

SuperSill®

Abutments for Modular Vehicular and Pedestrian Bridges

Abutment Support System for TrueNorth Steel Bridges

Whether you require a bridge crossing for vehicles, trail use, golf courses or pedestrian applications, the SuperSill® abutment system is simple, cost-effective and fabricated with the same quality and design requirements as the TrueNorth Steel Bridge it supports!



TrueNorth Steel
Bridge™

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SIMPLIFY YOUR BRIDGE INSTALLATION

The SuperSill is a patented, prefabricated, steel concrete abutment form with integral reinforcement.

SuperSill prefabricated abutments eliminate on-site concrete forming and placement of steel reinforcement.

SuperSill is comprised of a wide flange W-Beam bearing seat, lifting lugs, reinforcing, and concrete forms. No additional steel reinforcement is required.

SuperSill includes integral backwall for pedestrian bridges and separate steel backwall for vehicular bridges, providing interface between bridge and roadway approaches.

Upon request, TrueNorth Steel will provide minimum soil bearing requirements and other minimum soil properties based on the bridge span and loading conditions.

SuperSills are sized and supplied based upon site soil allowable bearing capacity and other properties that are normally determined by a geotechnical engineer. Contact your TrueNorth Steel representative for additional guidance.

SuperSill abutments can be shipped unfilled or filled with concrete, on the same truck as the bridge. Alternatively, Concrete can be placed into unfilled SuperSill once installed and with the bridge set.

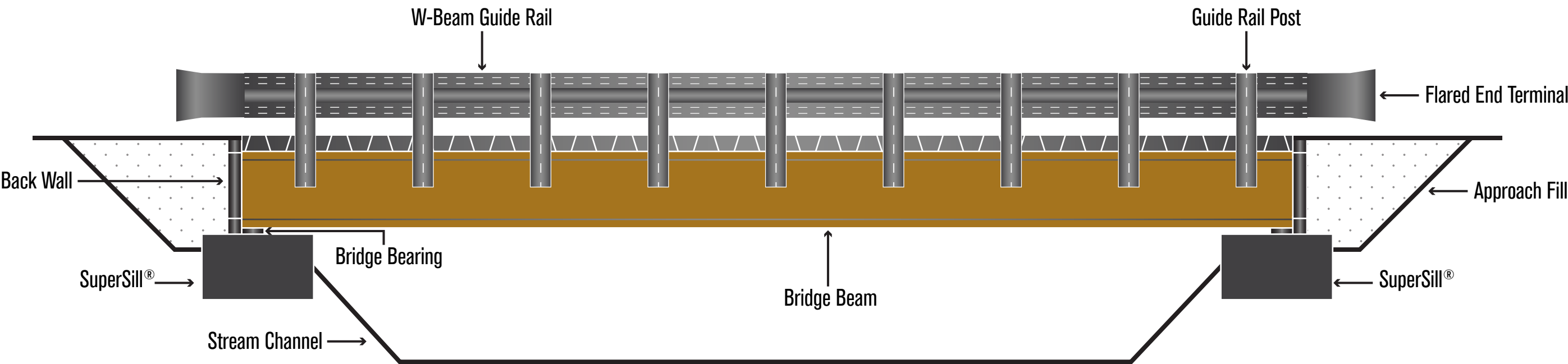
SuperSill can be supplied with the bridge or in advance of delivery of the bridge for preplacement. Additional freight costs may be required.

SUPERSILL INSTALLATION GUIDELINES

Following are general steps required for proper installation. Additional site evaluation and installation steps may be required.

1. Locate the area for proper placement of the SuperSill foundation.
2. Level and compact the foundation soil to the required density while ensuring the soil is level, relatively smooth, and free from large stones, voids, organic materials, or frozen soil. A geotechnical engineer should be consulted to determine proper compaction and testing requirements.
3. Place the SuperSill on the compacted soil and ensure it is properly placed at the correct elevation.
4. Fill SuperSill with Class A concrete or better having a minimum compressive strength of 3,000 psi. Clean any loose concrete from the top of the wide flange beam at the top of the SuperSill that will receive the bridge.
5. Bridge can be set immediately in most circumstances; alternatively, concrete can be placed into the unfilled SuperSill once installed and with the bridge set. Consult with your TrueNorth Steel representative for additional guidance.
6. Lay out bearing assemblies on top of wide flange beam to accurately correspond to the bridge girder spacing. Reference bridge shop drawings to confirm proper placement.
7. Refer to TrueNorth Steel installation guide for additional information on assembly and placement of bridge modules and bearing assemblies.

*TrueNorth Steel recommends that the owner and or their contractor consult with a qualified engineer to evaluate site conditions including confirming soil bearing capacity and the suitability of the use of SuperSills for the application. In addition, it is recommended that the bridge foundations be evaluated for potential settlement, scour and erosion and that appropriate measures are taken to guard against same.



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