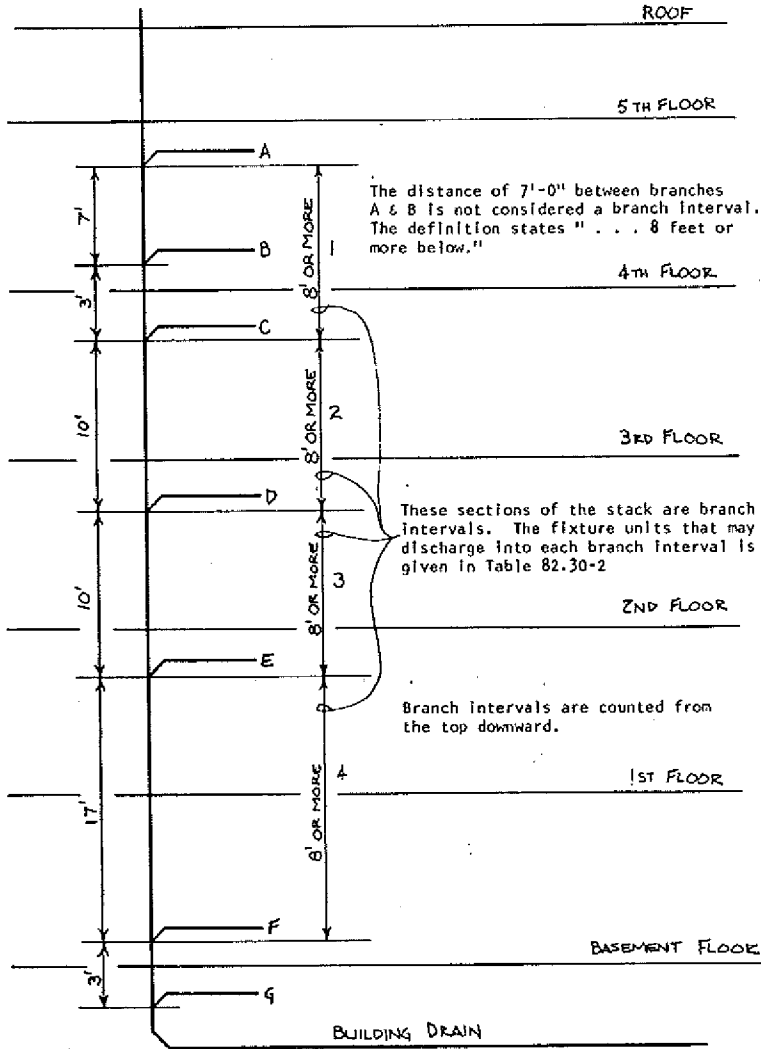


ILHR 82

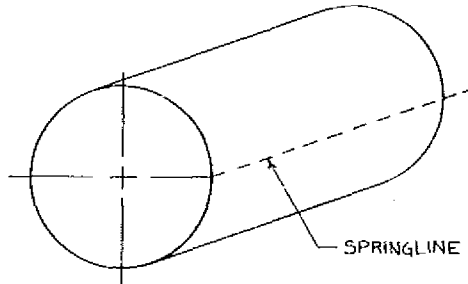
APPENDIX

The material contained in this appendix is for clarification purposes only. The notes, illustrations, etc., are numbered to correspond to the number of the rule as it appears in the text of the code.

A-82.11 (29) Branch Intervals.



A-82.11 (140) Springline of pipe.



On a round pipe the springline is along the horizontal centerline.

A-82.20 and A-82.21 FORMS. The following forms (D.I.H.R. S80-6154, 6677, 6099, 6690, 6212, 6479, 6192, 6114, 6155, and 7278) are used by the department in administration of this administrative code. Copies of these forms are available from the Division of Safety and Buildings, Plumbing Bureau, P.O. Box 7969, Madison, Wisconsin 53707.

INDUSTRY, LABOR AND HUMAN RELATIONS 165
ILHR 82

A-82.20-82.21 FORMS. The following forms are referred to in ss. ILHR 82.20 and 82.21. Copies of the forms are available from the Bureau of Plumbing, P.O. Box 7969, Madison, Wisconsin 53707.



GENERAL PLUMBING PLAN APPROVAL APPLICATION

STATE OF WISCONSIN DILHR DIVISION OF SAFETY & BUILDINGS BUREAU OF PLUMBING 201 E. Washington Ave., Rm. 111 P.O. Box 7269, Madison, WI 53707 608.266.3615

INSTRUCTIONS: Fill in all applicable data. This form is required with each general plumbing plan submitted. Examination fees, as determined on this form, shall accompany plan submittal. Data required in submittal is described on back side of this form.

1. PROJECT INFORMATION (Type or print clearly) Date Submitted: Name of Submitting Party (Plan's returned to same): Project Name: Street & No.: Project Location - Street & No. or Legal Description: City, State, Zip: City, Village, Town, County: Telephone No. (include area code): Designer (Plumbing): Telephone No. (include area code): 2. PLANS FOR: [] New Building [] Addition [] Remodel: [] Revision to plumbing plan No. 2a. Fee For Revisions - \$20.00: Owner Name: Telephone No. (include area code): Street & No.: City, State, Zip: 3. THIS APPLICATION IS FOR: Check Appropriate Box(es): 3a. [] Sanitary Building Sewer, Drain, Waste & Vent: 3b. [] Sanitary Building Sewer - Only: 3c. [] Building Water Distribution System: 3d. [] Building Water Service Only: 3e. [] Building Storm Sewer and Drainage System: 3f. [] Private Interceptor Man Sewer: 3g. [] Private Water Main: 3h. [] Controlled Roof Drainage System: 3i. [] Partition for Variance (must be submitted on form # DILHR 580-6890): 3j. [] Reduced Pressure Zone Principle: 3k. [] Type Backflow Preventer: 3l. [] Turf Sprinkler System: 3m. [] Mobile Home Parks: 3n. [] Priority Plan Review (Walk-Through): 4. FEE SUBMITTED: FOR OFFICE USE ONLY: SUBTOTAL: TOTAL FEE:

5. ENCLOSURES: [] Enclosed [] Under separate cover, please find the following: [] Two [] Three sets of plans and [] One set of Specifications: Check Number: In the amount of: Written by:

6. REDUCED PRESSURE ZONE TYPE BACKFLOW PREVENTER DATA: Indicate Valve Size, Manufacturer, Model no. and Location in Building (Room No., etc.) for each valve: 1. 2. 3. 4.

Use Additional Sheet If Needed: DILHR 580-6154 (R. 3-84) Note: Fees pursuant to Wis. Adm. Code, Chapter Ind. 89 may be subject to change annually Effective July 1, 1984

7. PLAN SUBMITTAL SHALL INCLUDE THE FOLLOWING IN ACCORD WITH CODE SECTION ILHR 82.25.

- A. One complete set of plans and specifications with one additional copy of plumbing drawings.
- B. Plans shall include:
1. Plot plan showing sewer and water.
 2. Floor plan showing building drain, water distribution mains and all fixtures and equipment to be installed.
 3. Riser diagrams of waste, vent and water distribution, with pipe sizes and fixture unit loads shown.
 4. Complete water calculations in accord with s. ILHR 82.13(4)(b).
 5. Remodeling or additions shall include existing loads.
 6. Plans including common ownership plumbing systems must be accompanied by form #DILHR 880-7066.

8. EXAMINATION FEES FOR ADDITIONS AND REMODELLING.

When new or relocated fixtures or both are connected to the existing piping inside a building the fee shall be determined in accordance with the following procedures:

A. *'Sanitary Building Sewer, Drain, Waste and Vent.'*

1. Total all of the drainage fixture units that are being added or relocated.
 2. Refer to s. ILHR 82.03(3) Table 2, Wis. Adm. Code, and determine the horizontal drain size that would be required if all new or relocated fixtures discharged through one pipe.
 3. Determine fee based on Table 69.23-1.1.
- Note: Disregard the asterisk limitation regarding 6 or 8 fixture unit pipe size. This pipe size is used for determining the fee only and does not necessarily mean this pipe size is used in actual design or installation.

B. *'Building Water Distribution Systems.'*

1. Total all of the water supply fixture units that are being added or relocated, using s. ILHR 82.13 Table 13, Wis. Adm. Code, and convert to gallons per minute (GPM) in accordance with s. ILHR 82.13 Table 14, Wis. Adm. Code.
2. The fees shall be determined in accordance with the GPM demand of the new or relocated fixtures as specified in Table 69.23-2.

Table 69.23-2

GPM	FEE
6	\$10.00
12	\$15.00
21	\$20.00
31	\$25.00
46	\$30.00
77	\$40.00
119	\$50.00
170	\$60.00
298	\$80.00

C. *'Building Storm Sewer and Drainage System.'*

1. Total all of the roof area that the new or relocated roof drains serve. For added or relocated clear water drains inside the building receiving continuous or semi-continuous discharge into the building storm drain, each gallon per minute (GPM) of discharge shall be computed at 76 square feet of roof area.
2. Refer to s. ILHR 82.12 Table 11, Wis. Adm. Code, the column for "4" pitch, and determine the horizontal drain size that would be required if all new or relocated fixtures discharged through one pipe. Use this pipe size for determining the fee.
3. Determine the fee based on Table 69.23-1.5.

SPD 6577 (1-84) (P.5 100)

Detach And Return Upper Portion Of This Form With Any Return Correspondence



STATE OF WISCONSIN ILHR DIVISION OF SAFETY & BUILDINGS BUREAU OF PLUMBING 201 E. WASHINGTON AVE. RM 141 P.O. BOX 7969 MADISON, WI 53707 608-266-3815

DATE: [] PROJECT: [] PLAN ID. # []

DETACH HERE

PROJECT NAME _____ PLAN ID. # _____

This is to acknowledge receipt of your plans and specifications for the above indicated project.

Preliminary review indicates the required fee is \$ _____ Fee received is \$ _____

- Underpayment, Please submit additional fee.
Plans accepted for review.
No fee has been remitted. Plans submitted with no fees will be held in abeyance.
Overpayment. Refund forthcoming.
Plans not returned.
Additional information required. SEE BELOW.

- I. Plan Submission
One complete set of plans and specifications with additional copy of plumbing drawings.
One additional copy of plumbing drawings submitted.
Plans shall be sealed or stamped.
Additional information requested shall be sealed, stamped or signed.
Plans not clear, legible or permanent.
Common ownership agreement.
Capacity of pumps.
Capacity of storage tank.
Method of draining system.
Provide riser, details and isometric diagrams.
Indicate method of backflow protection.
IV. Reduced Pressure Zone - Type Backflow Preventer
Valve size, model number and manufacturer.
Elevation and location of valve in building.
Detailed piping diagrams.
Flow rate.
Location of drain to receive discharge from device.
Signed service agreement between owner and certified tester.
V. Private Interceptor Main Sewer (sanitary and/or storm)
Materials and specifications.
Flow calculations.
Elevation of sewer and manhole flow lines.
Finish grade contours or profile of system.
VI. Sewage Grinder Pumps
Manufacturer and/or model number of pump and/or basin.
Elevation of building drain and main sewer.
Location of grinder pump.
Relative location to any nearby water line.
Cross section of pump showing pump(s).
VII. Pre-Fabricated Units
Model number or specific name of unit and/or pipe, tee.
Manufacturer's catalog of waste and water pipe and fittings with waste fitting radii listed.
Detailed waste and water piping diagrams identifying every fitting with it's manufacturer's I.D. number.



PLAN APPROVAL

- General Plumbing Plans
- Private Sewage Plans

Safety and Buildings Division
 Bureau of Plumbing
 P.O. Box 7969
 Madison, WI 53707
 Telephone: 608/266-1815

OFFICE USE ONLY
Plan Identification No.
Gallons Per Day

PRIORITY PLAN REVIEW ONLY
Plan Review
\$
Fee/Don For Modification
\$

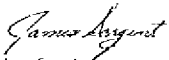
Project Name		Project Location - Street No. or Legal Description	
City	Village	Town of	County

SAMPLE

The plumbing plans and specifications for this project have been reviewed for compliance with applicable code requirements. This approval is based on Chapter 145, Wisconsin Statutes and the Wisconsin Administrative Code. The plans are stamped "conditionally approved". This approval is contingent upon compliance with any stipulations shown on the plans. All items that are noted must be corrected. All permits required by the city, village, township or county shall be obtained prior to construction. The licensed plumber responsible for the installation shall keep one set of plans with the department's approval stamp at the construction site. The installer shall notify the appropriate inspector when inspections can be made.

- FOR GENERAL PLUMBING PLANS:**
 This approval will expire two years from the date approved below. If construction has not commenced before the expiration date, new plan approval must be obtained.
- FOR PRIVATE SEWAGE PLANS:**
 This approval will expire two years from the date approved below or if a sanitary permit is obtained it will expire the day the initial sanitary permit expires.

Comments:

By:

 James Sargent
 Bureau Director

If Questions Contact →	Plans Approved By:	Date Approved:
------------------------	--------------------	----------------

- cc: OWS DPS HR & Res. Sec. Section
 County Local Pl. Utilities/Need Analysis Section
 LVS/SWMP Plumber Department of Agriculture
 Other Other

DLHR 510 (09/81) R. 01/84

Petition for Modification of an Administrative Rule PLUMBING FEE \$ _____	WISCONSIN DEPARTMENT OF INDUSTRY, LABOR AND HUMAN RELATIONS DIVISION OF SAFETY & BUILDINGS P.O. BOX 7969, MADISON, WI 53707	OFFICE USE ONLY
		Petition No. E.No. ID No.

Name of Owner	Building Occupancy or Use	TYPE, Architect or Engineering Firm or Master Plumber
Company	Tenant Name, if any	
Street & No.	Building Location, Street & No.	Street & No.
City State & Zip	City County	City State & Zip
Phone	Plan Number (if known)	Floor

WISCONSIN ADMINISTRATIVE RULE BEING PETITIONED

1. Rule _____ of the Wisconsin Administrative code cannot be entirely satisfied due to the following reasons:

2. In lieu of complying exactly with the rule, the _____ alternative is proposed as a means of providing an equivalent degree of safety or health:

3. Supporting arguments (if necessary, use back side of form to provide a detailed drawing):

SAMPLE

DETAILED PLAN OR DRAWING																				
SAMPLE																				
PLUMBING INSPECTOR AUTHORIZATION		Ru# _____ being petitioned																		
On-site inspection conducted (date): _____																				
I, _____ and certify the information recorded on this request form is accurate and correct to the best of my knowledge and belief.																				
Comments (plus costs): _____																				
VERIFICATION BY OWNER—PETITION IS VALID ONLY IF NOTARIZED FOR INFORMATION CONTACT THE DEPARTMENT AT (608) 265-3415																				
_____, being duly sworn, says he is petitioner herein, thus he has read the foregoing petition and that the same is true, as he verily believes.																				
Signature of Owner	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th colspan="3" style="text-align: left; padding: 2px;">OFFICE USE ONLY</th> </tr> <tr> <td style="width: 33%; padding: 2px;">Date Received</td> <td style="width: 33%; padding: 2px;">Amount Paid</td> <td style="width: 33%; padding: 2px;">Receipt No.</td> </tr> <tr> <td style="height: 20px;"></td> <td></td> <td></td> </tr> <tr> <th colspan="3" style="text-align: left; padding: 2px;">Department Action</th> </tr> <tr> <td style="padding: 2px;">Administrator</td> <td colspan="2" style="padding: 2px;">Date</td> </tr> <tr> <td style="height: 20px;"></td> <td colspan="2"></td> </tr> </table>		OFFICE USE ONLY			Date Received	Amount Paid	Receipt No.				Department Action			Administrator	Date				
OFFICE USE ONLY																				
Date Received	Amount Paid	Receipt No.																		
Department Action																				
Administrator	Date																			
Subscribed and sworn to me this _____ day of 19____.	_____ County, Wisconsin.																			
Notary Public	My commission expires: _____																			



State of Wisconsin \ Department of Industry, Labor and Human Relations

DATE: _____

SAFETY & BUILDINGS DIVISION

Bureau of Plumbing
201 East Washington Avenue
P.O. Box 7969
Madison, Wisconsin 53707

Plan Identification No. _____

Re: _____

SAMPLE

Plans and specifications have been received and assigned the above plan identification number. Preliminary review of these plans indicate the plans have not been sealed or stamped in accord with section ILHR 82.20 or s. ILHR 83.08 (2) (a), Wisconsin Administrative Code.

Rather than return the plans at this time, please have the party preparing the plans sign the affidavit below and return to this office.

AFFIDAVIT

I, the undersigned, hereby certify that the plans and specifications submitted and assigned the above plan identification number were prepared by or under my direction and control.

NAME _____
(Type or print)

REGISTRATION NUMBER _____ OR MASTER PLUMBER LICENSE NO. _____

ADDRESS _____

SIGNATURE _____ DATE _____

DILHR SBD-6212 (R.11/83)

WATER CALCULATION WORKSHEET

Information Needed for Water Service Sizing

- 1) _____ Demand of building in G.P.M.
- 2) _____ Low pressure at main in street (or at external pressure tank).
- 3) _____ Difference in elevation. Main to meter (or external pressure tank to building control valve).
- 4) _____ Size of water meter (if applicable).
- 5) _____ Developed length from main to meter (or external pressure tank to building control valve).

Your First Goal is to Find the Available Pressure After the Water Meter (or at building control valve). To obtain this, you must

- 1) _____ Find pressure loss due to friction in water service.
Example: Demand of the building is 20 G.P.M. and we want to use type "K" copper for the water service. We think "1" service is necessary. Look at "K" copper table and follow 20 G.P.M. horizontally to the 1" line. Look straight down to find pressure loss per 100' which is approximately 17 p.s.i. On this building water service is 120' long. The formula for finding the pressure loss thru service is:
$$\frac{17}{100} = \frac{X}{120}$$
 X = Pressure loss thru service. You must cross multiply and divide, $17 \times 120 \div 100 = 20$ p.s.i. loss due to friction.
- 2) _____ Find pressure loss due to elevation, main to meter (or external pressure tank to building control valve) multiply difference in elevation by .434.
- 3) _____ Find pressure loss due to meter. (from manufacturer, AWWA, or Water Distribution Manual).
- 4) _____ Subtract the loss due to friction (Step 1), loss due to elevation (Step 2), and loss due to meter (Step 3) from the low street pressure (or low pressure at external pressure tank). This gives you available pressure after the water meter (or at the building control valve).

Information Needed for Water Distribution Sizing

Using the following formula, find permissible uniform pressure loss for friction (p.s.i./100' of pipe)

$$A = \frac{B - (C + D + E) \times 100}{F}$$

WHERE:

- A. _____ Permissible uniform pressure loss for friction. (p.s.i./100' of pipe).
- B. _____ Available pressure after water meter (at the building control valve or low pressure at internal pressure tank).
- C. _____ Pressure needed at controlling fixture.
- D. _____ Difference in elevation between water meter (building control valve or internal pressure tank) and controlling fixture in feet _____ x .434.
- E. _____ Pressure loss due to heater (3 p.s.i.), softener, etc.
- F. _____ Total length between water meter (building control valve or internal pressure tank) and controlling fixture in feet _____ x 1.5.

With permissible uniform pressure loss, go to applicable table for distribution sizing.

DILHR-SBD-6479 (R. 11/83)

PLB-1

INSPECTION REPORT

Wisconsin Department of Industry,
Labor & Human Relations
Safety & Buildings Division
Bureau of Plumbing

Name of Premises		Date	Plan I.D. No.
Street	City	County	Sanitary Permit #
Master Plumber & Firm Name	Address		
Journeyman Plumber	Address		
Owner	Address		

SAMPLE

Discussed with	Signature
----------------	-----------

() See Attached.

