

SUPER PROTECT®



Super Protect® Plant and Super Protect® Stock are specifically designed hot rolled asphalt surface courses developed by Aggregate Industries for use in harsh acidic effluent conditions found in agricultural and similar environments. Both are designed as very dense mixtures with low voids and offer excellent impermeability and reduced sensitivity to chemical attack to deliver an extremely durable asphalt for the farming and anaerobic digestion sectors.

FEATURES & BENEFITS

Super Protect Plant and Super Protect Stock

- ▶ Use BS EN mix recipes and constituents to produce low void content surface course mixtures that are less sensitive to the chemicals commonly seen in farm yards and anaerobic digestion plants.
- ▶ Have excellent impermeability characteristics when compared with 'standard' bituminous materials; preventing degradation caused by water and chemical ingress.
- ▶ Are Non frost-susceptible.
- ▶ Utilise high quality binder and hard rock aggregates.
- ▶ Have excellent workability for improved compaction and jointing
- ▶ Can be laid on a suitable binder course or as an overlay to an existing concrete surface.
- ▶ Are usable within 24 hours of installation, minimising operational delays.
- ▶ Are manufactured to meet the product standard: BS EN 13108, Part 4: Hot Rolled Asphalt.

Super Protect Plant

- ▶ Primarily used for hardstanding areas for farmyard machinery.
- ▶ Has a high proportion of coarse aggregate in the mixture to provide good deformation resistance.
- ▶ This increased durability makes Super Protect Plant an ideal hard standing surface layer to receive the various plant and machinery that one would see in a farmyard or anaerobic digestion facility.

Super Protect Stock

- ▶ Primarily used for animal use areas.
- ▶ Has a higher proportion of fine aggregate making it less abrasive to animals on contact.
- ▶ Is a low maintenance easily cleaned material, enabling higher levels of hygiene to be maintained.
- ▶ Excellent insulation characteristics reducing the use of bedding material and providing increased comfort for livestock in animal houses.

APPLICATIONS

Super Protect is intended for use in agricultural, and similar, environments that are continually exposed to aggressive chemical attack including:

- ▶ Silage clamps
- ▶ Silo floors
- ▶ Anaerobic digesters
- ▶ Livestock housing (e.g. cow cubicle beds)
- ▶ Animal feed storage areas
- ▶ Farm tracks and access roads
- ▶ All areas exposed to acidic liquids and effluents

INSTALLATION STANDARD

It is important that a satisfactory depth of construction and an application of a tack coat, such as K1-40, is used to ensure a satisfactory performance. Super Protect shall be laid on an appropriate bound structure at a target layer thickness of 40mm and 35mm respectively as a surface layer and to a minimum compacted thickness of 30mm for both products at any point.

The mixture shall be installed whilst hot and ideally be used immediately on receipt. It shall be fully compacted to achieve in situ air voids of less than 6%, and it is recommended that a Tandem vibratory action roller is used of a similar type to a Bomag 120. Rolling shall be substantially completed at material temperatures above the 90°C.

Good installation practices such as given in BS 594987:2015 should be followed and particular attention should be made at joint positions. Joints must be fully compacted and sealed to prevent effluent seepage. Pay attention to any joints between the asphalt and retaining walls to ensure an adequate seal. It is normal practice to offset joints in the different layers (surface course/binder course/base) of a fully flexible construction by at least 300mm.

OPERATIONAL MAINTENANCE

Newly laid Super Protect should not be trafficked until it has cooled to ambient temperatures - normally about 24 hours. Certain machinery oils soften HRA and sustained point loadings can damage the surface. Regular maintenance should be undertaken. For example dung and mud should be regularly removed as these can disrupt the surface.

ASPHALT PERFORMANCE PROPERTIES

	Super Protect® Plant	Super Protect® Stock
Marshall stability (mm)	2-8	3-8
Maximum flow value (mm)	5	5
Design air voids, Vmax %	3	3

SUSTAINABILITY AND LOCAL SOURCING

Responsible sourcing: Aggregate Industries is the first company in the world to achieve a BES 6001:2008 Responsible Sourcing Certificate from BRE Global. Products are assessed on:

- ▶ Quality management
- ▶ Environmental management
- ▶ Health and Safety management
- ▶ Greenhouse gas emissions
- ▶ Minimising raw material usage
- ▶ Labour practice
- ▶ Biodiversity
- ▶ Community engagement

ENERGY USE: Aggregate Industries is at the forefront of sustainability and has committed to reducing both energy and greenhouse gas intensity 5% year-on-year (18.5% total improvement by 2020).

MANUFACTURING LOCATION: Produced in the UK, with locally sourced materials under strict environmental and social legislation, for local supply.

RECYCLABLE: Super Protect is 100% recyclable, thus at the end of product life it can be fully recycled, reducing the amount of material that is sent to landfill.

KEY AGGREGATE AND RECYCLED CONTENT

This product may be supplied containing a recycled or secondary aggregate to achieve a reduced environmental impact and increased Green Guide ratings for structural elements and assist in achieving BREEAM waste credits.

POLICIES

Aggregate Industries' policies on the environment and community, health and safety and sustainable solutions for different product applications can be viewed on our website www.aggregate.com.

COSHH DATA

Full COSHH data on the asphalt range of products is available on request.

TECHNICAL SUPPORT

Detailed guidance and assistance with the preparation of specifications and use of asphalt products is available through the sales offices. A free technical service is also available.

Call our technical services at the nearest sales location to your contract.

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