WATERPROOFING PRIMERS

SealForce AC505-W

ONE-PART WATER-BASED ACRYLIC PRIMER FOR SEALFORCE AC540-W

Rayson SealForce AC505-W is a one-part, water-based acrylic primer for the SealForce waterproofing range, brushed or rolled onto concrete, render, brick, stone and roof tiles. It seals pores, binds surface dust and firms weak surface layers, then dries clear, giving SealForce AC540-W a firm, pore-free surface to bond to.

KEY PROPERTIES

- One-part and water-based — brush or roller, straight from the pail
- Improves the bond of SealForce AC540-W to the substrate
- Seals pores so the membrane cures without bubbles or pinholes
- Binds surface dust and firms weak surface layers
- Milky white when applied, clear when dry and ready to coat



Illustration — single pack. Pack size: see this data sheet.

MIX	COVERAGE	OVERCOAT	COATS	PACK SIZE
Ready to use	**0.1–0.3 kg/m²**	**~30 min**	**1 – 2**	**20 kg**
one part	per coat	once dried clear	two if very porous	pail

01 RECOMMENDED USES

- Primer for absorbent concrete, render, brick, stone and tiles before SealForce AC540-W
- Bonding primer on smooth, dense concrete finishes
- Binding surface dust and firming weak surface layers before the membrane
- Sealing pores in rough concrete so the membrane cures without bubbles or pinholes

02 SUITABLE SUBSTRATES

- Concrete and render: sound, pull-off at least 1.5 N/mm², at least 28 days old
- Brick and stone with sound, flush-pointed mortar joints
- Unglazed ceramic tiles and clay roof tiles, securely fixed
- Power-washed or vacuumed free of dust, and dry: moisture at most 6%

03 SYSTEM ROLE

RAYSON SEALFORCE AC540-W — MEMBRANE COATS	Two or three coats, per system
RAYSON SEALFORCE AC505-W — PRIMER	0.1–0.3 kg/m², dries clear
PREPARED CONCRETE, MASONRY OR TILE	Sound, clean, dry

Figure 1 — Typical system build-up (top to bottom). Layer thicknesses are system-dependent; confirm the specification for your project.

Technical data & application controls

Control the substrate, the weather, the absorbency and the drying before the membrane goes on.

SOURCE TECHNICAL DATA

SURFACE PREPARATION	Sound, clean and dry, with no standing water, dust, oil, laitance or loose material; vacuum or power-wash. Concrete at least 28 days old, pull-off at least 1.5 N/mm², mechanically prepared; repair with Rayson PatchBond EP220 and let it cure. Masonry with sound, flush joints; tiles fixed, broken ones replaced, power-washed and dried.
MIXING / DILUTION	One part, ready to use — stir for at least 1 minute with a slow paddle until uniform, without whipping in air.
APPLICATION METHOD	Brush or roller.
COVERAGE	Approximately 0.1–0.3 kg/m² per coat, depending on absorbency. A 20 kg pail primes about 65–200 m² per coat. A small test area sets the rate for each surface.
APPLICATION CONDITIONS	Air and substrate +5 °C to +40 °C; relative humidity at most 80%; at least 3 °C above the dew point. Substrate moisture at most 6% by weight, no standing water, no rising moisture.

CONDITIONS, PACKAGING & STORAGE

DRYING	Dry when the milky white has turned clear: about 30 minutes, longer when cool or humid. Protect from rain until dry.
OVERCOATING	Apply SealForce AC540-W once the primer has dried clear; clean off any dust that has settled first.
COATS / FILM	One coat; a second on very porous surfaces once the first has dried clear. Clear, penetrating film.
PACK SIZE	20 kg pail. Density about 1.00 kg/L; solid content about 22% by weight.
STORAGE	Original unopened packaging, dry, between +5 °C and +30 °C.
SHELF LIFE	12 months from the date of production.
COMPATIBILITY	For SealForce AC540-W. SealForce PU510-W needs no primer; PA520-S, PA525-S, PA530 and PA535 take the primers in their own data sheets. Metal takes an anti-corrosion primer.

04 APPLICATION WORKFLOW

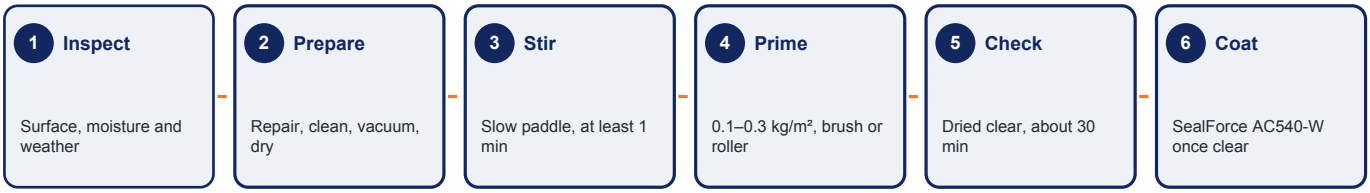

Figure 2 — Application workflow. Each stage is a hold point: confirm the previous stage is complete and within specification before proceeding.

Specify, apply and verify the system

SITE VERIFICATION

Cover the primer with SealForce AC540-W once it has dried clear, after about 30 minutes. SealForce AC505-W is a primer, not a waterproofing layer, and must not be left exposed.

05 RECOMMENDED SYSTEM

Concrete or render, before AC540-W

1. Prepare mechanically; repair with Rayson PatchBond EP220 and let it cure
2. Vacuum all dust; the surface must be dry
3. Apply Rayson SealForce AC505-W at about 0.1–0.3 kg/m²; two coats if very porous
4. Once dried clear, after about 30 minutes, apply SealForce AC540-W

Old tiles, brick or stone, before AC540-W

1. Fix loose tiles or units, replace broken ones and point open joints
2. Power-wash the surface and allow it to dry
3. Apply one coat of Rayson SealForce AC505-W at about 0.1–0.3 kg/m²
4. Once dried clear, apply SealForce AC540-W in two coats

06 LIMITATIONS

- A primer, not a waterproofing layer: always cover it with SealForce AC540-W
- Apply between +5 °C and +40 °C, at no more than 80% relative humidity and at least 3 °C above the dew point
- Substrate moisture at most 6% by weight; no standing water and no rising moisture
- Protect from rain until dry
- Not for use under SealForce PA520-S, PA525-S, PA530 or PA535, which take the primers named in their own data sheets
- Metal takes an anti-corrosion primer; confirm adhesion with a trial on glazed tiles and other dense surfaces

07 HEALTH & SAFETY

Water-based product. Wear gloves and eye protection; ensure reasonable ventilation. Avoid skin and eye contact; clean tools with water while wet. Keep out of reach of children. Consult the Safety Data Sheet (in preparation) before use.

DISCLAIMER

The information in this data sheet is given in good faith and reflects typical values and general good practice. Because site conditions and workmanship are beyond our control, Rayson gives no warranty implied from this document; users should verify suitability for their specific application and confirm they are working from the current issue. For project-specific advice, contact the Rayson technical team.

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