

**STANDARD CASTLE WATERPROOFING METHODOLOGY
FOR APPLICATION ON CONCRETE SURFACES**

CASTLE PRODUCTS AREA COVERAGE

- ~ 1 Gal. PME-901 Primer - Area Coverage: 25-35m² (Depending on concrete porosity)
- ~ 1 Gal. PME-202 Top Coat - Area Coverage: 3m² for 3 heavy coats w/ film thickness of 1.2mm to 1.5mm
- ~ 1 Pail PME-202 Top Coat - Area Coverage: 15m² for 3 heavy coats w/ film thickness of 1.2mm to 1.5mm

1. The surface to be waterproofed must be completely dry, oil free and clean. Use appropriate cleaning tools such as a vacuum cleaner, broom, or steel brush to remove sand, dust, stones, oils, and any other debris adhered to the surface.
2. Prepare the PME-901 Primer (1Gal/4kg) for application. Upon opening the container, stir the product thoroughly with a wooden stick or suitable mixing tool for at least 3 minutes, ensuring uniform consistency from top to bottom. Transfer the contents into a larger mixing bucket with a capacity of at least 3 gallons. Add 1.5 gallons or 150%/ 6kg of water to the primer and mix thoroughly until fully blended. The final mixture should yield a total volume of 2.5 gallons/10kg.
3. Saturate a paint brush with PME-901 Primer and apply the first coat evenly until a transparent film forms. The required number of coats will depend on the porosity of the concrete. If an additional coat is necessary to achieve a tacky, transparent film, ensure the first coat is completely dry before applying the next. **Note:** The primer is considered dry once its milky appearance has turned transparent and the surface is dry to the touch, without sticking to your fingers or lifting from the substrate.

Drying time: Under direct sunlight: Approximately 1 hour

Indoor conditions: Approximately 2-3 hours

High humidity or enclosed areas: the use of blower fans is recommended to aid in drying

4. Prepare the PME-202 Top Coat for application. Upon opening the container, stir the product thoroughly with a wooden stick or suitable mixing tool for at least 3 minutes, ensuring uniform consistency from top to bottom. For easier application, add approximately 60 ml of clean water per gallon of top coat to thin the mixture. Mix thoroughly until fully blended.
5. Using a clean paint brush, apply the first coat of PME-202 Top Coat in a thick, even layer. Allow each coat to fully dry before applying the next. The supplier recommends a standard application of three coats, with a total film thickness of approximately 1.2 mm to 1.5 mm. Whenever possible, allow at least 72 hours of drying time after the final coat before proceeding to the next step.

Drying time: Under direct sunlight: Approximately 1 hour

Indoor conditions: Approximately 2-3 hours

High humidity or enclosed areas: the use of blower fans is recommended to aid in drying

6. To verify a watertight installation, conduct a leak test by flooding the treated area and inspecting the surrounding structure for signs of seepage. If leakage is detected, drain the water and allow the surface to dry completely. Apply additional coats of top coat over the suspected areas of seepage, then repeat the test until no leaks are observed.
7. After successful leak testing and confirmation of a watertight surface, install a 1–2 inch concrete topping. Ensure the floor is properly leveled with a slope directed towards the drain to prevent ponding or stagnant water. When preparing the topping, mix the concrete outside the waterproofed area to avoid accidental damage. Exercise caution during placement, as shovels and other sharp tools may puncture the waterproofing membrane.

STANDARD CASTLE WATERPROOFING METHODOLOGY
PARA SA APLIKASYON SA MGA KONKRETO NG PANG-IBABAW

SAKLAW NG PAGGAMIT NG MGA PRODUKTO NG CASTLE

~ 1 Gal. PME-901 Primer - Saklaw ng Aplikasyon: 25-35m² (Depende sa porosity ng kongkreto)

~ 1 Gal. PME-202 Top Coat - Saklaw ng Aplikasyon: 3m² para sa 3 mabibigat na patong (kapal ng film 1.2-1.5mm)

~ 1 Pail PME-202 Top Coat - Saklaw ng Aplikasyon: 15m² para sa 3 mabibigat na patong (kapal ng film 1.2-1.5mm)

