

METOS SAUNA HEATER INSTALLATIONS INSTRUCTIONS — WALL MOUNT MODELS (MW5B, MW6B & MW75B)

1. GENERAL:

These heaters are for permanent installation and electrical connection. To determine the correct wire size, circuit protection and minimum spacing from wooden surfaces, refer to the chart below:

HEATER MODEL	VOLTAGE	PHASE	KW	CIRCUIT PROTECTION	WIRE SIZE	MINIMUM FLOOR AREA	MINIMUM CEILING HEIGHT	MINIMUM FROM WALL	MIN. DIST. BELOW CEILING	MIN. DIST. UP FROM FLOOR	HEATER DIMENSION H-W-D
MW5B	240	1	5.1	30A	10	20 sq. ft.	78"	4"	40"	12"	26x17½x13
MW6B	240	1	6	30A	10	20 sq. ft.	78"	4"	40"	12"	26x17½x13
MW75B	240	1	7.2	40A	8	20 sq. ft.	78"	4"	40"	12"	26x17½x13

2. SECURING HEATER TO THE WALL:

The sauna heater comes completely assembled. After removing heater from the carton, lay the heater on its back and remove the heater from its mounting frame by removing the two hex nuts. Attach the frame to the wall so that the bottom of the frame is 12 inches from the floor and the top of the heater is at least 40 inches below the interior ceiling and not less than 4 inches from the side walls. This will give you the proper minimum clearances from wooden surfaces as indicated in the chart above. Use the four CD6L molly screws which are attached to the frame. A 3/8" hole should be provided in the wall surface to accommodate the molly screws and they should be screwed into the hole first without the frame being in place. Turning the screw until it is completely flush with the wall will allow the body of the molly to expand within the wall and hold itself securely. Repeat this procedure for the other three mollies. Then remove the screws and attach the frame to the wall with the four screws. The heater can then be reattached to the frame. (See detail on page 3).

3. SAUNA ROCKS:

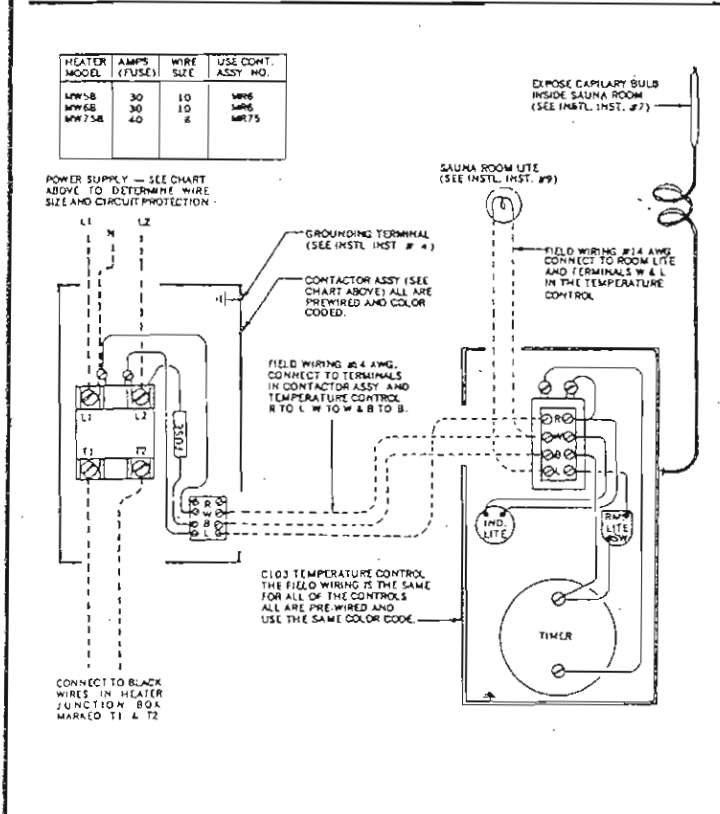
This heater should not be operated unless the rock compartment in the top of the heater is filled with the igneous rocks that are furnished with the heater. The rocks are packaged separately and are cleaned before packing, but it is recommended that they be washed before putting them in the heater. They should be placed in the heater so that the air is free to travel around them. Do not pack too tightly.

