



Project Name: PUBLIC SAFETY FACILITY  
 Project Address: WINTERHAVEN WINTERHAVEN  
 Compliance Scope: New/Complete

Calculation Date/Time: 10/38, Fri, Feb 24, 2017  
 Input File Name: WINTERHAVEN BLDG T-24R.cbxd

### H. CERTIFICATE OF INSTALLATION, CERTIFICATE OF ACCEPTANCE & CERTIFICATE OF VERIFICATION SUMMARY (NRCI/NRCA/NRCV) -

Documentation Author to indicate which Certificates must be submitted for the features to be recognized for compliance (Retain copies and verify forms are completed and signed to post in field for Field Inspector to verify). See Tables G, and H, in MCH and LTI Details Sections for Acceptance Tests and forms by equipment.

Building Component	Compliance Forms (required for submittal)	Confirmed	
		Pass	Fail
Covered Process	<input type="checkbox"/> NRCA-PRC-01-E Refrigerated Warehouse	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/> NRCA-PRC-01-F Compressed Air Systems	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/> NRCA-PRC-02-F Kitchen Exhaust	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/> NRCA-PRC-03-F Garage Exhaust	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/> NRCA-PRC-04-F Refrigerated Warehouse- Evaporator Fan Motor Controls	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/> NRCA-PRC-05-F Refrigerated Warehouse- Evaporative Condenser Controls	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/> NRCA-PRC-06-F Refrigerated Warehouse- Air Cooled Condenser Controls	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/> NRCA-PRC-07-F Refrigerated Warehouse- Variable Speed Compressor	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/> NRCA-PRC-08-F Electrical Resistance Underlab Heating System	<input type="checkbox"/>	<input type="checkbox"/>

**I. ENVELOPE GENERAL INFORMATION (See NRCC-PRF-ENV-DETAILS for more information)**

1.	2.	3.	4.	5.	6.	7.	8.	9.	10.
Total Conditioned Floor Area	7,084 ft²	Total Unconditioned Floor Area	0 ft²	Number of Floors Above Grade	1	Number of Floors Below Grade	0	Compliance Path	Confirmed

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### J. FENESTRATION ASSEMBLY SUMMARY

1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.
Fenestration Assembly Name / Tag or I.D.	Fenestration Type	Certification Method¹	Assembly Method	Area (ft²)	Overall U-Factor	Overall SHGC	Overall VT	Overall Energy Index	Pass	Fail

¹ Fenestration assemblies shall have a certified NRCI Label (CRS) or use the U-Factor (COG) and SHGC (COG) values as per the labeling determined by the manufacturer, and are shown for ease of verification. The U-Factor and SHGC values are calculated per Annexive Appendix 1 table and used in the analysis.

### K. OPAQUE SURFACE ASSEMBLY SUMMARY

1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.
Surface Name	Surface Type	Area (ft²)	Framing Type	Cavity R-Value	Continuities R-Value	U-Factor / F-Factor	F-Factor / C-Factor	Compliance Path	Pass	Fail

### L. ROOFING PRODUCT SUMMARY

1.	2.	3.	4.	5.	6.	7.	8.	9.
Product Type	Product Density (lb/ft³)	Aged Solar Reflectance	Thermal Emittance	SR1	Cool Roof Credit	Roofing Product Description	Pass	Fail

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### M. HVAC SYSTEM SUMMARY (See NRCC-PRF-MCH-DETAILS for more information)

1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.
Equip Name	Equip Type	System Type (Simple or Complex)²	Qty	Total Heating Output (kBtu/h)	Supp Heat Source (Y/N)³	Supp Heat Output (kBtu/h)	Total Cooling Output (kBtu/h)	Efficiency	Acceptance Testing Required? (Y/N)⁴	Pass	Fail

### N. MECHANICAL EQUIPMENT SUMMARY

12.	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.
Equip Name	Equip Type	Qty	Vol (gal)	Rated Capacity (kBtu/h)	Efficiency	Standby Loss	Tank Ext. R Value	Qty	GPM	HP	Vol (Y/N)	Pass

Discrepancy between modeled and designed equipment sizing? (If "Yes", see Table F. "Additional Remarks" for an explanation)

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### G. COMPLIANCE PATH & CERTIFICATE OF COMPLIANCE SUMMARY

The following building components are only eligible for prescriptive compliance, indicate which are relevant to the project.

Yes	NA	Prescriptive Requirement	Compliance Forms	Yes	NA	Mandatory Requirement	Compliance Forms
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Lighting (Indoor Unconditioned) §140.6	NRCC-LTI-01 / 02 / 03 / 04 / 05-E	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Commissioning §120.8	NRCC-CXR-01 / 02 / 03 / 05-E NRCC-CXR-01 / 02 / 04 / 05-E

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Building Component	Compliance Forms (required for submittal)	Confirmed	
		Pass	Fail
Envelope	<input checked="" type="checkbox"/> NRCA-ENV-01-E - For all buildings	<input type="checkbox"/>	<input type="checkbox"/>
	<input checked="" type="checkbox"/> NRCA-ENV-02-F - NRCI label verification for fenestration	<input type="checkbox"/>	<input type="checkbox"/>
	<input checked="" type="checkbox"/> NRCA-MCH-01-E - For all buildings with Mechanical Systems	<input type="checkbox"/>	<input type="checkbox"/>
	<input checked="" type="checkbox"/> NRCA-MCH-02-A - Outdoor Air	<input type="checkbox"/>	<input type="checkbox"/>
	<input checked="" type="checkbox"/> NRCA-MCH-03-A - Constant Volume Single Zone HVAC	<input type="checkbox"/>	<input type="checkbox"/>

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Building Component	Compliance Forms (required for submittal)	Confirmed	
		Pass	Fail
Plumbing	<input type="checkbox"/> NRCI-PLB-01-E - For all buildings with Plumbing Systems	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/> NRCI-PLB-02-E - Required on central systems in high-rise residential, hotel/motel application.	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/> NRCI-PLB-03-E - Single dwelling unit systems in high-rise residential, hotel/motel application.	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/> NRCI-PLB-04-E - HERS verified central systems in high-rise residential, hotel/motel application.	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/> NRCI-PLB-05-E - HERS verified single dwelling unit systems in high-rise residential, hotel/motel application.	<input type="checkbox"/>	<input type="checkbox"/>

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### A. PROJECT GENERAL INFORMATION

1.	2.	3.	4.	5.	6.	7.	
Project Location (City)	WINTERHAVEN	Standards Version	Compliance2015	CA Zip Code	92101	Compliance Software (version)	EnergyPro 8.6

### B. COMPLIANCE RESULTS FOR PERFORMANCE COMPONENTS (Annual TDV Energy Use, kWh/ft²-yr)

1. Energy Component	2. Standard Design (TDV)	3. Proposed Design (TDV)	4. Compliance Margin (TDV)	5. Percent Better than Standard
Space Heating	26.3	75.5	-49.2	-187.1%
Space Cooling	48.0	54.0	-6.0	-12.5%
Indoor Fans	89.3	22.7	66.6	74.6%
Heat Rejection	-	-	-	-
Pumps & Misc.	-	-	-	-
Domestic Hot Water	4.5	4.5	0.0	0.0%
Indoor Lighting	47.6	47.6	0.0	0.0%
COMPLIANCE TOTAL	215.7	204.3	11.4	5.3%

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### C. PRIORITY PLAN CHECK/ INSPECTION ITEMS (In order of highest to lowest TDV energy savings)

1st	2nd	3rd	4th	5th	6th	7th
Indoor Fans: Check envelope and mechanical	Heat Rejection: Check envelope and mechanical	Pumps & Misc: Check mechanical	Domestic Hot Water: Check mechanical	Indoor Lighting: Check lighting	Space Cooling: Check envelope and mechanical	Space Heating: Check envelope and mechanical

### D. EXCEPTIONAL CONDITIONS

The building does not include service water heating. Verify that service water heating is not required and is not included in the design.

