



THE UNIVERSITY OF ARIZONA  
BUSINESS AFFAIRS

University Facility  
Services

UFS Bldg. 186  
1405 N. Ring Rd  
PO Box 210186  
Tucson, AZ 85721  
Office #: 520-621-9113  
ufs.arizona.edu

## University of Arizona Design Specification Standards Overview of Update 11 Changes

A brief summary of key DSS changes are provided in red below.

### INTRODUCTION

### TAB A TABLE OF CONTENTS

### TAB B PROCEDURES

#### B-4 International Suite of Codes

- Added subsections clarifying the adoption of other standards through the adoption of these codes

B-9 As-Builts and Record Drawings B-10 Variance Procedure

B-10 Variance Procedure

B-11 Surface Water Procedures

### TAB C DESIGN CRITERIA

C-2 Campus Planning and Urban Design Guidelines

C-3 Laboratory Planning and Design Criteria

C-5 Custodial Planning and Design

C-6 Keyless Access and Security System Guideline

C-7 Room Numbering

#### C-9 Surface Water Design Guidelines

- Clerical – Changed Risk Management reference to Environmental Health & Safety

C-10 Tree Preservation, Protection, & Salvage Guidelines

#### C-11 Indoor Air Quality Criteria

- Clerical – Changed Risk Management reference to Environmental Health & Safety

#### C-12 Campus Accessibility

- Paper towel dispenser height changed in order to align with other sections in DSS
- Clarified with DRC exterior doors can be 10 lbs. max opening force
- New ANSI A117 Code requirements for turning space
- Requirements added for urinals, added verbiage per ANSI A117

C-13 Campus Sustainability

C-14 All Gender Restroom Requirements

C-15 Lactation Room Requirements

C-16 Use of Sage Green Color on Campus



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## TAB E STANDARDS

### DIVISION 02 - SITE WORK

#### Section 02100 Demolition

- Clerical – Changed Risk Management reference to Environmental Health & Safety

#### Section 02200 Earthwork

- Clerical – Changed Risk Management reference to Environmental Health & Safety

Section 02280 Soil Treatment

Section 02500 Paving and Surfacing

Section 02610 Site Chilled Water & Heating Water Utilities

Section 02620 Site Potable Water & Reclaimed Water Utilities

Section 02640 Site Natural Gas Utility

Section 02710 Site Sanitary Drainage

Section 02720 Site Storm Drainage

Section 02810 Irrigation

Section 02830 Fences and Gates

Section 02850 Trash Compactor Embed Plan

Section 02870 Site and Street Furnishings

Section 02900 Landscaping

Section 02910 Temporary Tree and Plant Protection

Section 02920 Tree Salvage

Section 02930 Palm Tree Salvage and Planting

### DIVISION 03 – CONCRETE

Section 03310 Structural Concrete

Section 03330 Architectural Concrete

### DIVISION 04 – MASONRY

Section 04200 Unit Masonry

### DIVISION 05 – METALS

Section 05300 Metal Decking

Section 05500 Metal Fabrications

Section 05700 Ornamental Metals- Skateboard Deterrents

### DIVISION 06 – WOOD & PLASTICS

Section 06000 General Discussion

Section 06100 Rough Carpentry

Section 06170 Prefabricated Structural Wood

Section 06200 Finish Carpentry

Section 06402 Architectural Woodwork / Custom Casework



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### DIVISION 07 – THERMAL & MOISTURE PROTECTION

- Section 07000 General Discussion
- Section 07100 Waterproofing and Dampproofing
- Section 07200 Insulation
- Section 07240 Exterior Insulation and Finish Systems
- Section 07250 Fireproofing
- Section 07270 Firestopping
- Section 07310 Shingles
- Section 07320 Clay Tile Roofing
- Section 07410 Preformed Roof and Wall Panels
- Section 07500 Membrane Roofing
- Section 07570 Traffic Topping
- Section 07590 Horizontal Traffic Surfacing
- Section 07600 Flashing and Sheet Metal
- Section 07700 Roof Specialties and Accessories
- Section 07800 Skylights
- Section 07900 Sealants

