



HEAVEN KOREA
Co., Ltd.



Korea Atomic Energy
Research Institute



HEAVEN KOREA CO., LTD.

PRODUCTS CATALOG

Sustainable **architectural solutions**
created using **eco-friendly composite**
waterproofing methods

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CEO Message

Hello. We are Heaven Korea.

We, Heaven Korea Co., Ltd., are contributing to the development of the construction industry with our human resources with extensive experience, cutting-edge technology, and efficient systems. In addition, as a family company and research company of the Korea Atomic Energy Research Institute, we always think from the customer's perspective and pursue strong trust based on the principle of providing the best quality and service. We will promise to fulfill our duties and responsibilities by adhering to our basics and principles in the future. Thank you

History

2019.03

Registered
manufacturing
business

2019.09

Established
corporate research
center

2020.07

Factory moved to
high-tech
industrial complex

2021.11

Designated as
a KAERI-Family
company

2023.03

Registered as a
research center
company

01 Registrations & Certifications



Registration No. 40-1577611
Aquakeeper
Trademark Registration



Registration No. 40-1580763
Radon Keeper
Trademark Registration



Registration No. 30-1133847
Spray Gun Air Curtain Generator



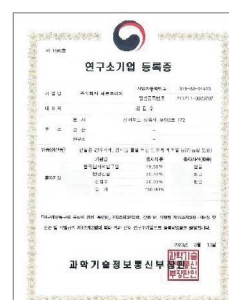
ISO 9001
**Quality Management
System Certification**



Registration No. 40-1577611
Aquakeeper
Trademark Registration



Registration No. 40-1580763
Radon Keeper
Trademark Registration



Registration No. 30-1133847
Spray Gun Air Curtain Generator



ISO 9001
**Quality Management
System Certification**

02 Patents



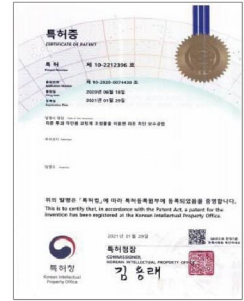
Patent No. 10-1870122
Rooftop floor repair
method



Patent No. 10-2193983
Underground parking lot floor
repair method



Patent No. 10-2193241
Exterior wall crack repair method



Patent No. 10-2212396
Radon barrier repair method



Patent No. 10-2159754
Radon barrier
manufacturing method



Patent No. 10-1856735
Stirring device for elastic
composite compound



Patent No. 10-2242599
Spray gun for preventing
dust scattering



Patent No. 10-2202037
Earthquake-resistant
design maintenance



Patent No. 10-2707137
Method for Manufacturing
Loess Concrete



Patent No. 10-2773164
Eco-Friendly Coating
Waterproofing Method



Patent No. 10-22773166
Method for Manufacturing
and Applying
Radon Blocking Agent



Patent No. 10-2773168
Reinforced Soil
Retaining Wall Block



Patent No. 10-2254926
Masonry repair method



Patent No. 10-2290148
Shingles-installed
surface repair method



Patent No. 10-2340479
Radon Blocking Agent
Spraying Device



Patent No. 10-2353471
Air curtain type spray gun
for preventing dust scattering



Patent No. 10-2479226
Road construction method
using soil hardener

AQUAKEEPER OVERVIEW

Introduction to the Aqua Keeper Method

What is the Composite Method

Using Patented Elastic Composite Materials?

