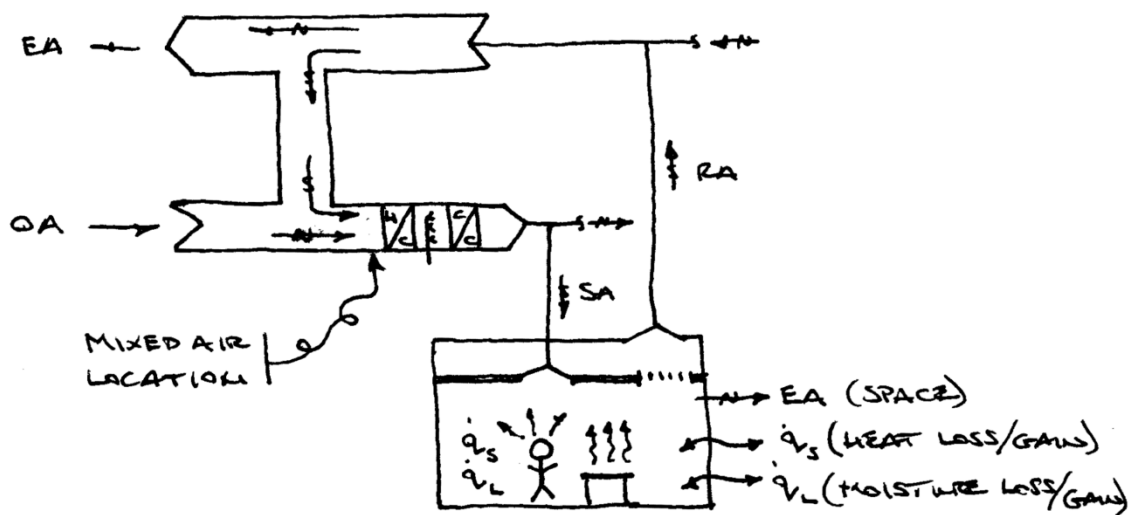


## HVAC PROCEDURE

- ①  $\dot{Q}_{SA} = (\text{ROOM VOLUME})(ACH)/3.6$ , L/S (PROPOSED).
- ②  $\dot{Q}_{OA} = (R_p \times \# \text{ PEOPLE}) + (R_A \times \text{FLOOR AREA})$ , L/S (REQUIRED)
- ③ DETERMINE OTHER EA'S FROM SPACE, ETC.
- ④ DETERMINE SPACE  $\dot{q}_s$  &  $\dot{q}_L$ 'S AND  $\sum \dot{q}_s$  &  $\sum \dot{q}_L$ 'S



- ⑤ SET RA CONDITION (ROOM AIR = RETURN AIR)
- ⑥ PSYCHROMETRICS
  - a)  $\dot{m}_{SA} = \dot{Q}_{SA} / \nu_{RA}$       NOTE:  $\dot{m}_{RA} = \dot{m}_{SA} - \dot{m}_{\text{SPACE EA}}$
  - $\dot{m}_{OA} = \dot{Q}_{OA} / \nu_{RA}$
  - b) DETERMINE 'MIXED AIR' CONDITION
  - c) DETERMINE 'SUPPLY AIR' CONDITION
  - d) DETERMINE THE CAPACITY OF THE
    - i) HEATING COIL, KW
    - ii) HUMIDIFIER, gm H<sub>2</sub>O/SECOND & L/S
    - iii) COOLING COIL, KW & AC TONS
- ⑦ SELECT AIR CONDITIONING COMPONENTS FROM A CATALOG.