HO Scale Structure Kit

STATION PLATFORMS

933-3391

Thanks for purchasing this Cornerstone Series® kit. All parts are styrene, so use appropriate cement and paint to finish your model. Please take a few minutes to read the directions and study the drawings before starting. Parts are included to add LED lighting, however this requires careful assembly and soldering skills, and is recommended for experienced modelers. Longer platforms can be built by combining additional kits, each sold separately.

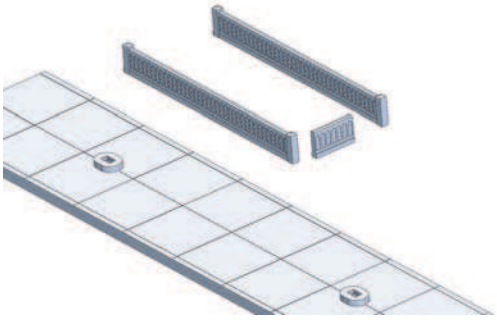
Like any major station, the Los Angeles Union Passenger Terminal (LAUPT) required an extensive network of support facilities. Handling 66 trains each day at its peak, some of the most visible and important for travelers were the platforms and shelters.

LAUPT was built with eight platforms, each serving two tracks and connected to the station via an underground pedestrian corridor. A variation on the popular and cost-effective “Butterfly” platform shed design (so named as the V-shape resembled a butterfly at rest), the upturned roof permitted extra clearance for equipment. This also allowed the roof panels to extend slightly over the tracks, better shielding passengers from the California sunshine. The underside of the roof and diamond-shaped end panels were made of corrugated metal to add decorative art-deco flair to these otherwise plain structures.

Your new models are authentic replicas of the platforms still in use at LAUPT and will look great alongside the Los Angles Union Passenger Terminal kit (#933-3390, sold separately). As this style of platform was widely used, often as a replacement for older train sheds and other types of platforms, the kit can easily be used alongside any large facility such as Union Station (#933-3094). For additional details to complete your scene visit your local hobby shop, check out Walthers HO Reference Book or visit us online at walthers.com.

1) Platform base has 3 options: Solid base (Shelter Only), Solid base (Shelter with pedestrian underground entrance), or Modified base (Shelter with pedestrian underground entrance). Modified version adds a cut hole to the base to give extra depth, but requires no hole in the layout. Pick which version of platform, and what quantity, you desire.

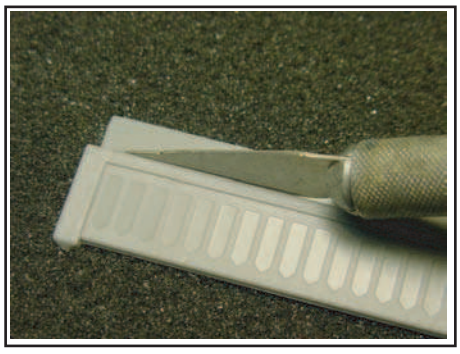
Solid Base Option



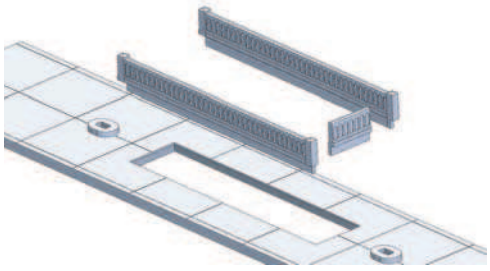
2) For the Solid base version with entrance, trim the lower tabs off railing sections (5, 6, 7). Glue railings together and add to the base (4) as illustrated (See Illustration on back page for complete assembly).

3) For Modified version, cut an opening in the bottom of base (4), using the guide grooves. Assemble railings (5, 6, 7) but do not trim tabs off bottom! Tabs insert in the open hole, providing perfect alignment. Glue in place.

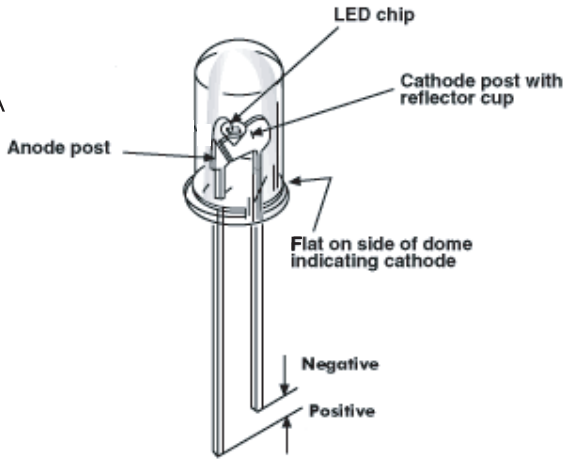
4) Add Canopy Support legs, (3) as shown (See Illustration #1-Page 2). If you are confident soldering near the light track (9), add it to the assembly now. If not, make a fixture from a small block of wood (not included). Use part 9 as a pattern; drill Four 1/8th inch holes holes on 75mm centers for the LEDs, and Two 1/16th holes on 150mm centers for the Power Drops. Even slight misalignment will cause problems. Verify your fixture matches the hole pattern in Part 9.



