

SCENIC RIDGE®

**N SCALE
COMPLETE LIGHTWEIGHT
LAYOUT KIT
ST1482**

INSTRUCTION BOOKLET

WOODLAND SCENICS®

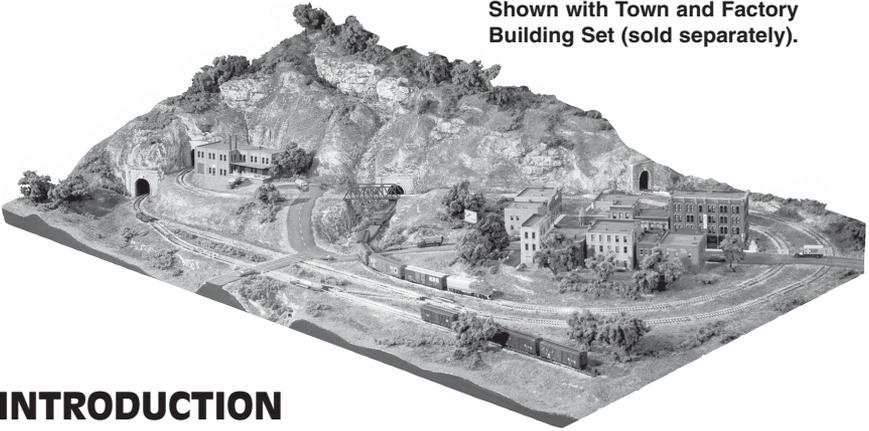


CONTENTS

Introduction	4
Layout Overview	5 and 6
Scenic Ridge Kit Contents	7
Adhesives and Special Tools	8
Low Temp Foam Glue Gun	8
Foam Tack Glue	8
Hot Wire Foam Cutter	9
Track	9
Begin Layout Assembly	9
Glue Base Panels	9
Assemble Track	9
Install Risers	10
Install Inclines	10
Install Second Tier Risers	11
Overpass and Bridge	12
Cut and Install Overpass	12
Test Track and Bridge	12
Check Train Clearance Under Overpass	12
Tunnel Work	13
Plaster Cloth in Tunnel Areas	13
Lay Track-Bed	14
Install Track and Ballast in Tunnel Areas	15
Foam Tunnel Portals	16
Tunnel Walls	16
Install Profile Boards	17
Back Profile Boards	17
Left-side Profile Boards	18
Front Profile Boards	18
Right-side Profile Boards	19
Glue Profile Boards	19
Cut Terrain Contours and Access Panels	19
Fill Corner Joints	20
Build Tunnel Roof	20
Create Flat Areas & Road Foundations	20
Flat Area A	20
Flat Area B	21
Add Road Foundation	22
Wiring	22
Add Plaster Cloth and Track-Bed	22
Make and Place Newspaper Wads	23
Apply Plaster Cloth	23

Test and Trace Track on Risers	24
Lay Track-Bed	25
Glue the Track	25
Rock Castings, Tunnel Portals and Culverts	26
Make Rock Castings	26
Install Rock Castings	26
Color Rocks	27
Color and Install Tunnel Portals	27
Color, Assemble and Install Culverts	28
Plaster Cloth Sides of Layout	28
Add Road System	29
Mark Roads and Streets	29
Pave Town and Factory Areas	29
Pave Roads	30
Create Road Crossings	30
Add Curbs, Sidewalks and Foundations.....	32
Ballast Track	33
Landscape	34
Color Terrain	34
Low Ground Cover	34
Blended Turf	34
Fine Turf	34
Medium Ground Cover	35
Coarse Turf	35
Talus	35
High Ground Cover	35
Model and Plant Trees	35
Clump-Foliage	36
Field Grass	37
Paint Sides of Layout	37
Finishing Touches	38
Drybrush Turf	38
Flyspecking.....	38
Adding Additional Landscape Material	39
A Final Word	40
Products	41
Track Plan and Layout	42 and 43

Shown with Town and Factory Building Set (sold separately).



INTRODUCTION

The Scenic Ridge Layout Kit builds a 3' x 6' N scale layout, complete with inclines, mountains, creeks, tunnels, bridges, roads and landscape. If using the Scenic Ridge Atlas Track Pack (ST1182), follow the track layout plan on pages 42-43 of this instruction booklet. Atlas track modifications have been made, and the layout plan differs slightly from what is printed on the Pre-printed Foam Base Panels.

Before beginning, collect the additional household items necessary for building this kit (listed under Household Items). We recommend purchasing a Low Temp Foam Glue Gun (ST1445), Low Temp Foam Glue Sticks (ST1446) and Hot Wire Foam Cutter (ST1437). These tools make building the Scenic Ridge Layout Kit easier and more efficient. Purchase at your favorite hobby shop.

When building Scenic Ridge, know that mistakes can be fixed. Woodland Scenics Systems are designed to leave room for error and modelers can go back and fix problem areas.

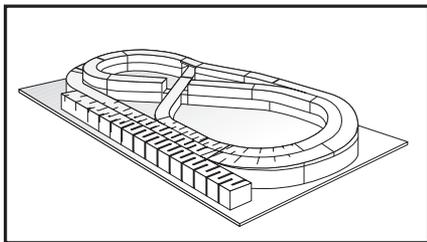
Risers and Inclines/Declines are included, along with a pre-printed track plan. Risers and Inclines/Declines are part of the SubTerrain Lightweight Layout System®. They elevate the track above the base of the layout, making it easy to add ditches, creeks and low-lying areas without cutting into the base. Inclines/Declines add predetermined grades to the layout, so the train can climb and descend hills easily, without you having to make complicated calculations.

The Town and Factory Building Set™ (S1485) was designed to complement the Scenic Ridge Layout Kit or any N scale layout. The 13 structures feature quality, molded-in architectural details. More than 70 detailed accessories bring life and color to the town, including forklift, tractor, billboards, street lamps, light poles, benches and more, along with Dry Transfer Decals for signs and windows. Although Scenic Ridge was intended as a stand-alone layout, it can be adapted to work as an NTRAK Module or combined with layouts you build in the future.

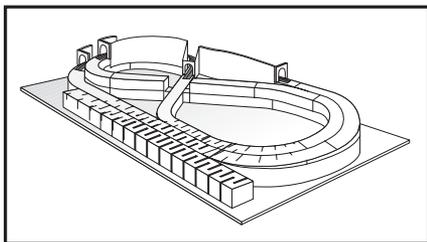
Modules are layouts that can be joined with other layouts, like pieces in a puzzle. There are both national and local clubs that supply standards and specifications for building modular layouts. The NTRAK organization is one of these clubs. For information on groups like this in your area, contact one of your local model railroading organizations. To convert Scenic Ridge to an NTRAK module consult the modified specifications pages 42-43. It is best to decide which way you will build the model before you begin.

The Mod-U-Rail® System provides the freedom and convenience to build a dream layout, one module at a time. This system consists of module kits that are bolted together to create a layout of any size, in most any scale. They can also be added on to an existing layout. Whether creating a layout for a home, starting a module club or building a layout with friends, modules can be completed in a couple of evenings. Everything is included in the kit except track.

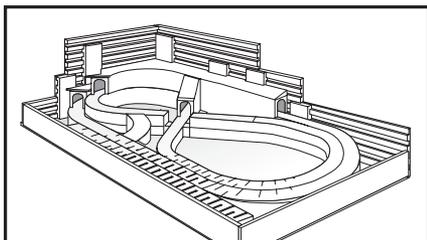
Layout Overview



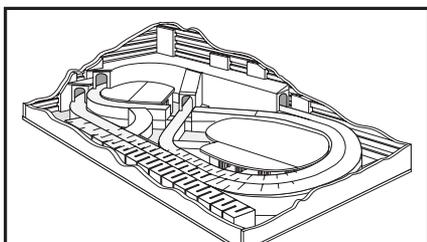
- 1. Risers and Inclines/Declines**
Install Risers and Inclines/Declines over Track Plan printed on Foam Base Panels.



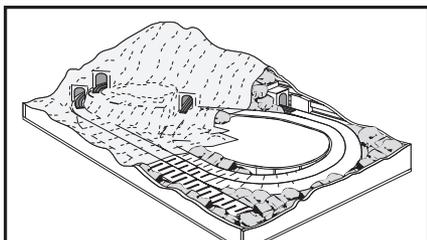
- 2. Tunnel Work for Risers**
Add Plaster Cloth, Track-Bed, track and Ballast to Risers along tunnel area. Install foam Tunnel Portals and tunnel walls.



- 3. Profile Boards and Tunnel Roof**
Place interlocking Profile Boards around the perimeter of layout. Add tunnel roof.



- 4. Foam Sheets**
Cut and install Foam Sheets to enclose tunnels and form level areas for buildings. Cut Profile Boards.

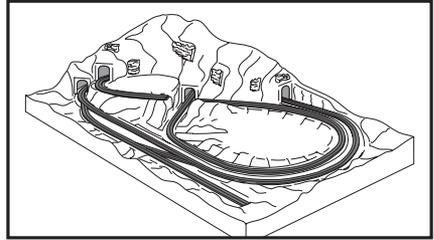


- 5. Add Paper Wads and Plaster Cloth**
Use newspaper wads to build terrain contours then cover with Plaster Cloth to form a hard surface.

Layout Overview

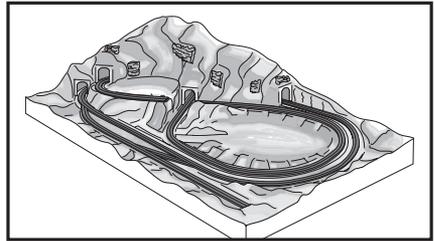
6. Lay Track-Bed

Lay Track-Bed over Risers covered in Plaster Cloth. Add track and rock faces.



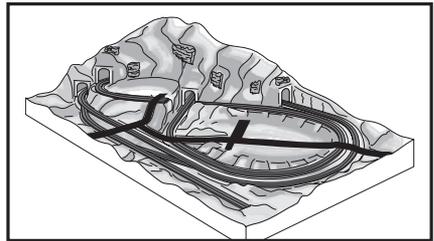
7. Apply Earth Undercoat

Install Tunnel Portals and paint the Plaster Cloth with Earth Undercoat.



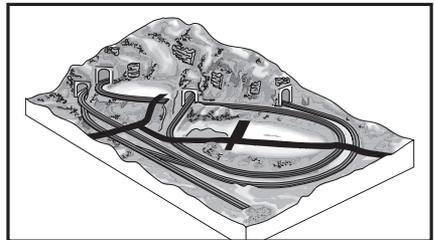
8. Add Road System

Use the Road System to create realistic roads and building foundations.



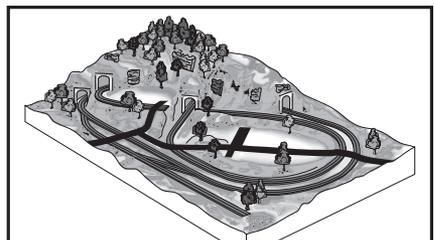
9. Begin Landscaping

Apply low ground cover and Ballast track.



10. Finish Landscaping

Add trees, bushes and grass. Paint sides of layout and add buildings.



Kit Contents

- | | |
|---|---|
| 3 Pre-printed Foam Base Panels
1/2" x 24" x 36" (1.27 cm x 60.9 cm x 91.4 cm) | Hob-e-Tac®
1 fl oz (29.5 mL) |
| 10 Profile Boards™
8" x 24" (20.3 cm x 60.9 cm) | Foam Tack™ Glue
8 fl oz (236 mL) |
| 6 Profile Board Connectors
8" x 3" (20.3 cm x 7.62 cm) | Earth Undercoat
1.84 fl oz (54.4 mL) |
| 2 Foam Sheets
1/2" x 12" x 24" (1.27 cm x 30.4 cm x 60.9 cm) | 12 Tree Armatures
3/4" - 1 1/4" (1.9 cm - 3.17 cm) |
| 4 Foam Sheets
1/4" x 12" x 24" (6.35 mm x 30.4 cm x 60.9 cm) | 12 Tree Armatures
1 1/4" - 2" (3.17 cm - 5.08 cm) |
| 22 Risers
2" x 2 1/2" x 24" (5.08 cm x 6.35 cm x 60.9 cm) | 18 Tree Armatures
2" - 3" (5.08 cm - 7.62 cm) |
| 2 Incline/Decline
0 - 1" (0 - 2.54 cm) sections, 2 1/2" x 24" (6.35 cm x 60.9 cm) | Light Green Clump-Foliage™
34.2 in' (860 cm) |
| 2 Incline/Decline
1" - 2" (2.54 - 5.08 cm) sections, 2 1/2" x 24" (6.35 cm x 60.9 cm) | Med. Green Clump-Foliage
50.5 in' (827 cm) |
| 17 Track-Bed™ Strips
1/8" x 1 1/4" x 24" (3 mm x 3.17 cm x 60.9 cm) | Dark Green Clump-Foliage
16.2 in' (265 cm) |
| 3 Plaster Cloth Rolls
20 ft (185 dm) ea | Medium Green Coarse Turf
32.4 in' (530 cm) |
| 1 Plaster Cloth Roll
5 ft (929 cm) | Green Blend Blended Turf
64.9 in' (1.06 dm) |
| Lightweight Hydrocal®
18.5 oz (524 g) | Earth Fine Turf
14.4 in' (235 cm) |
| 1 Random Rock - Rock Mold | Soil Fine Turf
7.21 in' (118 cm) |
| 1 Base Rock - Rock Mold | Burnt Grass Fine Turf
7.21 in' (118 cm) |
| Earth Colors™ Liquid Pigment / Rock Colors - Yellow
Ocher, Burnt Umber, Black 0.135 fl oz (3.99 mL) ea | Yellow Grass Fine Turf
3.6 in' (58.9 cm) |
| 75 Foam Nails
2" (5.08 cm) | Light Gray Fine Ballast
25.2 in' (412 cm) |
| 1 roll Paving Tape™ (includes Spreader)
1/4" x 1/16" x 30' (6.35 mm x 1.5 mm x 9.14 m) | Natural Fine Talus
10.8 in' (176 cm) |
| Smooth-It™
1.5 lb (680 g) | Harvest Gold Field Grass
1 g (0.03 oz) |
| Asphalt Top Coat™
1.84 fl oz (54.4 mL) | 4 Stir Sticks |
| Concrete Top Coat
1.84 fl oz (54.4 mL) | 1 Foam Pencil - Black |
| 4 Tunnel Portals, Cut Stone | 1 Plastic Cup with Sifter Lid |
| 2 Culverts, Concrete | 2 Foam Pad Applicators |
| Black Base Paint
8 fl oz (236 mL) | Profile Board Patterns |
| Scenic Cement™
32 fl oz (946 mL) | |
| 1 Spray Head | |

*Hydrocal is a U.S. Gypsum registered trademark.

