

PUREWELL *VariHeat* c
PUREWELL *VariHeat* he

REVERSE RETURN HEADER KITS

INSTALLATION INSTRUCTIONS

IMPORTANT NOTE

**THESE INSTRUCTIONS MUST BE READ
AND UNDERSTOOD BEFORE INSTALLING,
COMMISSIONING, OPERATING OR
SERVICING EQUIPMENT**



Heating *at work.*

Customer After Sales Services

Telephone: **0845 450 2866** E-mail: **aftersales@hamworthy-heating.com** Fax: **01202 662522**

Technical Enquiries

To supplement the detailed technical brochures, technical advice on the application and use of products in the Hamworthy Heating range is available from our technical team in Poole and our accredited agents.

Site Assembly

Hamworthy offer a service of site assembly for many of our products in instances where plant room area is restricted. Using our trained staff we offer a higher quality of build and assurance of a boiler built and tested by the manufacturer.

Commissioning

Commissioning of equipment by our own engineers, accredited agents or specialist sub – contractors will ensure the equipment is operating safely and efficiently.

Maintenance Agreements

Regular routine servicing of equipment by Hamworthy service engineers inspects the safety and integrity of the plant, reducing the risk of failure and improving performance and efficiency. Maintenance agreements enable our customers to plan and budget more efficiently.

Breakdown service, repair, replacement

Hamworthy provide a rapid response breakdown, repair or replacement service through head office at Poole and accredited agents throughout the UK.

Spare Parts

A comprehensive spare parts service is operated from our factory in Poole, providing replacement parts for both current and discontinued products. Delivery of parts and components is normally from stock within seven days. However, a next day delivery service is available for breakdowns and emergencies.

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REVERSE RETURN HEADER KITS

INSTALLATION INSTRUCTIONS

**Purewell *VariHeat* Condensing Boilers
Models PV 70c, PV 95c, PV 110c, PV 140c & PV 180c
Consisting of 2, 3 or 4 multiple boiler arrangement**

**Purewell *VariHeat* High Efficiency Boilers
Models PV 65he, PV 85he, PV 105he & PV 125he
Consisting of 2, 3 or 4 multiple boiler arrangement**

THESE INSTRUCTIONS MUST BE READ IN CONJUNCTION WITH
THE PUREWELL VARIHEAT INSTALLER'S GUIDE,
HHL Part No. 500001169 FOR CONDENSING MODELS
AND 500001170 FOR HIGH EFFICIENCY MODELS.

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CONTENTS	PAGE
Front Page	i
Contents	ii
1.0 GENERAL INSTRUCTIONS	1
2.0 ASSEMBLY	4
 TABLES: -	
1 List of Parts	3
 FIGURES: -	
1 2 Boiler Reverse Return Assembly - General Overview	1
2 Parts Identification Exploded View	2
2.2.1 Dimensional Overview, 2 Boiler Model 70c, 95c, 110c & 140c	7
2.2.2 Dimensional Overview, 3 Boiler Model 70c, 95c, 110c & 140c	7
2.2.3 Dimensional Overview, 4 Boiler Model 70c, 95c, 110c & 140c	8
2.2.4 Dimensional Overview, 2 Boiler Model 180c	8
2.2.5 Dimensional Overview, 3 Boiler Model 180c	9
2.2.6 Dimensional Overview, 4 Boiler Model 180c	9
2.2.7 Dimensional Overview, 2 Boiler Model 65he & 85he	10
2.2.8 Dimensional Overview, 3 Boiler Model 65he & 85he	10
2.2.9 Dimensional Overview, 4 Boiler Model 65he & 85he	11
2.2.10 Dimensional Overview, 2 Boiler Model 105he & 125he	11
2.2.11 Dimensional Overview, 3 Boiler Model 105he & 125he	12
2.2.12 Dimensional Overview, 4 Boiler Model 105he & 125he	12
2.3.1 Suggested Condensate Plumbing	13

1.0 GENERAL INSTRUCTIONS

These instructions **MUST** be read in conjunction with the Purewell VariHeat Installer's Guide (HHL Part No. 500001126 for Condensing Models or 500001155 for High Efficiency Models).

SAFETY NOTE: All safety instructions referred to in the Installer's Guide must be adhered to, and a competent person must carry out all works referred to in this instruction.

These header kits are specifically for use with Purewell VariHeat boilers.

All sub assemblies are pressure tested prior to despatch.

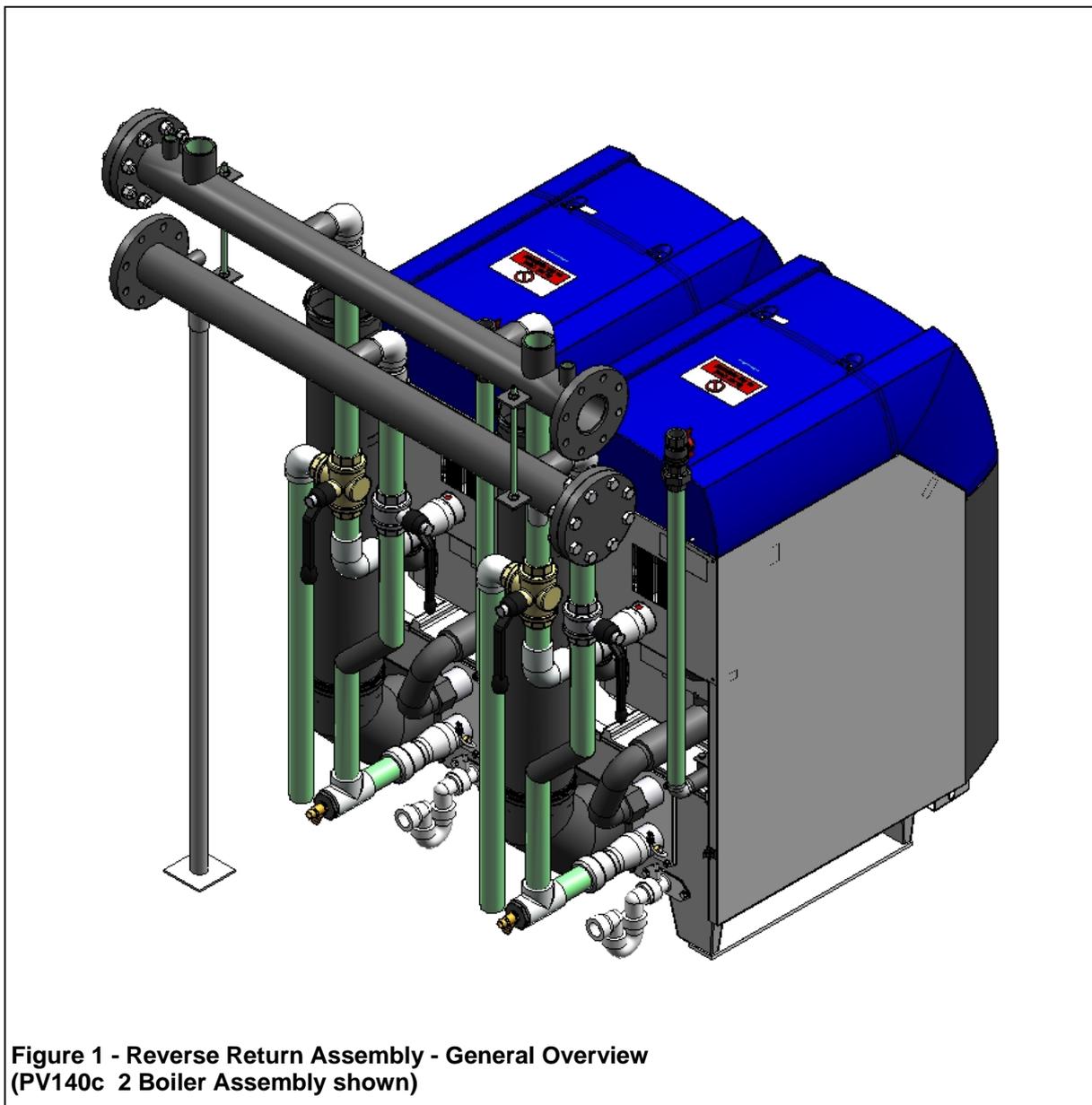
NOTE: This water header kit is intended for use as reverse-return.

