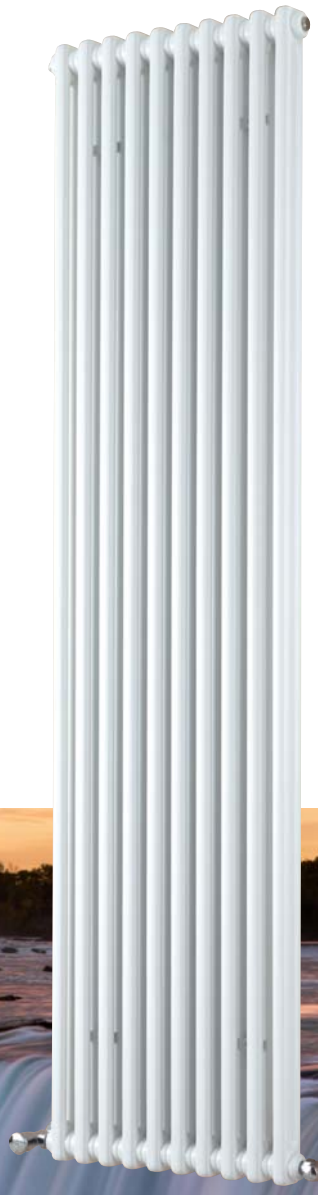
Column Radiator Series

Installation & Technical Guide

MYSON



heatingthrough**innovation.**

ECO RENEWABLE ENERGY COMPATIBLE

COLUMN.

MYSON COLUMN radiator's aesthetically sophisticated design was conceived for technologically superior heating. Their design form makes them suitable for a wide range of architectural applications from retro to modern.

Contents

Myson, Inc. Limited Warranty

Myson, Inc warrants the following products against defects in material and workmanship to the original owner for the duration listed from date of installation or three months after date of shipment, whichever comes first.

The remedy in all cases shall be to repair or replace the product at Myson's discretion upon verification of a factory defect. If replacement is required, and an exact replacement product is no longer available, Myson reserves the right to furnish a similar product of equal value.

NO REMOVAL, SHIPPING OR INSTALLATION EXPENSES ARE REIMBURSIBLE

The original purchaser is responsible for determining the suitability of the Myson product for their installation. Installation and troubleshooting should be performed by a competent technician with knowledge of hydronic heating and/or basic electricity.

Damages occurring during shipment, transit, storage or handling, abuse, neglect, accident, misapplication, incorrect power line voltage, mproper water source or connection, fire, flood or other Acts of God are not covered. Freight damage claims MUST be made within 10 days of receipt from Myson. No Exceptions.

STEEL PANEL RADIATORS -- SELECT, T6, DÉCOR, COLUMN AND BENCH

The duration of warranty for steel panel radiators is 5 Years.

What is covered:

- Painted finishes will not peel or flake from the surface of the radiator
- The body of the radiator and its welded joints will not leak when the product is properly installed and maintained according to Myson's instructions.

What is not covered:

- Rust occurring from improperly sealed threaded connections or oxygen corrosion
- Electrolytic corrosion caused by failure to flush the system properly after initial installation

BEFORE YOU BEGIN

INTRODUCTION

The Myson Column Radiator will keep any room in comfort and style. We at Myson Inc. thank you for your purchase of the Column Radiator. Each radiator combines Myson's compact design and advanced steel construction with a durable baked epoxy/polyester enamel powder coat finish. Myson's sleek styling and thorough testing provides attractiveness and dependability. Myson's goal is to assure the highest performance, quality, reliability and outstanding customer service.

CAUTION

Step 1 Read this entire instruction manual thoroughly before beginning installation.

Step 2 To ensure full efficiency of your Myson Décor Steel Panel Radiator, please follow all the instructions carefully .

Step 3 Failure to follow these instructions will invalidate the manufacturer's warranty.

APPLICATION

Myson radiators are only for use in recirculating closed loop hydronic-heating systems. These radiators are not recommended for gravity systems. **DO NOT USE STEAM IN THESE RADIATORS.**

INSPECT FOR DAMAGE

NOTE: Inspect materials for concealed shipping damage. You only have 10 days to file a freight claim. If items are damaged or missing, please call Myson at 1-800-698-9690.

INSPECTION FOR COMPLETENESS

Unpack the radiator carefully to avoid damage or loss of parts. The Column Radiator will come with the following parts:

- Wall mounting bracket kit
- Plastic inserts for noise suppression
- Stainless steel solid plug
- Vent plug

IT IS STRONGLY RECOMMENDED THAT A SUITABLY QUALIFIED PROFESSIONAL INSTALLER OR SIMILAR TRADESPERSON CARRIES OUT THE INSTALLATION.

Myson products are designed to be installed by professional tradespeople. Myson instructions are meant to be thorough; however it is assumed that the installer has the appropriate technical knowledge related to building codes, standard trade practices, and proper use of the tools of the trade. Should a homeowner without such knowledge or skill take it upon him/herself to attempt the installation, Myson will not be responsible for any damages, injuries or unsatisfactory performance of the Myson product used.

DESIGN AND LAYOUT CONDITIONS

Myson Column Radiators should only be used with a properly sized recirculation pump **closed loop hydronic heating system**. Please consult national and local codes for specific restrictions that may be imposed on your installation. Position your radiator away from your circulator pump to avoid either excess pressure that could force water out the air vent or excess suction that could draw air into the system. The preferred positioning for the Column radiator is below a window where it can minimize downdrafts from glazed areas.

