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The Angle Orthodontist: Vol. 58, No. 3, pp. 197-203.

Morphology of Polycrystalline Alumina Brackets and its Relationship to Fracture Toughness and Strength

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ABSTRACT

Inherent defects seen in the morphology of polycrystalline ceramic brackets severely limit their fracture strength. Only by improving the surface characteristics can those mechanical properties which are necessary for sufficient strength and efficient orthodontic tooth movement be more fully realized.

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KEY WORDS: BRACKETS, CERAMICS, FRACTURE MORPHOLOGY, FRACTURE TOUGHNESS, TENSILE STRENGTH.

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