2018 APPENDIX B
BUILDING CODE SUMMARY
FOR ALL COMMERCIAL PROJECTS
(EXCEPT 1 AND 2 FAMILY DWELLINGS AND TOWNHOUSES)

NAME OF PROJECT: UP-FIT FOR 215 EAST BROAD STREET

ADDRESS: 215 EAST BROAD STREET, DUNN, NORTH CAROLINA ZIP CODE: 28334

OWNER/AUTHORIZED AGENT: ERNEST & TERESA ALPHIN PHONE #: 919-820-2070/919-820-8465 EMAIL:

OWNED BY: ☐ CITY/COUNTY ☒ PRIVATE ☐ STATE

CODE ENFORCEMENT JURISDICTION: ☒ CITY DUNN ☐ COUNTY ☐ STATE

LEAD DESIGN PROFESSIONAL: CRUSE & ASSOCIATES, P.A.

DESIGNER	FIRM	NAME	LICENSE #	TELEPHONE NO.	E-MAIL
ARCHITECTURAL					
BUILDING	CRUSE AND ASSOCIATES, P.A.	RANDY CRUSE, PE	18909	(910)-892-4429	RCRUSE@CRUSEASSOCIATES.COM
CIVIL					
ELECTRICAL	CRUSE AND ASSOCIATES, P.A.	RANDY CRUSE, PE	18909	(910)-892-4429	RCRUSE@CRUSEASSOCIATES.COM
FIRE ALARM					
PLUMBING	CRUSE AND ASSOCIATES, P.A.	RANDY CRUSE, PE	18909	(910)-892-4429	RCRUSE@CRUSEASSOCIATES.COM
MECHANICAL	CRUSE AND ASSOCIATES, P.A.	RANDY CRUSE, PE	18909	(910)-892-4429	RCRUSE@CRUSEASSOCIATES.COM
SPRINKLER-STANDPIPE					
STRUCTURAL					
STRUCTURAL (FOUNDATION)					
RETAINING WALLS >5' HIGH					
OTHER					

("OTHER" SHOULD INCLUDE FIRMS AND INDIVIDUALS SUCH AS TRUSS, PRECAST, PRE-ENGINEERED, INTERIOR DESIGNERS, ETC.)

2018 EDITION NC BUILDING CODE: ☐ NEW BUILDING ☐ ADDITION ☒ RENOVATION

☐ 1ST TIME INTERIOR COMPLETIONS

☐ SHELL/CORE-CONTACT THE LEAD INSPECTION JURISDICTION FOR POSSIBLE ADDITIONAL PROCEDURES & REQUIREMENTS

☐ PHASED CONSTRUCTION-SHELL/CORE-CONTACT THE LEAD INSPECTION JURISDICTION FOR FOR POSSIBLE ADDITIONAL PROCEDURES & REQUIREMENTS

2018 NC EXISTING BUILDING CODE: ☐ PRESCRIPTIVE ☐ REPAIR ☐ CHAPTER 14

ALTERATION: ☐ LEVEL I ☐ LEVEL II ☒ LEVEL III

☐ HISTORIC PROPERTY ☐ CHANGE OF USE

CONSTRUCTED: (DATE)____ CURRENT OCCUPANCY(S): (CH. 3) B

RENOVATED: (DATE) ____ PROPOSED OCCUPANCY(S) (CH. 3): B

OCCUPANCY CATEGORY (TABLE 1604.5): CURRENT: ☐ I ☐ II ☐ III ☐ IV

PROPOSED: ☐ I ☐ II ☐ III ☐ IV

BASIC BUILDING DATA:

CONSTRUCTION TYPE: ☐ I-A ☐ I-B ☐ II-A ☐ II-B ☐ III-A ☒ III-B ☐ IV ☐ V-A ☐ V-B

SPRINKLERS: ☒ NO ☐ PARTIAL ☐ YES E.S.F.R. ☐ NFPA 13 ☐ NFPA 13R ☐ NFPA 13D

STANDPIPES: ☒ NO ☐ YES CLASS ☐ I ☐ II ☐ III ☐ WET ☐ DRY

PRIMARY FIRE DISTRICT: ☐ NO ☒ YES FLOOD HAZARD AREA: ☐ NO ☐ YES

SPECIAL INSPECTIONS REQUIRED: ☒ NO ☐ YES (CONTACT THE LOCAL INSPECTION JURISDICTION FOR ADDITIONAL PROCEDURES & REQUIREMENTS)

GROSS BUILDING AREA:

FLOOR	EXISTING (SQ FT)	NEW (SQ FT)	SUB-TOTAL
3RD FLOOR			
2ND FLOOR			
MEZZANINE			
1ST FLOOR	1,550		
BASEMENT			
TOTAL GROSS AREA:			

ALLOWABLE AREA

PRIMARY OCCUPANCY CLASSIFICATION(S):

