

## PLUMBING PRODUCTS RETAILERS

**Q. Do all state retailers only sell code-compliant code products for installation in Wisconsin?**

**A.** No. There are problems. Retailers may not have or look for all the necessary approval information. While retailers cannot legally sell unapproved products in certain categories for installation in plumbing systems in our state, people installing plumbing products are **also** legally responsible for meeting code requirements.

## WISCONSIN PLUMBING PRODUCTS REGISTER

The Safety and Buildings Internet WebSite has the latest edition of the *Wisconsin Plumbing Product Register*, <http://www.commerce.state.wi.us/SB/SB-PlumbingProductsRegister.html>. You can subscribe to the plumbing products register by sending a request and a check for \$20 to:

Material Orders  
Safety and Buildings Division  
PO Box 2509  
Madison, WI 53701

## CODE BOOKS AND INFORMATION

**Q. How do I get a copy of the plumbing code?**

**A.** The Wisconsin Uniform Plumbing Code, Comm 81-87, is available from the state Document Sales Unit of the Department of Administration. You may contact them at 608-266-3358 to determine the cost of what you wish to order.

Telephone orders are accepted when purchasing with a credit card, 800-362-7253.

Their email address is [docsales@doa.state.wi.us](mailto:docsales@doa.state.wi.us).

Codes are available without charge on the Internet. The Safety and Buildings list of codes is at <http://www.commerce.state.wi.us/SB/SB-CodesListing2000.html>.

**Q. If I have further plumbing questions, who should I contact?**

**A.** You should contact your local plumbing inspector or, for private onsite wastewater treatment systems (POWTS), you should contact your local zoning office.

You may also contact:

**Safety and Buildings Division**  
PO Box 7162  
Madison, WI 53707-7162  
608-266- 3151

**WebSite:** <http://www.commerce.state.wi.us/sb>

## Plumbing Products

Which can be used in

Wisconsin?

How do you know

what's effective,

what's safe?



**Information for  
Wisconsin residents  
about plumbing products**

Wisconsin Department of Commerce  
Safety and Buildings Division  
201 W. Washington Ave.  
PO Box 7162

Madison, WI 53707-7162

608-261-6546

<http://www.commerce.state.wi.us/sb>

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## Wisconsin's Plumbing Products Program

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### Q. What is the Safety and Buildings Division plumbing products program?

A. To determine if specific products meet the intent and/or requirements of Wisconsin's Uniform Plumbing Code, division staff evaluate products in these categories:

- Chemical, biochemical or physical treatments for POWTS (private onsite wastewater treatment systems);
- Health care and laboratory plumbing appliances;
- Prefabricated holding or treatment components for POWTS;
- Prefabricated plumbing systems;
- Water treatment devices for one- and two-family homes; and
- Alternative and experimental products, designs, and devices.

All other products must meet the standards contained in the Wisconsin Plumbing Code, Comm 81-87.

### Q. Why should I use approved plumbing products?

A. Aside from the fact that there are legal rules that require only approved plumbing products to be installed in plumbing systems in Wisconsin, the use of approved products gives you added assurance that the product will perform as advertised and is safe.

### Q. Where do I find out about what's approved for use in Wisconsin?

A. Any company selling a plumbing product should be able to tell you if the product meets the requirements of the code and/or has Safety and Buildings approval in one of the categories mentioned to the left. Your local plumbing inspector is also very important in protecting you from unapproved products or workmanship that does not comply with code.

### Q. What about water treatment products? How do I know if the products meet their claims?

A. Water treatment devices for one- and two-family dwellings, that serve two or fewer dwelling units in a multi-family dwelling, and consumer self-service bottled water vending machines are reviewed by the Safety and Buildings Division to ensure the manufacturer's performance claims are accurate. All other water treatment devices are exempt from product review and approval. The only residential water treatment devices that are acceptable without Safety and Buildings review are residential cation exchange water softeners that are listed by an ANSI accredited listing agency as conforming to NSF Standard 44. The seal from the listing agency and the NSF Standard 44 mark on the product indicate that a softener is listed. If a device has been approved, the manufacturer can provide you with a copy of the Safety and Building' approval letter. The letter defines the performance capabilities of the device.

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## Wisconsin's License Laws

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### Q. Are there restrictions on a homeowner doing their own plumbing?

A. Yes. There is a state law which requires a plumbing license to install plumbing in Wisconsin, except when the plumbing is performed by a property owner in a one-family dwelling he or she occupies. The home cannot be in the process of being built. The homeowner must live in the home to be eligible to installing plumbing there. (In order to live in a building, there must already be at least one water closet (or equivalent), one wash basin, one kitchen sink, one bathtub or shower, and a water heater to meet the basic requirements of sanitation. Also, a local ordinance may require licensed plumbers. Farmers may install plumbing in their own farm buildings. Homeowners are not permitted to install their own POWTS systems, which must be installed by licensed plumbers.

### Q. Is there help while installing my plumbing? Who can I call?

A. Yes! You may call your local government office and ask to contact the local plumbing inspector.

If your municipality doesn't have a plumbing inspector, you may call an area plumber. You may find your district Safety and Buildings plumbing consultant by calling 608-266-3151.



# New brochure accompanies S&B effort to contact plumbing suppliers

The brochure shown on the previous two pages will be part of the Safety and Buildings effort this fall, and in the future, to promote public and commercial awareness of the plumbing product approval system in Wisconsin.

Division staff will contact as many as possible of the state's plumbing products wholesalers and retailers to help them be aware of how to determine if plumbing products are code compliant. The brochure is meant to give both commercial employees and the public information on plumbing products use in our state.