Modified Base Option

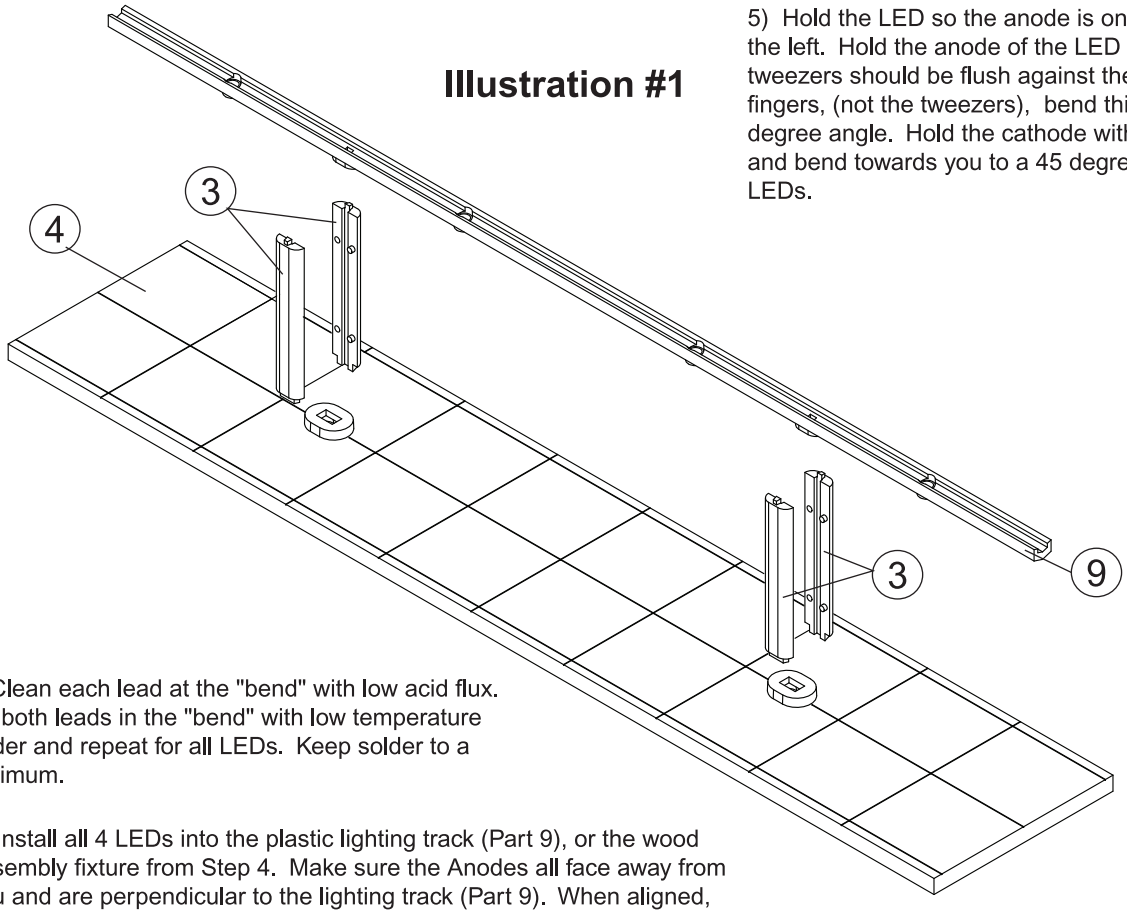


INSTALLATION of Light Emitting Diode (LED) Lighting:
LED lighting of the platforms is recommended for experienced modelers. You will need: A Pencil type soldering iron with a fine tip, fine point tweezers, Low Acid Flux, Low melting point solder, Hobby knife with a new #11 blade, Red Permanent Marker, and a "Twin grip work holder " if an assistant will not be available.



