

Panel Radiators “Solidoflux - N”

Comfortable Radiant Heat
Individual Temperature Control
Utilizes Less Linear Wall Space



Buddleius

Panel Radiation

Comfort and Versatility . . . The Choice is Buderus

*. . . comfort is defined
by more than the air
temperature in a room.*

The comfort and versatility of panel radiation has long been accepted as the standard of quality heating in Europe. Now a reliable source of low cost, high quality radiation is available in the United States. Buderus, the world's largest producer of cast iron boilers, manufactures high output hydronic steel panel radiators which are stocked in the U.S.

Panel radiators produce an incredibly comfortable heat. Our sense of comfort is defined by more than the air temperature in a room. Many of us have had the experience of feeling chilled in a room only to look at our thermostat and discover that the temperature reads 70°F. The really curious may have pondered the fact that at 70°F in the summer we are trying to cool off, but at an indoor temperature of 70°F in the winter we are still trying to warm up. While factors such as draft and humidity may contribute to this, there is another element which plays a central part in our sense of comfort and that element is radiant.



Convected heat, generated by conventional style fin-tube baseboard, warms only the air and circulates around all ceiling, wall and floor surfaces. Panel radiators, however, provide both convected and radiant heat. Radiant heat, like the sun, warms objects rather than air, creating a greater sense of warmth faster and at lower room temperatures. Buderus radiators are designed to operate with individual thermostats. With this option you are able to control the temperature of each panel separately. The design and styling of Buderus radiators eliminates the noise associated with other heating systems. . . no more clanking and hissing. And since these radiators utilize less space than baseboard, more flexible furniture placement and room decor is possible. Unique Buderus styling also minimizes areas where dust and dirt can collect. All these features combine to offer you a cleaner, quieter, and more comfortable source of heat.

PANEL RADIATORS SOLIDOFLUX “N”

The SOLIDOFLUX “N” panel radiators are available in a variety of lengths and heights. They are stocked in three heights, 12”, 20” and 24” and in two widths, Model 11 (21/2”) and Model 22 (4”). Our special bathroom model is 4” wide, 16” long and 36” high.

Additional sizes, up to 3 ft. high and 10 ft. long, including the high output Model 33, are available with a 4 to 6 week lead time.

All Buderus panel radiators are supplied in powder-enameled white, which matches most existing color schemes. Or, if you prefer you can paint them any color you wish. Each panel includes side panels, grill covers, and flowsetter valve.

The SOLIDOFLUX “N” radiator has piping connections located at the bottom, offering the advantage of less exposed distribution piping. The radiators can be piped as a standard 2-pipe (supply/return) system, on a monoflow-loop, or as a one pipe series-loop by installing the optional diverting valve.

The adjustable diverter valve is field installed external to the radiator and attaches to the existing bottom tapings on the radiator. The resulting one-pipe series-loop provides two major installation advantages over a two-pipe (supply/return) system :

1. Less material is required between radiators.
2. Less time is required to complete installation.

Compression fittings are available for copper or PEX tubing connections.

A 5/8” PEX one-pipe series loop can carry 25,000 Btu/hr based on a 36°F drop in loop temperature. Similarly, a 1/2” copper loop handles up to 18,000 Btu/hr. Radiators at the end of the loop require slight oversizing because of lower water temperature. Equip the radiators with thermostatic heads and each radiator has its own temperature control.

The SOLIDOFLUX “N” also features an integral flow setter to facilitate balancing the system.

Buderus radiators are designed for use with hot water systems only. Steam radiators are not available.

... why do bottom piping connections offer a distinct advantage ?

Bottom piping connections offer a minimum amount of exposed tubing, so as not to spoil or interfere with overall room appearance and decor. Such innovative design features are reflected in all Buderus products.



Buderus Panel Radiation with bottom piping connections and 90° diverter valve . . true innovation, by design.

