

# STRUCTURES

Structures are an easy way to add dimension, realism and character to your layout. They are available in a variety of shapes, sizes, scales and styles. You can customize them with paint, lights, weathering or landscape.

Consider the setting when choosing your structures. Some structures are designed for farm scenes, while others are better suited in a city. A wargamer may want fantasy or post-apocalyptic structures, while a model railroader might prefer structures for a 1940's New England scene. The setting you choose will impact the styles of structures that work for your layout.

After choosing the style, decide if you prefer pre-made structures or if you would rather make your own. Pre-made structures are great because you only need to install them on your layout, but making your own may be necessary for unique or specific structures.

If you are unsure about placement or how multiple structures will fit closely together, try making paper replicas with the same dimensions of the structures you plan to include. These paper replicas can be moved around the layout easily to verify the location and fit.

## LANDMARK STRUCTURES®

Landmark Structures are a complete spectrum of architecturally accurate buildings in N, HO and O scale. Enjoy the ease of using a building that is already built and weathered with expert detail, or build your own structure to fit your layout's needs.

### Product Overview

#### Built-&-Ready®

Built-&-Ready structures are ready to be placed on your layout straight out of the package. Each one is highly detailed, architecturally accurate, expertly painted and realistically weathered. Depending on the structure, extra details may include lights, accessories, window treatments, decals and printed interiors.

ONLINE  
VIDEO



## Building Kits

Building Kits include all the necessary pieces for making a specific building. They are easy to assemble and allow you the creative freedom to paint, weather and detail as you wish. Building Kits are available in a wide variety of building styles and assembly types. The most basic kits include walls and roofing material, while others have loads of scene-setting details, decals and accessories.



## Modular Buildings

Modular pieces are a great option if you want a specific building that is otherwise unavailable. Build anything from a corner gas station to a multi-story office or manufacturing complex. Modular parts offer unlimited building options. Interchangeable wall sections make it easy to build a structure of any size, shape and height.



## Scene Kits

There are four types of scene kits: Mini-Scene® Kits and Scenic Details®. Scene Kits contain landscaping materials or lead-free metal castings that can be finished with the Pewter Patina Finish or Mini-Scene Paint set.

Each scene represents a snapshot of activity. Some kits show typical scenes from everyday life. Others are more humorous like the Mini-Scene Outhouse Mischief.

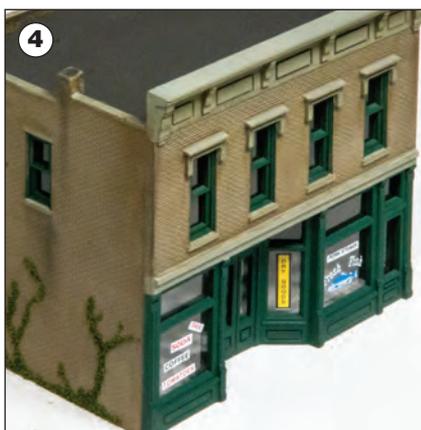
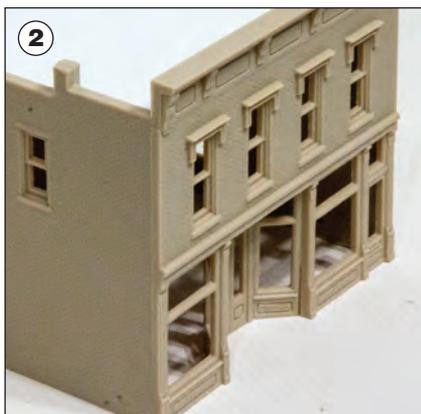
Scene Kits are designed for HO Scale. Display the scene kits in the Glass Dome or on your layout. You can also use them to practice new techniques before working on a permanent layout.



# ASSEMBLING AND PAINTING KIT STRUCTURES

ONLINE VIDEO

Building assembly instructions will vary from kit to kit, but there are some general principles that apply to all Building Kit structures that will help you achieve the best results.

