West Metro
Fire Rescue
433 S. Allison Parkway
Lakewood, CO 80226
Bus: (303) 989-4307
Fax: (303) 969-8908
www.westmetrofire.org

2010/2011 School Year
School Inspection Procedure

Following is a preview of what West Metro Fire Rescue will be looking for during their school inspections for the 2010/2011 school year. These decisions are based on feedback from principals, facility managers, and teachers as well as our findings during previous school year inspections. Our intent is to help support a productive learning environment for a student that also meets the requirements and intent of the 2006 International Fire Code that has been adopted by the Jefferson County School District. Inspections will commence as soon as possible after the school year begins. Each school will have the same inspector as they had in the 2009/2010 school year wherever possible.

Types of Violations

1. **Maintenance Items** - Violations that are to be corrected by the county's maintenance division.
2. **School Items** – Violations that fall under the school principal's responsibility to correct.

The initial inspection is to be scheduled during a time prior to or when the county's school maintenance zone team is at that school so they will have the opportunity to correct any maintenance items prior to the first re-inspection. All school items will be required to be resolved before the first re-inspection.

The inspection process will go as follows:

1. The *initial inspection* will be made and all code violations will be noted and the principal or vice-principal will be made aware of these violations and will be required to sign our initial *Building Fire Inspection Report*. A copy of this report will be forwarded to that school's community superintendent as well as the Jeffco Schools maintenance division. The maintenance division will respond to West Metro Fire Rescue to identify all violations that are maintenance items. All other items will be considered to be school items.
2. The *first re-inspection* will be scheduled within 2-3 weeks after the initial inspection. After this first re-inspection all remaining violations will be written onto a *Second Notice of Violation* form and again the principal or vice-principal will be made aware of these outstanding violations and will be required to sign this second notice. A copy of this second notice will be forwarded to the community superintendent who will be requested to attend the next re-inspection.
3. The *second re-inspection* will be scheduled within 2-3 weeks after the first re-inspection. After the second re-inspection all remaining violations will be written onto a *Final Notice of Violation* form and the principal or vice-principal and the community superintendant will be made aware of these outstanding violations and both will be required to sign this final notice.
4. Any *Final Notice of Violation* will be sent to the Superintendent of Schools.

Following are the fire code requirements that pertain to some common violations we have seen in the past. Please note that the following areas are not the only areas we will be enforcing as we, along with Jefferson County Schools, enforce the entire 2006 International Fire Code.

The last page of this document is a condensed list of the following common violations, without the code references, that can be handed out to teachers as a guide to help maintain a safe learning environment in their classrooms as well as in the rest of the school building.

SECTION 315
MISCELLANEOUS COMBUSTIBLE MATERIALS STORAGE

315.1 General.
Storage, use and handling of miscellaneous combustible materials shall be in accordance with this section.

315.2 Storage in buildings.
Storage of combustible materials in buildings shall be orderly. Storage shall be separated from heaters or heating devices by distance or shielding so that ignition cannot occur.
(A common area of concern is around kilns in art rooms and space heaters. {See 605.10})

315.2.1 Ceiling clearance.
Storage shall be maintained 2 feet (610 mm) or more below the ceiling in non-sprinklered areas of buildings or a minimum of 18 inches (457 mm) below sprinkler head deflectors in sprinklered areas of buildings.
(Shelving and its contents that are against a wall may extend up to the ceiling.)

315.2.2 Means of egress.
Combustible materials shall not be stored in exits, exit enclosures, or attached to exit doors.
(This would typically be in foyer areas. Combustibles shall not be attached to or within 5 feet of exit doors.)

315.2.3 Equipment rooms.
Combustible material shall not be stored in boiler rooms, mechanical rooms or electrical equipment rooms.

IFC SECTION 605
ELECTRICAL EQUIPMENT, WIRING, AND HAZARDS

605.3 Working space and clearance in front of electrical panels and equipment.
A working space of not less than 30 inches (762 mm) in width, 36 inches (914 mm) in depth and 78 inches (1981 mm) in height shall be provided in front of electrical service equipment. Where the electrical service equipment is wider than 30 inches (762 mm), the working space shall not be less than the width of the equipment. No storage of any materials shall be located within the designated working space.
(There are many electrical panels in a school and this code applies to all such panels in all locations.)

605.4 Multi-plug adapters
Only multi-plug adapters complying with the ICC Electrical Code shall be used.

605.4.1 Design.
Multi-plug adapters shall be of the polarized or grounded type, equipped with over-current protection.

605.4.2 Power supply.
Multi-plug adapters shall be directly plugged into a permanently installed electrical outlet.

605.4.3 Installation.
Multi-plug cords shall not extend through walls, ceilings, floors, under doors or floor coverings, or be subject to environmental or physical damage.

