

# INSPECTION CHECKLIST

## Mercantile Occupancies

Y = Meets Requirements; N= Does Not Meet Requirements

Y N

### EXTERIOR:

- Fire Lanes marked/unobstructed (IFC 503.3, 503.4)
- Address visible (IFC 505.1)
- Fire hydrants/water supply accessible (IFC 508)
- Combustible accumulations/storage acceptable (IFC 304.2, IFC 315.3)
- F.D. key box present/maintained (IFC 506)
- F.D. connections visible/maintained (IFC 912)
- Gas meter/piping protected against impact (IFC 312, 603.9)
- Dumpsters are outside and 5 ft. or more from combustible walls, openings or combustible roof eave lines. (IFC 304.3.3)

### EXIT FEATURES/MEANS OF EGRESS:

- Adequate number of exits (IFC 1004.4, 1015, 1019, 1027.23)
- Exits, aisles, & corridors free of obstructions (IFC 1028.3)
- Exit doors open from inside (IFC 1008.1.8)
- Exit signs present (IFC 1011, 1027.3)
- Emergency lighting present & operational (IFC 1006, 1027.5)
- Interior finish acceptable (IFC 803, 804)
- Exit corridors rated (IFC 1017.1, 1027.17.1)

### CONSTRUCTION FEATURES:

- Fire rated construction present/maintained (IFC 703.1)
- Incidental use areas separated/sprinklered (IFC 705.3)
- Rated fire doors operational (IFC 703.2)
- Vertical openings protected (IFC 704.2)

### STORAGE/MERCHANDISE DISPLAY:

- Storage neat and orderly (IFC 315.2)
- Combustible storage prohibited in electrical equipment rooms, restrictions apply in boiler/mechanical rooms (IFC 315.2.3)
- Attic storage (IFC 315.2.4)
- Storage maintained [2' below ceiling un-sprinklered, 18" sprinklered] (IFC 315.2.1)
- Rubbish/waste subject to spontaneous ignition shall be disposed of daily and in listed container (IFC 304.3.1)
- Proper high piled storage requirements if products displayed over 12' in height (IFC Chapter 23)

### FLAMMABLE/COMBUSTIBLE LIQUIDS:

- Safety containers if used (IFC 3405.2.4)
- Not stored/kept near exits (IFC 3404.3.3.3)
- No sources of ignition (IFC 3404.2.4)
- Quantities >10 gals in cabinet (IFC 3404.3.4.4)
- No basement storage unless sprinklered (IFC 3404.3.5.1)
- Adequate ventilation (IFC 3405.3.7.5.1)

### FIRE EXTINGUISHERS:

- Readily accessible (IFC 906.5)
- Travel distance not exceeded (IFC 906.1, 906.3)
- Tested/inspected at least annually (IFC 901.6.1)

Y N

### HAZARDOUS MATERIALS:

- Compressed gas cylinders secured (IFC 3003.5)
- Rooms/areas properly labeled (IFC 2703.5)
- Acceptable quantities (IFC 2703.1.1)
- Separation of incompatible materials (IFC 2703.9.8)

### UTILITY/MECHANICAL/HVAC:

- Shut off valves present on gas appliances (IFC 603.1)
- Approved piping, connections & appliances used (IFC 603.1.2)
- Combustion air supply/venting present (IFC 603.1)
- Adequate clearance between combustibles and appliances (IFC 305.1, 603.5.3)
- Commercial hood ducts/filters are clean (IFC 904.11.6.3)

### SPRINKLER SYSTEM:

- Coverage is adequate (IFC 903.3.1)
- Controls are readily accessible (IFC 903.3.1)
- Valves locked open (IFC 903.4.4)
- System and valves supervised [>20 sprinklers new, ≥ 100 in existing] (IFC 903.4)
- Heads in good condition (IFC 903.3.1)
- Wrench/spare sprinklers present (IFC 903.3.1)
- Tested/inspected at least annually (IFC 901.6.1)
- Riser/pump rooms labeled (IFC 510.1)

