

# Builder's Guide



**Module Standard Specifications**

**Module Standard Dimensions**

**Module Wiring Standard**

**Typical Layout Designs**

Pikes Peak Division NMRA



Pikes Peak Division Modulares



## FunRun Module Setups Defined

Casual low-key traditional style module setups and operations.

All members invited to run trains in DC and DCC.

Any modules that conform to the basic NMRA construction, track standards, and to the DCC wiring requirements.

Standards set by module group chairman.

New and un-tested modules ok.

Guest operators and trains ok.



# FunRun Module Standards & Requirements

**Straight Modules** - 2'x4', 2x8', or 2'x12' (multiples of 4') and must have a track 1, 2, and 3.

**Corner Modules** - Inside or outside corners must be designed to properly fit in "multiples of 4" configurations. Track 2, the middle mainline, shall have a radius of 32 inches minimum. Track 1, the outer mainline, shall be spaced 2 ½ inches on center from track 2. Track 3 shall be spaced 2 ½ inches on center inside of track 2. (See current module group leader about the need for additional corner modules.)

**Mainline Tracks** - HO Standard Gauge commercial flex track in code 100 Nickel Silver.

**Inter-module Buss Cables** - must be 12 gauge between the inter-module Cinch 6-pin connectors. (See diagrams) Drop-Feed wires soldered to the rails of tracks 1, 2, and 3 must be at least 16 gauge for DCC .

**Mainline Switches** - #6 switches are the desired size, but #4 switches may be used if necessary. (#6 switches are easier for 6 axle locomotives and long passenger cars.)

**“C” Clamps** - You need two 4 inch clamps to secure your module to the module to your left. (The module to your right will clamp to you...etc.)

**Track Overhead Clearance** - Allow a minimum of 3.5 inches of clearance for tall freight cars, double-stacks, or auto racks.

**Ballast** - Woodlands Scenics' Gray medium B-82 required for tracks 1, 2, and desired on track 3 . (Other tracks your choice.)

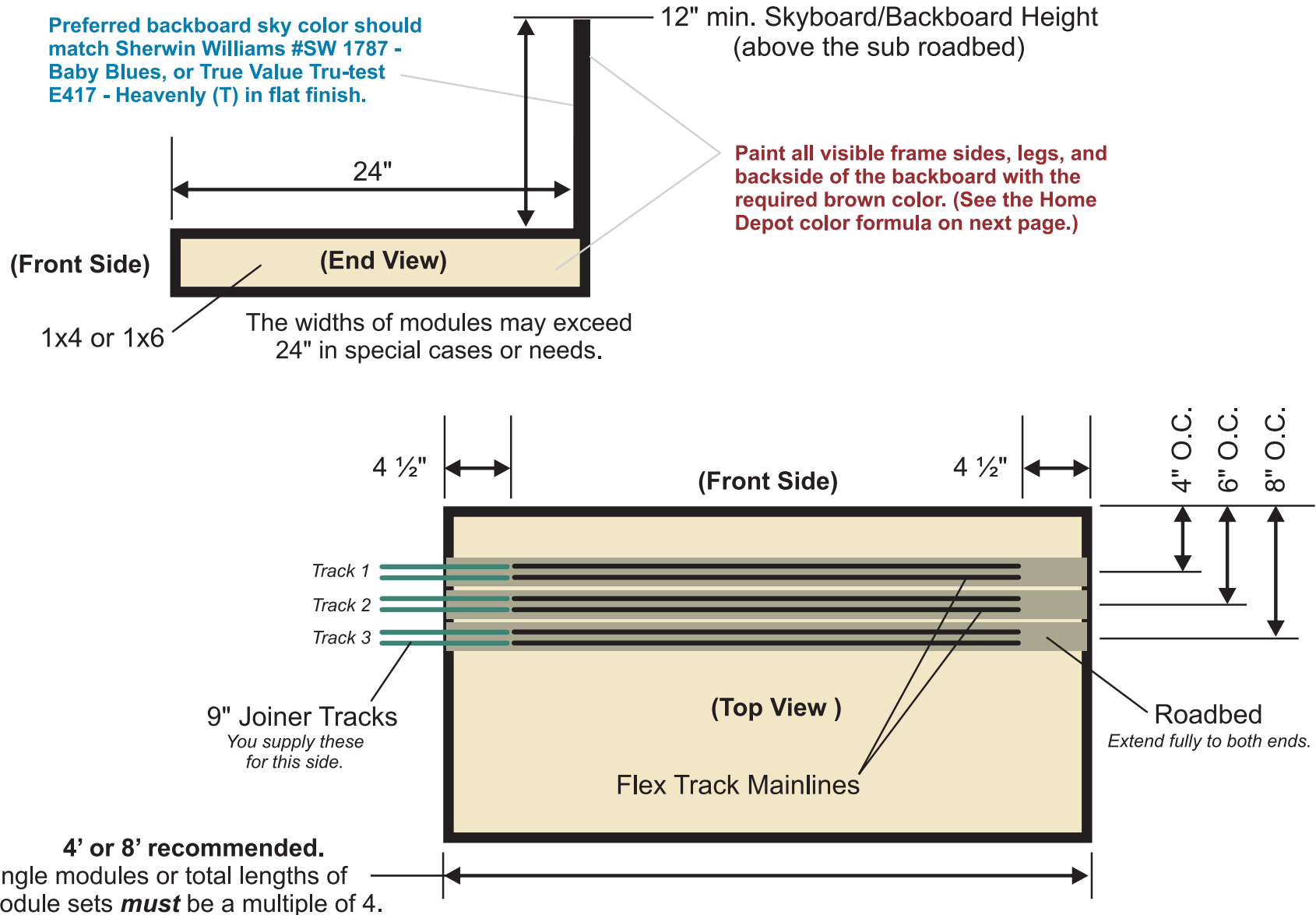
**Grades** - The grade on all mainlines shall be 0%.