The performance and safety of products noted in the categories listed on the second page of the brochure are reviewed for code compliance by members of the S&B Plumbing Products Unit. The division provides manufacturers with a letter defining the appropriate use of an approved product and lists the product in the quarterly *Wisconsin Plumbing*

*Products Register*. The *WPPR* is also provided on the S&B WebSite, <http://www.commerce.state.wi.us/SB/SB-PlumbingProductsRegister.html>.

Comm 84.10 states "Department approval. No fixture, appliance, appurtenance, material, device or product may be sold for use in a plumbing system or may be installed in a plumbing system, unless it is of a type conforming to the standards or specifications of chs. Comm 82 and 83 and this chapter and ch. 145, Stats."

Some businesses and members of the public are not aware of the plumbing product review system and products which are not code-compliant are available and installed in the state. S&B is trying to use some of its resources to educate people who have interests in quality safe products.

Copies of the brochure are available from the S&B Materials Distribution Unit, 608-267-4405, [phobbs@commerce.state.wi.us](mailto:phobbs@commerce.state.wi.us).

Dan Graham chosen director of S&B Bureau of Field Operations  
page 5



## (further) Inside this *WPCR*

Contact Info .....	page 2
Testing D&V with manometer .....	page 6
Pool revision package .....	page 8
Products listing agency .....	page 8
Plumbing con ed .....	page 9
POWTS manuals .....	page 10
Air admittance valve .....	page 11
Con ed advertisement .....	page 12

# Wisconsin Plumbing Codes Report

Safety and Buildings Division, Department of Commerce

Volume 16 No.11

November 2000

Sample S&B email address: [tjoyce@commerce.state.wi.us](mailto:tjoyce@commerce.state.wi.us)

Green Bay Office  
2331 San Luis Pl #150  
Green Bay WI 54304  
920-492-5601  
Fax 920-492-5604  
[greenbaysch@commerce.state.wi.us](mailto:greenbaysch@commerce.state.wi.us)

Hayward Office  
10541N Ranch Rd.  
Hayward WI 54843  
715-634-4870  
Fax 715-634-5150  
[haywardsch@commerce.state.wi.us](mailto:haywardsch@commerce.state.wi.us)

La Crosse Office  
4003 North Kinney  
Coulee Road  
LaCrosse WI 54603  
608-785-9334  
Fax 608-785-9330  
[lacrossesch@commerce.state.wi.us](mailto:lacrossesch@commerce.state.wi.us)

Madison Office  
201 W Washington Ave  
PO 2658  
Madison WI 53701  
608-266-3151  
Fax 608-267-9566  
[madisonsch@commerce.state.wi.us](mailto:madisonsch@commerce.state.wi.us)

Shawano Office  
1340 E Green Bay St #300  
Shawano WI 54166  
715-524-3626  
Fax 715-524-3633  
[shawanosch@commerce.state.wi.us](mailto:shawanosch@commerce.state.wi.us)

Waukesha Office  
401 Pilot Ct # C  
Waukesha WI 53188  
262-548-8600  
Fax 262-548-8614  
[waukeshasch@commerce.state.wi.us](mailto:waukeshasch@commerce.state.wi.us)

## Plan Review Scheduling

For plan review scheduling for Plumbing and Buildings, call the S&B office numbers listed above, or contact the email address shown. Fax scheduling is possible, 877-840-9172. Information about the project will be needed to schedule the plan review. Any of the offices can schedule the first appropriate plan review available statewide.

Plan review for Private Onsite Wastewater Treatment Systems is provided on a first-come, first-served basis. Contact one of the offices for information.

For scheduling info, also see <http://www.commerce.state.wi.us/SB/SB-DailyDoc.html>.

Direct comments, address, suggestions for articles, etc., to Todd Taylor. Fax 608-264-8795. Telephone 608-267-3606.  
[ttaylor@commerce.state.wi.us](mailto:ttaylor@commerce.state.wi.us)/  
Madison mailing address above.

## Plumbing Consultants

Tom Braun .....Stevens Point ..... 715-345-5335  
Don Hough .....Hayward ..... 715-634-4804  
Tim Joyce .....Madison ..... 608-825-4724  
Don Oremus .....Pelican Lake ..... 715-487-6123  
Robert Samuels .....Waukesha ..... 262-548-8634  
Jim Wehinger .....Friendship ..... 608-339-7430  
Jim Zickert .....Eldorado ..... 920-872-2656  
Harold Stanlick, Superv. .... 715-726-4520

## Plumbing Plan Reviewers

Ryan Boebel .....Madison ..... 608-261-6535  
Herman Delfosse .....La Crosse ..... 608-789-5535  
Tom Devereaux .....Hayward ..... 715-634-3026  
Wes Grube .....Green Bay ..... 920-492-5613  
Dan Kraft .....Madison ..... 608-266-8075  
Ken Pertzborn .....Madison ..... 608-267-2242  
Curt Wendorff .....Shawano ..... 715-526-9056

## Plumbing Products Reviewers

Mike Beckwith .....Madison ..... 608-266-6742  
Dan Jensen .....Madison ..... 608-267-5265  
Glen Schlueter .....Madison ..... 608-267-1401

## POWTS Plan Reviewers

Tom Devereaux .....Hayward ..... 715-634-3026  
Wes Grube .....Green Bay ..... 920-492-5613  
Julia Lewis .....Waukesha ..... 262-548-8638  
Robert Kanter .....Madison ..... 608-261-7735  
Pete Pagel .....Madison ..... 608-266-2889  
Jim Quinlan .....Madison ..... 608-266-3937  
Pat Shandorf .....Hayward ..... 715-634-7810  
Jerry Swim .....La Crosse ..... 608-789-7892  
Keith Wilkinson .....Shawano ..... 715-524-3630