### FIRE ALARM & DETECTION SYSTEMS:

- Control panel/annunciator panel in normal condition [no trouble or alarm conditions] (IFC 901.6, 901.7)
- Detectors properly installed (IFC 907)
- Tested/inspected at least annually (IFC 907.20)
- Single station smoke detectors present in each apartment (IFC 907.2.10, 907.3.6)
- Fire alarm system installed where required (IFC 907.2.9, 907.3.5)

### OTHER FIRE PROTECTION SYSTEMS:

- Standpipes needed (IFC 905)
- Standpipes/hose in good condition (IFC 905.2)
- Adequate coverage (IFC 905.2)
- Hood system fuel shutoff present (IFC 904.11.2)
- Hood system properly maintained/serviced (IFC 904.11.6)

### ELECTRICAL:

- No electrical hazards (IFC 605.1, 605.6)
- Appliances/fixtures in good condition (IFC 605.7)
- Overcurrent protection present (IFC 605.1)
- Power taps not used (IFC 605.4)
- Extension cords not substituted for fixed wiring (IFC 605.5)
- Power strips properly used (IFC 605.4)
- Access/clearance to electrical panels (IFC 605.3)
- Electrical Rooms labeled (IFC 605.3.1)

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.

## CODE SUMMARY

### *Mercantile Occupancies*

#### COMMON OCCUPANT LOAD FACTORS (MSFC 1004.1.1):

Business/Office Areas	100 sq. ft/person (gross)	Locker rooms	50 sq. ft/person (gross)
Grade (ground) Areas	30 sq. ft/person (gross)	Mechanical Areas	300 sq. ft/person (gross)
Basement Areas	30 sq. ft/person (gross)	Storage Areas	300 sq. ft/person (gross)
Other stories/floors	60 sq. ft/person (gross)		

EGRESS FEATURES:	UNSPRINKLERED:	SPRINKLERED:	REFERENCE SECTION:
Egress Width – Stairs (in./occupant)	0.3	0.2	IFC 1005.1
Egress Width – Other (in./occupant)	0.2	0.15	IFC 1005.1
Minimum Aisle Width – Public Areas (in.)	36	36	Refer to IFC 1005.1 for actual figures
Minimum Aisle Width – Non-Public Areas (in.)	36/28	36/28	IFC 1014.4.1.2 (Can be 28" for aisle serving less than 50 people)
Common Path of Travel – new (ft.)	75	75	IFC 1014.3
Common Path of Travel – existing (ft.)	75	100	IFC 1027.19
Dead-End Limit – new (ft.)	20	20	IFC 1017.3 Unlimited allowable if length < (2.5 x width)
Dead-End Limit – existing (ft.)	50	50	IFC 1027.17.4 Unlimited allowable if length < (2.5 x width)
Exit Access Travel Distance (ft.)	200	250	IFC 1016.1 – N; 1027.18 – E
Corridor Fire-Rating Req. – new (hr.)	1	0	For > 30 occupants. IFC 1017.1
Corridor Fire-Rating Req. – exist. (hr.)	1	0	For > 30 occupants. IFC 1027.17.1

#### COMMON OCCUPANT LOAD FACTORS:

- 2nd Exit Required - more than 50 occupants (IFC 1015.1) OR common path of travel exceeds 75 ft (IFC 1015.1) OR all stories above 2nd story (IFC 1019.2)
- 3rd Exit Required - 501 to 1,000 occupants (IFC 1019.1)
- 4th Exit required - 1,001 or more occupants (IFC 1019.1)

#### SPRINKLER SYSTEM REQUIRED:

Is required if any of the following exist:

- Exceed building code height & area limits,
- Windowless/basement/below grade area provisions apply,
- Group M fire area exceeds 12,000 sq. feet,
- Group M fire area is located more than three stories above grade plane,
- Combined areas of all Group M fire areas on all floors including mezzanines exceeds 24,000 sq. feet,
- There will be high-piled combustible storage of merchandise.

NOTE: Sprinklers can be an alternative to fire department access roads and inadequate water supplies.

#### FIRE ALARM SYSTEM AND DETECTION REQUIRED:

Not required in new or existing occupancies.