

Ceiling or Inside Wall Exhaust Fan

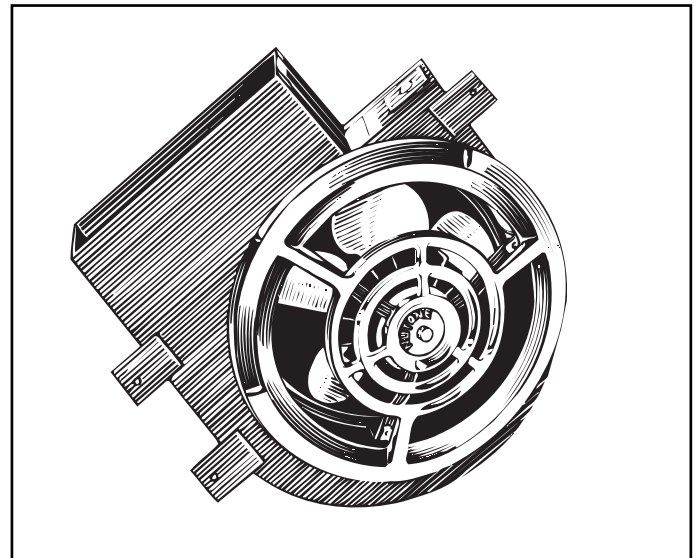
MODEL: 8510

DESCRIPTION

- Ventilates large kitchens up to 150 sq. ft. or other rooms up to 375 sq. ft.
- Discharges through a 3¹/₄" x 10" duct.
- Installs in ceilings or fits 2" x 4" walls; welded-on tabs fit 16" O.C. ceiling joists or walls studs.
- Housing with duct collar is 14³/₁₆" x 16³/₁₆" x 3³/₁₆". Built-in backdraft damper.
- Motor and impeller-type blade assemblies with one-piece electronically balanced aluminum blades snap in. Motor 'floats' on cushions for quiet operation; features an automatic reset thermal protector.
- Silver anodized aluminum grille resists rust and corrosion.
- Housing has plug-in electrical receptacle.
- Three-point suspension brackets for easy mounting of plug-in fan motor assembly.
- Purchase a washable aluminum-mesh grease filter separately from NuTone.
- Purchase switch separately from NuTone.
- Refer to NuTone's catalog for a complete line of accessories to effectively adapt this Exhaust Fan to your construction requirements.
- Suitable for use with solid-state speed controls.

DESIGN FEATURES

- Air Delivery:** 300 CFM at 0.10" S.P.
- Sound Level:** 7.5 Sones.
- Dimensions:** **Housing:** 14³/₁₆" x 16³/₁₆" x 3³/₁₆".
Grille: 13¹/₂" diameter.
- Material & Finish:** **Housing:** Cold rolled steel, baked enamel.
Grille: Aluminum, silver anodized.
- Motor:** Fully encased, plug-in, automatic reset, thermal protected, 120vAC, 60 Hz, 1550 RPM, 1/21 HP, 2.0 amp, 5/16" diameter shaft.
- Fan Blade:** One-piece 0.051 aluminum, 10" diameter, 5-leaf, 2¹/₁₆" pitch, 5/16" hub I.D.
- Duct Size:** 3¹/₄" x 10".



INSTALLATION

- The housing is installed in ceiling or 2" x 4" wall during the rough-in stage of construction. Motor, Blade Assembly and Grille are installed when other electrical fixtures are installed.
- Knockouts in prewired outlet box permit connecting house leads from above or the end of the housing. Motor assembly has three (3) brackets that fasten into the ends of three (3) mounting studs on the housing.
- Install at least 5 feet above floor or install above counter or major appliance.
- Installation Instructions are included with each unit.

ARCHITECT'S SPECIFICATIONS

Exhaust Fan shall be Model 8510 as manufactured by NuTone according to listed specifications. Fan shall ventilate at 300 CFM at 0.10" S.P. at a sound level of 7.5 Sones. Housing shall be 14³/₁₆" x 16³/₁₆" x 3³/₁₆" deep and connect to 3¹/₄" X 10" duct.

