

Preservation of Latent Impressions on Curved, Conical, and Asymmetrical Surfaces¹

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The purpose of this study is to test the use of polyurethane and other clear synthetic coatings as an alternative method for preserving latent impressions processed with fingerprint powders on curved, conical and asymmetrical surfaces. Objects such as door knobs, handles, bottle necks, light bulbs, candle sticks, and hand tools are typical items with shapes that may be difficult to lift latent impressions using lifting tape. Lifting tape may be used for removing latent prints, glove marks, or other impressions from large symmetrical curved surfaces; however, if the object's shape prevents the tape from being applied in a smooth even manner, the examiner should consider an alternative method for preserving the impression. Lifting tape does not conform well to small radii of curves, conical and asymmetrical surfaces. Consequently, the lifts may contain a partial impression, air bubbles, or creases as a result of attempting to lift with tape. Collecting or preserving the entire latent impression is more desirable than removing it in sections with lifting tape. Therefore, an alternative method to lifting tape is to apply a preservative such as polyurethane to the surface of the object that will preserve the impression in place without altering the pattern. Preserving the impression on the object allows the examiner flexibility to manipulate the light and camera angle for macro photography.

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