**Overall Height** - The module's height from the floor to the top of the rail shall be 40 inches adjustable to + or - 1-inch. Most modules use nominal 2x2 stock for leg construction. Carriage bolts or threaded metal feet with T-nuts are required on the bottom of the legs to make height adjustments. (At least + or - 1")

**Corner Module Mainline Radius and Spacings** - Track 2, the middle mainline, shall have a radius of 32 inches minimum. Track 1, the outer mainline, shall be spaced 2 ½ inches on center from track 2. Track 3, the yard access track, shall be spaced 2 ½ inches on center inside of track 2. (See current module group leaders about the need for additional corner modules.)

**Module Ends** - Scenery that ends at the module's edge must be finished and painted. No bare wood or white plaster should be showing. The scenery cannot extend beyond the module edges.

# Module Standard Dimensions



# Module Standard Frame Color

**NOT RETURNABLE**  
**BEHR**  
PREMIUM PLUS INT SEMI GLOSS ENAMEL(PPI)  
\*\* CUSTOM COLOR MATCH \*\*  
DEEP BASE (3300)  
QUART

| COLORANT |             | OZ | 48 | 96 |
|----------|-------------|----|----|----|
| E        | THALO BLUE  | 0  | 28 | 0  |
| I        | BROWN OXIDE | 1  | 15 | 1  |
| KX       | WHITE       | 0  | 7  | 1  |
| R        | EXTERIOR RE | 0  | 44 | 1  |

