CITY OF ELK RIVER INSPECTION CHECKLIST

Business 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)
☐ ☐ Dumpsterers 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 1004.1.1, 1015, 1021, 1104.24)
☐ ☐ Exits, aisles, & corridors free of obstructions (MSFC 1030.3)
☐ ☐ Exit doors open from inside (MSFC 1008.1.9)
☐ ☐ Exit signs present (MSFC 1011, 1104.3)
☐ ☐ Emergency lighting present & operational (MSFC 1006, 1104.5)
☐ ☐ Interior finish acceptable (MSFC 803, 804)
☐ ☐ Exit corridors rated (MSFC 1018.1, 1104.17)

CONSTRUCTION FEATURES:
☐ ☐ Fire rated construction present/maintained (MSFC 703.1)
☐ ☐ Incidental use areas separated/sprinklered (MSFC 1106.3)
☐ ☐ Rated fire doors operational (MSFC 703.2)
☐ ☐ Vertical openings protected (MSFC 1104.3)

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)

FIRE EXTINGUISHERS:
☐ ☐ Readily accessible (MSFC 906.5)
☐ ☐ Travel distance not exceeded (MSFC 906.1, 906.3)
☐ ☐ Tested/inspected at least annually (MSFC 901.6.1)

Y N

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)

UTILITY/MECANICAL/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 609.3.3)

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 [≥20 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) New only
☐ ☐ Tested/inspected at least annually (MSFC 907.8)
☐ ☐ Fire alarm system installed where required (MSFC 907.2.2)

OTHER FIRE PROTECTION SYSTEMS:
☐ ☐ Standpipes needed (MSFC 905)
☐ ☐ Standpipes/hose in good condition (MSFC 905.2)
☐ ☐ Adequate coverage (MSFC 905.2)
☐ ☐ Hood system fuel shutoff present (MSFC 904.11.2)
☐ ☐ Hood system properly maintained/serviced (MSFC 609.3 & 904.11.6)

ELECTRICAL:
☐ ☐ No electrical hazards (MSFC 605.1, 605.6)
☐ ☐ Appliances/fixtures in good condition (MSFC 605.7)
☐ ☐ Overcurrent protection present (MSFC 605.1)
☐ ☐ Multi-plug adapters per NFPA 70 (MSFC 605.4)
☐ ☐ Extension cords not substituted for fixed wiring (MSFC 605.5)
☐ ☐ Power strips properly used (MSFC 605.4.1)
☐ ☐ Access/clearance to electrical panels (MSFC 605.3)
☐ ☐ Electrical Rooms labeled (MSFC 605.3.1)
# CODE SUMMARY

**Business Occupancies**

## COMMON OCCUPANT LOAD FACTORS (MSFC 1004.1):

<table>
<thead>
<tr>
<th>Business Occupancies</th>
<th>Common Load Factor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business areas</td>
<td>100 sq. ft/person (gross)</td>
</tr>
<tr>
<td>Assembly (chairs only)</td>
<td>7 sq. ft/person (net)</td>
</tr>
<tr>
<td>Assembly (tables/chairs)</td>
<td>15 sq. ft/person (net)</td>
</tr>
<tr>
<td>Courtrooms</td>
<td>40 sq. ft/person (net)</td>
</tr>
<tr>
<td>Exercise Areas</td>
<td>50 sq. ft/person (gross)</td>
</tr>
<tr>
<td>Parking Garages/Areas</td>
<td>200 sq. ft./person (gross)</td>
</tr>
<tr>
<td>Mechanical Areas</td>
<td>300 sq. ft/person (gross)</td>
</tr>
<tr>
<td>Storage Areas</td>
<td>300 sq. ft/person (gross)</td>
</tr>
</tbody>
</table>

## EGRESS FEATURES:

<table>
<thead>
<tr>
<th>Feature</th>
<th>UNSPRINKLERED</th>
<th>SPRINKLERED</th>
<th>REFERENCE SECTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Egress Width – Stairs (in./occupant)</td>
<td>0.3</td>
<td>0.2 *</td>
<td>MSFC 1005.1 * Voice Alarm Reduction</td>
</tr>
<tr>
<td>Egress Width – Other (in./occupant)</td>
<td>0.2</td>
<td>0.15 *</td>
<td>MSFC 1005.1 * Voice Alarm Reduction</td>
</tr>
<tr>
<td>Minimum Aisle Width – Public Areas (in.)</td>
<td>36</td>
<td>36</td>
<td>Refer to MSFC 1005.2 for actual figures</td>
</tr>
<tr>
<td>Minimum Aisle Width – Non-Public Areas (in.)</td>
<td>36/28</td>
<td>36/28</td>
<td>MSFC 1014.4.1.2 (Can be 28” for aisle serving less than 50 people)</td>
</tr>
<tr>
<td>Common Path of Travel – new (ft.)</td>
<td>75</td>
<td>100</td>
<td>MSFC 1014.3 incl. Exception 1 &amp; 2</td>
</tr>
<tr>
<td>Common Path of Travel – existing (ft.)</td>
<td>75</td>
<td>100</td>
<td>MSFC 1104.19</td>
</tr>
<tr>
<td>Dead-End Limit – new (ft.)</td>
<td>20</td>
<td>50</td>
<td>MSFC 1018.4 Unlimited allowable if length &lt; (2.5 x width)</td>
</tr>
<tr>
<td>Dead-End Limit – existing (ft.)</td>
<td>50</td>
<td>50</td>
<td>MSFC 1014.17.4 Unlimited allowable if length &lt; (2.5 x width)</td>
</tr>
<tr>
<td>Exit Access Travel Distance (ft.)</td>
<td>200</td>
<td>300</td>
<td>MSFC 1016.1 – N; 1104.18 – E</td>
</tr>
<tr>
<td>Corridor Fire-Rating Req. – new (hr.)</td>
<td>1</td>
<td>0</td>
<td>For &gt; 30 occupants. MSFC 1018.1</td>
</tr>
<tr>
<td>Corridor Fire-Rating Req. – exist. (hr.)</td>
<td>1</td>
<td>0</td>
<td>For &gt; 30 occupants. MSFC 1104.17.1</td>
</tr>
</tbody>
</table>

## COMMON OCCUPANT LOAD FACTORS:

- **2nd Exit Required** - more than 49 occupants (MSFC 1015.1) OR common path of travel exceeds 75 ft
  (non-sprinklered) / 100 ft sprinklered (MSFC 1015.1) OR all stories above 2nd story
  (MSFC 1021.2). For existing see MSFC 1104.24.1.

- **3rd Exit Required** - 501 to 1,000 occupants (MSFC 1021.2.4 & 1104.24.2)

- **4th Exit Required** - 1,001 or more occupants (MSFC 1021.2.4 & 1104.24.3)

## SPRINKLER SYSTEM REQUIRED:

Not required UNLESS by building code height & area limits, high-rise or windowless/basement/below grade area provisions. Can be an alternative to fire department access roads and inadequate water supplies.

## FIRE ALARM SYSTEM AND DETECTION REQUIRED (MSFC 907.2.2, New Construction Only):

Fire alarm and detection system required where:
- Occupant load of 500 or more.
- Occupant load of 100 or more above or below the lowest level of exit discharge.
- Building contains an ambulatory care facility.

Automatic detection (heat or smoke) is required in boiler rooms, furnace rooms, shops, laundry rooms, kitchens, mechanical rooms, electrical rooms, trash collection rooms, storage rooms, and similar areas (not required if sprinklered).