

Reedley Fiesta Parade

FLOAT BUILDER'S MANUAL



INTRODUCTION

Thank you, for choosing to participate in “the Valley’s biggest, small town celebration.” The Reedley Fiesta Parade features the beautiful pageantry and tradition of unique floats, custom automobiles, high-stepping equestrians and spirited marching bands. This manual has been provided to assist you in your float building endeavor. Once you understand the basics of building a float, you can let your imagination run wild. Don’t forget that the Internet also offers a wealth of information and resources on float building.

GETTING STARTED

The best first step is to get a steering group organized. You may already know two or three friends or a group who would love to get involved. Make a few calls and see if they are interested. The success of your committee will

depend on the commitment and dependability of those who will be working with you. You can organize the committee in any way you think will work, but these are some responsibilities you need to have covered: float chairperson, treasurer, theme and concept, structural design, decorating, and communications.

CREATING YOUR FLOAT

Now that you have a solid organization, it’s time to get down to the real fun of deciding what you are going to build. Have a brainstorming session. Kick around the theme and have everyone share their own ideas. Be sure that your float concept is in some way consistent with the theme of the parade. Try to design a float concept that will be uniquely yours. Look for variations on shapes, materials, special effects, and anything else that will make your entry stand out from the pack.

CONSTRUCTION

Before you begin, you need to identify a place where you can actually build your float. Be certain you have clear access to electrical outlets.

You are also going to need a variety of tools. Here are a few you’ll want to plan for: a table saw or circular saw, saber saw, handsaws, hammers, staple guns, well-stocked tool box with screwdrivers, pliers, wrenches, utility knife, etc., a long tape measure and carpenter’s square. Other stuff will certainly be needed if you’re going to add animation, special effects or other features to your float.

You will need to plan for protection from the weather, especially in the later stages of construction. A few large sheets of plastic that can be carefully placed over your float and fastened securely will be needed as “stand by” items once you get into the decorating phase. Before that, you will probably be able to pull the float back into a garage each night for protection.



VEHICLE SELECTION

Floats can be built on a variety of beds: hay wagons, semi-trailers, low-boy trailers or any number of things. Select a vehicle that will be suitable for your towing needs.

When you have determined the style of your float and reserved your wagon, you can plan around the exact measurements of the wagon you have reserved. You can certainly begin some pre-fabrication before that time, but the major construction will be done once the wagon arrives.

ALLOWABLE VEHICLE DIMENSIONS

The vehicle cannot exceed 65 feet in length or 8 feet in width. The vehicle including the float cannot be higher than 13 feet 6 inches. That is the height of traffic signals and wires in the City of Reedley.

BASIC FRAMEWORK

The first stop after you have your wagon is to build the basic framework. You have to decide just how elaborate your float frame must be based on your intended use. You will need more floor strength if you plan to have riders on the float than if you do not. Also, floats with large structures on the wagon will also need extra strength.

Float construction should be a paramount concern. If it looks nice but has engineering flaws, everyone will be disappointed. Use quality materials to construct the float to endure wind, rain, and the journey. Remember: people have to ride on the float, so watch for sharp corners, dangerous objects, and protruding nails.

Many floats will require that you build a frame over the existing wagon. Other designs simply use the wagon bed as is and add the superstructure needed for your design. If you are going to build a new floor over the wagon, use 2x6s or 2x8s on edge for the outer framework and then run 2x4s between them side to side. In general, place these stringers no more than 16" apart for strength if you are actually going to stand on the floor. The edges of the wagons are protected with steel bands, so you'll have to plan your frame to fasten solidly to the wagon bed. You can toenail the frame to the wagon bed. Take note of any areas that seem to need extra support and add any braces you think are necessary. You can probably use 1x2s or something lighter for this purpose. This part of the float should be very solid.



If you will have people riding on the float, you'll now want to lay a floor of inexpensive sheathing plywood over your frame. 1/2" thick should be enough. The plywood will also add strength and stability to the frame.

Now you'll begin to construct the part of your float that is more for show. At this point you'll definitely start working with lighter lumber in areas that won't be supporting much weight. This superstructure will generally be used to support chicken wire, cardboard or other light decorating items. Keep in mind that the maximum float height is 13' 6". Width is restricted to 20'. There is no set limit on length. Depending on the type of design you have planned, you may now add a framework around the side of the wagon to flare out and down. This can help to hide the fact that you are building on a hay wagon. This can be built from 2x2s and 1x2s. Be certain that you allow for free movement of the wagon tongue and wheels. The front wheels move quite a bit when you turn, so be particularly careful there.

Now is the time to add lattice strips to the floor. These are easily "ripped" from cheap 2x4s. They can be made more flexible for bending around curves by soaking them in water prior to installation.

Now is a good time to hook up the float and give it a short test run. This is when you want to be certain that everything is ship shape... not the morning of the parade. You'll be surprised at how much the float can wobble and you may want to add some additional bracing to lessen this. You'll also want to note if you will have to pull your float over a curb to get it in the street. If that's the case, set aside several boards to use for ramps the morning of the parade.

