

# Technical Data Manual

## Vitoflex - Thermal Storage Tanks



for use with Vitoflex Boilers

### Safety and Installation Requirements

Please ensure that these instructions are read and understood before starting any service work. Failure to comply with these instructions may cause product/property damage, severe personal injury and/or loss of life.

### Working on the equipment

The installation, adjustment, service and maintenance of this product must be performed by a licensed professional heating contractor who is qualified and experienced in the installation, service, and maintenance of hot water boilers. There are no user serviceable parts on the tanks.

Ensure that main power to the equipment being serviced is off.

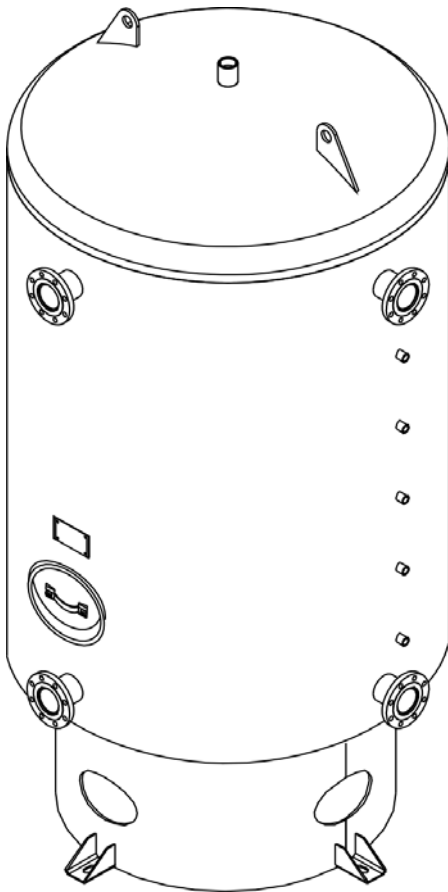
Take precautions to avoid accidental activation of power during service work.

Do not perform service work on any component part without ensuring safe operation of the heating system. When replacing parts, use original Viessmann or Viessmann approved replacement parts.



Refer to the Installation and Service Instructions applicable to the boiler.

## Product Information



The tank may not appear exactly as shown.

ASME 'U' code symbol stamped, pressure vessel with a Canadian Registration Number (CRN). When used in conjunction with Vitoflex boilers, the Vitoflex Thermal Storage Tank acts as a thermal reservoir and as a hydraulic break, decoupling boiler and the heating circuit from each other.

Heat may be added to the tank by the Vitoflex boiler or back-up systems and removed by the distribution system at different rates. This ensures steady supply temperatures to the heating system and ensures efficient energy use.

The tanks are equipped with three or five temperature sensors connected to the boiler control to regulate the Vitoflex boiler operation.

Tank Part Number	Tank Volume USG (L)
7726446	400 (1500)
7726447	500 (2000)
7726448	660 (2600)
7726449	1060 (3800)
7726450	1560 (5700)
7726451	2000 (6600)
7726452	2560 (9500)
7726453	3000 (12500)

