

PLUMBING AND MECHANICAL INTERPRETATION MANUAL



CODE: 2006 IPC

DATE:

CODE REF: 709.1

7/2/2008

SUBJECT: Minimum size floor sink required for a three compartment sink?

Question: What is the minimum size floor sink required for a three (3) compartment sink?

Answer: Section 709.1 of the 2006 IPC states the following:

709.4 Values for indirect waste receptor.

The drainage fixture unit load of an indirect waste receptor receiving the discharge of indirectly connected fixtures shall be the sum of the drainage fixture unit values of the fixtures that discharge to the receptor, but not less than the drainage fixture unit value given for the indirect waste receptor in Table 709.1 or 709.2.

2006 IPC Commentary States:

“Waste receptors such as hub drains and floor sinks are typically used to receive waste from multiple indirectly connected fixtures. The simultaneous discharge of indirectly connected fixtures may result in a greater load on the drainage system than accounted for by Table 709.2. For example, a 3 inch hub drain could be serving four 1 1/2” indirect waste, which may represent a total load of 8 dfu (4 by 2dfus), however Table 709.2 would assign a total load determined by this section is less than the given by Table 709.1 or 709.2, as applicable, the table values must prevail.”

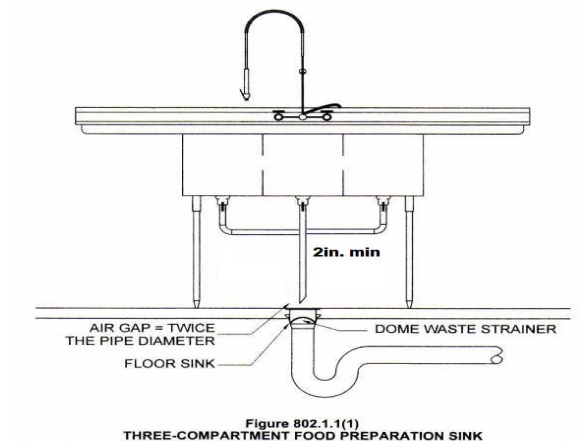
Table 709.1 does not list a 3 compartment sink therefore Table 709.2 establishes the dfu's values for each fixture drain. Therefore, a 3 compartment sink has a total of 3, 1 1/2” fixture drains with a total assigned value of 6 dfu's (2 dfu's per 1 1/2” drain outlet. Table 709.2 indicates that a 3” trap will carry 5 dfu's because the 3 compartment sink is draining indirectly the 3” floor sink would be the minimum size floor sink required.

The three-compartment sink would require 2” manifold to combine all three (3) compartments together to a center discharge and the use of a fixture cross will be required on then center discharged. (See Illustration) You will note the change from previous interpretations that required a single discharge from each compartment. Because of the flow control device installed before the grease interceptor the floor sink is flooding. This change was necessary to prevent fixture flooding.

2006 IPC 802.3.1 Size of receptors.

A waste receptor shall be sized for the maximum discharge of all indirect waste pipes served by the receptor. Receptors shall be installed to prevent splashing or flooding.

Conclusion: Minimum indirect waste drain size for a 3 compartment sink with 3 individual fixture drains is 3”. The manifold of all 3 compartments to a single fixture center discharge shall be 2 inch.



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