“Architects, design consultants, contractors and construction managers shall be responsible for obtaining approval of all construction products and methods specified in the project to be in compliance with specifications and applicable laws.”
Architectural & Accessibility Guidelines (AAG)

Introduction

The guidelines set forth in these documents are intended to serve as design and construction guidelines for the Architectural components of a project & Accessibility preferences of the University. As such, they reflect the planning, design, construction, maintenance and operation expertise of the University personnel.

As AAG for the University, this information is to be applied to renovation, remodeling and new construction from the very first planning and design stages through actual construction and facilities maintenance, management and operation. The information included within each guideline section contains suggested procedures to be followed, materials to be used, or design guidelines which the Facilities Architects (FA) at UW have found to be appropriate to assure the quality desired at the University, now and through the future maintenance of these facilities. Facilities and Capital Projects personnel within the University, as well as outside architects, consultants, vendors and contractors should become familiar with the AAG.

The AAG section is a guideline for design documents, LEED documents i.e. OPR & BOD, technical specifications, and detail drawings to be used by architects, consultants and contractors in the design and construction of new, renovated and remodeled buildings and infrastructure on the UW campus. The FA’s intent is to build cost effective buildings and infrastructure without restricting the Consultant’s latitude for innovation. Architects and other designers are encouraged to propose innovative and cost-effective variations that meet or exceed this section; however, any deviation must be brought to the attention of the FA for review prior to incorporation into the project.

Scope of the AAG

The AAG shall serve as a minimum level of quality for all university-wide design, construction, and maintenance procedures. The level of quality deemed by any one guideline is determined on FA experience with the basis of reliability, serviceability, safety, and cost (including design, construction, inventory, operating, and maintenance costs). The information contained in the AAG is not specific to any one project, but common to all UW projects.

The AAG is developed and maintained by FA. We appreciate any feedback you would like to give on the content of these guidelines.

Disclaimer

FA uses the best efforts to promulgate guidelines for the benefit of those parties involved in providing services to the University in light of available information and accepted industry practices. FA does not guarantee, certify, or assure the safety or performance of any products, components, or systems tested, installed, or operated in accordance with AAG, or that any tests conducted under these guidelines will be non-hazardous or free from risk.

Architects, Engineers, design consultants, contractors and construction managers engaged by UW shall be fully responsible and liable for their designs and construction, regardless of the extent to which the AAG is used or followed in the project, and regardless of any approvals or acceptance of design or construction documents by UW or its personnel.
All major UW projects shall employ commissioning of the Building Enclosure in compliance with (NIBS, 2017). All other UW projects that include Building Enclosure work shall employ independent Forensics Professional (FP) using the guidelines of this section.

1. A certified Building Enclosure Commissioning Agent (BECxA) shall be procured with experience in Ashrae standards of Building Enclosure commissioning and architectural forensics in institutional buildings (ASHRAE 90.1, 2016).
2. BECxA shall participate in development of Owner’s Project Requirements (OPR) and Basis of Design (BOD)
3. BECxA & FP shall be the technical advisor to the team on Building Enclosure Design.
4. BECxA & FP ensures building Enclosure is maintainable by UW staff without specialized equipment and tools. Construction Observation and Documentation.
5. BECxA & FP to ensure Building Enclosure is protected at each phase of installation from weather damage & exposure. Check periodically for damage in previously installed work prior to continuing installation of new Building Enclosure materials.
6. Review submittals for all Building Enclosure systems recommending corrections, approval and denial. Make recommendations on substitution requests.
7. BECxA to observe document and make recommendations during the Air Infiltration Test.
8. BECxA & FP to observe all phases of building Enclosure construction and testing for compliance with contract documents. This includes;
   a. Installation of air weather barrier,
   b. Continuity of air weather barrier at all penetrations, and at windows and doors
   c. Attachments of cladding systems. Standard masonry veneer system with mortared joints weekly.
   d. Roofing
   e. Below grade waterproofing
9. BECxA to document all discrepancies and track corrective measures.
10. BECxA to work with contractor and design team to resolve issues with material and installation from unforeseen conditions.
11. Stand-Alone Mock ups and Field Testing of Cladding and Fenestration
   a. Mock ups of untested custom designed cladding systems shall be tested and certified by (AAMA, 2017)
   b. Mock-up is required of building envelop enclosure for large projects; may not be part of the work; shall be used to train installers; to test the design for constructability.
   c. Use same materials, sequencing and testing as proposed for the building.
   d. The mock up shall include weather tight integration with adjacent building systems.
   e. All testing and inspections shall be observed by BECx agent (BECxA).
   f. Work must be approved by FA prior to working on the building.
   g. The approved mock up shall be the basis of design for construction.
12. In-Place Mock Ups of Cladding and Fenestration
   a. In addition to the stand alone mock up, construct individual in-place mock ups of unique architectural conditions throughout the building envelope. Number and location to be selected by FA.
   b. Mock ups shall be tested for water integrity prior to installation of any finish material.
   c. Test installed system in place in accordance with “Field Check of Metal Storefronts, Windows, Curtainwalls and Sloped Glazing Systems for Water Leakage”, AAMA 501.2-
University of Washington

94. Test at least once for every design condition of the curtainwall, storefront, or window system. Retest until pass.

d. Use the same materials, sequencing and testing as approved on the stand-alone mock up.

e. All testing and inspections shall be observed by BECx agent.

f. Discrepancies must be fixed and mock up must be approved by FA prior to continuing work on remainder of the building.

Section 03 00 00 Concrete

1. All concrete slab is to be sealed unless concrete is polished or receives additional floor coverings.

2. Penetrating type graffiti sealing is required on all non-historic building envelopes to top of the second-level at a minimum. Application method of sealant must not come into contact with the ground or waste water systems.

3. Saw-cut interior concrete joints only with every effort to layout saw-cuts in smaller/reasonable square proportions vs. rectangular.

4. No sealant between concrete sections in site paving.

5. Concrete joints to be @ 10'-0” max each way

6. Steel reinforcing in masonry to have minimum 1.5” cover or be rust-resistant.

7. Acid-etched and/or sandblasted finishes are not allowed on walking surfaces.

8. Mechanical rooms to have waterproof sealer on floors before equipment is installed

9. Use dense material, low absorption rate, adequate cover over reinforcing, rust resistant reinforcing.

10. Stainless steel anchors and picks shall be used on exterior precast concrete

11. All exterior application of concrete cladding shall be a rain screen system.

12. GFRC panels prohibited.

13. Use stainless steel anchors and picks

14. Locate existing pipe, conduit, structure, etc. prior to any concrete cutting and/or boring; interior and exterior.

15. All cutting is to be with vertical, straight-line joints. Do not overcut corners.

Section 04 00 00 Masonry

1. All wall cladding to be a rain screen system

2. Masonry veneer around entrances to be anchored to structural frame up to 20’ on both sides and to top of wall

3. University prefers no masonry or brick veneer below grade. If masonry is used below grade, it must be of dense material, low water absorption rate.

