

# BENFIELD ARCHITECTURE

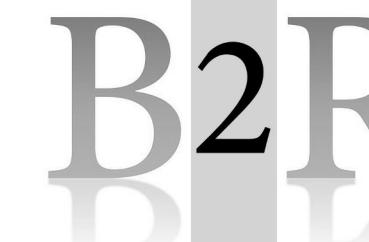
11 CHESTNUT STREET | SOUTH NORWALK CT | 203.857.5789

Drawing no. and date \_\_\_\_\_ Drawing sheet no. \_\_\_\_\_ of \_\_\_\_\_

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Drawing no. and date \_\_\_\_\_ Drawing sheet no. \_\_\_\_\_ of \_\_\_\_\_

100% CD  
04/19/2024



Consulting Engineers, PLLC  
100 South St, Suite 205  
Stamford, CT 06905  
(203) 548-9939

PROJECT:  
**Lofts at Mill Pond**

ADDRESS:  
1 Cemetery Street  
Norwalk, CT 06853

TITLE:  
MECHANICAL COVER PAGE

JOB NO.: B2R23057

DATE: 04/19/2024

SCALE: NO SCALE

DRAWN BY: CC/PRES/CR

M0.01

## CONNECTICUT STATE CODES & STANDARDS

- 2022 CONNECTICUT STATE BUILDING CODE
- 2021 INTERNATIONAL BUILDING CODE
- 2021 INTERNATIONAL EXISTING BUILDING CODE
- 2021 INTERNATIONAL PLUMBING CODE
- 2021 INTERNATIONAL SCAFFOLDING CODE
- 2020 NATIONAL ELECTRICAL CODE (NFPA 70)
- LOCAL FIRE DEPARTMENT/FIRE MARSHAL
- ALL OTHER LOCAL AUTHORITIES HAVING JURISDICTION

## CONNECTICUT ENERGY CODES

- 2021 INTERNATIONAL ENERGY CONSERVATION CODE

## REFERENCED STANDARDS

APPLICABLE REFERENCE STANDARDS SHALL BE AS REFERENCED BY ALL STATE AND LOCAL CODES. THE LIST BELOW IS FOR QUICK REFERENCE AND DOES NOT INCLUDE ALL APPLICABLE REFERENCE STANDARDS.

- 2019 NFPA 13 - STANDARD FOR THE INSTALLATION OF SPRINKLER SYSTEMS
- 2019 NFPA 14 - STANDARD FOR THE INSTALLATION OF STANPIPE AND HOSE SYSTEMS
- 2019 NFPA 20 - STANDARD FOR THE INSTALLATION OF STATIONARY PUMPS FOR FIRE PROTECTION
- 2019 NFPA 54 - NATIONAL GAS CODE
- 2020 NFPA 1 - NATIONAL ELECTRICAL CODE
- 2019 NFPA 72 - NATIONAL FIRE ALARM AND SIGNALING CODE

## MECHANICAL SYMBOL LIST - GENERAL

	NEW PIPING, DUCTWORK, OR EQUIPMENT
	EXISTING PIPING, DUCTWORK, OR EQUIPMENT TO REMAIN
	EXISTING PIPING, DUCTWORK, OR EQUIPMENT TO BE REMOVED
	NEW EQUIPMENT
	EXISTING EQUIPMENT TO BE REMOVED
	EXISTING EQUIPMENT TO REMAIN
	EXISTING EQUIPMENT TO BE REMOVED AND RELOCATED
	RELOCATED POSITION OF EXISTING EQUIPMENT
	CONTINUATION FOR DUCTWORK OR PIPING
	TYPE OF EQUIPMENT (AIR HANDLING UNIT)
	UNIT NUMBER (IND AIR HANDLER ON THE 3RD FLOOR)
	POINT OF CONNECTION (OF NEW WORK TO EXISTING WORK)
	POINT OF DISCONNECTION (TO REMOVE AND PATCH EXISTING WORK)
	DRAWING NOTE TAG
	REVISION SYMBOL
	SECTION DESIGNATION ON DRAWING WHERE SECTION IS CUT A - SECTION DESIGNATION B - DRAWING NO.
	THERMOSTAT WALL MOUNTED (OCCUPANT ADJUSTABLE)
	TEMPERATURE SENSOR TO BE WALL OR DUCT MOUNTED (SENSOR ONLY, NO OCCUPANT ADJUSTMENT OR DISPLAY)
	CARBON DIOXIDE OCCUPANCY DETECTOR
	DUCT MOUNTED SMOKE DETECTOR
	LEAK DETECTOR
	AIRFLOW MEASURING STATION
	STATIC PRESSURE SENSOR
	STARTER / DISCONNECT SWITCH
	STARTER

## MECHANICAL SYMBOL LIST - DUCTWORK

	SUPPLY CEILING DIFFUSER (4-WAY BLOW)
	SUPPLY CEILING DIFFUSER (3-WAY BLOW)
	SUPPLY CEILING DIFFUSER (2-WAY BLOW)
	SUPPLY CEILING DIFFUSER (1-WAY BLOW)
	RETURN CEILING GRILLE OR REGISTER
	DOOR LOUVER
	UNDERCUT DOOR

## MECHANICAL ABBREVIATIONS LIST

AC	AIR CONDITIONING UNIT
AD	ACCESS DOOR
AH	AIR HANDLING UNIT
ATC	AUTOMATIC TEMPERATURE CONTROL
B(500)	DIFFUSER TYPE - REFER TO SCHEDULE
BMS	BUILDING MANAGEMENT SYSTEM
BTU	BRITISH THERMAL UNIT
CC	COOLING COIL
CFM	CUBIC FEET PER MINUTE
CG	CEILING GRILLE
CHWP	CHILLED WATER PUMP
CP	CONDENSATE PUMP
CR	CEILING REGISTER
CUH	CABINET UNIT HEATER
CV	CONSTANT VOLUME
CWP	CONDENSER WATER PUMP
DC	DRY COOLER
DX	DIRECT EXPANSION
E	EXISTING
EAT	ENTERING AIR TEMPERATURE
EF	EXHAUST FAN
EG	EXHAUST GRILLE
ER	EXISTING EQUIPMENT TO BE REMOVED
ERR	EXIST. EQUIP. TO BE REMOVED & RELOCATED
EWT	ENTER WATER TEMPERATURE
SD	SMOKE DETECTOR
FXC	FLEXIBLE CONNECTION
FC	FAN COIL
FD	FIRE DAMPER WITH ACCESS DOOR
FLA	FULL LOAD AMPS
FPI	FIN PER INCH
FTR	FIN TUBE RADIATION
GPM	GALLONS PER MINUTE
GX	GENERAL EXHAUST
HWP	HOT WATER PUMP
HX	HEAT EXCHANGER
Hz	HERTZ
IU	INDUCTION UNIT
KW	KILOWATT
KX	KITCHEN EXHAUST
LAT	LEAVING AIR TEMPERATURE
MBH	THOUSAND BTU PER HOUR
MCA	MINIMUM CIRCUIT AMPS
MD	MOTORIZED DAMPER
NC	NORMALLY CLOSED
NO	NORMALLY OPEN
NTS	NOT TO SCALE
OAI	OUTSIDE AIR INTAKE
OED	OPEN END DUCT
PPH	POUNDS PER HOUR
PH	PHASE
PSI	POUND PER SQUARE INCH
PSIA	POUNDS PER SQUARE INCH ABSOLUTE
PSIG	POUNDS PER SQUARE INCH GAGE
TAO	TRANSFER AIR OPENING
TR	TOP REGISTER
TX	TOILET EXHAUST
V	VOLTS
VAV	VARIABLE AIR VOLUME
VD	VOLUME DAMPER
VFD	VARIABLE FREQUENCY DRIVE
WMS	WIRE MESH SCREEN

## MECHANICAL SYMBOL LIST - DUCTWORK (CONT.)


	DUCT SIZE (FIRST FIGURE INDICATES HORIZONTAL SIZE)
	ROUND DUCT DIAMETER
	SUPPLY DUCT UP
	SUPPLY DUCT DOWN
	RETURN OR EXHAUST DUCT UP
	RETURN OR EXHAUST DUCT DOWN
	ACOUSTICAL LINING IN DUCT
	TRANSITION FROM RECTANGULAR TO ROUND OR OVAL DUCT
	ACCESS DOOR IN DUCT
	SLOPING RISE IN DUCT IN DIRECTION OF ARROW
	SLOPING DROP IN DUCT IN DIRECTION OF ARROW
	MITERED ELBOW WITH TURNING VANES
	RADIUS ELBOW (INNER RADIUS = WIDTH)
	DUCT SPLIT
	90° BRANCH TAP (USE 45° BOOT, OR CONICAL TAP FOR BRANCH SERVING A SINGLE DIFFUSER/REGISTER ONLY)
	45° BRANCH TAP
	SPLIT (SUPPLY) OR CONVERGENCE (RETURN/EXHAUST) RADIUS ELBOW TYPE
	SPLIT (SUPPLY) OR CONVERGENCE (RETURN/EXHAUST) BULLHEAD TYPE
	OFFSET (WITH RADIUS ELBOWS)
	SUPPLY REGISTER
	RETURN OR EXHAUST REGISTER
	VOLUME DAMPER
	FIRE DAMPER W/D ACCESS DOOR (FD/AD)
	MOTORIZED DAMPER W/D ACCESS DOOR
	COMBINATION FIRE/SMOKE DAMPER W/D ACCESS DOOR
	SMOKE DAMPER W/D ACCESS DOOR
	FLEXIBLE CONNECTION
	FLEXIBLE DUCT
	SUPPLY SIDEWALL LINEAR DIFFUSER (WSHEET METAL W/1" LIN & BRANCH CONN FOR EVERY 4' OF LINEAR DIFFUSER)
	MODULAR LINEAR DIFFUSER WITH PLENUM
	BRANCH TAKEOFF TO CEILING DIFFUSER/REGISTER

