

## **Instructions for Casting History Stones Railing Molds**



For 2 Piece Straight, Curved or Corner Railing

#### **General preparations**

#### **Additional Items Needed:**

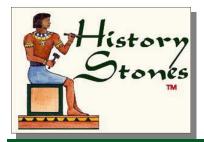
- 137 lbs. concrete or Portland cement and sand mix (details at right) for straight and curved rail sets, corner rail 69 lbs
- mixing tool, I.e. shovel or garden hoe
- Wheel barrow or mixing tray
- Lubricant or a mold release
- Two 2" x 4" x 24" of lumber
- Prepare the molds using a lubricant or a mold release. This will help in removing the casting from the mold later and will extend the life of the mold itself. We recommend the use of any concrete release agent, cooking spray or WD40 lubricant (use sparingly).
- The Mix is two parts sand and one part cement or pre mixed concrete. Use white Portland Cement and white sand for white railing
- Mix a small amount of water at a time until you achieve a consistency that is well mixed, and is thick, not runny.

#### Casting Railings

- Fill the molds 1 inch at a time. Keep filling, bouncing and tapping mold in between to spread the concrete inside the mold and to drive out all the air bubbles
- Place the molds in a dry place out of direct sun for 24 to 48 hours.
- Once concrete is set unmold the castings. Turn mold over onto 2 x 4 lumber.
- Loosen sides of mold
- Lift out of mold on each end to remove casting
- The concrete will continue to set up for 10 more days, so be gentle with handling until it is fully cured.
- Clean the mold immediately after use and store them out of the sun.
- You may have some air bubbles in the surface or sides of your railing which you may fill easily by mixing up a small batch of one part cement and one part sand and water to moisten. Use a damp sponge to fill and swipe excess to create a smooth finish.







# Casting The History Stones Baluster Molds

**Included In Each History Baluster Kit:** 

Two half baluster molds, 16 bolts 16 nuts, Instruction Sheet

#### **General preparations**

#### **Additional Items Needed:**

- 53 lbs Ready Mix Concrete or Portland cement and sand mix (described at right)
- 29" steel rebar (if creating balusters for railing
- Mixing tool, (small shovel or garden hoe)
- Lubricant or a mold release
- Prepare the molds using a lubricant or a mold release.
   This will help in removing the casting from the mold later and will extend the life of the mold itself. We recommend the use of any concrete release agent, cooking oil spray or WD40 lubricant (use spar-
- The Mix is two parts sand and one part cement or pre mixed concrete
- Mix a small amount of water at a time until you achieve a consistency that is well mixed, and is thick, not runny.
- Weight— baluster only 53 lbs.

#### **Casting Baluster**

- If you are casting balusters for railing you must pre drill the baluster mold
  in the bottom to accommodate the rebar to protrude from the bottom
  and 1" above the rim.
- Place the mold assembly upright and begin filling the molds 4" at a time.
- Shake, bounce and tap the sides of your mold in between pouring to spread the concrete and to help drive out air bubbles. You may use a 2" x 2" piece of lumber to pack the mix in (do not use a sharp tool that can scratch your mold — which will show on finished castings)
- Do not use pencil vibrator inside the mold. It will destroy the mold.
- Let molds set up in a dry place out of direct sun for 24 to 48 hours

#### **Removing Casting**

- Once concrete is set, remove the bolts, carefully tilt the baluster flat to the ground taking care not to rest heavy casting on edges of mold (best to remove on grass area, carpet, cardboard for softer surface).
- Now unmold the castings by pulling and lifting on the ends of the mold.
- The concrete will continue to set up for 5 more days so be gentle with handling until it is fully cured.
- Clean the molds immediately after use and store them out of the sun.
- It is normal to have some air bubbles in the surface of your baluster which you can patch easily by mixing a small batch of one part cement and one part sand and enough water to moisten. Apply with a damp sponge to smooth over the area.

#### **Using the Baluster**

- Especially designed to be used with the History Stones Concrete Railing System which includes rails and newel posts.
- You may use the baluster as a bird bath pedestal or as a pedestal for concrete balls, finials or other art.
- The baluster is a good choice for a table base.
- Use your imagination and be sure you use thin set mortar to attach other concrete pieces to your baluster for a stable and safe project (concrete is heavy) Have Fun!



