

Rock Moulding for Model Layouts by Johan Leeftang

No matter what part of the world you fancy to replicate or what the scale of your model layout is - you will need rocks of all sizes and shapes to create a unique layout, unless you are modelling Holland or the outback of the Karoo.

Various moulds are commercially available and I use moulds from Woodland Scenics. By using **Rhinolite** (a local product found in Hardware Stores) to cast the rocks, one can produce a "mountain out of a mole hill".

To find out more about **Rhinolite** please go to:
"<http://www.bpbsa.com/html/residential/plasters/rhinolite.htm>"

Preparing the mould for casting:

- Ensure the mould is clean.
- Dilute dishwashing liquid with water (2 to 3 drops dishwashing liquid: 250ml water) to make a soapy mixture.
- Brush the liquid in the mould

Mixing and Moulding the Rhinolite:

- Use a 'ProNutro' plastic scoop as measure. Put 12 scoops full of Rhinolite into a 2-litre ice cream plastic holder. This is enough to fill a set of 4 moulds.
- Add a few teaspoons of coloured oxide powder to the mix. By colouring the mixture it will prevent ugly white scars if the rocks are damaged in transport. Different colour oxides are available from Hardware Stores. Black oxide can be used to mix different shades of grey (obviously the more black oxide mixed in, the darker the grey). Other oxide colours like Raw Umber and Red Oxide also tends to be very useful in moulding rocks.
- Mix with enough water to achieve a firm mixture (Similar to mixing milk with your ProNutro for breakfast)
- Mix thoroughly for ± 5 minutes ensuring that water and Rhinolite combined well.
- Scoop with spatula or putty knife into the prepared moulds.
- Level off with spatula. Tap lightly to remove any air, filling every single recess of the mould with the Rhinolite mix.
- Allow to dry for ± 6 hours. (Drying time is depended on ambient temperature). Placing the moulds outside, could speed up the drying time.
- The pot life (workable time of the Rhinolite mix is 70 minutes. So it is important to mix only just enough to fill the number of moulds you have available.
- When dry gently prize out from the mould... and Viola!!! A rock.

Tips

- *Some of the moulds have areas which is quite shallow. To prevent the casting from breaking at these places, fill the shallow parts with rivet off cuts or nails as "reinforcement" prior to moulding the mix. But if the casting breaks it is not a train smash. Just use the pieces as smaller out crops.*
- *When cleaning your utensils, moulds and hands after mixing and moulding do it outside as the Rhinolite can block your drain. **Do not pour it down your water system!***

'Gluing' the rocks onto the terrain contours:

- Once the rocks are dried it can be 'glued' onto the terrain contours.

- To form terrain contours, I use fine meshed chicken wire overlaid with clean wipes dipped in a more 'watery' paste of Rhinolite mix.
- Damped the surface where the rocks are to be 'glued' and apply some of the Rhinolite paste and positioned the rock. On vertical areas, support the rock until the 'paste' is dry.
- After all the rocks are glued on, fill the gaps with Rhinolite paste covering and working off the joints between the castings using a brush.
- Any imperfections can later be filed off or worked off with a power tool bit.

Painting the Rocks:

The Definition of Painting:

The art of protecting surfaces from the weather and exposing them to the critic.

- The rocks have to dry out completely prior to application of the paint.
- Apply a **plaster primer** to seal the Rhinolite surface. The plaster primer is a solvent based paint and must be applied to the Rhinolite before any waterbased paint is used to finish off the rocks.
- After the recommended drying time for the plaster primer has elapsed, apply the earth colour paints on to the rocks using a 'leopard spot' technique i.e. daub the paint on in random manner. Remember in nature nothing is perfectly even in colour.
- The paint must be thinned to have the consistency of colour washing. This will ensure that the texture of the rock is still visible.

Tips

- *The paint must be mixed thoroughly before thinning or use. Remember you **stir** coffee but you **mix** paint. Mix with a flat spatula in up & down circular movements whilst rotating the tin slowly.*
- *After use close the tin tightly and invert the tin once to seal off any air locks - this will prevent the paint from drying out*

The Final Touch:

Grass, lichen or bushes can be placed to hide or fill in any imperfections and to give the rock phase a natural look.



Rock face after the addition of various colours and washes



Adding grass, lichen and some bushes

Books to get:

"The Scenery Manual" - by Woodlands Scenics

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