N Structure Kit

PRAIRIE CO-OP

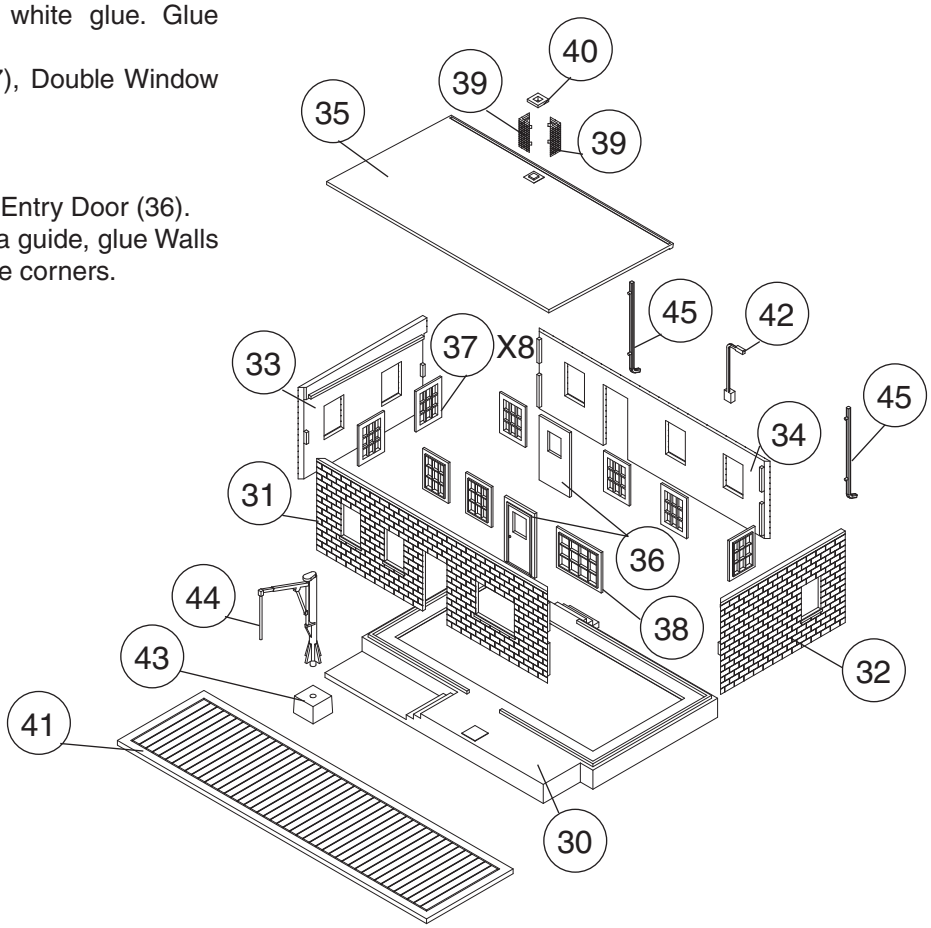
933-3860

Thanks for purchasing this Cornerstone kit. All plastic parts are styrene, so use compatible glue and paint to complete your model. If you wish to paint your structure you may find it easier to do so before beginning assembly. Structures of this type were either left in their natural concrete color, or typically painted solid white.

