

Substrate	Common name and treatment	Undercoats									w.proof	Notes	
		Weak-solvent primer EPO	Aquasabinon	AdPower EPO *	Adcool sealer	Adpermate	Adwall	Softwall	Dannetsu Softwall	Adsolid			Multiprimer EP
Metal	Steel frame	2 to 3 types of scraping	●	●	●	-	-	-	-	-	-	-	-
	Steel sheet	2 to 3 types of scraping	●	●	●	-	-	-	-	-	-	-	-
	Tin	2 to 3 types of scraping	●	●	●	-	-	-	-	-	-	-	-
	Electro galvanized steel sheet	2 types of scraping	●	-	●	-	-	-	-	-	-	-	-
	Stainless steel plate	2 types of scraping	●	-	●	-	-	-	-	-	-	●	-
	Aluminum plate	2 types of scraping	●	-	●	-	-	-	-	-	-	●	-
Non-metal	Calcium silicate board	Keical board, ceiling board	-	-	-	-	●	-	-	-	-	●	more than 0.8 density
	Precast concrete members	PC board	-	-	-	●	●	●	-	-	-	●	-
	Concrete block		-	-	-	●	●	●	-	-	-	●	-
	ALC panel		-	-	-	●	●	●	-	-	-	●	-
	Plaster / slate board	Ceiling board	-	-	-	●	●	●	-	-	-	●	-
	Concrete	RC, SRC	-	-	-	●	●	●	-	-	-	●	-
	Cement mortar	RC, SRC	-	-	-	●	●	●	-	-	-	●	-
	Ceramic siding board		-	-	-	●	●	●	-	-	-	●	-
	Slate, color vest, colonial	Flexible board	-	-	-	●	●	●	-	-	-	●	-
	Asbestos slate	Asbestos board	-	-	-	●	-	-	-	-	-	●	-
Waterproof	Asphalt waterproof	2 to 3 types of scraping	-	-	-	-	-	-	-	-	-	●	(note 1)
	PVC sheet waterproof	2 to 3 types of scraping	-	-	-	-	-	-	-	-	-	●	(note 1)
	Urethane waterproof	2 to 3 types of scraping	-	-	-	-	-	-	-	-	-	●	(note 1)
	FRP waterproof	2 to 3 types of scraping	-	-	-	-	-	-	-	-	-	●	(note 1+2)

\*JIS specification

\* ● is feasible, but please contact us if the old coated substrate is bad for adhesion.

\* note 1: Each waterproofing material is needed to scrape in 2 to 3 grade, and remove old coating film as much as possible. Please contact us for new construction substrate.

\* note 2: Roughening is necessary for FRP waterproof substrate.

## Precautions for application [Repair substrate]

- Remove rust, oil, adherence, weakened old coating film, float, peeling with disksander, wirewheel, scraper, wirebrush etc., thoroughly.
  - Repair crack / weakened substrate with sealing adjustment etc.
  - Remove all powdery adherence with high pressure washing, clean thoroughly, and dry substrate completely.
  - Accomplish appropriate adjustment of substrate based on deterioration level with old film and substrate survey before application.
  - Always apply proper standard coating amount to avoid anti-rust and adhesion function decline.
    - Not applicable when the existing coating film is fluorine resin / silicone resin.
    - Not applicable for doweled molten galvanized steel.
    - Please contact us when aiming to apply for newly constructed building.
- \* Please refer to the Ministry of Land, Infrastructure, Transport and Tourism repair work guidebook. [Other notes]
- Acid wash liquid to be used in surface preparation may change the color of the coating film due to its lytic action. Take sufficient precaution when cleaning.
  - When strong alkaline property is foreseen for substrate, efflorescence may be caused to affect the finish of the coating films. Please use solvent-based primer.
  - Actual color may differ slightly from color sample due to method of surface adjustment.

Adgreencoat is always necessary to stir more than 3 minutes in low speed rotation with stirrer just before use at each application.

