

DIVISION 10 - SPECIALTIES

10 1101 – VISUAL DISPLAY BOARDS

- A. All ceramic marker boards, acrylic boards, and glass boards shall be mechanically fastened to walls; gluing shall not be allowed except for a lightweight acrylic board. Acrylic boards can be glued provided this is not the only means of support for the board. A “Z” style metal clip that is mechanically fastened to the wall should be the main mean of fastening the acrylic boards.
- B. Paint-on and vinyl display boards are prohibited. Plastic laminate or melamine white boards shall not be used unless approved by UND Facilities Management.
- C. Ceramic coated metal marker boards are preferred for classrooms. Acrylic or glass boards can be used in classrooms; however, they are more suitable for offices and conference rooms. Substitutions or any value engineering will need approval by UND Facilities Management. In any common residential areas acrylic or glass boards shall be used in lieu of ceramic metal boards.
- D. All boards shall resist ghosting and require minimal cleaning between uses.
- E. Boards that are intended to double as a marker board and a projection board must be specified by the manufacturer to have the ability for projection. Appropriate models of projection style marker boards will need approval from UND Facilities Management and UND UIT Department.
 - 1. Ceramic Steel Marker boards
 - a. Approved Vendor: Steelcase, Polyvision, and Claridge. Other manufacturers by approval only from UND Facilities Management.
 - b. Steelcase - Edge Series, natural finish anodized thin aluminum contour edge frame, high-gloss white PolyVision e3™ CeramicSteel writing surface.
 - c. Magnetic or non-magnetic boards shall be determined with the UND building committee and non-magnetic boards will need UND Facilities Management approval during the early phases of design.
 - d. Boards shall incorporate an aluminum trim with bottom aluminum marker / eraser tray. If the boards are intended to be non-magnetic a top map clip or cork tack strip shall be used.
 - e. Locations where more than a single board is used, and the boards will be butted beside each other to create a single large multi-piece board. A spline joint should be specified, and the boards should not have an aluminum molding between each board.
 - f. Color shall be white with no overprinting of any kind, any variance in colors will be sole discretion of UND Facilities Management.
 - g. An accessory pack should be included with each board supplies to include:
 - h. Markers, a single eraser minimum and in the case of magnetic boards a set of board compatible magnets.
 - i. All Ceramic Steel boards shall use wood or metal blocking within the wall to support the weight of the boards.
 - j. Substitutions only by approval of UND Facilities Management.
 - 2. Acrylic Marker Boards:
 - a. Approved Vendor: Deko Premier Markerboards
 - b. Diamond fx color, brilliance edge, crown corners, and fit (Z-clip) setting.
 - c. Standard sizes shall be used as this is the most cost-effective option with exceptions if custom sizes are needed. Custom sizes and or other color options will need approval by UND Facilities Management.

