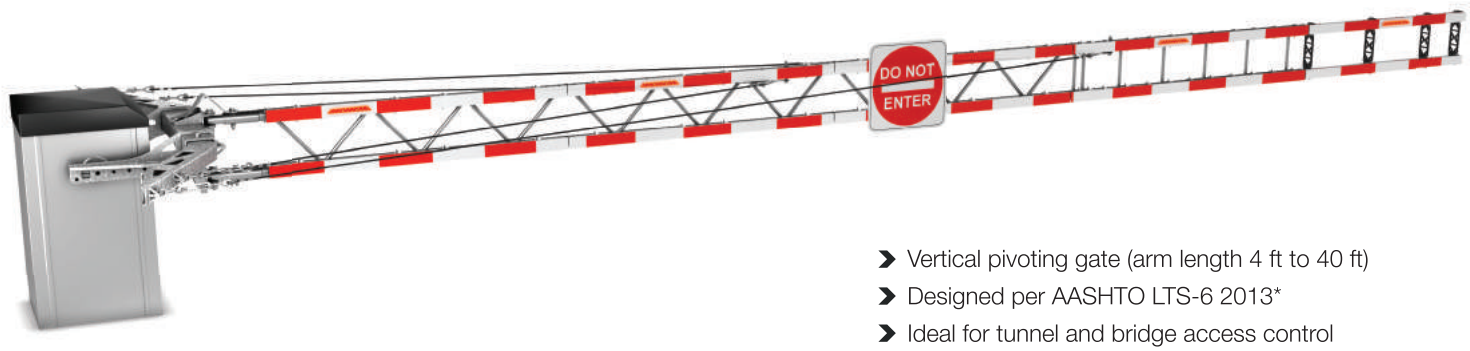
VERSILIS INC

VSG-40

VERTICAL SWIFTGATE

PRODUCT SHEET



- Vertical pivoting gate (arm length 4 ft to 40 ft)
- Designed per AASHTO LTS-6 2013*
- Ideal for tunnel and bridge access control

*Some exceptions may apply

SWIFTGATE SOLUTION OVERVIEW

SwiftGate is the Versilis automated gate solution specifically designed for highway traffic control operations. Various types of gates, such as the Vertical VSG-40, fall under the SwiftGate umbrella, as they all share the same design key features and communication technology. Whether the gates are short or long, pivot horizontally or vertically, Versilis has kept the same objectives in the design of each SwiftGate product: motorist safety, ease of integration and operational efficiency.

VSG-40 OVERVIEW

Gate VSG-40 pivots vertically and offers increased visibility using a high surface of reflective material and LED lighting. The gate arm's unique design provides strength, and durability. Manufactured with corrosion resistant materials, the VSG-40 is designed to withstand harsh roadside conditions and weather environments. Operation and integration is made easy with the Versilis communication hardware which offers different communication options to allow gates to be operated, monitored and sequenced, locally and remotely.

VSG-40 OPERATION

Gate VSG-40 includes the necessary Versilis Control Unit to receive and execute commands. A system application may include one or many gate modules that can be activated individually, in sequence, in groups, or as part of an overall solution that brings together various traffic devices, including lane control signs, flashing beacons, traffic light controllers, etc. Different communication interface options allow gates to be controlled and monitored remotely from a Traffic Management Center. For on-site operation and maintenance, a radio frequency (RF) handheld remote control is available, as well as push buttons.

VSG-40 ARM

The VSG-40 gate arm is built with easily replaceable aluminum sections, and a last section made of polycarbonate, offering more flexibility at the gate end. The gate arm, designed with two rails, offers maximum visibility and reflectivity using an increased flat surface of high intensity retroreflective sheeting, close to double the surface of typical highway gates. A large flexible polycarbonate sign and flashing LED lighting provide a clear and visible message to motorists that the access is closed. This large sign can be a chevron, positioned at the end of the gate arm, or a 'DO NOT ENTER' sign, centered on the gate arm. Other sign options are also available. In the event of an impact, a pivot mechanism allows the gate arm to swing out and minimize damage to the gate. A safety device is provided to lock the impacted gate arm and prevent the arm from swinging back.

APPLICATIONS

- Managed lane access control
- Reversible lane access control
- Tunnel/Bridge emergency/maintenance closure
- On-ramp and off-ramp control
- Median crossover management
- Other similar access control applicationsG-0

SAFETY
PERFORMANCE
EFFICIENCY

INCREASED HIGHWAY OPERATION EFFICIENCY

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VSG-40

VERTICAL SWIFTGATE (UP TO 40'

PRODUCT SHEET

TECHNICAL FEATURES

PHYSICAL

- Gate arm length available from 4' to 40' in approx 4" increments
- Pivoting range of 90 degrees (vertical)
- Deployment or retraction time: typically less than 15 seconds
- Arm: aluminum sections with quick-connect junctions
- Arm last-section: polycarbonate
- Wind load: 100 mph for 40' (shorter gates can sustain higher wind)
- Designed according to AASHTO LTS-6 2013 (exceptions may apply)

REFLECTIVITY

- Gate arm retroreflective sheeting surface: 64 in^2 per linear feet
- Added sign retroreflective sheeting surface: 510 in^2 minimum
- Retroreflective sheeting colors and grade: high intensity Type 3 or 4 or equivalent with alternating red and white vertical colors angled at 45 degree, or as specified by project requirements
- Red flashing gate LED; configurable light intensity and flashing pattern i.e. synchronized or delayed through the gate system

HOUSING

- E-coating process protected structure, covered with removable aluminum lateral panels
- Built-in anchoring plate, pre-drilled for four 7/8 inch anchors bolts
- Housing dimension: 638 mm x 729 mm x 1248 mm (25-1/8" x 28-3/4" x 49-1/8")
- Weight excluding arm: approx. 1350 lbs (615 kg)

ELECTRICAL

- Standard Versilis Control Unit for electrical motor control, LED power management & flashing logic, and battery charger function
- Battery 12V DC, AGM type as power backup for communication hardware and gate LED operation
- Housing heated by a 300 Watts element controlled by thermostat

GATE MECHANISM - MOTORISATION

- Electrical motor 1 hp with thermal protection (240V AC 1-phase; 208, 480 or 600V AC 3-phases)
- Drive mechanism: pulley and "V" belt
- Gearbox worm type, self-locking, ratio 49:1
- Speed reducer high efficiency, ratio 3:1
- Mechanical overload protection: torque limiter with two friction disks
- Yellow dichromate electro zinc rust protection
- Hand crank manual override

COMMUNICATION INTERFACE OPTION

- Wireless (US 915-MHz ISM band)
- Wire RS-485 interface
- Fiber optic

HANDHELD RF REMOTE CONTROL

- Wireless (US 915-MHz ISM band)
- Approximate range of 1 mile in normal condition with line of sight

CONTROL OPTIONS

Ability to mix and match control options for added operational flexibility and redundancy.

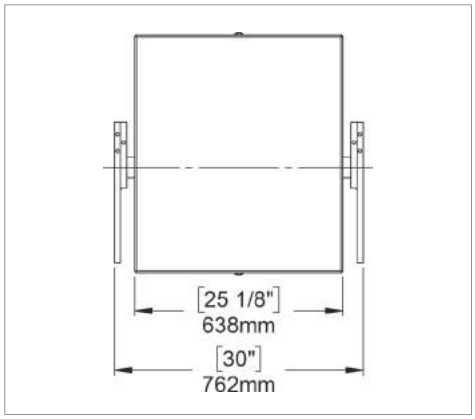
Local Control Options:

- Versilis handheld RF remote control
- Push buttons

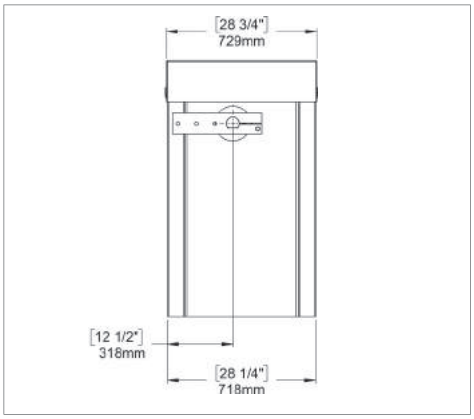
Remote Control Options:

- Versilis Commander for NTCIP and WEB access over Ethernet
- PLC using dry contacts

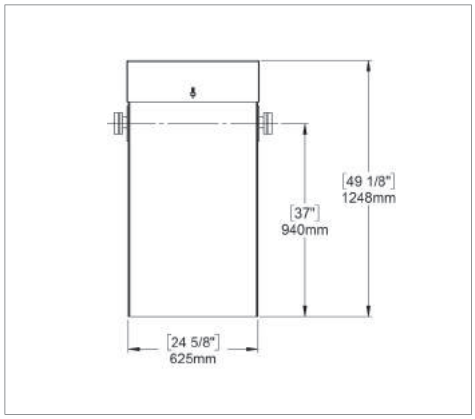
*When ice loading applicable.



Housing top view



Housing side view



Housing front view

ABOUT VERSILIS

Versilis takes pride in developing quality innovations and providing exceptional service. Everything we do is governed by three principles: quality, safety and efficiency. In an effort to meet the highest quality standards and respond to clients' evolving requirements, Versilis engineers work hard at continuous product improvement. For this reason, Versilis reserves the right to modify minor technical details listed in this product information sheet without warning.

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