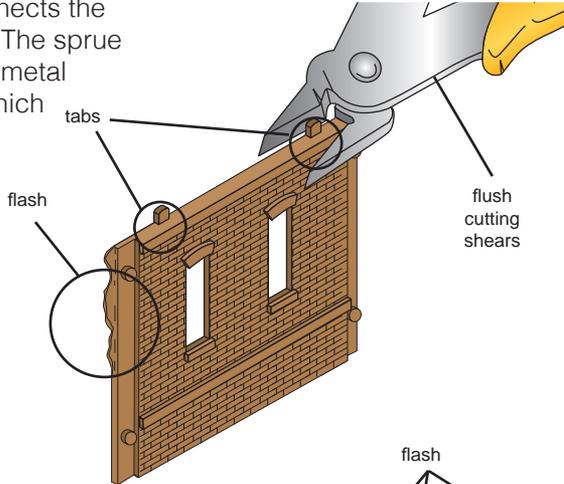


## WASHING PARTS

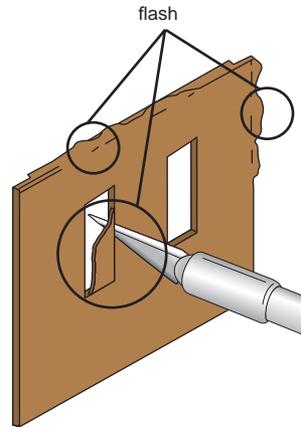
Each piece is molded, and there can be some lingering mold release agent on the piece. This can prevent adhesive and paint from adhering to the pieces. Before you begin, wash all parts by hand in warm soapy water with a mild detergent. Washing the parts thoroughly will remove the residue. Then rinse and let them dry. All metal and plastic castings should be washed before painting.

## REMOVE TABS AND FLASH

Use a hobby knife, flush cutting shears and sandpaper to remove tabs and flash from the parts. In manufacturing, a **tab** is the small piece of plastic or metal that connects the molded part to a **sprue**. The sprue is the piece of plastic or metal that connects to tabs, which hold the small molded parts together. **Flash** is a thin edge of excess plastic or metal that leaks from the seam between the top and bottom of the mold during the casting process.

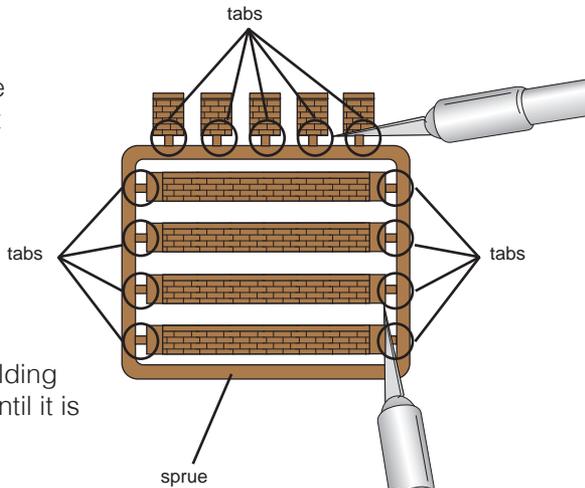


**To remove tabs:** If using a hobby knife, score the tab at the joint that is flush with the part. Snap off tab and sand edge smooth. If using flush cutting shears, remove as shown.



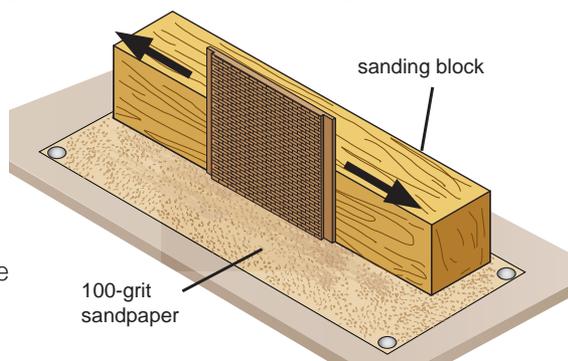
**To remove flash:** Lightly scrape along edges to remove flash debris. Use the dull edge of a hobby knife blade to scrape the flash. Keep the cutting edge facing away from the edge you are scraping to prevent cutting into the part. Sand the scraped edge smooth.

**To remove the part from a sprue:** Score the connection point flush with the part using a hobby knife. Snap it off. Then sand any parting lines and mold flash that still remains. Always keep the building parts on the sprue until it is ready to use.



## PREPARE WALLS

Due to the molding process, some walls have beveled edges. Beveled edges need to be removed for walls to sit flush and square. Sand beveled edges with 100-grit sandpaper. Each kit comes with individual instructions that specify which wall edges to sand. Do NOT sand edges that have detailed brickwork, unless specified. To avoid rounded edges, sand the wall on a flat surface and apply even pressure. You can also thumbtack sandpaper to a flat surface and use a "squaring block." Hold the squaring block in place while sanding walls.



## HOW TO ATTACH PARTS

Use plastic cement or cyanoacrylate adhesive (CA glue/super glue) to glue parts. Plastic cement works by dissolving the surface of plastic and welding parts together. Be careful to avoid contact with detail on parts and visible areas on window treatments. Cyanoacrylate adhesive is recommended for installing windows and small parts due to its quick dry time. Always allow glue to set thoroughly before moving on to the next construction step.

