



A standard fan in flammable vapor or dust can become the ignition source. Interlock the process so it cannot run unless the exhaust is on.

Original Masterbuild PE packet from Daily Code Talk on 2024 IMC 503. Confirm the adopted edition. Distinct from 502 required exhaust. "Explosion-proof" is not a classification. The fan must match the Class, Division, and Group (or Zone) of the location.

☐ **503.1: motors and fans sized for the required airflow, with safe access. In flammable vapor/dust areas, motors approved for use in Class I, Division 1 or 2, or Class II, Division 1 or 2.**

Remote manual shutoff. Process equipment that generates the vapor or dust cannot run unless the exhaust fans are on.

☐ **Motors outside the duct, or shielded and dust-tight, for systems conveying flammable vapors or dusts.**

Fan parts in the airstream nonferrous or nonsparking, or the casing lined. Bearings out of the airstream. Spark-resistant fans grounded.

☐ **503.3: ID plate stating the ventilation rate the system was designed for.**

503.4: fans handling corrosives built from or coated with corrosion-resistant materials. Radial-blade or tube-axial where the code calls for it on buffing and woodworking.

The fail we see first

Schedule says "explosion-proof." Electrical drawings never established Class, Division, and Group. Motor replacement at inspection.

What to send: what the exhaust is capturing, whether the location is classified, and the fan cut sheet.

Send the comments. Not the County guideline.

Folio (does it start with 30?), process or UP number, and the comments PDF. Masterbuild will say which row is actually open.

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+1 (786) 398-6940 · Calendly: 30-minute scoping call

Masterbuild provides engineering services under a written scope. Not a hazardous-location classification and not a fan selection. Confirm adopted 503. This is not legal advice.