



HO Scale Structure
**THREE STALL
ROUNDHOUSE**
933-3041

Thanks for purchasing this Cornerstone series® kit. Please take a few minutes to study the instructions and drawings before starting. All parts are made of styrene plastic, so use paints and glues which are compatible.

Since the beginning, the roundhouse has been vital to railroad operations. The circular design, served by a turntable, required less space and simplified track work. As a result, roundhouses could be found everywhere, from small towns on remote shortlines, (where they doubled as a back shop) to division point cities. While three stalls were about as small as they came, they ranged in size up to a full-circle, with one arrival and departure track.

The primary use was to house locos between runs, and most also had facilities to permit running inspections and light repairs. As locos became more complex, this routine maintenance helped lower expenses, keeping engines in use for a longer period between major shoppings.

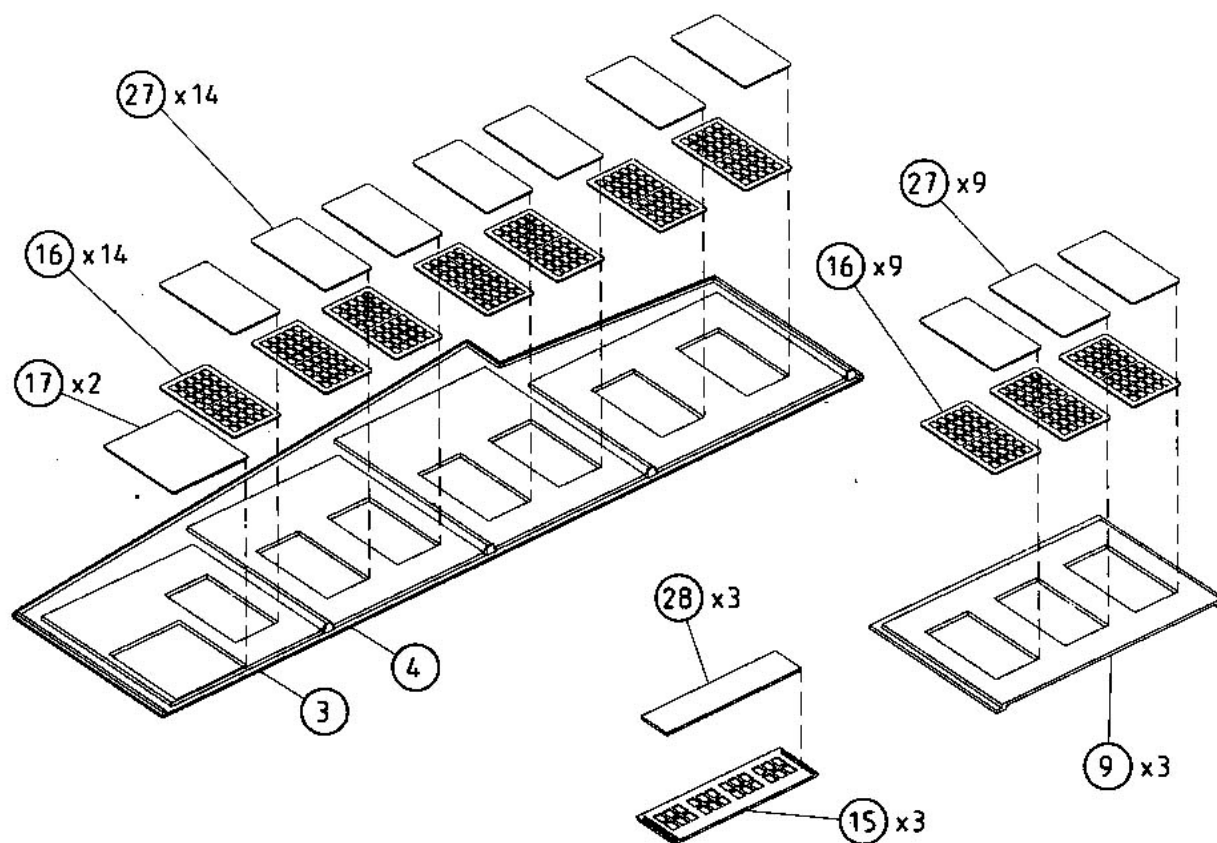
While the earliest roundhouses were made of wood, the danger of fire made this impractical, and brick structures were easier and cheaper to enlarge. Roundhouses were typically built to accommodate engines in use, or soon to be operating on that part of the railroad. This was especially true as larger and longer steamers entered service. (Very often, these large engines were restricted to one or two divisions because of bridge weight limits, curve radii and clearance problems. The added expense of installing several larger turntables and roundhouses for these engines was also a contributing factor to such restrictions).