## MECHANICAL SYMBOL LIST - PIPING

	DIRECTION OF FLOW IN PIPE
	PITCH PIPE DOWN IN DIRECTION OF ARROW
	ELBOW TURNED UP
	ELBOW TURNED DOWN
	BOTTOM PIPE CONNECTION
	TOP PIPE CONNECTION
	FLEXIBLE CONNECTION
	BALL VALVE
	GATE VALVE
	GLOBE VALVE
	CHECK VALVE (ARROW INDICATES FLOW DIRECTION)
	AUTOMATIC THREE-WAY CONTROL VALVE
	AUTOMATIC TWO-WAY CONTROL VALVE
	PRESSURE REDUCING VALVE
	PLUG VALVE
	SOLENOID VALVE
	BUTTERFLY VALVE (MANUAL)
	BUTTERFLY VALVE (MOTORIZED)
	CIRCUIT SETTER/BALANCING VALVE
	EXPANSION JOINT
	CONCENTRIC REDUCER (ARROW INDICATES FLOW DIRECTION)
	ECOCRATIC REDUCER (ARROW INDICATES FLOW DIRECTION)
	UNION
	CAPPED PIPE
	VALVED AND CAPPED CONNECTION (GATE)
	VALVED AND CAPPED CONNECTION (BALL)
	V" TYPE STRAINER WITH BLOW DOWN VALVE
	BASKET TYPE STRAINER
	DUPLEX STRAINER
	PIPE SLEEVE

## MECHANICAL - GENERAL NOTES

1. THESE DRAWINGS ARE GENERALLY DIAGRAMMATIC AND ARE INTENDED TO CONVEY THE SCOPE OF WORK AS WELL AS INDICATE GENERAL ARRANGEMENT OF EQUIPMENT, DUCTWORK AND PIPING. THE CONTRACTOR SHALL ADHERE TO THESE DRAWINGS AS CLOSELY AS POSSIBLE. HOWEVER, THE RIGHT IS RESERVED TO VARY FROM THE DRAWINGS AS NECESSARY TO ACCOMMODATE CONDITIONS ARISING AT THE JOB SITE. THE CONTRACTOR SHALL PREPARE SHOP DRAWINGS TO BE SUBMITTED TO THE ENGINEER FOR APPROVAL. NO WORK SHALL BE PERFORMED PRIOR TO RECEIPT OF APPROVAL.
2. DRAWINGS AND SPECIFICATIONS SHALL BE INTERPRETED SO AS TO REQUIRE THE MOST SUBSTANTIAL AND COMPREHENSIVE PERFORMANCE OF THE WORK, CONSISTENT WITH THE INTENT AND REQUIREMENTS OF THE CONTRACT DOCUMENTS. THE CONTRACTOR SHALL NOT BE HELD RESPONSIBLE FOR UNFORESEEN EXTRA COSTS TO THE OWNER.
3. ANY MATERIAL, OR INDIVIDUAL ACCESSORIES OR MINOR DETAILS, NOT SHOWN ON THE DRAWINGS, BUT NECESSARY TO THE WORK, SHALL BE PROVIDED BY THE CONTRACTOR, EVEN IF NOT PARTICULARLY SHOWN ON THE DRAWINGS, ET AL. ALL PARTS AND ACCESSORIES, IN ERECTED AND READY FOR OPERATION, EVEN IF NOT PARTICULARLY SHOWN ON THE DRAWINGS, SHALL BE PROVIDED BY THE CONTRACTOR WITHOUT ADDITIONAL EXPENSE TO THE OWNER.
4. DUCTS SHOWN ON DRAWINGS ARE CLEAR INSIDE DIMENSIONS. WHERE ACOUSTICALLY LINED DUCT IS SPECIFIED, OUTER DUCT DIMENSIONS SHALL BE INCREASED TO ACCOM



M1.00

## REVISION SCHEDULE

Description

Rev#

Date

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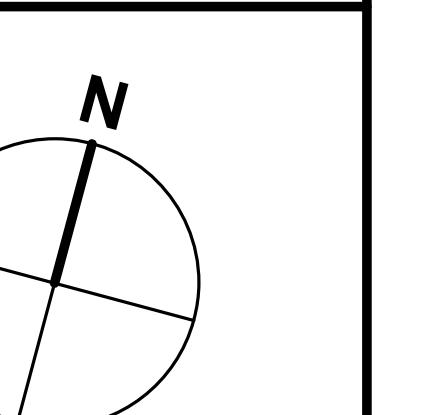
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Rev#

03.15.24

12.08.23

Date

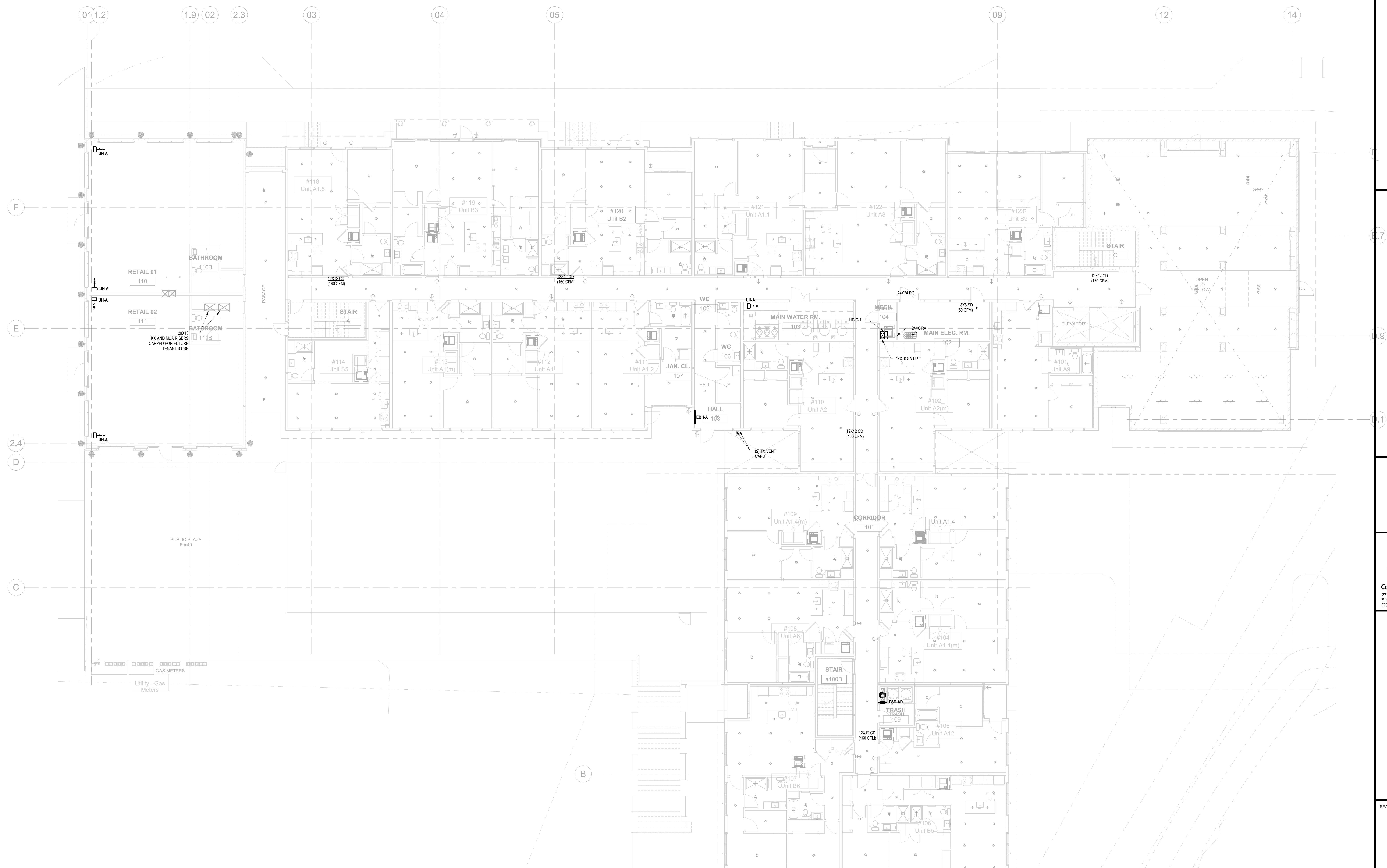
100% CD  
04/19/2024**B2R**Consulting Engineers, PLLC  
100 Summer St, Suite 205  
Stamford, CT 06905  
(203) 548-9939

SEAL

**BENFIELD ARCHITECTURE**  
11 CHESTNUT STREET | SOUTH NORWALK CT | 06853 5789

Autodesk Revit 2024 - 3D Model - 11 CHESTNUT STREET - South Norwalk, CT - 06853 - 5789

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**REVISION SCHEDULE**

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04/19/2024

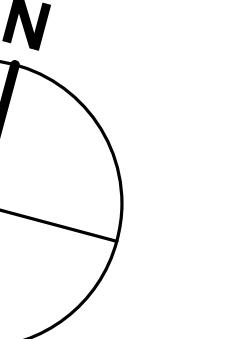


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Stamford, CT 06905

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**PROJECT:**  
**Lofts at Mill Pond**