DILHR-SBD-6192 (R. 11/83)

Signature of Dist. Plumbing Sup. On-Site Waste Specialist



Bureau of Plumbing
201 East Washington Avenue
P.O. Box 7969
Madison, WI 53707

ATTENTION

NOTICE OF INSTALLATION

The enclosed plans for the reduced pressure zone principle type backflow preventer(s) have been approved by the department. Before the unit is installed, this form must be completed by the plumber making the installation. Return completed form to the Bureau of Plumbing, P.O. Box 7969, Madison, Wisconsin 53707. FAILURE TO DO SO CANCELS THE APPROVAL FOR INSTALLATION.

PLAN IDENTIFICATION NO: _____ DATE OF INSTALLATION: _____

NAME AND ADDRESS OF PROJECT: _____

MAKE	SIZE	SERIAL NUMBER	LOCATION IN BUILDING

SAMPLE

NAME AND ADDRESS OF INSTALLER: _____

DILHR S80-7278 (H.05/84)

(Reduced Pressure Zone Principle Type Backflow Preventers)
 FILL OUT THIS FORM COMPLETELY

DEPARTMENT OF INDUSTRY, LABOR AND HUMAN RELATIONS
 Division of Safety and Buildings
 Bureau of Plumbing

MONTH _____ YEAR _____

MANUFACTURER _____ MODEL _____ SIZE _____ SERIAL # _____

NAME OF PROJECT _____ COUNTY _____

ADDRESS _____
 (Street) (City) (Zip)

LOCATION OF DEVICE
 IN BUILDING _____

MONTHLY REPORT	EVIDENCE OF LEAKAGE DIFFERENTIAL RELIEF VALVE		WEEKLY INSPECTION LOG
	IN OPERATION	LEAKAGE	
1st WEEK	<input type="checkbox"/> YES <input type="checkbox"/> NO REPAIRS <input type="checkbox"/> YES <input type="checkbox"/> NO	<input type="checkbox"/> YES <input type="checkbox"/> NO REPAIRS <input type="checkbox"/> YES <input type="checkbox"/> NO	INSPECTION BY _____ DATE _____ REPAIRED BY _____
2nd WEEK	<input type="checkbox"/> YES <input type="checkbox"/> NO REPAIRS <input type="checkbox"/> YES <input type="checkbox"/> NO	<input type="checkbox"/> YES <input type="checkbox"/> NO REPAIRS <input type="checkbox"/> YES <input type="checkbox"/> NO	INSPECTION BY _____ DATE _____ REPAIRED BY _____
3rd WEEK	<input type="checkbox"/> YES <input type="checkbox"/> NO REPAIRS <input type="checkbox"/> YES <input type="checkbox"/> NO	<input type="checkbox"/> YES <input type="checkbox"/> NO REPAIRS <input type="checkbox"/> YES <input type="checkbox"/> NO	INSPECTION BY _____ DATE _____ REPAIRED BY _____
4th WEEK	<input type="checkbox"/> YES <input type="checkbox"/> NO REPAIRS <input type="checkbox"/> YES <input type="checkbox"/> NO	<input type="checkbox"/> YES <input type="checkbox"/> NO REPAIRS <input type="checkbox"/> YES <input type="checkbox"/> NO	INSPECTION BY _____ DATE _____ REPAIRED BY _____
5th WEEK	<input type="checkbox"/> YES <input type="checkbox"/> NO REPAIRS <input type="checkbox"/> YES <input type="checkbox"/> NO	<input type="checkbox"/> YES <input type="checkbox"/> NO REPAIRS <input type="checkbox"/> YES <input type="checkbox"/> NO	INSPECTION BY _____ DATE _____ REPAIRED BY _____

THE ABOVE REPORT IS CERTIFIED TO BE TRUE
 BY _____ REPRESENTING (CO.) _____
 DATE _____ RETURN ADDRESS: NAME _____
 STREET _____
 CITY _____ STATE _____ ZIP _____

SEE REVERSE

DILHR SBD-6114 (R. 03/82)

INDUSTRY, LABOR AND HUMAN RELATIONS 177
 ILHR 82

FILL OUT THIS FORM COMPLETELY AND RETURN TO:
 DEPARTMENT OF INDUSTRY, LABOR AND HUMAN RELATIONS
 DIVISION OF SAFETY AND BUILDINGS, BUREAU OF PLUMBING
 P.O. BOX 7969, MADISON, VT 53707

REDUCED PRESSURE BACKFLOW PREVENTER ANNUAL TEST REPORT

MANUFACTURER _____ MODEL _____ SIZE _____ SERIAL NUMBER _____
 NAME OF PROJECT _____ COUNTY _____
 ADDRESS (street, city, zip) _____
 LOCATION OF DEVICE IN BUILDING _____

	CHECK VALVE #1	CHECK VALVE #2	DIFFERENTIAL PRESSURE RELIEF VALVE	COMMENTS
ANNUAL TEST	1. LEAKED <input type="checkbox"/> 2. CLOSED TIGHT <input type="checkbox"/>	1. LEAKED <input type="checkbox"/> 2. CLOSED TIGHT <input type="checkbox"/>	OPENED AT _____ LBS. REDUCED PRESSURE. DID NOT OPEN <input type="checkbox"/>	
REPAIRS	CLEANED _____ REPLACED: DISC _____ SPRING _____ GUIDE _____ PIN RETAINER _____ HINGE PIN _____ SEAT _____ DIAPHRAGM _____ OTHER, DESCRIBE _____	CLEANED _____ REPLACED: DISC _____ SPRING _____ GUIDE _____ PIN RETAINER _____ HINGE PIN _____ SEAT _____ DIAPHRAGM _____ OTHER, DESCRIBE _____	CLEANED _____ REPLACED: DISC _____ UPPER _____ LOWER _____ SPRING _____ DIAPHRAGM: LARGE: _____ UPPER _____ LOWER _____ SMALL _____ SEAT: _____ UPPER _____ LOWER _____ SPACER: _____ LOWER _____ OTHER, DESCRIBE _____	
FINAL TEST	CLOSED TIGHT <input type="checkbox"/>	CLOSED TIGHT <input type="checkbox"/>	OPENED AT _____ LBS. REDUCED PRESSURE	

THE ABOVE REPORT IS CERTIFIED TO BE TRUE. CERTIFICATION # _____

INITIAL TEST BY _____ REPRESENTING (CO.) _____ DATE:

MO.	DAY	YR.

REPAIRED BY _____ DATE: _____

FINAL TEST BY _____ REPRESENTING (CO.) _____ DATE:

MO.	DAY	YR.

SBD-6115 (R.06/82)

ILHR 82

A-82.20 (2) AGENT MUNICIPALITIES. The department has designated to the following municipalities, the authority to review and approve plumbing plans and specifications for those plumbing installations to be located within the municipality's boundary limits and which require approval under s. ILHR 82.20 (1) (b).

Appleton	Kenosha	Muskego
Beloit	Madison	Oconomowoc
Eau Claire	Manitowoc	Oshkosh
Green Bay	Mequon	Racine
Greenfield	Milwaukee	Two Rivers

A-82.20 (4) The following is a list of Designated Management Agencies and the counties they serve.

DESIGNATED MANAGEMENT AGENCY:	COUNTIES SERVED
Harlan P. Kiesow, Clearing House Review Coordinator East Central Wisconsin Regional Planning Commission 140 Main Street Menasha, WI 54952 (414) 729-1106	Menominee, Shawano, Waupaca, Outagamie, Waushara, Marquette Green Lake, Winnebago, Calumet, Fond du Lac
William N. Lane Director, Environmental Resources Planning Dane County Regional Planning Commission Room 523, City County Building Madison, WI 53709 (608) 266-4417	Dane
Patrick M. Valle, Senior Planner Brown County Planning Commission Room 608, City Hall 100 North Jefferson Street Green Bay, WI 54301 (414) 497-3633	Brown
Kurt W. Bauer, Executive Director Southeastern Wisconsin Regional Planning Commission 916 North East Avenue P.O. Box 769 Waukesha, WI 53187-1607 (414) 547-6721	Washington, Ozaukee Waukesha, Milwaukee Walworth, Racine, Kenosha

The following is a list of Sewer Service Area Plans approved by the Department of Natural Resources. For each Sewer Service Area Plan the approved Planning Agency and affected communities are shown.

CONTACTS - SEWER SERVICE AREA PLANS	AFFECTED COMMUNITIES
<u>Eau Claire - Chippewa Falls</u>	
Kevin Jones, Director West Central Wisconsin Regional Planning Commission 124 1/2 Graham Avenue Eau Claire, WI 54701 (715) 836-2918	City of Eau Claire City of Altoona City of Chippewa Falls Town of Hallie Town of Seymour Town of Union Town of Washington
<u>Hudson</u>	
Richard Thompson, County Planner St. Croix County Planning Office Courthouse Hudson, WI 54016 (715) 386-5581	City of Hudson Town of Hudson Town of St. Joseph Village of North Hudson Town of Troy

Stevens Point

Bill Burke or Chuck Kell
Portage County Planning Department
County - City Building
1516 Church Street
Stevens Point, WI 54481
(715) 346-1334

City of Stevens Point
Village of Whiting
Village of Plover
Village of Park Ridge
Town of Hull
Town of Plover
Town of Linwood

Wausau

Joseph Pribanich
Marathon County Regional Planning
Commission
Courthouse
Forest Street
Wausau, WI 54401
(715) 847-5227

City of Wausau
Village of Rothschild
City of Schofield
Town of Weston
Town of Stettin
Town of Rib Mountain
Town of Kronenwetter

Wisconsin Rapids

Gary Popelka
Office of County Planning
Wood County Courthouse
400 Market Street
Wisconsin Rapids, WI 54494
(715) 421-8466

City of Wisconsin Rapids
Village of Biron
Town of Grand Rapids
Town of Rudolph
Town of Sigel
Town of Seneca
Town of Grant

A-82.20 (8) FEES. The following reprint of s. Ind 69.23 (1) may be used to determine the amount of fee required for general plumbing plan review by the department.

Ind 69.23 Plumbing and private sewage systems. (1) **PLUMBING PLAN EXAMINATION FEES.** (a) *Applicability.* Plan examination fees for preliminary or complete plans shall accompany the plans and specifications when submitted. If the department determines upon review of the plans that inadequate fees were provided, the necessary additional fee shall be provided prior to departmental approval.

(b) *Examination fees.* The plan examination fee shall be determined in accordance with Table 69.23-1.

Table 69.23-1

Type of Review	Fee
1. Sanitary drain and vent system.....	\$ 20.00 per inch diameter of each bldg. sewer
2. Sanitary building sewer only, no drain and vent.....	\$ 10.00 per inch diameter of each bldg. sewer
3. Building water distribution system	\$ 20.00 per inch diameter of each water service
4. Building water service only, no water..... distribution system	\$ 10.00 per inch diameter of each water service
5. Building storm and clear water drain system	\$ 4.00 per inch diameter of each bldg. storm sewer
6. Sanitary private interceptor main sewers, determined on the largest diameter of each interceptor main sewer	\$ 8.00 per inch diameter
7. Private water main	\$ 35.00
8. Controlled roof drainage system, does not..... include building storm sewer	\$ 30.00
9. Reduced pressure zone principle type..... backflow preventer	\$ 35.00
10. Turf sprinkler system.....	\$ 30.00

ILHR 82

11. Mobile home parks:	
1-25 sites.....	\$155.00
26-50 sites.....	\$210.00
51-125 sites.....	\$270.00
Over 125 sites.....	\$335.00
12. Manufactured homes, each model.....	\$250.00

(c) *Examination fees for additions and remodeling.* When new or relocated fixtures or both are connected to the existing piping inside a building the fee shall be determined in accordance with the following procedures:

1. Sanitary building sewer, drain, waste and vent. a. Total all of the drainage fixture units that are being added or relocated.

b. Refer to s. ILHR 82.30 Table 82.30-2, and determine the horizontal drain size that would be required if all new or relocated fixtures discharged through one pipe.

Note: Disregard Note c limitation regarding water closets. This pipe size is used for determining the fee only and does not necessarily mean this pipe size is used in actual design or installation.

c. Determine fee based on Table 69.23-1.

2. Building water distribution system. a. Total all of the water supply fixture units that are being added or relocated, using s. ILHR 82.40 Table 13, and convert to gallons per minute (GPM) in accordance with s. ILHR 82.40 Table 14.

b. The fees shall be determined in accordance with GPM demand of the new or relocated fixtures as specified in Table 69.23-2.

Table 69.23-2

GPM	FEE
6.....	\$10.00
12.....	\$15.00
21.....	\$20.00
31.....	\$25.00
46.....	\$30.00
77.....	\$40.00
119.....	\$50.00
170.....	\$60.00
298.....	\$80.00

3. Building storm sewer and drainage system. a. Total all of the roof area that the new or relocated roof drains serve. For added or relocated clear water drains inside the building receiving continuous or semi-continuous discharge into the building storm drain, each gallon per minute (GPM) of discharge shall be computed as 26 square feet of roof area.

b. Refer to s. ILHR 82.36 Table 82.36-1, the column for 1/4" pitch, and determine the horizontal drain size that would be required if all new or relocated fixtures discharged through one pipe. Use this pipe size for determining the fee.

c. Determine the fee based on Table 69.23-1 5.

(d) *Priority plan review.* An appointment may be made with the department to facilitate the examination of plans in less than the normal processing time. The plans shall comply with the provisions of s. ILHR 82.20. Delivery of the plans for priority plan review shall be made in person. The fee for this type of plan examination shall be determined at twice the normal rate.

(e) *Reproduction fee.* If the correct number of plans or specifications have not been submitted, a minimum reproduction fee of \$7.00 per set shall be charged except that reproductions exceeding \$7.00 per set shall be charged actual costs. Reproduction fees shall be charged to the party submitting the plans.

(f) *Plan approval - additional copies.* Approval for sets of plans in excess of 3 sets shall be provided upon receipt of a fee of \$10.00 plus \$3.50 per plan sheet.

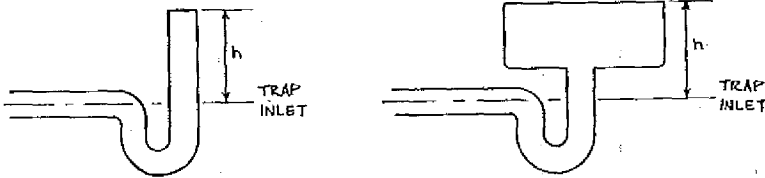
(g) *Revisions.* The fee for revisions to previously examined plans shall be \$20.00 per plan. This fee applies when plans are revised for reasons other than those that were requested by the department.

(h) *Projects without approval.* The fees specified in pars. (b) to (g) shall be doubled for those projects for which the installation of plumbing has started without department approval.

A-82.30 (4) The following table lists the maximum GPM which can be expected to readily flow through a given size trap where the receptor has a height as indicated.

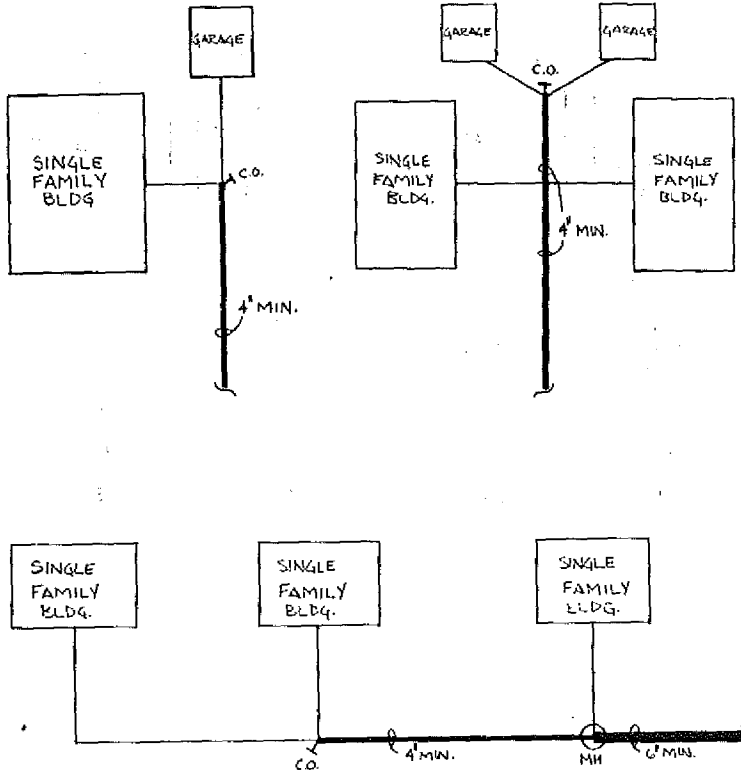
Also listed is a maximum drainage fixture unit load which a given size receptor trap may be expected to adequately receive.

Note: The department recommends an individual 4-inch diameter minimum trap and drain pipe for a commercial type dishwasher.

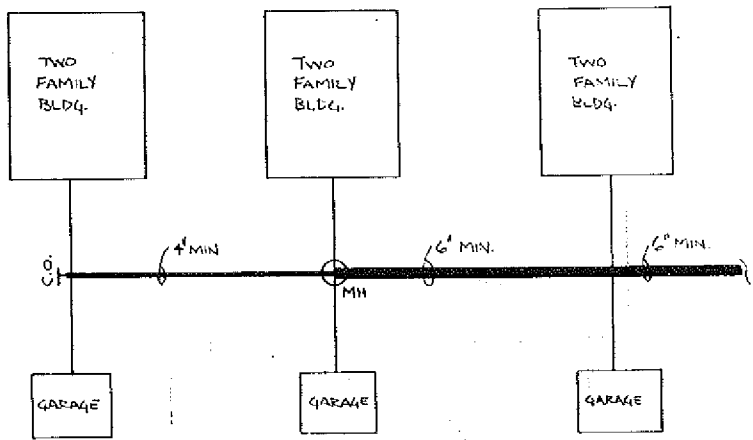
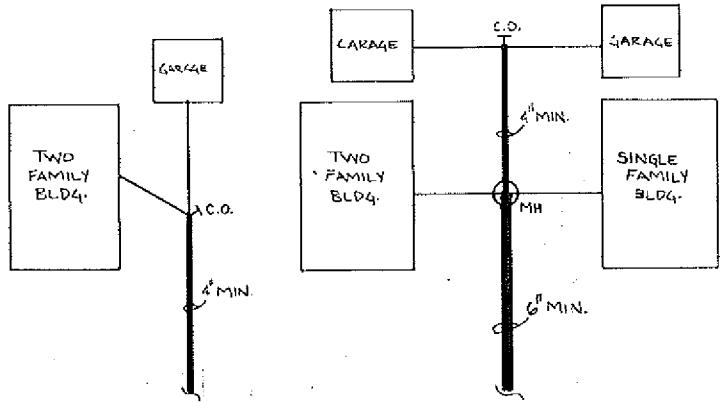


Receptor Trap size	H Height	GPM	d. f. u.
1-1/2"	12"	4	2
2"	14"	8	4
3"	15"	12	6
4"	17"	40	20
5"	20"	70	35
6"	22"	120	60
8"	25"	250	125

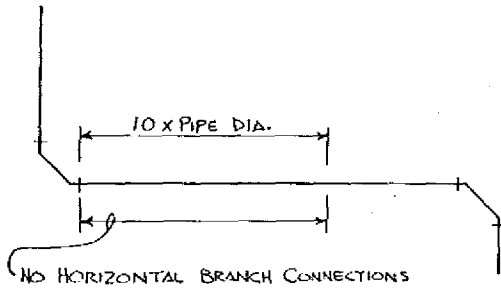
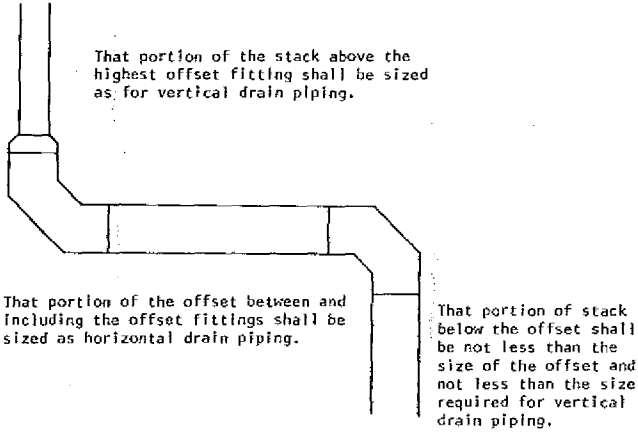
A-82.30 (4) (d) Minimum size of private interceptor main sewers.