(Please note that multi-plug adapters are useful to get electricity to areas of a classroom or office where there are no wall, pole, or floor outlets. However, in rooms where multi-plug adapters are being used a better long-term solution is to have permanent electrical outlets installed.)

605.5 Extension cords.
Extension cords and flexible cords shall not be affixed to structures, extended through walls, ceilings or floors, or under doors or floor coverings, nor shall such cords be subject to environmental damage or physical impact. Extension cords shall be used only with portable appliances.
(Portable means an appliance that is easily carried by hand by one person.)

605.5.1 Power supply.
Extension cords shall be plugged directly into an approved receptacle or approved multi-plug adapter and shall serve only one portable appliance. *(Extension cords shall not be plugged into other extension cords.)*

605.5.2 Ampacity.
The ampacity of the extension cords shall not be less than the rated capacity of the portable appliance supplied by the cord.

605.5.3 Maintenance.
Extension cords shall be maintained in good condition without splices, deterioration or damage.

605.5.4 Grounding.
Extension cords shall be grounded when serving grounded portable appliances.
(We commonly find multi-plug adapters plugged into an extension-cord which is in violation of the code. Also, as with multi-plug adapters, if you have rooms that are using extension cords a better long-term solution is to have permanent electrical outlets installed.)

605.10 Portable, electric space heaters.
Portable, electric space heaters shall comply with Sections 605.10.1 through 605.10.4.

605.10.1 Listed and labeled.
Only listed and labeled portable, electric space heaters shall be used.

605.10.2 Power supply.
Portable, electric space heaters shall be plugged directly into an approved receptacle.
(This means either directly into an electrical outlet or directly into a multi-plug adapter.)

605.10.3 Extension cords.
Portable, electric space heaters shall not be plugged into extension cords.

605.10.4 Prohibited areas.
Portable, electric space heaters shall not be operated within 3 feet (914 mm) of any combustible materials.
Portable, electric space heaters shall be operated only in locations for which they are listed.

605.6 Unapproved conditions.
Open junction boxes and open-wiring splices shall be prohibited. Approved covers shall be provided for all switch and electrical outlet boxes.
(This typically is a maintenance item.)

IFC SECTION 703
FIRE-RESISTANCE-RATED CONSTRUCTION

703.1 Maintenance.
The required fire-resistance rating of fire-resistance-rated construction (including walls, fire stops, shaft enclosures, partitions, smoke barriers, floors, fire-resistive coatings and sprayed fire-resistant materials applied to structural members and fire-resistant joint systems) shall be maintained. Such elements shall be properly repaired, restored or replaced when damaged, altered, breached or penetrated. Openings made therein for the passage of pipes, electrical conduit, wires, ducts, air transfer openings and holes made for any reason shall be protected with approved methods capable of resisting the passage of smoke and fire. Openings through fire-resistance-rated assemblies shall be protected by self- or automatic-closing doors of approved construction meeting the fire protection requirements for the assembly.

703.1.1 Fireblocking and draftstopping.
Required fireblocking and draftstopping in combustible concealed spaces shall be maintained to provide continuity and integrity of the construction.

703.1.2 Smoke barriers.
Required smoke barriers shall be maintained to prevent the passage of smoke and all openings protected with approved smoke barrier doors or smoke dampers.

703.2 Opening protectives.
Opening protectives shall be maintained in an operative condition in accordance with NFPA 80. Fire doors and smoke barrier doors shall not be blocked or obstructed or otherwise made inoperable. Fusible links shall be replaced promptly whenever fused or damaged. Fire door assemblies shall not be modified.

703.2.1 Signs.
Where required by the fire code official, a sign shall be permanently displayed on or near each fire door in letters not less than 1 inch (25 mm) high to read as follows:
1. For doors designed to be kept normally open: FIRE DOOR—DO NOT BLOCK.
2. For doors designed to be kept normally closed: FIRE DOOR—KEEP CLOSED.

703.2.2 Hold-open devices and closers.
Hold-open devices and automatic door closers, where provided, shall be maintained. During the period that such device is out of service for repairs, the door it operates shall remain in the closed position.

703.2.3 Door operation.
Swinging fire doors shall close from the full-open position and latch automatically. The door closer shall exert enough force to close and latch the door from any partially open position.