**ADDRESS:**  
1 Cemetery Street  
Norwalk, CT 06853

**TITLE:**  
MECHANICAL MAIN LEVEL PLAN

**JOB NO:** B2R23057

**DATE:** 04/19/2024

**SCALE:** 1/8" = 1'-0"

**DRAWN BY:** CC/PRES/CR

**M1.10**

**BENFIELD ARCHITECTURE**  
11 CHESTNUT STREET | SOUTH NORWALK CT | 203.838.5789

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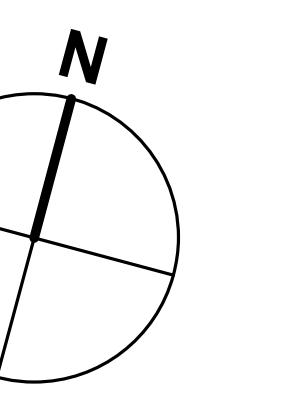
**REVISION SCHEDULE**

100% CD  
04/19/2024



Consulting Engineers, PLLC

1 Cemetery Street, Suite 205  
Stamford, CT 06905  
(203) 548-9939



SEAL

**PROJECT:**  
**Lofts at Mill Pond**

**ADDRESS:**  
1 Cemetery Street  
Norwalk, CT 06853

**TITLE:**  
MECHANICAL LEVEL 2 PLAN


**JOB NO:** B2R23057

**DATE:** 04/19/2024

**SCALE:** 1/8" = 1'-0"

**DRAWN BY:** CC/PRES/CR

**M1.20**







# BENFIELD ARCHITECTURE

11 CHESTNUT STREET | SOUTH NORWALK CT | 203.838.5789

REVISION SCHEDULE

100% CD  
04/19/2024

**B2R**

Consulting Engineers, PLLC  
100 Summer St, Suite 205  
Stamford, CT 06905  
(203) 548-9939

PROJECT:  
**Lofts at Mill Pond**

ADDRESS:  
1 Cemetery Street  
Norwalk, CT 06853

TITLE:  
MECHANICAL BUILDING B FIRST  
FLOOR PLAN

JOB NO.: B2R23057  
DATE: 04/19/2024  
SCALE: 1/4" = 1'-0"

DRAWN BY: CC/PRES/CR

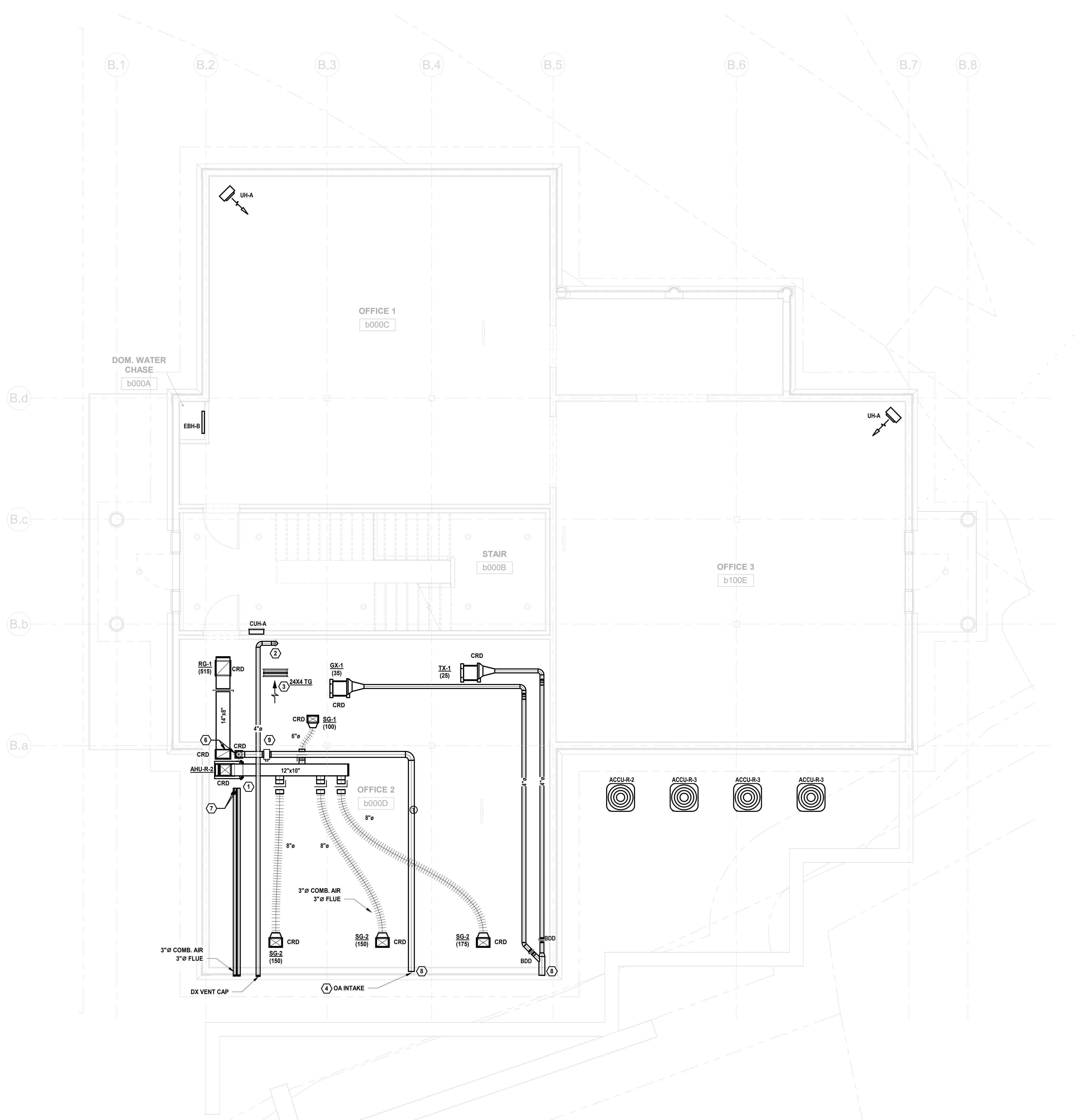
M1.61

#### MECHANICAL GENERAL NOTES

1. PROVIDE DUCT BOARD FOR MAIN TRUNK FROM AHU DUCT BOARD SHALL FOLLOW SIMONA STANDARDS AND SHALL BE INSULATED IN COMPLIANCE WITH CURRENT ENERGY CODE. ALL BRANCH DUCTWORK SHALL BE INSULATED FLEXIBLE DUCT.
2. CONTRACTOR SHALL PROVIDE PROPER VENTING KITS FOR GAS FURNACE AND WATER HEATER APPLIANCES. TERMINATE 2'-0" FROM OPENABLE WINDOW ROUTE TO TERMINATION POINTS ON EXTERIOR PROVIDED BY ARCHITECT. REFER TO MECHANICAL ELEVATIONS FOR LOCATIONS SHOWN ON ARCHITECTURAL ELEVATIONS.
3. DRYER EXHAUST TERMINATIONS SHALL BE 3'-0" FROM ANY OPENINGS INTO BUILDINGS INCLUDING BUT NOT LIMITED TO WINDOWS ROUTE TO TERMINATION POINTS ON EXTERIOR PROVIDED BY ARCHITECT. REFER TO MECHANICAL ELEVATIONS FOR LOCATIONS SHOWN ON ARCHITECTURAL ELEVATIONS.
4. PROVIDE RADIANT DAMPER WITH ACCESS DOOR AT CEILING WHERE MAIN SUPPLY AND RETURN DUCT PENETRATES RATED CEILING.
5. PROVIDE SUPPLY DIFFUSERS AND RETURN GRILLES WITH INTEGRAL RADIANT DAMPER, TYPICAL FOR ALL UNITS.
6. MECHANICAL CONTRACTOR SHALL PROVIDE AND INSTALL 4" DIA DUCT FROM DRYER BOOSTER FAN DX-1 TO EXTERIOR HOOD VENT.
7. CONTRACTOR SHALL COORDINATE ALL DUCTWORK ROUTING WITH STRUCTURE PRIOR TO DUCTWORK FABRICATION.
8. CEILING RADIANT DAMPER U/LISTING SHALL MATCH U/LISTING OF RATED CEILING ASSEMBLY. MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE TO COORDINATE WITH ARCHITECTURAL DRAWINGS AND APPROVED CEILING SUBMITTALS PRIOR TO CEILING RADIANT SUBMITTAL DEVELOPMENT.

#### MECHANICAL KEY NOTES

1. ROUTE 3/4" INSULATED CONDENSATE DRAIN FOR EACH STACK APARTMENT DOWN TO CONDENSATE DRAIN IN 1ST FLOOR APARTMENT LAUNDRY ROOM.
2. PROVIDE CLEAN OUT WITH ACCESS DOOR IN GYPSUM CEILING AT ALL DRYER EXHAUST ELBOWS. WHEN BOOSTER FAN IS SPECIFIED, PROVIDE ACCESS LINT TRAP AS RECOMMENDED BY DRYER BOOSTER FAN MANUFACTURER. INSTALL BOOSTER FAN IN VERTICAL POSITION. INSTALL AS PER MANUFACTURER'S INSTALLATION INSTRUCTIONS.
3. PROVIDE 2XA TRANSFER GRILLE WITH 50% F.A. ABOVE DOOR OF LAUNDRY CLOSET MINIMUM 48" S2 IN TYPICAL.
4. NOT USED.
5. NOT USED.
6. RETURN AIR AND OUTSIDE AIR DUCT DOWN TO AHU INTAKE PLenum.
7. ROUTE 3" COMBINATION AIR AND 3" FLUE TO AHU CONNECTION POINTS.
8. ALL FRESH AIR INTAKES SHALL BE MINIMUM 10' AWAY FROM ALL EXHAUST TERMINATIONS.
9. PROVIDE MOTORIZED DAMPER WITHIN THE MECHANICAL CLOSET FOR FRESH AIR INTAKE DUCT. PROVIDE DAMPER PRIOR TO CONNECTING TO MIXING BOX ON AHU'S RETURN.



