GENERAL SPECIFICATION
ATHLETIC LOCKERS

PART 1 – GENERAL

1.1 SUMMARY

A. Related Documents:
1. Drawings and provisions of the contract including General Conditions Supplementary Conditions and Division 1, apply to this section.

B. Section Includes:
1. Furnish and install plastic laminate athletic lockers and accessories as shown and listed on drawings and specified herein. Includes all supports, and filler panels necessary for a complete athletic locker installation.

C. Related Requirements to be Performed by Others:
1. Division 06 Section: “Rough Carpentry” for blocking within walls to adequately support athletic locker.
2. Division 06 Section: “Finish Carpentry”/Millwork.
3. Division 07 Section: “Preformed Joint Seals” for caulking of athletic locker and/or countertops to abutting walls.
4. Division 08 Section: “Finish Hardware” for athletic locker locks keyed or master keyed to building locks.
5. Division 09 Section: “Resilient Base and Accessories” for resilient base applied to manufactured athletic lockers.
6. Division 23 Section: “Heating, Ventilating, and Air-Conditioning” for furnishings, installation, and final connections of all ductwork to range hoods shall be by the HVAC contractor.
7. Division 26 Section: “Electrical” for the electrical contractor to state and local codes shall perform electrical furnishing, installation, and final connections of wiring, conduit, and/or electrical items within athletic locker.

1.2 REFERENCES

A. ANSI-A135: for all hardboard.
C. ANSI-A208.1-2016: for grade M-3i mat-formed wood particleboard.
D. BHMA A156.9: for grade-1 hinge requirements.
E. NEMA 3 LD-2005: for performance requirements of high pressure laminates.
F. SEFA 8PL Recommended Practices: for cabinet construction.

1.3 DEFINITIONS
A. Exposed:
   1. In lockers, surfaces visible when drawers and opaque doors (if any) are closed; behind clear glass doors; bottoms of lockers 42" or more above finished floor; and tops of lockers less than 78" above finished floor.

B. Semi-Exposed:
   1. In lockers, surfaces that become visible when opaque doors are open or drawers are extended; bottoms of lockers more than 30" or tops of lockers less than 42" above finished floor.

1.4 SUBMITTALS

A. Shop Drawings:
   1. Comply with Division 1.
   2. Include catalog numbers and specifications of Case Systems, Midland, Michigan.
   3. Submit three sets of laser quality, 11 x 17 shop drawings consisting of:
      a. Finish, hardware, construction options selection sheet.
      b. Small scale floor plan showing athletic lockers in relation to the building.
      c. Large scale elevations and plan views.
      d. Cross-sections; service runs; locations of blocking within walls (blocking is done by others); rough-in requirements.
   4. Approved shop drawings to be returned to manufacturer at least 60 days before production.
   5. Project Architect and Construction Manager must approve all items prior to fabrication and delivery of athletic lockers.
   6. Manufacturer and/or Manufacturer's rep verifies all critical building dimensions prior to fabrication.

B. Samples:
   1. Submit one set of laminate color brochures or webpage reference from standard laminate manufacturers Wilsonart, Formica, Pionite, and Nevamar.
   2. Submit one edge color sample chain.
   3. Submit one set of interior colors samples.
   4. Submit catalog showing construction details, material specifications and hardware specifications of all items used.

C. LEED Submittals:
   1. Provide EPP certificates of core for Credit MR 4.1 and [MR 4.2]: for athletic lockers core having recycled content.
   2. Provide FSC certificate for Credit MR 7: for products having chain-of-custody certificate certifying that the wood used in the athletic lockers complies with FSC requirements.
   3. Provide product data for IEQ 4.4: for athletic lockers core being manufactured without the use of urea formaldehyde.

D. Warranty:
   1. Provide sample warranty document stating specified terms as referenced in 1.8.

1.5 QUALITY ASSURANCE
A. Manufacturer Qualifications: Must be certified for chain of custody by a third party certification group approved by FSC.

B. Unless otherwise indicated, comply with AWI, for grades of interior architectural woodwork, construction, finishes and other requirements:
   1. Provide AWI Quality Certification Program [Labels] [Certificates] indicating that the woodwork, [including installation], complies with requirements of grades specified. This project has been registered as AWI/QCP project number ___________. OR, Case Systems, upon award of work, shall register the work under this section with the AWI Quality Certification Program (800-449-8811).

