



# INSPECTION CHECKLIST

## Educational Occupancies



Y = Meets Requirements; N= Does Not Meet Requirements

Y N

### EXTERIOR:

- Fire Lanes marked/unobstructed (MSFC 503.3, 503.4)
- Address visible (MSFC 505.1)
- Fire hydrants/water supply accessible (MSFC 507)
- Combustible accumulations/storage acceptable (MSFC 304.2, MSFC 315.4)
- F.D. key box present/maintained (MSFC 506)
- F.D. connections visible/maintained (MSFC 912)
- Gas meter/piping protected against impact (MSFC 312, 603.9)
- Dumpsters are outside and 5 ft. or more from combustible walls, openings or combustible roof eave lines. (MSFC 304.3.3)

### EXIT FEATURES/MEANS OF EGRESS:

- Adequate number of exits (MSFC 1004.2.1, 1016, 1104.25)
- Special egress provisions for younger children (MSFC 1001.3)
- Exits, aisles, & corridors free of obstructions (MSFC 1031.3)
- Exit doors open from inside (MSFC 1010.1.9)
- Exit signs present (MSFC 1013, 1104.3)
- Emergency lighting present & operational (MSFC 1008, 1104.5)
- Interior finish acceptable (MSFC 803, 804)
- Exit corridors rated (MSFC 1020.1, 1104.17.1)
- Minimum corridor width – 6' (MSFC 1020.2)
- Two exits from labs/prep rooms > 500 sq. ft New, 1000 sq.ft. Existing (MSFC 101.1, 1104.25.4)

### CONSTRUCTION FEATURES:

- Fire rated construction present/maintained (MSFC 701.2)
- Incidental use areas separated/sprinklered (MSFC 1105.3)
- Rated fire doors operational (MSFC 704.2)
- Vertical openings protected (MSFC 1103.4)

### STORAGE:

- Storage neat and orderly (MSFC 315.3)
- Combustible storage prohibited in electrical equipment rooms, restrictions apply in boiler/mechanical rooms (MSFC 315.3.3)
- Attic storage (MSFC 315.3.4)
- Storage maintained [2' below ceiling un-sprinklered, 18" sprinklered] (MSFC 315.3.1)
- Rubbish/waste subject to spontaneous ignition shall be disposed of daily and in listed container (MSFC 304.3.1)

### FLAMMABLE/COMBUSTIBLE LIQUIDS:

- Safety containers if used (MSFC 5705.2.4)
- Not stored/kept near exits (MSFC 5704.3.3.3)
- No sources of ignition (MSFC 5704.2.4)
- Quantities >10 gals in cabinet (MSFC 5704.3.4.4)
- No basement storage unless sprinklered (MSFC 5704.3.5.1)
- Adequate ventilation (MSFC 5705.3.7.5.1)

### EMERGENCY PLANNING:

- Comply with Chapter 4 for Education
- Fire Evacuation Drills, 5 per year (Mn Statute 299F.30)
- Lockdown drills 5 per year & Weather 1 per year (Mn Statute 121A.037)

Y N

### FIRE EXTINGUISHERS:

- Readily accessible (MSFC 906.5)
- Travel distance not exceeded (MSFC 906.1, 906.3)

### UTILITY/MECHANICAL/HVAC:

- Shut off valves present on gas appliances (MSFC 603.1)
- Approved piping, connections & appliances used (MSFC 603.1.2)
- Combustion air supply/venting present (MSFC 603.1)
- Adequate clearance between combustibles and appliances (MSFC 305.1, 603.5.3)
- Commercial hood ducts/filters are clean (MSFC 607.3.3)

### HAZARDOUS MATERIALS:

- Compressed gas cylinders secured (MSFC 5303.5)
- Rooms/areas properly labeled (MSFC 5003.5)
- Acceptable quantities (MSFC 5003.1.1)
- Separation of incompatible materials (MSFC 5003.9.8)

### SPRINKLER SYSTEM:

- Coverage is adequate (MSFC 903.3.1)
- Controls are readily accessible (MSFC 509.2)
- Valves locked open (MSFC 903.4.4)
- System and valves supervised [>6 sprinklers new, ≥ 100 in existing] (MSFC 903.4)
- Heads in good condition (MSFC 903.3.1)
- Wrench/spare sprinklers present (MSFC 903.3.1)
- Tested/inspected at least annually (MSFC 901.6.1)
- Riser/pump rooms labeled (MSFC 509.1)

### FIRE ALARM & DETECTION SYSTEMS:

- Control panel/annunciator panel in normal condition [no trouble or alarm conditions] (MSFC 901.6, 901.7)
- Detectors properly installed (MSFC 907 & 1103.7.2)
- Tested/inspected at least annually (MSFC 907.8)
- Fire alarm system installed where required (MSFC 907.2.3, 1103.7.2)
- Smoke detection in intervening egress rooms (MSFC 907.2.3.2, 1103.7.2.3)
- Fire drills conducted (at least 5/yr.) MN Stat 299F.30

