

# **TYPICAL PLUMBING WASTE AND VENT SYSTEM**

- ❑ Vertical drainage lines connecting with horizontal drainage lines shall enter through 45 degree wye branches, combination wye and 1/8 bend branches, or other approved fittings of equivalent sweep.
- ❑ Horizontal drainage lines connecting with other horizontal drainage lines shall enter through 45 degree wye branches, combination wye and 1/8 bend branches, or other approved fittings of equivalent sweep.
- ❑ Horizontal drainage lines, connecting with a vertical stack, shall enter through 45-degree wye branches, 60-degree wye branches, combination wye and 1/8 bend branches, sanitary tee branches, or other approved fittings of equivalent sweep.
- ❑ Horizontal trap arms, connecting with a vertical stack or waste, shall enter through sanitary tee branches. A trap arm is that portion of a fixture drain between a trap and a vent. See table below for horizontal trap arm distances.
- ❑ The size of vent piping shall be determined from its length and the total number of fixture units connected thereto. In addition, the drainage piping of each building and each connection to a public sewer shall be vented by means of one or more vent pipes, the aggregate cross-sectional area of which shall not be less than that of the largest building sewer.

| Trap Arm Pipe Size | Trap To Vent Distance |
|--------------------|-----------------------|
| 1-1/4"             | 2'-6"                 |
| 1-1/2"             | 3'-6"                 |
| 2"                 | 5'-0"                 |
| 3"                 | 6'-0"                 |
| Fixture            | Waste Line Size       |
| Toilet             | 3" Minimum            |
| Kitchen Sink       | 2" Minimum            |
| Lavatory           | 1-1/4" Minimum        |
| Shower             | 2" Minimum            |
| Bathtub            | 1-1/2" Minimum        |