Throughout the 20th century, advances in farming led to ever-larger grain harvests. But finding a place for all that grain at the local elevator often presented problems since it had to be kept dry and protected from insects and other vermin. Readily available and easy to use, wood was long the material of choice for elevator construction. The basic square designs housed a series of bins, and an elevated head house with the machinery needed to lift and distribute grain. Built-in or attached receiving areas with dump pits provided some protection for unloading wagons and later trucks. A separate office handled the paperwork, including inspecting inbound grain, and housed the scale (each wagon or truck was weighed loaded and empty to determine how much grain had been purchased) as well. While this basic design was widely copied, it had its limits, and was almost impossible to enlarge. Wood buildings were also prone to moisture and rot that required rebuilding or replacement every few years, and were potential fire hazards. From about 1885 on, designers tried to overcome these limits with brick, tile and steel, sometimes in combination, but each presented new problems of their own. By 1915, designers had found that poured concrete offered superior toughness, durability, and insulating qualities that made it the best choice for new elevators, despite being more complex to design and build. Although some small square concrete elevators were built early on, most were much bigger, consisting of several cylindrical bins arranged for maximum strength and efficiency, with the head house above their roofline. Concrete block also provided a quick and easy way to build offices and receiving sheds handling inbound grain. Along with its traditional role of paperwork and payments, the office now housed testing equipment, checking a small sample from each inbound load for moisture content and contaminants (today, this has been automated with a remote-controlled sampling arm). Although newer methods and machinery arrived to make grain elevator operations more flexible, many modern facilities still have their original concrete elevator as the heart of the operation. Typical of concrete elevators built all across the Great Plains from 1915 into the 1960s, they can still be found along mainlines and branches in the heart of small towns where they're usually the tallest building for miles. See your local hobby dealer, check out the current Walthers Model Railroad Reference Book or visit us online at walthers.com for additional figures, scenery materials, railcars and other details to complete your new elevator.