1.1 Delivery

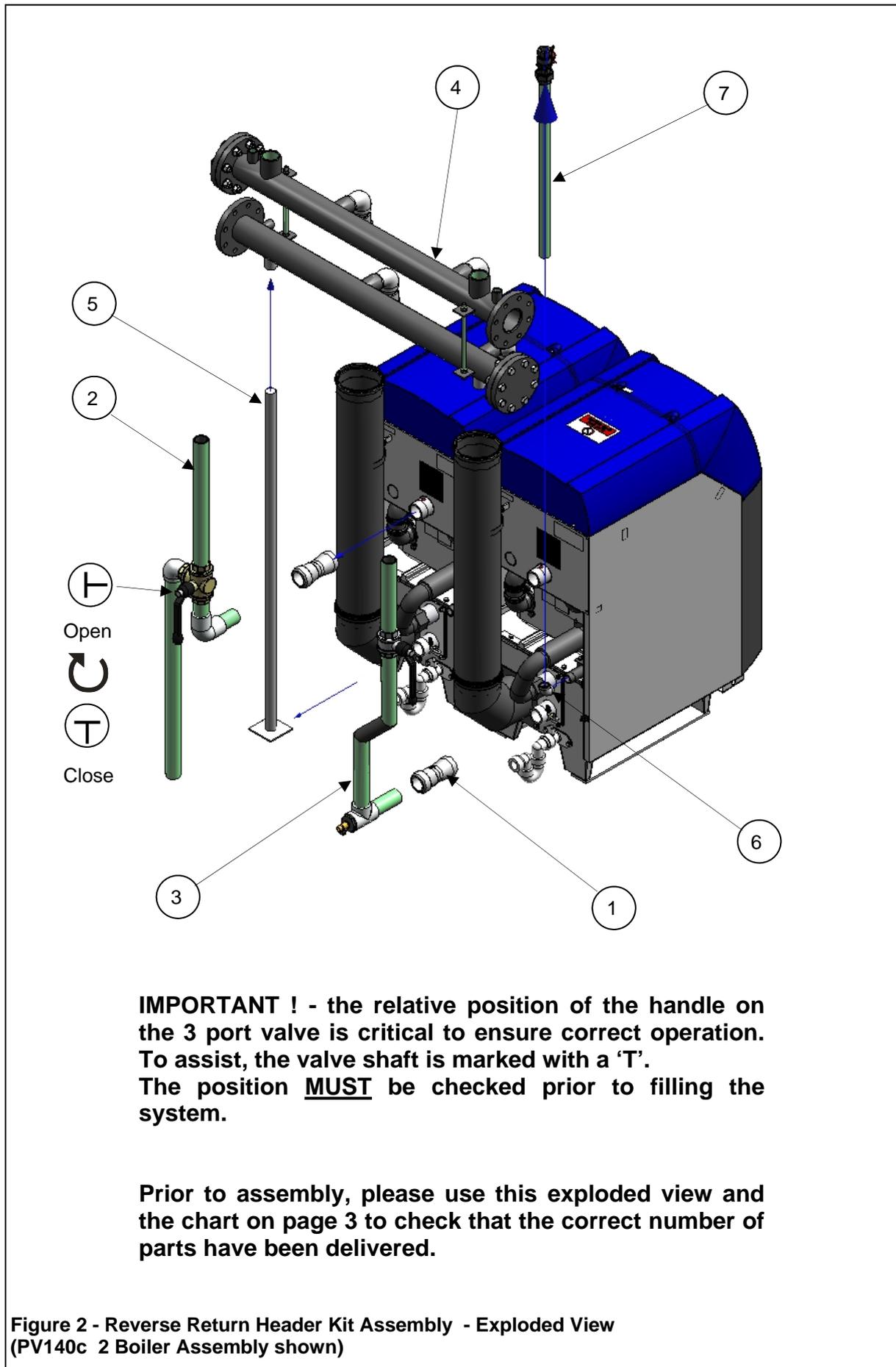
Remove all packing material and referring to Fig. 2 and Table 1 inspect the equipment to ensure that all parts are present and undamaged.

If in any doubt, **DO NOT USE THE EQUIPMENT.** Instead, contact HHL Technical Department.

Familiarise yourself with the parts and how they assemble together by referring to Figure 1.



**Figure 1 - Reverse Return Assembly - General Overview
(PV140c 2 Boiler Assembly shown)**



Condensing Models				
Item	Description	PV70c, PV95c, PV110c, PV140c or PV180c		
		2 Boilers	3 Boilers	4 Boilers
1	Flow & Return Adaptors	4	6	8
2*	Flow Pipe Sub Assembly	2	3	4
3*	Return Pipe Sub-Assembly	2	3	4
4**	Header Assembly	1	1	1
5	Header Assembly Support Bar	2	2	2
6***	Gas Pipe Connection Elbow	2	3	4
7	Gas Pipe Assembly	2	3	4
High Efficiency Models				
Item	Description	PV65he, PV85he, PV105he or PV125he		
		2 Boilers	3 Boilers	4 Boilers
1	Flow & Return Adaptors	4	6	8
2*	Flow Pipe Sub Assembly	2	3	4
3*	Return Pipe Sub-Assembly	2	3	4
4**	Header Assembly	1	1	1
5	Header Assembly Support Bar	2	2	2
6	Gas Pipe Connection Elbow	2	3	4
7	Gas Pipe Assembly	2	3	4

Table 1 - List of Parts

NOTES:

* Items 2 and 3, Flow & Return Pipe Sub-Assemblies, vary dimensionally depending on Model supplied. See dimensional drawings on pages 7 to 12.

** Item 4, Header Assembly, is supplied in 2 pieces, together with tie bars and fixings for on-site assembly.

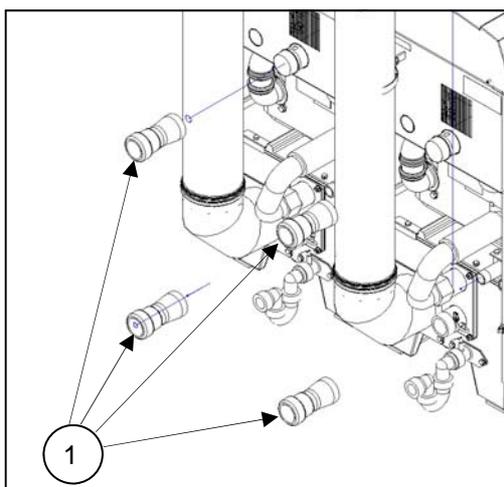
*** Item 6, Gas Pipe Connection Elbow. **For PV180c Models only**, each elbow comes with an additional 1" to 1¼" bush.

2.0 ASSEMBLY INSTRUCTIONS

Note: To assemble the Reverse Return Header Kit correctly the boilers must be butted up alongside one another (i.e. at 534mm centres). See dimensional drawings on pages 7 to 12.

2.1.1 Remove the red plastic thread protection caps from the flow and return stubs on the rear of the boilers.

2.1.2 For all Purewell VariHeat Models except 180c, select the Flow & Return Adaptors, marked ① and secure to flow and return stub connections on the rear of the boilers using proprietary thread sealant (not HHL supply).

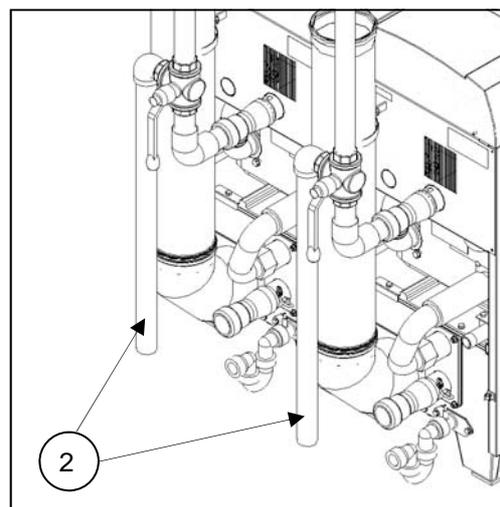


Note: For Purewell VariHeat 180c model ignore this step and move directly to Step 2.1.3

2.1.3 For Purewell VariHeat Model 180c **only** fit threaded end of female adaptor (HHL Ref. 533604004) directly onto the flow and return stub connections exiting the back of the boiler, using proprietary thread sealant (not HHL supply). The pipes and fittings used on this model are 2" NB.

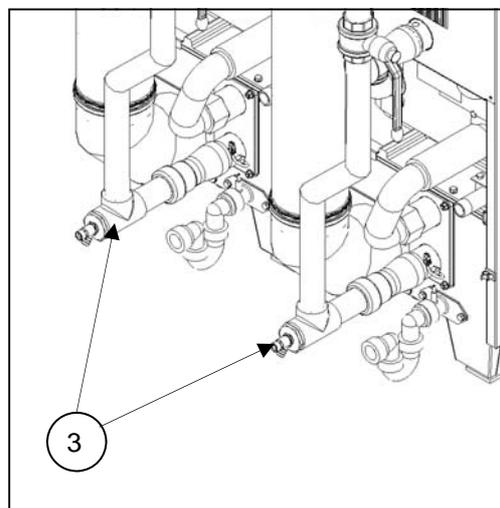
2.1.4 Select Flow Pipe Sub-Assembly, marked ② from kit of parts .

2.1.5 For all models except PV180c mark the unthreaded tube ends of the assembly with a pencil line at a distance from the edge of 36mm. PV180c assemblies using 2" NB tubing should be marked at a distance of 42mm.



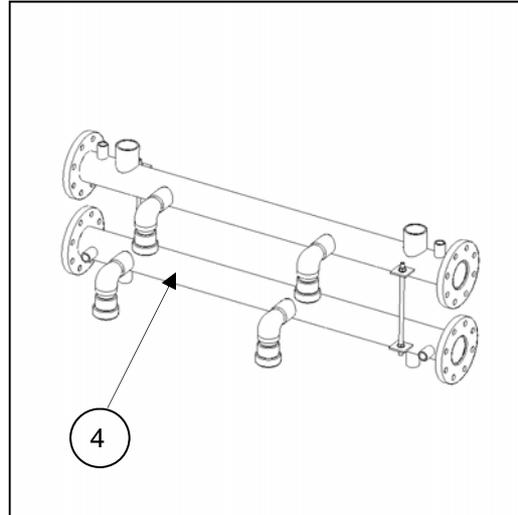
2.1.6 As indicated in Figure 2 insert tube into Primofit adaptors exiting from upper (flow) stub connections in back of boiler and line up to recently drawn mark. Do not secure the pipe into the adaptor at this time. This will allow a ± 5 mm adjustment on final assembly.

2.1.7 Similarly for Return Pipe Sub-Assembly, marked ③, repeat steps 2.1.5 & 2.1.6 except this time placing pre-assembled pipework into the adaptors exiting lower (return) stub connections. Again, do not secure the pipe into the adaptor at this time, merely align with previously drawn pencil line allowing for a ± 5 mm adjustment at a later stage.



