

**AIRTEMP INC.**  
**MECHANICAL CONTRACTORS**  
**11 WALLACE AVE.**  
**S. PORTLAND ME 04106**  
**207-774-2300**  
**207-871-1345 FAX**

**A COMFORT SYSTEMS USA COMPANY**  
**QUALITY PEOPLE – BUILDING SOLUTIONS**

**SUBMITTAL**

**JOB: BOILER REPLACEMENT PROJECT**  
**DATE: 8/14/13**  
**LOCATION: 100 STATE STREET, PORTLAND, MAINE**  
**MECHANICAL CONTRACTOR: AIRTEMP INC.**  
**ENGINEER: COLBY COMPANY ENGINEERING**  
**47A YORK ST.**  
**PORTLAND, MAINE 04101**

**AIRTEMP JOB NUMBER: 500**

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**AIRTEMP IS PLEASED TO SUBMIT THE FOLLOWING ITEMS FOR APPROVAL:**

**235100 BREECHINGS, CHIMNEYS, AND STACKS**

**Exact measurements will be field verified before ordering.**

**PLEASE RETURN .PDF OF REVIEWED SUBMITTALS TO US**



## FasNSeal CAT. II, III, IV

### PART 1 GENERAL

#### 1.1 SCOPE

- A. This section includes specifications for furnishing and installing Flexible single-wall positive pressure venting system”

##### FasNSeal

When installing FasNSeal® of 5” diameter or greater, any enclosures must be of non-combustible materials! Never install FasNSeal® on an appliance that is not listed for use with a Special Gas Vent or Type BH vent. FasNSeal® shall not be routed into, through, or within any vent, such as an existing masonry or factory-built chimney, that is connected to another appliance. Do not install insulation in any required clearance space around FasNSeal®.

##### FasNSeal W2

FasNSeal W2 must be installed by an experienced professional familiar with the operation and maintenance of heating appliances and venting. Before installing this product, examine all components for possible shipping damage and read the complete installation manual. Failure to follow proper installation procedures, including vent pitch and improper appliance connections may cause unsafe conditions. When venting Category II, III, or IV appliances, FasNSeal W2 must be used for the entire length of the system. Do not mix pipe, fittings, or joining methods from different manufacturers. The venting system must be free to expand and contract and must be supported in accordance with these instructions.

##### FasNSeal Flex

When installing FasNSeal Flex the direction of exhaust flow is away from the appliance. There is an arrow printed on each section of liner and components that will point in the direction of the exhaust gas. The flex liner must be installed from the top of the masonry chimney and must stay within the masonry chimney; however the Elbow or other FasNSeal components will extend beyond the masonry chimney. It is strongly recommended to use either a Universal Condensate Drain or Tee with Condensate Fitting right off the Male Adapter coming out of the chimney.

#### 1.2 SUBMITTALS

- Submit the following in accordance with Section \_\_\_\_\_:
- A. Catalog cuts

##### FasNSeal and FasNSeal W2

All FasNSeal (single-wall) and FasNSeal W2 (double-wall) vent lengths and components feature patented built-in mechanical locking band and triple-lipped

directional gaskets. All pipes and components are engineered with smooth clean welds located 90° from mechanical locking bands. This construction feature allows for ease of installation. The ½” air space between the inner and outer wall on FasNSeal W2 helps to reduce the clearance to combustibles in addition to creating heat shield for additional safety.

All FasNSeal components which come in contact with exhaust gases and condensates are now silicone free. This important design and manufacturing feature greatly reduces the chances of system breakdown and failure. The main problems with silicone are there are too many adhesion factors which are very difficult to control and the process of binding similar materials with an epoxy, which can weaken the bond over time. Welded seams ensures a leak-free product that is meant to last.

#### FasNSeal Flex

Made from AL29-4C stainless steel. Corrosion resistant. Manufactured with a sure-seal locking seam for superior strength and flexibility. The smooth inner wall optimizes gas flow, minimizes back pressure, and facilitates condensate management. Only flexible chimney liner listed to UL 1738 standard.

- B. Sizing Calculations
  - a. Please see attached installation instructions
- C. Installation Drawings
  - a. Please see attached installation instructions
- D. Installation Instructions
  - a. Please see attached installation instructions
- E. Sample Warranty
  - a. Please see attached installation instructions

### 1.3 QUALITY ASSURANCE

#### A. APPLICABLE STANDARDS

All products furnished under this section shall conform to the requirements of the National Fuel Gas Code, NFPA-54, where applicable and shall comply with and be UL listed to UL1738, Standard for Venting Systems for Gas-Burning Appliances, Category II, III, and IV.

#### B. WARRANTY

Manufacturer shall provide the following warranties for this product: One Hundred Percent (100%) of the purchase price or MSRP at time of purchase, whichever is lower, for 15 years from the date of purchase, and Fifty Percent (50%) thereafter.

## PART 2 PRODUCTS

### 2.1 FLEXIBLE POSITIVE PRESSURE VENT

- A. The vent shall be constructed of flexible single strip double layer AL29-4C, factory-built type for use on condensing appliances or pressurized venting systems serving Category II, III, or IV appliances.
- B. Maximum temperature shall not exceed 550° F
- C. Vent shall be constructed of AL29-4C® stainless steel.
- D. All supports, roof or wall penetrations, terminations, appliance connectors and drain fittings required to install the vent system shall be included.
- E. Vent shall terminate in accordance with installation instructions and local codes.

### 2.2 AVAILABLE MANUFACTURERS

- A. Vent shall be FasNSeal single wall, double wall and flex, as manufactured by M&G Duravent.

## PART 3 EXECUTION

### 3.1 INSTALLATION

- A. Installation shall conform to the manufacturer's installation instructions, UL listing, and state or local codes.
- B. Coordinate installation of dampers or fans as required. Dampers or fans shall be supported independently from the vent sections.
- C. \*FasNSeal Flex can only be used in vertical or near vertical runs of the system. For horizontal runs use rigid FasNSeal venting components and fittings.
- D. The UL listing for this product is void if components other than those supplied as Listed Components are used. All warranties, stated or implied, are void if this product and the appliances to which it is connected are not installed in accordance with their respective instructions and local code requirements. After the installation, check the entire system to make sure all joints are secure and sealed correctly. The seams and joints must be checked for gas tightness

when using the venting system with Category II, III or IV appliances. DuraVent recommends that the entire system be checked by a qualified inspector at least once annually following initial installation.

# M&G DuraVent's Double-Wall Special Gas Vent



## FasNSeal W2 3"-24" Commercial Venting

Sets the standard yet again as the first **AL 29-4C Double Wall Vent System** with a built-in gasket, a mechanical locking band and featuring a full ½" air space for superior performance.

**DuraVent**  
Member of & M&G Group



### Material Selection and Design

The **FasNSeal®W2 Double+Wall Special Gas Vent System** is manufactured under the most stringent quality control measures utilizing the latest production technology and know-how. FasNSeal®W2 is ideally suited for exhausting high efficiency, natural gas or propane fired heating equipment, where low flue gas temperatures can result in significant condensate formation within the vent system.

**The flue gas conduit** (inner tube) is made from AL29-4C, a super ferritic stainless steel designed for extreme resistance to chloride ion pitting, crevice corrosion and stress corrosion cracking, as well as general corrosion in oxidizing and moderately reducing environments. AL29-4C is an ideal choice for resisting deleterious effects of corrosive condensates created by partially or fully condensing natural gas and propane fired heating appliances. The Canadian Gas Research Institute confirmed that test results proved AL29-4C to be one of two “most corrosion resistant alloys of twenty candidate stainless steels evaluated for resistance to chloride-induced corrosion in condensing and partially condensing gas-fired appliances”. AL29-4C is a registered trademark of Allegheny Ludlum Corp.

**The Jacket** (outer tube) is manufactured from type 304 or type 430 stainless steel to provide long lasting performance and stability inside a building or when exposed to the outdoors.

**The air space** between the flue gas conduit and jacket is **.5 inches**, providing close clearances to combustibles, reasonable outside dimensions and an additional heat shield or margin of safety where needed.

**FasNSeal®W2 has been tested and is listed by Underwriters Laboratories, Inc.\*** to UL 1738 and ULC-S636-95 safety standards. When installed according to DuraVent's installation instructions, FasNSeal®W2 meets all test requirements for horizontal and vertical; interior or exterior installations.

### FasNSeal®W2 Is Built For Performance

Proven in our single wall system since 1997, all FasNSeal® products feature a smooth weld seam inside and out that is completely shielded during the TIG welding process. Contamination or molecular changes in the weld seam are avoided; no fillers are used in the welding process. Tube ends are formed under the most stringent quality standards to guarantee a perfect fit every time and to avoid built-in stress points or weak areas.

