Child & Adult Day Care Centers

Child & Adult Day Care Center Information Resources

SFMD Website
www.fire.state.mn.us

- Child Care Center Information Sheet
- Adult Day Care Center Information Sheet

Fire Code Email: firecode@state.mn.us
To be covered:
- Classification of Day Care Centers (DCC)
- MSFC Requirements specific to E & I-4 DCC
- Other code requirements and important points of clarification (emphasis on means of egress and fire protection systems)
  - A working knowledge of the MN State Fire Code (MSFC) is assumed

Acronyms
- MSFC – Minn. State Fire Code
- MSBC – Minn. State Building Code
- UFC – Uniform Fire Code
- SFMD – State Fire Marshal Division
- ADC – Adult Daycare Center
- CCC – Child Care Center
- LED – Level of exit discharge
New vs. Existing

Adoption of the 2015 MSFC: May 2, 2016

New
Any construction or change in use on or after May 2, 2016

Existing
Any construction or change in use prior to May 2, 2016

Care Centers vs. Residential Care

Care Center
- Licensed by State DHS
- Care within a commercial property
- Inspected to Group E or I-4 requirements
- Inspector required to conduct follow-up inspection
- Not licensed as a residential program

Residential Care
- Typically licensed by County Health & Human Services
- Care within a residential dwelling unit
- Inspected to R-3 or R-2 dwelling unit requirements
- County licensor may conduct follow-up inspection
Child Care Centers Classified

**Group E Child Care Center:** Care for more than 5 children older than 2-1/2 years of age (30 months)

**Group I-4 Child Care Center:** Care for more than 5 children 2-1/2 years of age or less (30 months)

**Exception:** Care for 100 or fewer children 2-1/2 years of age or less may be classified as Group E when such care rooms are located on the level of exit discharge -AND- each care room has an exit direct to the exterior. [MSFC 202]

Rooms on Level of Exit Discharge

**Level of Exit Discharge**

- **IBC Def.** The horizontal plane located at the point at which an exit terminates and an exit discharge begins.
- **IBC Commentary** – the level where;
  - Occupant leaves exit, and
  - No longer required to ascend or descend (i.e. no stairs or ramps)
When classifying Adult Day Care Centers use MSFC Section 8102.1
- Occupancy definitions in Chapter 2 do not apply

DHS Licensing Rules 9555.9730 Subp. 2
- Mandates that ADCs will be classified by the Minn. State Fire Code
- MSFC 8102 determines the classification of an ADC
  - No A-3 option

Classifications of Adult Day Care Centers MSFC 8102

Group E Occupancy
- Centers serving only participants who are capable of taking appropriate action for self-preservation under emergency conditions

Group I-4 Occupancy
- Centers serving only participants who are not capable of taking appropriate action for self-preservation under emergency conditions
Classifications of Adult Day Care Centers
MSFC 8102

Minn. Rules 9555.9600 to 9555.9730:
Capable of Self Preservation when:
- Ambulatory or mobile; and
- Combined physical/mental capability to:
  - recognize a danger, signal, or alarm
  - evacuate with only minor assistance
  - select an alternative means of escape
  - remain at designated meeting location

Classifications of Adult Day Care Centers
MSFC 8102

MSFC Chapter 2 definition:
Incapable of Self Preservation:
- Persons because of age, physical limitations, mental limitations, chemical dependency, or medical treatment who cannot respond as an individual to an emergency situation

Classifications of Adult Day Care Centers
MSFC 8102

- ADC Mixed-Capability Population
  - Can be classified as either
    - Group E
    - Group I-4
Classifications of Adult Day Care Centers
MSFC 8102

ADC centers with mixed-capability population: Group E when:
1. Not more than 50% of population is incapable of self-preservation
2. All exits are direct to grade without intervening stairs
3. The center is protected with an automatic fire alarm system
4. Evacuation time of 3 minutes or less

MSFC 8102.1.3

Classifications of Adult Day Care Centers
MSFC 8102

ADC centers with mixed-capability population and do not meet all requirements of MSFC 8102.1.3
1) max 50% incapable of self preservation
2) grade level exiting
3) complete fire alarm system
4) evacuation time of 3 minutes or less
...will be classified as Group I-4