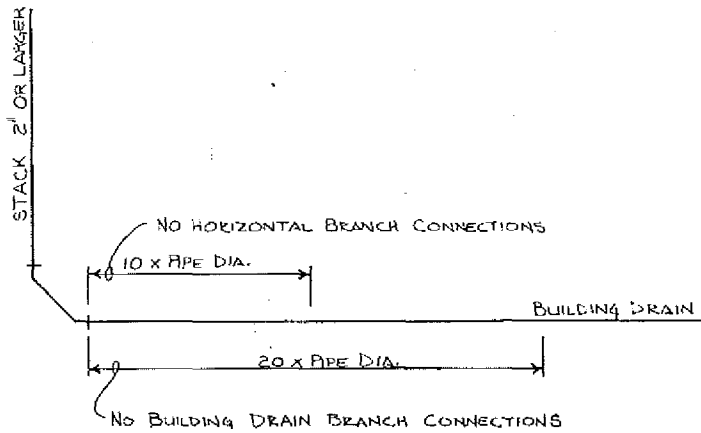
A-82.30 (4) (d) Minimum size of private interceptor main sewers.



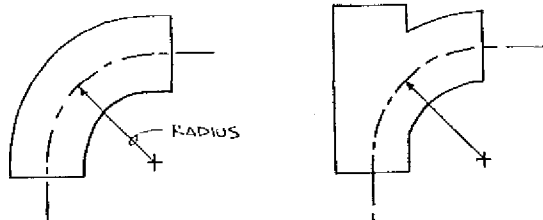
A-82.30 (6) (b) Offsets in vertical drains.



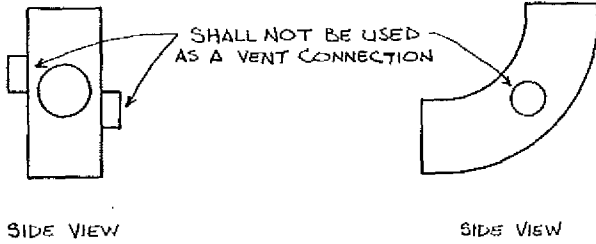
A-82.30 (7) Horizontal branch drain connection at base of a stack.



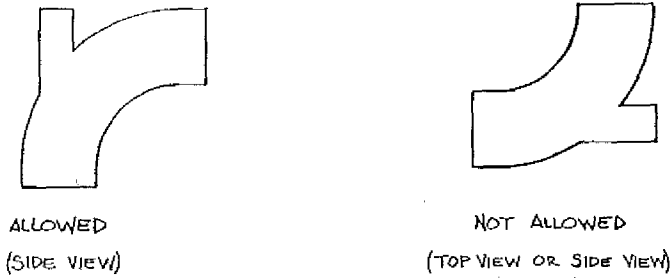
A-82.30 (8) Measuring radius of a fitting.



A-82.30 (9) Drain fittings and connections.

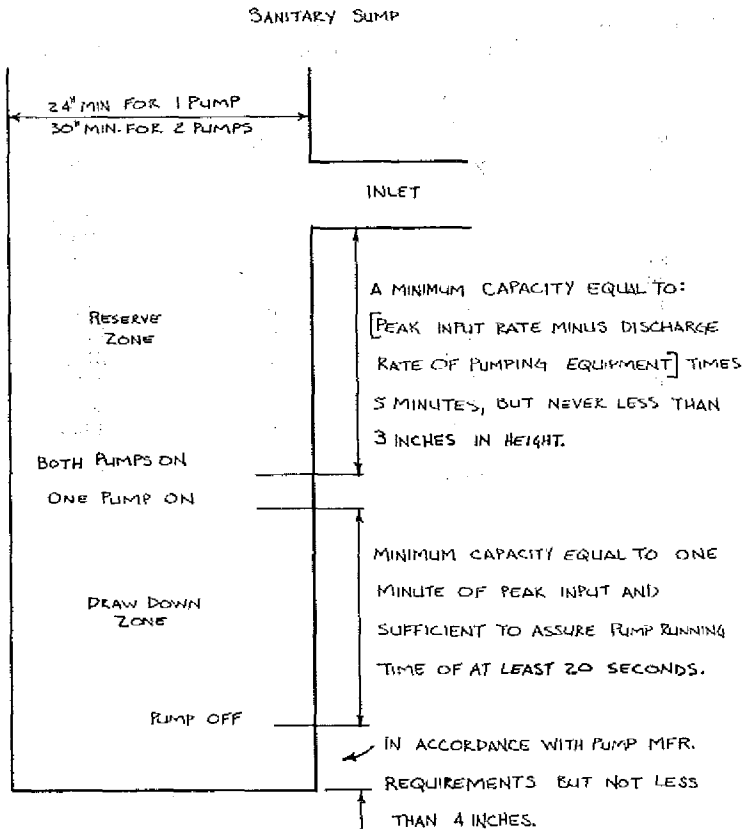


SIDE INLETS



HEEL INLETS

A-82.30 (10) (a) Determining required capacity of sanitary sump.

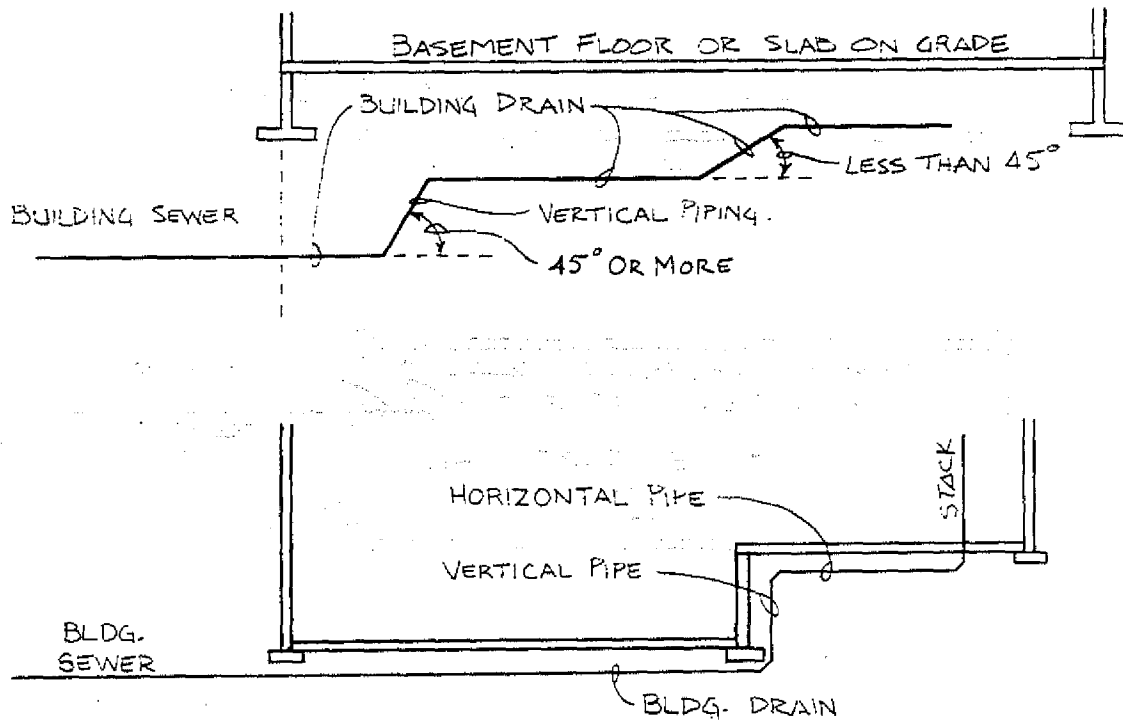


A-82.30 (10) (a)

Capacity of Sumps
(in gallons)

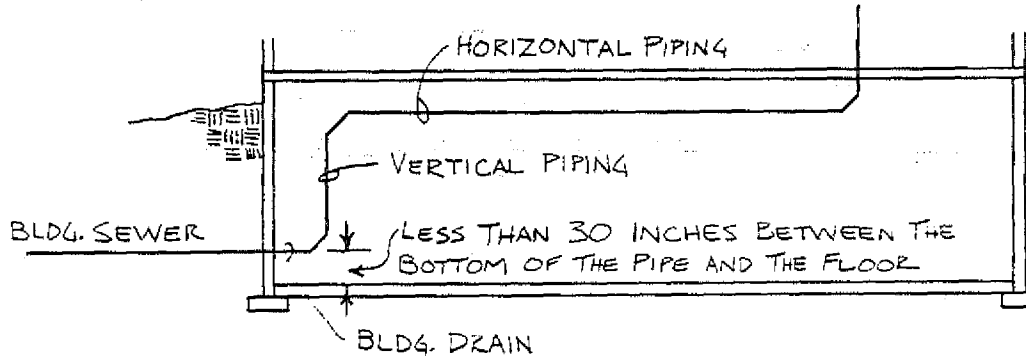
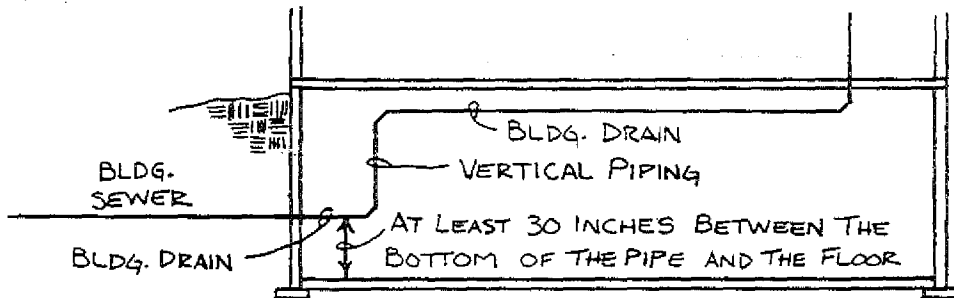
Diameter of sump in inches	Volume in gal/ft	Diameter of sump in inches	Volume in gal/ft
24	23.5	41	68.6
25	25.5	42	72.1
26	27.6	43	75.5
27	29.7	44	79.1
28	32.0	45	82.7
29	34.3	46	86.5
30	36.8	47	90.2
31	39.2	48	94.0
32	41.8	54	119.0
33	44.5	60	147.0
34	47.2	66	178.0
35	50.0	72	211.5
36	52.8	78	248.4
37	55.9	84	288.1
38	59.0	90	330.8
39	62.1	96	376.3
40	65.3	108	477.3

A-82.30 (11) (a) Building drains serving any building.

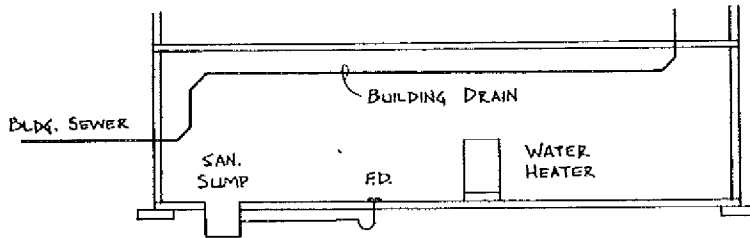


Register, February, 1986, No. 350

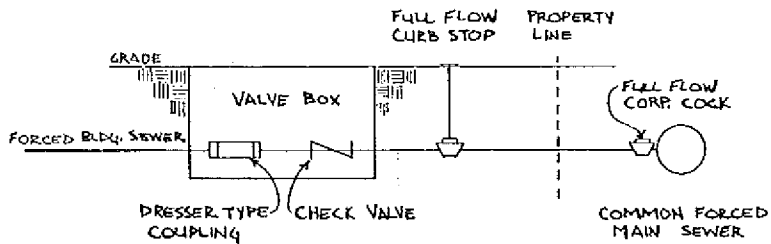
A-82.30 (11) (a) Building drains serving dwelling units.



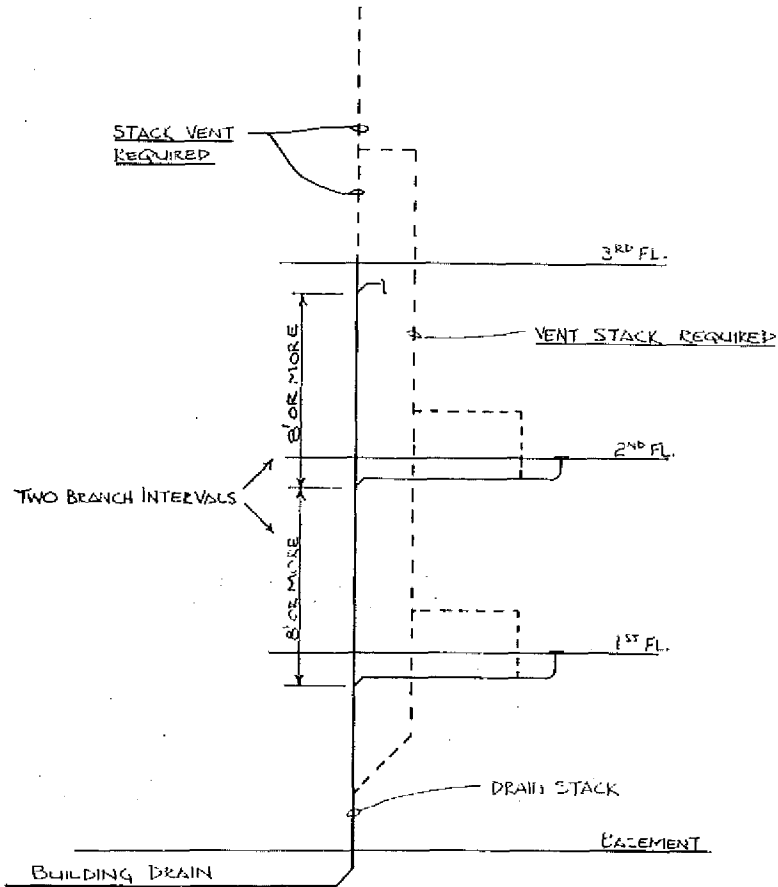
A-82.30 (11) (a) Floor drain required.



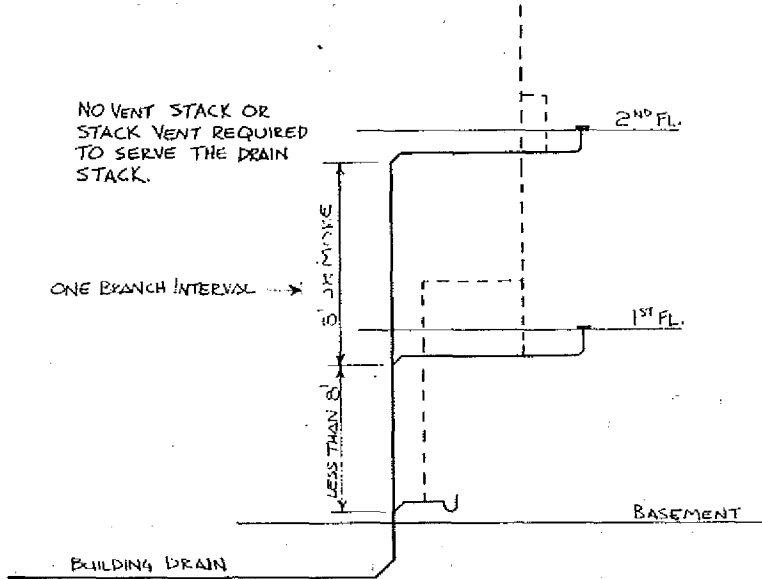
A-82.30 (11) (e) Connection to pressurized public sewer.



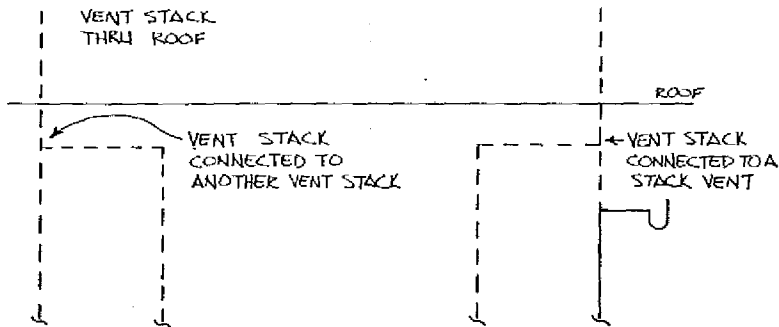
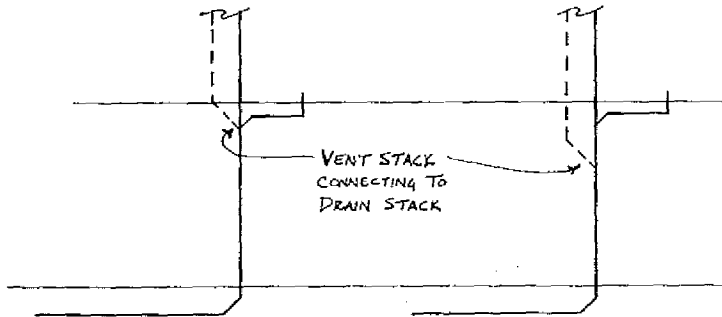
A-82.31 (4) (a) Where a vent stack and stack vent are required.



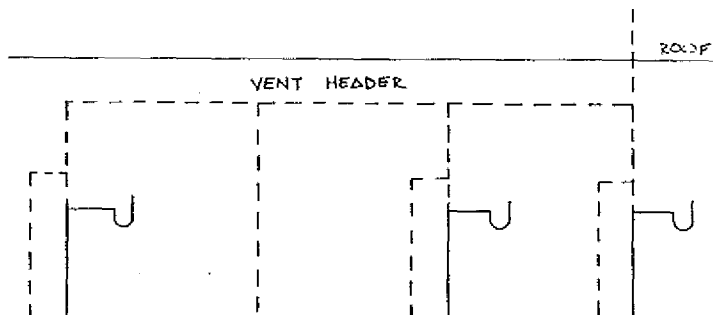
A-82.31 (4) (a) Where a vent stack and stack vent are not required.



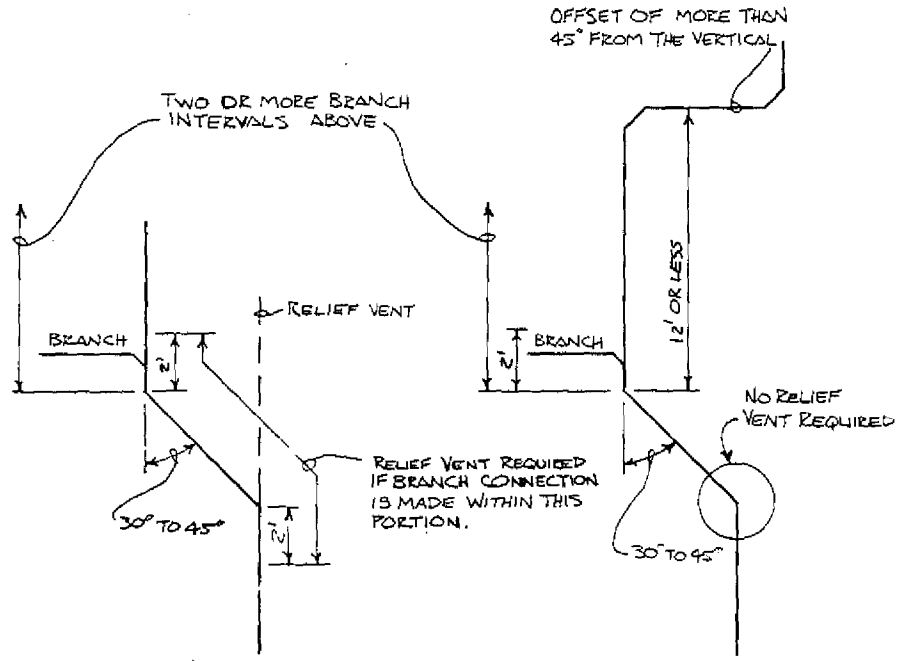
A-82.31 (4) (b) Installation of vent stack and stack vent.