SAFETY PRECAUTIONS

Radiators are hot when in use, and as such, present a risk of burns to users on prolonged contact. The temperature of a radiator is dependent on the temperature of the system water, as set by the system installer or user. Installers and users should ensure that those who may come into close proximity to hot radiators are aware of the risk of burns. Installers and users should take all necessary steps to minimise the risks of burns. If the risk is significant, consideration should be given to installing low surface temperature radiators, or to placing guards in front of the radiators.

For the correct installation of radiators it is essential that the fixing of the radiator is carried out in such a way that it is suitable for intended use AND predictable misuse. A number of elements need to be taken into consideration including the fixing method used to secure the radiator to the wall, the type and condition of the wall itself, and any additional potential forces or weights that may happen to be applied to the radiator, prior to finalising installation. **IN ALL CASES IT IS STRONGLY RECOMMENDED THAT A SUITABLY QUALIFIED PROFESSIONAL INSTALLER OR SIMILAR TRADESPERSON CARRIES OUT THE INSTALLATION.**

Radiators

Manufacture

MYSON COLUMN radiators are manufactured using a unique laser welding process that virtually eliminates the visible welding points associated with the traditional methods of manufacturing this type of radiator. The clean finish significantly enhances the aesthetic qualities of the radiator.

Tube Details

Precision, D-profile steel tube is used for all outside surfaces which ensures high outputs and soft, rounded edges for maximum safety. All MYSON COLUMN radiators are manufactured and tested to EN 442.

MYSON COLUMN radiators carry a 5 year guarantee against defects caused by faulty materials or manufacture.

Paint Finish

Every MYSON COLUMN radiator undergoes a multi-stage pre-treatment process followed by an epoxy polyester primer coating. A stoved epoxy polyester powder coat in white (RAL 9016) is applied to all front and rear surfaces allowing the MYSON COLUMN to be fitted without further painting.

PRODUCT DESCRIPTION

12 - 3045

- 12 — Number of Sections
- 3 — Number of Columns
- 045 — Overall Height [cm]

ABOVE EXAMPLE:
12 Sections, 3 Column, 18"High

2 - COLUMN:
Standard Heights: 18, 24, & 79 inches (45, 60, & 200 cm)

3 - COLUMN:
Standard Heights: 12, 18, & 24 inches (30, 45, & 60 cm)

4 - COLUMN:
Standard Height: 24 inches (60 cm)

- See pages 9 & 10 for standard number of sections and outputs
- Additional sizes and models are available as special order

Coatings:
1. Undercoat: electrophoretic, using water-soluble paints, conforming to DIN 55900 part 1, stoved at 329° F;
2. Finish: electrostatic powder coating, conforming to DIN 55900 part 2, in a state-of-the-art facility. (On request, and at a supplementary charge, a range of RAL and sanitary ware colours can be offered.) This particularly robust coating is stoved at an object temperature of 356° F.

Packaging: 1. Cardboard packaging
2. Edge protection
3. Shrink foil

Connections:
4 x internal thread G 1/2" BSP, welded-in for supply and return. Vent and drain plugs (or dummy plug) are included

Tested to positive pressure:	**188.5 psi**
Maximum positive operating pressure:	**145 psi**
Maximum operating temperature:	**248° F**