4. Steel reinforcing in masonry and cast stone to have minimum 1.5” cover or be rust-resistant.

5. Use stainless steel anchors and picks

6. Masonry site walls, seating, planter boxes, retaining walls, etc. must have an impervious cap.

7. Use materials that inhibit efflorescence.

8. Joints between dissimilar materials to accommodate thermal movement in horizontal and vertical direction.

9. During installation of masonry systems, the open top of the cavity must be covered with a canopy to prevent water intrusion and future efflorescence.
10. Material overstock is required only when specialty masonry is used; quantities TBD.
11. Metal stud walls may be used for interior masonry walls only.
12. Back-up Wall
   a. Concrete or fully grouted CMU.
   b. Wood stud framing may be considered for exterior masonry.
   c. Metal stud wall may be used in masonry systems that do not have mortar.
13. Type-S mortar is troublesome; use Type-N mortar for brick, tooled concave joint face.
14. Use only fresh mortar, no re-tempering, remove fins and droppings from cavities
15. Set in full mortar beds; do not move once initial set has taken hold
16. Place in lifts no greater than 4 feet; hold down from tops of wall 1 inch minimum.
17. Fully grout all structural walls.
18. Masonry Anchors
   a. Galvanized (G-90) steel angles and bent plates, ¼-inch thickness or greater. Shop fabricate and galvanize (G-90); make no field cuts; set level, allow ¼ inch between pieces for movement.
   b. Heckman anchors or approved equal, No. 425 Wedge Insert and No. 427 Askew Head Bolts, Galvanized (G90).
   c. Stainless steel expansion anchors may be used when cast-in-place anchors miss their mark.
   d. Epoxy anchors are not acceptable to support ledger angles and in grouted CMU construction.
   e. Use non-corrosive supports only.
19. Wall Ties
   b. Hohmann and Barnard, DW-I OHS Seismic Interlock System, 12 gauge stainless steel plate, BYNA-TIE, ¼-inch diameter stainless steel wire tie, and Seismic clip No. 250, rigid PVC seismic clip accepting 9 gauge stainless steel wire.
   c. Dovetail type anchors are not acceptable.
20. Shims for Setting Masonry
   a. Use Non-corrosive or non-metallic shims only.
   b. Use Galvanized (G90) steel shims to be used for brick.
   c. Shims in setting beds shall not be exposed.
21. Masonry Embedded Flashing
   a. Stainless steel (26 ga when concealed, 24 ga when exposed) or copper (24 oz.) under masonry with hemmed drip
   c. Horizontal surfaces must slope to drain.
   d. Terminate flexible flashing with metal bar; anchor to wall at 12 inches on center; seal top edge, form corners and ends carefully to promote drainage and not take excessive room in cavity.
   e. Use two-stage flashing
   f. Shop fabricate corners and ends, weld or solder seams; laps to be 4 inches minimum; set laps in sealant.
22. Masonry Cavity Drainage, Weepholes, and Vents
   a. Open head joints at 24-inches on center
b. Bottom and top of walls
c. Keep clear of mortar; use open head joints.
d. Slotted weep holes only. No round weeps. No rope weeps.
e. Air Space (at Drainage Wall)
   i. 2-inch minimum clear
   ii. Keep clear of all materials
   iii. Consider using pvc mesh

23. The purpose of sealers is to protect the exterior masonry and concrete walls from water and to protect the window glazing from chemical leeching of the masonry and mortar.

24. The acceptable water based water repellent sealer system used on campus is “Weather Seal Siloxane WB Concentrate” by ProSoCo. Other systems are acceptable if they meet or exceed the technical performance criteria of the above system.

25. Penetrating type graffiti sealing to top of the second level at a minimum where determined by Facilities Grounds Manager. Application method of sealant must not come into contact with the ground or waste water systems. Acceptable systems used are "Sonneborn 700B", “Sealmastic Asphalt Emulsion, Type 2” by W. R. Meadows, Inc. or “Karnak 220AF” by Karnak. Other systems are acceptable if they meet or exceed the technical performance criteria of the above systems (i.e. “Blueskin” and “Air Block 31” by Henry. Perma Barrier AB by Grace,”Sealers

Section 05 00 00 – Metals

1. Metal fabrications shall be shop finished. Field alteration and finish of metal fabrications to be avoided.
2. All exterior fasteners are to be stainless steel or hot-dipped galvanized.
3. Any metal within or on walking surfaces must incorporate non-slip texture.
4. Interior
   a. Minimum of 20 gauge metal stud @ 16” O.C.
   b. If cold formed metal framing is incapable of sufficiently carrying applied loads, additional structural framing shall be provided.
   c. Blocking in walls to be located and designed to carry wall mounted loads.
5. Exterior
   a. Minimum 18 gauge galvanized G60 metal stud @ 16” O.C.
   b. Exterior metal framing to be designed to carry all applicable loads i.e. cladding, windows etc.
   c. If cold formed metal framing is incapable of sufficiently carrying applied loads, additional structural framing shall be provided.
   d. Only screwed or welded connections shall be used in exterior framing. Crimped connections prohibited.
   e. Provide detailed shop drawing elevations showing framing, openings, dimensions of rough openings, connection points for all elements supported by framing.
6. Metal Ladders
   a. Required at roof hatches and exterior access to different roof elevations that are not provided with separate roof hatches.
   b. NO offset stepladders.
   c. Vertical members to be 1-1/2” standard pipe. Rungs to be ¾” round minimum with non-slip surface.
Section 06 00 00 – Wood, Plastics, & Composites

1. Do not use wood in exterior applications that requires resealing every few years.
2. Teak / Pressure treated Pine and hardwoods is preferred for longer life and in appropriate applications.
3. All fabrication to be done in shop.
4. Treat all exposed edges.
5. Field modified cladding edges need to be retreated with coating.
6. Do not use urethanes and other UV degradable coatings.
7. Manufacturer recommended and approved fasteners must be used in all pressure-treated wood applications.
8. Gypsum and cement based sheathing materials may be acceptable when fluid applied weather barrier is used.
9. Wood sheathing to be plywood only.
10. No particleboard is to be used in underlayment or any exterior applications.
11. Wood Decking – No synthetic products may be used.
12. Interior dividing partitions may not be braced by ceilings.
13. All exterior wood framing outside the weather barrier to be preservative treated.
14. Wood framing for construction above roof deck should be preservative treated i.e. expansion joints, parapets, curbs, cant etc.
16. Interior Handrails inside occupied rooms to have wall protection on wall adjacent to the handrail.
17. Where interior benches without backs are installed and the adjacent wall acts as the ‘seatback’, the wall must be detailed and/or reinforced so that frequent use, backpacks, etc. do not create damage to the wall.

