

Trapzilla®

A THERMACO®
Technology

BEATS GREASE!



View Trapzilla's
latest adventure
at Trapzilla.com

TZCB-3
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*Compact Super-capacity Grease Interceptors
and Solids Separators*

What is Trapzilla®?

The Trapzilla® Compact Supercapacity Grease Interceptor collects free-floating (non-emulsified) grease & oils contained in kitchen drain water flows. As most food service facility managers already know, 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® Supercapacity Grease Interceptor can reduce or eliminate these grease problems. Use of a Trapzilla® system assures minimization and/or elimination of costly sewer surcharges and fines through efficient separation and retention of free-floating grease & oils.

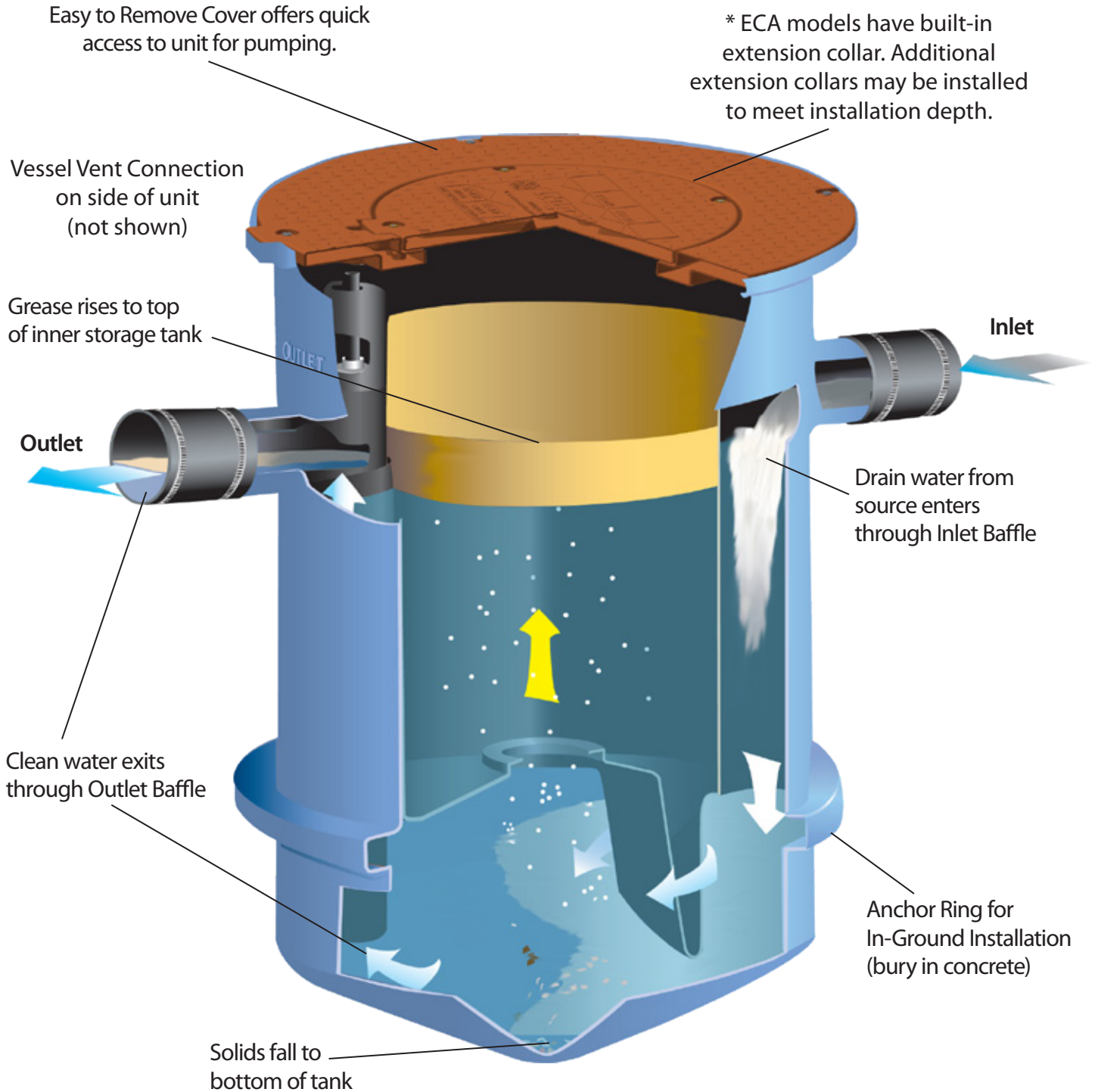
How does Trapzilla® offer a better solution?

The unique design of the Trapzilla® provides advantages that a traditional, in-ground grease interceptor does not have. The Trapzilla® 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.



How does Trapzilla® work?



