



Page 1

## HOW TO MAKE MOULDS

**Clinic Presenter: Donald Davis**

### Slide 2

#### Natural rock, Coal, Burnt timber and cement

This shows what some of the items you can use to make rock moulds. I have made moulds in the field where I have been able to make moulds using shale rock on the side of the road this was done over a period of several days. The burnt timber had to be painted with paint as when I first tried it just ended as a black mass, some form of chemical reaction, had similar reaction with the cement so also painted it. The rock and coal were OK.

### Slide 3

#### This is what is required to start making the mould.

**Container and cheap or used brush.** The container needs to have water and detergent in it to prevent the latex from clogging the brush, I always rinse the brush under running water and drying it on a towel before using with the latex again as the water may dilute the latex.

**Piece of Cement for master.** This was as a result of a bag of cement that was badly stored and when I broke it up to bin it the nicely defined crevasses and fault lines appeared.

**Brush Latex.** I purchased it from Barnes Products 6 Homedale Rd

**Spray bottle.** Usually I use a spray bottle with wet water (water with a few drops detergent added) to dampen the master.

**Slipicone Release Agent.** But I decided to experiment with the Slipicone Release Agent as when it dries it leaves a layer of dry silicone release agent. I found this gives a better finish as the first layer of latex is not diluted by the sprayed water. Slipicone by DC Products I bought mine from Bakers Engineering Supplies \$14



Page 2

#### **Slide 4**

**Muslin Cloth or Cheese Cloth** Cheese cloth or muslin cloth may be purchased at Spotlight. I have also used old bandage or chux if using the chux I wash it to make it more pliable

#### **Slide 5**

**Broken Cement Master** This shows how it duplicates craggy rock work

#### **Slide 6**

**First coat of latex** I started by spraying the master with Slipicone allowing several hours to dry. Then brushed on the first coat of latex

#### **Slide 7**

Clean brush immediately after use in water & detergent this will help prevent clogging. I usually leave it in the container of water/detergent until needed then rinse with running water and dry brush this will prevent the water from diluting the latex.

#### **Slide 8**

**First coat of latex has fully dried and gone a honey colour.** I normally leave this coat overnight in a room so the latex will dry slowly with out too much temperature changes, this would not be possible if using on a large surface. E.G. on the side of the road. DRYING TIME IS DEPENDANT ON THE WEATHER.

#### **Slide 9**

**7<sup>th</sup> coat of latex.** Note that the latex appears thicker in the crevasses. It is not necessary to use so many coats of latex but I prefer to give it plenty of thickness.

#### **Slide 10**

**Small pieces of cloth to strengthen cavities.** Using small pieces of cloth cover the area's where there are cavities with extra cloth and latex

#### **Slide 11**

**Larger pieces of cloth over cavity area.** Add a larger piece of cloth over the built up area over cavities



### Slide 12

**Apply latex, then apply cloth and cover well with more latex.** This is the first full size piece of cheese cloth use plenty of latex until the mesh is filled on the cheese cloth

### Slide 13

**Example.** As can be seen most of the holes in the mesh are full of latex

### Slide 14

**5<sup>th</sup> coat of cloth and final coat of latex** It is not necessary to use so many coats of cloth but I prefer to give it plenty of thickness.

### Slide 15

**Carefully remove mould from master and allow to cure before using.** After mould has cured for a day trim excess cloth from mould and wash with warm water and detergent to remove any residue

### Slide 16

**Making a mould to suit a particular spot on the layout.** Over the years when I have seen a rock which I can pick up I take it home for future use  
**DO NO REMOVE ROCKS FROM NATIONAL PARKS OR RESERVES**

### Slide 17

**2 views of the rock.** I was after a craggy ridge effect on my layout so I had a rock which had the shape I needed

### Slide 18

**The mould of the ridge line.** This is the final mould for the ridge line rockwork

### Slide 19

**What can this scrap material be used for?** What I did was look for a round object that was the same diameter as the top of the tunnel portal this ended up being a tin can the block of wood was the right size to make the side wall of the tunnel liner the plastic was used to form the sides of the mould they were actually a bit thin and allowed plaster to leak out



### Slide 20

**2 Types of tunnel liner.** The black insulation tape was to represent the formwork inside the tunnel. I used wrinkled alfoil to give the rough interior of the casting

### Slide 21

**Paper towel casting by John Montgomery** this gives a wall representing brick for “O” gauge John first sprayed the towel with Dullcote to help stiffen the paper

### Slide 22

**Another type of Mould Flexil a re-usable material.** I purchased the flexil from Barnes Products. It is melted using the gas ring ensuring it doesn't start to burn or stick to the pot

### Slide 23

**Flexil being melted.** The Flexil needs to be melted slowly and continually stirred to prevent burning as this will put black lumps in the mould

### Slide 24

**Prototype Santa Fe tunnel portal.** I wanted to have a tunnel portal which was not a commercial one so I did some research on the internet and found this one which looked fairly easy to reproduce

### Slide 25

**Parts for tunnel master.** The timber for the master were basically scrap timber which was cut and sanded to required shape. The face of the portal was covered with strip wood this was to accentuate the form work

### Slide 26

**Tunnel portal master.** This is the finished master before covering with Flexil

### Slide 27

**Flexil has been poured into container with master.** It is important to give plenty of body of material around the master so that there is no bowing or distortion in the mould which will give a bad end result



## Slide 28

**Tunnel portal and other examples of using Flexil** The other moulds are of items that are no longer available

## END OF CLINIC

Thank you

Are there any questions ???

## Latex Rubber Suppliers

**Barnes Products** 6 Homedale Rd Bankstown NSW 2200

Phone: 02 9793 7555 [www.barnes.com.au](http://www.barnes.com.au)

**Fiberglass A/Asia Pty Ltd** [fiberglass-sales.com.au](http://fiberglass-sales.com.au)

563 Willoughby Road, Willoughby NSW 2068 Phone: (02) 9958 5238

2 Lincoln St, Minto NSW 2566 Phone: (02) 9820 1595

Unit 1/ 19 Boden Road, Seven Hills NSW 2147 Phone: (02) 9674 7333

Unit 1, 188 Manns Road, West Gosford NSW 2250 Phone: (02) 4322 0255

## Erathane Supplier

**Barnes Products**

## Paint Supplies

Cheap shops Ronnies, Reject etc.

Art Sup Shop 7 98 Manning St. Kingswood 4736 5866 [www.artsup.com.au](http://www.artsup.com.au)

## Cork Supplies

Portugal Cork Co.Pty Ltd 2/36 Binney St. Kings Park 9676 8400

## Super Glue

Hafix Professional Glues Swansea NSW Jan 49716067

[snappyproducts@optus.com.au](mailto:snappyproducts@optus.com.au)