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Sheet 1 of 1

Autodesk Docs:Mill Pond - Norwalk\B2R23057\_Mill Pond\_R23.mt

# BENFIELD ARCHITECTURE

11 CHESTNUT STREET | SOUTH NORWALK CT | 203.838.5789

Drawing no. 031524  
Drawing date 04/19/2024  
Drawing type: Mechanical Building B Second Floor Plan  
Drawing description: This drawing shows the mechanical system for the second floor of Building B. It includes ductwork, fans, and valves. The drawing is intended for use by contractors and other professionals involved in the construction or maintenance of the building's mechanical systems.

REVISION SCHEDULE

100% CD  
04/19/2024

**B2R**

Consulting Engineers, PLLC

1 Cemetery Street, Suite 205  
Stamford, CT 06905

(203) 548-9939

**PROJECT:**  
**Lofts at Mill Pond**

**ADDRESS:**  
1 Cemetery Street  
Norwalk, CT 06853

**TITLE:**  
MECHANICAL BUILDING B SECOND FLOOR PLAN

**JOB NO.:** B2R23057  
**DATE:** 04/19/2024

**SCALE:** 1/4" = 1'-0"

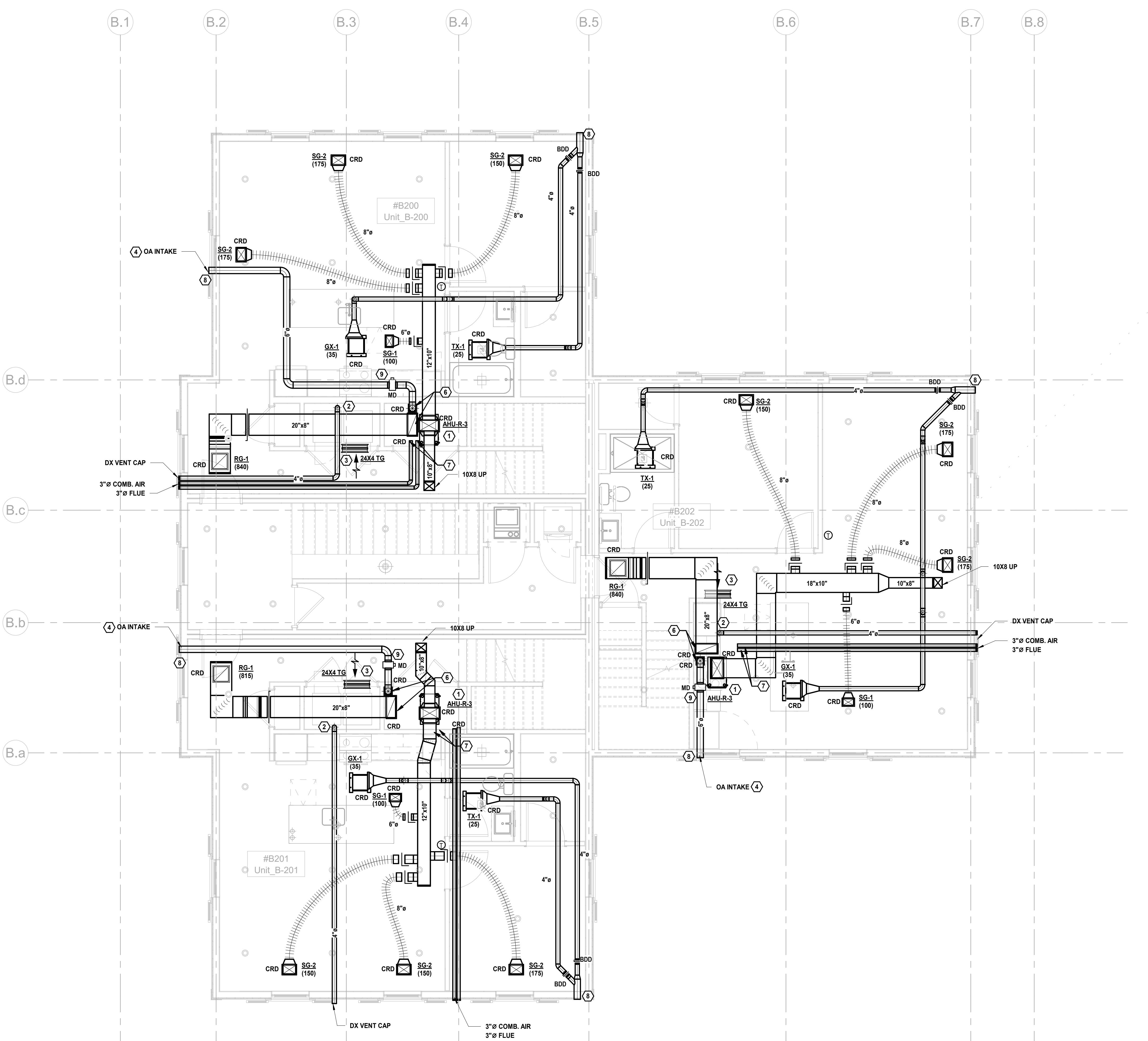
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**M1.62**

**MECHANICAL GENERAL NOTES**

1. PROVIDE DUCT BOARD FOR MAIN TRUNK FROM AHU DUCT BOARD SHALL FOLLOW ACMA STANDARDS AND SHALL BE INSULATED INCOMPLIANCE WITH CURRENT ENERGY CODE. ALL BRANCH DUCTWORK SHALL BE INSULATED FLEXIBLE DUCT.
2. CONTRACTOR SHALL PROVIDE PROPER VENTING KITS FOR GAS THERMISTERS AND ROUTE TO EXTERIOR OF APARTMENT UNIT. TERMINATION POINTS ON EXTERIOR PROVIDED BY ARCHITECT. REFER TO ARCHITECTURAL DRAWINGS FOR LOCATIONS SHOWN ON ELEVATIONS.
3. DRYER EXHAUST TERMINATIONS SHALL BE 3'-0" FROM ANY OPENINGS INTO BUILDINGS INCLUDING BUT NOT LIMITED TO WINDOWS. ROUTE TO TERMINATION POINTS ON EXTERIOR PROVIDED BY ARCHITECT. REFER TO ARCHITECTURAL DRAWINGS FOR LOCATIONS SHOWN ON ELEVATIONS.
4. PROVIDE RADIATION DAMPER WITH ACCESS DOOR AT CEILING WHERE MAIN SUPPLY AND RETURN DUCT PENETRATES RATED CEILING.
5. PROVIDE SUPPLY DIFFUSERS AND RETURN GRILLES WITH INTEGRAL RADIATION DAMPER, TYPICAL FOR ALL UNITS.
6. MECHANICAL CONTRACTOR SHALL PROVIDE AND INSTALL 4" DIA DUCTWORK FROM DRYER BOOSTER FAN DX-1 TO EXTERIOR HOOD VENT.
7. CONTRACTOR SHALL COORDINATE ALL DUCTWORK ROUTING WITH STRUCTURE PRIOR TO DUCTWORK FABRICATION.
8. CEILING RADIATION DAMPER UL LISTING SHALL MATCH UL LISTING OF RATED CEILING ASSEMBLY. MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE TO COORDINATE WITH ARCHITECTURAL DRAWINGS AND APPROVED CEILING SUBMITTALS PRIOR TO CEILING RADIATION SUBMITTAL DEVELOPMENT.

**MECHANICAL KEY NOTES**



# BENFIELD ARCHITECTURE

11 CHESTNUT STREET | SOUTH NORWALK CT | 203.838.5789

REVISION SCHEDULE

100% CD  
04/19/2024

**B2R**

Consulting Engineers, PLLC  
100 Summer St, Suite 205  
Stamford, CT 06905  
(203) 548-9939

PROJECT:  
**Lofts at Mill Pond**  
ADDRESS:  
1 Cemetery Street  
Norwalk, CT 06853

TITLE:  
MECHANICAL BUILDING B THIRD  
FLOOR PLAN

JOB NO.: B2R23057  
DATE: 04/19/2024  
SCALE: 1/4" = 1'-0"