## POWTS Wastewater Specialists

Ross Fugill .....Shawano ..... 715-524-3629  
Matthew Janzen .....Stevens Point ..... 715-345-5336  
Leroy Jansky .....Chippewa Falls ..... 715-726-2544  
Carl Lippert .....Hayward ..... 715-634-3484  
Karl Schultz .....Oshkosh ..... 920-424-3311  
Dennis Sorenson .....La Crosse ..... 608-785-9336  
Duane Steiner .....West Baraboo ..... 608-355-3159  
Allen Wendorf .....Madison ..... 608-873-5476  
Harold Stanlick, Superv. .... 262-521-5065

## Public Swimming Pool Reviewer

Dave Russell .....Madison ..... 608-267-3605

The WPCR is a monthly publication delivered to about 9,700 people as part of their certification, license, or registration with the Wisconsin Department of Commerce, Safety and Buildings Division. Subscriptions are also available. SBD 8340P

The Department of Commerce does not discriminate on the basis of disability in the provision of services or in employment. If you need this printed material interpreted or in a different form, or if you need assistance in using this service, please contact us, 608-266-3151, TTY 608-264-8777.

## Dan Graham chosen as director of the Bureau of Field Operations

The new director of the Safety and Buildings Division Bureau of Field Operations is Dan Graham, who has been the S&B section chief for the Electrical Systems and Fire Safety Programs. Graham was chosen through a competitive state civil service process.

He will supervise the division's field consultants, inspectors, and bureau support staff.

A graduate of the University of Cincinnati in Fire and Safety Engineering Technology, Graham also has more than 23 years in the fire service. He has worked at the local, state and federal levels, and has developed programs which coordinated fire issues with building, plumbing, and electrical concerns.

Graham's telephone number is 608-266-0056, his email address is [dgraham@commerce.state.wi.us](mailto:dgraham@commerce.state.wi.us).



Dan Graham

## Event Calendar

\*Nov. 15, 2000, Wednesday, **Plumbing Advisory Code Council**, 9 a.m. - 3 p.m., Wisconsin Technical College Foundation, 1 Foundation Circle,

**For those of you who receive the WPCR free** because you have a particular license administered by the Safety and Buildings Division, address changes should be provided to the S&B Credential Unit, [madisoncred@commerce.state.wi.us](mailto:madisoncred@commerce.state.wi.us), 608-261-8500.

**People with paid subscriptions**, may request service and address changes from Material Orders, PO Box 2509, Madison, WI 53701. Fax 608-261-6699. Telephone 608-267-4405. Email [phobbs@commerce.state.wi.us](mailto:phobbs@commerce.state.wi.us).

Subscriptions are \$20, payable in advance to the Safety and Buildings Division for 12 monthly issues.

Contact the listed Code Consultant for information on the meeting agendas, locations, etc. If you have questions concerning technicalities of the codes which are the subjects of the meetings, contact consultants and reviewers in the appropriate program area.

Waunakee, Jean MacCubbin, 608-266-0955, [jmaccubbin@commerce.state.wi.us](mailto:jmaccubbin@commerce.state.wi.us).

\*December 5, 2000, **Plumbing Advisory Code Council, Stormwater Workgroup**, Tues.

December 5, 2000, 9 a.m. - 2 p.m., Thompson Commerce Center, Rm 3B, 201 W. Washington Ave., Madison, Jean MacCubbin, 608-266-0955, [jmaccubbin@commerce.state.wi.us](mailto:jmaccubbin@commerce.state.wi.us).

\*December 7, 2000, Thursday, **Comm 10 Code Committee**, 9 a.m. - 3 p.m., Thompson Commerce

Center, Rm. 6A, 201 W Washington Ave., Madison, Duane Hubeler, 608-266-1390, [dhubeler@commerce.state.wi.us](mailto:dhubeler@commerce.state.wi.us).

\*Dec. 12, 2000, Tuesday, **Pool Code Advisory Council**, 10 a.m. - 3 p.m., Sun Prairie City Hall,

second floor council chambers, Jean MacCubbin, 608-266-0955, [jmaccubbin@commerce.state.wi.us](mailto:jmaccubbin@commerce.state.wi.us).

\*Dec. 13, 2000, Wednesday, **Plumbing Advisory Code Council**, 9 a.m. - 3 p.m., Thompson

Commerce Center first floor Human Resources Conference Room, 201 W Washington Ave., Madison, Jean MacCubbin, 608-266-0955, [jmaccubbin@commerce.state.wi.us](mailto:jmaccubbin@commerce.state.wi.us).

# Testing drain and vent systems with a manometer

A final test may be completed on a drain and vent system using a manometer. The manometer is an “instrument used for measuring the pressure of liquids and gases,” which can show whether a drain and vent system maintains a certain pressure. If it doesn’t, it needs to be checked for leakage.

The most common plumbing manometer is a U-shaped clear tube with a hose attached.

