

DIVISION 11 – EQUIPMENT

Section Number	Title
11 30 00	RESIDENTIAL EQUIPMENT
11 32 00	Unit Kitchens
11 50 00	EDUCATIONAL AND SCIENTIFIC EQUIPMENT
11 52 00	Audio-Visual Equipment
11 80 00	FACILITY MAINTENANCE AND OPERATION EQUIPMENT
11 81 00	Facility Maintenance Equipment
11 82 00	Facility Solid Waste Handling Equipment
11 82 26	Facility Waste Compactors
11 83 00	Automated External Defibrillators (AEDs)

Section Number	Title
11 30 00	RESIDENTIAL EQUIPMENT
11 32 00	Unit Kitchens Dining Hall Requirements

Part 1 – General

Plumbing:

- Minimum drain size shall be 2". Indirect waste shall be provided when required by International Plumbing Code (IPC) and/or Coconino County Health department.
- Floor drains rather than floor sinks shall be installed except when indirect waste is required by code.
- Eight-inch (8") water column gas pressure (minimum) shall be provided to all fixture locations.

Mechanical:

- Type 1 hoods, canopies and duct work, when provided, must conform to all applicable standards.
- Mechanical air curtains shall be installed over all exterior doorways. (Per NSF standards & Coconino County Health Department Requirements).
- No refrigeration units using R-12 will be accepted.
- Proper ambient protection controls shall be provided on all refrigeration condensing units installed outdoors.
- Refrigeration lines shall be sized and installed in accordance with American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) standards.
- Air balance and test reports shall be provided on all mechanical systems.

Electrical:

- Electrical cut-out boxes shall be of type 4 or 4X and shall be held away from any wall a minimum of 1/4".

Fire Life Safety Systems:

- Automatic fuel and power shutoffs shall be installed to all appliances under a fire protection system.
- A diagram of the fire protection system and its interface with other systems shall be provided.

Part 2 – Products

N/A

Part 3 – Execution

N/A

Section
Number

Title

11 50 00 EDUCATIONAL AND SCIENTIFIC EQUIPMENT

11 52 00 Audio-Visual Equipment

Refer to NAU Design Guidelines, Classroom and Office Design Guidelines.

11 80 00 FACILITY MAINTENANCE AND OPERATION EQUIPMENT

11 81 00 Facility Maintenance Equipment

Part 1 – General

Following is a list of the typical housekeeping equipment to be ordered for custodial services on new construction projects. This list is provided to ensure there is adequate space and storage in the custodial closets. The final list for each project is to be reviewed and approved by Owner (Project Manager and Custodial Supervisor).

Part 2 – Products

Owner will procure these items or suitable equivalents unless otherwise noted:

- ADVANCE SC500 X20D 20" Walk Behind Scrubber W/130AH Wet Batteries.
- Windsor Titan Tip ‘n Pour Wet/dry Vac 20gl w/hose & tool kit. Features powerful 1.5 hp vacuum motor and rugged construction to provide years of dependable operation. The Windsor Titan 20 gallon offers the added convenience of an optional squeegee attachment for faster large area wet pick-up. Every Titan wet/dry vacuum comes standard with an eight-piece tool kit to increase cleaning versatility.
- Rubbermaid Executive 32-gallon Brute Container, black.
- Rubbermaid Executive Brute Caddy Bag, black.
- Rubbermaid Executive Brute Dolly with quiet casters.
- Viper Venom 20" 175 RPM 1.5 HP Floor Machine including pad driver.
- Unger Speed Clean™ Window Kit. Drip-free indoor window cleaning. Quick and easy for hard-to-reach areas. No water spills or drips on windowsills, frames, carpets and furniture. Clean in one simple step (no squeegee required), windows dry streak-free.
- 6112-77 RM Caution Wet Floor Sign, 25”.
- WAXIE Versa High Performance Cleaning Caddy.
- Deluxe Carpet Extraction Dual Jet Wand.
- Rubbermaid Executive Janitor Cleaning Cart w/Locking Cabinet & Trash Cover.
- Rubbermaid Executive Collection 34-gallon Vinyl Cart Bag, Black.

Section Number	Title
	<ul style="list-style-type: none"> • AQUACLEAN 18FLX CARPET EXTRACTOR. • VERSAMATIC 18IN. • ICAPSOL MINI DELUXE. • PROBLITZ XP AIR MOVER. • Tersano wall-mounted Lotus water dispenser, which requires electrical and plumbing connections.

Part 3 – Execution

N/A

11 82 00 Facility Solid Waste Handling Equipment

Trash chutes shall not be designed into any structures. It is required that all trash handling and pick-up be designed in exterior locations.

11 82 26 Facility Waste Compactors

Compactors shall only be specified for food service facilities. All other locations shall be designed for exterior dumpsters.

11 83 00 Automated External Defibrillators (AEDs)

Pursuant to Arizona Revised Statutes §34-401: Any state building that is constructed or undergoes a major renovation at a cost of at least \$250,000 is required to be equipped with AEDs. This includes all academic, residential, and auxiliary buildings. When needed, AEDs will be purchased and installed as part of the construction or renovation project triggering this requirement.

The AEDs must be located in logical and accessible locations, not limited to the footprint of the construction or renovation project. If AEDs are already present but found to be inadequate, the project is responsible for adding AEDs to improve building-wide compliance. AED installations must meet the following criteria:

1. AED cabinets must be installed at a height not exceeding 27" from the floor to bottom of the cabinet OR must be semi-recessed with no part of the cabinet extending more than 4" from the wall (IBC 1003.3 protruding objects). In all cases, operable cabinet components (doors) must be located between 27" and 48" above finished floor.
2. In multi-story buildings, there must be at least one AED on every floor.
3. If a floor contains areas with key or card restricted access, the AED must be

Section
Number

Title

placed in the publicly accessible portion of the floor, excluding areas smaller than 100ft².

4. For general building use, AEDs shall be installed with no more than a three-minute round trip travel time at a brisk walk (1.5 minutes from the AED to the most distant service location).
5. In spaces where intense physical activity, (such as gyms or weight rooms) or large gatherings (classrooms/auditoria) are anticipated are located, AEDs should be sited within a 30 second brisk walk from the door of that room, when possible, without increasing the maximum travel time to other areas beyond three minutes.
 - a. AEDs should be located as close to physical activity or gathering areas as possible with preference to locations that do not require passing through internal lockable doors.
6. A single AED may be used to satisfy multiple criteria. Owner’s Environmental Health & Safety (EHS) department can provide assistance for siting the devices upon request.

****END OF SECTION****