



Modular Building Panels

Templates and Instructions for the RR Craftsman series
of Modular Building Panels

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Overview

Until now, creating a custom structure for your model railroad required either kitbashing one or more kit structures or building what you need from scratch using paper, plastic, and other materials.

With the introduction of RR Craftsman's Modular Building Panels, you can create complex, multi-story structures from a collection of standard plastic panels.

The panels described in this document are the "Concrete & Brick" collection that represents buildings from the 1930's to the current day.

Panel Styles

There are 3 styles of panel available:

1. Base / Lower Floor - these represent the first floor of the structure and have a floor to ceiling clearance of 12'-9". These are "solid" panels and are available with precut door and window openings. You can also specify custom openings when you place your order.
2. Upper Story / Dual - a 2-story upper floor panel that can be used to rapidly create a multi-story building. These have a floor to ceiling clearance of 10' and are cut for steel framed windows. Brick panels can be used to seal these off when windows are not desired at one or both levels.
3. Upper Story / Single - a single story upper floor panel that's half the height of the dual story panel described above.

Using these panels, you can create any kind of factory or warehouse style building.

Panel Types

There are 4 types of each panel style and this distinction is subtle. Each panel has a column at each side. The panels are designed so that gluing panels together or at 90-degree angles maintains the width of these columns. See the image on the next page for the Styles and Types of panels that are available.

- Single (full-width) Panel. This panel has the same column width on both ends. This is used when the building extends just one panel width so both columns are the full width.
- Center Panel. This panel has half-width columns on each end and is used to create a running wall. Gluing these to End or other Center Panels keeps the column width consistent.

- End Panels (Left and Right). These panels have a full width column on one side and a half-width column on the other. They are used when a wall you are facing ends or continues at a 90-degree angle. The panel that glues to the back of an end should be a half-width column as the wall thickness is also half a column width.

Panel Colors

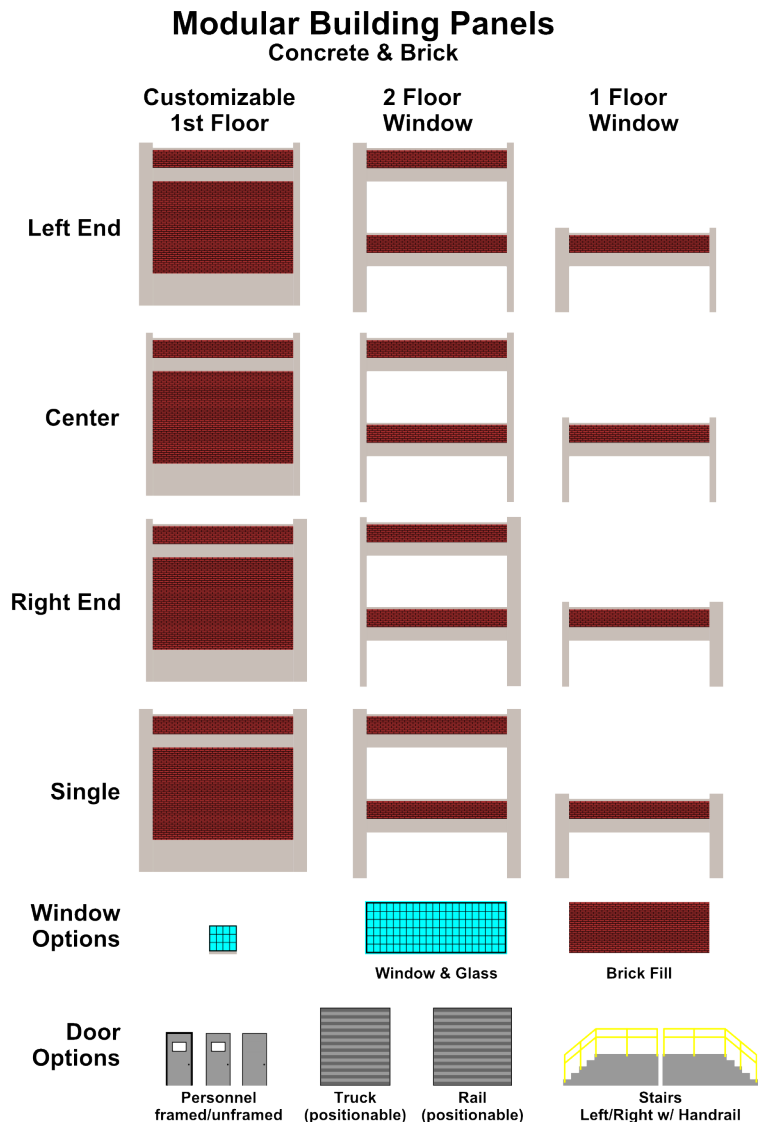
Panels are produced in appropriate colors. Concrete is represented by a “Bone White” color that has the look of aged concrete. Bricks are available in a choice of colors, including Terracotta (faded brick), Yellow-tan (a classic Midwest color), Ruddy Brown, and Gray. The brick layer exposes the underlying concrete color to produce mortar lines without additional modeling or painting effort.