Use a squaring tool when assembling wall sections. You can use a carpenter's square or a firm piece of styrene that has 90 degree angle corners. Align two wall sections against the square until the sections create a corner. Dab glue along the corner joint and hold firmly in place until glue has set and hardened. Once this corner is established, attaching the other wall sections will be much easier.

## LEVELING

After the building is assembled and glue is completely dry, the bottom of the building needs to be sanded until it is level. To level, thumbtack a piece of 120-grit sandpaper to a flat surface. Carefully sand the bottom of the building in a circular motion until the bottom edges are even and the building sits plumb on a flat surface. Do not sand into brick detailing.

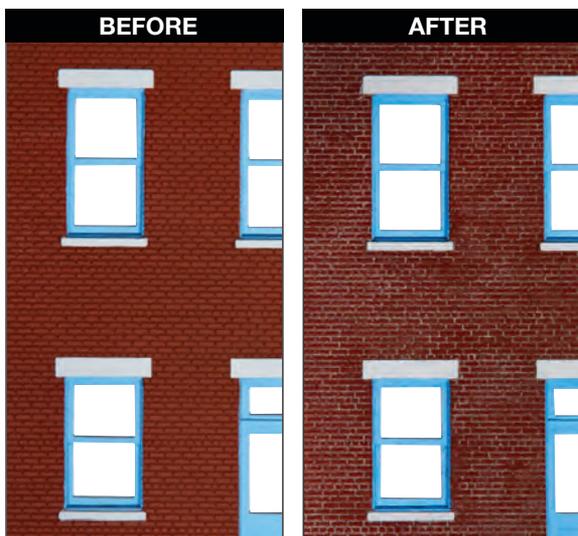
## PAINTING

You can customize any structure simply by painting it. The three rules you must follow to achieve a great paint job are: consider what kind of glue you are using, always install the window material after the paint is dry and do what is best for your work flow.

When you paint your building is up to you, but most kit instructions suggest painting after assembly to reduce touch-up painting and guarantee the glue works properly. Some glues, like solvent-based plastic cement, are incompatible with paint and will dissolve and/or bubble the paint job. We recommend using cyanoacrylate adhesive, so you can paint at any time. If you paint before assembly, scrape paint from the glue joints to ensure the adhesive bonds well with the building parts.

Choose paints that have a flat, matte finish. Semi-gloss and glossy paints leave a shiny finish that is not very realistic. The building kit instructions include whether you should use enamel, acrylic or solvent based paint for a specific structure. Check instructions before purchasing paints.

A single layer of paint is not enough to keep the building materials from showing through and will result in a patchy appearance, while too much paint can cause the realistic detailing to disappear. Start by painting the structure with a layer of flat gray primer paint to prevent a patchy appearance and ensure the molded-in details are not lost. Then paint as desired.

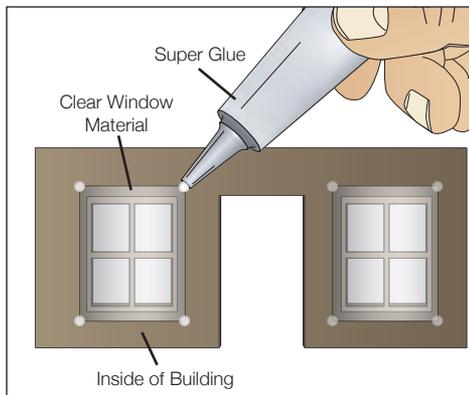


There are three general painting methods: airbrush, aerosol and hand-painting. Regardless of the method, start by painting the whole structure one color. Let it dry completely before adding accent colors to highlight textures like mortar in brickwork and wood grain. For wood grain texture, use the drybrush technique to paint the building (see page 213). Each kit structure will have molded-in wood, brick or stone textures on the building parts. The colors you choose should be compatible with the structure and scene.



