

SECTION 15850

FANS

PART 1 GENERAL

1.1 SUMMARY

- A. This section describes minimum requirements for fans.

PART 2 PRODUCTS

2.1 FANS

- A. General Requirements for All Fans:

1. All fans shall be constructed to AMCA Standards, AMCA listed and labeled.
2. Fan capacities shall be determined in accordance with AMCA 210.
3. Provide fans that are balanced statically and dynamically at the factory.
4. Paint steel fabricated fan housing, fan wheel, frame, and support brackets with prime coat and enamel finish coat at factory, after properly preparing surfaces. Fan assemblies constructed of aluminum or galvanized steel need not be painted.
5. Arrange fans to be cleanable and so wheel, bearings, shaft, and drive are removable. Gasket joints and bolt airtight.
6. Provide vibration isolation for all fans. Refer to 15070, Mechanical Sound, Vibration and Seismic Control, for specific requirements.

- B. Belt Drives for all Fans:

1. Provide v-belt drive for each fan selected for not less than 1.5 times the motor nameplate horsepower. Light duty belts acceptable only with motors less than one horsepower.
2. On each fan 10 HP and smaller, adjustable pitch drive sheave. Select drive sheave and fan pulley combination to provide fan rpm with drive adjusted to near mid-span.
3. Provide OSHA belt guard with hinged tachometer cap.

PART 3 EXECUTION

3.1 FLEXIBLE CONNECTIONS

- A. Provide flexible connections at the discharge and inlet where ducts attach to unit, except internally isolated units.

3.2 INSTALLATION

- A. Fasten fans securely to structure. Do not support fans on ductwork.
- B. Extend lubrication points which cannot be easily reached directly as required and identified.

END OF SECTION