



HO Structure Kit  
**WESTERN COAL  
FLOOD LOADER**  
933-3089

Thanks for purchasing this Cornerstone kit. All parts are styrene plastic, so use compatible cement and paint to assemble and finish your model. Please read these instructions and study the drawings before starting.

The energy crunch of the early 1970s and the move toward improved air quality left coal-fired power plants and other industries in need of clean-burning, low sulfur coal. Vast deposits were available in the western US, but getting it to customers was a big logistical problem. Several ideas were suggested, but in the end, railroads became the primary means of transport and coal quickly became a considerable part of the traffic on many lines. In place of single carloads, solid “unit trains” now ran direct from mines to customers and back again as rolling conveyor belts. As many customers now wanted just in time delivery, faster and more efficient cars, motive power and handling facilities were developed, including the flood loader, which is still used today. These large buildings are essentially trackside storage bins, often several miles from the mines and processing facilities, designed to load entire trains on the move. In operation, a unit train enters the loader at about 4mph, and coal begins flowing as computers detect the first car under the chute. In a matter of minutes the car is filled to capacity and loading begins on the next. Some loaders briefly stop the flow between cars, producing a downhill slope to the load, while others run continuously producing a more uniform appearance. As the last car clears, the loader stops automatically and begins refilling for the next train. Now fully loaded, the unit train passes over a weigh-in-motion scale to verify the actual amount of coal being shipped to the customer before departure. Seen in both eastern and western coalfields, this modern structure is a great way to add or expand coal operations in a relatively small area.

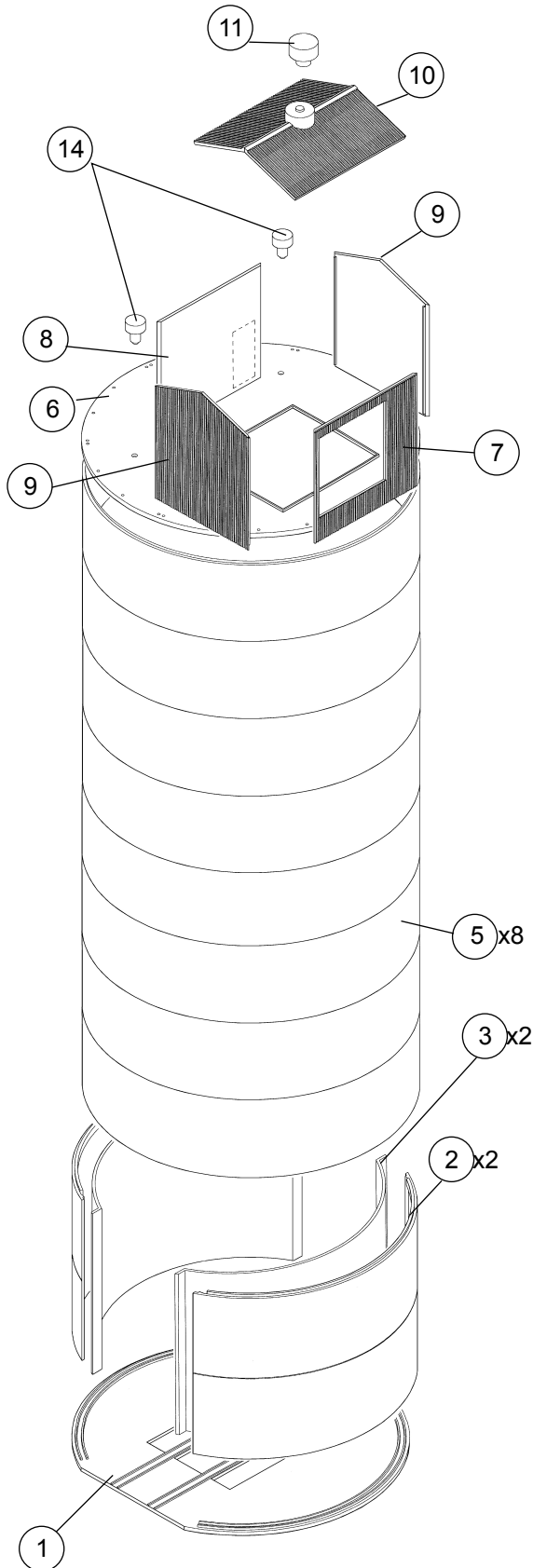
For additional models, figures, scenery materials and more to complete your scene, see your local dealer, check out the current Walther's Model Railroad Reference Book, or visit us online at [walthers.com](http://walthers.com).