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### G. COMPLIANCE PATH & CERTIFICATE OF COMPLIANCE SUMMARY

Identify which building components use the performance or prescriptive path for compliance. "NA" is not in project. For components that utilize the performance path, indicate the sheet number that includes mandatory notes on plans.

Building Component	Compliance Path	Compliance Forms (required for submittal)	Location of Mandatory Notes on Plans
Envelope	<input checked="" type="checkbox"/> Performance	NRCC-PRF-ENV-DETAILS (section of the NRCC-PRF-01-E)	
	<input type="checkbox"/> Prescriptive	NRCC-ENV-01 / 02 / 03 / 04 / 05 / 06-E	

**M.P.A. ARCHITECTS INC.**

3578 30th Street  
 San Diego, CA 92104  
 V. 619.236.0595  
 F. 619.236.0557  
 www.mpa-architects.com

MEMBER  
 AMERICAN INSTITUTE OF ARCHITECTS

CLIENT  
**COUNTY OF IMPERIAL  
 PLANNING & DEV.  
 SERVICES DEPT**  
 801 MAIN STREET  
 EL CENTRO, CA 92243  
 (760) 482-4236

PROJECT

A PROPOSED PUBLIC SAFETY FACILITY FOR:  
**WINTERHAVEN  
 PUBLIC SAFETY FACILITY**  
 WINTERHAVEN, CA

REVISIONS		
NO.	DESCRIPTION	DATE

**BTA**  
ENGINEERS, INC.

8845 ERMA RD SUITE 204  
 SAN DIEGO, CA 92128  
 PH 858 715-8601 FAX 858 433-7587  
 JOB # 15.74.00

REGISTERED PROFESSIONAL ENGINEER  
 License No. 15285  
 Mechanical  
 STATE OF CALIFORNIA

SHEET TITLE  
**MECHANICAL  
 TITLE-24 FORMS**

DATE: 02/27/17  
 SCALE: NTS  
 DRAWN BY: [Blank]  
 CHECKED BY: [Blank]  
 PROJECT NO: **M1.1**

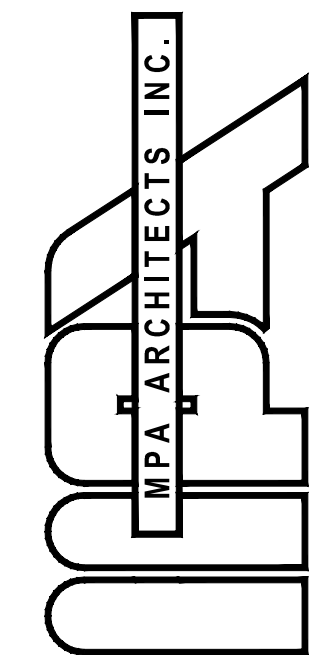
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ENVELOPE MANDATORY MEASURES: NONRESIDENTIAL		ENV-MM
Project Name WINTERHAVEN-PUBLIC SAFETY FAC.	Date 2/24/2017	
<b>DESCRIPTION</b>		
<b>Building Envelope Measures:</b>		
§110.8(a):	Installed insulating material shall have been certified by the manufacturer to comply with the California Quality Standards for insulating material, Title 20 Chapter 4, Article 3.	
§110.8(c):	All Insulating Materials shall be installed in compliance with the flame spread rating and smoke density requirements of Sections 2602 and 707 of Title 24, Part 2.	
§110.8(f):	The opaque portions of framed demising walls in nonresidential buildings shall have insulation with an installed R-value of no less than R-13 between framing members.	
§110.7(a):	All Exterior Joints and openings in the building that are observable sources of air leakage shall be caulked, gasketed, weatherstripped or otherwise sealed.	
§110.6(a):	Manufactured fenestration products and exterior doors shall have air infiltration rates not exceeding 0.3 cfm/ft <sup>2</sup> of window area, 0.3 cfm/ft <sup>2</sup> of door area for residential doors, 0.3 cfm/ft <sup>2</sup> of door area for nonresidential single doors (swinging and sliding), and 1.0 cfm/ft <sup>2</sup> for nonresidential double doors (swinging).	
§110.6(a):	Fenestration U-factor shall be rated in accordance with NFRC 100, or the applicable default U-factor.	
§110.6(a):	Fenestration SHGC shall be rated in accordance with NFRC 200, or NFRC 100 for site-built fenestration, or the applicable default SHGC.	
§110.6(b):	Site Constructed Doors, Windows and Skylights shall be caulked between the unit and the building, and shall be weatherstripped (except for unframed glass doors and fire doors).	
EnergyPro 6, by EnergySoft User Number: 7231 ID: 15.74.00 Page 23 of 23		

Project Name:	PUBLIC SAFETY FACILITY	NRCC-PRF-01-E	Page 19 of 20				
Project Address:	WINTERHAVEN WINTERHAVEN	Calculation Date/Time:	10:38, Fri, Feb 24, 2017				
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<b>B. INDOOR CONDITIONED LIGHTING MANDATORY LIGHTING CONTROLS (Adapted from NRCC-LTI-02-E)</b> § 130.1							
This Section Does Not Apply							
<i>§130.1(a) - Manual area controls; §130.1(b) - Auto Shut-Off; §130.1(c) - Mandatory Daylight; §130.1(d) - Demand Responsive</i>							
<b>C. TAILORED METHOD CONDITIONED LIGHTING POWER ALLOWANCE SUMMARY AND CHECKLIST (Adapted from NRCC-LTI-04-E)</b> § 140.6							
General lighting power (see Table D)							
General lighting power from special function areas (see Table E)							
Additional "use it or lose it" (See Table G)							
Total watts							
<b>D. GENERAL LIGHTING POWER (Adapted from NRCC-LTI-04-E)</b> § 140.6-D							
This Section Does Not Apply							
<b>E. GENERAL LIGHTING FROM SPECIAL FUNCTION AREAS (Adapted from NRCC-LTI-04-E)</b> § 140.6(c) 3H							
Room Number	Primary Function Area	Illuminance Value (LUX)	Room Cavity Ratio (Table G)	Allowed LPD	Floor Area (ft <sup>2</sup> )	Allowed Watts	Confirmed
NA	NA	NA	NA	NA	NA	NA	Pass Fail
<i>Note: Tailored Method for Special Function Areas is not currently implemented</i>							
<b>F. ROOM CAVITY RATIO (Adapted from NRCC-LTI-04-E)</b>							
Rectangular Spaces							
Room Number	Task/Activity Description	Room Length (ft)	Room Width (ft)	Room Cavity Height (ft)	RCR	Confirmed	
NA	NA	NA	NA	NA	NA	Pass Fail	
<b>Non-Rectangular Spaces</b>							
This Section Does Not Apply							
<i>Note: All applicable spaces are listed under the Non-Rectangular Spaces table</i>							
CA Building Energy Efficiency Standards- 2013 Nonresidential Compliance Report Version: NRCC-PRF-01-E-08122016-3995 Report Generated at: 2017-02-24 10:39:40							

Project Name:	PUBLIC SAFETY FACILITY	NRCC-PRF-01-E	Page 20 of 20		
Project Address:	WINTERHAVEN WINTERHAVEN	Calculation Date/Time:	10:38, Fri, Feb 24, 2017		
Compliance Scope:	NewComplete	Input File Name:	WINTERHAVEN BLDG T-24R.cbdx		
<b>G. ADDITIONAL "USE IT OR LOSE IT" (Adapted from NRCC-LTI-04-E)</b>					
1.	2.	3.	4.	Allowed Watts	Confirmed
Wall Display	Combined Floor Display and Task Lighting	Combined Ornamental and Special Effects Lighting	Very Valuable Merchandise	0	Pass Fail
0	0	0	0	0	
<b>5. Wall Display</b>					
This Section Does Not Apply					
<b>6. Floor Display and Task Lighting</b>					
This Section Does Not Apply					
<b>7. Combined Ornamental and Special Effects Lighting</b>					
This Section Does Not Apply					
<b>8. Very Valuable Merchandise</b>					
This Section Does Not Apply					
<b>H. INDOOR &amp; OUTDOOR LIGHTING ACCEPTANCE TESTS &amp; FORMS (Adapted from NRCC-LTI-01-E and NRCC-LTO-01-E)</b> § 130.4					
Declaration of Required Acceptance Certificates (NRCA) -Acceptance Certificates that must be verified in the field. (Retain copies and verify forms are completed and signed to post in field for Field Inspector to verify).					
Test Description		Indoor		Outdoor	Confirmed
		NRCA-LTI-02-A	NRCA-LTI-03-A	NRCA-LTI-04-A	NRCA-LTO-02-A
Equipment Requiring Testing or Verification	# of units	Occ Sensors / Auto Time Switch	Auto Daylight	Demand Responsive	Outdoor Controls
Occupant Sensors	0	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Automatic Time Switch	0	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Automatic Daylighting	0	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Demand Responsive	0	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Outdoor Controls	0	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
CA Building Energy Efficiency Standards- 2013 Nonresidential Compliance Report Version: NRCC-PRF-01-E-08122016-3995 Report Generated at: 2017-02-24 10:39:40					



