



HO Structure Kit MODERN COLD STORAGE

933-4069

Thanks for purchasing this Cornerstone kit. All parts are styrene plastic, so use compatible glue and paint to finish your model. Please take a few minutes to read these instructions and study the drawings before beginning – PLEASE NOTE – these instructions cover a typical assembly, however walls in this kit are individual panels like the prototypes, and are interchangeable to simplify customizing your model if desired. You can also use fewer parts to make a smaller structure, or combine complete kits and matching add-on wall sections (each sold separately) for a bigger building. Modern Wall Light 3-Pack (#949-4318, sold separately) may be used in place of the nonworking light fixtures (57). For ease of assembly, you may wish to have these additional parts on hand before starting.

Thanks to railroads, you can walk down the aisles of any grocery store and choose a huge assortment of fresh and frozen foods. But look closely at the labels and you may be surprised to see how far they had to travel to reach you in perfect condition! Before they arrived on the shelves, almost all spent some time in cold storage warehouses where they were cooled to between 30 and 50°F (-1.1 to 10° C) to slow the growth of bacteria and the action of enzymes. Although some products do better than others, the process has to be done quickly, avoiding changes in air temperature and maintaining consistent levels of moisture to keep food from drying out and becoming moldy. This is done using large refrigeration units and ventilators that keep air flowing and remove any gases given off by the food. For additional temperature control, many facilities built since the 1980s have been "tip-up" structures, consisting of cast concrete panels tipped upright with a crane. While concrete by itself offers great interior temperature stability, these panels can also be cast in layers with extra insulation in between. In growing areas, these facilities are typically the first stop for food products right after leaving the fields. Precooled shipments then move in refrigerated trailers, containers and railcars to similar operations in large cities where some are owned and operated by grocery stores, while others are independent brokers that resell products to regional and national customers. Both see year-round rail and truck service, but rural operations are often busiest during harvest season. Typical of tip-up industrial buildings constructed in many areas, your new model is perfect as a stand-alone rural receiving/distribution facility, or combined with the Modern Concrete Warehouse (#933-4067, sold separately) as part of a larger city operation. Modeling a complete industrial park is easy with the many support structures and accessories in the Cornerstone Modern Industrial Park series – see them online at walthers.com.

BEFORE STARTING...

All wall panels are glued together on the back using molded locator pins and separate connector plates as shown. A raised ridge is molded at the bottom to align with the base: double walls also have a raised ridge at the top to support the roof, and corner walls have a third raised ridge along the outside edge. When assembling wall sections, work on a flat surface and allow parts to dry.

Truck Dock & Office Wall (assemble from left to right):

PLEASE NOTE: Parts are included to build two different styles of office walls as shown on the drawings.

Choose one style and follow step 1 or 2.

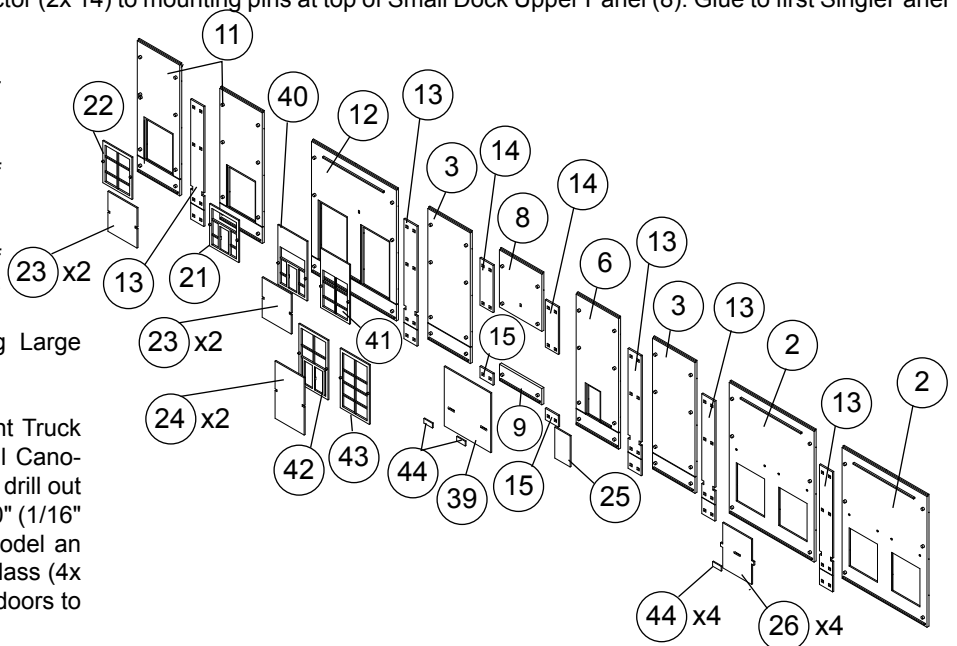
1) OPTIONAL: Single Office Wall (2x 11): Small Window (22), Glass Entry Door (21): both use Small Glass (2x 23). Glue walls together with a Large Connector (13).

