



# HO Structure Kit MODERN ROUNDHOUSE ADD-ON STALLS 933-2901

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: This partial kit (no exterior walls) is designed to add up to three stalls to the Modern Roundhouse (#933-2900, sold separately). Additional Add-On kits (each sold separately) can be combined to build any size structure up to a full circle. For easier assembly, you may wish to have all 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 Walthers Reference Book or visit us online at walthers.com.

## BASE

PLEASE NOTE: Parts for three intermediate stalls are included, and are identical to those in the Modern Roundhouse kit; you can use more or less as needed. Optional below ground Inspection Pits (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.

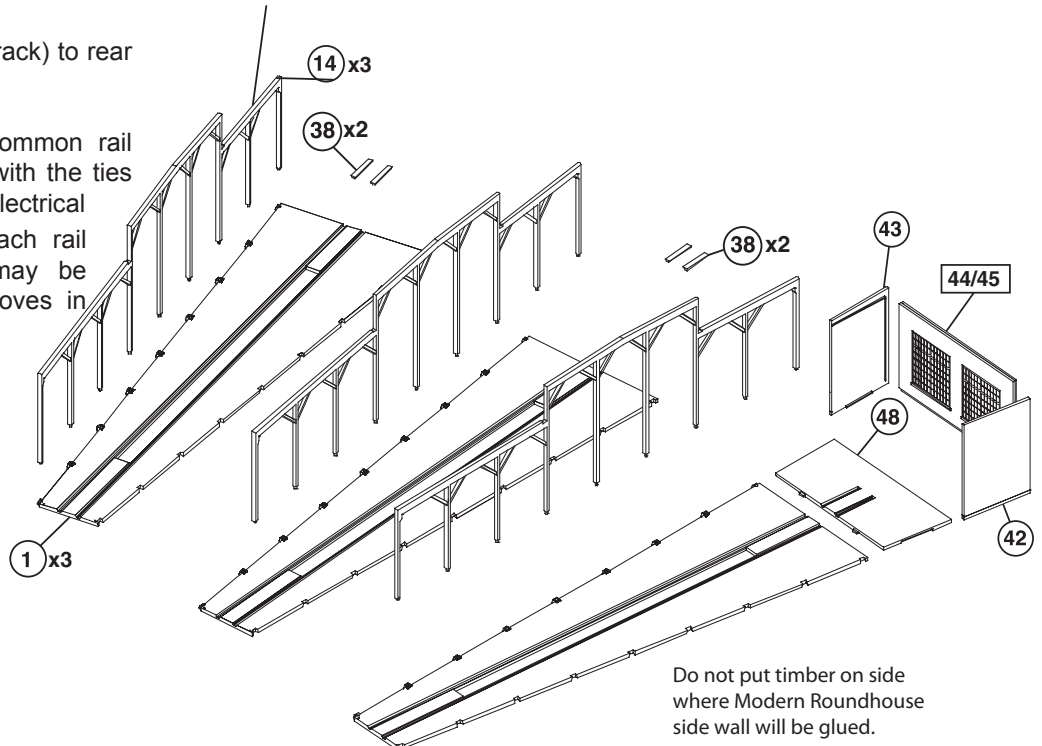
1) Align the tabs on one section of the Add-on Base (1) with the slots on the Roundhouse Base (#1 in kit #933-2900) and glue together. Glue each additional Add-on Base to the other sections as shown.

2) Install the first Roof Truss (14) where the Add-on and Roundhouse Bases meet. With the exception of the outside edge where the Exterior Wall from kit #933-2900 will be installed later, glue additional Roof Trusses where Add-on base sections meet.

This timber goes on whatever side this base butts up against the base from the Modern Roundhouse.

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

4) 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; more than one stall may be extended using parts from additional kits; 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. Glue Floor Rail Fillers (2x 38) to rear of grooves in Base Extension.

Do not put timber on side where Modern Roundhouse side wall will be glued.