Greasy effluent from the kitchen laminarly flows around the vertical baffle, rises upward through the horizontal 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. Pumping a Trapzilla® is easy - the pumper removes the lid and vacuums out the grease and solids.

Why Choose Trapzilla®?

The Problem of Thermal Inversion

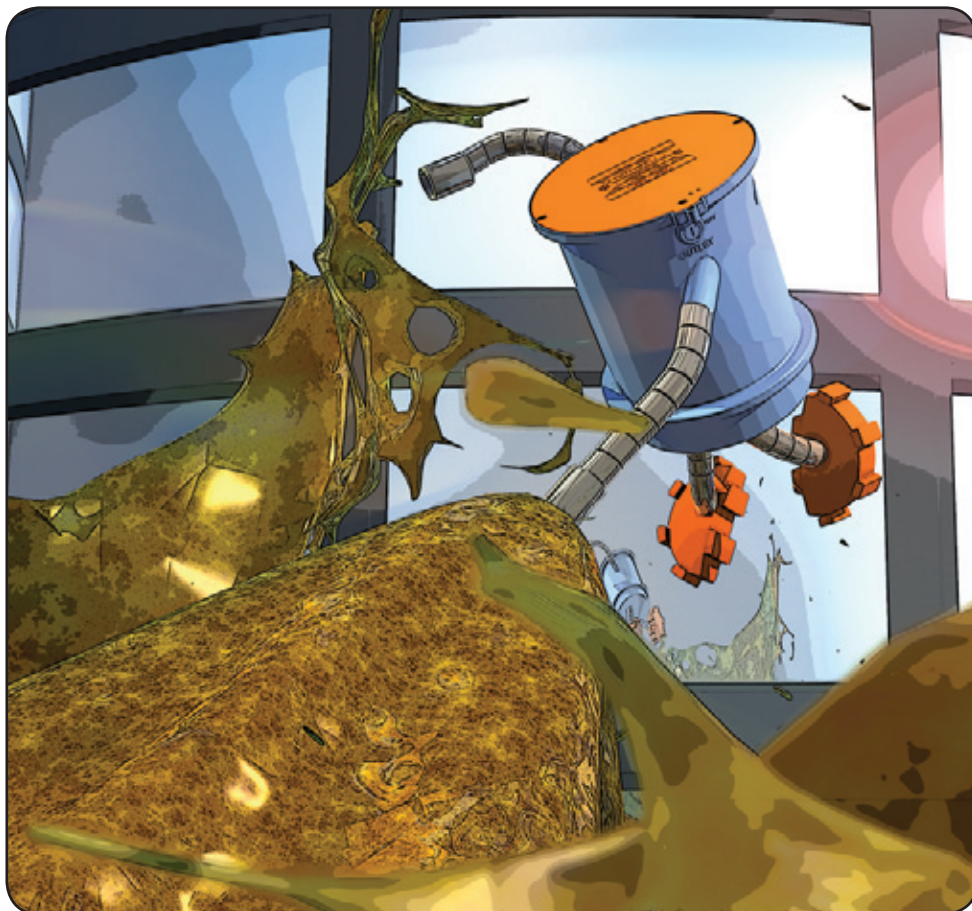
The Trapzilla® has a horizontal baffle that **prevents thermal inversion**. What is thermal inversion? When warmer effluent enters the grease trap, the trapped cold water layer under the retained grease layer suddenly falls downward as rapidly rising hotter water rises to take the place of the cold water. 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 interceptors, thermal inversion effect losses may occur. In layman's terms, the traditional grease interceptor becomes a gigantic lava lamp. The patented thermal inversion control design retains high-separation efficiency and high grease capacity within a small footprint ideal for space constrained food service establishments.

What makes Trapzilla® different?

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

Trapzilla® 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® TZ-160 Models handle a 35 GPM flow and stores 160+ lbs. of grease, the TZ-400 Models handle a 75 GPM kitchen flow and store 400+ lbs. of grease while the TZ-600 Models handle a 150 GPM kitchen flow and store 600+ lbs. of grease.



Where can I install Trapzilla®?

Installation Versatility

Trapzilla® was designed to efficiently handle the separation of fats, oils, and grease without taking up as much space as a traditional concrete inteceptor. Its compact design allows it to fit into locations that larger interceptors cannot while still providing protection to the municipal sewers. It has been installed in thousands of sites around the world including, but not limited to:

Shopping Malls
Schools
Restaurants Chains
Grocery Stores

High-Rises
Hotels
Airport Terminals
Theme Parks

Historic Downtown Areas
Hospitals
Arenas/Stadiums

Additionally, its small size coupled with its high capacity for grease storage, makes it easy to scale for larger projects by choosing the perfect number of Grease Interceptors and Solids Separators for your job.

Trapzilla® Installations...



