

The Grand Erie District School Board

FIRE SAFETY REFERENCE Manual for Grand Erie DSB Schools and Buildings

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FIRE SAFETY REQUIREMENTS FOR SCHOOLS

PURPOSE OF FIRE SAFETY GUIDE

This document has been created by the Grand Erie District School Board as a reference guide to help clarify fire code and fire safety requirements. The guidelines, recommendations and requirements have been developed from various communiqués, notices and opinions issued by the Office of the Fire Marshal over the years, consultation with various education stakeholders and the requirements of the Ontario Fire Code and Ontario Building Code. This document will be reviewed by the Division Manager of Operations and Health and Safety annually by Grand Erie DSB to ensure it meets the needs of the respective parties.

APPROVED/LISTED

When the term *approved* is used in this document it shall mean approved by the Chief Fire Official or Fire Prevention Office of the local Fire Department. Where *listed* is indicated it shall mean listed by a recognized and approved testing agency such as Underwriters Laboratory of Canada (ULC), Fire Marshal (FM) etc.

FIRE SAFETY PLANS

A complete copy of the approved fire safety plan shall be located at the primary entrance to the school by the fire alarm panel for use by firefighters upon arrival during an emergency.

The fire safety plan shall be reviewed annually by all supervisory staff. Any physical changes may result in a revision of the present Fire Safety Plan; temporary changes may possibly be addressed under alternate measures. The review shall include provisions for dealing with students with special needs or disabilities.

Any person given any responsibility(ies) identified in the Fire Safety Plan shall be made aware of their duties under the Fire Safety Plan and shall receive training prior to assuming responsibilities.

Written records including staff training with regards to fire safety shall be maintained for at least two years and shall be made available upon request for viewing.

REQUIRED TO REPORT

The Grand Erie District School Board require all fire related occurrences or incidents be reported immediately. All fires will be investigated by the local Fire Department and school board and a copy of the school board report shall be submitted to the local Fire Department. The Police are to be contacted for any confirmed or suspected arson related fire incident.

INAPPROPRIATE FIRE BEHAVIOR

If you know of a child who is playing with or setting fires, there is a safety prevention program available through the local Fire Department. The Arson Prevention Program for Children (TAPP-C) was developed by the Ontario Fire Marshal's Office, the Toronto Fire Service and the Centre for Addiction and Mental Health in the early 1990's. This program has been proven to help eliminate fire related behaviors for children and teens aged 2 to 17. It is a voluntary program and is recognized as an Extra-Judicial Measure under the *Youth Criminal Justice Act*.

FIRE SAFETY EDUCATION SERVICES

The local Fire Department may be available to attend schools at all grade levels to promote and teach fire safe behaviors for children and families. In addition to using a classroom setting, local Fire Departments often bring fire trucks and crews to complement the lesson. In Brantford, the Children's Safety Village provides an excellent opportunity for local schools to participate in fire safety education. For additional information and availability of onsite training please contact your local Fire Prevention Officer. The Ontario Fire Marshal's Office and the Fire Marshal's Public Fire Safety Council websites contain a great deal of information about injury prevention. They include contests and fact sheets about everything from bicycle safety to candle safety and holiday fire safety. The web sites are:

www.ofm.gov.on.ca www.firesafetycouncil.com

FIRE DRILLS (See OFM-TG-01-2004 Fire Drills)

Schools shall conduct total evacuation fire drills three (3) times in each of the fall and spring terms. Fire drills shall be held during operating hours when the school is occupied by students. The first fall term evacuation drill should be held early in the school year to ensure that students are familiar with proper evacuation techniques.

False alarms occurring at a school during regular hours, in which the school is fully evacuated by the students, may be counted towards the required fire drills for that term.

Written records of all fire drills must be maintained and available on site for review by the local Fire Department upon request.

Day cares located in schools shall participate in all school fire drills as well as conducting their own. Fire drills in day cares must occur at least monthly.