Classifications of Adult Day Care Centers
MSFC 8102

Q: What if the ADC isn’t operating yet, and they don’t know how many clients will be incapable of self preservation: How would I classify it?
A: Discuss the various classification requirements with the ADC representative, and then choose a classification for the basis of the inspection. Make sure to record the occupancy classification within the inspection remarks.
Inspection Remarks: Examples

Classifications of Adult Day Care Centers
MSFC 8102

ADC centers with mixed-capability population: Group E when, (MSFC 8102.1.3)
1) Not more than 50% of the licensed capacity consist of those incapable of self-preservation
2) All exits are direct to grade without intervening stairs
3) The center is protected with a complete fire alarm system
4) Evacuation time of 3 minutes or less

Detection in Hazardous Areas

ADC Centers - Mixed Population Group E
Fire Alarm System Requirements

Automatic fire detection (heat or smoke) required in boiler and furnace rooms, kitchens, storage rooms, janitors closets, laundries, and other hazardous areas [MSFC 8102.1.3.3]
ADC Centers - Mixed Population Group E
Fire Alarm System Requirements

Smoke detection required throughout the exiting system (MSFC 8102.1.3.3)

ADC Centers - Mixed Population Group E
Evacuation Requirements

The ADC center must demonstrate the ability to evacuate the entire population within 3 minutes.

MSFC 8102.1.3.4

ADC Centers - Mixed Population Group E
Evacuation Requirements

Q: How am I supposed to know whether or not the population can be evacuated within 3 minutes?
A: You’re not! The number and capabilities of the ADC are subject to frequent change. Evacuation times are to be verified by DHS.
Occupyancy Classification Question?

Existing Group E Adult Day Care Center
- 20 clients total (8 incapable of self-preservation)
- Complete fire alarm system with smoke detection
- Evacuation time of less than 3-minutes
- Main level use only
- Basement (currently unoccupied) has 2 separate exit
- stairways leading to separate main level exit discharge
doors

QUESTION: The ADC wants to increase license
capacity to 30 and occupy the basement level.
Would this change the occupancy classification?

ANSWER: YES
- Mixed-capability population
- No grade-level exits in basement per
  8102 (occupants must egress via stairs)
- I-4 classification is the only possibility

Scope of MSFC 8102 - Classification Only

Remember
- MSFC 8102 determines the
classification of Adult Day Care Centers
- All MSFC requirements for that
classification (E or I-4) apply
Certified Design Plans Required

State Statute 326.02 - 326.15 and MN Rules 1800.5200 will in most cases require that certified plans be prepared by a licensed architect or engineer for:

1. New construction
2. Change in occupancy use classification of an existing building
3. Change in exiting of an existing building

MN Board of Architecture: http://www.aelslagid.state.mn.us/

Fire Safety & Evacuation Plans

Day Care Centers must:

- Maintain emergency evacuation plans
- Maintain fire safety plans
- Conduct monthly emergency evacuation drills
- Provide employees with annual fire safety training

MSFC 404; 405; 406

Special Exiting Provision For Young Children in School Buildings

Child day care, preschool, head-start and similar programs in school buildings shall be located on the floor level of exit discharge (LED)

- Exceptions given for buildings with fire sprinkler systems and/or fire alarm systems or other egress methods
- 2nd grade students may be also be located one story above LED
- An Information Sheet is available for download at the SFMD Website. MSFC 1001.3; MSBC 421
Special Exiting Provision For Young Children in School Buildings

Child care areas in school buildings may be located on any floor level below the 4th story if:

- Fire sprinkler system throughout, and
- Fire alarm system with smoke detection
  - throughout the exiting system
  - within all areas except classrooms and offices

Special Exiting Provision For Young Children in School Buildings

Child care areas in fully sprinkled school buildings may be located on any floor level when:

- The use area is limited to one grade level at a time, and
- Independent exiting is provided from the exiting systems used by older students
  - For the purposes of this section, pupils from the 2nd grade and below are considered one grade level
Special Exiting Provision For Young Children in School Buildings

Child care areas in school buildings equipped with only a fire alarm system may be located on any floor level when:

- Smoke detection throughout exiting system and within all areas other than classrooms and offices, and
- The use area is limited to one grade level at a time, and
- Independent exiting is provided from the exiting systems used by older students

Accessory spaces in school buildings used for child care

- Gyms, cafeterias, libraries, etc.