4. ELECTRICAL WIRING:

All wiring should be accomplished by a qualified electrical contractor. Refer to the chart above to determine the wire size and circuit protection required. The complete sauna system consisting of heater, contactor assembly and temperature control should be properly grounded as per NEC 250-42 or as required by local codes. Grounding terminals are provided in the junction box of each heater and also in the contactor assembly and temperature control.

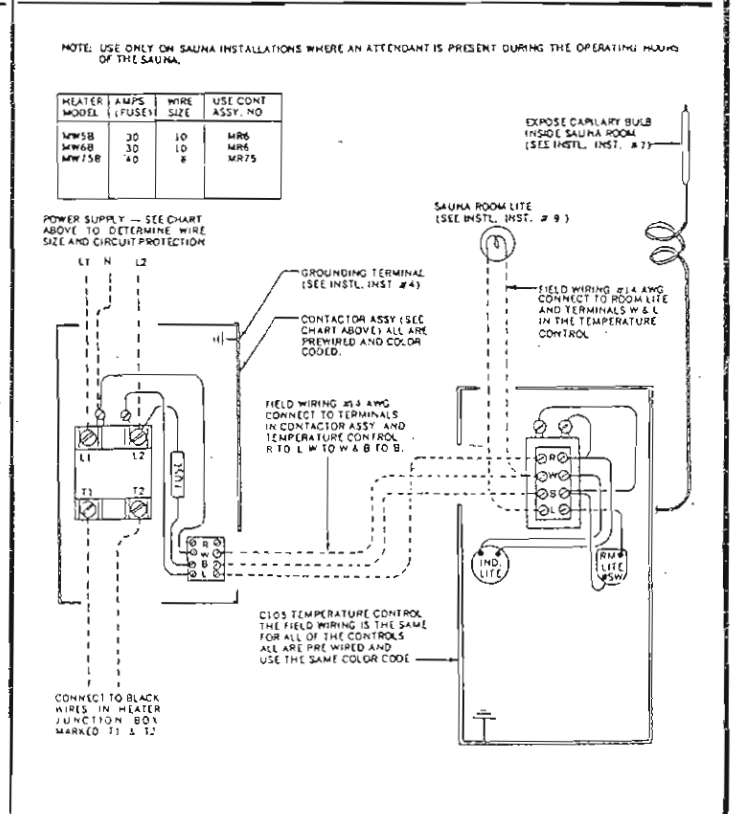
5. ELECTRICAL DIAGRAM:

Use for Sauna Heater Models MW5B, MW6B or MW75B, ONLY.
(When Temperature Control is Model C102 OR C103)



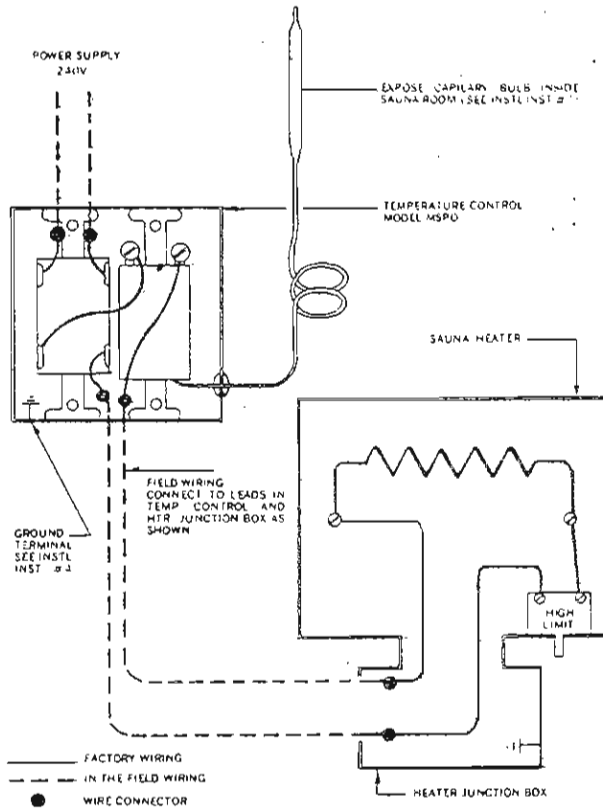
5A. ELECTRICAL DIAGRAM:

Use for Sauna Heater Models MW5B, MW6B or MW75B, ONLY.
(When Temperature Control is Model C104 OR C105)

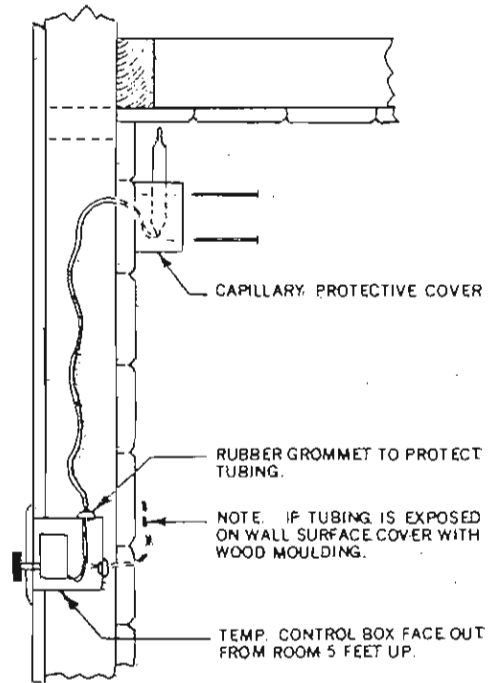
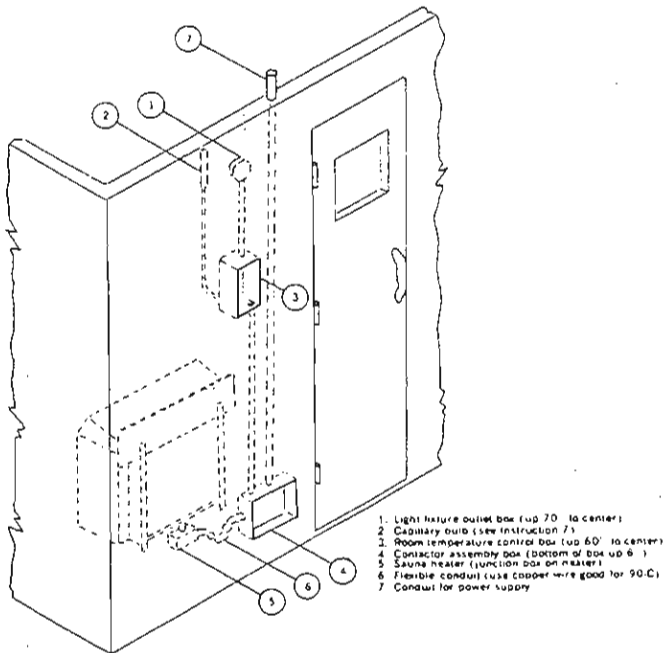