Identifying parts of an LED:
Study the attached diagram and learn to identify the LED parts properly. The negative lead is called the Cathode. The positive lead is called the Anode, and is typically the longer wire lead on the LED. If unsure, use a magnifier to view the LED and compare it with the diagram . Mark the tip of every Anode with Red permanent marker for clear identification. Recommended power supply for each FINISHED Circuit, Resistor and Diode is 6-18 Volts AC or DC current. Do not exceed 18 volts or damage to the LEDs and/or circuit will result.

Illustration #1



5) Hold the LED so the anode is on the right, and the cathode on the left. Hold the anode of the LED with fine tip tweezers. The tweezers should be flush against the plastic case. With your fingers, (not the tweezers), bend this lead away from you to a 45 degree angle. Hold the cathode with tweezers at the same position and bend towards you to a 45 degree angle. Repeat for all the LEDs.

6) Clean each lead at the "bend" with low acid flux. Tin both leads in the "bend" with low temperature solder and repeat for all LEDs. Keep solder to a minimum.

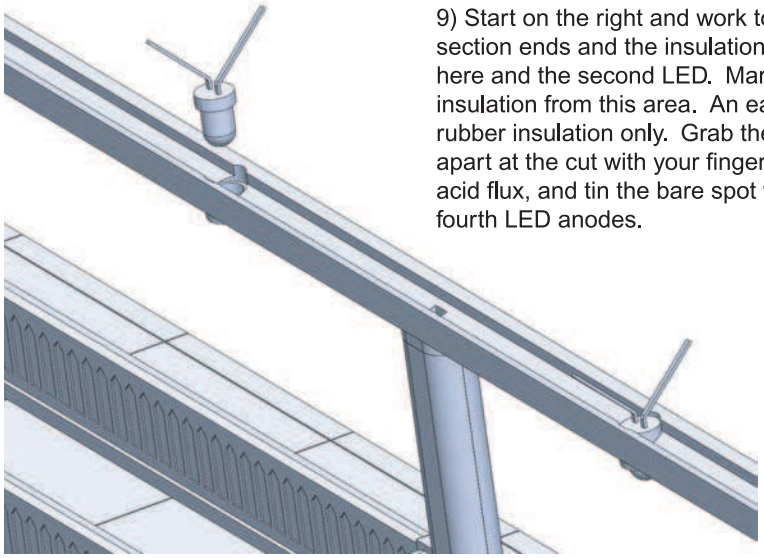
7) Install all 4 LEDs into the plastic lighting track (Part 9), or the wood assembly fixture from Step 4. Make sure the Anodes all face away from you and are perpendicular to the lighting track (Part 9). When aligned, tape the LEDs into a fixed position so they won't shift.

8) For LED Power Supply Wires, cut two pieces. Each should be 9.5” inches (24.1 cm) long. Strip 3/8“ (10mm) of insulation from one end of each wire. Clean stripped areas with low acid flux, and tin with low temperature solder.

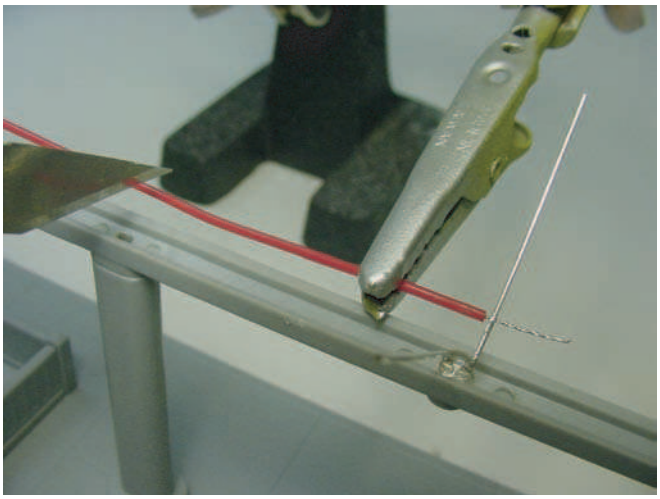
Illustration #2

Note: The following steps work better with an assistant - or a "Twin Grip Work Holder" if another person is unavailable.

WARNING: For the finished light assembly to fit, remember these three points: 1) Insulation cannot be stripped from all spots at one time, they must be performed in sequence. 2) Keep the wire tight when marking the insulation cut points and 3) Grab only the tinned end of the Power Supply Wire when separating the insulation.