1.6 DELIVERY, STORAGE, AND HANDLING

A. Delivery and Acceptance Requirements:
   1. Deliver athletic lockers once painting, and similar requirements have been completed that will not damage athletic lockers. This includes ensuring spaces are enclosed and weather tight.
   2. All athletic lockers shall be blanket wrapped or covered with cardboard and foam for protection during shipping.

B. Storage and Handling:
   1. Athletic lockers must be protected from dust, dirt and/or other trades.

1.7 SITE CONDITIONS

A. Ambient Conditions:
   1. Do not deliver or install the athletic lockers until concrete, masonry, and drywall/plaster work is dry; ambient relative humidity is maintained between 25 – 55% prior to delivery and throughout the life of installation; and the temperature is controlled above 55°F.
   2. Lockers shall not be stored or installed in non-climate controlled conditions.
   3. If ambient conditions are not met at the time of requested delivery, the general contractor or owner must provide Case Systems a letter releasing manufacturer from any liability and responsibility from any warranty or damage resulting from not complying with required ambient conditions.

1.8 WARRANTY

A. Case Systems shall offer a [One-Year] or [Three-Year] or [Five-Year] or [Limited Lifetime] warranty to the original owner against defective material and workmanship.
   1. The warranty specifically does not cover any product or hardware, which has been incorrectly installed, including poor climate conditions, exposed to excessive loads or abuse.
   2. All non-locker items supplied, but not manufactured at Case Systems including, but not limited to fixtures, lights, fans, power outlets, and power strips shall be covered under the original manufacturers’ warranty.
PART 2– PRODUCTS
2.1 MANUFACTURERS

A. Basis-of-Design Product: Case Systems, 2700 James Savage Road, Midland, Michigan 48642 (989) 496-9510 and/or approved dealers.

B. Substitution Limitations:
   1. Substitutions will be considered only when other manufacturers submit substitution requests in accordance with procurement substitution and/or substitution procedures, or provide a comparable product with the following support information detailed below:
      a. Written documentation stating specification compliance regarding construction, materials, and standard of quality and manufacturing techniques.
      b. Note all deviations to the drawings and/or specifications in writing.
      c. Provide the Architect with a full-scale base locker not less than ten days prior to bid date. The sample shall represent typical construction and materials for the product the athletic locker manufacturer proposes, meeting the quality standards set forth by this specification. The sample may be impounded by the owner and retained until completion of the athletic locker installation.
      d. The owner, or its designated representative, reserves the right to reject any proposal that in his opinion fails to meet the criteria established by this specification. Such a decision shall be final.

2.2 MATERIALS

A. Provide Plastic Laminate Faced Lockers Manufactured with:
   1. Particleboard Core:
      a. All particleboard shall be Grade M-3i and shall meet or exceed all requirements as set by ANSI-A208.1-2016.
         
         Modulus of Rupture: 2176 psi
         Modulus of Elasticity: 362600 psi
         Internal Bond: 73 psi
         Linear Expansion: 0.40%
         Thickness Tolerance: +/- 0.008"
         Face Screw Holding: 225 pounds Min
   
   2. MR (Moisture Resistant)/FSC Core shall be:
      a. Interior-Grade moisture resistant particleboard.
      b. Meet or exceed M-3i Grade, according ANSI-A208.1-2016.

   3. Low Emitting Core shall be:
      a. ULEF/FSC (No added Urea Formaldehyde) M-2 Particleboard:
         i. For athletic locker core having recycled content.
         ii. For casework core being manufactured without the use of urea formaldehyde.
iii. For products having chain-of-custody certificates certifying that the wood used in the athletic locker complies with FSC requirements.

b. ULEF/FSC (No added Urea Formaldehyde) Plywood:
   i. Plywood that meets or exceeds the standards set forth by the APA for structural use panels.
   ii. For athletic locker core being manufactured without the use of urea formaldehyde.
   iii. For products having chain-of-custody certificates certifying that the wood used in the athletic lockers complies with FSC requirements.

c. FSC M-3i Particleboard:
   i. For products having chain-of-custody certificates certifying that the wood used in the athletic lockers complies with FSC requirements.

d. FSC Plywood:
   i. For products having chain-of-custody certificates certifying that the wood used in the athletic lockers complies with FSC requirements.

B. Joinery:
   1. Mechanical Joinery:
      a. All locker body components shall be secured utilizing concealed interlocking mechanical fasteners.

C. Surface Material:
   1. Acceptable laminate color, pattern, and finish as either scheduled or otherwise indicated on drawings or as selected by Architect from manufacturer’s standards types and nominal thickness including:
      a. Vertical surface decorative grade VGS.
      b. General purpose decorative grade HGS.
      c. Athletic locker decorative liner grade CLS.
      d. Non-decorative backer grade BKH.
      e. Thermally fused melamine laminate.