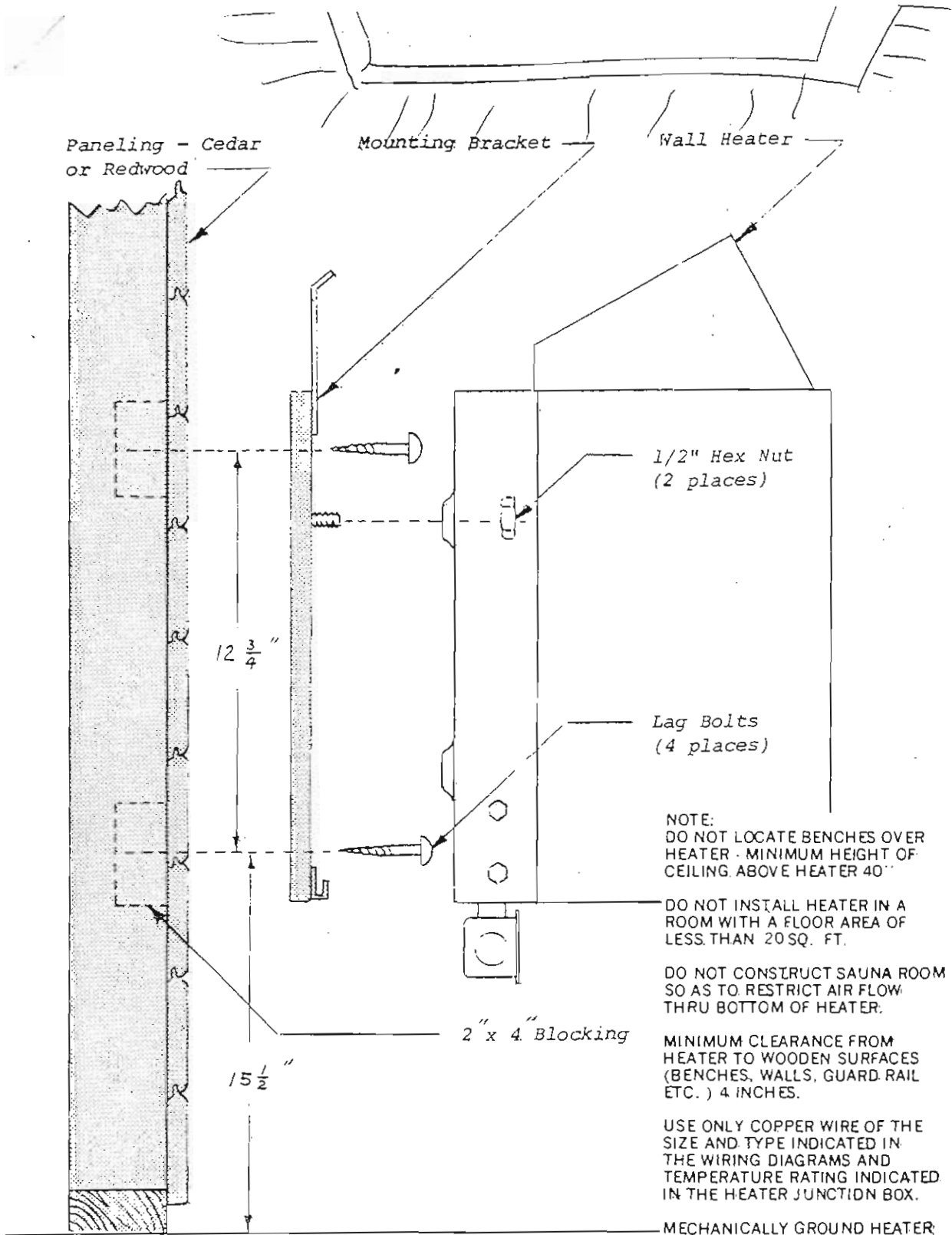
5B. ELECTRICAL DIAGRAM:
 Use for Sauna Heater Models MW5B, MW6B or MW75B. ONLY.
 (When Temperature Control is Model MSP0)

NOTE: USE ONLY ON SAUNA INSTALLATIONS WHERE AN ATTENDANT IS PRESENT DURING THE OPERATING HOURS OF THE SAUNA.



6. TYPICAL ELECTRICAL INSTALLATION.





NOTE:
DO NOT LOCATE BENCHES OVER
HEATER - MINIMUM HEIGHT OF
CEILING ABOVE HEATER 40"

DO NOT INSTALL HEATER IN A
ROOM WITH A FLOOR AREA OF
LESS THAN 20 SQ. FT.