3578 30th Street  
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WINTERHAVEN, CA

REVISIONS

NO.	DESCRIPTION	DATE

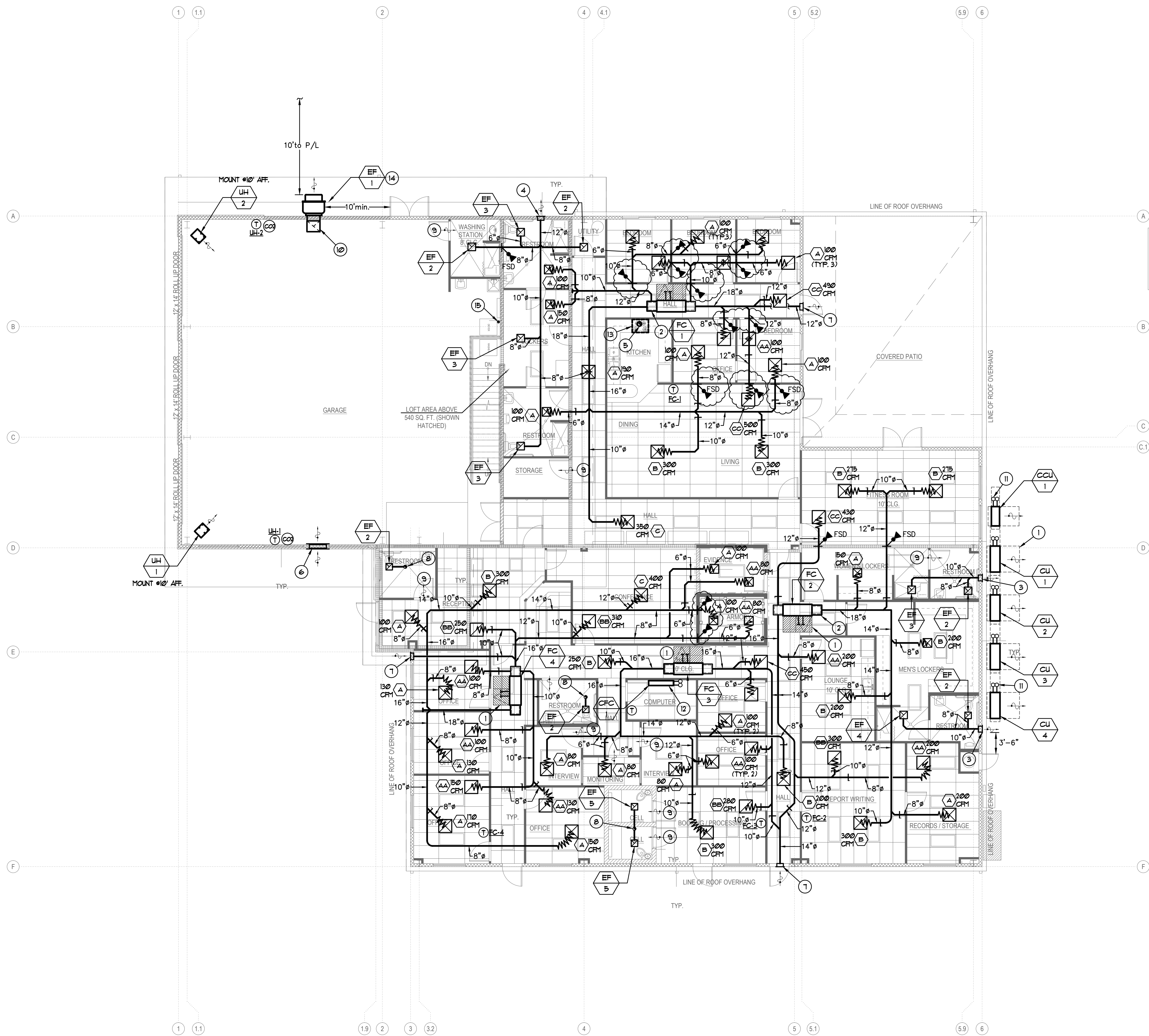
SHEET TITLE  
MECHANICAL  
TITLE-24 FORMS

DATE: 02/27/17 SCALE: NTS  
DRAWN BY: DATE: SHEET NUMBER: M1.3  
CHECKED BY: PROJECT NO:

**BTA**  
ENGINEERS, INC.

9845 ERMA RD SUITE 204  
SAN DIEGO, CA 92131  
PH 858 715-8801 FAX 858 433-7587  
JOB # 15.74.00





MECHANICAL PLAN

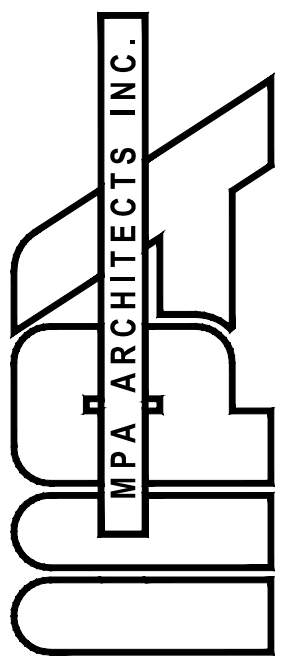
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**KEYNOTES:**

- ① SERVICE CLEARANCE SHALL BE PROVIDED FOR MAINTENANCE.
- ② LINED SUPPLY AND RETURN AIR PLENUM SHALL BE PROVIDED PER MECH. CONTRACTOR.
- ③ 16"x12" EXHAUST WALL LOUVER (MIN. 50% FREE AREA).
- ④ 24"x12" EXHAUST WALL LOUVER (MIN. 50% FREE AREA).
- ⑤ 1" RANGE HOOD EXHAUST AIR DUCT VENT TO ROOF WITH CAP.
- ⑥ 42"x30" INTAKE AIR WALL LOUVER WITH BAROMETRIC DAMPER.
- ⑦ 24"x12" INTAKE AIR WALL LOUVER (MIN. 50% FREE AREA).
- ⑧ 6" EXHAUST AIR VENT TO ROOF WITH WEATHER CAP.
- ⑨ 1" UNDERCUT DOOR FOR INTAKE/RETURN AIR.
- ⑩ 24"x16" EXHAUST AIR DUCT OPENING HIGH AND 24"x16" EXHAUST AIR DUCT DOWN TERMINATE 12" AFF. SEE DETAIL (M3.0).
- ⑪ ROUTE REFRIGERANT LINE SET TO FAN COIL UNITS.
- ⑫ HIGH WALL MOUNTED FAN COIL UNIT. SEE DETAIL (M3.1).
- ⑬ RANGE HOOD WITH BUILT-IN EXHAUST FAN. 30" VENT/hood UNDER CABINET HOOD 300 CFM AT NORMAL SPEED.
- ⑭ GARAGE EXHAUST FAN/DUCT TERMINATE MINIMUM 10 FT ABOVE GRADE, TO PROPERTY LINE AND FROM OPENING BACK INTO THE BUILDING OR 3 FT FROM AN EXTERIOR WALL OR ROOF.
- ⑮ 4" DRYER VENT TO ROOF WITH CAP. TOTAL LENGTH NOT TO EXCEED 14 FT AND 2-90 DEG ELBOW.