### FasNSeal®W2 Applications

FasNSeal®W2 is a Special Gas Vent and Gas Vent Connector, designed for use on natural gas or propane-fired appliances listed as Category II, III and IV or in Canada Type BH Gas Vent Systems having a maximum operating temperature of 480 degrees F and maximum **rated positive pressure of 6" water column** (tested at 15" water column!). FasNSeal®W2 provides venting for high efficiency gas boilers, furnaces, booster heaters, pool heaters, water heaters, unit heaters or tankless water heaters and is available in 3" -10", 12", 14", 16", 18", 20", 22" and 24" nominal flue gas conduit diameters. FasNSeal®W2 may also be used as a vent for Category I, natural gas or propane-fired heaters. (See installation instructions for details). FasNSeal®W2 must be sized according to the heating appliance manufacturer's instructions, NFPA 211, NFPA 54, The National Fuel Gas Code ANSI Z223.1 and any other relevant local building codes and regulations (see installation instructions for details!).

### FasNSeal®W2 Features Built-in Gaskets And Mechanical Locking Bands

The flue gas conduit of every vent length and component (inner tube) features a built-in gasket in its female-end to seal each joint. An integrated mechanical

Inner Wall Thickness	
3"-7" ( 76.2mm - 177.8)	.016" (.4mm)
8"-12" (203.2mm - 304.8)	.019" (.5mm)
14"-16" (355.6mm - 406.4)	.024 (.6mm)
18"-24" (475.2mm - 609.6mm)	.024 (.6MM)

Outer Wall Thickness	
3"-6" ( 76.2mm - 152.4)	.016" (.4mm)
7"-16" (177.8mm - 406.4)	.024 (.6mm)
18"-24" (475.2mm - 609.6mm)	.024 (.6MM)

\*Sizes 3"-16" are UL Listed.

locking band is factory-built into the jacket (outer tube) of each vent length and component (Pat #6,026,803 addtl. Patents pending). FasNSeal®W2 parts are simply pushed together until fully seated. This renders the joints air and water-tight. By tightening their integrated mechanical locking band, parts are fastened together in seconds. FasNSeal®W2 can be taken apart and reassembled in minutes, making inspection, maintenance or re-routing of FasNSeal®W2 systems a breeze. **Adjustable vent lengths** featured in our Wall Thimbles allow for built-in horizontal adjustability without the need for cutting pipe. Our standard Adjustable Vent Length allows 4" to 12" of vertical adjustment, making pitching FasNSeal®W2 to properly drain condensate simple. Connecting FasNSeal®W2 to a heater is done efficiently with one of our many Adaptors approved by heating appliance manufacturers. Heating equipment can be fired up immediately upon completing a FasNSeal®W2 installation, as no cure time or cleanup is required. **DuraVent listened to the installer and came up with the perfect way to join FasNSeal® parts.** No cutting, no exterior clamps, no joints to wipe with alcohol, no rings, no tabs no mess to clean.

### FasNSeal®W2 Technical Support Is Second To None

Submit your specifications on a submittal request form along with your layout and DuraVent will supply comprehensive submittal drawings and a complete bill of materials within 48 business hours. Unless your specs are changed more than once, this service is provided free of charge. For technical or marketing information visit our website at [www.duravent.com](http://www.duravent.com). You can contact our technical department at [techsupport@duravent.com](mailto:techsupport@duravent.com) or call 1.800.766.3473 should you prefer personal technical support.

FasNSeal W2					
Rated Operating Temperatures		Enclosed		Unenclosed	
		Horizontal	Vertical	Horizontal	Vertical
3" - 4"	300°F	3"	1"	1"	1"
	400°F	6"	1"	3"	1"
	480°F	6"	4"	3"	1"
5" - 16"	300°F	3"	1"	1"	1"
	400°F	6"	1"	3"	1"
	480°F	6"	6"	3"	3"

Rated Operating Temperature of 300°F = Max Flue Gas Temperature of 375°F  
 Rated Operating Temperature of 480°F = Max Flue Gas Temperature of 550°F

Product	Flue Gas Temperature (°F)	Skin Temp At Location (Per HeatFab diagram) (°F)						Ambient
		A	B	C	D	E	F	
FasNSeal	300	222	202	194	171	181	163	77
	380	258	218	214	182	195	192	75
	420	282	239	232	197	207	205	79
FasNSeal W2	300	135	139	136	141	124	103	78
	380	153	160	157	161	142	112	75
	420	151	159	154	163	139	114	72

Product	Flue Gas Temperature (°F)	Skin Temp At Location (Rise)(Per HeatFab diagram) (°F)					
		A	B	C	D	E	F
FasNSeal	300	145	125	117	94	104	86
	380	183	143	139	107	120	117
	420	203	160	153	118	128	126
FasNSeal W2	300	57	61	58	63	46	25
	380	78	85	82	86	67	37
	420	79	87	82	91	67	42

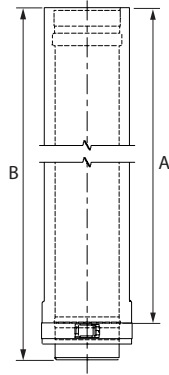
  

Product	Flue Gas Temperature (°F)	Skin Temp At Location (Assume 75°F Ambient) (Per HeatFab diagram) (°F)					
		A	B	C	D	E	F
FasNSeal	300	220	200	192	169	179	161
	380	258	218	214	182	195	192
	420	278	235	228	193	203	201
FasNSeal W2	300	132	136	133	138	121	100
	380	153	160	157	161	142	112
	420	154	162	157	166	142	117





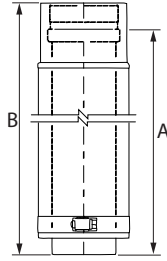
## Vent Length



Used for venting special gas burning Categories II, III and IV appliances. To calculate O.D. add 1" to vent diameter.

SIZE	ORDER #	STOCK #	A	B	SIZE	ORDER #	STOCK #	A	B
3"	W2-603	100001	4"	6"	10"	W2-2410	100067	22"	24"
3"	W2-1203	100015	10"	12"	10"	W2-3610	100082	34"	36"
3"	W2-1803	100045	16"	18"	12"	W2-612	100009	4"	6"
3"	W2-2403	100060	22"	24"	12"	W2-1212	100023	10"	12"
3"	W2-3603	100075	34"	36"	12"	W2-1812	100053	16"	18"
4"	W2-604	100002	4"	6"	12"	W2-2412	100068	22"	24"
4"	W2-1204	100016	10"	12"	12"	W2-3612	100083	34"	36"
4"	W2-1804	100046	16"	18"	14"	W2-614	100010	4"	6"
4"	W2-2404	100061	22"	24"	14"	W2-1214	100024	10"	12"
4"	W2-3604	100076	34"	36"	14"	W2-1814	100054	16"	18"
5"	W2-605	100003	4"	6"	14"	W2-2414	100069	22"	24"
5"	W2-1205	100017	10"	12"	14"	W2-3614	100084	34"	36"
5"	W2-1805	100047	16"	18"	16"	W2-616	100011	4"	6"
5"	W2-2405	100062	22"	24"	16"	W2-1216	100025	10"	12"
5"	W2-3605	100077	3"	36"	16"	W2-1816	100055	16"	18"
6"	W2-606	100004	4"	6"	16"	W2-2416	100070	22"	24"
6"	W2-1206	100018	10"	12"	16"	W2-3616	100085	34"	36"
6"	W2-1806	100048	16"	18"	18"	W2-618	103905	4"	6"
6"	W2-2406	100063	22"	24"	18"	W2-1218	103909	10"	12"
6"	W2-3606	100078	34"	36"	18"	W2-1818	103913	16"	18"
7"	W2-607	100005	4"	6"	18"	W2-2418	103917	22"	24"
7"	W2-1207	100019	10"	12"	18"	W2-3618	103921	34"	36"
7"	W2-1807	100049	16"	18"	20"	W2-620	103906	4"	6"
7"	W2-2407	100064	22"	24"	20"	W2-1220	103910	10"	12"
7"	W2-3607	100079	34"	36"	20"	W2-1820	103914	16"	18"
8"	W2-608	100006	4"	6"	20"	W2-2420	103918	22"	24"
8"	W2-1208	100020	10"	12"	20"	W2-3620	103922	34"	36"
8"	W2-1808	100050	16"	18"	22"	W2-622	103907	4"	6"
8"	W2-2408	100065	22"	24"	22"	W2-1222	103911	10"	12"
8"	W2-3608	100080	34"	36"	22"	W2-1822	103915	16"	18"
9"	W2-609	100007	4"	6"	22"	W2-2422	103919	22"	24"
9"	W2-1209	100021	10"	12"	22"	W2-3622	103923	34"	36"
9"	W2-1809	100051	16"	18"	24"	W2-624	103908	4"	6"
9"	W2-2409	100066	22"	24"	24"	W2-1224	103912	10"	12"
9"	W2-3609	100081	34"	36"	24"	W2-1824	103916	16"	18"
10"	W2-610	100008	4"	6"	24"	W2-2424	103920	22"	24"
10"	W2-1210	100022	10"	12"	24"	W2-3624	103924	34"	36"
10"	W2-1810	100052	16"	18"					

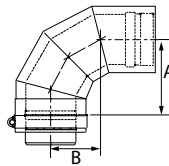
## Adjustable Vent Length



Use to add variable length to your straight length of FasNSeal pipe. Adds 2"-14" of length. Requires at least 4" overlap for a secure connection.

