

CHAS. ROBERTS AIR CONDITIONING, INC.
9828 N. 19th AVENUE PHOENIX, ARIZONA 85021
943-7291

BUILDER: RICHMOND PLAN: 3570 DATE: 02-25-97

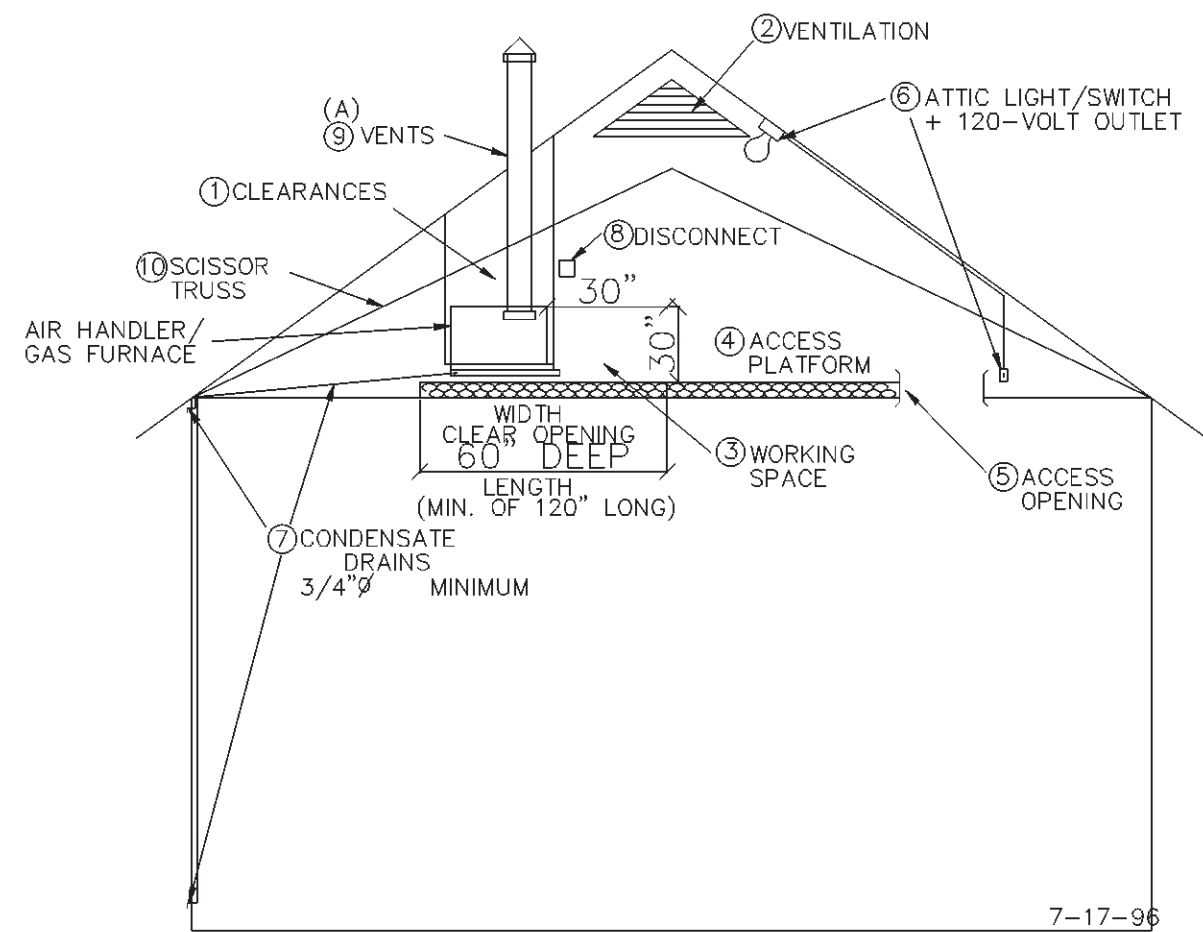
| ROOM | HEAT GAIN BTU/H | HEAT LOSS BTU/H |
|----------|-----------------|-----------------|
| LIVING | 4633 | 4264 |
| DINING | 3170 | 2917 |
| FAMILY | 3646 | 2251 |
| KITCHEN | 7194 | 6621 |
| BEDROOM | | |
| 1 | 4365 | 4017 |
| 2 | 2609 | 2401 |
| 3 | 2414 | 2222 |
| 4 | 2609 | 2401 |
| 5 | 0 | 0 |
| BATHROOM | | |
| 1 | 2463 | 2267 |
| 2 | 1390 | 1279 |
| 3 | 536 | 493 |
| 4 | 0 | 0 |
| Nook | 1268 | 1167 |
| Utility | 1048 | 965 |
| | 0 | 0 |
| SENSIBLE | 37345 | |
| LATENT | 1840 | |
| TOTALS | 39185 | 33265 |