2.1.8 Select from your package of parts the two 3" NB headers (or 5" NB for 180c models), marked ④, together with the M10 studding and M10 nuts and washers supplied.

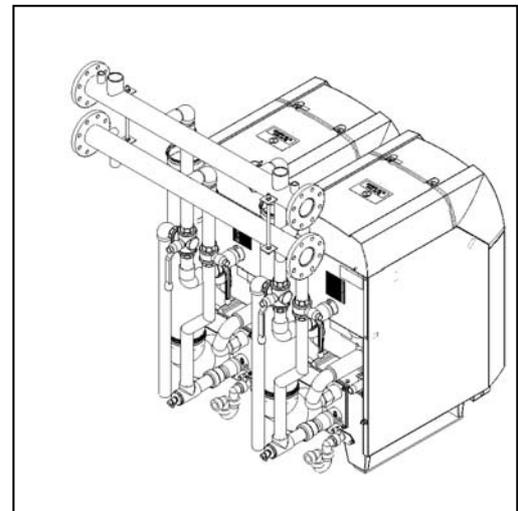
2.1.9 Bolt the two headers together using the studding supplied so that the header with the large 2" BSP sockets is at the top with the sockets pointing upwards and that the headers are spaced at approximately 250mm centres to each other (300mm centres for larger 5" NB headers used on PV180c models).



2.1.10 Using a suitably rated hoist, raise header assembly to approximate finished height and, gently lowering hoist, guide the pre-marked unthreaded ends of the pipes into the appropriate Primofit adaptor as indicated using the previously marked pencil lines as a guide.

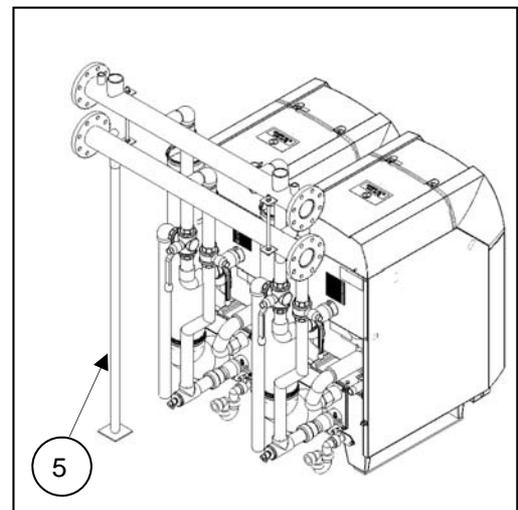
2.1.11 Keeping assembly safely balanced on hoist, adjust all pipes into the adaptors $\pm 5\text{mm}$ until a satisfactory level assembly has been achieved, **then secure all adaptors.**

Note: DO NOT overtighten the adaptors as this may damage the seals.



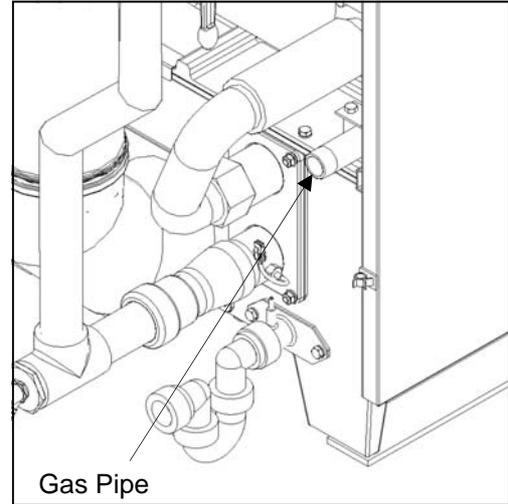
2.1.12 Select from your package the header support struts, marked ⑤. Notice that these supports are deliberately oversized. Measure the distance from the 1" sockets on the lower headers to the plant room floor then cut the unthreaded end of the support strut pipe to desired length. Screw threaded end of tube fully into 1" socket in lower header then adjust with M24 nut at base of strut until headers are satisfactorily secured.

2.1.13 Release the hoist and remove.

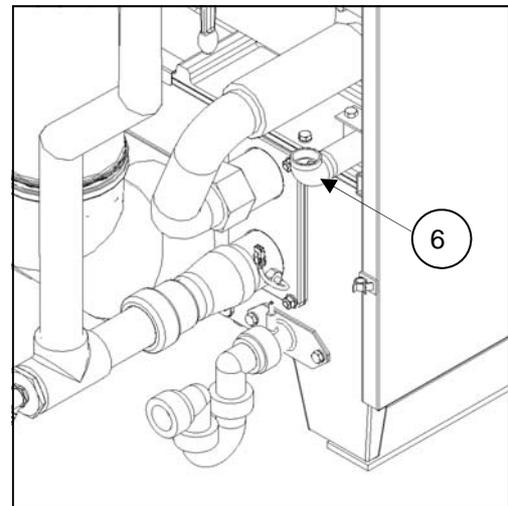


2.1.14 If constructing a PV180c model select 1" to 1¼" hexagonal bush supplied and secure to 1" gas pipe at rear of boiler.

If constructing any other Model ignore this step and move straight to 2.1.15.



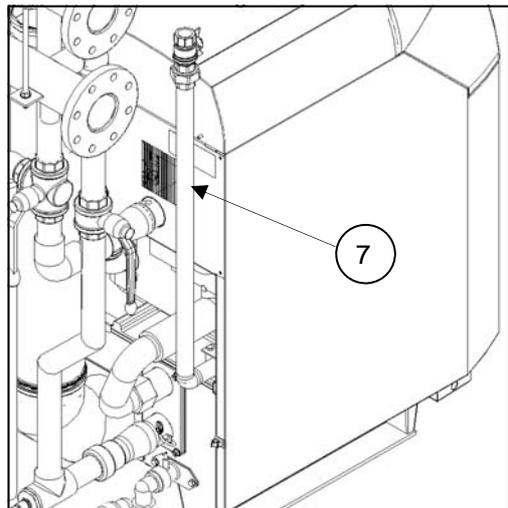
2.1.15 For any models other than PV180c select 1" f/f elbow, for model type 180c select 1¼" f/f elbow, marked ⑥, and using proprietary thread sealant (not HHL supply) secure to 1" gas pipe stub / 1¼" Hex. Bush in back of boiler ensuring that port is pointing upwards.