#### Important—Please Read

Artistic Home & Garden Co. will not be held responsible for any installation. All installations are the responsibility of the installer.

### **Installing Railing & Balusters**

#### See How-To Video Online On YouTube http://www.youtube.com/user/Historystones

These instructions are intended for installing on a solid concrete foundation which is at least six inches below the frost line in your area. Installing heavy concrete railing above ground is common, and must be on a concrete base and on a structure that will support at least **250 lbs per linear foot. Check your local building code requirements.** Work with a partner to assist you in installation or hire a professional mason. Recommended run is three, 3 segments. Use newel posts to break long run approximately every 9 feet, for appearance as well as additional support.

#### Required Tools & Items For Each 3 Foot Railing Section

- 5 cast balusters per railing section
- 2 rails with rebar channel (one for base and one on top of balusters)
- 1 cast cap rail
- Mortar
- 3/8" diameter rebar in two 4 ft pieces (use galvanized or primed if near saltwater)
- Trowels, pointed end types
- Level
- Gloves
- Sponge
- Bucket of water
- 1/2" masonry drill bit and drill
- Tape measure and pencil

If you need to adjust size and angles of concrete to fit installation or installing on stairs you will also need:

- Saw with masonry diamond blade
- Dust mask
- Safety goggles

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#### **Installing History Stones Rails & Balusters**

- Dampen concrete surface and all cast concrete pieces
- Apply mortar evenly over concrete surface
- Lay base rail on mortar and check for level
- Once base rails are laid apply mortar in the groove for rebar
- Insert rebar so you will extend minimum of 6" into next rail (use continuous piece of rebar or segments)
- Mark rail where each baluster will be set before beginning (balusters are to be placed no more than 1" apart if 2 feet or higher above ground)
- Apply mortar to the bottom rail under each baluster you install. Check to be certain that each baluster is plumb (vertically straight) and aligned with previous balusters
- Scrape excess mortar and clean with damp sponge as you go
- You may continue at this point to install more rail and baluster sections and apply top rails the next day
- Apply mortar to the tops of your balusters one section at a time
- Lay horizontal rebar on top of balusters in the mortar in the center of run to fit inside rail channel
- Apply mortar into the groove of second rebar rail and place rail on top of balusters and check for level
- Apply cap rail in same fashion and check level, scrape and clean excess mortar

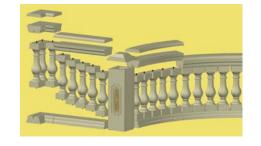
NOTE: horizontal rebar must tie into your end supports, which is your newel post or wall (drilled and mortared)

#### **Finish**

You may seal your concrete railing with concrete sealant

Molds available in History Stones Railing Line

- Baluster Molds
- Straight, curved and corner rails
- Newel Post and Post Cap molds





#### **Tips**

In cold weather — Plastic gets harder and stiffer in cold weather. If you have trouble removing from molds, set them out in the sun until plastic is warm, or use a hair blow dryer, but be careful to not melt the plastic. Do not cast in temperatures close to freezing.

In warm weather — let molds set up in the shade, not in the sun. Let concrete dry slowly and in hot, dry weather cover with plastic to slow dehydration. In humid weather allow more time, even another day ,to allow the concrete to set up in mold.

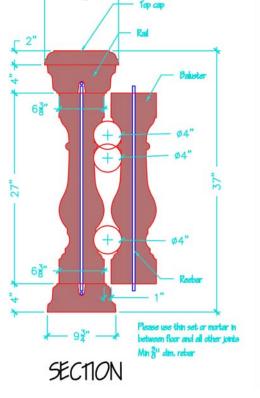
For use as bird bath pedestal that will not tip when placed on grass or soil, replace the rebar in center of baluster mold with conduit (plastic or metal tube). When you are ready to set up your bird bath insert 2 ft length of rebar into the ground and place baluster on top so conduit slips over the top 1 ft of rebar

securing your beautifully bird bath in place.



### Other Available Molds For History Stones Concrete Railing System:

- Straight Rail Molds
- Curved Rail Molds
- Corner Rail Molds
- Newel Post and Post Cap Molds





## **History Stones Baluster Railing System Detail Drawings**

Available molds: baluster, straight, corner and curved rail, newel post and cap molds., sphere finial half 10" diameter half round mold

