

### **HO Structure Kit**

# RAIL-TO-ROAD AGGREGATE TRANSFER

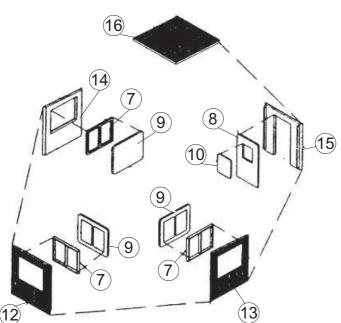
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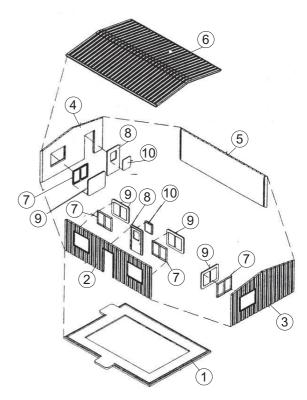
Thanks for purchasing this Cornerstone® kit. All structure parts are styrene, so use compatible glue and paint to complete your model. Please read the instructions and study the drawings before starting construction. NOTE: Some parts on the sprues are not needed for assembly of this kit, and are not shown on the instructions — use these "extras" for details or kitbashing future projects if desired.

While railroads have been handling freight from the beginning, getting loads to smaller customers without their own sidings, or those located well away from the tracks requires a secondary step to complete delivery. This operation, known as transloading, takes on many different forms depending on the products being handled and the equipment needed to move them down the rails or the road. Today, railroads handle all types of granular materials, ranging in size from fine powders to large grains, and the list includes sand, salt, fertilizer, cement, cereal grains and many more. Many of these can be contaminated if exposed to moisture or other materials, and some are light while others are very heavy, so they're shipped in covered hoppers designed and built for a specific cargo. Many of these cars move between producing industries and private firms that operate transload stations, where the cars can be unloaded as quickly as possible (railroads only allow customers 24 hours to unload a car before additional charges are added). For this reason modern facilities are built around large reinforced storage silos allowing the cars to be emptied right away, and the material can be stored until such time as the customer is ready or trucks are available. The process begins as hoppers are spotted over a below ground conveyor pit where gravity does most of the unloading work in a short time; a two-bay hopper carrying fracturing sand for example, can be emptied in about an hour. A mechanical conveyor lifts the material to a distribution point on the top of each storage silo. For added efficiency and protection from the elements, the bottom of the silo serves as a covered loading area, protecting workers and the material. Trucks are driven inside, and gravity once again transfers the load. Typical of facilities handling heavier and larger materials, transload operations like your new model can be found in and near many rail yards, and as freestanding operations, receiving loads in two-bay hoppers. For additional accessories to finish your scene, visit your local hobby dealer, see the current Walthers HO model Railroad Reference Book or visit us online at walthers.com.

#### **OFFICE ASSEMBLY**

Glue Windows (7) and Doors (8) to inside of Walls (2, 3, 4) as shown. Glue Window Glass (9, 10) in Place. Using ridges on Base (1) as a guide, glue Walls (2, 3, 4, 5) in place. Roof (6) can be set in place if you wish to add interior details or lighting (sold separately), or glued in place.





## **GUARD SHACK ASSEMBLY**

Glue Windows (7) and Door (8) to inside of Walls (12, 13, 14, 15) as shown. Glue Window Glass (9, 10) in Place. Glue Walls (12, 13, 14, 15) together as shown. Roof (16) can be set in place if you wish to add interior details or lighting (sold separately), or glued in place.

# SILO ASSEMBLY We suggest installing the Receiving Pit (2) in

Note: We suggest installing the Receiving Pit (2) in step 6, so the base and silo assembly stay flat during construction.

- 1) Make two truck portals. Place the tab on the bottom of each Silo Side (4x 6) in the opening on the ridge on Base (1) and glue in place. Glue Silo Portals (4x 4) to Base and Silo Sides.
- 2) Please refer to the assembly drawing of the silos; you'll build two. Be sure to use only Silo Segment Pieces #3; the larger but similar part #5 on the sprues is not used in this kit. Glue six Silo Segment Pieces (3) to form a ring. Note the position of the seams and internal locating tabs and glue eight rings in a stack for each silo. Carefully cut off the locating tabs on the top ring and smooth the surface. Glue a Roof (7) to the top of each silo.
- 3) Glue the Top Horizontal Conveyor Floor (9) into the holes in the silo Roofs. Glue Conveyor Housing (8) to Floor. Glue Drive Motor Mounting Bracket (10) into notch on Conveyor Housing. Glue Motor (11) into notch on top of Bracket. Glue Drive Belt Guard (12) to motor shaft and hole in Bracket.
  - 4) Glue Hopper Top (16) to Receiving Hopper (15). Glue Small Ladder (14) to left side of Hopper, 3/32" (2.3mm) from back edge. Glue completed Receiving Hopper assembly to raised area on Base; location A on drawing. Assemble lower section of Vertical Conveyor by gluing Sides (2x 18) to Ends (2x 17). Glue Platform (34) to top. Glue Upper Section Sides (35, 36) together and to Platform. Glue Railings (39, 40, 41) to locating holes in Platform.
- 5) Carefully trim the tall Ladder (37) from the sprue we suggest using a sharp sprue cutter to do a neat job. Note the small locating pins on the 1st, 4th, 7th, 10th, and 13th "arms" of the Ladder as you count up from the bottom align these with mounting points on Ladder (37) and glue in place. Place the top of the ladder assembly through the hole in Platform (34). Place the raised pegs on the back of the ladder assembly over the ridges on the Conveyor Side (18) and glue in place. Glue the completed Conveyor to the Hopper Top (16). Glue Sloping Duct (13) to locating point on Conveyor Housing (8) and Upper Section as shown.

6

Remove Tabs

on Top Course

6) Using the Receiving Pit (2) as a guide, cut an opening to clear the pit in your layout surface. Test fit the Pit in the opening, and make any adjustments. When the fit is to your liking, glue Pit to Base (1). Glue Open Conveyor Sides (21, 22) to Conveyor (23). Glue Motor (24) to Conveyor. Glue Belt Guard (25) to Motor and Conveyor. Glue Conveyor Support (31) into the slots in Base (1). Glue upper end of Conveyor Sides to Support, and lower end to the raised support molded on the Receiving Pit. Glue Pit Railings (2x 32, 33) into holes in Base. Glue Track Grates (19, 2x 20) to raised ledge in open areas on Base between rail locators.

#### **SIGNS**

Cut desired sign from sheet. Place a small drop of white glue on the back and place where desired.