D. Edge banding:
   1. PVC
      a. Shall be applied utilizing hot melt adhesive and radiused by automatic trimmers. Edging shall be available in a variety of color options.

E. Adhesives:
   1. PVA
      a. Adhesive shall be mechanically applied.
      b. ULEF, no VOC
   2. EVA
      a. Adhesive shall be mechanically applied.

F. Protective coating option:
   1. All surfaces, including: pulls, hinges, and edge banding be coated with OEM-treated, quat-silane antimicrobial AEM 5772 from AEGIS Environments.

2.3 FABRICATION
A. General Locker Body Construction:
   1. Athletic locker Box Style shall be [Standard: Reveal Overlay] or [Flush Inset Fronts].
   2. Athletic locker Core shall be [Standard: Particleboard] or [ULEF/FSC Plywood] or
      [MR/FSC Board] or [ULEF/FSC Particleboard] or [FSC Particleboard] or [FSC Plywood].
   3. Bottoms, tops, and ends of athletic lockers, (all structural components) shall be ¾”-inch thick.
   4. All panels shall be manufactured with balanced construction.
   5. Fixed interior components such as fixed shelves, dividers, and cubicle compartments shall be full 3/4” thick and attached with concealed interlocking mechanical fasteners.
   6. Athletic locker body exterior surfaces shall be: [Standard: VGS] or [TANGO by Case Systems Thermally Fused] or [Thermally Fused] or [Decorative Thermally Fused].
   7. Athletic locker finished interior options shall be: [Standard: None] or [Finished at All] or
      [Finished Where Noted] or [Finished At Opens].
   8. Athletic locker body interior surfaces shall be: [Standard: Thermally Fused] or
      [TANGO by Case Systems Thermally Fused] or [Decorative Thermally Fused] or
      [Liner Grade CLS] or [VGS] or [HGS].
   9. Athletic locker body front edge shall be: [Standard: .020” PVC] or [3mm PVC].
      Mounting stretchers are 3/4” thick structural components fastened to end panels and back by mechanical fasteners, and are concealed by the athletic locker back.
   10. When the rear of a athletic locker is exposed, a separate finished 3/4” thick decorative laminate back panel may be specified.
   11. Backs of athletic lockers are 1/2” thick surfaced both sides for balanced construction and fully captured on both sides and bottom.
   12. An upper 3/4” thick stretcher shall be located behind the back panel and attached between the end panels with mechanical fasteners. This stretcher is also fastened to the full sub-top thus capturing the back panel.
   13. [Protective coating option: All surfaces, including: pulls, hinges, and edge banding be coated with OEM-treated, quat-silane antimicrobial AEM 5772 from AEGIS Environments.]

B. Athletic locker Construction:
   1. All athletic lockers shall be provided with an intermediate fixed shelf to maintain internal dimensional stability under heavy loading conditions as well as an intermediate 3/4” thick stretcher located behind the back panel and be secured between the athletic locker ends with mechanical fasteners. The stretcher shall be secured to the shelf through the back with #8 x 2” plated flat head screws.

C. Athletic locker top edges shall be: [Standard: Raw] or [.020” PVC at Top of End Panels, Stretchers & Back] or [.020” PVC at Top of End Panels].

D. Athletic locker Tops shall be: [CLS to Match Standard Interior] or [HPL to Match Exterior Surface] or [Material Match Standard Interior].

E. Toe Base of athletic locker:
   1. Individual bases shall be constructed of: [Standard: Particleboard] or [MR/FSC Board] or [ULEF/FSC Particleboard] or [FSC Particleboard] or [ULEF/FSC Plywood] or [Pressure Treated Plywood] or [Raw Exterior Glue Plywood] or [FSC Pressure Treated Plywood] or [FSC Raw Exterior Glue Plywood] factory applied to
athletic lockers and shall support and carry the load of the end panels, and the athletic locker bottom, directly to the floor. The base shall be let in from the sides and back of the athletic locker to allow athletic lockers to be installed tightly together and tight against a wall, also to conceal the top edge of applied vinyl base molding (not supplied by athletic locker manufacturer). There shall be a front to back center support for all bases over 30” wide.

2. Toe Base Height [Standard: 96mm] or [102mm] or [152mm] or [Other: As Specified].
3. Toe Base Options [Standard: Attached] or [3/4” Raw Loose Base Strips] or [No Base].