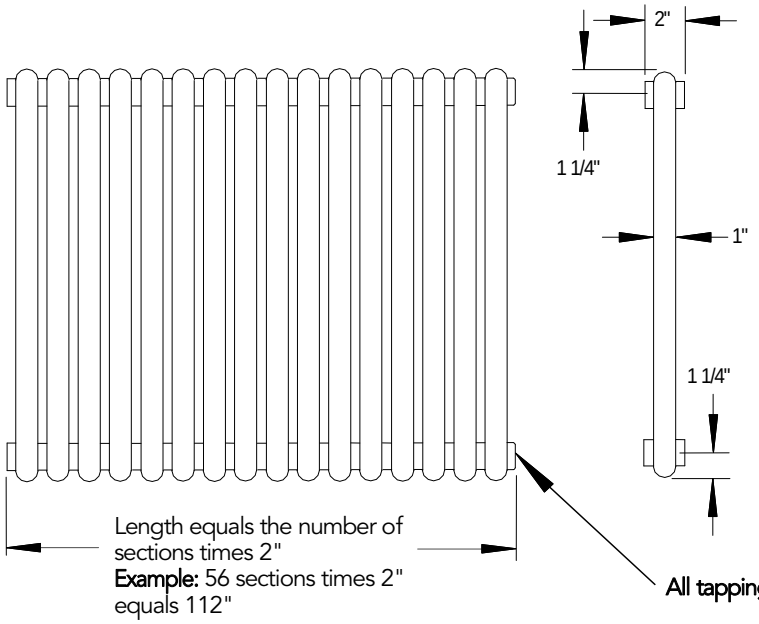
Quality certificates

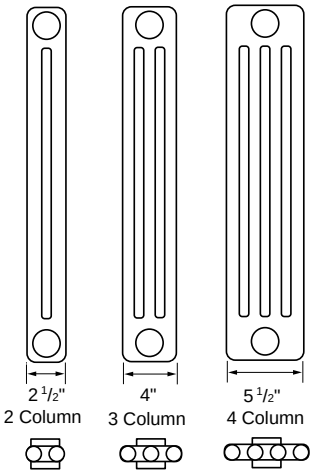
Strong brands of the highest quality

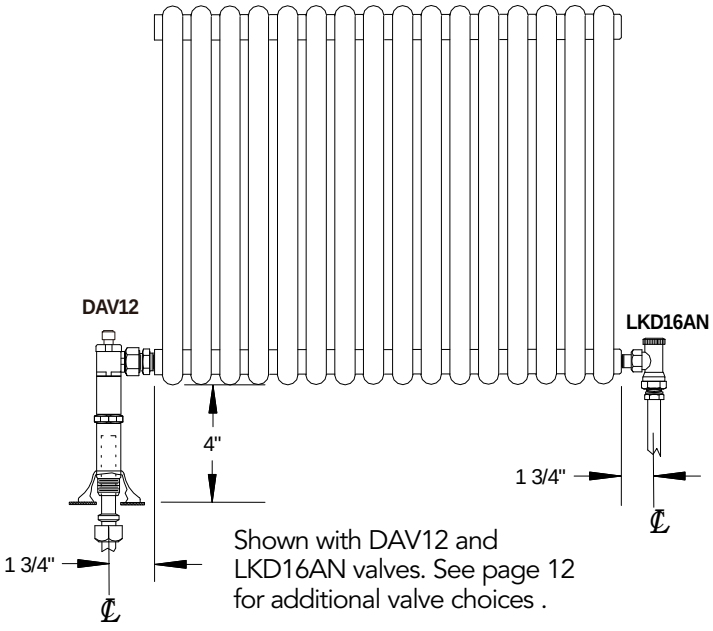
MYSON offers its customers strong brands that meet highest quality standards. All the production sites' production processes are certified according to ISO. The quality and performance specifications of the convectors and heating panels have been verifi ed by recognised European institutions.

The standards that the quality certifi - cates require us to maintain give you security, the best heating performance and premium product quality. For the MYSON warranty conditions, please refer to the table of contents page of this manual.

Dimension and Mounting Quick Reference



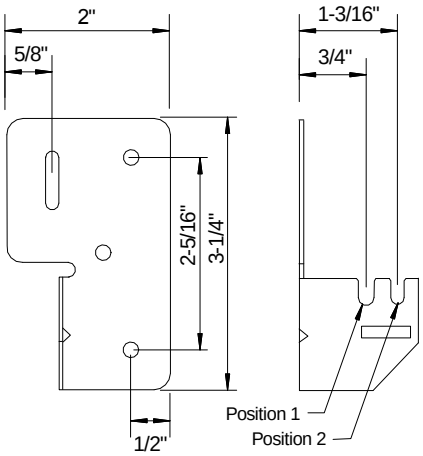




Shown with DAV12 and LKD16AN valves. See page 12 for additional valve choices .

MYSON COLUMN RADIATOR ROUGH -IN SPECIFICATIONS

To obtain pipe centers using Myson valves multuply the number of sections by 2" and add 3.5".
Example: A 12 section radiator would be 12 x 2"+ 3.5" = 27.5"



Column Radiator Wall Brackets

Pipe centers from finished wall are dependent on which mounting slot is selected on the mounting bracket and the number of columns.

		2 Column	3 Column	4 Column
Position 1	Min:	2 1/2"	3 1/4"	4"
Position 2	Max:	2 7/8"	3 5/8"	4 3/8"

Standard models

Suitable for mono-flo, home run or 2-pipe systems

All MYSON COLUMN radiators are ordered without an internal baffle. This will not effect the output of the radiator except in cases where the radiator is less than 4 sections long or is a 2 column radiator less than 8 sections long. These smaller radiators should be ordered with a baffle in the supply position. Contact MYSON Tech Support for more information.

MYSON COLUMN radiators are suitable for the use of **BBOE** (Bottom Bottom Opposite End), **TBSE** (Top Bottom Same End) and **TBOE** (Top Bottom Opposite End) connections. TTOE (**Top Top Opposite End) connections cannot be used.**

- All installations require 2 valves per radiator
- All valves are **½" BSP thread** for connection **to the radiator** and **½" NPT thread** for connection **to the system** (also **includes compression nut and ferrule** for connection to ½" copper)
- Valves are available in 3 basic patterns: angle, straight, and inverted angle (TRV only)
- **Basic Installation**: use 2 – **LKD16AN** (angle) or **LKD16SN** (straight) manual valves, nickel plated with screwdriver stops and caps

See page 12 for additional valve information

NOTE: See page 5 or 7 for rough-in from finished wall to pipe centers.

All systems must be designed with suitable pipe sizing and with adequate pump head. Failure to do this may lead to trapped air and cold spots because of insufficient pressure and water flow will not drive the air from the radiator. The taller and more tubes a radiator has, the more likely this is to happen.

The installation work must be carried out with precautions taken to avoid contamination which could lead to corrosion. If a corrosion inhibitor or other water treatment is to be used, the Manufacturer's Instructions must be strictly followed.

The MYSON COLUMN radiator's large diameter steel tube contruction ensures a negligible pressure drop through the radiator. The pressure drop through the radiator can be ignored in the design of most hydronic systems.

