



# Innovative, Compact Design



Easy, Effective Compliance



# What in the world is Tranzilla ?

The **Trapzilla**<sup>®</sup> Supercapacity Grease Trap collects free-floating Fats Oils and Grease contained within the kitchen drain water flows. As most food service facility managers already know, fats oils and grease buildup inside a building's grease containment system is a major cause of problems due to exterior drain line blockages. These problems jeopardize normal operations as well as create health and safety hazards within the facility itself.

The proper installation of a Trapzilla<sup>®</sup> Supercapacity Grease Trap can reduce or eliminate these grease problems. Use of a Trapzilla<sup>®</sup> system assures minimization and/or elimination of costly sewer surcharges and fines through efficient separation and retention of free-floating grease & oils.

#### Why does Trapzilla® offer a better solution?

The unique design of the Trapzilla<sup>®</sup> provides advantages that a traditional, in-ground grease trap doesn't have.



The Trapzilla<sup>®</sup> offers **patented flat separation** curve technology.

Traditional grease interceptors frequently suffer separation efficiency losses when the grease layer exceeds 25% of the internal liquid depth volume. This is why these older grease interceptors have very large footprints - to provide an adequate operating service period before reaching 25% full. The unique design of the Trapzilla maintains peak separation efficiency well past the 25% full threshold, allowing it to store large quantities of grease in a small footprint.



#### What is thermal inversion?

The Trapzilla<sup>®</sup> also has a horizontal baffle that **prevents thermal inversion.** What is thermal inversion? When warmer effluent enters the grease trap, the trapped cold water layer under the retained grease layer suddenly falls downward as rapidly rising hotter water rises to take the place of the cold water. As the cold water layer falls, it also pulls the underside of the overhead grease layer down along with it into the rapidly moving water flow along the bottom of the separator. Thermal inversion is why traditional grease separators have large internal volumes. As the grease layer approaches 25% of the internal volume depth in traditional grease traps, thermal inversion effect losses may occur. In layman's terms, the traditional grease trap becomes a gigantic lava lamp. The Trapzilla's patented/patent pending thermal inversion control design retains high-separation efficiency and high grease capacity within a small footprint ideal for space constrained food service establishments.

### **Other Advantages?**

The compact design of the Trapzilla<sup>®</sup> allows for installation into most facilities. Options are available enabling a Trapzilla<sup>®</sup> unit to be installed on the floor, suspended from the ceiling or in-ground outside the facility.

Trapzilla<sup>®</sup> units are designed to treat high flows of kitchen drain water with large grease storage capacity within a small footprint unit. These units are lightweight and compact, which means that they can be maneuvered into position with minimum labor. Plumbing the unit is also a simple matter.

The Trapzilla<sup>®</sup> Model TZ-160 handles a 2.21 L/ps flow and stores 72+ KGs of grease, the Model TZ-400 handles a 7.73 L/ps kitchen flow and stores 181+ KGs of grease while the Model TZ-600 handles a 9.46 L/ps kitchen flow and stores 272 KGs of grease.

Trapzilla® efficiency curves remain flat with increasing grease loads



TZ-400 Efficiency ASME A112.14.3-2000



# Cutaway Drawing of Trapzilla: TZ - 600 showing operating principles



Greasy effluent from the kitchen laminarly flows around the vertical baffle and becomes trapped in the grease storage area. The "cleaned" effluent flows through the outlet. The trapped grease remains segregated from the flows by means of the horizontal baffle, thus maintaining a flat separation curve. Pumpingthe Trapzilla is easy - the pumper unscrews the "Grease" and "Solids" plugs and vacuums out the grease and solids.



Light weight and compact design enables Trapzilla<sup>®</sup> to be installed in places where standard grease traps would not fit or could not be accommodated. Trapzilla<sup>®</sup> Options allow a variety of space saving, code friendly, creative installations.

# A TZ-400 with an SSA-400/600 Support Stand installed in a basement.

## SSA-400/600 Support Stand

Used to support the Trapzilla<sup>®</sup> Unit when installed directly on the floor of a basement or mechanical room.

## A TZ-600 buried in concrete outside. ECA-400/600 Extension Collar

Used with in-ground and in-floor installations. Aids in lining up facility drainage piping when located deep in the ground. Trim markings at 1" intervals to make field height adjustment easy.