703.3 Ceilings.
The hanging and displaying of salable goods and other decorative materials from acoustical ceiling systems that are part of a fire-resistance-rated floor/ceiling or roof/ceiling assembly shall be prohibited.

IFC SECTION 806
DECORATIVE VEGETATION

806.1 Natural cut trees
IFC 806.1.1
Natural cut trees shall be prohibited in schools.

Exceptions:

1. Trees located in areas protected by an approved automatic sprinkler system, which must still meet the requirements of **IFC 806.1, 806.1.2, 806.1.3, 806.3, 806.4, and 806.5.**

806.2 Artificial vegetation.
Artificial decorative vegetation shall meet the flame propagation performance criteria of NFPA 701. Meeting the flame propagation performance criteria of NFPA 701 shall be documented and certified by the manufacturer in an approved manner.
(Any artificial vegetation that does not have documentation on site and readily available for the inspector to see, that shows it complies with NFPA 701, shall not be allowed.)

IFC SECTION 807
OTHER DECORATIVE MATERIALS

807.1 General requirements.

In occupancies in Groups A, E, I and R-1 and dormitories in Group R-2, curtains, draperies, hangings and other decorative materials suspended from walls or ceilings shall meet the flame propagation performance criteria of NFPA 701 in accordance with Section 806.2 or be noncombustible.
Fixed or movable walls and partitions, paneling, wall pads and crash pads, applied structurally or for decoration, acoustical correction, surface insulation or other purposes, shall be considered interior finish if they cover 10 percent or more of the wall or of the ceiling area, and shall not be considered decorative materials or furnishings.

807.4.1 General

1. Explosive or highly flammable materials. Furnishings or decorative materials of an explosive or highly flammable character shall not be used.
2. Fire-retardant coatings. Fire-retardant coatings in existing buildings shall be maintained so as to retain the effectiveness of the treatment under service conditions encountered in actual use.
3. Obstructions. Furnishings or other objects shall not be placed to obstruct exits, access thereto, egress therefrom or visibility thereof.

807.4.3.1 Storage in corridors and lobbies.
Clothing and personal effects shall not be stored in corridors and lobbies.
Exceptions:

1. Corridors protected by an approved automatic sprinkler system installed in accordance with Section 903.3.1.1.
2. Corridors protected by an approved smoke detection system installed in accordance with Section 907.
3. Storage in metal lockers provided the minimum required egress width is maintained.

(Requirements of section 1028 must always be met regardless of the exceptions in this section.)

807.4.3.2 Artwork & teaching materials.

Corridors:
Artwork and teaching materials shall be limited on walls of corridors to not more than 20% of the wall area. *(Such materials shall not be excessive in any one area of a corridor. No artwork or teaching materials shall be allowed to hang from the ceilings in corridors. No combustible materials shall be allowed to be affixed to any exit door or within 5' of any exit door.)*

Classrooms:
Artwork and teaching materials shall be limited on the walls of classrooms to no more than 50% of the wall area on any individual wall. Artwork and teaching materials shall be allowed to hang from the ceiling in classrooms under the following conditions:

1. *The existing ceiling system is left intact as designed and un-altered. The ceiling's original fire-resistance-rating shall be maintained at all times.*
2. *Nothing can be attached in any way to acoustical ceiling tiles only to the track support system. All ceiling tiles shall remain seated in the track system as designed, un-damaged and un-altered.*
3. *Nothing shall be attached to the ceiling that is of excessive quantity, weight, or that is highly combustible. Such items will be identified by the fire inspector.*
4. *The elevation from the floor to the bottom of any items hanging from the ceiling will be at least 80". In addition, no items hanging from the ceiling shall interfere with any fire safety devices such as but not limited to visualization of strobes and exit signs or the proper function of smoke detection devices and sprinkler heads.*

SECTION 912
FIRE DEPARTMENT CONNECTIONS

912.3 Access.
Immediate access to fire department connections shall be maintained at all times and without obstruction by fences, bushes, trees, walls or any other object for a minimum of 3 feet (914 mm).

IFC CHAPTER 10
MEANS OF EGRESS

SECTION 1028
MAINTENANCE OF THE MEANS OF EGRESS

1028.1 General.
The means of egress for buildings or portions thereof shall be maintained in accordance with this section.
(Means of egress is from an occupied room inside the building to the public way outside. Corridors, lobbies, and hallways inside a room that lead to an exit door are included in the means of egress.)

1028.2 Reliability.
Required exit accesses, exits or exit discharges shall be continuously maintained free from obstructions or impediments to full instant use in the case of fire or other emergency when the areas served by such exits are occupied. Security devices affecting means of egress shall be subject to approval of the fire code official.
(This includes temporarily placing desks, chairs, or other furniture in a hallway for any reason or for any length of time while anyone is occupying the building.)