**GENERAL NOTES:**

1. ENVIRONMENTAL EXHAUST DUCT TERMINATIONS MAY BE NO CLOSER THAN 3 FEET FROM A PROPERTY LINE OR 3 FEET TO THE WINDOW PER CMC 504.5
2. PRODUCT CONVEYING EXHAUST TERMINATIONS MAY BE NO LESS THAN 10 FEET ABOVE GRADE, TO THE PROPERTY LINE, OR FROM OPENINGS BACK INTO THE BUILDING OR 3 FEET FROM AN EXTERIOR WALL OR ROOF PER CMC 506.9



3578 30th Street  
San Diego, CA 92104  
V. 619.236.0595  
F. 619.236.0557  
www.mpa-architects.com

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EL CENTRO, CA 92243  
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PUBLIC SAFETY FACILITY**  
WINTERHAVEN, CA

REVISIONS

NO.	DESCRIPTION	DATE

SHEET TITLE

MECHANICAL PLAN

DATE: 02/27/17 SCALE: 1/8" = 1'-0"

DRAWN BY: DATE: SHEET NUMBER:

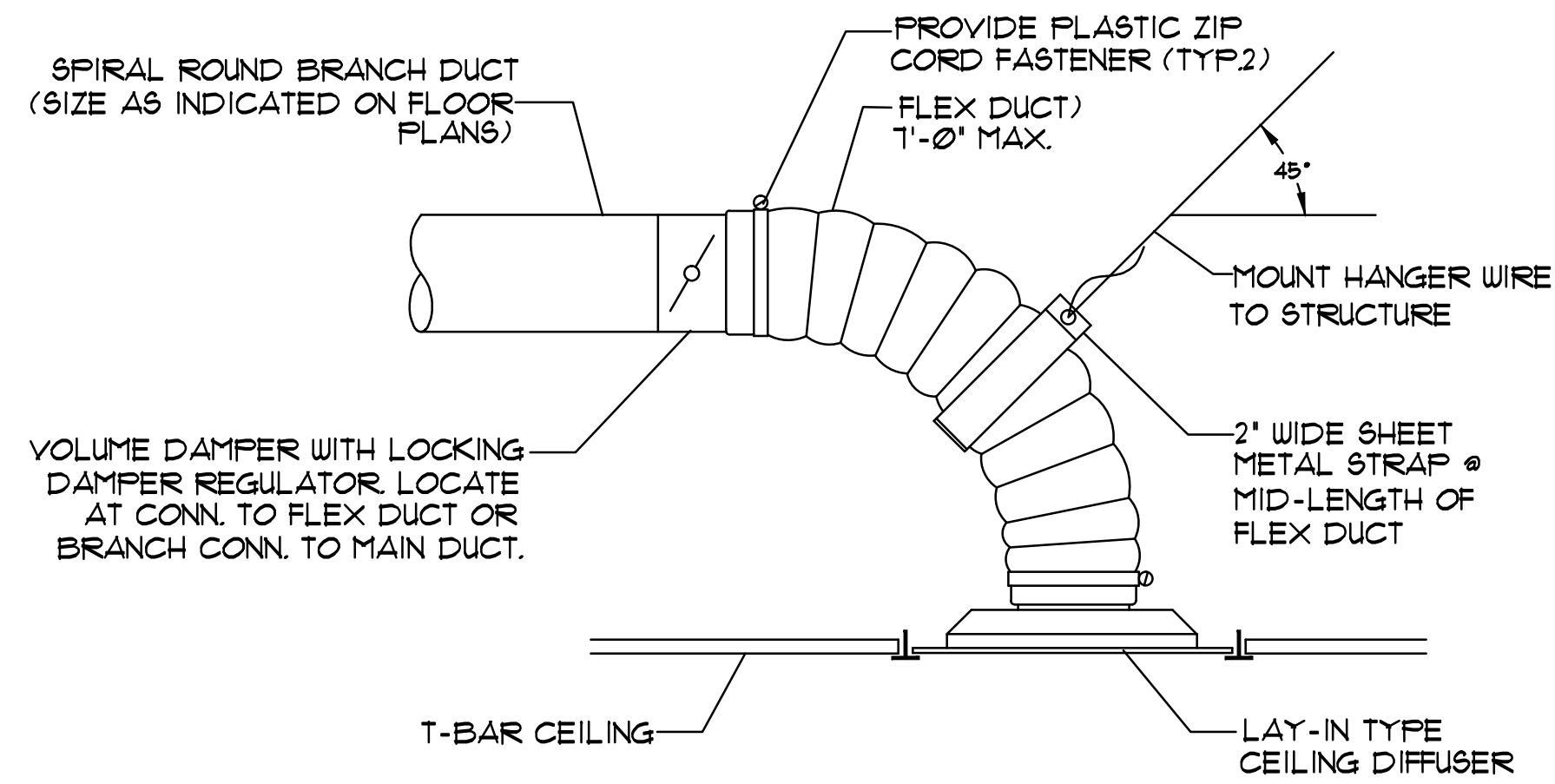
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PROJECT NO: M2.0

