

## DH-100 Old-new adhesive

### Product Information

DH-100 old-new adhesive is an epoxy resin which is used to prevent deterioration of adhesive strength when a new cement mortar is applied to the existing concrete structure. DH-100 provides high adhesive strength with the existing concrete, and is not affected by the new cement mortar or concrete hydration, providing complete integration adhesion between old and new concrete.



### Characteristics

It provides enough adhesive strength for concrete or reinforcing bars due to the high adhesive strength of epoxy resin.

It does not produce any cracks (poor interfacial adhesion) caused by the volume reduction, for it has a stable weather-resistance regardless of natural condition of high or low temperatures, and almost no shrinkage resulting from hardening reaction.

It is not affected by external impact, vibration or tensile strength, for it provides a perfect reinforcement to low strength and aged surface strength of new or old concrete.

It provides a perfect integration because it triggers hydration of newly placed cement mortar or concrete followed by absorption hardening.

It is not affected by moisture included in the cement mortar because of its underwater-hardening epoxy structure, providing a good adhesiveness even at a wet matrix.

It does not oxidize the adhesive surface because there is no neutralization with concrete due to a weak alkaline property, providing a good adhesiveness.

### Application Area

- New/existing concrete adhesion, hardening concrete adhesion.
- Recovery of the cut end and primer for resin mortar operation.
- Epoxy primer for wet surface.
- Concrete adhesion such as decorative design mortar and floor-finishing mortar.
- Adhesion reinforcement when tiling at outer wall and wet surface.

#### DH-100 Dimension Details

Classification	Main Component	Hardening Component	Remarks
Exterior Appearance	White Liquid	Brown Liquid	
Mixing Rate	100	20	
Specific Gravity	1.25 ± 0.1	1.02 ± 0.1	23 ± 0.5°C
Mixture Viscosity(mPa.s)	700±50		23 ± 0.5°C
Pot Life(Min)	30±10		23 ± 0.5°C
Tack Free Time(Hours)	8±2		23 ± 0.5°C
Hardening Time(Hours)	24 ~ 36		
Packing Unit	10 KG	2kg	

#### DH-100 Property Data

Test Category	Result Value	Base Value	Test Method	
Adhesive Strength ( N/mm <sup>2</sup> )	8.8	Over 6	KS F 4923	
Seal Breaking Expansion Rate ( % )	1.7	Under 10		
Seal Strength ( N/mm <sup>2</sup> )	41.2	Over 15		
Hardening Contraction Rate ( % )	1.9	Under 3		
Heating Change (110±3°C, 168hr)	Weight Change Rate ( % )	1.0		Under 5
	Volume Change Rate ( % )	0.9		Under 5

**Pot Life** the period of time during which you can work without a change in viscosity after resin and hardener are mixed.

**Tack Free** the state of hardening in which you can lightly touch the mixed resin with your hand, but the hardened material does not stick.

**Hardening Time** the time it takes for the mixed resin to be hardened enough to realize about 80% of final mechanical strength.