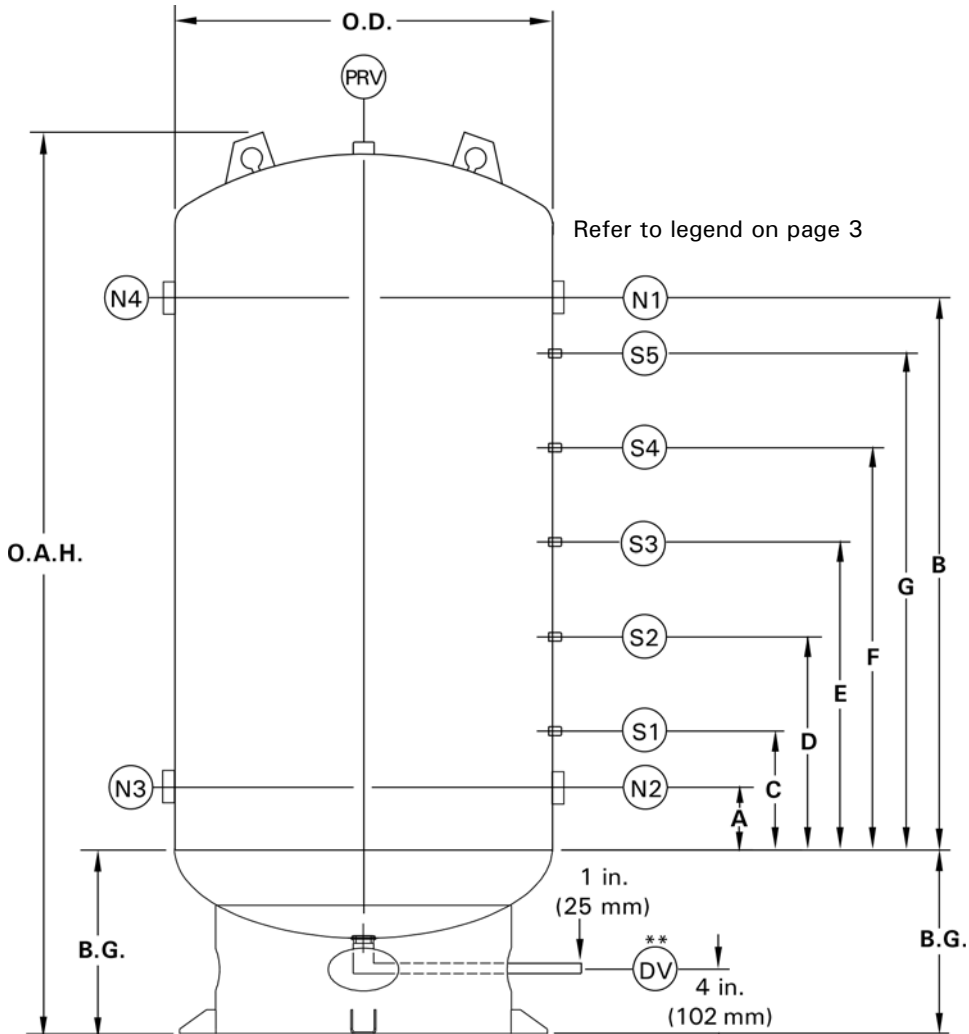
### IMPORTANT

Ensure that the lifting/handling equipment is able to securely handle the size and weight of these tanks (see data on page 2 and 4).

The floor where the tank is to be positioned must be able to properly support the weight of the tank filled with water.

# 1500 L and 2000 L Tank Information

Elevation View

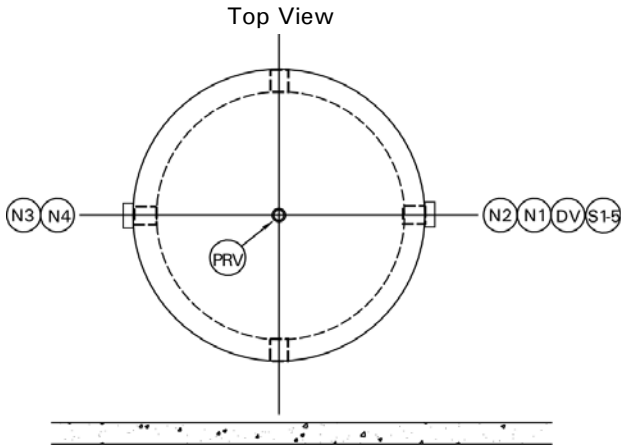


\*\* Viessmann supplies the isolation valve with cap for the field supplied drain (DV) system fitting.

Volume USG (L)	Weight * lbs. (kg)	O.D. in. (cm)	O.A.H. [ref] in. (cm)	B.G. in. (cm)	A in. (cm)	B in. (cm)	C in. (cm)	D in. (cm)	E in. (cm)	F in. (cm)	G in. (cm)
400 (1500)	720 (327)	36 (91.4)	102 (259.1)	18¾ (47.5)	5¼ (13.5)	65¼ (165.9)	15¼ (38.9)	25¼ (64.3)	35¼ (89.7)	45¼ (115.1)	55¼ (140.5)
500 (2000)	830 (376)	36 (91.4)	125 (317.5)	18¾ (47.5)	7¼ (18.5)	84¼ (214.1)	20¼ (51.6)	33¼ (84.6)	45¾ (116.3)	58¼ (148.1)	71¼ (181.1)

