

# Paradiene®

SBS elastomeric bitumen  
roof waterproofing membranes



- ▶ Long life due to the exceptional retention of the original properties of the SBS elastomeric bitumen
- ▶ High resistance to cracking and weathering due to the elasticity of the SBS elastomeric bitumen binder
- ▶ Excellent dimensional stability due to the glass reinforcements
- ▶ High resistance to puncturing for the Paradiene membranes that include non-woven polyester reinforcement
- ▶ Wide colour range for the Paradiene 30.1 A/G, AS/GS and Paradiene 40.1 AS/GS capsheets

## Packaging

- Roll of 15m x 1m: Paradiene R3, Paradiene R4
- Roll of 10m x 1m: Paradiene VV, Paradiene BDS, Paradiene S VV, Paradiene SR3, Paradiene SR4, Paradiene 30.1 G, Paradiene 30.1 GS
- Roll of 8m x 1m: Paradiene 35 SR4, Paradiene 40.1 GS

## Main uses

**Two-layer, coloured, self-finished waterproofing systems for inaccessible roofs:**

- on concrete, roof decks (slope > 0%);
- on profiled metal roof decks;
- on timber and plywood roof decks.

**Two-layer waterproofing systems under gravel protection for inaccessible roofs on concrete decks.**

# Paradiene®

SBS elastomeric bitumen roof waterproofing membranes

## Description

Products	Minimum thickness (mm)	Reinforcement	Underside	Upper surface
Paradiene VV	2.5	VV 50	sanded	sanded
Paradiene R4	2.0	R4	sanded	sanded
Paradiene BD S	2.5	VV 50	film*	sanded
Paradiene S VV	2.5	VV 50	sanded or film	film
Paradiene S R3	2.5	R3	sanded or film	sanded ou film
Paradiene S R4	2.5	R4	sanded or film	film
Paradiene 35 S R4	3.5	R4	sanded or film	film
Paradiene 30.1 G	2.5	VV 50	sanded	self-protection
Paradiene 30.1 GS	2.5	VV 50	film*	self-protection
Paradiene 40.1 GS	2.9	VV 90	film*	self-protection

\* bitumen of the underside is grooved.

The Paradiene membranes, based on SBS elastomeric bitumen, have different reinforcements according to their purposes and their mechanical resistances:

- VV: glass mat of 50g/m<sup>2</sup> or 90g/m<sup>2</sup>;
- R3: composite reinforcement of 130g/m<sup>2</sup> or glass mesh/glass mat of 140g/m<sup>2</sup> or non-woven polyester of 120g/m<sup>2</sup>;
- R4: non-woven polyester of 180g/m<sup>2</sup>.

Their undersides are either film-faced or sanded. Their upper surfaces are film-faced, sanded or self-protected with coloured mineral granules or slate flakes.

### New

The Paradiene 30.1 GS, Paradiene 40.1 GS and Paradiene BD S are fitted with a grooved underside (Profil patented system).

Products	Tensile strength (N/5 cm)		Elongation (%)		Resistance to static puncturing when combined with:		
	L	T	L (%)	T	Paradienne	Paradiene S VV	Paracier A/G
Paradiene VV	350	200	2,5	2			
Paradiene R4	950	650	40	49	L4		
Paradiene BD S	350	200	2,5	2			
Paradiene S VV	350	200	2,5	2			
Paradiene S R3	650	350	35	35		L3	
Paradiene S R4	700	550	40	45		L4	
Paradiene 35 S R4	700	550	40	45		L4	
Paradiene 30.1 G	350	200	2,5	2			
Paradiene 30.1 GS	350	200	2,5	2			
Paradiene 40.1 GS	700	350	2,5	2,5			

## Fire rating

Fire resistance:

- with underlayer:
  - Paradiene S VV
  - Paradiene S R3
  - Paradiene S R4

- with top-layer:
  - Paradiene 30.1 G
  - Paradiene 30.1 GS
  - Paradiene 40.1

- ▶ T 30/1\* on insulated, non combustible substrate.

\* according to the French fire resistance tests.

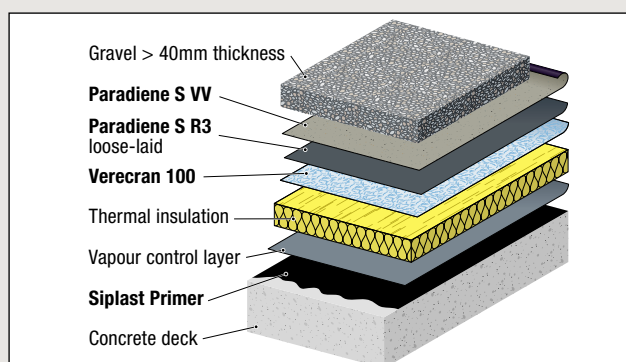
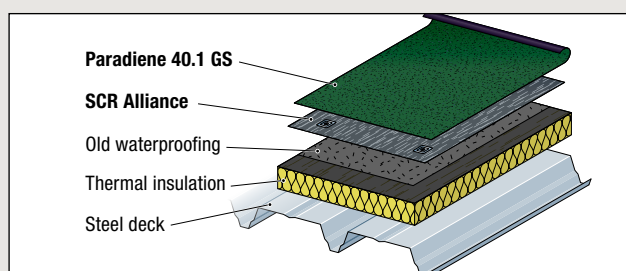
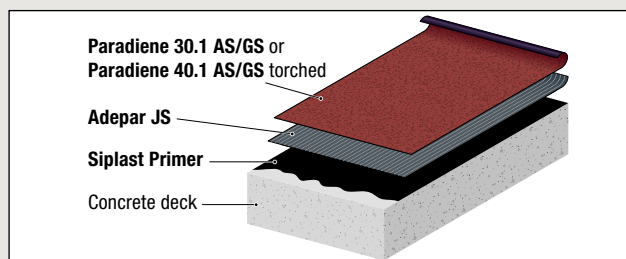
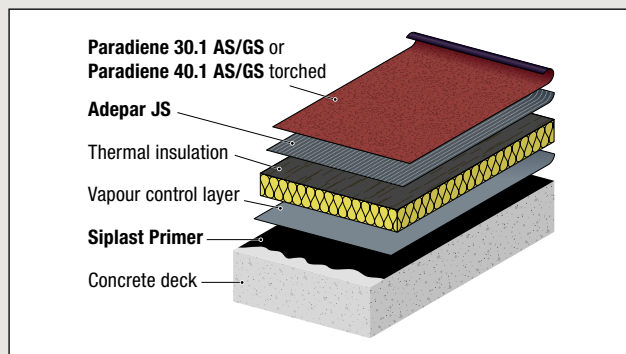
## Application