F. Drawer Fronts and Solid Doors:
1. All drawer fronts and solid door components shall be: [Standard: Particleboard] or [ULEF/FSC Plywood] or [MR/FSC Board] or [ULEF/FSC Particleboard] or [FSC Particleboard] or [FSC Plywood] surfaced both sides for balanced construction.
2. Options shall be: [Standard: HPL Door and Drawer Front Exterior and Grade CLS on Interior] or [HPL Door Interior and Exterior (both sides match front surface color)] or [HPL Door Interior and Exterior (inside surface match interior color)] or [HPL Door and Drawer Interior and Exterior (both sides match front surface color)] or [Corkboard Doors] or [True ¾” Core].
3. Surfaces shall be: [Standard: HPL Grade VGS] or [HPL Grade HGS] or [Thermally Fused] or [Decorative Thermally Fused] or [Chemical Resistant].
4. Door and drawer front edge shall be: [Standard: 3mm PVC] or [.020” PVC].

G. Drawer Boxes:
2. Drawer box at finished interiors shall be: [Standard: Surface to Match Standard Interior] or [Surface to Match Finished Interior] or [Hardwood Veneer Plywood] or [Liner Surface to Match Standard Interior].
3. [Standard: Drawer box sides, backs, and bottom shall be 3/4”. The top edge shall be nominal 1mm (.020”) PVC matching the drawer color. Drawer box rear corners are fastened together with wood screws and a butt joint. Drawer box sides and rear are secured to platform bottom using wood screws. Drawer box front corners are secured to drawer front with 14 ga. metal brackets. Drawer front and bottom are secured together using metal brackets.

H. Doors:
1. Solid Doors shall be: [Standard: ¾” thick core].

2.4 ACCESSORIES

A. Hardware:
1. Hinges:
   a. [5-Knuckle Hinges / Reveal Overlay: Standard: Hinges shall be: .095” thick steel five-knuckle hospital-tip, institutional Grade (Grade 1 per ANSI/BHMA A156.9) quality with .187” diameter tight pin. Each hinge
shall be secured with a minimum of nine No. 8 screws. Hinge shall permit
door to swing 270 degrees without binding. Doors less than 48" in height
shall have two hinges. Doors over 48" in height shall have three hinges]

2. Pulls:
   a. One pull shall be located at the centerline of the drawer, regardless of width,
to ensure ease of operation and maximize drawer slide life.
      i. [Standard: Anodized aluminum wire pull, 8mm diameter with 96mm
         O.C. mounting holes] or [Standard: Plastic contour pull, surface
         mounted, 35mm x 116 mm overall size with 96mm O.C. mounting
         holes] or [Epoxy coated wire pull, 8mm diameter with 96mm O.C.
         mounting holes] or [Brass core wire pull, 8mm diameter with 96mm
         O.C. mounting holes] or [Stainless steel wire pull, 8mm diameter
         with 96mm O.C. mounting holes] or [Semi recessed, 110mm x
         32mm with 96mm O.C. mounting holes] or [Semi recessed,
         oversized, 134mm x 43mm with 117.5mm O.C. mounting holes] or
         [No Drill/No Pull] or [Drill/No Pull] or [Custom Pull: As Specified].

3. Drawer Slides:
   KV8500, 150 lb. rated, heavy duty, full extension drawer slide. Side mounted
   ball bearing design in anochrome finish.

4. Coat Hooks shall be
   a. Zinc plated, single prong and double prong.
   b. Stainless steel. Wardrobe hook, with one coat hook and one garment hook.
   c. Matt silver anodized aluminum, single flat hook.

5. Locks (where shown or noted only):
   a. Lock Locations:
      i. [Standard: No Locks] or [Locks at personal compartments only]
   b. Lock Type:
      i. [Standard Lock: Five disc tumbler cam locks, chrome plated steel
         faceplate. All locks keyed alike or keyed differently by room and
         master keyed. Shall permit a minimum of 50 keying options. Lock
core is removable permitting owner to easily change lock arrangements. There may be product limitations depending on choice of lock. Please consult your Case Systems dealer for the best lock solution for your project.

ii. KEYLESS.CO Keyless1: Combination Cam Lock, 4 digit code, non-battery operated, Re-programmable cylinder, Break away security knob, Shared or private use. Satin Nickel Finish (standard), Premium Color Finishes (optional), ADA compliant handle (optional).

iii. COMPX REGULATOR: Electronic push button keypad, self-locking with slam cam, 75,000 cycles, external (2) AAA battery installation, low battery indicator, 19 user codes and 1 supervisor code, ADA compliant. Satin Chrome Finish, Black Matte Finish.

iv. KITLOCK KL1000: 11 digit keypad, 15,000 cycles, (2) AAA batteries, low battery indicator, Battery override, (4) Code levels, Private/Public function. Silver grey finish (standard), Black finish (standard), Color finish (options available).