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- d. Premier marker rails and or a magnetic accessory kit shall be provided per board. Marker rails shall be determined during design with the Building Committee Team.
 - e. Substitutions only by approval of UND Facilities Management.
3. Glass Marker Boards:
- a. Approved Vendors: Clarus and Claridge
 - b. Models: full range from manufacturers
 - c. All glass boards must use safety glass either tempered or laminated.
 - d. White shall be the standard color for all glass boards, additional colors by approval of UND Facilities Management.
 - e. Standard sizes shall be used for cost effectiveness.
 - f. Standoff mounting shall be used to prevent “over writing” onto wall surfaces. The standoffs can be mounted through the glass or edge.
 - g. All glass boards shall have adequate wood or metal backing per the manufacturer’s installation instructions.
 - h. Substitutions only by approval of UND Facilities Management.
4. Mobile Marker Boards:
- a. Approved Vendors: Multiple
 - b. Final selection by approval from Building Committee and UND Facilities Management.
 - c. All boards shall incorporate a four-wheel design. Three-wheel designs will **NOT BE ACCEPTED**.
 - d. Glass mobile marker boards over 48” width or 60” overall height will need approval by UND Facilities Management.
 - e. Acrylic or Ceramic Steel mobile marker boards are preferred.
 - f. All mobile marker boards shall have some type of marker / eraser rail included.
 - g. Lockable castors are preferred.
 - h. White shall be the standard color for all mobile marker boards, additional colors by approval of UND Facilities Management.
 - i. All mobile marker boards shall be dual sided to allow for collaboration work or additional writing surface for the users.
 - j. If mobile marker boards are full height and the board runs close to the floor a curved or angled lower surface is preferred to aid in easy writing at the lower level.
5. Personal Marker Boards:
- a. Approved Vendors: Steelcase and Haskell Education
 - b. Models: Steelcase Verb Personal White board– Haskell ECHO Personal Marker board.
 - c. All boards shall be dual sided, dry erase, magnetic and offer a handle for the user and or to be displayed. Boards shall have non-ghosting writing surfaces.
 - d. All boards shall have an edge banding with reinforced corners for increased longevity, durability, and safety.
 - e. Provide wall track or easels as determined by the Building Committee during design.
 - f. Boards can be stacked two boards deep on wall track.
6. Chalkboards:
- a. Only by approval from UND Facilities Management under certain circumstances.
 - b. Approved Vendor: Claridge
 - c. Natural slate shall be used and is preferred for all chalkboards.

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- d. Aluminum trims with map clips at top and chalk shelf at bottom shall be provided with each chalkboard.
- e. Linear lighting to be installed parallel to chalkboards where practical.

10 1124 – TACKABLE WALL SYSTEMS

- A. All tackboards shall be mechanically fastened to walls gluing is allowed depending on material being used consult with UND Facilities Management.
- B. Tackboards – typically for offices are provided by the furniture vendor. Additional areas may be incorporated and provided / installed by general contractor. Consult with UND Facilities Management.
 - 1. These shall be of the type to withstand frequent changes of mounted material.
 - 2. In corridors or special areas, a cork wall finish is appropriate.
 - 3. Upholstered type tack boards shall be included in offices and other areas as approved by the Building Committee and UND Facilities Management.

10 1300 – DIRECTORIES

- A. Contact UND Facilities Management for installation locations of directory boards.
- B. Directories shall be included within design and funded through the project. Consult with UND Facilities Management on the use of electronic vs. non-electronic displays.

10 1400 – SIGNAGE

- A. All interior and exterior signage required by current building code shall be included in the contract.
- B. Interior Signage:
 - 1. All interior signage shall be of the designs provided below by UND Facilities Management. Special attention shall be paid to the room signage usage descriptions. Sign colors and sign construction shall match specifications as outlined. Any deviation from the sign typical shall be approved by UND Facilities Management.
 - 2. One-off room signs for special conditions are required to have approval from UND Facilities Management.
 - 3. Room numbers shall be initially determined by the design Architect. At the Design Development stage of design, the floor plans, including the room numbers, shall be reviewed by our UND Facilities Management Space Manager. Revisions shall be made if required and a final review by our UND Facilities Management Space Manager shall be made at approximately 90% Construction Documents.
 - 4. Room numbering conventions can be requested from our Space Manager within UND Facilities Management.
 - 5. Flag style signage is preferred for distance identification and in circumstances where specific rooms need to be called out and could be in a blind corner or alcove.
 - 6. Flag style fire extinguisher signs may also need to be provided if a fire cabinet is not clearly visible from all directions in a normal path of travel. Review with UND Facilities Management.
- C. Interior Wayfinding Signage:
 - 1. Interior wayfinding signage should be designed by the Architect and incorporated into the overall signage package of the project. Contact UND Facilities Management for signage package for sign types to be used.

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2. All major spaces, classrooms, laboratories, restrooms, elevators, parents' rooms should be called out on way finding signage.
3. A combination of single sided wall mounted and two-sided flag style signs are used depending on location. Coordinate sign locations prior to finalizing design with UND Facilities Management.