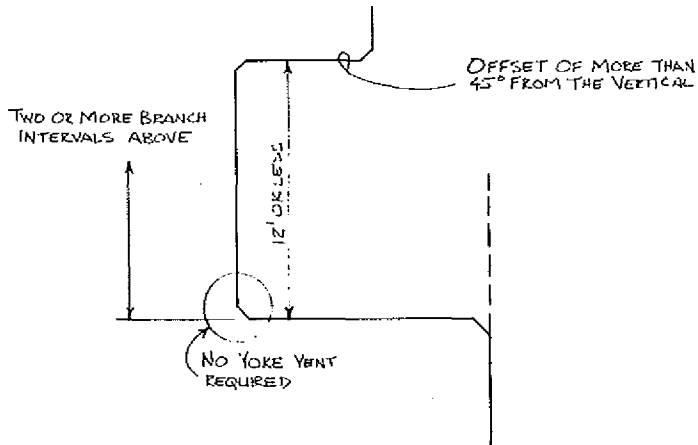
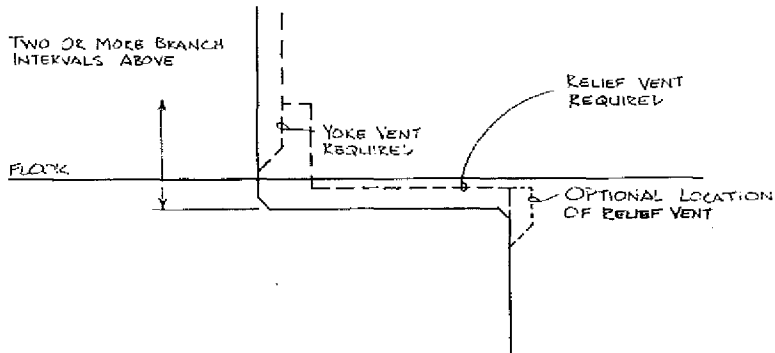
A-82.31 (4) (b) Installation of vent stack and stack vent.



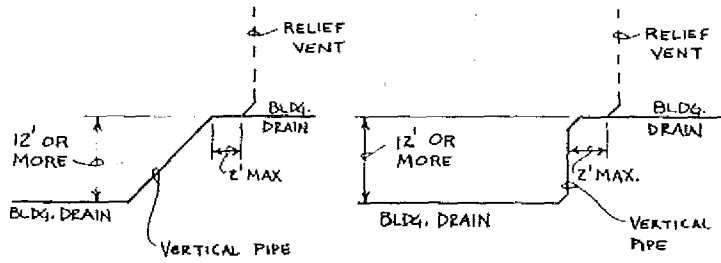
A-82.31 (5) (a) Relief vent for offsets of 30 to 45 degrees.



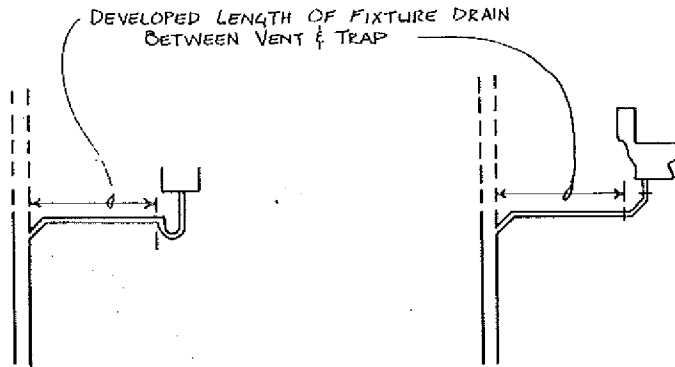
A-32.31 (5) (b) Relief and yoke vents for offsets of more than 45 degrees.



A-82.31 (7) Relief vents for building drains.

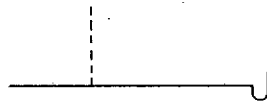


A-82.31 (9) Fixture vents.



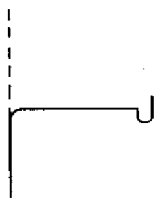
WHERE TRAP IS NOT AN INTEGRAL PART OF THE FIXTURE

WHERE TRAP IS AN INTEGRAL PART OF THE FIXTURE

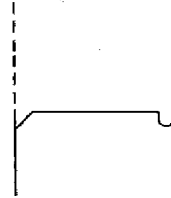


VENT CONNECTING TO HORIZONTAL DRAIN PIPING

VENT CONNECTING TO VERTICAL DRAIN PIPING

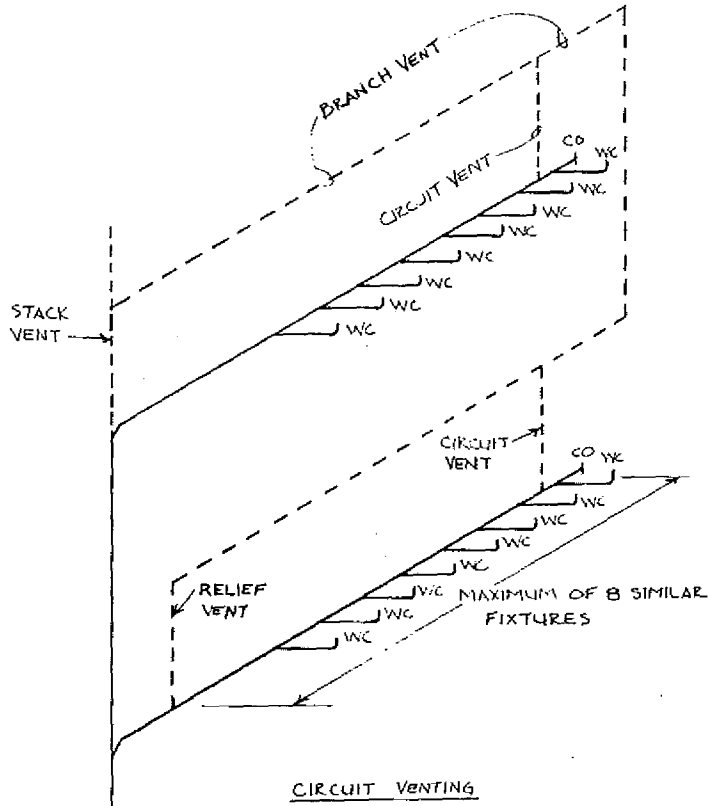


BY MEANS OF A SANITARY TEE FITTING

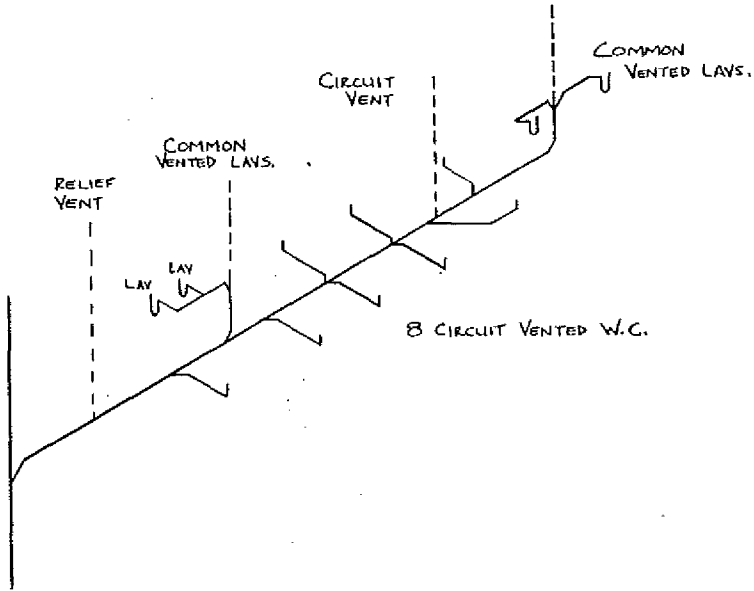


BY MEANS OF A WYE PATTERN FITTING

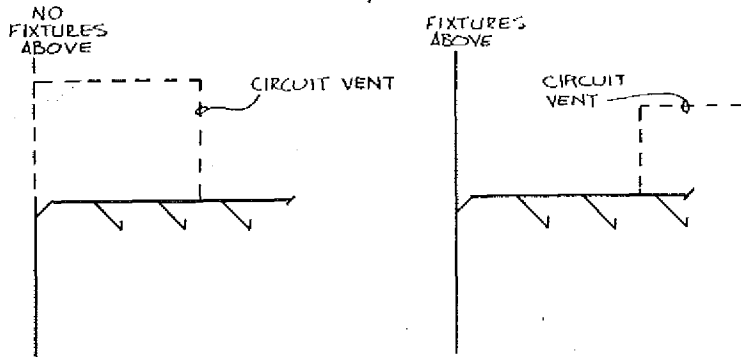
A-82.31 (10) Circuit venting.



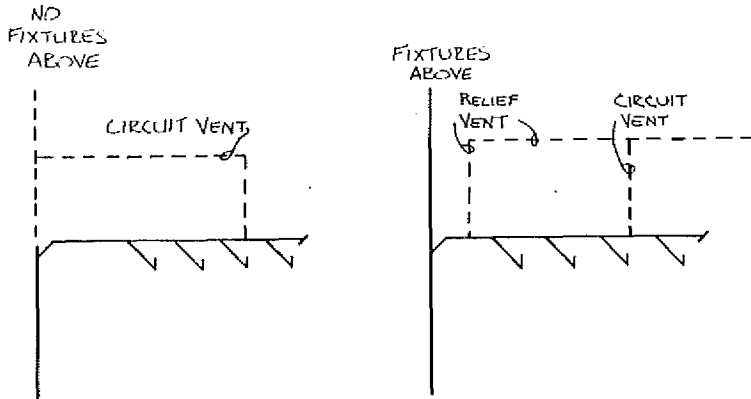
A-82.31 (10) Circuit venting.



A-82.31 (10) Circuit venting.

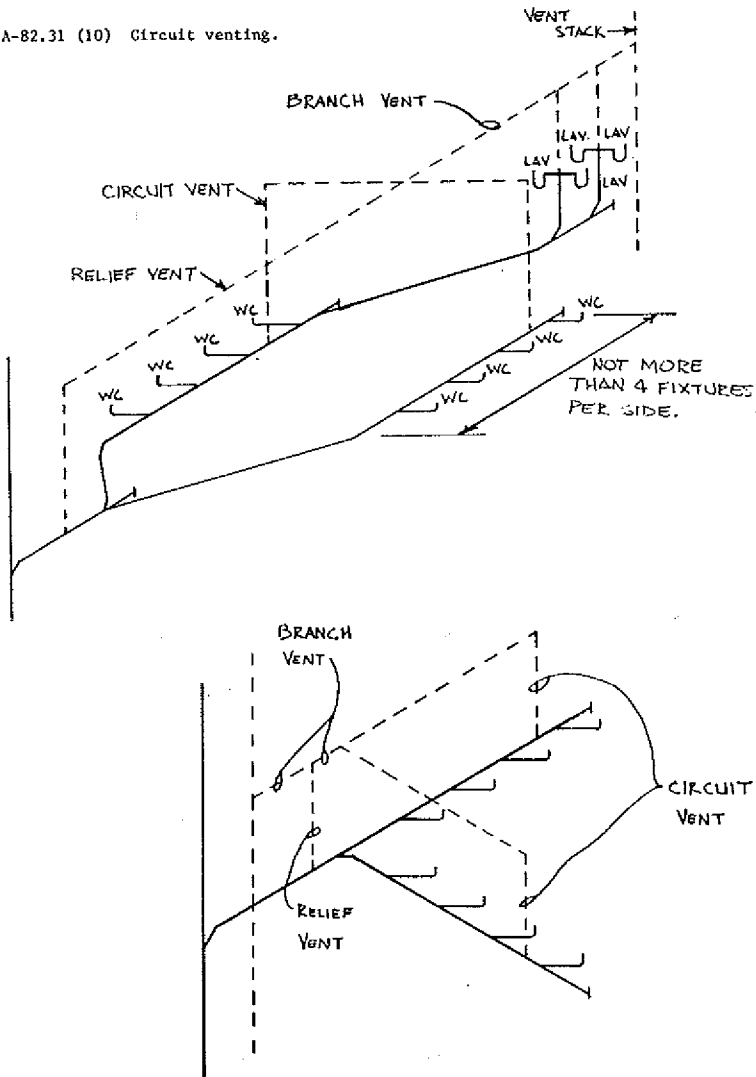


CIRCUIT VENTING
3 FIXTURES

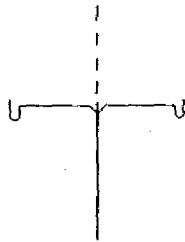


CIRCUIT VENTING 4 OR
MORE FIXTURES

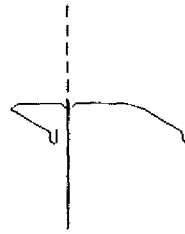
A-82.31 (10) Circuit venting.



A-82.31 (11) (a) Common vents, vertical drains.



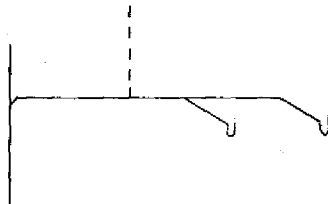
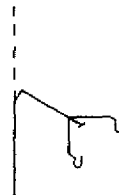
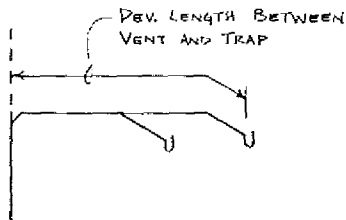
BACK-TO-BACK



SIDE-BY-SIDE

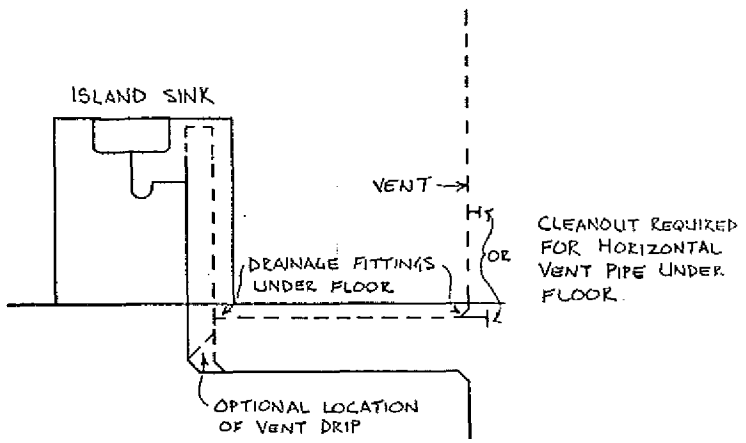
COMMON VENT SERVING ANY TWO FIXTURES

A-82.31 (11) (b) Common vents, horizontal drains.

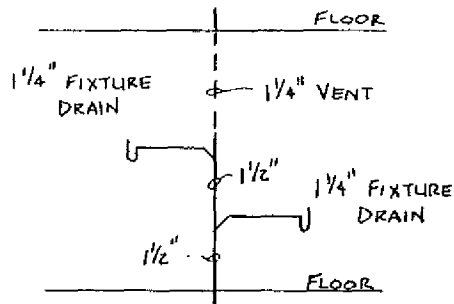
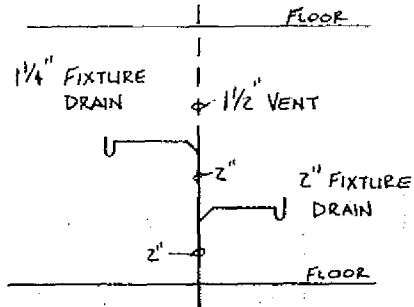


COMMON VENTS SERVING TWO LAVATORIES OR TWO COMPARTMENTS OF ONE KITCHEN SINK

A-82.31 (12) Island fixture venting.

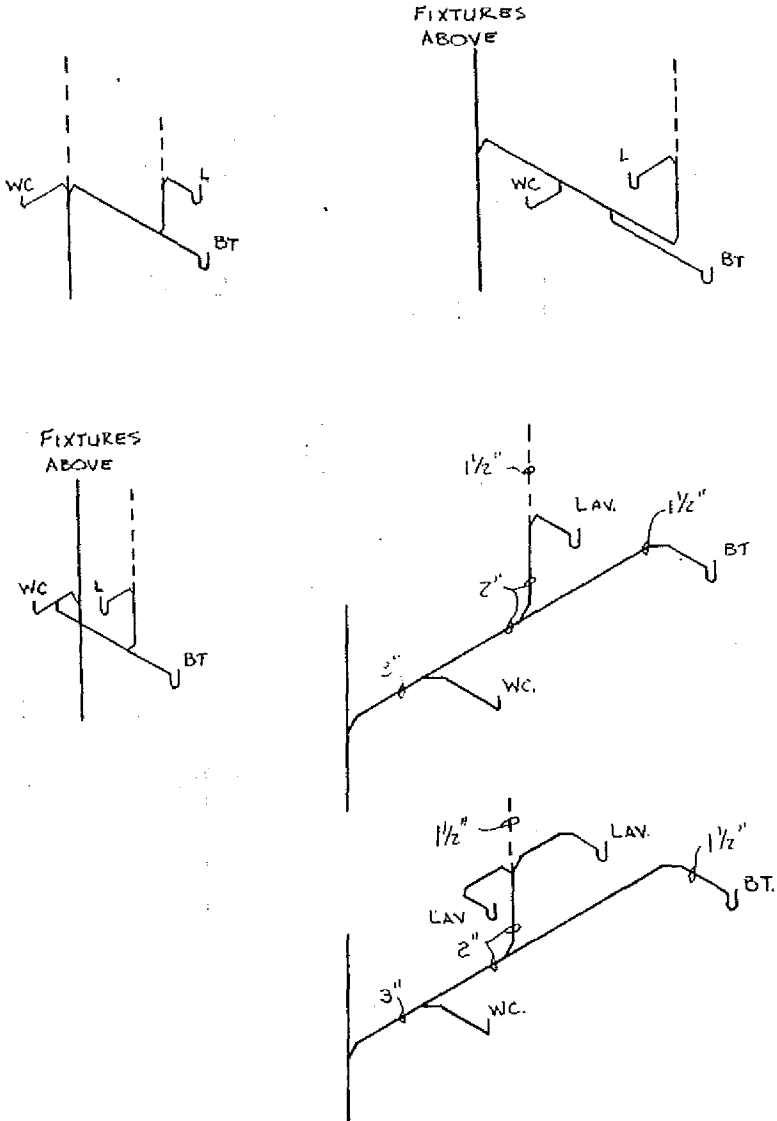


A-82.31 (13) (a) Vertical wet vents.

