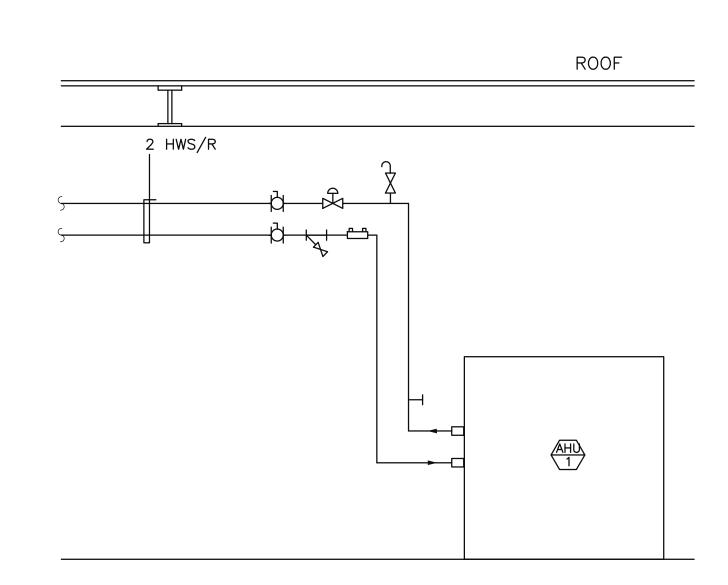


ROUND DUCT HANGER 3/8" DIA. ROD, OR 1" X 18Ga.  $\sim$  1/2" DIA. ROD. — 1" X 18Ga. HANGER HANGER STRAP, (TYP.) — (TYPICAL) STRAP, (TYP.) UNISTRUT OR 2" X 2" X 1/8 ANGLE ┌ 1" X 18Ga. OR 1 5/8" —— STRAP OVER UNISTRUT DUCT (TYP.) TOP & BOTTOM SCREWS (TYP.) ÚÞØRÁNSÖQ Ø ANÚÁHI fl ANGLE (TYP.) OR USE 1 5/8 MAX AND OVER UNISTRUT RECTANGULAR DUCT HANGER

### NOTES:

- 1. REFER TO SPECIFICATIONS FOR HANGER SPACINGS.
- 2. ATTACHMENTS TO OVERHEAD STRUCTURE SHALL BE MADE IN ACCORDANCE WITH STRUCTURAL ENGINEERS REQUIREMENTS AND WEIGHT LIMITATIONS. ALL ATTACHMENT METHODS TO REQUIREMENTS AND WEIGHT LIMITATIONS. ALL ATTACHMENT
- STRUCTURE SHALL BE SUBMITTED TO STRUCTURAL ENGINEER FOR REVIEW. 3. PROVIDE SWAY & SEISMIC BRACING PER SMACNA SEISMIC GUIDELINES.
- 4. SEE DETAILS 11 AND 12 ON SHEET M-512 FOR VERICAL SUPPORT CONNECTION TO OVERHEAD STRUCTURE FOR MECHANICAL PIPING, HVAC DUCT AND MECHANICAL EQUIPMENT

### **DUCT HANGERS DETAILS**



### **AHU-1 PIPING SCHEMATIC**

#### **COMBINATION FIRE/SMOKE DAMPER** INSTALLATION REQUIREMENTS

REQUIREMENTS FOR AN APPROVED INSTALLATION INCLUDE THE FOLLOWING:

OPENINGS IN FLOOR OR WALL SHALL BE 1/8" PER FOOT LARGER THAN DAMPER DIMENSIONS (3/16" LARGER PER FOOT FOR STAINLESS). MINI-MUM CLEARANCE OF 1/4" REQUIRED FOR ANY INSTALLATION.

SLEEVE GAGE SHALL BE AT LEAST EQUAL TO THE GAGE OF THE DUCT AS DEFINED BY THE APPROPRIATE SMACNA DUCT CONSTRUCTION STANDARD, AS DESCRIBED IN NFPA90A, WHEN ONE OR MORE OF THE FOLLOWING DUCT SLEEVE CONNECTIONS ARE USED: PLAIN S SLIP, HEMMED S SLIP, STANDING S SLIP, REINFORCED STANDING S SLIP, INSIDE SLIP JOINT, DOUBLE S SLIP.