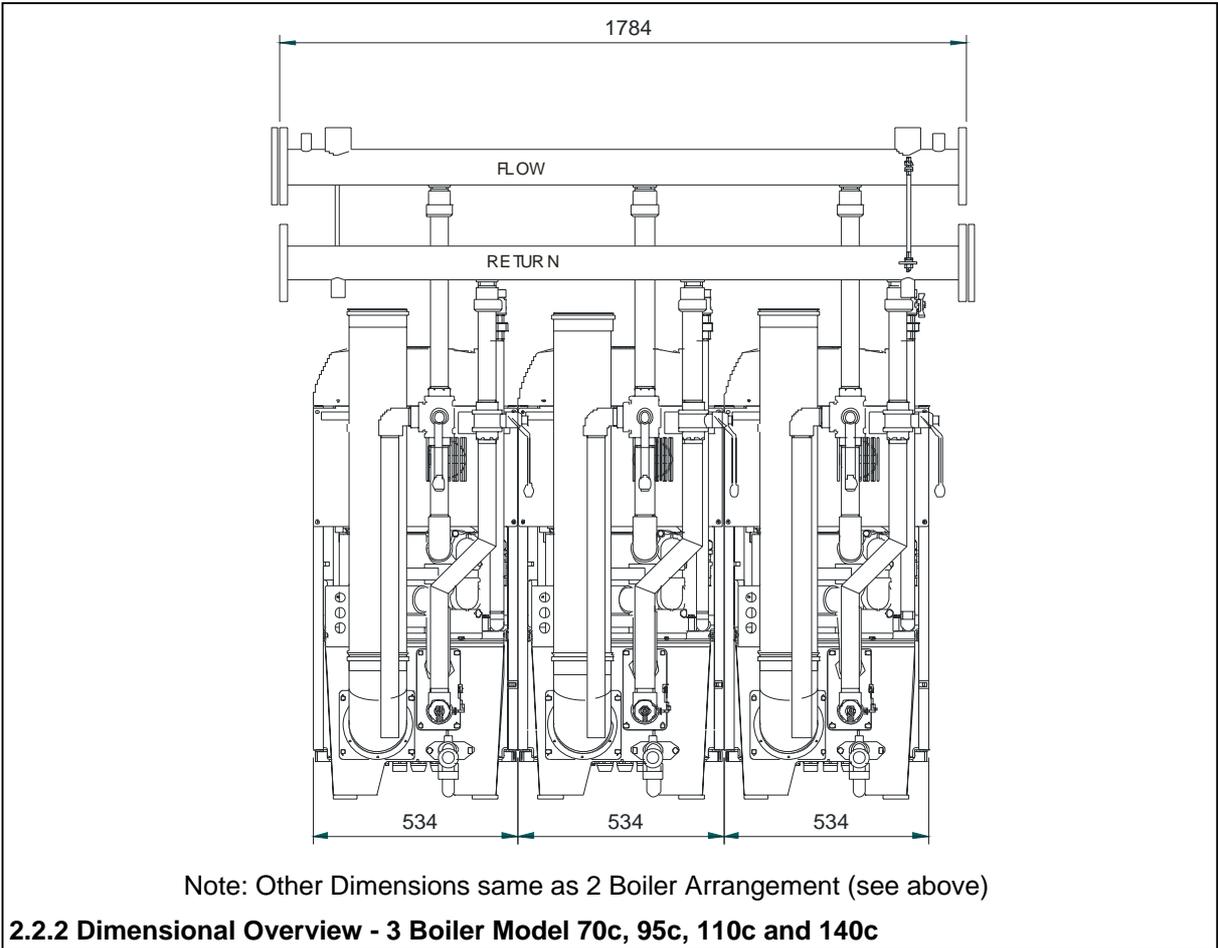
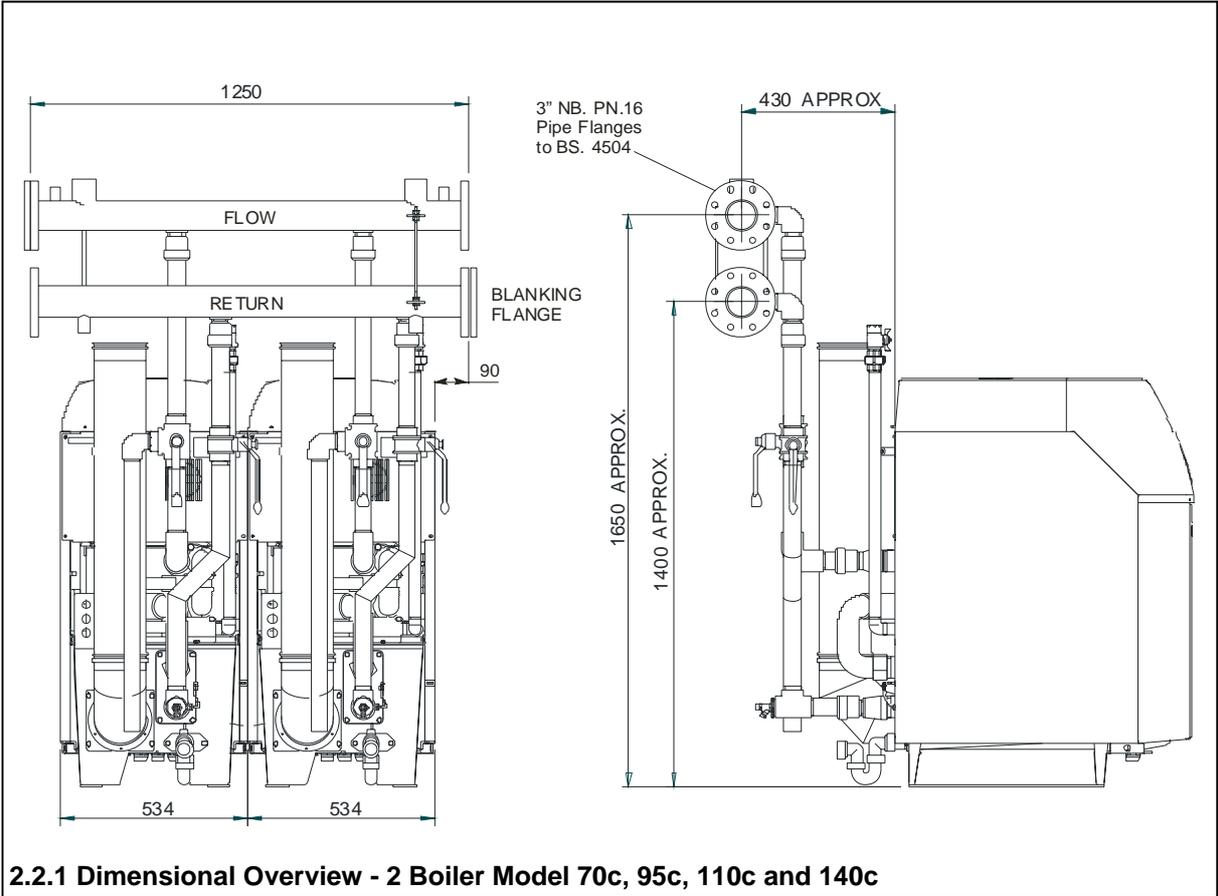


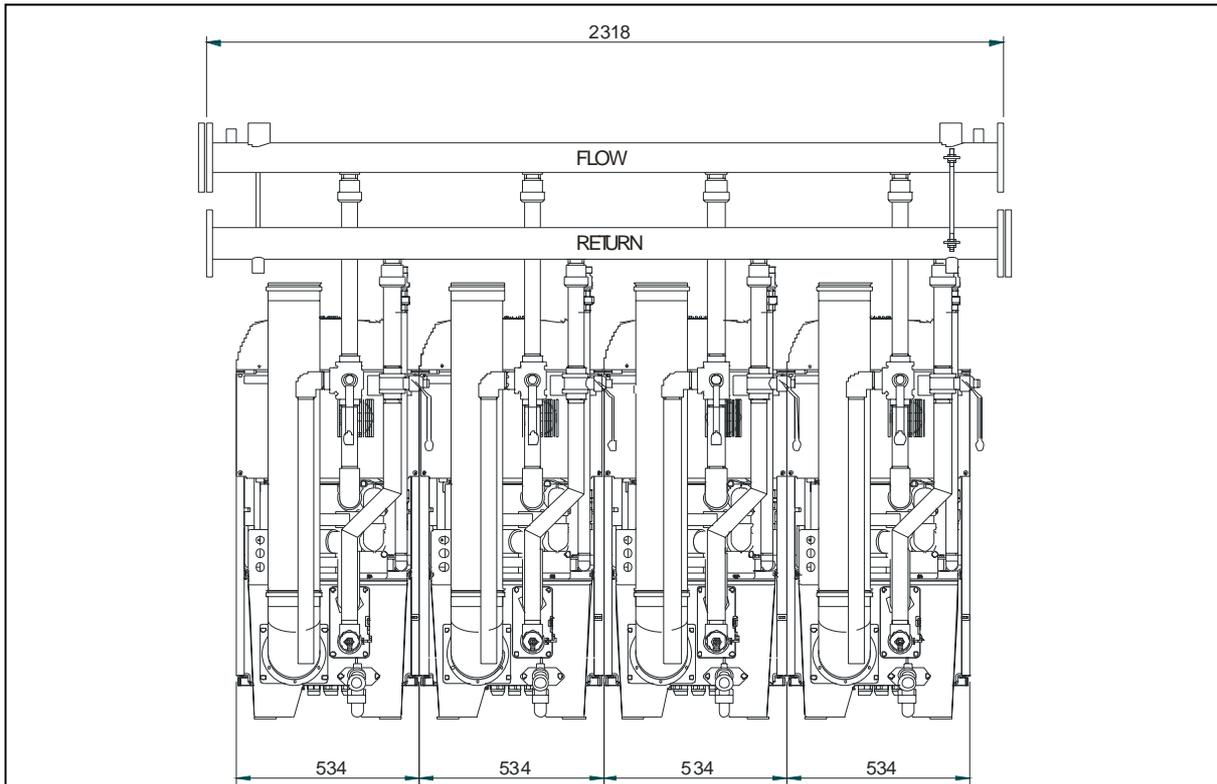
2.1.16 Select 1" x 750mm long tube c/w valve or 1¼" x 750mm long tube c/w valve depending on model being built, marked ⑦, and using proprietary thread sealant (not HHL supply) secure to previously fitted f/f elbows.

2.1.17 Assembly is now complete. Test pipework for leaks then connect gas and water pipes to the gas supply and heating system.

NOTE: The gas supply manifold / pipework must be adequately sized acknowledging the maximum volume of gas flow.

