



HO Structure Kit MODERN ROUNDHOUSE 933-2900

Thanks for purchasing this Cornerstone® kit. Please read these instructions and study the drawings before starting. All parts are styrene plastic, so use compatible glue and paint to assemble your model. PLEASE NOTE: Parts are included to build a three-stall structure with 10° stall spacing; parts are also included to extend a single stall an additional 20 scale feet (6m). This kit can be expanded up to a full circle using the Modern Roundhouse Add-on Stalls (#933-2901, each sold separately), with matching parts for three additional stalls. For easier assembly, you may wish to have additional kits on hand before starting.

One of the key questions for railroads considering bigger steam engines from the 1920s on was whether or not existing roundhouses and turntables could still be used or would require replacement. Where new facilities were built, brick was the favored material for construction as it reduced the chances of fire and allowed easy remodeling if even bigger engines were ever purchased. To supplement the electric lights of the era, large windows were still standard, especially on the rear wall (Most work was done on the front of engines so they were run in nose first, and should one roll too far forward, windows were cheap to replace!) and the interiors painted or whitewashed to reflect light. Roundhouse roofs were typically divided and pitched in different directions for easier repair and more efficient water run-off. Many also had a clerestory with windows or louvers to get more light and air into the building. At the rear of the roof, each stall was fitted with a smokejack, connected to a large hood about 8-12' (2.4-3.6m) long so engines did not have to be spotted in an exact location. When an engine was inside, the hood was lowered and the exhaust vented up and out of the building. Although servicing needs changed with the coming of diesels, individual units could fit comfortably inside and roundhouses were still used to store and service them. Although the number of roundhouses has diminished, some are still in use today. Typical of North American designs found at major division points, your new model will hold any steam loco up to 125 scale feet long (38.1m) and parts for a single 145' long (44.1m) stall are also included. For additional kits and accessories to build a complete engine terminal, see your local hobby shop, check out the current Walther's Reference Book or visit us online at walthers.com.

BASE

PLEASE NOTE: Optional below ground Inspection Pits (3x 37) are provided; if used, your layout surface must be modified to provide clearance below each pit. Determine the final location of your Roundhouse, and use the completed base to mark the location of each pit/s. Check for adequate clearance but do not install the Pit/s in the Base at this time.

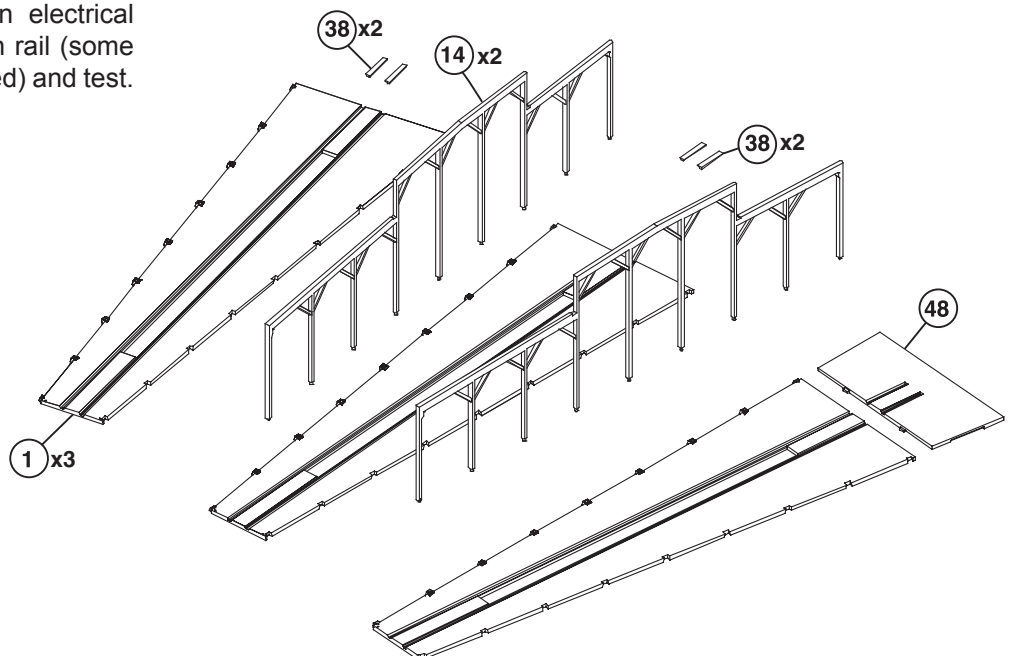
1) Note the alignment tabs and slots on the sides of the Base (3x 1) and glue together as shown. Glue Roof Trusses (2x 14) to mounting points on center section of completed Base as shown.

