

SECTION 10 51 29

PHENOLIC LOCKERS

(Cubiform® Lockers by AAPG — Solid Phenolic Locker System)

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes: Factory-fabricated solid phenolic lockers for commercial, athletic, and institutional use, including locker bodies, doors, shelves, hardware, bases and legs, number plates, and accessories.
 - 1. Standard-door lockers: [one-tier] [two-tier] [three-tier] [four-tier] [five-tier].
 - 2. Two-tier “Z” lockers.
 - 3. [Sloping tops, bases, filler panels, and finished end panels.]
- B. Products Not Furnished or Installed Under This Section:
 - 1. In-wall blocking, backing, and reinforcement for wall anchorage.
 - 2. Concrete bases, housekeeping pads, and floor finishes.
 - 3. [Benches and pedestals, where specified separately.]
 - 4. [Padlocks for hasp-equipped lockers, furnished by the Owner.]
 - 5. [Electrical power and data for electronic locks, specified in Divisions 26 and 27.]
 - 6. Field finishing of adjacent construction.

1.2 RELATED SECTIONS

- A. Section 06 10 00 - Rough Carpentry: In-wall blocking and backing for anchorage.
- B. Section 09 21 16 - Gypsum Board Assemblies: Wall substrates receiving anchorage.
- C. Section 09 30 00 - Tiling: Floor and wall finishes at lockers.
- D. Section 10 21 13.17 - Phenolic Toilet Compartments: Matching solid phenolic finishes.
- E. Divisions 26 and 27 - Electrical and Communications: Power and data for electronic locks.

1.3 REFERENCES

- A. ASTM International (ASTM):
 - 1. ASTM A240 and ASTM A666 - Stainless Steel Sheet, Strip, and Plate.
 - 2. ASTM A743/A743M - Corrosion-Resistant Stainless Steel Castings.
 - 3. ASTM B221 - Aluminum and Aluminum-Alloy Extruded Bars, Rods, and Shapes.
 - 4. ASTM E84 - Standard Test Method for Surface Burning Characteristics of Building Materials.
 - 5. [ASTM B86 - Zinc-Alloy (Zamac) Die Castings, where used.]
- B. National Electrical Manufacturers Association (NEMA):
 - 1. NEMA LD 3 - High-Pressure Decorative Laminates (decorative melamine faces).
- C. International Code Council / American National Standards Institute (ICC/ANSI):
 - 1. ICC/ANSI A117.1 - Accessible and Usable Buildings and Facilities.
- D. U.S. Department of Justice:
 - 1. 2010 ADA Standards for Accessible Design (28 CFR Part 36).
- E. International Building Code (IBC), Chapter 8 - Interior Finishes.
- F. UL GREENGUARD / GREENGUARD Gold Certification, where required by the Project.

1.4 ADMINISTRATIVE REQUIREMENTS

- A. Preinstallation Conference: Conduct a conference at the Project site before installation. Review substrates, blocking, floor conditions, layout and numbering, accessible locker locations, lock type and keying, power for electronic locks, and protection.
- B. Coordination: Coordinate blocking, base and floor conditions, accessible locker quantities and locations, and power and data rough-in for electronic locks before fabrication.

1.5 SUBMITTALS

- A. Product Data: Submit manufacturer's literature describing locker construction, tier configurations, sizes, colors, ventilation, hardware, locks, bases, and accessories.
- B. Shop Drawings: Submit plans and elevations showing locker layout, tier configurations, sizes, numbering sequence, accessible lockers, base and leg conditions, anchorage, ventilation, lock type and keying, and power and data for electronic locks.
- C. Samples:
 - 1. Color Samples: Manufacturer's full range for each phenolic color and finish specified.
 - 2. Corner and Edge Sample: Phenolic door corner showing core, decorative face, radiused corner, and polished beveled edge.
 - 3. Hardware Samples: One of each hinge, hasp, number plate, and lock specified.
- D. Certificates and Test Reports:
 - 1. Surface burning characteristics (ASTM E84) for the specified phenolic panels.
 - 2. GREENGUARD or GREENGUARD Gold certification, where required by the Project.
 - 3. Manufacturer certification that accessible lockers comply with ICC/ANSI A117.1 and the 2010 ADA Standards.
- E. Closeout Submittals: Submit cleaning and maintenance instructions, warranty documentation, lock keying and access records, and a record of approved colors, hardware, and product codes.