SIZE	ORDER #	STOCK #	A	B	SIZE	ORDER #	STOCK #	A	B
3"	W2-AVL3	100250	2"-14"	18"	12"	W2-AVL12	100258	2"-14"	18"
4"	W2-AVL4	100251	2"-14"	18"	14"	W2-AVL14	100259	2"-14"	18"
5"	W2-AVL5	100252	2"-14"	18"	16"	W2-AVL16	100260	2"-14"	18"
6"	W2-AVL6	100253	2"-14"	18"	18"	W2-AVL18	103937	2"-14"	18"
7"	W2-AVL7	100254	2"-14"	18"	20"	W2-AVL20	103938	2"-14"	18"
8"	W2-AVL8	100255	2"-14"	18"	22"	W2-AVL22	103939	2"-14"	18"
9"	W2-AVL9	100256	2"-14"	18"	24"	W2-AVL24	103940	2"-14"	18"
10"	W2-AVL10	100257	2"-14"	18"					

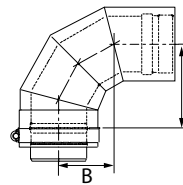
## 90° Elbow



Use to go from horizontal to vertical runs or vertical to horizontal runs. Use to turn vent 90°.

SIZE	ORDER #	STOCK #	A	B	SIZE	ORDER #	STOCK #	A	B
3"	W2-9003	100160	3 9/10"	5 9/10"	12"	W2-9012	100168	8 3/5"	10 3/5"
4"	W2-9004	100161	4 3/5"	6 3/5"	14"	W2-9014	100169	9 3/5"	11 3/5"
5"	W2-9005	100162	4 9/10"	6 9/10"	16"	W2-9016	100170	10 1/10"	12 3/5"
6"	W2-9006	100163	5 3/5"	7 3/5"	18"	W2-9018	103929	11 1/2"	13 4/11"
7"	W2-9007	100164	5 9/10"	7 9/10"	20"	W2-9020	103930	12 3/2"	14 4/11"
8"	W2-9008	100165	6 3/5"	8 3/5"	22"	W2-9022	103931	13 3/2"	15 4/11"
9"	W2-9009	100166	6 9/10"	8 9/10"	24"	W2-9024	103932	14 3/2"	16 4/11"
10"	W2-9010	100167	7 3/5"	9 3/5"					

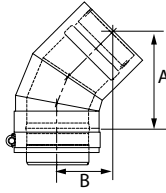
## 88° Elbow



Use to transition from a vertical to a horizontal run. Facilitates a 2° pitch towards the condensate drain for good condensate management.

SIZE	ORDER #	STOCK #	A	B	SIZE	ORDER #	STOCK #	A	B
3"	W2-8803	103890	3 9/10"	5 9/10"	12"	W2-8812	103898	8 3/5"	10 3/5"
4"	W2-8804	103891	4 3/5"	6 3/5"	14"	W2-8814	103899	9 3/5"	11 3/5"
5"	W2-8805	103892	4 9/10"	6 9/10"	16"	W2-8816	103900	10 1/10"	12 3/5"
6"	W2-8806	103893	5 3/5"	7 3/5"	18"	W2-8818	103901	11 1/2"	13 4/11"
7"	W2-8807	103894	5 9/10"	7 9/10"	20"	W2-8820	103902	12 3/2"	14 4/11"
8"	W2-8808	103895	6 3/5"	8 3/5"	22"	W2-8822	103903	13 3/2"	15 4/11"
9"	W2-8809	103896	6 9/10"	8 9/10"	24"	W2-8824	103904	14 3/2"	16 4/11"
10"	W2-8810	103897	7 3/5"	9 3/5"					

## 45° Elbow

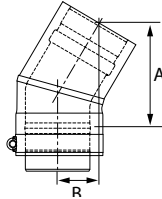


Offsets obstructions as needed. Allows for better condensate management and less back pressure.

SIZE	ORDER #	STOCK #	A	B
3"	W2-4503	100130	5 1/8"	3"
4"	W2-4504	100131	5 3/8"	3 1/16"
5"	W2-4505	100132	6"	3 1/8"
6"	W2-4506	100133	6 3/16"	3 3/8"
7"	W2-4507	100134	6 7/16"	3 1/2"
8"	W2-4508	100135	7"	3 7/16"
9"	W2-4509	100136	7 3/8"	3 9/16"
10"	W2-4510	100137	7 7/16"	4"

SIZE	ORDER #	STOCK #	A	B
12"	W2-4512	100138	8 3/8"	4 3/16"
14"	W2-4514	100139	9 1/16"	4 7/16"
16"	W2-4516	100140	9 5/8"	4 9/16"
18"	W2-4518	103925	11 5/16"	7 7/16"
20"	W2-4520	103926	12	8 1/8"
22"	W2-4522	103927	13	8 7/16"
24"	W2-4524	103928	14"	9 1/8"

## 30° Elbow

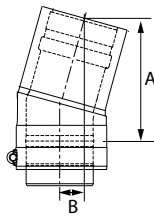


Offsets obstructions as needed. Allows for better condensate management and less back pressure.

SIZE	ORDER #	STOCK #	A	B
3"	W2-3003	100650	4 9/16"	1 1/8"
4"	W2-3004	100651	5 1/8"	1 9/16"
5"	W2-3005	100652	5 3/8"	2"
6"	W2-3006	100653	5 7/16"	2"
7"	W2-3007	100654	5 9/16"	2 1/16"
8"	W2-3008	100655	6 1/16"	2 1/8"

SIZE	ORDER #	STOCK #	A	B
9"	W2-3009	100656	6 3/8"	2 1/8"
10"	W2-3010	100657	6 7/16"	2 3/16"
12"	W2-3012	100658	7 1/8"	2 5/8"
14"	W2-3014	100659	7 7/16"	2 3/8"
16"	W2-3016	100660	8 1/8"	2 7/16"

## 15° Elbow

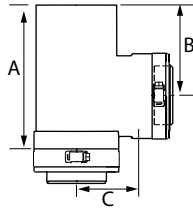


Offsets obstructions as needed. Allows for better condensate management and less back pressure.

SIZE	ORDER #	STOCK #	A	B
3"	W2-1503	100239	4 9/16"	1 1/8"
4"	W2-1504	100240	5 1/8"	1 9/16"
5"	W2-1505	100241	5 3/8"	2"
6"	W2-1506	100242	5 7/16"	2"
7"	W2-1507	100243	5 9/16"	2 1/16"
8"	W2-1508	100244	6 1/16"	2 1/8"

SIZE	ORDER #	STOCK #	A	B
9"	W2-1509	100245	6 3/8"	2 1/8"
10"	W2-1510	100246	6 7/16"	2 3/16"
12"	W2-1512	100247	7 1/8"	2 5/8"
14"	W2-1514	100248	7 7/16"	2 3/8"
16"	W2-1516	100249	8 1/8"	2 7/16"

## Standard Tee

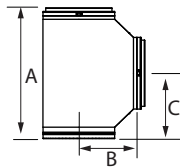


Use for a 90° offset, to combine connections from two or more appliances into a common vent or as a condensate management point when used in conjunction with drain fitting. All Standard Tees have completely welded inner walls.

SIZE	ORDER #	STOCK #	A	B	C
3"	W2-T3	100175	7 3/10"	4 1/2"	3"
4"	W2-T4	100176	8 3/10"	4 4/5"	3 1/2"
5"	W2-T5	100177	9 3/10"	5 3/10"	4"
6"	W2-T6	100178	10 3/10"	5 4/5"	4 1/2"
7"	W2-T7	100179	11 3/10"	6 3/10"	5"
8"	W2-T8	100180	12 3/10"	6 4/5"	5 1/2"
9"	W2-T9	100181	13 3/10"	7 3/10"	6"
10"	W2-T10	100182	14 3/10"	7 4/5"	6 1/2"

SIZE	ORDER #	STOCK #	A	B	C
12"	W2-T12	100183	16 3/10"	9"	7"
14"	W2-T14	100184	20 3/10"	11"	8 1/2"
16"	W2-T16	100185	22 3/10"	12"	9 1/2"
18"	W2-T18	103933	22 7/8"	12 1/2"	11"
20"	W2-T20	103934	24 7/8"	13 1/2"	12"
22"	W2-T22	103935	26 7/8"	14 1/2"	13"
24"	W2-T24	103936	28 7/8"	15 1/2"	14"

## Wide Mouth Boot Tee

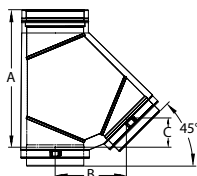


Use to transition from horizontal to vertical with improved flue gas flow with angled gradual transitions. Can also be used as a manifold connection to gang boilers into a common vent. Completely welded inner walls.