Section 07 00 00 – Thermal & Moisture Protection

1. Consult UW sole source documents prior to specifying roofing and waterproofing materials on new construction and reroof of existing buildings.
2. Sealants shall never be used for the primary weather barrier.
3. Protect building Enclosure at each phase of installation from weather damage & exposure. Check daily for damage in previously installed work prior to continuing installation of new building Enclosure materials. Damaged materials must be removed and replaced.
4. Personnel installing the products shall provide evidence of factory training and certification. Certification of individuals is required, not just certification of installing contactor.
5. Required Warranties
6. During warranty periods, water damage to any other building component and/or building contents due to product defect and/or incorrect installation requires correction at no cost and no dollar limit to the UW.
7. 30-year manufacturer warranty required for all waterproofing and roofing systems from date of Substantial Completion unless stated otherwise.
8. 2-year minimum installation warranty required for ALL waterproofing systems; from date of Substantial Completion.
9. Waterproofing
   a. NOTE: New waterproofing products and/or systems must be submitted to FA for consideration in any new construction.
   b. On horizontal surfaces over occupied spaces, hot rubberized asphalt waterproofing shall be used. Any drains installed at fixed pavers shall have two level inlets, at the finish surface and at the membrane level.
   c. On vertical surfaces below grade with occupied or service spaces on the other side, provide fully adhered membrane waterproofing systems. A protection system for the membrane is required to prevent damage from backfill or other construction.
   d. Extend the waterproof membrane up walls and curbs adjacent to a roof or horizontal surface a minimum of 1 foot, and a minimum of 4 inches above pavers, sidewalks or planting soils, whichever is greater. Terminate the membrane with continuously sealed joint and protect with metal counter-flashing set in a reglet or other reveal. Tie the waterproofing to the building Enclosure air weather barrier.
   e. A subgrade perimeter (footing) drainage system is required. If the soil report indicates any ground water above the lowest slab level, an under-slab waterproof barrier and drainage system is required.
   f. Membrane system for vertical and horizontal applications: The acceptable membrane waterproofing systems used on campus on vertical walls below grade and at plaza decks is a hot fluid-applied rubberized asphalt membrane.
   g. The acceptable system used is “Monolithic Membrane 6125” by American Hydrotech, CCW-500R by Carlisle, American Permaquik 6100 and Hot Rubberized Asphalt Waterproofing by Monsey - Bakor. No other membrane systems are acceptable substitutions unless they meet or exceed the technical performance criteria of the above systems and are acceptable to Engineering Services.
   h. The acceptable flexible flashing compatible with the waterproof membrane system used is uncured neoprene sheet, “Flex Flash UN” by American Hydrotech. Other flexible flashing systems are acceptable if they meet or exceed the technical performance criteria of the above system.
   i. The acceptable drainage course used is a three dimensional, crush-proof drainage core with a non-woven needle punched filter fabric system, “Hydrodrain 300” by American Hydrotech. Other drainage course systems are acceptable if they meet or exceed the technical performance criteria of the above system.
   j. Sheet system for vertical applications: For sheet system waterproofing on below-grade walls, under concrete slabs below grade, and around utility tunnel construction, the acceptable system used on campus is an expandable, resealable mineral composition sheet system.
   k. The acceptable system used is “Paraseal Membrane” by Mameco. Other systems are acceptable if they meet or exceed the technical performance criteria of the above system.
   l. The acceptable drainage course system used is “Hydrodrain 300” by American Hydrotech. Other systems are acceptable if they meet or exceed the technical performance criteria of the above system.
   m. The acceptable protection board used is extruded polystyrene that complies with ASTM C 578, Type IV, with compressive strength of 25psi and R-value of 10. Other systems are acceptable if they meet or exceed the technical performance criteria of the above system.
   n. Install flashings and corner protection at all corners, changes in plane, construction
joints, and cracks.

o. Overlap and/or reinforce and seal material at joints and ends.

p. Install appropriate terminations at all edges with counter-flashings over all exposed edges.

q. Seal all penetrations through membrane, sheet, etc. watertight.

r. This system shall be a cold applied, semi-mastic asphalt and solvent compound containing non-asbestos inorganic fibrous reinforcement.

s. Acceptable systems used are “Sealmastic Asphalt Emulsion, Type 2” by W. R. Meadows, Inc. or “Karnak 220AF” by Karnak. Other systems are acceptable if they meet or exceed the technical performance criteria of the above system.

t. At plaza deck and similar construction over occupied spaces, provide for a flood test of the installation. Test areas by flooding to a depth of 2 inches for a period of 48 hours. If leaks occur, the water must be drained and the membrane repaired. Contractor must verify that the supporting structure can support the deadload weight of the water.

10. Thermal Protection

a. No fiberglass batt insulation at removable ceilings.

b. No insulation below roof decks in new construction.

c. Dew point shall be outside of the air weather barrier

11. Weather Barrier

a. Materials specified in exterior wall shall have manufacturer’s statement of compatibility with adjacent materials and finishes.

b. Weather Barrier manufacturer shall provide on-site inspection and warranty on the Product warranty of 25 years. Warranty to include replacement of weather barrier system along with all other associated components/damage at no cost to UW.

c. Installation warranty of 10 years. Warranty to include repair of weather barrier system along with all other associated components/damage at no cost to UW.

d. Damp proofing shall not be used as a weather barrier

e. Loose applied sheet products shall not be used as a weather barrier.

f. Fluid applied weather barrier shall be used.

g. Weather barrier shall be continuous thru joints without depending on sealant for performance.

h. Protect exposed weather barrier systems as recommended by manufacturer against degradation by UV, moisture etc.

i. Parapets shall have permanent waterproof coping, flashing or capstones.

j. Parapets with capstones or masonry shall have through wall flashing over the moisture protection membrane.

k. Secure capstones to the parapet with stainless steel dowels. Seal dowels at through wall flashing with flexible flashing and sealant.

l. Cover all parapets’ back vertical surface with a moisture protection membrane that extends over the top of the parapet.

12. Wall Panels

a. Wall panels shall be open joint rain screen system.

b. Rain screen systems shall be fully detailed and specified by architect.

c. System specified and detailed shall be thoroughly designed, tested and detailed by the systems supplier prior to the start of work.

d. No vinyl siding.

e. Barrier wall systems prohibited.

f. Metal panels shall have no noticeable oil canning
g. No EIFS systems shall be used.

h. Metal wall panels to be attached with concealed fasteners. No surface fasteners allowed.

i. Rain screen manufacturer shall provide on-site inspection and warranty on the Product warranty of 25 years. Warranty to include replacement of rain screen system along with all other associated components/damage at no cost to UW.

j. Installation warranty of 10 years. Warranty to include repair of rain screen system along with all other associated components/damage at no cost to UW.