Technical Specifications

BTU OUTPUTS AT 108° F TEMPERATURE DIFFERENCE			MODEL 11 PK 2-1/2" WIDE			MODEL 22 PKKP 4" WIDE			Max. working pressure = 147 psi (factory tested at 191 psi) Max. working temp. = 250° F
<i>Water capacity per foot of radiator length</i>			.17 Gal.	.28 Gal.	.32 Gal.	.34 Gal.	.56 Gal.	.65 Gal.	
HEIGHT			12" 300 mm	20" 500 mm	24" 600 mm	12" 300 mm	20" 500 mm	24" 600 mm	Specifications/Scope of Delivery
LENGTH	INCH	MM	BTU	BTU	BTU	BTU	BTU	BTU	
	16	400	1047	N/A	N/A	1900	2650	3080	
	24	600	1570	2224	2591	2850	4000	4600	
	36	900	2356	3336	3887	4275	6000	6900	
	48	1200	3140	4448	5182	5700	8000	9200	
	63	1600	3926	5560	6478	7125	10000	11500	
71	1800	4711	6672	7774	8550	12000	13800		
Special Bathroom Model			36" High x 16" Long			4300			Radiators are packed in shrink wrap, corners reinforced. Wrap serves as protection during transport and assembly.
SHIPPING WEIGHTS			MODEL 11 PK 2-1/2" WIDE			MODEL 22 PKKP 4" WIDE			
HEIGHT			12" 300 mm	20" 500 mm	24" 600 mm	12" 300 mm	20" 500 mm	24" 600 mm	Note: Radiators with left hand tappings are available upon request with a 4 to 6 week lead-time. SEE ACCESSORIES ON PAGE 6
LENGTH	INCH	MM	LBS	LBS	LBS	LBS	LBS	LBS	
	16	400	9	N/A	N/A	16 lbs	29 lbs	34 lbs	
	24	600	13 lbs	24 lbs	29 lbs	24 lbs	43 lbs	51 lbs	
	36	900	19 lbs	36 lbs	43 lbs	36 lbs	61 lbs	77 lbs	
	48	1200	25 lbs	48 lbs	58 lbs	48 lbs	85 lbs	102 lbs	
	63	1600	33 lbs	60 lbs	72 lbs	63 lbs	106 lbs	128 lbs	
71	1800	37 lbs	72 lbs	86 lbs	71 lbs	127 lbs	158 lbs		
36" High x 16" Long Radiator, 22 (PKKP) = 51 lbs.									
BTU Outputs listed above are based on an average Water Temperature of 180° F (For Conversion Factor Table see Page 6.)									



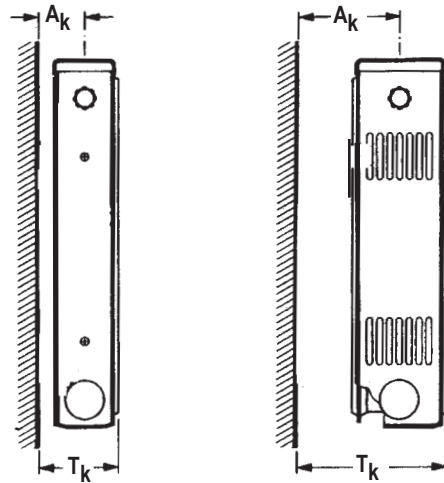
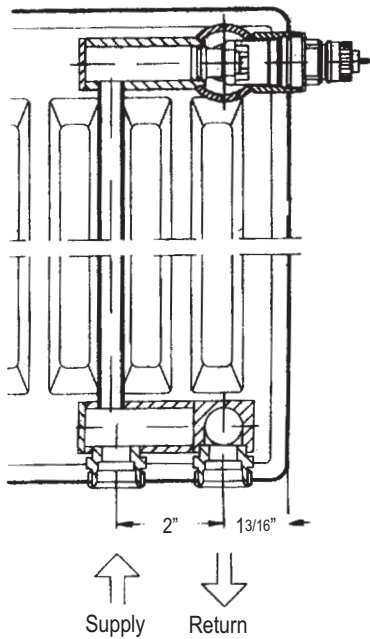
... white radiators enable unlimited potential to match your decor ...

Buderus thermostatic heads for individual room control.

