HO Scale Structure Kit 933-2949

TRAIN SHED

Thanks for purchasing this Cornerstone Series® kit. All parts are made of styrene plastic, so use only compatible cement and paint to assemble your model. Please take a few minutes to read these instructions and study the drawings before starting construction. Please note that this structure is designed so that several kits (each sold separately) can be combined to build a longer shed if desired.

Railroads were the first form of transportation to develop specialized buildings to meet the needs of customers. In the case of passengers, this included a covered shelter known as a train shed. The first appeared in England in 1830 and in America in 1835 at Lowell, Massachusetts. Borrowing its architectural style from Greek temples (a trend that would continue for decades), this early American design used an extended roof supported by columns to cover the single track serving the station. Passengers could now walk out of the building and board trains in relative safety and comfort in any weather.

With the rise of large cities in the 19th century, railroads began building bigger and more elaborate "terminal" station facilities and running better trains to serve them. For the railroad, such a building was a projection of corporate strength, power and superior service. Local businessmen, politicians and residents saw "their" station as an important symbol of their city and the image it presented to visitors, thus the railroads spared no expense in construction. Large train sheds were also required for these facilities, and architects who had previously concentrated only on the station building itself now designed ornate sheds to match.

Early designs used wooden beams and masonry supports, but once iron was available in quantity it was formed into arches and trusses to build large spans. Interior height was also increased, up to 100' 30m in some cases. To provide plenty of natural lighting, the roof was designed as a large skylight with glass panels between the various cross members. But keeping these clean was nearly impossible; soot and cinders settled on every surface, leaving the interior dark and gloomy. The glass panels were also hard to reach and maintain, and often leaked buckets during rainstorms. Ventilation was usually poor and clouds of smoke and steam limited visibility, increasing the possibility of accidents. Noise of all kinds was amplified, further increasing passengers' discomfort.

To overcome these problems, sheds designed in later years were greatly simplified. Sides were left open to increase air circulation across the platforms. High roofs were still used, but to create a draft and vent smoke and steam up and away from the platforms, they were crowned with a large clerestory. To prevent leaks, the roofs were now of solid construction, which required interior lighting. Lamps had to be carefully placed to eliminate shadows and make walkways safe for passengers, but without extra glare or reflection that would bother train crews. Gas and oil lamps were used, but these were soon replaced with electric lamps that could be turned on and off as needed to reduce operating expenses.

The platforms themselves could be very busy and potentially dangerous places. With trains passing inches from the edge, it was very easy for a passenger to stand too close. Baggage wagons could also be spotted so close they would sideswipe the engine or cars with disastrous results. For these reasons, wide stripes and warning messages indicating the edge of the platform were painted on the floor. Nonskid materials that could hold up under heavy foot traffic were also used to reduce the chances of a fall.

Moving passengers and their baggage to and from the trains also impacted the design of the shed platforms. The movement of passengers had to be safe and simple. This was less of a problem at head or end stations (where tracks ended at the back of the station), as passengers could walk from the concourse to the platforms. At side stations (where tracks ran alongside the station), stairways above or below ground routed passengers to the platforms. Getting baggage out to the platform was a science in itself. To avoid wheeling loaded baggage wagons through passenger waiting areas, underground passageways were built at some stations between the main building and platforms, with freight elevators at either end. Others had special platforms between each pair of tracks used only for loading baggage.

While grand in design and execution, train sheds were expensive to build and maintain. In the years just before World War I, simpler designs were introduced including the Bush Shed made of reinforced concrete, and very basic but more affordable Umbrella and Butterfly type platforms, which quickly became industry standards.

Despite any shortcomings, many train sheds were in daily use until the end of passenger service. While most were eventually demolished along with the stations they served, a handful are still standing after being remodeled for new uses.

ON YOUR LAYOUT

Based on the train shed built by the Milwaukee Road for its grand Everett Street station in downtown Milwaukee, Wisconsin, in 1886, sheds like your new model were constructed by many railroads across the eastern half of the United States. The Milwaukee facility was a through terminal, with the shed located directly behind the station. The prototype measured 600' 182.8m long and served five tracks. Both the station and train shed were demolished in 1966.