## INSTALL WINDOW PANES

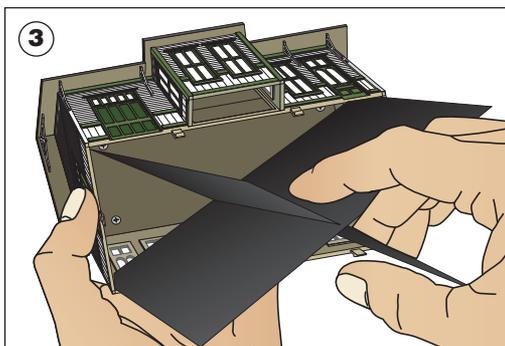
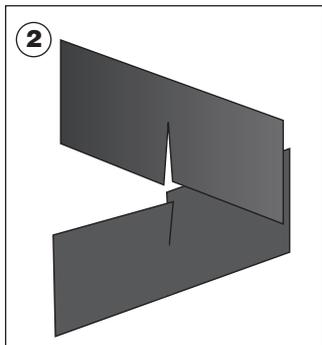
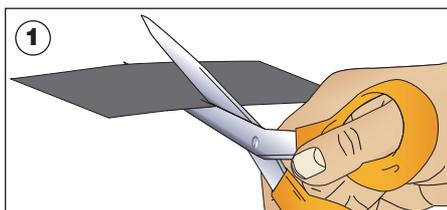
Once your building is painted, it is time to install the window material. Each building kit comes with Clear Window Material to replicate glass window panes. Cut the Clear Window Material to fit over the windows, allowing some overlap. If the windows are grouped together, you can cut it so it covers all of them at once. Center the Clear Window Material over the windows on the inside of the building and carefully dab a small amount of glue around edges. Repeat for each set of window openings.



## FINISHING TOUCHES

If your building does not have an interior, a viewer will be able to look in the windows and see the unpainted plastic walls. The windows will also cast light and strange shadows inside the building. You can fix this by cutting two strips of black construction paper and notching them in the center. Place them diagonally so the cut marks meet and an X is formed. Slide the pieces together at the notch and install them in the building. This will block light from the windows and cover up unsightly interior walls.

This finishing technique is great if you do not intend to light the structure. Adding lighting to a building makes it look occupied. See page 226 to add lighting to your structure.



## WEATHERING STRUCTURES

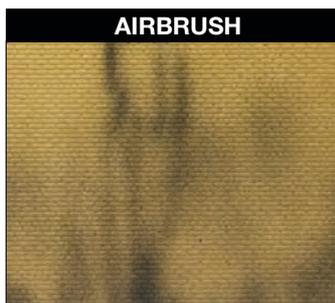
Any surface that is exposed to the natural elements, such as rain, wind and dust, is likely to have some kind of discoloration called weathering. Building occupants and wildlife also add wear and tear to structures. In modeling, weathering adds a sense of time and place, which helps create realism.

The amount of weathering present on a structure will depend on environment, age and how well it has been maintained. For example, industrial buildings, like a coaling facility, will often have residue buildup all over. While a new house will look crisp and fresh, a poorly kept, old house will have peeling paint and grime. Keep these factors in mind when determining how much and where to weather your structure.

Weathering a structure is an easy process, typically done with a mixture of materials. You can use acrylic paint, chalk and/or Fine Turf to weather your structures. Use diluted acrylic paint or chalk to create the look of grime, mold and stains. Paint will create a darker, more intense weathering than chalk. Use Fine Turf to replicate moss, pollen, dust and debris.

To weather with paint, dilute the paint so it is a light wash and dab it over the building. Let the wash seep into any cracks and crevices where the grime buildup would be the most intense. To weather with chalk, rub the chalk on sandpaper to create chalk dust. Then apply the chalk dust using the drybrush technique (page 112). Apply Fine Turf using the flyspeck technique (page 133).

For realistic weathering, choose colors that contrast enough with the building's paint to show subtle wear and tear. Add scratches to surfaces before you apply any weathering. The materials will fill the scratches to make them look worn. Test your weathering material's colors on inconspicuous areas or on sample swatches of paint before you begin.



# INSTALLING STRUCTURES

Buildings need a flat building site to sit evenly on a layout. Either plan in advance and keep part of your layout flat for buildings, or cut into the terrain shell to create a flat surface before installing your building. Regardless of whether you install the building temporarily or permanently, always use some ground cover to mask the seams between the building and terrain shell after installation.

If your building has or will have lights, be sure to see *Installing LEDs* (page 226) before installing structures on your layout.

## TEMPORARY INSTALLATION

Temporary installation of a structure allows for the model to be updated at a future date. It is great for modelers who want to continuously improve their layout or if you are unsure where the building's permanent foundation will be.

To temporarily install the building, simply place it on the flat building site or use some Ribbon Putty from the Light Block Kit (page 224) to hold it in place. Stretch the Ribbon Putty along the bottom edge of the building and press it into place on your layout. When you need to move the building, simply peel it up from the terrain shell. This putty doubles as a light block to prevent light bleed when you add lights to your building.

## PERMANENT INSTALLATION

Permanent installation is best when you know the model you are making will not need to be updated and when you want to prevent other people from bumping the building out of place. To permanently install a building, run a bead of Foam Tack Glue along the building's bottom edge and place it on the flat building site on your layout.