EQUIPMENT SELECTION

SPLIT HEAT PUMP

UNIT A - TRANE 5 TON SPLIT SYSTEM HEAT PUMP MODEL TWR060C/TWE060C
57500 BTU/H COOLING 55500 BTU/H HEATING
RATED @ ARI CONDITIONS FLA. 26.9/5.9
DIM (WXHXD) 38-7/8"X37X34-3/4" (COND) 23-1/2"X57-9/10"X21" (AIR HANDLER)
GAS/ELECTRIC

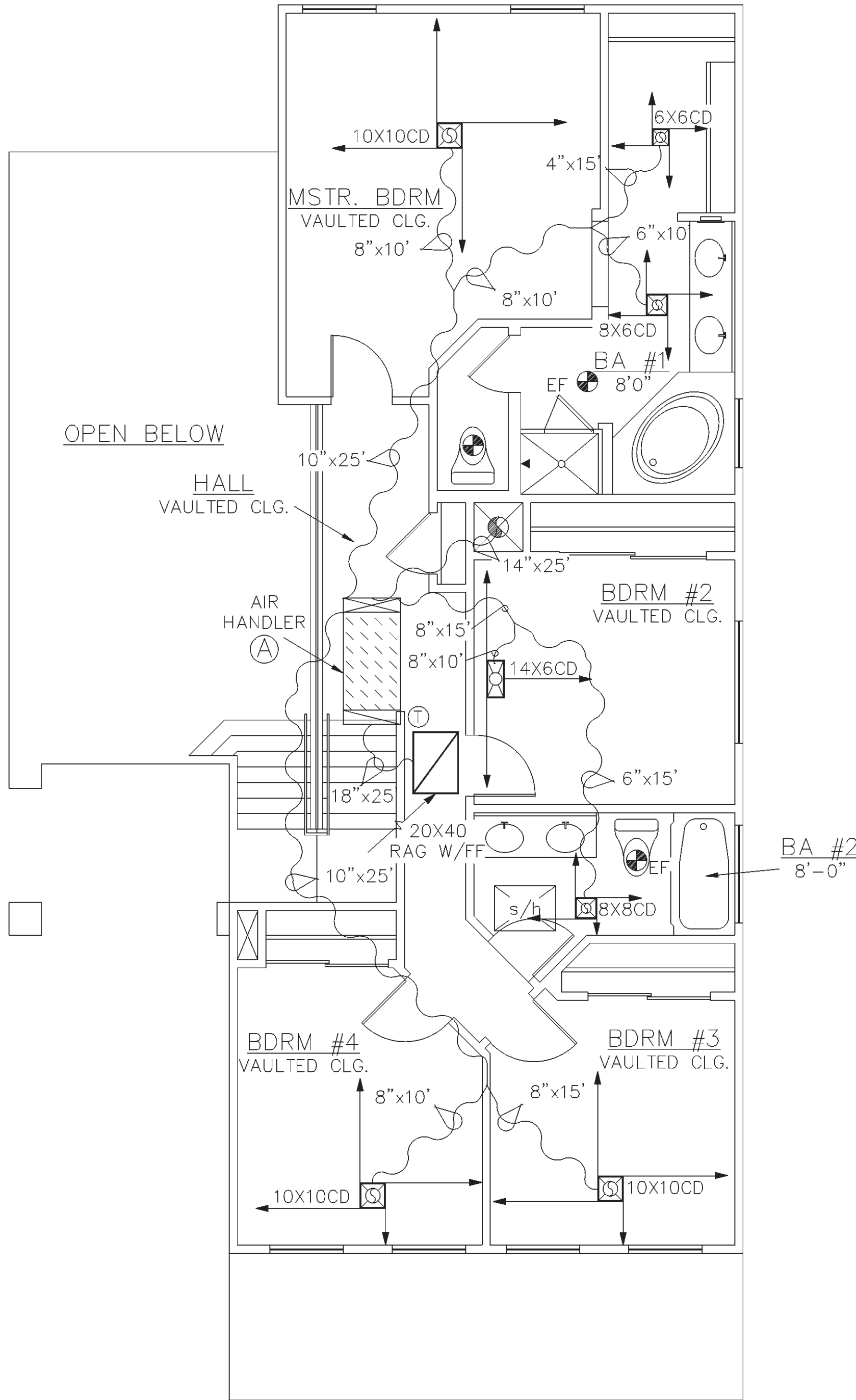
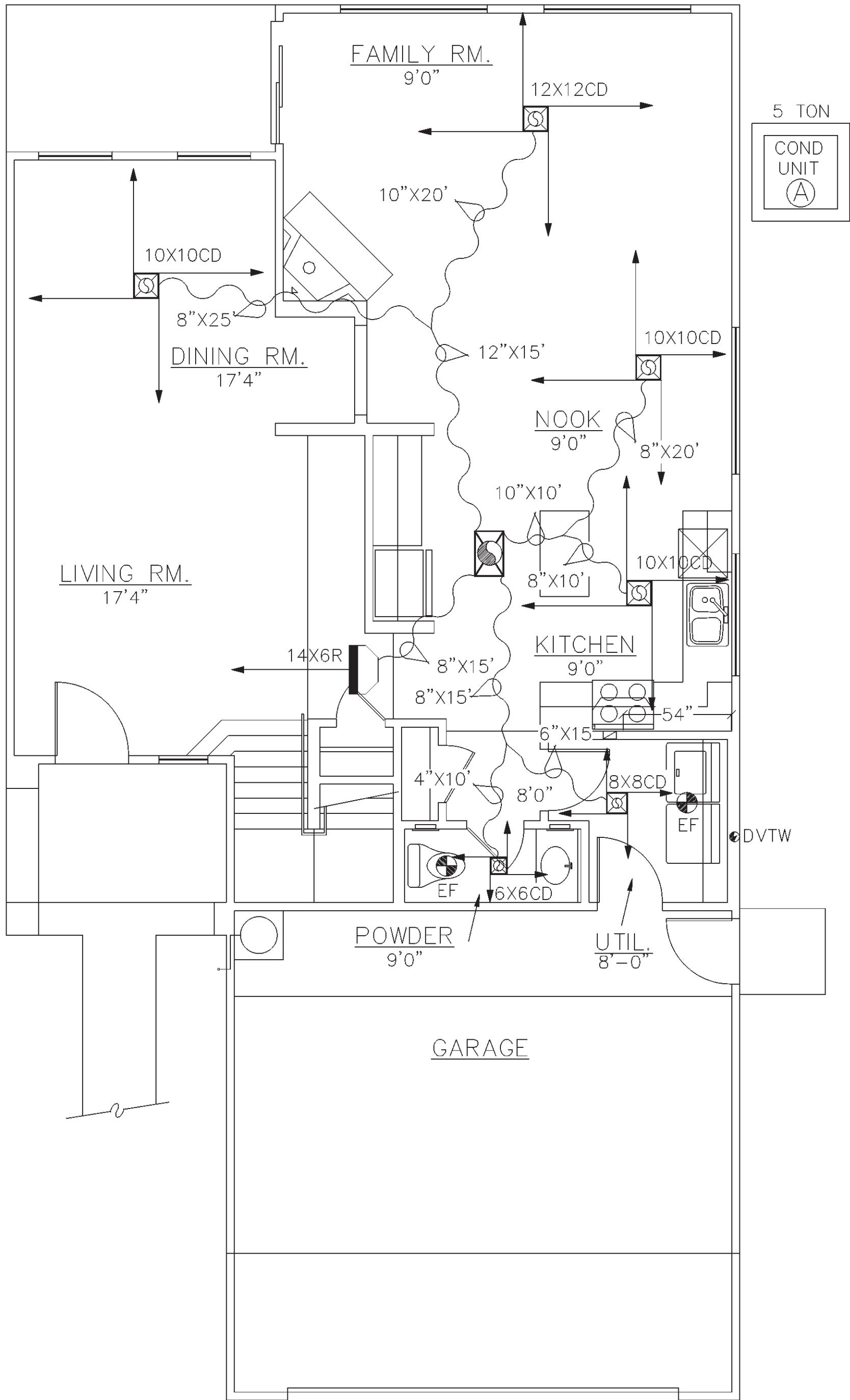
UNIT A - TRANE 5 TON GAS/ELECTRIC SPLIT AIR CONDITIONING SYSTEM
MODEL TTR060C(OUTDOOR)/TXC061C(COIL)/TUD100c960h(GAS FURNACE)
56500 BTU/H COOLING 100000 BTU/H HEATING
RATED @ ARI CONDITIONS FLA. 31.0/17.5



