MINNESOTA STATE DEPARTMENT OF PUBLIC SAFETY

State Fire Marshal Division

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CHILD CARE CENTER INFORMATION SHEET

SECTION 1 — INTRODUCTION

This fire safety information sheet is based on the 2007 Minnesota State Fire Code (MSFC) and the 2007 Minnesota State Building Code (MSBC). It contains a summary of the major rules that apply to child care centers, including day care, preschools, and head-start programs.

The requirements outlined in this information sheet apply only to preschool and head-start programs, child day care centers and similar child care programs. A child care center may be required to meet other requirements that are not listed in this publication. This information sheet provides an overview of the major code requirements that apply in this type of occupancy and does not attempt to cover every situation. References to the applicable code sections are found in brackets, [ ].

Prospective child care operators must contact the child care licensing agency (county or state) for a site inspection prior to requesting a fire inspection. A fire inspection is required prior to licensure [MN Rules 9503.0155, subp.2].

Additional information is available from the Minnesota State Fire Marshal Division at (651) 201-7200. You can email questions to firecode@state.mn.us or visit our web page at www.fire.state.mn.us for the latest information on fire in Minnesota.

1.1 Classification of Child Care Centers

Child Day Care (Group E) is the use of a building or structure, or portion thereof, for educational, supervision or personal care services for more than five children older than 2-1/2 years of age. Such uses shall be classified as a Group E Occupancy [MSFC (07) Section 202].

Child Care Center (Group I-4) is the use of a building or structure, or portion thereof, for educational, supervision or personal care services for more than five children 2-1/2 years of age or less. Such uses shall be classified as Group I-4 Occupancies [MSFC (07) Section 202].

Child care centers will be classified as Group E occupancies with the exception of those providing care for more than five children 2-1/2 years of age or less. Such facilities shall be classified as Group I-4.

Exception: A child care center which provides care for more than 5 but not more than 100 children 2-1/2 years or less of age, when the rooms where such children are cared for are located on the level of exit discharge and each of these child care rooms has an exit door directly to the exterior, shall be classified as a Group E [MSFC (07) Section 202].

1.2 Other Child Care Classifications

Child care that is provided within a residence for not more than 14 children may be licensed as either Family Day Care or Group Family Day Care under Minn. Rules § 9502.0315 to 9502.0445. Group and Family Day Care licensing allows limited child care to be provided within a private residence without having to meet the more stringent MSFC requirements for child care centers. See SFMD Information Sheet - *Group and Family Day Care* for more information.

1.3 Applicable Requirements

Child care centers constructed or occupied prior to July 10, 2007 are considered existing occupancies and are required to meet the minimum requirements specified in the MSFC for existing buildings. Compliance with previous editions of the Minnesota State Fire Code may be considered as an acceptable alternative. Buildings constructed or occupied on or after May 31, 2007 are considered new and are required to meet the MSFC provisions for new buildings. Any change in use (i.e. change in occupancy classification) of a new or existing building will require compliance with MSFC provisions for new buildings [MSFC (07) Section 102.3].

1.4 Occupancy Specific Inspection

Buildings are inspected to the requirements of the Minnesota State Fire Code based upon the occupancy types present. State Fire Marshal Deputies will inspect each building according to its use or character and apply the MSFC requirements applicable to the specific occupancy classification. Buildings about which there is a question as how to classify shall be included in the occupancy group that its use or character most closely resembles.

SECTION 2 – SPECIAL EXITING PROVISIONS FOR YOUNG CHILDREN

2.1 Level of Exit Discharge - New and Existing Occupancies

Rooms and areas used for child day care, preschool, head-start and similar programs located in educational occupancies shall be located on the floor level of exit discharge [MSFC (07) Section 1001.3; MSBC (07) Section 421]. Exceptions for buildings equipped with automatic sprinkler and/or fire alarm systems are as follows:

Buildings Protected with an Automatic Fire Sprinkler and Fire Alarm System

Child care rooms and areas may be located on any floor level below the fourth story if the following conditions exist:

1. The building is protected throughout with an approved automatic fire sprinkler system; and
2. The building is protected throughout with an approved automatic fire alarm system having automatic smoke detection devices installed throughout the exiting system

and within every room or area used for any purposes other than a classroom or office.

