

ASME A112.14.3-2018
[Revision of ASME A112.14.3-2000 (R2014)]

Hydromechanical Grease Interceptors

AN AMERICAN NATIONAL STANDARD



ASME A112.14.3-2018
[Revision of ASME A112.14.3-2000 (R2014)]

Hydromechanical Grease Interceptors

AN AMERICAN NATIONAL STANDARD



**The American Society of
Mechanical Engineers**

Two Park Avenue • New York, NY • 10016 USA

Date of Issuance: May 18, 2018

This Standard will be revised when the Society approves the issuance of a new edition.

ASME issues written replies to inquiries concerning interpretations of technical aspects of this Standard. Interpretations are published on the Committee web page and under <http://go.asme.org/InterpsDatabase>. Periodically certain actions of the ASME A112 Committee may be published as Cases. Cases are published on the ASME website under the A112 Committee Page at <http://go.asme.org/A112committee> as they are issued.

Errata to codes and standards may be posted on the ASME website under the Committee Pages to provide corrections to incorrectly published items, or to correct typographical or grammatical errors in codes and standards. Such errata shall be used on the date posted.

The A112 Committee Page can be found at <http://go.asme.org/A112committee>. There is an option available to automatically receive an e-mail notification when errata are posted to a particular code or standard. This option can be found on the appropriate Committee Page after selecting "Errata" in the "Publication Information" section.

ASME is the registered trademark of The American Society of Mechanical Engineers.

This code or standard was developed under procedures accredited as meeting the criteria for American National Standards. The Standards Committee that approved the code or standard was balanced to assure that individuals from competent and concerned interests have had an opportunity to participate. The proposed code or standard was made available for public review and comment that provides an opportunity for additional public input from industry, academia, regulatory agencies, and the public-at-large.

ASME does not "approve," "rate," or "endorse" any item, construction, proprietary device, or activity.

ASME does not take any position with respect to the validity of any patent rights asserted in connection with any items mentioned in this document, and does not undertake to insure anyone utilizing a standard against liability for infringement of any applicable letters patent, nor assume any such liability. Users of a code or standard are expressly advised that determination of the validity of any such patent rights, and the risk of infringement of such rights, is entirely their own responsibility.

Participation by federal agency representative(s) or person(s) affiliated with industry is not to be interpreted as government or industry endorsement of this code or standard.

ASME accepts responsibility for only those interpretations of this document issued in accordance with the established ASME procedures and policies, which precludes the issuance of interpretations by individuals.

No part of this document may be reproduced in any form,
in an electronic retrieval system or otherwise,
without the prior written permission of the publisher.

The American Society of Mechanical Engineers
Two Park Avenue, New York, NY 10016-5990

Copyright © 2018 by
THE AMERICAN SOCIETY OF MECHANICAL ENGINEERS
All rights reserved
Printed in U.S.A.

CONTENTS

Foreword		iv
Committee Roster		v
Correspondence With the A112 Committee		vi
1	General	1
2	General Requirements	1
3	Testing	2
4	Labeling, Installation, and Maintenance	9
5	Sizing and Maintenance of Grease Interceptors	9
6	Applications	9
7	Installation	9
8	Flow Control and/or Vent	10
 Nonmandatory Appendix		
A	Maintenance	13
 Figures		
1	Grease Interceptor Test Configuration for Rating Types A and B	3
2	Grease Interceptor Test Configuration for Rating Type C	4
3	Grease Interceptor Test Configuration for Rating Type D	5
4	Grease Interceptor Serving Trapped and Vented Sink — Flow Control Air Intake Intersects Vent	11
5	Grease Interceptor Serving Dishwasher — Flow Control Air Intake Intersects Vent	11
6	Grease Interceptor Serving Two Individually Trapped and Vented Sinks — Flow Control Air Intake Intersects Vent	11
7	Grease Interceptor Serving Trapped and Vented Sinks — Flow Control Air Intake Intersects Vent	12
 Tables		
1	Standard Flow Rates and Grease Retention Capacity Ratings for Grease Interceptors	2
2	Procedure for Sizing Grease Interceptors	10
3	Interceptor Sizing Method Utilizing Maximum Pipe Capacity	10
 Form		
3.6-1	Grease Interceptor Rating Test Reporting Form	8

FOREWORD

In 1994, the Plumbing and Drainage Institute (PDI) agreed to work with the American Society of Mechanical Engineers for the development of this Standard. This Standard includes criteria for testing and rating of grease interceptors; general requirements for these appurtenances; and an appendix of valuable sizing, installation, and maintenance data.

PDI has a membership of organizations that manufacture products for the plumbing industry. The basic aim of PDI is to contribute its combined talents and resources to the advancement of plumbing engineering and the plumbing industry. This Standard was developed with the assistance of PDI.

For more than a century, grease interceptors have been used in plumbing wastewater systems to permit free flow of drainage from sinks and similar equipment and to prevent grease accumulations from clogging connecting piping and sewer lines. In 1883, one Nathaniel T. Whiting of California applied for a patent on a grease trap, which was issued in October 1884. Whiting's design principle does not differ greatly from present-day grease interceptors.

For the next 50 years, there was no coordinated effort to standardize ratings, or to establish performance requirements for grease interceptors. Ratings were determined by each manufacturer for its interceptors, which were produced in a variety of sizes and types in an effort to meet engineers' specifications and satisfy code requirements.

In late 1940 and early 1941, prior to the United States' entry into World War II, grease interceptors were specified for Army posts to meet specifications of the Construction Division, Office of the Quartermaster General. These specifications called for interceptors, which proved inadequate; it immediately became apparent that a comprehensive engineering and testing program was needed to properly rate grease interceptors. Apart from prevention of sewage systems clogging, properly rated and sized grease interceptors were essential to the recovery of oils and grease so badly needed for the war effort. As a result, a series of conferences involving the Research Committee of the Plumbing and Drainage Manufacturer's Association (now PDI), representatives of the Quartermaster General, Surgeon General, Army Corps of Engineers, and others were held to develop a testing program to establish flow rates and grease holding capacity for uniform rating of grease interceptors manufactured at that time.

The program that emerged from these conferences included exhaustive laboratory testing of each grease interceptor at the Iowa Institute of Hydraulic Research at Iowa State University. This phase of the program was covered in a comprehensive report issued in August 1945. Using the guidelines established in Iowa, the Research Committee continued the testing program at the United States Testing Company, Inc., which culminated in the publication of Standard PDI-G101 in 1949 and the rating of applicable grease interceptors.

Since its initial publication, Standard PDI-G101 has been widely accepted and is referenced in most plumbing codes. It has been reprinted in its original format many times.

PDI currently maintains a grease interceptor testing, rating, and certification facility. This revision includes the following changes to the 2018 edition of the standard:

- (a) adds sizes above 100 gpm
- (b) include a new drawing to show additions for testing 75 and 100 gpm sizes and larger
- (c) eliminate efficiency "B"
- (d) add definition for hydromechanical grease interceptor
- (e) add additional sizing, see [Table 3](#) based on maximum flow for pipe capacity

The Committee recognizes that a number of sewerage treatment communities and other jurisdictions have established various maximum limits of fats, oils, and greases (FOG) in the waste stream. The most common of these is 100 mg/L or 100 gpm. The Committee decided that until a specific maximum limit is universally accepted, no number should be included in the Standard.

ASME A112.14.3 was approved as an American National Standard on January 10, 2018.

ASME A112 COMMITTEE

Standardization of Plumbing Materials and Equipment

(The following is the roster of the Committee at the time of approval of this Standard.)

STANDARDS COMMITTEE OFFICERS

W. M. Smith, *Chair*
S. Rawalpindiwala, *Vice Chair*
A. L. Guzman Rodriguez, *Secretary*

STANDARDS COMMITTEE PERSONNEL

R. K. Adler , City of San Jose	L. A. Mercer , IAPMO Group
J. A. Ballanco , JB Engineering and Code Consulting	D. Orton , NSF International
J. E. Bertrand , Moen, Inc.	S. Rawalpindiwala , Kohler Co.
A. Bonlender , Bradley Corp.	S. A. Remedios , Remedios Consultant
R. Burnham , Zurn Industries, LLC	M. Sigler , Plumbing Manufacturers International
M. Campos , ICC Evaluation Service, LLC	G. L. Simmons , Charlotte Pipe & Foundry
W. E. Chapin , Professional Code Consulting, LLC	W. M. Smith , American Society of Plumbing Engineers
P. V. DeMarco , IAPMO Group	J. C. Watson , Elkay Manufacturing
N. E. Dickey , CSA Group	M. Weiss , Plumbing & Drainage Institute
G. S. Duren , Code Compliance, Inc.	W. C. Whitehead , Whitehead Consulting Services
R. Emmerson , Consultant	A. Ciechanowski , <i>Alternate</i> , NSF International
R. L. George , Plumb-Tech Design and Consulting Services, LLC	F. DiFolco , <i>Alternate</i> , CSA Group
A. L. Guzman Rodriguez , The American Society of Mechanical Engineers	D. Gleiberman , <i>Alternate</i> , Sloan Valve Co.
G. W. Harrison , Consultant	D. Liang , <i>Alternate</i> , CSA Group
L. Himmelblau , Chicago Faucet	M. Malatesta , <i>Alternate</i> , American Standard
J. M. Koeller , Koeller and Co.	C. McLeod , <i>Alternate</i> , Kohler Co.
C. J. Lagan , American Standard	W. B. Morris , <i>Alternate</i> , Charlotte Pipe & Foundry
J. W. Lauer , Sloan Valve Co.	D. Viola , <i>Alternate</i> , IAPMO Group
W. LeVan , Cast Iron Soil Pipe Institute	S. L. Cavanaugh , <i>Contributing Member</i> , Cavanaugh Consulting
D. Marbry , Fluidmaster, Inc.	C. L. Jahrling , <i>Contributing Member</i> , ASSE International
R. Mata , CSA Group	N. M. Kummerlen , <i>Contributing Member</i> , Consultant

