Project Title: Sample Project

Project ID: 30206

Project Manger: T.M.

Prepared By: W.T **Sheet:** 1 of 1

Checked By: D.W. **Date:** 8/20/15

FAN MOTOR HP CALCULATION

Notes:

Required Motor HP Calculation

$$BHP = \frac{CFM \times SP \times SpGr}{6356 \times FanEfficiency}$$

$$MotorHP = \frac{BHP}{Motor/DriveEfficiency}$$

Fan Motor HP			Remarks
Airflow	**10,000**	CFM	Design Flow
Static Pressure	**2.40**	inches	Calc. from Form 2A
Specific Gravity	**1.00**		S.G. of Air = 1.0
Fan Efficiency	**70%**	Percent	Typical: 65% to 85%
Brake HP =	5.39	BHP	
Motor/Drive Efficiency	**85%**		Typical: 80% to 95%
Motor HP =	**6.35**	**HP**	

Selection

HP: 7.5 HP motor

Manufacturer: Baldor

Model: xxxx

Notes: xxxx

REMARKS:

Preliminary Motor HP calculation for new roof exhaust fan.

Selected 7.5 HP motor.