Buildings Protected with Automatic Fire Sprinklers or Fire Alarm System
Child care rooms or areas may be located on floor levels other than the level of exit discharge if one of the following conditions is met:

1. An approved automatic fire sprinkler system is provided throughout the building and the use of the affected room or space is limited to one grade level at a time and exiting is provided from the room or area which is independent from the exiting system used by older students or other occupancies; or
2. An approved automatic fire alarm system is provided throughout the building consisting of automatic smoke detection installed throughout the exiting system and within all rooms and areas other than classroom and office areas, and the use of the affected room or space is limited to one grade level at a time, and exiting is provided from the room or area which is independent from the exiting system used by older students or other occupancies.

   Note: For the purposes of Section 2.1, pupils from the second grade down are considered one grade level.

2.2 Accessory Spaces – New and Existing Occupancies
Accessory spaces, including spaces used for gymnasiums, cafeterias, media centers, auditoriums, libraries, and band and choir rooms, used on an occasional basis by preschool, kindergarten, first and second grade students are permitted to be located one level above or one level below the story of exit discharge if the building is protected throughout by an approved automatic sprinkler system or an approved corridor smoke detection system [MSFC (07) 1001.3; MSBC (07) 421].

SECTION 3 — GENERAL FIRE SAFETY PROVISIONS

3.1 Combustible Waste Material – New and Existing Occupancies
Combustible waste material creating a fire hazard shall not be allowed to accumulate in buildings [MSFC (07) Section 304.1].

Dumpsters must be outside and at least 5 feet from combustible walls or openings [MSFC (07) Section 304.3.3].

3.2 Fire Apparatus Access Roads – New Occupancies
For all newly constructed buildings, approved fire apparatus access roads shall be provided and maintained [MSFC (07) Section 503]. See SFMD Policy - *Fire Department Access* for more information.

3.3 Water Supply – New Occupancies
For all newly constructed buildings, an approved water supply capable of providing the required fire flow for fire protection shall be provided. Fire flow requirements shall be determined by an approved method [MSFC (07) Section 508]. See SFMD Policy - *Fire Department Water Supplies* for more information.

3.4 Kitchen Cooking Equipment – New and Existing Occupancies
Commercial cooking equipment that produces grease-laden vapors shall be equipped with a Type I ventilation hood and duct system meeting the requirements of the MN Mechanical Code [MSFC (07) Section 609]. See Section 9 of this document for information on fire extinguishers.

Type I ventilation systems and commercial cooking equipment that produce grease-laden vapors shall be equipped with an approved fire-suppression system [MSFC (07) Section 904.2.1].

3.5 Premises Identification – New and Existing Occupancies
Approved numbers or addresses shall be placed on all new and existing buildings in such manner to be plainly visible and legible from the street or road fronting the property. The premises identification numbers shall contrast with their background. In rural areas, the use of fire numbers is acceptable [MSFC (07) Section 505.1].

3.6 Storage of Combustible Materials – New and Existing Occupancies
Storage shall be orderly [MSFC (07) Section 315.2]. Storage shall be maintained at least 2 feet below the ceiling is nonspriklered areas, or at least 18 inches below sprinkler head deflectors in sprinklered areas of buildings [MSFC (07) Section 315.2.1].

3.6.1 Boiler and Furnace Rooms. Combustible storage within boiler and furnace rooms with equipment having 400,000 BTU per hour input or less is allowed when such rooms or areas are protected with an approved automatic fire extinguishing system (i.e. fire sprinkler protection). Combustible storage shall be maintained at least 36 inches from fuel-fired equipment [MSFC (07) Section 315.2.3.1]. Combustible storage within boiler and furnace rooms with equipment having over 400,000 BTU per hour input is allowed when such rooms or areas are protected with an approved automatic fire extinguishing system (i.e. fire sprinkler protection). Combustible storage shall be maintained at least 10 feet from the boiler or furnace [MSFC (07) Section 315.2.3.1].

3.6.2 Mechanical Rooms. Combustible storage is allowed within mechanical rooms when such rooms or areas are equipped throughout with an approved automatic fire extinguishing system. Storage shall be neat and orderly, with 36 inch access aisles maintained to all equipment. In addition, combustible storage shall be maintained at least 36 inches from fuel-fired equipment [MSFC (07) 315.2.3.2].

3.6.3 Electrical Rooms. Combustible storage is not allowed within electrical distribution equipment rooms or elevator equipment rooms [MSFC (07) Section 315.2.3.3 & 315.2.3.4].