Your new model is perfect for a big city station scene, which can be modeled with the Union Station (#933-3094). The finished Train Shed fits steam-, transition- or diesel-era layouts, and can easily be arranged to model a head or through station area to fit your layout. Additional kits can be combined to build a longer shed if desired.

As the platforms are open on all sides, they're a natural for adding lighting, baggage-handling equipment from various eras, as well as luggage and figures.

Tracks at prototype stations were arranged to move trains in and out as quickly as possible and provide alternate routes to keep trains moving in the event of any problems. This often required numerous turnouts and special crossovers that can be modeled with Walthers Code 83 Track and accessories. To speed operations, all of the switches and signals were controlled from one or more Interlocking Towers like the Cornerstone Series® Built-Ups models (#933-2837, #933-2838 or #933-2839).

Express shipments were a major part of passenger operations until the 1960s. All types of freight can be loaded aboard streamlined and heavyweight baggage cars as well as express reefers at the Railway Express Agency Transfer Building/Freight House (#933-3095).

Major stations often had engine facilities nearby to service passenger locomotives. This can be modeled with the Modern Roundhouse (#933-2900) and Add-On Stalls (#933-2901), or the Three-Stall Roundhouse (#933-3041). A typical facility would have a turntable such as the Cornerstone Series Built-Ups 90' (#933-2840) or 130' (#933-2829) models. Other service structures would include a Coaling Tower (#933-2903, #933-2922 or 933-3042), Water Tower (Kit #933-3531; Built-Ups #933-2813 or #933-2819) and Sand Tower (#933-3182). To model a later operation, the Diesel Fueling Facility (#933-2908) can be added.

Check with your dealer, or see the latest edition of Walthers HO Scale Model Railroad Reference Book or visit our Website at www.walthers.com for additional detailing ideas.

IMPORTANT!

By combining more than one kit, you will be able to extend your shed's length. The illustrations show the construction of one kit. However, there are written instructions to tell you how to expand the basic kit.