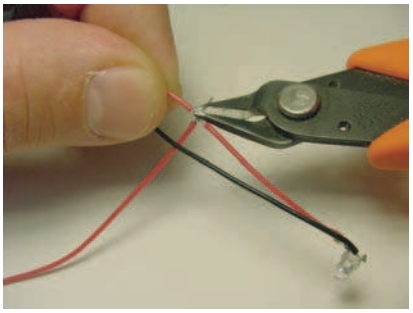


9) Start on the right and work to the left - position the first Power Supply Wire (where the tinned section ends and the insulation starts) against the first LED anode. Hold the wire taught between here and the second LED. Mark position where hole in support post (3)meets the wire, and remove insulation from this area. An easy method is to "roll" the wire underneath a knife blade, cutting the rubber insulation only. Grab the tinned end of the wire with your fingers, then "pull" the insulation apart at the cut with your fingernail to create a 2 mm bare spot. Clean the exposed joint with low acid flux, and tin the bare spot with low temp solder. Repeat this process for the second, third and fourth LED anodes.



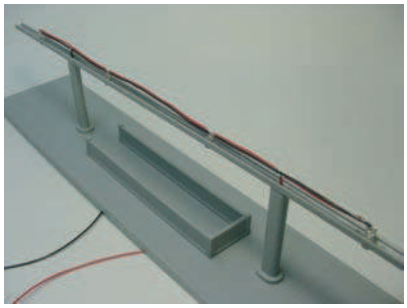
10) Test fit the Power Supply Wire to make sure the ends and bare spots align with the anode leads on each LED. Make adjustments as needed to the bare spots or bend in the leads, but DO NOT move or spin the LED to compensate!

11) PLEASE NOTE: The plastic lighting track (9) will not tolerate much heat, so work carefully. Also, the "Twin Grip Work Holder" or an assistant will help make this step much easier. Align the end of the Power Supply Wire with the first LED Anode. Proper placement of the wire is inside the "v" bent into the lead - not on top! When satisfied with the positioning, touch the tip of the hot soldering pencil to the tinned areas on the Power Supply Wire and the LED anode simultaneously. Remove iron when solder melts, wait for joint to cool, then proceed to each remaining LED. Make sure the LED's are in the correct position and that the Power Supply Wire is tight between each lead.

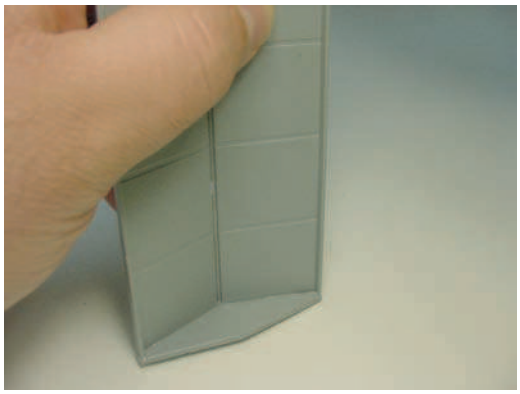


12) Repeat the wire strip and soldering procedure for the second Power Supply Wire but, for each LED cathode this time. Start from the LEFT side of the assembly and work towards the right.

13) Make Power Drops from the remaining wire. Strip 3/8th" (10mm) of insulation from both ends of each wire. Clean stripped portions with low acid flux, and tin with low temperature solder. Thread one Power Drop through each canopy support leg (Part 3). Touch the tip of a hot soldering pencil to both tinned areas simultaneously. Remove iron when solder melts, and wait for joint to cool. Repeat process for the other wire on the opposite leg.



14) Test assembly with a 1.5 or 2.0 volt DC power source - higher voltage will destroy the LEDs. Turn power supply on FIRST to prevent a voltage spike that could damage the LEDs, then make your connections. LEDs are polarity sensitive and will not operate if Positive current is applied to the wrong lead. Flip leads if your assembly does not light. When verified operational, use a fine side cutter to trim the LED leads, and power drop leads, as close to the solder joints as possible. Remove the light assembly CAREFULLY from the model.

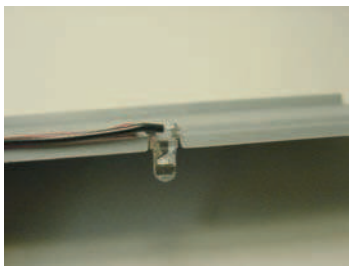


Final Procedure:

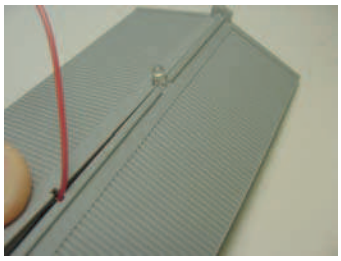
1) Lightly glue the first Roof Half (#1) to Roof End (#8). Keep the parts straight and allow to dry.