Household Items

- Newspaper
- Masking Tape
- Scissors
- Liquid Dish Soap
- Measuring Cups
- Paintbrushes
(various sizes: 1/2 in - 2 in, 1.27 cm - 5.08 cm)
- Ruler
- 4 Disposable Cups
- Plastic Mixing Bowl
- Pan for Water
- Hobby Knife
- Sandpaper (120 and 220-grit)
- Eyedropper
- Spray Bottle

Instruction Notes

Before beginning each section, read through the steps to understand the modeling process. Illustrations are included to demonstrate the steps.

As you cut the Profile Boards and Foam Sheets, keep all scrap pieces until you are done with the project. Scrap pieces will be used in assembly of the layout.

Adhesives and Special Tools

Woodland Scenics offers two types of adhesive for use with SubTerrain Lightweight Layout System. Each has advantages for different jobs. General instructions for using both appear below.

Scenic Ridge instructions were written using Low Temp Foam Glue Gun and Low Temp Foam Glue Sticks to complete the kit. If using Foam Tack Glue to assemble the entire layout, read this section and refer back to it as you are gluing foam components together.

Low Temp Foam Glue Gun (ST1445) and Low Temp Foam Glue Sticks (ST1446)

Low Temp Foam Glue Gun and Glue Sticks will not melt or damage the foam components included with this kit. The glue bonds almost instantly and is easy to use. Low Temp Foam Glue is recommended for gluing down Risers, Profile Boards and Foam Sheets. It sets quickly and dries faster than Foam Tack Glue. However, it can cause lumps if used underneath thin materials like Inclines/Declines or Track-Bed. Low Temp Foam Glue Gun and Glue are available at your local hobby shop.



To use the Low Temp Foam Glue Gun and Glue, run a continuous bead along the seam of the materials you are bonding.

IMPORTANT: Do not use a high temperature gun with this kit.

Foam Tack Glue (ST1444)

Foam Tack Glue is specially formulated glue that is safe and easy to use with foam. It can be used to assemble this kit and is available at your local hobby shop. This kit includes enough Foam Tack Glue to glue down the Track-Bed and track. Foam Tack Glue is also good for gluing thin or narrow pieces of foam.

To use Foam Tack Glue, spread an even layer over both contact surfaces. When applied to both surfaces and allowed to dry, Foam Tack Glue acts like contact cement. If using the Foam Tack Glue to secure the foam, follow these steps:

1. Insert Foam Nails at an angle to pin Risers and Inclines/Declines in place when test fitting placement.
2. Remove Risers and Inclines/Declines individually. Spread a thin layer of Foam Tack Glue on bottom of each piece and the contact surface of foam where it will be placed.
3. Let glue dry until clear (maximum working time, 1 hour).
4. Replace individual piece and pin firmly in place while drying. Continue until all pieces are glued in place. Remove Foam Nails when glue is dry.

NOTE: To remove Track-Bed, soften glue with warm, soapy water or use denatured alcohol.



Hot Wire Foam Cutter (ST1435)

The Hot Wire Foam Cutter is designed for use with Woodland Scenics foam products. When using with other foam products, toxic fumes may be emitted. The Foam Cutter Bow & Guide (ST1437) makes the Hot Wire Foam Cutter even more versatile. Hot Wire Foam Cutter Replacement Wire (ST1436) is also available. The Hot Wire Foam Cutter, Bow & Guide and Replacement Wire are available at your local hobby shop.



Track

We used the Scenic Ridge Atlas Track Pack (ST1182) with the Scenic Ridge Layout Kit, but you can use another brand or type of track, if you prefer. Refer to the list on pages 42-43 of this instruction booklet for track requirements.

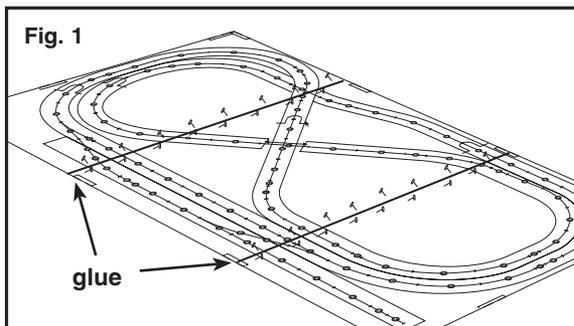
NOTE: When assembling track, it is not necessary to center it on the Risers. Test train to be sure it runs properly. If running a long line of rolling stock, verify clearance around tunnels, bridges, rocks, etc. and adjust accordingly.

Begin Layout Assembly

Here's a tip before you begin! Consider making the rock castings now. Lightweight Hydrocal takes some time to dry, so they will be finished when it's time to attach the rocks. To do this, turn to page 26 and follow the steps to "Make Rock Castings."

Glue Base Panels

On a flat surface, assemble the Pre-printed Foam Base Panels face up and in the proper sequence. Glue Panels together. Pin at seams with Foam Nails while drying (**Fig. 1**). Wipe off excess glue.



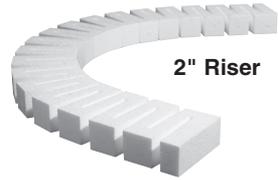
Assemble Track

1. Assemble track following track assembly instructions on Pre-Printed Panels and pages 42-43.
2. Remove assembled track in large sections. Use strips of masking tape to hold track segments together when moving. Track will be test fitted several times before permanent installation.

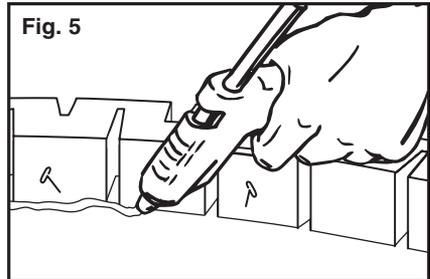
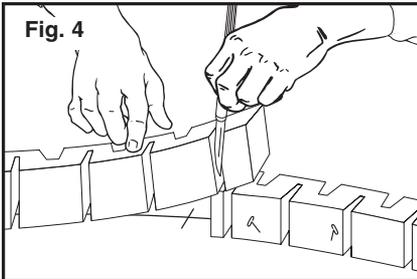
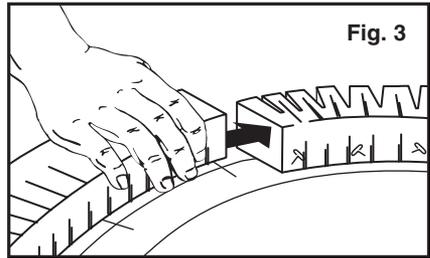
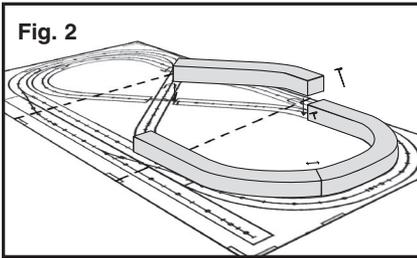
TIP! Store sections of assembled track on a large sheet of cardboard.

Install Risers

Risers elevate track to allow for the addition of ditches, creeks and low-lying areas without cutting into the base. The 2" Risers included in this kit are enough to complete the provided track plan. Additional Risers have been provided for NTRAK modular option (see information on pages 42-43).



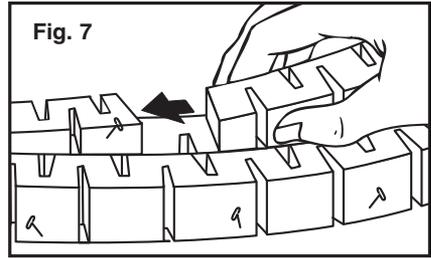
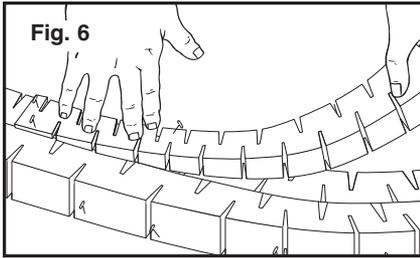
1. Place first tier of Risers by centering over pre-printed track plan on Base Panels. They cover the entire track plan without breaks. You may begin anywhere on the track plan (**Fig. 2**).
2. Pin Risers to the Base every 4" to 6" with Foam Nails. Make sure the ends of Risers butt snugly together (**Fig. 3**). **NOTE:** Cut the end of the last Riser with a hobby knife for a good fit (**Fig. 4**). Save foam scraps.
3. When Risers are pinned in place, glue to Base with Low Temp Foam Glue. Run a continuous bead of Low Temp Foam Glue along base of Riser (**Fig. 5**). Apply glue along base on both sides of Risers for a secure bond. **NOTE:** If using Foam Tack Glue, see the section on Adhesives on page 8.
4. Remove Foam Nails when glue has set.



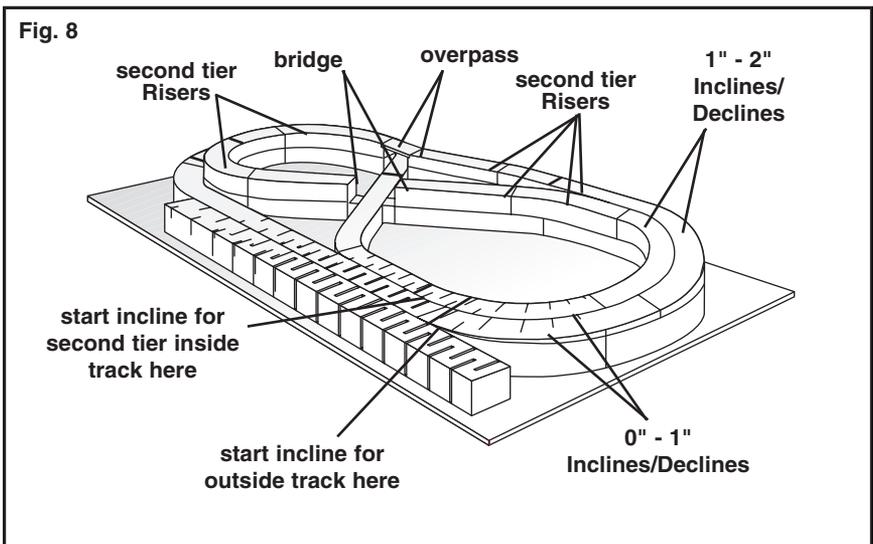
Install Inclines/Declines

After the Risers are in place, install Inclines/Declines. Inclines/Declines add pre-calculated grades to the layout, letting your train climb and descend hills. This kit includes Incline/Decline sections that incline from 0-1" and 1"-2".





1. Place a 0-1" Incline/Decline section on top of Riser where noted, "Start incline for second tier inside track here" (Fig. 8). Using Foam Nails, pin the 0-1" section in place on Riser in a counter-clockwise direction (Fig. 6). We recommend using Foam Tack Glue to attach the thin end of the starter piece.
2. Place the next 1"-2" Incline/Decline section on the Riser, butting it snugly against the first to create a continuous incline. Make sure it is centered on the Riser and pin it in place (Fig. 7).
3. Repeat Steps 1 and 2 for the outside track where noted, "Start incline for outside track here" (Fig. 8). Follow the counter clockwise direction.
4. Remove Foam Nails when glue has set.

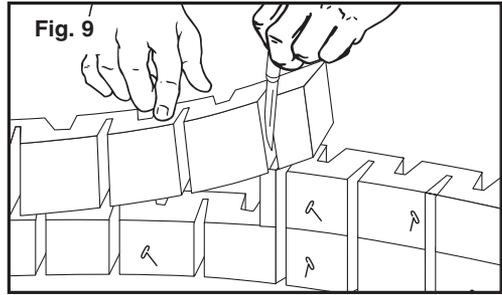


Install Second Tier Risers

1. On the track plan, locate the Bridge and the Overpass (Fig. 8). Begin pinning the second tier of Risers on top of the first tier of Risers. Make sure to leave gaps for the Bridge and Overpass (Fig. 8).
2. Continue placing Risers until they meet the 2" ends of the Inclines/Declines.
3. You will have to shorten the length of the last Riser so it fits snugly against

the highest end of the Incline / Decline. Trim with a Hot Wire Foam Cutter or hobby knife (Fig. 9).

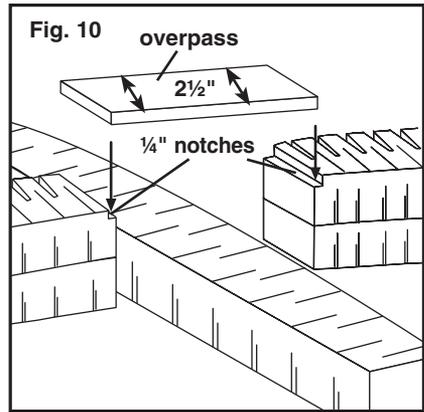
4. When the entire second tier is in place, glue to the bottom Risers.
5. Remove Foam Nails when glue has set.



Overpass and Bridge

Cut and Install Overpass

1. Cut notches 1/4" notches on both ends of the Risers where the overpass will set (Fig. 10).
2. Cut a piece of 1/4" Foam Sheet 2 1/2" wide to fit into notches and between the Risers (Fig. 10). Use a ruler for a precise cut.
3. Test fit overpass piece to fit flush inside notches and trim if necessary.
4. If you have cut too deeply, use a small sliver of scrap foam to adjust the difference in height or simply hold the piece in place while gluing.
5. When satisfied, glue the overpass into place.



Test Track and Bridge

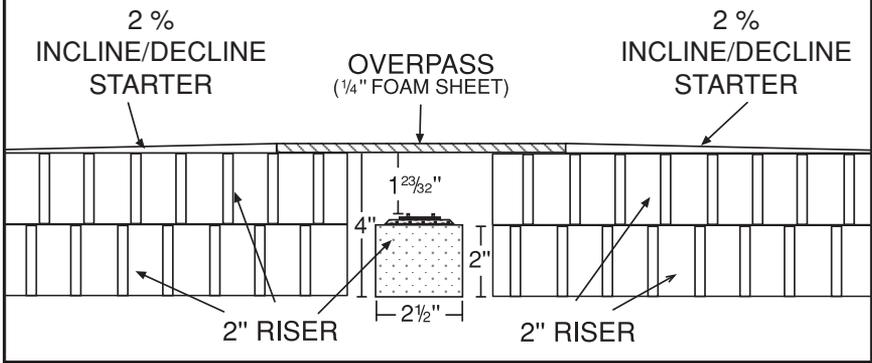
1. The bridge is part of the track. Reassemble track on Risers and Inclines/Declines and test run train.
2. If a surface is uneven, sand down with 120-grit sandpaper.
3. Remove track in large sections.
4. If you decided to use a section of foam or Masonite instead of a prefabricated bridge, follow the same steps for overpass.

Check Train Clearance Beneath Overpass

Although most rolling stock will clear the bottom of the overpass inside the tunnel area, a very small percentage (flatcars with a tall load) may exceed height clearance (Fig. 11). Before continuing construction, check clearance of train beneath the overpass. To test for clearance, set your tallest rolling stock on a level surface and measure the height. If it exceeds 1 3/8", make the following adjustments:

1. Purchase one package of 2% Incline/Decline Starters (ST1412).
2. With a hobby knife, cut two Incline/Decline Starter pieces at a 1/4" height (roughly the middle of the Starter). Set aside.