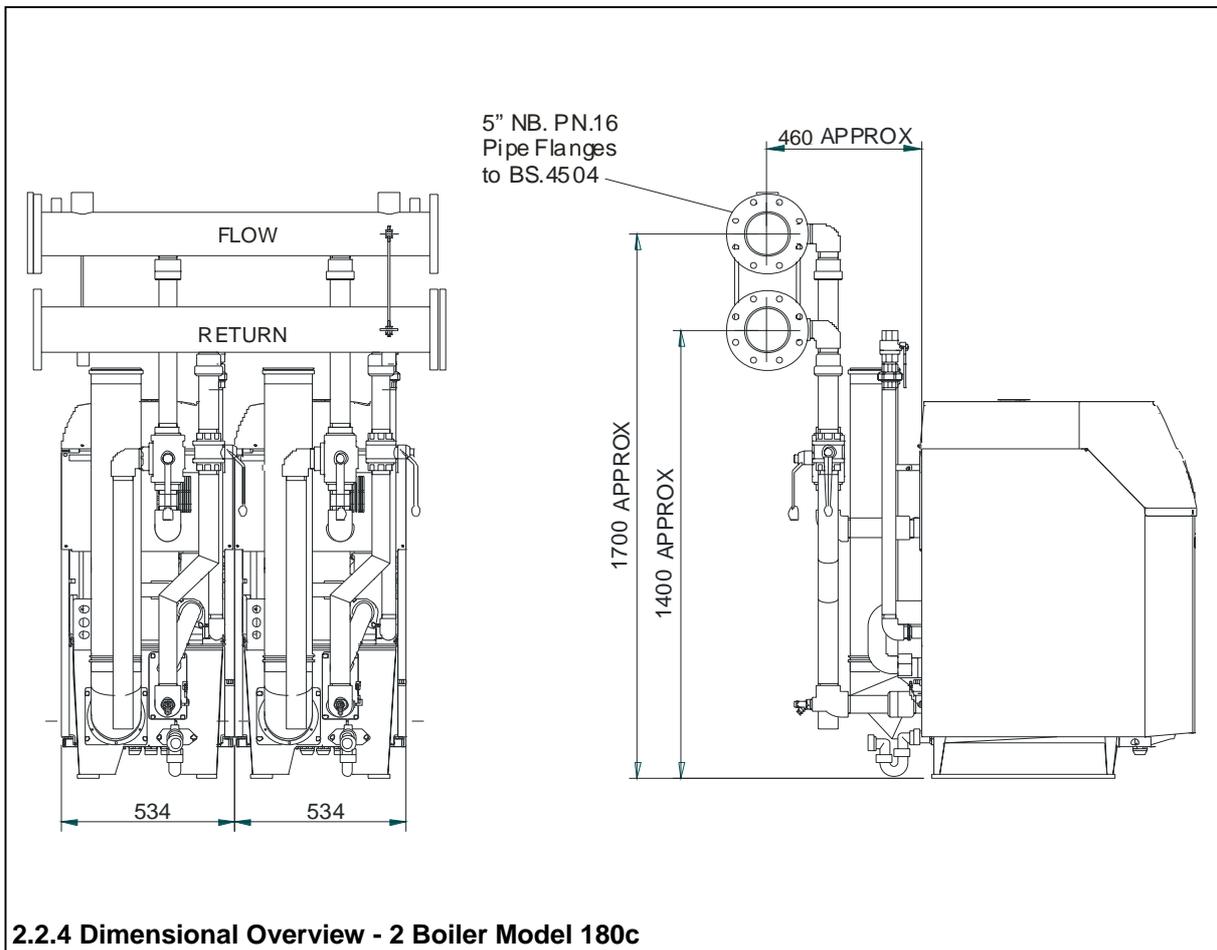




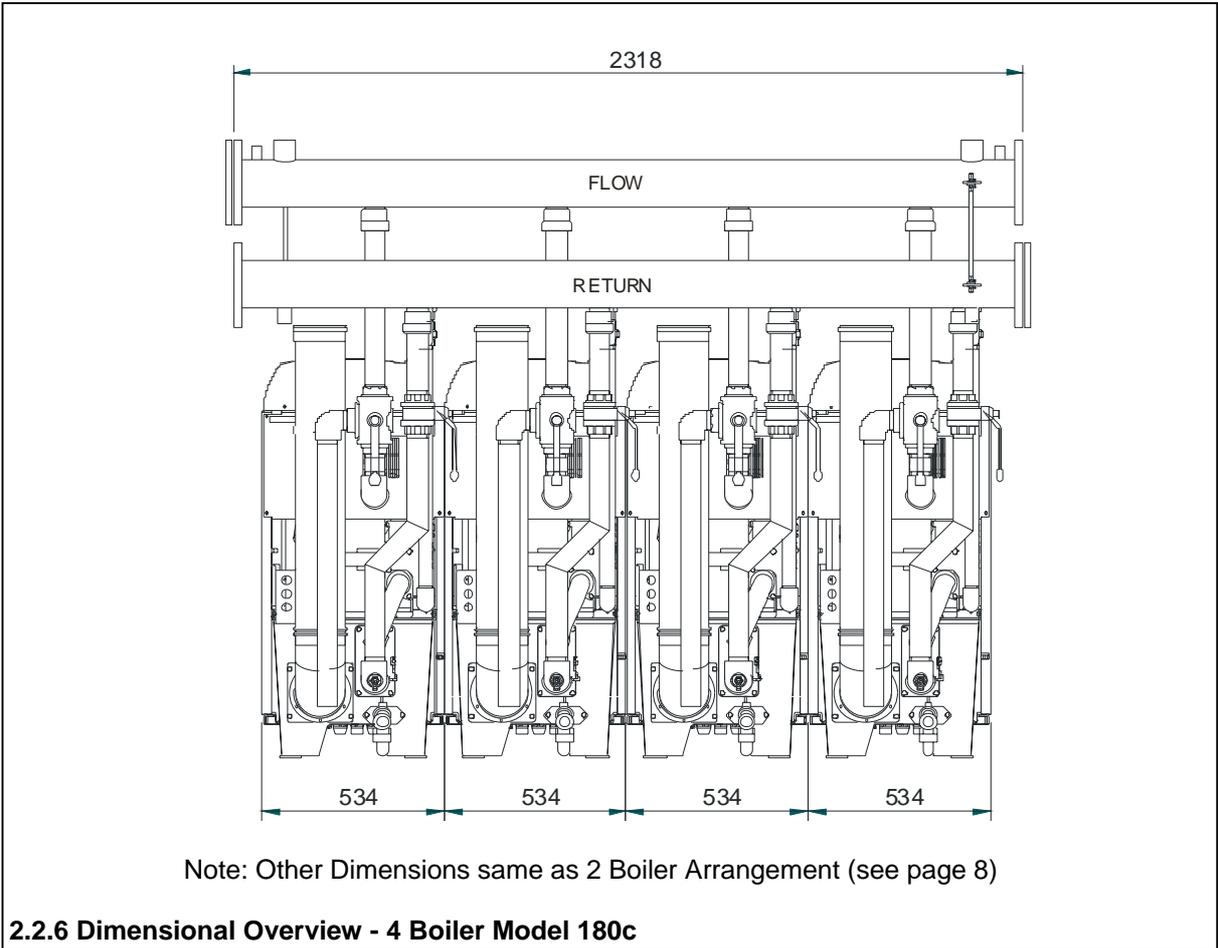
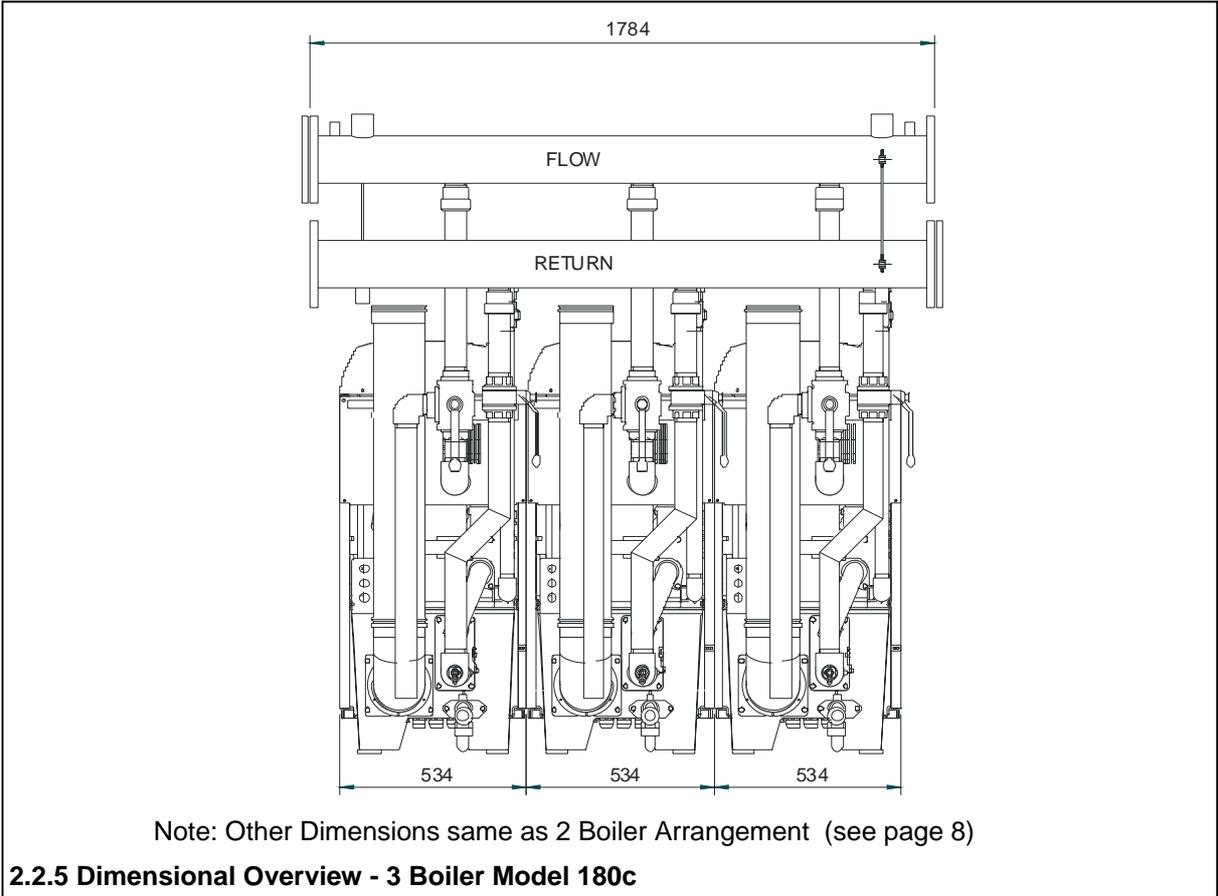