2) Lightly glue the second Roof Half (#1) to the same Roof End (#8) - but DO NOT GLUE both roof pieces together! Each roof piece should sway free from other. Let dry.

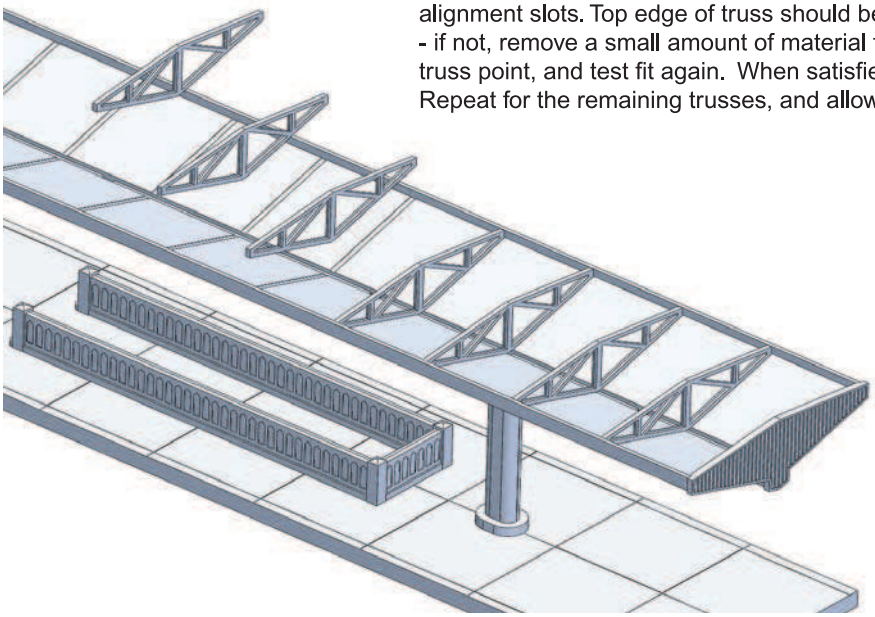
3) Install the lighting assembly into the wiring groove on the roof, and the LEDs into the proper openings. Do not fit the entire assembly at one time! Start at the end with Part 8 attached, and work to the opposite end. Tape (DO NOT GLUE) the roof sections together as each LED and wire section fits into place. Trim the openings for the LEDs if needed.

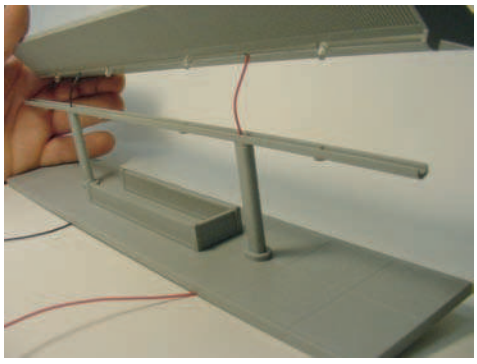


4) When the roof halves align properly with no gaps - lightly glue the remaining Roof End (#8) to the opposite side of the model and let dry. This will insure roof has proper V shape, but allows easy removal of end panels if combining multiple platforms. Glue Roof Halves (#1) together to create a firm assembly.



5) Start at one end and test fit a Roof Truss (#2) into the alignment slots. Top edge of truss should be flush with the sides - if not, remove a small amount of material from the bottom truss point, and test fit again. When satisfied, glue into place. Repeat for the remaining trusses, and allow to dry.