Detail Parts

In addition to wall panels, this collection includes a number of detail parts including windows, brick window panels, stairs with handrails, and several types of doors.

Personnel doors are available framed and unframed and with or without windows.

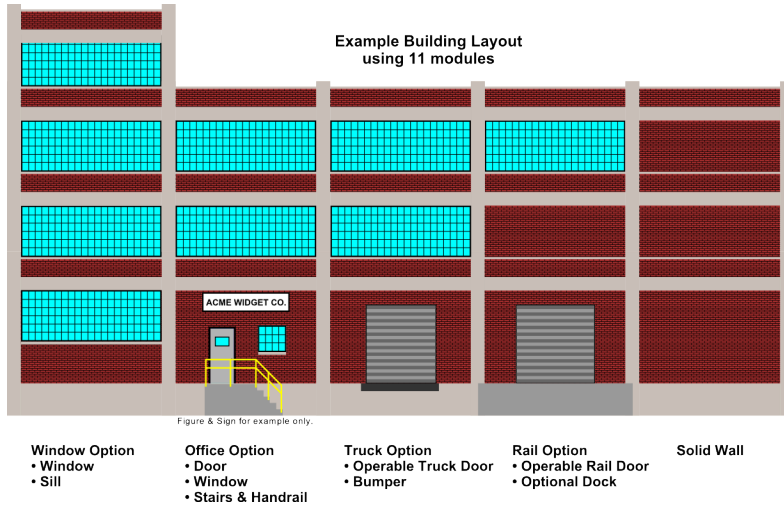
Freight doors include a slotted frame that allows the door frame to be flush with the bricks while the door remains recessed. The door panel can slide in the frame slots and be positioned open or shut.



