

DIVISION 15 - MECHANICAL

Section 15860 - Fans

Introduction

Fan systems including:

SUPPLY, RETURN AND EXHAUST AIR SYSTEMS.

Part 1 - General

- Don't use VFDs on forward curved fans.

Part 2 - Products

- Preferred manufacturers; Greenheck, Loren Cook, ILG, Trane.
- Short coupled, multi-belted fans to utilize companion sheaves in lieu of variable pitched sheaves.
- Provide vibration switch on fan.
- Max RPM for exhaust fans not to exceed 1800.
- Fans to be tested in accordance with ANSI/ASHRAE STD 51 and ANSI/AMCA STD 210.
- Centrifugal fans handling more than 1,000 CFM shall have backward inclined blades.
- Fans shall be statically and dynamically balanced at the factory.
- Standard Products - use same manufacturer for multiple installations for the same type.
- Permanently lubricated bearings are not acceptable on 10HP or larger drives.
- Bearings shall be heavy duty split pillow block, self-aligning ball bearings with seals and grease nipples, minimum service life of 200,000 hrs.
- Provide drain connection in bottom of exhaust fan housing - minimum size 3/4".
- Provide access doors on housing- minimum size 18" x 18".
- Provide weather-proof package for any fan located outdoors.
- Utility fans serving fume hoods shall have minimum velocity of 3000 fpm. at stack discharge. Min. height of discharge stack to be 10'.

Part 3 - Execution

- No discussion.

End of Section 15860