

HEATING SPECIFICATIONS

FOR

INSTALLATION OF LOW PRESSURE STEAM HEATING SYSTEM

RESIDENCE OF S. F. ARKUSH

SPECIFICATION

This specification is intended to cover everything necessary to fully furnish and install in the above mentioned building, a complete steam heating system in accordance with the accompanying plans and details which are to be considered as part of this specification.

GENERAL REQUIREMENTS

The Contractor is to provide all necessary tools and appliances for the erection and completion of the work, and when completed he must remove all apparatus, refuse and debris from the building and grounds, leaving the work in a clean and perfect condition. No cutting of any description shall be undertaken without consulting the

All work must be of the best quality, and should at any time - improper material or faulty workmanship be observed, this Contractor shall upon notice from the Architect remove the same, and good and proper material and workmanship shall be substituted without delay, in place thereof.

SYSTEM

The heating is to be effected by direct radiation distributed throughout as shown on plans, and the circulation of the steam shall be by the two pipe return system.

BOILER

Furnish and erect where shown on plans low pressure steam boiler, same to be Taylor-Forbes #S-327, - 7 sections, or Dominion Radiator Company's #S-36-5, - 5 sections. Provide alternate figure on a #15 Spencer Self-Feed Water-tube Boiler, equipped with magazine and patent arch grates. Provide necessary firing tools water-column, valves, try-cocks, automatic regulators, safety valves, etc.

SMOKE-PIPE

Connect boiler to flue in basement with heavy #20 Gauge Galvanized Iron smoke-pipe as shown on plans. Place check-damper in pipe.

WATER-SUPPLY

The Plumber will bring the water to within 8' of boiler, and this Contractor is to make connection with boiler - with 3/4" iron pipe, stop-cock and check-valve.

BLOW-OFF

Provide and erect two inch (2") blow-off piping controlled by two inch (2") stop-cock from boiler to nearest catch basin, and provide suitable connection leading from wet return at basement floor line to nearest catch basin with 3/4" brass cock for the control of same.

PIPES AND
FITTINGS

Provide and erect all mains, returns, risers etc. as shown on plans; all to be of the same size as shown. Mains and returns are to pitch downward in the direction of the flow of steam.

All piping to be of the best Canadian or American wrought iron; all fittings to be of heavy pattern with clean cut threads and to be made of the best grade cast iron; no malleable fittings to be used. Provision must be made by the Contractor to take care of all expansion in pipe lines, so that no strain whatever will come to the boiler, mains or radiators. Lateral connections to risers are to be one (1) size larger than same. Where the mains are reduced in size, use eccentric reducers. The ends of pipes are to be reamed out and all obstructions removed before pipes are placed in position.

RETURNS AND
DRAINS

All returns will drop into wet return at as shown on plans.

VALVES

All valves two inches (2") and under to have brass bodies and iron wheels, over two inches (2"), to be heavy cast iron with brass stem and trimmings and iron wheels. All four inches (4") and over to have heavy yokes.

RADIATOR
VALVES

Provide each radiator with disc union valves of the best metal, nickle plated, and to have hard-wood handles.

AIR VALVES

Each radiator through the entire building shall be furnished with an automatic air valve.

SLEEVES

Where pipes pass through floors, partitions etc., galvanized iron sleeves, large enough to pass a coupling of the pipe passing through, are to be provided and put in place before plastering is completed.

FLOOR & CEIL-
ING PLATES

Where pipes pass through floors, partirions etc., protect same with N. P. floor and ceiling plates.

HANGERS

Support mains and returns evert ten (10') feet apart with grabbler hanger rings with neat extension bar.

COVERINGS

Cover all mains, returns and branches, in basement as directed by the with three (3) ply ar-cell pipe covering secured with brass lacquered bands. Cover boiler with approved asbestos covering with cement finish and painted canvas-jacket, as per detailed drawing.

WASHING

BOILER

The Contractor is to thoroughly wash the boiler out several times with a suitable boiler compound before leaving the job, and is to leave a quantity of the compound with the Owner with complete instructions for the use of same.

TESTING

Upon completion of the work the apparatus is to be tested and made tight under a pressure of 10#, in the presence of the Architect and Owner. The Owner to provide the necessary water and fuel for testing and to appoint a caretaker to receive instructions while the test is taking place.

