



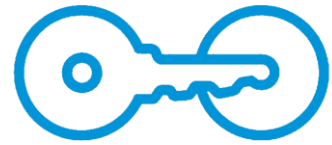
3 Part Specification for: **Bike-Shell™ 350 Series**
BICYCLE LOCKERS
12 93 00 Site Furnishings
12 93 14 Bicycle Lockers

*These specifications were current at the time of publication, but are subject to change at any time without notice. Please confirm the accuracy of these specifications with the manufacturer and/or distributor prior to installation.

PART 1 – GENERAL

1.1 SYSTEM DESCRIPTION:

- A. **Aesthetic Requirements:** Lockers shall be aesthetically pleasing in appearance with stippled textured finish, raised crowned roof and relieved pattern in “Y” or “X” design on end walls. Outside corners shall smooth having minimum 0.5" radius. Custom design and color changes shall be accommodated as to be specified.
- B. **Performance requirements:**
1. Superior corrosion and weathering resistance, high impact strengths, rigidity and dimensional stability.
 2. Lockers shall not have external or internal frame and shall be bolt together component system to permit assembly and disassembly on-site with grouped units sharing common walls.
 3. Molded Fiberglass Laminated Components shall have;
 - a. Flexural Strength 32,200psi
 - b. Tensile Strength 18,000psi
 - c. Glass Content 35% to 37%
 4. Precision molded fiberglass composite construction with mechanical and hand lamination. UL rated material to be self-extinguishing, conforms with UL 94-V2.
 5. Component materials shall be field repairable to “like new” specifications.
 6. Finish shall be integral surface of components laminated in molding process
 7. Locking, latching and anchoring/leveling systems shall be installed by manufacturer.
 8. Aluminum alloy materials shall not be permitted for mechanical and structural assemblies in contact with anchoring surface.
 9. ABS or HDPE materials shall not be permitted for FRP exterior materials.
- C. **Definitions:**
1. Unit shall be used to indicate the number of enclosures or boxes, two door units hold two bikes in separate lockers, one door units hold one bike in one locker. Units can be grouped to form linear row with common walls.



1.2 QUALITY ASSURANCE

- A. Installer Qualifications: An experienced installer who has completed installation of bicycle lockers similar in material, design, and extent to that indicated for this project and whose work has resulted in construction with a record of successful in-service performance.
- B. Manufacturer Qualifications: A manufacturer with primary experience in fiberglass composite lamination, machining and mechanical assembly of bicycle lockers as required for this project and with a record of successful in-service performance.
- C. Source Limitations: Obtain each color, finish, and type of bicycle locker from manufacturer with resources to provide components of consistent quality in appearance and physical properties.
- D. Product Options: Drawings indicate size, shape and dimensional requirements of bicycle lockers and are based on the specific system indicated.

1.3 REFERENCES

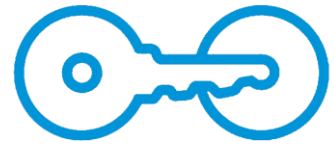
- A. Molded Fiberglass Composite Components
 - 1. ASTM D790 Flexural Properties of Unreinforced and Reinforced Plastics. Flexural Strength of laminated fiberglass composites.
 - 2. ASTM D638 Tensile Strength of Unreinforced and Reinforced Plastics. Tensile Strength of laminated fiberglass composites.
- B. Door Hinge:
 - 1. ASTM A314 Standard Specification for Stainless Steel Billets and Bars for Forging.

1.4 SUBMITTALS

- A. Product Data: Include physical characteristics such as shape, dimensions, bicycle parking capacity and finish.
- B. Shop Drawings: Show assembly and installation details.
- C. Samples for Verification: Showing the lamination of the fiberglass composite components with integral color of the finish. Prepare 2 inch by 3.5-inch (50.8 mm by 87.5mm) samples (or larger) from the same material to be used to mold the product.
- D. Maintenance Data: Include standard maintenance manual for this product.

1.5 DELIVERY, STORAGE, AND HANDLING

- A. Inspect bicycle lockers and components on delivery for carrier damage. Store bicycle lockers in original undamaged packaging in an area sheltered from weather until ready for installation. Inspect bicycle lockers and components prior to installation.



1.6 WARRANTY

- A. Bicycle lockers are to carry a one year manufacturer's limited warranty against defects in materials and workmanship. The one year warranty period begins the date the product is shipped from the manufacturer.
- B. High security Abloy lock sets shall be guaranteed for two years; Abloy keys are guaranteed against wear for life.

