

Efficient, Durable and Reliable Gravity Grease Interceptors *A Guide to ASTM C1613*

What is ASTM C1613?

ASTM International is one of the world's largest standards-developing organizations which oversees more than 12,000 standards used across hundreds of industries.

ASTM C1613, "Standard Specification for Precast Concrete Grease Interceptor Tanks" is a specification covering design requirements, manufacturing practices and performance requirements for monolithic or sectional precast concrete grease interceptor tanks.



ASTM C1613 is a specification with continual, ongoing peer review from professionals throughout the industry. Therefore, the latest edition of the specification should always be used for reference.

Why was ASTM C1613 developed?

This standard was first published in 2006 to address the need for standardized precast concrete gravity grease interceptor tank design and production. Engineers, regulators, maintenance professionals and communities grew increasingly aware of the impact

fats, oils and grease have on wastewater infrastructure – especially when the substances are allowed to flow uninhibited down drains and into wastewater conveyance and treatment structures.

Improperly designed, inadequately manufactured or inappropriately sized grease interceptors – or the lack of a grease removal device entirely – could wreak havoc on both residential and commercial establishments and result in costly repairs or cleanup.

Adopting and implementing ASTM C1613 in state and local codes can help ensure the health and safety of our communities by providing effective and efficient effluent treatment before the wastewater enters the centralized or decentralized wastewater system.

What does ASTM C1613 do?

ASTM C1613 addresses the following items:

- Ordering information such as design requirements for depth of earth cover, live load applied at the surface, and ground water level.
 - o This information helps provide guidance to the manufacturer when placing an order for a precast concrete gravity grease interceptor. The precast concrete manufacturer uses these details to determine the necessary structural and physical design requirements to meet the specific needs of each scenario.
- Materials such as cement, aggregates, water, admixtures, reinforcement and concrete mixtures, as well as sealants and pipe connections.
 - o A combination of high-quality raw materials, mix designs and supplemental equipment like sealants and connectors is key to producing top-quality, long-lasting tanks. The materials outlined in ASTM C1613 must conform to standards as well, to ensure quality, performance and longevity.
- Structural design requirements including loading and traffic considerations, concrete strength, reinforcing requirements and steel placement.
 - o This information is critical for ensuring the tank is designed according to the anticipated service conditions including loading, soil and hydrostatic loads, and depth of bury so the structure can provide effective treatment throughout its service life. At a minimum, loads from AASHTO HS20-44 are used for design of ASTM C1613-compliant gravity grease interceptors, which assumes heavy traffic and 16,000 lbf per wheel.
- Physical design requirements for items including sizing, compartments, dimensions, inlets, outlets, baffles, tees and openings.
 - o Tanks can be designed and configured to accommodate most any need, on-site challenge or unique application. The locations, dimensions and use of these components are important factors that affect treatment inside the tank, tank serviceability and safety.
- Quality control, sampling, permissible variations, repairs and product marking.
 - o Quality assurance and quality control provide the foundation for quality, durability and resilience and helps ensure the tank meets design and performance requirements.

Have questions?

To obtain the latest edition of ASTM C1613, visit: www.astm.org/Standards/C1613.htm

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