

SPECIFICATION SHEET NUMBER S-101

Precast units shall be placed with one-quarter inch minimum to one-half inch maximum space between units. This will provide a properly designed joint material volume to compensate for maximum expected movement. Joint sealant material shall consist of a two part, gun grade, polyurethane sealant which will cure to a 30 shore A±, elongation ability of 750%, tensile strength of 350 psi and tear-resistance of 85 psi material shall be applied per manufacturer's recommendation.

*Sizing of Commercial and Industrial Systems Based on the Uniform Plumbing Code **



GREASE AND GARBAGE, COMMERCIAL KITCHENS

Number of meals per peak hour X Waste flow rate X Retention time X Storage Factor = Interceptor size

SAND-SILT OIL, AUTO WASHERS

Number of Vehicles per hour X Waste flow rate X Retention time X Storage Factor = Interceptor size

SILT-LINT-GREASE, LAUNDRIES & LAUNDROMATS

Number of machines X 2 cycles per hr. X Waste flow rate X Retention time X Storage Factor = Interceptor size



RETENTION TIMES

Commercial kitchen waste dishwasher &/or disposal.....	2.5 hrs.
Single service kitchen.....	
Single serving with disposal.....	1.5 hrs.
Sand-silt-oil.....	2.0 hrs.
Lint-silt (laundry).....	2.0 hrs.

STORAGE FACTORS

Fully equipped commercial kitchen.....	
8 hrs. Operation =1; 16 hrs. Operation=2; 24 hrs. Operation=3	
Single service kitchen.....	1.5 hrs.
Auto washers self serve: 1.5 hrs.; employee operated: 2.0 hrs.	
Laundries, Laundromats.....	1.5hrs. (Allows for rock filter)

WASTE FLOW RATES TABLE I-3

Type of Occupancy.....	Unit Gallons per Day
1. Airports.....	15 per employee5 per passenger
2. Auto washers.....	check w/equipment manufacturer
3. Bowling alleys (snack bar only).....	75 per lane
4. Camps:	
Campground with central	
comfort station.....	35 per person
w/flush toilets, no shwrs.....	25 per person
Day camps (no meals).....	15 per person
Summer & seasonal.....	50 per person
5. Churches (Sanctuary).....	5 per seat
w/kitchen waste.....	7 per seat
6. Dance halls.....	5 per person
7. Factories	
No showers.....	25 per employee
with showers.....	35 per employee
Cafeteria, add.....	5 per employee
8. Hospitals.....	250 per bed
Kitchen waste only.....	25 per bed
Laundry waste only.....	40 per bed
9. Hotels.....	60 per bed (2 person)
10. Institutions (Resident).....	75 per person
Nursing home.....	125 per person
Rest home.....	125 per person
11. Laundries, self-service	
(Minimum 10 hrs/day)	50 per wash cycle
Commercial.....	Per Mfg. specs.

Type of Occupancy.....	Unit Gallons per Day
12. Motel.....	50 per bed space
with kitchen.....	60 per bed space
13. Offices.....	20 per employee
14. Parks, mobile homes.....	250 per space
picnic park (toilets only).....	20/parking space
recreational vehicles	
w/o water hook-up.....	75 per space
w/water & sewer.....	100 per space
15. Restaurants/Cafeterias.....	20 per employee
toilet.....	7 per customer
kitchen waste.....	6 per meal
add for garbage disposal.....	1 per meal
add for cocktail lounge.....	2 per customer
Kitchen Waste	
disposable services.....	2 per meal
16. Schools Staff & office.....	20 per person
Elementary.....	15 per student
Intermediate & High.....	20 per student
w/gym & showers, add.....	5 per student
w/cafeteria, add.....	3 per student
Boarding, total waste.....	100 per student
17. Service station, toilets.....	1000 for 1 st bay
.....	500 for each additional bay
18. Stores.....	20 per employee
public restrooms, add.....	1 per 10 sq. ft.
19. Swimming pools, public.....	10 per person
20. Theaters, auditoriums.....	5 per seat
drive-in.....	10 per space

Because of the many variables encountered, it is not possible to set absolute values for waste/sewage flow rates for all situations. The designer should evaluate each situation and, if figures in this table need modification, they should be made with the concurrence of the administrative authority.

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SEPTIC TANKS RESIDENTIAL, COMMERCIAL, AND INDUSTRIAL

Septic systems are the most commonly used type of on-site waste water treatment used in the United States. Approximately 20 percent of all new home construction in the U.S. makes use of septic systems for waste water treatment and disposal.

The septic tank constructed as required in California is a two compartment vessel. Most counties within the state require the design to meet the current requirements of the Uniform Plumbing Code. Additional characteristics which effect performance of the septic tank include the relationship between surface area, surge storage, discharge rate, and exit velocity. Superior treatment is obtained from tanks designed with large surface area and lesser liquid depth. This design concept provides for large scum area and requires less liquid level rise to store incoming waste water allowing longer exit flow time reducing velocity.

The second, and equally important component of the septic system, is the subsurface treatment and disposal area. Design of these systems are preformed by registered engineers. Applying septic tank effluent below grade forms a biological mat which slows and filters the effluent. Two to four feet of unsaturated soil will remove pathogens and pollutants allowing the effluent to replenish ground water.

Tank and system sizing methods, as well as maintenance methods, are contained in the Engineering Information section of this catalog.

System alternatives, filters, specific contaminate removal method information, and application assistance is also available.

PRO-CAST PRODUCTS INC.