PART 2 - PRODUCTS

2.1 ACCEPTABLE MANUFACTURERS

- A. Provide Bike-Shell™ bicycle lockers manufactured by American Bicycle Security Co., PO Box 7359, Ventura, CA 93006-7359, 800-245-3723, fax 805-933-1865, e-mail: turtle@ameribike.com

2.2 MATERIALS

- A. Molded components** shall be molded of fiberglass reinforced plastic composite having a lamination schedule with E-glass and polyester resin.
- B. Finish**
 - 1. Stipple texture Gelcoat with UV inhibitors laminated to components in molding process, mark and abrasion resistant coating, Solvent-wipe to clean up spray paints.
 - 2. Color as selected by architect from manufacturer's full range of standard colors or specify custom color to be matched.
 - 3. Construction of molded panels with finish applied after molding process shall not qualify.
- C. Hardware**
 - 1. Hinge shall be heavy gauge stainless steel continuous top to bottom of door. Hinge shall be installed on door with door hung in door frame by manufacturer.
 - 2. Stainless steel louvered vents shall be on each door, top center location for ventilation of lockers.
 - 3. Gear/clothing hooks two per locker shall be fastened to interior walls.
 - 4. All assembly fasteners shall be internal and zinc plated or better.
- D. Standard Locks and Locking Hardware**
 - 1. PN#010 – Padlock/U-Lock Locking System. Stainless steel padlock/u-lock handle. Padlocks/U-Locks not included.
 - 2. PN#015 – Stainless steel pop out T-handle assembly with a removable high security inner cylinder with biaxial lock design manufactured by Abloy Security, Inc., individually keyed with three duplicate keys per cylinder. 1 master key provided. ISO 9001 Certified.



3. Lock handle and housing shall be stainless steel with chrome plated handles and housings not acceptable.
4. Full length sliding locking bar secured to the door with ½" diameter stainless steel bolts and rides on teflon washers. Movement of locking bar is controlled by stainless steel cams attached to shaft of lock.
5. Locking system shall be installed and adjusted for operation by manufacturer before shipping.

E. Common and Diagonal Walls

1. Diagonal walls are exterior type OSB panels, sealed and pre-drilled for attachment. (For model 352 and 352SS only)
2. Common walls are molded fiberglass composite, sealed and pre-drilled for attachment.

F. Door Accessories (Standard)

1. PN#020 – Number Plates. Concealed mounted co-extruded impact acrylic shall be recessed in face of each door, etched and filled with white characters, sequentially numbered.
2. PN#030 – Stainless Steel louvered vents on doors to reduce dampness and moisture within the locker.
3. PN#040 - Gear hooks for riders gear or accessories 2 hooks per locker.

G. Leveling Brackets

1. Concealed adjustable leveling brackets in each corner of door frames to give maximum 1 1/2 inch vertical adjustment.
2. Height shall be adjustable by tightening two each 1/4 inch hex bolts with nylock nuts on each leveling bracket. Height shall be adjustable without drilling or screwing holes in leveling brackets

H. Anchor bolts

1. Expansion type anchor bolts of stainless steel are 3/8" dia. X 1-1/2" dia., four per unit supplied with each locker.

I. Options

1. PN#200 - Amerilok™ Bluetooth T-Handle Lock. Includes 1 bypass key and 1 override battery pack. Number plates are included on doors.
2. PN#035 - Ventilation "High Flow" System: Solar-powered ventilation 24/7. Highly recommended for areas of high temperature, humidity or dampness. This system will move 24,000cuft air per day* providing the utmost in locker ventilation. System includes louvered stainless steel vents on each end of the unit for air in-flow with a high volume stainless steel **Solar Day/Night** exhaust fan on the top of the locker.
 - i. *Equal to removing all of the air in a Model #352 locker 285 times a day.
3. Safety-View security Windows, see what is in a locker through the door, available in Acrylic or Powder Coated Black Perforated steel in two sizes.



- a. PN#073 - 12" x 12"
- b. PN#074 - 16" X 36"
4. Safety-View security Walls, see what is in a locker through the walls, available in Perforated steel or S.S. steel, 53"L X 40"H panel molded into center area of wall. Contact manufacturer for more details.
5. Logo's & Screened Images - Display signage for end panel to visibly promote the locker system to the public. Contact manufacturer for more details.
6. Custom colors. Contact manufacturer for more details.

2.3 BICYCLE LOCKERS

- A. The bicycle locker shall be the Bike-Shell™ Model # _____ (insert Bike-Shell model number and description), Quantity of _____ units (insert quantity of Molded fiberglass composite bicycle locker manufactured by American Bicycle Security Co.).
 1. Model #352 – Two door, Two bike capacity per unit. Dimensions per unit 49"H X 40"W X 74 ½ "L. Bike shall be separated by an internal diagonal wall creating two separate lockers each 32"W Front and 6"W Back.
 2. Model #351 – One door, One bike capacity per unit. Dimensions per unit 49"H X 30"W X 74 ½ "L.
 3. Model #352SS – Solar Charging Station. Two door, Two bike per unit. Dimensions per unit 64 1/2"H X 40"W X 74 ½ "L. Power shall be generated by 75 watt PV Panel, two charging invertors with controller and battery backup. Electric Bikes shall be separated by an internal diagonal wall creating two separate lockers each 32"W Front and 6"W Back.

PART 3 – EXECUTION

3.1 INSTALLATION

- A. Site requirements.
 1. Installation shall be on a concrete pad to local building code requirements.
 2. Five foot minimum clearance from the face of locker with door closed to closest obstruction. Allow 3 foot clearance on sides.
 3. Minimum pad size shall be 8" greater than the total length and width of lockers as grouped with maximum 3 degree slope.
 4. Model 352SS shall require southern exposure/orientation per manufacturer's specifications.
- B. Handle and install bicycle lockers in accordance with manufacturer's recommendations and installation instructions.
- C. Set bicycle lockers secured to construction, level and true to line, in correct relationship to adjacent materials.