One of the most common design elements, incorporated into almost every American structure, was the two-tiered roof. Considering the costs of repairing and replacing such a large surface, the roof was split into two parts and pitched in different directions. This allowed for more efficient removal of rain water (or run-off from melting snow) which could then be drained away from the front. Many had clerestory windows at the break between the roof lines. This allowed more natural light into the building, and some could be opened to permit circulation of fresh air.

Another roof detail was the numerous smoke jacks, which vented exhaust gases from the interior. Each smoke jack was connected to a large hood mounted below the interior ceiling. These hoods were usually 8-12' long so that engines did not have to be spotted in an exact location, and were lowered over the smokestack on the engine. In later years, mechanical blowers were also used with this type of ventilator.

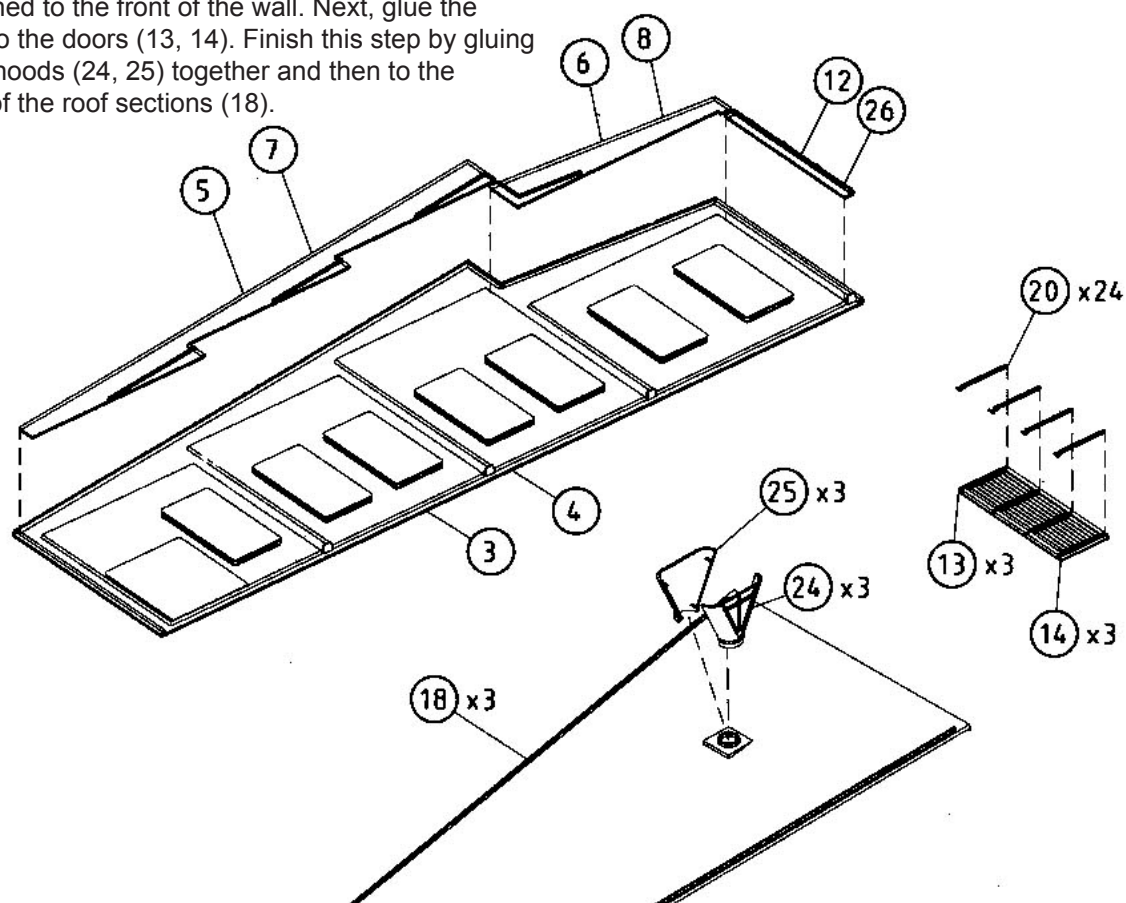
The outer circle walls made extensive use of large windows. While this helped light the interior, they were also cheaper to replace should an engine run off the rails and out the back of the building. To supplement the many windows, numerous flood lights were installed, both inside and out. This made it practical to work safely around them clock and under any conditions.

1. Start by gluing the windows (16) and doors (11) into the openings on the side (3, 4) and back (9) walls. Next, glue the "glass" (27, 28) on the backs of the windows (15, 16).