...may be used when located one level above or below the LED if:

- Fire sprinkler system throughout, or
- Fire alarm system with smoke detection throughout the exiting system

Day Care Centers: Number of Exits (New)

Two exits required for day care areas w/occupant load >10

- Day Care occupant load factor = 35 sq.ft.
- Thus, any room or area over 350 sq.ft. require at least 2 exits
Spaces with One Means of Egress (New)

<table>
<thead>
<tr>
<th>OCCUPANCY</th>
<th>MAXIMUM OCCUPANT LOAD</th>
</tr>
</thead>
<tbody>
<tr>
<td>A, B, E, F, M, U</td>
<td>49</td>
</tr>
<tr>
<td>H-1, H-2, H-3</td>
<td>3</td>
</tr>
<tr>
<td>H-4, H-5, I-1, I-3, I-4, R, S</td>
<td>10</td>
</tr>
</tbody>
</table>

a. Day care maximum occupant load is 10

Group E Day Care Center Exiting (New)

✓ Corridors
✓ Stairways
✓ Service areas
✓ Mech./utility rooms
✓ Bathrooms
✓ Similar incidental areas...
✓ Not included when determining a 'net' area occupant load
Number of Exits: Existing Group E under UFC (pre 2003)

Existing (UFC) day care areas with occupant load <50 allowed to have one exit
Former Day Care occupant load factor = 20 sq.ft.
Thus, any room or area 1000 sq.ft. or more will require at least 2 exits.

(MSFC 1104.24)

2015 MSFC Change in No. of Exits

➢ 2015 MSFC egress summary
  ▪ 2 or more exits required with any of the following conditions
    ✓ Care rooms/areas serving more than 10 children, 2.5 years of age or less
    ✓ Group I-4, more than 10
    ✓ Group E care rooms/areas serving 50 or more children
      ○ Change from 2007 MSFC

2015 MSFC Change in No. of Exits

(B) TABLE 1015.3
<table>
<thead>
<tr>
<th>SPACES WITH ONE EXIT OR EXIT ACCESS DOORWAY</th>
<th>OCCUPANCY</th>
<th>MAXIMUM OCCUPANT LOAD</th>
</tr>
</thead>
<tbody>
<tr>
<td>A, B, E, P, M, U</td>
<td>H-1, H-2, H-3</td>
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<td>H-4, H-5, L-1, L-2, I-3, I-4, R</td>
<td>S</td>
<td>29</td>
</tr>
</tbody>
</table>

[B] 1015.6 Day care means of egress. Day care facilities, rooms or spaces where care is provided for more than 10 children that are 21/2 years of age or less, shall have access to not less than two exits or exit access doorways.
Minimum Separation of Exits (New & Existing)

Non-sprinkled Building: 1/2 of the longest diagonal of the room or area
Sprinkled Building: 1/3 of the longest diagonal of the room or area [MSFC 1015.2.1]

Common Path of Egress Travel (New & Existing)

The maximum travel distance from any point of the exit access to where two separate and distinct paths of egress travel are available (MSFC 1014.3 & 1104.19)

75' max.
Additional exit required when maximum common path of egress travel distance exceeds 75 feet.

Exit Access Travel Distance (New)
The maximum travel distance from any point in a building to an exit enclosure or point of exit discharge

Group E
Sprinkled: 250 ft.
Non Sprinkled: 200 ft.
MSFC 1016

Group I-4
Sprinkled: 200 ft.
Non Sprinkled: (150) Not Permitted
**Exit Access Travel Distance (Existing)**

The maximum travel distance from any point in a building to an exit enclosure or point of exit discharge

Sprinkled: 250 ft.
Non Sprinkled: 200 ft.

MSFC 1104.17.4

**Exit Access Travel Distance**

**Egress Doors**

Must be side-hinged
some exceptions
- i.e. power-operated doors, Group R-3, etc.