2) OPTIONAL: Double Office Wall (12): Both solid top panel and all-glass style doors and windows are provided; choose one. Solid Top Style - use Entry Door (40) and Window (41): both use Small Glass (2x 23). All-Glass Style use Entry Door (42) and Window (43): both use Large Glass (2x 24): align Glass with locating pins on back of frames and glue where parts meet. Glue Large Connector (13) on the right side of Double Office Wall and left of first Single Panel Wall (3).

3) Large Overhead Dock Door: Glue Medium Connector (2x 14) to mounting pins at top of Small Dock Upper Panel (8). Glue to first Single Panel Wall (3) and Entry Panel Wall (6) as shown. PLEASE NOTE: Overhead Door can be left off to model an open door: for a closed door, glue Overhead Door Glass (2x 44) to rear of Double Overhead Door (39). Glue completed door to opening between Walls (8, 9). Glue Small Connector (2x 15) to left and right of Small Dock Lower Panel (9) and to mounting points on first Single Panel Wall (3) and Entry Panel Wall (6). Glue Steel Entry Door (25) to opening in rear of Entry Panel. Glue Large Connector (13) to right side of Entry Panel, and to left of second Single Panel Wall (3). Glue walls (12 & first 3) together using Large Connector installed in step 2.

4) Glue Large Connector (13) between left and right Truck Dock Door Panels (2x 2). PLEASE NOTE: Optional Canopies (4x 65) are provided for truck doors; if you wish, drill out mounting holes on the backs of Walls (2) using a .060" (1/16" 1.5mm) bit. Truck Dock Doors can be left off to model an open door: for a closed door, glue Overhead Door Glass (4x 44) to back of Truck Doors (4x 26). Glue completed doors to openings in rear of Dock Door Panels.

5) Complete assembly by gluing Large Connector as shown to right side of second Single Panel Wall (3) and left side of first Dock Door Panel.



Rail Car Dock (assemble from left to right):

6) Glue first Single Panel Wall (3) and first Double Panel Plain Wall (1) together using Large Connector (13). Glue lower flanges at left on first Plain Panel Wall (1) to first Rail Dock Door Panel (10) and complete assembly by gluing a Medium Connector (14) at top as shown.

7) Glue lower flanges on right of first Dock Door Panel to second Double Panel Plain Wall and complete assembly by gluing a Medium Connector (14) at top as shown.

8) Glue second and third Double Panel Plain Walls (2x 1) together using a Large Connector as shown.

9) Glue lower flanges at left on second Rail Dock Door Panel (10) to third Double Panel Plain Wall (1) and complete assembly by gluing a Medium Connector (14) at top as shown.

10) Glue lower flanges at right on second Rail Dock Door Panel to second Single Panel Wall (3) and complete assembly by gluing a Medium Connector (14) at top as shown.

11) PLEASE NOTE: Rail Dock Doors can be left off to model an open door: for a closed door, glue Overhead Door Glass (2x 44) to back of Rail Dock Doors (2x 29). Glue doors in place on back of both Dock Door Panels.

12) End Walls - make two: PLEASE NOTE: Raised ridges on one edge of Left (5) and Right (4) Corner Wall Panels as shown are the outside edges. Glue Large Connectors (2x 13) to mounting pins on the plain edge (inside) of both Corner Walls as shown.

13) PLEASE NOTE: Parts are included to build an entrance/exit door on the Right (6) or Left (7 not shown) of the Single Panel Entry Wall as seen facing the outside/front - drawing shows #6 from the back/inside. Select the appropriate Wall and glue connector pins to openings on both Large Connectors. Glue Entry Door (25) to opening as shown.