TZ-600 Installed in Green Space outside of Restaurant



TZ-600 Installed in Stairway Landing behind Restaurant



Trapzilla® Grease Interceptors and Solids Separators Servicing a Major International Hospital



Two TZ-600 Units Servicing Correctional Facility in NE United States



TZ-600 Meeting the Needs of an International Fast Food Chain

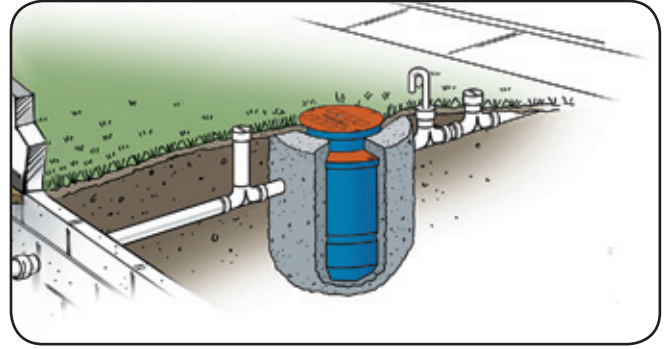


Grease being removed from TZ-600 in International Fast Food Chain.

In-Ground Trapzilla® Models

Key Features

- Designed for indoor or outdoor in-ground installations.
- Constructed of Durable, Rotationally Molding Polyethylene.
- Extension Collar Adapter Ring with Built-in 18" (45.7 cm) Tall Single-Piece Extension Collar and 22" (55.9 cm) Diameter Solid Top Cover.
- Use 29" (73.7 cm) Two-Piece Extension Collar to provide additional depth. (see page 10)
- 6" (150 mm) Inlet/Outlet Available on TZ-600-ECA.



TZ-600-ECA 150 GPM (9.46 l/s)

ASME A112.14.3 (Tested) Flow Rating: 75 GPM
Manufacturer Rated Inlet Flow Rating: 150 GPM
Grease Retention Capacity: 600+ lbs. (272+ Kg)
4" Inlet/Outlet (100 mm)

TZ-400-ECA 75 GPM (4.73 l/s)

Grease Retention Capacity: 400+ lbs. (181+ Kg)
4" Inlet/Outlet (100 mm)

TZ-160-ECA 35 GPM (2.21 l/s)

Grease Retention Capacity: 160+ lbs. (72+ Kg)
3" Inlet/Outlet (75 mm)



Conforms to
ASME Standard A112.14.3

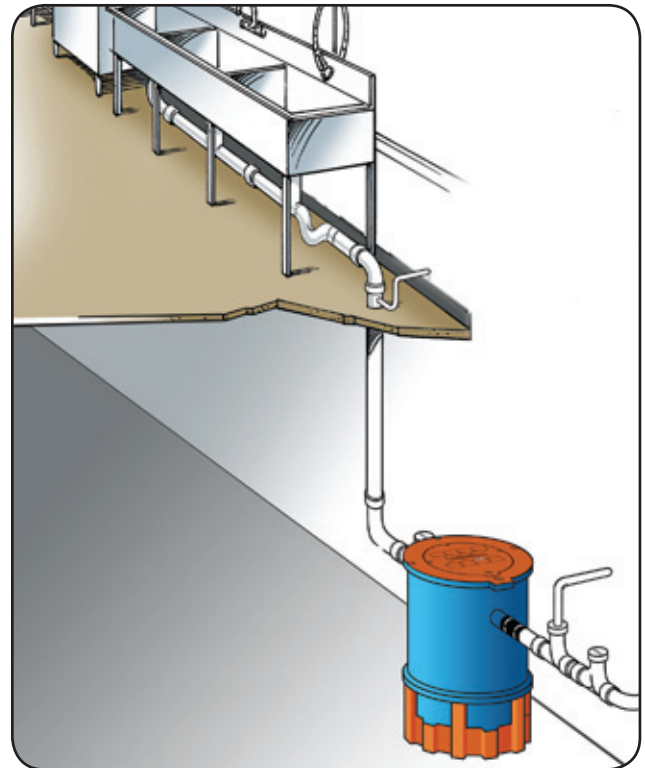


In order to provide the best products possible, specifications are subject to change
US & International Patents/Patents Pending

Above-Ground Trapzilla® Models

Key Features

- Designed for indoor, above-ground installations.
- Constructed of Durable, Rotationally Molded Polyethylene.
- Includes Support Stand Assembly for Floor-Installation
- Standard Adapter Ring with 22" (55.9 cm) Diameter Solid Top Cover.
- 6" (150 mm) Inlet/Outlet Available on TZ-600-SSA.