Introduction to the Aqua Keeper Product

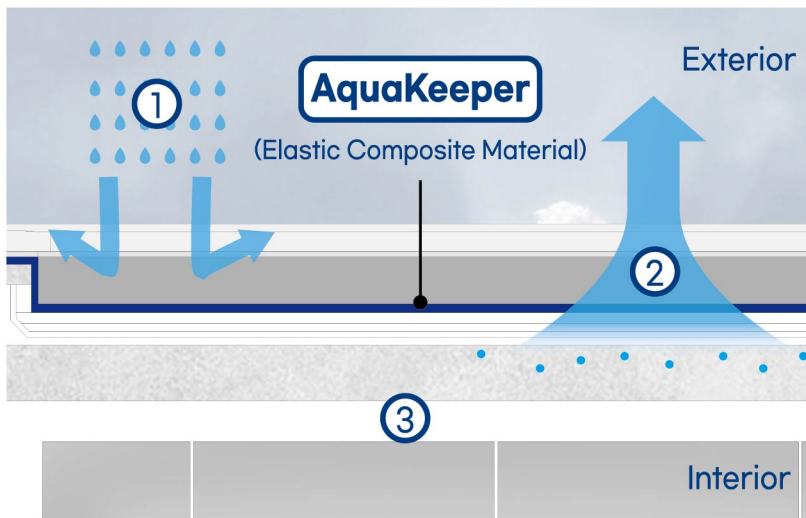
1. AquaKeeper - 100 Water Repellent
2. AquaKeeper - 500 Primer
3. AquaKeeper - 1000 Waterproofing & Repair

Introduction to the Aqua Keeper Method

What is the Composite Method Using Patented Elastic Composite Materials?

01 Aqua Keeper Overview

- **First,** uses **eco-friendly** elastic composite material.
- **Second,** offers **stronger adhesion and durability** than conventional methods.
- **Third,** **resists impact** at repair sites, **lasts long**, and is **cost-effective**.



Principle of Unidirectional Permeability

1 Blocks moisture from outside

2 Releases internal vapor through air pressure

3 Prevents indoor condensation from temperature difference

02 Unique Method Usable Even on Wet Surfaces

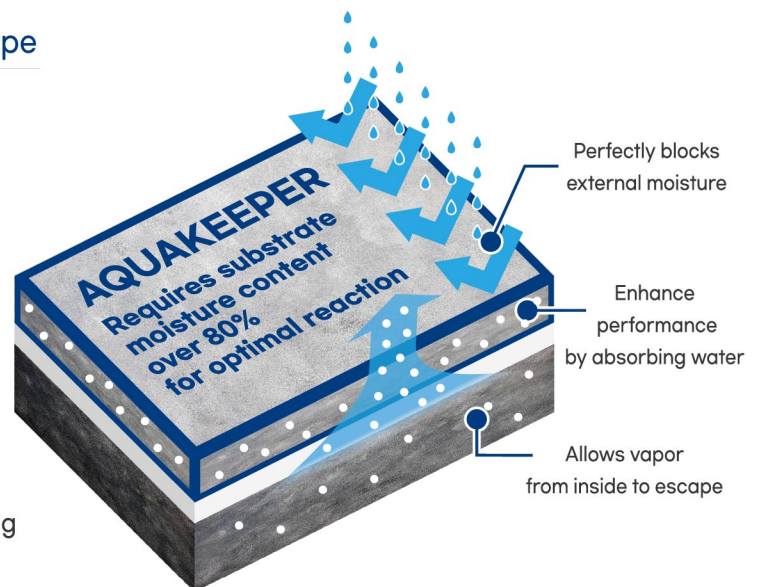
● Allowable Moisture Content by Coating Type

- Urethane waterproofing : $\leq 5\%$
- Epoxy coating : $\leq 6\%$
- Shingle waterproofing : $\leq 10\%$
- Acrylic waterproofing : $\leq 25\%$

● Sites Where Moisture Content Is Critical

- Outdoor floors right after rain
- Damp underground parking lots
- Wet-use areas (bathrooms, mechanical rooms)
- Public/commercial spaces needing fast reopening

● Issues When Moisture Limits Are Ignored



Introduction to the Aqua Keeper Product

1. AK-100 Water Repellent



AK-100 is a silicone-free, eco-friendly water-based repellent. It leaves no streaks or "tear marks", ensuring a clean finish while maintaining the surface's original appearance.

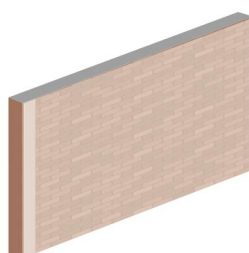
It offers excellent water repellency and long-lasting performance. The fast-drying formula increases work efficiency and allows for simple application.

Type	Water-based elastic composite repellent
Form	Liquid, milky white (becomes colorless after drying)
Packaging	15KG pail (4 gallons)
Coverage	Approx. 130 m ² (1400 ft ²) per 15kg
Applications	Brick, concrete, cement plaster, Dryvit, tile, etc.