BASE SECTIONS

14) The base is designed for easy modification, however some cutting and splicing will be needed for a longer or shorter design. Align corner tabs and slots and glue where Long (2x 16) and Short (2x 17) Base Sections meet.

MAIN ASSEMBLY

15) Using raised ridges on lower edges of completed wall assemblies, carefully align and support walls: glue to Base and at inside corners where parts meet.

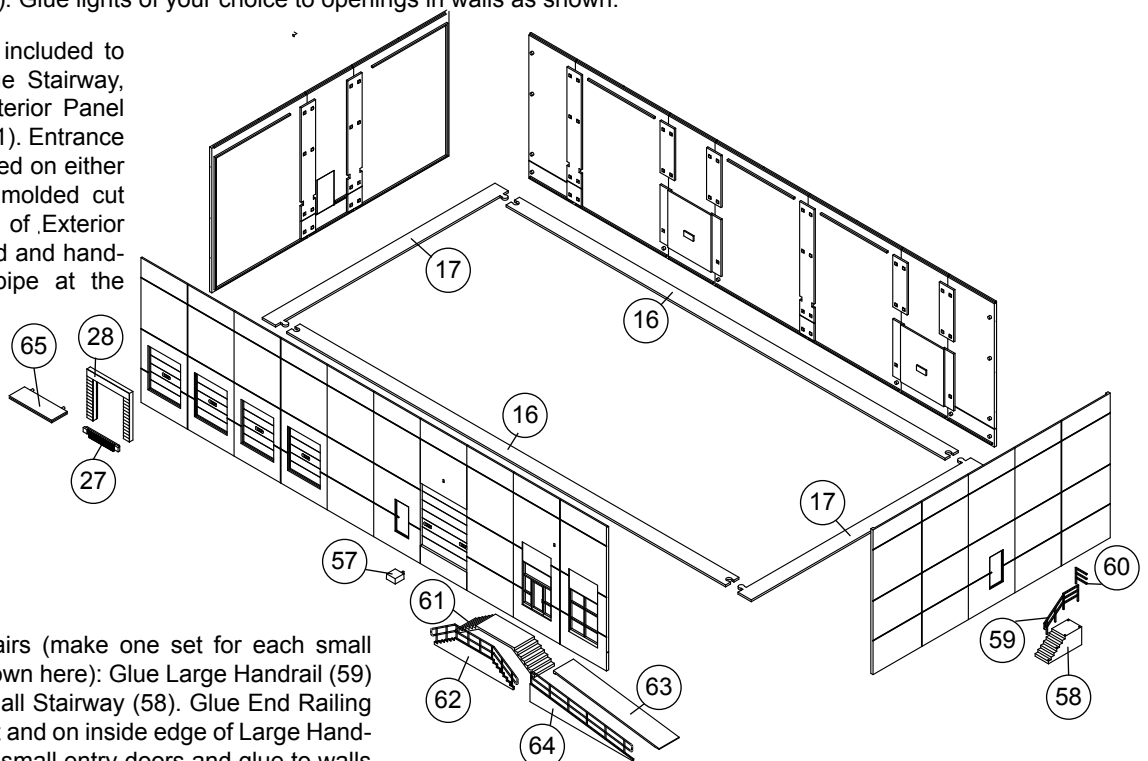
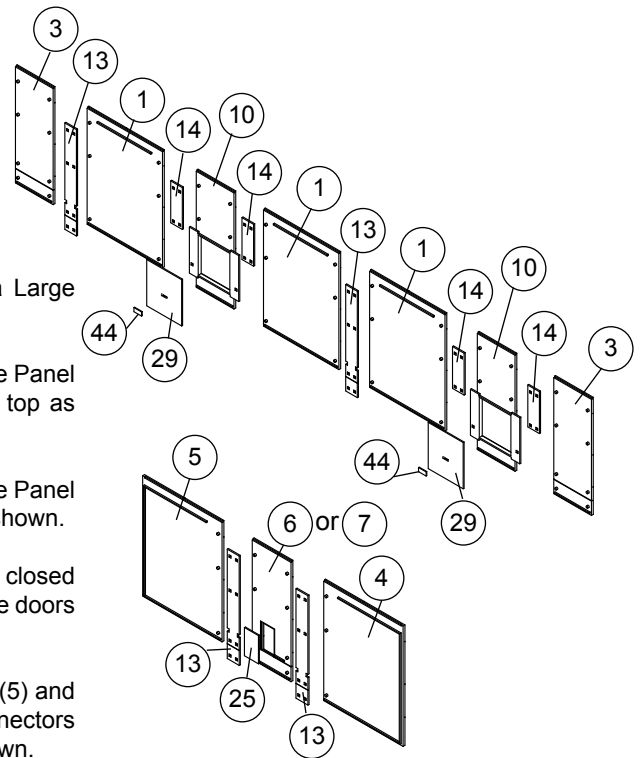
EXTERIOR DETAILS