Fig. 11



3. From a 1/4" Foam Sheet, cut a 2 1/2" x 7" piece. Glue the piece in place, overlapping the ends of the Risers equally on either side of the gap.
4. Glue the cut Incline/Decline Starter pieces on top of the Riser, butting the 1/4" ends against the ends of the installed overpass (Fig. 11).

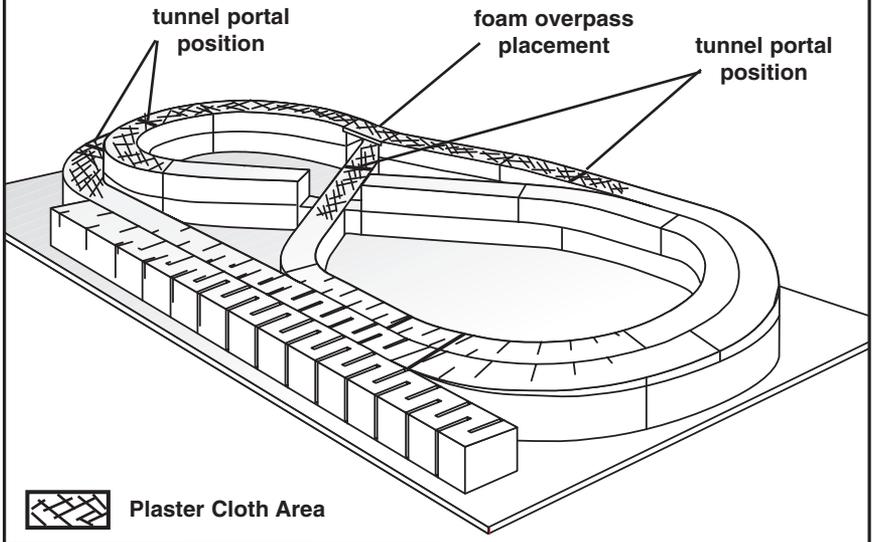
Tunnel Work

Plaster Cloth in Tunnel Areas

Plaster Cloth will only be applied in Tunnel Portal areas (Fig. 12) at this time.

1. Locate the small package of Plaster Cloth and a bowl of cold water. Cut Plaster Cloth into several 4" x 4" pieces.

Fig. 12



2. To apply Plaster Cloth, hold the piece by the corners, dip it in water and place on Risers with the bumpy side up. Sheets should overlap sides of Riser about 1/2" to 1" (Fig. 13).
3. Starting approximately 6" outside the Tunnel Portals (marked on the pre-printed track plan) and working inward, lay strips of Plaster Cloth on Risers. Smooth wet plaster bumps with wet fingers until holes in cloth are filled in and smooth (Fig. 13). Plaster Cloth must be flat and smooth under Track-Bed (see next section).
4. Apply additional sheets of wet Plaster Cloth, butting together end-to-end at the seam. **Do not overlap sheets.**
5. Smooth out all the lumps and folds by rubbing the surface with your fingertips. Work quickly. Plaster Cloth hardens in minutes.
6. When you reach the overpass inside the tunnel, make sure the edges of the Plaster Cloth wrap around the bottom of the overpass (Fig. 14).
7. Beneath the overpass, lay a dry strip of Plaster Cloth on lower Riser and mist with water from a spray bottle (Fig 14). Smooth cloth in place.
8. Let Plaster Cloth dry 4-6 hours. If any bumps exist, sand to remove.

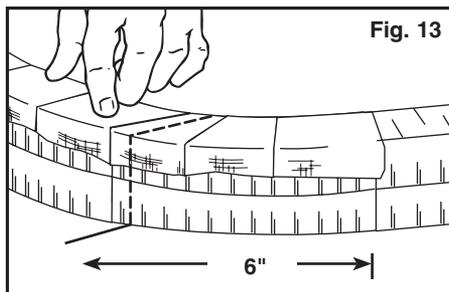


Fig. 13

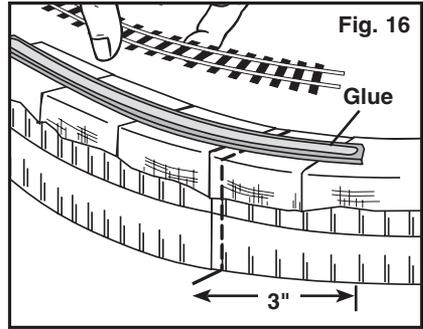
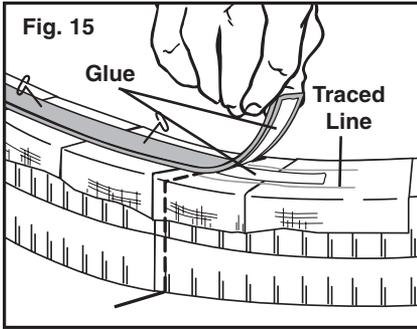


Fig. 14

Lay Track-Bed

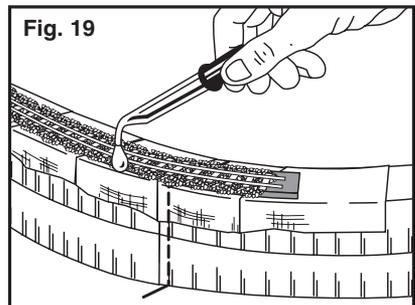
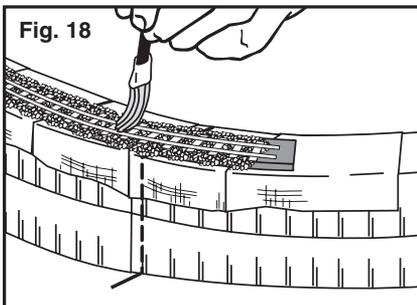
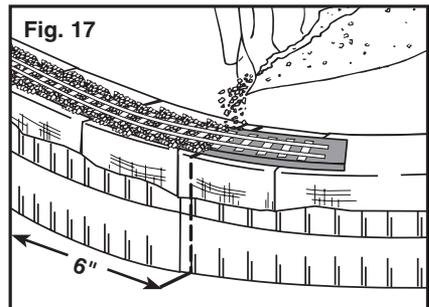
1. Place entire track on layout and pin in place with Foam Nails.
2. In tunnel areas, trace the track outline onto the Plaster Cloth with the Foam Pencil. Be very accurate when marking track placement in tunnel areas.
3. After tracing the track outline inside the tunnel area, remove the track from the layout in several large sections and store on cardboard.
4. Spread an even layer of Foam Tack Glue inside the track outline on the Plaster Cloth and on the bottom of the Track-Bed strips (Fig. 15). Let glue dry until clear (max. working time, 1 hour).
5. Carefully lay the Track-Bed, keeping it centered between track tracings (Fig. 15). Glue will bond instantly.
6. Place Foam Nails in the center of the Track-Bed (every 2" on curves, every 6" on straights) to hold in place while drying.
7. Track-Bed should extend approximately 3" beyond the Tunnel Portal markings on the base (Fig. 16).

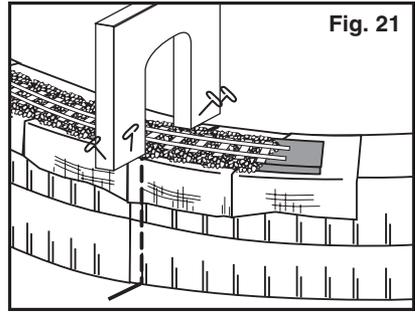
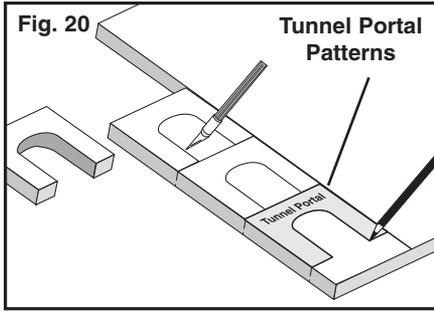
TIP! For a more secure adhesion, use 120-grit sandpaper to sand top and bottom of Track-Bed before adhering to the layout and installing track.



Install Track and Ballast in Tunnel Areas

1. Replace track over entire layout. Pin down the sections inside Tunnel.
2. When you are satisfied with placement, remove the track that is outside the Tunnel area, leaving the track inside the Tunnel area in place. Approximately 3" of track should extend beyond the Tunnel Portal markings on the base (**Fig. 16**).
3. Glue down the track inside the Tunnel area, one section at a time. Remove one section and spread a thin, even layer of Foam Tack Glue on top of the Track-Bed.
4. Pin track to glue-covered Track-Bed, making sure connections between each track section are secure.
5. Pour an even amount of Ballast over track 3"-6" inside the Tunnel area (**Fig. 17**). This step is for continuity and appearance. There is no need to cover the entire length of track inside the Tunnel area.
6. Brush excess Ballast from top of ties and rails (**Fig. 18**). Ballast should be even with top of ties for a realistic appearance.
7. Use an eyedropper to apply Scenic Cement on the Ballast (**Fig. 19**). Saturate Ballast for secure adhesion. **NOTE:** Clean Scenic Cement from top of rails before running train. We recommend using our Tidy Track® Rail Tracker™ Cleaning Kit (TT4550).
8. When dry, remove Foam Nails from track.



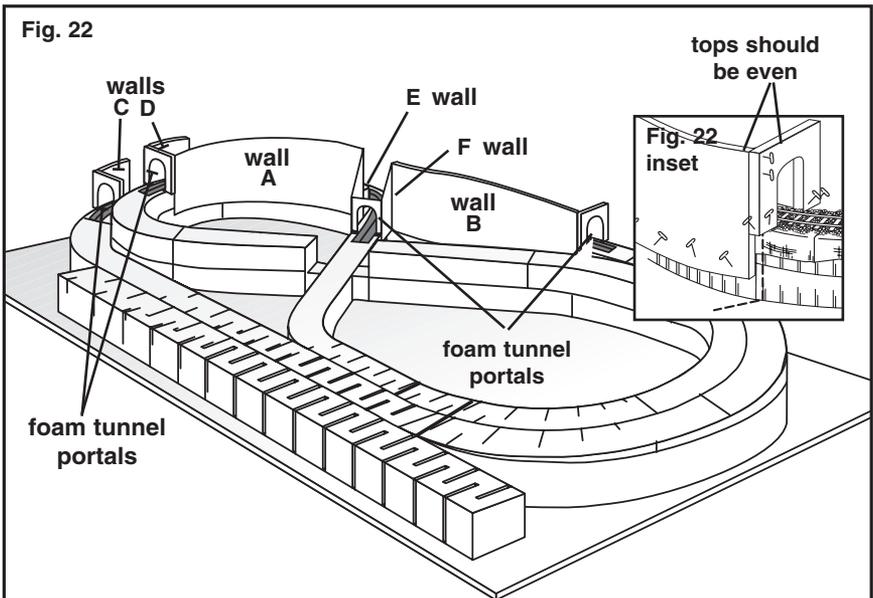


Foam Tunnel Portals

1. Trace four Tunnel Portal Patterns onto a 1/2" Foam Sheet (Fig. 20). Cut out with hobby knife or Foam Knife. Foam tunnel portals provide a stable backing for Hydrocal Tunnel Portals.
2. Locate Tunnel Portal positions on Track Plan and pin foam portals and supports in place (Fig. 21). Bottom edges of foam tunnel portals set on edges of Risers and protrude over the sides.

Tunnel Walls

1. Cut two of the 1/4" Foam Sheets in half lengthwise to create four 6" x 24" pieces. These will become the tunnel walls that attach to the backs of the tunnel portals and sides of the Risers.
2. Take two of the 6" x 24" segments and gently flex back-and-forth so pieces will not break when following the contours of the Risers. These are walls A and B. Use Foam Nails to pin them to the backs of the tunnel portals and



sides of the Risers (**Fig. 22**). The tops of the tunnel walls should be even with the tops of the foam tunnel portals (**Fig. 22 inset**). Trim walls to fit.

3. Take another 6" x 24" segment and cut out two 3" x 6" segments. These are walls C and D. Pin walls C and D to the backs of the tunnel portals and sides of the Risers (**Fig. 22**).
4. Use the last 6" x 24" segment to form walls E and F (**Fig. 22**). Cut this segment in half widthwise to form two 6" x 12" segments.
5. Test fit the 6" x 12" halves by placing against the back of the center tunnel portal and the sides of its Riser. Trim halves to fit the area from the back of the center tunnel portal to walls A and B.
6. Pin walls E and F against the back of the center tunnel portal and sides of its Risers.
7. Cut the tops of walls E and F to angle downward from the tops of walls A and B to the top of the center tunnel portal (**Fig. 22**).
8. Glue walls and portals in place when satisfied with their position. Remove pins when dry.
9. Paint inside of tunnel walls with Black Base Paint. For longer walls (A, B, E, F) paint 6" into tunnel.

Install Profile Boards

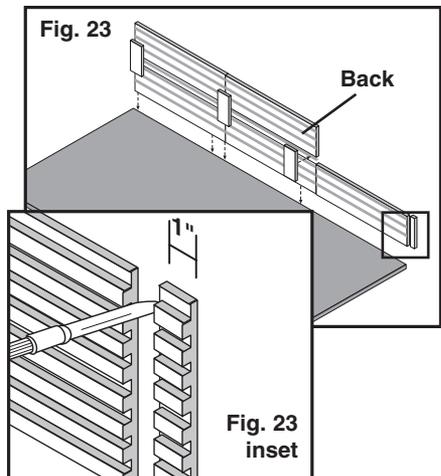
Profile Boards are interlocking foam components placed around edge of layout to form profiles for mountains and hills. Profile Boards need to be cut to fit the perimeter of the layout. Profile Boards are packaged interlocking face-to-face. Connectors interlock Profile Boards at the seams in a tongue-and-groove fashion.



Back Profile Boards

You will use five Profile Boards and three Connectors to build the back Profile Board configuration.

1. Beginning at the rear left corner, fit Profile Boards and Connectors on the back of the layout (**Fig. 23**). The ribbed side of the Profiles Boards always faces inward (**Fig. 23 inset**). **NOTE:** Profile Boards have a wide edge and a narrow edge. For the back of the layout, the wide edges should set on the base. Later, you will have to flip the side Profile Boards narrow-side-down to interlock at corners.

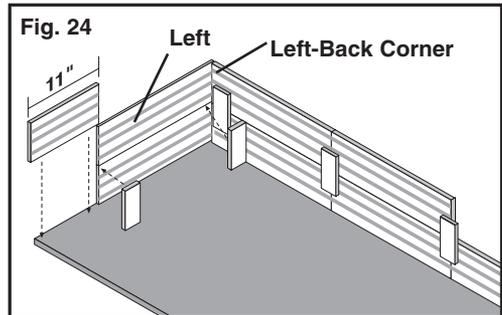


2. Test fit the last Profile Board on the right side of layout. It will extend beyond the back corner. With a straightedge, trim to fit base exactly by cutting off approximately 1" from end (**Fig. 23 inset**).
3. When Profile Boards are aligned with the back edge of the base, pin in place with Foam Nails.