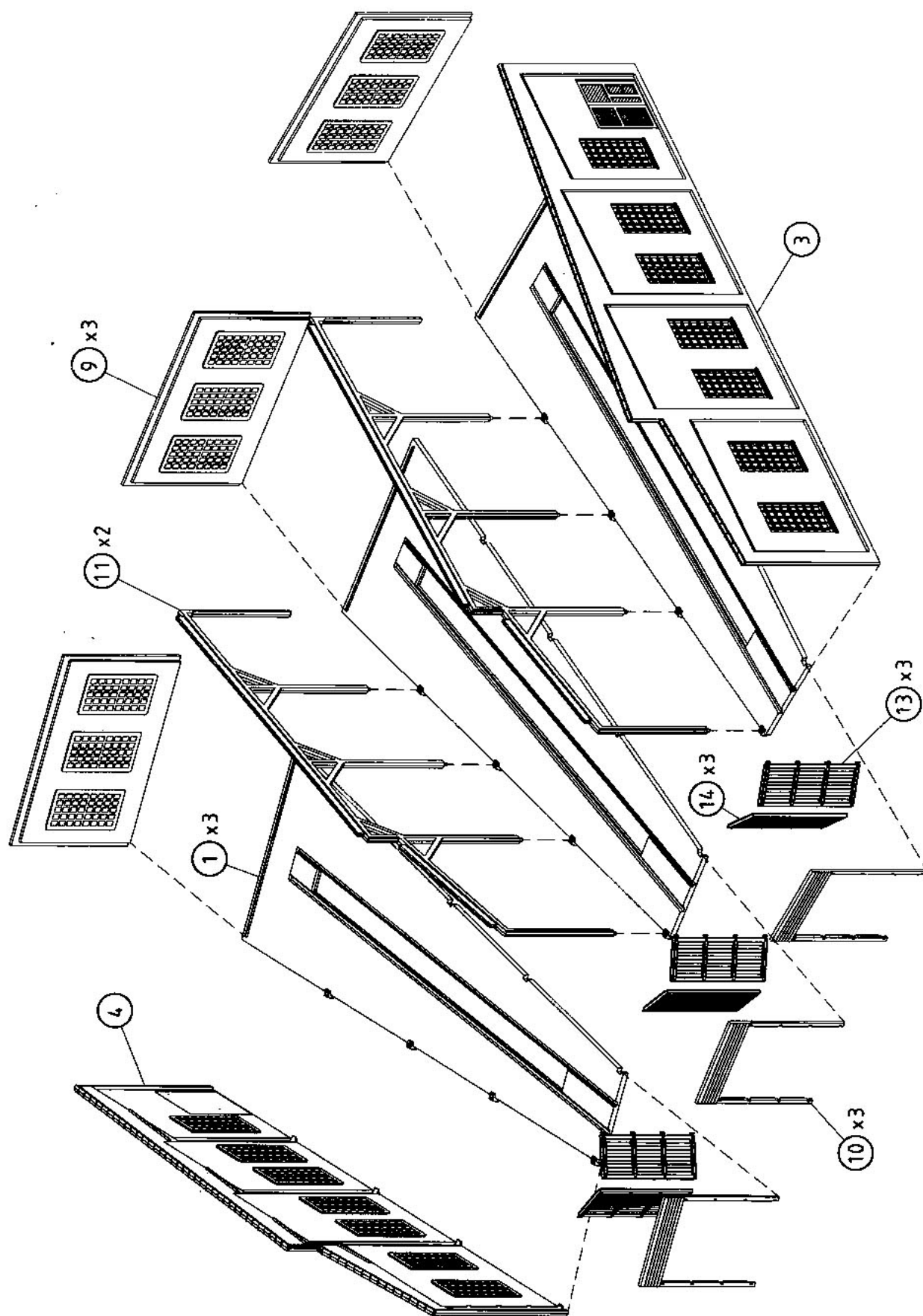


2. Glue the appropriate inside wall sections (5, 7, 6, 8) to the back of the side walls (3, 4) as shown. Then, glue the inner door posts (12, 26) to the side walls (3, 4) as shown.