Example Designs

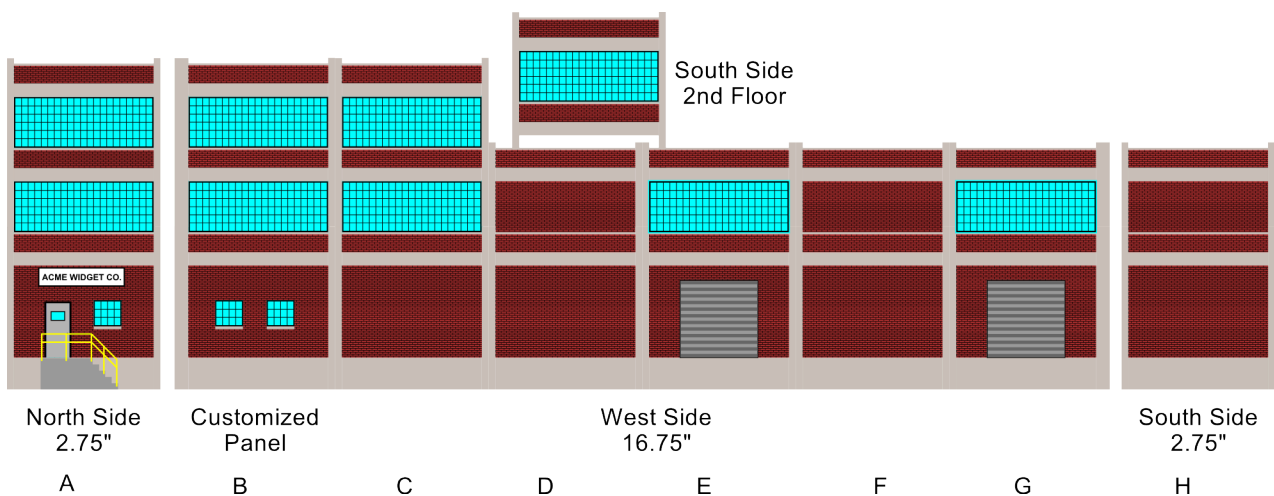
This page shows some example designs using our modular panels.

Example 1 - Factory



Ideal for a narrow background structure. One custom module was created to place the large window in the base panel.

Example 2 - Manufacturing Plant & Office



This structure is 2.75" deep by 16.5" wide and serves two freight car spots.

Templates

The following pages should be printed out full size. They can then be cut and pasted onto cardboard to create a paper model for planning the space and the modules needed.

The door, window, and stair details can be placed anywhere onto the base panels. We offer a standard Office, Truck Door, and Rail Door base module along with the ability to create custom modules.

Each template page has a 1" marker - confirm that this is close to 1" after you print your page. You may need to check your printer settings to ensure that it does not scale the page.

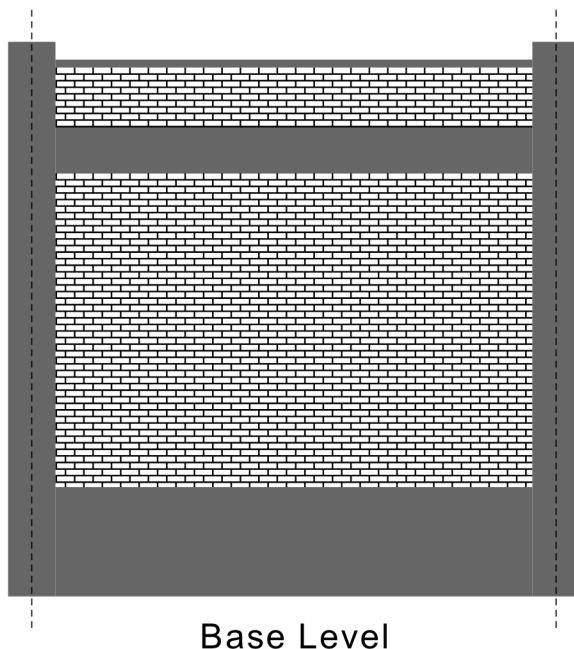
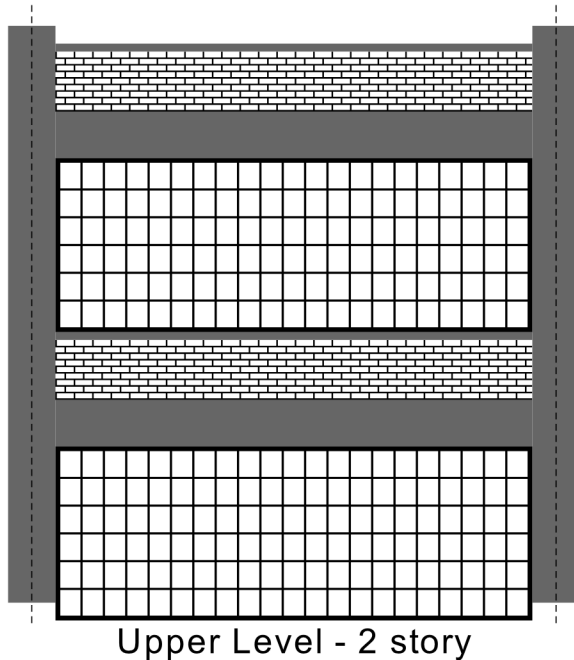
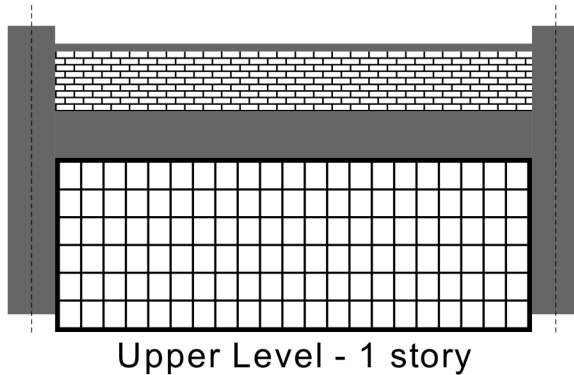
Ordering