Left-side Profile Boards

Build the left side Profile Board configuration using two full Profile Boards, an 11" segment and two Connectors.

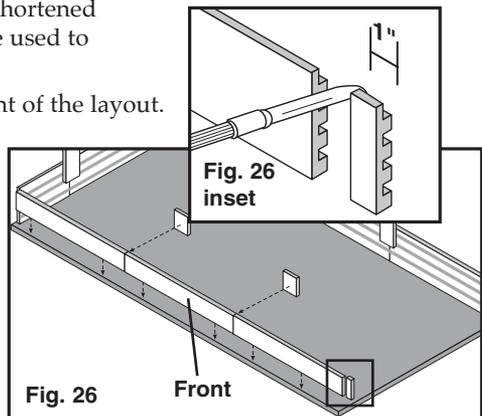
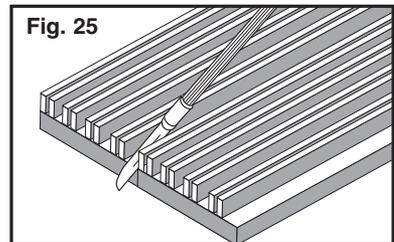
1. Measure and cut an 11" segment from the end of one Profile Board (**Fig. 24**). This will leave a section 13" in length that you will use later for the right side of the layout.
2. Assemble two full Profile Boards and the 11" segment for the left side (**Fig. 24**). Assemble with narrow-edge down to interlock at the corners.
3. When corners of back and side Profile Boards are locked into place, align edges of side Profile Boards with edges of base.
4. Pin in place.



Front Profile Boards

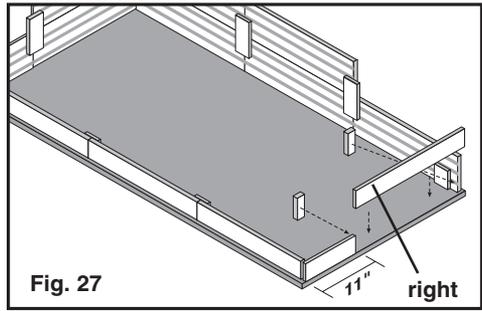
Use the two remaining Profile Boards to build the Front Profile Board configuration.

1. Cut the two Profile Boards in half lengthwise. To do this, count four ribs inward from the narrow edge and cut at the right side of this rib (**Fig. 25**).
2. Cut one 8" Connector in half widthwise. Use 4" segments to connect the shortened Profile Boards. They may also be used to reinforce the corners.
3. Use three long pieces for the front of the layout. Assemble as shown in **Fig. 26**. Trim 1" from one of the ends for a proper fit (**Fig. 26 inset**).
4. Place three of the half front Profile Boards and pin into place.



Right-side Profile Boards

1. Trim 2" off one end of the remaining 13" segment. Cut the 2" segment in half widthwise to form the last two Connectors.
2. Cut the 11" segment in half lengthwise.
3. Connect the 11" segment and the last full-length half together (Fig. 27). Pin in place.

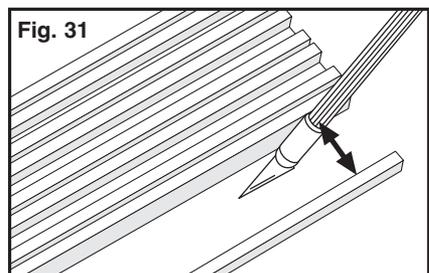
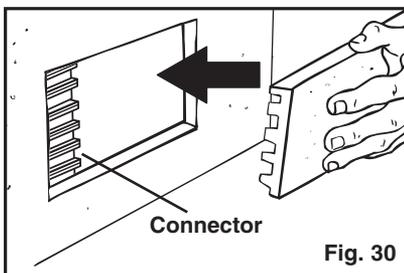
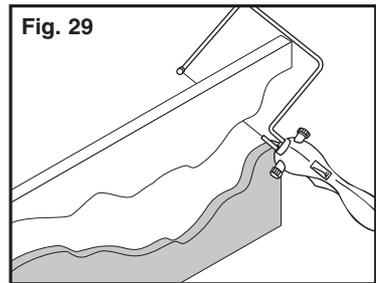
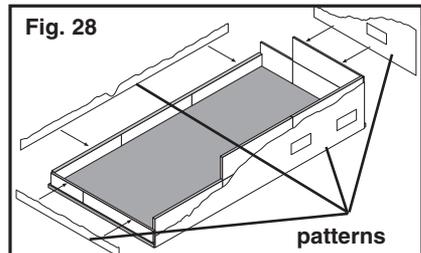


Glue Profile Boards

1. When all Profile Boards are in place in proper position, glue base along seams and at Connectors.
2. When glue is set, remove Foam Nails.

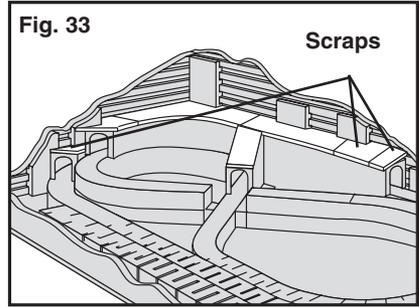
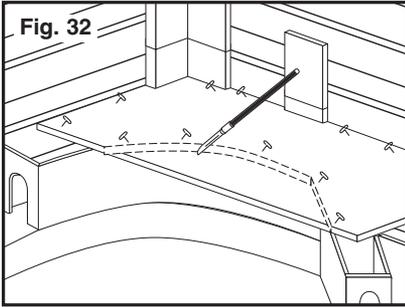
Cut Terrain Contours and Access Panels

1. Cut out paper Profile Board Pattern sheets. Tape sections together and cut out rectangles for access panels. Pin patterns to back, sides and front of Profile Boards. Make sure the straight edges are even with the bottom of the base (Fig. 28).
2. Use the Foam Pencil to trace the position of access panels and terrain contours. Remove the patterns. Cut out patterns (Fig. 29). If using Hot Wire Foam Cutter, attaching the Bow & Guide Attachment is helpful. Use a Foam Knife or hobby knife and a straightedge to cut out access panels. Keep the scrap sections of Profile Boards for later use.
3. Cut sections of Connectors and attach to Profile Boards along ribs. These will act as stops for access panels. Reinsert access panels flush with Profile Board (Fig. 30).



Fill Corner Joints

1. Fill joints where Profile Boards interlock at corners with scraps of Profile Boards cut into 4" to 12" strips. Cut the rectangular flat areas between the ribs (Fig. 31). Strips fit the right-angle gaps of the corners.
2. Cut or stack to fit the height of each corner. Glue in place when satisfied.



Build Tunnel Roof

Tunnel Roofs support newspaper wads in a future step.

1. Test fit 1/4" Foam Sheet along back, inside corner of layout with edges in between ribs of Profile Board (Fig. 32).
2. If Connectors interfere with Foam Sheet, mark Connector locations and cut 1" notches in Foam Sheet to fit around them.
3. Pin Foam Sheet down and trim to fit outside edge of Tunnel (Fig. 32).
4. Use 1/4" Foam Sheet scraps to cover the remaining tunnel roofs (Fig. 33). Do not worry about appearance. The roof will be hidden under newspaper wads and Plaster Cloth.

Create Flat Areas & Road Foundations

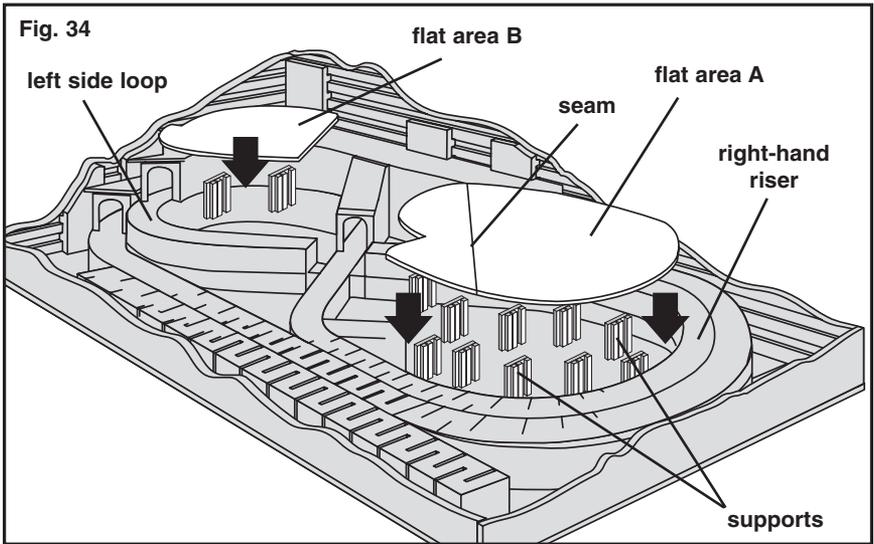
Create flat areas using 1/2" Foam Sheets.

There are no precise measurements for flat areas. Use Fig. 34 and 35 and buildings (sold separately) to determine approximate size. Test fit buildings (Town and Factory Building Set or other N scale buildings) when making flat areas to be sure there is plenty of clearance for train and landscape. See pages 42-43 or box cover photo for suggested placement.



Flat Area A

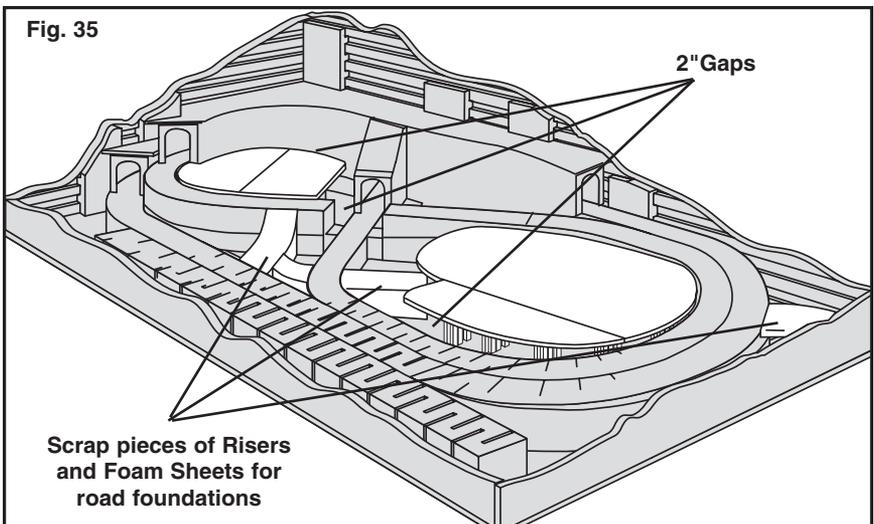
1. Place a 1/2" Foam Sheet near the right-hand Riser (Fig. 34). Use the Foam Pencil to trace area where the Foam Sheet meets the back and side Risers. Fit Foam Sheet close to back and side of Risers, but leave a 2" gap toward front of Risers (Fig. 35). Cut to fit using a Foam Knife or hobby knife.



2. Cut 12 supports 2 3/4" tall using scrap pieces of Profile Board or Foam Sheet. These elevate the flat areas (**Fig. 34**). **NOTE:** Extra supports may be needed if there is a seam between pieces of Foam Sheet (**Fig. 34**).
3. When satisfied with placement, glue in place with Low Temp Foam Glue.

Flat Area B

1. Cut another piece of Foam Sheet to fit flat area B (**Fig. 34**). Leave gaps around back and right edge of the left side to add a drainage ditch or streambed (**Fig. 35**).
2. Cut Supports 3 1/2" tall for flat area B.
3. When satisfied with placement, glue in place with Low Temp Foam Glue.



Add Road Foundation

The Road System included with Scenic Ridge creates realistic roads and paved areas.

1. Use scrap pieces of Risers or other foam to create foundations for the roads (Fig. 35).
2. Pin the scrap pieces even with the top edge of Risers and Flat Areas. When satisfied with position of scrap pieces, glue in place. Remove Foam Nails when dry. Road foundations will be covered with Plaster Cloth in a future step.

Wiring

1. Before applying Plaster Cloth, install wiring. Run wires along and through Risers to connect the track to the power supply and switch control boxes.
2. Locate wiring positions on the turnouts and track. Leave about 3" of wire unattached and tape over the exposed ends temporarily. Make a hole in the foam just large enough for the wire or run wire down the sides and along Risers and Inclines/Declines. Tape or glue the wire to the base.
3. If you prefer, drill a hole through the Inclines/Declines, Risers and the base. This hole should be just large enough for the wire to pass through (an awl or ice pick can even be used to make the hole). Route the wiring to the power supply or electric switches on the underside of the layout. We recommend leaving a single exit point for the wiring to maintain a clean appearance.
NOTE: When covering the layout with Plaster Cloth, be sure to consider the position of the wiring.

Add Plaster Cloth and Track-Bed

Before beginning, make sure all foam components are glued in place and Foam Nails are removed. In this stage, shapes of mountains, hills and other terrain features will be formed using newspaper wads. Leave a shallow trench down the front of the mountain to create a streambed (Fig. 48). Do this by slightly parting the paper wads from the top of the highest mountain shape to the front edge of the layout. Consult the photograph on the box for suggested placement.