### DIVISION 08 - DOORS & WINDOWS

- Section 08000 General Discussion
- Section 08110 Steel Doors and Frames
- Section 08210 Wood Doors
- Section 08305 Access Doors
- Section 08330 Overhead Coiling Doors
- Section 08400 Entrances and Storefronts
- Section 08500 Metal Windows
- Section 08610 Wood Windows
- Section 08710 Finish Hardware
- Section 08711 Finish Hardware; Residence Life
- Section 08720 Automatic Door Operators
- Section 08800 Glazing

### DIVISION 09 - FINISHES

- Section 09000 General Discussion
- Section 09100 Metal Support Systems
- Section 09200 Lath and Plaster
- Section 09250 Gypsum Board
- Section 09330 Tile



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Section 09500 Acoustical Treatment  
Section 09650 Resilient Flooring  
Section 09680 Carpet and Carpet Tile  
Section 09900 Painting  
Section 09950 Wall Covering

### DIVISION 10 - SPECIALTIES

**Section 10000 General Discussion**

- Clerical – Changed Risk Management reference to Environmental Health & Safety

Section 10100 Chalkboards, Markerboards and Tackboards  
Section 10160 Toilet Compartments  
Section 10260 Wall Protection Systems / Corner Guards  
Section 10293 Bird Control  
Section 10410 Directories and Bulletin Boards  
Section 10420 Dedication Plaque  
Section 10430 Exterior Signs

**Section 10431 AED (Defibrillators) and Cabinets**

- Clerical – Changed Risk Management reference to Environmental Health & Safety

Section 10520 Fire Protection Devices  
Section 10810 Toilet Accessories

### DIVISION 11 - EQUIPMENT

Section 11050 Compact Shelving  
Section 11132 Projection Screens

### DIVISION 12 - FURNISHINGS

Section 12000 General Discussion  
Section 12345 Laboratory Casework  
Section 12510 Blinds  
Section 12690 Floor Mats and Frames  
Section 12710 Fixed Seating

### DIVISION 14 - CONVEYING SYSTEMS

Section 14000 General Discussion  
Section 14210 Electric Traction Elevators  
Section 14240 Hydraulic Elevators  
Section 14440 Lifts

### DIVISION 15 – MECHANICAL

**Section 15000 General Requirements**



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- Relocated discussion of preferred system type to this section and updated it to not default to a dual deck arrangement
- Clerical – Changed Risk Management reference to Environmental Health & Safety  
Section 15050 Basic Mechanical Materials and Methods
- Added requirement for use of minimum MERV 13 filtration
- Clarified that ball valves with stainless steel trim shall have stainless steel balls as well
- Clarified that soldered valves are prohibited for all valve types  
Section 15250 Mechanical Insulation  
Section 15300 Fire Sprinkler Systems
- Clerical – Changed Risk Management reference to Environmental Health & Safety  
Section 15320 Clean Agent Systems
- Clerical – Changed Risk Management reference to Environmental Health & Safety  
Section 15410 Plumbing Piping and Specialties
- Modified Pipe Schedule table to differentiate low and medium pressure natural gas below grade piping
- Added verbiage discussing the installation of below grade polyethylene natural gas piping  
Section 15440 Plumbing Fixtures  
Section 15450 Plumbing Equipment  
Section 15480 Plumbing Special Systems  
Section 15510 Hydronic Piping and Specialties
- Added requirement for building entrance chilled water pressure sensors for projects meeting certain criteria.
- Clarified that piping appurtenances shall be individual entities, not combined in a single body/device.
- Added discussions regarding the use of PICVs and circuit setters on campus.
- Added requirement to include circuit setters in 3-way valve bypass lines
- Added requirement for pressure gauges at coils and other heat exchangers
- Clarified that circuit setters should be adjustable, dial type
- Clarified that hose kit installations shall not have the sum of bends exceed 90 degrees  
Section 15520 Steam Piping and Specialties  
Section 15530 Refrigerant Piping and Specialties  
Section 15540 Heat Transfer Equipment
- Corrected clerical error - CHW return temperatures should be 62 F, not 60 F
- Clarified cooling coil scheduling requirements regarding the listing of summer latent and sensible conditions  
Section 15550 Heat Generation  
Section 15680 Packaged Liquid Chillers



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### Section 15780 Packaged Air Conditioners

- Removed reference to MERV 8 filtration to be consistent with Section 15050 changes.