IF ANY OTHER DUCT SLEEVE CONNECTIONS ARE USED, THE SLEEVE SHALL BE MINIMUM 16 GAGE FOR DAMPERS UP TO 36"W X 24"H AND 14 GAGE IF WIDTH EXCEEDS 36" OR HEIGHT EXCEEDS 24".

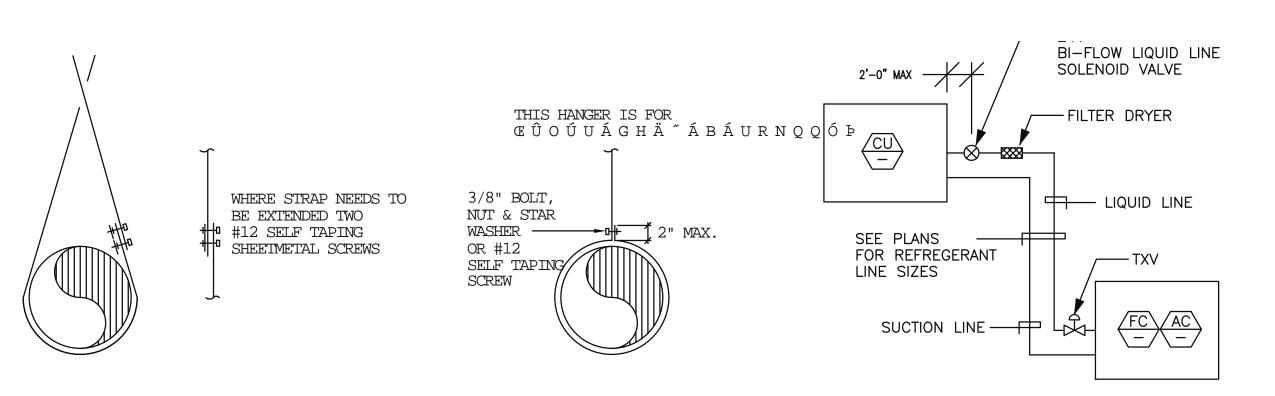
DAMPER TO BE MOUNTED IN SLEEVE BY MANUFACTURER

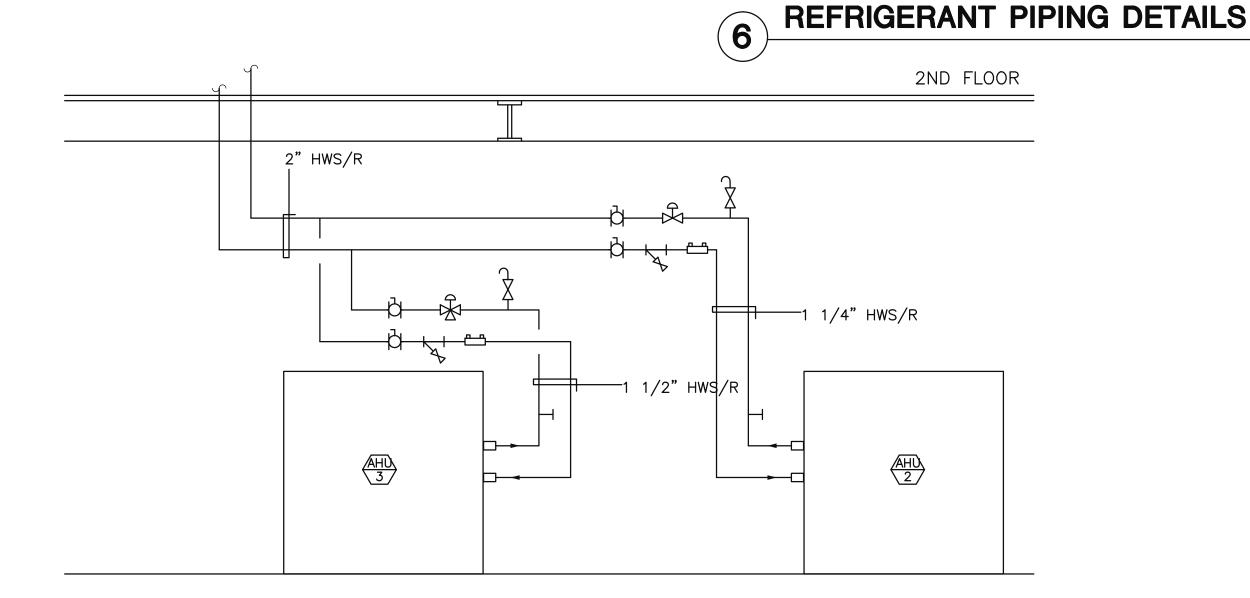
DAMPER AND ACTUATOR SHALL BE PER U.L. 555S CLASSIFIED SIZES.