3.6.4 Fueled Equipment. Fueled equipment (i.e. motorcycles, lawn and maintenance equipment, etc.) shall not be stored, operated or repaired within a building with the exception of –

1. Rooms constructed for such use in accordance with the MN State Building Code.

2. The storage of equipment utilized for maintenance purposes in approved locations where the aggregate fuel capacity of the stored equipment does not exceed 10 gallons and the building is equipped throughout with an approved fire-sprinkler system [MSFC (07) Section 313.1].

The fire code official is authorized to require removal of fueled equipment from locations where the presence of such equipment is determined by the fire code official to be hazardous [MSFC (07) Section 313.1.1].

3.6.5 Storage in Exits. Combustible materials shall not be stored within exits or exit enclosures [MSFC (07) Section 315.2.2].

3.6.6 Attic and Concealed Space Storage. Attic, under-floor and concealed spaces used for storage of combustible materials shall be protected on the storage side as required for one-hour fire-resistive construction unless such areas are protected by approved fire sprinkler systems. Where fire-resistive construction is required, openings shall be protected by assemblies that are self-closing and are of noncombustible construction or solid wood core not less than 1.75 inches in thickness. Storage shall not be placed on exposed joists [MSFC (07) Section 315.2.4].

3.7 Fire Safety and Evacuation Plans – New and Existing Occupancies
An approved fire safety and evacuation plan shall be prepared and maintained [MSFC (07) Section 404]. Emergency evacuation drills shall be conducted at least monthly and documented [MSFC (07) Section 405].

3.8 Furniture Flammability – New and Existing Occupancies
Upholstered furniture sold after January 1, 1992 and intended for use in public occupancies (including child care centers) shall meet applicable flammability requirements as described in rules adopted under MN Statute 299F.844. Such furniture shall have a label indicating that it meets the requirements of the California Bureau of Home Furnishings Technical Bulletin 133, or that the furniture's components meet the requirements of Technical Bulletin 117 [MN Rules 7510.5550].

SECTION 4 – MEANS OF EGRESS

4.1 Number of Exits - New Occupancies
Every room or area shall have access to at least one approved exit. Access to at least two exits shall be provided when the occupant load exceeds 10 for both Group E and Group I-4 child care occupancies [MSFC (07) Section 1015.1]. Floor areas and buildings shall be provided with exits as required by MSFC (07) Section 1019. Floor areas and buildings will require at least two exits when a floor area is over 350 square feet (occupant load greater than 10) for both Group E and Group I-4 child care occupancies.

To determine the occupant load, divide the total net square footage of the rooms or areas to be used for child care by the occupant load factor in Table 4.1.

Table 4.1 Minimum Egress Requirements (New)

Child Care Occupancy Type	Minimum of Two Exits Required When the Number of Occupants Exceeds	Minimum of Two Exits Required When the Square Footage Exceeds	Occupant Load Factor (square feet per person)
E	10	350 square feet	35
I-4	10	350 square feet	35

4.2 Number of Exits - Existing Occupancies

The means of egress in existing buildings and occupancies shall comply with MSFC (07) Sections 1001, 1002, 1026, & 1027 [MSFC (07) 1001.1].

Means of egress conforming to the requirements of the fire code or building code under which they were constructed shall be considered as complying means of egress if, in the opinion of the code official, they do not constitute a distinct hazard to life [MSFC (07) Section 1027.1.2]. Additionally, means of egress in existing buildings conforming to NFPA 101 (Life Safety Code) shall be deemed as evidence of compliance with the means of egress provisions of the MSFC.

Every room, area, floor level and building shall have access to at least one approved exit. Access to at least two exits from rooms, areas, floor levels and buildings shall be provided when the occupant load exceeds 50 for those child care facilities classified as Group E Occupancies, or when the occupant load exceeds 10 for those child care facilities classified as Group I-4 Occupancies [MSFC (07) Section 1027.23.1].

To determine the occupant load, divide the total net square footage of the rooms or areas to be used for child care by the occupant load factor in Table 4.2.

Table 4.2 Minimum Egress Requirements (Existing)

Child Care Occupancy Type	Minimum of Two Exits Required When the Number of Occupants Exceeds	Minimum of Two Exits Required When the Square Footage Exceeds	Occupant Load Factor (square feet per person)
E	50	1750 square feet	35
I-4	10	350 square feet	35

4.4 Common Path of Egress Travel – Existing Occupancies
The means of egress for Group E Occupancies shall be such that the maximum travel distance from any point within a building to a point where two separate and distinct paths of egress travel are available shall not exceed 75 feet [MSFC Section 1027.19].

