

METAL SUSPENSION SYSTEMS FOR LAY IN PANEL CEILING

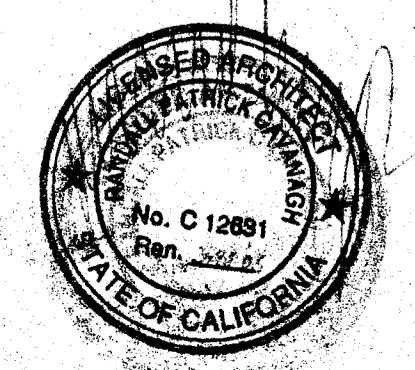
- 12 GA. (MIN) HANGER WIRES MAY BE USED FOR UP TO AND INCLUDING 4'-0" x 4'-0" GRID SPACING, ALONG MAIN RUNNER. SPLICES WILL NOT BE PERMITTED IN ANY HANGER WIRES UNLESS SPECIFICALLY APPROVED BY DSA.
- PROVIDE 12 GA HANGER WIRES WITHIN 8" OF THE ENDS OF ALL MAIN AND CROSS RUNNERS OR AT 1/4 OF THE LENGTH OF THE END TEE, WHICHEVER IS LESS AT THE PERIMETER OF THE CEILING AREA.
- PROVIDE TRAPEZE OR OTHER SUPPLEMENTARY SUPPORT MEMBERS AT OBSTRUCTIONS TO MAINTAIN HANGER SPACING. PROVIDE ADDITIONAL HANGERS, STRUTS OR BRACES AS REQUIRED AT ALL CEILING BREAKS, SOFFITS OR DISCONTINUOUS AREA. HANGER WIRES THAT ARE MORE THAN 1 IN 6 OUT OF PLUMB ARE TO HAVE COUNTERBRACED WIRES.
- CEILING GRID MEMBERS MAY BE ATTACHED TO NOT MORE THAN 2 ADJACENT WALLS. CEILING GRID MEMBERS SHOULD BE AT LEAST 1/2 INCH FREE OF OTHER WALLS. IF WALLS RUN DIAGONALLY TO CEILING GRID SYSTEM RUNNERS, ONE END OF MAIN AND CROSS RUNNERS SHOULD BE FREE AND A MINIMUM OF 1/2 INCH CLEAR OF WALL.
- AT THE PERIMETER OF THE CEILING AREA WHERE MAIN OR CROSS RUNNERS ARE NOT CONNECTED TO THE ADJACENT WALL, PROVIDE INTERCONNECTION BETWEEN THE RUNNERS AT THE FREE END TO PREVENT LATERAL SPREADING. A METAL STRUT OR A 16 GA WIRE WITH A POSITIVE MECHANICAL CONNECTION TO THE RUNNERS MAY BE USED. WHERE THE PERPENDICULAR DISTANCE FROM THE WALL TO THE FIRST PARALLEL RUNNERS IS 12" OR LESS, THIS INTERLOCK IS NOT REQUIRED.
- PROVIDE SETS OF 4-#12 GA. SPLOYED BRACING WIRES ORIENTED 90 DEGREES FROM EACH OTHER AT THE FOLLOWING SPACING:
  - (A) FOR SCHOOL BUILDINGS, PLACE SETS OF SPLOY WIRES AT A SPACING NOT MORE THAN 12 FEET BY 12 FEET ON CENTER.
  - (B) PROVIDE SPLOY WIRES AT LOCATIONS NOT MORE THAN 1/2 THE ABOVE SPACING FROM EACH PERIMETER WALL OR AT THE EDGE OF VERTICAL CEILING OFFSETS
- FASTEN HANGER WIRES WITH NOT LESS THAN 3 TIGHT TURNS. FASTEN SPLAY WIRES WITH 4 TIGHT TURNS. MAKE ALL TIGHT TURNS WITHIN A DISTANCE OF 1 1/2 INCHES. HANGER OR BRACING WIRE ANCHORS TO THE STRUCTURE SHOULD BE INSTALLED IN SUCH A MANNER THAT THE DIRECTION OF THE WIRE ALIGNS AS CLOSELY AS POSSIBLE WITH THE DIRECTION OF THE FORCES ACTING ON THE WIRE.
- SEPARATE ALL CEILING HANGING AND BRACING WIRES AT LEAST 6 INCHES FROM ALL UNBRACED DUCTS, PIPES, CONDUIT ETC., IT IS ACCEPTABLE TO ATTACH LIGHT-WEIGHT ITEMS, SUCH AS SINGLE ELECTRICAL CONDUIT NOT EXCEEDING 3/4" NOMINAL DIAMETER, TO HANGER WIRES USING CONNECTORS ACCEPTABLE TO DSA.
- ATTACH ALL LIGHT FIXTURES AND AIR TERMINALS TO THE CEILING GRID RUNNERS TO RESIST A HORIZONTAL FORCE EQUAL TO THE WEIGHT OF THE FIXTURES.
- FLUSH OR RECESSED LIGHT FIXTURES AND AIR TERMINALS OR SERVICES WEIGHING LESS THAN 56 POUNDS MAY BE SUPPORTED DIRECTLY ON THE RUNNERS OF A HEAVY DUTY GRID SYSTEM BUT, IN ADDITION, THEY MUST HAVE A MINIMUM OF 2-#12 GA. SLACK SAFETY WIRES ATTACHED AT DIAGONAL CORNERS AND ANCHORED TO THE STRUCTURE ABOVE.
- CLASSIFICATION OF CEILING GRID: CLASSIFICATION OF CEILING GRID IS "HEAVY DUTY" PER ASTM C635  
 MANUFACTURER'S CATALOG NUMBER - MAIN RUNNER HEAVY DUTY MAIN TEE OR EQUAL PER TABLE A.  
 MANUFACTURER'S CATALOG NUMBER - CROSS RUNNER PER TABLE A.  
 MANUFACTURER'S CATALOG NUMBER OF DETAIL FOR RUNNER SPLICE N/A.  
 ACOUSTICAL PANELS SHALL BE 5/8" MINIMUM THICK, MINERAL FIBERBOARD OR VINYL-FACED FIBERGLASS LAY-IN PANELS SQUARE EDGE ASTM FLAME SPREAD CLASS 1, 24" X 48" MODULAR SIZE, LIGHT REFLECTION 75% MINIMUM, NOISE REDUCTION COEFFICIENT OF 0.65 MINIMUM. MAXIMUM SMOKE DENSITY NOT TO EXCEED 450.

TABLE A HEAVY DUTY GRID COMPONENTS

MANUFACTURER	MAIN TEE	H.D. 4" CROSS TEE	H.D. 2" CROSS TEE
DOWN/USG	DX-26	DX-424	DX-216
ARMSTRONG	7301	7341	7323
CHICAGO MET.	200-01	1204-01	1226-01

NOTE: ALL GRID COMPONENTS SHALL BE BY SAME MANUFACTURER

24 X 40 RELOCATABLE CLASSROOMS



CUSTOMER: BAKERSFIELD CITY SCHOOL DISTRICT

DATE: 11/29/04  
 SCALE: NONE  
 DRAWN BY: RS  
 CHECKED BY:  
 SERIAL NO.

REVISIONS

NO	DATE	DESCRIPTION	NO	DATE	DESCRIPTION

PROJECT No. \_\_\_\_\_  
 SHEET No. 3

CEILING GRID, DETAILS AND NOTES

IDENTIFICATION STAMP  
 DIV. OF THE STATE ARCHITECT  
 OFFICE OF REGULATION SERVICES  
 APPROVED: 108679  
 DATE: JUL 26 2005  
 BASED PC# 02-104915