TZ-600-SSA

150 GPM (9.46 l/s)

ASME A112.14.3 (Tested) Flow Rating: 75 GPM
Manufacturer Rated Inlet Flow Rating: 150 GPM
Grease Retention Capacity: 600+ lbs. (272+ Kg)
4" Inlet/Outlet (100 mm)



TZ-400-SSA

75 GPM (4.73 l/s)

Grease Retention Capacity: 400+ lbs. (181+ Kg)
4" Inlet/Outlet (100 mm)



TZ-160-SSA

35 GPM (2.21 l/s)

Grease Retention Capacity: 160+ lbs. (72+ Kg)
3" Inlet/Outlet (75 mm)



Conforms to
ASME Standard A112.14.3

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Basic Trapzilla® Models

Key Features

- Additional options may be purchased for indoor or outdoor, in-ground or above-ground installations.
- Constructed of Durable, Rotationally Molding Polyethylene.
- Standard Adapter Ring with 22" (55.9 cm) Diameter Solid Top Cover.
- Use 29" (73.7 cm) Tall Two-Piece Extension Collar to provide additional depth. (see page 10)
- 6" (150 mm) Inlet/Outlet Available on TZ-600.



TZ-600

150 GPM (9.46 l/s)

ASME A112.14.3 (Tested) Flow Rating: 75 GPM
Manufacturer Rated Inlet Flow Rating: 150 GPM
Grease Retention Capacity: 600+ lbs. (272+ Kg)
4" Inlet/Outlet (100 mm)

TZ-400

75 GPM (4.73 l/s)

Grease Retention Capacity: 400+ lbs. (181+ Kg)
4" Inlet/Outlet (100 mm)

TZ-160

35 GPM (2.21 l/s)

Grease Retention Capacity: 160+ lbs. (72+ Kg)
3" Inlet/Outlet (75 mm)



Conforms to
ASME Standard A112.14.3

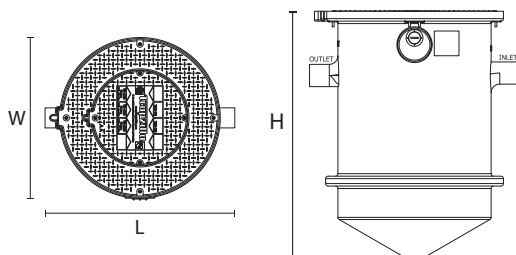
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Trapzilla® Model Specification Information

Trapzilla® Grease Interceptor Specifications

		Capacity				Dimensions (All measurements are to center pipe. Depth is from lid to center of pipe.)						
	Model	Flow Rate (GPM)	Grease (lbs.)	Solids (gal.)	Liquid (gal.)	L (in.)	W (in.)	H (in.)	Inlet Height (in.)	Inlet Depth (in.)	Outlet Height (in.)	Outlet Depth (in.)
In-Ground Models	TZ-600-ECA	75	635	22.6	95	42.5	36	49.5	37	12.5 - 30.5	36.5	13 - 31
	TZ-400-ECA	75	405	22.6	70	42.5	36	38.5	29	9.5 - 27.5	28.5	10 - 28
	TZ-160-ECA*	35	167	9.1	27	27.5	22	35	27.5	11.5 - 29.4	27	12 - 29.4
Above-Ground Models	TZ-600-SSA	75	635	22.6	95	42.5	36	49.5	37	12.5	36.5	13
	TZ-400-SSA	75	405	22.6	70	42.5	36	38.5	29	9.5	28.5	10
	TZ-160-SSA	35	167	9.1	27	27.5	22	35	27.5	7.5	27	8
Basic Models	TZ-600	75	635	22.6	95	42.5	36	49.5	37	12.5	36.5	13
	TZ-400	75	405	22.6	70	42.5	36	38.5	29	9.5	28.5	10
	TZ-160	35	167	9.1	27	27.5	22	35	27.5	7.5	27	8

*TZ-160-ECA uses Two-Piece Extension Collar (ECA-TZ-29) instead of Single-Piece Extension Collar (ECA-TZ-18)



Trapzilla® Grease Interceptors are sized based on the maximum flow rate that the unit might expect from the fixtures to which it is connected. Contact Thermaco® directly to get specific sizing for your job or consult the table below to get gallon retention capacities of the various models we provide. Remember that even though Trapzilla® units are more compact than traditional interceptors, they are specifically designed to retain more grease per volume than any other interceptor on the market today.

Trapzilla® units are tested to the third-party ASME A112.14.3 Standard and outperform other grease interceptors of like flow rating, storing as much as 425% more grease than the test requires!