When both ends of the manometer are open to free atmosphere, the water level in each side should be identical, because there is no pressure other than

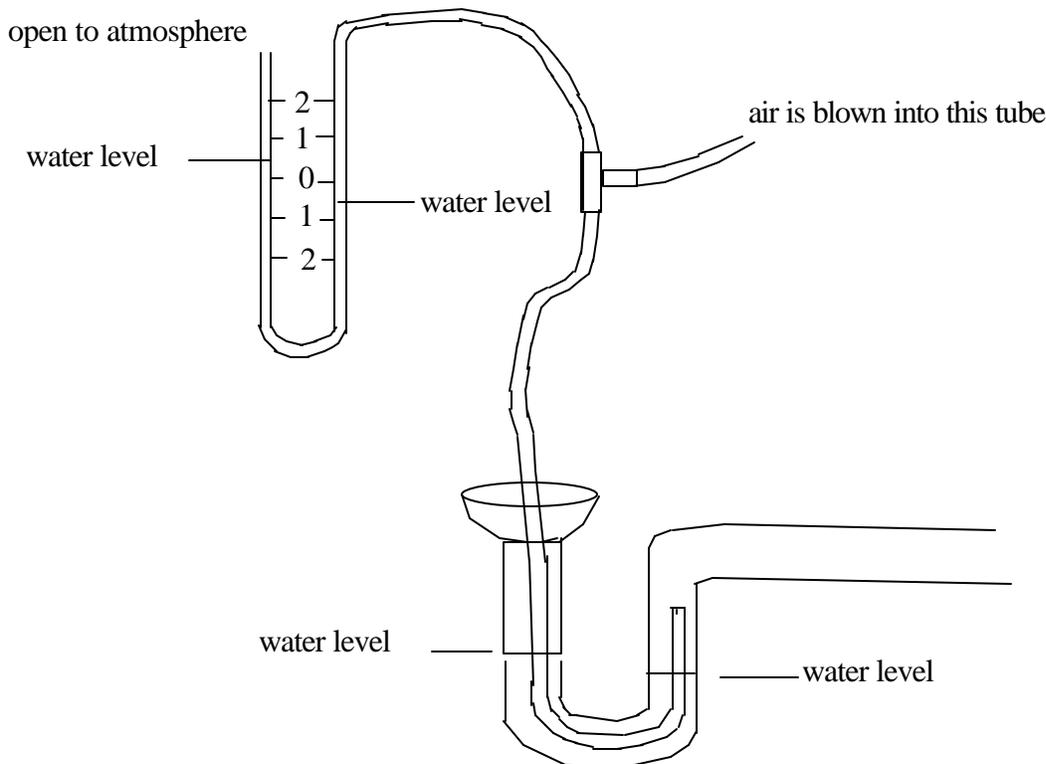
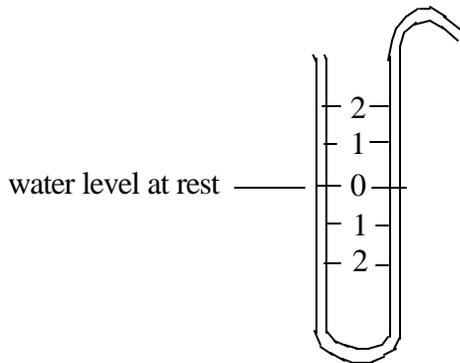
atmospheric pressure exerted on either side of the manometer.

When one side of the manometer is inserted into a trap of a plumbing system, and the building sewer and vent terminals are plugged, the manometer can be used to test the drain and vent system for leaks. A person should blow air (slowly) into a tee connected to the same side of the manometer as the tube that’s inserted in the D&V system until the water in one side of the manometer drops 1/2 inch and the water in the other side of the tube raises 1/2 inch (in this type of manometer). This is equal to one inch of water column pressure in the drain and vent system.

Each trap will show identical changes to the manometer; the water will lower 1/2 inch on one side of the trap and raise 1/2 inch on the other side.

If the pressure differential remains constant for five minutes, there are no leaks in the vent system. If the water columns readjust themselves to atmospheric pressure levels, there is leakage and it should be fixed.

For more information on manometers and plumbing system testing, contact any of the plumbing consultants or plan reviewers listed on page two of this *WPCR*.



# Petitions for variance from Comm 83 will be concentrated on issues

by Brad Johnson, Bureau of Integrated Services  
POWTS Program Section Chief, 920-492-5605,  
bjohnson@commerce.state.wi.us

Implementation of the new Comm 83, Private Onsite Wastewater Treatment Systems Code, provides an opportunity to change Safety and Buildings Division procedures to make processing of Comm 83 petitions uniform with how the division processes other petitions for variance. The new performance-oriented Comm 83 allows more flexibility for designers and consumers, hopefully reducing the necessity to file petitions for variance from numerous obsolete prescriptive design requirements.

In other programs within S&B, a separate petition for variance must be submitted for each code section, or an independent issue addressed in multiple code sections.

After November 30, S&B will only allow one code section, or an independent issue addressed in multiple code sections, to be petitioned per transaction. Each code section, or an individual issue citing multiple code sections, must be accompanied with a separate new

Petition for Variance Application Form SBD-9890, supporting data demonstrating equivalence to the code section(s) being petitioned, and a \$225 review fee.

## S&B Bureau of Integrated Services Management Contacts

Bureau Director: Randy Baldwin, 608-267-9152  
Green Bay office: Brad Johnson, 920-492-5605  
Hayward Office: John Spalding, 608-789-4693  
LaCrosse Office: John Spalding, 608-789-4693  
Madison Office: Clyde Bryant 608-266-1835  
Tom Kasper 608-267-7586  
Mary Jacobson 608-266-8456  
Jim Miller 608-266-8072  
Credentialing Supervisor, M. Jacobson, above  
Mobile Home Unit Super., Malini  
Ganeshapillai, 608-266-5333  
Shawano Office: Brad Johnson, 715-524-6853  
Waukesha Office: Tony Rubio, 262-548-8610

## Health care facilities: To submit, or not to submit?

by Dan Kraft, S&B Plumbing Plan Reviewer

A recent code change affected the plan submittal requirements for health care facilities.