ASSEMBLY ☐ A-1 ☐ A-2 ☐ A-3 ☐ A-4 ☐ A-5

BUSINESS ☒

EDUCATIONAL ☐

FACTORY ☐ F-1 MODERATE ☐ F-2 LOW

HAZARDOUS ☐ H-1 DETONATE ☐ H-2 DEFLAGRATE ☐ H-3 COMBUST ☐ H-4 HEALTH ☐ H-5 HPM

INSTITUTIONAL ☐ I-1 CONDITION ☐ 1 ☐ 2
☐ I-2 CONDITION ☐ 1 ☐ 2
☐ I-3 CONDITION ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5
☐ I-4

MERCANTILE ☐

RESIDENTIAL ☐ R-1 ☐ R-2 ☐ R-3 ☐ R-4

STORAGE ☐ S-1 MODERATE ☐ S-2 LOW ☐ HIGH-PILED
☐ PARKING GARAGE ☐ OPEN ☐ ENCLOSED ☐ REPAIR GARAGE
☐ UTILITY AND MISCELLANEOUS

ACCESSORY OCCUPANCY CLASSIFICATION(S):

INCIDENTAL USES(TABLE 509):

SPECIAL USES(CHAPTER 4-LIST CODE SECTIONS):

SPECIAL PROVISIONS(CHAPTER 5-LIST CODE SECTIONS):

MIXED OCCUPANCY: ☒ NO ☐ YES SEPARATION: ____HR. EXCEPTION:

☒ NON-SEPARATED USE(508.3) THE REQUIRED TYPE OF CONSTRUCTION FOR THE BUILDING SHALL BE DETERMINED BY APPLYING THE HEIGHT AND AREA LIMITATIONS FOR EACH OF THE APPLICABLE OCCUPANCIES TO THE ENTIRE BUILDING. THE MOST RESTRICTIVE TYPE OF CONSTRUCTION, SO DETERMINED, SHALL APPLY TO THE ENTIRE BUILDING.

☐ SEPARATED USE (508.4) SEE BELOW FOR AREA CALCULATIONS FOR EACH STORY. THE AREA OF THE OCUPANCY SHALL BE SUCH THAT THE SUM OF THE RATIOS OF THE ACTUAL FLOOR AREA OF EACH USE DIVIDED BY THE ALLOWABLE FLOOR AREA FOR EACH USE SHALL NOT EXCEED 1.

$$\frac{\text{ACTUAL AREA OF OCCUPANCY A}}{\text{ALLOWABLE AREA OF OCCUPANCY A}} + \frac{\text{ACTUAL AREA OF OCCUPANCY B}}{\text{ALLOWABLE AREA OF OCCUPANCY B}} \leq 1$$

$$____ + ____ + \ldots\ldots = ____ \leq 1.00$$

STORY NO.	DESCRIPTION AND USE	(A) BLDG AREA PER STORY (ACTUAL)	(B) TABLE 506.2[4] AREA	(C) AREA FOR FRONTAGE INCREASE[1,5]	(D) ALLOWABLE AREA PER STORY OR UNLIMITED[2,3]
1	B	1,550	19,000	-	19,000

[1] FRONTAGE AREA INCREASES FROM SECTION 506.2 ARE COMPUTED THUS:

A. PERIMETER WHICH FRONTS A PUBLIC WAY OR OPEN SPACE HAVING 20 FEET MINIMUM WIDTH = _____(F)
B. TOTAL BUILDING PERIMETER =_____(P)
C. RATIO (F/P) = _____ (F/P)
D. W = MINIMUM WIDTH OF PUBLIC WAY = _____ (W)
E. PERCENT OF FRONTAGE INCREASE ↸ = 100[F/P-0.25] X W/30=_____ (%)

[2] UNLIMITED AREA APPLICABLE UNDER CONDITIONS OF SECTION 507.

[3] MAXIMUM BUILDING AREA = TOTAL NUMBER OF STORIES IN THE BUILDING x D (MAXIMUM 3 STORIES) (506.2).

[4] THE MAXIMUM AREA OF OPEN PARKING GARAGES MUST COMPLY WITH 406.5.4.

[5] FRONTAGE INCREASE IS BASED ON THE UNSPRINKLERED AREA VALUE IN TABLE 506.2.

ALLOWABLE HEIGHT

	ALLOWABLE	SHOWN ON PLANS	CODE REFERENCE[1]
BUILDING HEIGHT IN FEET (TABLE 504.3)[2]	FEET 55	28'-0"	
BUILDING HEIGHT IN STORIES (TABLE 504.4)[3]	STORIES 2	STORIES 2	

1. PROVIDE CODE REFERENCE IF THE "SHOWN ON PLANS" QUANTITY IS NOT BASED ON TABLE 504.3 OR 504.4.
2. THE MAXIMUM HEIGHT OF AIR TRAFFIC CONTROL TOWERS MUST COMPLY WITH TABLE 412.3.1.
3. THE MAXIMUM HEIGHT OF OPEN PARKING GARAGES MUST COMPLY WITH TABLE 406.5.4.

