

# Duo 4 HT Slates/F C180 No Flame

Cold Applied



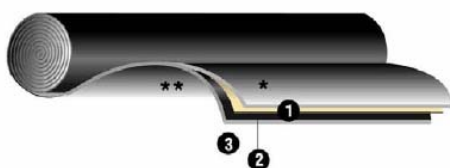
**Technical approvals:** BBA nr. 98/3537/C, BUTgb, ATG 1924, SITAC 1112/97, DS / INSTA 413

## Basic Uses:

For waterproofing of different locations including concrete and plywood flat roofs, podium decks, balconies and terraces. For exposed and protected areas in your building. Can be applied on wooden and concrete surfaces, and installed without use of an open flame

## System:

Pre-formed torch-on membrane manufactured in the De Boer ISO 9001 controlled factory in Antwerp, Belgium. For roof conditions where the membrane can be attached with cold adhesive. All materials can be delivered with a certificate of origin.



- \* Upper finishing: Coloured slates
- 1. Upper coating in APAO modified bitumen.
- 2. Composition armature consisting of polyester and glass reinforcement.
- 3. Under coating in SBS modified bitumen
- \*\* Under finishing: polypropylene fleece

## Composition:

**Duo 4 HT Slates/F C180 No Flame** is a flexible waterproof membrane. The upper coating consists of a mixture of penetration bitumen modified with Amorphous Poly-Alpha-Olefin (APAO). The under coating consists of a mixture of penetration bitumen modified with Styrene-Butadiene-Styrene (SBS). This membrane is reinforced with a thermally bounded layer of non-woven polyester of min 175 g/m<sup>2</sup>, reinforced with a glass fibre mesh of 8 g/m<sup>2</sup>. The upper surface is finished with coloured slates, pressed mechanically into the bitumen. The under surface is finished with a polypropylene fleece.

## Warranty

The client will receive a combined warranty on product and installation from the specialist applicator and manufacturer. The product warranty may be insurance backed by AG-FORTIS under policy number 99.075.400 during the warranty period.

## Advantages:

- ◆ High-tech quality waterproofing membrane especially designed for different climate areas.
- ◆ The product is UV resistant and remains tough in high temperature conditions.
- ◆ Duo remains flexible in colder temperatures and is easy to work with.
- ◆ The membrane delivers a strong and flexible waterproofing system for your building investment, with a life expectation of at least 20 years.
- ◆ Installed without risk of fire. Extra safe installation by means of Duo Cold Adhesive and hot-air welding equipment.

## Surface Preparation:

- ◆ All surfaces need to be cured and dry before application.
- ◆ Surfaces need to be smooth and clean, free of oil and grease.
- ◆ All necessary details like skylights, drains and downpipes need to be addressed before the laying of waterproofing membrane starts.
- ◆ Co-ordination with specialist applicator concerning these details is important.

## Method of Statement: Torch-on Application

The prepared substrate receives Duo Cold Adhesive, a solvent based, bitumen mastic adhesive. While the adhesive is still tacky, Duo membrane is rolled into the cold adhesive commencing at the lowest level (e.g. the drain). The overlaps are welded with a hot-air machine. The membrane is cut to shape by means of a knife. The bitumen lines are covered by coloured slates, that are mechanically pressed into the hot bitumen. This delivers an aesthetic finish. Specialist tools like membrane trowel, hand hot-air tool and overlap roller may be required in some conditions to ensure a perfect finish. The DUO system can only be installed by trained DUO applicators, who hold Equus Certified Applicator status.

## Packaging:

Roll size: 1x10 m  
Roll weight: +/- 48 kg  
Number of rolls on a pallet: 18





## Technical Data:

Physical properties	Average values	Test methods
Total thickness	4.3 mm	UEATC A, BDA PO1
Reinforcement	Non-woven polyester of min. 175 g/m <sup>2</sup> , reinforced with a glass fibre grill of 8 g/m <sup>2</sup>	UEATC A, BBA PO1
Ring & Ball	APAO: >150°C - SBS: >120°C	ASTM D 36-84, NBN T52-031, UEATC G
Coating penetration at 60°C	APAO: 70-130 - SBS: 90-160	ASTM D5-83, NBN T52-030
Tensile strength (N/50mm)	Longitudinal: 1000 - Transversal: 880N	ASTM D 412, NBN B46-201, BDA PO8, UEATC C
Elongation	Longitudinal: > 50% - Transversal: >50%	ASTM D 412, MOAT 30:6C
Puncture resistance	Ø 10 mm	SP 2190
Max. load membrane penetration	250 N	SP 2190
Water vapour permeability	0,118 g/m 24 hours	BS 3177
Cold flexibility	APAO -15°C / SBS -20°C	ASTM D146, BDA PO6
UV resistance	100%	ASTM 653-77, BDA P14

## Health & Safety:

Duo Cold Adhesive is solvent-based and must be used with adequate ventilation. Remove all naked flames and sources of ignition. Adequate ventilation is required to minimise exposure to bitumen fumes during the torching process. Material Safety Data Sheet (MSDS) must be read and understood prior to use of product.

## Storage:

Duo rolls should be stored in a dry area, always in an upright (vertical) position. Do not lay rolls flat (horizontal) when storing.

## Other Duo Products:

Name	Benefits
Duo 4 HT SLATES/F C180	Standard Duo roofing membrane with a choice of finish colours
Duo 4 HT SLATES/F C180 AERO	One layer self-venting waterproofing system.
Duo 4 HT SLATES/F C180 MECANO	Mechanical fastening system.
Duo 4 HT GRAN/F C180 BRIDGES & TUNNELS	For areas with hot asphalt topping. (e.g. car park deck)
Duo 4 HT SLATES/F C180 FC (FIRECARE)	Fire retarding waterproofing system.
Duo 4 HT SLATES/F C180 LANDSCAPE	Anti-root system for landscape areas, roof-gardens.

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