## A TZ-600 with an HA-400/600 Hanger Assembly and a PACP-400/600 Cover Plate installed between floors.

### HA-400/600 Hanger Assembly

Used to support the Trapzilla® Unit when installed between floors.

### PACP-400/600 Cover Plate

Provides a non-slip cover when the Trapzilla<sup>®</sup> unit is installed directly in the floor or locations where the cover may be in foot-traffic areas. Fabricated of durable aluminum with a diamond plate surface.

## **MFSH-44 Flow Splitter**

Used when plumbing twin Trapzilla<sup>®</sup> Units in parallel. Splits and diverts kitchen flow into two separate, equal flows when two (2) Trapzilla Units are necessary. Four (4) Trapzilla Units can be plumbed using three (3) flow splitters.













Trapzilla can be hung in the interstitial space of the building.

11111



'n

MEDI



Trapzilla may also be installed below ground with field modifiable extension collars.

Trapzilla can be installed on the floor in a basement or mechanical room. Optional Configurations can provide greater flexibility of installation.

0





















#### **Solids Interceptor**

To help reduce the amount of incidental food solids collected in the Trapzilla Grease Interceptor, Thermaco, Inc. offers several options.

# Point Source Incidental Solids Separation

The Flat Strainer (FS) separates and collects incidental solids such as rice, coleslaw and other food scraps larger than 0.125" (3.175 mm) in diameter found in point source drain flows. Designed to replace food disposals. Dewatered solids may be emptied into a trash container.



#### Centralized Incidental Solids Separation

The Trapzilla Solids Separator (TSS) separates and collects all sizes of incidental solids. Designed to collect incidental solids in a central location, the TSS is installed upstream of the Trapzilla Grease Interceptor. Two convenient sizes are available: the TSS-70 stores 70 gal. (265 L) of solids while the TSS-95 stores 95 gal. (360 L) of solids.



TSS-95 Solids Separator



# Cutaway Drawing of Trapzilla TSS - 95 showing operating principles



Solids-laden effluent from the kitchen flow is slowed and forced downward in a horizontal baffle, where solids filter out of the flow and sink to the solids storage area. The "cleaned" effluent flows through the outlet. Pumping the Trapzilla Solids Separator is easy - the pumper unscrews the "Solids" plugs and vacuums out the solids.

















### **Grease Recovery Units**

#### **Isolation & Containment**

Simply put, Isolation & Containment is protection of both the exterior plumbing (the collection system) and protection of the internal facility plumbing. Sewer codes often do not take into account the damage grease & oils can do to internal piping.

Isolation (point-source grease separators) and Containment (in-ground/external grease separators) provides long-term facility plumbing system and sewer system protection. Using an interior point-source system in conjunction with a Trapzilla unit installed downstream protects the sewer system and the facility's plumbing.

The typical grease generators inside a kitchen such as a three-compartment sink or pre-rinse station are treated using the grease recovery unit (GRU), while non-grease generating fixtures such as a dishwasher or mop sink are plumbed directly to the Trapzilla unit. The discharge from the GRU may also be plumbed to the Trapzilla unit. In short, Isolation is grease pretreatment at the source (GRU), while Containment is preventing grease from getting into the sewer lines (Trapzilla).





## What Size Trapzilla Do I Need?

Suggested Models TZ-160	Grease Production Low Level Grease Production	Examples Sandwich Shops, Coffee Shops
TZ-400 or TZ-600	Low to Moderate Level Grease Production	Pizza Parlors, Ice Cream Parlors, Bar & Grilles, Small Downtown Restaurants
Combination of Trapzilla Grease Trap(s) and Trapzilla Solids Separator(s)	Moderate to High Level Grease Production	Full Service Restaurants



# Innovative, Compact Design Easy, Effective Compliance

**Trapzilla**<sup>®</sup> is a Registered Trademark of Thermaco, Inc.

Trapzilla<sup>®</sup> products are covered by U.S. and International patents and patents pending 6,849,176 6,878,270 7,153,439 7,186,346



Aqua Mundus Ltd, 20 Bond Industrial Estate, Wickhamford, Worcestershire, WR11 7RL 01386 832205 | www.aquamundus.co.uk | support@aquamundus.co.uk