4.3 Exit Access Travel Distance – New Occupancies
Exits shall be located so that the maximum length of exit access travel, measured from any point within a building to an exit or the entrance of an exit component along the natural and unobstructed path of egress travel, shall not exceed the following distances listed in Table 4.3 [MSFC (07) 1016.1].

Table 4.3 Exit Access Travel Distance (New)

Occupancy Classification	Without Sprinkler System	With Sprinkler System
E	200 FT	250 FT
I-4	Not Permitted	200 FT

4.4 Exit Access Travel Distance – Existing Occupancies
Exits shall be located so that the maximum length of exit access travel, measured from any point within a building to an exit or the entrance of an exit component along the natural and unobstructed path of egress travel, shall not exceed the following distances listed in Table 4.4 [MSFC (07) 1027.18].

Table 4.4 Exit Access Travel Distance (Existing)

Occupancy Classification	Without Sprinkler System	With Sprinkler System
E	200 FT	250 FT
I-4	200 FT	250 FT

4.5 Locking Devices – New and Existing Occupancies
Exit doors shall be openable from the egress side without the use of a key or special knowledge or effort [MSFC (07) Section 1008.1.8 & 1027.7]. Door handles, pulls, latches, locks and other operating devices on doors shall only require a single operation to release the door from the egress side [MSFC (07) 1008.1.8.1 & 1027.7].

4.5.1 Panic and Fire Exit Hardware. Any exit or exit access door serving an occupant load of 50 or more within new Group E child care centers shall not be provided with a latch or lock unless such components are integral with approved panic hardware or fire exit hardware [MSFC (07) Section 1008.1.9]. In accordance with previous editions of the MSFC, any exit or exit access door serving an occupant load of 100 or more within existing Group E child care centers shall not be provided with a latch or lock unless such components are integral with approved panic hardware or fire exit hardware [MSFC (07) Section 1027.1.2 & 1027.7].

4.6 Exit Doors – New and Existing Occupancies
Doors within the means of egress shall be side-hinged swinging with the exception of –

1. Revolving doors in accordance with MSFC Sections 1008.1.3.1 (new) & 1027.9 (existing).
2. Horizontal sliding doors in accordance with MSFC Sections 1008.1.3.3.

Doors shall swing in the direction of egress travel where serving an occupant load of 50 or more persons [MSFC (07) Section 1008.1.2 & 1027.7].

4.5 Exit Width – New and Existing Occupancies
The means of egress width shall not be less than required by the MSFC as determined by the occupant load served [MSFC (07) Section 1005.1 & 1027.1.4]. The minimum clear width of each door opening shall be sufficient for the occupant load served as determined by MSFC (07) Section 1005.1, but shall not be less than 32 inches for new occupancies, or 28 inches for existing occupancies. The height of doors shall not be less than 80 inches [MSFC (07) Section 1008.1.1 & 1027.7].

4.5.1 Corridor Width - New Occupancies. Corridor width for new occupancies shall be as determined in MSFC (07) Section 1005.1, but shall not be less than 36 inches when serving an occupant load of 50 or less, and not less than 44 inches when serving an occupant load of greater than 50 [MSFC (07) Section 1017.2]. Corridors within Group E child care centers serving an occupant load of 100 or more shall not be less than 72 inches.

4.5.2 Corridor Width - Existing Occupancies. Corridor width for existing occupancies shall be determined in accordance with MSFC (07) Section 1005.1, but shall not be less than 36 inches [MSFC (07) 1027.17.3.1].

4.6 Dead End Corridors – New and Existing Occupancies
Where more than one exit or exit access doorway is required, the exit access shall be arranged such that dead end corridors do not exceed 20 feet in length [MSFC (07) Section 1017.3 & 1027.17.4].

Exception: Fully sprinklered Group E Occupancies constructed prior to October 3, 1975 are allowed to have dead end corridors up to 35 feet in length.

4.9 Egress through Intervening Spaces – New Occupancies
Egress from a room or space shall not pass through adjoining or intervening rooms or areas, except where such rooms or areas are accessory to the area served; are not a higher-hazard area, and provide a discernible path of egress travel to an exit. Egress shall not pass through kitchens, store rooms, closets or spaces used for similar purposes. An exit access shall not pass through a room which can be locked to prevent egress [MSFC (07) Section 1014.2].

4.10 Means of Egress Illumination – New and Existing Occupancies
The means of egress in all new and existing buildings shall be illuminated at all times the building is occupied [MSFC (07) Section 1006.1 & 1027.5.1]. In the event of primary power loss, an approved back-up power source shall be provided throughout the exiting system for those areas requiring two or more means of egress [MSFC (07) Section 1006.3 & 1027.5.3].