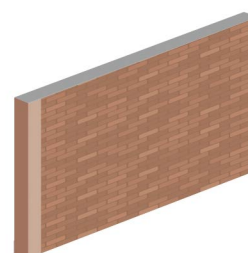
● Application Method



① Apply AK-100 evenly using a spray gun.



② Check for uniform coating.

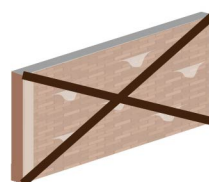


③ Transparent waterproof layer forms after drying.

● Construction Method

- ① Clean the surface of any dust or debris.
- ② Spray evenly, avoiding over-application in one spot.

● Key Feature



※ No tear stains, unlike silicone-based products.

● Construction Photos



Introduction to the Aqua Keeper Product

2. AK-500 Primer



AK-500 is a high-performance water-based primer. It maximizes adhesion between the substrate and topcoats like AK-1000. It delivers excellent adhesion even on damp surfaces, and is compatible with concrete, cement, tiles, and more.

Type	Water-based elastic composite primer
Form	Liquid, milky white (dries clear)
Packaging	15KG pail (4 gallons)
Coverage	Approx. 130 m ² (1400 ft ²) per 15kg
Applications	Rooftops, exterior walls, underground parking lots, concrete structures, water tanks, L-shaped gutters, fire-sensitive areas

● Key Features



1. Uniform Coating Layer

Forms a thin, even film with excellent flow and viscosity.



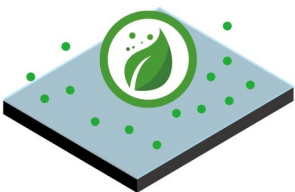
2. Can Be Applied on Wet Surfaces

No delay even after rain or on damp bases.



3. Strong Adhesion

Bonds tightly to concrete, cement, tiles, and boosts topcoat adhesion.



4. Water-Based & Solvent-Free

Low odor, human- and eco-friendly.



5. Excellent Compatibility

Compatible with urethane, acrylic, epoxy, etc.



6. Streamlined Process

Fast drying allows quicker next steps.



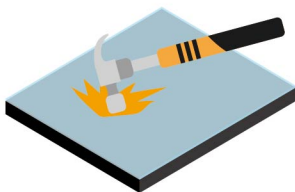
7. Overlay Possible

Can be applied on existing waterproof layers.



8. Easy to Apply

Brush, roller, or spray-friendly.



9. Improved Durability

Enhances durability and heat resistance. (with AK-1000)

Introduction to the Aqua Keeper Product

3. AK-1000 Waterproofing & Repair



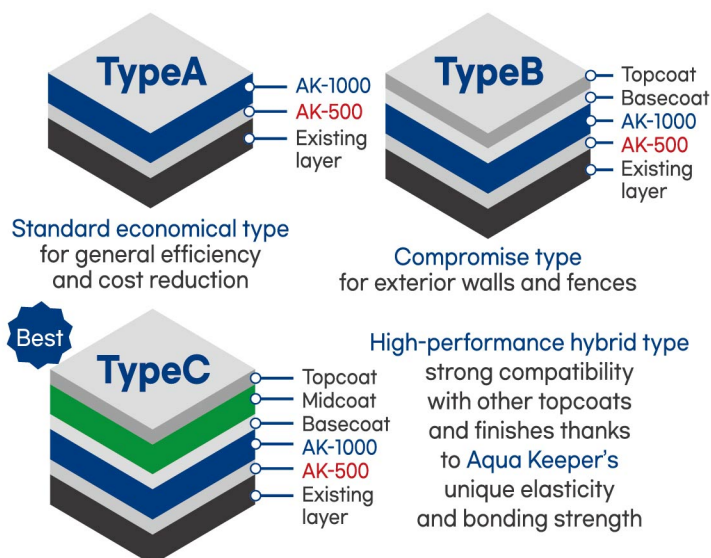
AK-1000 is a high-elasticity, high-strength water-based composite material, designed for eco-friendly waterproofing and repair across various structures.