An evaluation process is to be implemented to allow deficiencies noted during the fire drill to be addressed and corrected. (i.e. audibility)

EVACUATION CARDS OR EVACUATION SCHEMATICS

Evacuation cards shall clearly indicate procedures in the event of a fire emergency and shall be used for that purpose only. Cards shall be bright yellow with contrasting lettering and shall be a minimum 21.6 X 27.9 cm (8.5 x11 inches) in size. Evacuation cards shall be located in each classroom in a location at the classroom door so that it is clearly visible. These cards should be located at approximately eye level and not obstructed by art or other items. They shall indicate both the primary and secondary exit route for that classroom. Portable classrooms do not require evacuation cards when they open directly to the exterior.

EVACUATION OF SCHOOL

In the event of an activation of the fire alarm system, the school shall be fully evacuated by all occupants. The only exceptions shall be when a test is to be performed and students and staff are notified immediately prior to the activation of the alarm or in the event of a violent incident emergency response. At no time shall students and staff be advised to not evacuate the school due to the belief that an alarm has been the result of an accidental activation. No persons shall be permitted to re-enter a school until authorized by the Senior Fire Official on location.

Due to the possibility of inclement weather it is imperative to have an approved procedure in place to quickly relocate students to a safe area. Possible sites would be malls, other schools, churches or large buildings in the immediate area.

VIOLENT INCIDENT EMERGENCY RESPONSE IN SCHOOLS

Fire Alarm Procedures during LOCKDOWN

During a lockdown of the school staff may disregard the fire alarm if it is safe to do so. During a lockdown staff and students must always be aware of the potential for other emergencies such as fire. If a fire should occur during a lockdown all staff and students must be prepared to react and possibly evacuate a lockdown area for their own safety.

Occupants of a building may determine that the normal evacuation route is unsafe, and an alternate route is required. Teachers, student care providers and older students must be conscious of their primary, secondary and any other alternative means of escape such as windows that could be used, should it be necessary.

EVACUATION OF NON-AMBULATORY PERSONS

The safe evacuation of all occupants is the responsibility of all staff of Grand Erie DSB in case of fire. Special emergency procedures including provisions for evacuating persons requiring assistance shall be prepared by the building Administrator or Manager and approved by the local fire department and implemented in case of fire. The local Fire Department will work with each school to ensure compliance with this requirement at each applicable school. The Administrator shall appoint and organize designated supervisory staff to carry out fire safety duties for persons requiring assistance in case of fire.

The Fire Safety Plan and school emergency procedures are to be reviewed when there are any changes to the school population or structure that may affect the ability of the persons requiring assistance to evacuate in case of fire. The Administrator shall train supervisory staff with delegated responsibility and instruct other occupants on responsibilities with evacuating persons requiring assistance in case of fire. Supervisory staff shall be available on notification of a fire emergency to fulfill their obligation to evacuate persons requiring assistance in case of fire. Persons requiring assistance to evacuate are not to be placed or staged in classrooms to await rescue by firefighters. School occupants are to be evacuated in the event of any fire alarm activation, unless a test of the fire alarm system is being performed and students and staff are notified immediately prior to activation of the alarm or in the event of a violent incident emergency response.

FIRE ALARM SYSTEMS

Only single stage fire alarms are to be installed in schools. Fire alarms shall be checked daily at the beginning of the school day for power or a trouble signal. If any problem with the fire alarm is identified, immediate corrective action shall be taken. In the event that the fire alarm is not operational, approved alternative measures in the fire safety plan shall be implemented to ensure the safety of all personnel in the building. The fire department shall be notified in writing if the alarm system will be out of service for more than 24 hours.

EXITS AND EXIT DOORS

Access to exits, which include corridors used by the public, exits and outside areas, shall be maintained free of obstructions. Doors in these areas shall not be locked by any method that would prohibit or hinder the exiting of the area or building.

EXIT DOORS FROM HAZARDOUS CLASSROOMS

Exit doors from hazardous classrooms (except art rooms) shall swing in the direction of travel.

Hazardous classrooms would include labs, industrial shop areas or any classrooms with an increased fire hazard. Existing doors that swing inward may be permitted in cases where there is an exit door leading directly to the exterior that serves as the exit from that classroom and where no more than one exit is required. In any hazardous classroom (except art rooms) where the area of the classroom exceeds 100m², or the occupancy exceeds 60 persons, two exits must be provided that swing in the direction of travel.