16) Truck Dock - make 4: glue Weather Bellows/Seal (4x 28) to openings as shown. Glue Bumpers (4x 27) to lower edge of seals. If used, install Canopies (4x 65).

17) Security Lighting: PLEASE NOTE: If you wish, Modern Wall Light 3-Pack (#949-4318, sold separately) may be used in place of the nonworking light fixtures (2x 57). Glue lights of your choice to openings in walls as shown.

18) PLEASE NOTE: Parts are included to build two versions of the Large Stairway, select one: Standard: Glue Exterior Panel (62) to outside edge of Stairs (61). Entrance Ramp: The ramp may be installed on either side (right side shown). Note molded cut lines at left and right on back of Exterior Panel: carefully remove one end and hand-rails outside of the straight pipe at the angles of the pipes. Note that the raised ridge on the underside of Ramp (63) is the upper end; align with top stair and modified Exterior Panel and glue in place. Glue Ramp Exterior (64) to outside edge. Both versions: align completed steps with large entry doors and glue to walls where parts meet.

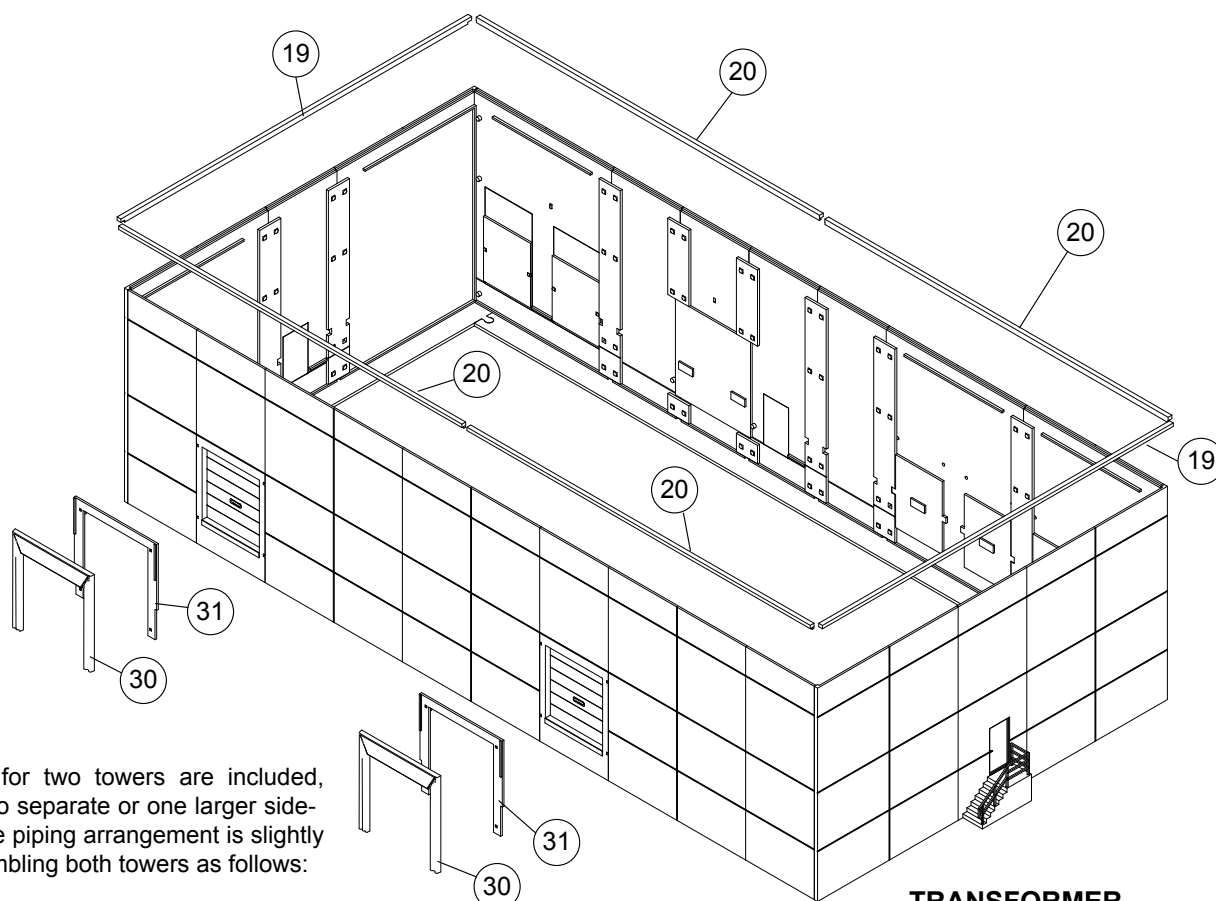
19) PLEASE NOTE: Small Stairs (make one set for each small entry door as needed; three shown here): Glue Large Handrail (59) to mounting points in top of Small Stairway (58). Glue End Railing (60) as shown in mounting point and on inside edge of Large Handrail. Align completed steps with small entry doors and glue to walls where parts meet.