D. Exterior Building Signage:

1. Exterior building signage as mounted to the building should be designed by the Architect and incorporated into the design documents for the project.
2. Building mounted signage should be shown within the construction documents on the building elevations.
3. Building address numbers shall be included within the design documents of the project.
 - a. The building address should be placed on a prominent facade of the building, which is also the physical address side of the building.
4. Consult with UND Facilities Management for materiality, finish, size and location of all exterior signage.

- E. An interior building plaque as outlined by North Dakota State Board of Higher Education Policy 907 Building Plaques should be included within the design and implemented into the overall project. A template has been approved and used previously on project. Contact UND Facilities Management for specifics regarding the plaque type, material, and size. A prominent location should be selected by the design Architect and shall be reflected in construction documents.

10 2113.13 – METAL TOILET COMPARTMENTS

- A. The use of metal toilet partitions is not preferred as the current standard is HDPE see section below.

10 2113.19 – PLASTIC TOILET COMPARTMENTS

- A. Partitions to be solid HDPE with minimal profile floor support for easy cleaning.
- B. Basis of Design: Scranton Products Hiny Hiders standard height with Stainless color Hammered finish.
- C. Toilet compartments shall include doors with gravity closing hinges, coat hooks, and, in women's
- D. restrooms, sanitary napkin disposal containers. See section 10 2800 for UND Facilities Management specific requirements.
- E. Urinal Screens shall be provided in all designs where grouping of urinals is being designed and or where privacy separation is required between sink surfaces and urinals in direct relation.

10 2226 – PARTITIONS

- A. Provide appropriate STC Rating and review with UND Facilities Management.
- B. Suspended partitions shall be operated electronically.

10 2601 – WALL AND CORNER GUARDS

- A. Corner guards should be used on all exterior corners in high traffic areas and in areas where furniture may impact the wall.
 1. PVC-free plastic or Stainless Steel are preferred.

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2. A 1 ½" leg width shall be a minimum as approved by UND Facilities Management and a minimum of 48" above finish floor for protection shall be provided.
 3. Basis of Design: Construction Specialties, Inpro or similar approved by UND Facilities Management.
 - a. Plastic – Acrovyn VA Series – finish to be coordinated with UND Facilities Management.
 - b. Stainless Steel – Multiple vendors by approval from UND Facilities Management.
 4. Corner Guards shall be mechanically fastened or double faced VHB mounted. Direct gluing is not preferred.
 5. Vinyl or Rubber corner guards are by approval only of UND Facilities Management for specific conditions.
- B. Wall guards & crash rails shall be provided where heavy use is expected, or equipment / carts may need to be frequently moved within a building.
- C. Standard sheet based or roll-based wall protection. Use of direct adhered wall protection is encouraged within certain areas such as a classroom where a back row of chairs may frequently interact with a parallel wall. Consult with UND Facilities Management on previous materials and systems that have been used throughout campus.

10 2800 – TOILET, BATH AND LAUNDRY ACCESSORIES

- A. Paper towel holders are **provided by UND and need to be installed by contractor.** (GP PRO enMotion #59462 10" Automated touchless paper towel dispenser, Black, 14.7" X 9.5" X 17.3" (WxDxH))
- B. Recessed waste receptacle – **provided & installed by contractor.** (Bobrick B-3644 classic series).
- C. Feminine hygiene dispenser – consult with UND Facilities Management prior to finalizing design if the dispensers will be required. **If required dispensers are to be provided and installed by contractor.** Install 1 sanitary napkin dispenser in womens public restrooms and/or unisex restroom on the first and third floors of building. Hospeco pad tampon dispenser size 26 "H x 10" W x 6.75" D, white, dual vendor, free vending.
- D. Sanitary Napkin holders **provided & installed by contractor.** (Bobrick B-270 Contura Series stainless-steel surface-mounted sanitary napkin disposal, flip top, 10"H X 7 1/2"W X 3 13/16" D).
- E. Toilet paper holders – **provided & installed by contractor.** (Georgia Pacific Two Roll Side-by- Side Bathroom Tissue Dispenser, Black #GP59206).
- F. Soap Dispensers are **provided by UND and need to be installed by contractor.** (GOJO FMX-12 Dispenser, ADA compliant, push-style, #5155-06, 11.66"h X 6.5"w X 4.68" D, 1,250 mL Refills, Black).
- G. Countertop mounted cylindrical waste chute – (Bobrick B-532) – **Provided and installed by contractor.**
- H. Free standing garbage & recycle cans – **provided and installed by UND.**
- I. Baby Changing Stations all restrooms – **provided & installed by contractor.** (Koala Kare horizontal mount with SS veneer model #KB300-SS color (Grey 01).
- J. Electric Hand Dryers (minimum of 1 per restroom, except for single user restrooms – contact UND Facilities Management to verify) – place before paper towel dispenser to encourage use if possible. **Provided & installed by contractor.** (Xlerator model XL-SB brushed stainless steel cover) ADA compliant recess kit

