

Relaxation of internal stress

The three types of inlay waxes **differ** in terms of melting point and flow:

1. **Type A:** hard or low-flow wax that is rarely used except in some indirect technique
2. **Type B:** medium-flow wax that is used in some direct techniques.
3. **Type C:** soft or high-flow wax that is used in indirect techniques for the construction of inlays, onlays, and full crowns.

The essential ingredients of a successful inlay wax are paraffin wax, gum dammar and carnauba wax with some coloring material. **Paraffin wax** is generally the main ingredient, usually in a concentration of 40-60%. **Gum dammar** is added to the paraffin to improve the smoothness in the molding. It also increases the toughness of the wax. **Carnauba wax** is quite hard and tends to decrease the flow of a wax.

Note: However the pattern is prepared, it should be an accurate reproduction of the missing tooth structure. The casting can be **no more accurate** than the wax pattern. The wax pattern should be invested as soon as possible after fabrication in order to minimize changes in **shape** caused by relaxation of the internal stresses in the wax.