### Typical uses

Two-layer, coloured, self-finished waterproofing systems for inaccessible roofs:

- On concrete, roof decks (slope > 0%);
- On profiled metal roof decks;
- On timber and plywood roof decks.

Two-layer waterproofing systems under gravel protection for inaccessible roofs on concrete decks.



## Basic systems

Underlayer	Under
Paradiene VV	Paradiene 30.1 G, R4 <sup>(1)</sup> (+hot bitumen)
Paradiene R4	Paradiene VV, 30.1 G <sup>(1)</sup> (+hot bitumen)
Paradiene S VV	Paradiene 30.1 GS, 30.1 G <sup>(2)</sup>
	Paradiene S, Vercuivre S, Verinox S <sup>(3)</sup>
	Parafor Solo GS <sup>(4)</sup>
Paradiene S R3	Paradiene BD S, 30.1 GS, 30.1 G <sup>(2)</sup>
	Paradiene S, Vercuivre S, Verinox S <sup>(3)</sup>
Paradiene S R4	Paradiene BD S, 30.1 G, 30.1 GS, 40.1 <sup>(2)</sup>
	Paradiene S, Vercuivre S, Verinox S <sup>(3)</sup>
Paradiene AC S VV	Paradiene 30.1 G, GS <sup>(5)</sup>
Paradiene AC S R3	Paradiene 30.1 G, GS <sup>(5)</sup>

### Upstands

Paradiene 35 S R4 <sup>(6)</sup>	
Top layer	Above
Paradiene VV	Paradiene R4 <sup>(1)</sup> (+hot bitumen)
Paradiene R4	Paradiene VV <sup>(1)</sup> (+hot bitumen)
Paradiene BD S	Paradiene S, S R4 <sup>(2)</sup>
	Paradiene VV, R4 <sup>(1)</sup>
Paradiene 30.1 G	Paradiene S VV, S R3, S R4 <sup>(2)</sup>
	Paradiene AC S VV, AC S R3 <sup>(5)</sup>
	Adepar JS <sup>(7)</sup>
Paradiene 30.1 GS	Paradiene S VV, S R3, S R4 <sup>(2)</sup>
	Paradiene AC S VV, AC S R3 <sup>(5)</sup>
	Adepar JS <sup>(7)</sup>
Paradiene 40.1 GS	SCR Alliance <sup>(8)</sup>

### Corresponding reference documents

- (1) CSTB Agrément **Paradiene**
- (2) CSTB Agrément **Paradiene S**
- (3) CSTB Agrément **Vermetal**
- (4) Under tiling **Parafor** installation manual
- (5) CSTB Agrément torchable **Paracier**
- (6) Tous CSTB Agrément **Siplast-Icopal**
- (7) CSTB Agrément **Adepar**
- (8) CSTB Agrément **SCR Alliance Renovation**

### Comments on roof decks and substrates

- Concrete: in accordance with DTU 20.12\* or relevant Avis Technique\*\* (eg cellular concrete).
- Timber boarding or plywood: in accordance with DTU 43.4\*.
- Wood derivative panels: in accordance with DTU 43.4\*.
- Composite panels: in accordance with Avis Techniques\*\*.
- Steel: in accordance with DTU 43.3\*.
- Thermal insulation boards: in accordance with Avis Techniques\*\*.

\* DTU – Documents Techniques Unifiés (Unified Technical Documents, the French Code of Practice).

\*\* Delivered by CSTB – Centre Scientifique et Technique du Bâtiment (Building Scientific and Technical Center, the French Institute member of UEAtc\*\*).

\*\*\* UEAtc – Union Européenne pour l'Agrément Technique dans la Construction (European Union for Technical Agreement in Construction).

## Complementary information

- Avis Techniques: Paradiene, Paradiene S, SCR Alliance Reroofing, Adepar.
- Installation Manual: Parafor system under tiles
- Colours: see leaflet "Colour on your roofs"

## Customs nomenclature

- 68.07.10.10.0.00.0.A.

## Safety

Paradiene is not rated dangerous (for the applications described in this document).

This document is only a guide. Siplast-Icopal reserves the right to change the composition and fixing recommendations of products as a result of evolution of knowledge and technology.

