



**BUILDING CODE MANUAL
COUNTY OF LOS ANGELES
DEPARTMENT OF PUBLIC WORKS
BUILDING AND SAFETY DIVISION
Based on the 2011 LACBC**

**#116
307
Article 1
12-7-12
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WOODWORKING ESTABLISHMENTS

A woodworking establishment or facility may be classified as Group F-1 occupancy (moderate-hazard factory) or Group H occupancy depending upon the “combustible dust”. Section 307.2 defines “combustible dust” as “finely divided solid material that is 420 microns or less in diameter and which, when dispersed in air in the proper proportions, could be ignited by a flame, spark or other source of ignition. Combustible dust will pass through a U.S. No. 40 standard sieve.”

Unlike many other hazardous materials, there is no exempt amount for combustible dust; therefore, when combustible dust exists, it shall be classified as Group H occupancy. However, based on Section 104.2.1, it shall be interpreted that a woodworking establishment may be classified as Group F-1 occupancy based on the report as required per Section 414.1.3.

This interpretation is based on the following:

1. The code once exempted woodworking establishments. In the 1988 UBC there was an exemption for “Rooms ... used for woodworking that ...may be classified as Group B occupancies (not a Hazardous Occupancy), provided dust-producing machines are equipped with approved dust collectors and there are not more than two such machines”
2. The amount of airborne dust is controlled or limited.
3. The amount of dust-producing woodworking appliances is limited.
4. The electrical system limits the ignition source.

The condition of approval is based on the following:

1. Based on Section 414.1.3, a report prepared by a licensed mechanical engineer or qualified person as approved by Research Section shall demonstrate that the woodworking establishment can limit or prevent airborne dust.
2. Equipment, machinery or appliances which generate finely divided combustible dust shall be equipped with an approved method of collection and removal in accordance with Section 1303.2 of the Fire Code. This requires a central dust collection (vacuum) system complying with the Mechanical Code (a ducted exhaust system to an exterior depository). Note on plan that: “Daily housekeeping of the shop, for the prevention of wood particle and dust accumulation, shall be in accordance with Section 1303.2 of the Fire Code, using sweepers or vacuum cleaning.” Section 1303.2 states accumulation of combustible dust shall be kept to a minimum in the interior of buildings. Accumulated combustible dust shall be collected by vacuum cleaning or other means that will not place combustible dust into suspension in air. Forced air or similar methods shall not be used to remove dust from surfaces.
3. In local areas of the plant where airborne dust accumulates or is present, the electrical wiring shall be in accordance with the Electrical Code and Section 1304.4 of the Fire Code.

Electrical power to the exhaust system shall be interlocked with the woodworking machinery power supply such that the machinery cannot be operated without the dust collection system also operating. A large volume production plant can readily meet this requirement.


4. For a tenant to utilize the following exemption of a central dust collection system, a floor plan showing the types and locations of all woodworking machines and processing equipment shall be submitted for review and approval by the Building and Safety Division and Fire Department. This exemption shall be permitted for certain equipment with individual dust collectors as follows:
 - a. Three or less dust-producing woodworking machines and/or processing equipment may be considered incidental, such as in home improvement stores, or
 - b. Equipment which produces shavings or chips, such as drills, routers, or lathes.

Supersedes BCM 306.8 Article 1 dated 04-15-97

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