13. Membrane Roofing


b. All roofing work to be done by a qualified roofer certified by product manufacturer to do the work.

c. Any alterations to the existing building enclosure ¹ must be coordinated with FA prior to setting scope & budget.

d. Follow requirements for new construction when completely reroofing an existing building.

e. For existing building repairs, selected roofing materials must match existing roofing materials.

f. When modifying existing roofing, protect the building from water infiltration.

g. All penetrations of the building Enclosure must be air and watertight.

h. Roof mounted equipment is not desired. Place all equipment within a penthouse to reduce foot traffic and therefore reduce leaks.

i. If roof mounted equipment is unavoidable, the support base shall be either a concrete slab designed for the specific equipment and tied into the structural deck or a stand according to attached drawings “Mechanical Equipment Stand and Insulated Deck Steel Frame” or a curb 1’-0” above finished roof surface, minimum.

j. All equipment shall have vibration dampening/isolation and seismic restraints. Where a concrete pad is provided it shall resist seismic forces, be a minimum of 4 inches thick, reinforced and secured to the structure deck.

k. Penthouse wall roof base and flexible flashing should extend up a minimum 1’ 0” and terminate with a termination bar and counter flashing. All penthouses shall have direct access from within the building.

l. Perimeter drainage of roofing with scupper overflow is preferred over interior drains.

m. Where drains are not located at the exterior wall, they shall be at points of maximum deflection of the structural roof deck. Drains shall be located off of centerline to minimize interference with columns, beams and bearing walls.

n. All drains and overflow drains shall be located in a sump.

o. Flash all drains with 4 lb. per square foot sheet lead in addition to the membrane flashing.

p. Slope the structural framing under plazas, decks, roofs and any below-grade space ¼”/ft. minimum towards drains or over the edge of foundation walls to accommodate drainage. Avoid using insulation to achieve roof drainage

q. In new construction vapor barrier may be used as a temporary roof during construction. Protect vapor barrier while performing other construction on the roof. Apply a new

¹ Building enclosure – includes roofs, exterior walls, exterior windows & curtain walls, exterior doors, below grade construction, balconies, canopies, decks, patios, utilities and other elements attached to the exterior of a building.
University of Washington

layer of vapor barrier prior to completion of roof installation.

r. Vapor barrier must extend vertically at all curbs, parapets and other penetrations minimum 6” higher than adjacent finished roof.

s. Only underlayment in roofing systems over metal decking may be mechanically fastened. No mechanical fasteners may be used at the roofing insulation.

t. Small stone ballast is prohibited.

u. Single ply roofing systems are prohibited.

v. Protect high traffic routes on roof by installing additional cap sheet along walking surface.

w. Provide joints that accommodate all movement of the structure. These joints include but are not limited to seismic, thermal expansion, building joints, etc.

x. All joints where movement is anticipated shall have a primary barrier with an architectural cover, and a secondary drainage barrier (gutter) that drains to the exterior.

y. These joints shall have a 12-inch curb above the finished roof surface. They shall be flashed with flexible or stainless steel flashing and counter flashing and tied to through wall flashing.

z. The structural deck shall slope away or be parallel to the joints.

aa. As part of the final inspection and acceptance procedure, a moisture analysis and roof cuts may be required when there is evidence of inferior products or installation. At two months prior to expiration of the 2- year roofing contractor warranty, if warranty issues are detected, then the same tests are required. If defects are discovered the Contractor shall provide and pay for repairs as indicated in warranty.

bb. Exterior waterproofing requires special inspection at completion; includes below grade waterproofing systems.

14. Flashing & Sheet Metal


b. Architects to specify specific SMACNA design for project components.

c. Design flashing at edges of roof for 100mph wind uplift. Ensure that substrate specification and installation is in compliance.

d. All flashing shall be designed to accommodate expansion without buckling, “oil canning”, or warping.

e. All corners and horizontal to vertical transitions shall be shop fabricated.

f. Provide for thermal movements from the maximum change in ambient and surface temperatures as specified by manufacturers.

g. Provide clips that resist rotation and avoid shear stress as a result of thermal movement.

h. To accommodate horizontal and vertical construction tolerances, flashing must consist of a 2-piece system.

i. All penetrations, openings, etc. through the exterior skin of the building must be protected by head flashing.

j. Metal flashing shall be minimum thickness as follows:

k. Stainless steel, 24Ga. (.018 inch);

l. Cooper, 16oz. per square foot;

m. coated galvanized steel, 24Ga (before coating and galvanizing);

n. Aluminum, .032 inch.

o. Coatings for flashing shall be high-performance coatings, e.g. epoxy, polyurethane and fluoropolymer.

p. Provide standing seam joints in copings unless material thickness prevents the forming
of a watertight coping joint.
q. 5-year manufacturer and installation warranty required for all flashing; from date of Substantial Completion. Warranty includes installation, leaks, displacement, failed joints, and damages to other building components impacted by failure.

15. Joint Protection
   a. Water stops are required in all cold joint in concrete construction below grade.
   b. Seismic & expansion joints below grade should be avoided. If joints are needed the structure shall slope away from the joint. All joints in building Enclosure shall receive minimum manufacturer recommended water proofing.
   c. Sealants at dissimilar cladding materials to accommodate thermal movement in horizontal and vertical directions without failure.
   d. Sealants at exterior systems to have 50% elasticity elongation
   e. Sealants at exterior systems shall have minimum of 15 year warranted life.
   f. Sealants shall be UV stable
   g. Closed cell backer rods are preferred in exterior joints
   h. Prime all joints. Provide for adhesion tests for all materials and sealants.
   i. Consider sand textured finish on masonry sealant joints.
17. Mechanical Equipment Stand Detail

PIPE COLUMN (TYP)

STRUCTURAL FRAME

HEIGHT SEE TABLE

WIDTH SEE TABLE

SEE DRAWING INSULATED DECK STEEL FRAME

<table>
<thead>
<tr>
<th>WIDTH OF EQUIPMENT</th>
<th>HEIGHT OF LEGS</th>
</tr>
</thead>
<tbody>
<tr>
<td>UP TO 24&quot;</td>
<td>14&quot;</td>
</tr>
<tr>
<td>25&quot; TO 36&quot;</td>
<td>18&quot;</td>
</tr>
<tr>
<td>37&quot; TO 48&quot;</td>
<td>24&quot;</td>
</tr>
<tr>
<td>49&quot; TO 60&quot;</td>
<td>30&quot;</td>
</tr>
<tr>
<td>61&quot; AND WIDER</td>
<td>48&quot;</td>
</tr>
</tbody>
</table>

NOTE:

THIS DETAIL IS PREFERABLE WHEN THE CONCENTRATED LOAD CAN BE LOCATED DIRECTLY OVER COLUMNS OR HEAVY OILERS IN THE STRUCTURE OF THE BUILDING. THIS DETAIL CAN BE ADAPTED FOR OTHER USES, SUCH AS SIGN SUPPORTS.

SD– A–15
18. Insulated Deck Steel Frame Detail

NOTE:
The details in this drawing depict job-site fabricated construction. Many manufacturers now offer pre-fabricated flashing pieces or permit the use of materials for flashing purposes other than those that are shown here. Specifics on these proprietary designs vary greatly, and individual manufacturers' specifications should be consulted for their use.