**BTA**  
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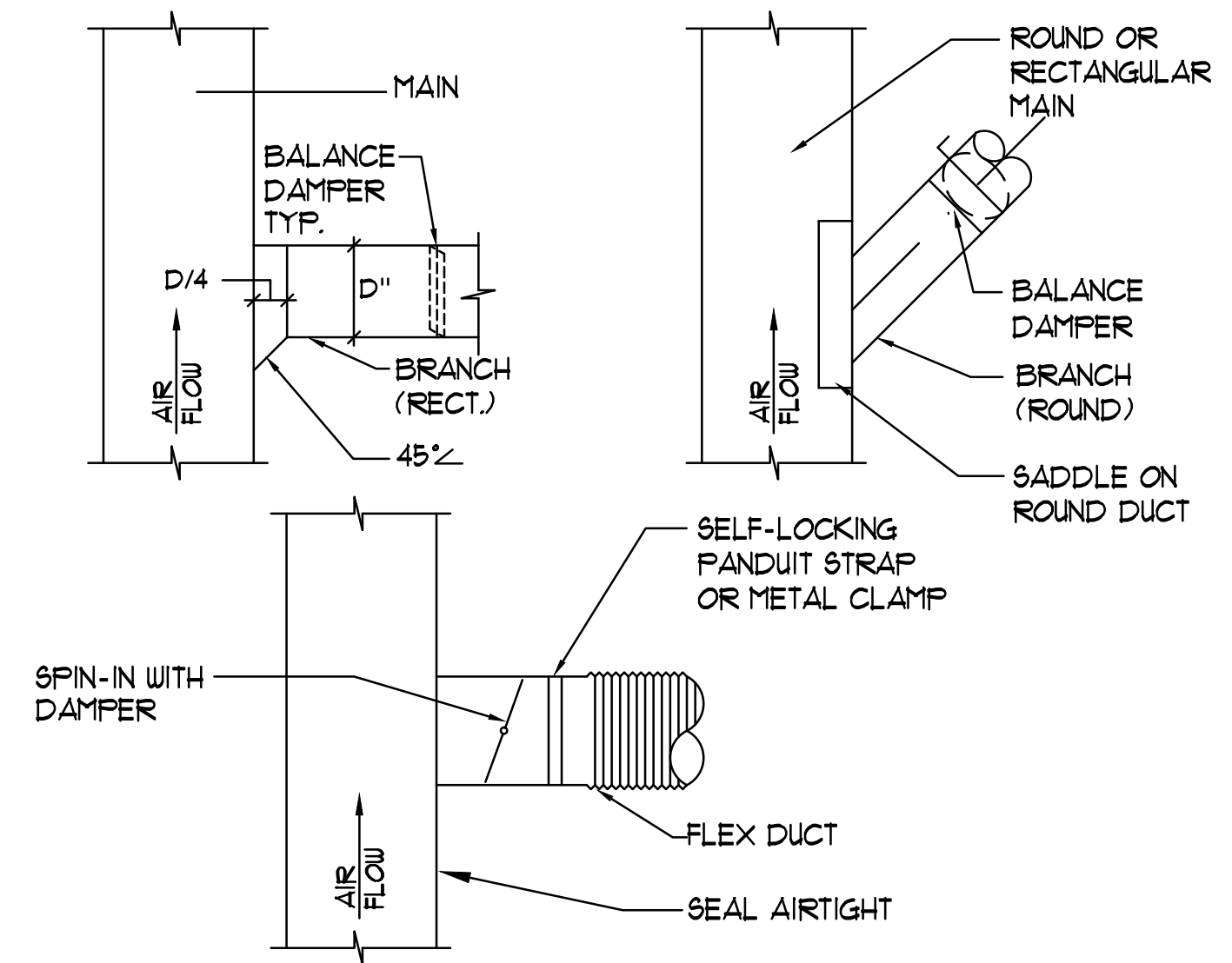
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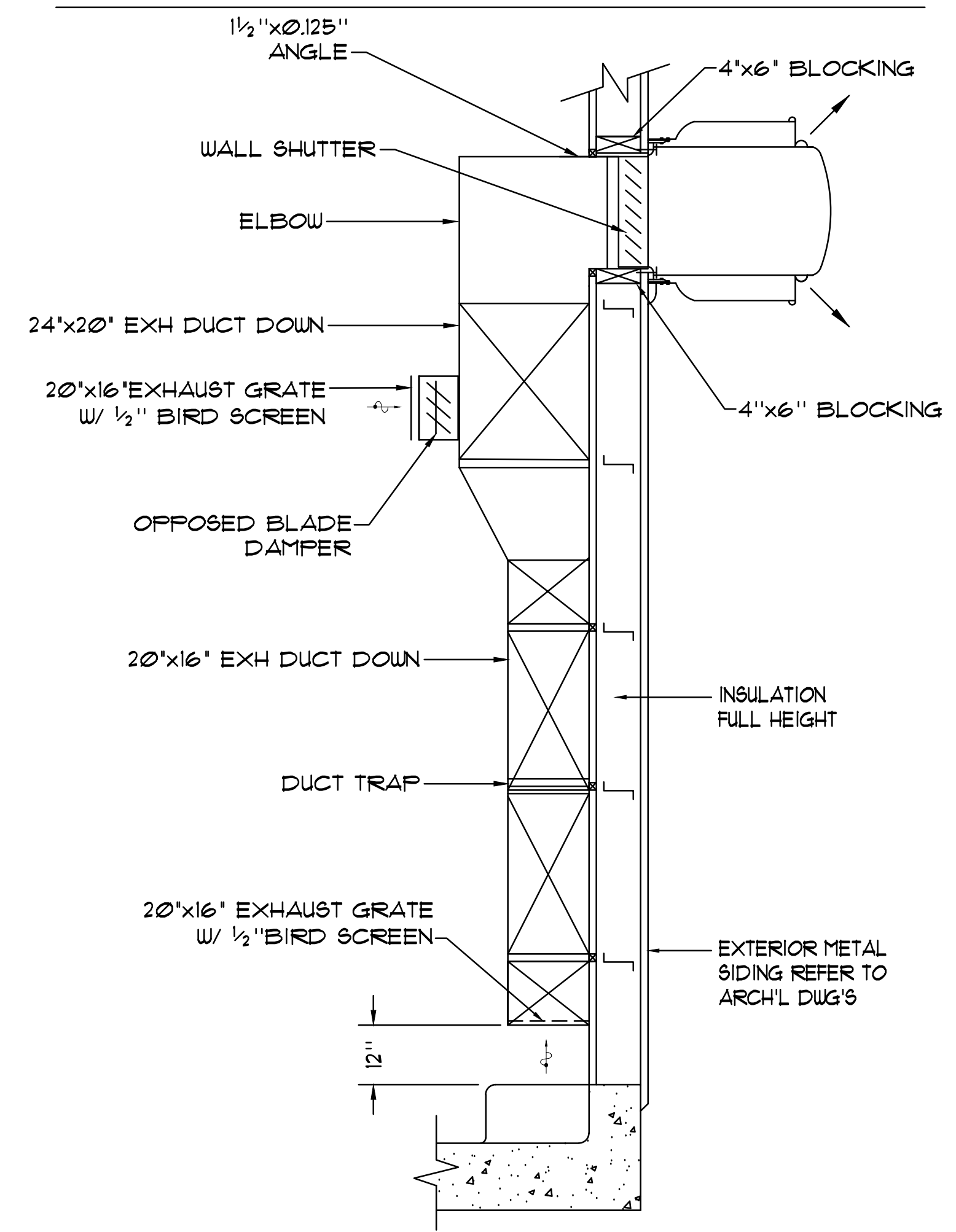


ROUND NECK CEILING DIFFUSER SHOWN. PROVIDE SQUARE TO ROUND TRANSITION (8' MIN. HEIGHT) FOR SQUARE NECK DIFFUSERS.

