

## Sizing a Grease Trap

The Indiana Plumbing Code, 1999 Edition, provides the following guidelines for installing a grease trap.

- An approved type grease trap shall be installed in the waste line leading from sinks, drains, and other fixtures in establishments where grease may be introduced into the drainage or sewage system in quantities that can effect line stoppage or hinder sewage treatment.
- No grease trap shall be installed which has an approved rate of flow of more than 55 gallons/minute nor less than 20 gallons/minute.
- Each fixture shall be individually trapped, vented, and provided with an approved type flow control device.
- No water-jacketed grease trap shall be installed.
- Each grease trap shall have an approved water seal of not less than 2" in depth or the diameter of its outlet, whichever is greater.

The Indiana Plumbing Code, 1999 Edition, provides the following guidelines for sizing a grease trap.

- Each grease trap shall have an approved rate of flow, which is not less than that given in the following Grease Trap Sizing Table for the total number of connected fixtures.
- The total capacity (in gallons) of fixtures discharging into any such grease trap shall not exceed 2 ½ times the certified flow rate of the grease trap.
- Not more than 4 separate fixtures shall be connected to a grease trap.
- For exceptions, refer to the Indiana Plumbing Code, 1999 Edition.

**Grease Trap Sizing Table**

(Adapted from Uniform Plumbing Code, Edition 1997, Table 10-2)

<b>Total Number of Fixtures Connected</b>	<b>Maximum Total Capacity of Fixtures</b>		<b>Required Rate of Flow (gallons/minute)</b>	<b>Grease Retention Capacity (pounds)</b>
	<b>(gallons)</b>	<b>(cubic feet)</b>		
1	50	6.7	20	40
2	62	8.3	25	50
3	87	11.6	35	70
4	125	16.7	50	100

## Sizing a Grease Interceptor

The Indiana Plumbing Code, 1999 Edition, does not provide guidance for sizing grease interceptors. Consequently, the following models developed by the Uniform Plumbing Code and EPA are provided.

### Uniform Plumbing Code Sizing Formula (1997 Edition, Appendix H)

Number of Meals per Peak Hour (meals/hour)	X	Waste Flow Rate (gallons/meal)	X	Retention Time (hours)	X	Storage Factor	=	Interceptor Size (gallons)
--	---	-----------------------------------	---	---------------------------	---	-------------------	---	-------------------------------

Waste Flow Rate - With dishwashing machine = 6 gallons/meal

Without dishwashing machine = 5 gallons/meal

Single service kitchen = 2 gallons/meal

Retention Time - Commercial kitchen waste, Dishwasher = 2.5 hours

Single service kitchen, Single serving = 1.5 hours

Storage Factors - Fully equipped commercial kitchen, 8 hours of operation = 1

Fully equipped commercial kitchen, 16 hours of operation = 2

Fully equipped commercial kitchen, 24 hours of operation = 3

Single service kitchen = 1.5

**EPA-1 Procedure for Restaurants (EPA 625/1-80-012, pg. 323)**

Number of seats	X	Gallons	X	Storage Factor	X	Number of hours open / 2	X	Loading Factor	=	Interceptor Volume (gallons)
--------------------	---	---------	---	----------------	---	-----------------------------	---	-------------------	---	---------------------------------

Gallons - Wastewater gallons per meal = 5 gallons

Storage Factor - Minimum = 1.7, Maximum = 2.5

Loading Factor - Minimum, other highways = 0.5

Maximum, inter-state freeways = 1.25

Other freeways and recreational freeways = 1.0

Main highways = 0.8

**EPA-2 Procedure for Hospitals, Nursing Homes and other type commercial kitchens with varied seating (EPA 625/1-80-012, pg. 323)**

Number of Meals Served per Day	X	Gallons	X	Storage Factor	X	Loading Factor	=	Interceptor Volume (gallons)
--------------------------------------	---	---------	---	----------------	---	-------------------	---	---------------------------------

Gallons - Wastewater gallons per meal = 4.5 gallons

Storage Factor - Minimum = 1.7, Maximum = 2.5

Loading Factor - Dishwasher = 1.0

Without Dishwasher = 0.75