Trapzilla® Grease Interceptor Capacities

(Capacities determined through third party certification to ASME A112.14.13 Standard)

	Flow Rate (GPM)	Minimum ASME Requirement (lbs.)	Actual Grease Retained (lbs.)	Actual Grease Retained (gal.)	Tot. Liquid (gal.)	Grease Retained as % of Volume	Avg. Cycle Efficiency
TZ-600	75	150	635.6	86.6	95	91%	97%
TZ-400	75	150	405.6	55.6	70	79%	94%
TZ-160	35	70	167.65	23.0	27	85%	97.9%

Trapzilla® Installation Options and Configurations

Its light weight and compact design enables Trapzilla® to be installed in places where standard grease interceptors would not fit or could not be accommodated. Trapzilla® Options allow a variety of space saving, code friendly, and creative installations.

29" Extension Collar Assemblies

Used with in-ground and in-floor installations. Aids in lining up facility drainage piping when located deep in the ground. Compatible with Standard Adapter Ring on Basic/Above-Ground Models and 18" Built-In Extension Collar on In-Ground Models.



ECA-TZ-29

ECA-TSS-29

Support Stand Assemblies

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



SSA-160

SSOP-400/600

SSOP-70/95

Hanging Assemblies

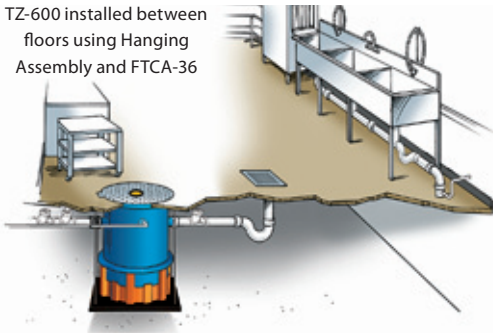
Used to support a Trapzilla® Unit when installed between floors. Includes Support Stand Assembly. Trapzilla® Unit must be purchased separately.

Use HA-70/95 with blue Support Stand for TSS Units and HA-160 for TZ-160 Units.



HA-400/600 for TZ Units

TZ-600 installed between floors using Hanging Assembly and FTCA-36

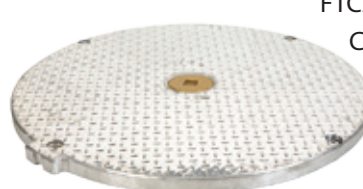


FTCA Cover Plates

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



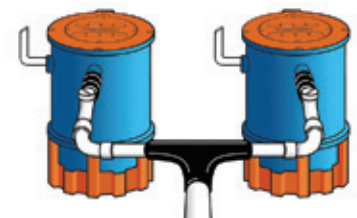
FTCA-22



FTCA-36 with Brass Cleanout Port

MFSH-44 Flow Splitter

Used when plumbing twin Trapzilla® 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.