20) Rail Dock - make 2: align pins on back of Weather Bellows/Seal Base (2x 31) with mounting points on edges of Dock Door Panel (10) and glue in place. Glue Exterior Bellows/Seals (2x 30) to outside of Base.

21) PLEASE NOTE: The Side (4x 20) and End (2x 19) Wall Caps are L-shaped; align the thin edge on the inside so the larger edge rests on top of the wall assemblies and glue in place as shown.

22) Pad-Mounted Transformer Cabinet: Using raised ridges on Base (37) to align Walls (32, 33, 34 & 35), glue to Base and at inside corners where parts meet as shown. Align inset area on underside of Top (36) with wall assembly and glue where parts meet.



Cooling Towers

PLEASE NOTE: Parts for two towers are included, which can be built as two separate or one larger side-by-side unit; however the piping arrangement is slightly different. Begin by assembling both towers as follows:

23) Tower Wall Assemblies: Align flange on bottom of all Upper Walls (105, 106, 107 & 108) with top of Lower Walls (102, 2x 103 & 104) and glue where parts meet as shown. Align tabs and slots on backs of wall assemblies and glue to raised ridge on Base (101) and at inside corners where parts meet. For ease of gluing add-on parts, Roof will be installed in step 26.

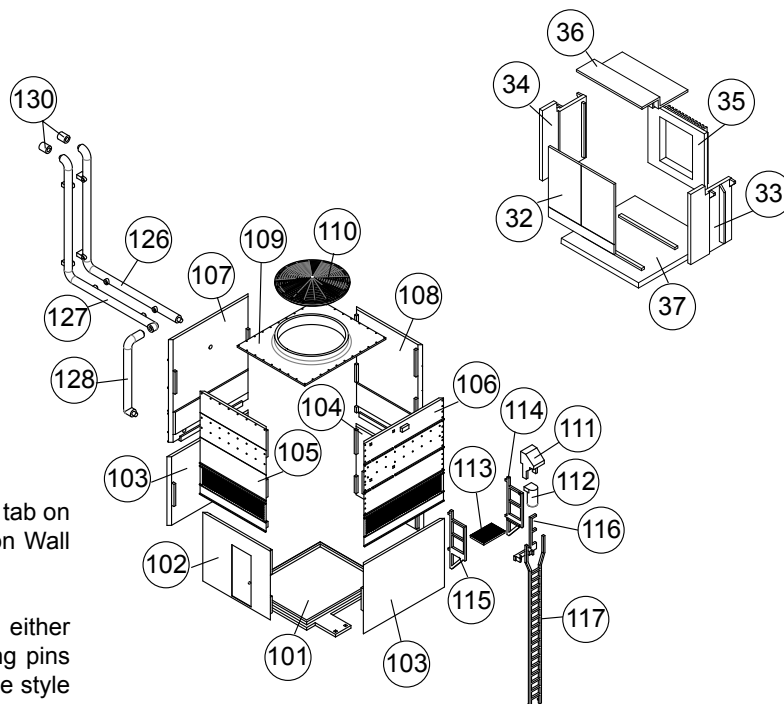
24) Tower Access Platform: Align pins on Right (114) and Left (115) Supports with openings in Wall (106) and glue from inside. With raised detail on top, glue Walkway (113) to flanges on lower inside of both Supports. Align Railing on Support Bracket (116) with railing on Right Support; glue flange on Bracket to outside edge of Walkway. Glue lower end of Ladder (117) to openings in Base and upper end to small inset areas on Support Bracket.