Comm Table 82.20-1, states that all plumbing, new installations, additions and alterations, regardless of the number of plumbing fixtures involved, to be installed in health care and related facilities must be submitted to the Safety and Buildings Division for review.

All plumbing fixtures to be installed in health care facilities need to be reviewed per Table 82.20-1. So, exactly which types of health care and related facilities are we speaking of, when involving only one fixture? Hospitals and nursing homes.

One-fixture submittals would not be required for animal hospitals, doctor or dentist offices, or clinics that are not located in a hospital. (There are individual fixtures noted in Table 1 and Table 82-20-2 that need to be reviewed regardless of what kind of public building they're in.)

If you have any questions concerning these types of submittals, contact me, Dan Kraft, 608-266-8075,

**That is the question!**

dkraft@commerce.state.wi.us, or any of the plumbing plan reviewers or consultants listed on page two of this *WPCR*.

## Questions about your continuing education credits?

Check the mailing address back page for a printed line giving your status for inspection-related S&B certifications, licenses, and registrations. Or, call the Credentialing Unit, 608-261-8500. Or, check the S&B WebSite, <http://www.commerce.state.wi.us/SB/SB-HomePage.html>, choose "Credentials."

# Comm 90 pool code revision package expected to be effective in January or February 2001

by Lynita Docken, Pools Program Manager, 608-785-9349, ldocken@commerce.state.wi.us

Comm 90, the Design and Construction of Public Swimming Pools Code, has revisions which should become effective January 1 or February 1, 2001.

Plan review fees will be increased at that time to reflect the actual cost of the plan reviewer's time. Gutter type pool plan review fees will increase to \$600 per pool and whirlpool plans will carry a separate \$450 fee. The 50 percent reduction in fees for a second pool plan has been removed from the code.

Plan submission requirements in Comm 90.04 are revised to require submittal of four sets of plans to S&B for review.

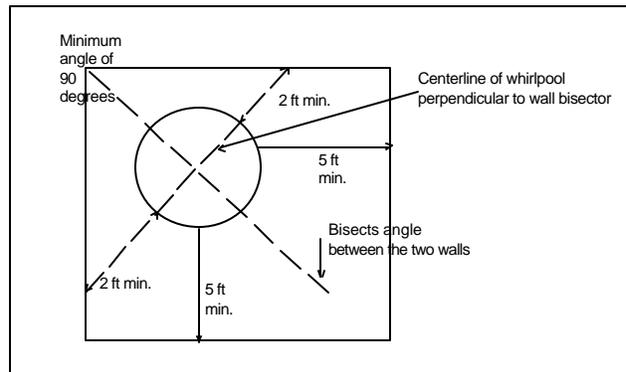
The new code will include paragraphs Comm 90.04(2) and (3) allowing designers to submit alternate or experimental pool or whirlpool designs. These designs may be used much like a "master design" in various installations statewide.

Comm 90.08 is revised to contain allowances for pool basin obstructions, including roof support columns, no more than two feet in diameter, of a contrasting color, and protruding at least five feet

above the pool bottom and no less than three feet above the water level. There are also revisions to the pool bench requirements.

Deck obstructions (Comm 90.09) may be allowed if the obstruction is no greater than two feet in diameter and of a contrasting color, so as to provide adequate clearance, safety, visibility, and access.

The appendix of Comm 90 will include the following drawing illustrating a code compliant whirlpool installation.



## CSA Int'l is listing agency

The Safety and Buildings Division now recognizes Canadian Standards Assoc. International as an acceptable listing agency for cross connection control devices and residential cation exchange water softeners. The products must be listed as conforming to the appropriate standard in Comm Table 84-11.

CSA's seal must be visible on the product after installation, as shown to the right. The seal with the 'C' and 'US' are for products for Canada and U.S., while the seal must be 'US' are for products for the

U.S. only. S&B will be revising the appendix in Comm A-84.11 to include the following: CSA International (CSA), 178 Rexdale Boulevard, Toronto, ON, Canada M9W 1R3.



Safety and Buildings-related codes are on the Internet,

[www.commerce.state.wi.us/SB/SB-CodesListing2000.html](http://www.commerce.state.wi.us/SB/SB-CodesListing2000.html)

Not all codes are available electronically. Paper copies may be purchased from Document Sales, 800-362-7253, for credit card purchases, or 608-266-3358.

# Changes, changes, changes . . . or why you should attend plumbing con ed this season

by Lynita Docken, Plumbing Program Manager, 608-785-9349, ldocken@commerce.state.wi.us

This fall and winter S&B continuing education course instructors will explain code changes implemented during 2000 and to be effective in 2001. (See the August 2000 *WPCR* for class info and a registration form, see the publication on the S&B WebSite, <http://www.commerce.state.wi.us/SB/SB-Publications Archives.html>; or call 608-261-8500 to request a form.)

There have been numerous plumbing code changes during 2000 and an additional revision to Comm 82 - 84 is scheduled to have an effective date of January 1 or February 1, 2001.

## **In July, 2000, Comm 81 became the chapter containing definitions and adopted standards:**

\* 81.01 (7e) Alternate plumbing system” means a type of plumbing system designed in such a manner that valid and reliable data shall demonstrate to the department that the plumbing system is in compliance with the intent of chs. Comm 82 and 84.

\* 81.01 (90e) Experimental plumbing system” has the same meaning as experimental system as specified in sub. (91). (81.01 (91) Experimental system means a type of plumbing system from which valid and reliable data are being sought to demonstrate compliance with the intent of chs. Comm 82 to 84.)

