

WATERPROOFING ADDITIVES

SealForce RW1

ONE-PART LATEX WATERPROOFING AND BONDING ADDITIVE FOR CEMENT WORK

Rayson SealForce RW1 is a one-part latex waterproofing and bonding additive for cement-based work. Mixed into renders, screeds, slurry coats, tile adhesives and grout, it cuts water penetration, strengthens the mortar and improves its bond and flexibility.

KEY PROPERTIES

- Cuts water penetration through cement work
- Modified mortar: compressive $\geq 40 \text{ N/mm}^2$, flexural $\geq 8 \text{ N/mm}^2$
- Bond strength $\geq 0.25 \text{ N/mm}^2$ for marble, granite and homogeneous tiles
- More flexible bond coat; less cracking, dusting and debonding
- One liquid for renders, screeds, slurries, tiling, grout and repairs


MIX
1 : 1 : 1

RW1 : cement : sand

DILUTION
1 : 1

renders, screeds, grout

COMPRESSIVE
 $\geq 40 \text{ N/mm}^2$

modified mortar

GROUT
 $\geq 24 \text{ h}$

after tiling

PACK SIZE
20 kg

pail

02 RECOMMENDED USES

- Waterproofing additive for cement renders, plaster and screeds
- Slurry coat that seals and bonds new work to old concrete
- Tile adhesive and thin-set mortar additive, including tile over tile
- Tile grout additive for bond and water resistance
- Injection to re-bond hollow plaster and screed

03 SUITABLE SUBSTRATES

- Concrete at least 28 days old; render at least 7 days
- Blockwork and rendered brickwork
- Sound existing tiles, cleaned, degreased and abraded
- Paint and coatings removed mechanically to a sound base

05 SYSTEM ROLE



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 mix, the weather and the timing of each layer.

SOURCE TECHNICAL DATA

SURFACE PREPARATION	Sound, clean, free of oil, grease, wax, curing compounds, release agents and loose material. Concrete at least 28 days old, render 7 days. Remove paint and coatings mechanically; clean old concrete and render. Existing tiles sound, cleaned, degreased and abraded.
MIXING / DILUTION	By volume. Slurry coat or thin-set: 1 RW1 : 1 cement : 1 sand (sand under 0.5 mm for thin-set and grout). Renders, screeds, grout: RW1 diluted 1:1 with water as the mixing water. Add no extra water.
APPLICATION METHOD	Mixed into mortar; slurry coat by brush; primer or sealer by roller.
QUANTITY	Set by the mix rather than the area; Rayson estimates the quantity for each job.
APPLICATION CONDITIONS	+10 °C to +35 °C. Protect fresh work from rain, direct sun and drying wind.

CONDITIONS, PACKAGING & STORAGE

SLURRY COAT	Lay render, screed or tiles onto the slurry while it is still wet, never over a dried slurry.
GROUTING & USE	Grout no sooner than 24 hours after tiling; keep traffic off for at least 48 hours after grouting.
MORTAR PROPERTIES	Compressive strength ≥ 40 N/mm ² , flexural strength ≥ 8 N/mm ² , bond strength ≥ 0.25 N/mm ² .
PACK SIZE	20 kg pail.
STORAGE	Original sealed packaging, dry, away from direct sunlight and frost.
SHELF LIFE	Approximately 12 months unopened, in original packaging.
WATERPROOFING	Waterproofs the cement layer; does not bridge moving cracks. Under tiles in wet areas, use SealForce WB20 as the membrane.

07 APPLICATION WORKFLOW

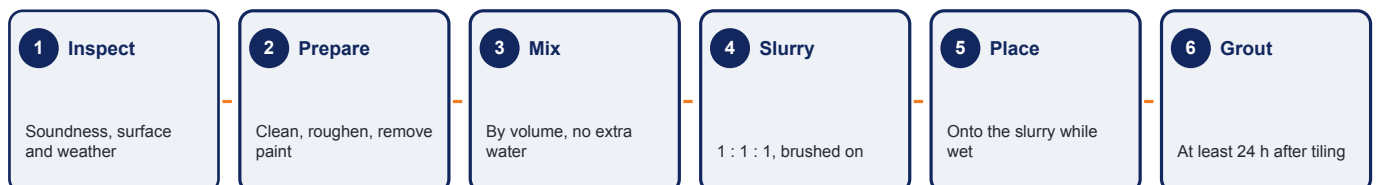


Figure 2 — Application workflow. Each stage is a hold point: confirm the previous stage is complete and within specification before proceeding.

Specify, apply and verify the system

SITE VERIFICATION

RW1 waterproofs the cement layer it is mixed into; where the waterproofing must bridge cracks, use a SealForce membrane. Lay render, screed or tiles onto a slurry coat while it is still wet.

08 RECOMMENDED SYSTEM

Render or screed on old concrete

- 1 Clean and roughen; remove paint and loose material
- 2 Brush on a 1 : 1 : 1 slurry of RW1, cement and sand
- 3 Lay render or screed with RW1 diluted 1:1, slurry still wet
- 4 Protect from rain, sun and drying wind while it cures

Screed, tiles and grout over WB20

- 1 After the WB20 flood test, lay the screed with RW1 1:1
- 2 Bed tiles in adhesive or thin-set mixed with RW1
- 3 Grout at least 24 h later, with RW1 1:1 in the grout
- 4 Keep traffic off for at least 48 hours

09 LIMITATIONS

- Waterproofs the cement layer but does not bridge moving cracks: wet areas under tiles take SealForce WB20
- Not for basements against groundwater, water-retaining structures or permanent immersion
- Sound substrates only: concrete 28 days, render 7 days; remove paint and coatings first
- Apply between +10 °C and +35 °C; protect fresh work from rain, sun and drying wind
- Keep to the stated dilution: extra water weakens the mortar
- Over existing tiles, abrade the glaze and trial the bond first

10 HEALTH & SAFETY

Water-based product. Cement mixes are alkaline: wear gloves and eye protection when mixing and applying, and 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.

RAYSON HIGH PERFORMANCE COATINGS

Singapore
Tel / WhatsApp: +65 9821 9129
support@raysonpaint.com.sg
raysonpaint.com.sg/products/sealforce-rw1/