Phone #:(719) 531-6400 ACADEMY BLVD  
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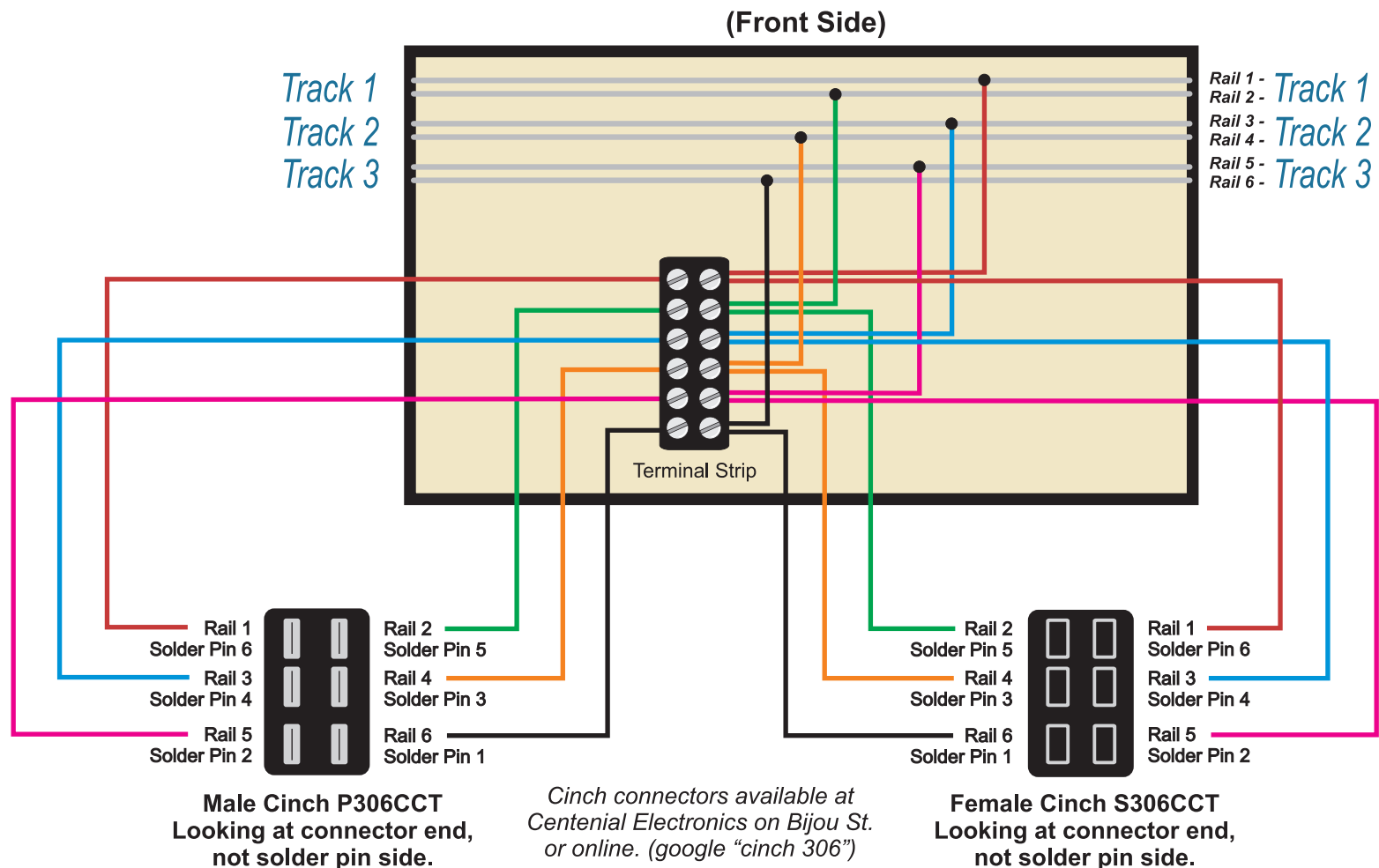
**Home Depot - Formula for 1 quart  
Brown paint color for module legs,  
facia, and backboard backs.**

# Module Wiring Standard

Tracks 1, 2, and 3 shall each be separate and whole blocks and insulated from each other at cross-overs with insulated track joiners. Track drop-feeders should be at least 16 gauge wire soldered to the rails.

Intermodule Connectors - Use **Cinch S306CCT and P306CCT** or equivalent for connectors between the modules using at least 12 gauge stranded wire. The connector ends should be able to reach at least 6 inches beyond the ends of the module. (This insures you and your neighbor's connectors will reach each other.) Rail to solder pin connections in Cinch 306 as follows: Rail 1 - solder pin 6, Rail 2 - solder pin 5, Rail 3 - solder pin 4, Rail 4 - solder pin 3, Rail 5 - solder pin 2, Rail 6 - solder pin 1.

Terminal Strips -Use (highly recommended) *terminal strips* between the Cinch plugs of your module. This allows easy trouble shooting and connection corrections with only a screwdriver instead of cutting wires.



# Typical Layout Designs