\* Shipping weight

## 1500 L and 2000 L Tank Location



**Note:** The tank must be securely bolted to the floor using all four mounting supports.

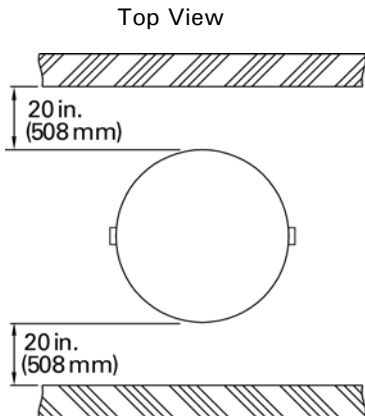
### Connection sizes

Model Size	DV	N1-4	PRV	S1-5
400	1 in. coupling	3 in. coupling	1 in. coupling	½ in. coupling
500	1 in. coupling	3 in. coupling	1 in. coupling	½ in. coupling

Legend	Qty	Service
N1	1	Supply from Boiler
N2	1	Return to Boiler
N3	1	Return from System
N4	1	Supply to System
PRV	1	Pressure Relief Valve
DV	1	Drain
S1	1	Sensor Well
S2	1	Sensor Well
S3	1	Sensor Well
S4	1	Sensor Well
S5	1	Sensor Well