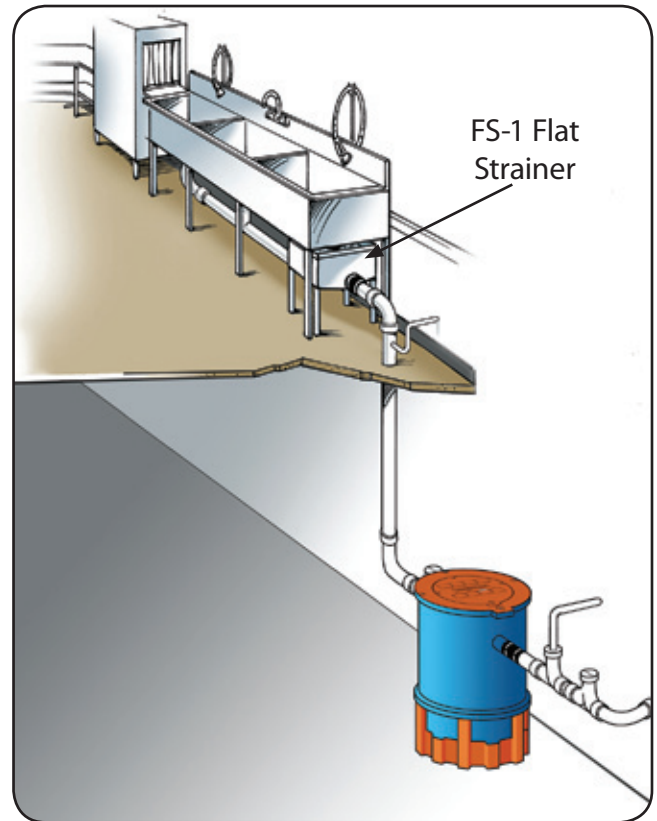


Solids Strainer Options

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

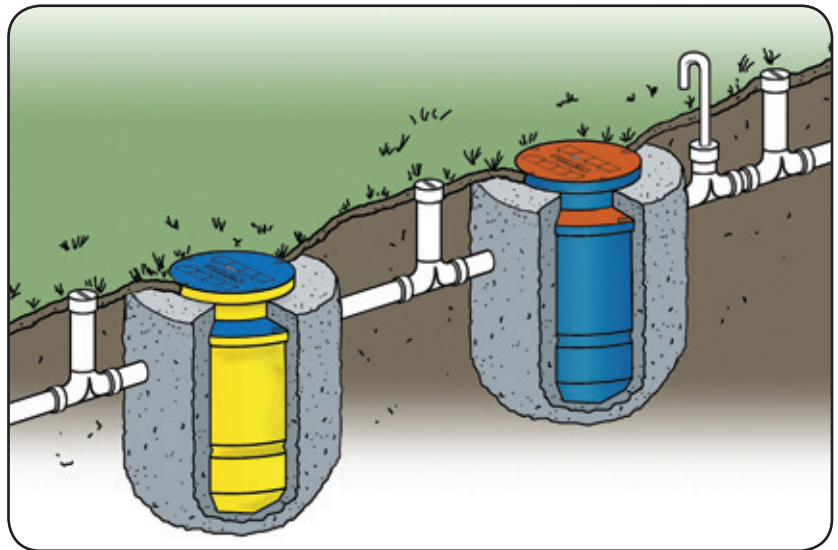
Point Source Incidental Solids Separation Options

The Flat Strainer (FS-1) 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. Other options available from Thermaco® include the In-line Strainer (ILS-1) and External Strainer (ESU-1).



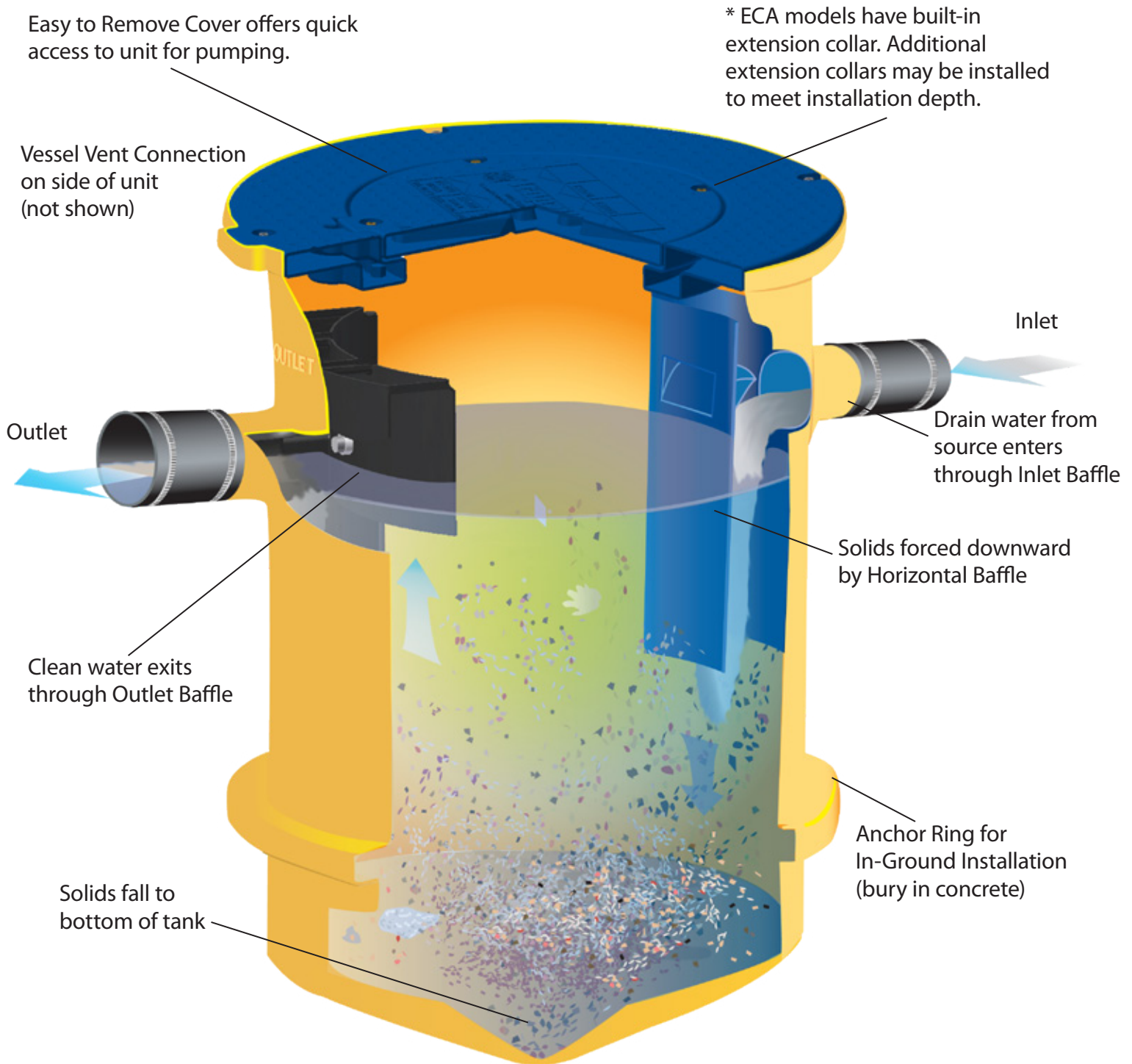
Trapzilla® Solids Separators

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

How does a Trapzilla® Solids Separator Operate?