## **WALLS & WINDOWS**

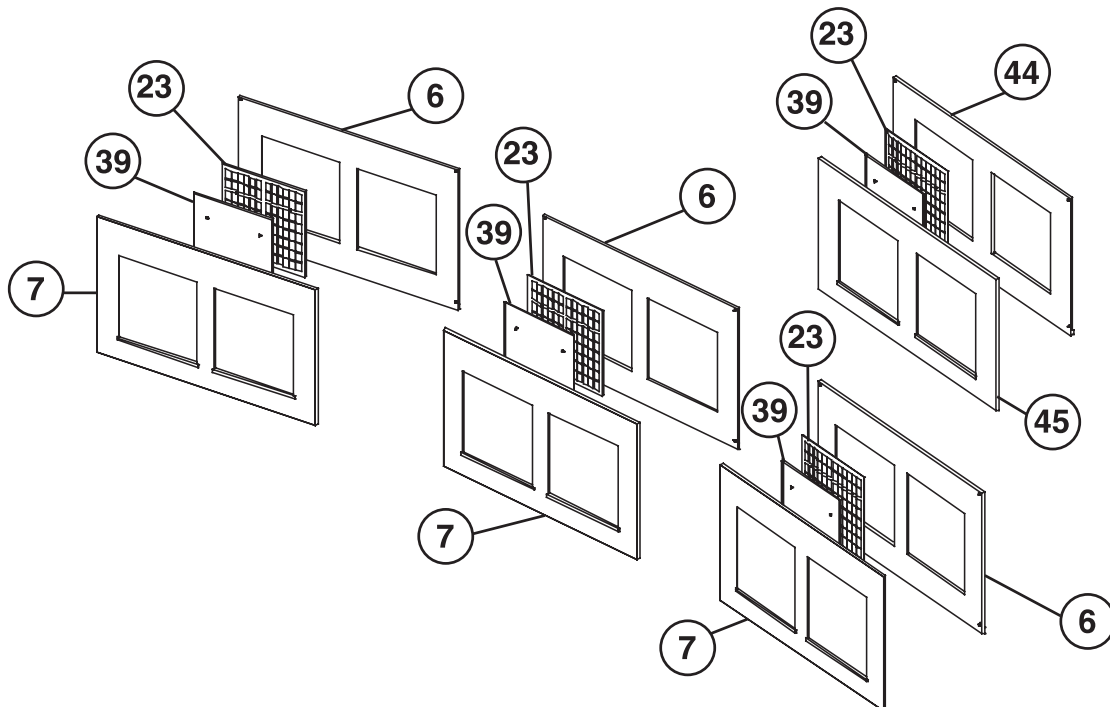
PLEASE NOTE: This kit only includes Rear Walls, each consisting of two parts with brick detail on one side, and a plain back. Exterior Walls (6 and optional 44) also have a recessed mounting area on the plain side for Double Windows.

1) With transom at top, glue Rear Windows (23; 2x per wall) to inside of each Exterior Rear Wall (6) as shown. Remove any burrs from Rear Window Glass (39; 2x 39) so that interior and exterior walls fit flush and glue to backs 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.

1A) 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.