MAGNETIC HOLD OPEN DEVICES

Magnetic hold open devices shall be installed in conformance with NFPA 80. For any system currently installed in which the installation does not meet NFPA 80, a request for approval of a minor installation variance may be requested.

During a fire alarm activation, all doors equipped with magnetic hold open devices must release, close and latch. Building permits must be obtained in all cases prior to the new installation of these devices.

EXIT STAIRWAYS

Article 2.4.1.2. of the Ontario Fire Code (OFC), restricts combustible materials in a stairway or other means of egress. It should also be noted that OFC Sentence 2.7.1.7.(1) requires exits to be maintained free of obstructions, which could hinder evacuation.

It is of utmost importance that exit stair enclosures are free of combustible storage to ensure a safe haven for occupants evacuating during a fire emergency.

STAIR LIFTS

Stair Lifts are not permitted within an exit stairway where they reduce the required width of the exit. Where sufficient exit width is available, and a stair lift is installed precautions must be taken through installation of railings or similar means to ensure that the stair lift does not impede egress. A proposal to install a stair lift is to be *approved* and installed under a building permit.

FIRE SEPARATION DOORS

Required doors shall not be blocked or wedged open at any time. Doors in corridors including washrooms, where it is necessary for safety reasons to keep doors open, must have magnetic hold open devices installed under a building permit. Fire separation doors may be held open when equipped with magnetic hold open devices, or where addressed in the approved fire safety plan.

Hazardous classroom (except art rooms which are addressed as normal classrooms), and boiler room doors must not be blocked or wedged open at any time.

After school hours while the building has a greatly reduced occupant load custodian staff may temporarily block fire doors open for cleaning only. Doors blocked open are to be supervised at all times in the area where they are working.

WASHROOM DOORS

Washroom doors that are designed as part of the fire separations shall not be blocked or wedged open while the building is occupied.

OCCUPANT LOADS

Occupant loads shall be strictly adhered to for all portions of the school. In cases where outside groups or organizations are using a portion of the school for activities, they shall be clearly advised of the occupant load for the space that they are using and of their responsibility to ensure that posted occupant numbers are adhered to. The school board has ultimate responsibility to ensure that all groups adhere to the occupant loads at all times. Occupant layouts for various functions like craft sales, dinners, seasonal plays, graduations, school assemblies etc. that are fire code compliant, are available on Ebase.

Proper occupant load cards issued by the local Fire Department shall be prominently posted in all large assembly areas such as gymnasiums, auditoriums, theaters, etc.

ASSEMBLY ROOMS WITH OCCUPANT LOADS IN EXCESS OF 200 PERSONS

Assembly rooms such as cafeterias, gymnasiums and theatres shall have a minimum 1-hour fire separation when the occupant load exceeds 200 persons. Kitchens may not be located within the fire compartment enclosing such rooms. The fire resistance rating of these rooms may be reduced to 30 minutes where the floor area is sprinklered.

OCCUPANCIES IN CORRIDORS

Corridors serving classrooms shall not be used for the placement or storage of combustible items such as desks, chairs, furniture, stationery supplies etc. One or two fixed, noncombustible benches for the use of visitors are permitted to be placed adjacent to the administration area provided that such furniture does not reduce the required width of the access to exit and this has been approved by the local Fire Department.

Wooden benches or fabric covered furniture shall be tested as in NFPA 705 "Recommended Practice for a Field Flame Test of Textiles and Films," to meet requirements of NFPA 701, and shall be treated as non- combustible furniture in the Administration area.

Student desks are not to be placed in corridors to remove students from the rest of the class or activity <u>unless supervised</u>.

Non-combustible lockers may be placed along both sides of the corridor walls provided they do not reduce the required width of the access to exit.

Existing open coat racks may be located along corridor walls provided they do not reduce the required width of the access to the exit. New coat racks located in corridors are to be *approved*.

Display cabinets, etc. installed in corridors shall comply with the requirements of the OBC to ensure compliance with regulations affecting accessibility.

DRAPERY AND STAGE CURTAINS IN GYMNASIUMS

ALL Drapery material in Gymnasiums including stage areas shall be tested as in NFPA 705 "Recommended Practice for a Field Flame Test of Textiles and Films," to meet requirements of NFPA 701.