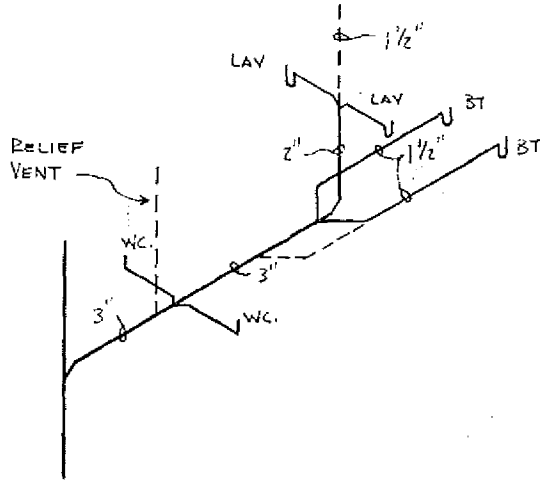


VERTICAL WET VENT

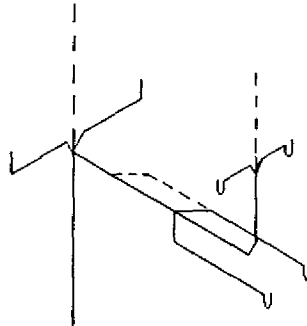
A-82.31 (13) (b) Horizontal wet vents.



A-82.31 (13) (b) Horizontal wet vents.

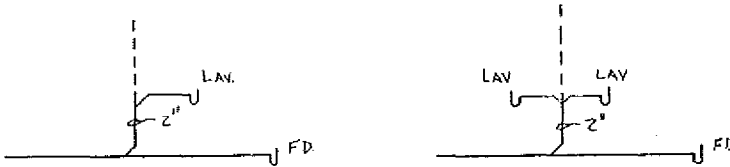


HORIZONTAL WET VENTS

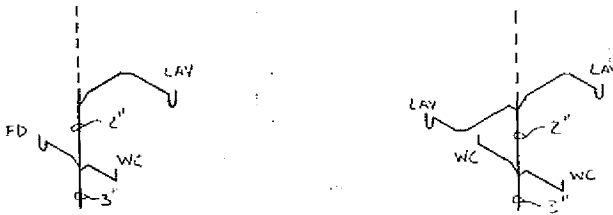


BACK-TO-BACK TOP FLOOR

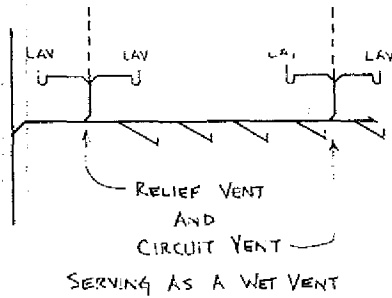
A-82.31 (13) (c) Wet venting - floor outlet fixtures.



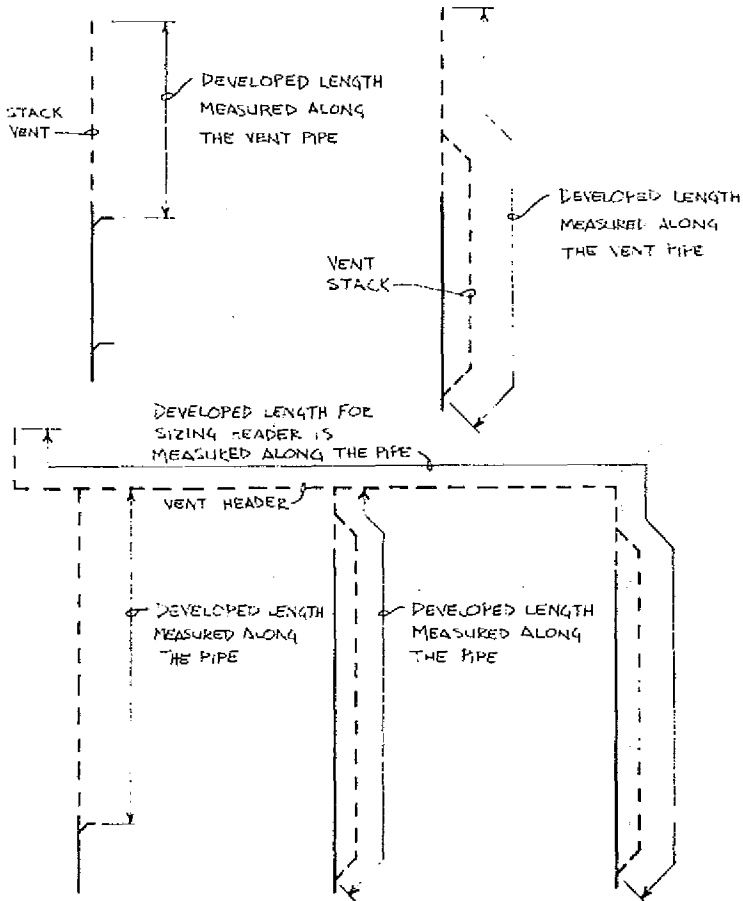
INDIVIDUAL VENT FOR FLOOR OUTLET FIXTURE
SERVING AS A WET VENT



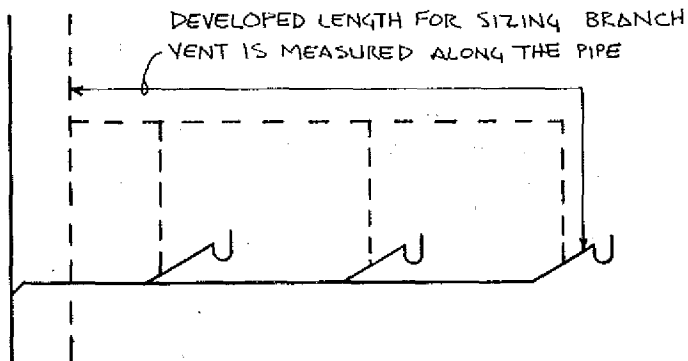
COMMON VENT FOR FLOOR OUTLET FIXTURES
SERVING AS A WET VENT



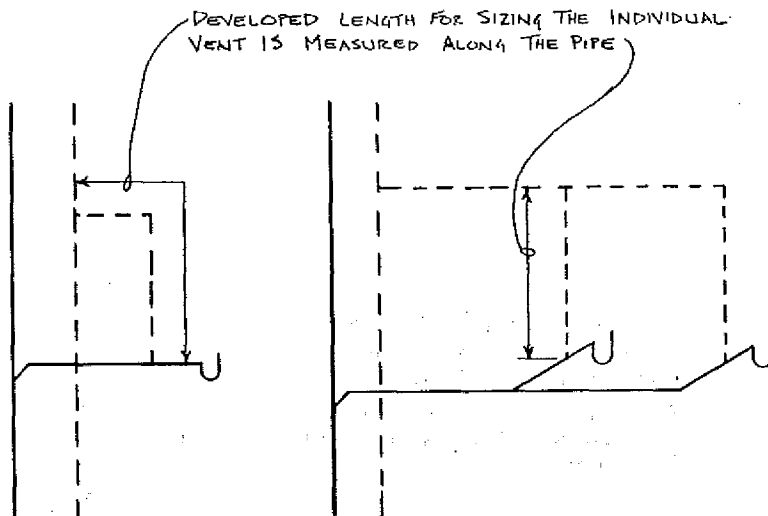
A-82.31 (14) (a) and (b) Sizing vent stacks and stack vents.



A-82.31 (14) (c) Sizing branch vents.

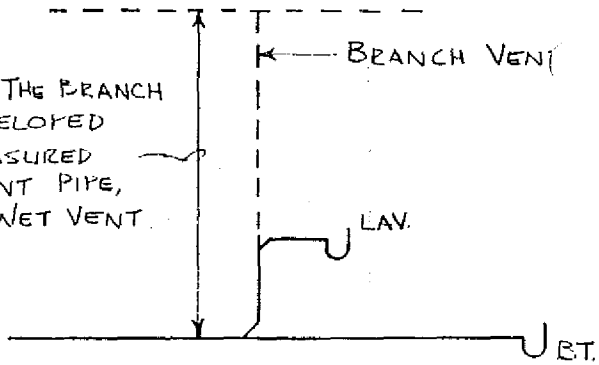


A-82.31 (14) (d) Sizing individual vents.

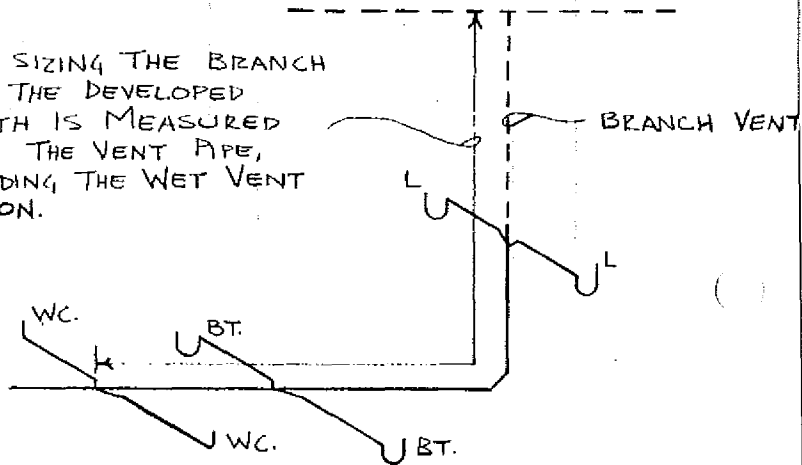


A-82.31 (14) (c) Sizing branch vents serving a wet vent.

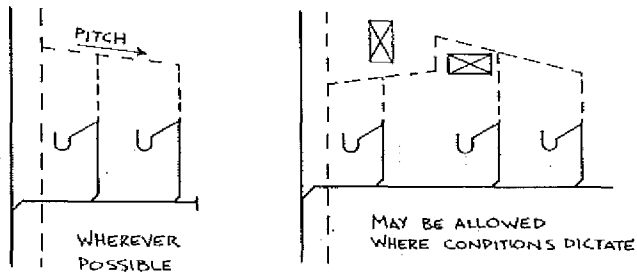
WHEN SIZING THE BRANCH VENT, THE DEVELOPED LENGTH IS MEASURED ALONG THE VENT PIPE, INCLUDING THE WET VENT PORTION.



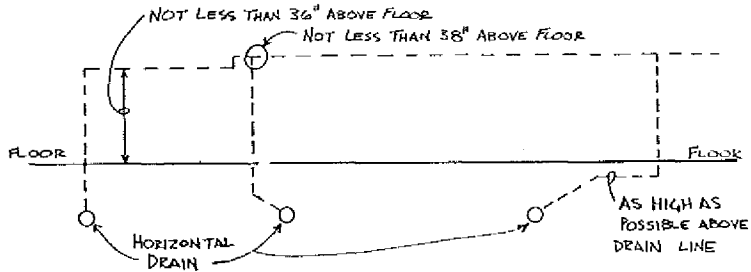
WHEN SIZING THE BRANCH VENT, THE DEVELOPED LENGTH IS MEASURED ALONG THE VENT PIPE, INCLUDING THE WET VENT PORTION.



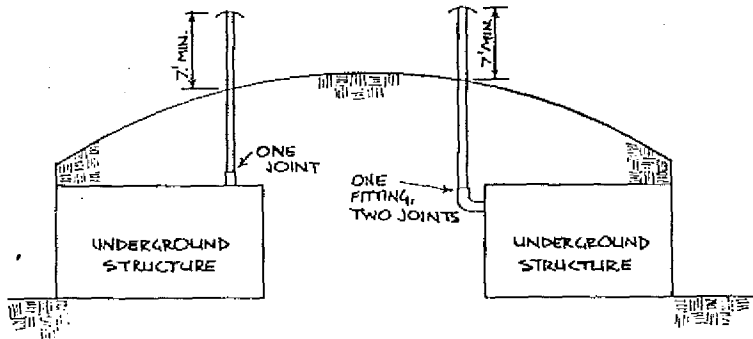
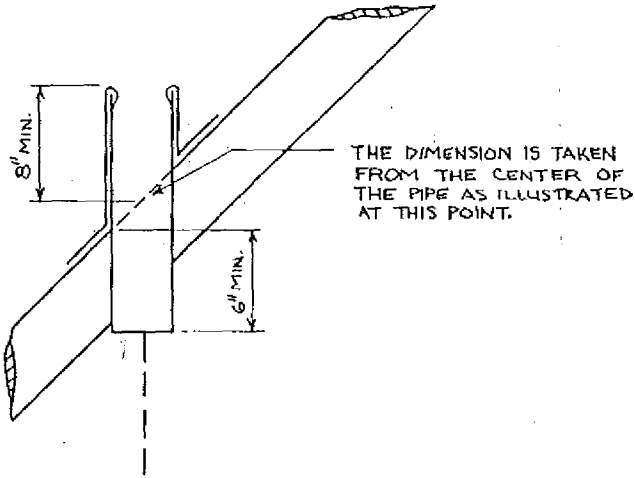
A-82.31 (15) (a) Vent grades and connections,



A-82.31 (15) (b) Vent grades and connections.

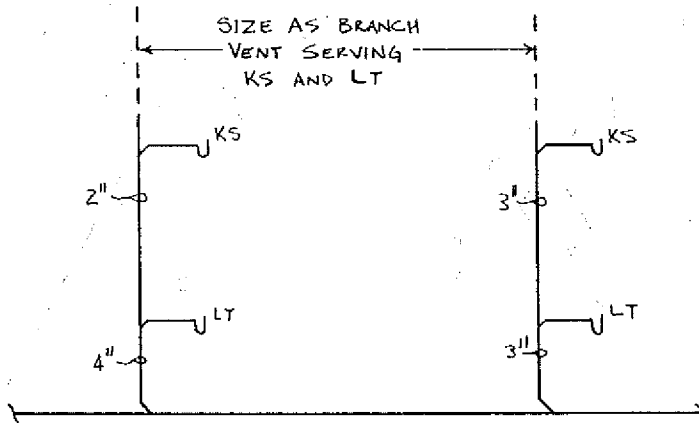
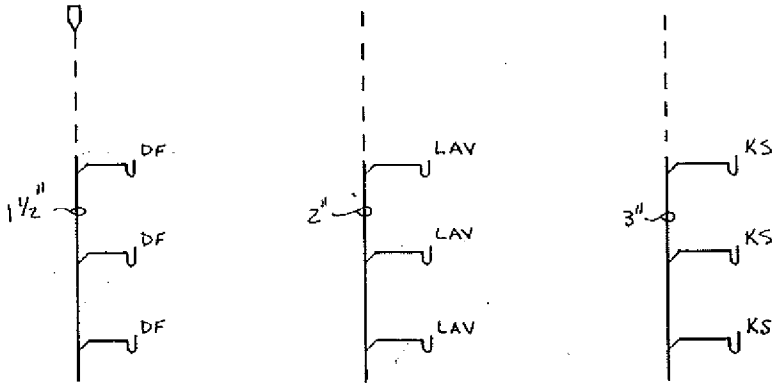


A-82.31 (16) Vent terminals.



VENT TERMINALS FOR UNDERGROUND STRUCTURES

A-82.31 (17) (a) Combination drain and vent stacks.

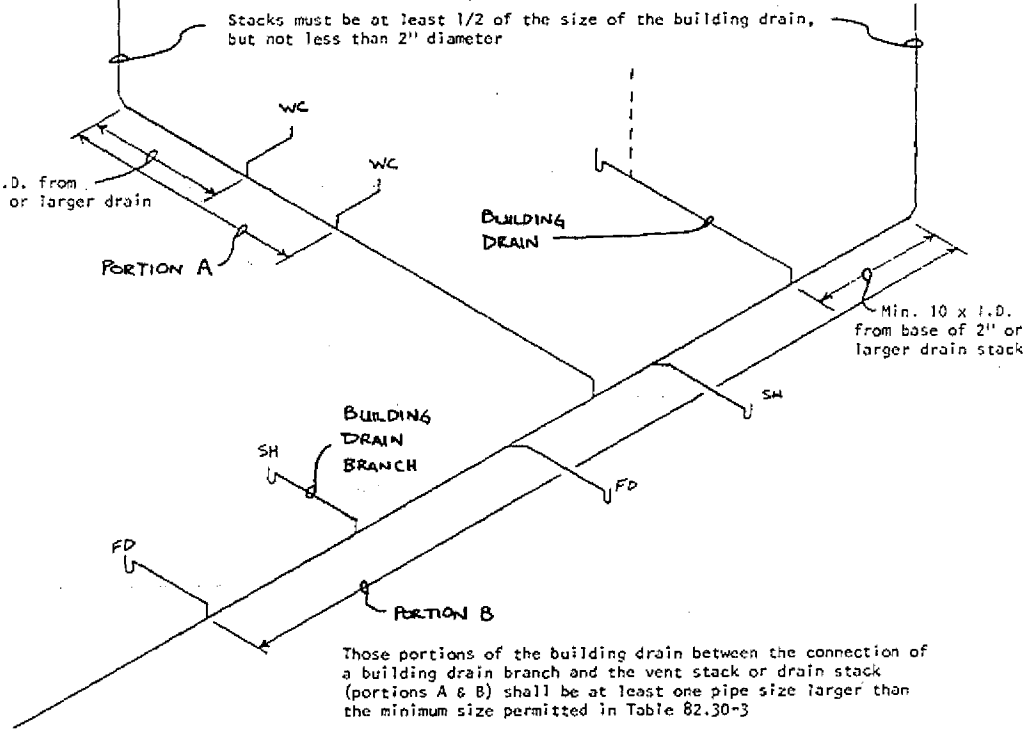


A-82.31 (17) (b)

Combination drain and vent building drain.

Stacks must be at least 1/2 of the size of the building drain, but not less than 2" diameter

Min. 20 x I.D. from base of 2" or larger drain stack.

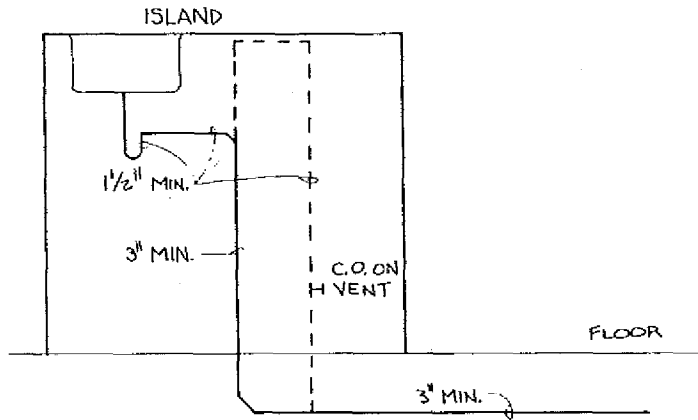
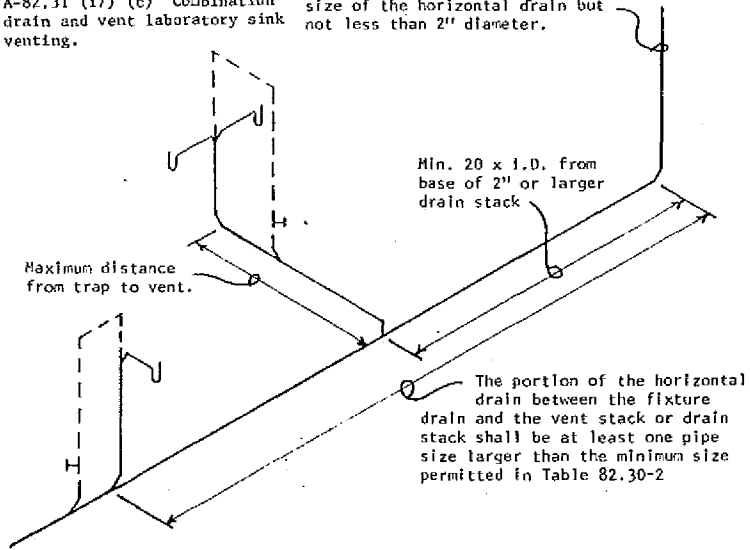


Those portions of the building drain between the connection of a building drain branch and the vent stack or drain stack (portions A & B) shall be at least one pipe size larger than the minimum size permitted in Table 82.30-3

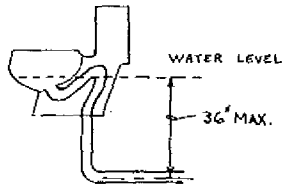
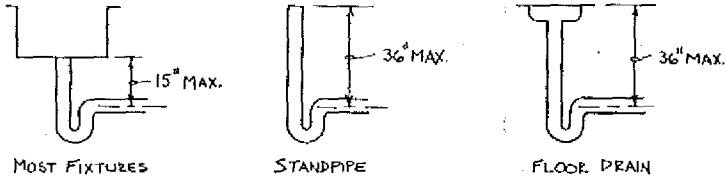
53

A-82.31 (17) (c) Combination drain and vent laboratory sink venting.