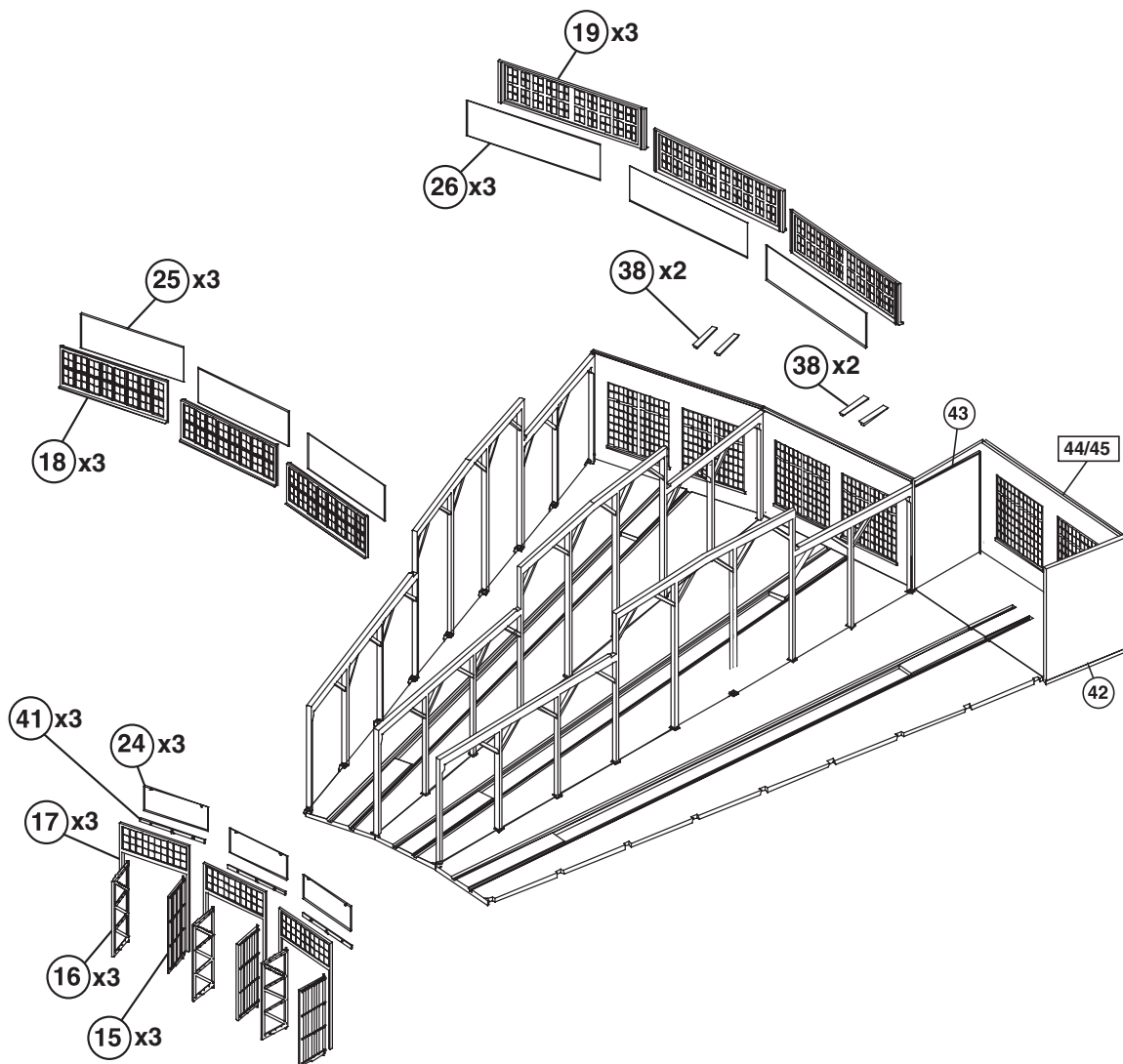
2) Glue lower edges of each completed Rear Wall (6/7) to Base and at inside edges where all Walls meet.

2A) PLEASE NOTE: If you are placing the Optional Extended Stall alongside the Roundhouse Exterior Wall, please refer to the Roundhouse instructions, Main Assembly Step 2. 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, 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. Glue Extension Wall Caps (2x 46) to top of Extension Side Walls as shown.



3) PLEASE NOTE: For positionable Stall Doors, carefully insert – do not glue – pins on top and bottom of each Left (16) and Right (15) Stall Door to openings in Retainers and Base. Glue Transom Glass (24) to back of each Stall Door Frame (17). Align three pins on rear of each Door Retainer (41) with mounting points on lower edge of each inside Door Frame 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 (25) to rear of each Front Clerestory Window (18), and Large Clerestory Glass (26) to rear of each Rear Clerestory Window (19). Note that the “ledge” is the bottom and glue completed Clerestory Windows to edges of Roof Trusses at front and rear.