## Loader Assembly

1) Note the alignment ridges molded in the Loader Base (1) for track (sold separately). Remove just enough ties to fit the base, and glue the rails in position between the ridges. Glue Interior Loader Wall Halves (2x 3) inside Bottom Silo Wall Halves (note raised ridge on top - 2x 2). Note the raised ridges along the outside of the Loader Base; using these as a guide, glue each lower wall half in place as shown.

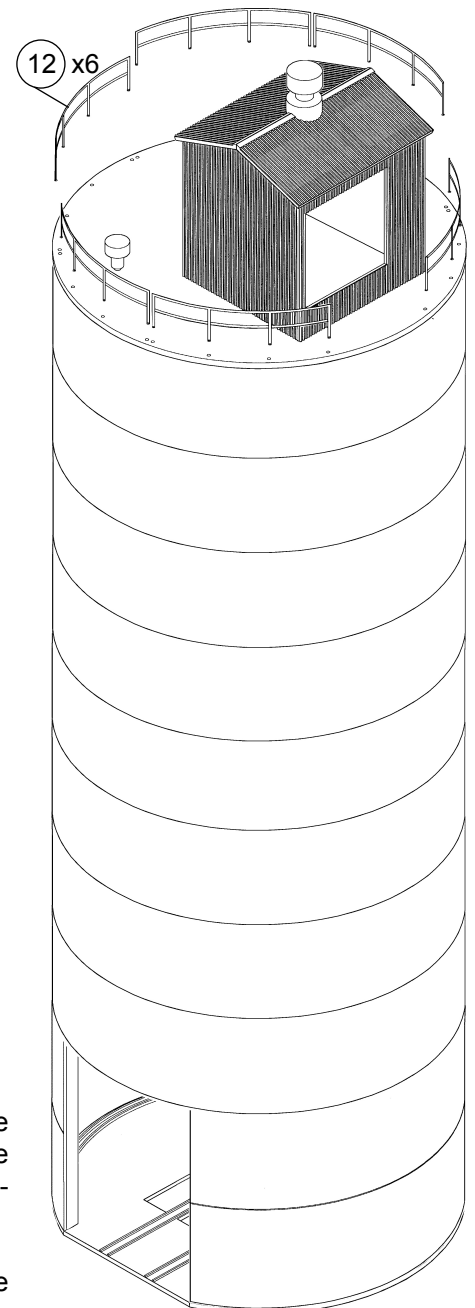
2) Bevel the lower edge of a Silo Section (1x 5) and test fit to Lower Wall Halves. When the fit is correct, assemble the silo by stacking and gluing the remaining sections (7x 5) together.

3) PLEASE NOTE: The Loader Roof (6) can be installed facing any direction - determine the final location of the loader and conveyor on your layout, and glue the Roof in place.



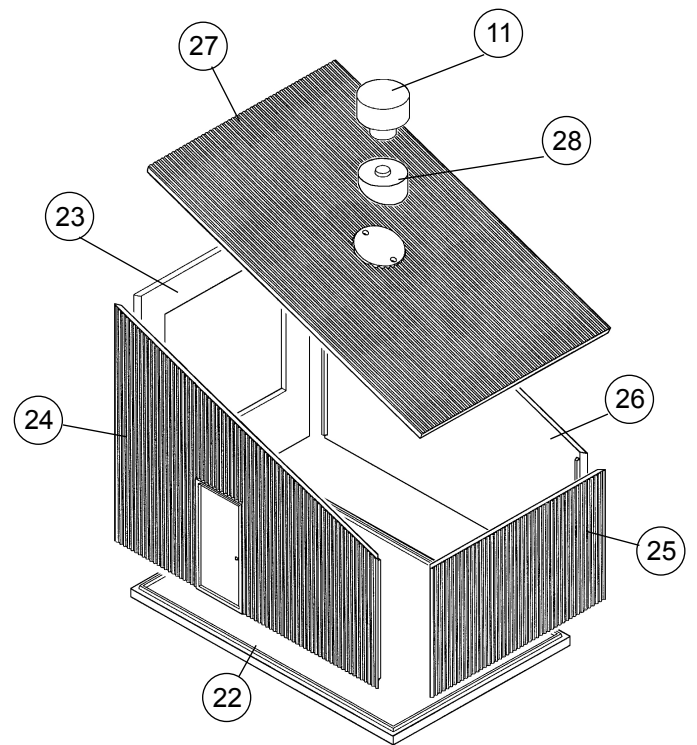
4) Note the raised ridges on the Loader Roof (6); using these as a guide, glue the Headhouse Receiving Wall (7), Rear Wall (8) and Ends (2x 9) to Roof and at inside corners where parts meet. Glue Roof (10) to tops of walls. Glue Vent (11) to mounting point on Roof.

