



DIVISION OF INDUSTRY SERVICES
Plumbing Product Review
P.O. Box 7302
Madison, Wisconsin 53701-2658
TTY: Contact Through Relay

Scott Walker, Governor
Dave Ross, Secretary

January 20, 2017

STRATFORD HOMES L.P.
RUSS MARTI
402 S. WEBER AVE.
PO BOX 37
STRATFORD WI 54484

STRATFORD HOMES L.P.
CRAIG HAYES/AARON LANG
402 S. WEBER AVENUE
PO BOX 37
STRATFORD WI 54484

Re: Description: PREFABRICATED PLUMBING SYSTEM
Manufacturer: STRATFORD HOMES L.P.
Product Name: (trans id 2873476) GREENSIDE HOTEL
Model Number(s): A AND B UNITS
Product File No: 20160317

The specifications and/or plans for this plumbing product have been reviewed and determined to be in compliance with chapters SPS 382 through 384, Wisconsin Administrative Code, and Chapters 145 and 160, Wisconsin Statutes.

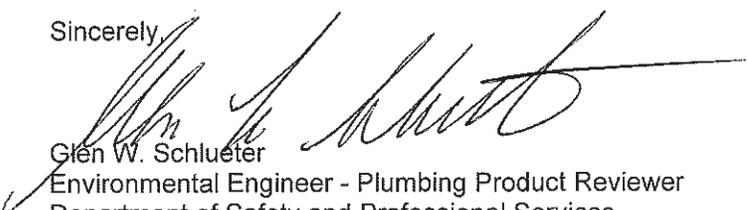
The Department hereby issues an approval based on the Wisconsin Statutes and the Wisconsin Administrative Code. This approval is valid until the end of January 2022.

This approval is contingent upon compliance with the following stipulation(s):

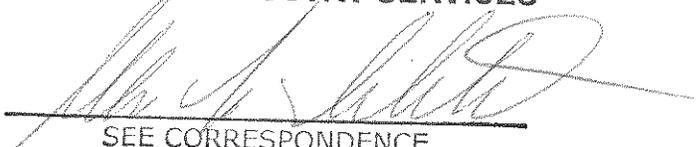
- The flowing water supply pressure at the point(s) of connection must be at least 36.1 psig.
- The manufacture must keep at the manufacturing plant a set of plans and specifications bearing the department's stamp of approval. The plans and specifications must be open to inspection by an authorized representative of the department.
- This approval is for only the prefabricated plumbing system as defined herein. "Prefabricated Plumbing" means concealed drain piping, vent piping or water supply piping or a combination of these types of piping, contained in a modular building component, which will not be visible for inspection when delivered to the final site of installation.

The department is in no way endorsing this product or any advertising, and is not responsible for any situation which may result from its use.

Sincerely,


Glen W. Schlueter
Environmental Engineer - Plumbing Product Reviewer
Department of Safety and Professional Services
Division of Industry Services
Bureau of Technical Services
(608) 267-1401 Phone
(608) 267-9723 Fax
glen.schlueter@wi.gov E-mail

**CONDITIONALLY
APPROVED
DEPT OF SAFETY AND
PROFESSIONAL SERVICES
DIVISION OF INDUSTRY SERVICES**


SEE CORRESPONDENCE

Unit B2 or B4

Please use the below information when completing the water calculation worksheet. It appears that you may not fully understand how to properly complete the worksheet in order to benefit you.

WATER CALCULATIONS FOR PREFABRICATED PLUMBING SYSTEMS

Using the following formula, find the pressure required at point of connection.

$$A = [(B \times C)/100] + D + E + F$$

29.1 psi = $[(37 \times 20)/100] + 20 + \cancel{E} + 1.7$

Where:

A. 29.1 Pressure required at point of connection in psi.

B. 37 Developed length from point of connection to controlling fixture in feet $\cancel{50} \times 1.5 = 37 \text{ ft}$

C. 20/100 Permissible uniform pressure loss for friction. (psi/100 ft. of pipe) 20 psi/100 ft

D. 20 Pressure needed at controlling fixture in psi. 20 psi min at shower valve

~~E.~~ Pressure loss due to water heater(s), water treatment device(s) and backflow preventer(s) in psi.

F. 1.7 Difference in elevation between point of connection and controlling fixture in feet $\cancel{4} \times 4.34 = 1.7 \text{ psi/ft}$

NOTE: 20 psi/100 ft. is recommended for permissible uniform pressure loss for friction.

Letter value of A is what you are solving for.

Letter B is the length of pipe from the point of connection shown on drawing to furthest fixture times 1.5. In the case of model M7033, I figured the distance from the capped inlet to the bath tub in the by bedroom 3 being about 50 ft. So 50 ft times 1.5 = 75 ft.

