

## 5 main features of BONNFLON WATERBASE AC COATING SYSTEM

### 1. Outstanding weatherability

Outstanding weatherability of fluororesin material presents a coating system that remains maintenance free for 15 to 20 years.

### 2. Excellent water repellency

Undercoat is a water repellent ( a special water absorption-resisting material for concrete) which prevents water from entering the coating system.

### 3. Natural finish

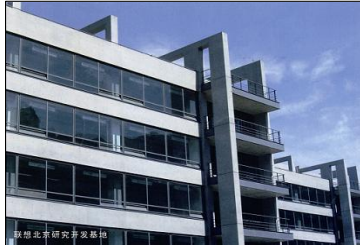
The product maintains the natural finish color of concrete.

### 4. Crack protection

The water absorption-resisting material penetrates the concrete which is then covered by fluororesin paint coat. This prevents the concrete deterioration near hair crack.

### 5. Outstanding resistance against neutralization

Neutralization is the major enemy to concrete. The product prevents neutralization to a high level.



## Bonnflon Waterbase AC Coating System- Fluoropolymer Concrete Protection Coating

BONNFLON Waterbase AC Coating system developed by AGC COAT-TECH CO., Ltd (ACT) is the world's first concrete protective coating for civil engineering and construction application. Asahi Glass Co., Ltd (AGC), a parent company of AGC-TECH CO., Ltd (ACT), is a leading total chemical industrial company in Japan. AGC developed and commercialized a fluoropolymer resin called LUMIFLON that features excellent weatherability, capability of drying at normal temperature, and superior appearance in 1982. BONNFLON Waterbase AC Coating system, composed of LUMIFLON and other materials such as water repellent (A water absorption-resisting material for concrete), shows an outstanding performance in terms of durability and resistance against corrosion.

BONNFLON Waterbase AC Coating system, possessing all the outstanding characteristics of fluoropolymer resin, therefore, makes it the most ideal and long-term protective system for concrete.

Unlike conventional fluoropolymer paints, the new BONNFLON paint hardens under normal temperature. This drastically expands the scope of use of fluoropolymer materials themselves as they allow on-site application of corrosion-resistant coating on bridges and large concrete structures where the use of conventional fluoropolymer paints are prohibited.

The fluoropolymer paints are widely known for their excellent resistance against ultraviolet attack and stability against acids and alkalis. Air pollution is worsening any painting films at an increasing speed. This is especially true in large cities where civil engineering works, buildings and other structures are under adverse effects of Nox, Sox and other pollutants contained in exhaust emission. Not only do the pollutants affect the concrete at elevated concrete structures (Monorails, expressways etc.) but also gradually reduce their physical strength. Since this corrosion could jeopardize our safety, it is very imperative to take preventive measures.

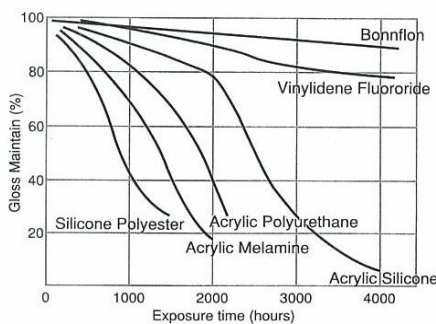


Fig. Weatherability Test

Sunshine Weather-O-Meter  
Humidity: 80% RH  
Water spray: 12 min./hour

※There is no color difference between repaired parts and other parts when substrate preparation materials are used.



## Performance of BONNFLON WATERBASE AC COATING SYSTEM

Test items	Methods of testing	BONNFLON AC COATING SYSTEM
1 Adhesion	JIS K 5600 Standard	25/25
	X cutting method (4mm x 4mm)	25/25
2 Water permeability	JIS A 6909-7-12 After 1 day	0.20ml
	Permeability test B After 5 days	0.30ml
3 Water resistance	JIS K 5600-6-2 Water resistance 20°C x 3 months	No change
6 Repeated warming and cooling resistance	JIS K 6909-7-10 Repeated warming and cooling test 50 cycles	No change
5 Alkali resistance	JIS K 5600-6-1 Alkali resistance 20°C x 1 months	No change
7 Accelerated weatherability	JIS K 5400 Apperance	No change
	Accelerated weatherability Rate of turning yellow (Δ YI)	-2.59
	Gloss retention (%)	80
8 Weatherability	JIS K 5600-7-6 5 years (Chiba)	No change
	Weatherability 3 years (Okinawa)	