SD-A-16
Section 08 00 00 – Doors and Windows

1. Vision panels at max. 43” AFF required on doors from frequently used spaces (not closets) with swing into circulation.
2. ALL/ANY item that requires special tools and/or test equipment for maintenance or repair must be brought to the attention of FA prior to specification and/or installation.
   a. See mechanical, electrical, plumbing, etc. requirements for access doors.
   b. Where utility risers are located in a chase large enough for maintenance personnel to enter, the chase shall have a ‘utility access door’ 2ft x 7ft. Provide grated flooring at access door inside chase.
   c. NO plastic access doors and/or panels.
   d. For all system components requiring maintenance panel size must be sufficient to repair the equipment.
   e. NO key access. Access must be possible by hand-actuated quarter turn hardware; removal of multiple screws is not acceptable.
5. Show all information required for installation of the curtain wall, storefront, window and integral panel systems, all details of connection and integration with all other building systems including waterproofing, structure and anchoring.
6. Coordinate design of curtain walls, storefronts and windows with adjacent cladding systems and support framing.
7. Storefronts and similar systems shall not be used when exposed to weather.
8. Life expectancy of curtain walls, storefronts and windows is 50 years before major upgrade or replacement. This includes all joints within the curtain wall or window. Life expectancy of perimeter joints at the interface with other exterior building systems is 10 years for joint sealants and 50 years for cavity flashing.
9. On-site representation by the manufacturer is required to advise on coordination with unforeseen conditions, for quality assurance and to assist with intersections at other building systems.
10. Access to all windows surfaces, interior and exterior, shall not put maintenance personnel at risk and shall not require personnel to bring equipment such as ladders or lifts unless approved by FA.
11. Consider window-washing requirements when designing sunshades or visors on building exterior.
12. Windows shall be designed to be cleaned by conventional, accepted methods. Coordinate with FA.
13. If windows are designed to be cleaned from ground level, provide vehicle access with structural support for the existing University lifts. Coordinate with FA.
14. Provide hose bibbs at roof and ground levels at every 100 feet of building perimeter.
15. If a swing stage is required to wash windows, provide weatherproof power receptacles (120V & 20 amps) at every 50 feet of parapet.
16. Provide outside weatherproof power receptacles (120V & 20 amps) at roof & ground level at every 100 feet of building perimeter.
17. Materials
a. Anchoring elements: Stainless steel or aluminum. Galvanized or other coated metal is unacceptable.
b. Flashing materials: Compatible with the curtain wall material and matching the life expectancy of the system.
c. Stainless steel, metal with high performance coating or anodized aluminum is acceptable.
d. Flexible flashing at concealed locations is acceptable. Consider Dow 123 or similar product.
e. Metal with paint, baked-on enamel or exposed galvanizing is not acceptable.
f. Shims: Stainless steel or high density plastic

g. Hollow metal is not acceptable.

18. Finishes
a. High performance fluoropolymer coating: Comply with AAMA 2605-98
b. Anodized aluminum: Comply with Class I anodizing conforming to AAMA 611-98
c. Powder coating: Comply with AAMA 605.2-90
d. Other high-performance coatings as approved for interior surfaces.

19. The following minimum submittals are required from the Contractor:
a. Coordination with adjacent building systems.
b. Fabrication details
c. Back-up support system
d. Fasteners and anchors
e. Perimeter flashing conditions
f. Samples for appearance and conformance to specifications

20. Curtain Walls and Glazed Assemblies
a. No reflective glazing or reflective window film shall be used.
b. Glazed units must be serviceable from the interior of the building. Glazing systems that require access from the exterior to complete the removal and installation of insulated glazing units are not permitted.
c. Breaking of existing insulated glazing units to accommodate unit removal and/or access to glazing sealant/tape systems is not permitted
d. Interior Wet/Dry Method (Tape and Sealant) or Interior Dry Method (Tape and Tape) are permitted.
e. Provide minimum manufacturer’s warranty period of ten (10) years from the date of manufacture for dual seal units vertically glazed. Insulating units in sloped glazing applications shall be warranted for a period of five (5) years from date of manufacture. Warranty to include all costs associated with unit replacement.
f. On-site representation from manufacturer during construction
  i. To assist with unforeseen conditions
  ii. To assist in quality assurance
  iii. To assist with intersections with other systems, i.e., metal wall systems
g. Curtainwall and window performance criteria: All systems shall meet the following minimum criteria in addition to industry standard practice.
  i. Air infiltration: Test in accordance with (ASTM 283, 2017), at a pressure of 6.24 psf; air infiltration shall not exceed 0.60 cfm per square foot of wall surface.
  ii. Water penetration: Test in accordance with (ASTM E331, 2017); at a pressure of 8psf, no water shall penetrate to any inside surface.
  iii. When tested in accordance with (AAMA 1503.1, 2017), using 1 inch glazing, the condensation resistance factor (CRF) for the system shall not be less than 56,
and the thermal transmittance (U-value) shall not exceed .68 BTU / Hr / ft²/ ° F.

iv. Coordinate with requirements for "Safe Access and Fall Protection" in General Requirements

h. Curtainwall designs that utilize custom extrusions, i.e., UWMC East Wing Recladding Project, are highly discouraged. If custom extrusions are proposed, the following steps shall be taken:

i. Design, manufacture and test a mock-up of the proposed system in accordance with project design and performance criteria.

ii. Successful testing of the mockup is a prerequisite for participation in bidding.

iii. Test finished system in place. Test shall be performed in accordance with the Curtainwall Performance Criteria above. Hybrid systems of curtainwall which include other elements such as entry doors, metal panels and operating sash shall be tested as part of the curtainwall.

iv. Requirements for a mock-up of custom designs may be waived if sufficient documentation can be produced to prove the performance of the custom design.

i. Testing procedures shall be approved by FA.

21. Roof Windows & Skylights

a. Roof penetrations must comply with roofing manufacturer’s recommendations.

b. Skylights and roof hatches shall have curbs that extend a minimum 1’ 0” above the roof surface. Provide crickets to prevent ponding.

c. Provide fall protection in accordance with applicable codes and standards and Section 11 81 29.

22. Hardware

a. Construction keying and final keying is by Facility Services.

b. A minimum of one building entry requires a power door operator.

c. Magnetic holders must be tied into the fire alarm system.

d. NO narrow style hardware is allowed; medium or wide styles only.

e. Oversized doors are to use wide-style hardware only.

f. Mullions with electric strikes allowed only with access control systems.

g. Operable ground level windows opening out are to have 6-inch limiters to avoid entry or injury from the exterior.

h. Some hardware has been shown to be difficult to maintain or does not perform well in our institution, and is therefore undesirable.

i. Floor closers and floor hinges: Use overhead closers.

ii. Butts at exterior doors: Use continuous hinge.

iii. Concealed exit devices: Use exposed exit devices.

i. Following is a list of hardware items and acceptable manufacturers. Substitutions must be pre-approved by the University. Where existing conditions are different, consult the University for directions.

