

Lithium Disilicate glass, an all-ceramic system. Furthermore, lithium disilicate ceramics can be used as a dental repair material, bone repair and filling material, and biological implant material due to their high strength, good biocompatibility, translucency, and attractiveness[4] Consequently, this filler agent lithium disilicate is more resistant than feldspathic ceramic⁴; therefore, it is the material of choice for esthetic treatments with or without a framework.^{5,6} However, lithium disilicate remains sensitive to acid etching, which can alter the morphology of the ceramic and increase its capacity to bond with resin cements. The objective of this study was to evaluate the effect different HF concentrations and application times, with and without an additional etching step with 37% phosphoric acid (H₃PO₄), on the surface roughness of a ceramic reinforced by lithium disilicate and also on the strength of the bond formed between the ceramic and self-adhesive resin cement. It is one of the most aesthetically pleasing options, porcelain can be layered on it, creating incredible translucency and a very realistic looking tooth that matches with other natural teeth. Lithium disilicate is a filler agent of acid-etchable ceramics, and .60% to 65% of its composition includes lithium oxide (Li₂O) crystals