DRAWN BY: CC/PRES/CR

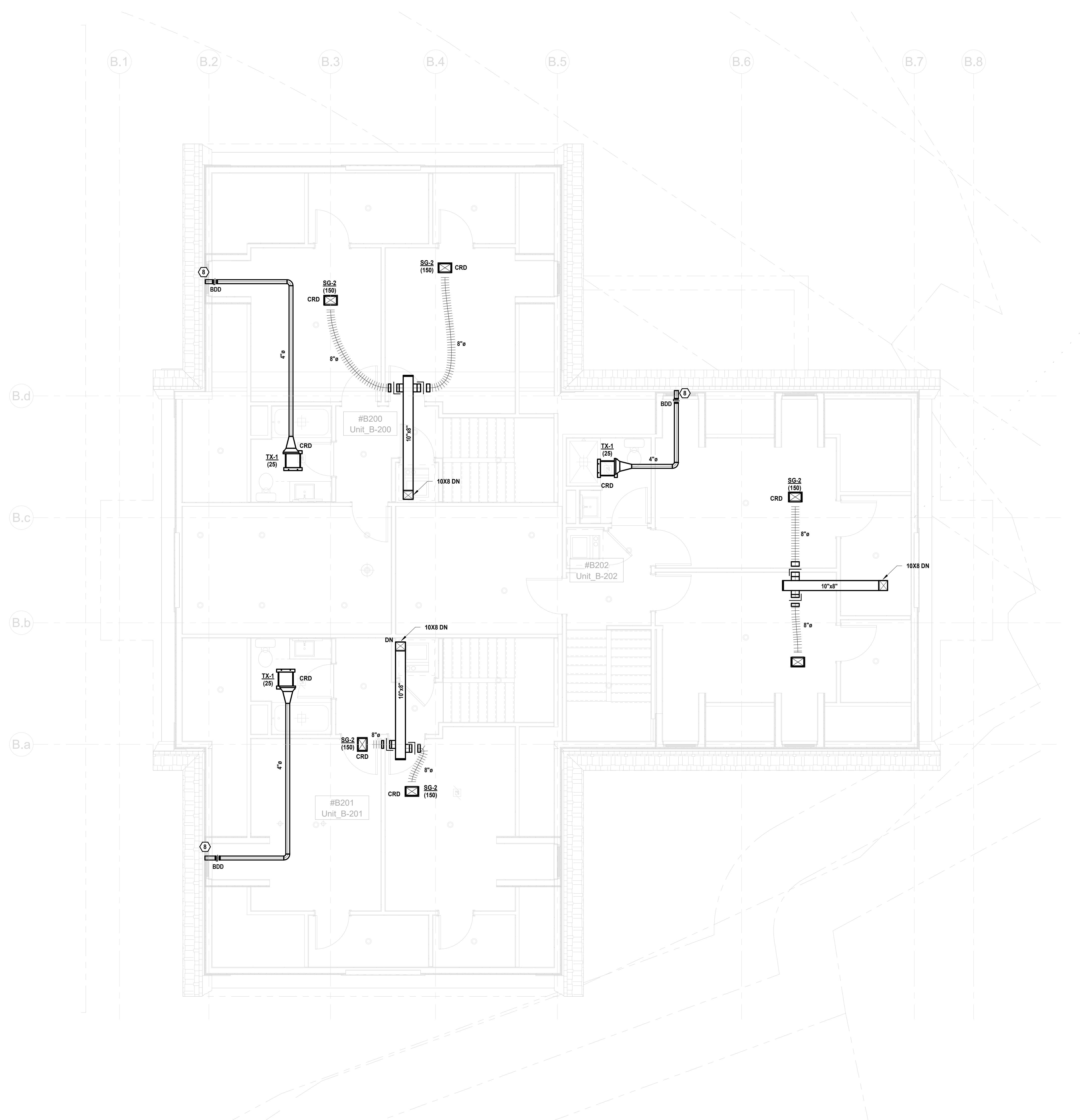
M1.63

#### MECHANICAL GENERAL NOTES

1. PROVIDE DUCT BOARD FOR MAIN TRUNK FROM AHU. DUCT BOARD SHALL FOLLOW SCAFFOLD STANDARDS AND SHALL BE INSULATED INCORPORATING WITH CURRENT ENERGY CODE. BRANCH DUCTWORK SHALL BE INSULATED FLEXIBLE DUCT.
2. CONTRACTOR SHALL PROVIDE PROPER VENTING KITS FOR GAS FURNACES AND ROUTE TO EXTERIOR OF APARTMENT UNIT. TERMINATE AT APPROVABLE WINDOWS. ROUTE TO TYPICAL POINTS OR EXTERIOR PROVIDED BY ARCHITECT. REFER TO ARCHITECTURE DRAWINGS FOR LOCATIONS SHOWN ON ARCHITECTURAL ELEVATIONS.
3. DRYER EXHAUST TERMINATIONS SHALL BE 5'-0" FROM ANY OPERATING COOKING EQUIPMENT IN THE BUILDING BUT NOT LIMITED TO WINDOWS. ROUTE TO TERMINATION POINTS ON EXTERIOR PROVIDED BY ARCHITECT. REFER TO ARCHITECTURAL DRAWING FOR LOCATIONS SHOWN ON ARCHITECTURAL ELEVATIONS.
4. PROVIDE RADIATION DAMPER WITH ACCESS DOOR AT CEILING WHERE MAIN SUPPLY AND RETURN DUCT PENETRATES RATED CEILING.
5. PROVIDE SUPPLY DIFFUSERS AND RETURN GRILLES WITH INTEGRAL RADIATION DAMPER, TYPICAL FOR ALL UNITS.
6. MECHANICAL CONTRACTOR SHALL PROVIDE AND INSTALL 4" DIA RIGID DUCT FROM DRYER BOOSTER FAN DX-1 TO EXTERIOR HOOD VENT.
7. CONTRACTOR SHALL COORDINATE ALL DUCTWORK ROUTING WITH STRUCTURE PRIOR TO DUCTWORK FABRICATION.
8. CEILING RADIATION DAMPER UL LISTED AND UL LISTED CONTRACTOR SHALL BE RESPONSIBLE TO COORDINATE WITH ARCHITECTURAL DRAWINGS AND APPROVED CEILING SUBMITTALS PRIOR TO CEILING RADIATION SUBMITTAL DEVELOPMENT.

#### MECHANICAL KEY NOTES

1. ROUTE 3/4" INSULATED CONDENSATE DRAIN FOR EACH STACK AND DRAIN DOWN TO CONDENSATE DRAIN IN 1ST FLOOR APARTMENT LAUNDRY ROOM.
2. PROVIDE CLEAN OUT WITH ACCESS DOOR IN GYPSUM CEILING AT ALL DRYER EXHAUST ELBOWS. WHERE BOOSTER FAN IS SPECIFIED, PROVIDE SECONDARY LINT TRAP AS RECOMMENDED BY MANUFACTURER. CONTRACTOR SHALL INSTALL BOOSTER FAN IN A VERTICAL POSITION; INSTALL AS PER MANUFACTURER'S INSTALLATION INSTRUCTIONS.
3. PROVIDE 24X4 TRANSFER GRILLE WITH 50% F.A. ABOVE DOOR OF LAUNDRY CLOSET. MINIMUM 48 SQ IN. TYPICAL.
4. NOT USED.
5. NOT USED.
6. RETURN AIR AND OUTSIDE AIR DUCT DOWN TO AHU INTAKE PLenum.
7. ROUTE 3"Ø COMBUSTION AIR AND 3"Ø FLUE TO AHU CONNECTION POINTS.
8. ALL FRESH AIR INTAKES SHALL BE MINIMUM 10' AWAY FROM ALL EXHAUST TERMINATIONS.
9. PROVIDE MOTORIZED DAMPER WITHIN THE MECHANICAL CLOSET FOR FRESH AIR INTAKE DUCT. PROVIDE DAMPER PRIOR TO CONNECTING TO MIXING BOX ON AHU'S RETURN.













**BENFIELD ARCHITECTURE**  
11 CHESTNUT STREET | SOUTH NORWALK CT | 203.838.5789

419/2024 11:03 AM

AIR HANDLING UNIT		LOCATION	SERVICE (APARTMENT TYPE)		GAS HEATING			EVAPORATOR COIL CONDITIONS				SUPPLY FAN			ELECTRICAL DATA			UNIT DIMENSIONS			MANUF. MODEL #		
MIN. INLET PRESSURE (IN WC)	INPUT (MBH)		OUTPUT (MBH)	TOTAL (MBH)	SENSIBLE (MBH)	CFM COOLING	ENT. AIR DB/WB (°F)	LVL. AIR DB/WB (°F)	EXT. SP (IN. G.)	MOTOR HP	BLOWER SPEED	VOLTS	PHASE	HZ	FLA	AMPERES	WEIGHT (LBS)	LENGTH (IN)	WIDTH (IN)	HEIGHT (IN)			
AHU-1	SEE PART PLANS	SEE PART PLANS	4.5	44	41	18	14.2	600	75.762.5	55.94	0.5	15	LOW	120	1	60	3.1	121	28.5	17.5	33	CONCORD	95104048PBP (FURNACE MODEL)
AHU-2	SEE PART PLANS	SEE PART PLANS	4.5	44	41	24	18.5	800	75.762.5	55.94	0.5	15	MED	120	1	60	3.1	121	28.5	17.5	33	CONCORD	95104048PBP (FURNACE MODEL)
AHU-3	SEE PART PLANS	SEE PART PLANS	4.5	66	64	30	24.6	1,000	75.762.5	55.94	0.5	13	MED	120	1	60	6.1	128	28.5	17.5	33	CONCORD	95104070PBP (FURNACE MODEL)
AHU-4	SEE PART PLANS	SEE PART PLANS	4.5	66	64	36	28.1	1,200	75.762.5	55.94	0.5	13	HIGH	120	1	60	6.1	128	28.5	21.0	33	CONCORD	95104070PBP (FURNACE MODEL)
AHU-5	SEE PART PLANS	SEE PART PLANS	4.5	88	85	49	31.9	1,600	75.767	55.94	0.7	12	HIGH	120	1	60	8.2	148	28.5	21.0	33	CONCORD	95104060PBP (FURNACE MODEL)

NOTE: 1. INDOOR UNIT IS EVAPORATOR ONLY - OUTDOOR UNIT IS CONDENSING UNIT (COMPRESSOR AND CONDENSER)  
2. PROVIDE ADDITIONAL ACCESSORIES FOR LONG LINE APPLICATION AS REQUIRED BY MANUFACTURER.  
3. LINE SIZES SHALL BE VERIFIED BY MANUFACTURER.