\* 81.01(288e) Whirlpool” has the meaning as specified under s. Comm 90.03(11)(k). Note: Section Comm 90.03 (11)(k) reads: “Whirlpool” means a relatively small pool which uses high temperature water and which may include a water agitation system. A “whirlpool” is sometimes called a spa. Note: A fill and dump bathtub is not a whirlpool.

\* 81.01(288m) Whirlpool bathtub” means a plumbing appliance consisting of a bathtub fixture that is equipped and fitted with a circulation piping system designed to accept, circulate and discharge bathtub water upon each use.

## **Comm 82 revisions in the 2001 package:**

\* 82.20 (12) Alternate and experimental plumbing system review and approval requirements.

\*82.21 (2)(a) Existing systems are allowed to remain (and be maintained in accordance with original installation) if the plumbing system was installed in accordance with the code in effect at the time of installation or the plumbing system conforms to the present code, but when a hazard to life, health or property exists or is created by an existing system, that system shall be repaired or replaced.

\*82.21 (3)(b)4.b. The results of cross connection device performance tests shall be submitted to the department and purveyor within 60 days of completion of the test.

\*82.33-3 A new table is created for the discharge points for public swimming pool wastewater from filters and drains.

\*82.36 (3)(b)3 Discharge from municipal well pump house floor drains and floor drains from one- and two-family garage floor drains may be directed to sanitary or ground surface.

\*82.36 (4) Performance language is included in stormwater sizing requirements to allow a designer to provide calculations acceptable to the department using 3.7 inches per hour rainfall data.

\*82.36-4a A stormwater sizing table is included for elliptical reinforced concrete pipe.

\*82.40(3)(d)3 Testable cross connection control devices and assemblies are required to have a tag attached when installed. The tag must carry the following minimum information. “Wisconsin Department of Commerce, Identification/Object Number \_\_\_\_\_, Cross Connection Control Assembly, Do Not Remove This Tag.”

continued on the next page

## Plumbing con ed topics

continued from the previous page

\*82.41-1 The device selection table is expanded to include the Canadian Standards Association nomenclature.

\*82.41(4)(b)1 Except for deck-mounted devices, atmospheric vacuum breakers must be installed at least 6 inches (deck-mounted, 1 inch) above the flood level rim of the receptor serving the water supply port, the highest point downstream from the device where backpressure could be created and the highest point of injection or aspiration.

\* 82.50(10)(g) Health care and related facility requirements for hot water have been changed to allow hospitals, CBRFs, inpatient hospices and nursing homes to install and maintain shower faucets with a hot water discharge temperature between 110 degrees and 115 degrees.

### Some of the issues in Comm 84 revisions:

\* 84.10(5) All products shall be installed in accordance with the manufacturer's printed instruction and as specified in Comm 82-84. If there is a conflict between the manufacturer's printed instruction and requirements of Comm 82-84, the requirements of Comm 82-84 shall take precedence."

\*84.20(4)(b)9 Safing will now be required on floor drains and other similar fixtures (not required in basements or poured floors over unexcavated areas). The safing must extend 12 inches from the edge of the fixture and must be properly drained.

\* 84.20(5)(n) Urinals are allowed to be 15 inches from the centerline of the urinal to an obstruction. The previous requirement was 16 inches.

A more complete set of plumbing revisions in 2000-2001 will be discussed at the continuing education courses. If you have questions or concerns contact any plumbing plan reviewer or consultant noted on page 2 of this *WPCR*.

## Comm 83, POWTS Code, component manuals are sold by state Document Sales

The component manuals for the revised Comm 83, POWTS Code, will now be sold through the state Department of Administration's Document Sales and Distribution Section. During the transitional period to the new code, the manuals were distributed by the Safety and Buildings Division Madison office. Now, the manuals will be sold through the same agency that sells Comm 83 and other state administrative codes. For detailed ordering information, contact Document Sales, 608-266-3358, or email them, docsales@doa.state.wi.us.

**All the component manuals will continue to be  
free electronically through the S&B WebSite:**

**[http://www.commerce.state.wi.us/SB/SB-  
Publications.html](http://www.commerce.state.wi.us/SB/SB-Publications.html)**

# Studor air admittance valve linked to alternate system approval

by Lynita Docken, Plumbing Program Manager,  
608-785-9349, ldocken@commerce.state.wi.us

The Studor air admittance valve (AAV) and accompanying system has been approved for use in Wisconsin, effective January 1, 2001.

Because the valve can affect sizing and installation of the venting system, S&B has reviewed the Studor valve and system using the “alternate system” review process. Before issuing an alternate system approval, for over a year three staff members representing S&B field operations, plan review, and product review perspectives reviewed information submitted by the Studor company.

Studor AAVs are sold in two sizes: the “mini-vent” and the “maxi-vent.” The mini-vent is for 1 1/4-inch through 2-inch pipe and the maxi-vent is used on 3-inch and 4-inch vent piping.

**Following are the stipulations for system installation:** 1. The AAV must be installed as required in the manufacturer’s printed instructions. If the Wisconsin Plumbing Code or the alternate system approval stipulations vary from the manufacturer’s instructions, the code and stipulations must be followed.

2. Studor valves must be tested immediately prior to or after installation. The test required is to one inch of water column positive pressure for 5 minutes.

3. The AAV must be installed within 15 degrees from vertical.

4. Each plumbing system using the AAV must have one three-inch vent terminating outside the building with an open pipe. Studor recommends this vent be the most downstream vent in the system. This is only a recommendation, not a requirement.