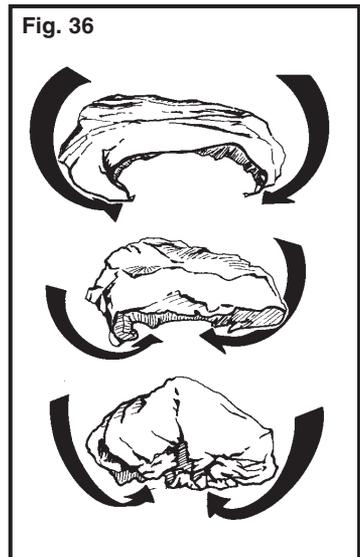
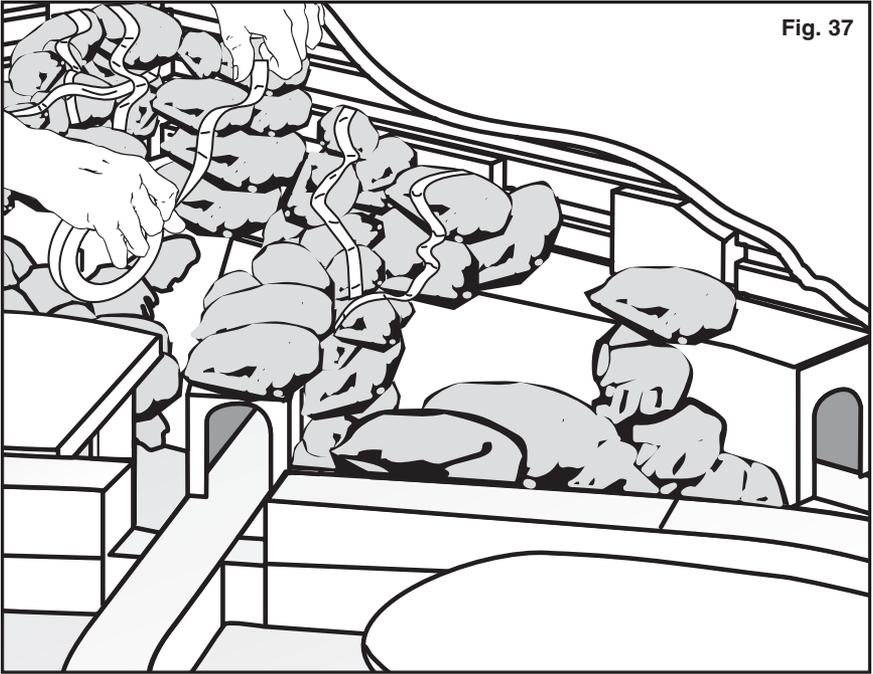


Fig. 37



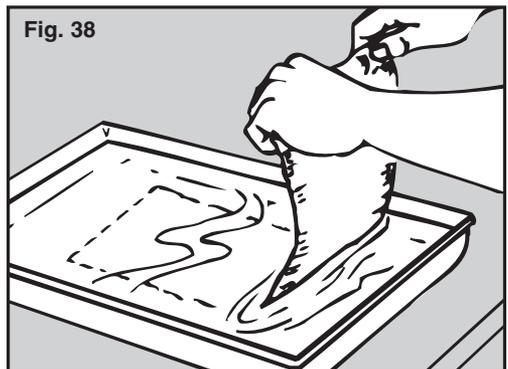
Make and Place Newspaper Wads

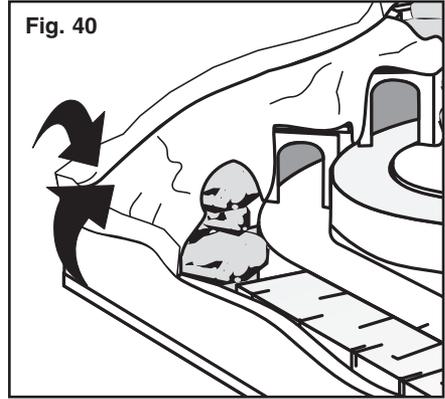
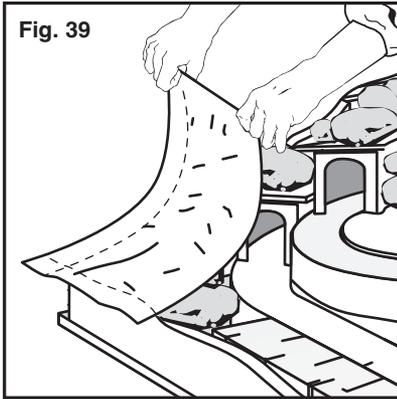
1. To wad a sheet of newspaper, begin at the outside of the sheet and roll the edges under to form a pillow shape. This shape is the easiest to stack for creating hills and mountains (Fig. 36).
2. The wads should be stacked evenly with the top of the Profile Boards to form realistic contours. Fill in the spaces between Risers and around the perimeter of the Foam Sheets. Hold in place with masking tape (Fig. 37).
3. Verify that the train will have clearance around Tunnel Portals. If you feel there are too many newspapers, remove some.

Apply Plaster Cloth

Plaster Cloth adds a hard shell over the layout and creates a solid surface to add landscape and scenery products.

1. Cut one roll of Plaster Cloth into strips approximately 8" long.
2. Take a strip and dip it into a pan of cold water holding the two top corners so the strip will not twist (Fig. 38).





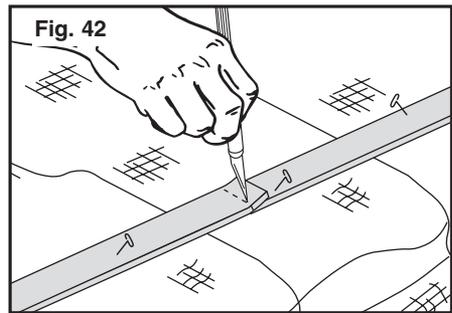
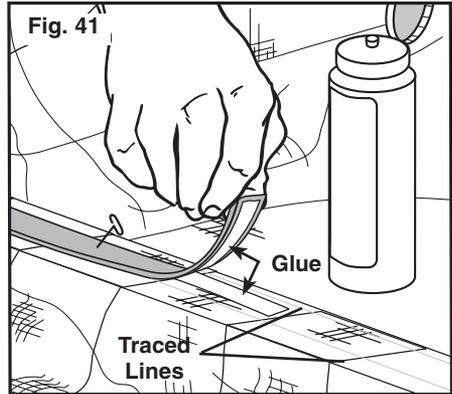
3. Start at the bottom left-hand corner of the layout and place the strip bumpy side up over the paper wads. Leave a 1" strip overlapping edges of the layout (**Fig 39**).
4. Fold the overlapped end even with edge of layout to form a clean, finished edge (**Fig. 40**).
5. Rub bumps on Plaster Cloth with wet fingertips to smooth out the plaster and fill holes in the cloth. Don't worry about wrinkles except on the Risers (see step "7" below). Wrinkles add character to your terrain.
6. Working from left to right, repeat the process for the remaining strips of Plaster Cloth. Overlap each strip 50% to form a double-thick plaster surface. Cover all the paper wads. Remember to leave a crease down the front of the mountain for the streambed (**Fig. 48**).
7. When covering Risers, butt ends of Plaster Cloth strips without overlapping, making sure there are no bumps, wrinkles or folds in the Plaster Cloth. These can cause problems later when you're laying the track. Let Plaster Cloth dry 4-6 hours.

Test and Trace Track on Risers

1. When Plaster Cloth is dry, lay track on top of Risers and Inclines/Declines.
2. Hook up the power and test the train to make sure it doesn't derail and clears Tunnel Entrances.
3. When a clear run is made, pin track in place and trace the track pattern on the Risers. Make sure a clear, distinct impression is made of the track's position. This will be the guide for laying Track-Bed.
4. Remove track in three or four large sections. Use pieces of masking tape to secure the individual track pieces if necessary.

Lay Track-Bed

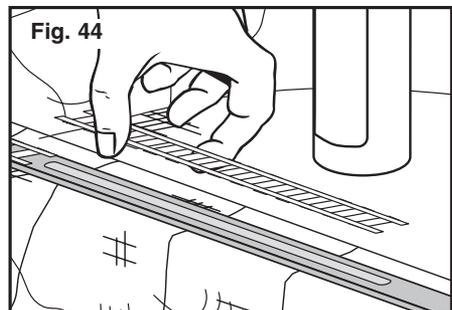
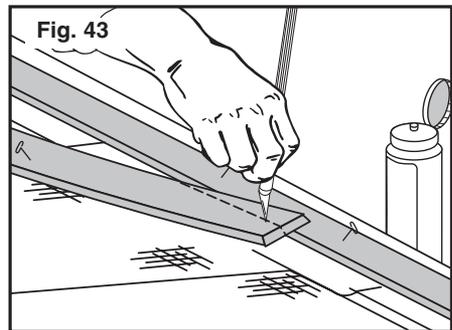
1. Following the traced track plan on the Risers, glue Track-Bed over remaining surface by spreading a layer of Foam Tack Glue on bottom of the Track-Bed and another layer on the Risers (**Fig. 41**). Make sure Track-Bed is centered with the track tracing, Pin in place.
2. If needed, place Foam Nails in the center of the Track-Bed (every 2" on curves, every 6" on straights) to hold it in place as it dries.
3. Make sure the ends of each strip meet without bumps, ridges or gaps. To do this, overlap both strips and cut through simultaneously with a hobby knife. The seams will match almost perfectly (**Fig. 42**).
4. Cut Track-Bed to form areas for the turnouts (**Fig. 43**). Let dry and remove Foam Nails.



Glue the Track

Work slowly and carefully. Make sure all the track connectors are attached and the track is not crimped. This step is permanent. Accuracy is important for your train to run properly.

1. Working from the Tunnel Portals where the track is already in place, glue the remaining track to the Track-Bed by spreading an even layer of Foam Tack Glue on top of the Track-Bed and attaching the track, one section at a time (**Fig. 44**). Be sure not to use too much glue or get any on the rails. This is especially important when gluing down the turnouts. Make sure glue does not get near a turnout's switching mechanism.
2. Pin track in place and let dry.



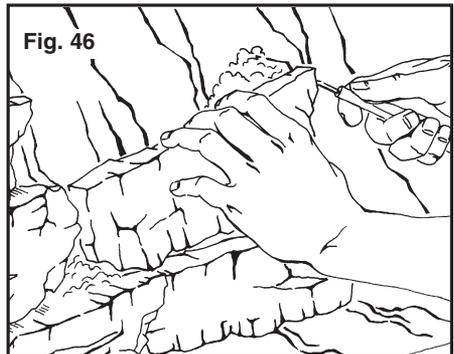
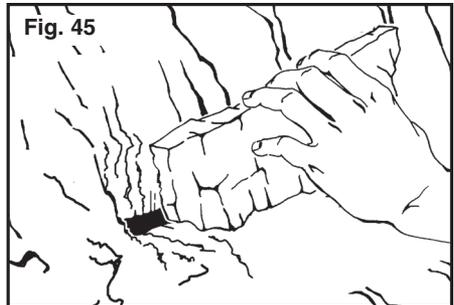
Rock Castings, Tunnel Portals and Culverts

Make Rock Castings

1. Make a solution of “wet water.” Mix 2 drops of liquid dish soap in 1 cup of water. Coat inside of Rock Molds with solution and pour out excess. Wet water helps disperse air bubbles in rock castings and acts as a mold release agent.
2. Secure Rock Molds in a level position.
3. Shake Lightweight Hydrocal for 30 seconds to mix contents. Set aside 1 1/2 cups to attach rocks and Culverts in a later step.
4. Prepare Lightweight Hydrocal using a clean, disposable bowl and utensils, only. Pour 2 1/2 level cups of Lightweight Hydrocal slowly into 1 cup of water. Let stand for 2 minutes, then stir thoroughly for 1 minute. Pour mixture into Rock Molds immediately (working time, 5 minutes). Fill level with top of Mold, and tap gently to dislodge air bubbles. **NOTE:** There is enough Lightweight Hydrocal to fill both Rock Molds twice.
5. Let rock castings dry 30-40 minutes before removing from Molds. Clean mixing bowl and utensils before preparing each batch of Hydrocal. Do not pour any excess plaster down sink drain.

Install Rock Castings

1. Decide on rock placement and test fit rocks in desired locations. Rocks look more natural on steep hillsides with strata layers running horizontally (**Fig. 45**). Break some castings into pieces for rock variety and a realistic, natural look.
2. It may be necessary to cut into Plaster Cloth terrain with a hobby knife for best fit (**Fig. 45**). Plaster Cloth is very durable and the integrity of the terrain will not be damaged.
3. Use the remaining 1 1/2 cups of Lightweight Hydrocal to install rock castings. Due to limited working time (5 minutes), mix in small batches to attach two or three rocks at a time. Mix 2.5-parts Lightweight Hydrocal with 1-part water. Prepare mixture as instructed in Make Rock Castings section.
4. Soak castings in water for 10 seconds and wet Plaster Cloth terrain where rock will be attached. Both surfaces need to be wet.
5. Spread Lightweight Hydrocal on back of rock casting and press into place (**Fig. 46**). Hold until setting begins or use Foam Nails to hold



in place until set. Use the Stir Stick to dab small amounts of Hydrocal around edge of rock where there are gaps. Keep plaster off rock face or casting will lose its rock-like detail.

6. Repeat for each rock. Let dry for a minimum of 2-3 hours before coloring.

Color Rocks

Color rocks using the Leopard Spot painting technique. It is easy to do and has realistic results. Let colors run together naturally. Dilute Earth Colors Liquid Pigment in individual cups. If color is too light when applied, add more pigment to the wash. If they are too dark, add more water.

1. Dilute Rock Colors with water to create color washes.

Yellow Ocher: 1-part pigment to 8-parts water

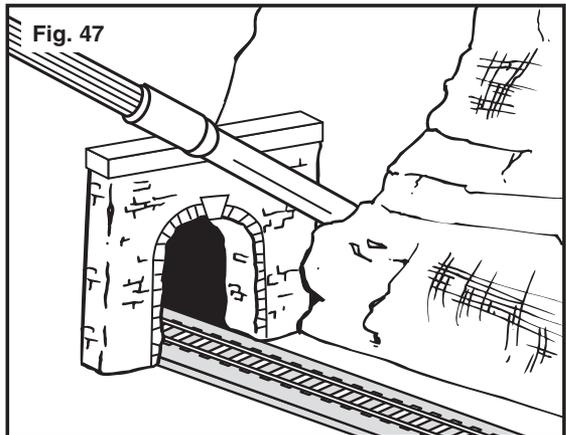
Burnt Umber: 1-part pigment to 8-parts water

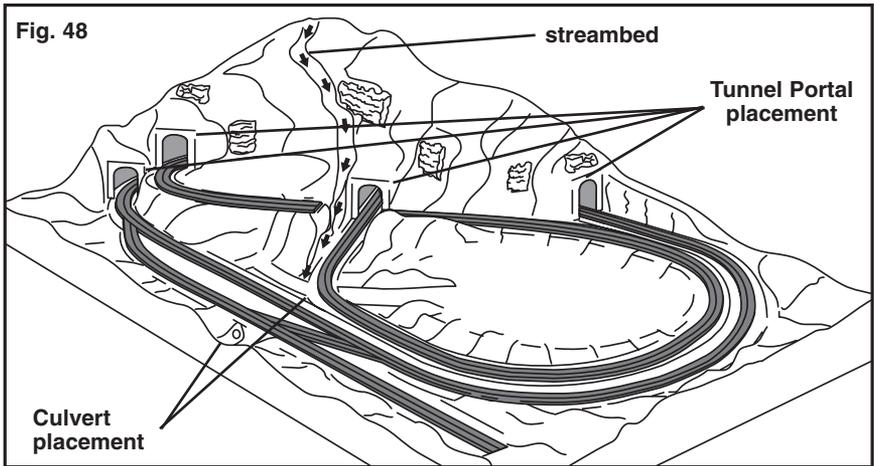
Black: 1-part pigment to 16-parts water

2. Using the Foam Pad Applicator, dab Yellow Ocher randomly over 1/3 of rock face. Rinse Applicator.
3. Dab Burnt Umber randomly over a different 1/3 of the rock, leaving 1/3 white. Rinse Applicator.
4. Apply Black wash over the entire rock to tie colors together. Rinse Applicator.
5. Repeat the Leopard Spot technique on each rock casting. **NOTE:** Save remaining color washes for coloring Tunnel Portals, Culverts and touch-up work.