1028.3 Obstructions.
A means of egress shall be free from obstructions that would prevent its use, including the accumulation of snow and ice.

1028.4 Exit signs.
Decorations, furnishings, equipment or adjacent signage that impairs the visibility of exit signs, creates confusion or prevents identification of the exit shall not be allowed.
(This includes but is not limited to artwork and teaching materials in classrooms that are hanging from the ceiling.)

1028.5 Furnishings and decorations.
Furnishings, decorations or other objects shall not be placed so as to obstruct exits, access thereto, egress therefrom, or visibility thereof. Hangings and draperies shall not be placed over exit doors or otherwise be located to conceal or obstruct an exit. Mirrors shall not be placed on exit doors. Mirrors shall not be placed in or adjacent to any exit in such a manner as to confuse the direction of exit.
(An appropriate aisle way width {at minimum the width of the door} shall be maintained in all means of egress components and within each occupied room. Exit access within occupied rooms shall not be obstructed by trashcans, furniture, shelving, clothing items, personal belongings of occupants, etc.)

Doors per NFPA 80
6.1.4.2.1 "Self-closing fire doors shall swing easily and freely and shall be equipped with a closing device to cause the door to close and latch each time it is opened."
6.1.4.2.2 "The closing mechanism shall not have a hold-open feature.
(Therefore no door wedges or similar devices are allowed to prop open any classroom door.)

Teacher's Guide to Fire Code Requirements

Please note that the following areas are not the only areas we will be enforcing but rather these are just some of the more common violations we find on an annual basis across the school district. This is a guide to help you in setting up your classrooms as well as maintaining a safe learning environment in the rest of the school building.

1. Storage of combustible materials in buildings shall be orderly. Storage shall be separated from heaters or heating devices like but not limited to kilns and space heaters.
2. Storage shall remain 2 feet or more below the ceiling (18" if sprinklers are present). Shelving and its contents that are against a wall may extend up to the ceiling.
3. Combustible materials shall not be stored in foyers or on or within 5 feet of any exit doors.
4. Clothing and personal effects shall not be stored in corridors and lobbies unless there are sprinklers, smoke detectors, or they are stored in metal lockers. Furnishings, decorations or other objects shall not be placed so as to obstruct or conceal exits, access thereto, egress therefrom, or visibility thereof, even if temporary.
5. Exit access within occupied rooms shall not be obstructed. An appropriate aisle way width {at minimum the width of the door} shall be maintained.
6. Artwork and teaching materials shall be limited on walls of corridors to not more than 20% of the wall area and shall not be excessive in any one area of a corridor. Nothing shall be allowed to hang from the ceilings.
7. Artwork and teaching materials on any individual wall in a classroom shall be limited to 50% of the wall area.
8. Nothing can be attached in any way to acoustical ceiling tiles, only to the track support system. All ceiling tiles shall remain seated in the track system as designed, un-damaged and un-altered. Nothing shall be attached to the ceiling that is of excessive quantity or weight and shall be at least 80" off the floor and they shall not interfere with any fire safety devices or exit signs.
9. No highly combustible materials shall be used in the school.
10. Natural cut trees shall be prohibited in schools that do not have sprinkler systems. Any artificial vegetation that does not have documentation on site that shows it complies with NFPA 701 shall not be allowed.
11. No door wedges or similar devices are allowed to prop open any self-closing door.
12. Access to all electrical panels in all locations shall be kept clear.
13. Multi-plug adapters shall be grounded and equipped with over-current protection.
14. Multi-plug adapters shall be plugged into a permanently installed electrical outlet, not an extension cord.
15. Multi-plug cords shall not extend through walls, ceilings, floors, under doors or floor coverings, or be subject to environmental or physical damage.
16. Extension cords shall be grounded and used only with one portable appliance. Portable means an appliance that is easily carried by hand by one person.
17. Extension cords and flexible cords shall not be affixed to structures, extended through walls, ceilings or floors, or under doors or floor coverings, nor shall such cords be subject to environmental damage or physical impact.
18. Extension cords shall be plugged directly into a permanent electrical outlet or an approved multi-plug adapter. Extension cords shall not be plugged into other extension cords.
19. Extension cords shall be an equal or heavier gauge than the gauge of the portable appliance cord.
20. SUGGESTION: If you have rooms that are using multi-plugs and extension cords a better long-term solution is to have permanent electrical outlets installed.