2) Glue Floor Rail Fillers (38; 2x per track) to rear of grooves in Base.

3) Grooves in Base accept most common rail sizes, or use a section of flex track with the ties removed (both sold separately). Run electrical feeder wires (sold separately) to each rail (some modification of the base may be needed) and test. Glue rails to grooves in Base.

Optional Extended Stall

1A) PLEASE NOTE: Parts to extend one stall an additional 20 scale feet (6m) are included; all assembly sketches show a typical installation on the right side. Select the stall you wish to extend, and glue a Base Extension (48) to rear as shown (discard remaining Base Extensions). Glue Floor Rail Fillers (2x 38) to rear of grooves in Base Extension.



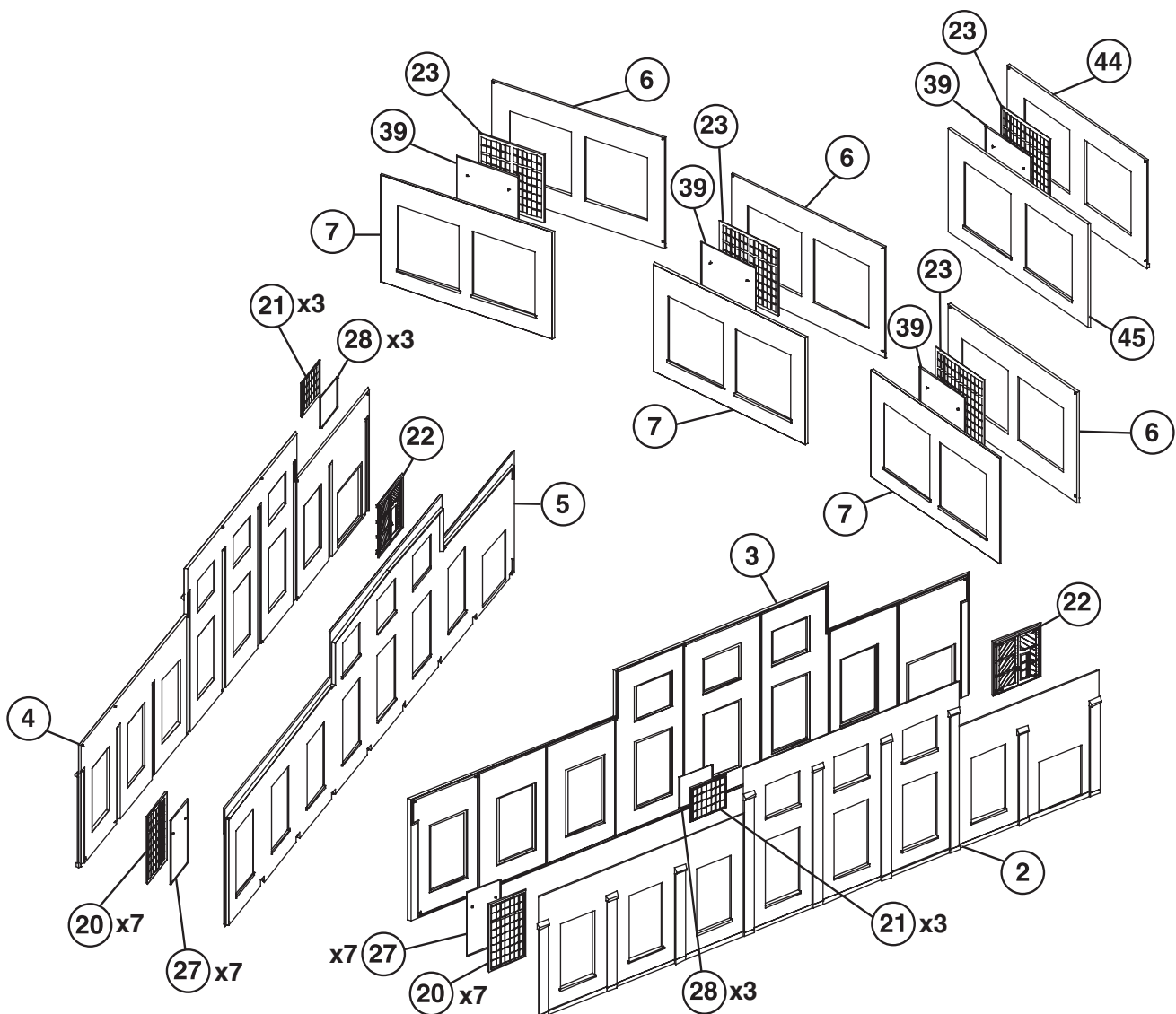
WALLS & WINDOWS

PLEASE NOTE: All Walls consist of two parts with brick detail on one side, and a plain back; Exterior Walls (2, 4, 6 and optional 44) also have a recessed mounting area on the plain side for Windows. Be sure all Windows are oriented correctly with the horizontal transom detail at the top, and glue to inside of Exterior Walls as shown. Remove any burrs from Window Glass so that interior and exterior walls fit flush.

1) With transom at top, glue Large Windows (14x 20; seven per wall), to back of Exterior Side Walls (2, 4). Glue Small Upper Windows (6x 21; three per wall) to back of Exterior Side Walls. Remove any burrs from Large Window Glass (14x 27, seven per wall) and Small Window Glass (6x 28; three per wall) so that interior and exterior walls fit flush and glue to back to backs of appropriate windows. Align recessed areas and pins with mounting points, and glue plain backs of Inner Side Walls (3, 5) to plain backs of Exterior Side Walls.

2)) With transom at top, glue Rear Windows (23; 2x per wall) to inside of Exterior Rear Walls (3x 6). Remove any burrs from Window Glass (39; 2x per wall) so that interior and exterior walls fit flush and glue to back of Rear Windows. Align small pins with mounting points and glue plain backs of Inner Rear Walls (7) to plain backs of Exterior Rear Walls.

2A) Optional Extended Stall: With transom at top, glue Rear Windows (2x 23) to inside of Exterior Rear Wall (44). Remove any burrs from Rear Window Glass (2x 39) so that interior and exterior walls fit flush and glue to backs of Rear Windows. Glue plain back of Inner Extended Rear Wall (45) to plain back of Exterior Rear Wall.

