NATURAL VENTILATION GUIDELINE

1.0 PURPOSE

The Natural Ventilation guideline outlines how to achieve adequate amounts of fresh air in spaces that rely on natural ventilation as opposed to areas where mechanical ventilation is present.

Proper ventilation is a key component of good indoor air quality. Poor ventilation in a building can result in discomfort among occupants and/or negative health effects. Insufficient fresh air can lead to tiredness, headaches, dry or itchy skin and eye irritation. In the general office environment fresh air is needed to provide oxygen for breathing, remove carbon dioxide which is exhaled and remove/dilute body odours and other odours (eg. food) and remove/dilute any contaminants in the air.

There are two types of ventilation possible in a building – mechanical and natural. Natural ventilation relies on wind pressure and temperature to move air from outside to inside through open windows, doors, vents, openings, etc. In this sense natural ventilation is not fully controllable. Mechanical ventilation uses fans and ducting to move air around a building.

2.0 SCOPE

This procedure applies to all faculty, staff, students and contractors.

3.0 ROLES AND RESPONSBILITIES

3.1 Senior Executives, Deans and Directors

Including Department Heads and Managers are responsible to:

- Provide required information and assistance necessary for implementation of the procedure.

3.2 Supervisors

- Ensure workers comply with this written guideline;
- Receive complaints and take corrective action as required when issues are reported to them.

3.3 Workplace Health and Safety Committee

- Assist in the communication and promotion of the natural ventilation procedure.

3.4 Member of the University Community

- Follow the natural ventilation guideline;
- Report any concerns to immediate supervisor or by using Memorial's Incident Management System.

3.5 Environmental Health and Safety

- Provide assistance on conducting assessments on areas of concern;
- Provide guidance to university community on natural ventilation guideline.

4.0 PROCESS

1. When doors and windows remain shut the air may become stagnant. When occupancy in an office is for a duration greater than one hour, open the window a minimum of 1cm for five minutes each hour. Windows should be left open for longer time periods as thermal comfort permits.

2. During a 50 minute class, open windows a minimum of 1cm for ten minutes each hour. In more comfortable climates, the windows should remain open as thermal comfort permits.

3. During a 90 minute class, open windows a minimum of 1 cm for ten minutes each 45 minutes. In more comfortable climates, the windows should remain open as thermal comfort permits.

4. Ensure windows are operable and in good condition at all times. If there are concerns with operation of the windows report to your supervisor and Facilities Management to get windows repaired/replaced as required.

5. Fans can help move air. If necessary for thermal comfort request a fan for the office/classroom to move stagnant air.

6. Be sure to close windows in the space (office or classroom) when leaving the building for the day for security/weather reasons.