3. PROVIDE LOW AMBIENT KIT BY MANUFACTURER.  
4. ALL UNITS TO HAVE R410A REFRIGERANT.  
5. PROVIDE CONDENSATE NEUTRALIZING KIT.

UNIT TAG	APPLICATION	FACISLOTS W/H (IN.)	NECKINET (IN.)	CFM RANGE	T.S.P. (IN. W.S.)	NC	MANUFACTURER	MODEL	REMARKS
CD-1	SUPPLY	24x24	6"	0-110	0.07	20	TITUS	OMNI	SEE NOTES
CD-2	SUPPLY	24x24	8"	111-255	0.10	25	TITUS	OMNI	SEE NOTES
CD-3	SUPPLY	24x24	10"	256-350	0.10	30	TITUS	OMNI	SEE NOTES
CD-4	SUPPLY	20x20	8"	111-255	0.10	30	TITUS	OMNI	SEE NOTES
CD-5	SUPPLY	12x12	8"	0-255	0.10	30	TITUS	OMNI	SEE NOTES
LD-1	SUPPLY	(1) 1'W SLOT	75 CFM/FT	0.10	20	TITUS	FL-10-JT		SEE NOTES
LD-2	RETURN	(2) 1.5'W SLOT	180 CFM/FT	0.07	19	TITUS	FL-15-JT		SEE NOTES
SG-1	SUPPLY	10x6	-	0-150	0.02	-	TITUS	301R	SEE NOTES
SG-2	SUPPLY	12x8	-	151-250	0.02	-	TITUS	301RL	SEE NOTES
SG-4	SUPPLY	12x12	-	351-450	0.02	-	TITUS	301RL	SEE NOTES
TG-1	SUPPLY	VARIES	-	VARIES	0.10	-	TITUS	301BS	SEE NOTES
RG-1	RETURN	18X15	-	0-1000	0.10	-	TITUS	350 RL	SEE NOTES
RG-2	RETURN	24x24	-	1000-1600	0.10	-	TITUS	350 RL	SEE NOTES
RG-3	RETURN	12x12	-	0-450	0.10	-	TITUS	350 RL	SEE NOTES
RG-4	RETURN	48x15	-	3000	0.10	-	TITUS	350 RL	SEE NOTES
EG-1	EXHAUST	12x6	-	0-225	0.10	-	TITUS	300FS	SEE NOTES
TR-1	EXHAUST	12x8	-	0-250	0.02	-	TITUS	301RL	SEE NOTES

NOTES:  
1. COORDINATE BORDER, FRAME AND FINISH OF AIR OUTLETS WITH ARCHITECT.  
2. PROVIDE CORD OPERATED DAMPERS FOR SUPPLY, RETURN, AND EXHAUST DEVICES, IN INACCESSIBLE CEILINGS. PROVIDE CORD CLIP FOR LINEAR DIFFUSERS.  
3. AIR DEVICES SHALL BE SUITABLE FOR THE CEILING CONSTRUCTION TYPE. CONTRACTOR SHALL COORDINATE WITH ARCHITECTURAL DRAWINGS PRIOR TO ORDERING.

FAN SCHEDULE		CONDENSING UNIT		FAN MOTOR DATA		ELECTRICAL DATA		CONTROL TYPE		WT. (LBS)		MANUFACTURER & MODEL		REMARKS					
UNIT No.	SYSTEM TYPE	SERVICE	CFM	EXT. SP (IN.)	FAN RPM	HP	MOTOR RPM	TYPE	VOLTS	PHASE	HZ	MCA	MOPC	LENGTH (IN)	WIDTH (IN)	HEIGHT (IN)	WEIGHT (LBS)	SEER2	MANUF. MODEL #
EF-1	EXHAUST	TRASH ROOM	710	0.6	1641	1/4	1725	-	208	1	60	12	15	24.25	24.25	3.5	134	CONCORD	4AC161B-53A
EF-2	EXHAUST	LOADING AREA	800	0.4	811	1/4	1725	-	208	1	60	CONOX	SENSEUR	35	GREENHECK	BSQ-140	SPRING ISOLATORS		
EF-3	EXHAUST	MAIN ELECTRICAL ROOM	500	0.4	1550	1/8	1725	-	115	1	60	WALL	WALL THERMOSTAT	39	GREENHECK	SQ-95	SPRING ISOLATORS		
DX-1	EXHAUST	RESIDENTIAL UNIT	140	0.375	-	80 W	-	115	1	60	DRYER	INTERLOCK	13	FANTECH	DEPV-705	UL CERTIFIED TO DEDPV SUPPLEMENT OF UL705			
TRF-A	GARAGE TRANSFER	GARAGE	2,130	-	4000	1/2	4000	208	1	60	CONOX	SENSOR	110	GREENHECK	G-26				
GPX-1.2	GARAGE EXHAUST	GARAGE	10,000	0.25	1511	3	1550	208	3	60	CONOX	SENSOR	153	GREENHECK	AER-24-VG				
TX-1	EXHAUST	RE PLANS	25.50	0.75	808	6W	-	SWITCH	120	1	60	TIED TO LIGHT SWITCH	20	GREENHECK	SP-A50-90-VG				
GX-1	APARTMENT KITCHEN EXHAUST	RE PLANS	35	0.25	900	13W	-	SWITCH	120	1	60	TIED TO WALL SWITCH	20	GREENHECK	SP-A90				

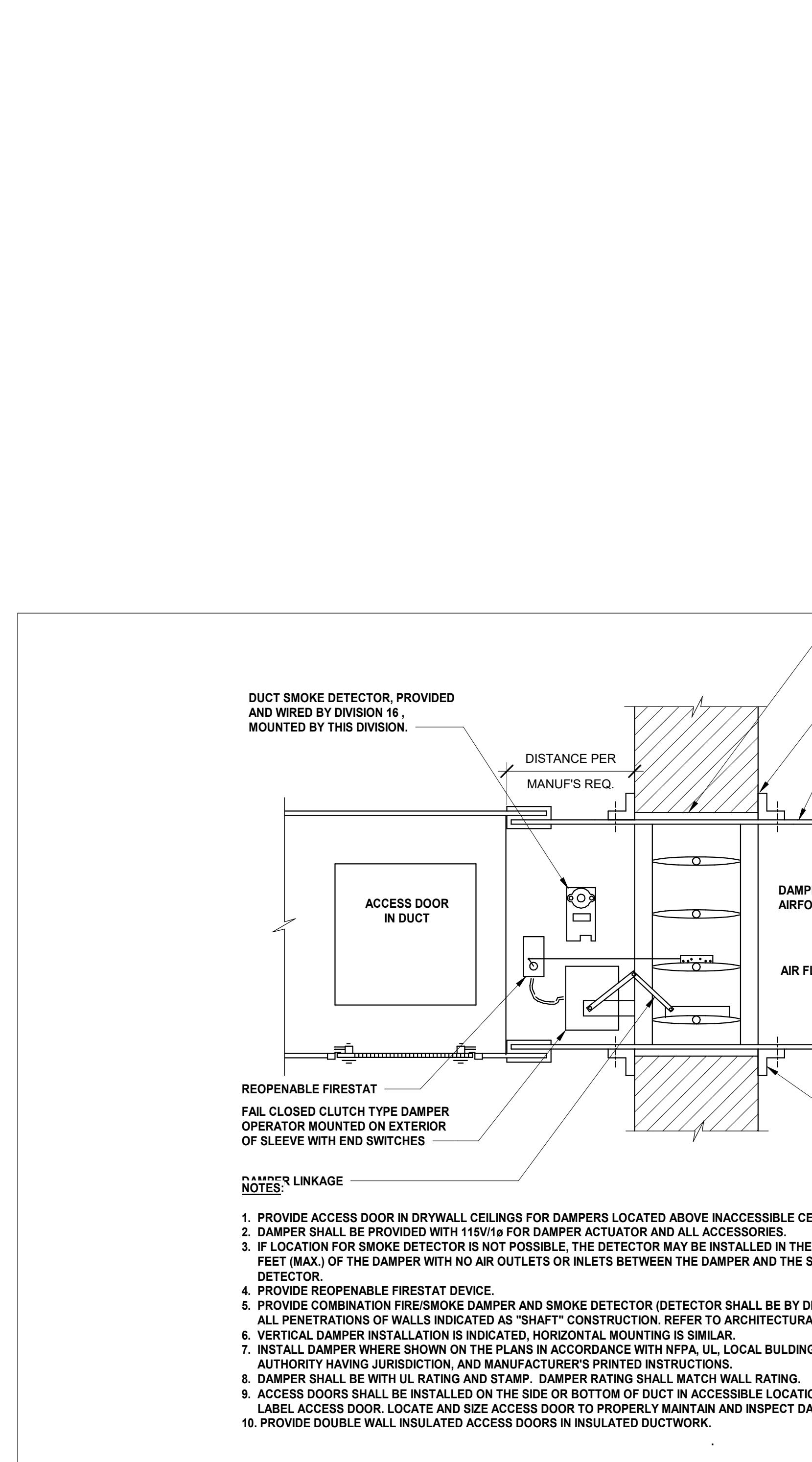
NOTES:  
1. PROVIDE BACKFLAP DAMPERS FOR ALL EXHAUST FANS.  
2. AMENITY TOILET AND GENERAL EXHAUST FANS SHALL RUN CONTINUOUSLY.  
3. PROVIDE MANUFACTURER'S WEATHER HOOD FOR OUTDOOR MOTOR.