REQUIREMENTS FOR ATTIC AIR HANDLER OR GAS FURNACE

- CLEARANCES FROM COMBUSTABLE MATERIALS FOR GAS FIRED FURNACES MUST BE AS SPECIFIED IN THE MANUFACTURER'S INSTALLATION INSTRUCTIONS AND APPLICABLE LOCAL BUILDING CODES. (A)
- VENTILATION - THE NET Free VENTILATION AREA SHALL NOT BE LESS THAN 1/150 of the area OF THE SPACE VENTILATED.
EXCEPTIONS: THE AREA MAY BE 1/300 OF THE AREA OF THE SPACE VENTILATED PROVIDED 50 PERCENT OF THE REQUIRED VENTILATING AREA IS PROVIDED BY VENTILATORS LOCATED IN THE UPPER PORTION OF THE SPACE VENTILATED AT LEAST 3 FEET ABOVE EAVE OR CORNICE VENTS WITH THE BALANCE OF THE REQUIRED VENTILATION PROVIDED BY EAVE OR CORNICE VENTS.
* REQUIRED ATTIC VENTILATION EXCEEDS REQUIREMENTS FOR FURNACE COMBUSTION AIR. (A)
- WORKING SPACE - A WORKING PLATFORM must NOT be LESS THAN 30 inches in depth FOR THE ENTIRE SERVICE SIDE OF THE FURNACE WITH A minimum height of 30 inches head clearance.
- access platform - the access platform must be a minimum of 24 inches wide continuous floor not more than 20 feet in length unless the entire AIR HANDLER/furnace can be serviced from the attic access opening.
* make provisions for proper insulation to be installed under the platforms when required.
- access opening - attic openings and passageways to the AIR HANDLER/furnace must be 30 INCHES X 30 INCHES.
expection: the access opening into the space may be 22 inches by 30 inches provided the largest piece of equipment can be removed through this opening.
- attic light - a permanent 120-volt receptical outlet and lighting fixture controlled by a switch located at the required passage way opening shall be provided at or near the AIR HANDLER/furnace.
- condensate drains - a secondary drain pan must be installed under the coil section to prevent damage to the ceiling below. the secondary drain must be installed with a minimum grade of 1/8 inch per 12 inches of horizontal run and must exit to the outside where it can be readily visible.
- disconnect - a positive means of electrical disconnect must be located at or near the AIR HANDLER/furnace.
- vents- type b vent, size per furnace manufactures specifications.
vents must terminate in accordance to u.m.c. requirements provided they are at least 8 feet from any vertical wall of 45 DEGREES or more and terminate not less than 2 feet higher than the highest point they pass through. (A)
- if furnace is located below scissor truss the recommend insulating procedure is along ceiling LINE below the furnace not along scissor above to provide proper combustion AIR with out COMPROMISING the integrity of the thermal envelope by penetrating it with combustion ducts. (A)
the specifications above meet the minimum requirements established in the 1988, 1991, 1994 u.b.c and u.m.c. manuals.
(A) - APPLIES TO GAS FURNACE ONLY.

11-4-96



WINDAMERE HOMES
5855 E. MCDOWELL RD.
MESA, AZ 85215

MECHANICAL PLAN

REL DATE: 5-24-99

| Rev. | DATE: |
|------|-------|
| 1 | |
| 2 | |
| 3 | |
| 4 | |
| 5 | |
| 6 | |

PLAN #

3008

SHEET No.

M1

11 OF 14