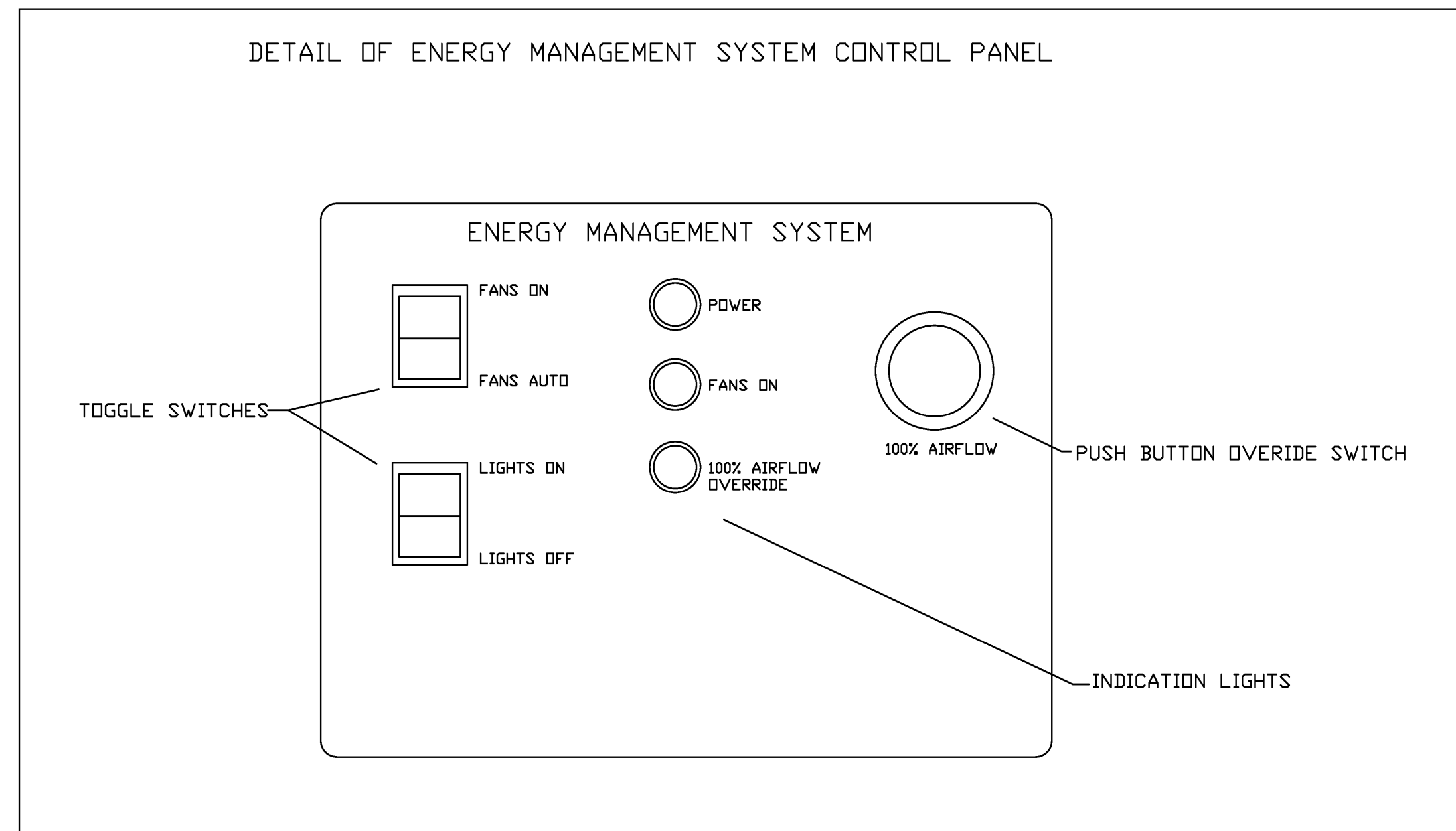


ELECTRICAL PACKAGES

NO.	TAG	PACKAGE #	LOCATION	SWITCHES		ROOFTOP STARTERS	OPTION	FANS CONTROLLED				
				LOCATION	QUANTITY			TYPE	#	H.P.	VOLT	FLA
1		EMS11102	Wall Mount In SS Box	SS Wall Mount Box	1 Light 1 Fan 1 Other		Exhaust In Fire	Exhaust	3	3,000	208	9.5
								Supply	3	1,500	208	4.7



Model: EMS Series

Certifications: Controls shall be listed by ETL (UL 508A).

Application: The Energy Management System (EMS) is capable of saving energy during idle cooking periods. The EMS is designed to automatically reduce exhaust and supply airflow quantities while ensuring hood performance is maintained. The EMS uses high and low speeds that shall be adjusted by variable frequency drives. A temperature switch in the exhaust duct shall control airflow set points and modulates the fans during cooking operation to maximize energy savings. A 100% airflow override button shall be supplied with an adjustable timer.