## 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)

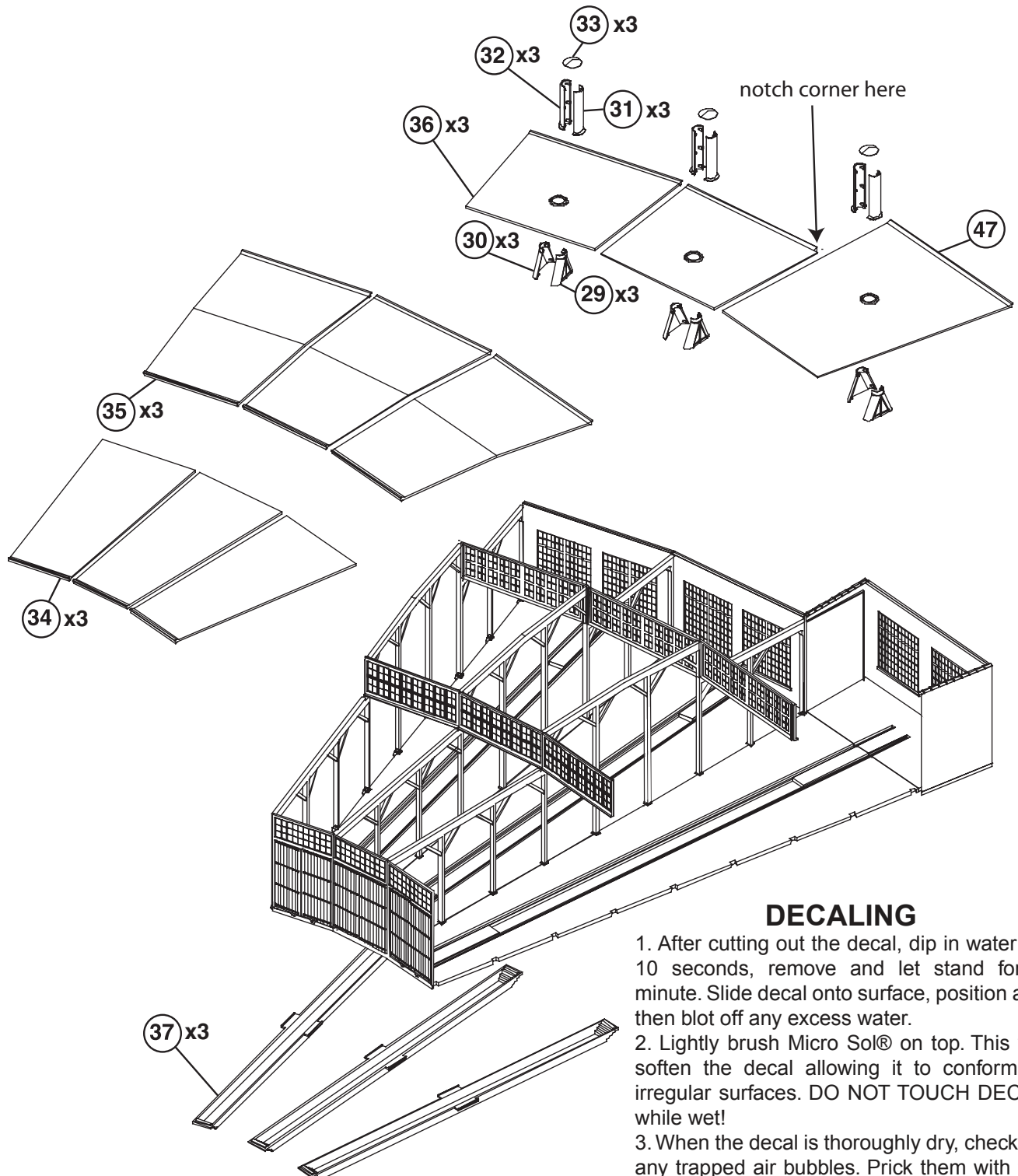
1) Assemble Smokejacks by gluing Right (31) and Left (32) Stack Halves together. Glue a Rain Cap (33) to each completed Stack assembly. Glue to raised opening in top of each Rear Roof Panel (36) on standard length structure; use Extension Roof Panel (47) for an extended stall. Glue Right (29) and Left (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 (36 and/or 47), Clerestory (35) and Front (34) Roof Sections in place.

## FINAL ASSEMBLY

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

Follow instructions in Modern Roundhouse #933-2900 for assembly and installation of exterior sidewall included in that kit.



## 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®.