

**Johnson County Environmental Department
Pollution Control Division**

**Sizing of Grease Interceptors in Areas Served by the Johnson County
Unified Wastewater Districts.**

Grease interceptor sizing is based on providing a 30 minute peak hydraulic detention time, calculated on plumbing fixture units. The following table is used to size grease interceptors in the Wastewater Districts service area:

| Drain Outlet or P-Trap Size | Drainage gallons per minute equivalent |
|-----------------------------|--|
| 1 ¼" | 7.5 |
| 1 ½" | 15 |
| 2" | 22.5 |
| 2 ½" | 30 |
| 3" | 37.5 |
| 4" | 45 |

All kitchen drains must be plumbed to the grease interceptor. When using the above chart only use sinks and dish machines. Floor drains and mop sinks do not produce a sufficient quantity of water to be added to the calculation, but must be plumbed to the interceptor.

For dish machines, multiply the result by a factor of 0.3 to compensate for the time that the machine is not discharging wastewater.

The interceptor is sized using the drainage gallons per minute multiplied by a thirty-minute detention time.

Example: If you had a 2 inch drain going to a grease interceptor from a 3-compartment sink and a 2 ½ inch drain from a dish machine going to the grease interceptor, the calculation is as follows:

22.5 gpm x 30 minute detention time = 675 gallons for the 3 compartment sink.

30 gpm x 30 minute detention time = 900 gallons x 0.3 factor = 300 gallons for the dish machine.

This would round up to 1000 gallons.

The minimum size for a grease interceptor is 1000 gallons.

The maximum size for a grease interceptor is 2000 gallons.

If a larger capacity is needed, grease interceptors shall be connected in series.