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- K. Partitions to be solid HDPE with minimal profile floor support for easy cleaning. (Scranton Products Hiny Hiders standard height with Stainless color Hammered finish) **Provided and installed by contractor.**
- L. A single coat hook with rubber bumper shall be installed per stall on the interior side of the toilet partitions. Bobrick model B-212 single mount coat hook with bumper in aluminum matte finish. **Provided and installed by contractor.**
- M. Commercial restroom foot pulls – (StepNpull Silver Finish) **Provided and installed by contractor.**
 - 1. Avoid mounting flush with base of door to help prevent tolerance issues with flooring.
- N. Continuous mirrors are preferred behind sink units vs. single mirrors. Bobrick 290 Series or similar stainless steel welded frame mirrors. **Provided and installed by contractor.**
- O. Sinks must be under mount style. **Provided and installed by contractor.**
- P. Solid surface counter tops are to be used vs. p-lam in all restrooms. **Provided and installed by contractor.**
- Q. UND prefers door-less designs for group style restrooms for the entry / exits. The use of a push/pull style of doors is acceptable, and doors are to swing out of restroom unless not feasible with design.

10 3100 – MANUFACTURED FIREPLACES

- A. Fireplaces are only to be used with prior approval from UND Facilities Management.

10 4400 – FIRE PROTECTION SPECIALTIES

- A. Fire extinguishers:
 - 1. Approved Vendor: Amerex – **NO SUBSTITUTIONS**
 - a. Model Numbers:
 - 1) 10-pound ABC – B456
 - 2) 5-pound ABC – B402
 - b. Room size and distance between fire extinguishers shall dictate how many fire extinguishers are needed for the space according to the current NFPA code. All fire extinguishers shall be easily accessible and visible to the occupants of the space.
 - c. Fire extinguishers shall be mounted at heights listed in NFPA per weight of the extinguisher.
 - d. Provide 10-pound ABC all-purpose extinguishers (Minimum 4A:80B:C size rating) in each fan, elevator machine, and mechanical equipment rooms. Fire Extinguishers in these areas may be mounted on brackets.
 - e. Bracket model number – Amerex 889 10-pound capacity forked wall mounted. Provide adequate blocking behind mount.
 - f. In public areas, use a standard 10-pound ABC all-purpose extinguisher (Minimum 4A:80B:C size rating). All public fire extinguishers must be housed in a fire protection cabinet – see section 10 4413 for information on fire cabinets.

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- B. In special circumstances a standard 5-pound ABC all-purpose extinguisher (Minimum 3A:40B:C size rating) may be used at the discretion and approval of UND Facilities Management, the UND Office of Safety, and the Authority Having Jurisdiction (AHJ).
- a. Minimum 6-year manufacturer's warranty with a stored pressure design.
 - b. **Contractor provides and installs all fire extinguishers, extinguisher mounting brackets, and fire protection cabinets.** Coordinate final locations with UND Facilities Management and the UND Office of Safety.
 - c. Additional rooms may be requested by UND Facilities Management, the UND Office of Safety, and the Authority Having Jurisdiction (AHJ) during design depending on room type and use.