GUARANTEE

The Contractor is to guarantee all the material and workmanship to be first-class in every respect and that the system when completed shall be capable of warming all rooms in which radiators are to be placed - to a temperature of 70 degrees Fah., when the outside temperature is degrees below zero.

TEMPORARY

HEATING

If the Owner require the apparatus for temporary heating purposes, to make arrangements with the Contractor for the use of same, and is to provide anthracite pea coal as fuel.

DIRECTION

CARD

Secure the direction card in a substantial manner at a prominent and convenient location in the boiler room.

ALTERNATE BID

FOR STEEL

RADIATION

Provide alternate bid using approved steel radiation instead of cast iron as herein scheduled. Steel radiators to be supported on wall brackets and connections to be made horizontally into wall on level of tapping thus leaving floor in every case free of pipes and radiator legs.

*Revised in Boiler
for Domestic
Hot Water Supply*

Provide same of approved design

RADIATION Finish and set in house Monarch (plain) and Colonial
(Low Pressure (plain) pattern radiators (Taylor-Forbes) a similar
steam) pattern Dominion Radiator Co's.

	Sq. ft. Radiation.	No. Sections.	Height.	Style.
<u>BASEMENT</u>				
BILLIARD ROOM	37	1 - 7 sec.	26½"	4 Col. Monarch
<u>FIRST FLOOR:</u>				
LIVING ROOM	100	1 - 9 sec. 1 - 10 sec. 1 - 6 "	20½" " "	4 Col. Monarch " " " "
LIVING ROOM	60	1 - 15 "	20½"	" " "
BED ROOM- #1	21	1 - 4 "	26½"	" " "
" " #2	26	1 - 5 "	26½"	" " "
" " #3	32	1 - 6 "	26½"	" " "
" " #4	23	1 - 10 "	23"	2 " Colonial
RECEPTION ROOM	26	1 - 5 "	26½"	4 " Monarch
HALL (Front)	53	1 - 10 "	26½"	4 " "
HALL (Rear)	16	1 - 7 "	23"	2 " Colonial
STAIR HALL TO SECOND FLOOR	60	1 - 9 "	32½"	4 " Monarch
BATH ROOM - #1	14	1 - 6 "	23"	2 " Colonial
BATH ROOM - #2	14	1 - 6 "	23"	2 " "
PANTRY	14	1 - 6 "	23"	2 " "
KITCHEN	72	1 - 10 " 1 - 8 "	20½" 20½"	4 " Monarch 4 " "
<u>SECOND FLOOR:</u>				
LIVING ROOM	96	1 - 7 " 1 - 17 "	20½" 20½"	4 " " 4 " "
DINING ROOM				
BED ROOM- #1	76	1 - 7 " 2 - 6 "	20½" 20½"	4 " " 4 " "
DINING ROOM	76	1 - 19 "	20½"	4 " "
BED ROOM- #2	48	1 - 12 "	20½"	4 " "
" " #3	36	1 - 9 "	20½"	4 " "
RECEPTION ROOM	26	1 - 5 "	26½"	4 " "
DEN	23	1 - 10 "	23"	2 " Colonial
BATH ROOM - #3	21	1 - 9 "	23"	2 " "
" " #4	16	1 - 7 "	23"	2 " "
DRESSING ROOM	32	1 - 8 "	20½"	4 " Monarch
PANTRY	14	1 - 6 "	23"	2 " Colonial
KITCHEN PANTRY	9	1 - 4 "	23"	2 " "
KITCHEN	60	1 - 8 "	20½"	4 " Monarch
HALL (Front)	26	1 - 5 "	26½"	4 " "
" "	21	1 - 9 "	23"	2 " Colonial
STORE ROOM	18	1 - 8 "	23"	2 " "
<u>ATTIC:</u>				
BILLIARD ROOM	85	2 - 4 " 1 - 8 "	26½" 26"	4 " Monarch 4 " "

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	Sq. ft.	Radiation.	No. Sections.	Height.	Style.
BED ROOM -#1	21		1 - 4 sec.	26½"	4 Col. Monarch
" " #2	26		1 - 5 "	26½"	4 " "
" " #3	37		1 - 3 "	26½"	4 " "
HALL (Front)	16		1 - 7 "	23"	2 " Colonial
" (Rear)	23		1 - 10 "	23"	2 " "
BATH ROOM -#5	16		1 - 7 "	23"	2 " "

GRAND TOTAL: ~~1302 ft.~~

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