2.5 FINISHES

A. Plastic Laminate Athletic Locker Colors:
   1. High Pressure Laminate is available in non-premium, non-specialty and manufacturers’ standard suede finishes from our select laminate manufacturers, including:
      a. [Standard: Wilsonart® in a “60” or “38” matte finish] and [Standard: Nevamar® in a “T” textured finish] and [Standard: Formica in a "58" finish] and [Standard: Pionite in an “SD” finish].
      b. Color: Specialty and other manufacturer finishes are available with additional cost and longer lead times.
      a. [Standard: Light Beige (TANGO by Case Systems D30)] or [Standard: Fashion Grey (TANGO by Case Systems D381)] or [Standard: Frosty White (TANGO by Case Systems 1573)]
   3. Thermally Fused Melamine Decorative Laminate available, but will result in additional cost when used for athletic locker.
      a. [Baroque (TANGO by Case Systems FB2040 Timberline)] or [Coffee Groovz (TANGO by Case Systems FB3950 Timberline)] or [Concrete Groovz (TANGO by Case Systems FB3930 Timberline)] or [Licorice Groovz (TANGO by Case Systems FB3920 Timberline)] or [Seria (TANGO by Case Systems FB2030 Timberline)] or [Tobacco Groovz (TANGO by Case Systems FB3910 Timberline)] or [Negotiating in Geneva ( TANGO by Case Systems PFA60 Chamois)] or [First Light (TANGO by Case Systems HP258 Wood Essence)] or [Macchiato (TANGO by Case Systems WF0011 Wood Essence)] or [Stout Walnut (TANGO by Case Systems WW3100 Wood Essence)] or
4. Liner .020” thick, high-pressure liner conforming to ANSI/NEMA 3 LD – 2005, Grade CLS. Surface texture shall be similar to exterior finish. Color shall match interior.

5. Edges:
   a. [Select color from standard color options].

B. Accessories:
   1. Hinges:
      a. 5-Knuckle Hinge / Reveal Overlay: Three finishes are available as standard in epoxy powder coat: [Black] or [Almond] or [Platinum] and at an additional charge for [Brushed Chrome] or [Stainless].
      b. Inset 5-Knuckle Hinge: Three finishes are available as standard in: [Black] or [Almond] or [Platinum].
      c. 3-Knuckle Hinge shall be nickel-plated.
      d. Concealed Hinge shall be nickel-plated.

   2. Pulls:
      a. [Aluminum Wire]
      b. [96mm Stainless Steel]
      c. Brass Core Wire Pull shall be available as standard in: [Dull Chrome] or [Polished Chrome] or [Dull Brass] or [Polished Brass].
      d. Plastic Contour Pulls shall be available as standard in: [Almond] or [Greystone] or [Black].
      e. Epoxy Coated Wire Pulls shall be available as standard in: [Almond] or [Platinum] or [Black].
      f. ABS Semi Recessed Pulls shall be available as standard in: [Black] or [Almond] or [Greystone].
      g. Semi Recessed, Oversized Pulls shall be available as standard in: [Black] or [Almond] or [Grey].
      h. [Custom Pull: Must Specify Brand and Model Number].

PART 3 – EXECUTION
3.1 INSTALLERS

   A. Installation shall be: by athletic locker manufacturer’s authorized representative.
3.2 INSTALLATION

A. Athletic Lockers shall not be: installed until concrete, masonry, and drywall/plaster work is dry.
   1. If ambient conditions are not met at the time of requested delivery, the general contractor or owner must provide Case Systems a letter that releases manufacturer from any liability and responsibility from any warranty or damage resulting from not complying with required ambient conditions.

B. Athletic lockers shall be: installed plumb and true and is to be securely anchored in place.

C. The athletic locker contractor shall verify all critical building dimensions prior to fabrication of athletic lockers.

D. Provide all labor for unloading, distribution, and installation of athletic lockers and related items as specified.

E. All athletic lockers shall be: securely anchored to horizontal wall blocking, not to plaster lathe or wall board.

F. The athletic locker installer shall remove all debris, sawdust, scraps, and leave athletic locker spaces clean.

G. All athletic lockers must be installed by athletic locker installer plumb and level, adjust all doors, drawers and hardware to comply with manufacturers specifications and operate properly.

-END OF SECTION-