Type	Water-based elastic composite waterproofing/repair
Form	Two-component mortar (gray)
Mix Ratio (A:B)	1 : 5 (by weight)
Packaging	- Part A: 15kg (4 gal) pail - Part B: 25kg (55 lb) bag
Coverage	16 m ² (172 ft ²) per 15kg (at 3mm thickness)
적용 부위	Rooftops, exterior walls, underground parking lots concrete structures, water tanks, L-shaped gutters, fire-sensitive areas

● Key Features



● Types of Use Cases

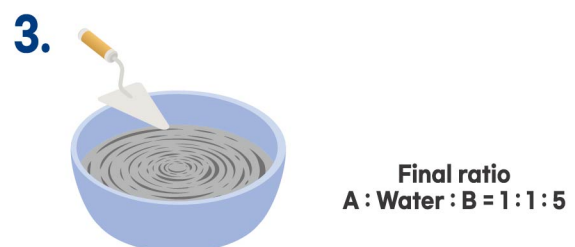


※ Topcoat, midcoat, and basecoat may vary depending on site conditions.

● Mixing Instructions



※ Mix Part A and water thoroughly before adding Part B.



02

AQUAKEEPER APPLICATION METHODS

1. **Rooftop** Waterproofing & Repair
(Patent No. 10-1870122)
2. **Underground Parking Lot** Waterproofing & Repair
(Patent No. 10-2193983)
3. **Shingle Roof** Waterproofing & Repair
(Patent No. 10-2290148)
4. **Exterior Wall** Crack Repair & Coating
(Patent No. 10-2193241)
5. **Masonry Surface** Repair & Finishing
(Patent No. 10-2254926)
6. **Balcony Window Frame Area** Repair

AQUAKEEPER APPLICATION METHODS

1. Rooftop Waterproofing & Repair

(Patent No. 10-1870122)

● Patented Construction Method



① Base Surface Preparation

Remove contaminants and clean the surface thoroughly for smoothness.



② AK-1000 Base Repair

Fill cracks, voids, or irregularities to reinforce and smoothen the surface.



③ AK-500 Primer

Apply moisture (≥80%) or AK-500 primer to enhance adhesion. (Apply twice if necessary)



④ AK-1000 Application

Within 12-24 hours after primer, apply AK-1000 at approx. 3-5mm thickness.



⑤ Base & Middle Coat

Apply urethane coating 2-3 times within 24 hours to desired thickness.



⑥ Top Coat

Repair pinholes as needed, then apply a colored top coat to exposed areas.

Application Methods

● Construction Photos



Rooftop waterproofing (Type A)



Rooftop waterproofing (Type B, C)



Rooftop waterproofing (Type B, C)

● Mixing Ratio

Application Area		(AK-1000(A) + Water) + AK-1000(B)
Rooftop	Floor	(15kg + 15kg) + 3bag(75kg)
	Wall	(15kg + 15kg) + 4bag(100kg)

2. Underground Parking Lot Waterproofing & Repair

(Patent No. 10-2193983)

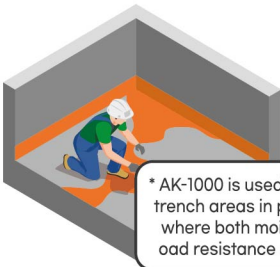
● Patented Construction Method

Application Methods



① Base Surface Preparation

Remove contaminants and clean the surface thoroughly for smoothness.



* AK-1000 is used to reinforce trench areas in parking lots, where both moisture and load resistance are critical.

② AK-1000 Base Repair

Fill cracks, voids, or irregularities to reinforce and smoothen the surface.



③ AK-500 Primer

Apply moisture (≥80%) or AK-500 primer to enhance adhesion. (Apply twice if necessary)



④ AK-1000 Application

Within 12-24 hours after primer, apply AK-1000 at approx. 3-5mm thickness.



⑤ Base & Middle Coat

Use a roller or sprayer to apply evenly on a clean surface. Then apply the topcoat color.