A112 PROJECT TEAM 14.3 — GREASE INTERCEPTORS

D. Orton , <i>Chair</i> , NSF International	R. L. George , Plumb-Tech Design and Consulting Services, LLC
J. A. Ballanco , JB Engineering and Code Consulting	R. Guinn , Canplas Industries, Ltd.
W. C. Batten , Thermaco, Inc.	G. W. Harrison , Consultant
A. Bird , Canplas Industries, Ltd.	M. J. Lenger , Cleanblu, Inc.
R. Burnham , Zurn Industries, LLC	K. Loucks , IW Consulting Service
M. Campos , ICC Evaluation Service, LLC	D. Viola , IAPMO Group
N. E. Dickey , CSA Group	M. Weiss , Plumbing & Drainage Institute
G. S. Duren , Code Compliance, Inc.	W. C. Whitehead , Whitehead Consulting Services
D. W. Gallmann , Consultant	

CORRESPONDENCE WITH THE A112 COMMITTEE

General. ASME Standards are developed and maintained with the intent to represent the consensus of concerned interests. As such, users of this Standard may interact with the Committee by requesting interpretations, proposing revisions or a case, and attending Committee meetings. Correspondence should be addressed to:

Secretary, A112 Standards Committee
The American Society of Mechanical Engineers
Two Park Avenue
New York, NY 10016-5990
<http://go.asme.org/Inquiry>

Proposing Revisions. Revisions are made periodically to the Standard to incorporate changes that appear necessary or desirable, as demonstrated by the experience gained from the application of the Standard. Approved revisions will be published periodically.

The Committee welcomes proposals for revisions to this Standard. Such proposals should be as specific as possible, citing the paragraph number(s), the proposed wording, and a detailed description of the reasons for the proposal, including any pertinent documentation.

Proposing a Case. Cases may be issued to provide alternative rules when justified, to permit early implementation of an approved revision when the need is urgent, or to provide rules not covered by existing provisions. Cases are effective immediately upon ASME approval and shall be posted on the ASME Committee web page.

Requests for Cases shall provide a Statement of Need and Background Information. The request should identify the Standard and the paragraph, figure, or table number(s), and be written as a Question and Reply in the same format as existing Cases. Requests for Cases should also indicate the applicable edition(s) of the Standard to which the proposed Case applies.

Interpretations. Upon request, the A112 Standards Committee will render an interpretation of any requirement of the Standard. Interpretations can only be rendered in response to a written request sent to the Secretary of the A112 Standards Committee.

Requests for interpretation should preferably be submitted through the online Interpretation Submittal Form. The form is accessible at <http://go.asme.org/InterpretationRequest>. Upon submittal of the form, the Inquirer will receive an automatic e-mail confirming receipt.

If the Inquirer is unable to use the online form, he/she may mail the request to the Secretary of the A112 Standards Committee at the above address. The request for an interpretation should be clear and unambiguous. It is further recommended that the Inquirer submit his/her request in the following format:

- | | |
|-------------------------|---|
| Subject: | Cite the applicable paragraph number(s) and the topic of the inquiry in one or two words. |
| Edition: | Cite the applicable edition of the Standard for which the interpretation is being requested. |
| Question: | Phrase the question as a request for an interpretation of a specific requirement suitable for general understanding and use, not as a request for an approval of a proprietary design or situation. Please provide a condensed and precise question, composed in such a way that a "yes" or "no" reply is acceptable. |
| Proposed Reply(ies): | Provide a proposed reply(ies) in the form of "Yes" or "No," with explanation as needed. If entering replies to more than one question, please number the questions and replies. |
| Background Information: | Provide the Committee with any background information that will assist the Committee in understanding the inquiry. The Inquirer may also include any plans or drawings that are necessary to explain the question; however, they should not contain proprietary names or information. |

Requests that are not in the format described above may be rewritten in the appropriate format by the Committee prior to being answered, which may inadvertently change the intent of the original request.

Moreover, ASME does not act as a consultant for specific engineering problems or for the general application or understanding of the Standard requirements. If, based on the inquiry information submitted, it is the opinion of the Committee that the Inquirer should seek assistance, the inquiry will be returned with the recommendation that such assistance be obtained.

ASME procedures provide for reconsideration of any interpretation when or if additional information that might affect an interpretation is available. Further, persons aggrieved by an interpretation may appeal to the cognizant ASME Committee or Subcommittee. ASME does not “approve,” “certify,” “rate,” or “endorse” any item, construction, proprietary device, or activity.

Attending Committee Meetings. The A112 Standards Committee regularly holds meetings and/or telephone conferences that are open to the public. Persons wishing to attend any meeting and/or telephone conference should contact the Secretary of the A112 Standards Committee. Future Committee meeting dates and locations can be found on the Committee Page at <http://go.asme.org/A112committee>.

INTENTIONALLY LEFT BLANK

HYDROMECHANICAL GREASE INTERCEPTORS

1 GENERAL

1.1 Scope

This Standard covers general product requirements as well as the performance criteria for the testing and rating of hydromechanical grease interceptors, rated by flow in gallons per minute (gpm) or liters per minute (L/min).

1.2 Units of Measurement

Values are stated in U.S. Customary units and in the International System of Units (SI). The U.S. Customary units shall be considered as the standard.

1.3 Reference Standards

As a prerequisite for evaluation, a product that tested to the requirements of this Standard shall satisfy the requirements of the latest edition of the following standards, as applicable:

- ASME A112.3.1, Stainless Steel Drainage Systems
- ASME B1.20.1, Pipe Threads
- Publisher: The American Society of Mechanical Engineers (ASME), Two Park Avenue, New York, NY 10016-5990 (www.asme.org)
- ASTM A53/A53M, Standard Specification for Pipe, Steel, Black and Hot-Dipped, Zinc-Coated, Welded and Seamless
- ASTM A888, Standard Specification for Hubless Cast Iron Soil Pipe and Fittings for Sanitary and Storm Drain, Waste, and Vent Piping Applications
- ASTM D2665, Standard Specification for Poly (Vinyl Chloride) (PVC) Plastic Drain, Waste, and Vent Pipe and Fittings
- Publisher: American Society for Testing and Materials (ASTM International), 100 Barr Harbor Drive, P.O. Box C700, West Conshohocken, PA 19428-2959 (www.astm.org)

1.4 Definitions

breakdown grease capacity: the number of pounds or kilograms of grease a grease interceptor retains at a specific flow rate at the last increment preceding two successive increments in which either the average efficiency is less than 90% or the incremental efficiency is less than 80%.

directly connected: a grease interceptor that is designed to receive the discharge directly from fixtures without an air gap or air break and be directly or indirectly connected to the plumbing drainage system.

flow control, unvented: a device installed upstream of or within the interceptor, having an orifice that controls the rate of flow through the interceptor.

flow control, vented: a device installed upstream of the interceptor having an orifice and air intake (vent) downstream from the orifice which allows air to be drawn into the flow. The device that controls the rate of flow through the interceptor, and an air intake (vent) downstream to the interceptor.

hydromechanical grease interceptor: a plumbing appurtenance or appliance installed in a sanitary drainage system to intercept nonpetroleum fats, oils, and greases (FOG) from a wastewater discharge; rated by flow. The design incorporates, air entrainment, hydromechanical separation, interior baffling, and/or barriers in combination or separately, and one or more of the following:

- (a) external flow control, with air intake (vent), directly connected
- (b) external flow control, without air intake (vent), directly connected
- (c) without external flow control, directly connected
- (d) without external flow control, indirectly connected

indirectly connected: a grease interceptor that is designed to receive the discharge from fixtures through an air gap or air break and be directly or indirectly connected to the plumbing drainage system.

minimum grease capacity: the number of pounds or kilograms of grease a grease interceptor must retain at a specified flow rate from [Table 1](#).

2 GENERAL REQUIREMENTS

2.1 Rating

The flow rate and grease retention capacity of each grease interceptor shall be determined by application of the parameters of this Standard. Grease interceptor size shall be expressed in gallons per minute (gpm) and/or liters per minute (L/min).

Grease interceptors shall be rated using one or more of the following methods:

Type	Figure	Installation Parameters
A	1	Units with an external flow control, with air intake (vent): directly connected
B	1	Units with an external flow control, without air intake (vent): directly connected
C	2	Units without an external flow control: directly connected
D	3	Units without an external flow control: indirectly connected

Table 1 Standard Flow Rates and Grease Retention Capacity Ratings for Grease Interceptors

ASME Size Symbol Flow Rate, gpm (L/min)	Grease Capacity, lb (kg)
4 (15)	8 (3.6)
7 (26)	14 (6.4)
10 (38)	20 (9.1)
15 (57)	30 (13.6)
20 (76)	40 (18.1)
25 (95)	50 (22.7)
35 (132)	70 (31.8)
50 (189)	100 (45.4)
75 (284)	150 (68.0)
100 (378)	200 (90.7)

2.2 Inlet and Outlet Connections

2.2.1 The inlet and outlet connections of the grease interceptor shall be either pipe thread or of a plain end diameter to allow hubless coupling connections. The manufacturer's installation requirements shall identify installation parameters sufficiently to enable connection consistent with the test parameters of this Standard.

2.2.2 Grease interceptor connections shall comply with ASME A112.3.1, ASME B1.20.1, ASTM A53/A53M, ASTM A888, or ASTM D2665.

2.2.3 Grease interceptors shall be connected as prescribed by the manufacturer, consistent with this Standard.

2.3 Flow Controls and/or Vents

2.3.1 The use and placement of flow controls and/or vents or air intakes for grease interceptors shall be in accordance with the manufacturer's installation requirements. When a flow control is not required by the manufacturer, testing shall be conducted at the manufacturer's prescribed rate of flow without any restriction of the flow from the test apparatus to the grease interceptor.