ROOF & DETAILS

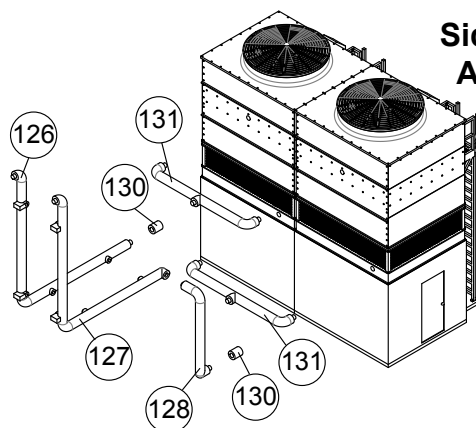
25) Note that Fan Motor Cover (111) has two inset areas: glue tab on Fan Motor (112) to the lower. The upper is glued to the tab on Wall (106) as shown.

Tower Piping - PLEASE NOTE: piping is included to model either stand-alone or side-by-side towers. For both versions, locating pins on ends of pipes fit mounting points on Wall (107). Choose one style and assemble as follows, keeping pipes straight during assembly:

TRANSFORMER CABINET



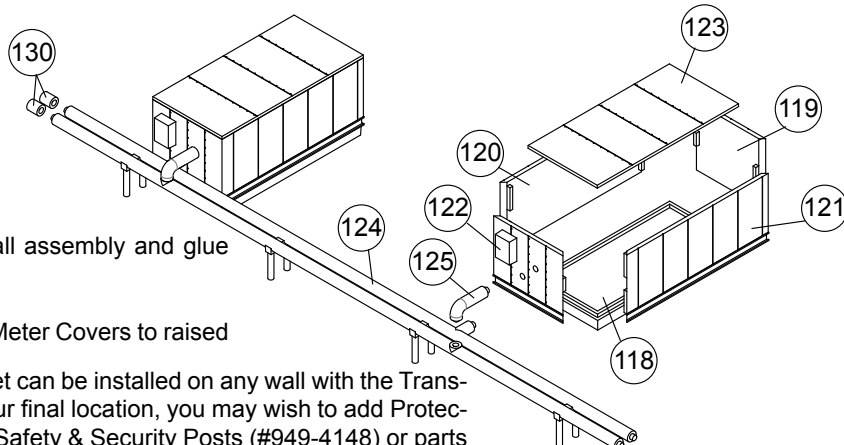
26A) Single Tower: Glue Large Pipes (126, 127) together at four mounting points as shown. Glue Unions (2x 130) to top elbows. Glue Lower Pipe (128) to elbow at back of Large Pipe (127). Glue completed pipes to openings in Wall (107).



Side-By-Side Tower Assembly Shown

26B) Side-by-Side Towers: Glue Connector Pipes (2x 131) to top and bottom

locating points on Wall (107). Glue Large Pipes (126, 127) together at four mounting points as shown. Glue Lower Pipe (128) to elbow at back of Large Pipe (127). Glue a single Union (130) to back of each Large Pipe and to Connector Pipes as shown.



27) Complete tower assembly by gluing Grille (110)

to Top (109); align inset area on underside of Top with wall assembly and glue where parts meet.

28) Electrical Cabinet with Meters (38): Glue Clear (2x 46) Meter Covers to raised

round areas on meter details. The finished Electrical Cabinet can be installed on any wall with the Transformer alongside or some distance away; depending on your final location, you may wish to add Protective Posts to alert drivers using the Walthers SceneMaster Safety & Security Posts (#949-4148) or parts from the Cornerstone Security Details (#933-4076), both sold separately.

ROOF & DETAILS

29) Connect Roof Halves (2x 18) by gluing Large Connectors (2x 13) on underside of each half as shown. Make sure Roof is resting on raised ridges on double wall panels and tops of Connectors (13, 14): it may be glued or simply set in place if you wish to add floors, interior details or lighting (all sold separately).

