

Glow Inc.

<http://www.glowinc.com/glow-in-the-dark/dot-room.aspx>

Dot Room

This effect is one of the cheapest and easiest projects you can do for a fun house or at a party. Yet, it is amazingly effective at making young children happy.

A glow in the dark dot room is simply a room with multi-colored glowing dots randomly spaced on all of the walls. A black light fixture is hung from the ceiling.

A dot room has a happy or fanciful feeling. In addition to the visual effect of the glowing dots, children also can enjoy the effects of black light on their clothes.

If you have a larger dot room, you can put an actor in the room completely covered in black with matching dots. If you have the actor stand against the wall, he is barely noticeable until he moves. This trick works well on adults and children.

Once you understand the simplicity of a dot room, you realize that there are many ways they can be constructed. If you look around your house, you can probably find materials that you already own.

This article will talk about each individual component separately with a list of possible materials and construction tips. Overall, keep in mind that you are just building or painting a small square room with dots and hanging a black light.

Before you begin, consider long term storage if this is not a permanent installation.

Structure

Like any building or room, you will need to start by building a frame. This gives the room structure as well as giving you a place to attach the walls and ceiling. A standard glow in the dark dot room is usually 10 feet wide, 10 feet deep, and 8 feet tall. If you would like to add an actor, you should have a room that is about 20 feet long. Keep in mind that if this structure is outside, that it may have to hold up in winds or rain.

For a portable or temporary dot room, an inexpensive canopy sold for camping does well. This provides sufficient structure and a roof with crossbeams to

support the black light. They can be taken apart or folded for storage in a tight area.

Standard 2x4's lumber also makes a great structure. If you go this route, make sure that you do not have any nails or screws where they can snag a child.

Metal conduit is an inexpensive alternative. There are companies that specialize in selling this pipe for sales canopies like those used in flea markets. They will have all the connectors and can provide you sizing information.

2" PVC pipe does well if you can find the appropriate connectors.

Walls and ceiling

I personally prefer to use corrugated plastic for my walls and ceiling. Corrugated plastic is similar in structure to the cardboard that is used to make boxes. But instead of paper, it is made from plastic. It is lightweight, inexpensive, durable and easy to assemble. It is available from most sign companies for about \$14 per sheet. The model and brand I use is Corroplast 4mm black. I use nylon cable ties to attach the sheets to the structure. This allows me to disassemble it quickly with a sharp knife. I seal any seams or holes allowing light to enter with black electrical tape.

A very inexpensive alternative is 6 mil black plastic sheeting. It is available at any hardware store for approximately \$6 for a 50 foot roll. This should be enough to complete most rooms. When buying, hold a single ply up to the light to see if any light passes through it. Look for another brand if it is not 100% opaque. Use 2" plastic packaging tape to attach the plastic to the structure.

Typical building materials like drywall or plywood also work. When using these materials, use traditional building techniques.

Doors

If you have followed my directions in order, you now have a great room without an entrance.

Corrugated plastic has a built in hinge. Cut out the bottom, top and one side of the door. For the other side, only cut through one layer of the plastic. This should create a built in hinge that can be bent and creased. I usually add extra material to the outside edges of the door so that the light is sealed out when the door is closed.

Doors in plastic sheeting can be created by just cutting a slit from the bottom to about 6 feet up. Using tape add a piece of overlapping plastic to the outside to help shield incoming light.

Dots

Purchase 2 packs of white or fluorescent "price stickers" available for about \$2 at your local office supply. These are small 1" stickers that come in different colors and are intended for pricing items at a yard sale.

If you want a glow in the dark dot room, then you will need to paint these stickers with glow in the dark paint. I would suggest the sample pack of glow in the dark paint so that you will have a variety of colors. Paint the stickers before applying them to the walls. Do not let your children work with the wet paint.

To apply the dots, simply peel and stick. Move randomly around the room with no order whatsoever. As the room starts to fill up, try to fill in large empty areas. Properly done, colors and spacing should be completely random. My rooms typically have about 6 inches between the dots. Our dot sticking expert says "Don't think about it, just stick". Do not stick dots to the ceiling.

Black Lights

These rooms can use any type of black light in any type of fixture. I personally prefer tube lights over the bulbs. Good sources for black lights are Walmart or Spencer Gifts. Use large nylon cable ties to attach the black light to the ceiling structure. It does not have to be centered. Use twice as many cable ties as you think you need for extra added safety.

Fire Retardance

Most of the materials listed on this page are not fire retardant. Therefore they should not be used for public or high-volume activities. Proper adult care should be used to supervise activities.

Corroplast offers a fire retardant version of their material for about \$20 extra per sheet.

Final Thoughts

A glow in the dark dot room provides amazing amusement to children and adults of all ages. It is also a great opportunity to share the construction with your child.

As with any structure that involves children, please make extra sure that it can withstand extreme abuse without collapsing.

Do not let your child near the wet paint as it can be hazardous.