Letter C is a figure that you pick, of course the higher the number the better. However, it does not benefit you by exceeding 20 psi/100 ft because of velocity limit of 8 fps. So I suggest you use 20 psi/100 ft all the time. This will give you the smallest pipe sizes in the system.

Letter D is determined by the manufacturer of the fixture that is typically the furthest away from the point of connection.

Letter E in most cases is not applicable to the housing industry unless you include a water treatment device in the system. Then it is base on the manufacturer's stated pressure loss through that piece of equipment.

Letter F is the elevation difference between the point of connection and the controlling fixture. ~~of model M7033. I figured the difference between the capped inlet and the bath valve in the bath room by bedroom 3 to be about 5 ft.~~

CONDITIONALLY
APPROVED
DEPT OF SAFETY AND
PROFESSIONAL SERVICES
DIVISION OF INDUSTRY SERVICES

SEE CORRESPONDENCE

MODS: A1-7 (MIRROR), A2-7 (MIRROR) (ADA 1ST FLR UNIT)

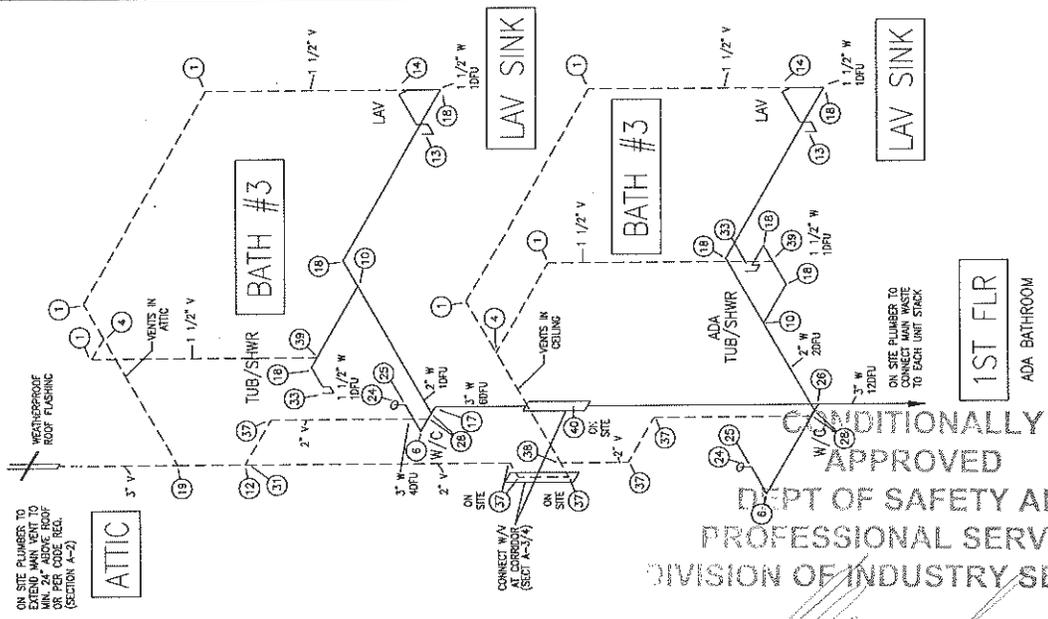
A-2/A-1 UNITS DWV DETAILS

NUMBER	QTY.	DESCRIPTION	SIZE
1	9	PVC SCHEDULE 40 FITINGS & PIPE	
2	1	VENT ELB	1 1/2
3	1	COUPLER	2
4	2	1/4 BEND	1 1/2
5	2	VENT TEE	1 1/2
6	2	CLEAN OUT TEE W/ FULC	1 1/2
7	2	LONG SHEEP 1/4 BEND	3
8	2	LONG SHEEP 1/4 BEND	2
9	2	WYE W/ 1/8 BEND STREET	2 x 2 x 1 1/2
10	2	WYE W/ 1/8 BEND STREET	2 x 1 1/2 x 1 1/2
11	2	DW TAIL PIECE	1 1/2 x 3/4 x 2
12	1	P-TRAP W/ DEL SEAL UNION JOINT	3 x 3 x 2
13	2	SAWARY TEE	1 1/2 x 1 1/4
14	2	SAWARY TEE	1 1/2
15	2	SAWARY TEE	2 x 2 x 1 1/2
16	2	1/4 BEND	3
17	1	LONG SHEEP 1/4 BEND	1 1/2
18	1	VENT TEE	3 x 3 x 1 1/2
19	1	VENT TEE	2
20	1	P-TRAP W/ SOLVENT WELD JOINT	1 1/2
21	1	P-TRAP W/ SOLVENT WELD JOINT	2
22	1	1/8 BEND STREET	1 1/2
23	2	CLOSET FLANGE	4
24	2	CLOSET BEND	4 x 3
25	1	SAWARY TEE	3
26	1	WYE W/ 1/8 BEND STREET	2 x 2 x 1 1/2
27	4	WYE W/ 1/8 BEND STREET	3 x 3 x 2
28	2	WYE W/ 1/8 BEND STREET	2 x 1 1/2 x 2
29	1	REDUCING BUSHING	1 1/2 x 3
30	1	REDUCING BUSHING	2 x 3
31	1	REDUCING COUPLER	1 1/2 x 2
32	2	TUB BRAN & OVERFLOW	1 1/2
33	2	DOUBLE VENT TEE	3
34	2	WYE W/ 1/8 BEND STREET	1 1/2
35	2	COUPLER	2
36	1	VENT ELB	1 1/2
37	5	VENT TEE	2
38	1	WYE W/ 1/8 BEND STREET	1 1/2 x 2 x 2
39	2	COUPLER	1 1/2
40	1	COUPLER	3