DO NOT CONSTRUCT SAUNA ROOM
SO AS TO RESTRICT AIR FLOW
THRU BOTTOM OF HEATER.

MINIMUM CLEARANCE FROM
HEATER TO WOODEN SURFACES
(BENCHES, WALLS, GUARD RAIL
ETC.) 4 INCHES.

USE ONLY COPPER WIRE OF THE
SIZE AND TYPE INDICATED IN
THE WIRING DIAGRAMS AND
TEMPERATURE RATING INDICATED
IN THE HEATER JUNCTION BOX.

MECHANICALLY GROUND HEATER
AND CONTROLS AS REQUIRED BY
GOVERNING CODES.

1. Remove mounting bracket from heater by removing the two 1/2" hex nuts.
2. Attach mounting bracket to wall as shown above with lag bolts. If 2"x4" blocking has not been provided in wall, use Molly screws or Toggle bolts.
3. Re-attach heater to mounting bracket.

INSTRUCTIONS FOR SECURING METOS HEATERS TO WALL

7. ROOM TEMPERATURE CONTROL:

The temperature control rough-in box should be installed flush in the wall, 5 feet up from the floor level and so the opening is to the outside of the sauna room wall. The control that fits in this box is completely prewired and color coded to simplify the field wiring. (See electrical Diagram 5). The capillary tube of the thermostat should go out through the hole in the back of the rough-in box. The rubber grommet furnished with the control is to protect the capillary where it leaves the rough-in box. The capillary tubing should be run up the wall so the tip is at ceiling height.

The capillary tubing and bulb should then be covered with the protective shield furnished with the heater. The screws for attaching the shield are included. **CAUTION**—The tubing should be uncoiled carefully—the minimum bend radius of the tubing is 1/4 inch. Damage to the tubing will make the heater inoperative. The electrical wiring of the control should be as shown in Diagram 5, SA or 5B.

8. RESET BUTTON:

This heater is equipped with an overheat safety device. In the event of an abnormal heating condition, the heater will automatically shut off and the heater cannot be turned on again for five minutes. The red reset button is located on the bottom of the heater adjacent to the junction box. Pushing in on the reset button, after the cooling period, will restore power to the heater. If reset button continues to trip, your service man should be notified.

9. OUTLETS OR RECEPTACLES:

CAUTION—Receptacles or clock outlets must not be installed in a sauna room. If an intercom speaker is to be installed in a sauna room, it should be of the outdoor metal type and should be installed away from the sauna heater and as low to the floor as possible. The sauna room light should be a wall bracket type and the rough-in box should be flush with the inside finished material. The recommended height is 70" up from the floor. If a ceiling light is to be used, it should be an approved type with a junction box that is remote to the fixture itself. Use only a fixture that utilizes A.F. or fixture type internal wiring.

10. ROOM CONSTRUCTION: (Architectural Recommendation)

Refer to the chart on the front page to ascertain that the room size and the heater model are as indicated on the chart.

WALL FRAMING: Masonry or concrete walls to be stripped with 2"x4" cedar or redwood on 16 inch centers to provide nailing for wall paneling; frame walls to be standard stud walls. Provide 2x4 backing for heater mounting bracket.

INSULATION: Full thick, foil faced fiberglass blanket with a minimum "R" factor of 11 both walls and ceiling. Aluminum foil facing into room.

CEILING FRAME: Ceiling height 78" minimum. Ceiling joists 2x4, 2x6 or 2x8 dry fir on 16 inch centers.

PLASTERBOARD: (When required by code) 5/8" gypsum wallboard, one-hour fire rated. Apply on wall and ceiling framing before interior finish.

INTERIOR FINISH: 1"x4" V-joint T & G vertical grain KD redwood or cedar. All boards full length. Blind nail with 5d galvanized finish nails or equivalent power stapling.