- **Basic upgrade**: use 1 - **FF16WAC** and 1 - **FF16LAC** manual valves, angle only, chrome plated with white handles (FF16WAC is adjustable for balancing, FF16LAC is fixed open but can be closed for service)
- **TRV** (thermostatic radiator valves) are available for automatic temperature control of individual radiators: available in 3 body patterns, with or without thermostatic head (sensor), **use in conjunction with LKD or FF**

LKD16AN

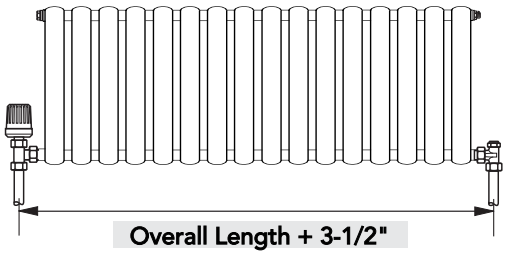
FF16WAC

TRV

NOTE ! **Rough-in** information is given for Myson control valves. Valve specifications vary by manufacturer. Myson will not be responsible for damage or repair of property resulting from the use of non-Myson valves.

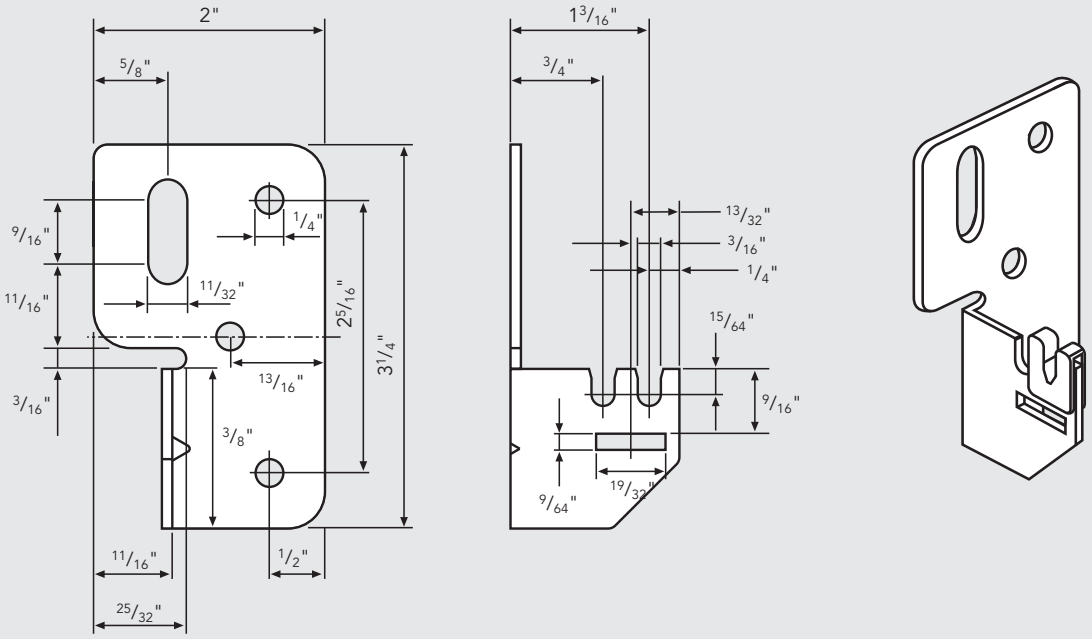
Rough-in dimension shown at right is for a **TRV** and a **LKD** valve or a **pair** of **LKD** valves.
When using **FF** valves add **3-5/8"** to overall length.

Recommendation:
Radiator tappings and valve spuds are **1/2"BSP**. Professional expertise is required when sealing these **"straight"** threads. Failure to properly seal the connections will result in leaks resulting in property damage.