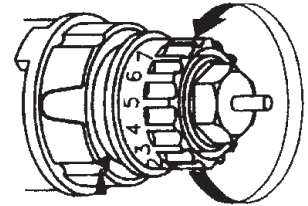
PANEL RADIATORS "SOLIDOFLUX - N"

Rough-In Dimensions

Radiator	A_k	T_k
Model 11	1 ⁵ / ₁₆ "	2 ⁵ / ₈ "
Model 22	3 ¹ / ₄ "	5 ¹ / ₄ "
Model 33	3 ¹ / ₄ "	6 ¹ / ₄ "



Flow-Setter Valve



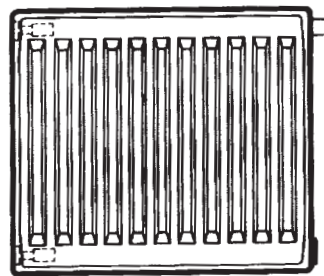
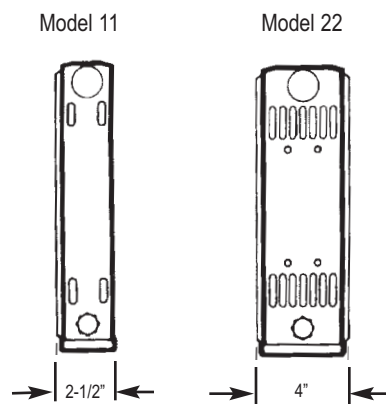
Turn red or yellow adjustment ring and align the desired setting with machined groove.
 1, 2, ..., N → more flow.

Flow-Setter Valve . . . A Buderus Exclusive

Another design feature unique to Buderus is our Flow-Setter Valve. This feature enables your system installer to quickly and easily regulate the water flow through the radiator. The result is consistent, even heat throughout all units in the house. No more feeling warm in one room, and chilly in another.

Finally, the best feature of Buderus panel radiation is the least obvious . . . they're all but silent when operating. Because Buderus radiators don't turn "on and off" in the way traditional baseboards do, there isn't the sound of creaking and expanding joints, wood, etc. No longer will you even be aware that your home is being warmed by the most technologically advanced system available today.

Front, Top and Side Views Model 11 & 22



Model 11



Model 22

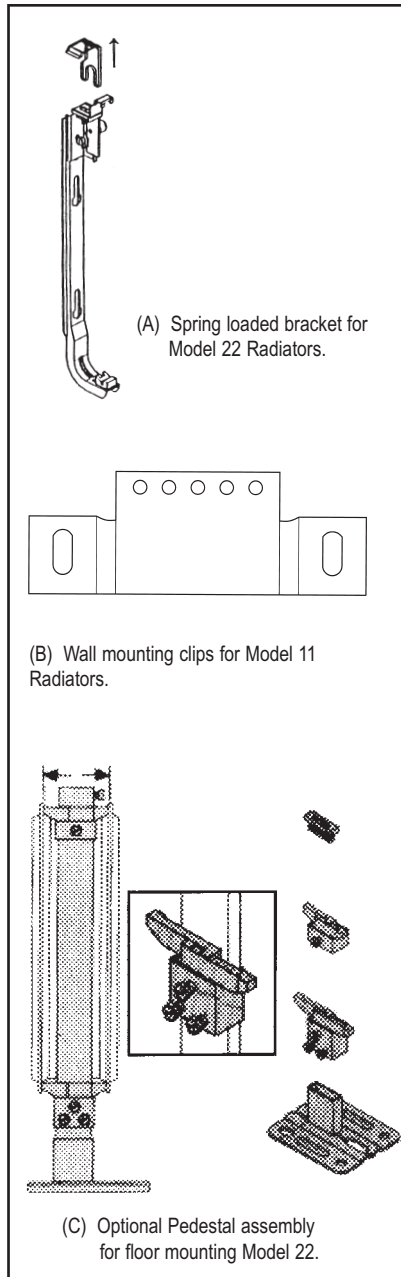


MODEL 33 - High Output

6" Wide Radiators.
 Output is 40-45% higher than Model 22.
 Available by Special Order Only.