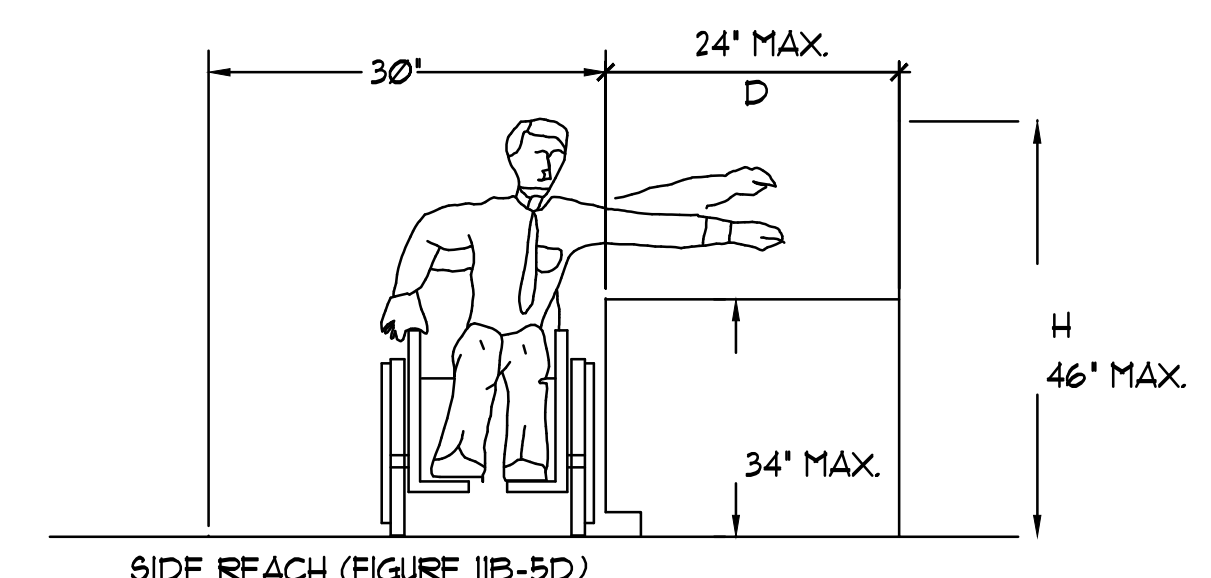
**4 CEILING DIFFUSER MOUNTING DETAIL**  
SCALE: NTS



**2 TYPICAL DUCT TAKE-OFFS**  
NOT TO SCALE



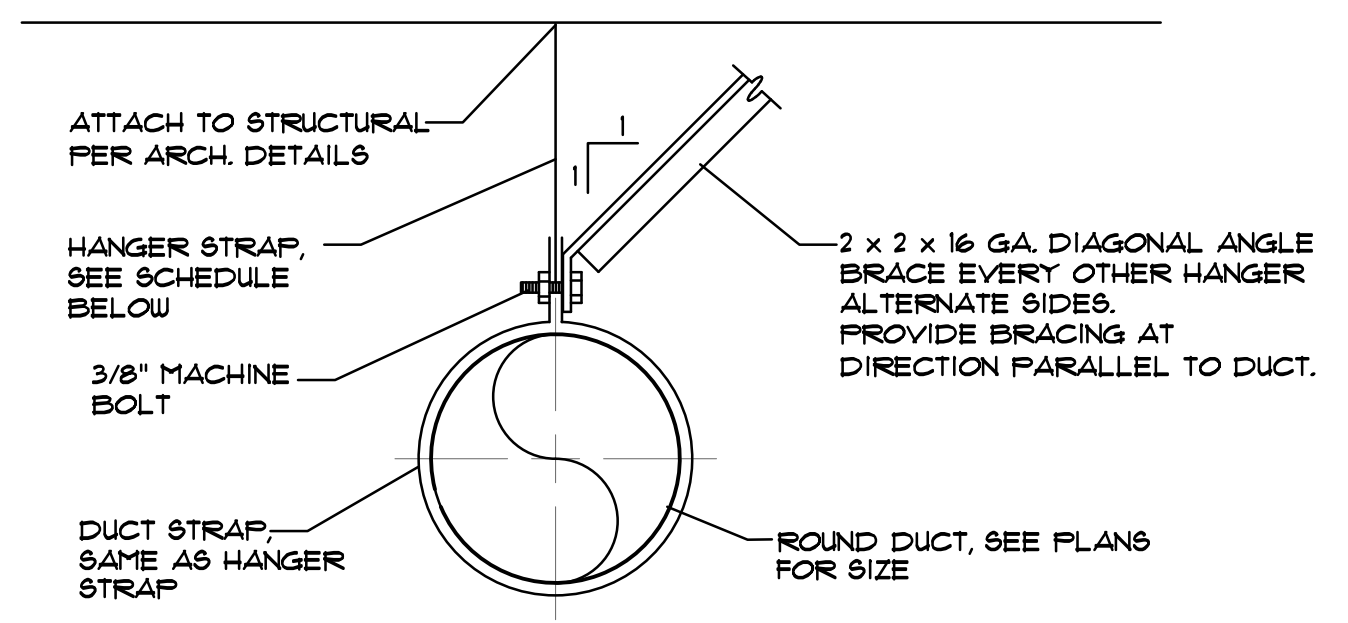
**1 GARAGE EXHAUST FAN DETAIL**  
NO SCALE



SIDE REACH (FIGURE 11B-5D)  
MAXIMUM SIDE REACH OVER OBSTRUCTION  
CORRESPONDING REACH HEIGHTS FOR GIVEN DEPTHS:  
WHEN D = 10' OR LESS, H = 54' MAX.  
WHEN D = 11' H = 53.5' MAX.  
WHEN D = 12' H = 53.0' MAX.  
WHEN D = 13' H = 52.5' MAX.  
WHEN D = 14' H = 51.5' MAX.  
WHEN D = 15' H = 51.0' MAX.  
WHEN D = 16' H = 50.5' MAX.  
WHEN D = 17' H = 50.0' MAX.  
WHEN D = 18' H = 49.5' MAX.  
WHEN D = 19' H = 49.0' MAX.  
WHEN D = 20' H = 48.5' MAX.  
WHEN D = 21' H = 47.5' MAX.  
WHEN D = 22' H = 47.0' MAX.  
WHEN D = 23' H = 46.5' MAX.  
WHEN D = 24' H = 46.0' MAX.

THIS DIAGRAM (SIDE REACH FIGURE 11B-5D) ILLUSTRATES THE SPECIFIC REQUIREMENTS OF THESE REGULATIONS AND IS INTENDED ONLY AS AN AID FOR BUILDING DESIGN AND CONSTRUCTION.