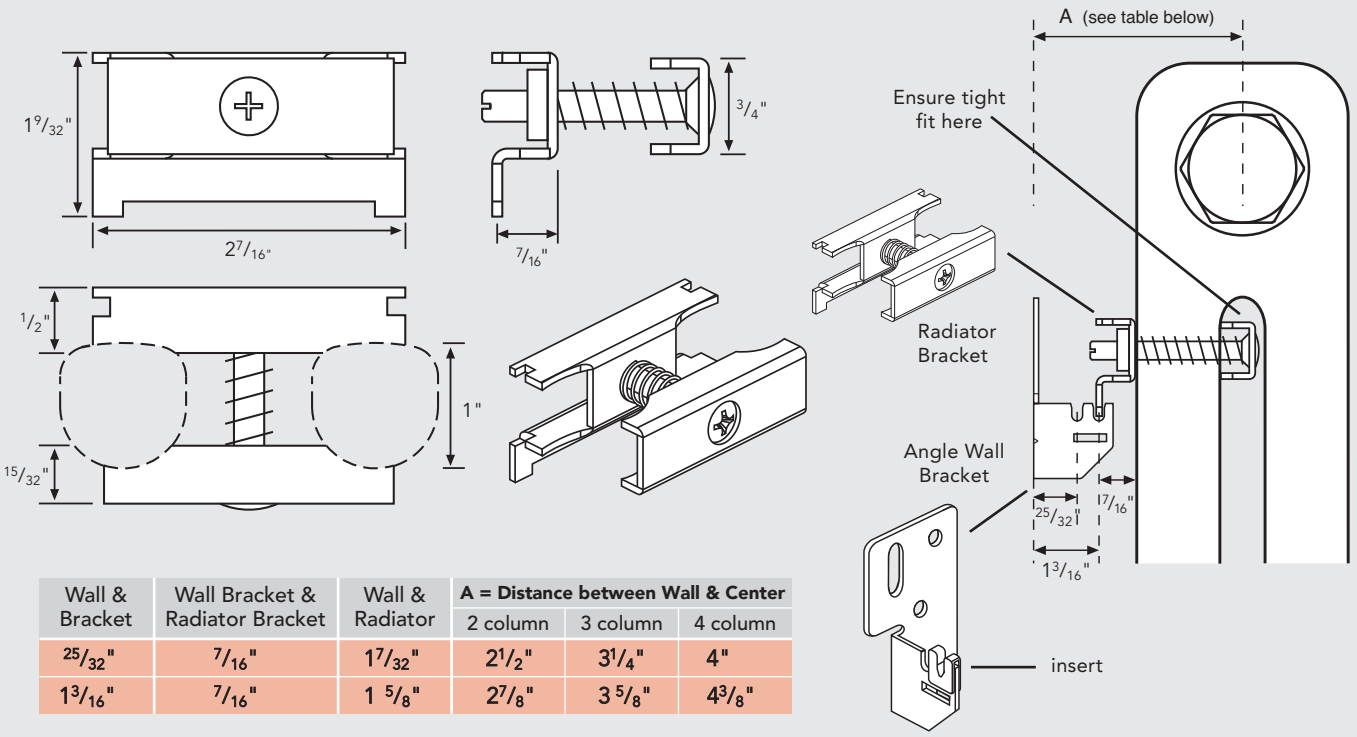


NOTE ! Myson is not responsible for damage resulting from improper workmanship.

Mounting Brackets (supplied with every radiator) - Wall Brackets

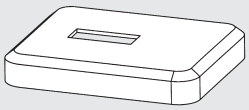


Radiator Brackets

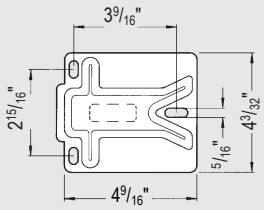


Wall & Bracket	Wall Bracket & Radiator Bracket	Wall & Radiator	A = Distance between Wall & Center		
			2 column	3 column	4 column
25/32"	7/16"	17/32"	21/2"	31/4"	4"
13/16"	7/16"	1 5/8"	27/8"	3 5/8"	43/8"

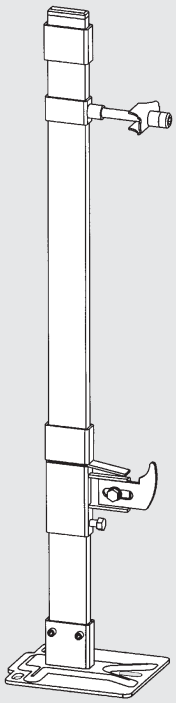
Floor Bracket SK (Optional)

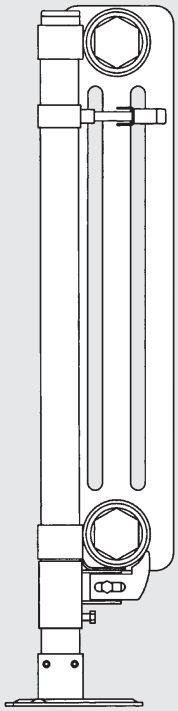


Two-part cover for base-plate in white plastic $4^{5}/_{16}$" x $5^{5}/_{16}$"



Dimensions of base-plate for Floor Bracket SK





Complete system for free-standing radiators, from 2-6 column up to 1000mm height. Painted to RAL 9016.

Includes:

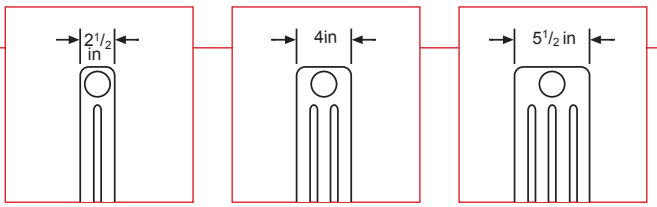
- 3mm thick base-plate for fixing to either finished or unfinished floor
- upright support 35 x 10 x 1.5mm, fixing set with adjustable bracket, security fixing, anti-vibration insert
- adjustable bottom support with spacer and security fixing, anti-vibration insert, white plastic end stop for top of upright.

Height of Upright	Height of Radiator	Order Code
18"	12"	Q10+1..
24"	18"	Q10+23.
30"	24"	Q10+4..
Base-Plate Cover		KOM-ASK2

The table on the right gives recommendations for the number of brackets to be used with each radiator.

The strength of the wall should be checked for its load-bearing capabilities before installation.