WALL COVERAGE IN SCHOOLS

Combustible wall coverings and teaching materials in corridors shall be kept to a minimum. In classrooms, the Grand Eire DSB restricts combustible materials that are attached to walls to not exceed 20% of the area of the classroom walls.

WALL COVERAGE IN DAYCARES

Combustible artwork and teaching materials that are attached to walls shall not exceed 20% of the area of the walls in daycares. The intent of this is to ensure that if a fire were to start in a daycare, the fire spread would not jeopardize the safe evacuation of all occupants.

VENDING MACHINES

Vending machines may be installed in approved locations only where they do not reduce the exit capacity of the corridor. Vending machines must be securely fastened to a wall for added safety. Extension cords are not permitted for vending machines and each machine will be provided with proper electrical outlets installed in accordance with the electrical code. Containers for the collection of non- combustible recyclables at these machines shall be in accordance with the requirements of the section dealing with recycling containers.

COMMUNITY CARE COLLECTION BINS (CHRISTMAS)

Collection bins shall be located in an area that is not a part of the means of egress such as a designated classroom, gymnasium, cafeteria, or office.

In cases where this is impractical, approval may be given for alternate locations in corridors that are supervised and do not impede exiting. Fire Prevention staff are to be contacted for approval and a letter or drawing detailing the area approved will be inserted in the fire safety plan.

Approved locations are to be monitored to ensure that quantities do not become excessive and create exiting or combustible hazards.

WASTE CONTAINERS

The Ontario Fire Code prohibits combustible materials, including combustible waste containers, from being located in any means of egress or exit. In areas separated from the means of egress, waste containers may be made of combustible materials. It is recommended that listed and approved waste containers be installed in higher risk areas such as all washrooms and cafeterias. The local Fire Department may approve the placement of listed and approved garbage cans in corridors based on individual circumstances. Written approval must be obtained PRIOR to the placement of any waste containers in any corridor and a copy of the approval to be attached to the fire safety plan specifying approved locations. Waste containers cannot be located in exit stairways.

In all rooms that operate as a day care, waste receptacles must be made of non-combustible material.

RECYCLING CONTAINERS

Containers for recycling shall be treated in a similar fashion to waste containers. Individual recycling bins shall not be located in the means of egress or exit areas. Containers may be situated in areas such as classrooms, cafeteria and designated storage rooms. Listed and approved recycling containers may be located in corridors in approved locations. Regular metal or steel bins may be used for the collection of recyclable cans in corridors, provided that these bins are located in preapproved areas.

Regular collection of materials must be carried out directly from the classrooms, with no recyclables being placed in the corridors for pick up on collection days. In cases where the quantity of recyclables is expected to exceed the capacity of the blue boxes such as in cafeterias, containers that have self-closing lids, designed to contain any fire in the containers generally having a capacity of no more than 50 gallons, are acceptable.

No storage of recyclables, or collection bins shall be located in an exit stairway at any time. Indoor bulk storage of recyclables must be arranged in a room with a minimum 1-hour fire separation from the remainder of the building and equipped with automatic sprinkler protection. In cases where the bulk storage takes place outside it shall be located in a safe manner, away from the building 12m (40 feet) is recommended and protected against vandalism.

All new construction or alteration of any room or area designed specifically to store bulk recyclables must be done under building permit, drawings submitted to the OFM for review and approval and building permits obtained as required.

COMMERCIAL KITCHENS

All new commercial cooking appliances are to be equipped with ventilation and fire protection in compliance with NFPA 96. Cooking equipment that has been listed in accordance with UL 197 or equivalent standard for reduced emission shall not be required to be provided with an exhaust system.

All staff and students involved in the use of commercial cooking facilities (Culinary Arts) shall be fully trained in the operation of the fire suppression system and portable fire extinguishers prior to being permitted to operate the cooking appliances. Instruction for manually operating the fire extinguishing system is to be posted conspicuously in the kitchen area and included in the fire safety plan.

Written records of all training shall be maintained on site and available upon request of the fire department. Documentation of training for students shall be included in the academic records for the class.