Most modules can be ordered right from the RR Craftsman store. We do offer customization of the Base panels, adding custom windows, personnel doors, and freight doors. A full open panel can also be provided to allow railcar entry to your building.

If you need something specific, we can usually accommodate. Call or email our team to discuss your specific requirements.

Full-Width Panels

1"



When planning a building, use these at each end of a wall. Use Center panels in-between these, and the Center panel should overlap on the dotted line to make each vertical column the same width.

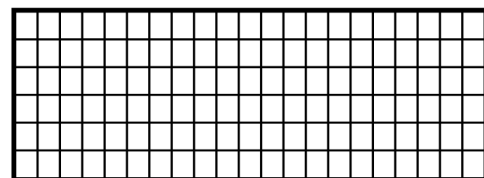
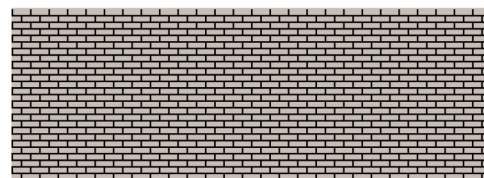
When creating a corner, use one full-width panel at the end and then glue a Center panel to the back of the Full Width panel. This will result in the column being the same width on both sides!

This page represents multiple parts:
1. Full Width - used at the end of a single width building OR when joining two major buildings together to create a fire wall.

2. Left End - cut the RIGHT Side on the dotted line.

3. Right End - cut the LEFT side on the dotted line.

Order these as Full, Left, or Right panels.

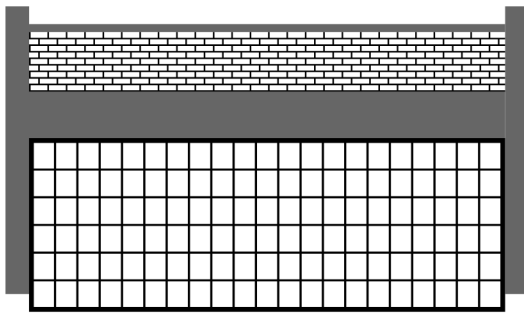


Large Opening Brick / Window

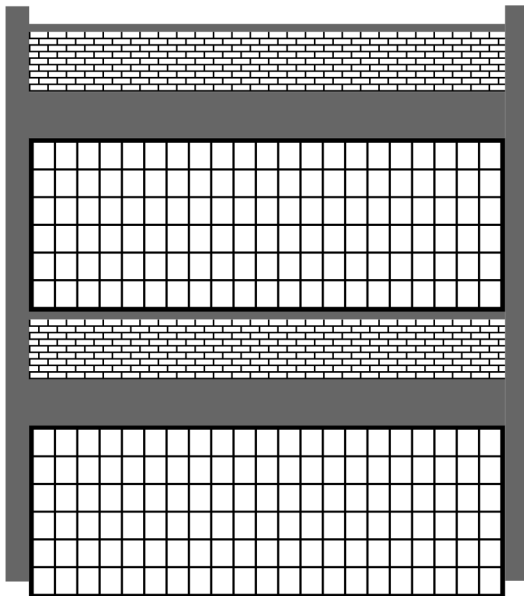
Large window openings can hold framed glass windows or be filled with brick. Paste the brick over the window in any panel you want to be solid.

