



AirFlow™ Spacers FAQ

WHAT ARE AIRFLOW SPACERS USED FOR?

AirFlow Spacers are granules used to separate palletized concrete layers. Separating layers can result in:

- Reduced contact abrasion and scuffing.
- Improved air circulation between the layers.

Many manufactured concrete products can benefit including pavers, segmental retaining walls and block.

WHAT ARE AIRFLOW SPACERS MADE FROM?

AirFlow Spacers are manufactured by Green Dot BioPlastics, an innovator in resin materials that can replace plastics. Spacer granules are non-hazardous and manufactured from materials that are designed to degrade over time when exposed to moisture in soil or bedding material.

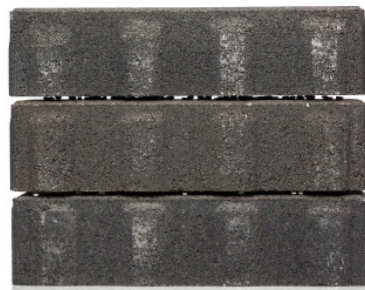
AirFlow Spacers are made out of bioplastic material that is particularly biobased and is fully biodegradable.

WHAT DOES BIOBASED MEAN?

The term 'biobased' means that the material or product is (partly) derived from biomass (plants). Biomass used for bioplastics stems from e.g. corn, sugarcane, cellulose, potatoes, cassava and wheat.

WHAT DOES BIOPLASTIC MEAN?

Bioplastics are not just one single material. They comprise of a whole family of materials with different properties and applications. A plastic material is defined as a bioplastic if it is either biobased, biodegradable, or features both properties.



AirFlow Spacers separate paver layers

WHAT DOES BIODEGRADABLE MEAN?

Biodegradation is a chemical process during which microorganisms that are available in the environment convert materials into natural substances such as water, carbon dioxide, and compost (artificial additives are not needed). The process of biodegradation depends on the surrounding environmental conditions (e.g. location or temperature), on the material and on the application.

ARE THE SPACERS BIODEGRADABLE?

Yes, the spacers are biodegradable. To make biodegradable claims, the FTC requires the environment be specified, with a general timeframe of where biodegradation can occur. Regarding AirFlow Spacers, the spacers are biodegradable in soil, with an estimated biodegradation rate of 2 years.

ARE AIRFLOW SPACERS COMPOSTABLE?

Yes, the spacers are compostable. Similar products have passed the ASTM D6400 and EN13432 Standards for Industrial Compostability, as well as the TUV Austria Home Composting Certification and TUV Austria Soil



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Biodegradability Certification. Testing of the AirFlow Spacers is underway.

TUV Austria is a third party standards verification organization based in Europe that validates compostability and biodegradability claims. For more information see: <https://www.tuv-at.be/green-marks/>

CAN I DISPOSE OF THE SPACERS IN SOIL?

Yes, the spacers can be disposed of in the soil and they will biodegrade.

WILL THEY LEACH TOXIC MATERIALS INTO THE SOIL?

No, testing has been completed to confirm this does not occur. This evaluation, referred to as ecotoxicity testing, is part of the standards and certifications required to be certified for TUV Home Composting and Soil Biodegradability.

HOW LONG DO SPACERS TAKE TO BIODEGRADE?

Like any material or item that biodegrades, the time frame will vary depending on a variety of factors: thickness, moisture, temperature, sunlight, oxygen, and pH. Based on prior biodegradability studies of similar materials in similar thickness to the spacers, the time for biodegradation will be 1 to 4 years.

WILL THE SPACERS DEGRADE INTO MICROPLASTICS?

While the spacers will get smaller as they biodegrade, because they are fully compostable, microplastics will not persist in the soil.

DO THE SPACERS CONTAIN PETROLEUM?

No, the spacers do not contain petroleum. They are a blend of both new and old carbon derived feedstocks. New carbon comes from plants and old carbon is derived from chemical modification of glycerol.

WHAT ABOUT TEXTURED UNITS?

AirFlow Spacer dimensions will effectively separate most units, including pavers with textured surfaces up to 2 mm depth.

DO AIRFLOW SPACERS REDUCE CUBE EFFLORESCENCE?

Improved air circulation between layers can help to reduce the potential for cube efflorescence by reducing moisture movement both between layers, and moisture movement into and out of units. Moisture trapped on the concrete surfaces can now evaporate.

For producers that use top sheets, AirFlow Spacers are also effective at improving air circulation between the top sheet and the units and reducing efflorescence that can occur on the top layer when a top sheet is used.



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WON'T A ROUND SHAPE ALLOW LAYERS TO ROLL?

Unlike other products, AirFlow Spacers have a patent pending design with an "anti-rolling" dimension built in that reduces the possibility of pavers or paver layers sliding or moving on the pallet during shipping.

HOW ARE THE AIRFLOW SPACERS APPLIED?

AirFlow Spacers can be dispensed through most inline granule dispensers, including sand dispensers.

Spacers are designed not to roll, so they stay where they land during dispensing. Spacers can be properly distributed by an automated dispensing system, without need for manual intervention.

Waste is minimal when dispensers are correctly set for layer dimensions. Spacers that remain on the boards after cubing can be reclaimed and reused, if desired.

Unlike separator sheets, spacer inline application does not require extra steps during palletizing and can be done without manual intervention, making it more efficient and safer for personnel.

HOW DO COSTS COMPARE TO OTHER SEPARATION METHODS?

AirFlow Spacers require only about 2.5 cups per pallet to be effective, making them a low cost and low impact solution for producers.

Easy, automated dispensing reduces the time consuming and often tricky manual labor required for many mesh or poly sheet separator systems.

Contact

ACM Chemistries, Inc.

P.O. Box 920430 Norcross, GA 30010

770-417-3490

acmchem.com