FIRE PROTECTION REQUIREMENTS

BUILDING ELEMENT	FIRE SEPARATION DISTANCE (FEET)	RATING REQ'D	RATING PROVIDED (W/ ___ REDUCTION)	DETAIL AND SHEET # *	DESIGN # FOR RATED ASSEMBLY	DESIGN # FOR RATED PENETRATION	DESIGN # FOR RATED JOINTS
STRUCTURAL FRAME, INCLUDING COLUMNS, GIRDERS, TRUSSES	-	0	-	-	-	-	-
BEARING WALLS	-	-	-	-	-	-	-
EXTERIOR	-	-	-	-	-	-	-
NORTH		0	-	-	-	-	-
EAST		0	-	-	-	-	-
WEST		0	-	-	-	-	-
SOUTH		0	-	-	-	-	-
INTERIOR	-	0	-	-	-	-	-
NONBEARING WALLS & PARTITIONS	-	-	-	-	-	-	-
EXTERIOR	-	0	-	-	-	-	-
NORTH	-	0	-	-	-	-	-
EAST	-	0	-	-	-	-	-
WEST	-	0	-	-	-	-	-
SOUTH	-	0	-	-	-	-	-
INTERIOR	-	0	-	-	-	-	-
FLOOR CONSTRUCTION INCLUDING SUPPORTING BEAMS AND JOISTS	-	0	-	-	-	-	-
FLOOR CEILING ASSEMBLY	-	2 HR	-	-	-	L505	-
COLUMNS SUPPORTING FLOORS	-	-	-	-	-	-	-
ROOF CONSTRUCTION INCLUDING SUPPORTING BEAMS AND JOISTS	-	0	-	-	-	-	-
ROOF CEILING ASSEMBLY	-	-	-	-	-	-	-
COLUMNS SUPPORTING ROOF	-	-	-	-	-	-	-
SHAFT ENCLOSURES-EXIT	-	-	-	-	-	-	-
SHAFT ENCLOSURES-OTHER	-	-	-	-	-	-	-
CORRIDOR SEPARATION		0	-				-
OCCUPANCY SEPARATION	-	-	-	-	-	-	-
PARTY/FIRE WALL SEPARATION	-	4	-	-	-	-	-
SMOKE BARRIER SEPARATION	-	-	-	-	-	-	-
TENANT/DWELLING UNIT/ SLEEPING UNIT SEPARATION	0	-	-	-	-	-	-
INCIDENTAL USE SEPARATION							

*INDICATE SECTION NUMBER PERMITTING REDUCTION

THIS IS AN EXISTING DOWNTOWN BUILDING WITH MASONRY (>4 HR) TENANT SEPARATION WALL.

PERCENTAGE OF WALL OPENING CALCULATIONS-EXISTING, NO CHANGE

FIRE SEPARATION DISTANCE (FEET) FROM PROPERTY LINES	DEGREE OF OPENINGS PROTECTION (TABLE 705.8)	ALLOWABLE AREA (%)	ACTUAL SHOWN ON PLANS (%)
-	-	-	-

LIFE SAFETY SYSTEM REQUIREMENTS:

EMERGENCY LIGHTING: ☐ NO ☒ YES
EXIT SIGNS: ☐ NO ☒ YES
FIRE ALARM: ☒ NO ☐ YES
SMOKE DETECTION SYSTEMS: ☒ NO ☐ YES ☐ PARTIAL _____
CARBON MONOXIDE DETECTION: ☒ NO ☐ YES

*NOTE: PROVIDE CO SENSORS THROUGHOUT R-2 SPACE ON SECOND FLOOR

LIFE SAFETY PLAN REQUIREMENTS:

LIFE SAFETY PLAN SHEET #, IF PROVIDED SEE SHEET LS-1 OF 1

ACCESSIBLE DWELLING UNITS N/A
(SECTION 1107)

TOTAL UNITS	ACCESSIBLE UNITS REQUIRED	ACCESSIBLE UNITS PROVIDED	TYPE A UNITS REQUIRED	TYPE A UNITS PROVIDED	TYPE B UNITS REQUIRED	TYPE B UNITS PROVIDED	TOTAL ACCESSIBLE UNITS PROVIDED

ACCESSIBLE PARKING-EXISTING PARKING PROVIDED BY CITY
(SECTION 1106)