Type	2 to 4 Column	
Number of Sections	0 - 20	21 - 40
Up to 39" Height: Wall - Mounted Angle Brackets - RW	4	6
Radiator Bracket - RH	4	6
Floor Mounting Floor bracket - SK	2	3
Over 39" Height: Wall - Mounted Angle Brackets - RW	4	6
Radiator Bracket - RH	4	6



2 COLUMN | 3 COLUMN | 4 COLUMN

2 COLUMN

	Order Code	No. of Sections	Length (in)	Output (Btu/h)	Weight (lbs)	Water Content (gals)
Height 18in	12 - 2045	12	24	1847	19.8	1.68
	16 - 2045	16	32	2462	26.5	2.24
	20 - 2045	20	40	3078	33.0	2.80
	24 - 2045	24	48	3693	39.6	3.36
	28 - 2045	28	56	4309	46.2	3.92
	36 - 2045	36	72	5540	59.4	5.00
Height 24in	12 - 2060	12	24	2448	25.9	2.10
	16 - 2060	16	32	3265	34.6	2.80
	20 - 2060	20	40	4081	43.2	3.50
	24 - 2060	24	48	4897	52.0	4.20
	28 - 2060	28	56	5713	60.5	4.90
Height 79in	6 - 2200	6	12	4041	41.4	3.00
	8 - 2200	8	16	5388	55.2	4.02
	10 - 2200	10	20	6735	69.0	5.02
	12 - 2200	12	24	8082	82.8	6.02
	15 - 2200	15	30	10103	103.5	7.53

3 COLUMN

	Order Code	No. of Sections	Length (in)	Output (Btu/h)	Weight (lbs)	Water Content (gals)
Height 12in	16 - 3030	16	32	2380	27.5	2.42
	20 - 3030	20	40	2975	34.4	3.02
	28 - 3030	28	56	4265	48.2	4.23
	36 - 3030	36	72	5355	62.0	5.44
Height 18in	12 - 3045	12	24	2674	29.6	2.41
	16 - 3045	16	32	3565	39.5	3.22
	20 - 3045	20	40	4456	49.4	4.02
	24 - 3045	24	48	5347	59.3	4.83
	28 - 3045	28	56	6239	69.3	5.63
	36 - 3045	36	72	8021	88.9	7.24
Height 24in	12 - 3060	12	24	3566	41.4	3.00
	16 - 3060	16	32	4755	55.2	4.02
	20 - 3060	20	40	5944	69.0	5.02
	24 - 3060	24	48	7132	82.8	6.02
	28 - 3060	28	56	8321	103.5	7.53

4 COLUMN

	Order Code	No. of Sections	Length (in)	Output (Btu/h)	Weight (lbs)	Water Content (gals)
Height 24in	12 - 4060	12	24	4213	51.6	4.00
	16 - 4060	16	32	5618	68.8	5.33
	20 - 4060	20	40	7022	86.0	6.67
	24 - 4060	24	48	8426	103.2	8.00

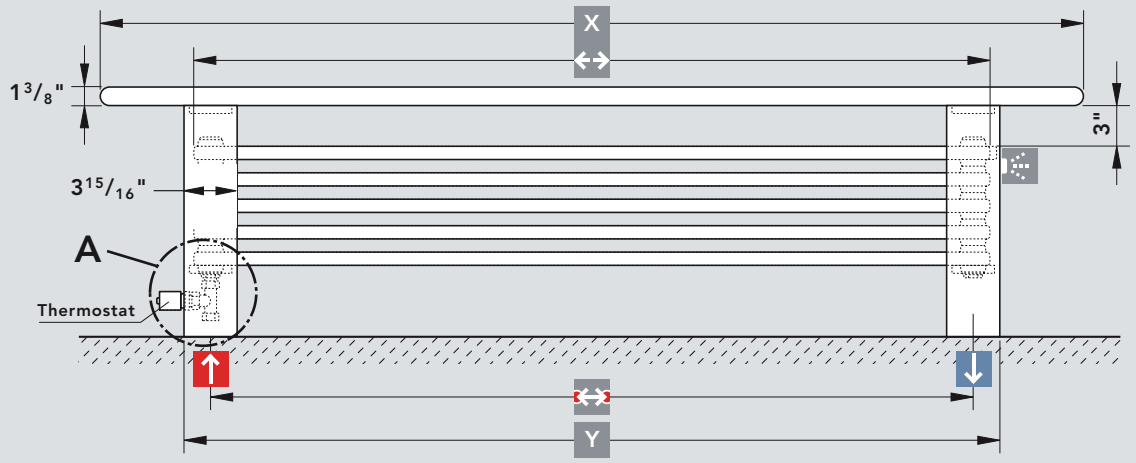
NOTES:

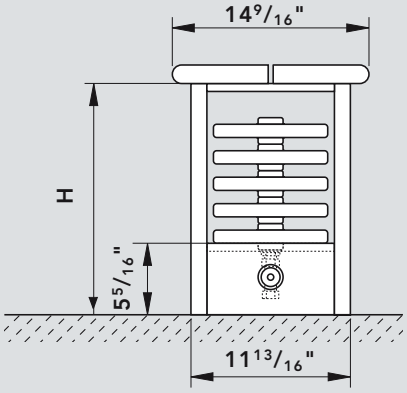
1. All dimensions are nominal.
2. Heat outputs are based on **180^{0}F AWT** and 68^{0}F EAT (mean water to air temperature of 112^{0}F)
3. For heat outputs at other temperatures see page 13.