### OTHER FIRE PROTECTION SYSTEMS:

- Standpipes needed (MSFC 905, 1103.6)
- Standpipes/hose in good condition (MSFC 905.2)
- Adequate coverage (MSFC 905.2)
- Kitchen Hood system fuel shutoff present (MSFC 904.12.2)
- Kitchen Hood system properly maintained/serviced (MSFC 607.3 & 904.12.5)

### ELECTRICAL:

- No electrical hazards (MSFC 604.1, 604.6)
- Appliances/fixtures in good condition (MSFC 604.7)
- Overcurrent protection present (MSFC 604.1)
- Multi-plug adapters per NFPA 70 (MSFC 604.4)
- Extension cords not substituted for fixed wiring (MSFC 604.5)
- Power strips properly used (MSFC 604.4)
- Access/clearance to electrical panels (MSFC 604.3)
- Electrical Rooms labeled (MSFC 604.3.1)

Version 3.0 effective March, 31, 2020

This checklist is intended as a guide to assist fire inspection personnel in identifying general fire and life safety hazards, other possible code requirements may apply. Please refer to other checklists for information on certain occupancies/topics.

MSFC = Minnesota State Fire Code

## CODE SUMMARY

### Educational Occupancies

#### COMMON OCCUPANT LOAD FACTORS (MSFC 1004.1):

Classrooms	20 sq. ft/person (net)	Shops/labs/vocational	50 sq. ft/person (net)
Office/business areas	150 sq. ft/person (gross)	Mechanical Areas	300 sq. ft/person (gross)
Assembly (chairs only)	7 sq. ft/person (net)	Storage Areas	300 sq. ft/person (gross)
Assembly (tables/chairs)	15 sq. ft/person (net)		
Exercise Areas	50 sq. ft/person (gross)		

EGRESS FEATURES:	UNSPRINKLERED:	SPRINKLERED:	REFERENCE SECTION:
Egress Width – Stairs (in./occupant)	0.3	0.2 *	MSFC 1005.3.1 * Voice reduction
Egress Width – Other (in./occupant)	0.2	0.15 *	MSFC 1005.3.1 * Voice reduction
Minimum Aisle Width (in.)	36	36	Refer to MSFC 1005.1 for actual figures
Common Path of Travel – new (ft.)	75	75	MSFC 1006.2.1
Common Path of Travel – existing (ft.)	75	75	MSFC 1104.20
Dead-End Limit – new (ft.)	20	50	MSFC 1020.4 Unlimited allowable if length < (2.5 x width)
Dead-End Limit – existing (ft.)	50	50	MSFC 1104.17.4 Unlimited allowable if length < (2.5 x width)
Exit Access Travel Distance (ft.)	200	250	MSFC 1017.1 – N; 1104.19 – E
Corridor Fire-Rating Req. – new (hr.)	1	0	For > 30 occupants. MSFC 1020.1
Corridor Fire-Rating Req. – exist. (hr.)	1	0	For > 30 occupants. MSFC 1104.17.1

#### COMMON OCCUPANT LOAD FACTORS:

- 2nd Exit Required - more than 49 occupants (MSFC 1006.1) OR common path of travel exceeds 75 ft. (MSFC 1006.2.1) OR all stories above 2nd story (MSFC 1021.2) OR labs or prep rooms greater than 500 sq. feet containing hazardous materials. (MSFC 1006.2.2.7). For existing see MSFC 1104.25.
- 3rd Exit Required - 501 to 1,000 occupants (MSFC 1006.2.1.1 & 1104.25.2)
- 4th Exit required - 1,001 or more occupants (MSFC 1006.2.1.1 & 1104.25.3)

#### SPRINKLER SYSTEM REQUIRED (MSFC 903.2.3 – NEW, 1103.5.3 – EXISTING):

New: All group E fire areas greater than 12,000 sq. feet in area, O.L.  $\geq$  300, or every portion of building below the level of exit discharge (not required if every classroom provided with at least one exterior exit door to ground level)

Existing: Windowless basements exceeding 2,500 sq. feet used by students

#### FIRE ALARM SYSTEM AND DETECTION REQUIRED (MSFC 907.2.3 – NEW; 1103.7.2 – EXISTING):

Fire alarm and detection system required with 50 or more occupants.

Automatic detection is required in laundry rooms, boiler rooms, furnace rooms, mechanical rooms, electrical rooms, shops, laboratories, kitchens, locker rooms, janitor's closet, trash collection rooms, storage rooms, lounges, and similar areas (not required if sprinklered).

Where single exit is through adjoining or intervening room serving more than 10 persons, smoke detection is required in the room through path of travel.

Version 2.0 effective May 2, 2016

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