**5 T-STAT MOUNTING DETAIL**  
NOT TO SCALE

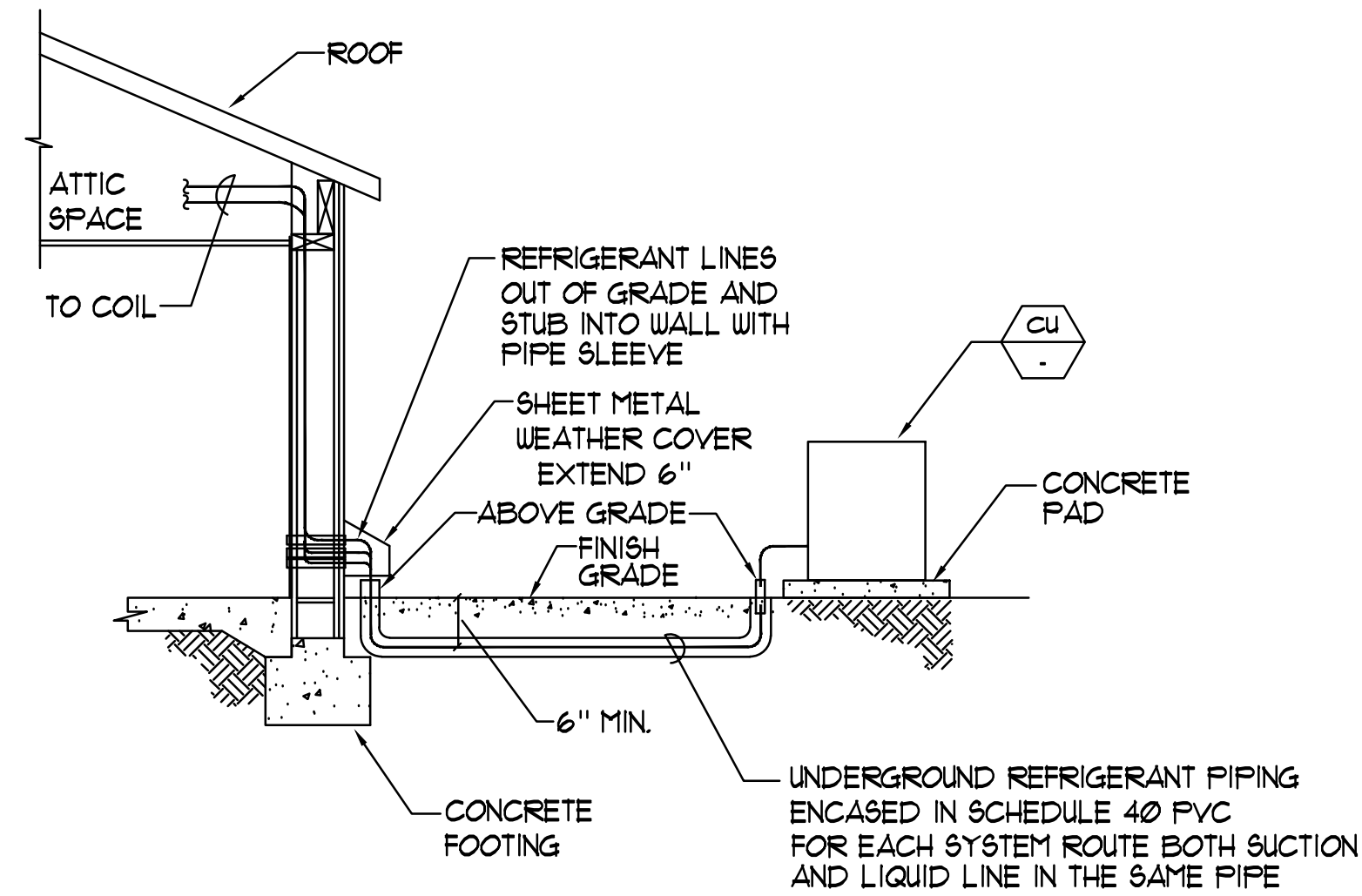


NOTE:  
WHERE DUCT IS LARGER THAN 28\"/>

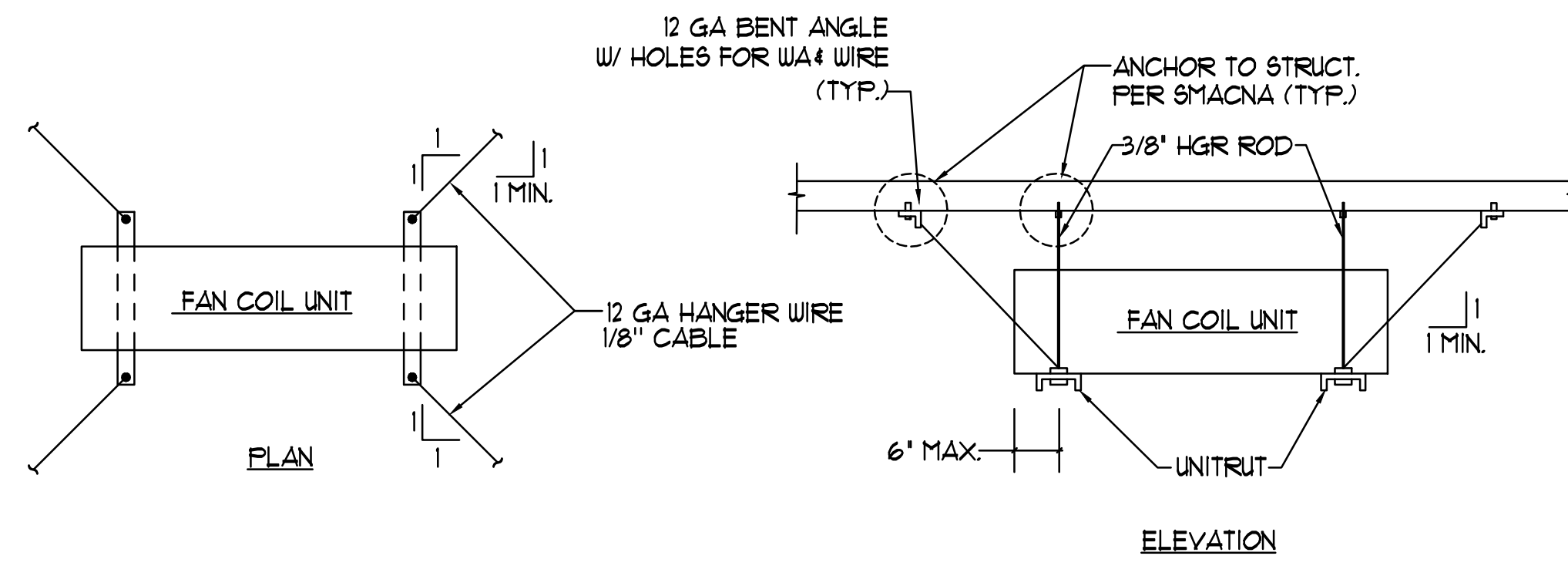
HANGER STRAP SCHEDULE			
DUCT SIZE	STRAP SIZE	MAX. LOAD EA. HANGER	MAX. SPACING
UP THRU 10"	1" x 22 GA.	260 LBS	8'-0"
11" TO 18"	1" x 22 GA.	260 LBS	6'-0"
19" TO 24"	1" x 22 GA.	260 LBS	6'-0"
25" TO 36"	1" x 20 GA.	320 LBS	6'-0"

**3 TYP. ROUND DUCT SUPPORT DETAIL**  
SCALE: NTS

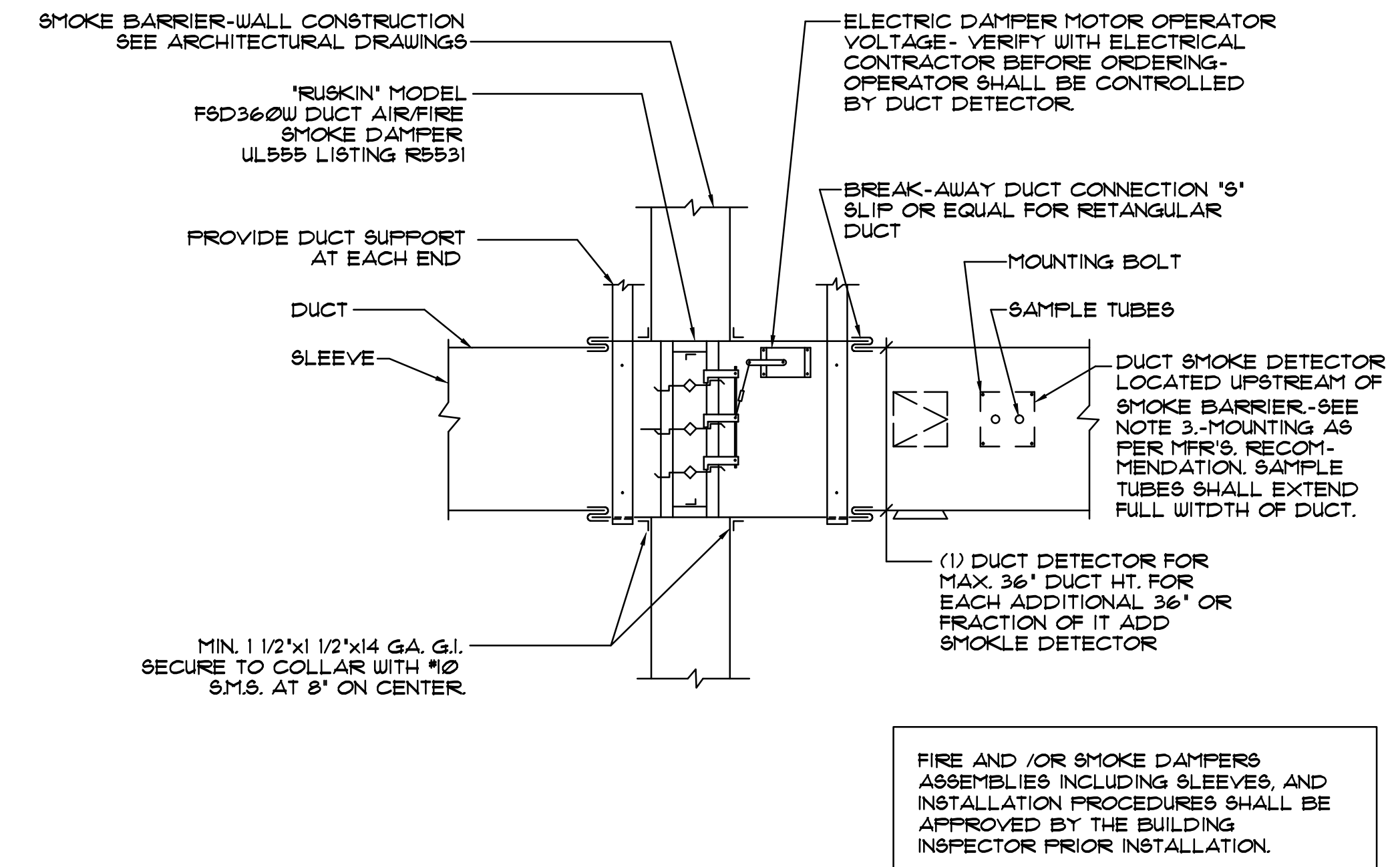
REVISIONS		
NO.	DESCRIPTION	DATE



**4 REFRIGERANT LINES THRU WALL**  
NOT TO SCALE



**3 TYPICAL FAN COIL MOUNTING DETAIL**  
SCALE: NTS



**1 FIRE/SMOKE DAMPER DETAIL**  
SCALE: NTS

**SPECIFICATIONS**

**3.2 BALANCE**

A. BALANCE SYSTEM TO AIR QUANTITIES NOTED ON DRAWINGS AND AS RECOMMENDED IN THE ASSOCIATED AIR BALANCE COUNCIL BALANCE HANDBOOK. PROVIDE AN INDEPENDENT TEST AND BALANCE REPORT, BY AN AABC REGISTERED CONTRACTOR, AND SUBMIT 3 SETS FOR EVALUATION AND APPROVAL BY THE ENGINEER. BALANCE TO COMPLY WITH CMC TABLE 4-A. PROVIDE CHART WITH ROOM NAMES, MINIMUM AIR CHANGE RATE, AIR QUANTITIES AND PRESSURIZATION.