5. Frost protection is required if the AAV is installed in freezing temperatures.

6. The AAV must be installed:

- 4 inches above the weir of the highest trap being served, Figures 1 and 2, page 13;
  - No more than 20 inches below the flood level rim of any fixture served;
  - At least 6 inches above insulation materials;
  - In an accessible area;
  - In a ventilated space (at least one square inch of total opening), and;
  - Within the trap to vent distances, Comm 82.31(9).
7. Horizontal offsets less than 36 inches above the floor are permitted except where the vent connects to another vent pipe, Figure 3, page 14.

8. The AAV may serve as a vent terminal for a:

- Branch vent;
- Individual vent;
- Circuit vent;
- Common vent;
- Combination drain and vent system;
- Stack vent;
- Wet vent, or;
- Vent stack.

9. The AAV may be located:

- Inside a building;
- Under an overhang of a building;
- Less than 10 feet from an air intake;
- Less than 5 feet from a

“Studor valves must be tested immediately prior to or after installation.”

continued on the next page

State administrative codes and the code update service may be purchased by contacting state Document Sales, 608-266-3358, or 800-362-7253, for credit card purchases.

# Studor approval

continued from previous page

power exhaust;

- Less than 10 feet horizontally from and less than 2 feet above roof scuttles, doors and openable windows;

- Less than 7 feet above a roof or the surrounding grade, but not less than 8 inches above a roof; and

- Less than 10 feet from a lot line.

10. If a branch drain served by an AAV connects

to a drain stack below 4 branch intervals, a relief vent terminating outside the building with an open pipe must be installed between the most downstream fixture of the branch and the drain stack.

11. A branch served by an AAV shall not connect to any horizontal drain within 20 pipe diameters downstream from the base of a 2-inch or larger stack.

12. The AAV must not be located in:

- An enclosed stairwell;

- An area under positive pressure for more than

## Continuing Education

“Pipe Penetration and Fire Protection;” “Wisconsin Plumbing Codes;” Nov. 14-15, Dec. 5-6; Three hours credit for MP, JP, MPRA, JPRA, MPRS, JPRS, UDC-I; Fee; Classes are in Eau Claire area; Call 715-834-8813 after 6 p.m. or email [ecdbrain@yahoo.com](mailto:ecdbrain@yahoo.com).

## Inspectors convention dates changed

Due to a scheduling conflict, the Wisconsin League of Municipalities has changed the dates of its 2001 Plumbing Inspectors Convention to September 12-14 in La Crosse. The gathering previously had been scheduled a week later.

## Wisconsin Underground Contractors Association

presents

# Competent Person Training for Excavation and Trenching

- “ Provides extensive training for plumbers, soil testers, and operators on OSHA’s Excavation Standard
- “ Demonstrates OSHA’s soil classification system
- “ Identifies hazards associated with excavation and trenching
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- “ Provides information, rules, regulations, and methods needed in order to be an OSHA “Competent Person”



**Location:** Office of the Wisconsin Underground Contractors Association  
2835 N. Mayfair Rd. - Suite 35  
Milwaukee, Wisconsin 53222

**Dates:** December 2, 2000 8 a.m. to 4:30 p.m.  
or December 12 and 14, 2000 5 p.m. to 8:30 p.m.

**Cost:** \$100 per person, including lunch

**Register:** Wisconsin Underground Contractors Association, 414-778-1050

8 hours continuing education approved by the Safety and Buildings Division for Master Plumbers, Journeyman Plumbers, Master Plumbers-Restricted Service, Journeyman Plumbers-Restricted Service, Soil Testers

12 continuous hours;

- An area used as a supply or return air plenum; or
- A pit, vault or depression below the adjacent grade or floor level.

13. The AAV may not serve as a vent terminal for:

- Vents installed to relieve positive pressure;
  - Vents serving chemical waste systems;
  - Vents serving POWTS holding or treatment tanks;
  - A stack vent serving 2 or more branch intervals;
- or

- A vent required by Comm 82.31(4)(a).

14. Vent sizing is affected when using the AAV as a vent terminal. The mini- and maxi- vent sizing tables are shown in Figures 5 and 6, page 15.

“The S&B plumbing system approval for use in Wisconsin of the Studor Mini- and Maxi-Vent air admittance valves, beginning January 1, 2001, includes the innovative requirement that the company provide educational classes before the valves are put into use.” See page 1 of the October *WPCR* for more info.

For more information on installation requirements for the AAV system, contact one of the plumbing plan reviewers or plumbing consultants listed on page 2 of this *WPCR*.