## 1500 L and 2000 L Tank Wall Clearances

**Note:** Dimensions shown are recommended minimum service clearances.

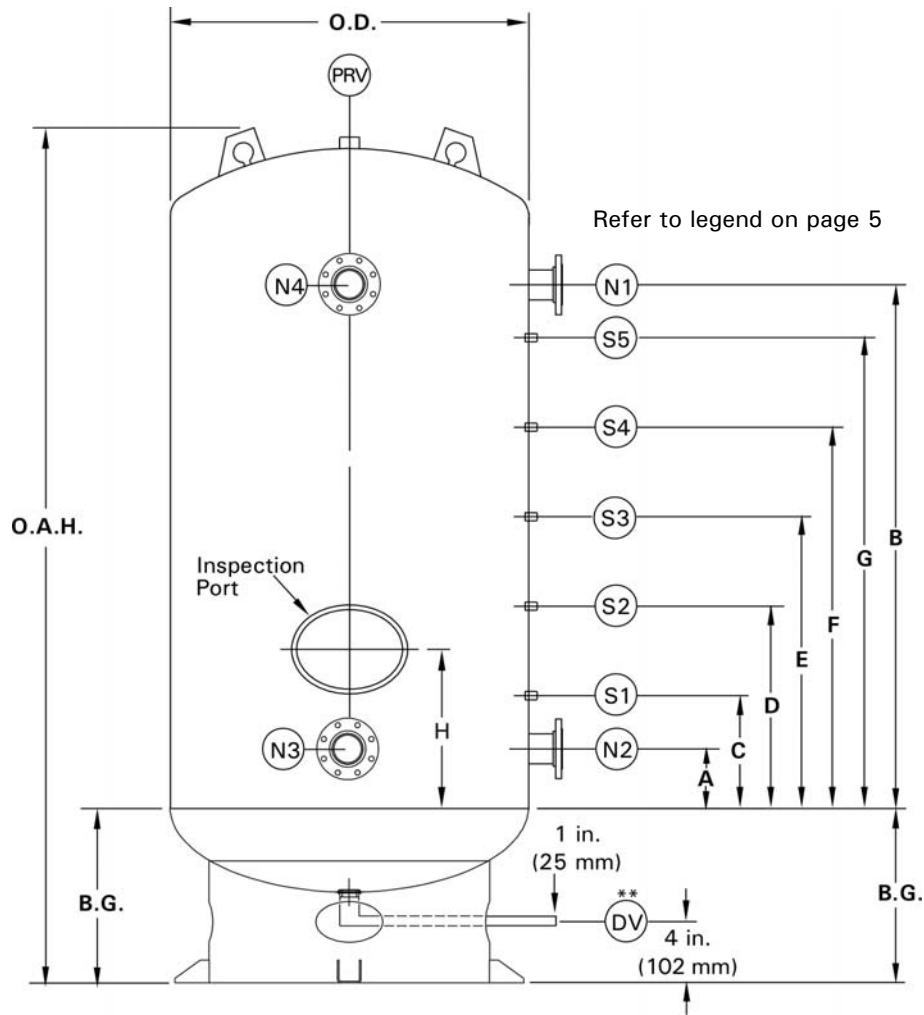


### IMPORTANT

The final location/position of the tank inside the building/structure must allow access to the inspection port for tank inspection. If the tank is tight to the wall, an opening in the wall/structure must be provided to properly access the inspection port.

The tank rating plate must be in an accessible location.

## 2600 L through to 12500 L Tank Information



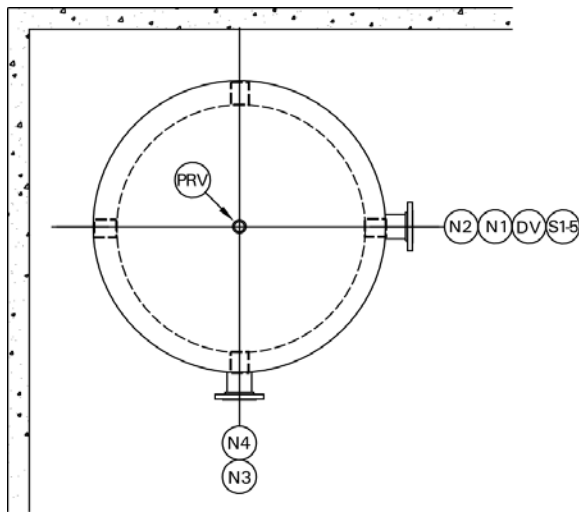
\*\* Viessmann supplies the isolation valve with cap for the field supplied drain (DV) system fitting.

Volume USG (L)	Weight * lbs. (kg)	O.D. in. (cm)	O.A.H. [ref] in. (cm)	B.G. in. (cm)	A in. (cm)	B in. (cm)	C in. (cm)	D in. (cm)	E in. (cm)	F in. (cm)	G in. (cm)	H in. (cm)
660 (2600)	1375 (624)	48 (121.9)	125¼ (318.1)	18¾ (47.5)	8½ (21.7)	83½ (212.2)	21 (53.5)	33½ (85.2)	46 (117)	58½ (148.7)	71 (180.5)	24½ (62.4)
1060 (3800)	1935 (878)	48 (121.9)	152 (386.1)	21¼ (54)	10¾ (27.3)	128 (325.1)	26¾ (67.9)	42¾ (108.6)	58¾ (149.2)	74¾ (189.9)	90¾ (230.5)	26¾ (67.9)
1560 (5700)	2610 (1131)	54 (137.2)	173½ (440.7)	22¼ (56.5)	11¼ (28.6)	125¼ (318.1)	30¼ (76.8)	49¼ (125.1)	68¼ (173.4)	87¼ (221.6)	106¼ (269.9)	27¼ (69.2)
2000 (6600)	3450 (1496)	60 (152.4)	182 (462.3)	24¼ (61.6)	9¾ (24.8)	123¾ (314.3)	28¾ (73)	47¾ (121.3)	66¾ (169.5)	85¾ (217.8)	104¾ (266.1)	25¾ (65.4)
2560 (9500)	4215 (1912)	60 (152.4)	230 (584.2)	24¼ (61.6)	9¾ (24.8)	177¾ (451.5)	37¾ (95.9)	65¾ (167)	92¾ (235.6)	121¾ (309.2)	149¾ (380.4)	25¾ (65.4)
3000 (12500)	4590 (2082)	66 (167.6)	222 (563.9)	25½ (64.6)	10½ (26.8)	148½ (377.3)	33½ (85.2)	56½ (143.7)	79½ (202.1)	105½ (268.1)	125½ (318.9)	26½ (67.5)

