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environmental declaration

DuO HT 4 Slates-F C180 Landscape

COMPANY

SOPREMA has a production unit for the manufacturing of bituminous-based water-proofing materials in Schoten, Belgium.

Environmental occupation within SOPREMA

SOPREMA has an environmental policy and has a certified environmental management system according to ISO14001 : 2004.

As a member of the "Foundation for Roof & Environment" in the Netherlands, SOPREMA has been certified to meet the all the emission requirements and leaking aspects stipulated in the building materials decree. (NL –BSB BD 007)

SOPREMA has a certified quality system according to ISO 9001:2000, audited by accredited European Audit companies.

PRODUCT

DuO HT 4 Slates F C180 Landscape is a flexible waterproofing membrane. The membrane is root-resistant for application in "Green Roof" solutions. The upper coating consists of APAO (Amorphous Poly Alpha Olefins) modified bitumen, resulting in a hard, protective and UV-resistant surface. The under coating consist of an SBS (Styrene Butadiene Styrene) modified bitumen for high elasticity and strong adhesion. The material is reinforced with a composite (polyester/glass scrim) inlayer. The upper side is finished with a mineral slates, the underside is finished with a polyethylene film..

Products do not contain substances listed in the European Directive of dangerous substances.

Product weight: ca 4600 g/m²

Product contents (weight %):

APAO modified bitumen	20-30%
SBS modified bitumen	44-55%
Filler	0%
Slates	15-25%
Reinforcement	2-6%
Polyethylene film	<0,3%

Packaging

Every roll is wrapped with three tapes. The rolls are stored upright on a wooden pallet and are wrapped with shrink foil of polyethylene film. The pallet can be locally recycled and the shrink foil is collected and disposed according to local regulations.

Packaging amount: ca 3 g per kg of product (excl. pallet).

SOPREMA fulfils producer liability for packaging as a member of IVC ('Inter-regionale Verpakkingscommissie' or Inter-regional Packaging Commission) and the organisation 'Val-I-Pac' which controls and oversees the handling of waste and recyclable material by our industry in Belgium.

Transport

Products are transported by container and by truck to the building site or warehouse of the distributor, directly from the production unit in Belgium.

This product is not classified as a dangerous good.

Application

DuO HT 4 Slates F C180 Landscape is applied to exposed flat and pitched roofs. It can be used for new construction or as a renovation solution.

DuO HT 4 Slates F C180 Landscape is primarily applied by welding and/or by mechanical fastening (Welding method: torch-on application with gas or hot air warmed by electricity.) Weld-ing fumes are proven non-toxic.

PRODUCTION

Energy

Natural gas

Discharge in water/air

At the production no discharge in water occurs. Outgoing air streams contain carbon oxide, small quantity of dust, volatile hydrocar-bons and diluted nitrogen and sulphur compounds whose levels are additionally reduced with help of filters.

Influence on the soil

At the production no discharge on the soil happens.

Rest substances

Inflammable rest substances containing energy are extracted by incineration Mineral rest substances are deposited as filling material. Waste oil is treated as dangerous waste and disposed according to government regulations.

Noise

Equipment and fans in the production give noise. Sound values are below the current limits and are regularly monitored and controlled.

RENOVATION

The cap sheet does not need to be removed. A new layer can be mechanically fastened or torched on top of the existing layer.

In case of demolition, the membrane can be treated according to conditions for rest substances respective the instructions of the local environmental authority.

REST SUBSTANCES

Left over material and un-used product can be applied according to the current conditions at the actual point of time.

Recycling of material

Rest substances can be recycled by re-processing or interference with an alternative building product. (For example in road works)

Energy-recuperation

The energy contents of the product can be recuperated by incineration in approved installations

Waste products

Rest substances cannot shall be disposed off in an approved site and in accordance with the instructions of the local environmental authority.