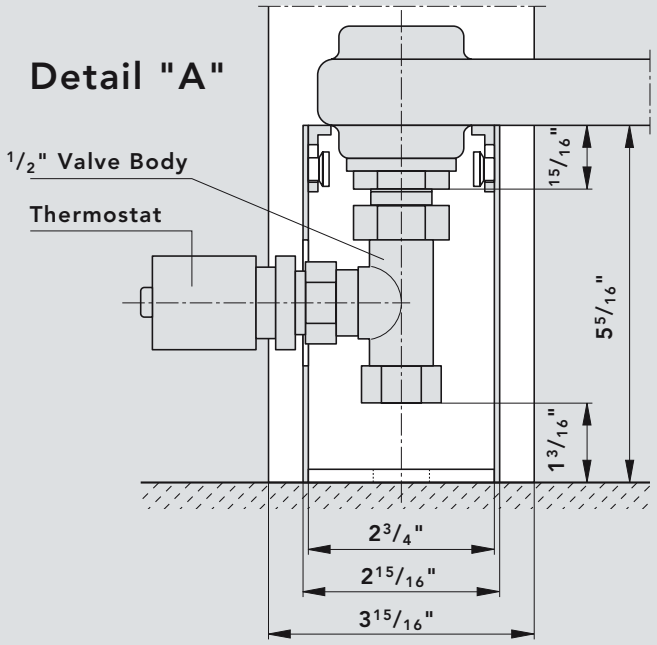
Architecture Range - Bench Radiator

Order Code	No. of Sections	Dimensions (in) LxHxW	Output (Btu/h)	Weight (lbs)	Water Content (gals)	Radiator Length ↔ (in)	Rough - in (cc) ↔ (in)
23-05-6100	5	53 x 19 x 14	3528	75	3.75	39 3/8	36 13/16
23-06-6100	6	53 x 21 x 14	4231	87	4.49	39 3/8	36 13/16
23-05-6120	5	61 x 19 x 14	4185	85	4.41	47 1/2	44 11/16
23-06-6120	6	61 x 21 x 14	5022	99	5.28	47 1/2	44 11/16
23-05-6150	5	73 x 19 x 14	6452	146	4.52	59 1/16	56 1/2
23-06-6150	6	73 x 21 x 14	7530	161	6.50	59 1/16	56 1/2
23-05-6180	5	85 x 19 x 14	7868	172	5.34	70 7/8	68 5/16
23-06-6180	6	85 x 21 x 14	9182	190	7.64	70 7/8	68 5/16
23-05-6200	5	93 x 19 x 14	8895	186	5.90	78 3/4	76 3/16
23-06-6200	6	93 x 21 x 14	10383	205	8.42	78 3/4	76 3/16

Technical Data







↔ Radiator Length - 2 9/16"

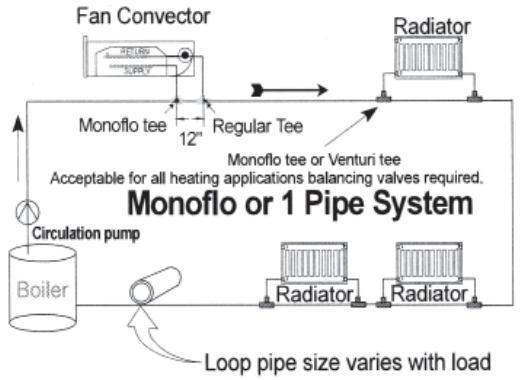
X Radiator Length + 13 3/4"

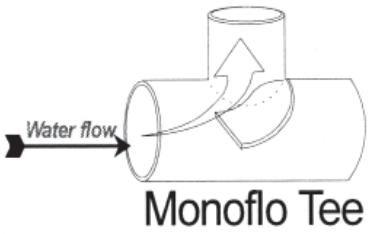
Y Radiator Lenth + 1 3/8"

NOTE: All dimensions are nominal.

Typical hydronic system types

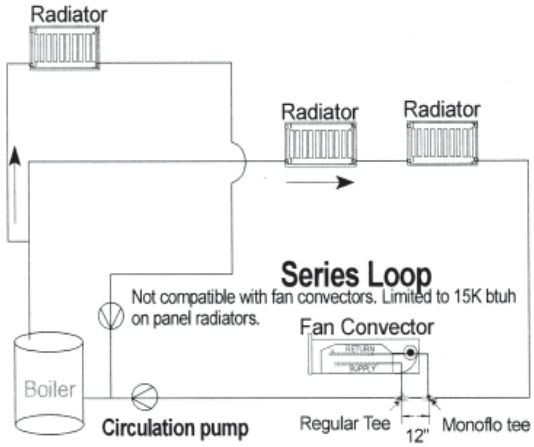
The following drawings are general examples.
Consult a certified heating professional for your specific application.