LOT OR PARKING AREA	TOTAL # OF PARKING SPACES		# OF ACCESSIBLE SPACES PROVIDED			TOTAL # ACCESSIBLE PROVIDED
	REQUIRED	PROVIDED	REGULAR WITH 5' ACCESS AISLE	VAN SPACES WITH 132" ACCESS AISLE	VAN SPACES WITH 8' ACCESS AISLE	

PLUMBING FIXTURE REQUIREMENTS
(TABLE 2902.1)

USE		WATERCLOSETS			URINALS	LAVATORIES			SHOWERS /TUBS	SERVICE SINKS	DRINKING FOUNTAINS	
		MALE	FEMALE	UNISEX		MALE	FEMALE	UNISEX			REGULAR	ACCESSIBLE
SPACE	REQUIRED	1	1	--		1	1	--		1	N/A	N/A
	PROVIDED			2				2		1	N/A	N/A

2018 NCBC 2902.2 EXC. 5; PROVIDING TWO UNISEX TOILET ROOMS TO MEET REQUIREMENT.

SPECIAL APPROVALS

SPECIAL APPROVAL: (LOCAL JURISDICTION, DEPARTMENT OF INSURANCE, OSC, DPI, DHHS, ICC, ETC., DESCRIBE BELOW)

DESIGN LOADS: STRUCTURAL DESIGN (EXISTING BUILDING-NO CHANGE)

SNOW (I_S) -
SEISMIC (I_E) -

LIVE LOADS: ROOF - PSF
MEZZANINE N/A PSF
FLOOR - PSF

GROUND SNOW LOAD: - PSF

WIND LOAD: BASIC WIND SPEED - MPH (ASCE-7)
EXPOSURE CATEGORY -

SEISMIC DESIGN CATEGORY ☐ A ☐ B ☐ C ☐ D

PROVIDE THE FOLLOWING SEISMIC DESIGN PARAMETERS:

OCCUPANCY CATEGORY (TABLE 1604.5) ☐ I ☐ II ☐ III

SPECTRAL RESPONSE ACCELERATION S_S - %g S_1 - ☐ IV

SITE CLASSIFICATION (ASCE 7): ☐ A ☐ B ☐ C ☐ D %g

DATA SOURCE: ☐ FIELD TEST ☐ PRESUMPTIVE ☐ E ☐ F ☐ HISTORICAL DATA

BASIC STRUCTURAL SYSTEM (CHECK ONE)

☐ BEARING WALL ☐ DUAL W/SPECIAL MOMENT FRAME
☐ BUILDING FRAME ☐ DUAL W/INTERMEDIATE R/C OR SPECIAL STEEL
☐ MOMENT FRAME ☐ INVERTED PENDULUM

ANALYSIS PROCEDURE ☐ SIMPLIFIED ☐ EQUIVALENT LATERAL FORCE ☐ DYNAMIC

ARCHITECTURAL, MECHANICAL, COMPONENTS ANCHORED? ☐ YES ☐ NO

LATERAL DESIGN CONTROL: EARTHQUAKE ☐ WIND ☒

SOIL BEARING CAPACITIES:

FIELD TEST (PROVIDE COPY OF TEST REPORT) _____ PSF

PRESUMPTIVE BEARING CAPACITY - PSF

PILE SIZE, TYPE, AND CAPACITY_____

ENERGY REQUIREMENTS: EXISTING BUILDING, NO ENVELOPE CHANGES.

THE FOLLOWING DATA SHALL BE CONSIDERED MINIMUM AND ANY SPECIAL ATTRIBUTE REQUIRED TO MEET THE ENERGY CODE SHALL ALSO BE PROVIDED. EACH DESIGNER SHALL FURNISH THE REQUIRED PORTIONS OF THE PROJECT INFORMATION FOR THE PLAN DATA SHEET. IF PERFORMANCE METHOD, STATE THE ANNUAL ENERGY COST FOR THE STANDARD REFERENCE DESIGN VS THE ANNUAL ENERGY COST FOR THE PROPOSED DESIGN.

EXISTING BUILDING ENVELOPE COMPLIES WITH CODE: ☐ NO ☐ YES (THE REMAINDER OF THIS SECTION IS NOT APPLICABLE)

EXEMPT BUILDING ☐ NO ☐ YES PROVIDE CODE OR STATUTORY REFERENCE:_____

CLIMATE ZONE: ☐ 3A ☐ 4A ☐ 5A

METHOD OF COMPLIANCE: ENERGY CODE ☐ PERFORMANCE ☐ PRESCRIPTIVE
ASHRAE 90.1 ☐ PERFORMANCE ☐ PRESCRIPTIVE

OTHER: ☐ PERFORMANCE (SPECIFY SOURCE)_____

THERMAL ENVELOPE (PRESCRIPTIVE METHOD ONLY)