### Top coats / Main

- The amount indicated on the manual is standard application and including variability due to condition of substrate, weather, application, and structure of buildings.
- It is essential to stir more than 3 minutes in low speed rotation with stirrer just before use at each application due to its specific ceramics to be dispersed thoroughly.
- The process of the substrate adjustment is not included in the scope of responsibility for coating.
- Not applicable when the existing coating film is either 2-liquid solvent type fluorine resin coating or silicone resin coating.
- Avoid application under the weather conditions of; temperature below 5 degrees c., humidity above 85%, and where condensation, rainfall, strong wind, or snowfall is expected.
- Protect by masking/curing for rain and snow when expected after application. And/or stop application afternoon when expected below freezing temperature during night.
- Stop application and dry thoroughly before sunset when expected high humidity, night dew, morning mist, condensation, squall etc., to avoid drops, unevenness, and peeling cause.
- Avoid application when expected continuously/always condensation in the area and the season.
- Always make sure the standard amount and the interval time according to the specification, not to cause peeling, crack, and/or color discrepancy, and pay attention not to apply too thick in once.
- Make sure not to freeze at site and delivery, it cannot be used once frozen.
- Avoid direct sunlight, store under 40 degrees c. condition in cold and dark place, use outside or well ventilated. (Always make sure the storage condition when application.)
- Please refer to the SDS (safety data sheet) for the general and detailed handling and notification.)

### For metals / Undercoat

- The amount indicated on the manual is standard application and including variability due to condition of substrate, weather, application, and structure of buildings.
- Always make sure the standard amount and the interval time according to the specification, not to cause peeling, crack, and/or color discrepancy.
- Avoid application under the weather conditions of; temperature below 5 degrees c., humidity above 85%, not to cause gloss failure of topcoats.
- Avoid application when expected condensation, rainfall, strong wind, or snowfall after within 6 hours.
- Avoid direct sunlight, store under 40 degrees c. condition in cold and dark place, use outside or well ventilated.
- Strictly meet requirements and be especially careful about fire, and strictly observe the Fire Service Act and the Industrial Safety and Health Act.
- Close tightly the lid and use up as soon as possible after opened.
- Not use any tools which sparks occur, and take static electricity preventive measures.
- If spilled from containers, wipe with a cloth and store in a container with water.
- Dispose bins and contents as industrial waste according to rules of each local government.
- Do not dispose waste water (washed tools / bins) to ground/drain due to bad affect to environment, always contact to local facility of waste water treatment plant and/or industrial waste supplier.
- Always contact us when apply to newly constructed / materials.
- Please refer to the SDS (safety data sheet) for the general and detailed handling and notification.)

● This handling manual is issued on Jan 2023 with the latest information as of the month.

### For waterproofing substrate / Undercoat

- The amount indicated on the manual is standard application and including variability due to condition of substrate, weather, application, and structure of buildings.
- Dry thoroughly of substrate (less than 10% moisture, less than pH10). If solvent remains on the existing coating film, there is risk of blistering, so need sufficient drying before coating.
- Please cut off where the upper and lower tiles are glued with paint at drainage section.
- Please do a final check, such as damage to the tiles, nail lifts, and broken seals before application.
- Please remove extraneous substances (Moth, algae, degraded layer etc.) by high pressure washing (about 10MPa pressure) as substrate adjustment.
- It may cause peeling of coating and/or less gloss etc. if adjustment of substrate is insufficient.
- It may cause gloss deterioration, swelling, cracking and peeling if the substrate surface is wet due to rain or dew, therefore, do not apply until it is sufficiently dry.
- Please immediately wash coating tools with a lacquer thinner etc.
- Sealer coating may cause swelling and shrinkage of the existing coating. Please check in advance with trial coating. If swelling or shrinkage occurs, completely remove the existing coating.
- Close tightly the lid and use up as soon as possible after opened.
- Avoid application when expected condensation, rainfall, strong wind, or snowfall after within 6 hours.
- Strictly no fire. Please avoid heat, humidity, and keep in cool and dark place.
- Not use any tools which sparks occur, and take static electricity preventive measures.
- If spilled from containers, wipe with a cloth and store in a container with water.
- Do not dispose waste water (washed tools / bins) to ground/drain due to bad affect to environment, always contact to local facility of waste water treatment plant and/or industrial waste supplier.
- Please refer to the SDS (safety data sheet) for the general and detailed handling and notification.)