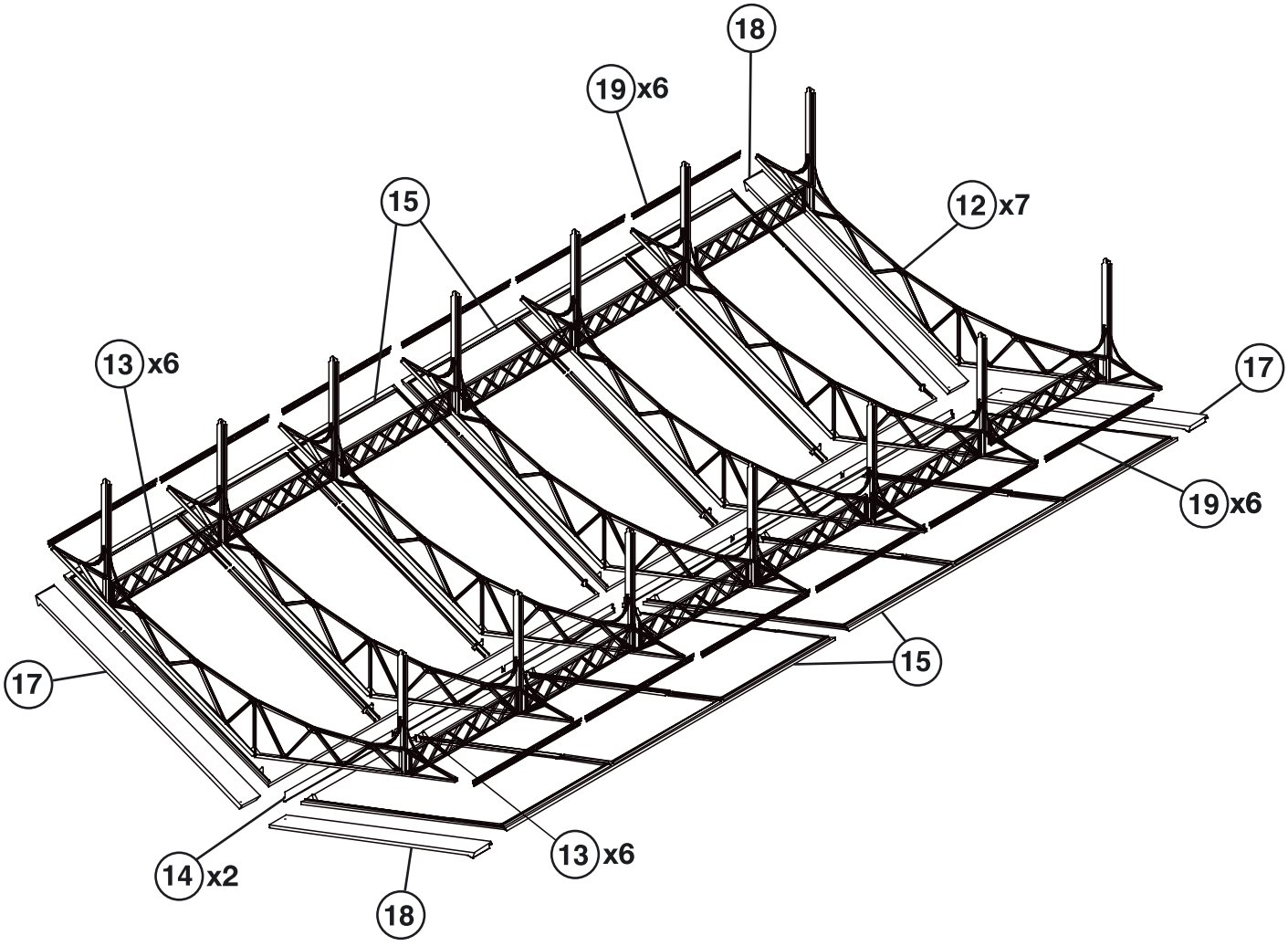
1. Glue the main roof (15) sections together. If you are building this kit as one complete structure, glue the end roof (17, 18) panels on both ends of the main roof. If you plan to extend the shed with another kit, glue the end roof (17, 18) panels on only one end! Then on the other end, glue the next kit's main roof sections on. Add the other two end roof panels to the last main section used.

2. Glue the center beams (14) to the main roof sections where they meet at the top.

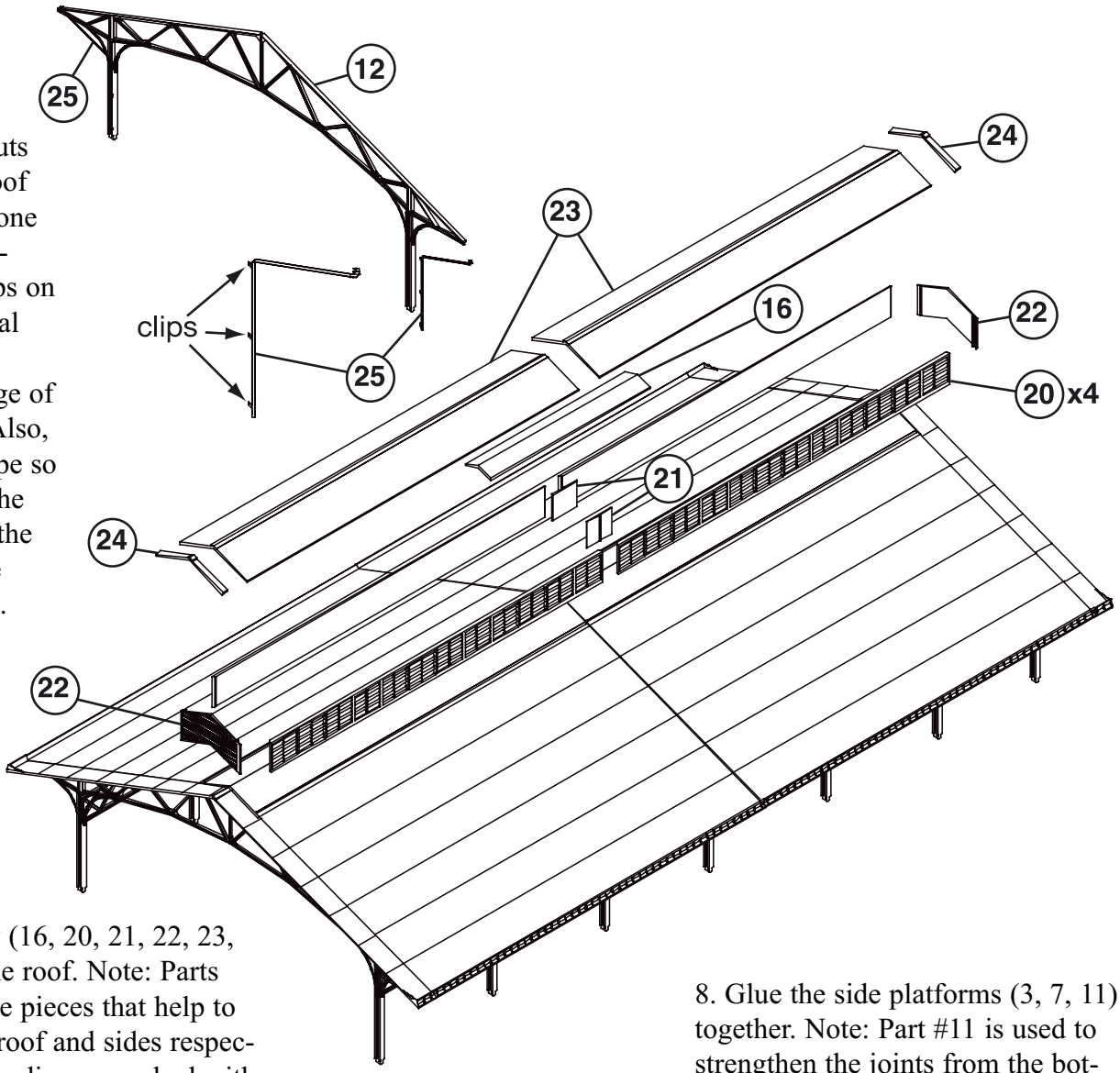
3. Glue the roof trusses (12) within the ridges found on the bottom of the main roof sections.

4. Glue the main braces (13) in between the supports.

5. Glue the end braces (19) in between the supports and to the main roof sections.

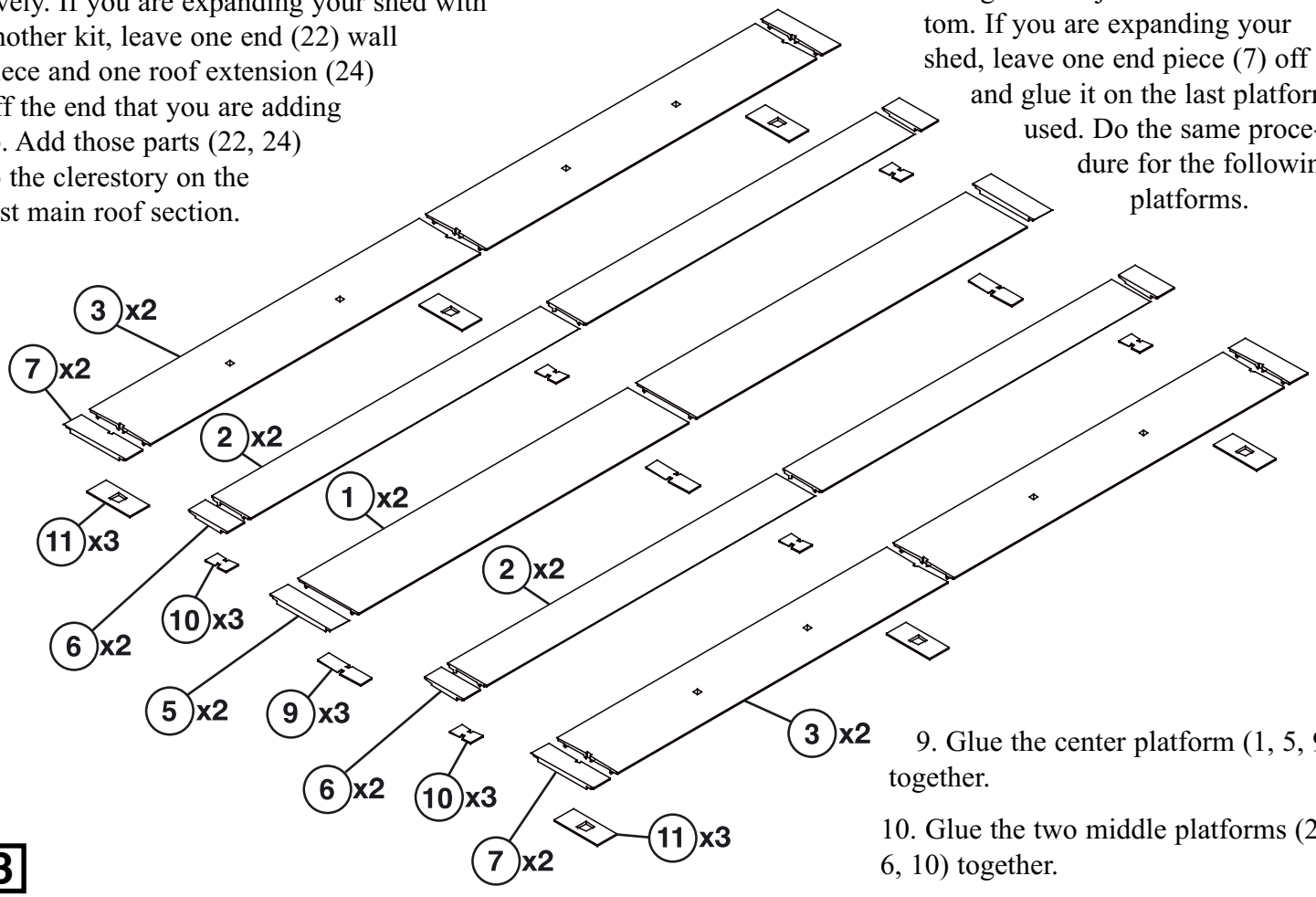


6. Glue the downspouts (25) to every other roof truss (12) starting at one end. Note: The downspouts have three clips on one side of the vertical pipe. These are to be glued to the outer edge of the main roof truss. Also, trim the top of the pipe so that it will fit under the roof without forcing the downspout below the bottom of the I-beam. This could cause the structure not to sit properly on the platform.



7. Glue the clerestory (16, 20, 21, 22, 23, 24) together and to the roof. Note: Parts #16 and #21 are splice pieces that help to stiffen the clerestory roof and sides respectively. If you are expanding your shed with another kit, leave one end (22) wall piece and one roof extension (24) off the end that you are adding to. Add those parts (22, 24) to the clerestory on the last main roof section.

8. Glue the side platforms (3, 7, 11) together. Note: Part #11 is used to strengthen the joints from the bottom. If you are expanding your shed, leave one end piece (7) off and glue it on the last platform used. Do the same procedure for the following platforms.