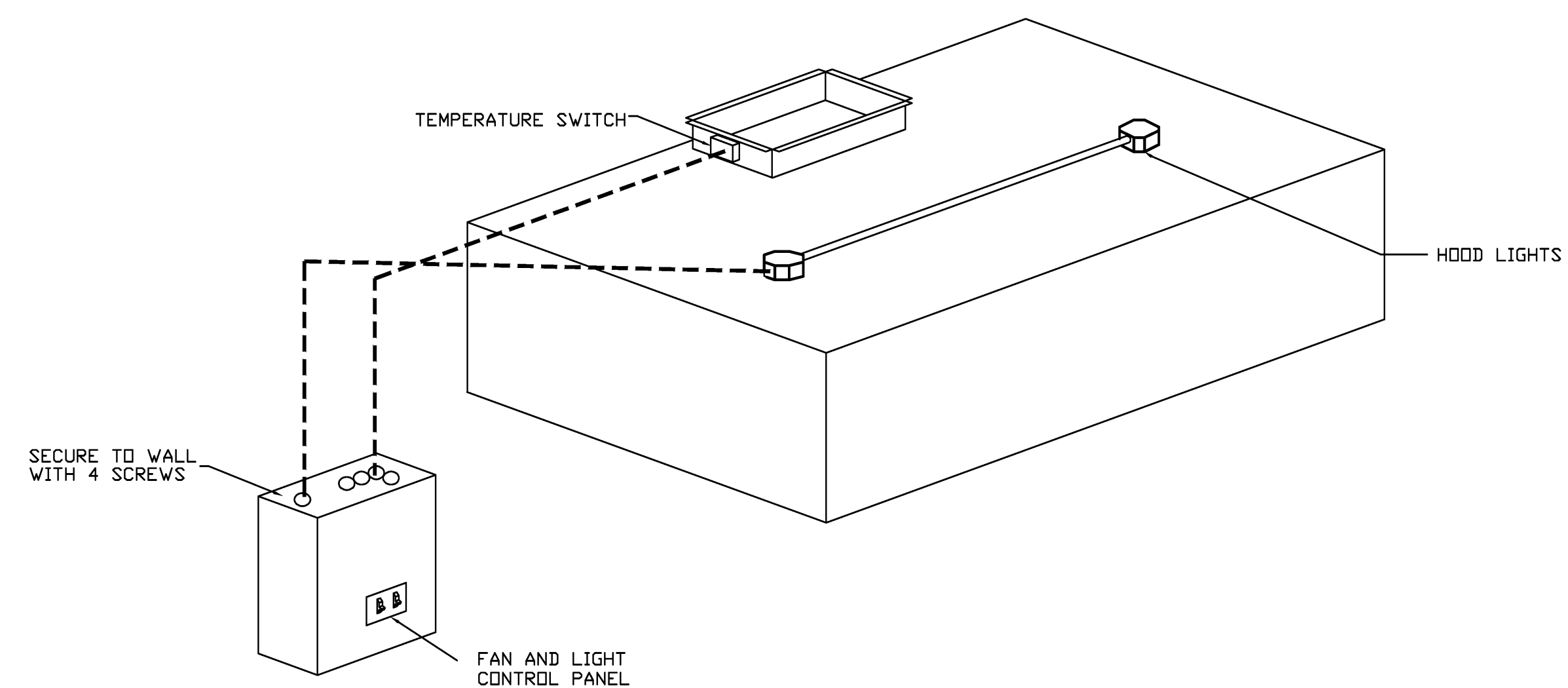
Construction: The control interface shall include (1) fan switch, (1) hood light switch, (1) 100% airflow override push button and indicator lights. Indicator lights shall include a "power" light, a "fans on" light, and a "100% airflow override" light. The control interface shall be screen printed on stainless steel and be able to be installed on the face of the hood, face of the utility cabinet, or on the face of the control enclosure. The control enclosure shall be NEMA 1 rated and listed for installation inside of the exhaust hood utility cabinet. The control enclosure may be constructed of stainless steel or painted steel.

Variable frequency drives shall allow full adjustment of high speed and low speed airflows for proper kitchen balance. Drives shall contain motor thermal overload protection and control inputs for up to 7 preset speeds. Acceleration and deceleration times shall be fully adjustable as well as fan speed at each of the 7 different inputs. Drives shall also allow for a minimum and maximum frequency set-point. Drives are capable of controlling up to 5 HP each.

Adjustable temperature switch shall be mounted in the exhaust hood riser. Temperature probe shall be constructed of Stainless Steel. Temperature switch shall be factory set at 130°F for 600°F cooking applications and 90°F for 400°F cooking applications. The temperature sensor is fully modulating and adjusts on temperature changes. The riser mounted temperature sensor constantly monitors the exhaust air temperature and works in conjunction with a panel mounted temperature controller to modulate the system based on the temperature, therefore maximizing energy savings.

The timer shall contain one instantaneous contact and one delayed contact. Time shall be adjustable from .05 seconds to 30 days. Timer is energized with the 100% Airflow Override button. When button is depressed, time starts and fans go to high speed. Upon timeout, fans return to low speed or speed dictated by temperature switch.

The panels include color coded wiring with as-built wiring diagrams, and spare terminals controlled by the fire system micro switch. The panel is factory pre-wired to shut down supply fans in a fire condition. There is also a factory pre-wire option to turn on the exhaust fans in a fire condition (if required).



WALL MOUNTED ENERGY MANAGEMENT SYSTEM

REVISIONS	
DESCRIPTION	DATE



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Bowl Portland
Yarmouth, ME

DATE: 11/18/2009

DWG.#:
ECP-8-1054233

DRAWN BY:

SCALE:
Not To Scale

ECP

SHEET NO.
8