ROOF/CEILING ASSEMBLY (EACH ASSEMBLY)
DESCRIPTION OF ASSEMBLY
U-VALUE OF TOTAL ASSEMBLY:
R-VALUE OF INSULATION:
SKYLIGHTS IN EACH ASSEMBLY
U-VALUE OF SKYLIGHT:
TOTAL SQUARE FOOTAGE OF SKYLIGHTS IN EACH ASSEMBLY

EXTERIOR WALLS (EACH ASSEMBLY)
DESCRIPTION OF ASSEMBLY
U-VALUE OF TOTAL ASSEMBLY:
R-VALUE OF INSULATION:
OPENINGS (WINDOWS OR DOORS WITH GLAZING)
U-VALUE OF ASSEMBLY SOLAR HEAT GAIN COEFFICIENT:
PROJECTION FACTOR DOOR R-VALUES

WALLS BELOW GRADE (EACH ASSEMBLY)
DESCRIPTION OF ASSEMBLY
U-VALUE OF TOTAL ASSEMBLY R-VALUE OF INSULATION:

FLOORS OVER UNCONDITIONED SPACE (EACH ASSEMBLY)
DESCRIPTION OF ASSEMBLY
U-VALUE OF TOTAL ASSEMBLY R-VALUE OF INSULATION:

FLOOR SLAB ON GRADE
DESCRIPTION OF ASSEMBLY
R-VALUE OF INSULATION:
U-VALUE OF TOTAL ASSEMBLY -
HORIZONTAL / VERTICAL REQUIREMENT -
SLAB HEATED ?

SUMMARY:

ENERGY CODE:	2018 NORTH CAROLINA STATE BUILDING CODE: ENERGY CONSERVATION CODE
BUILDING CODE:	2018 NORTH CAROLINA STATE BUILDING CODE: BUILDING CODE
MECHANICAL CODE:	2018 NORTH CAROLINA STATE BUILDING CODE: MECHANICAL CODE
PLUMBING CODE:	2018 NORTH CAROLINA STATE BUILDING CODE: PLUMBING CODE
ELECTRICAL CODE:	2020 NATIONAL ELECTRIC CODE
ACCESSIBILITY CODE:	ICC/ANSI 117.1-2009 AMERICAN NATIONAL STANDARD ACCESSIBLE AND USABLE BUILDINGS AND FACILITIES
CONSTRUCTION:	III-B
OCCUPANCY:	B

SHEET INDEX

BD-1 OF 1	APPENDIX B
BD-2 OF 2	UL DETAIL-FLOOR/CEILING
LS-1 OF 1	LIFE SAFETY PLAN
F-1 OF 2	FLOOR PLAN
F-2 OF 2	EQUIPMENT PLAN
P-1 OF 2	PLUMBING SUPPLY PIPING PLAN
P-2 OF 2	PLUMBING WASTE PIPING PLAN
M-1 OF 3	MECHANICAL HVAC PLAN
M-2 OF 3	MECHANICAL SCHEDULES/NOTES & DETAILS
M-3 OF 3	MECHANICAL SCHEDULES/NOTES & DETAILS
E-1 OF 3	ELECTRICAL LIGHTING PLAN
E-2 OF 3	ELECTRICAL POWER PLAN
E-3 OF 3	ELECTRICAL RISER DIAGRAM/PANELS/NOTES

NORTH CAROLINA PROFESSIONAL SEAL 18909 ENGINEER RANDY L. CRUSE 09/09/25

PROPOSED UP-FIT FOR:
RUMBLE PIZZA
215 EAST BROAD STREET
DUNN, NORTH CAROLINA 28334

REVISIONS

NO.	

Cruse And Associates, P.A.
414 E. Edgerton St.
Raleigh, North Carolina 28304
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DATE 09/09/2025
DRAWN BY BAM
JOB NO. 25-20

SHEET NO.
BD-1 OF 2

UL Product iQ®

UL Solutions

Design/System/Construction/Assembly Usage Guidance

- Authorities Having Jurisdiction should be consulted in all cases as to the particular requirements governing the installation and use of UL Certified products, equipment, system, devices, and materials.
- Authorities Having Jurisdiction should be consulted before construction.
- Fire resistance assemblies and products are developed by the design submitter and have been investigated by UL for compliance with applicable requirements. The published information cannot always address every construction nuance encountered in the field.
- When field issues arise, it is recommended the first contact for assistance be the technical service staff provided by the product manufacturer noted for the design. Users of fire resistance assemblies are advised to consult the general Guide. Information for each product category and each group of assemblies. The Guide information includes specifics concerning alternate materials and alternate methods of construction.
- Only products which bear UL's Mark are considered Certified.