Color and Install Tunnel Portals

1. Color Tunnel Portals using the same Leopard Spot paint technique that was used to color rock castings. Let dry.
2. Test fit Tunnel Portals in front of foam portal openings. The Tunnel Portal openings must be centered over track. If Tunnel Portal does not fit properly against the foam portal, cut into the Plaster Cloth terrain with a hobby knife for a proper fit (**Fig. 47**).
3. Test train clearance through Tunnel Portal before gluing in place.
4. Spread a layer of Foam Tack Glue on the front of the foam portal and backside of the Tunnel Portal. Wait for glue to dry (max. working time, 1 hour) and install Tunnel Portal.

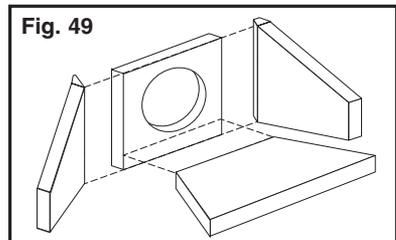




5. Repeat for remaining Portals (**Fig. 48**).

Color, Assemble and Install Culverts

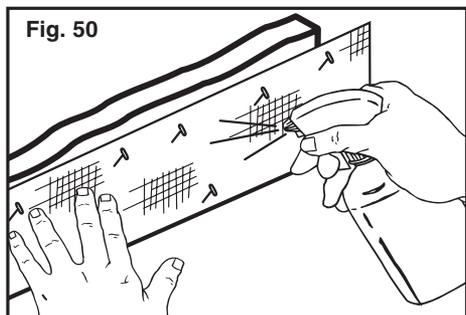
1. Sand Culvert pieces and paint with Black wash. Let dry.
2. Glue Culverts together at seams with Foam Tack Glue (**Fig. 49**).
3. Cut into Plaster Cloth to create recessed areas to accommodate the assembled Culverts (**Fig. 48**). They should be placed in the course of the streambed. If needed, cut into terrain for a good fit.
4. Place Culverts in recessed areas.
5. Mix 2 tablespoons Lightweight Hydrocal with 1 1/2 teaspoons of water.
6. Use the mixture to attach Culverts and fill in gaps. Brush water on backside of Culverts before attaching.



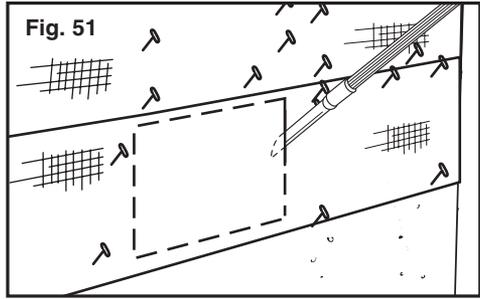
Plaster Cloth Sides of Layout

This is a very messy job! Prop layout on 1" pieces of scrap Foam. Place layers of newspaper under raised edge of layout.

1. Pin Plaster Cloth strips to all sides of layout, bumpy side out. On the front, and wherever possible, use a continuous strip, allowing an inch or so to overlap the sides.
2. Spray Plaster Cloth thoroughly with water, smoothing the plaster with your fingertips to fill holes in cloth (**Fig. 50**).



- Let Plaster Cloth dry approximately 30 minutes, then cut out the access panels with a hobby knife (Fig. 51). Remove access panels. **TIP!** Cut a small finger notch in access panel so it is easier to remove.



Add Road System

Woodland Scenics Road System consists of Smooth-It, Paving Tape and two colors of Top Coat, Asphalt and Concrete. It makes it easy to add realistic roads, streets, sidewalks and pavement to a layout.

Mark Roads and Streets

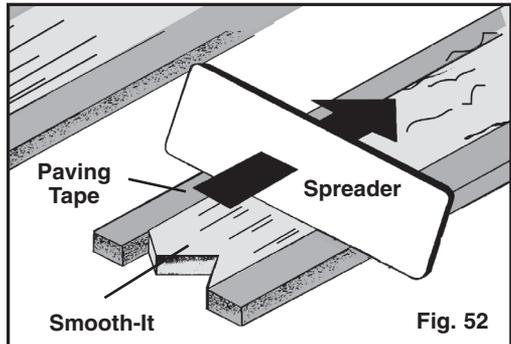
Plan placement of roads, town areas and crossovers. Draw an outline of roads and paved areas with the Foam Pencil. For N scale, country roads should be 1 3/8" wide and city streets should be 2 1/4" wide. For a diagram of road and pavement placement see Fig. 62 and back pages. Test fit buildings, to make sure their placement allows room for streets.



Pave Town and Factory Areas

Use the Road System to make large paved areas for towns and factories. Before placing buildings and creating city streets, pave the large area on the right-hand side of the layout. Doing this requires a special technique (below) that will make the job easier. Later, add another layer of pavement on top of this one to add foundations, curbs and sidewalks. **Always make sure the surface is very clean and dry.**

- Lay several parallel strips of Paving Tape about 2" apart across the area to be paved (Fig. 52).
- Mix Smooth-It according to carton directions. Apply Smooth-It to alternate stripped sections. Smooth evenly with Spreader (Fig. 52).



3. Allow Smooth-It to dry thoroughly (about 20-30 minutes).
4. Remove Paving Tape.
5. Fill in remaining areas and smooth even with tops of existing pavement with Spreader (Fig. 53).
6. Let dry thoroughly and sand surface smooth.

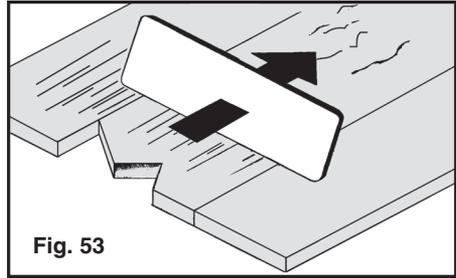


Fig. 53

Pave Roads

1. Make sure outlined surface of roads are clean and dry.
2. Starting at the large paved town area, lay Paving Tape along outline of drawn road to form borders (Fig. 54).
3. Mix a batch of Smooth-It according to directions on the back of the carton.
4. Apply Smooth-It between the strips of tape and use the Spreader to spread evenly. Be sure Smooth-It covers the entire area between the taped edges. It should be even with the top of the tape when smoothed (Fig. 55).
5. When Smooth-It is dry, sand and paint with a Top Coat of your choice.

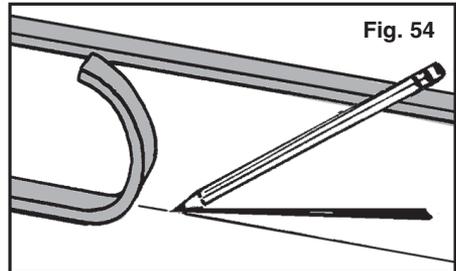


Fig. 54

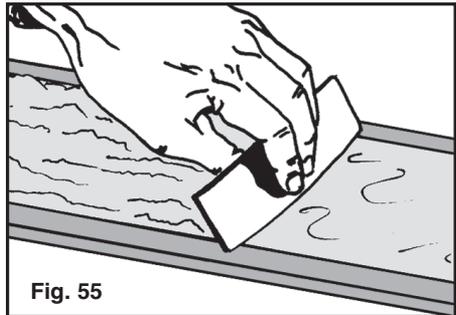


Fig. 55

Create Road Crossings

To create a realistic appearance, add paved road crossings where the road overlaps the track.

1. Track-Bed will need to be removed from both sides of the track where the road crosses the track (Fig. 56). Use a hobby knife to cut out and remove this material.
2. Following the path of the roads, place strips of Paving Tape up to the track where you removed the Track-Bed. This is where the road will cross the track (Fig. 56).

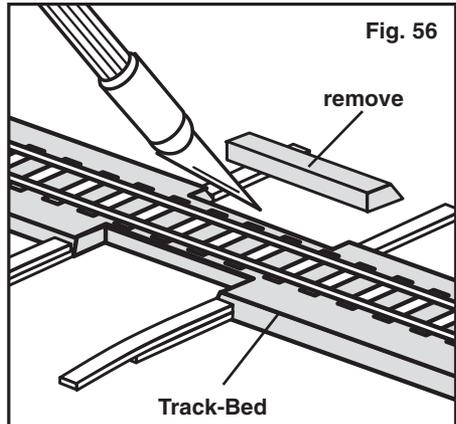
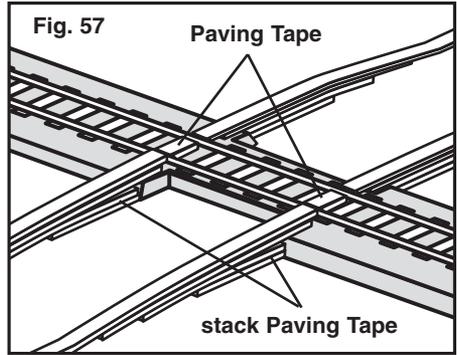


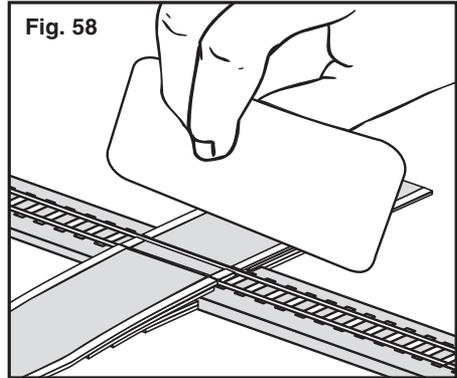
Fig. 56

3. Stack progressively longer strips of Paving Tape on top of the first to bring the road crossing up to the top of the rail. The last and longest piece of tape should butt against the side of the rail (Fig. 57).



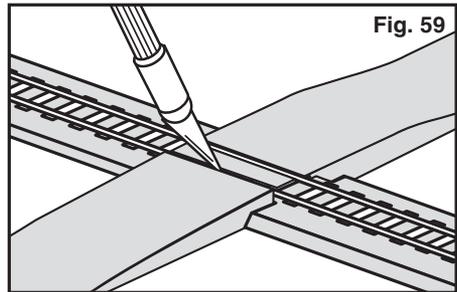
4. Cut and place two small lengths of Paving Tape between the rails in line with the outside Paving Tape (Fig. 57).

5. Fill all areas between Paving Tape with Smooth-It. Smooth-It should be even with top of rails (Fig. 58). The finished road at the crossing should be the same height as the top of rails and top of Paving Tape. Use Spreader to level Smooth-It even with tops of rails and Paving Tape (Fig. 58). Remove excess Smooth-It from top of rails.

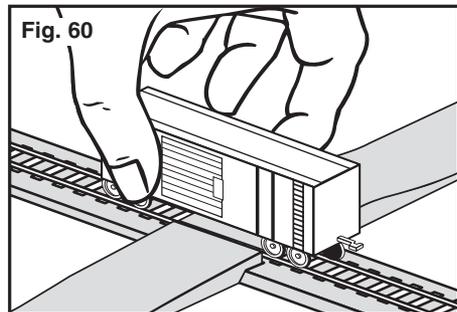


6. Let Smooth-It dry and remove Paving Tape.

7. Carefully run a hobby knife down the inside of the rails several times to score a groove in the Smooth-It to allow clearance for train wheels (Fig. 59).



8. Test clearance by running rolling stock over the area (Fig. 60). If necessary, sand Smooth-It between rails.



9. Repeat steps 7 and 8 until the train has proper clearance.

10. Paint with Asphalt or Concrete Top Coat and let dry.

11. Use rolling stock to check for clearance again. Sand and paint again if necessary.

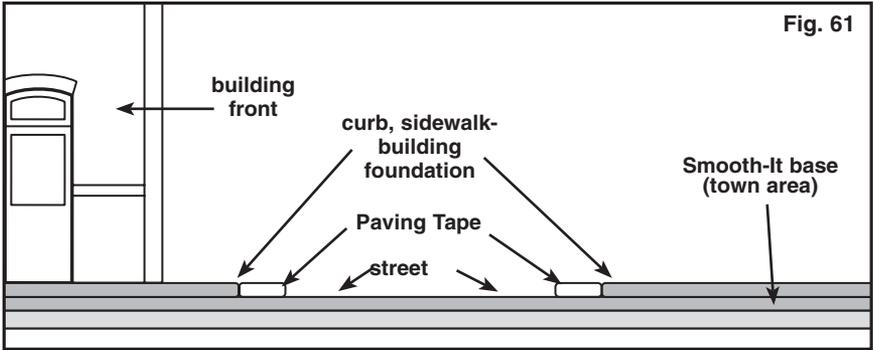


Fig. 61

Add Curbs, Sidewalks and Foundations

1. Following the desired path of your sidewalk, curb or foundation, lay strips of Paving Tape over the existing dried Smooth-It on the inside edges of all your roads in the town area (Fig. 61 and 62). Make sure curbs line up with roads leading into the town area.
2. Following the steps under "Pave Town and Factory Areas" (page 29) apply another layer of Smooth-It over the area outside the road. This will elevate the area above the existing layer of Smooth-It creating a curb, sidewalk or foundation for your buildings (Fig. 61).
3. When Smooth-It is thoroughly dry, lightly sand with 220-grit sandpaper.
4. Paint the raised foundation surface with Asphalt or Concrete Top Coat. We suggest using the Concrete Top Coat for the foundation or sidewalk area and Asphalt Top Coat for the street. Paint all remaining paved areas.

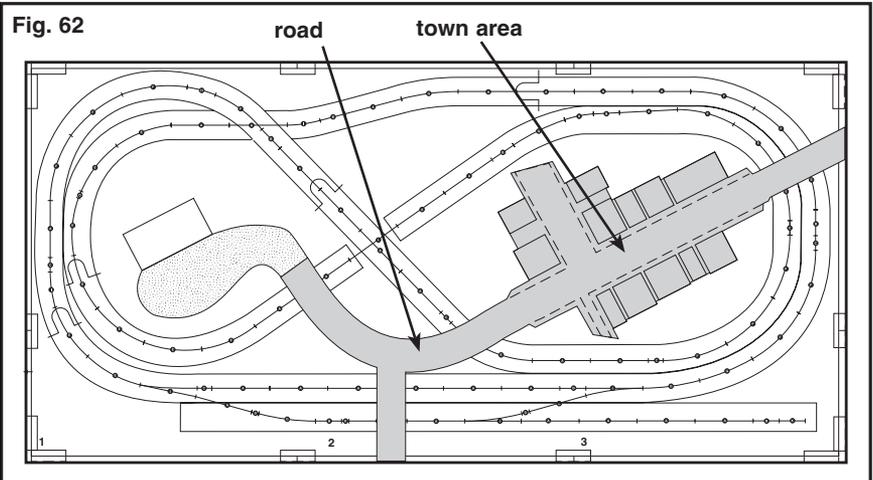
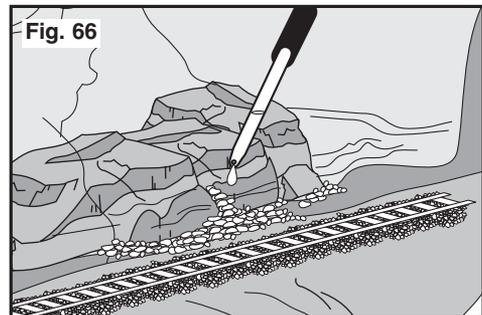
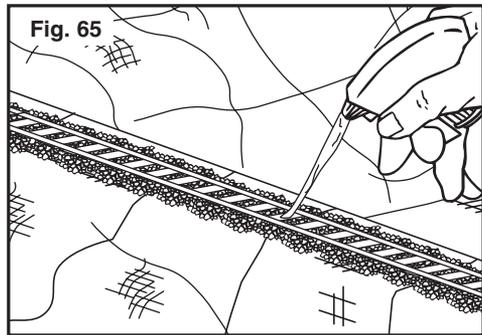
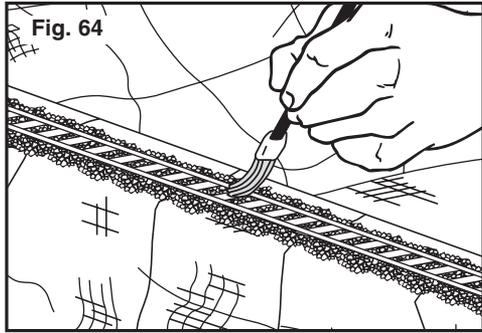
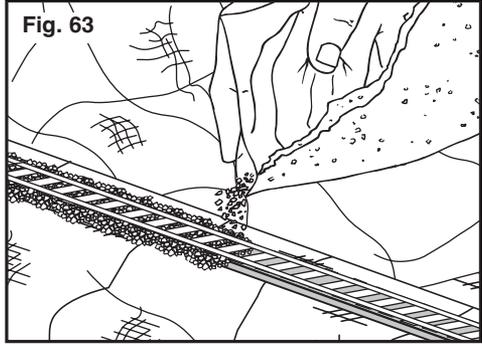


Fig. 62

Ballast Track

Ballast is broken stone laid along the railroad bed to stabilize ties and rails. **IMPORTANT:** Before Ballasting track, cover top of turnouts and switch machines with masking tape.

