



1 ROOM VENTILATION SCHEMATIC
M4 NTS

EXIT CONE MIN HEIGHT
ABOVE ROOF 2000mm

UL/ULC LISTED POSITIVE
PRESSURE ENGINE EXHAUST
150Ø ENGINE EXHAUST

LATERAL BASE TEE WITH
45 ELL
19Ø DRAIN VALVE ON
BASE OF LATERAL TEE
WALL
THMBLE

150Ø ENGINE EXHAUST
FLANGE ADAPTER(PF-D)
GENSET MUFFLER BY
GENSET MANUFACTURER
GENSET MUFFLER SUPPORT
AS PER EXISTING

PIPING FLEXIBLE CONNECTION
75Ø JCWS CONNECTION TO
FLANGE ON GENSET
125Ø JCWR CONNECTION TO
FLANGE ON GENSET

FLEXIBLE CONNECTION
AND MANIFOLD PIPING
BY GENSET MANUF

25Ø FROM
MUFFLER DRAIN
CONNECTION TO
FD

GENSET
REMOTE RADIATOR PROVIDED BY
GENSET MANUFACTURER.

TERMINATE CONDENSATE DRAINS FROM
GENERATOR MUFFLER AT FLOOR LEVEL

125Ø
125Ø
DRIP PAN FOR GENSET

2 GENERATOR VENTILATION SCHEMATIC
M4 NTS

GEN-SET ROOM VENTILATION CONTROL SEQUENCE

POWER PRESENT:
THE GEN-SET(S) ARE NOT OPERATING. FRESH AIR DAMPERS AND EXHAUST DAMPERS ARE CLOSED. RECIRCULATING DAMPERS ARE OPEN.
IF THE ROOM TEMPERATURE IS BELOW THE SET-POINT, THEN THE FRESH AIR AND EXHAUST DAMPERS ARE CLOSED AND THE FANS ARE STOPPED. UNIT HEATERS UH-01/02 ARE ENERGIZED.
IF THE ROOM TEMPERATURE IS ABOVE THE SET-POINT, THEN THE FRESH AIR AND EXHAUST AIR DAMPERS OPEN AND FANS SF-01/02 AND EF-01 START.

POWER ABSENT:
UPON THE LOSS OF POWER SIGNALLED BY THE CONTROL PANEL OF GEN-SET, THE MOTORIZED DAMPERS AND FANS ACTIVATE AS FOLLOWS:
ROOM TEMPERATURE BELOW SETPOINT
- FRESH AIR DAMPERS TO MINIMUM POSITION (XX%)
- EXHAUST DAMPERS CLOSED
- RECIRCULATION DAMPERS OPEN.
- SUPPLY FANS ON.
ROOM TEMPERATURE ABOVE SETPOINT
- FRESH AIR DAMPERS TO FULLY OPEN
- EXHAUST FULLY OPEN
- RECIRCULATION FULLY CLOSED
- SUPPLY AND EXHAUST FANS ON.

UPON THE RESTORATION OF POWER AND THE SHUT-DOWN OF THE GEN-SET:
GENERATOR COOL DOWN (ROOM TEMPERATURE ABOVE SETPOINT)
- FRESH AIR DAMPERS TO FULLY OPEN
- EXHAUST DAMPERS FULLY OPEN
- RECIRCULATION DAMPERS CLOSED.
- SUPPLY AND EXHAUST FANS ON.

Revision/	Description/Description	Date/Date
C	ISSUED FOR CONSTRUCTION	JAN. 29, 2014
B	ISSUED FOR 100% REVIEW	JAN. 27, 2014
A	ISSUED FOR 90% REVIEW	NOV. 12, 2013

Client/client
CORRECTIONAL SERVICE CANADA

Project title/Titre du projet
**EMSI GENERATOR
ADDITION**

Approved by/Approve par
DJC
Designed by/Concept par
TJB
Drawn by/Dessine par
TJB
PWGSC Project Manager/Administrateur de Projets TPGSC

PWGSC, Architectural and Engineering Resources Manager/
Ressources Architectural et de Directeur d'Ingénierie, TPGSC

Client/client
CORRECTIONAL SERVICES CANADA

Drawing title/Titre du dessin
**EMSI GENERATOR BUILDING
VENTILATION SCHEMATIC**

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