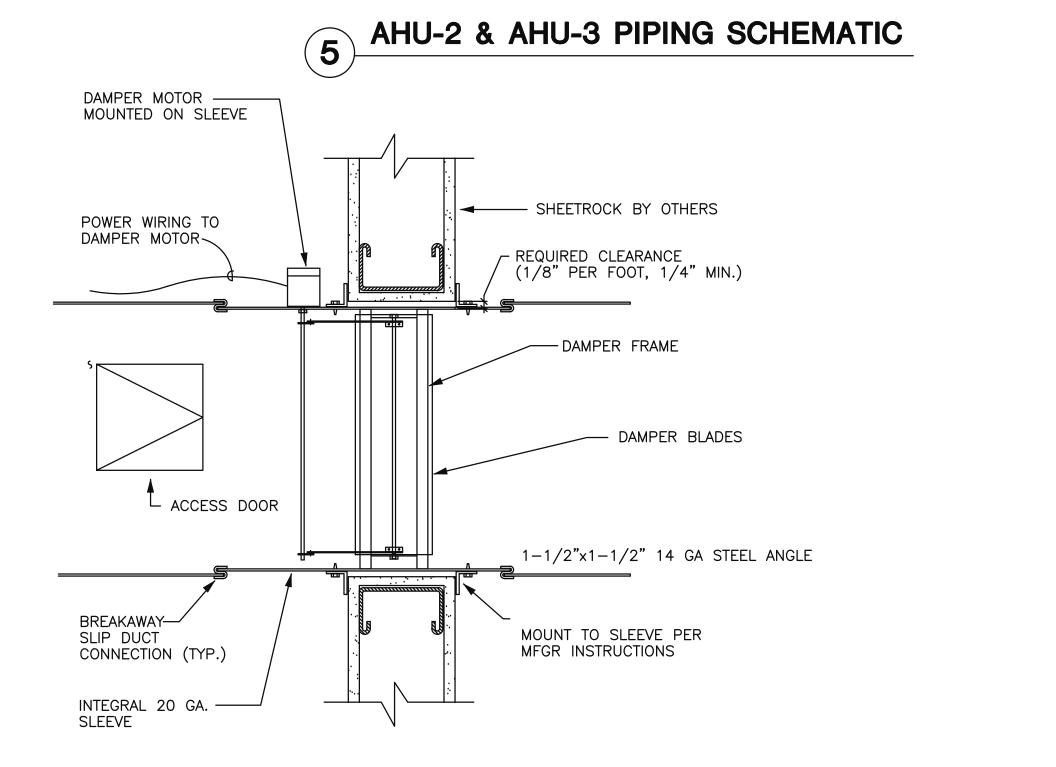
ACTUATOR SHALL BE INSTALLED OUT OF AIRSTREAM AND ACCESSIBLE FOR

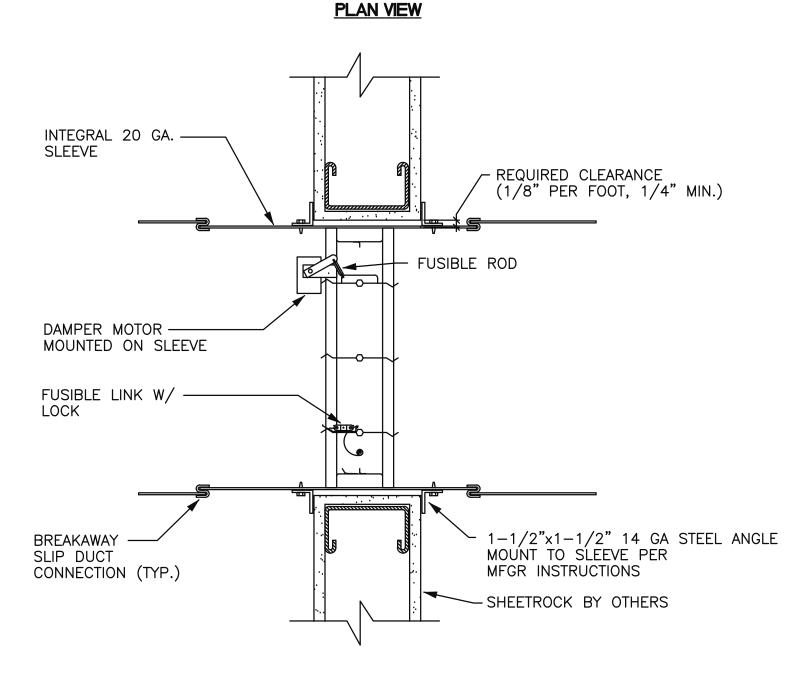
ACCESS DOOR SHALL BE PROVIDED IN DUCT TO ASSURE SERVICING OF LINKAGE. DOOR SHALL BE LABELED, "FIRE DOOR DO NOT OBSTRUCT" PER UBC REQUIREMENTS.

MOUNTING ANGLES SHALL BE MINIMUM OF 1-1/2" X 1-1/2" X 14 GAGE AND OR SCREWED TO SLEEVE AT MAXIMUM SPACING OF 12" AND WITH MINIMUM OF TWO CONNECTIONS IN EACH SIDE, TOP AND BOTTOM. MOUNTING ANGLES SHALL OVERLAP WALL A MINIMUMOF ONE INCH ON ALL FOUR SIDES.