1. Use a paintbrush to apply Scenic Cement to sides of Track-Bed. Be careful not to get adhesive on rails.
2. Start at far left Tunnel Portal. Pour Ballast over track and ties until Track-Bed is completely covered (**Fig. 63**). Do not Ballast turnouts and switch machines.
3. Spread Ballast evenly and brush from top of ties and rails with a small, dry paintbrush (**Fig. 64**).
4. Saturate Ballast with Scenic Cement using the Scenic Sprayer set to stream or an eyedropper (**Fig. 65 and Fig. 66**). Avoid spraying rails with adhesive.
5. Clean rails before use.



Landscape

Landscape adds depth, color, texture and realism to your layout. From ground cover and foliage to bushes and trees, the complete Landscape System offers versatile materials that blend and mix together, for ultimate realism. These easy-to-use, fail-safe materials are perfect for beginner to advanced modelers.

Apply landscape materials using the box photos and the Legend on page 38 as a guide or place where you wish. The instructions explain how to use the different materials.

Color Terrain

Earth Undercoat models dirt and soil by creating a terrain base of natural-looking earth tones and highlights. It hides the white plaster and has a realistic appearance when covered with landscape materials.

1. In a container, mix entire bottle of Earth Undercoat with 1/2 cup water. Mix thoroughly.
2. Dip Foam Pad Applicator or a 1" foam paintbrush in diluted Earth Undercoat. Brush over entire Plaster Cloth surface. Dab Undercoat into crevices and low spots for complete coverage. Earth Undercoat should be slightly translucent.
3. Do NOT apply over rock castings.

Low Ground Cover

Low ground cover is dirt and soil and the smallest plants and grasses. After applying a base layer of Blended Turf, add Fine Turf to blend in additional colors for realism. Turf colors should be subtly blended together as they are in nature.

Blended Turf

1. Fill Plastic Cup with Green Blend Blended Turf and attach Sifter Lid.
2. Spray terrain with Scenic Cement using the Scenic Sprayer set to spray.
3. Sprinkle Green Blend Turf onto wet adhesive, covering the terrain. Leave a few areas of Earth Undercoat visible.
4. When happy with coverage, spray with Scenic Cement to seal in place.

Fine Turf

1. Use the Plastic Cup & Sifter Lid to apply Fine Turf or sprinkle on with fingers.
2. Sprinkle on various colors of Fine Turf, spraying Scenic Cement between each layer. Blend colors to model nature's color variances.
3. When satisfied with coverage, spray on a final coat of Scenic Cement to seal.

Fine Turf Colors

Burnt Grass – Add highlights to Blended Turf and model drier areas.

Soil and Earth – Use for modeling weeds, paths, dirt roads, streambeds, eroded areas, drainage ditches, etc.

Yellow Grass – Model areas that do not get a lot of water or sprinkle lightly on top of Turf to add a sundrenched look.

Medium Ground Cover

Medium ground cover is low grasses, leaves and weeds. It is the natural rise and fall of plants that are different sizes, shapes and colors and grow in random patterns. This section also includes Talus or rock debris. Landscape materials start to overlap.

Coarse Turf

Medium Green Coarse Turf models texture variation and weeds, coarse grass and small plants.

1. Spray landscape with Scenic Cement, avoiding rock faces.
2. Sprinkle Coarse Turf lightly onto wet adhesive.
3. When satisfied with coverage, spray with a coat of Scenic Cement to seal.

Talus

Talus is rock debris that collects beneath cliffs, around base of mountains, in erosion ruts and at base of rock outcroppings.

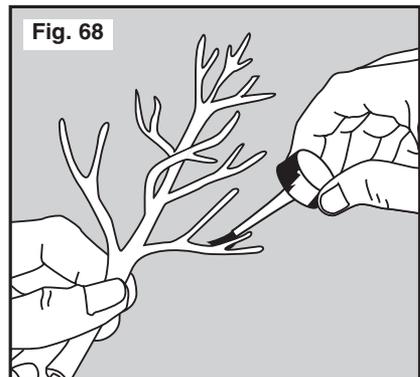
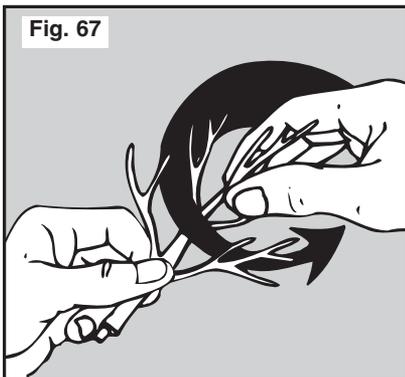
1. Shake bag to mix rock sizes. Sprinkle Talus at base of rock outcroppings and cliffs, around tunnel portals, and in creek beds and drainage ditches.
2. Use the Scenic Sprayer set to stream or an eyedropper to saturate Talus with Scenic Cement (Fig. 66). Let dry and apply an additional coat to seal in place.

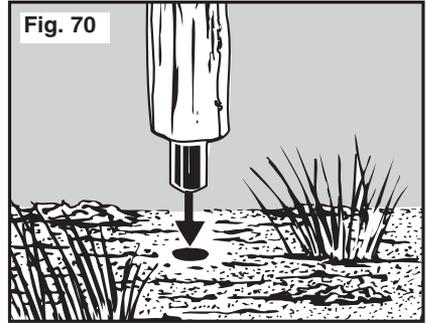
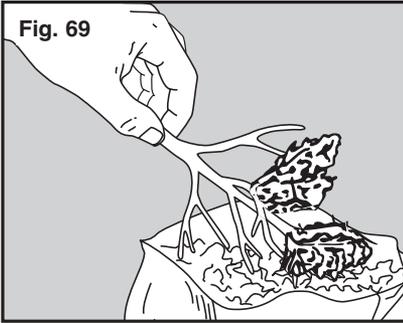
High Ground Cover

High ground cover is bushes, shrubs, tall grasses and trees.

Model and Plant Trees

1. Remove optional bases from all Tree Armatures.
2. Bend and twist Tree Armatures into realistic, three-dimensional shapes (Fig. 67).
3. Brush Hob-e-Tac on both sides of all branches (Fig. 68). Avoid trunk area where foliage does not grow naturally. Let adhesive dry until clear and tacky.
4. Break Clump-Foliage into approx. 1/2" pieces.



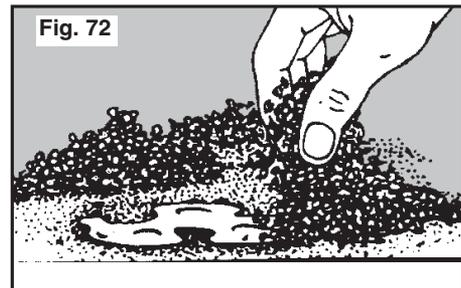
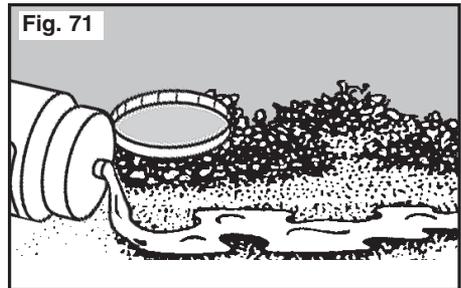


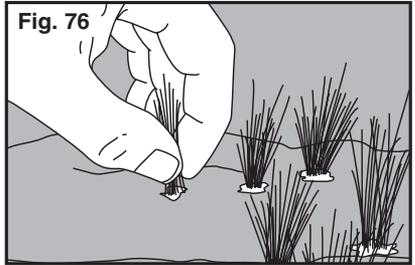
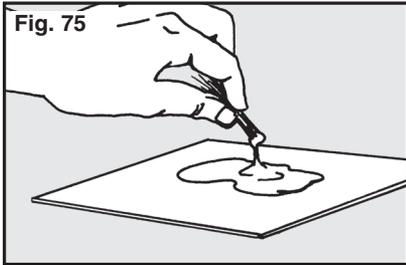
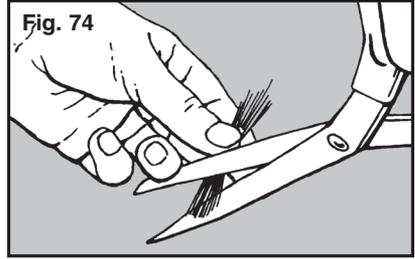
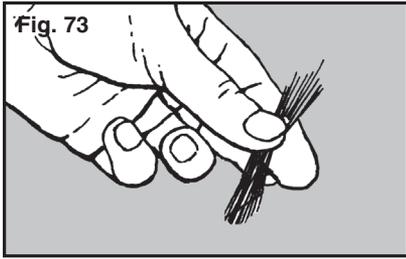
5. Dip Armatures into Clump-Foliage bag (Fig. 69), then pinch foliage firmly on branches. Spray foliage with Scenic Cement to secure in place.
6. To plant trees, use a hobby knife to poke a small hole in layout where tree is desired. Place a drop of Foam Tack Glue over hole and insert base pin in hole (Fig. 70). **TIP!** Sprinkle various colors of Fine Turf on Clump-Foliage to add highlights and texture.

Clump-Foliage

Model bushes and shrubs with Clump-Foliage. Bushes tend to grow in groups.

1. Break Clump-Foliage in desired size pieces.
2. Apply Foam Tack Glue where bushes and shrubs are desired (Fig. 71).
3. Press foliage into glue (Fig. 72). Spray top of bushes and shrubs lightly with Scenic Cement and sprinkle with Fine or Coarse Turf to add highlights.





Field Grass

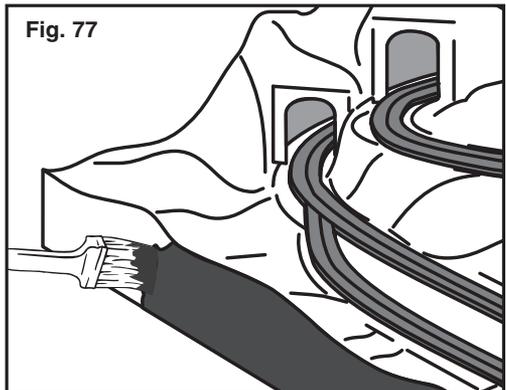
Use Field Grass to model weeds and tall grasses.

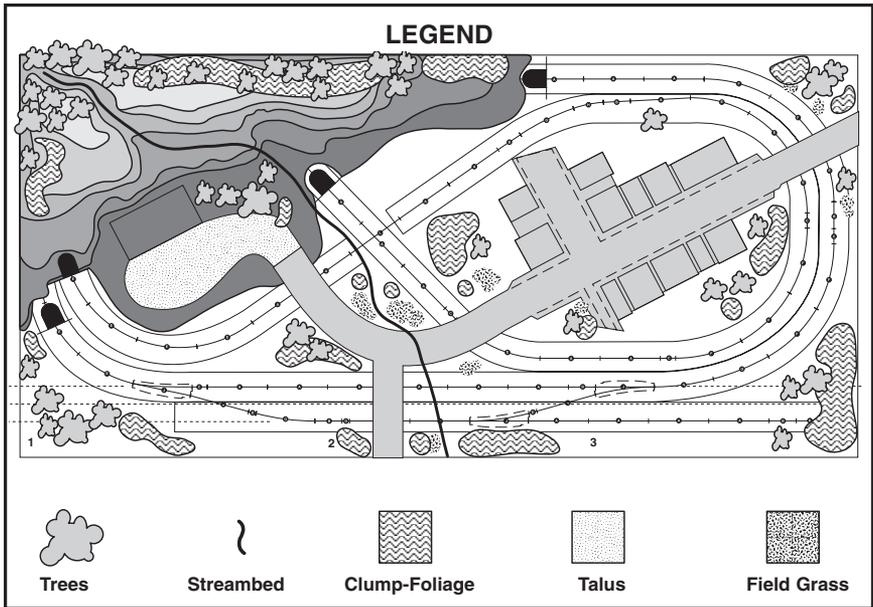
1. Pour a small amount of Foam Tack Glue onto a piece of scrap paper.
2. Roll a small clump of Field Grass between fingers to produce an uneven look (Fig. 73). Cut to desired length (Fig. 74). Shorter clumps look more realistic.
3. Dip cut end in adhesive (Fig. 75), place on layout and hold until setting begins (Fig. 76). Trim if necessary.

Paint Sides of Layout

Paint sides of layout to give it a finished look.

1. Use 220-grit sandpaper to remove rough areas from sides of layout.
2. Use a 2" paintbrush and Black Base Paint to paint sides of layout. Begin at the front and paint all sides (Fig. 77).
3. Be careful to avoid edges where landscape begins.





Finishing Touches

The final step is detailing. Most techniques use the same materials with slight variations in modeling principles as other steps. Let each step dry completely before moving on to the next.

Drybrush Turf

Add color variety to Turf, cover up bare spots or change the look of landscape. **IDEAS!** To model dirt collected along embankments, apply Soil or Earth Fine Turf on top of Talus or along edges of Ballast. To model weeds and grasses, apply Burnt Grass Fine Turf around bottom of trees.

1. Dip a dry paintbrush in selected color Fine Turf and brush onto layout where desired.
2. When satisfied with look, spray lightly with Scenic Cement to seal in place.