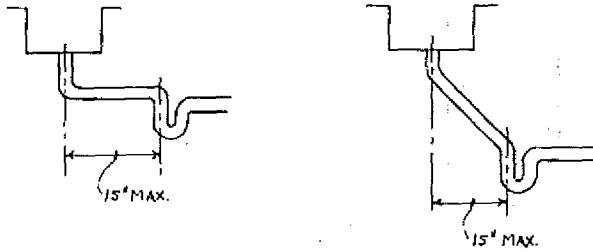
Stack must be at least 1/2 of the size of the horizontal drain but not less than 2" diameter.



A-82.32 (4) (b) Installation of traps.

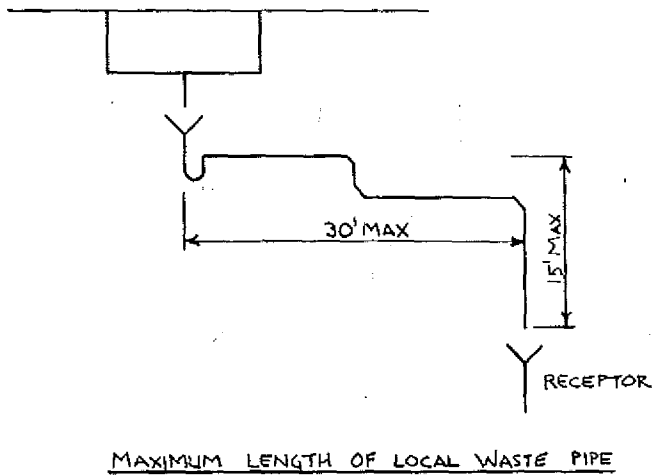
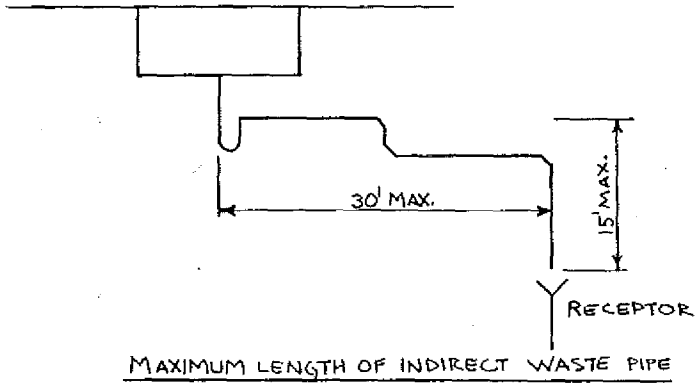


VERTICAL DISTANCE BETWEEN FIXTURE DRAIN OUTLET AND TRAP

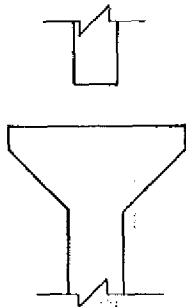


HORIZONTAL DISTANCE BETWEEN FIXTURE DRAIN OUTLET AND TRAP

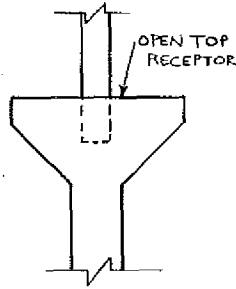
A-82.33 (6) Indirect and local waste piping.



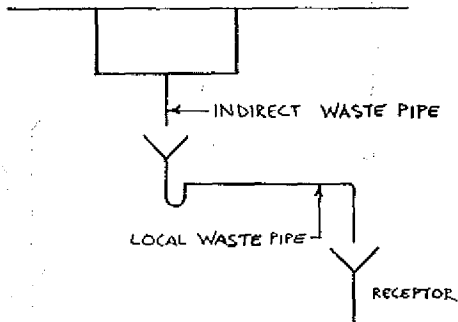
A-82.33 (7) Air-gaps and air-breaks.



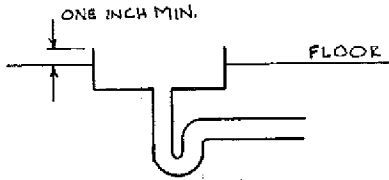
AIR GAP



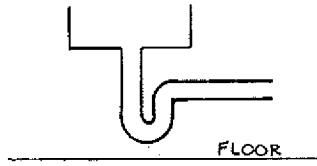
AIR BREAK



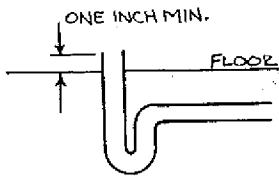
A-82.33 (8) (a) Waste sinks and standpipes.



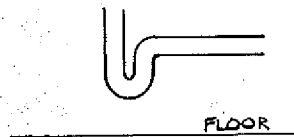
WASTE SINK IN FLOOR



WASTE SINK ABOVE FLOOR

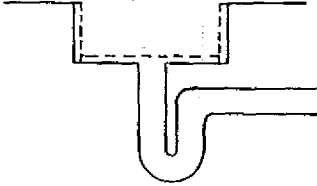


STANDPIPE IN FLOOR

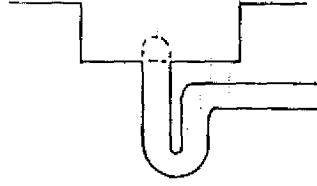


STANDPIPE ABOVE FLOOR

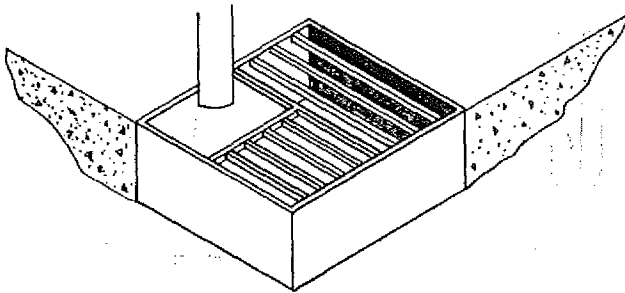
A-82.33 (8) (b) Floor sinks.



FLOOR SINK WITH BASKET

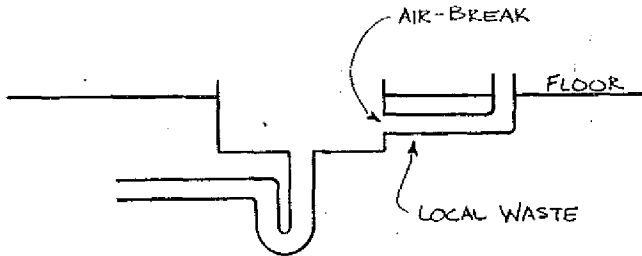


FLOOR SINK WITH DOME STRAINER

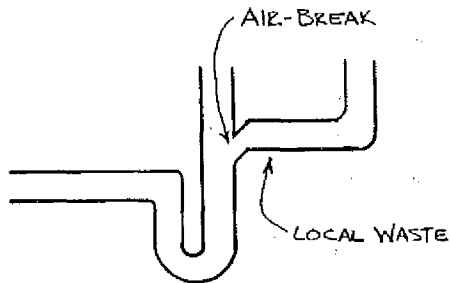


FLOOR SINK WITH GRATE OPENING
FOR AIR GAP

A-82.33 (8) (c) Local waste piping.

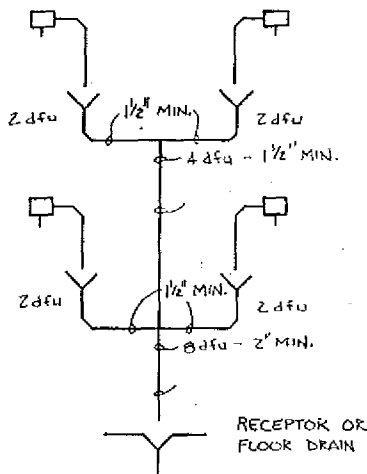
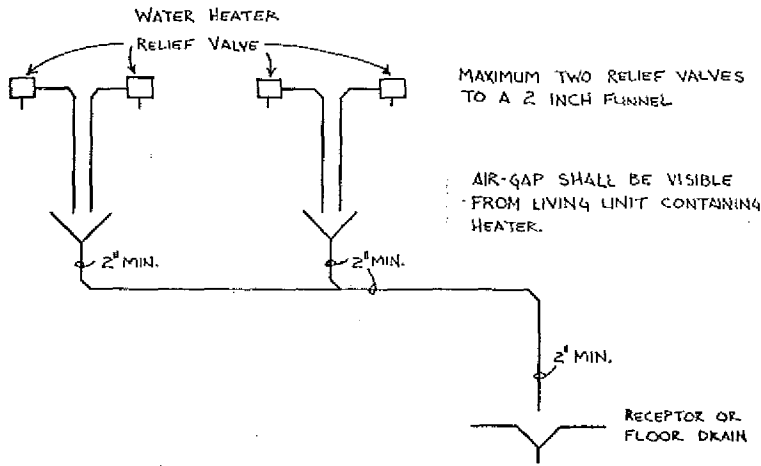


LOCAL WASTE LEADING TO A WASTE SINK,
FLOOR SINK OR FLOOR DRAIN



LOCAL WASTE LEADING TO A STANDPIPE

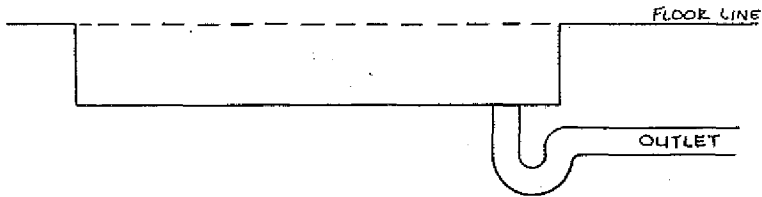
A-82.33 (8) (c) Local waste piping serving water heater relief valves.



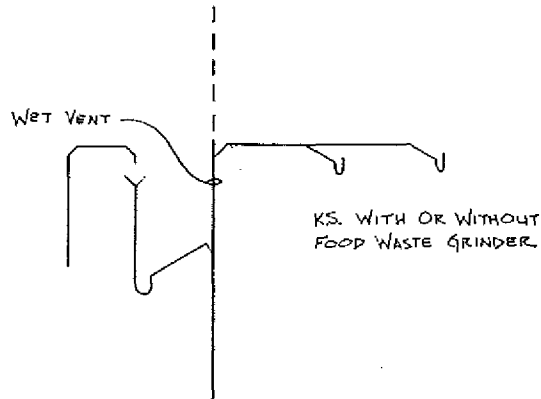
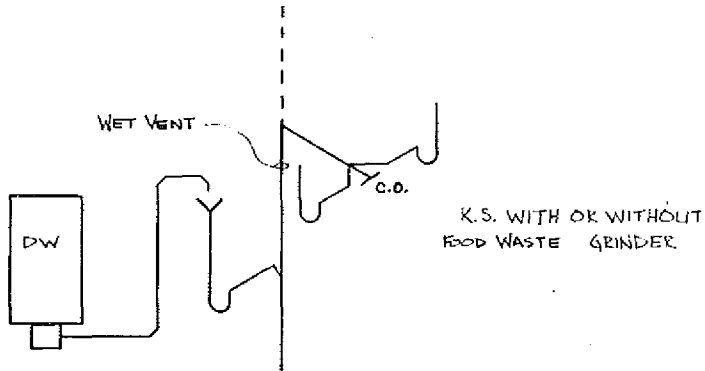
LOCAL WASTE PIPES SERVING WATER HEATER RELIEF VALVES.

A-82.33 (9) (c) Commercial gravity discharge-type clothes washers.

TRENCH TYPE LAUNDRY RECEPTOR

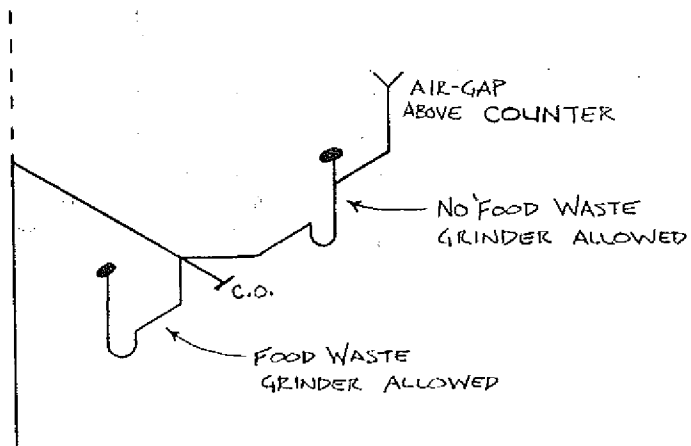
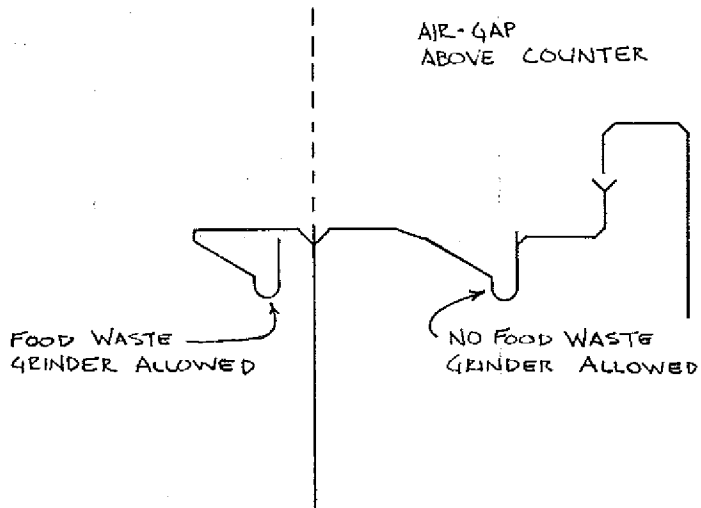


A-82.33 (9) (d) Residential-type dishwashers.

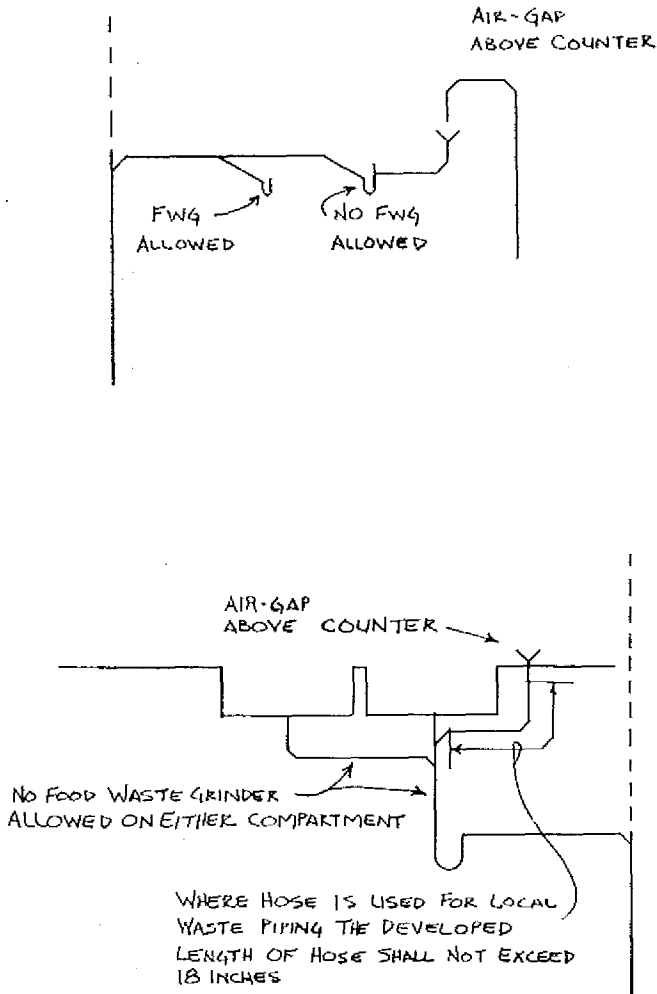


DISHWASHER DISCHARGING TO A STANDPIPE
BELOW THE COUNTER TOP

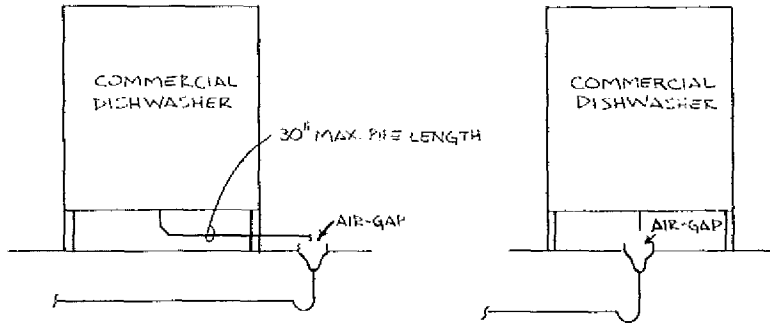
A-82.33 (9) (d) Residential-type dishwashers.



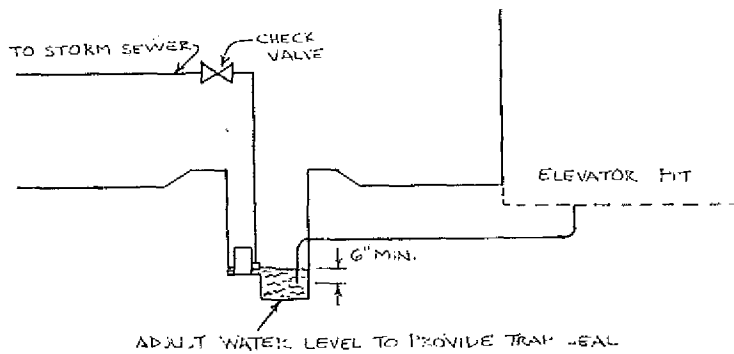
A-82.33 (9) (d) Residential-type dishwashers.



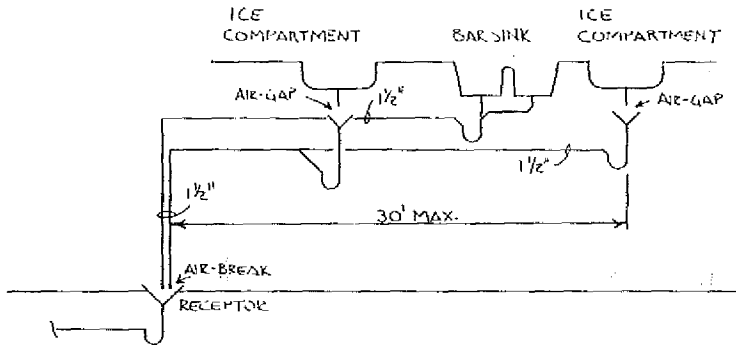
A-82.33 (9) (d) Commercial dishwashers.