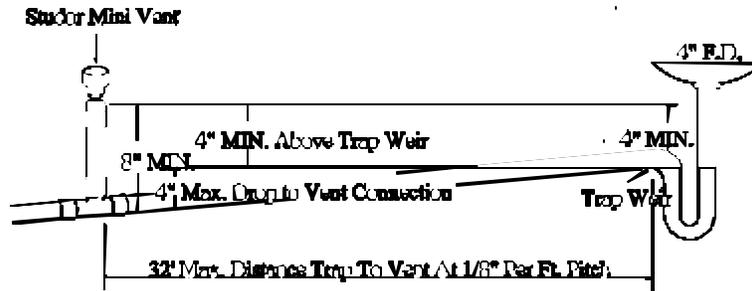


Figure 1, AAV 4 inch min. above highest trap weir

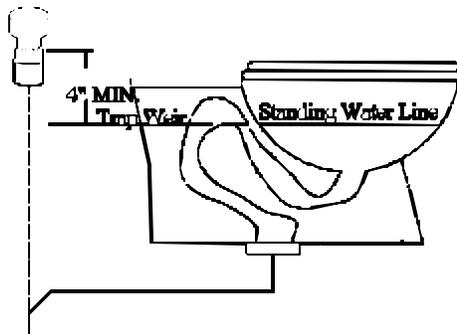


Figure 2, AAV 4 inch min. above highest trap weir

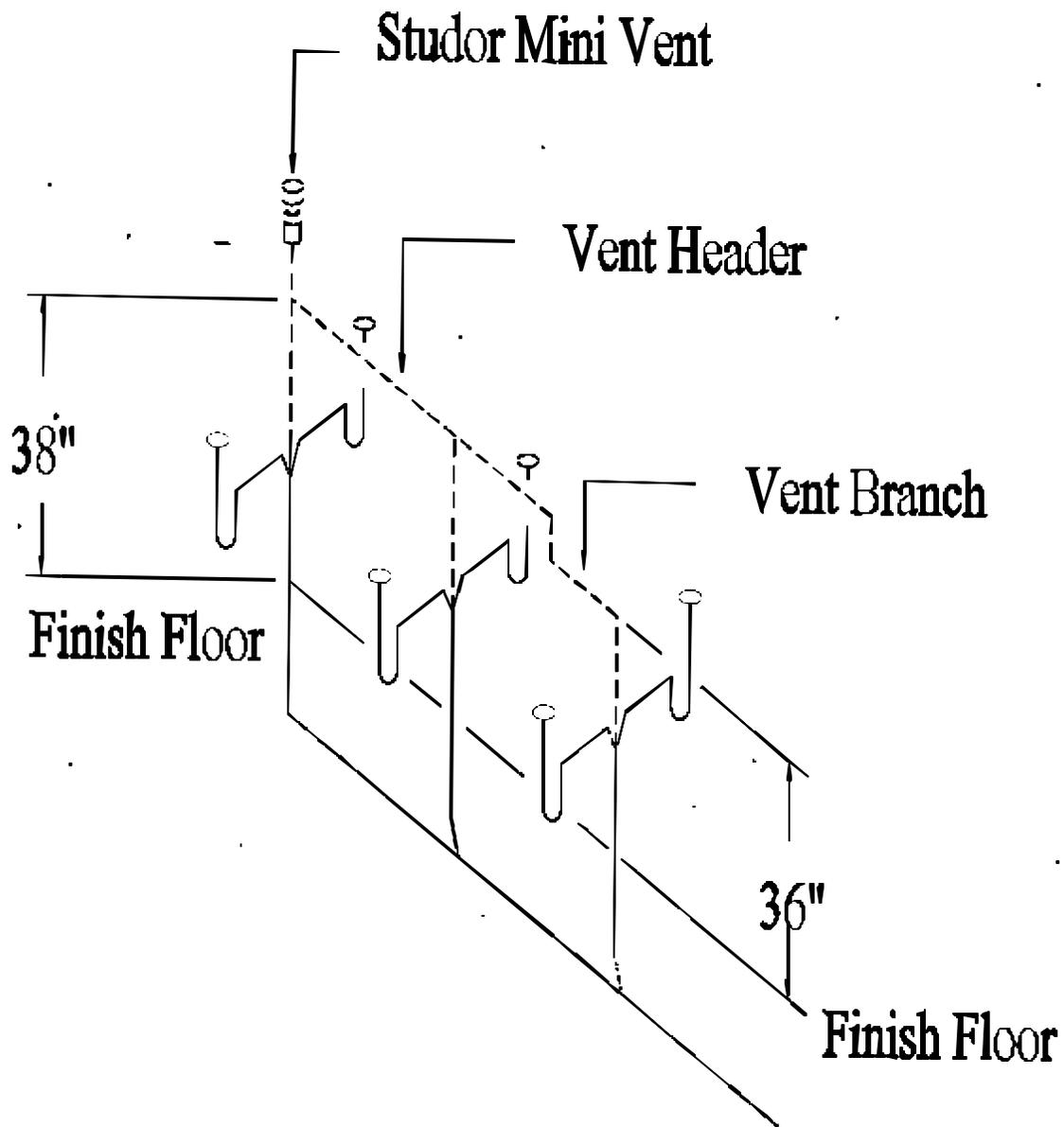


Figure 3, Offsets and branch connection to vent headers.

<b>Studor Mini-Vent</b>			
<b>Table 1</b>			
<b>Maximum Drainage Fixture Units<sup>a</sup> Served</b>	<b>Maximum developed Distance of Vent to Connection of Air Admittance Valve (AAV)</b>		
	<b>1-1/4" Vent Diameter</b>	<b>1-1/2" Vent Diameter</b>	<b>2" Vent Diameter</b>
1	35	NL <sup>b</sup>	NL
3	28	140	NL
6	NP <sup>c</sup>	100	200
20	NP	60 <sup>d</sup>	110
160	NP	NP	25

**Notes:** a: Drainage Fixture Units based on ch. Comm 82, Wis. Adm. Code  
b: NL means no limit  
c: NP means not permitted  
d: Not more than two (2) water closets or similar type fixtures of four (4) or more drainage fixture units.

Figure 5

<b>Studor Maxi-Vent</b>		
<b>Table 1</b>		
<b>Maximum Drainage Fixture Units<sup>a</sup> Served</b>	<b>Maximum developed Distance of Vent to Connection of Air Admittance Valve (AAV)</b>	
	<b>3" Vent Diameter</b>	<b>4" Vent Diameter</b>
20	NL	NL
160	300	NL

**Notes:** a: Drainage Fixture Units based on ch. Comm 82, Wis. Adm. Code  
b: NL means no limit

Figure 6

WPCR - September  
Safety and Buildings Division  
201 W Washington Ave  
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