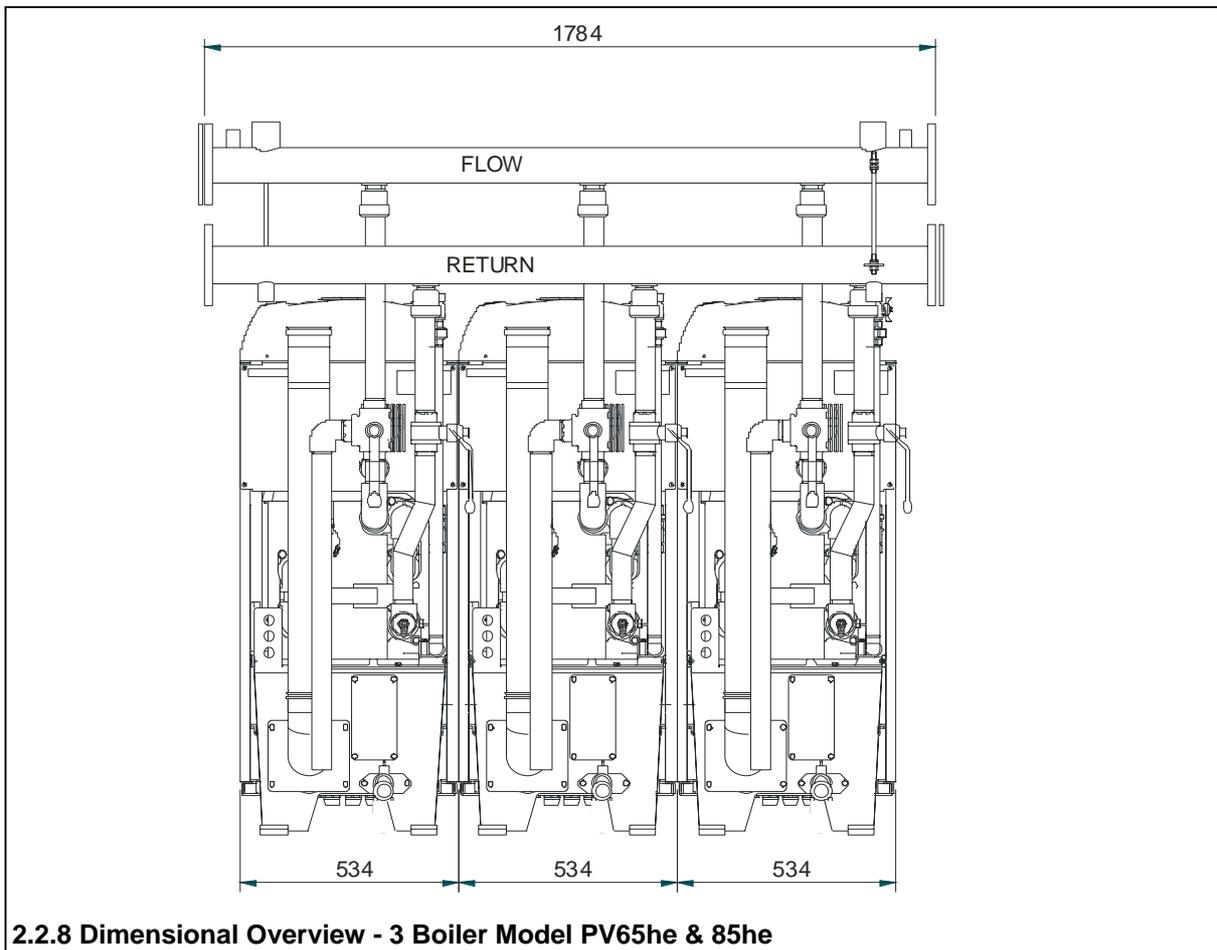
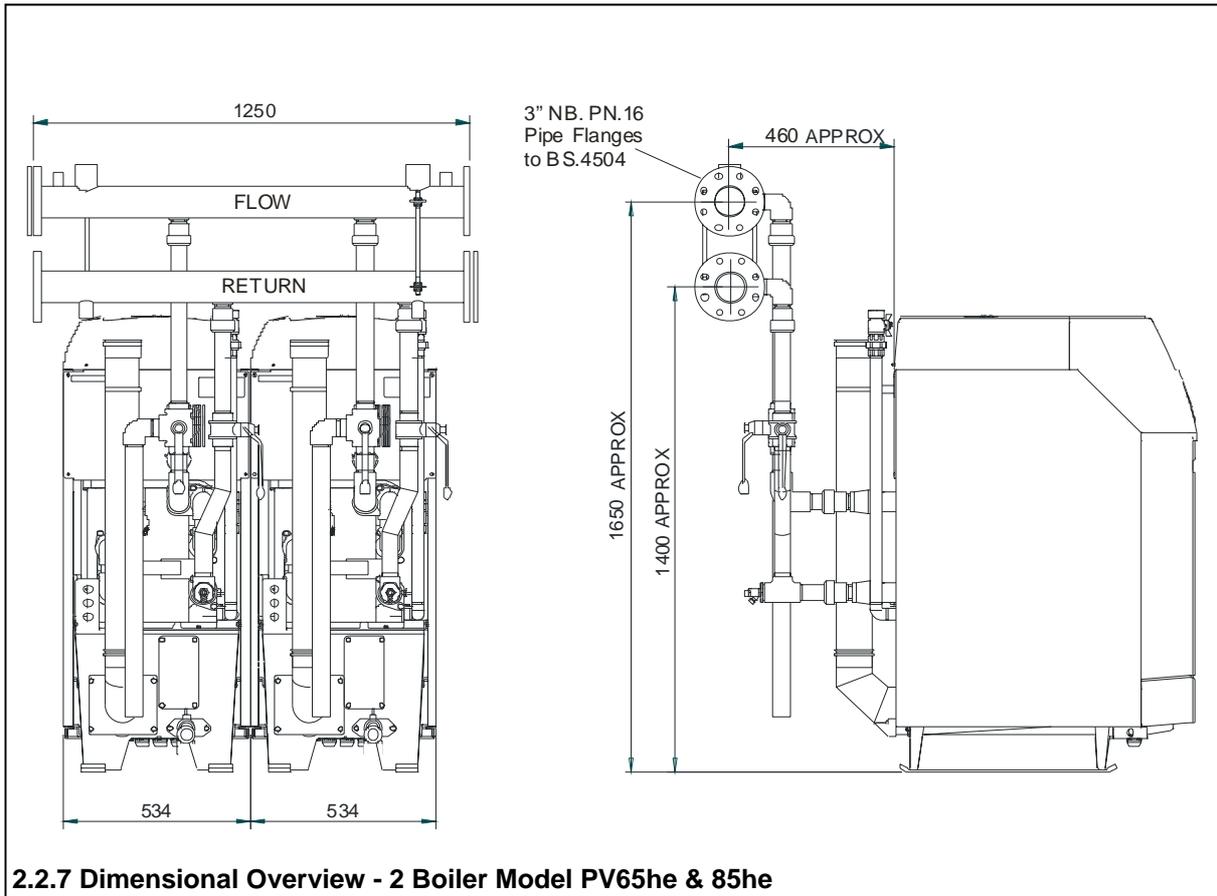
Note: Other Dimensions same as 2 Boiler Arrangement (see page 7)