Center Panels

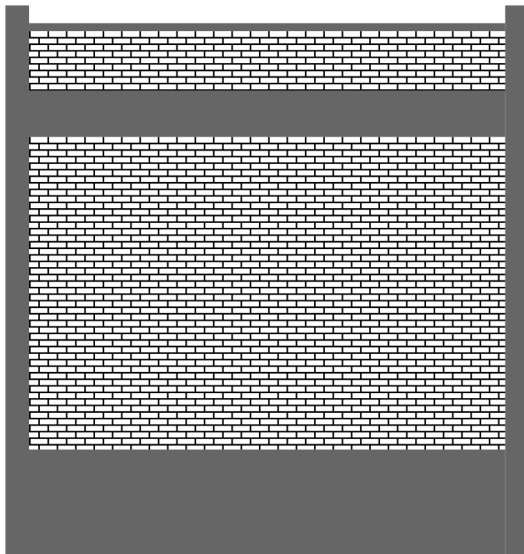
1"



Upper Level - 1 story

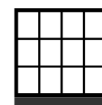


Upper Level - 2 story



Base Level

Center panels are the same height and style as the Full-Width panels but the columns at each end are half the width. When these panels are assembled end to end, the result is a column the same width as the end of the wall.

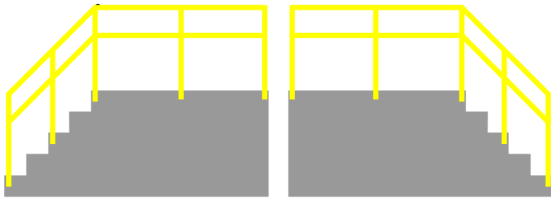


Small Opening Window

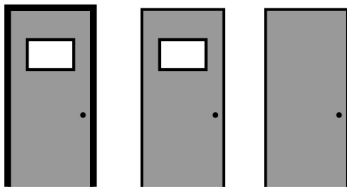
Small window openings can be placed on any solid wall or even over a brick window filler panel. They include the concrete window sill. You can specify up to 3 small windows be installed in any brick panel large enough to contain them.

Doors and Details

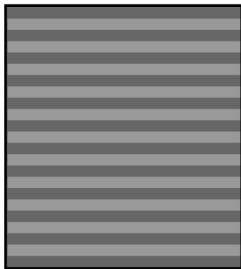
1"



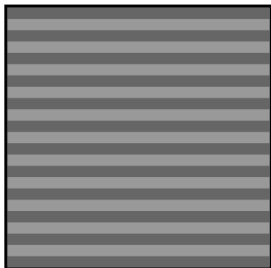
Stairs- available Left or Right. Includes handrail. Place on bottom edge of any Base Panel.



Personnel Doors- Available in solid and with a window, framed or without a frame. Framed doors sit above the brick surface while unframed doors can be set back.



Truck Door- a freight door sized for tractor-trailer service. Includes the bumper to install below the door.



Rail Door- a wider freight door sized for railcar service.

Freight doors include a frame that sits flush with the brick and extends back behind the panel. The door slides into the frame and can be moved up and down.

Doors can be placed on any Base panel. They are usually centered in the panel and adjacent to the concrete base.

Building Anatomy

Most buildings of this design have a floor raised above the level of the ground. This allows for trucks and rail cars to be serviced without the need to raise or lower the freight into the car. If a railcar is intended to enter the building, it does so at ground level and the "pit" extends into the building.