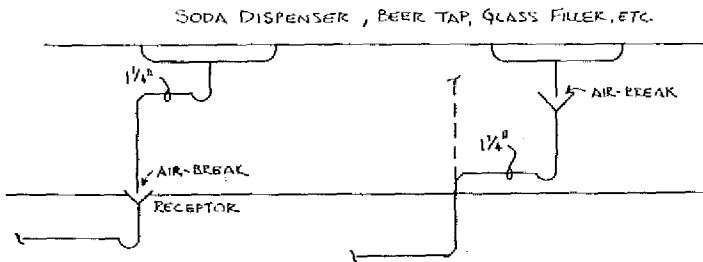
A-82.33 (9) (f) Elevator pit subsoil and floor drains.



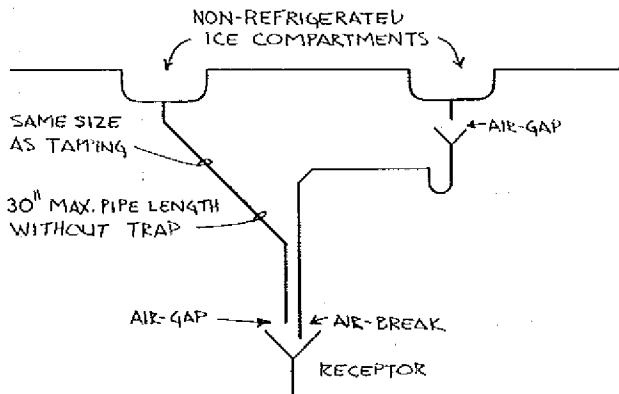
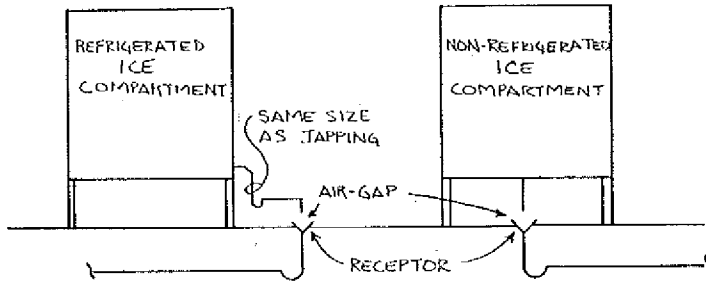
A-82.33 (9) (g) 1. Bar and soda fountain sinks.



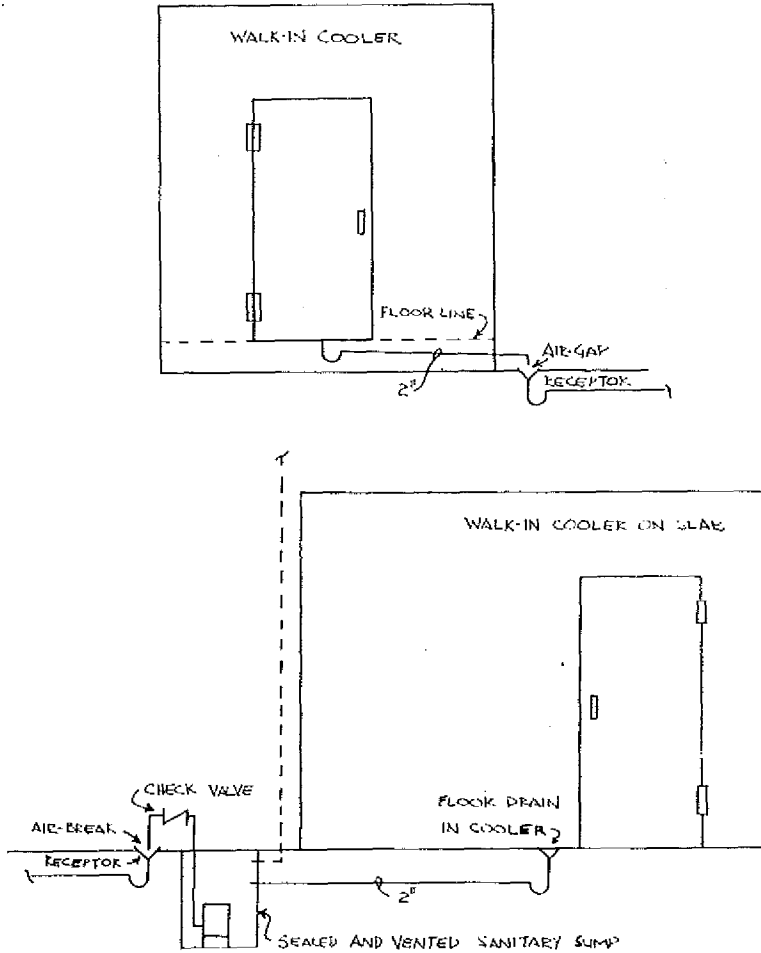
A-82.33 (9) (g) 2.



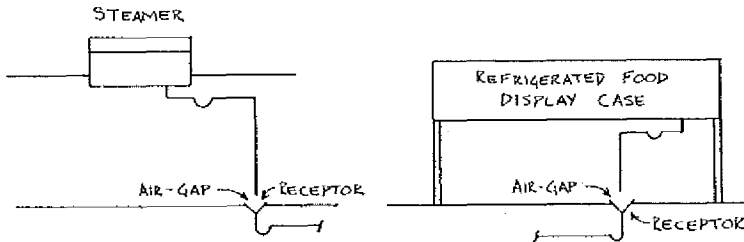
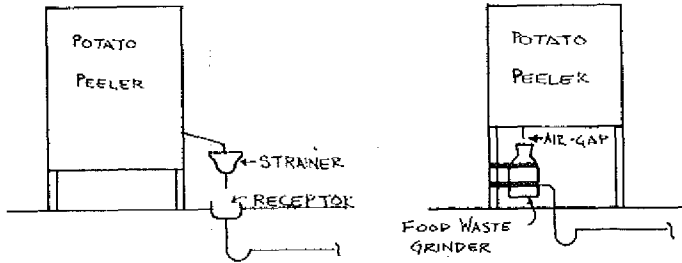
A-82.33 (9) (g) 3. Novelty boxes, ice compartments and ice cream dipper wells.



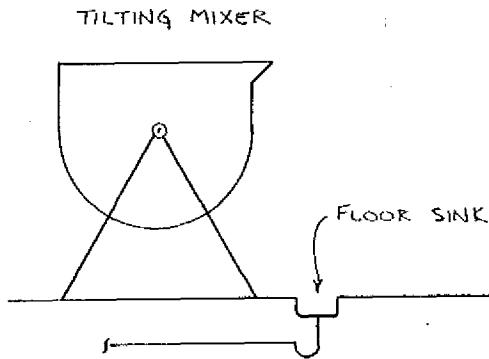
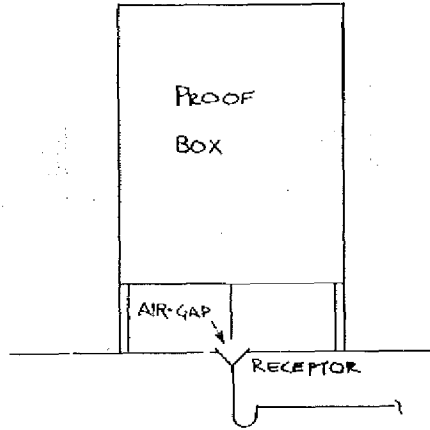
A-32.33 (9) (g) 4. Refrigerated food storage rooms, compartments, and display cases.



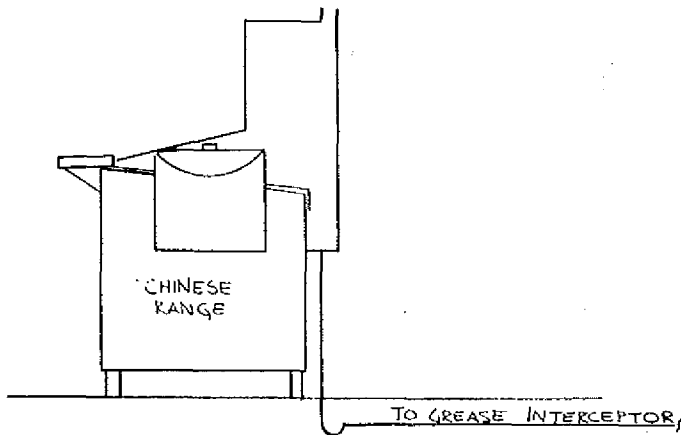
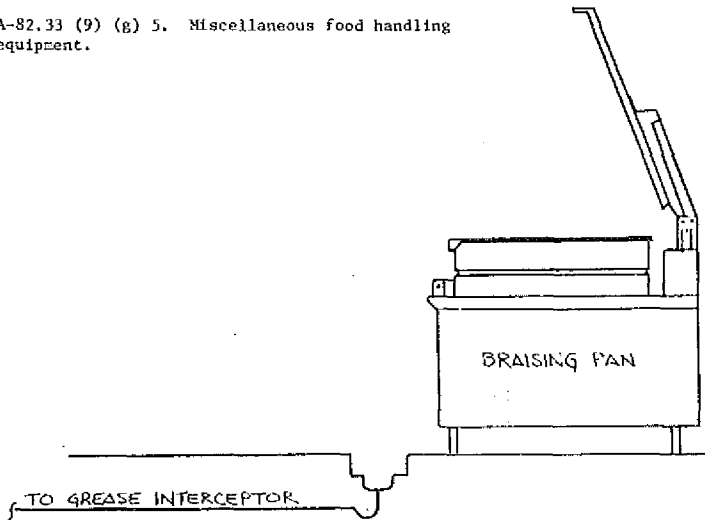
A-82.33 (9) (g) 5. Miscellaneous food handling equipment.



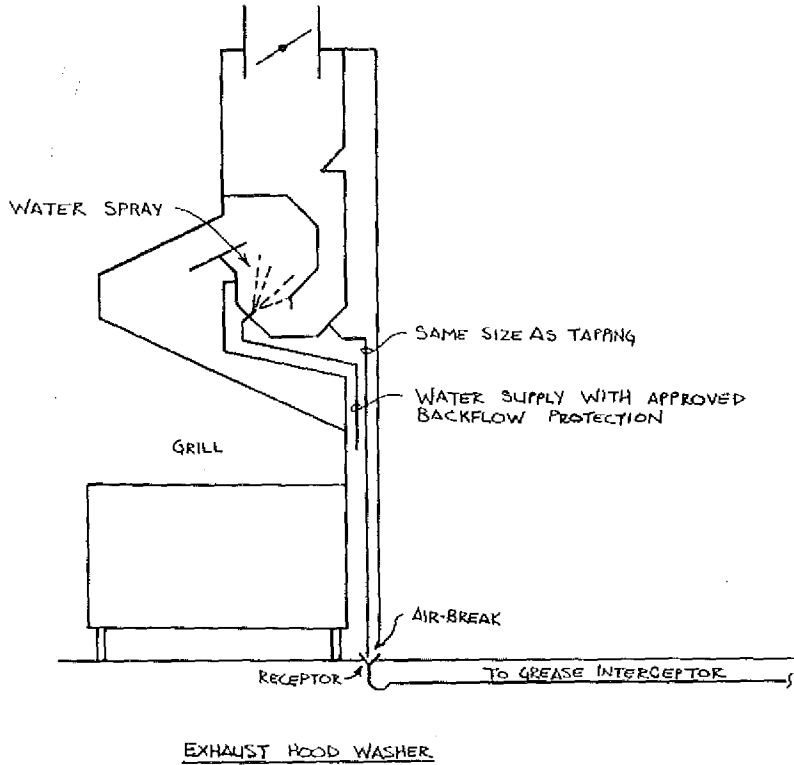
A-82.33 (9) (g) 5. Miscellaneous food handling equipment.



A-82.33 (9) (g) 5. Miscellaneous food handling equipment.

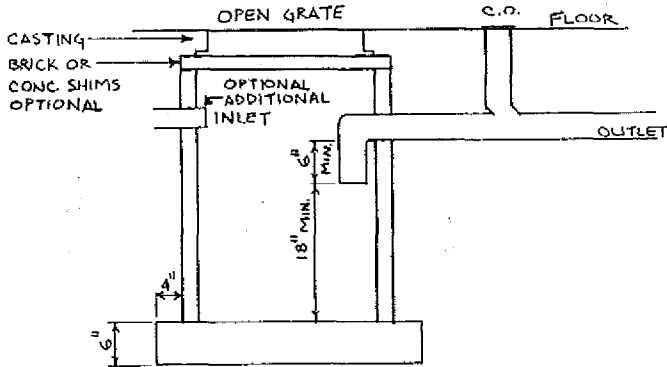


A-82.33 (9) (g) 5. Miscellaneous food handling equipment.

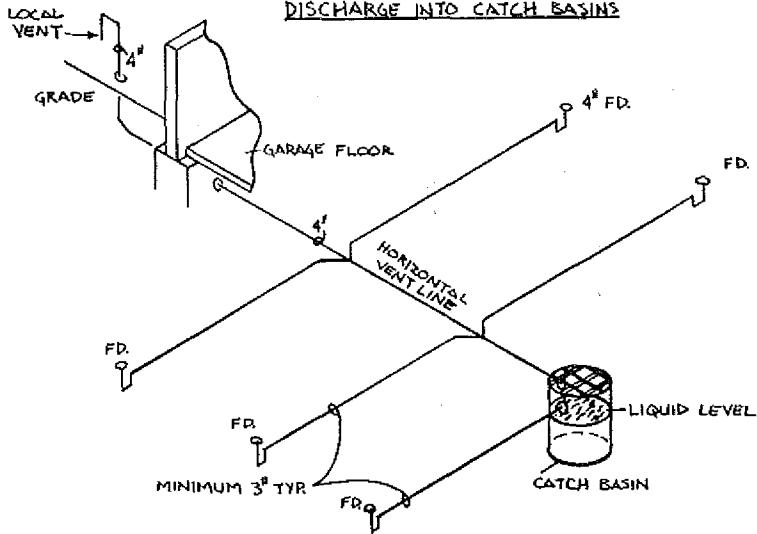


A-82.34 (4) (a)

GARAGE CATCH BASIN



DISCHARGE INTO CATCH BASINS



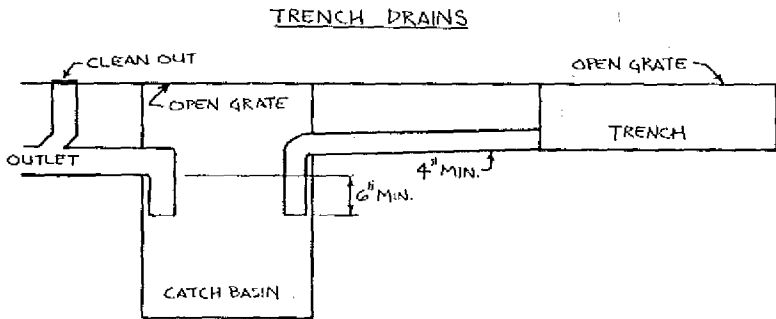
ILHR 82

A-82.34 (4) (a)

Capacity of Catch Basins
(in cubic feet)

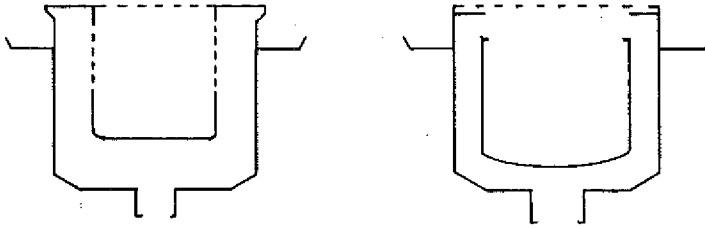
Diameter of Catch Basin	Volume in cubic feet per foot of depth	Diameter of Catch Basin	Volume in cubic feet per foot of depth
36	7.1	45	11.1
37	7.5	46	11.6
38	7.9	47	12.1
39	8.3	48	12.6
40	8.7	54	15.9
41	9.2	60	19.7
42	9.7	66	23.8
43	10.1	72	28.3
44	10.6	84	38.6

A-82.34 (4) (a)



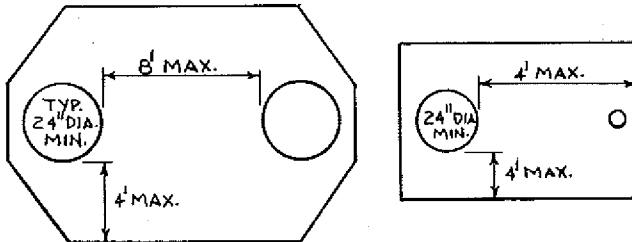
A-82.34 (4) (b)

TYPICAL FLOOR DRAIN WITH SOLID BOTTOM SEDIMENT BASKET

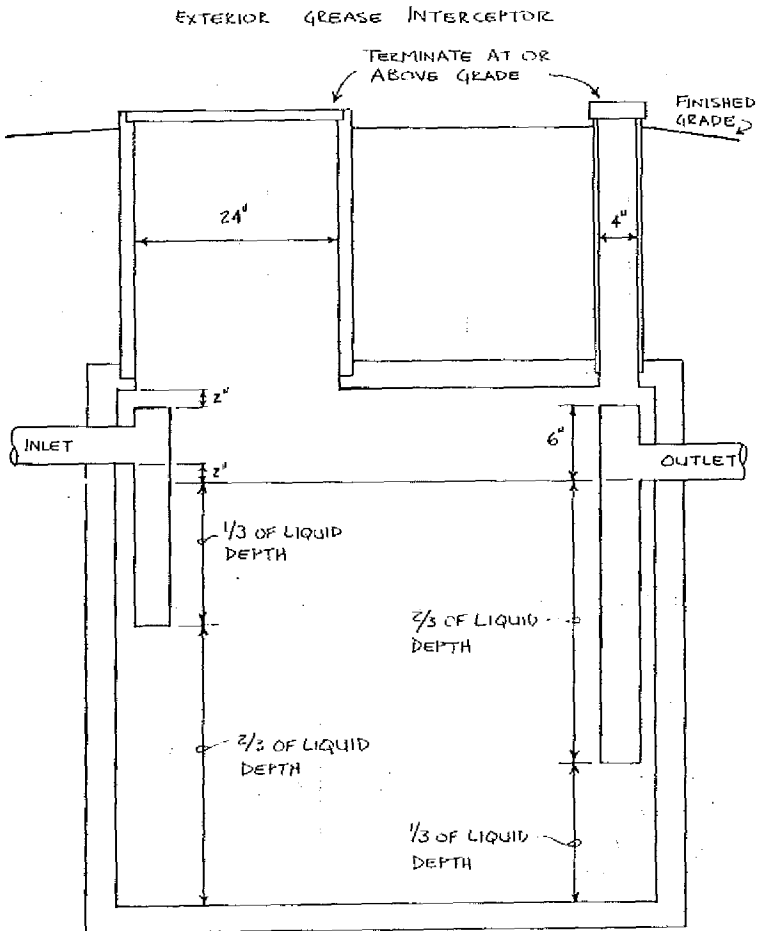


A-82.34 (5) (b)

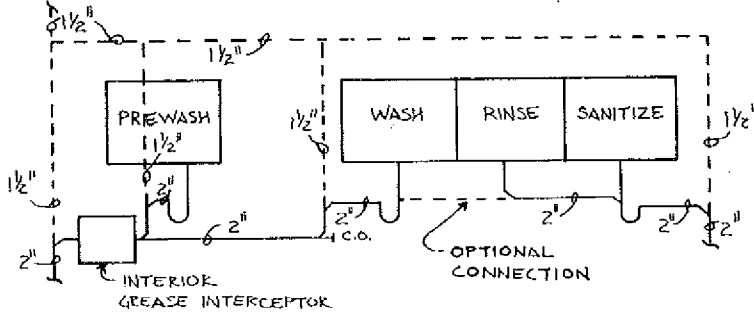
GREASE INTERCEPTOR MANHOLE LOCATION



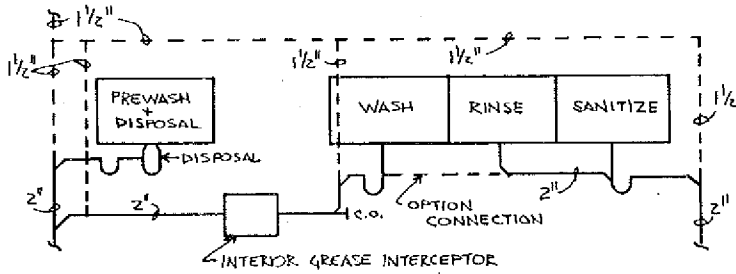
A-82.34 (5) (b)



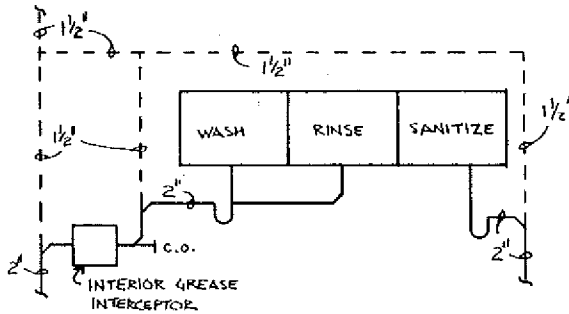
A-82.34 (5) (c) Interior grease interceptors.