### Section 15810 Humidifiers

### Section 15840 Ductwork

- Updated product requirement information for foil grip tape

### Section 15850 Ductwork Accessories

- Clarified that stated VAV heating control scheme is for single deck systems
- Added language to have dual deck VAV systems evaluated on a case-by-case basis

### Section 15855 Air Handling Systems

- Moved discussion of preferred system type to Section 15000

### Section 15860 Fans

### Section 15870 Variable Frequency Drives

### Section 15970 Control Systems

### Section 15980 Utility Meters

### Section 15990 Testing, Adjusting, and Balancing

- Clerical – Changed Risk Management & RLSS references to Environmental Health & Safety

## DIVISION 16 – ELECTRICAL

### Section 16000 General Discussion

- Clerical – Changed Risk Management reference to Environmental Health & Safety

### Section 16050 Basic Electrical Materials and Methods

### Section 16110 Raceways

### Section 16115 Underground Conduits and Distribution Duct Banks

### Section 16120 Wire and Cable

### Section 16122 Primary Power Cables

### Section 16130 Boxes

### Section 16140 Devices

- Added requirement for usb charging ports in all new receptacles to enhance the environment for students

### Section 16160 Cabinets and Enclosures

### Section 16170 Motor Starters

### Section 16175 Elevator Power and Controls

### Section 16190 Supports

### Section 16195 Electrical Identification

### Section 16310 Primary Switching Station

### Section 16320 Transformers (Medium Voltage)



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Section 16390	Primary Grounding
Section 16420	Service Entrances
Section 16425	Motor Control Controllers and Contactors
Section 16430	Metering
Section 16435	Switchboards
Section 16440	Disconnect Switches
Section 16450	Secondary Grounding
Section 16460	Transformers (Low Voltage)
Section 16465	Busduct
Section 16470	Panelboards
Section 16475	Overcurrent Protective Devices
Section 16485	Lighting Controls and Contactors
Section 16510	Lighting Design

**Section 16530 Site Lighting**

- Update and modify section to better align with Dark Sky requirements, U of A mission, while maintaining our commitment to the safety of our campus community

Section 16535	Emergency Lighting
Section 16580	Theatrical Lighting
Section 16610	Uninterruptable Power Supply Systems

**Section 16620 Standby Power Generator Systems**

- Corrected the fire alarm connections to match DSS 16720 requirements, remove the connection to the building automation system requirements, and correct typo's and incorrect code references

**Section 16622 Automatic Transfer Switch**

- Deleted a wrong and non-needed reference and clarify allowed products

Section 16650	Electromagnetic Shielding Systems
Section 16660	Ground Fault Protection Systems
Section 16680	Variable Speed Drive Systems Coordination
Section 16700	Telecommunications

**Section 16705 Blue Light Phones**

- Clerical – Changed Risk Management reference to Environmental Health & Safety

**Section 16720 Fire Alarm Systems**

- Clerical – Changed Risk Management reference to Environmental Health & Safety

**Section 16725 Fire Command Center**

- New section to provide guidance when a fire command center is required by code

Section 16950	Testing
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### APPENDICES

#### APPENDIX A - MECHANICAL SUPPLEMENTAL SPECIFICATIONS

Section 15970 Control Systems

#### APPENDIX B - ELECTRICAL SUPPLEMENTAL SPECIFICATIONS

Section 16122 Primary Power Cables

Section 16310 Primary Switch Station

Section 16311 Underground Distribution Switchgear 15kV Class

Section 16320 Pad Mount Transformer

Section 16425 Motor Controllers and Contactors

- Change from requiring certain products to requiring the engineer to submit for approval of products in the pre-design

Section 16435 Switchboards

- Clarification of breaker types

Section 16620A Diesel Engine Generator Set

- Removed in its entirety

Section 16620B Natural Gas Engine Generator Set

- Removed in its entirety

Section 16621A Automatic Transfer Switch

- Removed in its entirety

Section 16621B Automatic Transfer Switch, Bypass Isolation Type

- Removed in its entirety

Section 16700 Telecommunications

Section 16720 Fire Alarm Systems

#### APPENDIX C – BOILERPLATE

General Boilerplate

Division 00

Division 01

- Clerical – Changed reference from Risk Management to Environmental Health & Safety