http://waterheatertimer.org/install-and-troubleshoot-water-heater-vent.html



Specifications

Vent Tables

Venting Specifications for:

40 Gallon 50 Gallon

2" Diameter (5.1 cm) PVC Vent Connector Lengths					
Terminating	# of Elbows	Maximum Straight Length ft (m)	Minimum Straight Length ft (m)		
Through the Wall	1	45 (13.7)	2 (.6)		
Through the Wall	2	40 (12.2)	2 (.6)		
Through the Wall	3	35 (10.7)	2 (.6)		
Through the Wall	4	30 (9.2)	2 (.6)		
Through the Roof	0	50 (15.2)	7 (2.1)		
Through the Roof	1	45 (13.7)	7 (2.1)		
Through the Roof	2	40 (12.2)	7 (2.1)		
Through the Roof	3	35 (10.7)	7 (2.1)		
Through the Roof	4	30 (9.2)	7 (2.1)		

3" Diameter (7.6 cm) PVC Vent Connector Lengths				
Terminating	# of Elbows	Maximum Straight Length ft (m)	Minimum Straight Length ft (m)	
Through the Wall	1	115 (35.0)	10 (3.1)	
Through the Wall	2	110 (33.5)	10 (3.1)	
Through the Wall	3	105 (32.0)	10 (3.1)	
Through the Wall	4	100 (30.5)	10 (3.1)	
Through the Wall	5	95 (29.0)	10 (3.1)	
Through the Roof	0	120 (36.6)	15 (4.6)	
Through the Roof	1	115 (35.0)	15 (4.6)	
Through the Roof	2	110 (33.5)	15 (4.6)	
Through the Roof	3	105 (32.0)	15 (4.6)	
Through the Roof	4	100 (30.5)	18 (5.5)	



Vent Tables

Venting Specifications for:

48 Gallon 65 Gallon

3" Diameter (7.6 cm) PVC Vent Connector Lengths					
Terminating	# of Elbows	Maximum Straight Length ft (m)	Minimum Straight Length ft (m)		
Through the Wall	1	55 (16.8)	2 (.6)		
Through the Wall	2	50 (15.2)	2 (.6)		
Through the Wall	3	45 (13.7)	2 (.6)		
Through the Wall	4	40 (12.2)	2 (.6)		
Through the Roof	0	60 (18.3)	7 (2.1)		
Through the Roof	1	55 (16.8)	7 (2.1)		
Through the Roof	2	50 (15.2)	7 (2.1)		
Through the Roof	3	45 (13.7)	7 (2.1)		

4" Diameter (10.2 cm) PVC Vent Connector Lengths					
Terminating	# of Elbows	Maximum Straight Length ft (m)	Minimum Straight Length ft (m)		
Through the Wall	1	85 (25.9)	10 (3.1)		
Through the Wall	2	80 (24.4)	10 (3.1)		
Through the Wall	3	75 (22.9)	10 (3.1)		
Through the Wall	4	70 (21.3)	10 (3.1)		
Through the Wall	5	65 (19.8)	12 (3.6)		
Through the Roof	0	90 (27.4)	15 (4.6)		
Through the Roof	1	85 (25.9)	15 (4.6)		
Through the Roof	2	80 (24.4)	15 (4.6)		
Through the Roof	3	75 (22.9)	15 (4.6)		
Through the Roof	4	70 (21.3)	15 (4.6)		