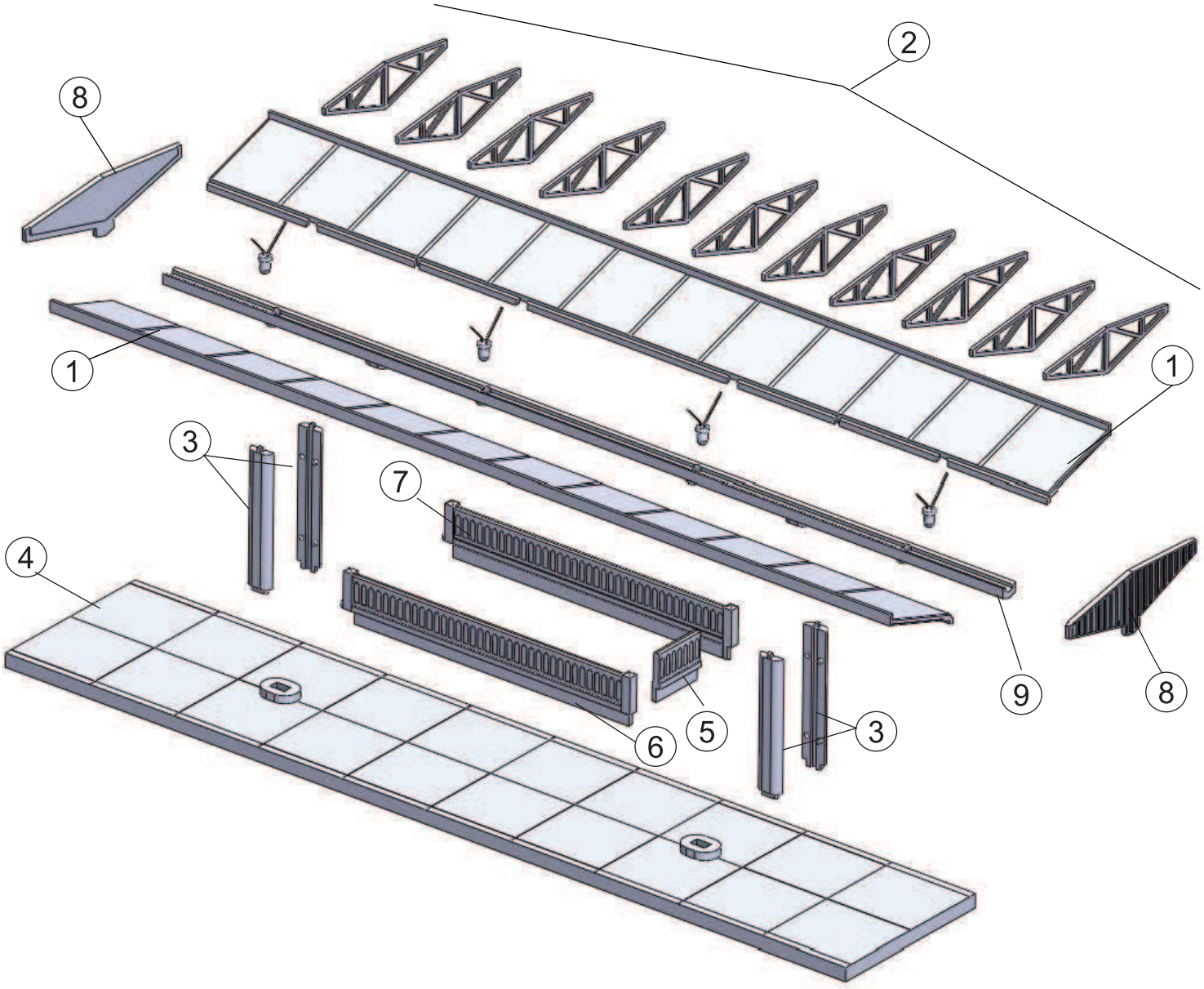




6) Install the completed Roof Panel/LED assembly into the Base assembly by threading one Power Drop through each upright post. Fit the LEDs into the openings on Light Track (9), and press the assemblies together. When satisfied that there are no gaps, glue the Upper and Lower assemblies together.

7) For single platforms; permanently glue both End Panels (#8) in place. When combining 2 platforms together; carefully remove one (#8) End Panel only from each platform section, then join both sections together. An additional Roof Truss (#2) is required to cover the joint where the two models connect. When combining 3 or more platforms; each center model must remove both (#8) End Panels, while both outer models remove one (#8) End Panel. Additional Roof Truss (#2) will be required to cover each joint where any two models connect.

8) If you plan to paint your model, mask off the LED's. After painting, touch up any light leaks before installation on the layout.



Final Wiring:

The following items should be placed under the layout (not the Platform!). Free space around each item will help dissipate heat.

Four 750 Ohm, 1/4 watt resistors are supplied in the kit - one for each Platform Assembly. Solder one resistor in line with the Anode lead of the LED circuit for each completed model. Resistors are not directionally sensitive, so it can be installed facing either way.

Four 1 Amp, 50 PIV diodes are supplied in the kit - one for each Platform Assembly. Solder one diode in line with the Cathode lead of the LED circuit for each completed model. Diodes are directionally sensitive, so it's important to identify and install them properly. One end of the diode will have a line or "band" painted around it. This line must face the power supply, not the model!