<table>
<thead>
<tr>
<th>Hardware Item</th>
<th>Manufacturer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cylinders</td>
<td>Schlage, Medeco</td>
</tr>
<tr>
<td>Butts</td>
<td>Stanley, McKinney (or approved)</td>
</tr>
<tr>
<td>Electric transfer hinge</td>
<td>Von Duprin (or approved)</td>
</tr>
<tr>
<td>Key switch</td>
<td>Von Duprin</td>
</tr>
</tbody>
</table>

Architectural and Accessibility Guidelines 17
Continuous hinge (Geared Hinges)
Exit devices Von Duprin, Corbin, Russwin (no others)
Locksets and latches Corbin, Schlage, Medeco (no others)
Closers (typical) LCN Delayed action 4040XP (no others)
Closers (180° swing) Norton (no others)
Astragal Pemko
Door stops Glen Johnson (or approved)
Push/pull Builders Brass (or approved)
Kickplates Builders Brass (or approved)
Thresholds and weatherstrip Pemko (or approved)
Door operators (ADA) Keane Monroe (no others)
Automatic door sensors (ADA) B.E.A. (no others)
Door actuators (ADA) Largo (or approved)
Door position switch (CAAMS) Sentrol (or approved)
Door Holders Rixon; wall or floor (or approved)

23. CAAMS - The University of Washington has created a Campus Automated Access Management System (CAAMS) that is a centralized access control system for gaining access to University facilities using an access card rather than a brass key. All exterior doors of University buildings shall be controlled and/or monitored by CAAMS. Specific interior doors to be controlled shall be identified by user representatives from the departments who will occupy the building. Refer to Access Control section for requirements.
Section 09 00 00 – Finishes

1. ALL/ANY item that requires special tools and/or test equipment for maintenance & repair must be brought to the attention of FA prior to specification and/or installation.
2. Finish choices MUST NOT jeopardize, or be made at the expense of, essential building systems.
3. Coat/seal all items prior to installation as much as able; special consideration(s) required in occupied buildings.
4. Water based finishes only for interior and onsite applications.
5. Follow finish manufacturer’s recommendations for acceptable moisture ranges prior to application / installation. Moisture testing on concrete, substrate, etc. is required prior to installation of finishes and results must be submitted to the PM.
6. Cutting and Patching
   a. Patch areas in a manner that eliminates evidence of patching and refinishing.
   b. Refinishing should provide an even surface of uniform finish, color, texture, and appearance of all finish surfaces including as much of the surrounding wall as practical. (I.e. Corner to corner most adjacent to the patch.)
   c. Patch, repair, and/or re-hang ceilings to provide an even-plane surface of uniform appearance.
   d. Restore exterior building enclosures to a weather-tight condition.
7. NO spline ceilings.
8. Mechanical and electrical access to equipment above a hard-lid ceiling require a minimum of 24” x 24” access panel with clear path to the equipment.
9. Porous ceilings (tiles and/or systems) are not to be used in ‘wet’, clean, or sterile applications.
10. NO tegular ceiling tile.
11. No fiberglass batt insulation at removable ceilings.
12. T-bar grid to be standard of 1” in width.
13. A ‘Maintenance Access’ zone (vertically & horizontally) is to be defined and called out on drawings and maintained through final construction.
14. Lighting shall not be located in the ‘Maintenance Access’ zones or access points.
15. Removal of ceiling tiles may not be blocked by equipment locations. Minimum 6-inches from the suspended ceiling to the bottom of equipment & ductwork is required for ceiling tile removal.
16. Flooring must have traction and slip-resistant properties to minimize incidents.
17. Carpet must not require dry cleaning methods.
18. Rubber flooring and base is preferred over vinyl.
19. Resilient Flooring Manufacturers known to be acceptable: Noraplan, Marmoleum.
20. Polished or stained concrete in public areas is preferred.
21. The number of transitions from hard to soft flooring is to be minimized.
22. Concrete slabs must be tested for moisture prior to start of flooring installation. Moisture levels in slabs shall be less than the maximum permitted level specified by the flooring manufacturer. Documentation of acceptable moisture levels to be provide to PM.
23. Graffiti sealing is required on all building envelopes to top of second level at a minimum. Application method of sealant must not come into contact with the ground or waste water systems.
24. NO application of varnish within occupied buildings.
25. Clean pipe, conduit, and similar features before applying paint or other finishing materials.
26. NO painted galvanized.
27. NO ‘cold’ or spray-on galvanizing.
28. Do not cover or paint any signs, labels, identification, etc. If covered or painted, the contractor is
required to replace items.

29. Exterior metal accessories
   a. Galvanized when accessories are poured in place and/or not removable for refinishing.
   b. Powder coated when accessories are removable for refinishing.

30. Finishing of Mechanical and Electrical Equipment
   a. Prime and paint exposed pipes, conduit, boxes, ducts, hangers, brackets, collars and supports, except where items are shop finished or insulated.
   b. Paint interior exposed conduit and electrical equipment except in mechanical rooms. Galvanized conduit must be pickled, primed, and receive 2 finish coats.
   c. When painting ventilation grills, access panels, etc. remove item(s) and paint separately.
Section 11 81 29 Facility Fall Protection

1. Fall protection systems are required on every new roof and every re-roofing project if not already present.
2. Existing and new fall protection system must be certified to meet design loads and current applicable codes. Attachment to building structure shall be designed by WA state licensed structural engineer.
3. Preferred locations of fall protection are on vertical walls or parapets vs. horizontal locations that require additional deck / roofing penetrations.
4. If a parapet is used as a fall protection system it shall be a minimum of 42 inches above the finished roof surface at all points.
5. Fall arrest anchors and their attachment to the building must be of materials that will not rot, corrode, or deteriorate in any way.
6. Vertical lifelines (drop-lines) shall have a minimum tensile strength of 5,000 pounds.
7. Horizontal lifelines shall have a tensile strength capable of supporting a horizontal fall impact load of at least 5,000 pounds, applied anywhere along the lifeline.
8. Design all anchors to withstand a horizontal load in any direction of at least 5,000 pounds; the end anchors may need to be stronger.
9. The location of the leading edge lifeline must be at least ten feet from the roof edge (SBC, 2015).
10. The lifeline under load not deflect more than the distance from the anchor to the roof edge.
11. The design consultant shall review fabrication documents and witness installation of fall anchors for compliance with design documents.
12. To protect the roof and rope from abrasion, the rope should not contact the roof surface.
13. Provide slack in the lifeline to prevent the loads from exceeding the strength of the anchors.
14. Typical Fall Arrest Anchor Fabrication Detail

**TOP VIEW**
- 3/4" Ø U-BAR, BEND TO 1/2" RADIUS
- 1/2" PLATE, PUNCH 2-HOLES TO RECEIVE 3/4" Ø U-BAR
- 3" ØXXS PIPE, FILL WITH POLYURETHANE FOAM INSULATION AFTER GALVANIZING, PLUG GALV. VENTS WITH LIQUID METAL (USE DOMESTIC PIPE ONLY)
- 1/2" Ø HOLE FOR GALVANIZING
- (4) 3"x3"x1/2" PLATE GUSSETS TYPICAL
- TYP @ GUSSETS