BXUV - Fire Resistance Ratings - ANSI/UL 263 Certified for United States

BXUV7 - Fire Resistance Ratings - CAN/ULC-S101 Certified for Canada

See General Information for Fire-resistance Ratings - ANSI/UL 263 Certified for United States

Design Criteria and Allowable Variances

See General Information for Fire-resistance Ratings - CAN/ULC-S101 Certified for Canada

Design Criteria and Allowable Variances

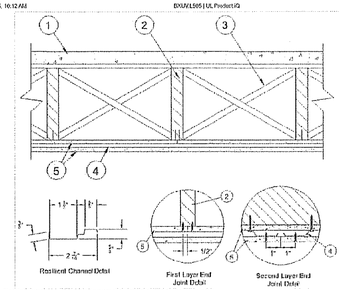
Design No. L505

June 30, 2025

Unrestrained Assembly Rating — 2 Hr.
Finish Rating — 75 Min.

This design was evaluated using a load-design method other than the Limit States Design Method (e.g., Working Stress Design Method). For jurisdictions employing the Limit States Design Method, such as Canada, a load restriction factor shall be used — See Guide BXUV or BXUV7

*** Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.**



1. **Flooring System** — The flooring system shall consist of one of the following:

System No. 1

Subflooring — Min 1 by 6 in. T & G lumber fastened diagonally to joists, or min 15/32 in. thick wood structural panels or 7/16 in. thick oriented strand board (OSB) wood structural panels, min grade "C-D" or "Sheathing". Face grain of plywood or strength axis of panels to be perpendicular to the joists with joints staggered.

Vapor Barrier — Nom 0.010 in. thick commercial resin-sized building paper.

Finish Flooring Min 1 by 4 in. T & G lumber fastened perpendicular to joists, or min 19/32 in wood structural panels, min grade "Underlayment" or "Single Floor". Face grain of plywood or strength axis of panels to be perpendicular to joists with joints staggered

System No. 2

Subflooring — Min 15/32 in. thick wood structural panels, min grade "C-D" or "Sheathing". Face grain of plywood or strength axis of panels to be perpendicular to the joists with joints staggered.

Vapor Barrier - (Optional) — Nom 0.010 in. thick commercial asphalt saturated felt.

Finish Flooring - Floor Topping Mixture* — Min 3/4 in. thickness of floor topping mixture having a minimum compressive strength of 1800 psi Refer to manufacturer's instructions accompanying the material for specific mix design.

UNITED STATES GYPSUM CO — Types LBX, HGLFR, CSD

USG MEXICO S A DE C V — Types LBX, HGLFR, CSD

Floor Mat Materials* — (Optional) - Floor mat material laid over the subfloor. Refer to manufacturer's instructions regarding the minimum thickness of floor topping over each floor mat material.

UNITED STATES GYPSUM CO — Types SAM, LEVELROCK® Sound Reduction Board, LEVELROCK® Brand Floor Underlayment SRM 25

Alternate Floor Mat Materials* - (Optional) — Nom 3/8 in. thick floor mat material laid over the subfloor. Floor topping thickness shall be as specified under **Floor Topping Mixture.**

GRASSWORK L L C — Type SC59

Alternate Floor Mat Material* — (Optional) - Floor mat material nominal 3/8 in. thick loose laid over the subfloor. Floor topping shall be a min 3/4 or 1 in. thickness of floor topping mixture for min 19/32 or min 15/32 in. thick wood structural panels respectively.

System No. 3

Subflooring — Min 15/32 in. thick wood structural panels, min grade "C-D" or "Sheathing". Face grain of plywood or strength axis of panels to be perpendicular to the joists with joists staggered.

Vapor Barrier - (Optional) — Nom 0.010 in thick commercial asphalt saturated felt.

Finish Flooring - Floor Topping Mixture* — Min 1-1/2 in. thickness of floor topping mixture having a min compressive strength of 1000 psi and a min density of 100 pfcu or mixes 5 pcf. Foam concentrate mixed 40:1 by volume with water and expanded at 100 psi through nozzle. Mixture shall consist of 1.4 cu feet of preformed foam concentrate to 94 lbs Type I Portland cement, 300 lbs of sand with 5-1/2 gal of water.

ELASTIZELL CORP OF AMERICA — Type FF

System No. 4

Subflooring — Min 15/32 in. thick wood structural panels, min grade "C-D" or "Sheathing". Face grain of plywood or strength axis of panels to be perpendicular to the joists with joists staggered

Vapor Barrier - (Optional) — Nom 0.010 in thick commercial asphalt saturated felt.