4. PROVIDE MANUFACTURER'S VIBRATION ISOLATION SUPPORT FOR ALL OUTDOOR FANS.  
5. PROVIDE NEMA-4 FOR ALL OUTDOOR DISCONNECT SWITCHES  
6. D/P: PRESSURE SENSING SWITCH, INDICATOR PANEL TO SHOW STATUS, GALVANIZED METAL (NO PLASTIC OR FLEX DUCTS).

ENERGY RECOVERY UNIT																		
DESIGNATION	SUPPLY			EXHAUST			ELECTRICAL	V10Hz	SENSIBLE COOL/HGT (%)	TOTAL EFF% / WINTER / SUMMER	DIMENSION (LxWxH)	APPROX. WEIGHT (LBS)	MANUFACTURER	MODEL	REMARKS			
	AIR FLOW (CFM)	DB (°F)	RH (%)	EXT. SP (IN. WC)	MOTOR HP	AIR FLOW (CFM)	DB (°F)	WB (°F)	EXT. SP (IN. WC)	MOTOR HP								
ERV-1	80	95	50	0.8	120 W	70	75	50	0.8	114 W	115/160	68 / 69	75 / 68	25x23x10	35	FANTECH	FT-120E-D-EC	-

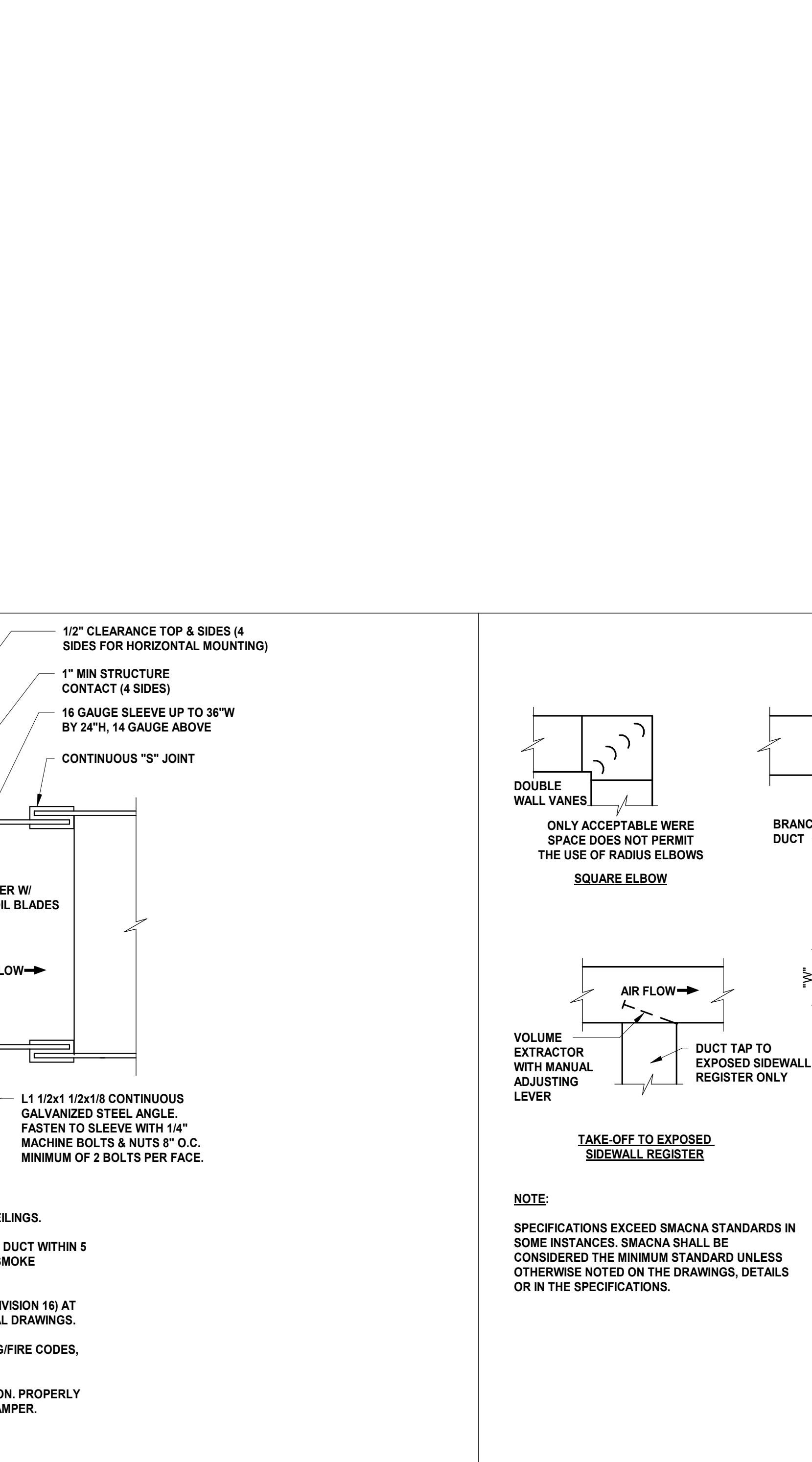
NOTES:  
1. ECM MOTORS, HARD WIRED, ELECTROSTATIC WASHABLE FILTERS.  
2. LOW PROFILE, 22 GA COATED GALVANIZED STEEL.  
3. MECHANICAL LOW VOLTAGE SHUTOFF DAMPER ON THE OUTDOOR AIR INLET POWERED BY THE UNIT.  
4. PROVIDE NEMA-4 FOR ALL OUTDO





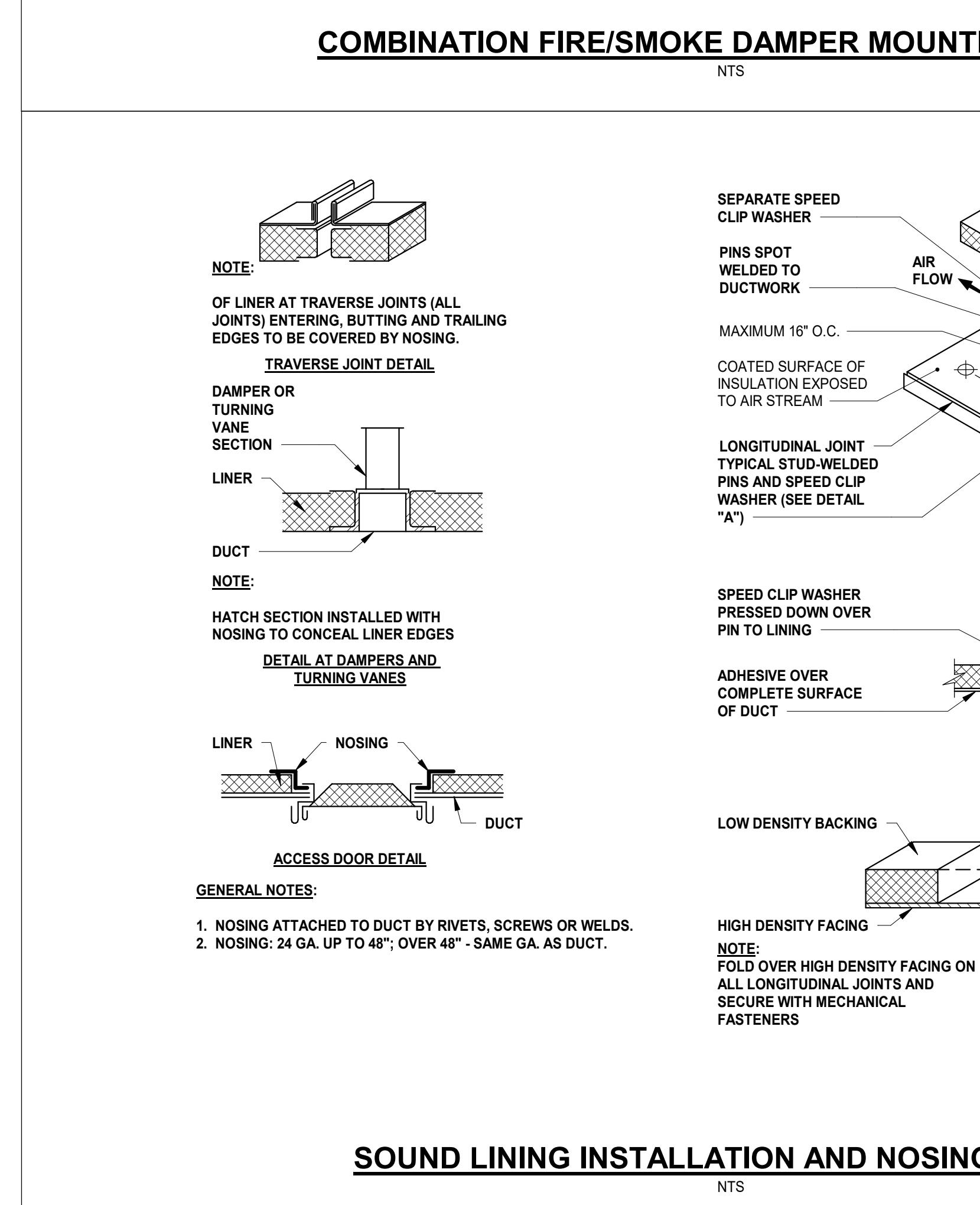
**COMBINATION FIRE/SMOKE DAMPER MOUNTING DETAIL**  
NTS

Detailed technical drawing showing the mounting of a combination fire/smoke damper. It includes a damper with airfoil blades, a smoke detector, and a firestat. Notes specify 1/2" clearance top & sides, 1" min structure contact, and continuous "S" joints. A note also specifies a distance per manufacturer's req.



