

Appendix H1-A: Additional guidance for larger buildings

Capacity of pipes

(see paragraph 1.28)

A.1 The flow depends on the type, number and grouping of appliances.

A.2 Appliances are seldom in use simultaneously and the minimum stack sizes in normal use are capable of carrying the flow from quite large numbers of appliances. Table A1 shows approximate flow rates resulting from the typical household group of 1 WC, 1 bath, 1 or 2 washbasins, 1 sink and 1 washing machine used for design purposes in BS EN 12056.

Table A1 Flow rates from dwellings

Number of dwellings	Flow rate (litres/sec)
1	2.5
5	3.5
10	4.1
15	4.6
20	5.1
25	5.4
30	5.8

A.3 Flow rates for other commonly used appliances not covered in Table A1 are shown in Table A2.

Table A2 Flow rates from appliances

Appliance	Flow rate (litres/sec)
Spray tap basin	0.06
Washing machine	0.70
Dishwashing machine	0.25
Urinal (per person)	0.15

Traps

(see paragraph 1.4)

A.4 Minimum trap sizes and seal depths for appliances not listed in Table A2 are shown in Table A3.

Table A3 Minimum trap sizes and seal depths additional to Table 2

Appliance	Diam. of trap (mm)	Depth of seal (mm)
Sanitary towel macerator	40	75
Food waste disposal unit (industrial type)	50	75
Urinal stall (1 to 6 person position)	65	50

Branch discharge pipes

(see paragraph 1.10)

A.5 A branch pipe should not discharge into a stack less than 750mm above the invert of the tail of the bend at the foot of the stack in a multi-storey building up to 5 storeys. Alternatively a branch pipe serving any ground floor appliance may discharge direct to a drain or into its own stack.

A.6 If the building has more than 5 storeys ground floor appliances, unless discharging to a gully or drain, should discharge into their own stack. If the building has more than 20 storeys ground floor appliances, unless discharging to a gully or drain, and first floor appliances should discharge into their own stack.

Ventilating stacks

(see paragraph 1.21)

A.7 A dry stack may provide ventilation for branch ventilation pipes as an alternative to carrying them to outside air or to a ventilated discharge stack (ventilated system).

A.8 Ventilation stacks serving buildings with not more than 10 storeys and containing only dwellings should be at least 32mm diameter (for all other buildings see paragraph 1.29).

A.9 The lower end of a stack may be connected directly to a ventilated discharge stack below the lowest branch discharge pipe connection and above the bend at the foot of the stack or to the crown of the lowest branch discharge pipe connection providing it is ≥ 75 mm diameter.