Floor Mat Materials* - (Optional) — Floor mat material nom 1/8 in. (3 mm) thick loose laid over the subfloor. Floor topping thickness shall be a min of 1 in. (25 mm)

HACKER INDUSTRIES INC — FIBRE FILL SCM 125

Alternate Floor Mat Materials - (Optional) — Floor mat material nom 1/8 in. (6 mm) thick loose laid over the subfloor. Floor topping thickness shall be a min of 1 in. (25 mm)

HACKER INDUSTRIES INC — Types FIBRA-FILL SCM 250 and FIBRA-FILL SCM 250+

Alternate Floor Mat Materials - (Optional) — Floor mat material nom 5/8 in. (16 mm) thick loose laid over the subfloor. Floor topping thickness shall be a min of 1-1/4 in. (32 mm)

HACKER INDUSTRIES INC — Types FIBRA-FILL SCM 400 and FIBRA-FILL SCM 400+

Alternate Floor Mat Materials - (Optional) — Floor mat material nom 3/4 in. (19 mm) thick loose laid over the subfloor. Floor topping thickness shall be a min of 1-1/2 in. (38 mm)

HACKER INDUSTRIES INC — Types FIBRA-FILL SCM 750 and FIBRA-FILL SCM 750+

Alternate Floor Mat Materials - (Optional) — Floor mat material nom 5/64 in. (2 mm) thick adhered to subfloor with Hacker Floor Primer. Primer to be applied to the surface of the mat prior to the placement of a min 1-1/4 in. of floor-topping mixture.

HACKER INDUSTRIES INC — Type Hacker Sound-Mat.

Alternate Floor Mat Materials - (Optional) — Floor mat material nom 1/4 in. (6 mm) thick adhered to subfloor with Hacker Floor Primer. Primer to be applied to the surface of the mat prior to the placement of a min 1-1/2 in. (37 mm) of floor-topping mixture.

HACKER INDUSTRIES INC — Type Hacker Sound-Mat R.

Metal Lath (Optional) — For use with 6/6 in. (150 mm) floor mat materials. 3/8 in. expanded steel diamond mesh. 3.4 lb/sq yd placed over the floor mat material. Hacker Floor Primer to be applied prior to the placement of the metal lath. When metal lath is used, floor topping thickness is a nom 1-1/4 in. over the floor mat.

Finish Flooring - Floor Topping Mixture* — Min 3/4 or 1 in. thickness of floor topping mixture for min 19/32 or min 15/32 in. thick wood structural panels respectively, having a min compressive strength of 1100 psi. Mixture shall consist of 6.8 gal of water to 80 lbs of floor topping mixture to 1.0 cu ft of sand.

HACKER INDUSTRIES INC — Fibra-Fill Gypsum Concrete, Fibra-Fill 2030, Fibra-Fill 4040, Fibra-Fill High Strength. Gyp-Span Radiant

System No. 5

Deleted.

System No. 6

Subflooring — Min 15/32 in. thick wood structural panels, min grade "C-D" or "Sheathing". Face grain of plywood or strength axis of panels to be perpendicular to the joists with joists staggered.

Vapor Barrier - (Optional) — Nom 0.010 in thick commercial asphalt saturated felt.

Finish Flooring - Floor Topping Mixture* — Min 3/4 or 1 in. thickness of floor topping mixture for 19/32 or 15/32 in. thick wood structural panels respectively, having a min compressive strength of 1000 psi. Mixture shall consist of 5 to 8 gal of water to 80 lbs of floor topping mixture to 2.5 cu ft of sand.

ULTRA QUIET FLOORS — UQF-A, UQF-Super Blend, UQF-Plus 200

System No. 7

Subflooring — Min 15/32 in. thick wood structural panels, min grade "C-D" or "Sheathing". Face grain of plywood or strength axis of panels to be perpendicular to the joists with joists staggered.

Vapor Barrier - (Optional) — Nom 0.010 in thick commercial asphalt saturated felt.

Finish Flooring - Floor Topping Mixture* — Min 3/4 in. thickness of floor topping mixture having a minimum compressive strength of 1500 psi. Refer to manufacturer's instructions accompanying the material for specific mix design.

MAXXON CORP — Type Maxxon Standard and Maxxon High Strength

Floor Mat Materials* - (Optional) — Floor mat material loose laid over the subfloor. Refer to manufacturer's instructions regarding the minimum thickness of floor topping over each floor mat material.

MAXXON CORP — Type Encapsulated Sound Mat.

Floor Mat Reinforcement - (Optional) - Refer to manufacturer's instructions regarding minimum thickness of floor topping for use with floor mat reinforcement.

Metal Lath — (Optional) — 3/8 in. expanded galvanized steel diamond mesh. 3.4 lb/sq yd loose laid over the floor mat material.

Fiber Glass Reinforcement - (Optional, Not Shown) - 0.015 in. thick PVC coated non-woven fiberglass mesh. 0.960 lbs/sq yd loose laid over the floor mat material.

System No. 8

Subflooring — Min 15/32 in. thick wood structural panels, min grade "C-D" or "Sheathing". Face grain of plywood or strength axis of panels to be perpendicular to the joists with joists staggered.

Vapor Barrier — (Optional) — Nom 0.010 in. thick commercial resin-sized building paper.