1.6 QUALITY ASSURANCE

- A. Manufacturer Qualifications: Manufacturer regularly engaged in the production of solid phenolic lockers of similar type, scope, and quality.
- B. Installer Qualifications: Installer experienced in locker installation of comparable scope and approved by the manufacturer.
- C. Surface Burning Characteristics: Provide phenolic panels complying with the interior finish requirements of IBC Chapter 8 for the occupancy and location indicated, when tested in accordance with ASTM E84.
 - 1. Required Rating: [Class A.] [Class B.] [As required by the authority having jurisdiction.]
- D. Accessibility: Provide accessible lockers complying with ICC/ANSI A117.1 and the 2010 ADA Standards, including accessible tier locations within permitted reach ranges and hardware operable with one hand and without tight grasping, pinching, or twisting of the wrist.
- E. Single-Source Responsibility: Provide lockers, hardware, locks, and accessories under single-source responsibility.
- F. Mockup: [Provide one complete locker of each tier configuration specified, including doors, hardware, lock, and base, for review. The approved mockup establishes the minimum standard.]

1.7 DELIVERY, STORAGE, AND HANDLING

- A. Deliver lockers in protective packaging identified with product, color, and Project information.
- B. Store components upright and supported in a dry, ventilated space, protected from soiling and damage. Solid phenolic is moisture-resistant; nonetheless protect faces and edges from impact and abrasion.
- C. Handle components to prevent chipping, scratching, and damage to faces, edges, and hardware.
- D. Immediately report damaged or missing materials to the shipper and to AAPG. Do not install missing or damaged components.

1.8 PROJECT CONDITIONS

- A. Environmental Conditions: Do not install until the building is enclosed and wet work at adjacent construction is complete and dry.
- B. Field Measurements: Verify dimensions, alcove and recess conditions, and clearances at the Project site before fabrication where the Work depends on field conditions.

1.9 WARRANTY

- A. Manufacturer's Warranty: Provide the manufacturer's standard written warranty covering defects in materials and manufacture for [one (1)] year, and covering rust, delamination, and component breakage for [ten (10)] years, from the date of Substantial Completion.

PART 2 - PRODUCTS

2.1 MANUFACTURER

- A. Basis-of-Design Manufacturer: American Architectural Products Group (AAPG), 248 James Street, Venice, FL 34285. Telephone: +1-844-307-9571. Email: info@aapgco.com. Website: www.aapgco.com.
- B. Specified Product: Cubiform® Phenolic Lockers.

2.2 SUBSTITUTIONS

- A. Substitutions: Not permitted. Requests for substitutions, comparable products, alternates, or proposed equals will not be considered.
- B. Division 01 substitution procedures do not apply to this Section. Product naming is proprietary and establishes the only acceptable manufacturer and product.

2.3 LOCKER SYSTEM — COMMON REQUIREMENTS

- A. System Description: Solid phenolic lockers of one-piece phenolic construction throughout — bodies, doors, shelves, tops, bottoms, and backs — self-supporting and resistant to moisture, humidity, impact, and graffiti, suitable for wet and high-abuse environments.
- B. Overall Height: 72 inches (1829 mm).
- C. Widths (Available): 12, 15, 18, 21, and 24 inches (305, 381, 457, 533, and 610 mm). Provide widths as scheduled.
- D. Depths (Available): 12, 15, 18, 21, and 24 inches (305, 381, 457, 533, and 610 mm). Provide depths as scheduled.
- E. Material: Solid phenolic core of cellulose fibers impregnated with phenolic resin and fused under heat and pressure, with integral decorative melamine faces (NEMA LD 3, Grade VGS) and a [black] [color-thru] core. Phenolic throughout.
- F. Colors and Finish: Selected from the manufacturer's [standard] [full] color range; matte or suede finish.
- G. Edges: Machined smooth with radiused corners and polished 15-degree beveled exposed edges.

2.4 TIER CONFIGURATIONS

- A. Standard-Door Lockers: [One-tier.] [Two-tier.] [Three-tier.] [Four-tier.] [Five-tier.] Each opening served by a full-width, single-piece phenolic door within a 72-inch (1829 mm) high body.
- B. Two-Tier “Z” Lockers: Interlocking Z-shaped doors providing two full-height garment compartments within a single 72-inch (1829 mm) high opening width, for full-length hanging in a reduced footprint.
- C. Provide the tier configuration, sizes, and quantities scheduled.