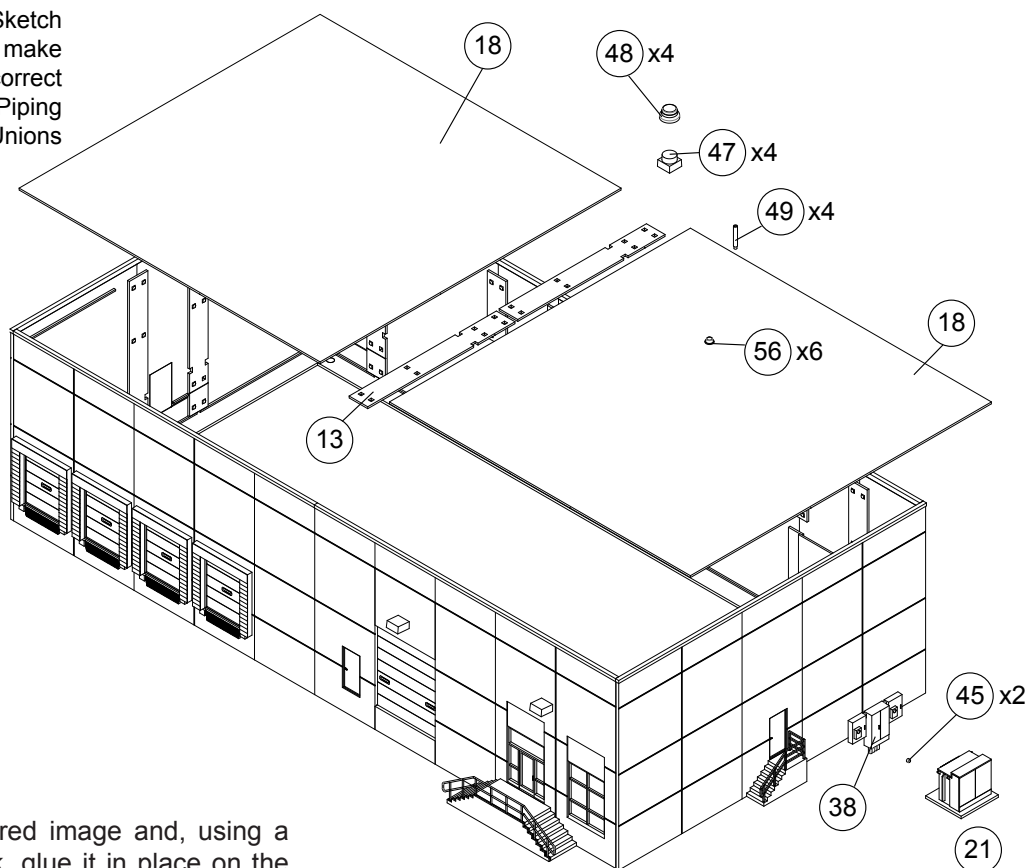
30) Roof-Top Heat Exchangers - make four as follows: With flange on bottom of all Walls (119, 120, 121 & 122), align tabs and slots on backs of walls and glue to raised ridge on Base (118) and at inside corners where parts meet. Align inset area on underside of Top (123) with wall assembly and glue where parts meet.

31) Roof-Top Piping - PLEASE NOTE: Sketch shows a single assembly for the right side, make two sets as follows, and note the correct alignment of connections. Additional Piping (132), Tees (133), Supports (134) and Unions

(130) are provided for customizing, but are not needed for assembly as shown. Glue connector on Long Pipe (124) to lower and Long Elbow (125) to upper opening on Heat Exchanger Wall (122).

32) With the Roof in place, determine where you'll place the four heat exchangers and piping. Align the outside ends of the piping with Unions installed on Large Pipes (126, 127) on Cooling Tower/s. Glue Unions (2x 130) to opposite end of Long Pipe (124); align these with the ends of the second Long Pipe. Once you're satisfied with the overall placement, glue Heat Exchangers and Piping to Roof and Cooling Tower/s.

33) PLEASE NOTE: Finish assembly by gluing Vents (4x 47, 4x 48, 4x 49 & 6x 56) at any point on the Roof.



SIGNS

To mount signs, simply cut the desired image and, using a small drop of white glue on the back, glue it in place on the structure.