2.3.2 When a flow control (vented or unvented) and/or vent is used during testing for rating a grease interceptor, the rating of the unit shall not exceed the tested flow through the flow control. The manufacturer's literature shall reflect that the rating was achieved with the flow control and/or vent attached, and that the flow control and/or vent shall be installed with the unit.

3 TESTING

3.1 Construction of Test Equipment

3.1.1 Test Sink

(a) The sinks shall be constructed of corrosion resistant material, structurally reinforced and supported on legs. The legs shall be of such length that the rim of the sinks are 3 ft (0.91 m) above the floor. The sink legs shall be structurally braced.

(b) For flow rates up to and including 50 gpm (189 L/min) the test sinks shall be 50 gal (189 L) and have the following inside dimensions: 8 ft (2.44 m) in length, 2 ft (0.61 m) in width, and 12½ in. (0.32 m) in depth. The sinks shall have two compartments of equal length.

(c) For flow rates above 50 gpm (189 L/min) up to and including 100 gpm (378 L/min), the test sinks shall be as follows:

(1) multiples of two of the sinks specified in (b).

(2) a 100 gal sink having the following dimensions: 128 in. (3.2 m) in length, 36 in. (0.91 m) in width, and 12.5 in. (0.32 m) in depth; it shall be divided into two equal compartments.

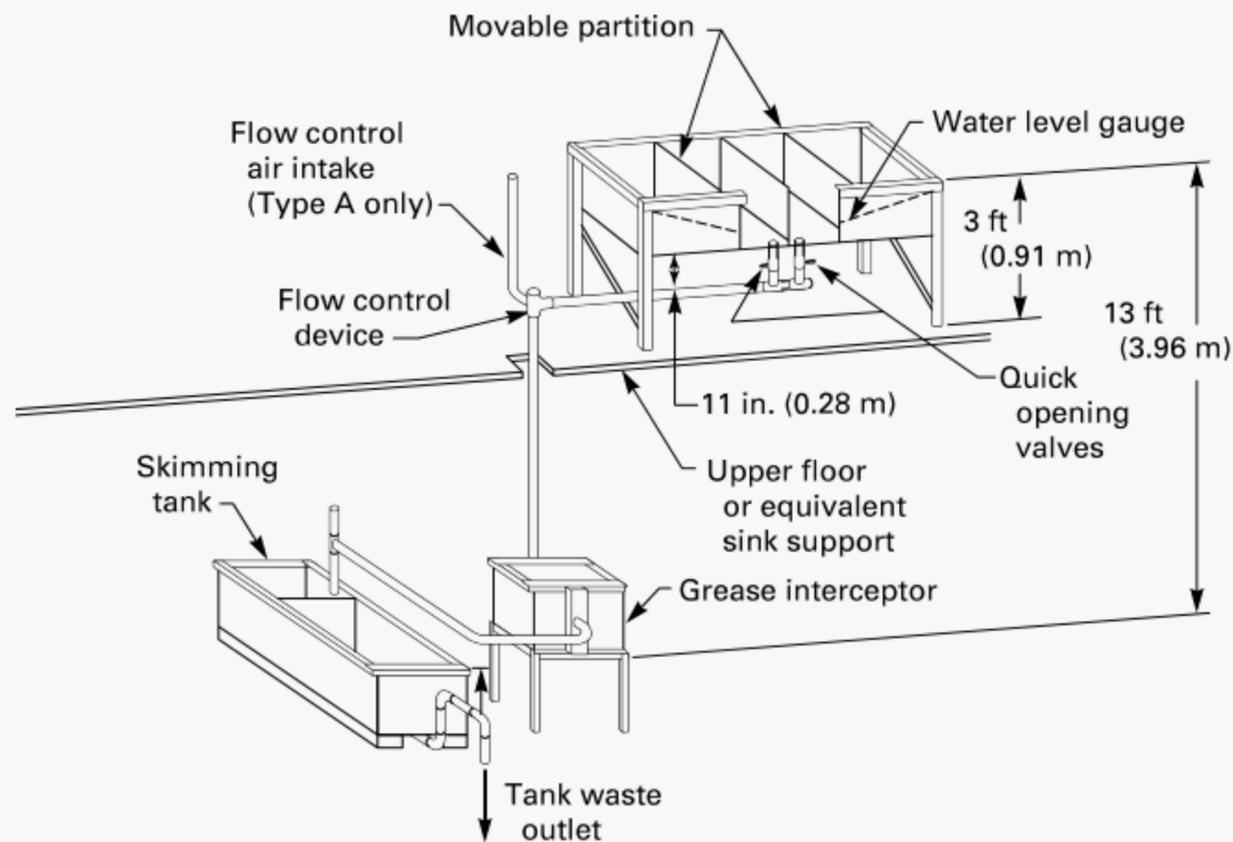
(d) For flow rates of greater than 100 gpm (378 L/min), two or more sinks as specified in (b) or (c) shall be used.

3.1.1.1 Sink Waste Connections. For sinks constructed per para. 3.1.1(b), each sink compartment shall be fitted with a 1½ in. (38 mm) standard sink waste connection with flange, threaded or slip joint tail-piece, and locknut. The waste connections shall be located on opposite sides of the center partition in the corner formed by the front side of the sink and the center partition.

For sinks constructed per para. 3.1.1(c), each sink compartment shall be fitted with a 2 in. (51 mm) sink waste connection with flange, threaded or slip joint tail-piece, and locknut. The waste connections shall be located on opposite sides of the center partition in the corner formed by the front side of the sink and the center partition.

3.1.1.2 Water Level Gauges. Each compartment shall be equipped with a gauge connection and a water level gauge with gauge glass. Each gauge connection shall be fitted into the bottom of a sink compartment and in close proximity to the waste outlet. Each gauge shall be mounted on the outside of the sink, adjacent to its respective gauge connection, and shall extend diagonally upward from the bottom center to the top outside corners. These gauges shall be calibrated to read the number of inches of water in the sink compartments above the sink waste flange.

3.1.1.3 Movable Sink Partitions. Each compartment of the sink shall be fitted with a movable partition, making it possible to regulate the size of the compartment to any desired capacity.

Figure 1 Grease Interceptor Test Configuration for Rating Types A and B

3.1.2 Skimming Tank. The skimming tank shall be constructed as follows:

(a) The skimming tank shall be rectangular in shape and open at the top. The tank shall be constructed of galvanized sheet or corrosion resisting metal with structural reinforcement.

(b) The tank shall be 12 ft (3.66 m) in length, 36 in. (0.91 m) in width, and 28 in. (0.71 m) in depth.

NOTE: If the flow rate is 50 gpm (189 L/min) or less, the tank may be approximately 8 ft (2.44 m) in length, 28 in. (0.71 m) in width, and 32 in. (0.81 m) in depth.

(c) The waste outlet from the tank shall be 4 in. (102 mm) in diameter, connected to the bottom of the tank at one end and trapped to retain a minimum of 18 in. (0.45 m) of water in the tank. The tank shall be provided with a 4 in. (102 mm) bottom drain and valve to permit draining and cleaning.

(d) The skimming tank shall be equipped with a stationary baffle located approximately 4 ft (1.22 m) from the end of the tank receiving the discharge from the interceptor. This baffle shall extend the width of the tank and to within 4 in. (102 mm) of the bottom of the tank. The purpose of this baffle shall be to limit the heavy spread of grease to one end of the tank and to control to a degree the turbulent water currents created by the discharge from the interceptor.

3.2 Installation of Testing Equipment

3.2.1 Direct Connection Test Types A, B, and C. See Figures 1 and 2.

3.2.1.1 Waste Piping. The combined horizontal waste, vertical waste riser, and interceptor inlet shall be 2 in. (51 mm) for test flows of 50 gpm (189 L/min) or less and 3 in. (76 mm) for test flows over 50 gpm (189 L/min). Discharge piping from the interceptor on test shall be equal to the outlet of the interceptor.

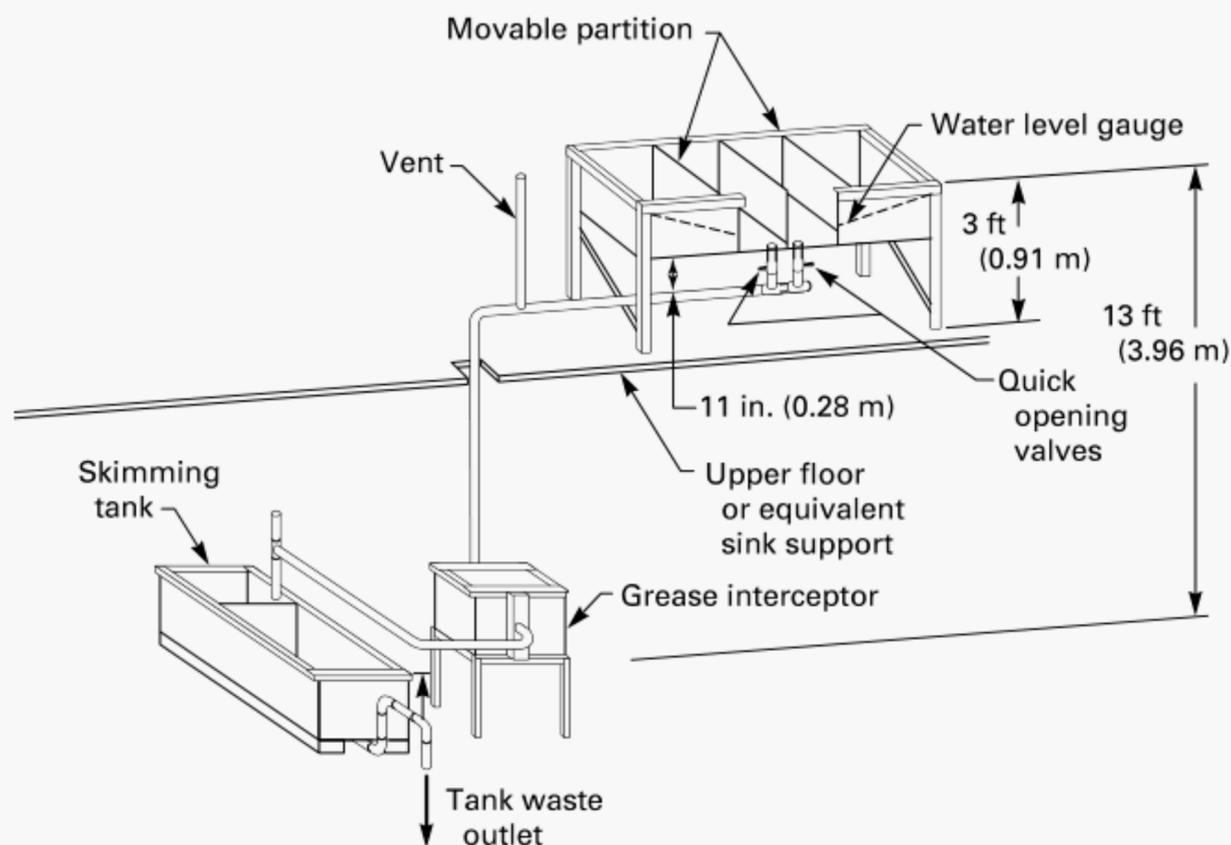
3.2.1.2 Sink and Interceptor Locations. The sink shall be located with the sink rim 13 ft (3.96 m) above the outside bottom of the grease interceptor being tested. The interceptor shall be so located that its bottom is 10 ft (3.05 m) below the floor level upon which the sink is located.

