DEPARTMENT OF LABOR AND INDUSTRY

Combination Waste and Vent Systems

The checklist only serves as guidance and is not the code. Please refer to the Minnesota Plumbing Code, Chapter 4714, Section 910, for all requirements. Due to its oversize characteristics, the waste system is not self-scouring, care must be exercised in its design, and it must only be utilized where it is structurally impossible to provide conventional venting.

Checklist:

1. Must Seek Approval from the Authority Having Jurisdiction (910.2)
   - ☐ Permitted where structural limitations exist and conventional venting is not possible. An example is where fixtures are not adjacent to walls or partitions to allow for conventional venting.
   - ☐ System will receive liquid wastewater only.
     (No greasy/kitchen waste, suds-producing waste, or restroom waste.)

2. Floor Drains/Floor Sinks/Trench Drains in Combination Waste and Vent Systems
   - ☐ Fixtures must be within 15 feet of vented system or be separately vented.
   - ☐ Fixtures must NOT receive waste from pumps or large equipment discharge.

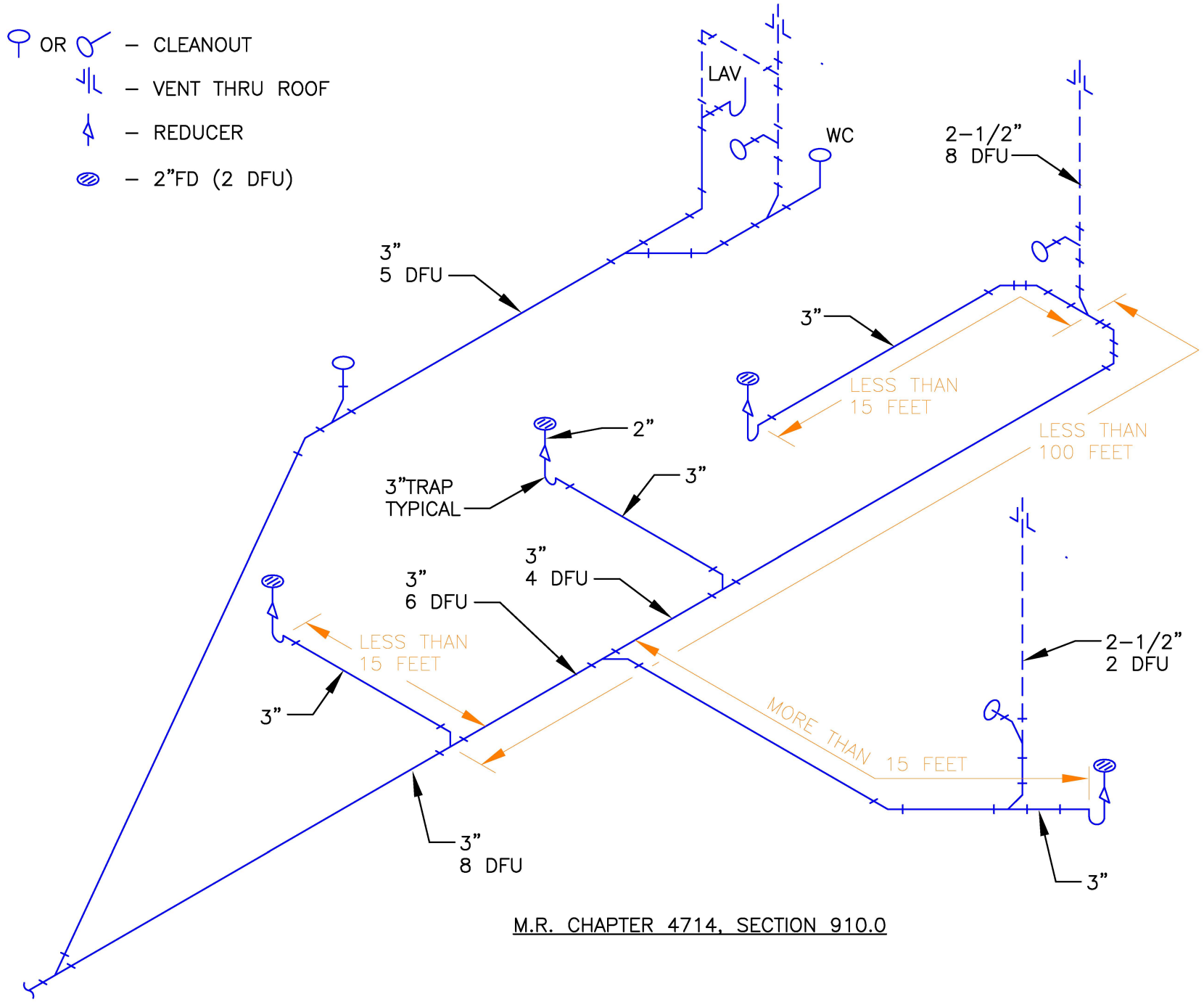
3. Venting (910.3)
   - ☐ Vent uppermost floor drain fixture.
   - ☐ Vent must rise vertically to a point not less than 6-inches above the flood level rim of the fixture before offsetting horizontal.
   - ☐ Area of vent must be ½ *inside* cross-sectional area of waste pipe served
     - 5-inch waste requires 4-inch vent
     - 4-inch waste requires 3-inch vent
     - 3-inch waste requires 2-1/2 inch vent
   - ☐ Additional vent required for runs in excess of 100 feet.