**SIDE VIEW**
- 16"x16"x3/4" PLATE

**PLAN VIEW**
- (8) 7/8" Ø HOLES TYPICAL
- 16"x16"x3/4" PLATE
- 16"x16"x3/4" BOTTOM PLATE (SIM.) WHERE REQUIRED BY INSTALLATION CONDITION

**NOTES:**
1. GALVANIZED ASSEMBLY AFTER FABRICATION
2. SEE ADDITIONAL DETAILS FOR INSTALLATION, FOR MEMBRANE & FLASHING CONDITIONS
3. ALL STEEL PLATES TO BE TYPE A572 GRADE 50
4. A325 BOLTS TO BE Fu = 120 KSI AND A307 BOLTS TO BE Fu 120 KSI

SD–A–41
15. Fall Anchor at Concrete Slab Detail

- TYP. FALL AREST ANCHOR
- ROOFING FLASHING SEE ROOFING DETAILS
- ROOFING & INSULATION SYSTEM
- AT EXISTING BUILDING, REMOVE ROOFING & FILL TO EXPOSE STRUCTURE. AFTER INSTALLATION OF FALL ANCHOR, FILL VOID TO MATCH EXISTING
- C.I.P. CONCRETE STRUCTURE
- VARIES W/ LOCATION
- (8) 3/4"Ø A307 HEX HEAD BOLTS
- TYP. BOTTOM PLATE
- DOUBLE NUTS EACH BOLT

NOTES:
1. DO NOT USE THIS DETAIL WHERE STRUCTURE CONDITIONS VERY FROM THOSE SHOWN
2. VERIFY STRUCTURE IS CAPABLE OF SUPPORTING WORKING LOADS

SD–A–43
16. Fall Arrest Anchor Installation Detail at Concrete Beam Detail

NOTES:

1. DO NOT USE THIS DETAIL WHERE STRUCTURE CONDITIONS VARY FROM THOSE SHOWN

2. VERIFY STRUCTURE IS CAPABLE OF SUPPORTING WORKING LOADS

SD-A-42
17. Fall Arrest Anchor Installation Detail at Concrete Joist Detail

**NOTES:**

1. DO NOT USE THIS DETAIL WHERE STRUCTURE CONDITIONS VARY FROM THOSE SHOWN
2. VERIFY STRUCTURE IS CAPABLE OF SUPPORTING WORKING LOADS
18. Fall Arrest Anchor at Steel Beam Detail

**NOTES:**

1. **DO NOT USE THIS DETAIL WHERE STRUCTURE CONDITIONS VERY FROM THOSE SHOWN**
2. **VERIFY STRUCTURE IS CAPABLE OF SUPPORTING WORKING LOADS**

SD–A–45
Section 41 22 23 Hoists

1. A permanent or removable hoist may be required to lift heavy objects.
2. On the roof, provide swing arm hoist adjacent to each roof hatch.
   a. Hoist arm hook shall be minimum 5ft. clear above hatch.
   b. Coordinate location and finish with FA.
   c. Load capacity shall be minimum 200lbs. Clearly label hoist arm with rated load capacity.
   d. Hoist arm attachment shall be designed by a WA state licensed structural engineer.
   e. Hoist arm shall have provisions that accommodate electric as well as manual hoists.
   f. Hoist arm shall have carabiners that are either manual or auto-locking.
   g. Provide 20 amp circuit at base of hoist arm.
3. Coordinate with Facilities for other hoist locations.
Accessibility

The University of Washington faces the challenge of providing an inviting, welcome, supportive, and universally accessible environment for all persons. (ADA, 1990), the (ADA, 2010), (WAC, 2017), the (SBC Chapter 11, 2012), and the (ANSI A117.1, 2009) shall be used as minimum guides in establishing accessibility design requirements (using the most stringent if there are any differences) and shall not be construed to limit Design Professionals from going beyond these requirements and proposing a higher level of accessible design features. Any design or elements thereof that the Design Professional may question as being aligned with the University’s position on universally accessible environments or the ADA’s intent, including identification of potential risks associated with code/law interpretations, shall be brought to the attention of the FA early in the design phase to allow for analysis and direction.

Overview

The Americans with Disabilities Act (ADA) of 1990 is a civil rights law in the United States that prohibits discrimination based on disability. Because of its status as law, compliance is not optional. Municipalities do not have to adopt ADA in the way they adopt other building codes; it is already mandatory. The most recent version of the design standards for public spaces was released by the Justice Department in 2010 and it is what designers follow today. Keep in mind that similar to codes, things like clear floor space and wheelchair maneuvering space are given in the guidelines as a minimum—you can always design more generously and it’s always good practice to keep universal design in mind on any public project.

WAC 51-50-005

International Building Code requirements for barrier-free accessibility.

Chapter 11 and other International Building Code requirements for barrier-free access, including ICC A117.1-2009 and Appendix E, are adopted pursuant to chapters 70.92 and 19.27 RCW.

Pursuant to RCW 19.27.040, Chapter 11 and requirements affecting barrier-free access shall not be amended by local governments.

202.3.1 Prohibited Reduction in Access. An alteration that decreases or has the effect of decreasing the accessibility of a building or facility below the requirements for new construction at the time of the alteration is prohibited.
University of Washington

Building design, including renovations shall be based on “Universal Design” concepts and criteria (The 7 principles of Universal Design, 1997). Universal Design is defined as “A process that enables and empowers a diverse population by improving human performance, health and wellness, and social participation.” (Edward Steinfeld, 2012) In short, Universal Design makes life easier, healthier, and friendlier for all.”

The following information is provided as a guideline for accessibility requirements to be considered when establishing project scope & budget.

4. Site
   a. Site steps are not allowed on public sidewalks when route requirements can be accomplished with a ramp. Design accessible exterior routes without ramps when possible and use alternatives to steps such as sidewalks and proper grading to achieve gentler slopes.
   b. Avoid or eliminate grates or other openings in traveling paths.
   c. Bicycle paths need safety features to avoid pedestrian and wheelchair accidents. E.g. Separate lanes for bicycles and pedestrians, speed control devices at all cross traffic in bike lanes.
   d. Provide bicycle deterrents at wheelchair accessible ramps
   e. All sidewalks shall have a minimum width of 6 feet.
   f. Curbs shall be contrast color to roads where sidewalks are adjacent to vehicular traffic.
   g. All sidewalks leading up to a vehicular roadway or route shall have a detectable warning perpendicular to path of travel. Provide curb cuts at all crosswalks.
   h. Any sidewalk grade drop off more than 30" in 3' distance to have guardrails
   i. Avoid pavers that move over time & use and become wheelchair hazards
   j. WAC requires blue and white International Symbols of Accessibility.
   k. On signage, use term “accessible” and the International Symbol of Accessibility. The terms “ADA” or “handicap” shall not be used.
   l. Adequate and safe detour(s) shall be provided when sidewalks and/or building entrances are closed and blocked.
   m. Temporary traffic control - Barricades shall have a 4” high board on the bottom edge. Cone and tape barriers shall have 4” high continuous rigid barrier on bottom.
   n. Accessible parking to be closest available to accessible entrance
   o. Metered accessible parking spaces shall include curb cuts and sidewalk access to the meters.
   p. Accessible trails
      i. Accessible trails shall be made of flexible porous paving that must be designed, mixed and installed per manufacturer’s recommendations.
      ii. Flexible porous paving must be KBI Flexipave, Porous Pave or approved equal.
      iii. Installer must be certified for the installation of the flexible porous paving
      iv. Flexible porous pavement thickness must be shown on the Drawings.