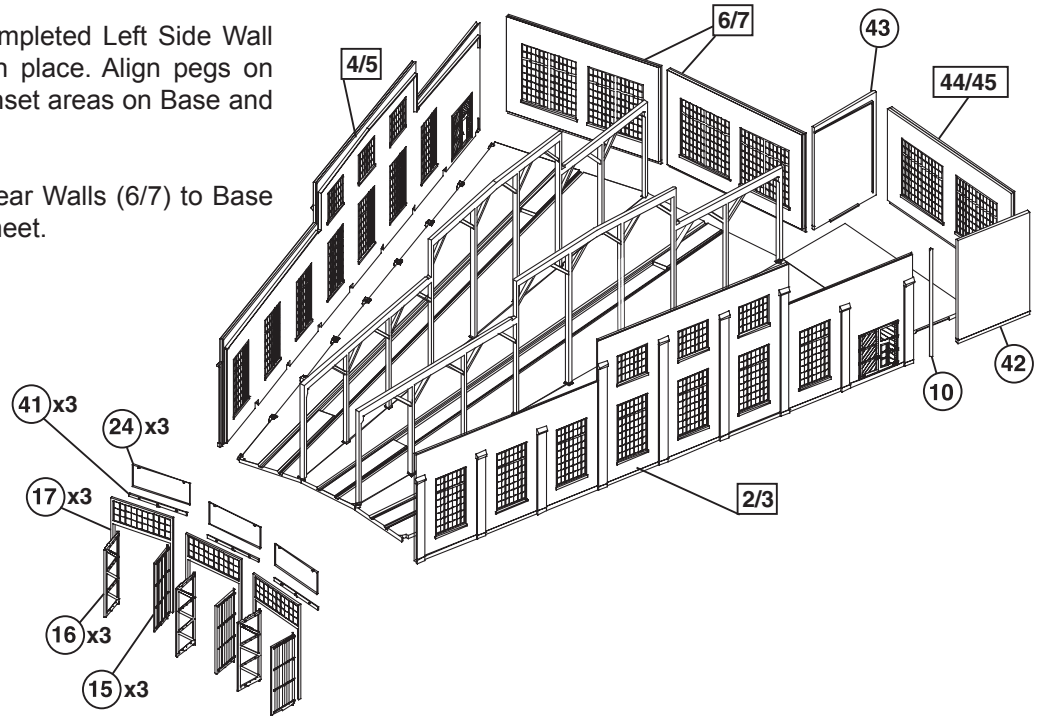


MAIN ASSEMBLY

PLEASE NOTE: If you are building a larger structure, glue only one completed Side Wall to Base at this time and refer to instructions in Modern Roundhouse Add-on Stalls (#933-2901) to continue assembly.

1) Align inset areas on bottom of completed Left Side Wall (4/5) with pegs on Base and glue in place. Align pegs on bottom of Right Side Wall (2/3) with inset areas on Base and glue in place.

2) Glue lower edges of completed Rear Walls (6/7) to Base and at inside edges where all Walls meet.