Solids-laden effluent from the kitchen flow is slowed and forced downward in a vertical baffle, where solids filter out of the flow and sink to the bottom of the solids storage area. The “cleaned” effluent flows through the outlet. Pumping the Trapzilla® Solids Separator is easy - the pumper removes the lid and vacuums out the solids.

When should I use a Trappzilla® Solids Separator?

Trappzilla® solids separators can be used in conjunction with Trappzilla® Grease Interceptors, prior to Thermaco's Big Dipper® Automatic Grease Removal Devices, or in isolated situations where there is a need for large quantities of solids to be removed from kitchen wastewater.

Most grease interceptors are capable of effectively removing sufficient fats, oils, and grease from kitchen effluent, but struggle to handle solids with the same efficiency. In situations where large quantities of solids are going down the kitchen drains, it is in the best interest of a food service establishment to install a Trappzilla® Solids Separator. Doing so will prevent solids from filling up the grease interceptor and interfering with its regular operation.



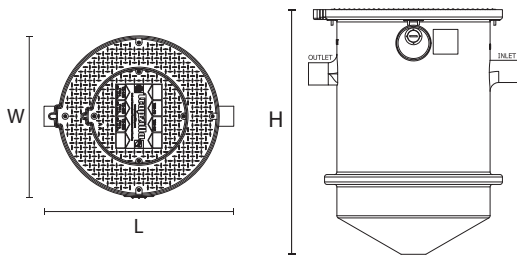
Two TSS-95 Solids Separators in front of two TZ-600 Grease Interceptors servicing a large cafeteria in a high-rise office building.



A Solids Separator installed ahead of a Trappzilla® GI servicing the food prep area of a national grocery chain.



Two Solids Separators and two Grease Interceptors handling the flow from the food court in a large shopping mall.



Trappzilla® Solids Separator Models have the same footprint and design as their Trappzilla® Grease Interceptor counterparts of like flow rating, making installation of additional units easy!



Trappzilla® Solids Separator Specifications

		Capacity				Dimensions (All measurements are to center pipe. Depth is from lid to center of pipe.)						
	Model	Flow Rate (GPM)	Grease (lbs.)	Solids (gal.)	Liquid (gal.)	L (in.)	W (in.)	H (in.)	Inlet Height (in.)	Inlet Depth (in.)	Outlet Height (in.)	Outlet Depth (in.)
In-Ground Models	TSS-95-ECA	150	n/a	95	95	42.5	36	49.5	37	12.5 - 30.5	36.5	13 - 31
	TSS-70-ECA	75	n/a	70	70	42.5	36	38.5	29	9.5 - 27.5	28.5	10 - 28
Above-Ground Models	TSS-95-SSA	150	n/a	95	95	42.5	36	49.5	37	12.5	36.5	13
	TSS-70-SSA	75	n/a	70	70	42.5	36	38.5	29	9.5	28.5	10
Basic Models	TSS-95	150	n/a	95	95	42.5	36	49.5	37	12.5	36.5	13
	TSS-70	75	n/a	70	70	42.5	36	38.5	29	9.5	28.5	10

Trapzilla® Solids Separator Models

Key Features

- Constructed of Durable, Rotationally Molded Polyethylene.
- Compact design uses space efficiently to maximize solids storage capacity.
- Use 29" (cm) Two-Piece Extension Collar to provide additional depth. (see page 10)
- 4" (100mm) Inlet/Outlet Standard on all models.
- 6" (150 mm) Inlet/Outlet Available on TSS-95 Models.

In-Ground Models

- Designed for indoor or outdoor in-ground installations.
- Extension Collar Adapter Ring with Built-in 18" (cm) Single-Piece Extension Collar and 22"(cm) Diameter Solid Top Cover.



TSS-70-ECA

75 GPM (4.73 l/s)
Solids Retention Capacity:
70 US Gallons (265 L)

TSS-95-ECA

150 GPM (9.46 l/s)
Solids Retention Capacity:
95 US Gallons (359 L)

Above-Ground Models

- Designed for indoor, above-ground installations.
- Includes Support Stand Assembly for Floor-Installation
- Standard Adapter Ring with 22"(cm) Diameter Solid Top Cover.