4.11 Means of Egress Identification – New and Existing Occupancies
Exit and exit access doors shall be marked by approved exit signs readily visible from any direction of egress travel in rooms or areas requiring more than one exit or exit access. Access to exits shall be marked by readily visible exit signs in cases where the exit or path of egress travel in not immediately visible to occupants. Exit sign placement shall be such that no point in an exit access corridor is more than 100 feet from the nearest visible exit sign [MSFC (07) Section 1011.1 & 1027.3]. Exit signs shall be internally or externally illuminated at all times. In the event of primary power loss, an approved back-up power source shall be provided [MSFC (07) Section 1011.5.3 & 1027.4].

4.12 Means of Egress Obstructions – New and Existing Occupancies
Obstructions shall not be placed in the required width of a means of egress. The required capacity of a means of egress system shall not be diminished along the path of egress [MSFC (07) Section 1003.6 & 1028.2].

SECTION 5 – FIRE RESISTIVE CONSTRUCTION

5.1 Occupancy Separation – New Occupancies
Child care centers shall be separated from other occupancies with fire-resistive occupancy separations in accordance with the Minnesota State Building Code [MSFC (07) Section 701.1]. Table 5.1 lists the required time rating for fire-resistive occupancy separations dependent upon the classification of the Child Care Center (Group E or Group I-4) and the occupancy to be separated [MSFC (07) 701.1; MSBC (07) 508.3.3]. Except for Group H and I-2 areas, where the building is equipped throughout with an approved automatic sprinkler system, the fire-resistance ratings shall be reduced by one-hour but to not less than one-hour and to not less than that required for floor construction according to the type of construction.

Non-separated use design shall be in accordance with MN State Building Code [MSBC (07) 508.3.2.].

Table 5.1 Required Fire-Resistive Occupancy Separations

Group E Child Care Occupancy	**A**	**I, R***	**F-2, S-2, U**	**B, F-1, M, S-1***	**H Occupancies**
Separation	No Separation	2 HR	1 HR	2 HR	Refer to MSBC Table 508.3.3
Group I-4 Child Care Occupancy	**A**	**I, R**	**F-2, S-2, U**	**B, F-1, M, S-1**	**H Occupancies**
Separation	1 HR	1 HR	1 HR	1 HR	Refer to MSBC Table 508.3.3

*A reduction of 1-hour is permitted, but not less than 1-hour, when both buildings are equipped with automatic sprinkler systems.

5.1.1 Occupancy Separation – Existing Occupancies

Existing Group E and Group I-4 child care occupancies shall be separated from Group I and Group R occupancies in accordance with the State Building Code. See Table 5.1 of this document for details [MSFC (07) Section 705]. In addition, because Group H (Hazardous) occupancies are classified as such due to the presents of sufficient quantities of hazardous materials, existing Group E and Group I-4 child care occupancies shall also be separated from all Group H occupancies in accordance with the State Building Code [MSFC (07) Section 102.2].

Previous editions of the MUFC and MSFC required occupancy separations between child care centers and most other occupancy types. Therefore, existing child care centers that are lacking proper occupancy separations as prescribed by previous MUFC editions shall be provided with separations in accordance with the MSBC when in the opinion of the code official, a distinct hazard to life and property exists [MSFC (07) Section 102.1].

5.2 Accessory Use Areas – New Occupancies

Except where required for incidental use areas, fire-resistive construction shall not be required for accessory use areas not occupying more than 10 percent of the area of any floor of a building [MSFC (07) Section 701.1; MSBC (07) Section 508.3.1].

5.3 Incidental Use Areas – New Occupancies

New child care centers shall have their incidental use areas separated from the rest of the building by fire-resistive construction in accordance with the State Building Code [MSFC (07) Section 701.1; MSBC (07) Section 508.2]. Examples of incidental use areas include furnace rooms (over 400,000 Btu input); boiler rooms (over 15 psi and 10 hp); parking garages; laboratories and shops; waste, linen, laundry or storage rooms over 100 square feet.

5.3.1 Incidental Use Areas – Existing Occupancies

Without Fire Sprinkler Protection

In existing child care centers, shops; laboratories containing hazardous materials; storage rooms over 100 square feet; and rooms containing boilers or central heating plants (over 400,000 Btu input) shall be separated from the rest of the building by one-hour fire resistive construction [MSFC (07) Section 705.3].