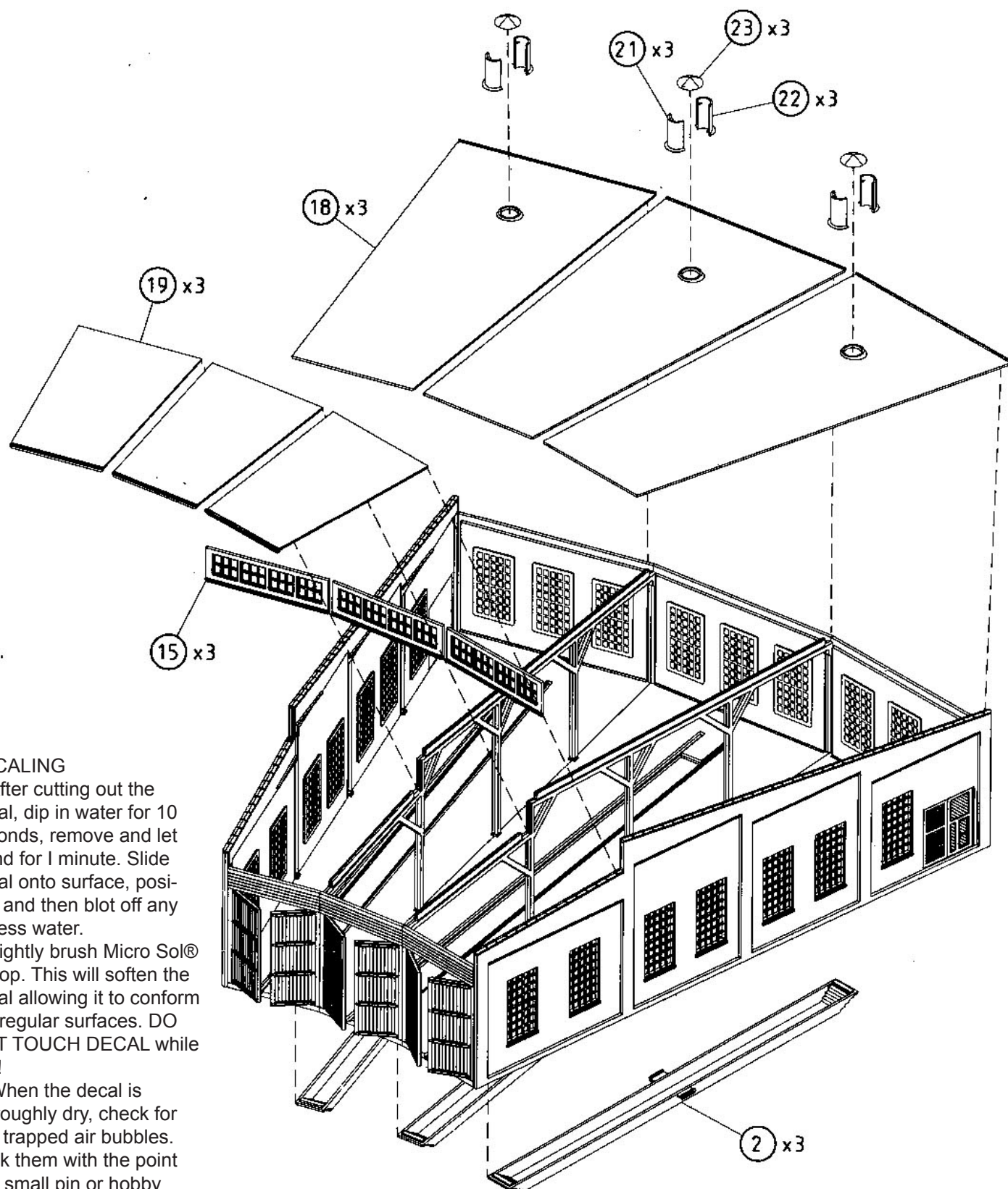
NOTE: #12 goes on #4 and #26 goes on #3, the raised ridge positioned to the front of the wall. Next, glue the hinges (20) to the doors (13, 14). Finish this step by gluing the exhaust hoods (24, 25) together and then to the underneath of the roof sections (18).



3. Glue the base plates (1) together. NOTE: You can expand your roundhouse by purchasing more roundhouse kits and simply gluing more base plates together until you reach the size desired. Glue track rails (not included), of your choice in the slots provided in the base plates. Now, glue the inner support beams (11) to the holes in the bases. Continue by gluing the walls (3, 4, 9) in place. Set the hinges of the doors (13, 14) in the doorway (10) (when closed, the diagonal braces on the doors will face inside) and then, making sure not to get glue on the hinges, glue the doorway sections in place.



4. First, glue the upper windows (15) in place. Next, glue the stacks (21, 22, 23) together and then to the large roof (18) sections. Now, glue the small (19) and large (18) roof sections in position, the sections resting on top of the upper host ridge on the side walls. Complete assembly by gluing on pits (2) underneath the base plates.



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®.