



**LEE'S SUMMIT**  
MISSOURI



**FIRE DEPARTMENT**

**PLAN REVIEW CONDITIONS**

May 13, 2016

RUNDQUIST & ASSOCIATES, ARCHITECTS PC  
6635 EDGEVALE ROAD  
KANSAS CITY, MO 64113

Permit No: PRCOM20160414  
Project Title: HT SOLUTIONS  
Project Address: 1440 SE BROADWAY DR, LEES SUMMIT, MO 64081  
Parcel Number: 61720124500000000  
Location: NEWBERRY LANDINGS FIRST PLAT---LOT 292  
Type of Work: NEW COMMERCIAL  
Occupancy Group: FACTORY AND INDUSTRIAL, LOW HAZARD  
Description: NEW BUILDING FOR THE MANUFACTURING OF METAL PARTS  
FOUNDATION/UNDERSLAB PERMIT: PRCOM20160805

***The following is a list of requirements from the City of Lee's Summit that have not been satisfactorily addressed in the plans and specifications. Please contact the appropriate department regarding clarification of comments.***

Codes Administration (816) 969-1200

Fire Department (816) 969-1300

**Building Plan Review**

**Reviewed By: Joe Frogge**

**Pending**

1. The building permit for this project can not be issued until the Codes Administration Department has received the approved Final Development Plan from the Planning and Development Department.

Action required: Comment is for informational purposes.

2. Copies of the engineered metal building package were not provided at the time of permit application.

Action required: Provide engineered building package or request deferral.

3. All plans submitted for review on or after January 1, 2014 shall be designed to the requirements of the 2012 International Building Code, 2012 International Mechanical Code, 2012 International Plumbing Code, 2012 International Fuel Gas Code, 2012 International Fire Code, 2011 National Electric Code and the ANSI A117.1-2009 as amended and adopted by the City of Lee's Summit.

Action required: Update code references on sheet A-1 to reflect correct year of ICC/ANSI A117.1

4. 2012 IBC 603.1 Allowable Materials. Combustible materials shall be permitted in buildings of Type I or II construction in the following applications and in accordance with Sections 603.1.1 through 603.1.3: (see code for specific examples and exceptions)

Action required: Specify compliant materials at Electrical Service Room and Fire Sprinkler Room.

5. Screening of ground mounted equipment

Unified Development Ordinance Article 7, Section 7.180.F

Ground mounted equipment – Ground mounted equipment shall be totally screened from view by landscaping or masonry wall up to a height of the units to be screened.

Action required: Vinyl fencing not permitted as screening material.

6. 2012 IPC 403.1 – Minimum number of fixtures. Plumbing fixtures shall be provided for the type of occupancy and in the minimum number shown in Table 403.1. types of occupancies not shown in Table 403.1 shall be considered individually by the code official. The number of occupants shall be determined by the International Building Code. Occupancy classification shall be determined in accordance with the International Building Code.

Action required: Provide mop sink.

7. ICC A117.1-2009 Section 603.2.1 Turning Space. A turning space complying with Section 304 shall be provided within the room. The required turning space shall not be provided within a toilet compartment. 603.2.2 Door Swing. Doors shall not swing into the clear floor space or clearance for any fixture. (see code for exceptions)

Action required: At office area women's restroom, modify door swing or alter design to provide turning space that is not impeded by door swing.

8. ICC A117.1-2009 604.2 – Location. The water closet shall be located with a wall or partition to the rear and to one side. The centerline of the water closet shall be 16 inches minimum and 18 inches maximum from the side wall or partition. Water closets located in ambulatory accessible compartments specified in Section 604.10 shall have the centerline of the water closet 17 inches minimum and 19 inches maximum from the side wall or partition.

Action required: Relocate toilets to comply.

9. 2011 NEC Article 110.26 (C)(3) Personnel Doors. Where equipment rated 1200 A or more that contains overcurrent devices, switching devices, or control devices is installed and there is a personnel door(s) intended for entrance to and egress from the working space less than 25 feet from the nearest edge of the working space, the door(s) shall open in the direction of egress and be equipped with panic bars, pressure plates or other devices that are normally latched but open under simple pressure.

Action required: Door at Electric service room to swing outward and be equipped with panic hardware.

10. 2012 IBC 1809.5 Frost protection. Except where otherwise protected from frost, foundations and other permanent supports of buildings and structures shall be protected from frost by one or more of the following methods:

1. Extending below the frost line of the locality;
2. Constructing in accordance with ASCE 32; or
3. Erecting on solid rock.

(see code section for exceptions)

Shallow foundations shall not bear on frozen soil unless such frozen condition is of a permanent character.