Flyspecking

Flyspecking is a technique that models dirt and soil collected around rocks.

1. Spray rock casting with water.
2. Bend a sheet of paper into an "L" shape. Place a small amount of Soil Fine Turf on the horizontal section of the paper.
3. Hold the paper near the rock castings and gently puff onto the vertical sections of the paper (**Fig. 78**). This will blow specks of Soil onto the rock castings. If you apply too much Soil, brush it off with a dry paintbrush.
4. When satisfied, secure with Scenic Cement.



Adding Additional Landscape Material

To add more variety in texture, color and realism, or to cover gaps in terrain, apply additional landscape material where desired. **IDEAS!** Burnt Grass and Yellow Grass Fine Turf provide color variations for bushes, ground cover and trees. Coarse Turf adds texture.

1. Spray Scenic Cement where additional Turf is desired on landscape.
2. Sprinkle Fine or Coarse Turf onto wet adhesive.
3. Spray again lightly to seal Turf in place.

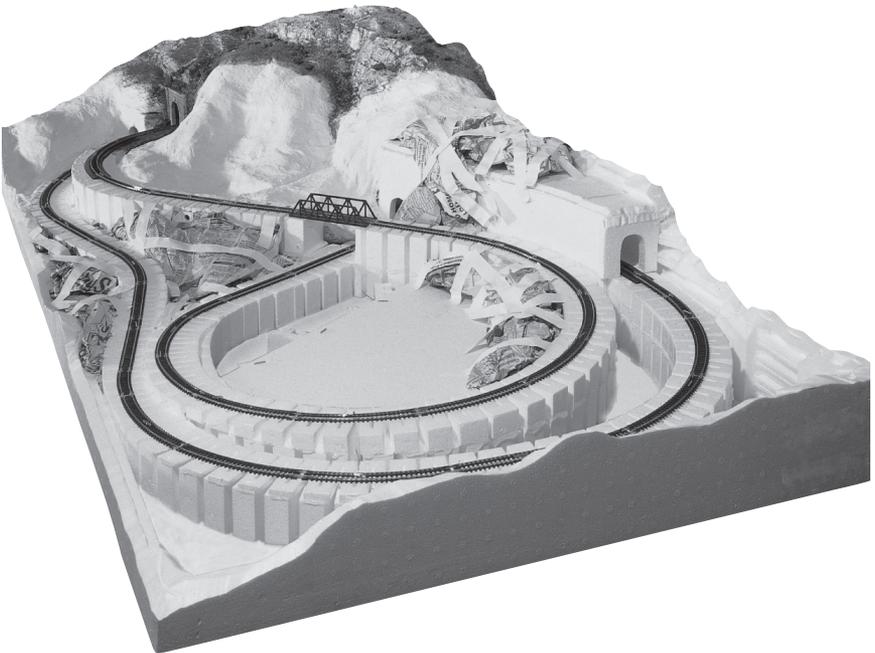
A Final Word

You have now finished the Scenic Ridge Lightweight Layout Kit. Feel free to go back and fix any areas that do not meet your satisfaction. You can patch up your Road System or add extra foliage to cover gaps and seams around the Tunnel Portals or Culverts. You can even purchase more Woodland Scenics Trees, buildings, Trackside Scenes or scene-setting items to personalize your Scenic Ridge Kit.

The Town and Factory Building Set was designed to complement the Scenic Ridge or any N scale layout.

In the process of building Scenic Ridge you have also learned how to use the revolutionary Woodland Scenics SubTerrain Lightweight Layout System. This system allows you to add elevations, inclines and lowlands to your layout without using expensive power tools or complicated calculations. If you want to build future layouts or add to your Scenic Ridge layout, ask your local hobby store for information.

To learn more about the SubTerrain System, buy the "SubTerrain: Build A Layout Fast and Easy" video (DVD-ST1400). To learn more about the SubTerrain System and landscaping your layout, purchase *The Complete Guide to Model Scenery* (C1208) and "The Clinic Video" (DVD-R970). For answers to frequently asked questions, tips and techniques and to view How-to Videos, visit woodlandscenics.com. If you want specifications for building Scenic Ridge as an NTRAK module write to NRail™, P.O. Box 1301, Tuttle, OK, 73089 or visit nrail.org.



Products

If you would like to build a new layout or add landscaping to your Scenic Ridge layout, just refer to the item name and number then go to your favorite hobby store and buy what you need.

ITEM NUMBER DESCRIPTION

SubTerrain Items

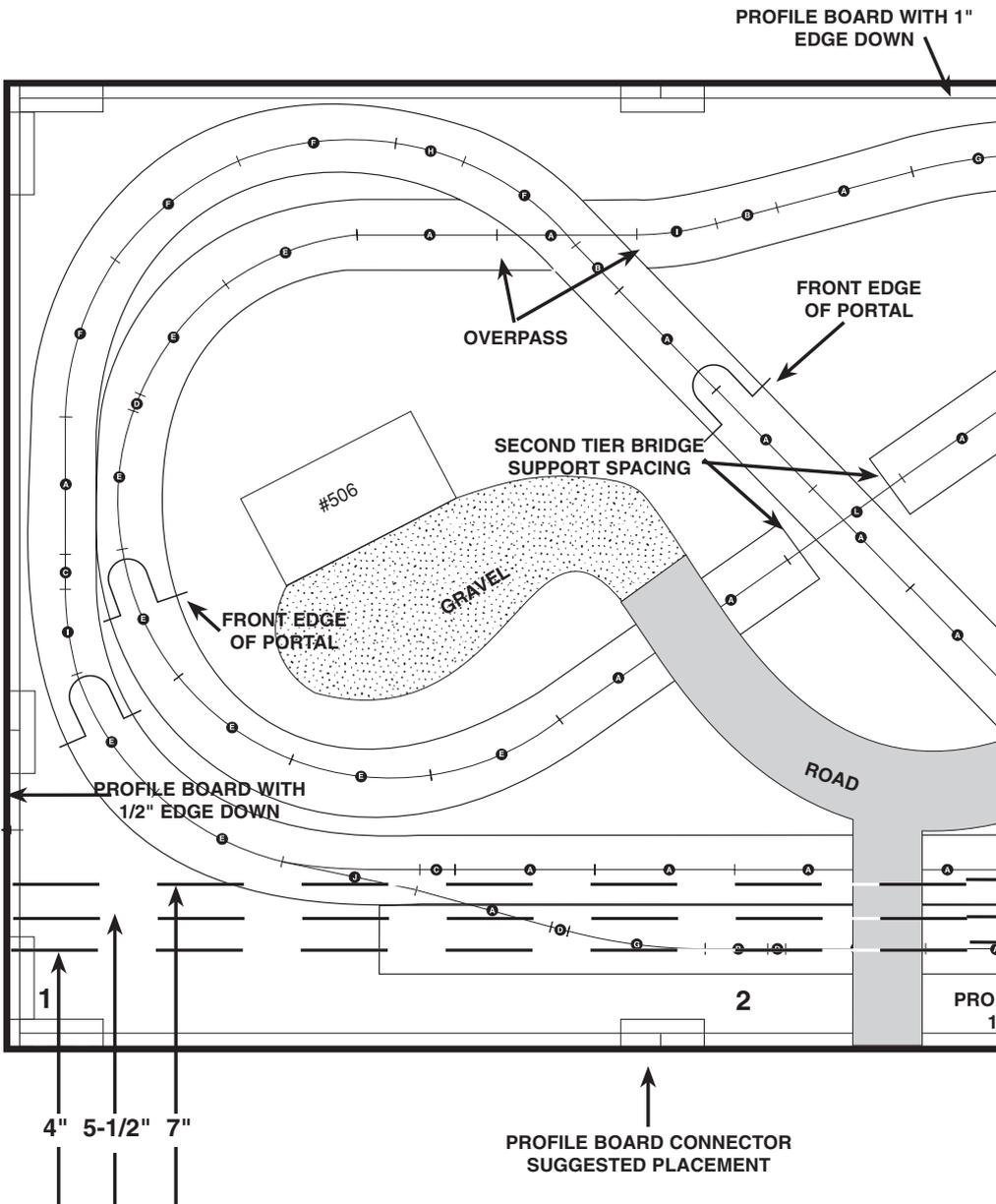
ST1408	2" Riser - 4/pkg
ST1411	4% Incline Set
ST1419	8" Profile Boards
ST1422	1/4" Foam Sheet
ST1423	1/2" Foam Sheet
ST1431	Foam Pencils
ST1432	Foam Nails - 75/pkg
ST1444	Foam Tack Glue
ST1452	Smooth-It
ST1453	Top Coat Asphalt
ST1454	Top Coat Concrete
ST1455	Paving Tape
ST1472	N-scale Track-Bed - 12/pkg

Landscaping System items

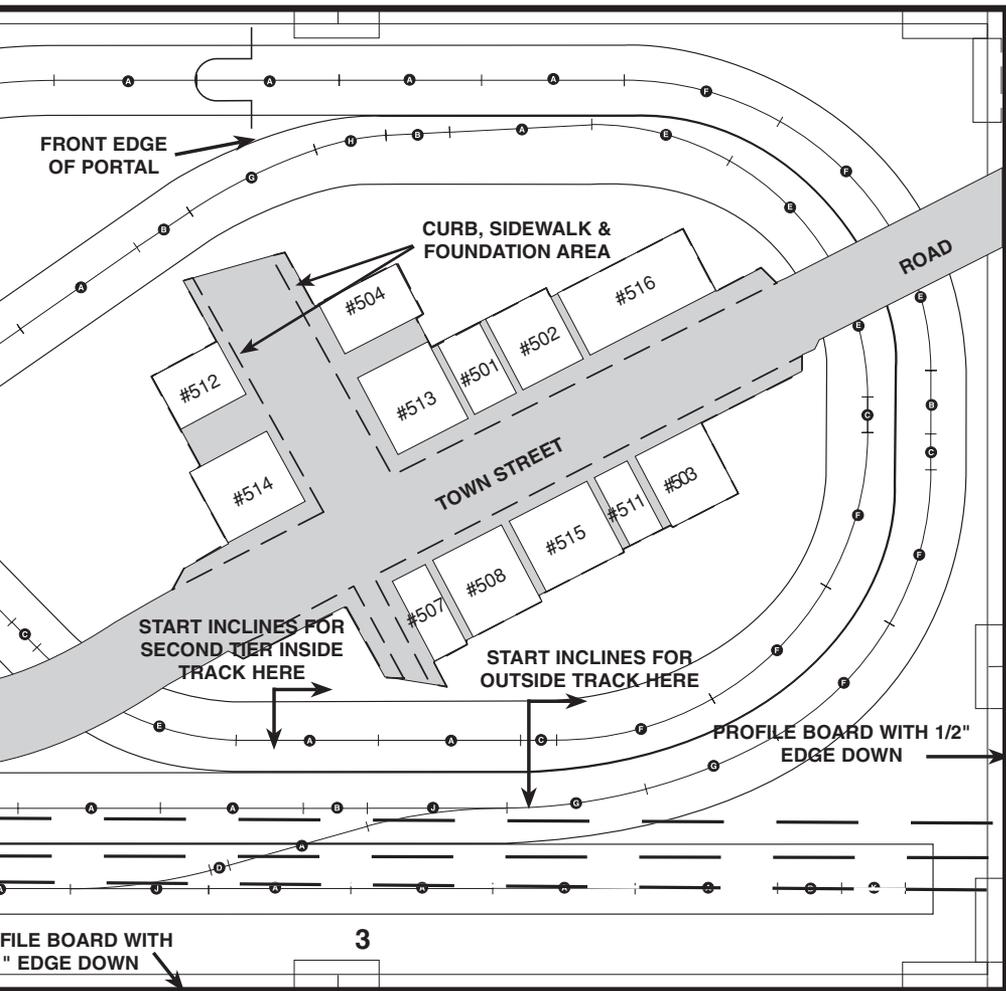
B74	Light Gray - Fine Ballast
FC182	Light Green - Clump-Foliage
FC183	Medium Green - Clump-Foliage
FC184	Dark Green - Clump-Foliage
FG172	Harvest Gold - Field Grass
T41	Soil - Fine Turf
T42	Earth - Fine Turf
T43	Yellow Grass - Fine Turf
T44	Burnt Grass - Fine Turf
T49	Green Blend - Blended Turf
T64	Medium Green - Coarse Turf
S191	Scenic Cement
S192	Scenic Sprayer™
S195	Hob-e-Tac Adhesive

Terrain System Items

C1153	N-scale Cut Stone Portals
C1162	N-scale Concrete Culverts
C1201	Lightweight Hydrocal
C1203	Plaster Cloth
C1220	Black - Earth Colors Liquid Pigment
C1222	Burnt Umber - Earth Colors Liquid Pigment
C1223	Yellow Ocher - Earth Colors Liquid Pigment
C1229	Earth Undercoat - Earth Colors Liquid Pigment
C1234	Random Rock Mold
C1243	Base Rock Mold
C1282	Natural - Fine Talus



**NTRAK MEASUREMENTS FROM
 DOTTED LINE TO FRONT OF
 LAYOUT**



WOODLAND SCENICS SCENIC RIDGE LAYOUT ATLAS N SCALE SNAP-TRACK

A = 5" STRAIGHT.....	33	G = 19" RADIUS.....	5
B = 2 1/2" STRAIGHT	8	H = 1/2 - 9 3/4" RADIUS.....	2
C = 1 1/4" STRAIGHT	6	I = 1/2 - 11" RADIUS	3
D = 5/8" STRAIGHT	4	J = LEFT TURNOUT SWITCH	3
E = 9 3/4" RADIUS	14	K = BUMPER.....	1
F = 11" RADIUS.....	11	L = BRIDGE	1

Model making product. Not a toy! Not suitable for children under 14 years! / Produit pour le modélisme. Pas un jouet! Pas adapté aux enfants de moins de 14 ans! / Producto para modelismo. No es un juguete! No adecuado para niños menores de 14 años! / Modellbauartikel. Kein Spielzeug! Nicht geeignet für Kinder unter 14!



MODELING AND CARE INFORMATION: This kit suggests the use of materials that may stain or cause damage. Take care to cover project area and clothing appropriately. Follow recommendations for use and cleanup. Clean up spills immediately with warm soapy water.

Conforms to Health Requirements of ASTM D4236

CAUTION: Store above 32° F (0° C). Tools recommended. Use with care.

CAUTION: We do not recommend using Plaster Cloth, Lightweight Hydrocal or Smooth-It for body casts as these may irritate skin and develop heat sufficient enough to cause burns. Do not take internally. Do not clean utensils in sink or pour leftover plaster mixture down drain. Discard leftover plaster in trash.



WOODLAND SCENICS®
Manufactured by **WOODLAND®**
PO BOX 98, LINN CREEK, MO 65052
woodlandscenics.com

Distributed in Europe by Bachmann Europe Plc, Moat Way, Barwell, LE9 8EY, England

XINST1482
N3 ©1999 O CO