### For non-metals / Undercoat

- The amount indicated on the manual is standard application and including variability due to condition of substrate, weather, application, and structure of buildings.
- Thoroughly dry to less than 8% moisture and less than pH 10 when apply to alkalic substrate such as concrete / mortar etc..
- Stir thoroughly before application, and apply outside or well ventilated area.
- Avoid application under the weather conditions of; temperature below 5 degrees c., humidity above 85%.
- Avoid application when expected condensation, rainfall, strong wind, or snowfall after within 6 hours.
- Strictly do not mix any other coatings, pens etc. regardless of any types.
- Storage must be in cool and dark place, bins must be closed tightly, and store in well ventilated.
- Avoid using together with general water-based coating tools and Adpermate which will be solidated due to its cationic specification.
- Please refer to the SDS (safety data sheet) for the general and detailed handling and notification.)

\* wb=water based, 1WSV=1 liquid weak solvent, 2WSV=2 liquid weak solvent, 2SV=2 liquid solvent

## Top coats

Product Name	Packing	Application area (per 1 coating)	Type	classification
Adcool Aqua 30% gloss	14 kg / can 4 kg / can	90 m2 / can 25 m2 / can	Modified acrylic silicone resin	WB
Adcool Aqua 50% gloss	14 kg / can 4 kg / can	90 m2 / can 25 m2 / can	Modified acrylic silicone resin	WB

## Under coats

Product Name	Packing	Application area (per 1 coating)	Type	classification	
For Metal	Weak-solvent primer EPO	16 kg / can	53~123 m2 / can	Modified epoxy resin	1WSV
	Aquasabinon	16 kg / can	105~140 m2 / can	One-component reaction curing type Epoxy modified acrylic resin	WB
	AdPower EPO (For strong rust) *JIS specification	16 kg / set	95~114 m2 / can	2-liquid quick-drying weak solvent type Modified epoxy resin	2WSV
For masonry	Roof Wall Adcoolsealer	14 kg / can	82~140 m2 / can	Heat shielding epoxy resin	1WSV
	Roof Wall Adpermate *remain stock only	14 kg / can	82~140 m2 / can	Nano-cation - high penetration type Epoxy modified emulsion	WB
	Wall Adwall *remain stock only	16 kg / can	100~133 m2 / can	Special Urethane Modification Acrylic emulsion	WB
	Wall Softwall	16 kg / can	10~53 m2 / can *depends on way of application	Flexible repair coating material E	WB
For waterproofing	Wall Dannetsu Softwall	12 kg / can	12~24 m2 / can	Heat-insulating flexible repair material E	WB
	Multiprimer EP	16 kg / set	100~123 m2 / can	Two-component reaction curable epoxy resin	2SV
For Asbestos slate	Multiprimer EP Dedicated thinner	16 kg / can 4 kg / can	-	Epoxy thinner	SV
	Adsolid *Limited for the certified applicator	18 kg / can	approx. 100 m2 / can	Condensation / Solidification Asbestos processing agent	WB

## Intermediate coats

Product Name	Packing	Application area (per 1 coating)	Type	classification	
For metal / Coating waterproofing material	BariStop	18 kg / can	36~60 m2 / can	Acrylic rubber waterproof film	WB

\* It will be the end of product with the remaining stock only with Adpermate and Adwall.

\* Limited item for the certified applicator: Only for the applicator who took the certified construction engineer workshop (paid). Please contact us for the details.

\* Please contact us when you need "JIS specification".

## Standard construction specification

### For Metal Substrate

[Applicable substrate: steel, aluminum, stainless plate etc.]

