base, as long as the construction itself is strong enough to hold installation and maintenance equipment.

The sub-base should be constructed in accordance with the design of professional specifiers like architects and design entities. The gradient should ideally be between 0.5 to 1.0 % from the longitudinal axis to both sides of the field to ensure proper drainage of rainwater.



In practice a gradient of 1 % is optimal for fast drainage and this will also minimize expansion of both the synthetic turf and the shock pad.

Dynamic (granular) bases are preferred over engineered bases, as the dynamic base is somewhat softer and more resilient. This ensures a more natural and comfortable playing surface and improves drainage performance.

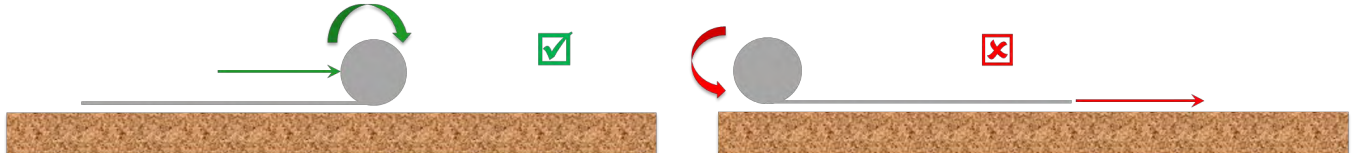
For stabilized dynamic bases with a top layer of fine grade stone, i.e. loose material that could rinse out, it is recommended to install the EnkaFlex on top of a needle punched, thermally bonded geotextile with a rough surface. The rough surface limits the movement of the pad during installation and use inflicted by the loose stone top layer.



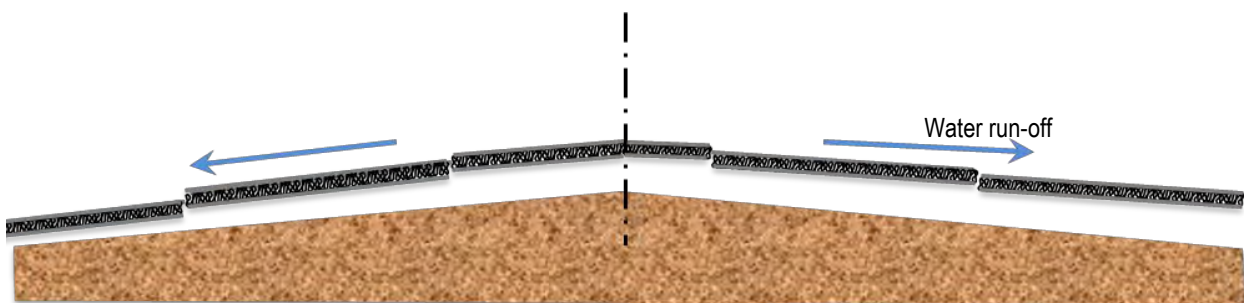
When EnkaFlex is installed on an existing sub base, e.g. in case of a renovation project, it is required to verify if the appropriate plane and gradient is still present or need correction. Practice teaches that engineered, permanent (asphalt) based sub bases often require repair.


Installation

Dragging of the EnkaFlex shock pads during or after unrolling should be prevented.

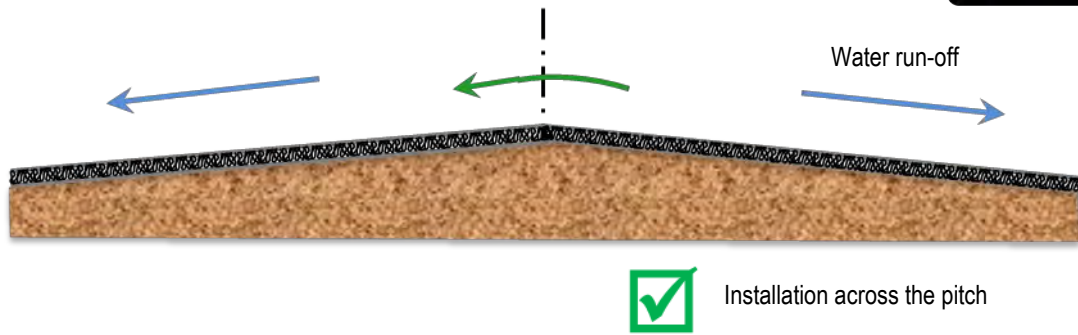


EnkaFlex may be installed either across or along the pitch, parallel to the lengths of synthetic turf or perpendicular to them. When the pitch is built as a crowned construction, sloping down from the long axis to the sides, it is advisable to install EnkaFlex across the pitch from side to side.



 Installation sequence along the pitch

All rolls of EnkaFlex should be rolled out in the same direction, from one side of the pitch to the other. Do not install a few lengths along the pitch or around the edges of the pitch, and the remaining rolls in between across the pitch, as this disturbs the free settlement and expansion of the shock pad and causes the synthetic turf to lift up. We strongly advise against fixing EnkaFlex to the pitch.

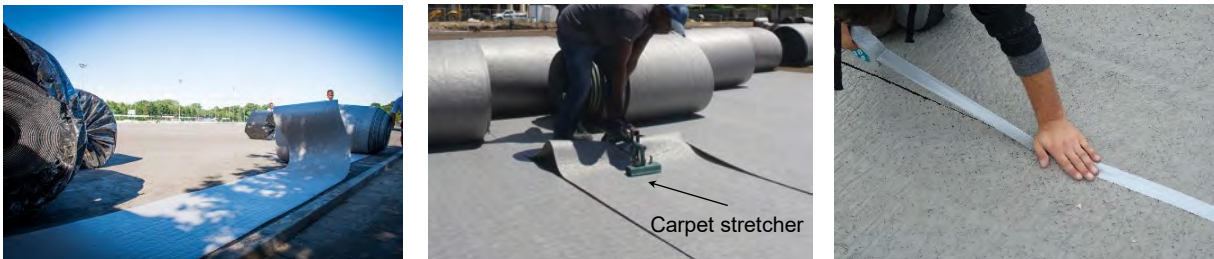


Enka-Flex has a slight curvature across its width. The shock pad should be installed in such a way that the edges are pushed down against the sub-base.

EnkaFlex may be installed in any weather condition, but special care is needed in strong winds. Small sandbags provide an easy and efficient way of ballasting EnkaFlex.

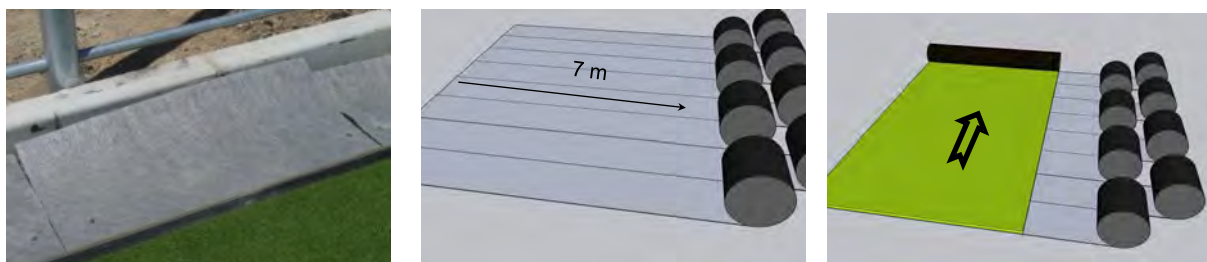
Instructions

Place rolls along the edge of the pitch. Roll out EnkaFlex, stretch the shock pad, ensuring adjacent shock pads are neatly aligned with a tiny gap of one or two mm to allow for some expansion. Overlaps are not allowed.

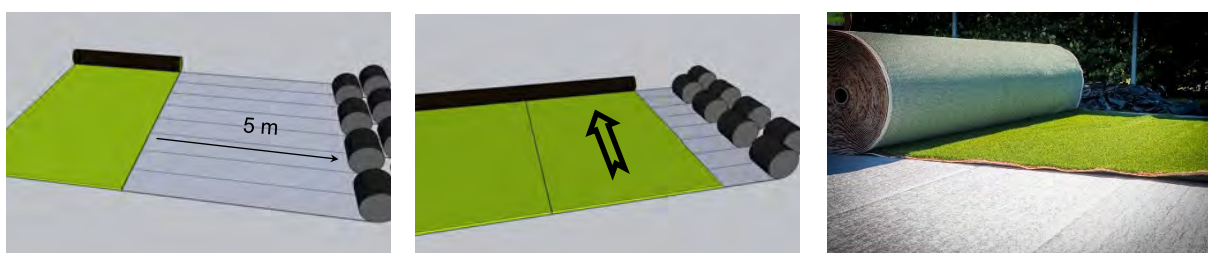


Secure EnkaFlex temporarily with small sandbags along the outer edges and two pins 150-200 mm in length to fix the positions of the pad at the ends of the rolls. This ensures the shock pad does not move during installation of the synthetic turf and the butt joints remain tight. This is the most important and most critical part of the installation of EnkaFlex, as any gaps will be visible through the filled synthetic turf. Though not absolutely necessary taping of the joints may assist to reduce movement of the pads.

Typically, the EnkaFlex rolls are not unrolled completely during installation in the pitch length, they are first unrolled over 7m, synthetic turf roll is then laid perpendicularly:



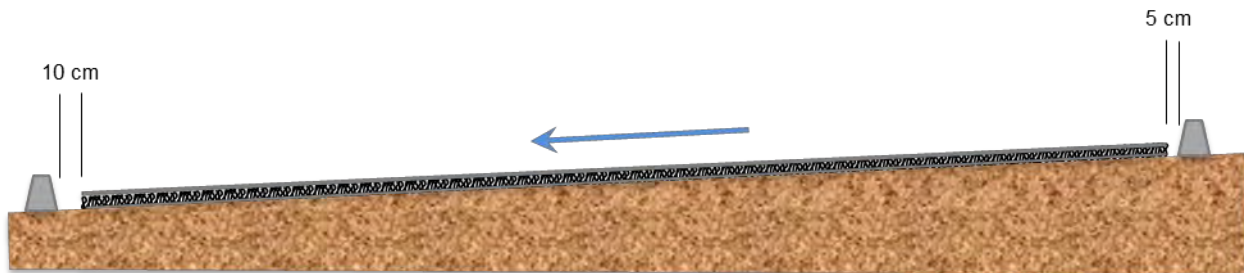
Afterwards EnkaFlex rolls are unrolled 5m step by 5m step, after synthetic turf roll is installed, and so on. Via this way, the installation can be very precise.



This rule remains valid when the synthetic turf is laid in the same direction than EnkaFlex rolls.

Adhesive tape is of little use when joining two successive strips, the rolls may have to be straightened again. The synthetic turf should not be glued by any means to the EnkaFlex pad.

As both the EnkaFlex shock pad and the synthetic turf stretch and elongate slightly towards the low side of the pitch during the first months of playing, it is advisable to stretch both materials manually in order to remove any slack and reduce the creep. It is advisable to stay clear from the curb for about 50mm to allow for settlement and some expansion.



Installation across the pitch with single plane

Some specifiers prefer to build the pitch as one plane, having the maximum gradient running diagonally from one corner to the opposite corner, or only in the width direction. However, such approach is not recommended. If the pitch is installed on a single plane, sloping down from one corner to the opposite corner, it is advisable to trim the EnkaFlex 50mm back at the high side and 100 mm from the low side to account for possible extra expansion.

After installation of the synthetic turf on top of the EnkaFlex the turf should be loaded evenly with infill material to ensure that the carpet and EnkaFlex are secured and stabilized. It is recommended to fill the turf with a minimum of 2 lbs/sqft = > 10 kg/m² of infill.

After care and maintenance

Settlement and expansion could cause some growth of both the synthetic turf carpet and the EnkaFlex shock pad. This usually requires some trimming of both materials during the first months after installation. It is advised to inspect both the carpet and the shock pad for dimensional change every six months during the first two years.

Special requirements for needle punched synthetic turf carpets

Needle punched synthetic turf carpets expand more than tufted types. Their behavior is also different when installed on a flat uniformly sloping pitch. Experience has shown that this expansion may result in a displacement of the total sanded synthetic turf area towards the low side, leaving a gap at the high side of the pitch of up to 100 mm. To prevent this total displacement and "carpet shortage" on the high side(s), it is necessary to fix the carpet firmly with an anchor trench or other means at the high side(s) of the pitch. We advise against the use of needle punched synthetic turf carpets on flat uniformly sloping pitches in favor of the crowned pitch, sloping from the long axis to the sides, with the use of tufted synthetic turf.