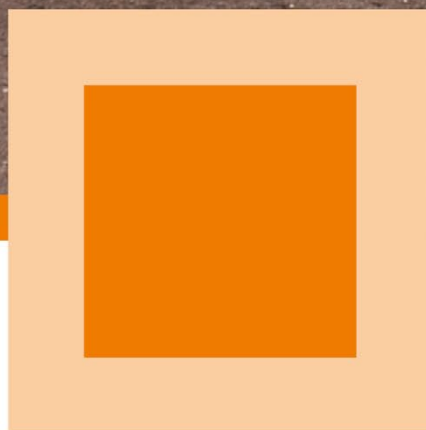




**BECOLASTIC**

SHOCK PADS



02

## GENERAL INFORMATION

When constructing football pitches with synthetic turf, users and designers have a wide range of concepts and types of synthetic turf to choose from. In creating a durable overall system with properties as similar as possible to those of natural turf, the use of a suitable shock pads is of vital importance. The perfect combination of synthetic turf, infill material and shock pads is what makes all the difference when playing and for ensuring a long service life.



The **BECOLASTIC** shock pad provides sports constructors, design engineers and clubs with a sound shock pad that has been tried and tested in synthetic turf systems over several decades. Thanks to consistent and focused further development and modification, the latest **BECOLASTIC** generation performs even better in terms of water drainage and ease of installation.





**BECOLASTIC** is a prefabricated shock pad made of 100% closed-cell polyethylene foam. It has a proven record of long-term elasticity over a period of more than 30 years, with practically no change in its shock absorption values in synthetic turf systems.

The excellent performance of **BECOLASTIC** has been verified in independent long-term studies. Repeated inspection tests have shown that the shock absorption values and material properties remain practically constant over the years. Optimal test values were obtained even in cases where the worn synthetic turf had been replaced and the original **BECOLASTIC** shock pad left in place.

**BECOLASTIC** shock pads are industrially manufactured. This guarantees consistent technical product characteristics and a constantly high level of quality.

They are prefabricated to fit the dimensions of the particular playing field and is then delivered to the site in rolls. **BECOLASTIC** can be laid quickly, conveniently and easily in a single operation. The synthetic turf can then be laid directly on top of the **BECOLASTIC** shock pad, ensuring that the entire synthetic turf playing field can be installed within a very short time.



## 03

The excellent chemical and microbiological resistance of the polyethylene base material prevents environmental conditions, such as pollutants and micro-organisms, from causing reactive changes in the material structure that could permanently alter the product. This means that the mechanical properties, such as shock absorption, remain unchanged over time.

The closed cell - polyethylene foam also shows a clear and ecological advantage and performance. Since there is no undesirable leaching of pollutants from the **BECOLASTIC** shock pad. It can also be used for synthetic turf playing fields located in waterbody areas where drinking water can be collected.





## 04



Cross-shaped perforations are made in the **BECOLASTIC** shock pad in an industrial manufacturing process. These perforations make it possible to lay the sheets flexibly and to ensure that they are absolutely level over the whole area. Once the synthetic turf system has been installed on a suitable base layer, the perforations guarantee excellent water permeability (water infiltration rate  $\geq 1000$  mm/h), so that the synthetic turf pitch can be used again immediately after heavy rain.

**BECOLASTIC** offers a wide range of advantages compared to elastic layers based on open-cell structures such as for example in-situ elastic layers (EL/ET - layers). In contrast to those shock pads that are water-permeable through their overall cell structure and surface area, **BECOLASTIC** does not absorb water thanks to the closed-cell structure of the material and is, therefore, absolutely frost resistant. The synthetic turf remains elastic even in sub-zero conditions.

Nor can any foreign substances, such as dust, sand or liquids, etc. possibly penetrate the closed-cell structure and change the elastic properties of **BECOLASTIC**.