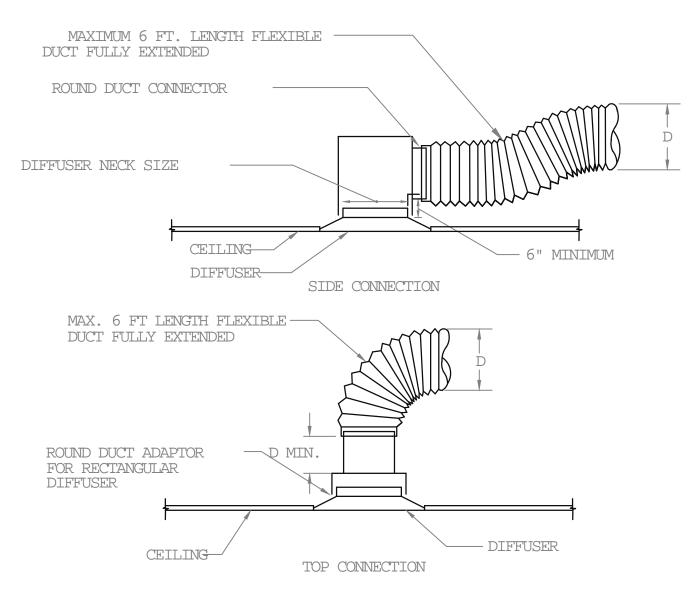






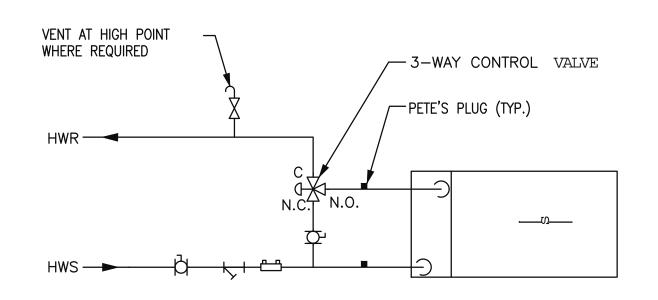
SECTION VIEW

# COMBINATION FIRE/ SMOKE DAMPER DETAIL

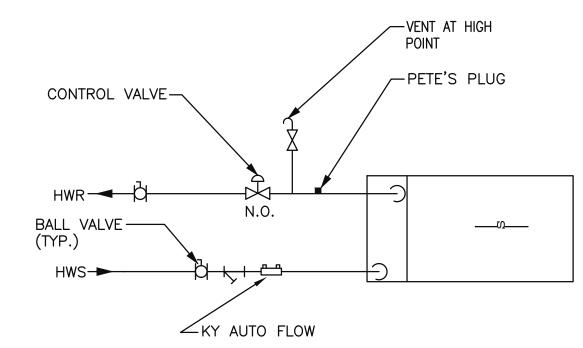


IF THERE IS INSUFFICIENT HEADROOM FOR TOP CONNECTION AS DETAILED, USE SIDE CONNECTION.

# **CEILING DIFFUSER INSTALLATION**



REHEAT COIL PIPING (3-WAY VALVE) SEE VAV BOX SCHEDULES FOR LOCATIONS



REHEAT COIL PIPING (2-WAY VALVE)

SEE VAV BOX SCHEDULES FOR LOCATIONS

PIPING LEGEND BALL VALVE 中 BUTTERFLY VALVE DRAIN VALVE MANUAL AIR VENT. GRISWOLD FLOW CONTROL VALVE TWO-WAY CONTROL VALVE PNEUMATIC BYPASS VALVE TRIPLE DUTY VALVE M CHECK VALVE ✓ GAUGE COCK BALANCING VALVE ☑ GAS COCK SAS PRESSURE REGULATOR GAS SOLENOID VALVE W/HI-LO FIRE

RELIEF VALVE

CIRCUIT SETTER

W/ STRAINER

☐ GRISWOLD FLOW CONTROL VALVE

PETE'S PLUG THERMOMETER W/WELL PADDLE TYPE FLOW SWITCH FS DIFFERENTIAL PRESSURE FLOW SWITCH DP DIFFERENTIAL PRESSURE SENSOR PRESSURE GAUGE FLEXIBLE CONNECTOR **▼** MALE HOSE CONNECTOR → PIPING REDUCER X PIPE ANCHOR | | PIPE GUIDE

PIPE EXPANSION LOOP **EXPANSION JOINT** יוי UNION ► FLOW ARROW