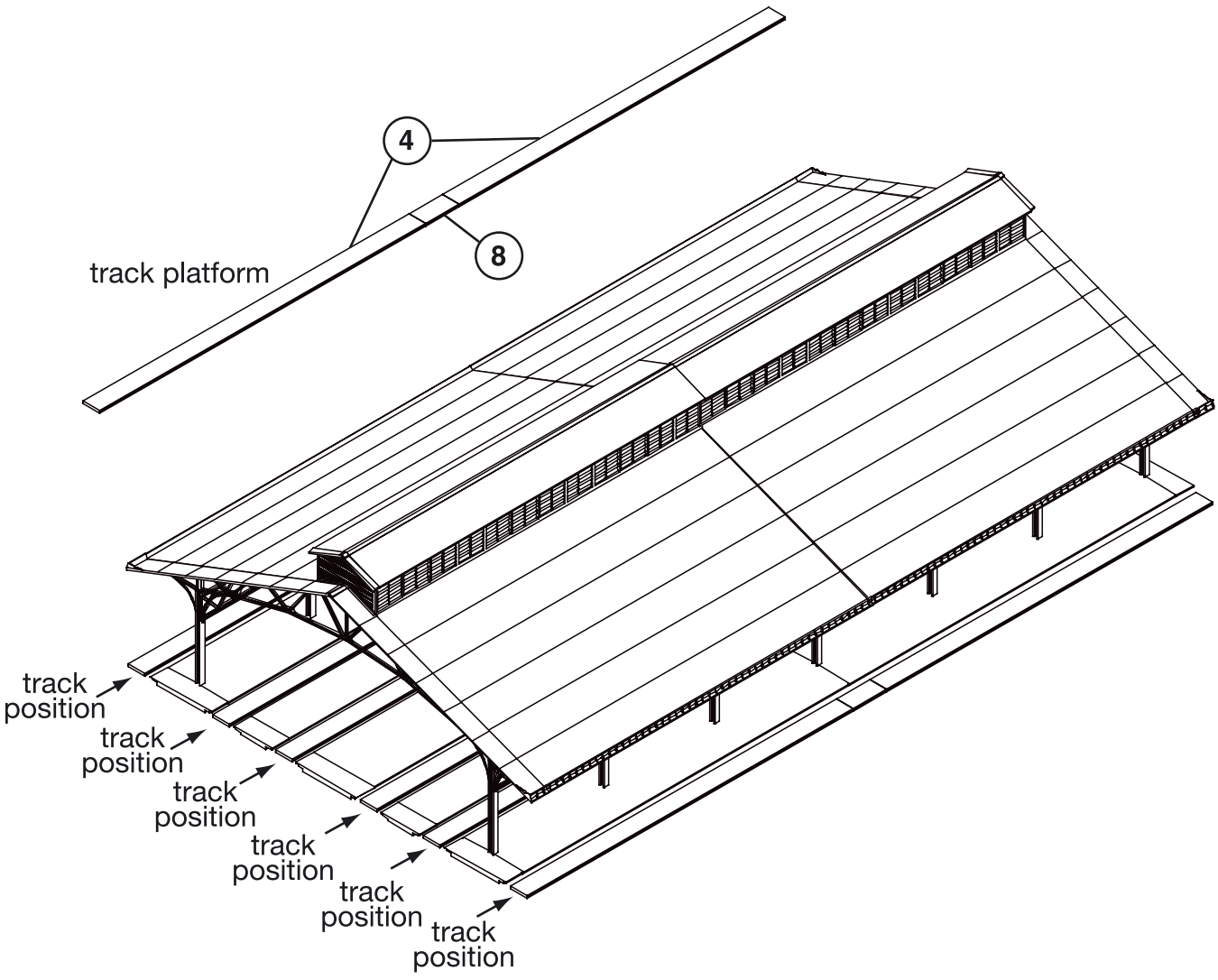


9. Glue the center platform (1, 5, 9) together.

10. Glue the two middle platforms (2, 6, 10) together.

11. Lay four straight lengths of track (not included), long enough to extend past the ends of the platforms, down on your layout where you want the shed. Then put the center platform between the two middle tracks, making sure the platform edges butt up tight against the outside of the rails. Next put the middle platforms against the outside of the middle tracks. Now add two more tracks, one next to each of the middle platforms. Add the side platforms to the edges of these tracks. Note: Make sure the edges of all the platforms are up tight against the sides of the rails and that all the platforms are lined up straight at the ends. If this is done correctly, the finished shed will fit into the holes in the side platforms, allowing you to take the shed off to adjust cars, figures, etc. that are under it. Once the spacing is correct, glue the platforms and track in place. You can now add one more track on each side of the corner platforms.

12. Glue the track platforms (4, 8) together and put them in between the track rails.



SIGNS

To mount signs, simply cut the desired name and, using a small drop of white glue on the back, glue it in place.