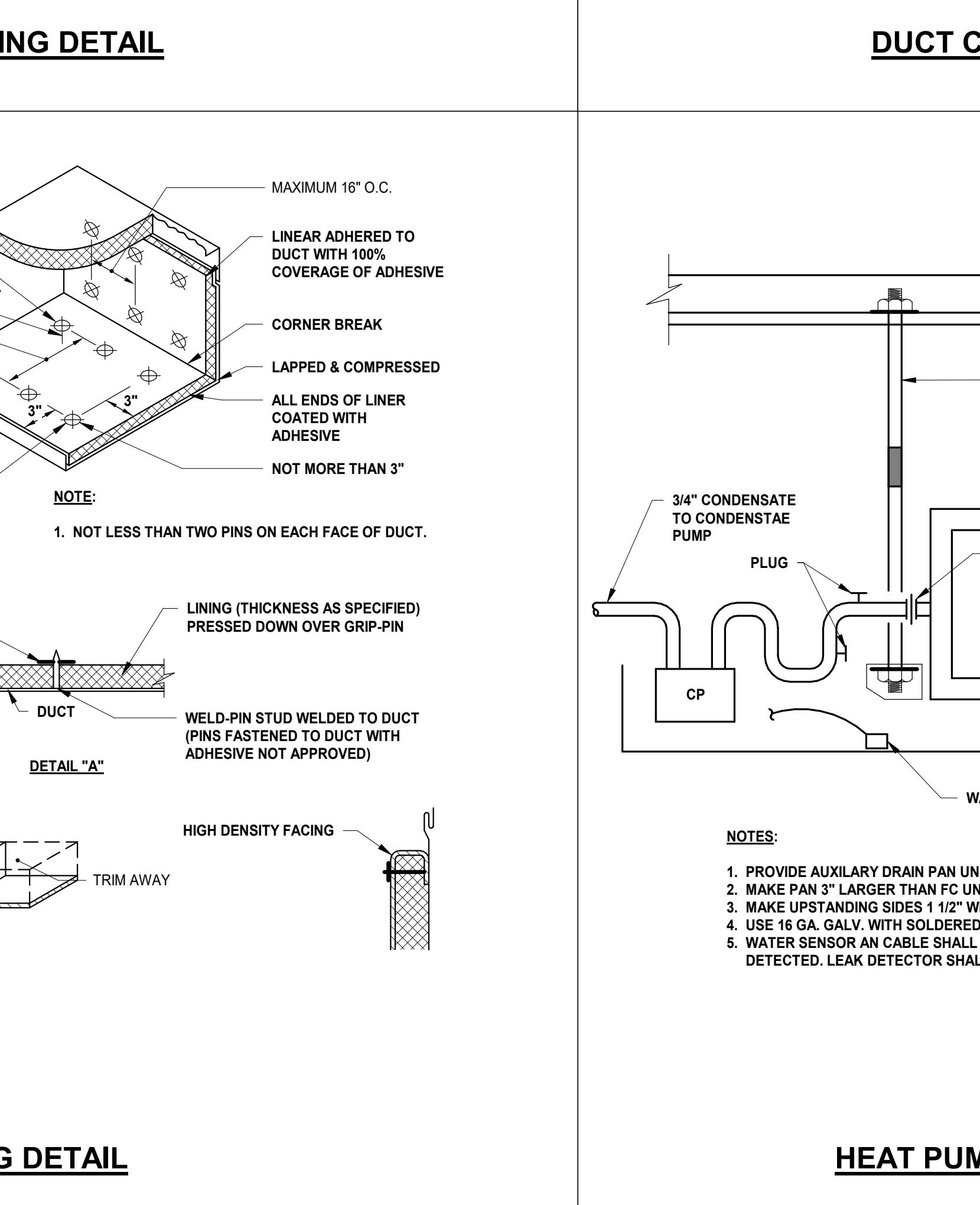
**DUCT CONSTRUCTION DETAIL**  
NTS

Detailed technical drawing of duct construction components. It shows various duct fittings like square elbows, supply taps, return taps, volume extractors, radius elbows, and supply splits. Notes include air flow direction, duct tap to exposed sidewall register, and clear opening dimensions.



**SOUND LINING INSTALLATION AND NOSING DETAIL**  
NTS

Detailed technical drawing of sound lining installation. It shows how liner is applied to ductwork, including traverse joint details, nosing sections, and access door details. General notes specify nosing attachment methods and material thicknesses.



**HEAT PUMP UNIT SUPPORT DETAIL**  
NTS

Detailed technical drawing of heat pump unit support. It shows the unit connected to a condensate pump, a vibration isolator, and a supply air duct plenum. Notes include the use of 3/8" dia. rods and a union.

PROJECT:  
**Lofts at Mill Pond**ADDRESS:  
1 Cemetery Street  
Norwalk, CT 06853TITLE:  
MECHANICAL DETAILS

JOB NO.: B2R23057

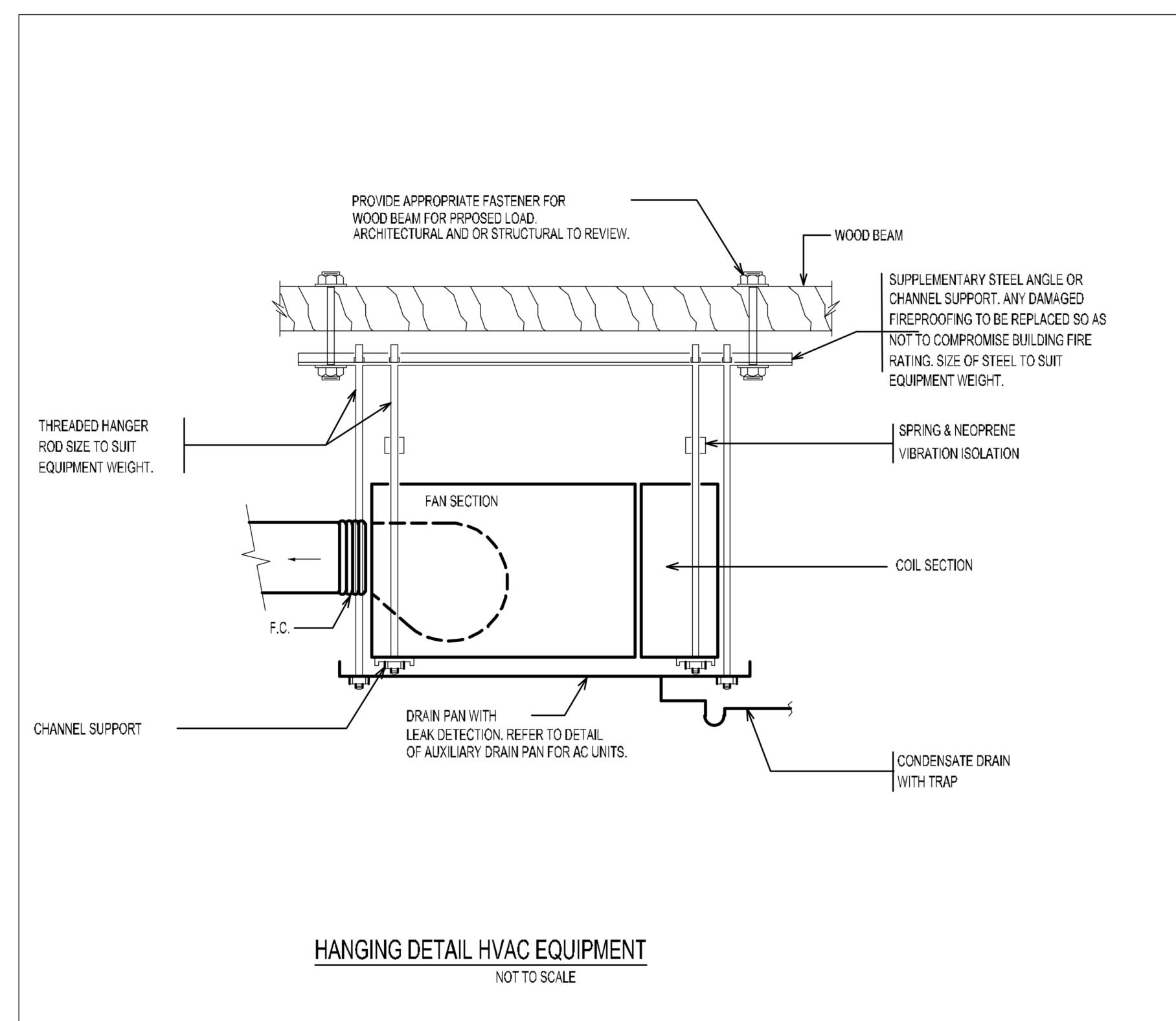
DATE: 04/19/2024

SCALE: NO SCALE

DRAWN BY: CC/PRES/CR

**M7.02**





REVISION SCHEDULE	
3	100% CD FOUNDATION PERMIT
2	100% DD
1	100% DD

100% CD  
04/19/2024

**B2R**

Consulting Engineers, PLLC  
1 Cemetery Street, Suite 205  
Stamford, CT 06905  
(203) 548-9939

SEAL

PROJECT:  
**Lofts at Mill Pond**

ADDRESS:  
1 Cemetery Street  
Norwalk, CT 06853

TITLE:  
MECHANICAL DETAILS

JOB NO.: B2R23057

DATE: 04/19/2024

SCALE: NO SCALE

DRAWN BY: CC/PRES/CR

M7.04