Process	Product Name	Standard application amount (kg / m <sup>2</sup> / times)	No. of coatings	Coating interval time (23°C)	Diluent agent	Diluent ratio	Application tools
Substrate adjustment	・Remove and clean dusts with using high pressure washing, thoroughly dry substrate. ・Remove rust, float, paint film deterioration such as peeling, powder etc., by using power tool such as disc sander, a wire wheel, and hand tool such as sand paper, scraper wire brush, etc. ・After 2-3 types of scraping, wipe oil to remove by solvent.						
Under coat	Weak-solvent Primer EPO	0.13~0.3	1~2	more than 16h / less than 7 days	Thinner	0~10%	Brush Wool roller Airless spray
Top coat	Adcool Aqua 30% / 50% gloss	0.15	2	more than 3h / less than 7 days	Water	0~5%	Brush Wool roller Airless spray

- ◇ All water-based specification: "Aquasabinon" (1 liquid / water-based) 0.11-0.15kg/m<sup>2</sup>/times, coating interval more than 16h, less than 7d, dilution 0-5% water  
 ◇ For strong rust / JIS specification: "Adpower EPO" (2 liquid / solvent-based) 0.14-0.17kg/m<sup>2</sup>/times, coating interval more than 4h, less than 7d, dilution 0-10% thinner

### For Non-Metal Substrate

[Applicable substrate: concrete, mortar, slate, ALC etc.]

Process	Product Name	Standard application amount (kg / m <sup>2</sup> / times)	No. of coatings	Coating interval time (23°C)	Diluent agent	Diluent ratio	Application tools
Substrate adjustment	・Clean with high pressure washing, and thoroughly dry substrate. ・Remove and clean deteriorated old coating film, dusts, oils etc., used in combination with hand tools such as wire brush, cloths, sand paper etc. ・Repair the cracks, scratch, unevenness, and defect, etc. on substrate before application if necessary.						
Under coat	Adcoalsealer (Weak solvent)	0.1~0.17	1	more than 16h / less than 7 days	No dilution	-	Brush Wool roller Airless spray
Top coat	Adcool Aqua 30% / 50% gloss	0.15	2	more than 3h / less than 7 days	Water	0~5%	Brush Wool roller Airless spray

- ◇ All water-based specification: "Adpermate" (1 liquid / water-based) 0.1-0.17kg/m<sup>2</sup>/times, coating interval more than 3h, less than 7d, no dilution  
 ◇ All water-based specification for wall: "Adwall" (1 liquid / water-based) 0.12-0.16kg/m<sup>2</sup>/times, coating interval more than 3h, less than 7d, no dilution  
 ◇ JIS specification: "Adbest sealer" (1 liquid / weak solvent-based) 0.2-0.8kg/m<sup>2</sup>/times, coating interval more than 4h, less than 7d, dilution 0-10% thinner

### For Waterproofing Substrate

[Applicable substrate: urethane, asphalt waterproofing etc.]

Process	Product Name	Standard application amount (kg / m <sup>2</sup> / times)	No. of coatings	Coating interval time (23°C)	Diluent agent	Diluent ratio	Application tools
Substrate adjustment	・Remove / clean dusts with using a high pressure water washing, thoroughly dried substrate. ・Depending on types of substrate, apply appropriate treat / adjustment such as removing weakened and/or floating old coating film etc. *In case of polymer cement mortar (Leve-mol) installation on a silver coating, apply 0.3 kg / m <sup>2</sup> / 2 times to completely seal the silver surface.						
Under coat	Multiprimer EP (Solvent)	0.13~0.16	1	more than 16h / less than 5 days	Dedicated thinner	0~18%	Brush Wool roller Airless spray
Top coat	Adcool Aqua 30% / 50% gloss	0.15	2	more than 3h / less than 7 days	Water	0~5%	Brush Wool roller Airless spray

- ◇ All water-based specification: "Adpermate" (1 liquid / water-based) 0.1-0.17kg/m<sup>2</sup>/times, coating interval more than 3h, less than 7d, no dilution  
 \* Waterproofing layer application: please invariably contact us due to substrate diversity.

## Health and safety precautions

#### 1. Handling precaution

- When handling, avoid contact with skin, and wear appropriate protective clothes.
- Wash hands and gargle thoroughly after handling.
- Install ventilation equipment in application place and well ventilate during/after application.
- Do not use the products for other purpose than the intended.

#### 3. Storage precaution

- Store the products inside place in the temperature range of to degrees c., avoiding direct sunlight.
- In case of leakage, cover with dry sands etc. before collecting, or wipe off residual spill by waste close etc.
- Keep reaching out from children.