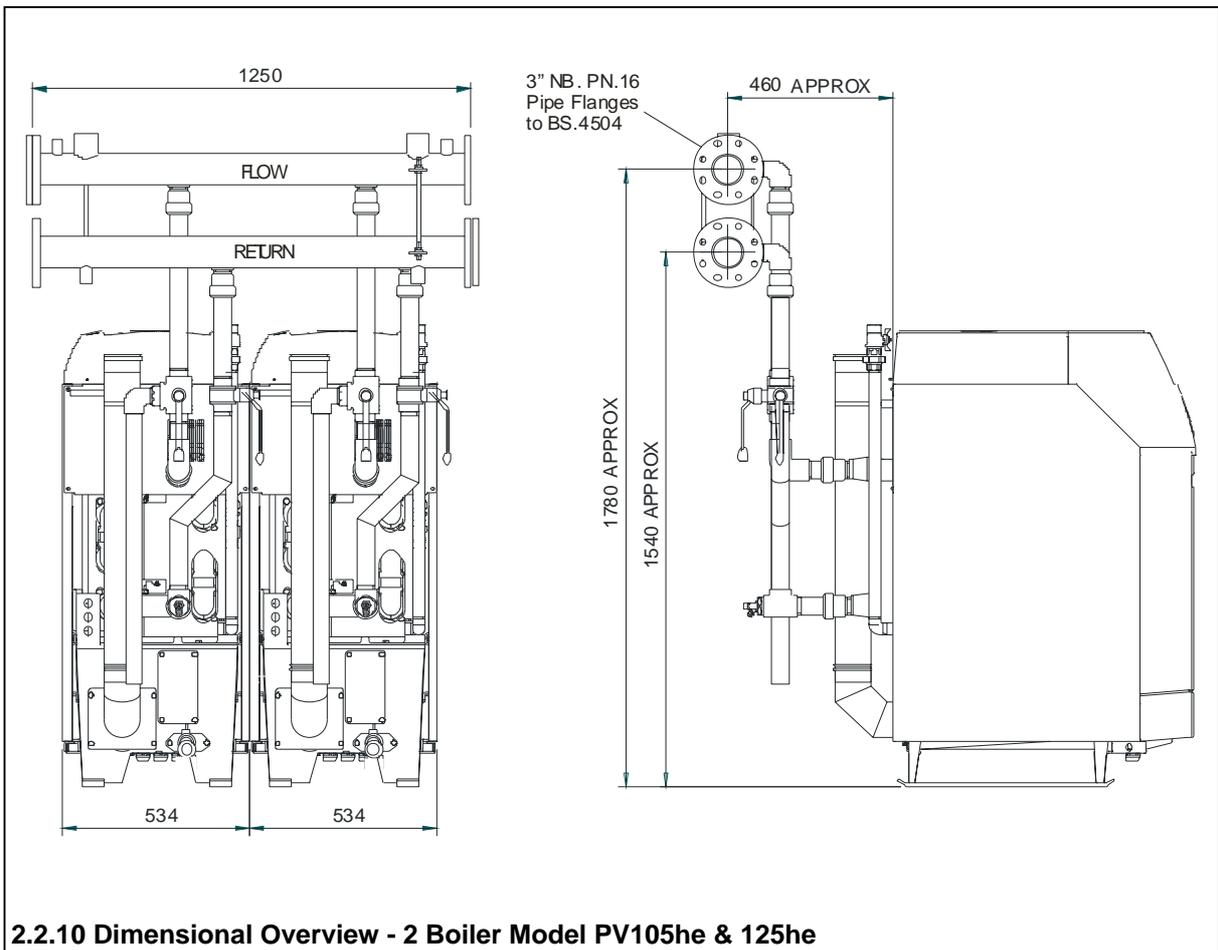
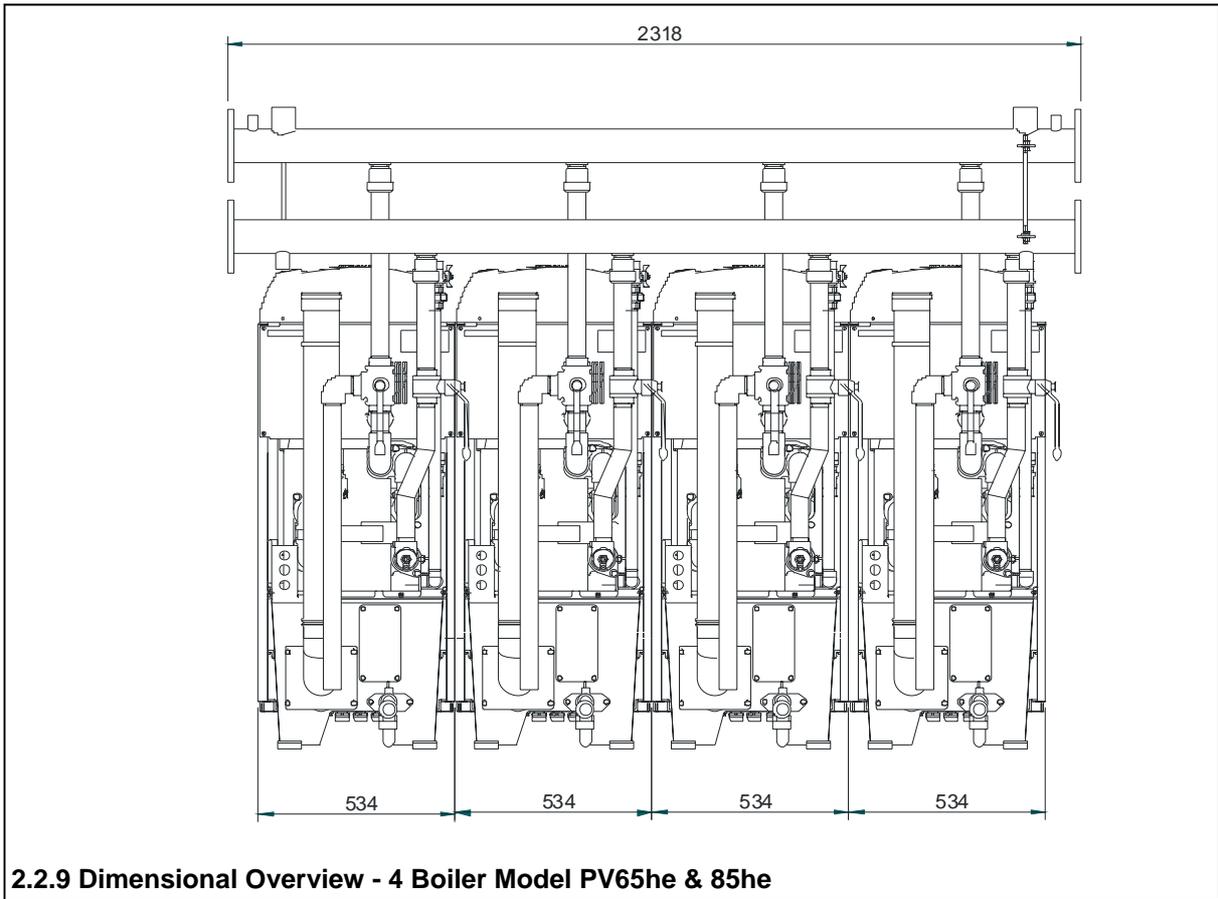
2.2.3 Dimensional Overview - 4 Boiler Model 70c, 95c, 110c and 140c

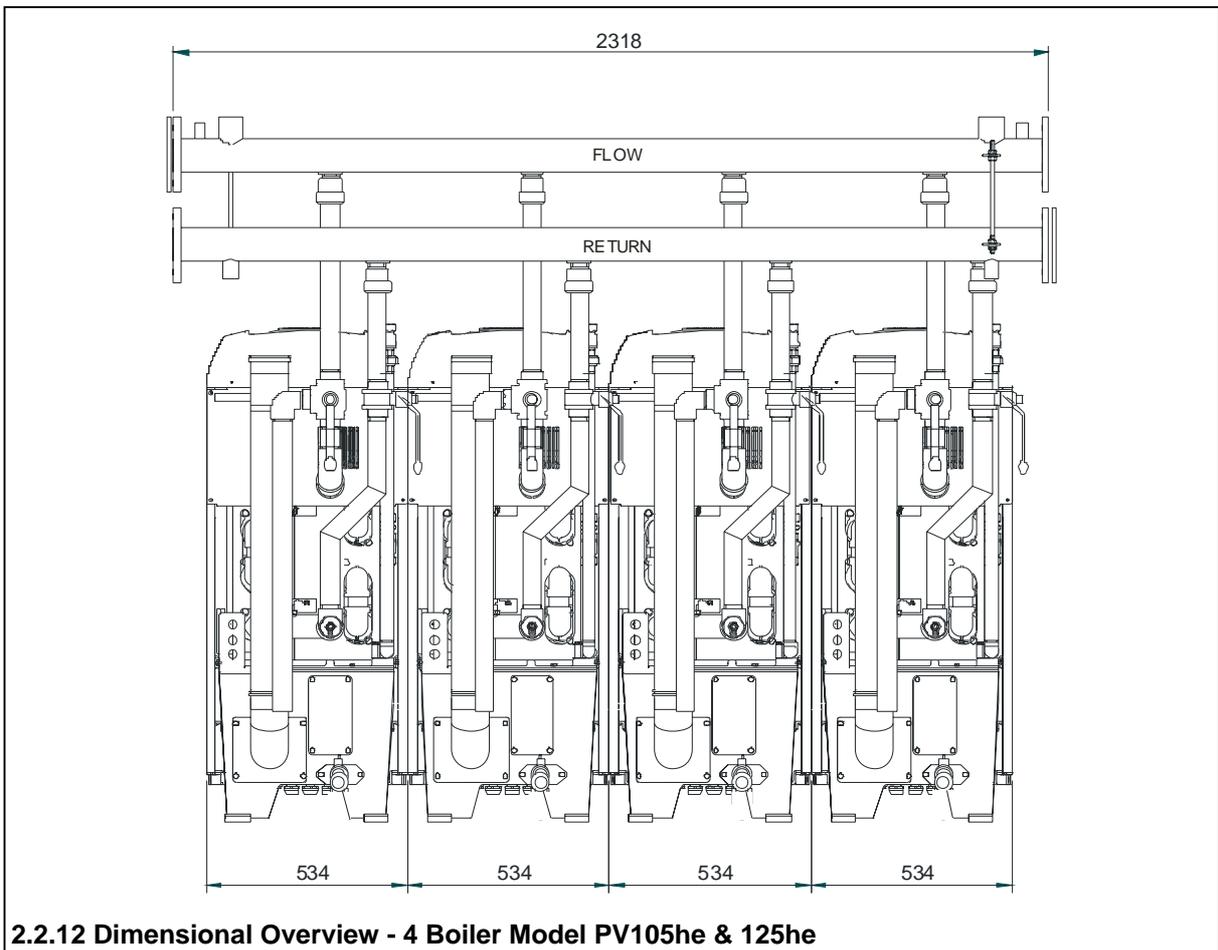
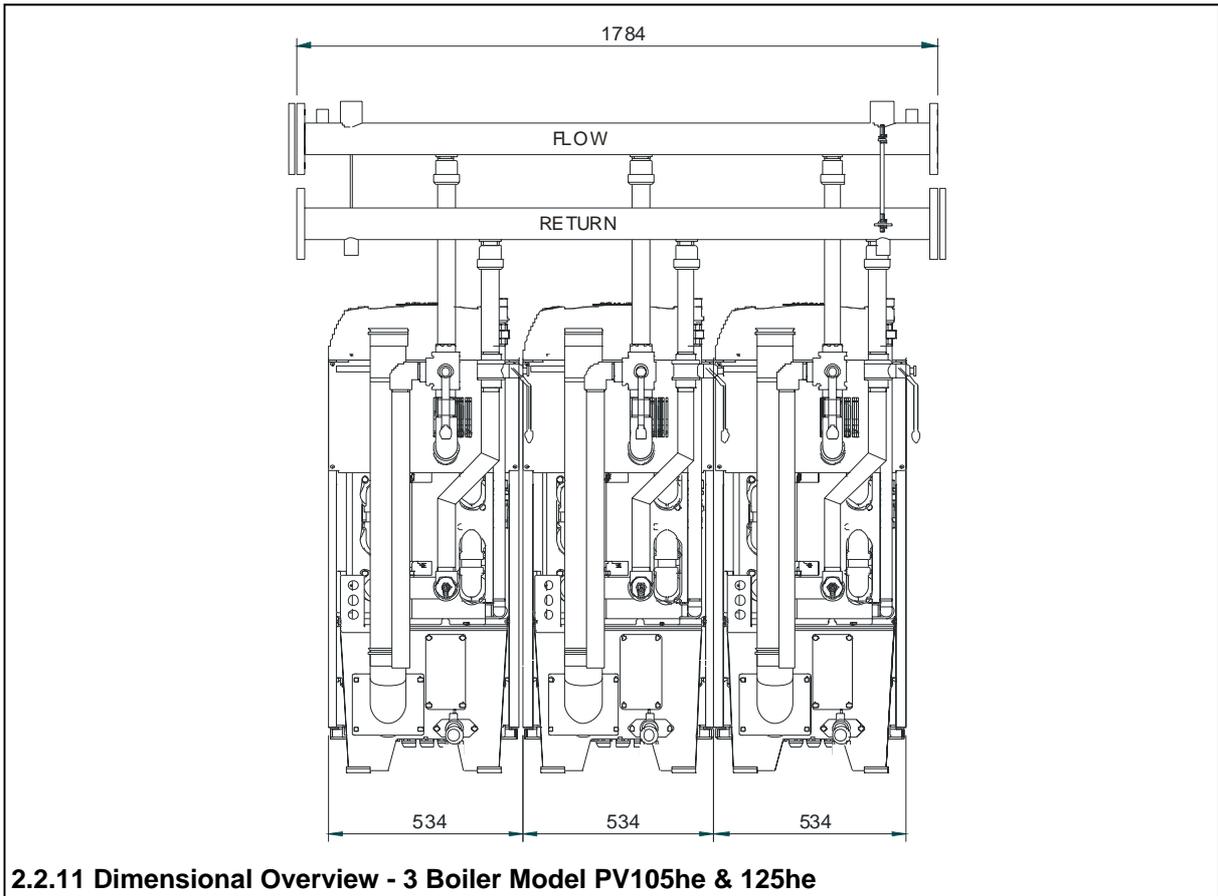