3.2.1.3 Skimming Tank Location. The skimming tank shall be located relative to the interceptor such that discharge piping from the interceptor is above the tank rim by a distance not less than 3 in. (76 mm).

3.2.1.4 Installation of Waste Piping

3.2.1.4.1 Sink Connections. For test flows of 50 gpm (189 L/min) or less, the sink outlet waste connection from each sink compartment shall be 1½ in. (38 mm) in size; for test flows over 50 gpm (189 L/min), the sink outlet waste connection from each compartment shall be 2 in. (51 mm) in size and each connection shall be fitted with a quarter-turn ball quick opening valve.

3.2.1.4.2 Combined Horizontal Waste Piping. The combined horizontal waste piping into which the sink outlets connect shall be installed with the centerline 11 in. (0.28 m) below the bottom of the sink, and properly hung and braced from the sink reinforcement and supports. This waste piping shall be fitted to the inlet

Figure 2 Grease Interceptor Test Configuration for Rating Type C

of a vented (air intake), flow control, and/or vent, or equal device (if required for use with the interceptor).

3.2.1.4.3 Flow Control and/or Vent Device. The flow control and/or vent device, if required by manufacturer, shall be adequate in size for the interceptor to be tested, and equipped with the proper size orifice and/or other details to provide the proposed flow rate of the subject interceptor based on the simultaneous drainage of both sink compartments as detailed hereinafter (see para. 3.3.4.1). The waste piping on either side of the flow control and/or vent shall be fitted with unions to permit removal of the device. If the flow control orifice required exceeds 2 in. (51 mm) in diameter, thereby requiring a flow control larger than 2 in. (51 mm), the outlet piping shall be no less than 3 in. (77 mm).

3.2.1.4.4 Vertical Waste Riser. The vertical waste riser shall be connected to the outlet of the flow control and/or vent device, if required, and shall extend downward to connect to the grease interceptor inlet by means of an elbow and a short horizontal nipple. Test flows exceeding 50 gpm (189 L/min) requiring connections larger than 2 in. (51 mm), interceptor inlet and outlet sizes shall be no less than 3 in. (77 mm).

3.2.1.4.5 Interceptor Inlet Connection. If the inlet diameter of the interceptor to be tested exceeds the riser pipe diameter size, use reducing coupling to permit connection of the inlet pipe.

3.2.1.4.6 Interceptor Discharge. The discharge pipe from the interceptor outlet to the skimming tank shall be equal in size to the outlet of the interceptor, have a pitch of $\frac{1}{8}$ in./ft (1 cm/m), and be provided

with a 2 in. (51 mm) vent properly located to prevent siphoning of the interceptor.

3.2.2 Indirect Connection Test Type D. (See Figure 3.)

3.2.2.1 Sink and Interceptor Location. The sink shall be located on a floor with the sink rim 3 ft (0.91 m) above the floor level and 13 ft (3.96 m) above the outside bottom of the grease interceptor being tested.

3.2.2.2 Floor Sink and Location. A 6 in. (152 mm) deep floor sink to receive the indirect waste discharge from the test sink shall be located in the floor supporting the test sink. The rim of the floor sink shall be located at floor level. The outlet of the floor sink shall be sized to handle the test flow rate, and shall not be less than 3 in. (76 mm).

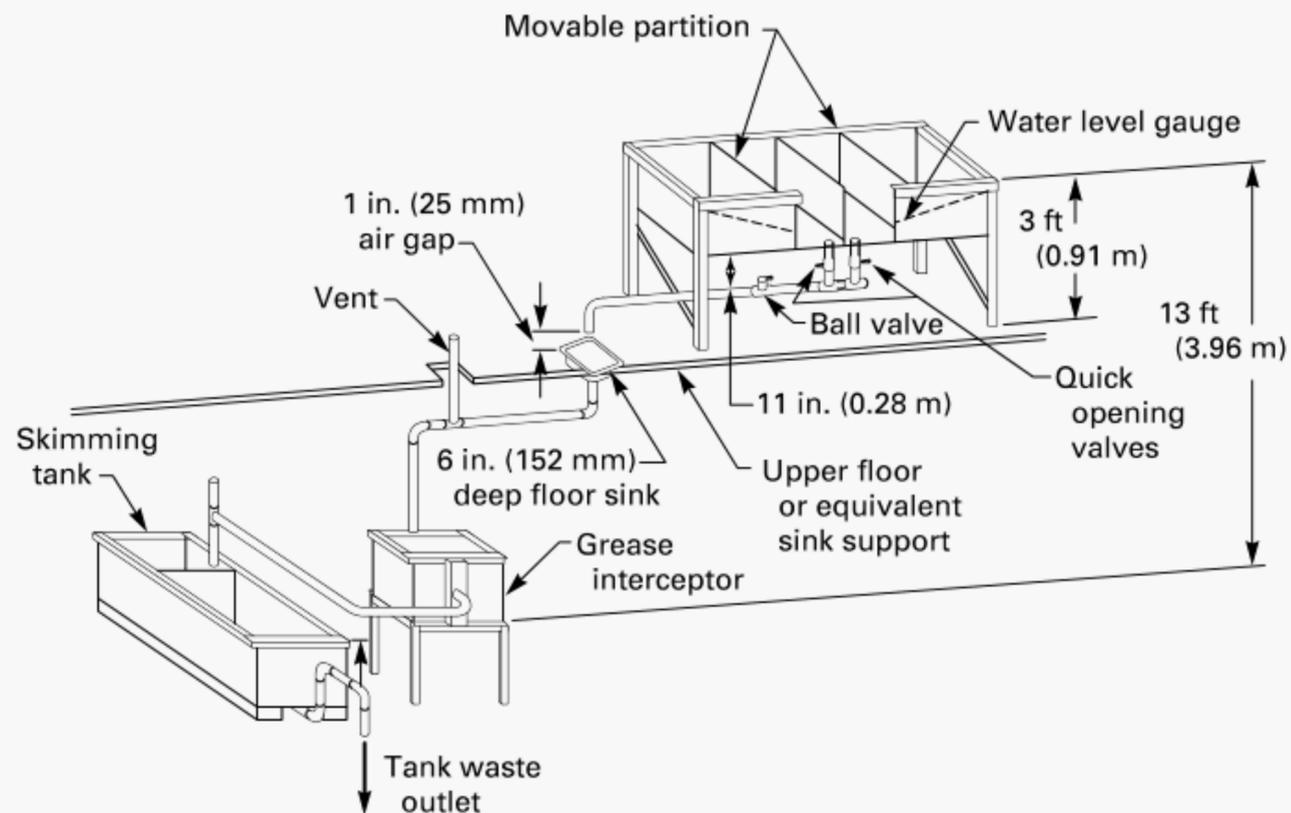
3.2.2.3 Skimming Tank Location. The skimming tank shall be located low enough, with respect to the interceptor, for the discharge piping from the interceptor to clear the tank rim by not less than 3 in. (76 mm).

3.2.2.4 Installation of Waste Piping

3.2.2.4.1 Sink Connections. The sink outlet waste connection from each sink compartment shall be $1\frac{1}{2}$ in. (38 mm) in size and each connection shall be fitted with a quick-opening valve.

3.2.2.4.2 Combined Horizontal Waste Piping. The combined horizontal waste piping into which the sink outlets connect shall be 3 in. (76 mm), installed with the centerline 11 in. (0.28 m) below the bottom of the sink and properly hung and braced from the sink reinforcement and supports. This waste pipe shall connect

Figure 3 Grease Interceptor Test Configuration for Rating Type D



to a single 3 in. (76 mm) valve that shall serve to regulate the total discharge flow rate. The pipe connected to the valve outlet shall turn downward 90 deg and shall terminate 1 in. (25 mm) above the rim and at the centerline of the floor sink.

3.2.2.4.3 Floor Sink to Interceptor Piping. A trap fitting shall be connected to the outlet of the floor sink, of a size appropriate for the flow rate tested, but not less than 3 in. (76 mm). Horizontal piping of the same size and 3 ft (0.91 m) in length with a vent shall be connected between the floor sink elbow and the vertical waste riser, which shall extend downward to connect to the grease interceptor inlet by means of an elbow and a short horizontal nipple.

3.2.2.4.4 Interceptor Discharge. The discharge pipe from the grease interceptor outlet to the skimming tank shall be the same size as the inlet pipe. It shall have a minimum pitch of $\frac{1}{8}$ in./ft (10 mm/m) and shall be provided with a 2 in. (51 mm) vent properly located to prevent siphoning of the interceptor.

3.2.2.4.5 Interceptor Connections. If the inlet and/or outlet connections of the interceptor are larger than the inlet pipe necessary to provide the required flow rate, reducing couplings shall be permitted to be used.

3.3 Preliminary Test Procedure

3.3.1 Media Analysis. Before conducting rating tests on any grease interceptor, simple analysis of the test media shall be made to determine that it complies with the following characteristics:

(a) Water: hydrogen ion concentration (pH value from 6.0 to 8.0).

(b) Lard: specific gravity of 0.875 ± 0.005 , at 150°F (66°C).

(c) Viscosity in Seconds Saybolt universal (SSU), at 150°F (65.5°C).

3.3.2 Establishing Sink Compartment Capacity. The size of each test compartment shall be established by means of the movable partitions so that the gross capacity of each compartment in gallons will be equal to 1.2 times the proposed flow rate in gallons per minute (gpm) of the interceptor to be tested. The gross sink capacity shall be calculated on the basis of length \times width \times depth of 12 in. (0.3 m) above the sink outlet flange.

3.3.3 Establishing Volume of Incremental Discharge. The volume of water to be discharged from each sink compartment during each test increment shall be based on 10 in. (254 mm) of water above the sink outlet flange. On this basis, the incremental discharge in gallons per compartment shall be equal to the proposed gallons per minute (gpm) flow rate of the interceptor being tested.

3.3.4 Computation of Flow Rate. The flow rate from the sink shall be computed by timing the rate of drainage of the first 9½ in. (241 mm) of water from the sink compartment, measured from the 10 in. (254 mm) mark to the datum line ½ in. (13 mm) above the sink outlet flange.

3.3.4.1 Check Flow Rate Tests. The flow rates of the test sinks shall be calibrated using the following procedure:

(a) Setup

(1) establish the sink compartment capacities

(2) connect the sink to the interceptor with the flow control and/or vent or equivalent device, as required

(3) confirm equipment is properly sized and installed

(4) confirm the interceptor discharge pipe is properly vented and extended to the skimming tank

(b) *Test.* The following series of check flow rate tests shall be made. Three tests shall be made for each of the following four conditions:

(1) With the waste outlet from the adjacent compartment closed off, drain, gauge, and compute the flow rate from compartment No. 1.

(2) With the waste outlet from the adjacent compartment closed off, drain, gauge, and compute the flow rate from compartment No. 2.

(3) Drain compartments No. 1 and No. 2 simultaneously and gauge and compute the flow rate on the basis of the time required to drain compartment No. 1.

(4) Drain compartments No. 1 and No. 2 simultaneously and gauge and compute the flow rate on the basis of the time required to drain compartment No. 2.

(c) *Criteria.* For test methods (b)(3) and (b)(4), the time for the measured discharge shall not be less than 108.6 sec or exceed 114 sec.

NOTE: Flow rates determined in (b)(1) and (b)(2) are only for purposes of checking against actual flow rates of test increments.

3.3.4.2 Calibrated Drainage Flow Rates. The average of the three tests for each of groups paras. 3.3.4.1(b)(3) and 3.3.4.1(b)(4), above shall be considered as the calibrated drainage flow rate for that group provided no one of the tests varies by more than 5% from the other two in the same group. If such variation occurs, the test showing the discrepancy shall be discarded and additional check tests shall be made until three tests meeting the above condition are obtained.

The average of the calibrated drainage flow rates for simultaneous discharge, as determined in this paragraph and paras. 3.3.4.1(b)(3) and 3.3.4.1(b)(4) shall be equal to or exceed by not more than 5% the proposed flow rate of the interceptor being tested. If the average flow rate so determined is less than the proposed flow rate of the interceptor, the flow control and/or vent orifice, if utilized, shall be enlarged and the check flow rate tests rerun and the calibrated drainage flow rates again computed until flow rates within the required limits are obtained.

If the average of the calibrated drainage flow rates exceeds the proposed flow rate of the interceptor by more than 5%, the flow control and/or vent orifice, if utilized, shall be reduced in size and the above tests shall be repeated until an average flow rate is obtained which falls within the 5% limit stipulated above.

3.4 Rating Test Procedure

After preliminary data collection and tests have been completed, the rating tests shall be conducted as follows and all test data shall be recorded. The information shall be recorded on a form, which contains the data as

shown on the Grease Interceptor Rating Test Reporting Form (see para. 3.6).

3.4.1 Test Media. Certification tests shall be conducted with fresh, unused lard with recorded physical characteristics stated in para. 3.3.1(b) and water as defined in para. 3.3.1(a), both within a temperature range of 150°F to 160°F (66°C to 71°C).

3.4.2 Ratio of Lard to Water. Both compartments of the test sink(s) shall be supplied with the required volume of water (para. 3.3.3) at the temperature prescribed in para. 3.4. The test lard, within the above temperature range, shall be introduced into one compartment, during each incremental discharge, in the ratio of 1 lb (0.45 kg) of lard for each 5 gal (19 L) of water in that compartment. Consequently, the proportion of lard to the total amount of water discharged from both sink compartments during each increment shall be 1 lb (0.45 kg) for each 10 gal (38 L), respectively.

3.4.3 Test Increments

(a) Each test increment shall consist of the simultaneous discharge of the water from both sink compartments and the lard from the test compartment.

(b) During the first test increment, the lard shall be poured into the No. 1 compartment (that compartment having its discharge outlet closest to the interceptor, measured along the waste pipe) and the No. 2 compartment shall discharge clear water. During the second test increment the lard shall be poured into the No. 2 compartment while the water in No. 1 compartment remains clear. This procedure of introducing the lard into alternate sink compartments shall be continued throughout the test. When multiple sinks are used, there are multiple No. 1 and No. 2 compartments. The lard shall always be introduced in the sink compartments at the ratio specified in para. 3.4.2.

3.4.4 Flow Rates. The drainage period for each increment shall be gauged and timed on the basis of the flow from the compartment containing the clear water. The flow rate from the compartment shall be computed as prescribed in para. 3.3.4 and recorded for each increment.

3.4.5 Efficiency Determinations (Minimum Grease Capacity). At the option of the manufacturer the efficiency determination shall be conducted at either the interceptor's minimum grease capacity per Table 1 (see para. 3.4.7) or at the interceptor's maximum grease capacity by determining the break down point (see para. 3.4.6).

3.4.6 Efficiency Determinations (Maximum Grease Capacity). The grease shall be removed from the skimming tank and the efficiency of the interceptor shall be computed at intervals of five increments or less until the average efficiency reaches approximately 93% and/or the incremental efficiency reaches approximately 85%. After this point has been reached, efficiency checks

shall be made after each incremental discharge. The formula for determining the above efficiency shall be as follows:

$$\text{efficiency} = \frac{\text{grease added} - \text{grease skimmed}}{\text{grease added}}$$

3.4.6.1 Duration of the Test. The test procedure in para. 3.4.6, is to be continued until the average efficiency reaches 85% or less, and/or the incremental efficiency reaches 75% or less.

3.4.6.2 Determination of Test Breakdown Grease Capacity. The test failure, or breakdown grease capacity of the interceptor, shall be established at the increment preceding two successive increments in which either the average efficiency is less than 90% or the incremental efficiency is less than 80%.

3.4.7 Efficiency Determinations (Minimum Grease Capacity). The grease shall be removed from the skimming tank and the efficiency of the interceptor shall be computed at intervals of five increments or less until the average efficiency reaches approximately 93% and/or the incremental efficiency reaches approximately 85%. After this point has been reached, efficiency checks shall be made after each incremental discharge. The formula for determining the above efficiency shall be as follows:

$$\text{efficiency} = \frac{\text{grease added} - \text{grease skimmed}}{\text{grease added}}$$

3.4.7.1 Duration of the Test. The test procedure in para. 3.4.7 is to be continued until the 12th increment.

3.4.7.2 Determination of Efficiency at Minimum Grease Capacity. The efficiency shall be established at the increment preceding the increment in which either the average efficiency is less than 90% or the incremental efficiency is less than 80%. If the average efficiency has not yet dropped below 90% or the incremental efficiency has not yet dropped below 80%, the efficiency shall be reported at the 12th increment.

3.4.8 Performance Requirements for Certification. The interceptor shall conform with or exceed the following requirements at the breakdown point:

(a) have an average efficiency of 90% or more (see para. 3.4.5)

(b) have an incremental efficiency of 80% or more (see para. 3.4.5)

(c) have retained not less than 2 lb (0.9 kg) of grease for each 1 gpm (3.8 L/min) average flow rate as determined during the test

3.4.9 Rated Capacities. Standard rating flow and grease retention capacities for grease interceptors tested in accordance with the above procedure shall

conform in their respective values as those expressed in Table 1.

3.5 Skimming Procedure

The skimming procedure shall be initiated no less than 5 min after the increment to be skimmed has discharged into the tank. A sheet metal hand baffle, slightly shorter than the width of the skimming tank and 12 in. (305 mm) in width shall be employed to push all surfaced grease to one corner of the tank from which the grease is readily skimmed by means of a rectangular pan. The mixture of water and grease thus removed shall be placed in a separatory funnel equipped with a drain cock. All grease shall be squeegeed from the baffle and pan. This process shall be continued until the visible grease has been removed from the surface of the water in the skim tank.

The first 1 in. (25 mm) of the baffle plate shall be immersed at one end of the skimming tank and the baffle moved toward the opposite end, as before, to concentrate surfaced grease. The baffle shall be moved at a rate sufficient to prevent turbulence from drawing the accumulating grease below the baffle, and to minimize grease passing through the clearance space between the baffle and the tank walls.

Upon reaching a point 2 in. (51 mm) from the end of the tank, the baffle motion shall be slowed and simultaneously lowered to bring the cooler surface in contact with the trapped grease. The motion shall be executed such that the baffle is submerged to within 1 in. (25 mm) of its top upon reaching the end of the last 2 in. (51 mm) of horizontal travel.

The baffle shall then be removed from the water and moved, grease side up, to the separatory funnel where the adhering grease shall be squeegeed off and added to the previous contents. The baffle shall be used until the amounts of grease collected are less than 1% by visual observation.

The mixture shall be allowed to stand in the funnel for 5 min, at the end of which time the water is drawn off from the bottom of the funnel. The remainder shall be drained from the separatory funnel into one or more preweighed cans.

The cans shall be cooled to solidify the grease. The cans may be placed in a freezer or refrigerator to expedite the cooling process. The solidified contents shall then be scraped and kneaded with a small putty knife, and the water thus worked from the mixture shall be poured off. If the quantity of water thus removed is greater than several drops, the heating and solidification process shall be repeated. When only a few drops of water are removed in this manner, the mixture shall be assumed to be completely dewatered and weights are taken for computation purposes.

FORM 3.6-1 Grease Interceptor Rating Test Reporting Form

Interceptor Manufacturer:					Model Number:				GPM Size:		Report No.:				
Sink Capacity and Flow			Test Media Data			Flow Control Data			Test Lab Information						
Capacity No. 1		gal	Spec. Gravity:			Orifice Size:			Test Lab:		Test Date:				
Capacity No. 2		gal				Type:			Notes:						
Separate No. 1		GPM	Viscosity:						Test Technicians:		(1) Drainage gauged on clear compartment.				
Separate No. 2		GPM													
Simultaneous No. 1		GPM													
Simultaneous No. 2		GPM													
												(2) The "amount retained" is a calculation of "Added" minus "Skimmed."			
					Incremental				Accumulated						
					(drop-skim)/drop x100 = efficiency				(drop-skim)/drop x100 = efficiency						
No.	Test	Clear	Second	Rate GPM	lb. Added	lb. Skimmed	lb. Retained	Efficiency	lb. Added	lb. Skimmed	lb. Retained	Efficiency	(3) All skimmed weights taken after dewatering by separatory funnel and chilling.		
1	1	2													
2	2	1													
3	1	2													
4	2	1												Summary and Adjusted Results based on the totals at the increment when grease retained equals 2 lb per gpm rated flow	
5	1	2													
6	2	1													
7	1	2													
8	2	1												Req. retention:	
9	1	2													
10	2	1													
11	1	2													
12	2	1												(1) Total Skimmed:	
13	1	2												(2) Total Retained:	
14	2	1												(3) Total Added:	
15	1	2												Eff. = (line 3 - line 1)/line 3	
16	2	1												Efficiency % =	
17	1	2													
18	2	1													
19	1	2												Summary and Results based on the testing to "maximum grease capacity"	
20	2	1													
21	1	2													
22	2	1													
23	1	2												Breakdown Increment No.	
24	2	1												(1) Total Skimmed:	
25	1	2												(2) Total Retained:	
26	2	1												(3) Total Added:	
27	1	2												Eff. = (line 3 - line 1)/line 3	
28	2	1												Efficiency % =	
29	1	2													
30	2	1													
31	1	2													
Average or Total															

The lard shall be weighed on a gram balance and weights shall be taken to the nearest ½ gram. Tare weights of the preweighed cans shall then be subtracted from the total weight and the corrected weight of lard removed shall be entered as data.

3.6 Grease Interceptor Rating Test Reporting Form

A rating test reporting form containing the same information as [Form 3.6-1](#), shown below shall be used by the testing laboratory to record the test results for each interceptor.

4 LABELING, INSTALLATION, AND MAINTENANCE

4.1 Labeling

Products shall be permanently labeled with the following information:

- (a) manufacturer's name or trademark or other recognized identification
- (b) model number
- (c) rated flow(s) (see [para. 3.3.4.2](#))
- (d) "Inlet" and "Outlet"
- (e) A112.14.3.
- (f) efficiency at the minimum grease capacity defined in [Table 1](#)
- (g) if appropriate, flow control model number and or orifice size

4.2 Installation Components

Hydromechanical grease interceptors shall be provided with complete installation instructions, including but not limited to the following:

- (a) properly sized flow control and/or vent requirements (if required by manufacturer)
- (b) separate trapping requirements (if required by manufacturer)
- (c) elevation and accessibility requirements
- (d) safety and health related instructions
- (e) cleanout locations
- (f) instructions which show the clearances required for maintenance, cleaning, and to prevent hazards
- (g) cautions against installation in any manner except as tested and rated
- (h) where a reducer is required on the outlet, it shall be eccentric with the flat on the bottom

NOTE: An eccentric reducer will prevent changing the static water level and performance of the interceptor.

4.3 Maintenance and Cleaning Instructions

Units shall be provided with maintenance and cleaning instructions including but not limited to the following:

- (a) maintenance instructions
- (b) safety and health provisions
- (c) cleaning instructions

Each grease interceptor shall be provided with service and cleaning instructions, which include a trouble shooting guide as well as instructions for performing necessary servicing or for obtaining servicing.

5 SIZING AND MAINTENANCE OF GREASE INTERCEPTORS

5.1 General

The recommendations for sizing, installation, and maintenance of grease interceptors contained in this section are based on input from PDI. [Table 1](#) is used for guideline purposes and larger sizes are based on two pounds per gpm of rated flow.

5.2 Sizing

5.2.1 Sizing Considerations. Grease interceptors conforming to this Standard are designed to operate efficiently at their rated flow.

5.2.2 Size Symbols. It has been determined through the testing and rating procedure that ten different-sized interceptors are required for normal domestic, commercial, and institutional installations. These sizes are based on standard flow rates and grease retention capacity ratings for grease interceptors. (See [Table 1](#).)

5.2.3 Sizing Procedure. [Table 2](#) shows the basic standard formula in steps for sizing grease interceptors to suit requirements of specific fixtures. An example of this sizing formula application is included to illustrate the steps. [Table 3](#) is included as a method for sizing grease interceptors utilizing maximum pipe capacity.

6 APPLICATIONS

6.1 Dishwashers

A separate grease interceptor is recommended for each commercial dishwasher. The size of the interceptor is determined by the discharge rate (gpm) of the dishwasher as specified by the manufacturer. Select the proper interceptor of equivalent or next higher rate from [Table 1](#).

6.2 Multiple Fixtures

Where multiple fixtures are served by a single interceptor, calculate the total capacity of all fixtures, establish the number of fixtures that may be drained simultaneously and apply this factor to the total capacity to determine the maximum simultaneous capacity. Then proceed with sizing and selection of the grease interceptor using the sizing formula in [Table 2](#).

7 INSTALLATION

All installation recommendations are subject to approval of the code authority.

Table 2 Procedure for Sizing Grease Interceptors

Step	Formula	Example
1	Determine cubic content of fixture. Multiply length × width × depth.	A sink 48 in. long × 24 in. wide × 12 in. deep. Cubic content: 48 × 24 × 12 = 13,824 in. ³
2	Determine capacity in gallons. 1 gal. = 231 in. ³	Content in gallons: $\frac{13,824}{231} = 59.8$ gal
3	Determine actual drainage load. The fixture is normally filled to about 75% of capacity with water. The items being washed displace about 25% of the fixture content; thus, actual drainage load = 75% of fixture capacity.	Actual drainage load: 0.75 × 59.8 = 44.9 gal
4	Determine flow rate and drainage period. In general, good practice dictates a one-minute drainage period; however, where conditions permit, a two-minute drainage period is acceptable. Drainage period is the actual time required to completely drain the fixture. Flow rate = $\frac{\text{actual drainage load}}{\text{drainage period}}$	Calculate flow rate for one-minute period: Drainage period = $\frac{44.9}{1} = 44.9$ gpm flow rate For two-minute period = $\frac{44.9}{2} = 22.5$ gpm flow rate
5	Select interceptor. From Table 1 select interceptor that corresponds to the flow rate calculated; see Note (1).	Select interceptor: For one-minute period: 44.9 gpm = ASME size 50. For two-minute period: 22.5 gpm = ASME size 25.

NOTE: (1) Select next larger size when flow rate falls between the two sizes listed.

Table 3 Interceptor Sizing Method Utilizing Maximum Pipe Capacity

Pipe Size, in.	Full Pipe Flow at 1/2 in. Slope, gpm	Interceptor Size one-minute Drain, gpm	Interceptor Size two-minute Drain, gpm
2	19.44	20	10
3	58.67	75	35
4	125.77	...	75

GENERAL NOTE: Based on 1/4 in. (240) slope per foot based on Manning's formula with friction factor N = 0.012; Cast Iron Soil Pipe and Fittings Handbook and nCh8, Flow Theory and Capacity; pp: 130-134 [Full Pipe]; Cast Iron Soil Pipe Institute (CISPI); 2401 Fieldcrest Drive, Mundelein, IL 60060.

7.1 Installation Considerations

7.1.1 Location. Install the interceptor as close as practical to fixture or fixtures being served. The interceptor may be set on the floor, partially recessed in the floor, or fully recessed below the floor to suit piping and structural conditions.

7.1.2 Clearance. Anticipate sufficient clearance for removal of the interceptor cover for cleaning. Avoid installation wherein long runs of pipe (exceeding 25 ft) are necessary to reach the interceptor. This precaution will reduce the possibility of pipeline becoming clogged with congealed grease that could collect before reaching the interceptor.

7.1.3 Prohibited Fixtures. Do not install piping from other sanitary fixtures such as water closets, urinals, and lavatories into the inlet piping to an interceptor.

The inlet piping to the interceptor should only be from fixtures and appliances that discharge grease or oil-laden wastes.

7.1.4 Waste Line Venting. The waste line downstream from a grease interceptor shall be vented in accordance with plumbing code requirements.

7.1.5 Alternate Installations. Grease interceptors that are tested and rated without the use of vented flow control devices should be installed in the same manner as tested and rated, in accordance with the manufacturer's instructions.

7.1.6 Installation Diagrams. Figures 4 through 7 are included to illustrate various grease interceptor installations normally encountered. These figures will serve as a guide to practical application of grease interceptors.

8 FLOW CONTROL AND/OR VENT

The flow control and/or vent fitting, when furnished with interceptors, shall be installed ahead of the interceptor in the waste line beyond the last connection from the fixture and as close as possible to the underside of the lowest fixture on the horizontal line. When waste of two or more sinks or fixtures are combined to be served by one interceptor, a single flow control and/or vent fitting may be used. Except in the case of indirect waste installations, each fixture connected to a grease interceptor shall be trapped in accordance with the plumbing code. In no instance should a fixture vent be located between the vented flow control device and the grease interceptor.

Figure 4 Grease Interceptor Serving Trapped and Vented Sink — Flow Control Air Intake Intersects Vent

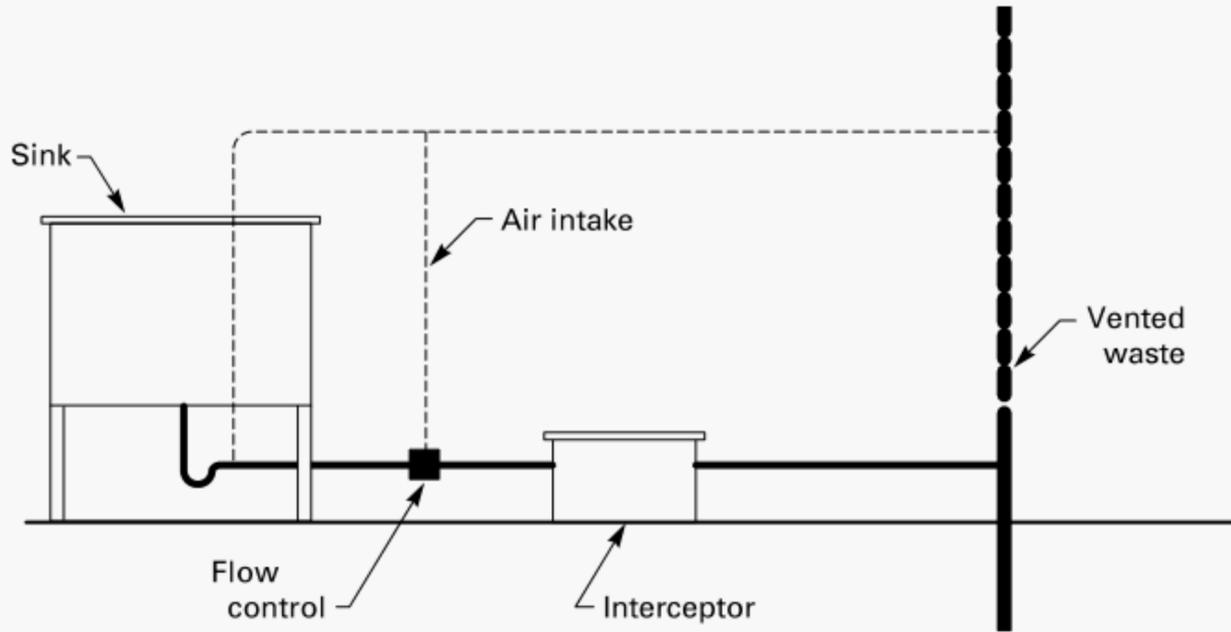


Figure 5 Grease Interceptor Serving Dishwasher — Flow Control Air Intake Intersects Vent

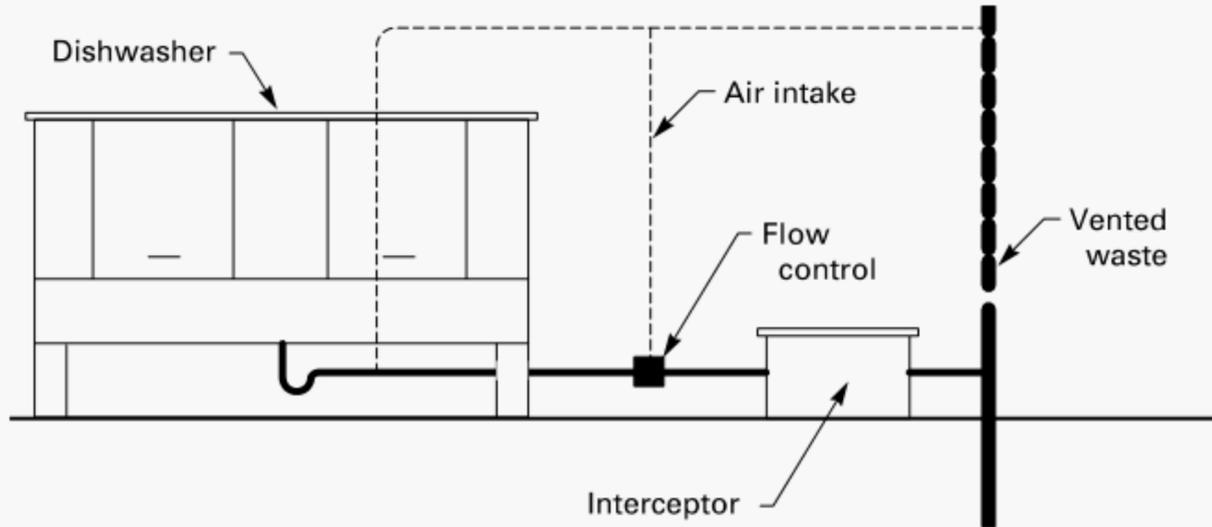


Figure 6 Grease Interceptor Serving Two Individually Trapped and Vented Sinks — Flow Control Air Intake Intersects Vent

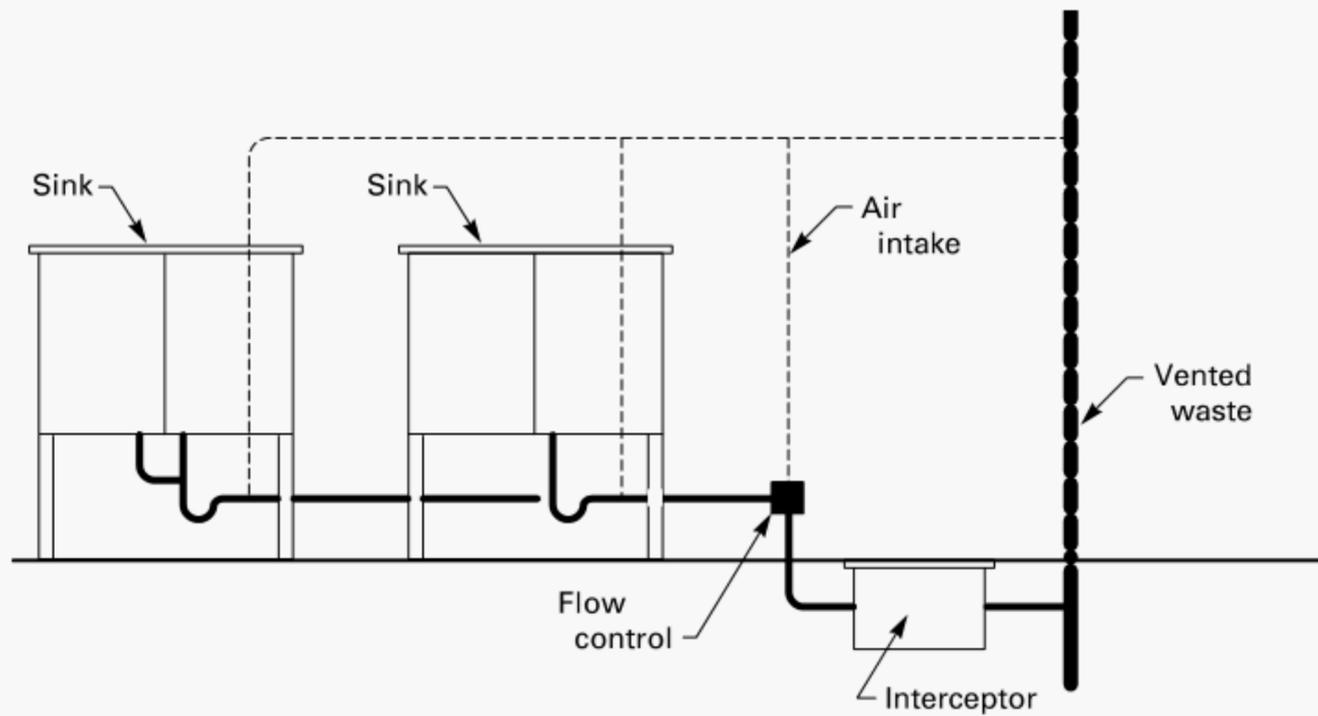
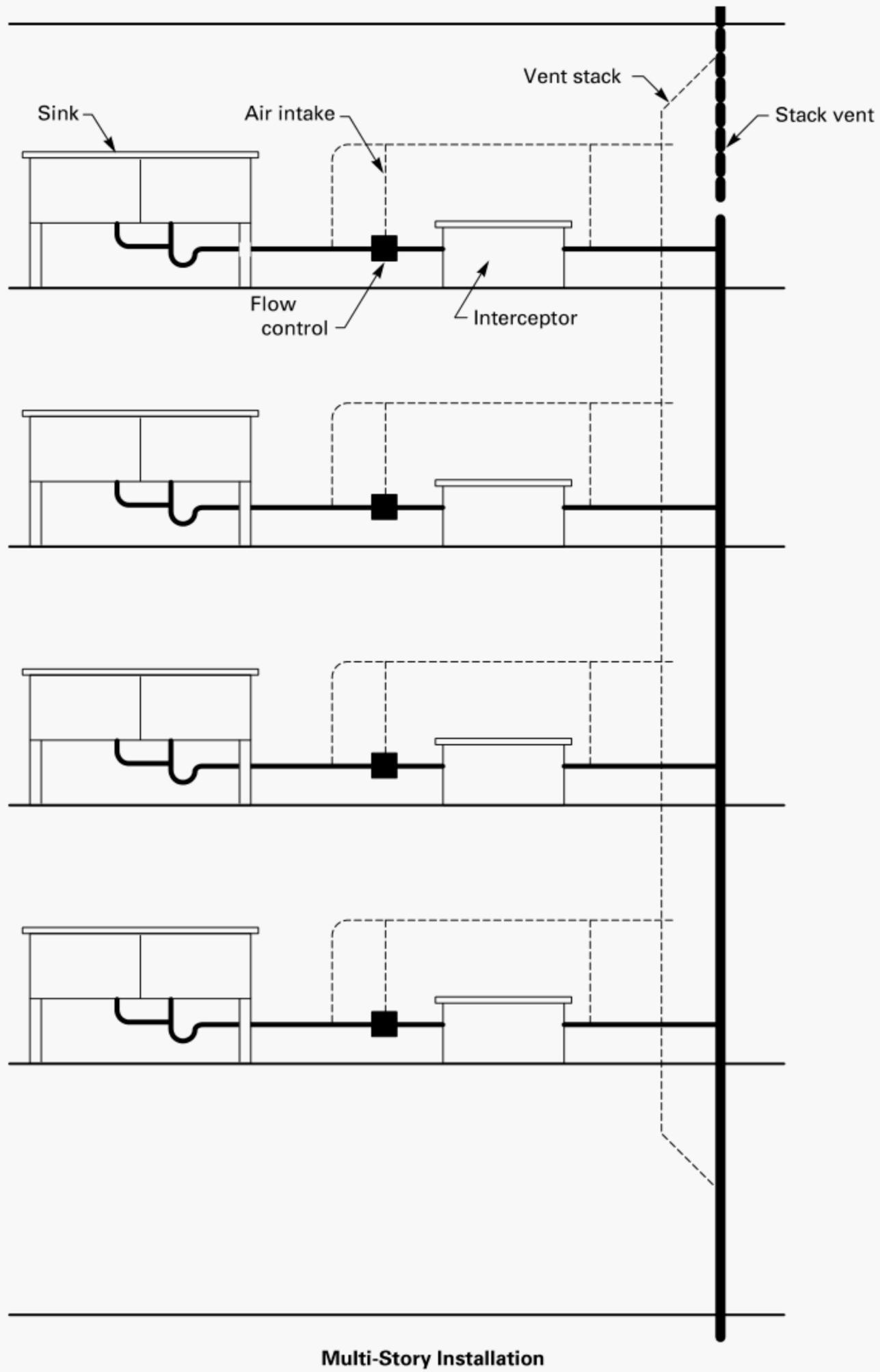