10 4413 - FIRE PROTECTION CABINETS

- A. Fire extinguisher cabinets shall be semi-recessed or recessed in public offices and academic areas. The location shall be shown on the drawings and approved by the Authority Having Jurisdiction (AHJ). All cabinets shall accommodate a standard extinguisher.
- B. All fire extinguisher cabinets that are not clearly visible from all directions in a normal path of travel shall be required to have a flag style sign mounted above the cabinet height within close proximity to the cabinet – see section 10 1400 – Signage.
- C. In some laboratories and mechanical spaces all that is required is a mounting board with hanging hooks in lieu of cabinets.
- D. A minimum of the following number of extinguishers shall be provided per IFC requirements.
- E. The lockbox location shall be shown in the drawings and approved by the Grand Forks Fire Department. Adequate detailing shall be indicated to facilitate the installation. The lockbox shall be purchased by the Owner and installed by the Contractor.

10 5100 – LOCKERS

- A. When required for the project, type style and size shall be in Building Program. Baked enamel of steel construction is preferred for general use. Team sports may require custom designed lockers, usually of wood construction.
- C. Lockers may be provided by either contractor or furniture vendor – consult with UND Facilities Management.
- D. Provide a concrete base and sloped top for lockers were applicable.
- E. When remodeling an existing facility with lockers, all reasonable efforts should be made to match the existing fixtures.
- E. Where applicable, repainting of existing lockers shall be with electro- statically applied enamel.

10 5500 – POSTAL SPECIALTIES

- A. Consult with UND Facilities Management & UND Mail Services.

10 5613 – METAL STORAGE SHELVING

- A. Consult with UND Facilities Management.

10 5617 – WALL MOUNTED STANDARDS AND SHELVING

- A. Consult with UND Facilities Management.

10 5623 – WIRE STORAGE SHELVING

- A. Consult with UND Facilities Management.

10 7500– FLAGPOLES

- A. Consult with UND Facilities Management if flagpoles are requested for a project.
- B. Flag poles can be a stand-alone US flag or in sets of 3. US flag along with 2 flanking flags, one being North Dakota State flag and the other being the University of North Dakota flag.
- C. The US flag should be prominent and on a taller pole than the 2 flags flanking. If a stand-alone US flag is being used a 20' or 25' pole can be used.
- D. All flags shall incorporate white lighting within the design. Lighting shall be placed on a daylight automatic sensor.
1. Lithonia DSXF1 Series Floodlight, P2 performance package, 42W LED, 4000K CCT, auto-sensing voltage (120V Thru 277V) 50/60 HZ.
- E. Pole to be placed within a concrete pier and include a lighting spike at the bottom of the pier which directly grounds the pole itself.
1. Basis of Design:
- a. Pole Tech Company.
- b. Internal Halyard Cam Cleat Flagpole.
- 1) US Flag – 25' above ground.
- 2) North Dakota State Flag & UND Flag – 20' above ground.
- c. Pole to be aluminum ASTM B241 cone tapered alloy 6063-T6 seamless with a polished satin brush finish.
- 1) 6" butt diameter, 3 1/2" top diameter with .188 wall thickness.
- 2) Spun aluminum flash collar finished to match pole.
- 3) Cast aluminum revolving hood and truck. Truck & hood revolve on stainless steel ball bearings mounted on an aluminum spindle.
- 4) 6" diameter 14-gauge flush seam spun aluminum gold anodized finial ball.
- d. A reinforced aluminum flush pivot access door with cylinder lock & continuous piano hinge for cam cleat access should be included.
- e. Internal cam cleat system:
- 1) #10 – 5/16" diameter black braided polypropylene halyard.
- 2) Roller and spring lock levers shall be included.
- f. Truck & Rigging details:
- 1) Bronze or stainless-steel swivel type snap hooks with vinyl covers should be used for flag attachment.
- 2) Neoprene coated counterweights shall be used with a plastic bead retaining loop.

END OF DIVISION 10