Cooking appliances used for domestic purposes such as staff rooms or Family Studies classes that do not produce grease laden vapors, may be exempted from complying with ventilation and fire protection requirements on approval of the local Fire Department. All appliances not to be used for commercial cooking will have a small notice posted at each appliance.

Example Only

Not to be used for commercial cooking or for foods that produce grease laden vapours

FIRE ROUTES

2.5.1.3. Fire access routes shall be maintained so as to be immediately ready for use at all times by fire department vehicles.

Fire routes shall be maintained clear of vehicles at all times in order to ensure immediate access for all emergency vehicles.

Fire routes shall be clearly identified with approved fire route signs. During renovations or

construction extra diligence is required regarding the placement of equipment, vehicles and supplies.

STRAW/LIVE CHRISTMAS TREES

No straw, live or cut Christmas trees are permitted in schools in any location.

SMOKE MACHINES - THEATRICAL

The local Fire Department must approve the use of theatrical smoke machines in the school. The use of smoke machines may cause false activation of the fire alarm and impede egress by reducing visibility. A request for approval for the use of smoke machines must also include a plan containing alternative measures taken to prevent the activation of the fire alarm system by the smoke machine and emergency evacuation procedures.

CANDLES AND LIVE FLAMES

The use of candles and live flames is generally prohibited in schools. Live flames are permitted in designated science rooms, industrial shops and labs while under the supervision of a teacher/instructor only. All science rooms, industrial shops and labs with open flames shall be equipped with a portable fire extinguisher with a minimum 2A10BC rating, master gas shut-off valve, and staff training. Procedures for shutting off gas supply lines are to be established and all staff are to be trained on these procedures prior to being given responsibility for the class area.

FIREWORKS AND PYROTECHNICS

The use of fireworks and pyrotechnics is prohibited in, or on school grounds.

FLOOR CLEANERS

It is recommended that floor cleaners utilizing rechargeable batteries shall be located in service rooms fire separated from the remainder of the building. Charging installations shall be located in a well-ventilated room, equipped with a 10BC or higher portable fire extinguisher. All staff operating a charging system are to be trained

ALTERATIONS/RENOVATIONS TO SCHOOLS

No major alterations, renovations or additions shall be undertaken by school staff. See:

- Policy FT1 Major Construction Projects;
- Policy FT2 New School Construction Projects; and
- Procedure FT11- School Initiated Facility Upgrades

All major work is subject to the prior approval by the Building Department, Fire Prevention Office, and the Ontario Fire Marshal's Office. The Facility Services Department is responsible for ensuring these approvals are completed.

SERIOUS CONDITION

Should a situation occur in a school that affects the fire or life safety of the occupants, immediate remedial action to correct the condition as outlined in the alternate measures of the fire safety plan. Any time a situation cannot be corrected promptly the local Fire Department is to be contacted.

A serious condition will include, but is not limited to, the inability to use a required exit, damaged fire separation from a hazardous area, shut down of sprinkler system, fire suppression system and loss of fire alarm. The Fire Prevention Office can be contacted at any time to advise on the best resolution to the serious condition.

AFTER HOURS SCHOOL USAGE

All users of school facilities after hours shall be provided with a copy of the emergency procedures in the fire safety plan and shall be informed of their responsibilities under the fire safety plan prior to their use of the school as per the rental agreement. Emergency procedures, including emergency contacts, will be posted in areas used after hours.

Supervisory staff shall be available on notification of a fire emergency, but not necessarily in the building at all times.

SLEEPING ACCOMMODATIONS IN SCHOOLS

Schools shall review and adhere to OFM-TG-01-2002 - Use of Schools for Sleeping Accommodations. Schools shall not be used for any form of sleeping accommodations unless constructed for this purpose in accordance with the Ontario Building Code.

REFERENCES

As per subsection 22(1) of the Fire Protection and Prevention Act

Limitation on orders relating to structural repairs

Existing school buildings constructed in compliance with the *Building Code* established under the *Building Code Act,* 1992 or under a predecessor to that Act and that continues to comply with that Code as it existed at the time of construction are exempt from the issuing of orders for structural repairs or alterations.