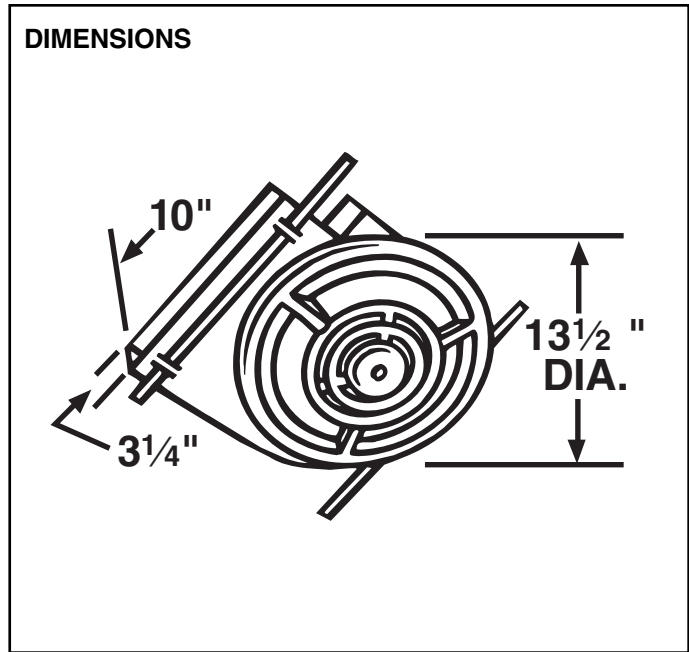


CERTIFIED TEST DATA

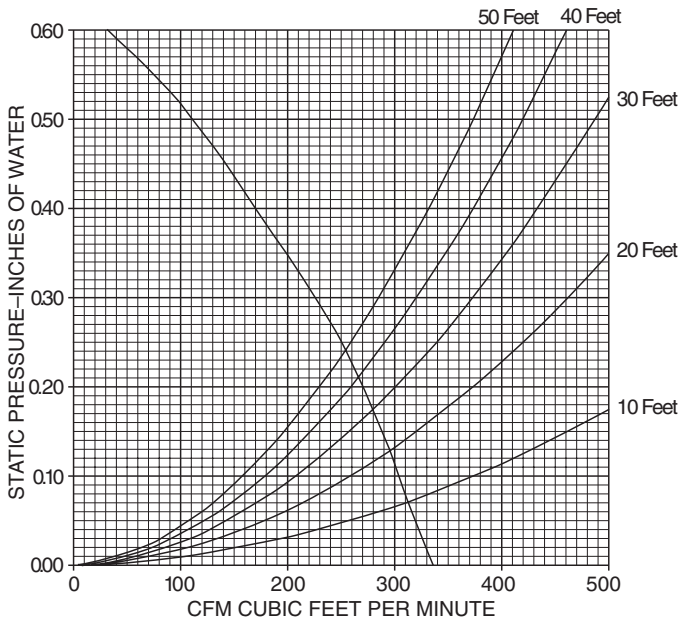
HVI-2100 CERTIFIED RATINGS comply with new testing technologies and procedures prescribed by the Home Ventilating Institute, for off-the-shelf products, as they are available to consumers. Product performance is rated at 0.1 in. static pressure, based on tests conducted in AMCA's state-of-the-art test laboratory. Sones are a measure of humanly-perceived loudness, based on laboratory measurements. This NuTone model is listed by Underwriters' Laboratories Inc. and Certified by the Canadian Standards Association (CSA.)

The air delivery of a ventilating system may be determined by:

1. Determine the equivalent duct length for each 90 degree elbow by adding one foot of duct length for each inch of duct diameter, i.e., a 4 inch diameter duct elbow equals 4 feet equivalent duct length and an 8 inch diameter duct elbow equals 8 feet equivalent duct length.
2. Add the total straight length of duct and the equivalent length for each elbow to obtain the total equivalent duct length.
3. Locate the intersection of the fan performance curve and the total equivalent duct length curves and draw a vertical line down to the CFM scale and read the system air performance.
(NOTE: 3 1/4" x 10" duct equals 6 inch diameter duct.)



AIR PERFORMANCE CURVE
(6 In. (3 1/4" X 10") Duct to 10 Foot Lengths)



STATIC PRESSURE INCHES OF WATER	0.05	0.1	0.15	0.2	0.25	0.3	0.35	0.4	0.45
CFM	319	305	290	273	251	226	195	170	140

Product specifications subject to change without notice.

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