4. Waste Pipe and Fixture Trap Sizing (910.4 and 910.5)
   - ☐ Fixture traps must be at least two pipe sizes larger than the fixture tailpiece.
     Examples:
     2-inch FD tailpiece requires 3-inch trap/drain
     3-inch FD tailpiece requires 4-inch trap/drain
     4-inch FD tailpiece requires 5-inch trap/drain
   - ☐ Tailpiece as short as possible - maximum 2 feet.
   - ☐ Pipe sizes recognized for the purpose of trap and drain sizing are 2, 2-½, 3, 3-½, 4, 4-½, 5, 5-½, and 6 inches, etc.
   - ☐ Each waste pipe size in the system must be at least two pipe sizes larger than required in Table 703.2.

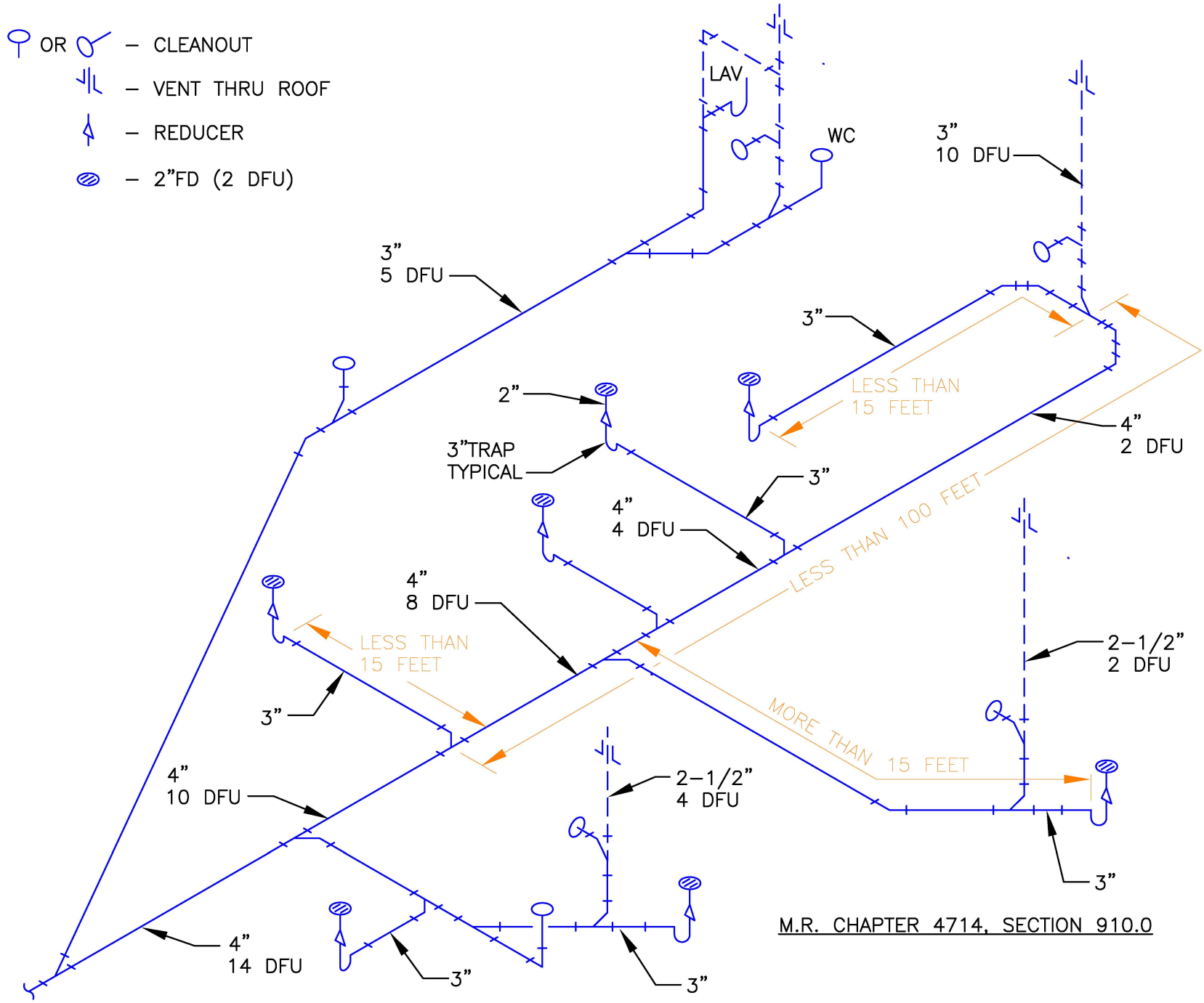
5. Other Fixtures Connected to System (910.7)
   - ☐ No water closets or urinals are allowed on the system.
   - ☐ *Remotely located* 1, 2, and 3 DFU liquid wastewater fixtures may connect to combination system when approved by the AHJ. When allowed by the AHJ, the fixture must be trapped and vented conventionally.
   - ☐ Waste line sizing for combination system must include all fixtures & be sized two pipe sizes larger than required in Table 703.2.

6. Cleanout (CO) Requirements (910.6)
   - ☐ Provide a cleanout on each vent system.
   - ☐ Cleanouts are *not* required on individual branch with tailpiece 2 inch and larger. However, a CO is required if more than one fixture is on a branch.

7. System Identification
   - ☐ Identify the start and end of the combination waste and vent system on the plans.



M.R. CHAPTER 4714, SECTION 910.0



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