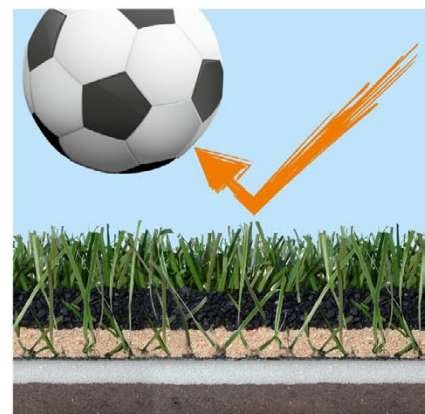


## FUNCTIONS

A modern synthetic-turf playing field is not defined by the synthetic turf alone, but by the whole system, made up of individual components and layers that need to be perfectly coordinated and compatible with each other. As in many other areas, the entire system is only as good as its constituent parts. The best synthetic turf also needs a suitable shock pad and an optimal sub-base in order to achieve its true potential.

Synthetic-turf systems and shock pads are regulated in the DIN EN 15330-1, DIN SPEC 91335 and DIN 18035-7 standards and recommendations and have to meet a wide range of requirements. The core functions include suitability for sports, protective and technical functions, and environmental compatibility.

The sports function relates to those properties of the synthetic turf that affect playing performance and the stress placed on players. The spectrum of requirements covers rotational resistance, ball roll behaviour, levelness, vertical ball rebound and vertical deformation of the synthetic-turf surface.



05

The protective function of the synthetic turf playing field serves to reduce the players' risk of injury and of damage to the musculoskeletal system. The fundamental requirements here are shock absorption, rotational resistance and vertical deformation of the turf system.

The technical function of the system covers requirements affecting the service life of the synthetic turf field, such as ageing, wear, contact diffusion and dimensional stability.

Environmental friendliness is assessed in relation to the long-term effects that the components of the synthetic turf system have on the soil and groundwater.

**BECOLASTIC** complies with the current requirements of DIN EN 15330-1, DIN SPEC 91335 and DIN 18035-7 and can be perfectly used in artificial turf systems designed to meet the highest requirements as set forward in the FIFA Quality Concept Handbook for artificial turf.

## STRUCTURE OF THE BECOLASTIC SYNTHETIC TURF SYSTEM

The latest generation of synthetic turf, with a pile height of approximately 40 to 50 mm

Elastic infill material: approx. 4 to 9 kg/m<sup>2</sup> granulated rubber

Mineral infill material: approx. 18 to 20 kg/m<sup>2</sup> crystalline silica sand

**BECOLASTIC** shock pad

Laid on a bound or unbound sub-base layer, in accordance with DIN SPEC 91335



06

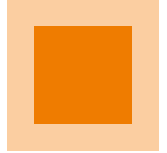
## APPLICATIONS

**BECOLASTIC** shock pads are ideal for many different types of application in a football environment:

- Full-size football pitches
- Training pitches
- Small playing fields
- Indoor football
- School sports fields
- Sports schools



WE ARE HAPPY TO SUPPLY CURRENT  
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## ADVANTAGES

The advantages of **BECOLASTIC** shock pads:

- Excellent long-term elasticity
- Outstanding long-term stability
- Consistent performance
- Defined and constant quality, resulting from industrial production
- Excellent water permeability
- Simple and convenient installation
- Easy to cut to size using a cutter or Stanley knife
- Excellent chemical and microbiological resistance
- Unaffected by frost
- Environmentally compatible and harmless to the environment
- Suitable for use in waterbody areas
- Very good cost-benefit ratio



07

## INSTALLATION

**BECOLASTIC** shock pads are usually installed by experienced sports contractors.

If required, we can also instruct inexperienced contractors on how to lay **BECOLASTIC**.

Instructions for the installation of **BECOLASTIC** shock pads:

1. The layers can be laid in all normal weather conditions. The work need only be interrupted or postponed in case of heavy rain or strong winds.
2. The shock pads must be laid on a bound or unbound sub-base layer in accordance with DIN SPEC 91335.
3. The **BECOLASTIC** sheets are laid adjacent to each other with butt joints. They are then fixed together using a special adhesive seam tape.