Must swing in the direction of egress when serving an occupant load of 50 or more

MSFC 1008.1.2; 1104.7
Egress Doors

Minimum clear width
- New: 32"
- Existing: 28"
- No less than required per MSFC 1005.1

Minimum height: 80"

MSFC 1008.1.1; 1104.7.1

Egress Doors

Opening force
- Interior side-swinging doors w/o closer
  - 5-pounds of force maximum
- Other doors
  - Latch releases with 15-pounds of force max
  - Door set into motion with 30-pounds of force max and continue to full open position with 15-pounds max

MSFC 1008.1.2

Egress Door Hardware (New & Existing)

Egress doors must open without
- Keys
- Special knowledge or effort

Door must release with a single operation

MSFC 1008.1.8; 1104.7
Egress Door Hardware
(New & Existing)

Double-keyed lock on main exit door not permitted in E or I-4 occupancies
(MSFC 1008.1.8.3)

Day care centers are not permitted to lock exit doors!

MSFC 1008.1.8, 1104.7
Unapproved Locking Device

Egress Door Hardware (New & Existing)

**Delayed egress locks**
- Requires sprinkler system or fire alarm smoke detection system
- Locks release with activation of fire protection systems or loss of power
- Irreversible unlocking process after 1 second
- 15 or 30 second delay
- Not permitted in Group A occupancies

MSFC 1008.1.8.6

Egress Door Hardware (New & Existing)

**Special Egress Control Devices**
Where clients require special security for safety (MSFC 1008.1.9.6) Group I-1, I-2, R-3, R-4
- Fire sprinkler system
- Fire alarm system with smoke detection
- Locks release with activation of fire protection systems or loss of power
- Only one control device per egress path
- Constant staff supervision with keys
- Etc.
Special Egress Control Devices

‘Seclusion’ and ‘Time-out’ Rooms

Special detention arrangements

- Allows occupants to be temporarily detained for safety purposes

MSFC 1008.1.11
Foam Plastic

- Exposed foam plastic exceeding 10% of interior wall/ceiling surfaces must comply with large scale fire performance testing per MSBC 2603.9

Seclusion and Time-out Rooms: Interior Finish

Special detention arrangements (MSFC 1008.1.11)

- Release upon activation of fire protection systems and loss of power
- Quick-response sprinkler protection in room
- Smoke detection in room and throughout exiting pathway to exit discharge
- Lock-release systems tested monthly
- Interior finish requirements apply (i.e. foam)
- Door swing in direction of egress travel

Egress Door Hardware Height

Door hardware height (MSFC 1008.1.9.2)

- between 34” and 48” above floor level
### Egress Door Hardware Height

**Door hardware height**

(MSFC 1008.1.9.2)

- Hardware height cannot exceed 48” in an attempt to prevent children from operating exit doors

### Panic Hardware (New & Existing)

**Panic hardware**

Required in Group E when occupant load >49

- Panic hardware is not required in Group I-4 (only Groups A, E and H)

MSFC 1008.1.10; 1104.7

### Panic Hardware

**Is this panic hardware?**
Panic Hardware (New & Existing)

Panic hardware
No additional locking/latching devices allowed on doors with panic hardware

Corridors

Corridor
- An interior passageway having a length at least three times its width
- Having walls, partitions or other obstructions over 6 feet in height on two opposing sides
- Having openings from rooms or similar spaces
- Generally will lead to an exit
Corridors (new)

Group E >30 Occupants: one-hour fire-rated unless fully sprinklered

Corridors (existing)

Group E >30 Occupants: one-hour fire-rated unless fully sprinklered

Exception: Group E with a monitored fire alarm system having smoke detection throughout egress system.

MSFC 1104.17.1
Dead End Corridors (New & Existing)

Maximum dead-end corridor length: 20’ when more than one exit access is req.
- No limit if length is < 2.5 times the width

MSFC 1018.4; 1104.17.4

Dead End Corridors (New & Existing)

Maximum dead-end corridor length: 20’
- Exception: Pre-1975 Group E may have up to a 35’ dead end corridor if fully sprinkled

Door Swing Creating a Dead End
2015 MSFC Dead End Corridor Change

- 2015 MSFC 1018.4 Exception 2:
  - 50’ dead-end corridor in Group E when fully sprinklered
  - Change from 2007 MSFC

Corridor Width (New)

- At least 36” when serving less than 50 occupants
- At least 44” when serving more than 50 occupants
- For Group E at least 72” inches when serving 100 or more occupants

At no time less than the minimum required per MSFC 1005.1

MSFC 1018.2

Corridor Width (Existing)