TSS-70-SSA

75 GPM (4.73 l/s)
Solids Retention Capacity:
70 US Gallons (265 L)



TSS-95-SSA

150 GPM (9.46 l/s)
Solids Retention Capacity:
95 US Gallons (359 L)

Basic Models

- Additional options may be purchased for indoor or outdoor, in-ground or above-ground installations.
- Standard Adapter Ring with 22" (cm) Diameter Solid Top Cover.



TSS-70

75 GPM (4.73 l/s)
Solids Retention Capacity:
70 US Gallons (265 L)



TSS-95

150 GPM (9.46 l/s)
Solids Retention Capacity:
95 US Gallons (359 L)

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Using Trapzilla® with Point-Source Separators

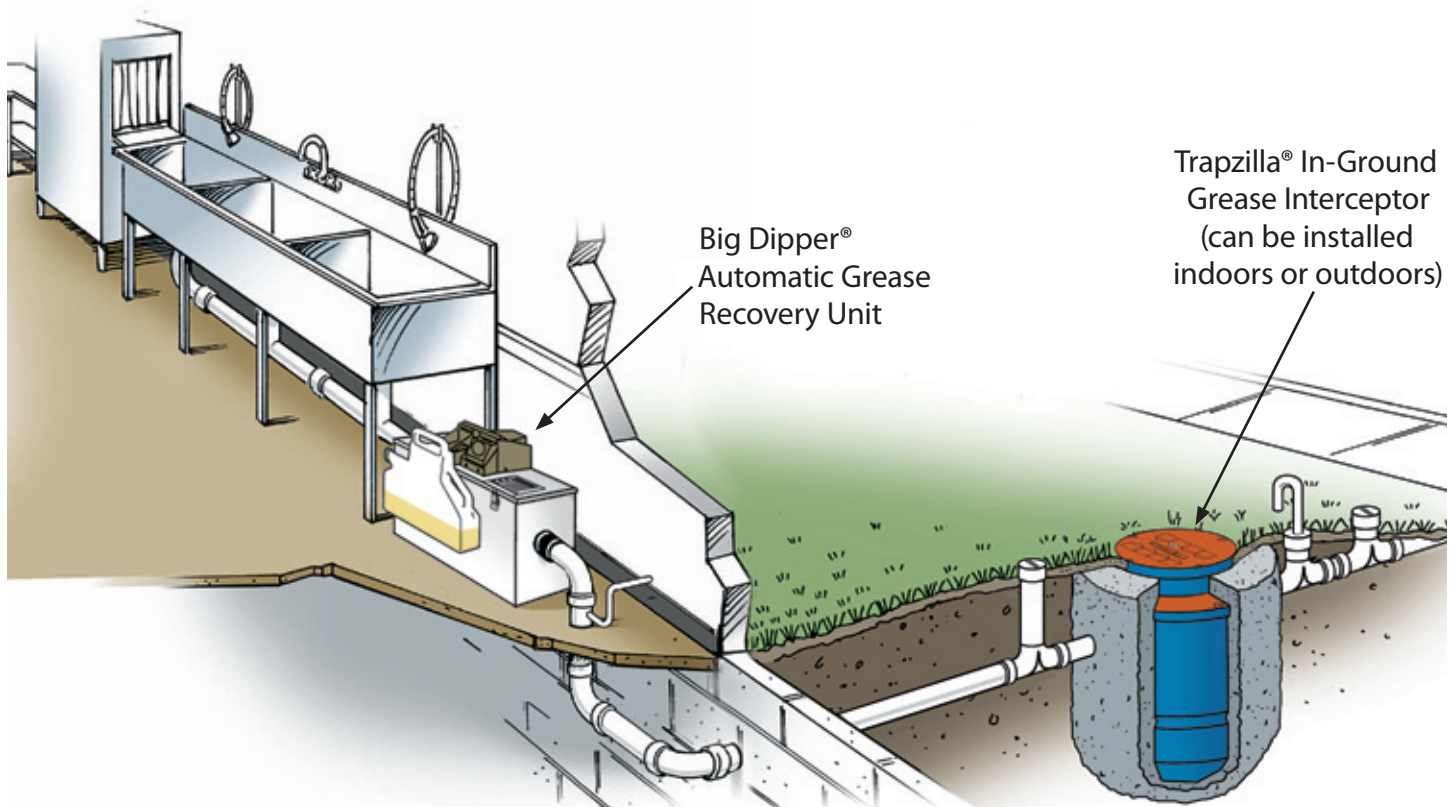
Isolation & Containment Strategy

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®).



Trapzilla® is a Registered Trademark
of Thermaco, Inc.

Trapzilla® products are covered by U.S. and
International patents and patents pending

6,849,176

6,878,270

7,153,439

7,186,346



* Please consult Thermaco, Inc. for details on the specific models
tested, certified, accepted and/or listed by these organizations
& for proper installation procedures.