MECHANICAL & PIPING DETAILS

**Steinberg Architects** 

CRITCHFIELD MECHANICAL, INC. 4085 CAMPBELL AVENUE TEL (650) 321-7801 FAX (650) 321-1798

P

"These drawings and specifications have been prepared by CMI for their exclusive use in accord with Sec. 6737.4 of the Professional Engineers Act of the State of California.

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ISSUES/REVISIONS 04/28/08 100% SCHEMATIC DESIGN 06/13/08 50 % DESIGN DEVELOPMENT 100% DESIGN DEVELOPMENT 07/28/08 INCREMENT 2 80% REVIEW 10/10/08 DSA INCREMENT 2 11/11/08 STRUCTURE & GFRC PANELS DSA INCREMENT #3 50% REVIEW 11/11/08 DSA INCREMENT #3 90% REVIEW 12/19/08 DSA INCREMENT #3 02/09/09 TENANT IMPROVEMENT AND ROOFING SYSTEM HPCC REVIEW 04/30/09 DSA INCREMENT #3 BACKCHECK 05/12/09

ISSUED FOR CONSTRUCTION

AS BUILTS

10/27/09

12/15/10

THE STATE ARCHITECT APPL # 01-110117 FILE #<u>41-C1</u> AC \_\_\_\_\_ FLS \_\_\_\_ SSS \_\_\_\_\_ DATE\_\_\_\_ IDENTIFICATION STAMP



SKYLINE COLLEGE SAN MATEO COUNTY COMMUNITY COLLEGE CIP2 DESIGN-BUILD

**PROJECT BUILDING 4 INCREMENT 3** 

KEYPLAN

SHEET NO:

