

Model 21 & 22 Panel Radiators

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Overview



Engineering Specifications

There shall be provided and installed a quantity of ____ Buderus Model 21 / 22 panel radiator(s), suitable for hot water (hydronic) heating systems.

Panel radiator(s) shall have a maximum working temperature of 230 °F (110 °C) and a maximum working pressure 145 psi (10 bar). Panel radiator(s) shall be factory tested with a maximum test pressure 188 psi (13 bar).

Panel radiator(s) shall be constructed with a fluted front panel made from .049" steel and convection tunnels welded on the water channels. Panel radiator(s) shall have a white (color code RAL 9016), baked on powder coating finish.

Panel radiator(s) shall be equipped with an air bleeder and flow setter. The flow-setter valve enables the system installer to quickly and easily regulate the water flow through the radiator(s) room by room for consistent, even heat throughout the structure. Panel radiator(s) may be equipped with a thermostatic valve head that is mounted on the flow-setter allowing for further individual radiator / room temperature control.

Panel Radiator(s) shall be equipped with a 1/2" plug in the side panel that may be removed, and replaced with an optional panel radiator drain valve (sold separately).

Panel radiator(s) shall have piping connections located at the bottom of the panel. The piping connections are R20 type metric male (approximately 3/4") located in the bottom left or right hand corner of the radiator. Panel radiator(s) shall be field reversible for either right or left piping connections.

Each panel radiator is recommended to be equipped with isolation valves either as shut-off, combination shut-off / bypass, or crossover valves for isolation purposes. All valves are available in straight or angle configurations.

Panel radiator(s) can be installed using individual supply and return piping, monoflow tee loop piping or one continuous pipe piping arrangements.

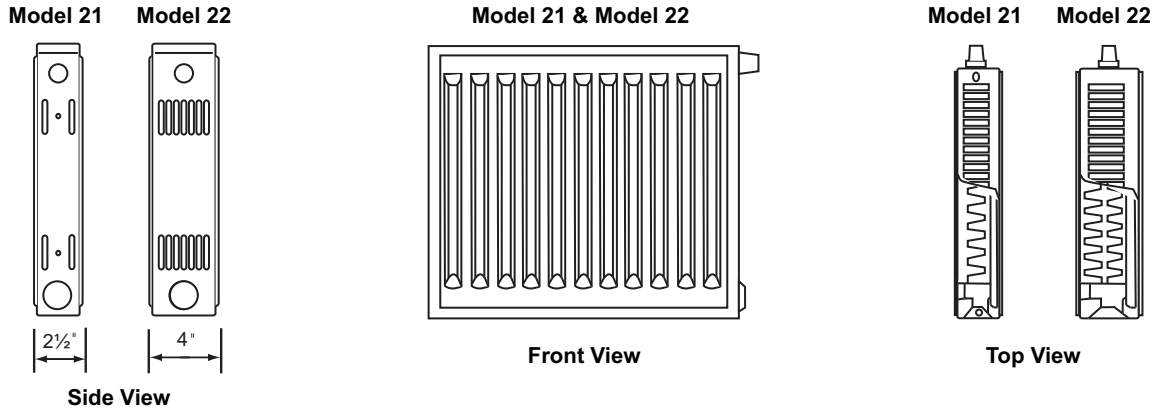
Panel radiators shall be designed for use with hot water systems only. Buderus panel radiators are not compatible for use with steam systems.

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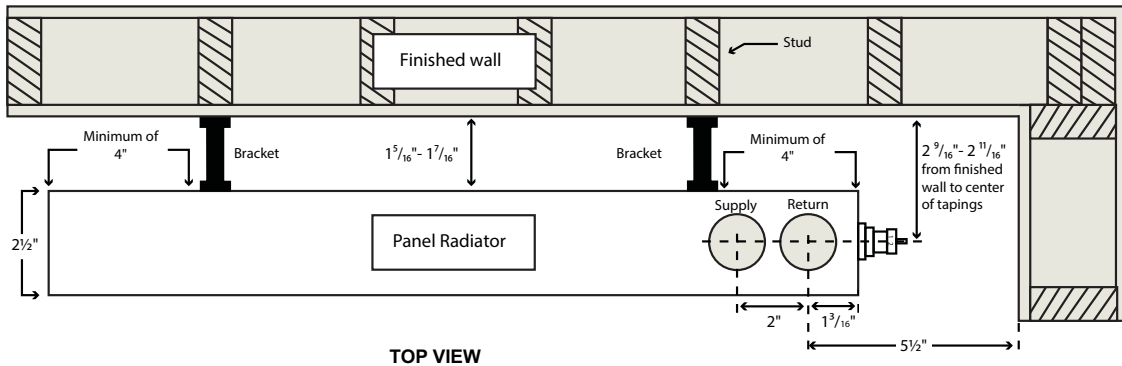
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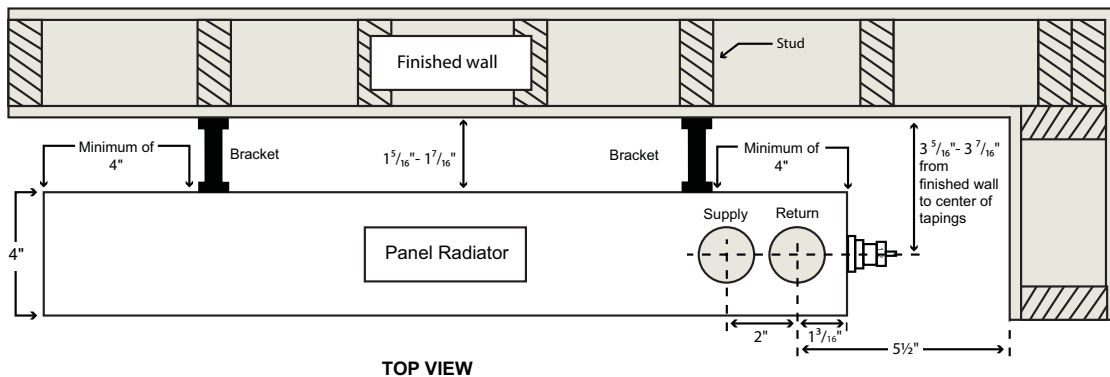
Model 21 / 22 Dimensions - Front View, Top View & Side View



Model 21 Rough-in Dimensions and Clearances



Model 22 Rough-in Dimensions and Clearances



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Model 21 Performance Data*									
Part Number	Dimensions		BTU Output			Weight		Water Volume	
	H x L x W (inches)	H x L x W (mm)	180°F (82°C)	160°F (71°C)	140°F (60°C)	lbs	kg	gal	liters
7-750-100-306	12" x 24" x 2.5"	300 x 600 x 66	1838	1387	970	19.98	9.06	0.66	2.52
7-750-100-309	12" x 36" x 2.5"	300 x 900 x 66	2756	2080	1455	29.97	13.59	0.99	3.78
7-750-100-312	12" x 48" x 2.5"	300 x 1200 x 66	3675	2773	1940	39.96	18.12	1.33	5.04
7-750-100-315	12" x 59" x 2.5"	300 x 1500 x 66	4594	3467	2425	49.95	22.66	1.66	6.30
7-750-100-318	12" x 71" x 2.5"	300 x 1800 x 66	5513	4160	2910	59.93	27.18	1.99	7.56
7-750-102-306	20" x 24" x 2.5"	500 x 600 x 66	2713	2038	1417	31.49	14.28	0.97	3.68
7-750-102-309	20" x 36" x 2.5"	500 x 900 x 66	4070	3057	2125	47.24	21.43	1.45	5.52
7-750-102-312	20" x 48" x 2.5"	500 x 1200 x 66	5427	4075	2833	62.98	28.57	1.94	7.36
7-750-102-315	20" x 59" x 2.5"	500 x 1500 x 66	6784	5094	3541	78.73	35.71	2.42	9.20
7-750-102-318	20" x 71" x 2.5"	500 x 1800 x 66	8140	6113	4250	94.46	42.85	2.91	11.04
7-750-103-306	24" x 24" x 2.5"	600 x 600 x 66	3138	2351	1629	37.97	17.22	1.12	4.26
7-750-103-309	24" x 36" x 2.5"	600 x 900 x 66	4706	3526	2443	56.96	25.84	1.68	6.39
7-750-103-312	24" x 48" x 2.5"	600 x 1200 x 66	6275	4701	3258	75.95	34.45	2.25	8.52
7-750-103-315	24" x 59" x 2.5"	600 x 1500 x 66	7844	5876	4072	94.93	43.06	2.81	10.65
7-750-103-318	24" x 71" x 2.5"	600 x 1800 x 66	9413	7052	4887	113.91	51.67	3.37	12.78

