

EVERGREEN[®] Pro

**MODELS 110-399
CONDENSING GAS BOILERS**

Manual Addendum

- EVG 110, 155 Boiler Manual P/N 550-100-210
- EVG 220, 299, 300, & 399 Boiler Manual P/N 550-100-211

This Addendum must be used in conjunction with the Boiler Manual provided with your product.

- ATTENTION to installers and homeowners of Weil-McLain boilers -

KEEP THIS ADDENDUM WITH BOILER MANUAL

Changes to Equivalent Length for Polypropylene (PP) Elbow Fittings

See Page 2 for changes to the “Equivalent length for elbows” section on Page 20 of the P/N 550-100-210 Evergreen 110/155 Boiler Manual

See Page 3 for changes to the “Equivalent length for elbows” section on Page 20 of the P/N 550-100-211 Evergreen 220/299/300/399 Boiler Manual



This addendum must only be used by a qualified heating installer/service technician. Read all instructions, including the boiler manual and all other information shipped with the boiler, before installing. Perform steps in the order given. Failure to comply could result in severe personal injury, death or substantial property damage.



Venting & air — general *(continued)*

Figure 19 Evergreen® venting and air piping — DIRECT VENT ONLY — OPTIONS and PIPING LIMITS

NOTICE The table below lists the acceptable vent/air pipe terminations described in this manual. Follow all instructions provided to install the vent/air system. NOT SHOWN below, but also approved, are the polypropylene piping and terminations listed in Figure 20, page 21. For these applications, use ONLY the manufacturers' parts listed and follow all instructions provided by the pipe manufacturer.

Evergreen® Model	<p>Maximum vent and air pipe length = 100 feet for all applications (Minimum length for all applications is 2 feet) (All applications include allowance for the termination fittings plus one elbow in air piping and one elbow in vent piping).</p>											USE SWEEP ELBOWS ONLY	
	See Figure 20, page 21 for material specifications See Figure 105, page 121 for part/kit numbers												
	<p>Vent and air pipe sizes: Maximum vent lengths apply for vent and air pipe. Boilers will derate as vent/air pipe length increases — see rating data on Figure 118, page 133 for derate amounts.</p>												
	SIDEWALL termination						VERTICAL termination						
	Separate pipes [Note 1]		PVC or PP Concentric [Note 1]		3" Weil-McLain PVC vent/air cap [Note 1]		Separate pipes [Note 1]		PVC or PP Concentric [Note 1]		Vertical vent, Side Air [Note 1]		
	See page 25		See page 27		See page 29		See page 31		See page 33		See page 35		
	Size, inches	Materials Fig. 20, page 21	Size, inches	Materials Fig. 20, page 21	Size, inches	Materials Fig. 20, page 21	Size, inches	Materials Fig. 20, page 21	Size, inches	Materials Fig. 20, page 21	Size, inches	Materials Fig. 20, page 21	
	110	3 PVC/PVC-DWV CPVC, PP, SS	3	PVC Concentric only	—	—	3	PVC/PVC-DWV CPVC, PP, SS	3	PVC/PVC-DWV CPVC, PP, SS	3	PVC/PVC-DWV CPVC, PP, SS	
	155	3 PVC/PVC-DWV CPVC, PP, SS	3	PVC/PVC-DWV CPVC, SS, PP**	3	PVC/PVC-DWV CPVC, PP, SS	3	PVC/PVC-DWV CPVC, PP, SS	3	PVC/PVC-DWV CPVC, PP, SS	3	PVC/PVC-DWV CPVC, PP, SS	

** Model 155 may be concentric sidewall vented using Centrotherm polypropylene pipe (Eco Systems InnoFlue® Single-wall) ONLY if using Centrotherm stainless steel concentric termination kit, part number ICWS3513.

WARNING All elbows in vent and air piping must be sweep elbows ONLY. DO NOT use short-radius elbows.

Equivalent feet for elbows (USE SWEEP ELBOWS ONLY) — deduct from max. equivalent length of piping (does not apply to termination fittings).
 PVC • 7 feet per for each additional 90° sweep elbow or 45° elbow — If piping contains more than 1 elbow in air or vent piping, other than termination fittings.
 PP • Centrotherm 3" - 87° elbow = 8' | 3" - 45° elbow = 3'
 • Duravent 3" - 90° elbow = 7' | 3" - 45° elbow = 3'

Note 1: Material abbreviations: PP = polypropylene, SS = AL29-4C stainless steel
 If using polypropylene or stainless pipe, provide adapters for 3" boiler connections and for terminations, if required IPEX 3" PVC concentric vent kits can be used with standard PVC pipe, fittings and cement (ANSI/ASTM D1785) except if ULC S636 compliance is required. For ULC S636 compliance, all pipe, fittings and cement must be IPEX System 636. For UL 1738 compliance all pipe, fittings and cement must be IPEX System 1738. If using IPEX kits, use only IPEX product code 196006 for 3" venting.
 Contact Weil-McLain for ordering information and availability of Weil-McLain venting kits.