**3.3 GENERAL**

A. REMOVE ALL DEBRIS FROM SITE AT THE END OF EACH WORK DAY.  
B. MATERIALS TO BE INSTALLED PER MANUFACTURER'S RECOMMENDATION.

**3.4 GUARANTEE**

A. ALL MATERIALS AND LABOR - ONE YEAR.

**3.5 OPERATION AND MAINTENANCE MANUALS**

A. OPERATION AND MAINTENANCE MANUALS SHALL BE SUBMITTED FOR THE EQUIPMENT, VALVES AND CONTROLS. SUBMIT 3 SETS FOR EVALUATION AND APPROVAL BY THE ENGINEER.

**2.3 AIR DISTRIBUTION**

AS INDICATED ON DRAWING

**PART 3 EXECUTION**

**3.1 DUCTWORK**

A. DUCTWORK INSTALLATION SHALL CONFORM TO "HVAC DUCT CONSTRUCTION STANDARDS - METAL AND FLEXIBLE" AS PUBLISHED BY SMACNA 1991 EDITION.  
B. DUCT WRAPS SHALL BE INSTALLED BY WRAPPING ENTIRELY ROUND THE DUCT AND SECURING WITH 18 GAUGE GALVANIZED ANNEALED WIRE AT NOT MORE THAN 12 INCH CENTERS. DUCT WRAP SHALL LAP NOT LESS THAN 6 INCH LONGITUDINAL JOINTS. INSULATION AND UNDERSIDE OF DUCTS NOT MORE THAN 12 INCHES IN WIDTH SHALL BE SECURED TO DUCT SURFACES WITH AN APPROVED ADHESIVE. AT ACCESS DOORS, INSULATION SHALL BE NEATLY CUT AROUND DOORS AND EDGES SHALL BE SECURED TO DOOR FRAMES WITH AN APPROVED ADHESIVE.

**PART 1 GENERAL**

**1.1 CONDITIONS**

A. GENERAL AND SUPPLEMENTARY CONDITION APPLY, SEE ARCHITECTURAL SPECIFICATION.

**1.2 REQUIREMENTS**

A. COMPLY WITH THE LATEST LOCALLY ADOPTED VERSION OF THE UNIFORM MECHANICAL CODE, AND ALL OTHER APPLICABLE CODES.  
B. EXAMINE BUILDING THOROUGHLY, LOCATIONS AND ARRANGEMENT IS APPROXIMATE.  
C. APPLY AND PAY FOR ALL PERMITS AND INSPECTIONS.  
D. LABOR BY SKILLED MECHANICS UNDER COMPETENT FOREMAN.

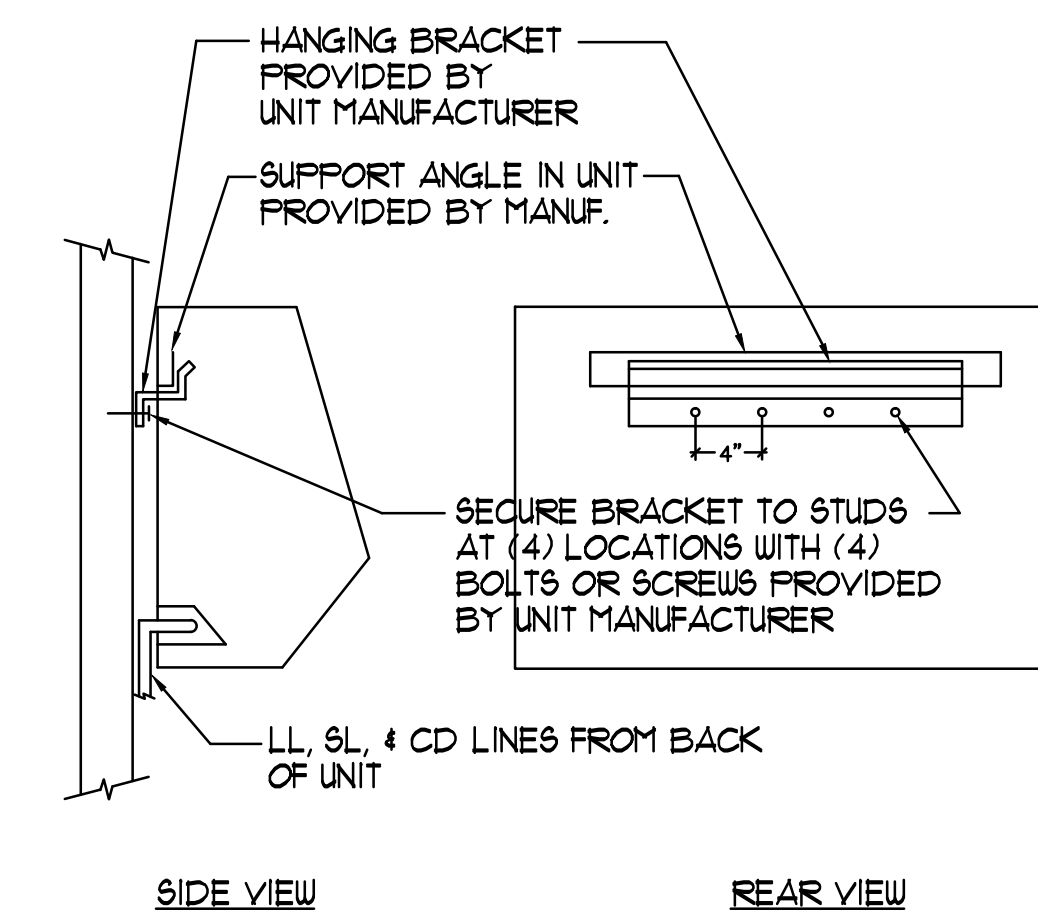
**PART 2 PRODUCTS**

**2.1 DUCTWORK**

A. DUCTWORK: GALVANIZED, GAUGE AND CONSTRUCTION PER RECOMMENDATIONS OF THE LATEST EDITION OF THE "HVAC DUCT CONSTRUCTION STANDARDS - METAL AND FLEXIBLE" AS PUBLISHED BY SMACNA 1991 EDITION.  
B. ADHESIVES AND INSULATION MATERIALS SHALL HAVE A FLAME-SPREAD RATING OF NOT MORE THAN 25 AND A SMOKE DEVELOPED RATING OF NOT MORE THAN 50. ADHESIVE TO BE WATERPROOF.

**2.2 EQUIPMENT**

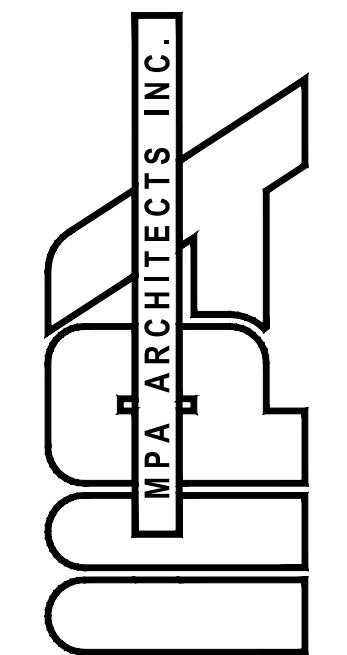
AS INDICATED ON DRAWING



**2 FAN COIL MOUNTING DETAIL (CFC-1)**  
SCALE: NTS

**BTA**  
ENGINEERS, INC.

8845 ERMA RD SUITE 204  
SAN DIEGO, CA 92128  
PH 858 715-8801 FAX 858 433-7587  
JOB # 15.74.00



3578 30th Street  
San Diego, CA 92104  
V. 619.236.0595  
F. 619.236.0557

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SERVICES DEPT  
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(760) 482-4236

PROJECT

A PROPOSED PUBLIC SAFETY FACILITY FOR:  
**WINTERHAVEN  
PUBLIC SAFETY FACILITY**  
WINTERHAVEN, CA

**REVISIONS**

NO.	DESCRIPTION	DATE

SHEET TITLE

**MECHANICAL  
DETAILS**

DATE: 02/17 SCALE: NTS

DRAWN BY: DATE:

CHECKED BY: SHEET NUMBER:

PROJECT NO: **M3.1**