DECORATING YOUR UNIT

Now that the main float structure is complete, you will start the decorating process.

SAFETY CONSIDERATIONS

In assembling your floats it is required that you use flame resistant tissues, paste, paper, cloth, etc. due to fire hazards involved. Flame-resistant materials can be purchased at area stores. If you are unable to find an item that is flame-resistant the following solution can be mixed and used: 1 ¼ lbs. boric acid + 9 oz. Borax + 3 gallons water. Commercial solutions may also be available to use. Test any solution on a small sample of material to be treated as it may cause colors to run.

TECHNIQUES

The traditional technique for final decorating is the use of simple pre-cut squares of colored tissue paper, called Poms. They give a very rich and consistent appearance and come in a wide variety of colors. They also lend themselves to very elaborate decorating patterns. A single package of Poms, used in every other hold in chicken wire can cover 4 sq. ft. The disadvantage is that they require quite a bit of time to stuff in place. Here are two methods of using Poms in float building.



METHOD A.: USING CHICKEN WIRE

For this method, you'll need to buy an adequate supply of chicken wire. This wire can be easily cut with tin snips and molded over the wooden superstructure into a wide variety of flexible shapes. You will find that it won't take long to understand how to cut the wire and then join the pieces with other short lengths of wire or plastic electrical ties. Another option is to buy a "hog ringer" at a hardware store. This tool crimps an open ring and clamps the two adjacent pieces of wire together. Fasten the wire to the wooden framework with staples wherever it crosses a brace.



Once the float is covered with wire, layout your design areas where different colors are to go. You can mark them with spray paint or paint brushes.

Now you'll need all those volunteers who haven't gotten involved so far. There are two techniques used for stuffing Poms. For large areas of general coverage you can place a Pom in every other opening. For dense detail use every hole.

Working with a small area, spray the chicken wire lightly with a spray adhesive. This is available at discount stores and building supply centers. Then take a single Pom, form it quickly into a cone over the tip of your index finger and place it firmly into the chicken wire. You'll catch onto this technique quickly.



METHOD B: USING CORRUGATED CARDBOARD

This method combines the use of Poms, spray adhesive and corrugated cardboard. Work within small sections so that the adhesive remains tacky. As described in Method A, form a cone over your index finger with a single Pom and simply touch the point to the tacky cardboard. Continue attaching Poms approximately 3" to 4" apart for general coverage and closer for detail work or combinations of colors. When covering large areas, you can reduce Pom use by painting the cardboard to match the Pom color so that no brown cardboard shows through. The cardboard is usually fastened to the frame with ½" to ¾" staples. The larger the sheets of cardboard, the better the result will be.

Here are some tips for installing the cardboard:

1. Don't overlap the cardboard. Make certain the edges butt together.
2. Cut the cardboard so that the edges end on a piece of the wood frame for extra stability.

3. The cardboard will sag and droop if it is humid, so plan to add cardboard only a few days before the parade.
4. If the cardboard gets wet, take it off and replace it with a dry panel.

Large sheets of corrugated cardboard may be obtained from appliance and furniture stores, bicycle dealers and others. Call in advance to ask them to save cartons well before you need them.

Other Techniques – Paper Mache

Paper-Mache is normally used for areas on your float that require great detail in shape or for contrast against the softer look of Poms or petal paper. The Paper-Mache process involves creating a chicken wire frame and then covering it with several layers of newspaper soaked in a mixture of flour and water. Be sure to plan ahead because it takes several days before it will dry enough for you to paint it. When the Paper-Mache has dried, it's a good idea to use a primer before your final coat. A gloss or semi-gloss paint will help to make Paper-Mache more water-resistant.

FINISHING TOUCHES

There are many products available to help give your float that "finished" look. These are only a few suggestions.



Festooning

This is a paper product that comes in long rolls and looks much like Hawaiian lei. It is great to cover seams, flaws or to blend areas where two colors or surfaces come together. It is especially helpful when using petal paper or applying skirting or fringe to the bottom of your float. Festooning is also available in foil and plastic. This is a product for which you will discover many original uses. Attach it with 3/8" to 5/8" staples.

Fringe and Skirting

These two products are commonly used to decorate the bottom of floats. Skirting comes in 30" lengths while fringe is 15" long. Keep the bottom edge approximately 2" above the street to prevent it from becoming soiled. Attach skirting and fringe through the narrow band at the top using medium length staples. Complete the installation by overlaying the band with a row of festooning. Skirting is available in plastic only while fringe is sold in both paper and plastic.

Spray Paint

One of the greatest tools you can use in the pursuit of a true professional look is spray paint. In the hands of a person with some artistic talent, spray paint can be used to add shading, shadowing, and highlights and to add color that may not be available in other float building products. **Note: Be certain that paint is compatible with the materials on your float. Standard aerosol paints will actually melt plastic and Styrofoam.** Special paints are available at craft stores.

