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[\[Image PDF \(413K\)\]](#) [\[References\]](#)**Effect of fiber-reinforced composite at the interface on bonding of resin core system to dentin**[Isil CEKIC-NAGAS^{1\)}](#), [Gulfem ERGUN^{1\)}](#), [Arzu TEZVERGIL^{2\)}](#), [Pekka K. VALLITTU^{2\)}](#)
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Abstract:

The aim of this study was to evaluate the effect of fiber-reinforced composite (FRC) at the interface on bonding of resin core systems to bovine dentin using different adhesive systems. To this end, the labial surfaces of 60 bovine incisors were ground to obtain flat dentin surfaces and then divided into two groups according to the adhesive system used: total-etching (Solobond Plus) *versus* self-etching (Clearfil SE Bond). Resin core systems were bonded to tooth structure either without or with a FRC layer (everStick Net, StickTech). For groups with FRC layer, a silicon forming aid was used to adapt the latter on the dentin surfaces. After resin core was polymerized with Optilux 501 for 40 seconds, the specimens were tested in a universal testing machine. ANOVA revealed that presence of FRC at the interface had a significantly positive effect on bond strength ($p < 0.001$). However, differences between groups were not significant for either adhesive system ($p = 0.076$) or with the use of silicon forming aid ($p = 0.348$).

Key words:[Bond strength](#), [FRC](#), [Silicon device](#)[\[Image PDF \(413K\)\]](#) [\[References\]](#)

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