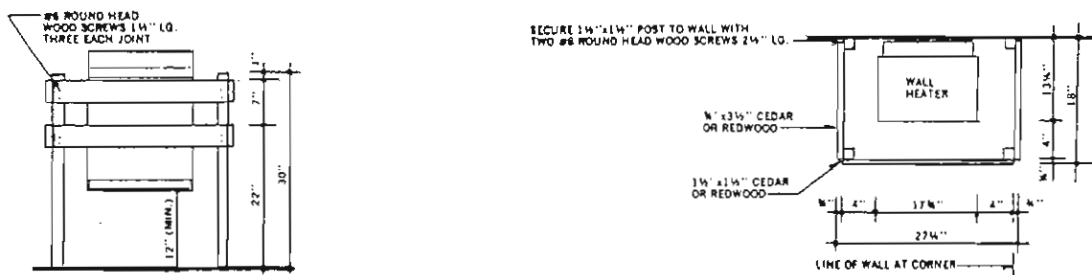
BENCHES: 1" x 4" or 2" x 2" clear VG redwood or cedar with 2"x4" or 2"x6" face and framing members. Use galvanized nails and fastenings, concealed where possible.

HEATER GUARD RAIL: Clear VG KD redwood or cedar (see Diagram below)

SAUNA DOOR: Solid fir or other 2'0" x 6'8" x 1 3/4". Panel sauna side to match interior. Hardware 1 1/2 pair bomber spring closers #HA 3 1/2 x 3 1/2. Do not use a catch or lock of any kind on the door. Window (optional) 14 1/2" x 27 1/4" thermopane.

11. HEATER FENCE:

It is recommended that a guard or fence be constructed around the sauna heater to prevent the bather from making physical contact with the heating unit. The fence should not be closer than four inches to the exterior walls of the heater. The illustration below shows how the fence should be constructed. If the heater is to be located in the corner of the room, one section of the fence may be deleted.



12. WARNING PLACARD:

The warning placard provided with the heater must be attached to the sauna room door at approximately eye level. Use the four screws furnished with the placard.

13. THERMOMETER:

(Not furnished with heater available from your METOS dealer). Locate 6" down from ceiling on wall so that temperature can be observed from outside sauna room through the door window.

14. HUMIDITY GAUGE:

(Not furnished with heater, available from your METOS dealer). Locate next to thermometer.

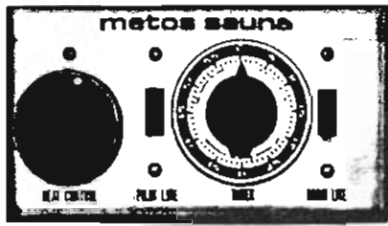
15. BUCKET & DIPPER:

(Not furnished with heater, available from your METOS dealer). Bucket must be kept full of water at all times. Do not leave bucket in sauna room when not being used. Dippers have long wooden handles to keep from exposing hand to steam.

A COMPLETE LINE OF ADDITIONAL SAUNA ACCESSORIES AVAILABLE FROM YOUR METOS SAUNA DEALER.

Upon completion of the sauna installation, please leave all instructions and warranty with the owner.

metos REMOTE WALL CONTROLS



THIL
(THERMOSTAT - PILOT LITE -
TIMER - RM LITE SW)



MSP
(THERMOSTAT)



TIL
(PILOT LITE - TIMER - RM LITE SW)



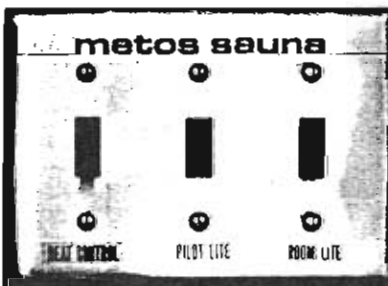
SI
(PILOT LITE - CONTROL SW)



HIL
(PILOT LITE - THERMOSTAT - RM LITE SW)



T60
(TIMER - 60 MINUTE)



SIL
(CONTROL SW - PILOT LITE - RM LITE SW)



M102
M104
(TIME CLOCK - FOR SKIP-A-DAY
FEATURE ADD PREFIX - S)