2.5 COMPONENT CONSTRUCTION

- A. Body Sides: [3/8 inch (10 mm)] solid phenolic.
- B. Tops, Bottoms, and Backs: [1/2 inch (13 mm)] solid phenolic.
- C. Doors: 1/2 inch (13 mm) single-piece solid phenolic, radiused corners, polished 15-degree beveled edges.
- D. Shelves: [1/2 inch (13 mm)] solid phenolic, where scheduled.
- E. Hinge Quantity: Three hinges per door at one-tier lockers; two hinges per door at all other tiers and at “Z” lockers.
- F. Ventilation: [None (standard).] [3/8-inch (9.5 mm) ventilation slots.] [1/4-inch (6 mm) ventilation perforations.]

2.6 HARDWARE

- A. General: Stainless steel and corrosion-resistant hardware, through-bolted and tamper-resistant.
- B. Hinges: Soft-close, concealed, heavy-duty [Type 304 stainless steel] hinges, standard, [with 90-degree limit arm].
- C. Latching and Locking — Standard: Machine hasp and staple of [14-gauge] stainless steel for an Owner-supplied padlock. [Padlocks furnished by the Owner.]
- D. Latching and Locking — Options: [Electronic keypad (digital) lock.] [Built-in key lock.] [Built-in combination lock.] Coordinate power and data rough-in for electronic locks.
- E. Door Pull: Stainless steel pull, [recessed] [surface-mounted], integral with the latching.

- F. Number Plates: [2-inch (51 mm) aluminum disc, flush-mounted to the door face] [black acrylic], consecutively numbered as scheduled.
- G. Coat Hooks and Hang Rods: [Two-prong swivel nylon coat hook] and [garment rod] at one-tier, two-tier, and “Z” lockers, where scheduled.
- H. Fasteners: Stainless steel throughout, tamper-resistant at exposed locations.
- I. Accessible Hardware: At accessible lockers, provide lock and pull hardware operable with one hand, without tight grasping, pinching, or twisting, and located within ADA reach ranges.

2.7 BASE AND SUPPORT

- A. Locker Base (Option): Optional solid phenolic locker base available where scheduled — [continuous phenolic base] [1 inch (25 mm) solid phenolic toe base] — with matching finished ends and fillers.

2.8 FABRICATION

- A. Fabricate lockers square, true, and rigid in one-piece phenolic construction, with radiused corners, polished beveled edges, and factory-drilled hardware locations.
- B. Factory-assemble lockers complete with hardware to the greatest extent practicable.
- C. Reinforce internally at hinges, hasps, locks, and anchorage points as required.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine floors, walls, blocking, base conditions, power and data rough-in for electronic locks, accessible locker locations, and dimensions before installation.
- B. Verify that blocking and anchorage substrates are present, correctly located, and adequate to resist imposed loads.
- C. Do not begin installation until unsatisfactory conditions have been corrected. Beginning installation constitutes acceptance of substrates.

3.2 PREPARATION

- A. Establish layout, numbering sequence, and accessible locker locations.
- B. Coordinate blocking, base, and power and data rough-in before setting lockers.

3.3 INSTALLATION

- A. Install lockers plumb, level, and rigid in accordance with the approved shop drawings and the manufacturer's written instructions.
- B. Set lockers on the specified base or directly on the finished floor; level; anchor securely to the floor and to wall blocking. Join banks of lockers for flush, aligned fronts with consistent reveals.
- C. Provide accessible lockers at the scheduled locations, with tiers and hardware within ADA reach ranges.
- D. Install locks and set keying; coordinate, connect, and commission electronic locks where specified.
- E. Install number plates in the scheduled numbering sequence.

3.4 ADJUSTING

- A. Adjust doors, soft-close hinges, hasps, and locks for smooth, quiet, aligned operation with consistent reveals.

3.5 FIELD QUALITY CONTROL

- A. Inspect the completed installation for level, plumb, secure anchorage, door alignment and operation, soft-close function, hardware and lock operation, numbering, and conformance with the approved shop drawings and accessible requirements.
- B. Replace components that are chipped, scratched, delaminated, misaligned, or otherwise unacceptable.

3.6 CLEANING

- A. Clean exposed surfaces with manufacturer-approved nonabrasive products. Remove markings and construction residue without damaging the finish. Solid phenolic surfaces resist graffiti; do not use abrasive pads or cleaners not approved by the manufacturer.

3.7 PROTECTION

- A. Protect completed lockers from impact, staining, and damage by subsequent construction activities.
- B. Repair or replace damaged work before Substantial Completion.

END OF SECTION 10 51 29