

A.	$A_{\text{cone surface}} = \pi r g$
B.	$\frac{H-h}{r_2} = \frac{H}{r_1} (=) (H-h)r_1 = r_2 H (=) H r_1 - r_2 H = h r_1 (=) H(r_1 - r_2) = h r_1 (=) H = \frac{h r_1}{r_1 - r_2}$ <p>1. CORONAL ADHESION AREA APICAL</p> <p>2. H, h, r1, r2, g1, g2</p> <p>3. r1, r2, h, g1-g2</p>
C.	$g_1^2 = H^2 + r_1^2 (=) g_1 = \sqrt{H^2 + r_1^2}$ $g_2^2 = (H-h)^2 + r_2^2 (=) g_2 = \sqrt{(H-h)^2 + r_2^2}$
D.	$A_{\text{Adhesion}} = \pi r_1 g_1 - \pi r_2 g_2 (=)$ $ (=) \sqrt{H^2 + r_1^2} \pi r_1 - \sqrt{(H-h)^2 + r_2^2} \pi r_2 (=)$ $ (=) \sqrt{\left(\frac{h r_1}{r_1 - r_2}\right)^2 + r_1^2} \pi r_1 - \sqrt{\left(\frac{h r_1}{r_1 - r_2} - h\right)^2 + r_2^2} \pi r_2 (=)$ $ (=) \sqrt{\frac{h^2 r_1^2}{(r_1 - r_2)^2} + r_1^2} \pi r_1 - \sqrt{\frac{(h r_1 - h r_1 + h r_2)^2}{r_1 - r_2} + r_2^2} \pi r_2 (=)$ $ (=) \frac{1}{r_1 - r_2} (\sqrt{h^2 r_1^2 + r_1^2 (r_1 - r_2)^2} \pi r_1 - \sqrt{h^2 r_2^2 + r_2^2 (r_1 - r_2)^2} \pi r_2 (=)$ $ (=) \frac{\pi}{(r_1 - r_2)} (r_1 \sqrt{h^2 + (r_1 - r_2)^2} r_1 - r_2 \sqrt{h^2 (r_1 - r_2)^2} r_2 (=)$ $ (=) \frac{\pi}{(r_1 - r_2)} (\sqrt{h^2 + (r_1 - r_2)^2} (r_1^2 - r_2^2) (=)$ $ (=) \frac{\pi \sqrt{h^2 + (r_1 - r_2)^2}}{(r_1 - r_2)} (r_1 - r_2) (r_1 + r_2) (=)$ $ (=) \pi \sqrt{h^2 + (r_1 - r_2)^2} (r_1 + r_2)$

Figure S1. (A) Formula for cone's lateral surface area calculation; (B) Triangles similarity (1 – Representation of root canal taper; 2 – Schematic representation of triangle similarity; 3 – Specimen representative longitudinal section); (C) Pythagorean theorem; (D) Adhesion area formula.

Table S1. Calcium silicate-based materials specifics.

Calcium silicate-based material	Manufacturer	Composition	Preparation instructions	Lot number	Expiration date
ProRoot MTA®	Dentsply Maillefer, Tulsa, Oklahoma, United States of America	Powder: Portland cement, bismuth oxide, calcium sulfate dihydrate or gypsum, tricalcium silicate, dicalcium silicate, tricalcium aluminate, tetracalcium aluminoferrite. Liquid: water	Mixed powder/liquid ratio 1:3	177918	08/2020
TotalFill® BC Putty	FKG, La Chaux-des-Fonds, Switzerland	Tricalcium silicate, zirconium oxide, tantalum pentoxide, dicalcium silicate, and calcium sulfate.	Pre-mixed, ready-to-use, scoopable material	1702BPP	11/2019
Biodentine™	Septodont, Saint-Maur-des-Fossés Cedex, France	Powder: tricalcium silicate, zirconium oxide, calcium oxide, calcium carbonate and colorings. Aqueous solution: calcium chloride and polycarboxylate.	1. Pour 5 drops of liquid into the capsule 2. Place the capsule on a mixing device 3. Mix for 30 seconds	B21183	06/2019