

University of Illinois Department of
Agricultural Engineering
BESS Lab

Project Number: 98198

Test Date: October 20, 1998

Fan

Make: Hired Hand

Model #: 6603-6020 with cone
with 6621-0350 roll seal
Manufacturer: Hired Hand

Blade Size: 48.5"

Orifice Dia.: 49.1"

Motor

Make: Magnetek

Model #: 8-194083

H.P.: 1

Amps: 4.3/8.6

Volts: 230/115

RPM: 1725

S.F.: 1.40

Blade

Number: 3

Shape: propeller

Material: galvanized steel

Pitch: -

Clearance: 0.3"

Drive

Drive Pulley Dia.: MA40

Axle Pulley Dia.: 10.4" o.d.

Shutter roll seal 6621-0350

Material: poly cloth

of Doors: 1

of Columns: 1

Door Length: 54"

Location: intake

Housing

Material: Fiberglass

Intake Area: 54" x 54.5"

Discharge Area: 49.1"

Depth: 30.5" top
27.5" bottom

Guards

Description: wire

Spacing: 2" concentric

Location: exhaust

Other Attachments:

Discharge cone 31.5" deep, 49.1" i.d., 59.8" o.d.

TEST RESULTS

HIRED HAND 6603-6020 w/cone

	Static Pressure	Speed	Airflow	Efficiency
	<u>in. water</u>	<u>rpm</u>	<u>cfm</u>	<u>cfm/Watt</u>
Test: 98198	0.00	-	-	-
Fan description:	0.05	669	27300	20.9
48" belt drive, 1 hp Magnetek 8-194083	0.10	665	25800	18.4
motor, fiberglass housing, roll seal shutter	0.15	662	24400	16.5
kit # 6621-0350, guard and discharge cone	0.20	658	22700	14.5
	0.25	654	20900	12.7
	0.30	650	18700	10.8