SIZE	ORDER #	A	B	C
4"	W2-WBT4	15 3/4"	7"	6 9/10"
5"	W2-WBT5	16 3/4"	7 1/2"	7 4/10"
6"	W2-WBT6	17 3/4"	8"	7 9/10"
7"	W2-WBT7	18 3/4"	8 1/2"	8 4/10"
8"	W2-WBT8	19 3/4"	9"	8 9/10"
9"	W2-WBT9	20 3/4"	9 1/2"	9 4/10"
10"	W2-WBT10	21 3/4"	10"	9 9/10"

SIZE	ORDER #	A	B	C
12"	W2-WBT12	23 3/4"	11"	10 9/10"
14"	W2-WBT14	25 3/4"	12"	11 9/10"
16"	W2-WBT16	27 3/4"	13"	12 9/10"
18"	W2-WBT18	29 3/4"	14"	13 9/10"
20"	W2-WBT20	31 3/4"	15"	14 9/10"
22"	W2-WBT22	33 3/4"	16"	15 9/10"
24"	W2-WBT24	35 3/4"	17"	16 9/10"

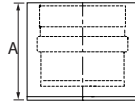
## Double-Wall Wye



Use in place of any M&G DuraVent tee for a 45° angle instead of 90°; can be used as a manifold connection to gang multiple boilers into a common vent.

SIZE	ORDER #	STOCK #	A	B	C
6"	W2-WYE06	103613	14 1/2"	7 1/2"	3 1/10"
7"	W2-WYE07	103164	16 1/3"	8 3/5"	3 1/2"
8"	W2-WYE08	103165	18"	9 7/10"	4"
9"	W2-WYE09	103166	19 7/10"	10 7/10"	4 2/5"
10"	W2-WYE10	103167	21 2/5"	11 4/5"	4 9/10"
12"	W2-WYE12	103168	24 9/10"	14"	5 4/5"
14"	W2-WYE14	103169	28 3/10"	16 1/10"	6 3/5"

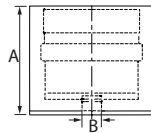
## Tee Cap



Use to cap Standard Tee, Branch Tee or Boot Tee. Remove Tee Cap to inspect the system; clean out debris.

SIZE	ORDER #	STOCK #	A	SIZE	ORDER #	STOCK #	A
3"	W2-TC3	100205	3 1/2"	12"	W2-TC12	100213	3 1/2"
4"	W2-TC4	100206	3 1/2"	14"	W2-TC14	100214	3 1/2"
5"	W2-TC5	100207	3 1/2"	16"	W2-TC16	100215	3 1/2"
6"	W2-TC6	100208	3 1/2"	18"	W2-TC18	103941	3 1/2"
7"	W2-TC7	100209	3 1/2"	20"	W2-TC20	103942	3 1/2"
8"	W2-TC8	100210	3 1/2"	22"	W2-TC22	103943	3 1/2"
9"	W2-TC9	100211	3 1/2"	24"	W2-TC24	103944	3 1/2"
10"	W2-TC10	100212	3 1/2"				

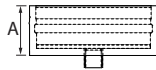
## Drain Fitting



Use instead of Tee Cap to manage condensates at the bottom of a vertical run. For vent systems larger than 16", use an IPS Drain Fitting.

SIZE	ORDER #	STOCK #	A	B
3"	W2-DF3	100220	3 1/2"	5/8"
4"	W2-DF4	100221	3 1/2"	5/8"
5"	W2-DF5	100222	3 1/2"	5/8"

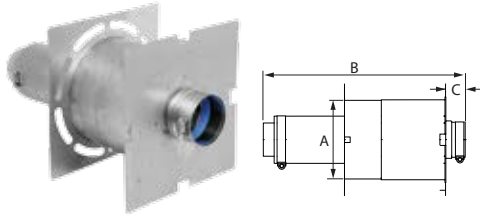
## IPS Drain Fitting



Use to connect iron drain pipe to flow acidic condensates to a neutralization tank before disposal. Uses 1" NPT thread.

SIZE	ORDER #	STOCK #	A	SIZE	ORDER #	STOCK #	A
3"	W2-IPSDF3	103815	3 1/2"	12"	W2-IPSDF12	103823	3 1/2"
4"	W2-IPSDF4	103816	3 1/2"	14"	W2-IPSDF14	103824	3 1/2"
5"	W2-IPSDF5	103817	3 1/2"	16"	W2-IPSDF16	103825	3 1/2"
6"	W2-IPSDF6	103818	3 1/2"	18"	W2-IPSDF18	103945	3 1/2"
7"	W2-IPSDF7	103819	3 1/2"	20"	W2-IPSDF20	103946	3 1/2"
8"	W2-IPSDF8	103820	3 1/2"	22"	W2-IPSDF22	103947	3 1/2"
9"	W2-IPSDF9	103821	3 1/2"	24"	W2-IPSDF24	103948	3 1/2"
10"	W2-IPSDF10	103822	3 1/2"				

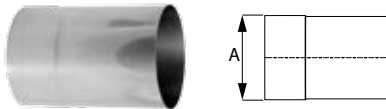
## Wall Thimble w/AVL



Use for through-the-wall termination. Fits between standard wall studs. 3"-5" diameters accommodates wall thickness of 4 1/4" to 8 1/2". 6"-16" diameters accommodate wall thickness of 5 3/4" to 11 1/2". AVL pipe allows for adjustability in length variance.

SIZE	ORDER #	STOCK #	A	B	C
3"	W2-WT3	100280	9"	18"	1 1/2"
4"	W2-WT4	100281	10"	18"	1 1/2"
5"	W2-WT5	100282	11"	18"	1 1/2"
6"	W2-WT6	100283	12"	18"	1 1/2"
7"	W2-WT7	100284	13"	18"	1 1/2"
8"	W2-WT8	100285	14"	18"	1 1/2"
9"	W2-WT9	100286	15"	18"	1 1/2"
10"	W2-WT10	100287	16"	18"	1 1/2"
12"	W2-WT12	100289	18"	18"	1 1/2"
14"	W2-WT14	100290	20"	18"	1 1/2"
16"	W2-WT16	100291	22"	18"	1 1/2"

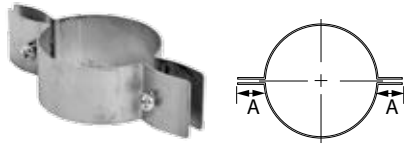
## Wall Thimble Sleeve



When installing FasNSeal W2 with this component use 1" larger diameter, (e.g. 10" vent system, use 11" size).

SIZE	ORDER #	STOCK #	A	B
3"	FSWTE3	300839	6"	9"
4"	FSWTE4	300840	7"	9"
5"	FSWTE5	300841	8"	9"
6"	FSWTE6	300842	9"	9"
7"	FSWTE7	300843	10"	9"
8"	FSWTE8	300844	11"	9"
9"	FSWTE9	300845	12"	9"
10"	FSWTE10	300846	13"	9"
12"	FSWTE12	300847	15"	9"
14"	FSWTE14	300848	17"	9"
16"	FSWTE16	300849	19"	9"

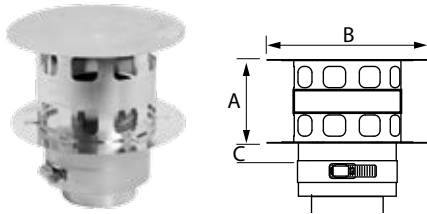
## Support Clamp



Use to support vertical and horizontal runs. Recommended every 10' in the vertical run. Use additional Support Clamps as needed. When installing FasNSeal W2 with this component use 1" larger diameter, (e.g. 10" vent system, use 11" size).

SIZE	ORDER #	STOCK #	A	SIZE	ORDER #	STOCK #	A
4"	FSCL4	300361	1 1/2"	13"	FSCL13	300485	1 1/2"
5"	FSCL5	300362	1 1/2"	15"	FSCL15	300486	1 1/2"
6"	FSCL6	300363	1 1/2"	17"	FSCL17	300487	1 1/2"
7"	FSCL7	300364	1 1/2"	19"	FSCL19	304015	1 1/2"
8"	FSCL8	300365	1 1/2"	21"	FSCL21	304017	1 1/2"
9"	FSCL9	300366	1 1/2"	23"	FSCL23	304019	1 1/2"
10"	FSCL10	300367	1 1/2"	25"	FSCL25	304021	1 1/2"
11"	FSCL11	300484	1 1/2"				

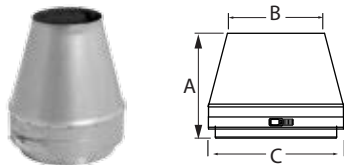
## Rain Cap



Use where pipe terminates above the roof line. When terminating larger than 12" vent diameter use a Termination Cone.