- At least 36” but not less than the minimum required per 1005.1

At least 36” but not less than the minimum required per 1005.1

MSFC 1104.17.3
Guards (New)

Guards (MSFC 1013)
- Required along open side of walking surfaces >30” above floor or ground level
- 42” min. height
- Opening limitations
  - Stops a 4” diameter sphere: up to 34”
  - Stops an 8” diameter sphere: 34” to 42”
Guards (Existing)

Guards (MSFC 1104.6)
- Required along open side of walking surfaces >30” above floor or ground level
- 42” min. height
  - Exception: Guards along the open side of stairs may be a minimum of 30” in height
- Opening limitations
  - Stops a 6” diameter sphere: up to 34”

Maintenance of the Means of Egress

Exits, exit access and exit discharge
- Maintained free from obstructions

MSFC 1030.2
Means of Egress - Maintenance

A clear path must be maintained to a public way.
What is a public way?

Public street, roadway or alley

Maintenance of the Means of Egress

Gates or barriers may not obstruct required means of egress or create dead-end corridors

(MSFC 1030.2)

Exposed Foam Plastic
Exposed Foam Plastic

Foam plastic materials shall not be used as interior wall and ceiling finish unless:
- Separated from the building interior via a thermal barrier per MSBC 2603.4 (i.e. 1/2” gypsum board), or
- Meets combustibility standards during large-scale fire testing per MSBC 2603.9
  - i.e. NFPA 286 ‘Room Corner Test’

MSFC 801.1.1; 803.7

Artwork & Decorations in Corridors

Artwork and materials in corridors shall be limited to 20% of wall area

MSFC 807.4.3.2

Storage of Clothing & Personal Effects

Clothing and personal effects shall not be stored in corridors and lobbies

Exceptions: Corridors protected by a fire sprinkler system, or when stored in metal lockers provided minimum egress width is maintained

MSFC 807.4.3; 807.4.4
Fire Alarm Systems (New & Existing Group E)

Group E Day Care Centers having an occupant load of 50 or more shall be provided with an approved fire alarm system

(\textit{MSFC 907.2.3; 1103.7.1})

Fire Alarm Systems (Group I-4)

Group I-4 Day Care Centers shall be provided with an approved fire alarm system

(\textit{MSFC 907.2.6.4; 1103.7.3})

Fire Alarm Systems (New & Existing Group E)

Initiation: manual and automatic means

Automatic fire detectors shall be provided in:

- Laundry rooms, boiler & furnace rooms, mechanical and electrical rooms, shops, laboratories, kitchens, locker rooms, janitor closets, trash rooms, storage rooms, lounges and similar areas

(\textit{MSFC 907.2.3; 1103.7.1})
Fire Alarm Systems (Group I-4)

**Initiation:** manual and automatic means

Automatic fire detectors shall be provided in:
- Laundry rooms, boiler & furnace rooms, mechanical and electrical rooms, shops, laboratories, kitchens, locker rooms, janitor closets, trash rooms, storage rooms, lounges and similar areas.

(MSFC 907.2.6.4; 1103.7.3)

Fire Alarm Systems (Group I-4)

**Automatic smoke detection**
- Required in waiting areas that are open to corridors

(MSFC 907.2.6.4; 1103.7.3)

Fire Alarm Systems (Group E)

**Fire alarm system exceptions for fully sprinkled buildings:**
- Manual fire alarm boxes are only required in the main office and within a custodial area
- Required automatic fire detectors need not be provided

(MSFC 907.2.3; 1103.7.1)
Intervening room smoke detection in non-sprinklered schools:

- Where a room having more than 10 occupants with a single means of egress through an adjoining room;
- Smoke detection must be located throughout the common atmosphere through which egress passes.