With Fire Sprinkler Protection

Existing Group E Occupancies. Incidental use areas within existing Group E Occupancies need not be separated when the incidental use area is protected with automatic fire sprinklers.

Existing Group I-4 Occupancies. Incidental use areas within existing Group I-4 Occupancies need not be separated when the incidental use area is protected with automatic fire sprinklers and the construction of such areas is capable of resisting the passage of smoke. Doors to such areas shall be one-hour fire-rated, solid-core wood doors, or insulated steel doors. Such doors shall be self-closing [MSFC (07) Section 705.3.2].

5.4 Corridor Construction – New Occupancies
All corridors serving an occupant load greater than 30 within child care centers classified as Group E shall be of one-hour fire-resistive construction. Regardless of the occupant load served, all corridors within child care centers classified as Group I-4 shall be of one-hour fire-resistive construction. All openings within one-hour fire-resistive corridors shall be protected with listed 20-minute fire-rated assemblies. Fire doors shall be self-closing [MSFC (07) Section 1017.1].

Exceptions:

1. *Group E and I-4 child care centers where the building is equipped throughout with an approved automatic sprinkler system.*

2. *Group E child care centers where each room used for child care has at least one door directly to the exterior at ground level and rooms for assembly purposes have at least one-half of the required means of egress doors opening directly to the exterior at ground level.*

5.4.1 Corridor Construction – Existing Occupancies
All corridors serving an occupant load greater than 30 within child care centers classified as Group E shall be of one-hour fire-resistive construction. All corridors serving an occupant load greater than 10 within child care centers classified as Group I-4 shall be of one-hour fire-resistive construction. Door openings within one-hour fire-resistive construction shall be protected by 20-minute fire-rated assemblies, insulated steel doors, or solid core wood doors not less than 1-3/4 inches thick. Fire doors shall self-closing [MSFC (07) Section 1027.17].

Exceptions:

1. *Group E and I-4 child care centers where the building is equipped throughout with an approved automatic sprinkler system.*

2. *Group E child care centers where the building is protected with an approved automatic fire alarm system which is monitored by an approved central, proprietary, or remote station service. The fire alarm system shall include automatic smoke detection throughout the exiting system and approved detection in all rooms and areas other than classrooms, child care areas and offices.*

5.5 Vertical Opening & Shaft Construction – New Occupancies
Vertical openings and shafts within new child care centers shall be constructed in accordance with the MN State Building Code [MSFC (07) Section 701.1]. Generally, all openings through a floor/ceiling assembly shall be protected with a fire-resistance rated construction. Vertical openings and shafts shall have a fire-resistance rating of not less than 2 hours where connecting four stories or more and 1 hour where connecting less than four stories. Shaft enclosures shall have a fire-resistance rating not less than the floor assembly penetrated, but need not exceed 2 hours.

5.5.1 Vertical Opening & Shaft Construction – Existing Occupancies
Vertical openings and shafts within existing child care centers shall be protected with fire-resistance rated construction in accordance with table 5.5.1 [MSFC (07) Section 704.1].

Table 5.5.1 Required Protection for Vertical Openings and Shafts

Occupancy Classification	Conditions	Protection Required
Group E	vertical openings connecting 2 stories	no protection required
Group E	vertical openings connecting 3 to 5 stories	1-hour protection or automatic sprinklers throughout
Group E	vertical openings connecting more than 5 stories	1-hour protection
Group I-4	vertical openings connecting 2 or more stories	1-hour protection

5.6 Maintenance of Fire-Resistive Construction – New and Existing Occupancies
The required fire-resistance rating of fire-resistance-rated construction shall be maintained. Such elements shall be properly repaired, restored or replaced when damaged, altered, breached or penetrated [MSFC (07) Section 703].

SECTION 6 – INTERIOR FINISH AND DECORATION

6.1 Interior Finish – New & Existing Occupancies
In general, interior finish within new and existing child care centers shall meet the following flame spread requirements [MSFC (07) Section 801.1.1 & 803.3].

