DIA-X BOND

Universal

X-traordinary Strength, Remarkably Simple.

INDICATIONS FOR USE:

- All direct restorations:
 Resin-based composite, resin-modified glass ionomers, core build-up, resin cement, etc.
- All indirect restorations: metal, zirconia, glass ceramics, alumina, etc.
- Desensitization/Sealing of Tooth
- ∏ Intraoral Repair
 (chipped porcelain, additions to direct restorations, etc.)









DIA-X BOND

Universal

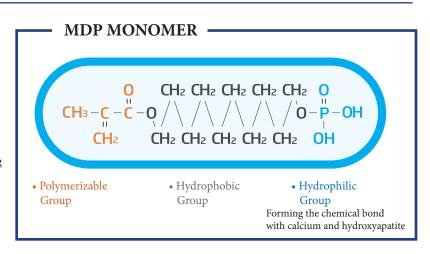
Advantages of Universal Bond vs 7th Generation Bond



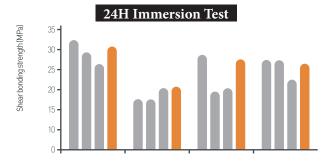
Universal Bond	7th Generation Bond
Versatile: total-, self-, or selective-etching	Self-etching
Stable and hydrophilic	Needs to be thoroughly shaken before use
Self-etching without additional etching material has better adhesion than 5th generation bonding (2-step process)	Weak bond to enamel
Indirect restorations, direct restorations (zirconia/metals, 10-MDP as the primary adhesive functional monomer)	Direct restorations only (enamel/zirconia, ceramics, etc.)
Virtually no post-op sensitivity	Reduced chance of post-op sensitivity
Long shelf life (2 years)	Short shelf life

10-MDP Monomer Features

- The 10-MDP monomer component shows excellent bonding strength to metals such as zirconia and alumina
- Excellent overall bonding strength to teeth (dentin, enamel), indirect restorations (metal, zirconia, alumina), and direct restorations (composite resin)
- Excellent chemical bonding with tooth components due to the structure of the hydrophilic group of 10-MDP
- It has low solubility in water and forms excellent chemical bonding with the tooth surface
- 10-MDP monomer has excellent solubility stability compared to other monomers, as it is the most hydrophobic of the adhesive functional monomers



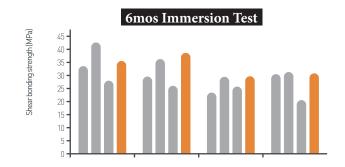
▼ Direct Restoration Immersion Tests



	T.E.	S.E.	T.D.	S.D.
Brand A	32.25	17.77	28.96	27.32
Brand B	29.25	17.72	19.59	27.29
Brand C	26.35	20.32	20.32	22.53
Dia-X Bond	30.81	20.83	27.64	26.43

Conditions: • Composite resin: DiaFil

- 37% Etching Gel: DiaEtch
- Light curing with D-Lux+ (high mode 10 secs)



	Initial T.E.	After S.E.	Initial T.D.	After S.D.
Brand A	33.64	29.75	23.24	30.33
Brand B	42.73	36.10	29.49	31.08
Brand C	28.07	26.02	25.80	20.37
Dia-X Bond	35.54	38.47	29.69	30.76

Conditions: • Number of specimens: 15 ea

- Light curing with D-Lux+ (high mode 10 secs)
- \bullet 6 months / $37^{\rm o}C$ / 1mm/min shear adhesion measurement





No phosphoric acid



Phosphoric acid on enamel



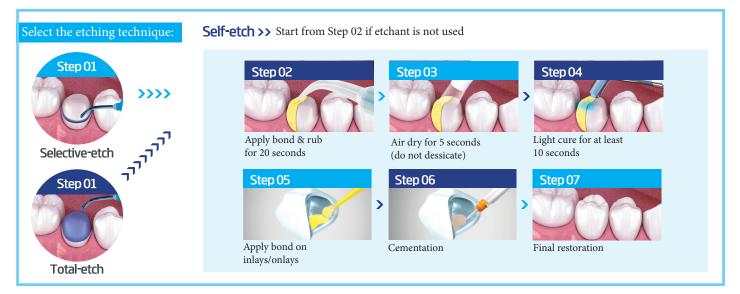
Phosphoric acid on enamel and dentin

▼ Step-by-Step Instructions -

• Direct Restoration



• Indirect Restoration



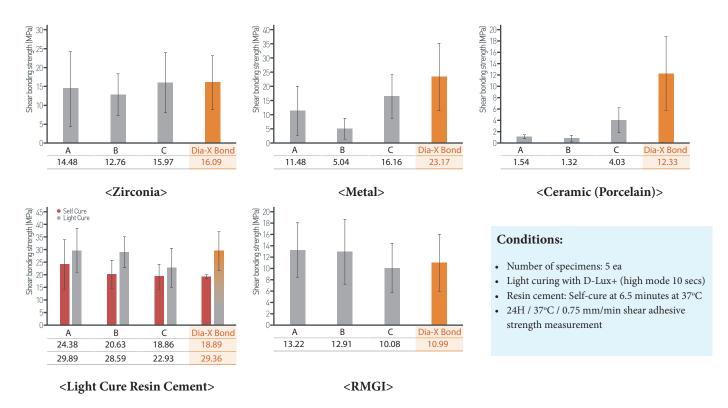
• Desensitization/Sealing of Tooth



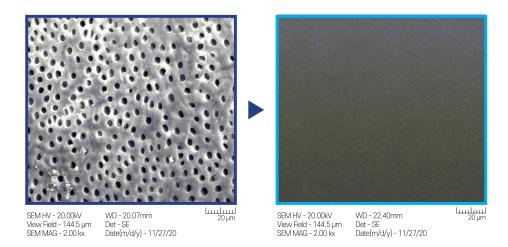
• Intra-Oral Repair



▼ Indirect Restoration Material Comparison Tests



▼ Desensitization / Dentin Tubules Occlusion



SEM shows Dia-X Bond Universal's desensitization effectiveness by completely occluding the dentin tubules.



DiaDent Group International