5) Glue Small Vents (2x 14) to mounting points on Loader Roof as shown. Be sure to leave the area in front of the Receiving Wall clear as shown, and glue Roof Hand-rails (6x 12) to mounting points on outside edge of Roof.



## Ground Machinery Shed Assmby

1) Using the raised ridges as a guide, glue the Shed Walls (23, 24, 25, 26) to Shed Base (22) and at inside corners where parts meet. Glue Shed Roof (27) to completed wall assembly. Glue Vent Base (28) to raised area on Roof. Glue Vent (11) to Vent Base.



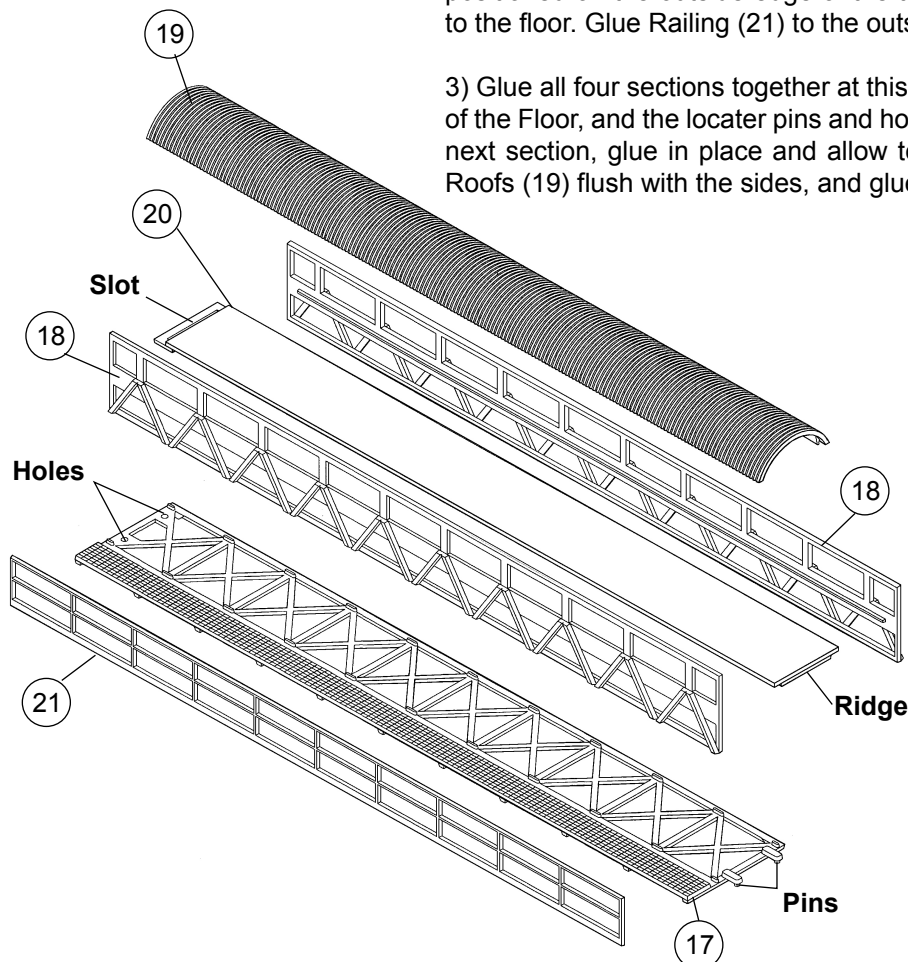
## Conveyor Assembly

Please Note: Parts to build four conveyor sections are provided. Assemble each section as follows:

1) Note the molded ridges inside both Conveyor Side Walls (2x 18). With the ends of the Conveyor Floor (20) flush with ends as shown, glue the Floor on top of both ridges on each side.