PREWASH AND 3 COMPARTMENT SCULLERY SINK

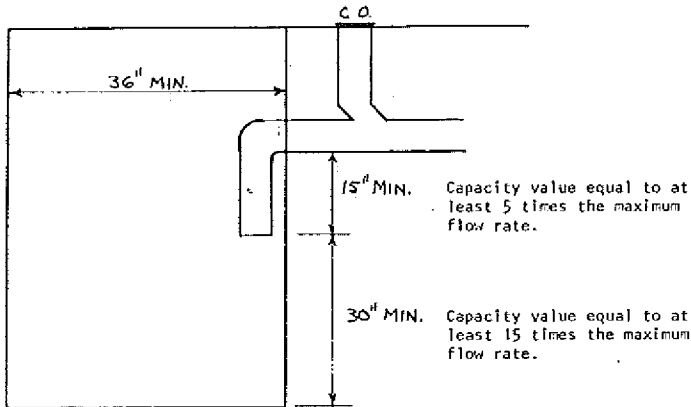


PREWASH + DISPOSAL + 3 COMPARTMENT SCULLERY SINK

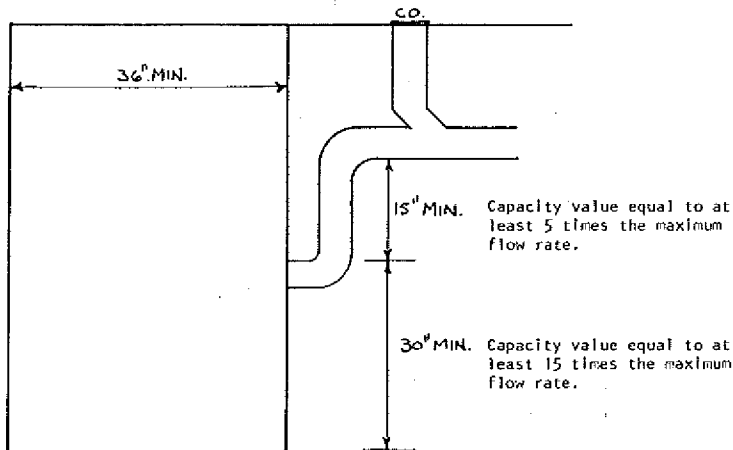


3 COMPARTMENT SCULLERY SINK

A-82.34 (6) Automatic car washes.



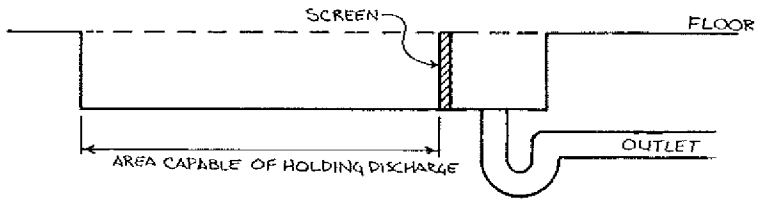
CAR WASH INTERCEPTOR WITH CAST IRON INVERT INSIDE OF BASIN



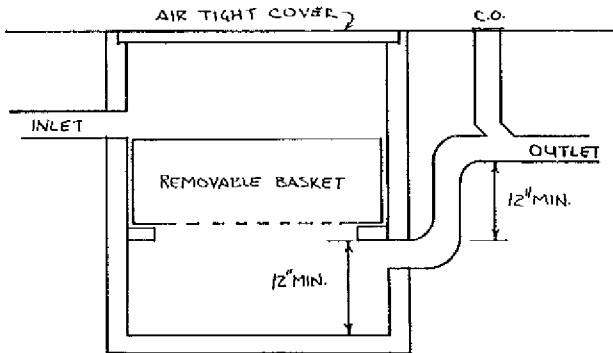
CAR WASH INTERCEPTOR WITH INVERT OUTSIDE OF BASIN

A-82.34 (7) Commercial laundries.

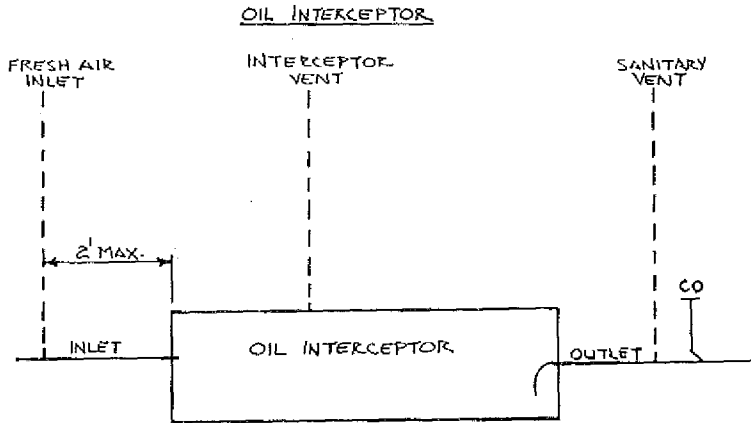
TRENCH TYPE LAUNDRY INTERCEPTOR



IN-LINE LAUNDRY INTERCEPTOR

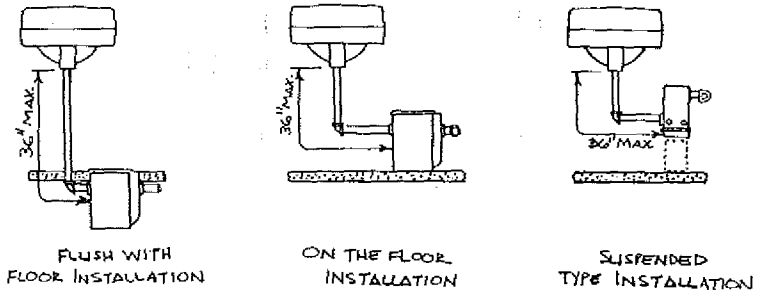


A-82.34 (8)

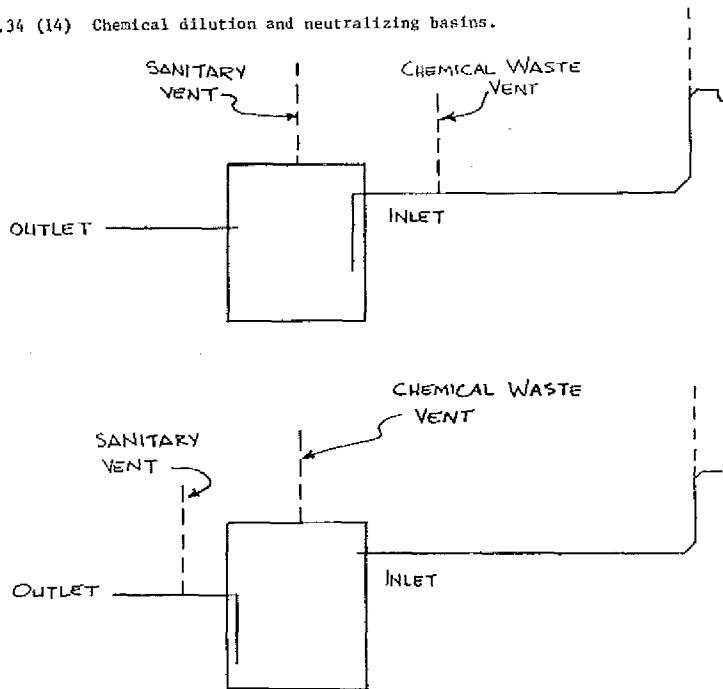


A-82.34 (13)

PLASTER AND HEAVY SOLIDS TRAP

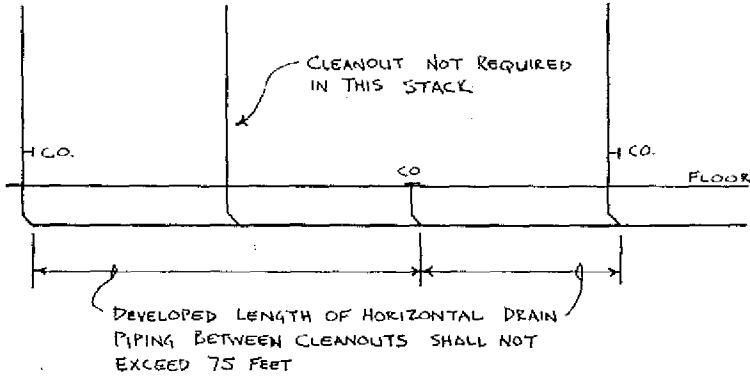


A-82.34 (14) Chemical dilution and neutralizing basins.

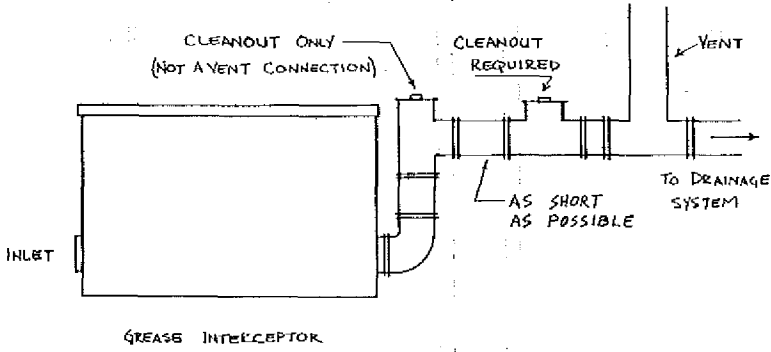
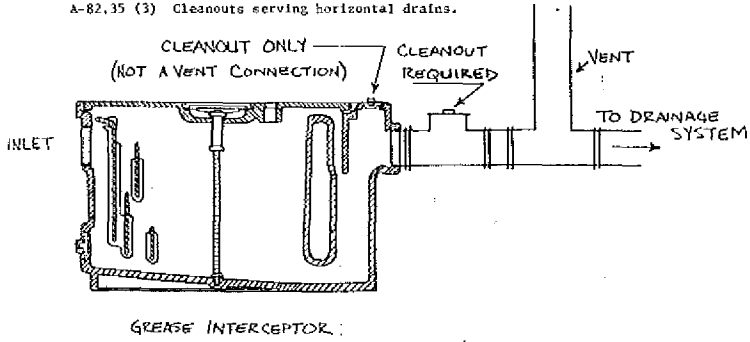


A-82.35 (3)

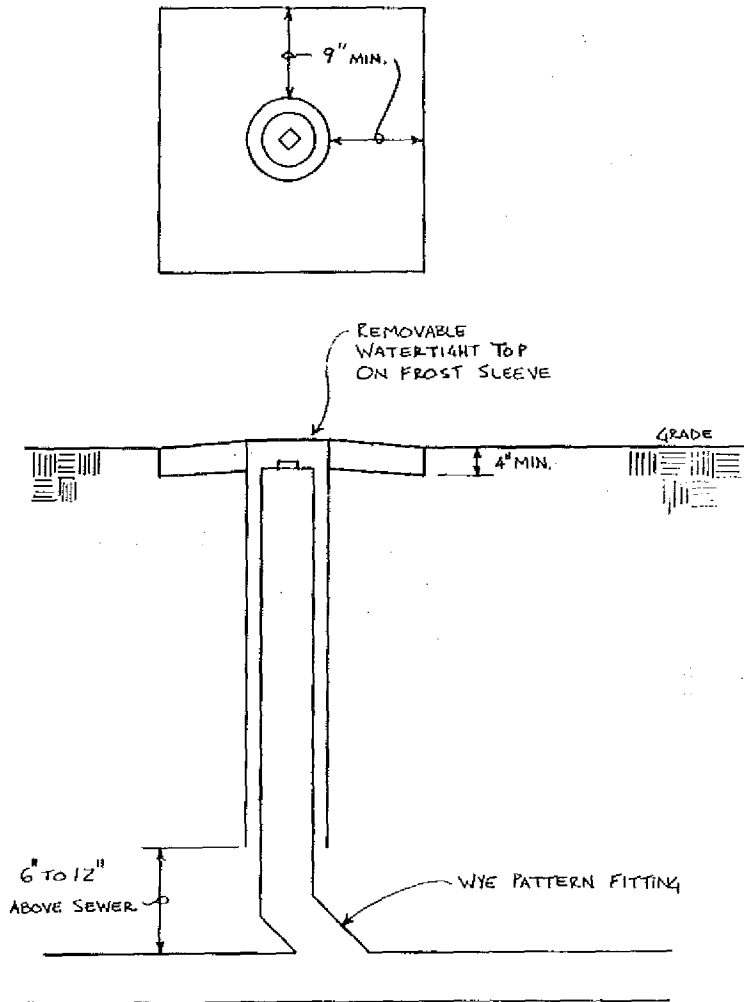
CLEANOUTS SERVING HORIZONTAL
DRAINS WITHIN OR UNDER A BUILDING



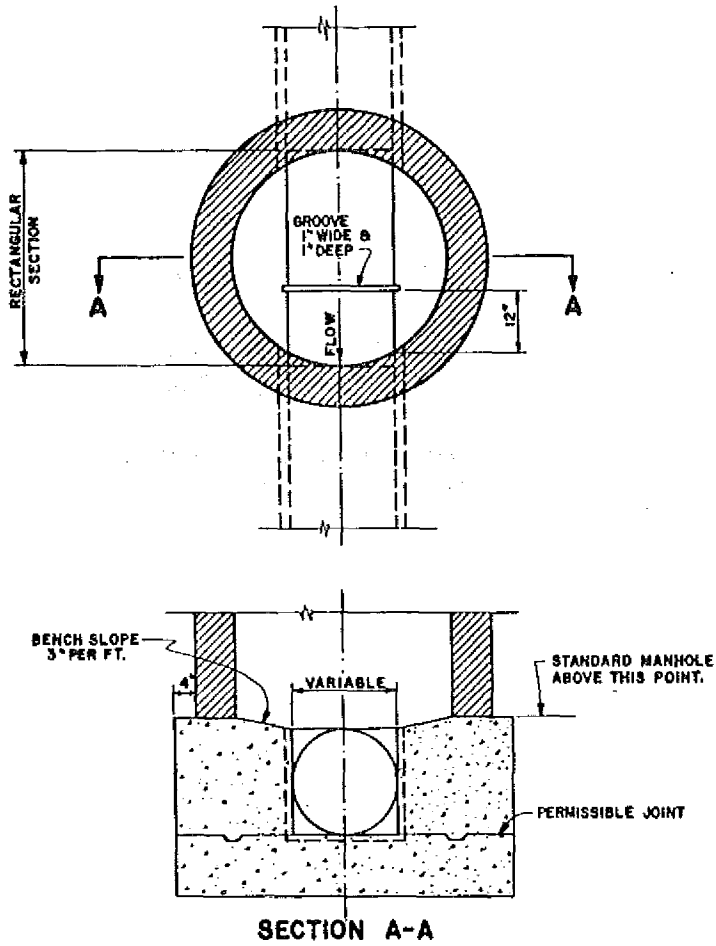
A-82.35 (3) Cleanouts serving horizontal drains.



A-82.34 (5) (a) Cleanout extension to grade.

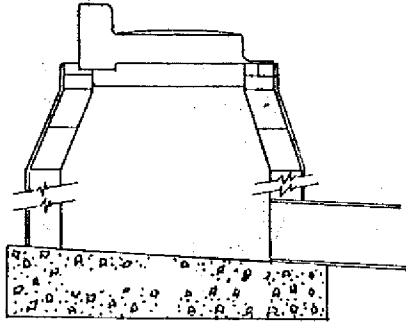


A-82.35 (8)

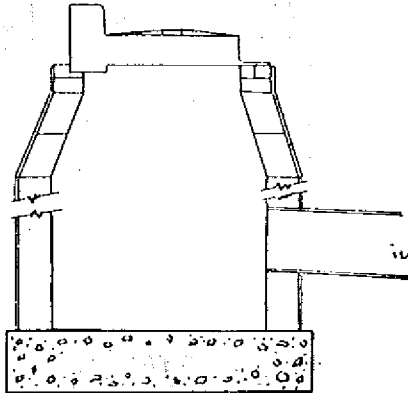


SECTION A-A
DETAIL OF SAMPLING MANHOLE

A-82.36 (17) Area drain inlets.



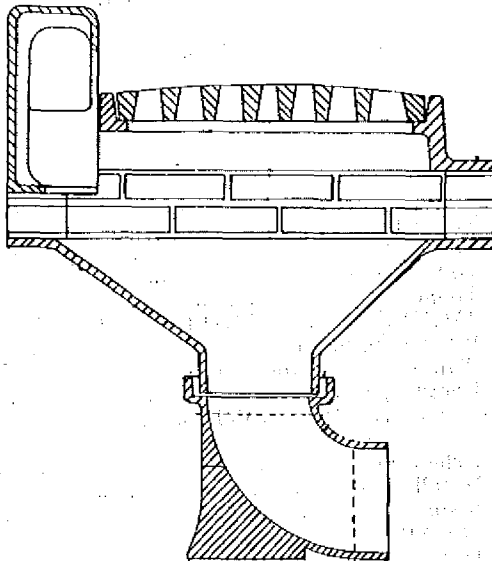
**STANDARD STORM WATER
INLET (MASONRY)**



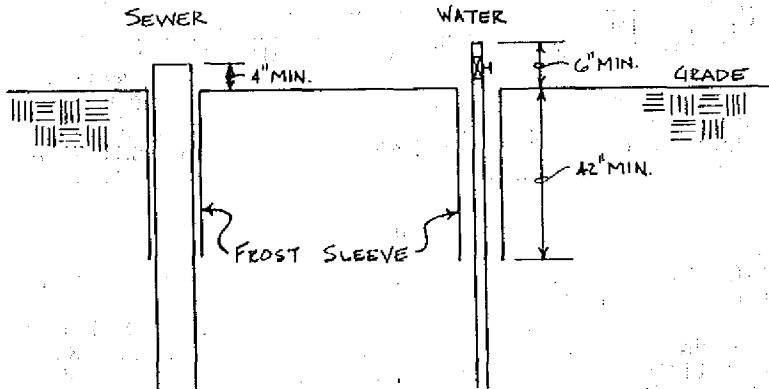
**STANDARD STORM WATER
CATCH BASIN (MASONRY)**

A-82.36 (17) Area
drain inlets.

CAST IRON STORM
WATER INLET



A-82.51 (3) Mobile home sites and parks.



MOBILE HOME BUILDING SEWER AND
WATER SERVICE TERMINATIONS