SIZE	ORDER #	STOCK #	A	B	C
3"	W2-RC3	100325	3 1/2"	6 4/5"	1"
4"	W2-RC4	100326	4 1/2"	8 9/10"	1"
5"	W2-RC5	100327	5 4/5"	11 3/10"	1"
6"	W2-RC6	100328	6 4/5"	13 1/2"	1"
7"	W2-RC7	100329	7 4/5"	15 4/5"	1"
8"	W2-RC8	100330	8 4/5"	18"	1"
9"	W2-RC9	100331	10"	20 3/10"	1"
10"	W2-RC10	100332	11"	22 1/2"	1"
12"	W2-RC12	100333	13"	27"	1"

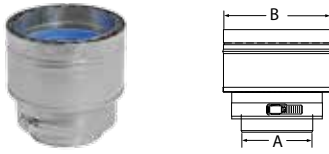
## Termination Cone



Use for vertical termination. Creates static back pressure to adjust harmonics. Venturi effect increases velocity of flue gases. Reduced opening provides for a smaller cross section to deter rain from entering the system. **Available in custom size combinations.**

SIZE	ORDER #	STOCK #	A	B	C
8" x 6"	W2-CN0806	100618	8"	6"	6 3/5"
14" x 12"	W2-CN1412	100622	14"	12"	6 3/5"

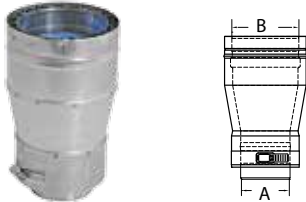
## Stepped Inserter



Use to increase vent diameter when space constraints are an issue. **Available in custom size combinations.**

SIZE	ORDER #	STOCK #	A	B
4" x 5"	W2-45I	100381	4"	5"
8" x 9"	W2-89I	100401	8"	9"

## Tapered Inserter



Use to increase vent diameter. Creates a smooth transition for an undistruptive flow. FasNSeal W2 has a 10" max change in diameter. **Available in custom size combinations.**

SIZE	ORDER #	STOCK #	A	B
3" x 4"	W2-0304TI	100407	3"	4"
3" x 6"	W2-0306TI	100406	3"	6"

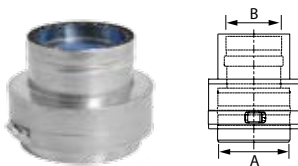
## Eccentric Inserter



Use to transition to a larger diameter pipe. Adjusts the systems center point to offset from obstructions. Aids in reducing formation of condensates on horizontal runs. FasNSeal W2 has a 10" max change in diameter. **Available in custom size combinations.**

SIZE	ORDER #	STOCK #	A	B
8" x 10"	W2-0810EI	100439	8"	10"

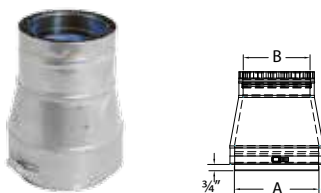
## Stepped Reducer



Use to reduce vent diameter when space constraints are an issue. **Available in custom size combinations.**

SIZE	ORDER #	STOCK #	A	B
7" x 5"	W2-75R	100638	7"	5"
12" x 10"	W2-1210R	100403	12"	10"

## Tapered Reducer

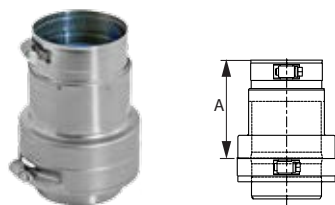


Use to reduce vent diameter. Creates a smooth transition for an undistruptive flow. FasNSeal W2 has a 10" max change in diameter. **Available in custom size combinations.**

SIZE	ORDER #	STOCK #	A	B
8" x 7"	W2-0807TR	100395	8"	7"
10" x 7"	W2-1007TR	100369	10"	7"



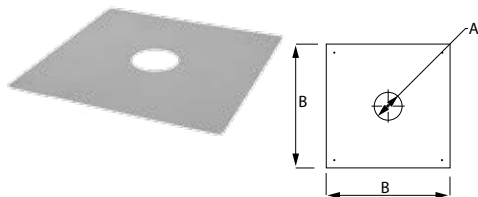
## Single-Wall Adapter



Use to transition from double-wall pipe to single-wall pipe.

SIZE	ORDER #	STOCK #	A	SIZE	ORDER #	STOCK #	A
3"	FSA-DWSW3	400193	4"	9"	FSA-DWSW9	100199	4"
4"	FSA-DWSW4	100194	4"	10"	FSA-DWSW10	100200	4"
5"	FSA-DWSW5	100195	4"	12"	FSA-DWSW12	100201	4"
6"	FSA-DWSW6	100196	4"	14"	FSA-DWSW14	100202	4"
7"	FSA-DWSW7	100197	4"	16"	FSA-DWSW16	100203	4"
8"	FSA-DWSW8	100198	4"				

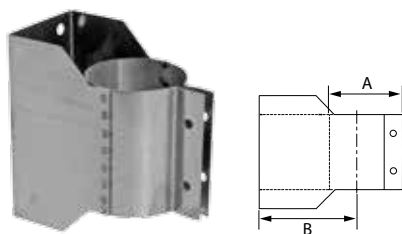
## Firestop/Flat Flashing



Use when penetrating floor levels. When installing double-wall with this component use 1" larger diameter, (e.g. 10" vent system, use 11" size).

SIZE	ORDER #	STOCK #	A	B	SIZE	ORDER #	STOCK #	A	B
4"	FSFS4	300296	4 1/4"	15"	15"	FSFS15	300482	15 3/8"	28"
5"	FSFS5	300297	5 3/8"	17"	16"	FSFS16	300324	16 3/8"	28"
6"	FSFS6	300298	6 3/8"	17"	17"	FSFS17	300483	17 3/8"	30"
7"	FSFS7	300299	7 3/8"	19"	18"	FSFS18	303981	18 3/8"	30"
8"	FSFS8	300300	8 3/8"	19"	19"	FSFS19	300982	19 3/8"	32"
9"	FSFS9	300301	9 3/8"	22"	20"	FSFS20	303983	20 3/8"	32"
10"	FSFS10	300302	10 3/8"	22"	21"	FSFS21	3009848	21 3/8"	34"
11"	FSFS11	300480	11 3/8"	24"	22"	FSFS22	303985	22 3/8"	34"
12"	FSFS12	300322	12 3/8"	24"	23"	FSFS23	300986	23 3/8"	36"
13"	FSFS13	300481	13 3/8"	26"	24"	FSFS24	303988	24 3/8"	36"
14"	FSFS14	300323	14 3/8"	26"					

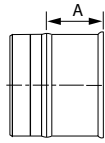
## Wall Bracket



Use to support vent pipe or tee sections. Provides proper clearance to combustibles. When installing FasNSeal W2 with this component use 1" larger diameter, (e.g. 10" vent system, use 11" size).

SIZE	ORDER #	STOCK #	A	B	SIZE	ORDER #	STOCK #	A	B
4"	FSWB4	300431	4"	4"	11"	FSWB11	300492	11"	7 1/2"
5"	FSWB5	300432	5"	4 1/2"	12"	FSWB12	300438	12"	8"
6"	FSWB6	300433	6"	5"	13"	FSWB13	300493	13"	8 1/2"
7"	FSWB7	300434	7"	5 1/2"	14"	FSWB14	300439	14"	9"
8"	FSWB8	300435	8"	6"	15"	FSWB15	300494	15"	9 1/2"
9"	FSWB9	300436	9"	6 1/2"	16"	FSWB16	300440	16"	10"
10"	FSWB10	300437	10"	7"	17"	FSWB17	300495	17"	10 1/2"

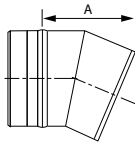
## Bird Screen



Use for 3" and 4" standard through-the-wall terminations. Check installation instructions for restrictions on horizontal terminations, such as minimum distance from windows and doors.

SIZE	ORDER #	STOCK #	A
3"	FSBS3	300186	2"
4"	FSBS4	300187	2"

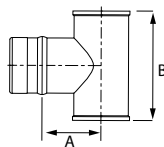
## 23° Bird Screen



Use for 5" to 16" through-the-wall termination. Deters rain and other elements from entering the vent system. Check installation instructions for restrictions on horizontal terminations, such as minimum distance from windows and doors.

SIZE	ORDER #	STOCK #	A
5"	FSBS5	300188	4 4/5"
6"	FSBS6	300189	5 3/5"
7"	FSBS7	300190	6 2/5"
8"	FSBS8	300191	7 1/10"
9"	FSBS9	300192	7 9/10"
10"	FSBS10	300193	8 7/10"
12"	FSBS12	300194	10 1/5"
14"	FSBS14	300195	11 7/10"
16"	FSBS16	300196	13 1/5"

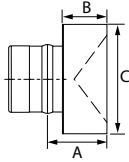
## Termination Tee



Use for standard and high-wind through-the-wall terminations. Check installation instructions for restrictions on horizontal terminations, such as minimum distance from windows and doors.

SIZE	ORDER #	STOCK #	A	B
3"	FSTT3	300311	3"	6"
4"	FSTT4	300312	3 1/2"	7"
5"	FSTT5	300313	4"	8"
6"	FSTT6	300314	4 1/2"	9"

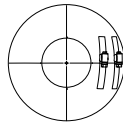
## Termination Box



Use for horizontal through-the-wall terminations. Check installation instructions for restrictions on horizontal terminations, such as minimum distance from windows and doors.

SIZE	ORDER #	STOCK #	A	B	C
3"	FSTB3	300500	2 3/16"	2"	5"
4"	FSTB4	300501	2 3/16"	2"	6"

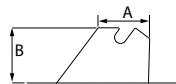
## Storm Collar



Use to create a weather tight seal between the pipe and flashing. When installing FasNSeal W2 with this component use 1" larger diameter, (e.g. 10" vent system, use 11" size).