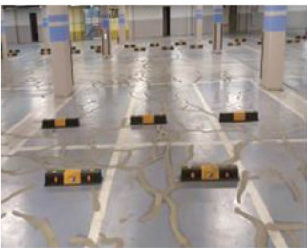
⑥ Top Coat

Apply epoxy coating 1-2 times within 24 hours to achieve desired film thickness.

● Construction Photos



Trench



Floor crack and joint repair



Partial floor repair



Full surface floor coating

● Mixing Ratio

Application Area		(AK-1000(A) + Water) + AK-1000(B)
Underground parking lot	Floor	(15kg + 15kg) + 3bag(75kg)
	Wall	(15kg + 15kg) + 4bag(100kg)

AQUAKEEPER APPLICATION METHODS

3. Shingle Roof Waterproofing & Repair

(Patent No. 10-2290148)

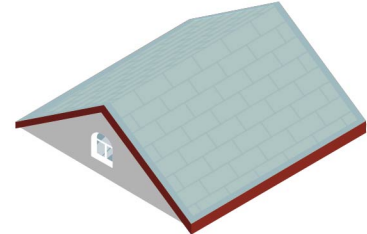
● Patented Construction Method

**① Shingle Surface Preparation**

Fix any loose or unstable shingles with nails and level the surface evenly.

**② Flashing Installation**

Install flashing along structural edges to block water infiltration.

**③ Reinforcement Mesh Attachment**

Attach mesh to prevent crack spreading and absorb external impacts.

**④ First Coat of AK-1000**

Mix and apply AK-1000 to the specified thickness.

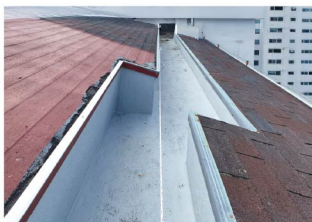
**⑤ Second Coat of AK-1000**

Apply AK-1000 again as needed based on site conditions.

**⑥ Application of Shingle Finish Coat**

Mix AK-1000 Part A with "Shingletan" and apply evenly to form the final shingle surface.