Note 2: Use only Weil-McLain approved termination kits listed in Figure 105, page 121



Venting & air — general *(continued)*

Figure 23 Evergreen® venting and air piping — DIRECT VENT ONLY — OPTIONS and PIPING LIMITS

NOTICE The table below lists the acceptable vent/air pipe terminations described in this manual. Follow all instructions provided to install the vent/air system. NOT SHOWN below, but also approved, are the polypropylene piping and terminations listed in Figure 24, page 21. For these applications, use ONLY the manufacturers' parts listed and follow all instructions provided by the pipe manufacturer.

Evergreen® Model	Maximum vent and air pipe length = 100 feet for all applications											
	(Minimum length for all applications is 2 feet equivalent plus termination)											
	(All applications include allowance for the termination fittings plus one elbow in air piping and one elbow in vent piping).											
	See Figure 24, page 21 for material specifications See Figure 111, page 117 for part/kit numbers											
	Vent and air pipe sizes:											
	Maximum vent lengths apply for either 3" or 4" vent and air pipe.											
	If using 3" pipe, provide 4"x 3" tapered reducers at boiler connections and at Weil-McLain vent/air cap or at concentric terminations.											
	Boilers will derate as vent/air pipe length increases — see rating data on Figure 123, page 129 for derate amounts.											
	SIWALL termination						VERTICAL termination					
	Separate pipes [Note 1]		Weil-McLain vent/air plate [Note 1 & 2]		PVC Concentric [Note 1 & 2]		Separate pipes [Note 1]		PVC or PP Concentric [Note 1 & 2]		Vertical vent/Sidewall air [Note 1]	
See page 25		See page 27		See page 29		See page 31		See page 33		See page 36		
Size, inches	Materials page 21	Size, inches	Materials page 21	Size, inches	Materials page 21	Size, inches	Materials page 21	Size, inches	Materials page 21	Size, inches	Materials page 21	
220	3	PVC/PVC-DWV CPVC, PP, SS	3	PVC/PVC-DWV CPVC, PP	3	PVC/PVC-DWV CPVC	3	PVC/PVC-DWV CPVC, PP, SS	3	PVC/PVC-DWV CPVC, PP	3	PVC/PVC-DWV CPVC, PP, SS
	4	PVC/PVC-DWV CPVC, PP, SS	4	PVC/PVC-DWV CPVC, PP	4	PVC/PVC-DWV CPVC	4	PVC/PVC-DWV CPVC, PP, SS	4	PVC/PVC-DWV CPVC, PP	4	PVC/PVC-DWV CPVC, PP, SS
299/300	4	PVC/PVC-DWV CPVC, PP, SS	4	PVC/PVC-DWV CPVC, PP	4	PVC/PVC-DWV CPVC	4	PVC/PVC-DWV CPVC, PP, SS	4	PVC/PVC-DWV CPVC, PP	4	PVC/PVC-DWV CPVC, PP, SS
399	4	PVC/PVC-DWV CPVC, PP, SS	4	PVC/PVC-DWV CPVC, PP	4	PVC/PVC-DWV CPVC	4	PVC/PVC-DWV CPVC, PP, SS	4	PVC/PVC-DWV CPVC, PP	4	PVC/PVC-DWV CPVC, PP, SS
⚠ WARNING All elbows in vent and air piping must be sweep elbows ONLY. DO NOT use short-radius elbows. When transitioning to 4-inch to 3-inch, use tapered reducer with 4" PVC nipple (l ≥ 6"). Do not use 4-inch to 3-inch bushing. Bushing will Not seal in boiler adapter.												
Equivalent feet for elbows (USE SWEEP ELBOWS ONLY) — deduct from max. equivalent length of piping (does not apply to termination fittings).												
PVC • 7 feet per for each additional 90° sweep elbow or 45° elbow — If piping contains more than 1 elbow in air or vent piping, other than termination fittings.												
PP • Centrotherm 3" - 87° elbow = 8' 3" - 45° elbow = 3' 4" - 87° elbow = 8' 4" - 45° elbow = 3'												
• Duravent 3" - 90° elbow = 7' 3" - 45° elbow = 3' 4" - 90° elbow = 12' 4" - 45° elbow = 5'												
Note 1	Material abbreviations: PP = polypropylene, SS = AL29-4C stainless steel If using polypropylene or stainless pipe, provide adapters for 4" boiler connections and for terminations, if required IPEX PVC concentric vent kits can be used with standard PVC pipe, fittings and cement (ANSI/ASTM D1785) except if ULC S636 compliance is required. For ULC S636 compliance, all pipe, fittings and cement must be IPEX System 636. For UL 1738 compliance all pipe, fittings and cement must be IPEX System 1738. If using IPEX kits, use only IPEX product code listed in Figure 111, page 117. Contact Weil-McLain for ordering information and availability of Weil-McLain venting kits.											
Note 2	Use only Weil-McLain approved termination kits listed in Figure 111, page 117.											