\* Shipping weight

## 2600 L through to 12500 L Tank Location

Top View



**Note:** The tank must be securely bolted to the floor using all four mounting supports.

### Connection sizes

Model Size	DV	N1-4	PRV	S1-5
660	1 in. coupling	4 in. flange	1 in. coupling	½ in. coupling
1060	1 in. coupling	6 in. flange	1¼ in. coupling	½ in. coupling
1560	1 in. coupling	6 in. flange	1¼ in. coupling	½ in. coupling
2000	1 in. coupling	6 in. flange	1¼ in. coupling	½ in. coupling
2560	1 in. coupling	6 in. flange	1¼ in. coupling	½ in. coupling
3000	1 in. coupling	6 in. flange	1¼ in. coupling	½ in. coupling

Legend	Qty	Service
N1	1	Supply from Boiler
N2	1	Return to Boiler
N3	1	Return from System
N4	1	Supply to System
PRV	1	Pressure Relief Valve
DV	1	Drain
S1	1	Sensor Well
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## 2600 L through to 12500 L Tank Wall Clearances

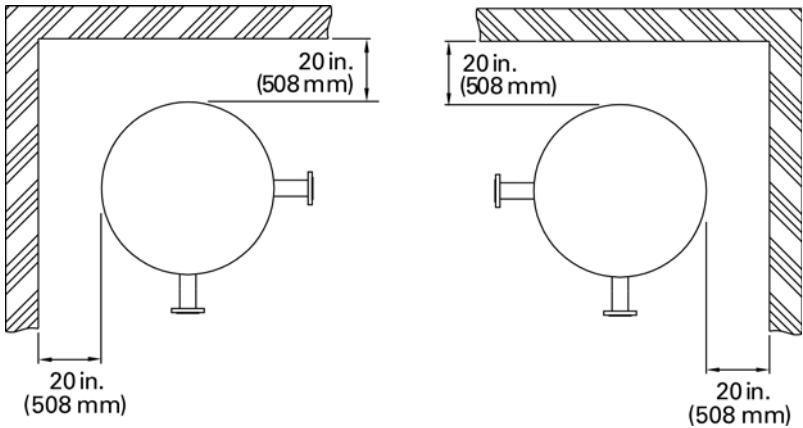
**Note:** Dimensions shown are recommended minimum service clearances.

### IMPORTANT

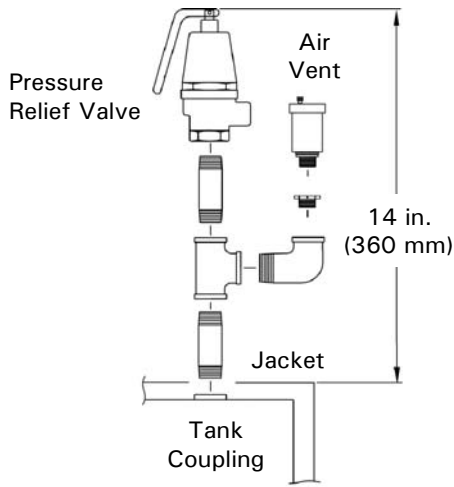
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The tank rating plate must be in an accessible location.

Top Views



## PRV Installation



**Note:** The pressure relief valve/air vent is normally installed to the top opening of the tank (as shown). If height is a concern, the pressure relief valve can be installed to the flanged supply connection to the heating system or from the Vitoflex boiler (see N2/ N4 on page 2) using a field supplied fitting. Ensure that the pressure relief valve spindle is always installed vertically. The air vent must be installed at the top of the tank.

The discharge line opening of the pressure relief valve must be piped 1.0 ft. (300 mm) above the floor close to the floor drain with copper or steel pipe. The discharge pipe must be installed in the shortest distance and pitch downward from the pressure relief valve and terminate plain. Ensure the pressure relief valve is adequately secured.

### WARNING

The discharge pipe for the pressure relief valve must be oriented to prevent scalding of attendants. Never pipe the discharge pipe to the outdoors.

### WARNING

Do not install an isolation valve or any kind of an obstruction between the tank and the pressure relief valve or between the pressure relief valve and the discharge pipe outlet.

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Technical information subject to change without notice.

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