ALL METOS heaters have self contained controls so that the heater can be turned on and controlled at the heater itself, just as you control your electric range. This is the least expensive type installation, however, many combinations of remote controls are available, designed to fit the needs of the most discriminating buyer. Each METOS remote control is prewired, color coded and bench tested to assure efficiency and ease of installation. Your choice of a prewired control can give you a substantial saving over on-the-job installation time. The junction boxes are of sufficient depth to accommodate the field wiring with ease. All combinations of control are designed for flush mounting between the wall studs and are housed under one attractive brushed stainless steel cover. Select your control from the many combinations shown.

Following is a description of the component parts that make up our remote controls.

60 Minute Timer. Gives you the assurance that the heater will shut off automatically in the event you forget to turn it off after your Sauna. This, of course, does not limit you to one hour as the timer can be advanced from time to time as desired during the bath. Recommended for home sauna installations.

Thermostat. Allows you to control the room temperature from outside the sauna room at eye level. Controls that utilize a thermostat have to be located in the Sauna room wall because they have a heat sensing device that is exposed into the hot room. All other controls can be located anywhere that is convenient. **Example** In the master bedroom or bath of a residence; on the upper level of a house where the Sauna is located on the lower level; in commercial installations in the office or maintenance room.

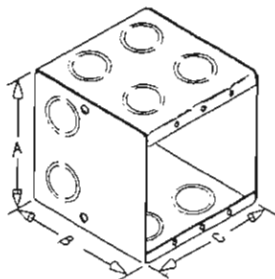
Control Switch: Allows you to control the power to the heater from any desired location.

Indicator Light. Low density red jewel light. Shows when the power to the heater is on.

Room Light Switch. Select a control that incorporates a room light switch, when the control is to be located immediately outside the Sauna room in the wall, near the door.

Time Clock. Can be used in conjunction with any of the remote wall controls. Power to the unit can be set to come on and go off at any 15 minute interval. An additional skip-a-day feature can be incorporated. When ordering add the prefix "S" after the time clock number. Recommended for apartments and commercial sauna installations.

ROUGH-IN BOX DIMENSIONS



CAT. NO	A	B	C
THIL	3-3/4	3-1/2	7-1/2
TIL	3-3/4	3-1/2	5-5/8
HIL	3-3/4	3-1/2	5-5/8
SIL	3-3/4	3-1/2	5-5/8
MSP	3-3/4	3-1/2	3-3/4
SI	3-3/4	3-1/2	3-3/4
T60	3-3/4	3-1/2	3-3/4

REMOTE CONTROLS

(FOR CONTROLLING SAUNA TEMPERATURE FROM OUTSIDE SAUNA ROOM)