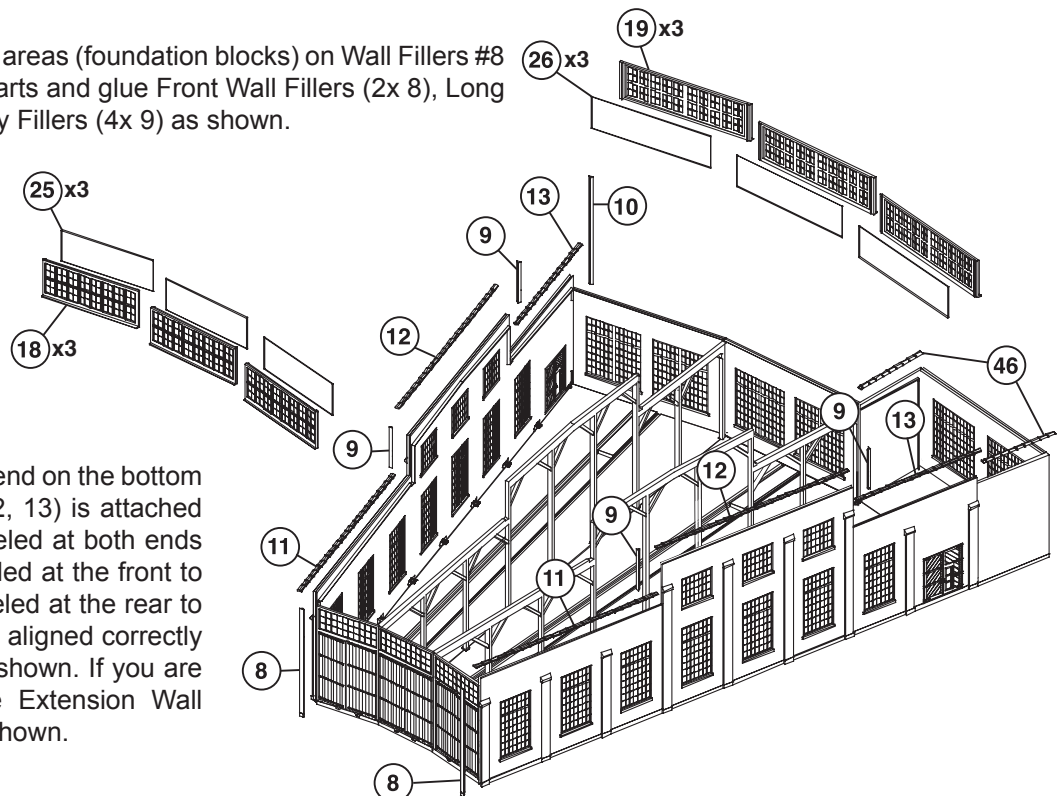


2A) PLEASE NOTE If you are placing the Optional Extended Stall alongside the Side Wall, be sure the blank area (foundation block) on Wall Filler (10) is at the bottom, align and glue to rear of Side Wall (right side shown). Using the raised ridges to align parts, glue Left (43) and Right (42) Extension Side Walls to Base Extension (48; if building multiple extended stalls using parts from the Roundhouse Add-On Stalls (#933-2901), Extension Side Walls are used only on the outermost left and right edges). Align edges with raised ridges on Extension Side Walls and Glue Exterior Rear Wall (44/45) to base and at inside corners where parts meet.

3) PLEASE NOTE: For positionable Stall Doors, carefully insert – do not glue – pins on top and bottom of Left (3x 16) and Right (3x 15) Stall Doors to openings in Retainers and Base. Glue Transom Glass (3x 24) to back of each Stall Door Frame (3x 17). Align three pins on rear of Door Retainers (3x 41) with mounting points on lower edge of inside Door Frames and glue in place. Insert Doors and glue completed Frame assemblies to Base and at inside edges where parts meet.

4) Glue Small Clerestory Glass (3x 25) to rear of Front Clerestory Windows (3x 18), and Large Clerestory Glass (3x 26) to rear of Rear Clerestory Windows (3x19). Note that the “ledge” is the bottom and glue completed Clerestory Windows to edges of Walls and Roof Trusses at front and rear.

5) PLEASE NOTE: Be sure blank areas (foundation blocks) on Wall Fillers #8 and 10 are at the bottom. Align parts and glue Front Wall Fillers (2x 8), Long Wall Fillers (2x 10) and Clerestory Fillers (4x 9) as shown.



6) PLEASE NOTE: The beveled end on the bottom surface of the Wall Caps (11, 12, 13) is attached over the Wall Fillers; #12 is beveled at both ends to fit over Fillers #9, #11 is beveled at the front to fit over Filler #8, and #13 is beveled at the rear to fit over #10. Make sure parts are aligned correctly and glue Wall Caps in place as shown. If you are adding an extended stall, glue Extension Wall Caps (2x 46) to top of Walls as shown.

