Uniformat No.	MasterFormat No.	Title
Z1020.70	01 35 46	Indoor Air Quality Management

## Z10 General Requirements - UniFormat to MasterFormat Conversion Chart

## Z.1020.70 INDOOR AIR QUALITY MANAGEMENT

## 01 35 46 IAQ MANAGEMENT

## A. Objectives

The University of Alabama at Birmingham (UAB) is committed to promoting environmentally friendly buildings and sites through sustainable site development, water savings, energy efficiency, materials selection, and indoor environmental quality. All subcontractors will be required to work alongside UAB and assist the project team in achieving the goals set forth in this plan. This plan helps projects meet or exceed the Control Measures of the Sheet Metal and Air Conditioning National Contractors Association (SMACNA) IAQ Guidelines for Occupied Buildings under Construction.

## B. Project IAQ Overview

A critical goal of UAB projects is to avoid indoor air quality problems resulting from the construction process and to help sustain the comfort and wellbeing of construction workers and future building occupants. The goals set forth in this plan rely on close collaboration between UAB and the General Contractor (GC). Each subcontractor should receive a copy of this IAQ Management Plan and any tracking forms they may need.

During construction, the recommended Sheet Metal and Air Conditioning National Contractors Association (SMACNA) IAQ Guideline for Occupied Buildings Under Construction, 2nd Edition 2007, ANSI/SMACNA 008-2008 (Chapter 3) must be met for all projects.

## C. Required SMACNA Strategies

1. HVAC Protection

When possible, permanently installed HVAC systems should not be used during construction to prevent uptake of contaminants. The best approach for preventing dust-related problems is to identify all sources of dust and protect the HVAC systems.

If permanently installed air handlers must be used during construction, filtration media with a Minimum Efficiency Reporting Value (MERV) of 8 must be used at each return air grill, as determined by ASHRAE 52.2-1999. The most significant potential

IAQ sources from construction are dust, moisture and volatile organic compounds (VOC's). All filtration media must be replaced immediately prior to occupancy.

If the HVAC system is not being used during construction, the supply and return air system openings should be sealed off to prevent the accumulation of dust and debris in the duct system. Diffusers should also be sealed in plastic.

Return air system openings shall be sealed completely for the duration of activities that produce high dust, such as drywall sanding, concrete cutting, masonry work, wood sawing, insulation installation etc.

All ductwork brought to the site must be protected from contaminants until such a time that it can be installed. Protection shall include covering open ends of ductwork with plastic while being stored and after installation. Upon periodic inspections during construction, if ducts become contaminated due to inadequate protection, the ducts must be cleaned.

The mechanical rooms shall not be used to store construction or waste materials. Mechanical Rooms should be kept clean and neat.

The General Contractor shall inspect the site periodically and take pictures throughout the duration of the project, maintaining an ongoing, dated photo log to document that the above guidelines are followed during the construction phase of the project. Photographs will be submitted to UAB for their records.

#### 2. Source Control

Use of low VOC products (such as caulks, sealants, adhesives, composite wood, and cleaning products) as indicated by the specifications should be utilized to reduce potential problems. The use of these products will be verified and checked throughout the submittal process. Reference project specification section 018113 (Sustainable Design Requirements) for product-specific VOC limits.

The General Contractor is expected to restrict onsite traffic volume and prohibit idling of motor vehicles in areas where emissions can be drawn into the building.

Electric or natural gas alternatives for gasoline and diesel equipment shall be used wherever feasible and practical. The use of gas or diesel powered equipment inside enclosed buildings is prohibited without the expressed approval of the UAB Project Manager. Equipment should be cycled off when not being used or needed. If needed, pollution sources may be exhausted to the outside with portable fan systems.

Containers of wet-applied products should be kept closed as much as possible. Materials that can release odors or dust should be covered, sealed, or removed immediately to the outdoors.



## 3. Pathway Interruption

The General Contractor will use and enforce the use of dust curtains or temporary enclosures to prevent dust from migrating to finished spaces.

The General Contractor will locate pollutant sources as far away as possible from supply ducts and areas occupied by workers, when feasible. Supply and exhaust systems may have to be shut down or isolated during such activity.

Depending on the weather conditions, the General Contractor will ensure to ventilate using 100% outside air to exhaust contaminated air directly to the outside during the installation of VOC emitting materials.

#### 4. Housekeeping

All subcontractors are required to engage in cleaning activities which are designed to control contaminants in building spaces during construction and prior to occupancy. The GC shall monitor and enforce cleaning activities as required during construction.

All coils, air filters, fans and ductwork shall remain clean during installation. All coils, air filters, fans and ductwork shall also be inspected prior to performing the testing, adjustment and balancing of the system. Air filters shall be replaced accordingly.

Construction dust shall be suppressed with wetting agents or sweeping compounds. The use of efficient dust collecting methods such as damp cloths, wet mopping, wet scrubbers and vacuuming with particulate filters is encouraged as necessary.

The GC shall ensure the removal of any accumulated water inside the building when porous materials are being stored. Porous materials such as insulation and ceiling tile shall be protected from exposure to moisture.

Photographs will be taken during the course of the project to document that the above is followed during the construction phase of the project.

#### 5. Material Protection

Insulation shall be protected from moisture and water damage. Insulation shall be stored in clean dry areas away from sources of water or moisture, and elevated when stored. Damaged insulation shall be immediately removed and replaced with new products.

Gypsum drywall products shall be protected from moisture and water damage. Materials shall be periodically inspected for signs of moisture contamination and mold. Gypsum drywall products shall be stored in clean, dry areas away from sources of water or moisture, and elevated when stored. Damaged gypsum products shall be immediately removed and replaced with new product.

New finish materials that are stored on site and installed as part of construction shall be protected from water, mold, dust and odors produced by chemical offgassing of other building products and materials. Porous finish materials are particularly susceptible to water, dust and odors, and tend to absorb contaminants, which are later released into the finished building. Materials such as carpet, ceiling tiles, fabrics, and wall coverings, or flexible vinyl products should not be delivered or stored onsite until just prior to installation. Uninstalled materials should be in sealed packaging at the end of each work day to prevent contamination. Finish products that produce chemical off-gassing should be ventilated and allowed to off-gas prior to installation in an area away from finished construction or other porous materials.

Storage areas/rooms for materials shall be determined and coordinated with current construction activities.

Subcontractors whose materials are damaged shall bear the responsibility of removing and replacing such damaged materials.

6. Environmental Tobacco Smoke (ETS) Control

The University of Alabama at Birmingham prohibits smoking on all campus project sites and the GC shall enforce this policy with all staff, under all circumstances.



## **Revision Request Form - Electrical Construction Standards**

Date: \_\_\_\_\_

Requestor: \_\_\_\_\_ Department/Consultant: \_\_\_\_\_

Project Number & Name: \_\_\_\_\_

## **EXISTING ELECTRICAL STANDARD**

Section Number & Name:

Section Revision Number: \_\_\_\_\_\_ Section Paragraph: \_\_\_\_\_

(ENTER CURENT SECTION LANGUAGE BELOW)

# **REQUESTED REVISION REQUEST**

(ENTER REVISION SECTION LANGUAGE BELOW)- Identify if request will be permanent to standards or for the referenced project.

# JUSTIFICATION FOR REVISION

## FOR UNIVERSITY OF ALABAMA AT BIRMINGHAM USE ONLY

UAB Staff	Requestor:		
Authorize	d UAB Approval Personnel:	Date:	
Status:	Rejected Accepted		
	Revise and Resubmit (see attachment)		

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