Lettering

Letters are almost always used in some form on floats. Remember, your float will be assigned a number so allow for it on your design. You can choose from ready made lettering or others that must be made from paper, Styrofoam or wood. Some general considerations for lettering include:

1. Contrast between the letter color and the background color.
2. Make all letters as large as possible. Will a parade spectator be able to read it from 20' away?
3. Font/typeface – keep it simple and legible. Script lettering is rarely used in Informational signage for good reason.

Ready-made letters and paper letters are 2-dimensional, but they can be quite effective when used on the proper background. Styrofoam letters are cut from sheets of building insulating materials that can be inexpensively obtained from many lumber yards and building supply centers. It is available in several thicknesses and produces letters that are 3-dimensional and can be mounted on a wide variety of surfaces. In addition, the Styrofoam is light in weight and very easy to cut. Craft stores carry a number of paints safe for Styrofoam. You can install the letters with drywall ring shank nails by simply pushing them through the chicken

wire or cardboard and into the back of the letters.

SPECIAL EFFECTS

Special effects enhance the visual appeal of floats and give creative types an outlet to express their imagination. Special effects include almost anything you can conceive that brings excitement, vitality and originality to your entry. Let your imagination run wild.

Here are a few general techniques for adding pizzazz to your float. Make sure you read carefully the section on Power Sources.



POWER SOURCES

Many special effects require electrical power. You can decide on the best power source after you complete your plans and have some idea of what type and the quantity of power you will need. Many small items may run on a battery, normally a car or golf cart battery. Be sure you use a separate battery from the one being used to run the vehicle pulling your float. Pulling the float through the parade will be enough of a strain on the towing vehicle without tapping into its power supply.

If you will be using a powerful sound system or any other 110 amp electrical equipment, you'll need to use a gas powered electric generator. They are normally available at equipment rental stores. Be sure to reserve these units early.



ANIMATION

Animation is one of the best special effects used on floats. In general there are three common methods used to put motion in float animation.

1. A turntable driven by a motor at the center that turns the table and creates animation.
2. An "extra" wheel that trails under or behind the float. Then a belt and pulley system transfers that rotation into the movement you need to make your creation run. Bicycle wheels are great for this purpose. I'm sure you know someone who has an old bicycle tire to "spare."
3. A motor mounted on the object that is to move. That will allow you to have an object rotate around a turntable for example.

Other animation requires motions that will have to be worked out for your individual circumstances. Don't let the little extra time you might have to spend working on a solution keep you from using animation. It is a tremendous asset to a float and a great crowd pleaser.



SOUND

Sound – either music or sound effects – is another great dimension that you should consider for your float. Best of all, it can be added with little investment in either time or money.

The best source is either a cassette tape, or perhaps a portable CD or MP3 player. Many of the CD players will allow you to program a REPEAT function to re-play a selection track again and again. This might be perfect if you are using a straight song and it's available on CD.

Once you have selected your sound source, you'll need to obtain a playback system with amplifier and speakers. Boom boxes are rarely a good solution. Although they may rattle walls of your children's bedroom, they won't supply the sound or quality you will need on the parade route.

Instead, consider a stereo amplifier or receiver with several bookshelf-type speakers placed on both sides of the float. Position them behind your chicken wire frame or other surfaces that will allow the sound to penetrate. You will probably need a small generator, which can often be used to power a limited number of lights or other accessories. The difference a quality system will make in your sound is dramatic and it will payoff parade day.

Special effects are just that – SPECIAL. You can probably come up with an effect that has never been used in just that way in a parade before. Special effects can help to make a good float GREAT.

ODDS & ENDS (Hang in there – you’re almost done)

Just a few final thoughts:

- Plan your route to the parade carefully. Be certain you won’t have to pass under any low hanging trees or other obstacles. Also, try to travel side streets and travel slowly. The wind can really damage a fragile float.
- Arrive on time at the staging area. The parade is very well organized and we are counting on you to arrive at your assigned time to make the assembly and coordination as smooth as possible. Go directly to the staging area you will be assigned in advance. Estimate the travel time you need, and double it!
- Bring a last minute repair kit. Include extra Poms to replace any that blow away, spray adhesive, staple guns, duct tape, a roll of patching wire, a good mechanics tool set and anything else you can think of that would be needed to make a last minute repair. Also, buy a “flat repair in a can.” It might keep you in the parade if a flat occurs on either the float or towing vehicle.

IN CONCLUSION

This is only an introduction to what can be a great experience for you and your club or organization. Use your imagination and your float will be sure to stand out from the rest.

HERE ARE SOME WEBSITES FOR MORE FLOAT BUILDING IDEAS!

<http://www.valleydecorating.com>

<http://www.paradesetc.com>

Good Luck and Happy Float Building!



*Note: This manual was adapted from the Worthington Bicentennial Parade website:
<http://www.worthington.org/bicentennial/events/paradepartic.cfm>*

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