● Construction Photos



Flashing installation



Mesh reinforcement



AK-1000 application



Construction completed

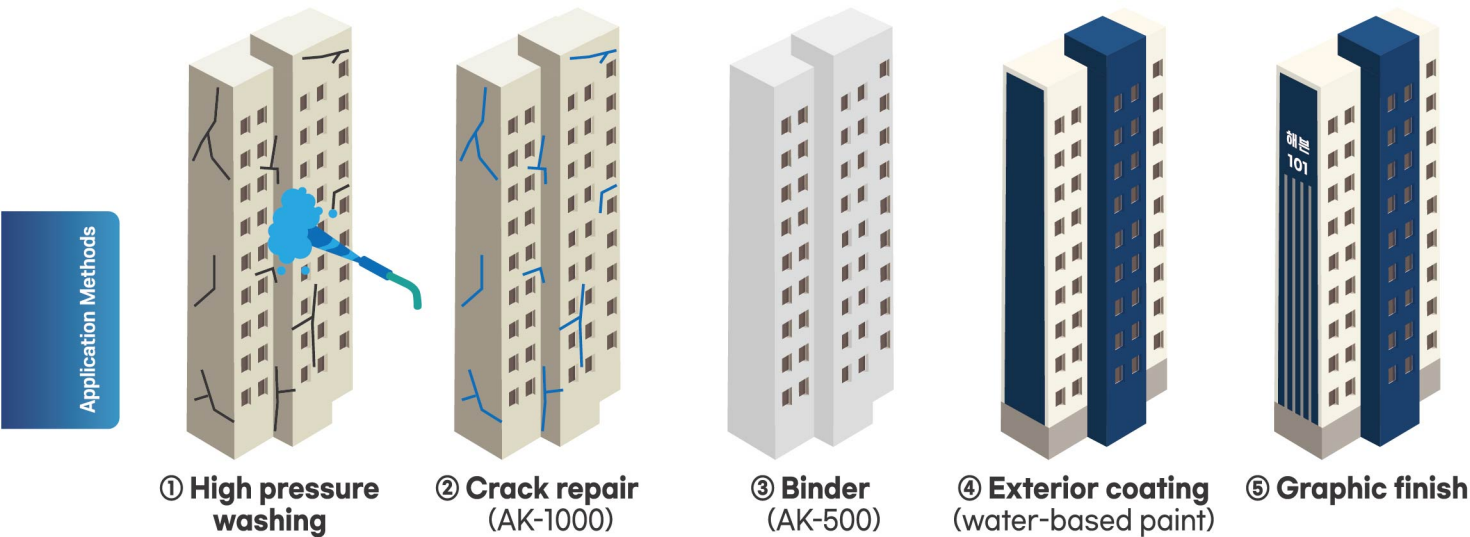
● Mixing Ratio

Application Area		(AK-1000(A) + Water) + AK-1000(B) or Resin mortar			
Shingle surface	Base coat & middle coat	(15kg	+	15kg) + 3bag(75kg)
Application Area		AK-1000(A) + Shingletan (Shingle finish coat)			
Shingle surface	Top coat	15kg	+		5pail(80kg)

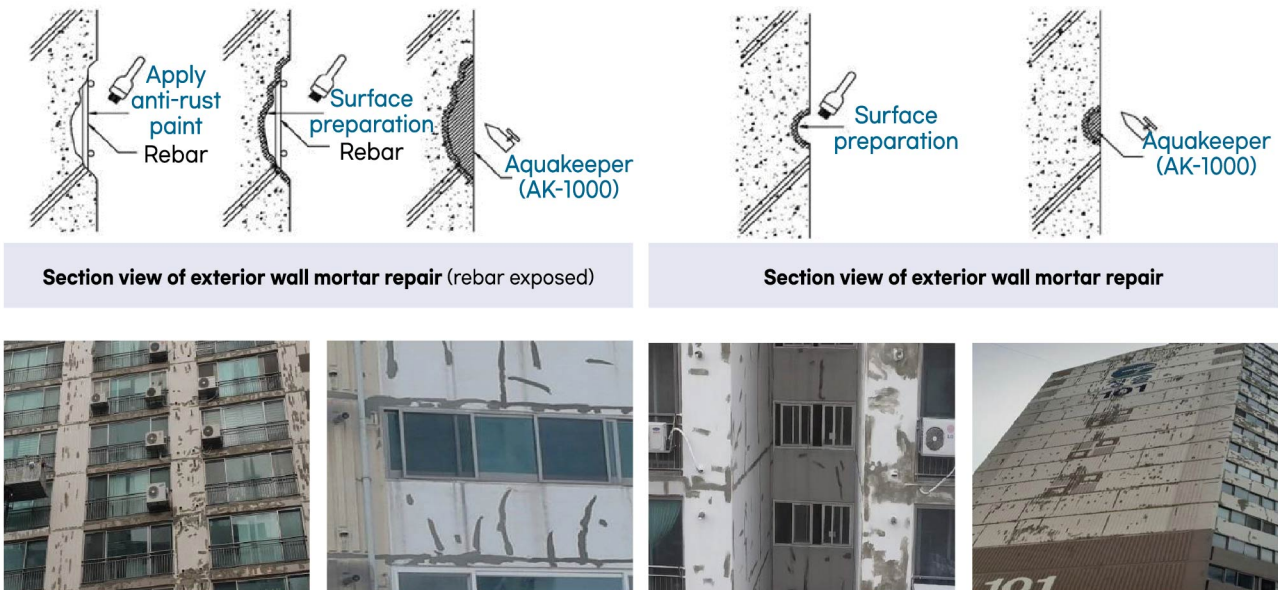
4. Exterior Wall Crack Repair & Coating

(Patent No. 10-2193241)

● Patented Construction Method



● Construction Photos



● Mixing Ratio

Application Area		(AK-1000(A) + Water)	+ Resin mortar
Crack repair	Wall	(2L + 2L)	+ 20kg
	Microcracks	(2L + 2L)	+ 20kg
	Deep areas	(1L + 1L)	+ 20kg



HEAVEN KOREA CO., LTD.

Head Office 172, Cheomdan 2-ro, Jeongeup-si, Jeollabuk-do

Tel_ +82-63-538-0318

E-mail_ heaven8457@heavenak.com

Website_ en.heavenak.com



Visit Heaven Korea Website