



# **Removal of Synthetic Turf Pitches**

## **ESTC's Recommendations**

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2019 EDITION



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### The responsibility as a pitch owner

Used synthetic turf pitches must be disposed of in accordance with EU and/or national legislation. Pitch owners are solely and fully responsible for the correct handling of materials from used pitches – both the carpet, the various infill, e-layers etc. Pitch owners may be heavily fined for non-compliance (also of non-compliance by third party cooperation partners). Therefore, it is of utmost importance to choose a cooperation partner with a proven process removal model.

#### ESTC recommendation:

As a pitch owner, you need to familiarize yourselves with the current legislation and guidelines. If you assign a third party to assist you with the removal, you should have the third party provide a detailed, written process description of the method of removal. We strongly recommend that you choose a cooperation partner with a recognized, official process certification. In order to minimize your liability as a pitch owner, ESTC further recommends that you negotiate for the removal company to take ownership of the used pitch at site prior to removing the used pitch.

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### Selection of method of removal

As may be seen below, three methods of removal are available for owners of used synthetic turf pitches. The removal services are offered by different types of market players including turf manufacturers, installers, recyclers, waste handling companies, incinerators, landfill owners, transportation companies and others. It is the experience of ESTC that each market player will offer only one method of removal. You may have a preferred supplier for your new pitch – however, this market player may not offer your preferred method of removal for your used pitch system.

#### ESTC recommendation:

As a pitch owner, you will want to have a free choice of selection between the various methods of removal. Therefore, ESTC recommends that you should tender the removal of your used pitch system separately from the possible tender details for a new pitch.

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## Three methods of removal

### a. Upcycling and reuse

Used synthetic turf systems – both infill, the carpet and the e-layer may be cleaned and upcycled to be used in new plastic items and new turf fields. This method will remove any foreign impurities, dust and micro particles from the infill, which otherwise is likely to cause major drainage problems and personal injuries. Also, this method will secure that the grass fibers will be cleaned, rejuvenated and subsequently used for the production of plastic items to complete the full life cycle. Certified producers of secondary raw materials (recyclers) will be able to provide pitch owners with an official CO<sub>2</sub> savings document upon completion of the upcycling process. Pitch owners may use these CO<sub>2</sub> points directly in their Annual Sustainability Report. Pitch owners may also order their new infill to be produced from secondary raw materials only. In this way, pitch owners will be able to get a field with up to FIFA standard playing conditions, while at the same time supporting the green sustainable agenda.

#### ESTC recommendation:

As a pitch owner, you are looking for a fair price/ quality solution, while at the same time you may be looking for the most sustainable solution. Therefore, ESTC recommends the combined method of upcycling and reuse.

### b. Direct reuse

A pitch owner may choose to reuse an old synthetic turf system. Often such old pitches are intended as training facilities for lower league practice. Some pitch owners tend to believe that the old pitches will have a great value also if they are reused directly – often they are disappointed: The costs for ground preparation etc. are similar to erecting of a new turf system – but with used, uncleaned infill and an old, worn carpet there are numerous challenges e.g. poor playability, clogged drainage, high demand for the refill of infill and injuries from system faults/ broken yarns etc.

Some market players will take in old pitches and sell these again as “used pitches” to new owners. In this process, infill and turf rolls from different pitches are likely to be mixed. The quality of such re-installed pitches is therefore unknown. The market for direct reuse of old pitches for other purposes (e.g. gardens, golf courses, race tracks) is rather limited – these market players usually demand a newly produced, good looking grass fiber. It seems that a lot of materials from reused pitches get discarded illegally in nature or otherwise. ESTC believes that it is the responsibility of the original pitch owner to ensure the correct removal of a used turf system.

#### ESTC recommendation:

If a particular turf system has only been in use for a few years, then pitch owners may consider to relocate the entire system within the boundaries of their own stadium. In general, ESTC does not endorse direct reuse in support of the pitch owner, the players/users and the environment.

### c. Waste Incineration

Synthetic turf pitches may be accepted by some public incinerators. Such materials may also be used for co-firing at selected industry appliances such as cement factories. Analysis has shown that the incineration of one standard pitch is likely to result in the emission of 336 tons CO<sub>2</sub>. Also, the incinerated materials must be replaced by new raw materials, which will result in additional CO<sub>2</sub> emission of 82 tons for a standard pitch. The total CO<sub>2</sub> emission related to incineration may be 336 + 82 tons = 418 tons CO<sub>2</sub>. Alternatively, the CO<sub>2</sub> emission related to upcycling and reuse may be as low as 18 tons.

#### ESTC recommendation:

ESTC supports the sustainable utilization of resources. Due to the high CO<sub>2</sub> emission, ESTC does not recommend the use of incineration as method of removal for synthetic turf pitches.

### d. Landfill

Landfill of rubber crumbs (or turf containing any rubber crumbs) is prohibited within the European Union in accordance with the EU directive on Landfill Waste. Illegal removal of used synthetic turf is a very unfortunate problem in a number of countries – sometimes even organized criminal activities.

#### ESTC recommendation:

In accordance with ESTC's sustainability strategy, ESTC is in agreement with the legislation of the EU. Thus, ESTC strictly opposes to landfill or removal of used synthetic turf pitches in nature.

## 4 Definitions and classifications

- a. Used synthetic turf pitches or parts hereof are defined as “waste” at the time, when the waste owner/pitch owner authorizes a third party to dispose of the material.
- b. The pitch owner is thereby also a waste owner. By legislation, it is the duty of the waste owner to dispose of the waste in accordance with legislation and framework conditions.
- c. The waste owner may assign transport and recycling tasks to a third party; but the original waste owner remains responsible for the waste until he has received a receipt from the recycling facility upon completion of the recycling process. The original waste owner may transfer ownership of the used pitch to a third party at any time – in such case, the third party is responsible for the correct and applicable handling and recycling of the material.

## 5 Transport legislation

- a. Within the EU used rolled-up turf pitches with infill are generally classified as so called unlisted waste material. If the material is to be transported within the boundaries of a given country, then the pitch owner must apply for classification papers and transport permits from the national, federal authorities. If the material is to be transported across national borders, then the pitch owner must apply for classification papers and transport permits from the local community authorities. As a pitch/waste owner, it is your responsibility to check that your assigned handling/transportation company has the necessary legal permits.

### ESTC recommendation:

Upon negotiations with your preferred recycler, ESTC recommends that pitch owners ask the handling company for a copy of their transport certificate with approvals for the (cross border) transportation of unlisted waste products. Also, ESTC recommends pitch owners ask the preferred handling company to present detailed, written information on the specific method of removal, which will be applied to the specific pitch. Finally, ESTC recommends pitch owners to select only handling companies with appropriate process certificates.



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