Model 22 Performance Data*									
Part Number	Dimensions		BTU Output			Weight		Water Volume	
	H x L x W (inches)	H x L x W (mm)	180°F (82°C)	160°F (71°C)	140°F (60°C)	lbs	kg	gal	liters
7-750-100-604	12" x 16" x 4"	300 x 400 x 102	1573	1180	819	15.08	6.84	0.44	1.68
7-750-100-606	12" x 24" x 4"	300 x 600 x 102	2359	1769	1228	22.63	10.26	0.67	2.52
7-750-100-609	12" x 36" x 4"	300 x 900 x 102	3539	2654	1842	33.94	15.39	1.00	3.78
7-750-100-612	12" x 48" x 4"	300 x 1200 x 102	4719	3539	2456	45.25	20.53	1.33	5.04
7-750-100-615	12" x 59" x 4"	300 x 1500 x 102	5898	4423	3070	56.56	25.66	1.66	6.30
7-750-100-618	12" x 71" x 4"	300 x 1800 x 102	7078	5308	3684	67.87	30.79	2.00	7.56
7-750-102-604	20" x 16" x 4"	500 x 400 x 102	2341	1753	1215	25.23	11.44	0.65	2.45
7-750-102-606	20" x 24" x 4"	500 x 600 x 102	3511	2630	1822	37.84	17.16	0.97	3.68
7-750-102-609	20" x 36" x 4"	500 x 900 x 102	5266	3945	2733	56.76	25.75	1.46	5.52
7-750-102-612	20" x 48" x 4"	500 x 1200 x 102	7022	5260	3644	75.68	34.33	1.94	7.36
7-750-102-615	20" x 59" x 4"	500 x 1500 x 102	8777	6575	4555	100.91	45.77	2.59	9.81
7-750-102-618	20" x 71" x 4"	500 x 1800 x 102	10533	7889	5467	113.51	51.49	2.92	11.04
7-750-103-604	24" x 16" x 4"	600 x 400 x 102	2713	2031	1406	29.90	13.56	0.75	2.84
7-750-103-606	24" x 24" x 4"	600 x 600 x 102	4069	3046	2109	44.85	20.35	1.13	4.26
7-750-103-609	24" x 36" x 4"	600 x 900 x 102	6104	4569	3164	67.28	30.52	1.69	6.39
7-750-103-612	24" x 48" x 4"	600 x 1200 x 102	8139	6092	4218	89.71	40.69	2.25	8.52
7-750-103-615	24" x 59" x 4"	600 x 1500 x 102	10173	7615	5273	119.61	54.25	3.00	11.36
7-750-103-618	24" x 71" x 4"	600 x 1800 x 102	12208	9139	6327	134.55	61.03	3.38	12.78
7-750-105-604	36" x 16" x 4"	900 x 400 x 102	3833	2856	1965	45.07	20.45	1.07	4.04

* Calculations based on a 69° F (20°C) Required Room Temperature and a 20° F (11°C) ΔT

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