

GUIDELINE FOR CONSTRUCTION PERMITTING FOR MARIJUANA ESTABLISHMENTS / BUSINESSES LOCATED IN COMMERCIAL BUILDINGS

The intent of this guideline is to aid in the construction permitting process including *Change of Use/Occupancy* for marijuana establishments or businesses (i.e infused product manufacturing, cultivation, sales, or testing labs) within commercial buildings or tenant spaces regarding what should be submitted for Fire Prevention Division review. Because every building differs, this guideline is not intended to identify each code requirement applicable, therefore the applicant must follow all appropriate Codes as adopted by the City and County of Denver for the process or construction under review. Other Fire Department annual operational permits maybe required.

The following items are related to construction permitting including changes of use and/or occupancy of a commercial building for use as marijuana establishment or business after a City & County of Denver Zoning Use Permit has been obtained. Where a new certificate of occupancy is required, please see Building Permit **Policy IBC 3406B** *Change of occupancy and/or change in use, procedures for obtaining a new certificate of occupancy*; policies can be found at: www.denvergov.org/BuildingCodePolicies.

The Fire Prevention Division reviews construction permit submittals concurrently with Denver Development Services for compliance with the 2011 Denver Fire Code (DFC). Submittals for construction permits and changes of use/occupancy are submitted to Denver Development Services Commercial Log-in counter at 201 W Colfax 2nd floor. The following information, specific to marijuana centers, plant cultivation facilities, testing labs, and marijuana infused product manufacturing / kitchens should be submitted in addition to Building Department requirements when applying for an applicable construction permit:

- 1) Identify any proposed blocked windows or doors and how blocking will be accomplished. For growing operations, any new wall partitions or ceilings need to be permitted for construction. Any use of plastic or mylar to enclose rooms or cover the walls or ceilings must be installed in accordance with Building Code & Fire Code requirements. If plastic material is proposed, include manufacturer cut sheets showing the flame spread ratings and details of how the product will be installed in compliance with applicable Codes. If plastic is not proposed, indicate in a letter or on construction drawings that plastic materials will not be used to line walls/ceiling or create room enclosures. (Note that hanging plastic from ceilings or suspended overhead structures to create wall dividers is not in compliance with code provisions for a wall partition or interior finish).
- 2) There are several common triggers when a fire sprinkler system is required for plant cultivation operations. These include an F-1 occupancy fire area exceeding 12,000sqft, the building meets the requirements to be considered a *story without openings* per Denver Fire Code 903.2.11.1, or Building Code height and areas are exceeded. Plant cultivation operations are regulated as an F-1 occupancy. A Building Code analysis should be submitted with any construction permit or change of use/occupancy which is typically conducted by a licensed Architect or Engineer. This analysis identifies if the building will require a fire sprinkler system.
- 3) An installation permit is required for CO2 enrichment systems. Please see Denver Fire Department CO2 Gas Enrichment Policy for details of permit requirements.

- 4) Denver Fire Code prohibits the use of extension cords or power strips as permanent wiring to equipment, lighting, fans, etc. The electrical loads and wiring for grow lighting, fans, etc will need to be reviewed and permitted for use. An electrical submittal will need to be included to justify that electrical loads are size adequately. Also note for field installation of lighting, all electrical wiring (including wiring from ballasts to grow lamps) is required to be supported in accordance with the National Electrical Code.
- 5) The type of proposed locking hardware on all exit doors must be submitted for review. Please see Denver Building Permit **Policy IBC 1008.1.8** for further information of locking of doors in commercial buildings. See Denver Building Code Appendix L for requirements where an access control system is used.
- 6) If plant oil extractions will be performed, provide complete details of the proposed extraction process, equipment, mechanical exhaust system, and room construction in a complete permit submittal. Per CO State Marijuana Law 1 CCR 212-1 effective 3-1-2014, all extractions must be performed in an enclosed room. All exhaust system installations and room construction requires Building Department mechanical & construction permit. Unless *listed* extraction equipment is used (i.e. UL or equivalent), Denver Fire Code sections 104.7.2 and 2703.2.3 require an engineering report justifying that the equipment is adequately constructed to process a hazardous material.
 - a. The use of butane or other similar flammable gases in open systems (i.e. where the agent is directly released to the atmosphere) is prohibited by the Denver Fire Code. Closed systems are approved by permit only after review to confirm that the system is in compliance with Denver Fire Code requirements. Closed systems must include a low level (typically floor level) mechanical exhaust system (minimum 1 CFM / sqft of floor area) or a hazardous exhaust hood designed to capture any possible vapor release. A local hydrocarbon detector shall be used at all times the extraction equipment is in operation. Exhaust system shall be rated intrinsically safe. Where closed systems use refrigeration recovery machines, the unit must be rated for use with hydrocarbon refrigerants. Where butane is stored/used on site an annual operational hazardous material permit is required and can be obtained at DFD Fire Prevention at 745 W Colfax.
 - b. CO2 supercritical extractions relief venting must be piped to the exterior. Local CO2 level monitoring / alarm must be provided in the area of operation; also in any CO2 storage rooms. Provide details of the equipment and the amount of CO2 used / stored on site.
 - c. Alcohol or other flammable/combustible liquid extractions where the liquid is boiled, distilled, or evaporated shall be in compliance with Denver Fire Code and NFPA 30. The solvent used in the process (typically alcohol) must be identified by the applicant. The operation must be conducted under a hazardous exhaust hood that is rated for exhausting flammable vapors; electrical equipment used (including hot plates) shall be rated for use in flammable vapor atmospheres. Heating flammable liquids over an open flame is prohibited. Details of the proposed equipment must be submitted for approval. Note that a heating element that is not rated for flammable atmospheres may be approved where documentation from the manufacturer or an approved testing laboratory shows that it is rated for heating flammable liquids.
- 7) For existing permitted occupancies, any modification to extraction processes, the building layout (i.e. walls, ceilings, or other similar construction), electrical system, etc shall only be conducted under review and permit. Coordinate with Building Department requirements for construction.