Figure 7 Grease Interceptor Serving Trapped and Vented Sinks — Flow Control Air Intake Intersects Vent



NONMANDATORY APPENDIX A MAINTENANCE

A-1 GENERAL CONSIDERATIONS

To obtain optimum operating efficiency of a properly sized and installed grease interceptor, a regular schedule of maintenance shall be adhered to. All grease interceptors are furnished with manufacturer's operating and maintenance instructions, which shall be followed to insure efficient satisfactory operation.

A-2 CLEANING

All grease interceptors shall be cleaned regularly. The frequency of grease removal is dependent upon the capacity of the interceptor and the quantity of grease in the

wastewater. Grease removal intervals may therefore vary from once a week daily to once in several weeks.

A-3 DISPOSITION OF INTERCEPTED MATERIALS

Grease and other waste matter that has been removed from the interceptor shall not be introduced into any drain, sewer, or natural body of water. This waste matter shall be placed in proper containers for disposal.

INTENTIONALLY LEFT BLANK

A112 ASME STANDARDS RELATED TO PLUMBING

A112.1.2-2012 (R2017)	Air Gaps in Plumbing Systems (For Plumbing Fixtures and Water-Connected Receptors)
A112.1.3-2000 (R2015)	Air Gap Fittings for Use With Plumbing Fixtures, Appliances, and Appurtenances
A112.3.1-2007 (R2017)	Stainless Steel Drainage Systems for Sanitary, DWV, Storm, and Vacuum Applications, Above- and Below-Ground
A112.3.4-2000 (R2004)	Macerating Toilet Systems and Related Components
A112.4.1-2009 (R2014)	Water Heater Relief Valve Drain Tubes
A112.4.2-2009 (R2014)	Water Closet Personal Hygiene Devices
A112.4.3-1999 (R2015)	Plastic Fittings for Connecting Water Closets to the Sanitary Drainage System
A112.4.4-2017	Plastic Push-Fit Drain, Waste, and Vent (DWV) Fittings
A112.4.7-2002 (R2008)	Point of Use and Branch Water Submetering Systems
A112.4.14-2004 (R2010)	Manually Operated, Quarter-Turn Shutoff Valves for Use in Plumbing Systems
A112.6.1M-1997 (R2017)	Floor-Affixed Supports for Off-the-Floor Plumbing Fixtures for Public Use
A112.6.2-2017	Framing-Affixed Supports (Carriers) for Off-the-Floor Plumbing Fixtures
A112.6.3-2016	Floor and Trench Drains
A112.6.4-2003 (R2008)	Roof, Deck, and Balcony Drains
A112.6.7-2011 (R2015)	Sanitary Floor Sinks
A112.6.9-2010 (R2015)	Siphonic Roof Drains
A112.14.1-2003 (R2017)	Backwater Valves
A112.14.3-2018	Hydromechanical Grease Interceptors
A112.14.4-2001 (R2017)	Grease Removal Devices
A112.14.6-2010 (R2015)	FOG (Fats, Oils, and Greases) Disposal Systems
A112.18.1-2011/CSA B125.1-11 (R2017)	Plumbing Supply Fittings
A112.18.2-2011/CSA B125.2-11	Plumbing Waste Fittings
A112.18.3-2002 (R2017)	Performance Requirements for Backflow Protection Devices and Systems in Plumbing Fixture Fittings
A112.18.6-2009/CSA B125.6-09 (R2014)	Flexible Water Connectors
A112.18.8-2009 (R2014)	In-Line Sanitary Waste Valves for Plumbing Drainage Systems
A112.18.9-2011 (R2017)	Protectors/Insulators for Exposed Waste and Supplies on Accessible Fixtures
A112.19.1-2008/CSA B45.2-08	Enamelled Cast Iron and Enamelled Steel Plumbing Fixtures
A112.19.2-2008/CSA B45.1-08	Ceramic Plumbing Fixtures
A112.19.3-2008/CSA B45.4-08	Stainless Steel Plumbing Fixtures
A112.19.4M-1994 (R2004)	Porcelain Enameled Formed Steel Plumbing Fixtures
A112.19.5/CSA B45.15-2011 (R2016)	Flush Valves and Spuds for Water Closets, Urinals, and Tanks
A112.19.6-1995	Hydraulic Performance Requirements for Water Closets and Urinals
A112.19.7/CSA B45.10-2012 (R2017)	Hydromassage Bathtub Appliances
A112.19.9M-1991 (R2008)	Non-Vitreous Ceramic Plumbing Fixtures
A112.19.10-2017	Retrofit Dual Flush Devices for Water Closets
A112.19.12-2014	Wall Mounted, Pedestal Mounted, Adjustable, Elevating, Tilting, and Pivoting Lavatory, Sink, and Shampoo Bowl Carrier Systems and Drain Waste Systems
A112.19.13-2001 (R2007)	Electrohydraulic Water Closets
A112.19.14-2013 (R2018)	Six-Liter Water Closets Equipped With a Dual Flushing Device
A112.19.15-2012 (R2017)	Bathtubs/Whirlpool Bathtubs With Pressure Sealed Doors
A112.19.17-2010 (R2018)	Manufactured Safety Vacuum Release Systems (SVRS) for Residential and Commercial Swimming Pool, Spa, Hot Tub, and Wading Pool Suction Systems
A112.19.19-2006 (R2011)	Vitreous China Nonwater Urinals
A112.20.1-2004	Qualification of Installers of High Purity Piping Systems
A112.20.2-2004	Qualification of Installers of Firestop Systems and Devices for Piping Systems

A112.21.3M-1985 (R2017)

Hydrants for Utility and Maintenance Use

A112.36.2M-1991 (R2017)

Cleanouts

The ASME Publications Catalog shows a complete list of all the Standards published by the Society. For a complimentary catalog, or the latest information about our publications, call 1-800-THE-ASME (1-800-843-2763).

ASME Services

ASME is committed to developing and delivering technical information. At ASME's Customer Care, we make every effort to answer your questions and expedite your orders. Our representatives are ready to assist you in the following areas:

ASME Press	Member Services & Benefits	Public Information
<i>Codes & Standards</i>	Other ASME Programs	Self-Study Courses
Credit Card Orders	Payment Inquiries	Shipping Information
IMEchE Publications	Professional Development	Subscriptions/Journals/Magazines
Meetings & Conferences	Short Courses	Symposia Volumes
Member Dues Status	Publications	Technical Papers

How can you reach us? It's easier than ever!

There are four options for making inquiries* or placing orders. Simply mail, phone, fax, or E-mail us and a Customer Care representative will handle your request.

<i>Mail</i>	<i>Call Toll Free</i>	<i>Fax—24 hours</i>	<i>E-Mail—24 hours</i>
ASME	US & Canada: 800-THE-ASME	973-882-1717	customercare@asme.org
150 Clove Road, 6th Floor	(800-843-2763)	973-882-5155	
Little Falls, New Jersey	Mexico: 95-800-THE-ASME		
07424-2139	(95-800-843-2763)		

*Customer Care staff are not permitted to answer inquiries about the technical content of this code or standard. Information as to whether or not technical inquiries are issued to this code or standard is shown on the copyright page. All technical inquiries must be submitted in writing to the staff secretary. Additional procedures for inquiries may be listed within.

ASME A112.14.3-2018

ISBN 978-0-7918-7181-2



9 780791 871812



J 1 5 8 1 Q