Group E Child Care Centers

Sprinklered Buildings
Rooms and Enclosed Spaces…….Class C
Exit Access Corridors and Exitways……Class C
Vertical Exits and Exit Passageways…….Class B

Unsprinklered Buildings
Rooms and Enclosed Spaces…….Class C
Exit Access Corridors and Exitways…….Class B
Vertical Exits and Exit Passageways…….Class A

Group I-4 Child Care Centers

Sprinklered Buildings
Rooms and Enclosed Spaces……Class B
Exit Access Corridors and Exitways……Class B

Vertical Exits and Exit Passageways……Class B

Unsprinklered Buildings
Rooms and Enclosed Spaces……Class B
Exit Access Corridors and Exitways……Class A
Vertical Exits and Exit Passageways……Class A

Exception: In vertical exits of buildings less than three stories in height, Class B interior finish for unsprinklered buildings and Class C for sprinklered buildings shall be permitted.

6.2 Interior Decorative Materials – New and Existing

Artwork and teaching materials shall be limited on walls and corridors to not more than 20 percent of the wall area for Group E and I-4 child care centers [MSFC (07) Section 807.4.3.2 & 807.4.4.2].

6.3 Storage in Corridors and Lobbies – New and Existing

Clothing and personal effects shall not be stored in corridors and lobbies of child care centers unless -

1. The corridor is protected by an approved automatic sprinkler system, or
2. The storage is contained within metal lockers provided the minimum required egress width is maintained.

[MSFC (07) Section 807.4.3.1 & 807.4.4.1]

SECTION 7 – FIRE ALARM SYSTEMS

7.1 Required Fire Alarm Systems – New and Existing Occupancies

7.1.1 Group E Child Care Centers

Group E child care centers having an occupant load of 50 or more shall be provided with an approved fire alarm system [MSFC (07) Section 907.2.3 & 907.3.2].

Initiation. Initiation of the system shall be by manual and automatic means. Approved automatic fire detectors shall be provided in laundry rooms, boiler and furnace rooms, mechanical and electrical rooms, shops, laboratories, kitchens, locker rooms, janitor closets, trash-collection rooms, storage rooms, lounges and similar areas.
Exceptions:

1. *Buildings protected throughout by an approved automatic sprinkler system, manual fire alarm boxes are only required in the main office and in a custodial area.*

2. *Where the exiting systems are protected by approved automatic smoke detection with alarm verification, manual fire alarm boxes are only required near exits serving shops, chemistry and physics laboratories, boiler rooms, industrial technology and industrial arts rooms, kitchens, custodian's office, and the main office.*

Travel through adjoining rooms. Where the only means of egress travel from an interior room or rooms having an aggregate occupant load of more than 10 occupants is through an adjoining or intervening room, automatic smoke detectors shall be installed throughout the common atmosphere through which the path of egress travel passes.

Exception: Adjoining or intervening room smoke detection is not required when the building is protected throughout by an approved automatic fire sprinkler system.

Notification. Activation of the fire alarm system or automatic sprinkler systems shall initiate a general evacuation signal.

7.1.2 Group I-4 Child Care Centers
Group I-4 child care centers shall be provided with a approved fire alarm system [MSFC (07) Section 907.2.6 & 907.3.3].

Initiation. Initiation of the system shall be by manual and automatic means. Approved automatic fire detectors shall be provided in laundry rooms, boiler and furnace rooms, mechanical and electrical rooms, shops, laboratories, kitchens, locker rooms, janitor closets, trash-collection rooms, storage rooms, lounges and similar areas. Automatic smoke detection shall be shall be provided in waiting areas that are open to corridors.

Notification. Activation of the fire alarm system or automatic sprinkler systems shall initiate a general evacuation signal. In addition, activation of the fire alarm system shall immediately transmit an alarm to an approved central station or remote station service.

SECTION 8 – FIRE SPRINKLER AND STANDPIPE SYSTEMS

8.1 Required Fire Sprinkler Systems – New Occupancies

Group E
An automatic sprinkler system shall be provided <u>throughout all Group E fire areas</u> greater than 20,000 square feet in area. An automatic sprinkler system shall also be provided for every Group E area below the level of exit discharge [MSFC (07) Section 903.2.2].

Exception: Where each classroom or care area has at least one exterior exit door at ground level.

Group I-4
An automatic sprinkler system shall be provided <u>throughout all buildings</u> containing a Group I-4 child care center [MSFC (07) Section 903.2.5].

8.2 Special Fire Sprinkler Requirements – New Occupancies
Fire sprinkler protection may also be required for stories and basements in excess of 1500 square feet not provided with adequate openings to the exterior, or where any portion of a basement is located more than 75 feet from a required opening [MSFC (07) Section 903.2.10].