Action required: Footings and perimeter column pads must extend to minimum 36" frost depth. Modify General Foundation Note #2 on sheet S1, Footing Schedule on sheet S2, and Details/Sections on sheet S3.

11. Additional information required to complete review.

Provide the following information:

- Clarify construction of ceiling at Employee Information/Punch area and similar locations out of office area but under mezzanine.
- Clarify construction of walls at mezzanine level. (currently specified to extend above lay-in ceiling that is not there)
- Clarify size of water meter. 1" shown on civil plans, while supply into building is 2"
- Clarify how air returns to AHU-1.
- Specify/clarify plumbing fixture ED-1 in shop area.

12. 2012 IBC 1109.4 – Kitchens and kitchenettes. Where kitchens and kitchenettes are provided in accessible spaces or rooms, they shall be accessible.  
ICC A117.1-2009 Section 902.4 Height. The tops of dining surfaces and work surfaces shall be 28 inches minimum and 34 inches maximum in height above the floor.

Action required: Specify counter height in break room to demonstrate compliance.

13. 2012 IPC 904.1 Required vent extension.

The vent system serving each building drain shall have not less than one vent pipe that extends to the outdoors.

Action required: Specify size, location, etc. of vents through roof.

14. 2012 IPC 708.3 Where required. Cleanouts shall be located in accordance with Sections 708.3.1 through 708.3.6.

2012 IPC 708.3.4 Base of stack. A cleanout shall be provided at the base of each waste or soil stack.

Action required: Modify plans and risers to demonstrate compliance.

15. 2012 IMC 403.2 Outdoor air required. The minimum outdoor airflow rate shall be determined in accordance with Section 403.3. Ventilation supply systems shall be designed to deliver the required rate of outdoor airflow to the breathing zone within each occupiable space.

Action required: Complete outside air information in RTU schedule.

16. 2012 IMC 606.2.1 Return air systems. Smoke detectors shall be installed in return air systems with a design capacity greater than 2,000 cfm, in the return air duct or plenum upstream of any filters, exhaust air connections, outdoor air connections, or decontamination equipment and appliances.

Exception: Smoke detectors are not required in the return air system where all portions of the building served by the air distribution system are protected by area smoke detectors connected to a fire alarm system in accordance with the International Fire Code. The area smoke detection system shall comply with Section 606.4.

Action required: Provide smoke detectors at all return air systems that exceed 2,000 CFM.

**Fire Plan Review**

**Reviewed By: Joe Dir**

**Approved with Conditions**

2. 2012 901.2 Construction documents.

The fire code official shall have the authority to require construction documents and calculations for all fire protection systems and to require permits be issued for the installation, rehabilitation or modification of any fire protection system. Construction documents for fire protection systems shall be submitted for review and approval prior to system installation.

Action required: Provide sprinkler plans for review.

3. 2012 IFC 907.1.2 Fire alarm shop drawings.

Shop drawings for fire alarm systems shall be submitted for review and approval prior to system installation, and shall include, but not be limited to, all of the following:

1. A floor plan that indicates the use of all rooms.
2. Locations of alarm-initiating devices.
3. Locations of alarm notification appliances, including candela ratings for visible alarm notification appliances.
4. Location of fire alarm control unit, transponders and notification power supplies.
5. Annunciators.
6. Power connection.
7. Battery calculations.
8. Conductor type and sizes.
9. Voltage drop calculations.
10. Manufacturers' data sheets indicating model numbers and listing information for equipment, devices and materials.
11. Details of ceiling height and construction.
12. The interface of fire safety control functions.
13. Classification of the supervising station.

Action required: Provide shop drawings for review and approval.

4. 2012 IFC 506.1- Where required. Where access to or within a structure or an area is restricted because of secured openings or where immediate access is necessary for life-saving or fire-fighting purposes, the fire code official is authorized to require a key box to be installed in an approved location. The key box shall be of an approved type and shall contain keys to gain necessary access as required by the fire code official.

Action required: A Knox box is required to be installed 6'AFF, over the FDC. The box may be ordered at [knoxbox.com](http://knoxbox.com).

5. 2012 IFC 901.5- Installation acceptance testing. Fire detection and alarm systems, fire-extinguishing systems, fire hydrant systems, fire standpipe systems, fire pump systems, private fire service mains and all other fire protection systems and appurtenances thereto shall be subject to acceptance tests as contained in the installation standards and as approved by the fire code official. The fire code official shall be notified 48 hours before any required acceptance test. Call (816) 969-1300 to schedule testing.

901.5.1 Occupancy.

It shall be unlawful to occupy any portion of a building or structure until the required fire detection, alarm and suppression systems have been tested and approved.