1. Ang ibabaw na tatakan ng waterproofing ay dapat ganap na tuyo, walang langis, at malinis. Gumamit ng angkop na mga kasangkapan sa paglilinis gaya ng vacuum cleaner, walis, o bakal na brush upang alisin ang buhangin, alikabok, bato, langis, at iba pang dumi na nakadikit sa ibabaw.
2. Ihanda ang PME-901 Primer (1Gal/4kg) para sa aplikasyon. Pagkabukas ng lalagyan, haluing mabuti gamit ang kahoy na stick o angkop na panghalo sa loob ng hindi bababa sa 3 minuto, upang masigurong pantay ang pagkakabuo mula itaas hanggang ibaba. Ilipat ang laman sa mas malaking timba na may kapasidad na hindi bababa sa 3 galon. Magdagdag ng 1.5 galon o 150% / 6kg na tubig sa primer at haluing mabuti hanggang tuluyang magsama. Ang huling halo ay dapat magbigay ng kabuuang 2.5 galon / 10kg.
3. Basaing mabuti ang paint brush ng PME-901 Primer at ikalat ang unang patong nang pantay hanggang makabuo ng transparent film. Ang kinakailangang bilang ng patong ay nakadepende sa porosity ng kongkreto. Kung kailangan ng dagdag na patong upang makamit ang transparent film, tiyakin na ang unang patong ay ganap na tuyo bago magpahid ng kasunod. Tandaan: Ang primer ay itinuturing na tuyo kapag ang mala-gatas na anyo nito ay naging malinaw na transparent at ang ibabaw ay tuyo na sa hawak, hindi dumikit sa daliri o humiwalay sa kongkreto.
Oras ng Pagpapatuyo: Sa direktang sikat ng araw: Humigit-kumulang 1 oras
Sa loob ng gusali: Humigit-kumulang 2–3 oras
Sa mataas na halumigmig o saradong lugar: gumamit ng blower fans upang mapabilis ang pagpapatuyo
4. Ihanda ang PME-202 Top Coat para sa aplikasyon. Pagkabukas ng lalagyan, haluing mabuti gamit ang kahoy na stick o angkop na panghalo sa loob ng hindi bababa sa 3 minuto, upang masigurong pantay ang pagkakabuo mula itaas hanggang ibaba. Para sa mas madaling aplikasyon, magdagdag ng humigit-kumulang 60ml ng malinis na tubig kada galon ng top coat upang medyo lumabnaw ang halo. Haluin nang mabuti hanggang tuluyang magsama.
5. Gamit ang malinis na paint brush, ikalat ang unang patong ng PME-202 Top Coat sa makapal at pantay na paraan. Hayaang ganap na matuyo ang bawat patong bago maglagay ng kasunod. Inirerekomenda ng supplier ang karaniwang aplikasyon ng tatlong patong, na may kabuuang kapal ng film na humigit-kumulang 1.2mm hanggang 1.5mm. Sa abot ng makakaya, hayaang matuyo nang hindi bababa sa 72 oras pagkatapos ng huling patong bago magpatuloy sa leak test.
Oras ng Pagpapatuyo: Sa direktang sikat ng araw: Humigit-kumulang 1 oras
Sa loob ng gusali: Humigit-kumulang 2–3 oras
Sa mataas na halumigmig o saradong lugar: gumamit ng blower fans upang mapabilis ang pagpapatuyo
6. Upang masiguro ang watertight na aplikasyon, magsagawa ng leak test sa pamamagitan ng pagbaha sa tinratratong bahagi at inspeksyunin ang nakapaligid na istruktura para sa anumang senyales ng tagas. Kung may tagas na makita, alisan ng tubig at hayaang ganap na matuyo ang ibabaw. Magpahid ng karagdagang patong ng top coat sa mga pinaghihinahang bahagi ng tagas, pagkatapos ay ulitin ang pagsusuri hanggang walang makitang tagas.
7. Pagkatapos ng matagumpay na leak test at pagkumpirma ng watertight na ibabaw, maglagay ng 1–2 pulgadang kongkreto ng topping. Siguraduhing pantay ang sahig na may bahagyang hilig papunta sa drain upang maiwasan ang pamumuo o pananatili ng tubig. Kapag naghahanda ng topping, ihanda ang halo ng kongkreto sa labas ng waterproofed na lugar upang maiwasan ang hindi sinasadyang pinsala. Maging maingat sa paglalagay, dahil ang pala at iba pang matutulis na kasangkapan ay maaaring makabutas sa waterproofing membrane.

CASTLE PME-202 TOP COAT

Recommendation on Application Thickness

The published test thickness for 3 coats is (1.2–1.5 mm), measured on smooth non-porous panels, cannot be uniformly achieved on concrete due to pore penetration and surface texture; therefore, field performance shall be controlled by minimum system consumption (m²/gallon) and number of coats to achieve an approximate total dry film thickness (DTF).

1) Moderate Wet (Occasional Water, Humid Areas, Spills)

Medium build.

- System: 2-3 coats
- Coverage: 1 gallon : 3 - 3.5 m² (*total system consumption*)
- Approx. total DTF: ~1 mm

Typical applications

- Powder rooms (typical residential/commercial)
- Kitchen wet zones (sink areas, light wash areas)
- Interior concrete walls with intermittent dampness

2) High Wet / High Moisture (Frequent Wetting, Splashing, Ponding Risk)

Use a thicker barrier (lower coverage per gallon).

- System: 3 coats
- Coverage: 1 gallon : 2.5 - 3 m² (*total system consumption*)
- Approx. total DTF: ~1 - 1.2 mm (*varies with porosity/profile*)

Typical applications

- Shower floors and shower walls (vertical)
- Bathrooms with shower / wet rooms
- Balconies, terraces, podium decks

- Roof decks (especially poor drainage/ponding-prone zones)
- Laundries / utility floors with frequent washing
- External walls exposed to driving rain (vertical waterproofing)

3) Immersion / Constant Water Contact (Tanks, Pools, Cisterns)

Even if the product is non-toxic and shows no elemental migration, immersion areas are higher stress (hydrostatic pressure, continuous exposure), so recommend higher build and stricter inspection.

- System: 3 - 4 coats
- Coverage: 1 gallon : 2 - 2.5 m² (*total system consumption*)
- Approx. total DFT: ~1.2 - 1.5 mm

Typical applications

- Cistern tanks / water tanks
- Swimming pools / water features
- Sumps / fountain basins
- Wet-process containment (non-chemical)

The above thickness and coating recommendations represent standard application guidelines. Actual site conditions—including but not limited to substrate porosity, surface profile, moisture content, and exposure environment—must be properly assessed prior to application, and product usage, number of coats, or application method may be adjusted as necessary to suit specific project conditions and ensure optimal waterproofing performance.