8.2.1 Special Fire Sprinkler Requirements – Existing Occupancies

A fire sprinkler system shall be provided in basements containing a Group E or Group I-4 child care center when such areas exceed 2500 square feet in size and do not have 20 square feet of opening entirely above the adjoining ground level in each 50 lineal feet or fraction thereof of exterior wall on at least one side of the building. Required openings shall have a minimum dimension of 30 inches. If any portion of the basement is located more than 75 feet from required openings, the basement shall be provided with an approved automatic sprinkler system throughout [MSFC (07) Section 903.6.2].

8.3 Standpipe Systems – New Occupancies
See MSFC (07) Section 905 for complete information regarding standpipe systems.

Building Height
In general, a class III standpipe system shall be installed throughout buildings where the floor level of the highest story is located more than 30 feet above the lowest level of fire department vehicle access, or where the floor level of the lowest story is located more than 30 feet below the highest level of fire department vehicle access [MSFC (07) Section 905.3.1].

Exception: Class I standpipes are allowed in buildings equipped throughout with an approved automatic fire sprinkler system.

8.3.1 Standpipe Systems – Existing Occupancies

Standpipe systems complying with MSFC (07) Section 905 are required in existing buildings which have occupied floors located more than 50 feet above the lowest level of fire department access. The standpipes shall have an approved fire-department connection with hose connections at each floor level above or below the lowest level of fire department access [MSFC (07) Section 905.11].

SECTION 9 – PORTABLE FIRE EXTINGUISHERS

9.1 Fire Extinguisher Type and Location – New and Existing Occupancies
At least one portable fire extinguisher having a minimum rating of 2A-10BC shall be available within 75 feet of all occupied areas. Travel to another floor level to obtain the extinguisher is not acceptable. Extinguishers shall be mounted and located in conspicuous locations where they will be readily accessible and immediately available for use [MSFC (07) Section 906.1].

In Group E Occupancies equipped throughout with an approved fire sprinkler system, fire extinguishers shall be required only in laundry rooms, boiler and furnace rooms, mechanical and electrical rooms, garages, stages, projection booths, shops, laboratories, kitchens, locker rooms, janitor closets, trash collection rooms, storage rooms and similar areas.

Cooking equipment involving vegetable or animal oils and fats shall be protected by a Class K rated portable fire extinguisher [MSFC (07) Section 904.11.5].

Fire extinguishers shall be serviced and tagged by qualified personnel annually [MSFC (03) Section 906.2]

SECTION 10 – COMMERCIAL KITCHEN VENTILATION HOOD & FIRE EXTINGUISHING SYSTEM

10.1 Commercial Kitchen Ventilation Hood & Fire Extinguishing System – New and Existing Occupancies

A type I ventilation exhaust hood and an approved automatic fire-extinguishing system are required for commercial cooking operations that produce grease-laden vapors [MSFC (07) Section 609.2 & 904.2.1].

SECTION 11 – BUILDING SERVICES AND SYSTEMS

11.1 Heating Appliances – New and Existing Occupancies

Heating appliances shall be listed by a nationally recognized testing agency [MSFC (03) Section 603.5].

Exception: Unlisted appliances may be installed where permitted by the code official, provided that proper clearances from combustibles are maintained in accordance with the Mechanical Code.

Heating appliances shall be installed in accordance with the manufacturer's instructions and the State Building, Mechanical and Electrical Codes [MSFC (07) Section 603.5.2].

Portable and fixed unvented fuel-fired heating appliances are prohibited within child care centers [MSFC (07) Section 603.4 & 603.5.2].

11.2 Electrical Services – New and Existing Occupancies

Identified electrical hazards shall be corrected in accordance with the MSFC (07) Section 605 and the State Electrical Code [MSFC (07) 605.1].

Multiplug adapters, such as cube adapters, unfused plug strips or any other device not complying with the State Electrical Code shall be prohibited [MSFC (07) Section 605.4].

Relocatable power taps shall be of the polarized or grounded type, equipped with overcurrent protection, and shall be listed [MSFC (07) Section 605.4.1].

Extension cords shall not be used as a substitute for permanent wiring. Extension cords shall be used only with portable appliances [MSFC (07) Section 605.5].

Electrical appliances and fixtures shall be tested and listed by an approved agency and installed and used in accordance the manufacture's listing and instructions [MSFC (07) Section 605.7].

11.3 Gas Meters and Piping – New and Existing

Above-ground gas meters, regulators and piping subject to damage shall be protected by a barrier complying with MSFC (07) Section 312 or otherwise protected in an approved manner [MSFC (07) 603.9].