

## **Putty 101**

*by Vic Rothman*

Putty is made up of two basic ingredients. Whiting and linseed oil. Then there are various things people add to the basic mix. I have broken this stuff into four categories.

- 1- Powders: whiting, plaster of paris, dental plaster, field plaster, portland cement.
- 2- Liquids: raw linseed oil, boiled linseed oil.
- 3- Thinners: mineral spirits, paint thinner, kerosene, white spirits, gasoline, turpentine
- 4- Driers: white lead, red lead, Japan drier.

The powders add bulk (makes putty thick). Whiting should be used alone. Plaster absorbs moisture (moisture is the number 1 killer of building materials). Portland cement is so strong it attaches itself to the glass making restoration very hard. Plaster and Portland cement NOT good.

Liquids are for turning the whiting into the putty mix. Should use 75% raw and 25% boiled linseed oil.

Thinners are for making the putty mix more liquid for brush putty work as opposed to pushing the putty with your fingers. These thinners evaporate quickly so that the putty sets up fast. This can be a problem as it shortens the life of the putty.

Driers are used to speed up the setting time of the putty. White and red lead are now illegal in the US. These things also shorten the life of the putty.

The last thing to add is color, if wanted.

The purpose of the putty is to add strength and to waterproof windows. For putty to work well, it needs to stay elastic for as long as possible. That's why thinners and driers are not so good.

So who cares? Well, as someone who living comes from stained glass restoration, I do (all stained glass windows will need restoration at sometime). It's been shown that the above problems can cause damage to a window in time. What is in time? 25+ years. Nothing happens in the first few years of a window's life.

While most hobby work will end up in a landfill (please don't take offense) some of you might start making architectural and church windows. That is when this knowledge is important.

Now Abbey, your question. Inland cement, Miracle Mudd and other putties contain some of the NOT recommended ingredients. In the short term they all work, but if you want your work to last, they should be avoided. You decide what you need to do.