MSFC 907.2.3; 1103.7.1

Fire Alarm Systems (New & Existing)

Initiation;
Activation of the fire alarm system shall initiate a general evacuation signal

- For Group I-4, the alarm system must be monitored

(MSFC 907.2.3.3; 907.2.6.4.2)
Fire Sprinkler Systems (New Group E)

- Required throughout all Group E fire areas greater than 12,000 sq.ft. (MSFC 903.2.3)

Fire Sprinkler Systems (New Group E)

- Required in every portion of a Group E located below the LED
  - Exception: Where each classroom or care area has a grade level exit direct to the exterior (MSFC 903.2.3)

Fire Sprinkler Systems (New Group I-4)

- Required throughout buildings containing a Group I occupancy (MSFC 903.2.6)
Basement Access or Sprinkler Protection (Existing)

Existing basements used for day care >2,500 sq.ft. and not provided with 20 sq.ft. of opening above ground level in each 50 lineal feet of exterior wall on at least one side of the building require fire sprinkler protection

- Minimum opening dimensions of 30”

Minimum opening dimensions of 30”

Or, if any portion of the basement is located more than 75’ from the required openings, the basement will require a fire sprinkler system

MSFC 1103.5.3
Commercial Cooking Operations

Commercial cooking operations producing grease-laden vapors
- Type I ventilation hood
- Automatic fire extinguishing system

MSFC 904.2.1; 609

Commercial Cooking Operations (New & Existing)

Class K Fire Extinguishers
- Required for kitchens utilizing animal fats and/or vegetable oils
- Within 30 feet travel distance of cooking operations
- Instructional placard required stating that the extinguisher is to be used only AFTER the fixed extinguishing system has been actuated

(MSFC 904.11.5)
Special Family Daycare Homes
MN Statute 245.14 Subd. 4

Subd. 4. Special family day care homes.
- Nonresidential child care programs serving 14 or fewer children that are conducted at a location other than the license holder's own residence shall be licensed under this section and the rules governing family day care or group family day care if:
  (a) the license holder is the primary provider of care and the nonresidential child care program is conducted in a dwelling that is located on a residential lot;
  (b) the license holder is an employer who may or may not be the primary provider of care, and the purpose for the child care program is to provide child care services to children of the license holder's employees;
  (c) the license holder is a church or religious organization;
  (d) the license holder is a community collaborative child care provider. For purposes of this subdivision, a community collaborative child care provider is a provider participating in a cooperative agreement with a community action agency as defined in section 256E.31;
  (e) the license holder is a not-for-profit agency that provides child care in a dwelling located on a residential lot and the license holder maintains two or more contracts with community employers or other community organizations to provide child care services. The county licensing agency may grant a capacity variance to a license holder licensed under this paragraph to exceed the licensed capacity of 14 children by no more than five children during transition periods related to the work schedules of parents, if the license holder meets the following requirements:
Special Family Daycare Homes
MN Statute 245.14 Subd. 4

(1) the program does not exceed a capacity of 14 children more than a cumulative total of four hours per day;
(2) the program meets a one to seven staff-to-child ratio during the variance period;
(3) all employees receive at least an extra four hours of training per year than required in the rules governing family child care each year;
(4) the facility has square footage required per child under Minnesota Rules, part 9502.0425;

(5) the program is in compliance with local zoning regulations;
(6) the program is in compliance with the applicable fire code as follows:
   (i) if the program serves more than five children older than 2-1/2 years of age, but no more than five children 2-1/2 years of age or less, the applicable fire code is educational occupancy, as provided in Group E Occupancy under the Minnesota State Fire Code 2003, Section 202; or
   (ii) if the program serves more than five children 2-1/2 years of age or less, the applicable fire code is Group 1-4 Occupancies, as provided in the Minnesota State Fire Code 2003, Section 202; and

(7) any age and capacity limitations required by the fire code inspection and square footage determinations shall be printed on the license; or
(f) the license holder is the primary provider of care and has located the licensed child care program in a commercial space, if the license holder meets the following requirements:
Special Family Daycare Homes
MN Statute 245.14 Subd. 4

(1) the program is in compliance with local zoning regulations;
(2) the program is in compliance with the applicable fire code as follows:
(i) if the program serves more than five children older than 2-1/2 years of age, but no more than five children 2-1/2 years of age or less, the applicable fire code is educational occupancy, as provided in Group E Occupancy under the Minnesota State Fire Code 2003, Section 202; or
(ii) if the program serves more than five children 2-1/2 years of age or less, the applicable fire code is Group 1-4 Occupancies, as provided under the Minnesota State Fire Code 2003, Section 202;
(3) any age and capacity limitations required by the fire code inspection and square footage determinations are printed on the license; and
(4) the license holder prominently displays the license issued by the commissioner which contains the statement "This special family child care provider is not licensed as a child care center."

QUESTIONS?