RADIATOR

BRACKETS

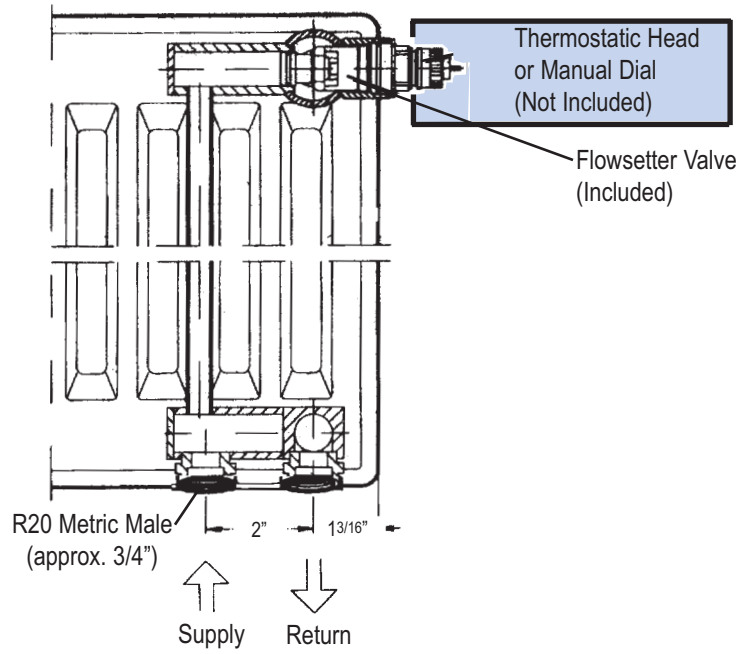


Conversion Factors

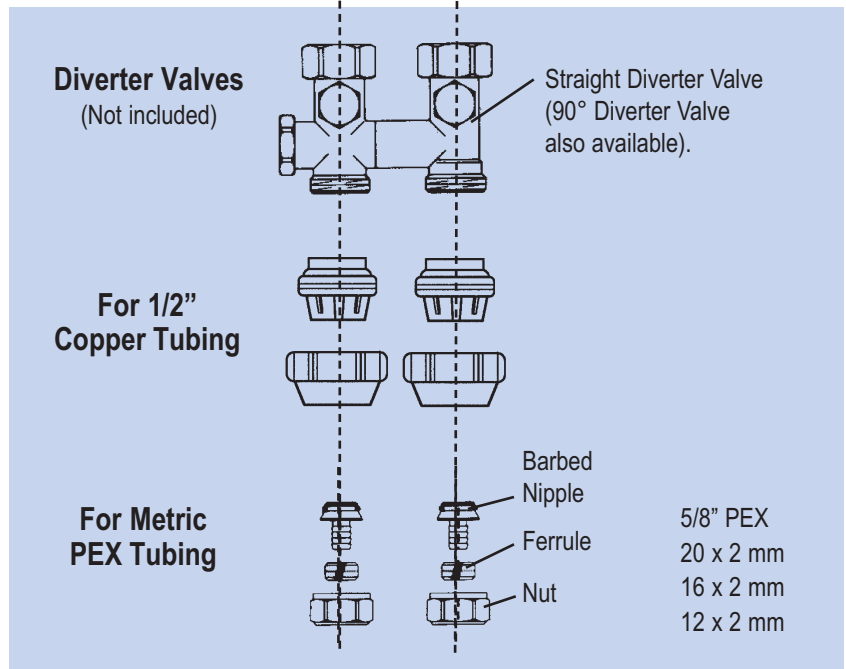
Factors for differences between average water temperature and room temperature in °F other than 108°F, (example: water temperature 180°F, minus room temperature 72°F equals ΔT 108°.)

ΔT °F	Conversion Factor	ΔT °F	Conversion Factor
10	0.045	90	0.789
20	0.112	100	0.905
30	0.198	108	1.000
40	0.275	110	1.024
50	0.367	120	1.147
60	0.466	130	1.272
70	0.569	140	1.401
80	0.677	150	1.535

RADIATOR



Optional Equipment



Spring or wall mounting clips are standard supplied with each radiator. Compression fittings, diverter valves, thermostatic heads and manual dials must be ordered separately.

Buderus

HYDRONIC SYSTEMS

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