

**TABLE 7-4**  
**Maximum Unit Loading and Maximum Length of Drainage and Vent Piping**

Size of Pipe, mm	32	40	50	65	80	100	150	200	250	300
<b>Maximum Units</b>										
Drainage Piping <sup>1</sup>										
Vertical	1	2 <sup>2</sup>	16 <sup>3</sup>	32 <sup>3</sup>	48 <sup>4</sup>	256	1,380	3,600	5,600	8,400
Horizontal	1	1	8 <sup>3</sup>	14 <sup>3</sup>	35 <sup>4</sup>	216 <sup>5</sup>	720 <sup>5</sup>	2,640 <sup>5</sup>	4,680 <sup>5</sup>	8,200 <sup>5</sup>
<b>Vertical Stack</b> (exceeding three branch intervals)										
Total for 1 branch interval		2 <sup>2</sup>	6 <sup>3</sup>	9 <sup>3</sup>	20 <sup>4</sup>	90	350	600	1,000	1,500
Total for Stack		8 <sup>2</sup>	24 <sup>3</sup>	42 <sup>3</sup>	72 <sup>4</sup>	500	1,900	3,600	5,600	8,400
<b>Maximum Length</b>										
Drainage Piping										
Vertical, m	14	20	26	45	65	91	155	229		
Horizontal (unlimited)										
<b>Vent Piping (see note)</b>										
Horizontal and Vertical										
Maximum Units	1	8 <sup>3</sup>	24	48	84	256	1,380	3,600		
Maximum Lengths, m	14	18	37	55	65	91	155	229		

<sup>1</sup> Excluding trap arm.<sup>2</sup> Except sinks, urinals, and dishwashers.<sup>3</sup> Except six-unit traps or water closets.<sup>4</sup> Only four water closets or six-unit traps allowed on any vertical pipe or stack; not to exceed three water closets or six-unit traps on any horizontal branch or drain.<sup>5</sup> Based on 20 mm/m (1/4 in./ft.) slope. For 10mm/m (1/8 in./ft.) slope, multiply horizontal fixture units by a factor of 0.8.

**Note:** The diameter of an individual vent shall be not less than 32mm (1-1/4 in.) nor less than 1/2 the diameter of the drain to which it is connected. Fixture unit load values for drainage and vent piping shall be computed from Table 7-3 and Section 702.0. Not to exceed 1/3 of the total permitted length of any vent may be installed in a horizontal position. When vents are increased one pipe size for their entire length, the maximum length limitations specified in this table do not apply.

SI: 1mm = 3.281 ft.; 1mm = 0.04 in.