HO Structure Kit

SINGLE TRACK RAILROAD BRIDGE CONCRETE PIERS

933-4550

Thanks for purchasing this Cornerstone® kit. Please read these instructions and study the drawings before starting construction. All parts are styrene, so use compatible glue and paint to finish your model. As part of the Cornerstone Engineered Bridge System (walthers.com/bridgesystem), your new model can easily be used with other Cornerstone bridges and accessories to create a custom structure for your railroad.

Unlike most buildings that can rest on a foundation, bridges require very specialized support structures to withstand the tremendous weight, vibration, pushing (compression) and pulling (tension) forces exerted by a moving train. Where both ends of the structure meet the land, they rest on large substructures known as abutments. But for multiple spans that meet ateach end, or where traffic will be heavier, smaller piers are used. These are built in various shapes, sizes and heights to fit the terrain, and are typically made of poured concrete. Piers may rest on dry land, but they're also found directly in moving water. Built to withstand the current, many are also fitted with a cutwater, a V-shaped extension facing upstream into the current, that deflects floating debris or ice floes around the pier. Based on a common pier design used by many railroads, your new model makes it easy to add this important detail to your layout. Designed especially for use with single-track bridges from the Cornerstone Engineered Bridge System, this kit can also beadapted to similar bridge models, each sold separately. For a complete installation, matching Single-Track Railroad Bridge Concrete Abutments (#933-4551) are available separately. For more ideas andinformation on the Cornerstone Engineered Bridge System please visit **walthers.com/bridgesystem**. For additional products to complete your scene, see your participating hobby dealer, check out the latest Walthers Model Railroad Reference Book or visit us online at walthers.com.

BEFORE STARTINGCONSTRUCTION: Molded cut lines are provided on the Left and Right Side Walls (2x 1), and the Front and Rear Walls (2x 2) to build shorter or narrower piers if desired. Be sure to make your cuts at the same line. If used, the Cutwater (3) will need to be trimmed to fit. We suggest test-fitting the piers as subassemblies directly on your layout to determine final placement of all parts. Be sure the finished piers (and abutments, sold separately) are level and correctly aligned before attaching them to your layout.

A) Glue Left and Right Side Walls (2x 1), to Front and Rear Walls (2x 2). Glue Bearing Plate (4) to top of wall assembly.

B) To model a pier in "moving" water, glue Cutwater (3) to one end of the wall assembly; on your layout this should face towards the current.

C) Parts are included to customize your assembly with three sizes of Risers, which are used on the prototype wherever bridges with different girder depths meet - please visit **walthers.com/bridgesystem** for some typical examples. Determine the appropriate size, and glue parts as shown. Glue completed Riser to Bearing Plate so it supports the shallower depth bridge.

PLEASE NOTE:
Risers shown are optional - see Step 3.