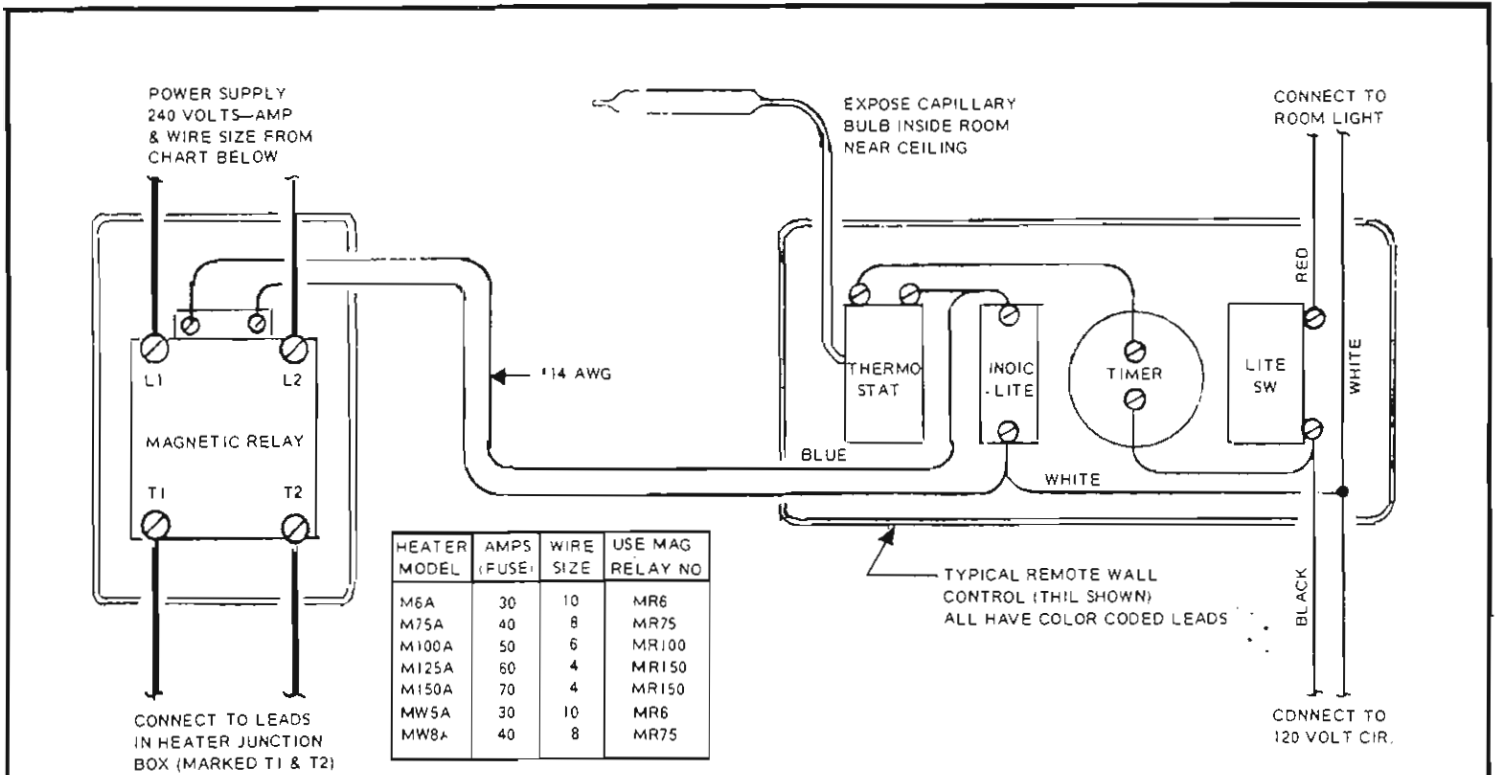
CATALOG NO.	DESCRIPTION
Si	ON/OFF SWITCH - INDICATOR LITE
SIL	ON/OFF SWITCH - INDICATOR LITE - ROOM LITE SWITCH
MSP	REMOTE WALL THERMOSTAT
HIL	REMOTE THERMOSTAT - INDICATOR LITE-ROOM LITE SWITCH.....
T60	60 MINUTE TIMER
TIL	60 MINUTE TIMER - INDICATOR LITE - ROOM LITE SWITCH.....
THIL	60 MINUTE TIMER - THERMOSTAT - INDICATOR LT-LITE SWITCH.....
M102	24 HOUR TIME CLOCK

NOTE:

ALL OF THE ABOVE REMOTE CONTROLS MUST BE USED WITH THE APPROPRIATE MAGNETIC RELAY LISTED BELOW

MR6	MAGNETIC RELAY USED WITH SAUNA HEATER M6A & MW5A
MR75	MAGNETIC RELAY USED WITH SAUNA HEATER M75A & MW8A
MR100	MAGNETIC RELAY USED WITH SAUNA HEATER M100A
MR150	MAGNETIC RELAY USED WITH SAUNA HEATER M125A & M150A.....

USE THIS WIRING DIAGRAM FOR REMOTE CONTROL & MAGNETIC RELAY



metos



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metos SAUNA inc.
DRAWING EM-1