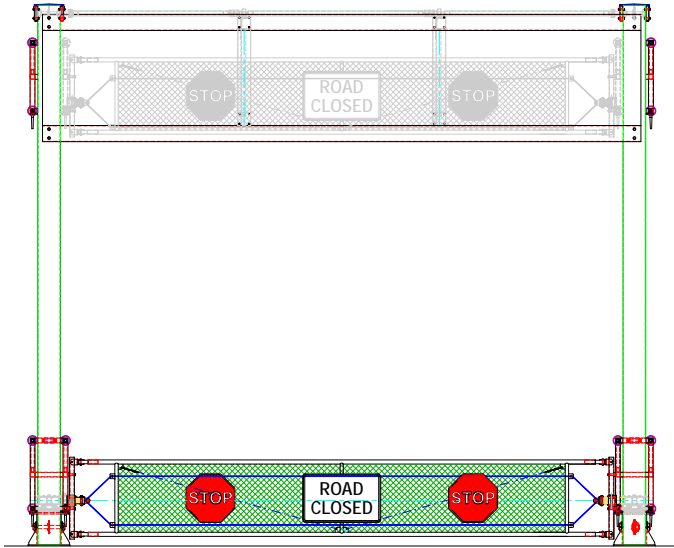


SOFT STOP VLR VERTICAL LIFT RESISTANCE BARRIER Specifications



GENERAL: The soft stop vertical lift resistance barrier shall be Model VLR, as manufactured by B&B Roadway, (888) 560-2060.

APPLICATIONS: The barrier shall be designed for use as a penetration resistance barrier system to capture and decelerate vehicles with minimal risk to the occupants. The barrier system shall be crash tested and certified by an independent testing facility to meet Federal Highway Administration standards for arresting and decelerating the vehicle to a safe stop.

SOFT STOP BRAKING SYSTEM: The braking system shall be designed and crash tested to safely decelerate and stop a 1,965 pound vehicle and a 4,400 pound vehicle traveling 62 mph without damage to the vehicle power train, windshield or passenger compartment. The braking mechanism shall be resettable in minutes and capable of sustaining repeated crashes without replacement of any of the braking system parts. The payout strap shall withstand

repeated crashes and shall have an expected life of 5 years. The braking system stopping force shall be adjustable to allow tailoring the system for various vehicle weights, stopping distances and roadway widths.

CAPTURE SYSTEM: The capture system shall be designed for ease of replacement and shall be crash tested to safely capture and maintain control of a 1,965 pound vehicle and a 4,400 pound vehicle traveling 62 mph, while bringing each vehicle to a safe, controlled stop. The test vehicles shall remain stable vertically and horizontally and shall not veer into adjacent traffic lanes.

SYSTEM RESET AFTER CRASH: After a normal crash into the capture and braking system, the demonstrated repair time to get the system operating back into service shall be 30 minutes or less using normal hand tools without the use of cranes or other mobile equipment. This shall include resetting the brakes and replacement of capture panel.

OPERATING MECHANISM: The Operating mechanism shall consist of two pairs of vertically mounted tubes, an electro-mechanical drive system, counter weights as required to balance the loads, a pair of carrier mounted mechanical payout brakes, a net panel capture system and other electrical and mechanical equipment. The capture panel shall be mounted on carrier pins and shall be raised and lowered by the electro-mechanical drive system. The capture panel shall be held in a stable position by the carrier pins on each side of the roadway which shall release the panel during a normal crash without damage to the carriers. Operating time to open or close the roadway shall not exceed 18 seconds.

ELECTRO-MECHANICAL DRIVE: The electro-mechanism shall consist of an instant reversible electric motor, a fully enclosed worm gear speed reducer and a chain drive system to raise and deploy the vehicle capture panel. The operating mechanism shall be counter-balanced with enclosed counter-weights to minimize wear and loading to the electro-mechanical drive system.

MOTOR AND BRAKE: The motor voltage and phase shall be as specified by the customer and shall include a motor mounted brake to assure accurate and stable stopping positions. The motor horsepower shall be as recommended by the barrier manufacturer to suit the installation, from 1 to 2 hp. The motor shall be a C-face design and shall be mounted directly to the transmission. The motor shall be instantly reversible and overload protected.

LIMIT SWITCHES: Suitable limit switches shall be incorporated onto the barrier system to provide safety, accuracy of barrier deployment and interfacing with other equipment and communication systems as required for each installation.

ACCESS DOORS: Suitable access doors shall be provided to all access to all equipment as required for service, parts replacement and adjustments. Suitable locks will be provided as required for safety and vandal resistance.

COUNTERWEIGHTS: Counterweights shall be provided to mechanically balance the operating mechanism to minimize wear, drive loading and power requirements. Counterweights shall be sectional and shall be balanced at the factory.

MOUNTING: The barrier shall be fixed to a suitable foundation, as specified by the project engineer, using twenty-four 1" (25mm) diameter anchor bolts. The barrier housing base shall provide 1.25" (32mm) mounting holes.

HANDCRANK: Both a handcrank and a drill crank shall be provided with each barrier to facilitate manual operation.

SAFETY SWITCHES, TERMINAL BLOCKS AND WIRING: A manual disconnect switch shall be provided, pre-wired at the factory to break the main motor leads, to protect personnel during service. A handcrank safety switch shall be provided to prevent automatic actuation of the barrier during manual operation. Control components and terminal blocks shall be mounted inside an electrical enclosure, which shall be mounted inside the operator housing. Pressure-type, modular terminal blocks shall be fully labeled and clearly coded to wiring diagrams. All control wiring shall be clearly coded to wiring diagrams and shall terminate at the terminal block. Connections to screw-type terminals shall have lugs. Conductors shall be type XHHW #14 AWG stranded, minimum.

ACCESSORIES AND MODIFICATIONS: All common accessories and modifications shall be available. Custom modifications and accessories shall be available through coordination with manufacturer.

WARRANTY: A warranty shall cover the barrier and related equipment against defective material and components for 1 year from date of shipment from manufacturer. Manufacturer shall furnish replacement parts for a minimum of 10 years. Replacement parts for most components shall normally be available in 1 working day. Lamps, fuses and other components designed for a life less than 1 year shall be covered for the rated life of the component or the warranty period of the component manufacturer.

PARTIAL LIST OF ADDITIONAL OPTIONS (contact factory for detailed specifications):

Capture Panel Finishes, Materials and Colors	Mounting Template and Anchor Bolts
Arm Lights and Flasher	Alternate Door Latch Styles
Door Strap with Integral Heavy Duty Padlock Hasp	Reflective Button Delineator
Tamper-Resistant Door Latches	Gong or Vibrating Bell

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