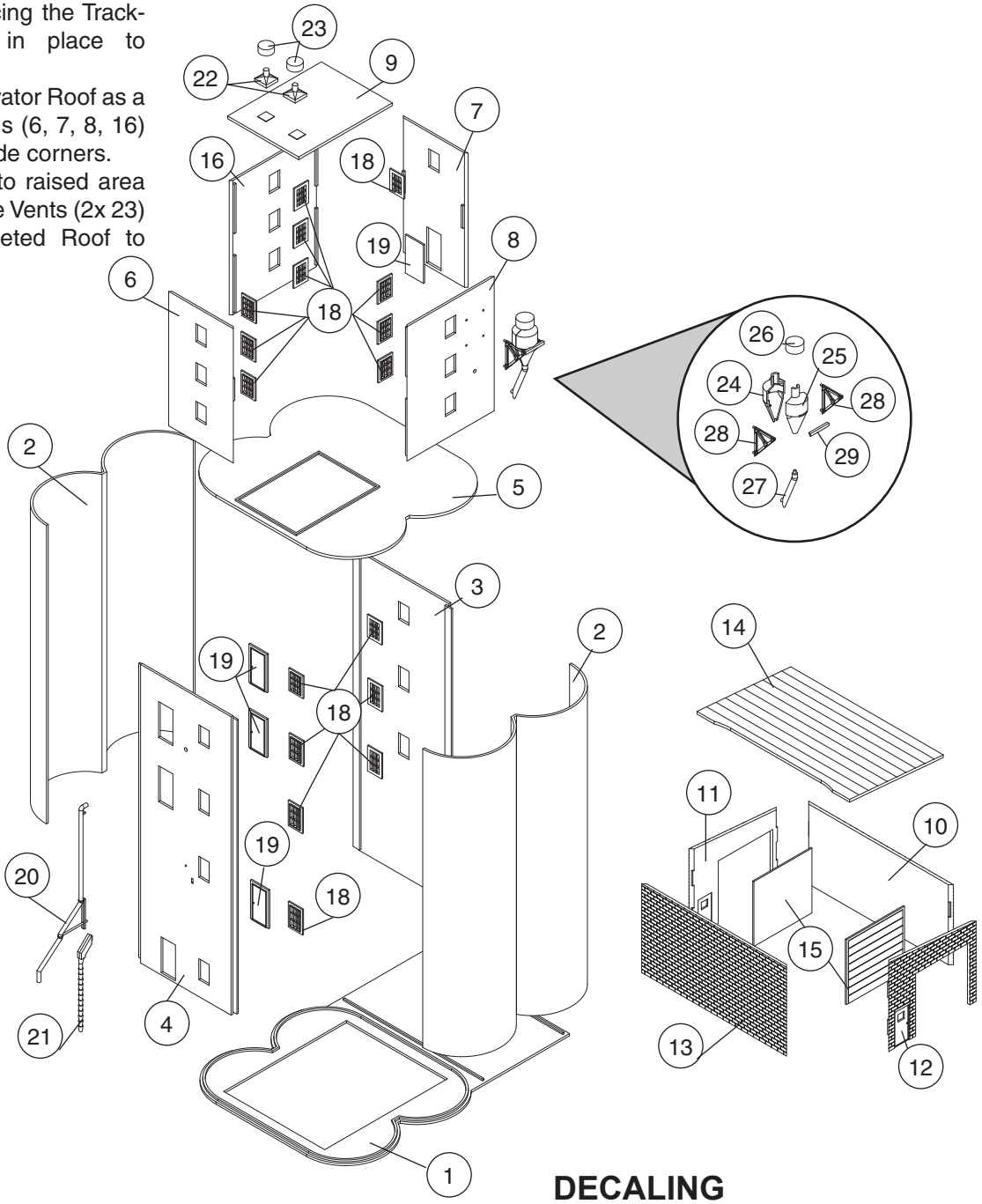
Office

1) Acetate is provided for window glass. Cut pieces slightly larger than the Windows and glue in place with white glue. Glue Windows and Doors to Walls as shown:
Front Office Wall (31): Small Windows (2x 37), Double Window (38), Entry Door (36).
Right Office Wall (32): Small Window (37).
Left Office Wall (33): Small Windows (2x 37).
Rear Office Wall (34): Small Windows (3x 37), Entry Door (36).
2) Using raised ridges on Office Base (30) as a guide, glue Walls (31, 32, 33, 34) in place as shown and at inside corners.
3) Glue Sample Arm (44) to Sample Arm Base (43). Glue completed Sample Arm to mounting point on Base.
4) Glue Chimney Halves (2 x 39) together and to Chimney Cap (40). Glue completed Chimney to mounting point on Roof (35). Roof may be set in place to add lights or interior details (sold separately), or glued in place as desired.
5) Glue Downspouts (2x 45) to mounting holes on each corner of Rear Wall. Glue Electric Meter (42) to any convenient location on Rear Wall with conduit below the roofline.
6) Install Truck Scale (41) in new or existing scenery in front of the completed Office.



Elevator & Head House

1) Acetate is provided for window glass. Cut pieces slightly larger than the Windows and glue in place with white glue. Glue Windows and Doors to Walls as shown:
Trackside Elevator Wall (4): Windows (4x 18), Access Doors (3x 19).
Rear Elevator Wall (3): Windows (3x 18).
Head House Front Wall (6): Windows (3x 18).
Head House Left (16) and Right (8) Side Walls: Windows (3x 18 each; 6x total).
Head House Rear Wall (7): Window (18), Access Door (19).
2) Using raised ridges on Elevator Base (1) as a guide, glue Walls (3, 4) and Bins (2x 2) in place as shown and at inside corners.
3) Loading spouts for boxcars and covered hoppers are included, as many elevators were refitted to load both in later years. Choose the styles you'll use; fill any unused mounting points with styrene scrap and sand smooth. Glue the Covered Hopper Loading Spout (20) to the two mounting points centered in the Trackside Elevator Wall; glue the Boxcar Loading Spout (21) to the single mounting point at lower right as shown.
4) Note the correct alignment of the Elevator Roof (5) with raised area facing the Trackside Elevator Wall. Glue in place to completed elevator assembly.
5) Using raised ridges on Elevator Roof as a guide, glue Head House Walls (6, 7, 8, 16) in place as shown and at inside corners.
6) Glue Vent Bases (2x 22) to raised area on Head House Roof (9). Glue Vents (2x 23) to Vent Bases. Glue completed Roof to Head House.



Dust Collector

1) Glue Front (24) and Rear (25) halves together. Glue Cap (26) to top.
2) Glue Braces (2x 28) to mounting points in Head House Right Side Wall (8) as shown.
3) Insert Dust Collector between Brackets and glue in place. Glue Cross Brace (29) in place.
4) Glue Discharge Pipe (27) to bottom of Dust Collector and opening in Wall.

Receiving Shed

1) Using the raised ridges on the rear of the Elevator Base as a guide, glue Walls (10, 11, 12, 13) to Base and at inside corners. Overhead Doors (2x 15) can be glued in place or left off as desired. Glue Shed Roof (14) to completed Shed assembly.

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®.