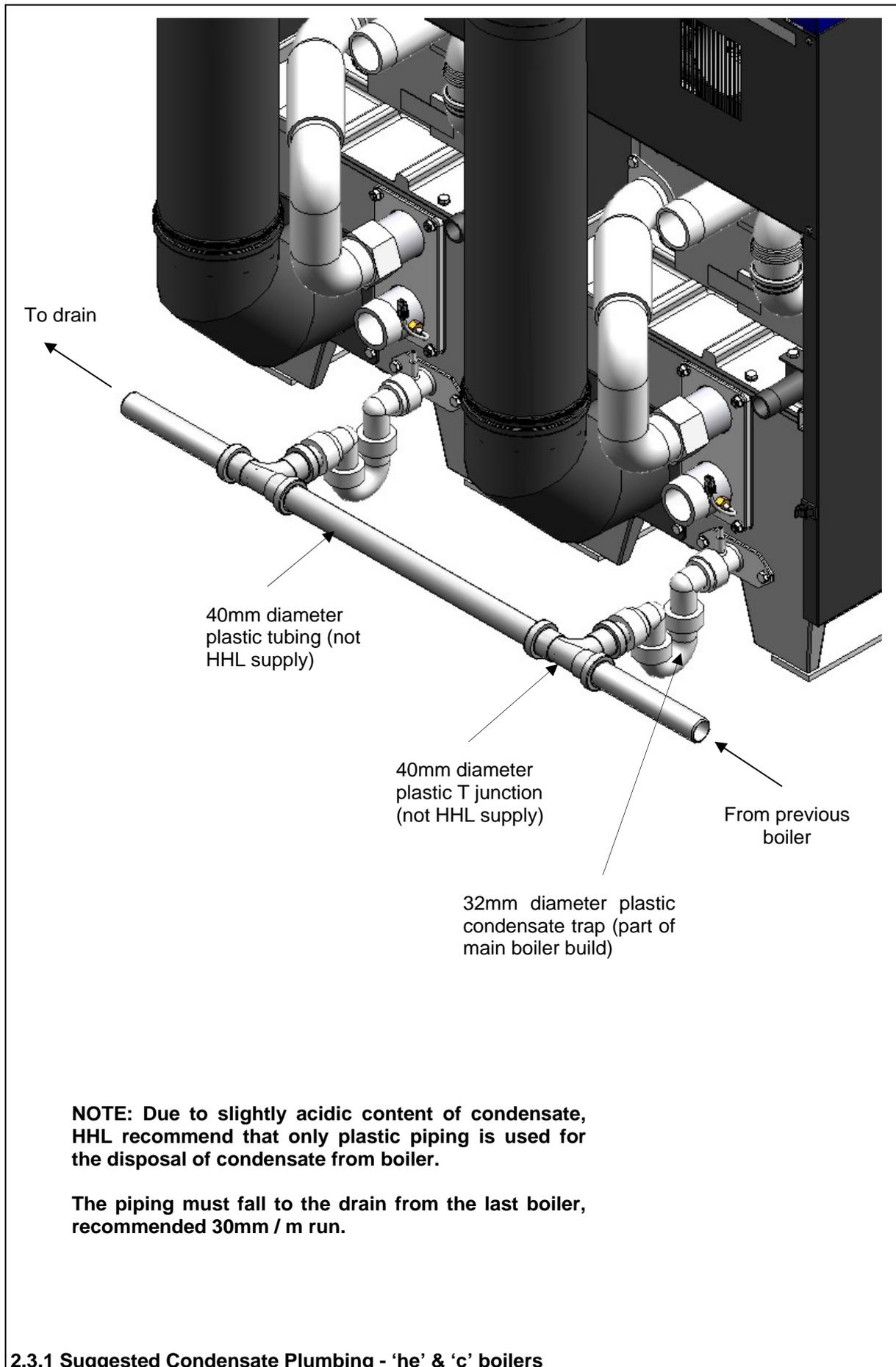
2.2.4 Dimensional Overview - 2 Boiler Model 180c











NOTES

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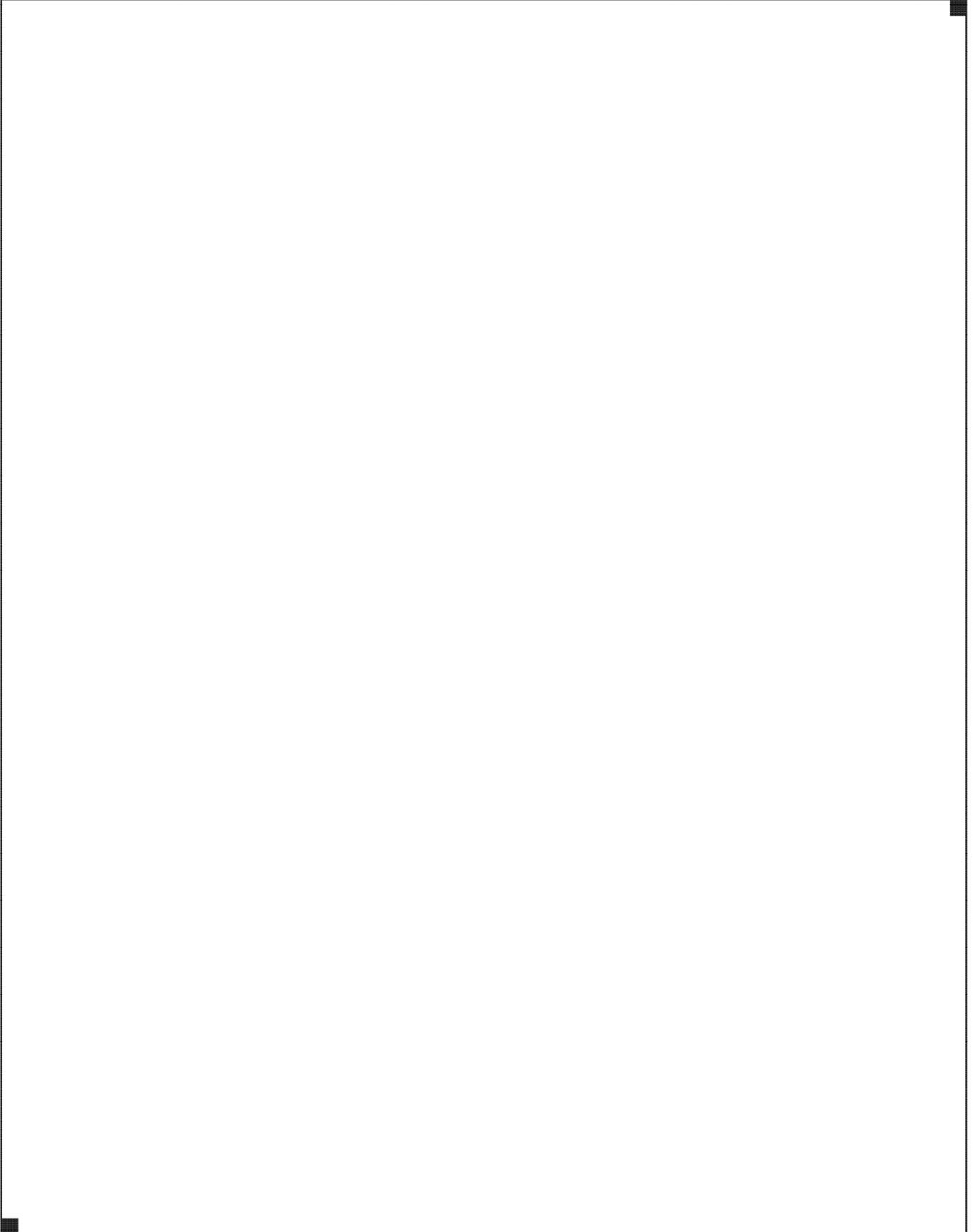
INSTALLER

SITE ADDRESS

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Notes



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