#### 2. Emergency and first aid

- Eye contact: Immediately rinse affected eyes with plenty of clean water, and seek medical attention.
- Skin contact: Wash affected area with clean water and soap, and seek medical attention if necessary.
- Ingestion: Take a plenty of clean water and induce vomiting, and seek medical attention.
- Inhalation: If feeling sick, take rest for a while, and/or seek medical attention.

#### 4. Disposal precaution

- To dispose of used containers and unused coating materials etc., contact industrial waste disposal contractors.
  - To dispose of this products, do not release it on ground or into sewer, drainage etc.
- \* Please refer to the each Safety Data Sheet (SDS) for the details.

## Standard construction specification

### For Wall / Slight Elastic Undercoat

[Applicable substrate: concrete, mortar, slate, ALC etc.]

Process	Product Name	Standard application amount (kg / m <sup>2</sup> / times)	No. of coatings	Coating interval time (23°C)	Diluent agent	Diluent ratio	Application tools
Substrate adjustment	・Remove dust, uncured cement powder, dust, oil and other adhesive materials with a wire brush, waste, leather, sandpaper, etc., and make sure for dry, clean surface.						
Under coat	Dannetsu Softwall	0.5~1.0	1~3	more than 5-16h / less than 7 days	Water	0~1.2 L	Porous roller
		0.5~1.0	1~3	more than 5-16h / less than 7 days	Water	0.6~1.2 L	Spraying (scraped-finish gun) Diameter 4~6mm Spray pressure 0.5~0.6MPa
	Softwall	0.3~0.6	1~2	more than 5 h / less than 7 days	Water	0.9~1.2 L	Wool roller (middle length)
		0.8~1.5	1	more than 5 h / less than 7 days	Water	0.3~0.9 L	Porous roller
Top coat	Adcool Aqua 30% / 50% gloss	0.15	2	more than 3 hours / less than 7 days	Water	0~5%	Brush Wool roller Airless spray

### For Asbestos Slate Substrate

[Applicable substrate: asbestos slate only]  
 \*handling limited for certified applicator

Process	Product Name	Standard application amount (kg / m <sup>2</sup> / times)	No. of coatings	Coating interval time (23°C)	Diluent agent	Diluent ratio	Application tools
Substrate adjustment	・ Remove organic waste (garbage, dust, moss, mold, bird dropping, etc.) with brush or broom, etc., and apply Adsolid. ・ Note: Do not use high pressure washing as it may cause asbestos scattering.						
	Adsolid (Substrate adjusting agent) *Limited for the certified applicator	0.1~0.17	1	more than 6 hours / less than 7 days	No dilution	-	Airless spray, Sprayer etc.
Under coat	Adcoalsealer (Weak solvent)	0.1~0.17	1	more than 16h / less than 7 days	No dilution	-	Brush Wool roller Airless spray
Top coat	Adcool Aqua 30% / 50% gloss	0.15	2	more than 3h / less than 7 days	Water	0~5%	Brush Wool roller Airless spray

- ◇ It is not feasible to apply on synovial surface and/or if old coating film is remaining on substrate

### For Intermediate Coat

Process	Product Name	Standard application amount (kg / m <sup>2</sup> / times)	No. of coatings	Coating interval time (23°C)	Diluent agent	Diluent ratio	Application tools	
Substrate adjustment	・ Depending on types of substrates, follow the standard construction specifications for each material, and apply appropriate substrate treatment / adjustment, and primer coating.							
Under coat								
Intermediate coat	For metal / Coating waterproofing material	Baristop	0.3~0.5	2	more than 5h / less than 7 days	Water	0~5%	Brush Wool roller Airless spray
Top coat	Adcool Aqua 30% / 50% gloss	0.15	1~2	more than 3h / less than 7 days	Water	0~5%	Brush Wool roller Airless spray	

- It is the standard amount/numbers on the manual. It has some variability according to condition of application.
- When handling solvent, make extra care about fire and comply with the Fire Service Act and the Industrial Safety and Health Act.