SIZE	ORDER #	STOCK #	SIZE	ORDER #	STOCK #
4"	FSC4	300945	13"	FSC13	300971
5"	FSC5	300946	15"	FSC15	300486
6"	FSC6	300947	17"	FSC17	300973
7"	FSC7	300948	19"	FSC19	303992
8"	FSC8	300949	21"	FSC21	303994
9"	FSC9	300950	23"	FSC23	303996
10"	FSC10	300952	25"	FSC25	303998
11"	FSC11	300970			

## Variable Pitch Roof Flashing



Use to create a weather-tight penetration where the vent pipe passes through the roof. Storm Collar required. When ordering Flashings for FasNSeal W2 product the flashing diameter and vent diameter are the same. ie. W2-3610 requires a FSVPF10. Accommodates flat to 9/12 roof pitch.

SIZE	ORDER #	STOCK #	A	B	SIZE	ORDER #	STOCK #	A	B
4"	FSVPF4	300923	6"	7"	12"	FSVPF12	300930	14"	7"
5"	FSVPF5	300924	7"	7"	14"	FSVPF14	300931	16"	7"
6"	FSVPF6	300925	8"	7"	16"	FSVPF16	300932	18"	7"
7"	FSVPF7	300926	9"	7"	18"	FSVPF18	300987	20"	28 1/2"
8"	FSVPF8	300927	10"	7"	20"	FSVPF20	300984	22"	29 1/2"
9"	FSVPF9	300928	11"	7"	22"	FSVPF22	300985	24"	30 1/2"
10"	FSVPF10	300929	12"	7"	24"	FSVPF24	300986	26"	31 1/2"

## Appliances and Adapters

Manufacturer	Model	Appliance Adapter	Termination Adapter
Aerco International	Benchmark 2.0 GWS, 3.0 LN	FSA-AE8	
	KC-1000	FSA-AE6	
	Modulex Series	Standard Vent Pipe 4", 6"	
Ajax	Atlas GS Series	FSA-HFA6, 8	
A.O. Smith	Burkay Genesis Series	FSA-HFA4 a, 5 a	
	Legend 2000 Series	FSA-HFA6 a, 7 a	
	ProStar Series	FSAAU4	
	GB/GW 400, 500	300827	FSAAU6
	GB/GW 1000	300831	FSAAU10
	GB/GW 1300, 1500	300832	FSAAU12
	GB/GW 1850, 2100	300833	FSAAU14
	GB/GW 2500	300834	FSAAU16
	GB/GW 300	300831	FSAAU10
	GB/GW 650, 750	300829	FSAAU8
	ATI 705-N	300825	FSAAU4
	Cyclone BTH-150	300405	FSA-PVC3
	VW-750	300460	FSA-HFA6
	Aerco	Benchmark 1.5	300421
Atlas	300	300382	
Beacon/Morris	BRU Series	FSAAU4	
	BTU Series	FSAAU4, 5, 6	
Bosch	Aquastar 125 FX	FSA-LMGD4 a	
	Aquastar GHW-635-ES	Standard Vent Pipe 3"	
	Aquastar 250SX	Standard Vent Pipe 3"	
	Aquastar 240FX	FSAAU4	
	AquaStar 2400ES	300824	FSAAU3
	AquaStar 2700ES	300825	FSAAU4
	GWH 425EF	300825	FSAAU4
Bradford-White	EF Series	FSA-PVC3	
Buderus	G115 Series	FSAAU4 or FSAAU5	
	G124X Series	FSAAU5, 6	
	GA124 Series	FSAAU3	
	GA244/37, 44, 53	FSAAU3	
	GA244/62	FSAAU4	
	GB142 Series	FSAAU3	
	GB312/90 to GB312/160	FSA-158-6F	
	GB312/200 to GB312/280	FSA-197-8F	
	SB615 Series	FSA-SB7, 8, 10, 12	
	SB735 Series	FSA-SB14	
Burnham	Independence PV	FSA-HFB3 b	FSA-PV3
	Minute Man II	FSA-HFB3 b	FSA-PV3

Burnham	Revolution	FSA-HFB3 b	FSA-PV3
	Revolution II	FSA-HFB3 b	FSA-PV3
	Series 2PV	FSA-HFB3 b	FSA-PV3
	Spirit	FSA-HFB3 b	FSA-PV3
	PVG/SCG Series	FSA-HFB3 b, 4 b	
	V11 Series	FSAAU8, 10, 12, 14, 16	
Camus Boiler	MicoFlame Series I	FSAAU3, 4, 5, 6	
	MicoFlame Series II	FSAAU8, 10, 12	
	MicoFlame Grande Series	FSAAU12, 14	
	DynaFlame Series	FSAAU6, 8, 10, 12, 14	
Carel	Humidifier UG 180	FSAAU5	
Cleaver Brooks	MCF Series	FSA-MCF6, 8, 10, 12	
	FLX Series	FSA-FLX10, 12, 16	
	CFC 1000	300829	FSAAU8
	CFC 1500	300831	FSAAU10
	CFC 500	300827	FSAAU6
Columbia	Patriot Series-Direct Vent	FSA-UTC4	
Crown Boiler Co.	Bali BWF-061, 095, 128, 162	Standard Vent Pipe 3" a	FSA-M3 a
	Bali BWF-195, 229	Standard Vent Pipe 4" a	FSA-M4 a
	Bimini BWC150, 225	Standard Vent Pipe 3" a, 4" a	FSA-M3, 4 a
	Cabo CSC-050 thru 150	Standard Vent Pipe 3" a	FSA-M3 a
	BWC 399		std. vent pipe
	Cabo CSC-175, 200	Standard Vent Pipe 3" a, 4" a	FSA-M3, 4 a
	Cabo II CWD060-245	FSA-HFA3, 4	
Dunkirk	XEB-2 thru XEB-5	FSAMETEK3	FSA-M3 a
	XEB-6 thru XEB-7	FSAMETEK3	Standard Vent Pipe 3"
De Dietrich	GT334A, GT335A, GT336A	FSAAU7	
	GT337A, GT338A, GT339A	FSAAU8	
	GT430-8A to GT430-10A	FSAAU10	
	GT430-11A to GT430-14A	FSAAU12	
	Series 334,335, 336	300828	FSAAU7
	Series 337,338, 339	300829	FSAAU8
	Series 430-11, -12, -13,-14	300832	FSAAU12
	Series 430-8, -9, -10	300831	FSAAU10
	Series 310-5,-6, -7, -8, -9	300831	FSAAU10
	C-230 ECO *updated*	303764	FSA-149-6F
	C-130 ECO	303235	FSA-250-10F
Fulton Boiler Works	PulsePak PHW Series	FSA04T2.5, FSA06T2.5	
	Vantage VTG3000	FSAAU12	
	PHW 2000	300881	FSA-06T2.5

## Appliances and Adapters

Peerless	DE Series	FSA-PSC/DE3 a	
	PDE Series	FSA-PDE3 a	
	PSC Series	FSA-PSC/DE3 a	
	PSC II Series	FSA-HFA3	
	PF Series PF-50, PF-80, PF-110, PF-140 *updated*	300147	
	PF-210 *updated*	300715	
	PF-399 *updated*	300759	
	PF850, PF-1000 *updated*	STD 6" SW Vent or SWDW adaptor	
Penanco	FSB Series	FSAMETEK3	
Pentair	MiniMax NT	TBA	
PVI	Power VT Series	FSA-HFA4 a	
Quietside	QVM8 Series	FSAAU3	FSA-PV3
	DPW 199	300535	FSA-PVC4
	DPW 120A	300405	FSA-PVC3
Raypak	Advanced Design Boiler ADB-500	FSAAU6	
	Advanced Design Boiler		
	ADB-750 thru 1501	FSAAU8, 10, 12	
	Hi Delta 122 thru 2342	FSAAU4, 5, 6, 8, 12, 14, 16	
	MVB 1003	300827	FSAAU6
	MVB 2003, 1753, 1503, 1253	300829	FSAAU8
	X-Therm WH-1505, 2005	300829	FSAAU8
	X-Therm WH-1005	300827	FSAAU6
	Pool heater CR-406A	300830	FSAAU9
	Pool heater CR-336A	300829	FSAAU8
	Pool heater CR-266A	300828	FSAAU7
	Pool heater CR-206A	300827	FSAAU6
RBI	Fusion Series	FSA-HFAX *updated*	
	Futura II Series	FSA-HFAX *updated*	
	Futura III Series	FSA-HFAX *updated*	
	Dominator Series	FSA-HFAX *updated*	
	LCD Dominator Series	FSA-HFAX *updated*	
Rheem/Ruud	RTG-42PVN (Pronto 4.2)	FSA-RI-4.2	
	RTG-74 (Pronto 7.4)	FSAAU4	
Slantfin	Caravan Series	FSA-HFA3 a	
	Concept 21 Series	FSA-HFA3 a	FSA-NYV3 a
Slantfin	Prodigy 21	FSA-HFA3 a	
	Victory VSPH Series	FSA-HFA3 a	
	Victory II Series	FSA-HFA3 a	
Smith Cast Iron	GV100 Series	FSA-SMITH4	
	Lexington GS110 Series	FSA-ELB3, 4	
	State Water Heater	Aurora GAX194	14-15
Smith Cast Iron	GT 200	300824	FSAAU3
StayRite	Pool Heater	300354	FSA-STARITE-4