DRAINAGE FITTING LIST

PVC SCHEDULE 40 PLASTIC PIPING FITTINGS
 --- = WASTE
 --- = VENT
 ALL HORIZONTAL PIPING TO BE SUPPORTED 4'-0" o.c. MAX.
 ALL HORIZONTAL PIPING TO SLOPE 1/4" PER FOOT

NOTE: PIPE HANGER & SUPPORTS PER SPS 382.60

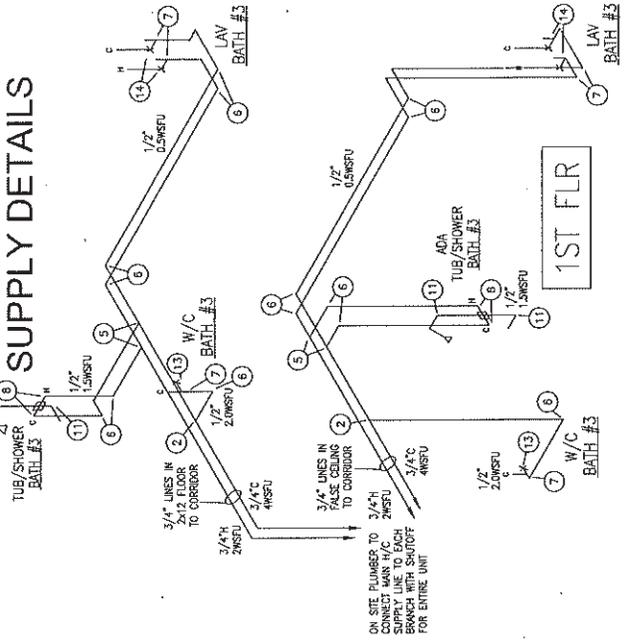


CONDITIONALLY APPROVED
 DEPT OF SAFETY AND PROFESSIONAL SERVICES
 DIVISION OF INDUSTRY SERVICES

SEE CORRESPONDENCE

MODS: A1-7 (MIRROR), A2-7 (MIRROR) (ADA 1ST FLR UNIT)

A-2/A-1 UNITS SUPPLY DETAILS



ON SITE PLUMBER TO 3/4\"/>

NUMBER	QTY.	DESCRIPTION	SIZE	COMMENTS
1	-	REDUCER TEE	1 x 3/4 x 3/4	INSERT X INSERT
2	-	REDUCER TEE	3/4 x 3/4 x 1/2	INSERT X INSERT
3	-	COUPLER	3/4	INSERT X INSERT
4	-	REDUCER TEE	3/4 x 1/2 x 3/4	INSERT X INSERT
5	4	REDUCER TEE	3/4 x 1/2 x 1/2	INSERT X INSERT
6	14	ELBOW	1/2	INSERT X INSERT
7	6	COPPER STUB-OUT ELL	1/2 x 6 - 1/2	INSERT X CLOSED END
8	4	TUB/SHOWER SWEAT ELL	1/2	INSERT X SWEAT (MALE)
9	-	SHUT OFF VALVE	1/2	INSERT X SWEAT (FEMALE)
10	-	SWEAT CONNECTOR/ADAPTER	1/2 x 1/2	INSERT X SWEAT (C X C)
11	4	DROP EAR ELBOW	1/2	SWEAT X SWEAT (C X C)
12	-	ELBOW	3/4	SWEAT/COMP. (C X C)
13	2	P.C. SUPPLY VALVE/RISER	1/2 x 3/8	SWEAT/COMP. (C X COMP)
14	4	LAV. SUPPLY VALVE/RISER	1/2 x 3/8	SWEAT/COMP. (C X COMP)
15	-			
16	-			
17	-			

PEX (F876) WATER SUPPLY FITTING LIST