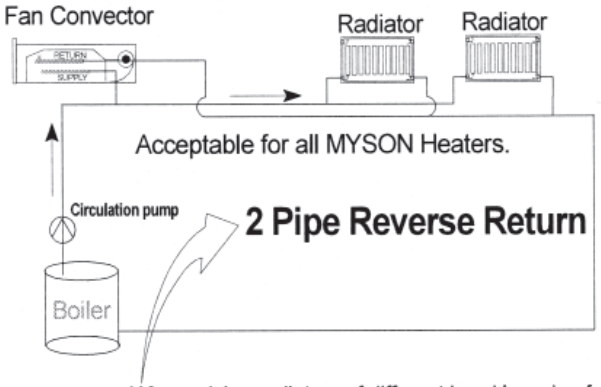


General information on the use of Monoflo tees:

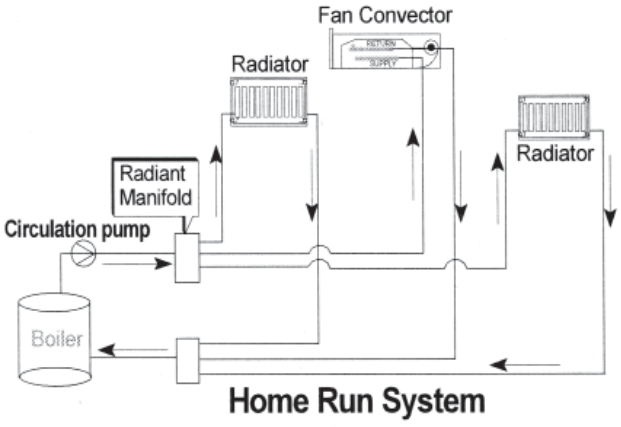
. Scoop type is placed on the supply.
. Venturi Type on the return.
. If heating unit is below main or more the 4 feet horizontally from the main use two monoflow tees facing each other.

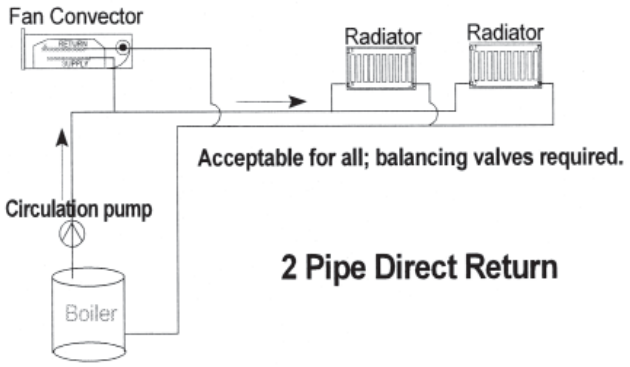


A single fan convector may be added to a series loop using monoflo tees.



When mixing radiators of different head loss. i.e. fan convectors with radiators, balancing is often required to ensure proper flow through the fan convector.





Valve application

- All installations require **2 valves per radiator**
- All valves are **½" BSP thread** for connection **to the radiator** and **½" NPT thread** for connection **to the system** (also **includes compression nut and ferrule** for connection to ½" copper
- Valves are available in 3 basic patterns: angle, straight, and inverted angle (TRV only)
- **Basic Installation**: use 2 – **LKD16AN** (angle) or **LKD16SN** (straight) manual valves, nickel plated with screwdriver stops and caps
- **Basic upgrade**: use 1 - **FF16WAC** and 1 – **FF16LAC** manual valves, angle only, chrome plated with white handles (FF16WAC is adjustable for balancing, FF16LAC is fixed open but can be closed for service)
- **TRV** (thermostatic radiator valves) are available for automatic temperature control of individual radiators: available in 3 body patterns, with or without thermostatic head (sensor), **use in conjunction with LKD or FF**
- **TRV** remote sensors and adjusters available for special applications
- **DCK12** – 4" chrome nipple with compression connection available for use with all Myson valves, includes escutcheon (connects valve to heating system)
- **DAV12** – same as DCK12 **with** addition of **integral ball stop angle valve**
- Decorative pipe covers and escutcheons available in chrome or white (use to cover exposed copper pipe used in radiator installation)

LKD16AN

LKD16SN

FF16WAC

FF16LAC

TRV angle w/HEAD

Remote Sensor

Remote Adjuster

TRV straight

TRV inverted angle

TRV HEAD only

DCK

DAV

Heat Output

The heat outputs for all MYSON COLUMN radiators can be found on pages 9 and 10. The tabulated figures are quoted in accordance with EN 442 for a mean water to air temperature of 112^{0}F. This is based on an average water temperature of 180^{0}F and an ambient air temperature of 68^{0}F. When the difference is not 112^{0}F, the output should be multiplied by the appropriate factor from within the table below:

Aver. Water Temp. ^{0}F	Ambient Air Temp. ^{0}F	Water to Air (Delta T ^{0}F)	Conversion Factor
190	68	122	1.14
180	68	112	1.00
170	68	102	.91
160	68	92	.79
150	68	82	.68
140	68	72	.58
120	68	52	.38

SYSTEM START-UP

STOP

Failure to flush system of debris and flux may cause premature radiator failure, which can result in leaks and property damage NOT covered under the Myson Warranty.

Step 1 Fill and vent the system.

Step 2 Run the system for two (2) hours at full temperature with all radiator valves in the open position.

Step 3 Shut off and drain the system while the water is still hot.

Step 4 Refill the system.

Step 5 Reheat, vent, and balance the system.

Step 6 Once the Décor Radiator is filled with water the system should be left filled.

Step 7 System should be checked for leaks on seasonal start-ups. Leaks must be repaired as automatic system fill valves allow fresh water/oxygen into the system attacking radiators internally.

MAINTENANCE & CLEANING

1. Once operating, avoid the introduction of fresh water and oxygen to the system to prevent corrosion.
2. An occasional wiping with a damp cloth using a non-abrasive detergent can protect the finish of your Myson Décor Panel Radiator.
3. The use of abrasive cleaners will damage the surface of your radiator and void the manufacturer's warranty.

Notes

Notes

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