Takagi	T-H1	FSAAU4	FSA-TTA4
	T-K1	FSAAU4	FSA-TTA4
	T-K2	FSAAU4	FSA-TTA4
	T-K3	FSAAU4	FSA-TTA4
	T-K1S	FSAAU4	FSA-TTA4
	T-K Jr.	FSAAU4	FSA-TTA4
	T-KD20	FSAAU4	FSA-TTA4
	T-M1	FSAAU4	FSA-TTA4
	T-M50	FSAAU5	FSA-TTA4
	Solaris	FSA-TS6	
	Thermo-Dynamics	LMGD Series	FSA-LMGD4 a
CWL-GS Series		TBA	
Thermal Solutions	Evolution Series	FSA-HFA3 a, 4 a, 6 a, 8 a	
Triangle Tube	Delta Performance	FSA-TR3	
	Delta Performance Plus	FSA-TR3	
	Solo 250	300611	FSA-ULT3
	Solo 399	300566	FSA-ULT4
Utica	USC Series	Standard Vent Pipe a d	
	DV-B Series	Standard Vent Pipe a d	
Vapac	GF Series	FSA-GF3	
Viessmann	Vitocrossal 300 CT-3 Series	FSAAU8, 10, 12	
	Vitogas 50 ECV Series	Standard Vent Pipe 3" a	FSA-M3 a
	Vitogas 100 GS10 Series	FSAAU8, 9, 10	
	Vertomat VSB-37, 46, 57	TBA	
	Vitodens WB2 Series	FSA-V3, 4	
	WB 100	303763	FSA-80-3F
Wai Wela	PH-16IFSN/P	FSA-RI-4.2	
	PH-20-RIFSN/N	FSA-RI-4.2	
	PH-28RIFSN/P	FSAAU4	
Weben Jarco	Vision 3000 Series	FSA-HFA6, 8, 10 a	
	E-Finity	TBA	
Weil McLain	GV ST	FSA-WEIL-GV3	
	CGi Series	FSA-WM-CG13	
	CGs Series	FSA-WM-CG13	
	CGt Series	FSA-WM-CG13	
	GV GOLD Series 3	FSA-WEIL-GVTEE3	
	GV GOLD Series 4	FSA-WEIL-GVTEE3	
Williamson Thermoflo	Ultra Series	FSA-ULT3, 4	
	GWI Series	FSA-WM-CG13	

a = High-temperature RTV silicone sealant is required.

b = Can also be vented with FSAVL3 (3") or FSAVL4 (4").

c = Additional Muffler adapters required.

d = Can use FSAAU in place of Standard Vent Length with silicone.

# Custom Design Solutions

## Engineering Support for Commercial Applications

Commercial projects require expert knowledge and a fast, flexible, customer oriented approach. From simple single boiler installations to complex multi-unit common vented, or cascaded projects, M&G DuraVent has the expertise, the product offerings and the tools to help you create the right solution.

### Expertise

Our staff of engineers can work with you through a simple and quick submittal process to provide system sizing, simple layout drawings for quotation purposes, a detailed product listing and quote and fully detailed mechanical drawings should your job require. With many years of expert experience we can deal confidently with your needs no matter what the heating appliance may be.

### Products

Our FasNSeal product, both single and double-wall, features:

- A triple lipped gasket.
- Butt-welded smooth seams inside and out.
- A built-in mechanical clamping system at each joint.
- AL29-4C stainless steel alloy.
- No silicone required.
- Diameters from 3" to 24" with a full compliment of appliance adapters, adjustable vent lengths, tees, increasers, reducers, tee, terminations and condensate management options to suit any install.

Assuring you safe, secure installations without call backs.

Where exhaust gases permit a non-metallic venting system, we offer our Green Vent Poly Pro product for commercial installations in 5", 6" and 8" diameters. Listed to ULC-S636 and featuring engineered ice-free terminations, quick easy assembly and installation as well as an environmentally friendly material, this is the best product available when plastics are your solution.

### Tools

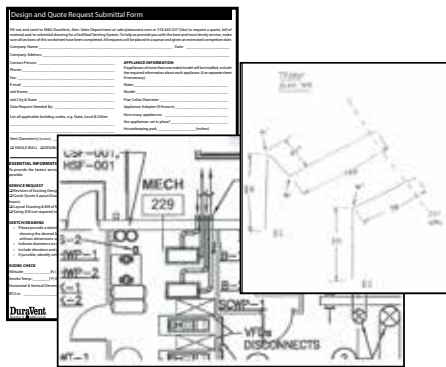
We provide expert sizing for your systems using proprietary tools compliant with ASHRAE standards and the EN14483 standard. Using a quick sketch layout tool we provide a layout drawing and product detail to support your quote. Where you need further detail, we provide full detailed 3D layouts to support your installation.

### Engineering Support Second to None

A quick easy submittal process with a simple dimensioned layout sketch provides you with the detail and the quote you need.

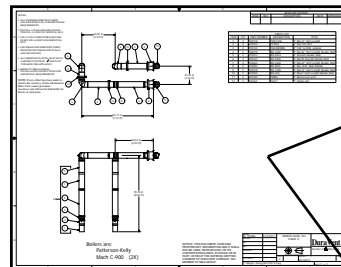
**M&G DuraVent**  
**Technical and Engineering Support**  
**800-766-3471**  
**FAX 518-463-5271**  
**engineering@duravent.com**

### Start



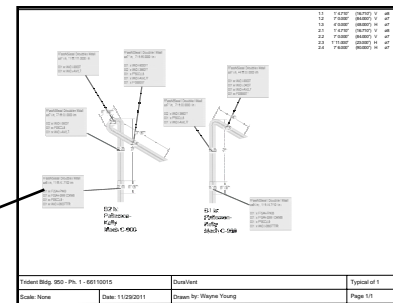
Submit the design submittal sheet and either a mechanical drawing OR a hand sketch of the mechanical drawing

### Finish



Inventor layout on CAD software providing the computer aided vent diagram and order of install

### Computer Aided Vent Diagram



### Order of Install

Section	Qty	Item No.	Description	Weight
1.1	1	FSA-P16	FasNSeal Double Wall - 4" x 710 (1671) length, 8" diameter	5.6
1.1	1	FSA-P16-DB	8" Dia Adapter Pk Mach 5 series	6.0
1.1	1	FSC1	8" Dia Support Clamp	5.1
1.1	1	W2-DB1776	8" Dia 17" Terminate Adapter W2	6.0
1.2	2	W2-2027	FasNSeal Double Wall - 7' 0.000 (84.007) length, 7" diameter	11.2
1.2	1	FSC1	8" Dia Support Clamp	5.1
1.2	1	W2-217	8" Dia Ad. Double Wall	4.8
1.3	1	W2-2027	FasNSeal Double Wall - 4' 0.000 (60.007) length, 7" diameter	6.4
1.3	1	W2-2027	7" Dia 20" Term. Double Wall	6.4
1.3	1	W2-217	8" Dia Ad. Double Wall	4.8
1.3	1	W2-217	7" Dia 18" Term. Double Wall	5.2
1.3	1	W2-217	7" Dia 18" Terminate Double Wall	6.7
2.1	1	FSA-P16	FasNSeal Double Wall - 4" x 710 (1671) length, 8" diameter	5.6
2.1	1	FSA-P16-DB	8" Dia Adapter Pk Mach 5 series	6.0

### Quote

Item	Product No.	Description	Weight	Qty	Unit	Ext	Net
2	300462	8" Dia Adapter Pk Mach 5 series	6.0	1.0	152.24	1	156.24
2	300462	8" Dia Adapter Pk Mach 5 series	6.0	1.0	152.24	1	156.24

### Combined Bill of Materials

# FasNSeal W2

## 3"-24" Commerical Venting

Sets the standard yet again as the first **AL 29-4C Double Wall Vent System** with a built-in gasket, a mechanical locking band and featuring a full ½" air space for superior performance.



### Information to get the job done right

#### Website

Before calling, check the company's literature library to see if your question can be answered there. Publications are available for immediate viewing at [www.duravent.com](http://www.duravent.com). Click on the 'support' then 'literature' link to download literature as a pdf that can be saved on your computer or printed out.

#### Working out the details.

Every project is different. Each has its own specifications, and constraints. DuraVent's Engineering Department services the needs of customers with unique requirements.

#### Commercial Applications

Commercial projects may require custom parts and unique system designs. DuraVent offers complete project assistance for:

- Engineering Services: Personalized system design services which offer comprehensive CAD submittal drawings and a complete bill of materials.
- Custom Parts: If your project requires innovative solutions contact Dura-Vent for custom parts to meet a specific project's needs.

· FasNSeal W2: W2, the double-wall FasNSeal, is an ideal choice for commercial applications where there exists low clearances to combustibles.

· Up to 24" Vent Diameters: Many commercial applications require large diameter systems due to a units size and output. Large diameters are available in single and double wall, featuring FasNSeal's triple lipped directional gaskets and built-in locking band, for safe and convenient installations.

