

# DIVISION 11 – EQUIPMENT

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# **11 05 00 Common Work Results for Equipment**

## **Installation**

The installation of equipment on a project will usually fall under one or more of the following conditions:

### **1. Contractor Furnished – Contractor Installed**

- Installation shall conform to the provisions of the Contract Documents and be coordinated by the general contractor.
- Specify that the installation shall be performed by competent and trained workmen in accordance with manufacturer's instructions, all applicable codes, and governing regulations. Where appropriate, the installation by the manufacturer shall be specified.
- Documents must specify any necessary inspection by the installer that may affect installation. Specify that the installer shall not proceed until any unsatisfactory conditions are corrected.
- Specify that any defects caused by unsatisfactory conditions or untimely installation shall be corrected at no cost to the Owner.

### **2. Owner Furnished – Contractor Installed**

Same requirements as Contractor Furnished – Contractor Installed

### **3. Owner Furnished – Owner Installed**

- Contract Documents for the general construction contract shall identify equipment, any space requirements, and any utility connections required.
- Specify that installation must be coordinated with the Project Manager.

### **4. Contractor Furnished – Owner Installed**

- Same requirements as Owner Furnished – Owner Installed

## **Delivery**

1. Specify that coordination of delivery shall be the responsibility of the general contractor. The contractor shall have a representative on site to receive the shipment.
2. Specify that all debris and crating material shall be removed from the site and properly disposed of.



## **Testing and Operation**

1. Specify that any equipment requiring testing of its operation is to be accomplished and properly documented, including any safety devices. When appropriate, operation and maintenance instruction shall be provided to the Owner's personnel. This instruction shall include demonstration of proper use, maintenance, safety features, cleaning procedures, and proper storage and handling.
2. Provide operation and maintenance manuals as appropriate in accordance with applicable sections of this manual.

## **11 08 00 Commissioning Equipment**

1. When equipment is to be provided within the scope of the project and the design/selection is included as part of the A/E agreement, the services provided will include the identification of user needs, formulation of budgets, development of design documents for the purchase and installation of the equipment. Identification of user needs, and formulation of budgets shall be accomplished during the programming and design development phases of the project. The entire process shall be closely coordinated with the user group with the Project Manager involved. The result of this process must ensure compatibility with user requirements, current University standards, as well as compliance with governing codes and regulations.
2. Plans and specifications shall be prepared that adequately supply information necessary to purchase and install the equipment as approved by the University. Any applicable warranty or guarantee on material, installation, and/or manufacturing workmanship must be coordinated with the Project Manager. Approval of acceptable manufacturers shall be obtained from the Project Manager prior to the release of documents.

## **Purchasing**

1. The University prefers that equipment be procured and installed under the provisions of the general construction contract. When this method of procurement is not possible or practical, it may become necessary to specify and purchase these furnishings through the University Purchasing Division. This method also requires complete bid documents including instructions to bidders which will detail provisions from related documents that may apply. Bid evaluations and recommendations shall be provided to the Project Manager for review and approval prior to award of a contract. When this method of procurement is used, the documents for the general construction contract must contain any necessary coordination requirements for this separate delivery and installation.

## **11 21 00 Retail and Service Equipment**

### **11 21 23 Vending Machines**

1. The location, type, and number of vending machines will be determined in conjunction with University Housing and Dining.



2. Allocate suitable electrical and data ports as needed in accordance with Divisions 26 and 27.

## **11 81 00 Facility Maintenance Equipment**

1. Any specialty equipment required to perform routine maintenance shall be purchased as a part of the project. University Facilities' [Maintenance Services](#) is to be contacted for review and approval of any equipment selection.

## **11 82 00 Solid Waste Handling Equipment**

### **11 82 13 Solid Waste Bins**

1. The University uses an 8 cubic yard, front load dumpster for refuse disposal. These are to be enclosed in an approved screening device and located in a service area where they are accessible to a front-loading truck, but not be objectionably visible to the general public. Site location and enclosure are to be coordinated with [University Planning](#), and the Director of Custodial, Recycling and Solid Waste.
2. Pay special attention to designing adequate structural integrity of pavement, concrete etc. around the dumpster container to minimize wear by repeated service.
3. Allocate space for one 23-gallon waste receptacle located near the door of each restroom.
4. Residence hall area waste receptacles and recycling containers shall be limited to 16 gallons or be fire rated with a lid.

### **11 82 23 Recycling Equipment**

1. All recycling stations are to have, at a minimum, bins for Metal, Plastic & Glass, Paper, and Landfill.
2. An adequate supply of recycling bins shall be supplied to accommodate the anticipated material volume and are to be dispersed throughout the building such that they are easily accessible from all public areas within a building such as hallways, atriums, etc. to minimize travel distance to reach them. At no time should it be necessary for building occupants to go to another floor to reach a recycling station. Preferred locations for these are adjacent to vending machines and outside of large classrooms.
3. Do not place bins inside classrooms.
4. All recycling stations shall be placed in alcoves sufficiently sized to house all bins. When placing bins without a reconfiguration of space, the designer is to determine location(s) that minimize the impact to the function of the building and emergency egress.
5. Recycling bins are also to be placed in non-public areas such as work rooms, copy



rooms, break rooms, computer labs, and lounges.

6. Residence hall recycling equipment shall be in enclosures.



# **PRODUCTS AND MATERIALS- DIVISION 11 – EQUIPMENT**

## **Recycling And Waste Bins**

- Public Areas: Clean River Transition TIM 72-4 or approved equal
- Non-public Areas: Clean River LeanStream with backboard or Busch Systems Waste Watcher with Sign Stand or approved equal
- Office Space Waste Bins: Clean River Mini Bin, Clean River Side Saddle, or approved equals
- Office Space Recycling Bins: Clean River Desksider 7-10.25 Gallon, Clean River Office Recycler, or Busch Systems Multi Recycler 6 gallon
- Restroom Waste Bins: See Division 10 Products