11. 2012 IFC 509.1 Identification.

Fire protection equipment shall be identified in an approved manner. Rooms containing controls for air-conditioning systems, sprinkler risers and valves, or other fire detection, suppression or control elements shall be identified for the use of the fire department. Approved signs required to identify fire protection equipment and equipment location shall be constructed of durable materials, permanently installed and readily visible.

Action Required: Label sprinkler and mechanical room doors (verified at inspection)

12. 2012 IFC 5001.5.2 Hazardous Materials Inventory Statement (HMIS).

Where required by the fire code official, an application for a permit shall include an HMIS, such as Superfund Amendments and Reauthorization Act of 1986 (SARA) Title III, Tier II Report or other approved statement. The HMIS shall include the following information:

1. Product name.
2. Component.
3. Chemical Abstract Service (CAS) number.
4. Location where stored or used.
5. Container size.
6. Hazard classification.
7. Amount in storage.
8. Amount in use-closed systems.
9. Amount in use-open systems.

Action required: Provide an inventory statement of materials stored and used in the facility.

13. B] 1008.1.9 Door operations.

Except as specifically permitted by this section egress doors shall be readily openable from the egress side without the use of a key or special knowledge or effort.

**NO KEY CYLINDER LOCKS ON THE EGRESS SIDE OF ANY MARKED EXIT.**

14. B] 1008.1.9.8 Access-controlled egress doors.

The entrance doors in a means of egress in buildings with an occupancy in Groups A, B, E, I-2, M, R-1 or R-2, and entrance doors to tenant spaces in occupancies in Groups A, B, E, I-2, M, R-1 or R-2, are permitted to be equipped with an approved entrance and egress access control system, listed in accordance with UL 294, which shall be installed in accordance with all of the following criteria:

1. A sensor shall be provided on the egress side arranged to detect an occupant approaching the doors. The doors shall be arranged to unlock by a signal from or loss of power to the sensor.
2. Loss of power to that part of the access control system which locks the doors shall automatically unlock the doors.
3. The doors shall be arranged to unlock from a manual unlocking device located 40 inches to 48 inches (1016 mm to 1219 mm) vertically above the floor and within 5 feet (1524 mm) of the secured doors. Ready access shall be provided to the manual unlocking device and the device shall be clearly identified by a sign that reads "PUSH TO EXIT." When operated, the manual unlocking device shall result in direct

interruption of power to the lock—independent of the access control system electronics—and the doors shall remain unlocked for a minimum of 30 seconds.

4. Activation of the building fire alarm system, if provided, shall automatically unlock the doors, and the doors shall remain unlocked until the fire alarm system has been reset.

5. Activation of the building automatic sprinkler or fire detection system, if provided, shall automatically unlock the doors. The doors shall remain unlocked until the fire alarm system has been reset.

6. Entrance doors in buildings with an occupancy in Group A, B, E or M shall not be secured from the egress side during periods that the building is open to the general public.

[B] 1008.1.9.9 Electromagnetically locked egress doors.

Doors in the means of egress in buildings with an occupancy in Group A, B, E, M, R-1 or R-2, and doors to tenant spaces in Group A, B, E, M, R-1 or R-2, shall be permitted to be electromagnetically locked if equipped with listed hardware that incorporates a built-in switch and meet the requirements below:

1. The listed hardware that is affixed to the door leaf has an obvious method of operation that is readily operated under all lighting conditions.

2. The listed hardware is capable of being operated with one hand.

3. Operation of the listed hardware directly interrupts the power to the electromagnetic lock and unlocks the door immediately.

4. Loss of power to the listed hardware automatically unlocks the door.

5. Where panic or fire exit hardware is required by Section 1008.1.10, operation of the listed panic or fire exit hardware also releases the electromagnetic lock.

15. 2012 IFC 505.1- Address numbers. New and existing buildings shall have approved address numbers, building numbers or approved building identification placed in a position that is plainly legible and visible from the street or road fronting the property. These numbers shall contrast with their background. In Multi-tenant commercial building where tenants have multiple entrances located on different sides of the building, each door shall be addressed. Address numbers shall be Arabic numerals or alphabet letters. Numbers shall be a minimum of 4 inches (102 mm) high with a minimum stroke width of 0.5 inch (12.7 mm).

POST THE NUMERIC ADDRESS OF 1440 ON THE BUILDING READABLE FROM THE ADDRESSED ROADWAY (BROADWAY)

***The approval of plans and specifications does not permit the violation of any section of the Building Codes or other City Ordinances or State Law.***

***The review conducted by the City of Lee's Summit Codes Administration Department shall not be construed as a structural review of the project.***