We provide expert sizing for your systems using proprietary tools compliant with ASHRAE standards and the EN14483 standard. Using a quick sketch layout tool we provide a layout drawing and product detail to support your quote. Where you need further detail, we provide full detailed 3D layouts to support your installation.

DuraVent has the experience, talent and equipment to fabricate parts for most commercial venting systems.



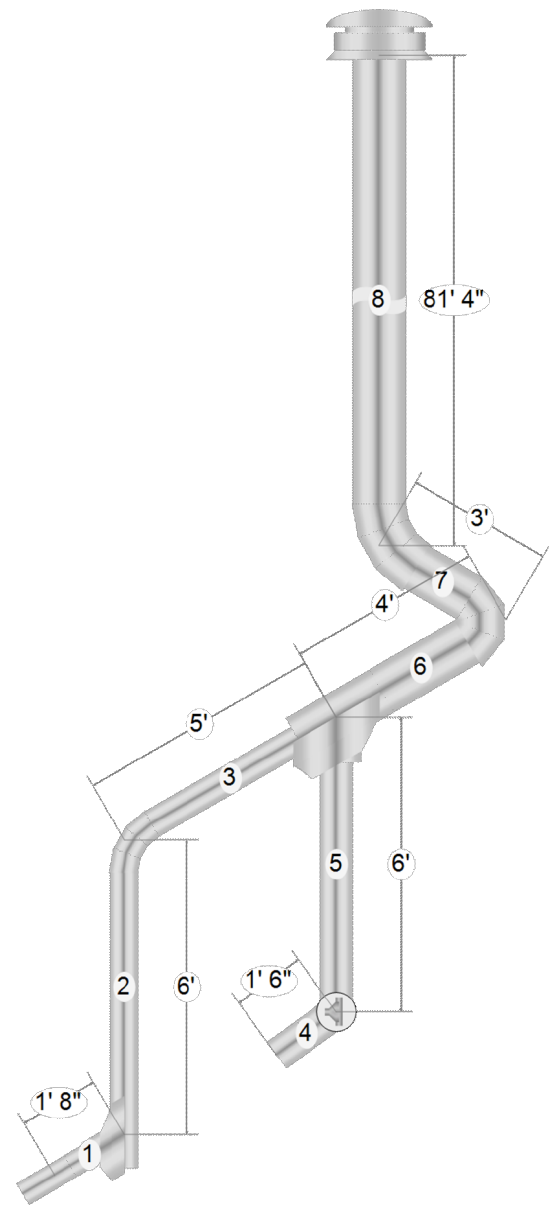
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Member of M&G Group

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800-835-4429 [www.duravent.com](http://www.duravent.com)  
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**L1189 9/2012**

1	1' 7.750"	(19.750")	H	ø6
2	6' 0.000"	(72.000")	V	ø7
3	5' 0.000"	(60.000")	H	ø7
4	1' 6.000"	(18.000")	H	ø8
5	6' 0.000"	(72.000")	V	ø8
6	4' 0.000"	(48.000")	H	ø12
7	3' 0.000"	(36.000")	H	ø12
8	81' 4.100"	(976.100")	V	ø12



100 State St Job - 100 State St Job W/ Double Wall stac		DuraVent	Typical of 1
Scale: None	Date: 8/14/2013	Drawn by: Kevin Sponable	Page 1/1



# Order of Install

**Project No:**  
**System No:** 041730  
**Date:** 8/14/2013

**Project Name:** 100 State St Job  
**Location:**  
**Layout Title:** 100 State St Job W/ Double Wall stack


Section	Qty	Item No	Description	Weight
1			FasNSeal Single Wall - 1' 7.750 (19.75") length, 6" diameter:	
1	1	FSA-HFA6	6" Dia Heatfab To FNS Adapter	0.8
1	1	FS0607EI	6" Dia To 7" Eccentric Increaser	5.0
2			FasNSeal Single Wall - 6' 0.000 (72.00") length, 7" diameter:	
2	1	FSWBT07	Wide Mouth Boot Tee	2.3
2	1	FSIPPSDF07	7" Dia IPS Drain Fitting	1.1
2	1	FSVL1207	7" Dia 12" Vent Length	1.6
2	1	FSVL3607	7" Dia 36" Vent Length	4.4
2	1	FSCL7	7" Dia Support Clamp	0.9
2	1	FSAVL7	7" Dia Adj Vent Length 18" Length	2.4
3			FasNSeal Single Wall - 5' 0.000 (60.00") length, 7" diameter:	
3	1	FSELB9007	90° Elbow	2.1
3	1	FSVL1207	7" Dia 12" Vent Length	1.6
3	1	FSAVL7	7" Dia Adj Vent Length 18" Length	2.4
3	1	FS0712EI	7" Dia To 12" Eccentric Increaser	5.0
4			FasNSeal Single Wall - 1' 6.000 (18.00") length, 8" diameter:	
4	1	FSVL608	8" Dia 6" Vent Length	1.2
4	1	FSAVL8	8" Dia Adj Vent Length 18" Length	3.1
5			FasNSeal Single Wall - 6' 0.000 (72.00") length, 8" diameter:	
5	1	FSWBT8	8" Dia Wide Mouth Boot Tee	3.3
5	1	FSIPPSDF08	8" Dia IPS Drain Fitting	1.2
5	1	FSVL2408	8" Dia 24" Vent Length	4.1
5	1	FSCL8	8" Dia Support Clamp	1.0
5	1	FSAVL8	8" Dia Adj Vent Length 18" Length	3.1
5	1	FS0812TI	8" Dia To 12" Tapered Increaser	5.0
6			FasNSeal Single Wall - 4' 0.000 (48.00") length, 12" diameter:	
6	1	FSWBT12	12" Dia Wide Mouth Boot Tee	5.8
6	1	FSVL1812	12" Dia 18" Vent Length	5.4
6	1	FSAVL12	12" Dia Adj Vent Length 18" Length	5.4
7			FasNSeal Single Wall - 3' 0.000 (36.00") length, 12" diameter:	
7	1	FSELB9012	90° Elbow	5.6
7	1	FSVL612	12" Dia 6" Vent Length	1.8
7	1	FSAVL12	12" Dia Adj Vent Length 18" Length	5.4
7	1	FSA-SW DW12	12" Dia SW to W2 Adapter	0.0
8			FasNSeal Double Wall - 81' 4.100 (976.10") length, 12" diameter:	
8	1	W2-9012	90° Double Wall Elbow	11.4
8	28	W2-3612	12" Dia 36" Vent Length Double Wall	20.0
8	1	W2-612	12" Dia 6" Vent Length Double Wall	3.2
8	7	FSCL13	13" Dia Support Clamp	1.4
8	1	FSC13	13" Dia Storm Collar	1.9
8	1	W2-RC12	12" Dia Rain Cap Double Wall	20.2

# Bill-of-Materials

**Project No:**  
**System No:** 041730  
**Date:** 8/14/2013  
**Product(s):**

**Project Name:** 100 State St Job  
**Location:**  
**Layout Title:** 100 State St Job W/ Double Wall stack  
**Customer:** Sweeney Rogers - Roger

**Layout Warnings:**

 4 There is at least one starting point that does not have an item selected.

Qty	Item No	Description	Weight
1	FSA-HFA6	6" Dia Heatfab To FNS Adapter	0.8
1	FS0607EI	6" Dia To 7" Eccentric Increaser	5.0
1	FSWBT07	Wide Mouth Boot Tee	2.3
1	FSIPSDF07	7" Dia IPS Drain Fitting	1.1
2	FSVL1207	7" Dia 12" Vent Length	1.6
1	FSVL3607	7" Dia 36" Vent Length	4.4
1	FSCL7	7" Dia Support Clamp	0.9
2	FAVL7	7" Dia Adj Vent Length 18" Length	2.4
1	FSELB9007	90° Elbow	2.1
1	FS0712EI	7" Dia To 12" Eccentric Increaser	5.0
1	FSVL608	8" Dia 6" Vent Length	1.2
2	FAVL8	8" Dia Adj Vent Length 18" Length	3.1
1	FSWBT8	8" Dia Wide Mouth Boot Tee	3.3
1	FSIPSDF08	8" Dia IPS Drain Fitting	1.2
1	FSVL2408	8" Dia 24" Vent Length	4.1
1	FSCL8	8" Dia Support Clamp	1.0
1	FS0812TI	8" Dia To 12" Tapered Increaser	5.0
1	FSWBT12	12" Dia Wide Mouth Boot Tee	5.8
1	FSVL1812	12" Dia 18" Vent Length	5.4
2	FAVL12	12" Dia Adj Vent Length 18" Length	5.4
1	FSELB9012	90° Elbow	5.6
1	FSVL612	12" Dia 6" Vent Length	1.8
1	FSA-SW DW12	12" Dia SW to W2 Adapter	0.0
1	W2-9012	90° Double Wall Elbow	11.4
28	W2-3612	12" Dia 36" Vent Length Double Wall	20.0
1	W2-612	12" Dia 6" Vent Length Double Wall	3.2
7	FSCL13	13" Dia Support Clamp	1.4
1	FSC13	13" Dia Storm Collar	1.9
1	W2-RC12	12" Dia Rain Cap Double Wall	20.2
Total Weight (Lbs):			687.5

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