5. Buildings
   a. In new construction, all public entrances to the building shall be designed for universal accessibility. Entrances on an accessible route, including the main entrance, shall be provided with power-operated doors.
   b. If an entrance to the building other than the main entrance is located closer to the parking designated for persons with disabilities, that entrance shall also be power operated.
   c. In vestibules power operators shall be provided in and outside the vestibule.
d. Although areas used exclusively by employees for work are not required to be fully accessible, consider designing such areas to include non-required turning spaces, and provide accessible elements whenever possible.

e. Electric wheelchairs are more commonly used on UW campus due to the steep slopes. Consider that they need higher clearance at desks and larger turn radius beyond ADA laws.

f. Provide some electric wheelchair charging outlets in common areas and large classrooms with 62” turn radius and 32” x 50” clear space in front of outlet.

g. Minimize interior doors where possible if not needed. Use other features to designate separation of spaces where possible e.g. arches or decorative columns etc.

h. All door vision panels to be max 42” max. AFF

i. Make minimum one operable window accessible in common areas and flexible spaces that may need accommodation in the future

j. Consider digital display for emergency messages on each floor at each core that display the action to be taken. Different emergencies have different requirements e.g. earthquake, fire, shooter etc.

k. Where area of rescue assistance is required, it shall be accessible to an exit stairwell on every floor on multistory building and have two-way communication, smoke partitions and seismic bracing.

l. Avoid door closers where not required by building codes.

m. All interior doors to open with less than 5lb force and stay open for minimum 6 seconds. If door cannot be opened with less than 5lb, provide power door operator.

n. All operable parts e.g. Door handles, thermostats, light switches, electric outlets, toilet partition latches, faucets, dispensers etc. to function with less than 5lb force to be 16”- 46” AFF should be operable with a closed fist.

o. Doors larger than 3’ x 7’ in rooms open to public must have power door operators.

p. All operable parts to have 32”x 50” clear space in front for wheelchair users.

q. Switches over counter spaces in common areas should be mounted in front for accessibility.

r. All recycle bins and garbage to have opening between 16”- 46” high

s. Use high contrast color signs to accommodate visual impairment.

t. Server rooms with raised floor must have accessible ramp.

u. Fixed seating in lecture halls shall have accessible locations with fixed table and moveable chairs and/or open space for wheelchairs and Table with adjustable heights.

v. Provide entrances to lecture halls that allow wheeled access to the teaching area.

6. Remodels and renovations of buildings

   a. A minimum of one (1) entrance shall provide universal accessibility. The accessible entrance shall be power operated and shall be the main entrance unless otherwise approved by the ES. Whenever it is physically and economically feasible, all entrances shall be made accessible.

   b. Alterations that affect an area containing a primary function shall ensure that the path of travel to the altered area is made accessible for individuals with disabilities.

   c. Verify all interior doors open with less than 5lb force and stay open for minimum 6 seconds

   d. Make existing restrooms accessible.

   e. Install “no gap” strips at toilet partitions.

   f. Employee spaces for “common use” should be made fully accessible.

   g. Objects protruding more than 4” in circulation paths must be modified to comply with
ADA laws.
h. Induction hearing loop systems shall be the system installed for spaces requiring assistive listening systems.

7. Restrooms and Restroom Accessories
   a. All single occupant restrooms in UW facilities to be ADA accessible and gender neutral.
   b. Provide unisex restrooms per (SBC, 2015) 1109.2.1 and (SBC, 2015) 1109.2 Exception 3. Locate on the same floor as the population being served.
   c. Provide full height phenolic partitions for toilets and urinals. Provide minimum 1” gap from finished floor surface and 4” gap from ceiling for ventilation. Height to be maximum 8’-0”. Use no gap/privacy partitions only.
   d. Avoid main entry doors in gang restrooms. Use a vestibule to mitigate line of sight.
   e. Provide wall-hung toilets and urinals.
   f. Urinals to be minimum 3’-0” o.c.
   g. Min 24” clearance required inside stalls from fixture to partition door
   h. Minimum 36” clearance for circulations required in all restrooms
   i. Lavatories shall be installed in countertops and not as separate wall-hung fixtures.
   j. Provide wainscot at 5 feet AFF minimum.
   k. Tile grout shall be tinted, not white.
   l. Accessible stalls and restrooms to have 62” turn radius and 32”x 50” clear space.
   m. All counters to be 34” height max. AFF. with 29” clear space underneath.
   n. Mirrors shall be the full width of the counter, without a shelf. Top of mirror not to exceed 7 ft. above finished floor. Bottom of mirror and top of backsplash to be 40” max. AFF.
   o. Provide touchless flush, faucet & napkin dispenser etc.
   p. Locate electric hand dryers or paper towel dispensers to minimize water in walking path.
   q. Provide a shelf over toilet paper dispenser in each restroom.
   r. Provide coat hook in each restroom stall. Locate hooks on wall or partition to prevent injuries to custodial staff when cleaning or maintaining the space.
   s. Provide depressed slab(s) sloped to drain(s) at ¼” per 1’-0” minimum.
   t. Side approach for the sink in the kitchen is acceptable if the following conditions are met:
      i. The kitchen counter and sink height is 34” max. AFF
      ii. All controls are within reach range as shown in the figure (ANSI A117.1, 2009) 308.3.2 & comply with 309.
      iii. All faucets and operable parts can be operated with under 5lbs force with a closed fist.
      iv. Provide clear floor space 30”x 48” for side approach centered on the sink.
      v. Provide non-protruding cabinet accessories for lower cabinets i.e. recessed handles.
Appendix A

The following list of University of Washington policies, forums, documents, etc. is to be used in conjunction with this document. The most current and to date documents shall be sought and used.

UW Master Plan
https://cpd.uw.edu/resources/plans

Safety of Minors on UW Campus
https://compliance.uw.edu/compliance/compliance/minors

Restroom Policy
https://compliance.uw.edu/sites/default/files/16-1-5%20FAQs%20re%20restrooms.pdf

Bicycle Policy
https://facilities.uw.edu/transportation/bike-safety?ref=

Parking
https://facilities.uw.edu/transportation/park

Pedestrian
https://facilities.uw.edu/transportation/walk

Shuttle
https://facilities.uw.edu/services/tags/Shuttles

Sustainability
https://green.uw.edu/sites/default/files/cap/uw_climate_action_plan.pdf

_____________________________________________
References


