



INSPECTION REPORT

Report Issued: Apr 01, 2025

Inspection Result: **FAILED**

Permit Number: SPRMH240971

Issuance Date: Jul 19, 2024

Property Address: 2305 MT WERNER CIR;

Applicant: Stephen Patterson

Contractor: TOLIN MECHANICAL SYSTEMS CO. 12005 E. 45TH AVE. DENVER, CO 80239-3111 (303) 859-0261

To construct: Install exhaust fan in the ski shop. This Exhaust Fan will be used to capture fumes, debris, and other related materials that get airborne as part of the Ski Tuning process, and ski tuning machine that was moved into this space. This Unit is located on the lower level at the corner of the public open covered corridor on the southeast corner.

On this day we have inspected your construction for **Mechanical Rough-in Inspection** and we find the following result of the inspection. If there are any questions, please call the inspector at the address below.

Comments: The work description on this permit was stated to install an exhaust fan in a ski shop, but not other pertinent information was provided to us. This exhaust fan is being installed in a ski tune shop and is being used to exhaust our fibers, debris, and materials, and fumes associated with ski tuning process and grinding of skis. These products may not be hazardous in terms of toxic fumes, but there is a lot of debris and materials being exhausted out by this exhaust fan. There is no make up air system installed or described to be existing in the permit application, and this is also an issue that will require some additional information provided to us before we can approve any inspections on site. The exhaust fan was pulling up debris and other materials when I turned the fan on, employees were complaining about the fan causing issues related to debris becoming airborne in the shop when the fan was on, and getting debris in their eyes. The exhaust fan also was simply ducted just outside the ski tuning shop and is dumping fumes, odors, and debris into a common open covered public walkway, there was debris on the ground and on a nearby ATM machine outside the store at the termination location that is in the ceiling above the open covered public corridor. Please submit a design to be reviewed of the installation of a code compliant exhaust system, make up

air system, and proper termination location for the exhaust fan in accordance with the 2021 IMC Code, if needed please seek the assistance of a Mechanical Engineer. Also the ski tuning machine that was moved into this space, please provide us the manufactures specifications or information on any possible exhaust port locations this machine may have that could be directly connected to this exhaust system, or if the machine is supposed to have an exhaust line to the exterior of the building.

510.1 General.

This section shall govern the design and construction of duct systems for hazardous exhaust and shall determine where such systems are required. Hazardous exhaust systems are systems designed to capture and control hazardous emissions generated from product handling or processes, and convey those emissions to the outdoors. Hazardous emissions include flammable vapors, gases, fumes, mists or dusts, and volatile or airborne materials posing a health hazard, such as toxic or corrosive materials. For the purposes of this section, the health-hazard rating of materials shall be as specified in NFPA 704. For the purposes of the provisions of Section 510, a laboratory shall be defined as a facility where the use of chemicals is related to testing, analysis, teaching, research or developmental activities. Chemicals are used or synthesized on a nonproduction basis, rather than in a manufacturing process.

510.2 Where required.

A hazardous exhaust system shall be required wherever operations involving the handling or processing of hazardous materials, in the absence of such exhaust systems and under normal operating conditions, have the potential to create one of the following conditions:

1. A flammable vapor, gas, fume, mist or dust is present in concentrations exceeding 25 percent of the lower flammability limit of the substance for the expected room temperature.

2. A vapor, gas, fume, mist or dust with a health-hazard rating of 4 is present in any concentration.

3. A vapor, gas, fume, mist or dust with a health-hazard rating of 1, 2 or 3 is present in concentrations exceeding 1 percent of the median lethal concentration of the substance for acute inhalation toxicity.

Exception: Laboratories, as defined in Section 510.1, except where the concentrations listed in Item 1 are exceeded or a vapor, gas, fume, mist or dust with a health-hazard rating of 1, 2, 3 or 4 is present in concentrations exceeding 1 percent of the median lethal concentration of the substance for acute inhalation toxicity.

[F] 510.2.2 Combustible fibers.

Equipment or machinery within a building that generates or emits combustible fibers shall be provided with an approved dust-collecting and exhaust system. Such systems shall comply with this code and the International Fire Code.



510.5.5 Makeup air.

Makeup air from all sources shall be provided during operations at a rate approximately equal to the rate that air is exhausted by the hazardous exhaust system. Makeup air shall be provided by gravity or mechanical means or both. Mechanical makeup air systems shall be automatically controlled to start and operate simultaneously with the exhaust system. The makeup air shall not reduce the effectiveness of the exhaust system. Makeup air intakes shall be located in accordance with Section 401.4.

501.3 Exhaust discharge.

The air removed by every mechanical exhaust system shall be discharged outdoors at a point where it will not cause a public nuisance and not less than the distances specified in Section 501.3.1. The air shall be discharged to a location from which it cannot again be readily drawn in by a ventilating system. Air shall not be exhausted into an attic or crawl space, or be directed onto walkways.

Exceptions:

1. Whole-house ventilation-type attic fans shall be permitted to discharge into the attic space of dwelling units having private attics.
2. Commercial cooking recirculating systems.
3. Where installed in accordance with the manufacturer's instructions and where mechanical or natural ventilation is otherwise provided in accordance with Chapter 4, listed and labeled domestic ductless range hoods shall not be required to discharge to the outdoors.

Corrections:

Sincerely,

Todd Carr
Building Official
tcarr@co.routt.co.us