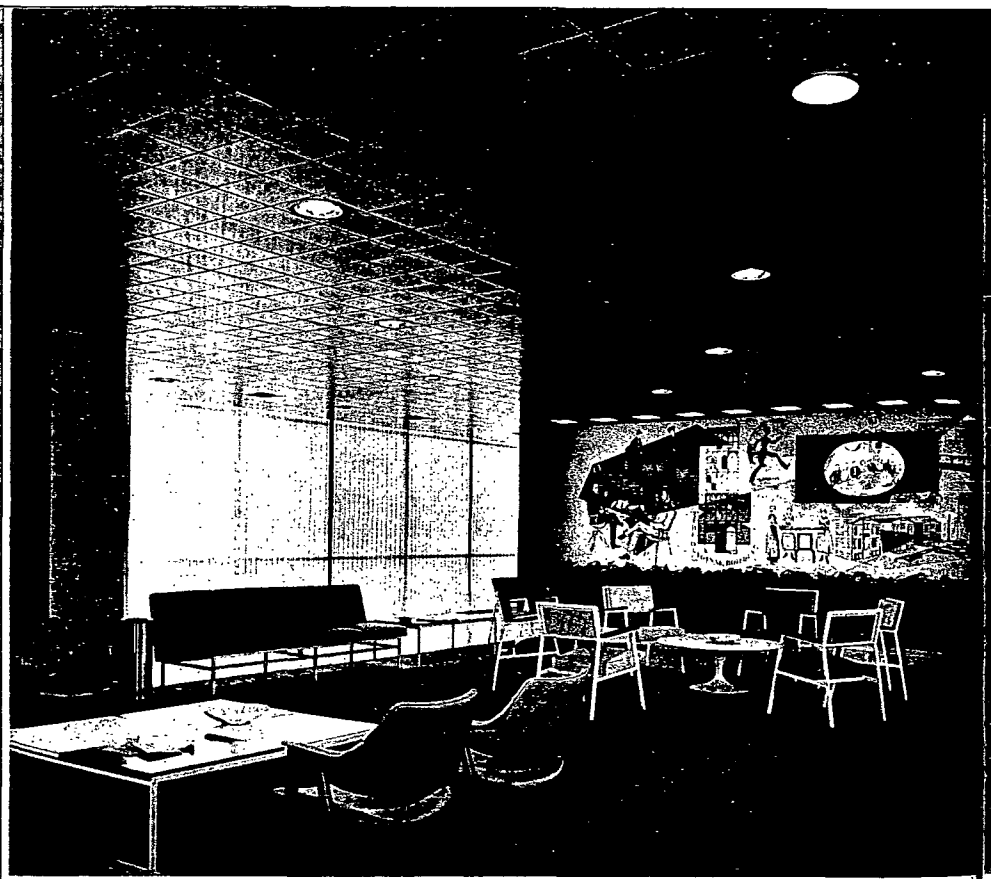

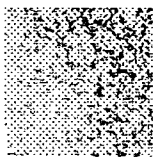

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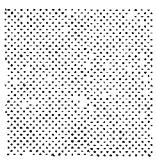

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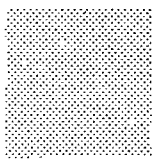

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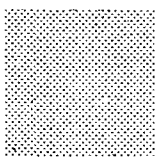

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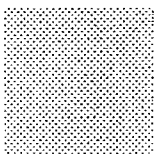

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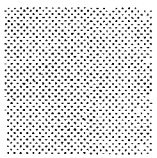

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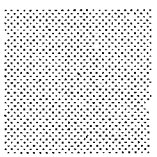

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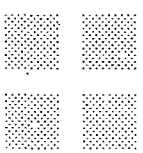

FOUR SQUARE

Decorator-designed panels and colors now offer greater freedom to the architect in planning attractive interiors. Your Inland/Burgess-Manning Distributor has full details.

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INLAND/BURGESS-MANNING
Radiant-Acoustic Ceilings

Ceilings that HEAT, COOL and help to CONTROL NOISE

UNIFORM, QUIET, DRAFTLESS HEATING AND COOLING

Radiant ceilings keep a room uniformly heated or cooled from ceiling to floor. Only a comfortable amount of air need be kept in motion for ventilation and to remove latent load (humidity). No hot or cold spots — everyone is comfortable, even children on the floor.

FAST RESPONSE TO CONTROLS

Calls for temperature changes by room or zone controls bring a quick response in an Inland/Burgess-Manning Radiant Ceiling. There is no lag or over-run. The aluminum panels react almost instantaneously to changed water temperatures.

ACOUSTIC CONTROL

Non-combustible acoustic blankets over the perforated radiant panels provide noise reduction coefficients from .80 to .90.

ARCHITECTURAL DESIGN FREEDOM

Modular system simplifies the designer's layout job and easily accommodates lighting and ventilation fixtures. Absence of wall-hung convection units frees valuable room space, improves room efficiency.

CONSTRUCTION SAVINGS

Numerous building costs are eliminated: no wall recesses or floor trenching for conventional radiators or convectors. Much smaller air handling equipment, such as blowers, fans, coils, etc., can be used, since air requirements are less. Smaller air ducts permit space savings between floors and a general reduction in building height.

OPERATING AND MAINTENANCE SAVINGS

Fuel savings are common with radiant ceilings systems and, since it contains no moving parts, the ceiling itself requires little or no maintenance. Baked enamel surfaces are easy to clean and panels can be removed easily for access above ceiling at any time.

How does a radiant ceiling operate?







LET'S START WITH THE SUN

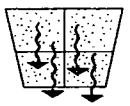
Radiant heat, like that from the sun, travels in straight lines, undissipated, until it reaches a solid object. It warms that object and is absorbed. Heat travels from a radiant ceiling to every surface in the room, warming all uniformly. Unlike convection "heat," which is actually currents of warmed air, radiant heat does not *rise*. The floor is kept as warm as all other absorbing surfaces.

HOW ABOUT COOLING?

When cooling, the radiant surface is dropped to a temperature *lower* than that of other surfaces, including people, in the room. The ceiling then *absorbs* heat, gradually lowering all surfaces to a uniform, desired temperature.

HOW DOES THIS AFFECT PEOPLE?

Actually, radiant heating and cooling are better suited to the needs of the human body than any other method. Since the body is always generating an excess of heat, comfort is dependent on the effortless loss of that heat as it is produced.





Radiant heating and cooling permit a better control of the heat balance between the body and its surroundings. In winter, a radiant ceiling supplies direct counter-radiation to reduce body heat loss. In summer, it absorbs radiated body heat at a comfortable rate. Ordinary systems must accomplish this through the passage of large amounts of heated or cooled air around the body.

HOW DOES A RADIANT CEILING HEAT AND COOL?

An Inland/Burgess-Manning Radiant Ceiling consists of perforated aluminum panels, fastened directly to pipes which form water circulating coils. The panels are heated or cooled quickly by the pipes and serve as a room-wide heat exchanger, either absorbing room heat or radiating heat into the space.

Standard modulating controls send heated or cooled water into the coils upon the demand of room or zone temperature controls. The panels respond almost instantaneously to water temperature changes and the room receives the desired heating or cooling action.