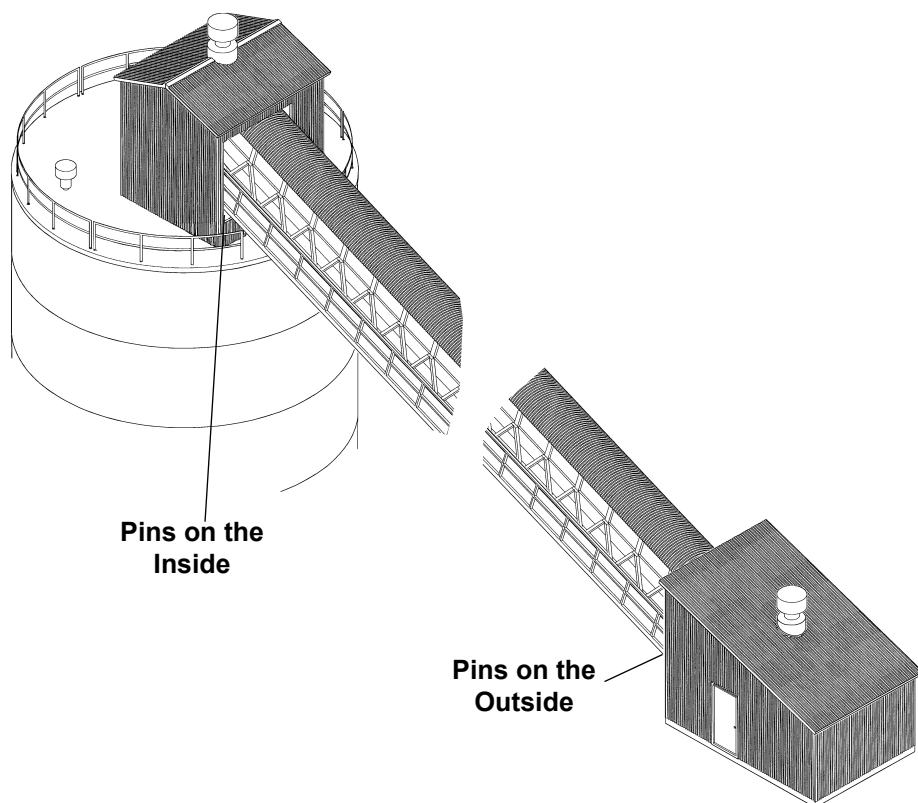
2) Note the raised tabs on the Conveyor Bottom (17). Make sure the Side Walls are positioned on the outside edge of the tabs, and glue the completed wall assembly to the floor. Glue Railing (21) to the outside edge of the walkway as shown.

3) Glue all four sections together at this time. Note the slots and ridges at each end of the Floor, and the locator pins and holes on the Bottom; align these parts with the next section, glue in place and allow to dry on a flat surface. Align the Conveyor Roofs (19) flush with the sides, and glue in place.



## 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 con-form 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®.



## Conveyor Supports

PLEASE NOTE: To match your layout surface, the Conveyor Supports (4x 16: three needed for construction) must be cut to fit. Please read the following steps before proceeding.

1) Test fit the Loader, Ground Machinery Shed and Conveyor on your layout. Note the joints at the end of each conveyor section are the mounting points for the Conveyor Supports. The top of each Support has a rounded edge, so they'll rest squarely on the ground, no matter the angle of angle the conveyor. Glue the pins on the bottom end of the conveyor inside the opening on the Headhouse Receiving Wall; glue the pins at the opposite end on the outside of the opening in the Ground Machinery Shed.

2) PLEASE NOTE: each Conveyor Support requires two Conveyor Footings (8x 15; six needed for construction), which measure .229" (5.8mm) tall. Measure the distance from the underside of each joint to your layout surface – subtract 5.8mm for the footings – to determine the final height of each support.

3) Measure from the top of the support subtracting 5.8mm for the footings and cut to size: NOTE you may wish to cut the supports a bit oversize and sand or file the legs to make final adjustments. On shorter supports, remove the interior bracing below the lowest horizontal brace as shown.

4) Glue Footings (15 two per support, six total) to the bottom of the modified supports. Align the rounded top of each support in the mounting points on the bottom of the conveyor, make sure the support footings rest firmly on the ground, and glue the completed Conveyor Supports in place.