ROOF ASSEMBLY

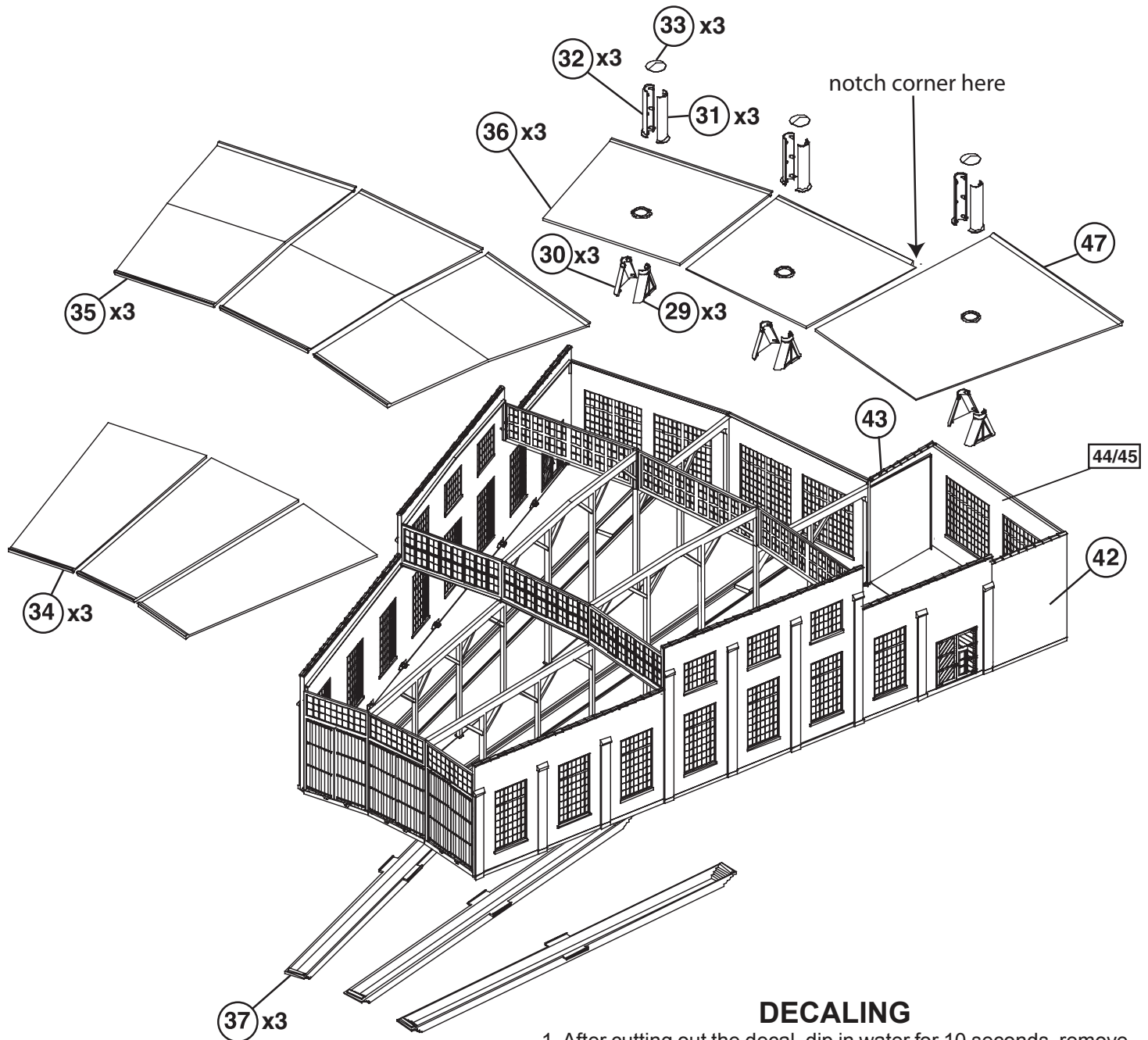
PLEASE NOTE: We recommend setting all roof panels in place so they're removable for easier interior access and maintenance. If you are building an extended stall, one corner of the adjacent Rear Roof Panel (36) must be notched to fit (right side shown)

1) Make three identical Smokejacks by gluing Right (31) and Left (32) Stack Halves together. Glue a Rain Cap (33) to each completed Stack assembly. Glue to raised opening in top of Rear Roof Panel (36) on standard length structure; use Extension Roof Panel (47) for an extended stall. Glue Right (29) and Left (30) Exhaust Hoods together and to mounting point on underside of each Roof Panel.

2) Use the raised ridges to align parts and place - do not glue - Rear (3x 36 or 2x 36 & 47), Clerestory (3x 35) and Front (3x 34) Roof Sections in place.

FINAL ASSEMBLY

If used, glue Inspection Pits (3x 37) to openings in base and your modified benchwork.



DECALING

1. After cutting out the decal, dip in water for 10 seconds, remove and let stand for 1 minute. Slide decal onto surface, position and then blot off any excess water.
2. Lightly brush Micro Sol® on top. This will soften the decal allowing it to conform to irregular surfaces. DO NOT TOUCH DECAL while wet!
3. When the decal is thoroughly dry, check for any trapped air bubbles. Prick them with the point of a small pin or hobby knife blade and apply more Micro Sol®.