Finish Flooring — Floor Topping Mixture* — Min 3/4 in. thickness of floor topping mixture having a minimum compressive strength of 1500 psi. Refer to manufacturer's instructions accompanying the material for specific mix design.

FORMULATED MATERIALS LLC — Types FR-25, FR-30, SteelMix and Tradstone Advantage

Alternate Floor Mat Material* — (Optional) — Floor mat material nominal 7 - 9.5 mm thick loose laid over the subfloor. Floor topping thickness shall be a minimum of 3/4 in

FORMULATED MATERIALS LLC — Types M1, M2, M3, Elite, Duo, P-1, and R2.

System No. 9

Subflooring — Min 1 by 6 in. T & G lumber fastened diagonally to joists, or min 15/32 in. thick wood structural panels or 7/16 in. thick oriented strand board (OSB) wood structural panels, min grade "C-D" or "Sheathing". Face grain of plywood or strength axis of panels to be perpendicular to the joists with joists staggered.

Finish Floor - Mineral and Fiber Board* — Min 1/2 in thick, supplied in sizes ranging from 3 ft by 4 ft to 8 ft by 12 ft. All joints to be staggered a min of 12 in. in bth adjacent sub floor joint.

HOMASOTE CO — Type 440 SD Mineral and Fiber Board

System No. 10

Subflooring — Min 15/32 in. thick wood structural panels, min grade "C-D" or "Sheathing". Face grain of plywood or strength axis of panels to be perpendicular to the joists with joists staggered.

Vapor Barrier - (Optional) — Nom 0.010 in thick commercial asphalt saturated felt.

Finish Flooring - Floor Topping Mixture* — Min 1-1/2 in. thickness of floor topping mixture having a min compressive strength of 1000 psi and a min density of 100 pfcu or mixes 5 pcf. Foam concentrate mixed 40:1 by volume with water and expanded at 100 psi through nozzle. Mixture shall consist of 1.2 cu feet of preformed foam concentrate to 94 lbs Type I Portland cement, 300 lbs of sand with 5-3/4 gal of water.

ATRIX INDUSTRIES — Floor-Topping Mixture

System No. 11

Subflooring — Min 15/32 in. thick wood structural panels, min grade "C-D" or "Sheathing". Face grain of plywood or strength axis of panels to be perpendicular to the joists with joists staggered.

Vapor Barrier - (Optional) — Nom 0.010 in. thick commercial asphalt saturated felt.

Finish Flooring - Floor Topping Mixture* — Min 3/4 or 1 in thickness of floor topping mixture for 19/32 or 15/32 in. thick wood structural panels respectively, having a min compressive strength of 1000 psi Refer to manufacturer's instructions accompanying the material for specific mix design.

ARCOSA SPECIALTY MATERIALS — AccuCrete ® Types NeuGen, Green, Prime and ProFoot; AccuAdditive®, Accuaver ® Types G40, G50 and S030

Alternate Floor Mat Material* - (Optional) - Floor mat material nominal 7 - 9.5 mm thick loose laid over the subfloor. Floor topping shall be a min of 3/4 in. or 1 in. thick of floor topping mixture for 19/32 or 15/32 in. thick wood structural panels respectively.

ARCOSA SPECIALTY MATERIALS — AccuQuiet® Types 035, D-18, 075, D075, FM 125, FM 1325, FM 750, FM 750S, FM 875, FM 1375, FM 750, and EM 750S

System No. 12

Subflooring — 15/32 or 19/32 in. thick wood structural panels, min grade "C-D" or "Sheathing". Face grain of plywood or strength axis of panels to be perpendicular to joist with joists staggered.

Vapor Barrier — (Optional) — Nom 0.010 in. thick commercial asphalt saturated felt.

Finish Flooring — Floor Topping Mixture* — Min 3/4 or 1 in thickness of floor topping mixture for 19/32 or 15/32 in. thick wood structural panels respectively, having a min compressive strength of 1000 psi Refer to manufacturer's instructions accompanying the material for specific mix design.

System No. 13

Subflooring — Min 15/32 in. thick wood structural panels, min grade "C-D" or "Sheathing". Face grain of plywood or strength axis of panels to be perpendicular to the joists with joists staggered.

Vapor Barrier — (Optional) - Commercial asphalt saturated felt, 0.030 in. thick.

Vapor Barrier — (Optional) - Nom 0.010 in. thick commercial resin-sized building paper.

Finish Flooring* - Min 3/4 in. thickness of any Floor Topping Mixture bearing the UL Classification Marking as to Fire Resistance. See Floor- and Roof-Topping Mixtures (CCZX) category for names of Classified Companies

Floor Mat Materials* — (Optional) - Nom. 1/4 in. thick loose laid over the subfloor. Floor topping thickness shall be a minimum of 3/4 in.

KEENE BUILDING PRODUCTS CO INC — Type Quiet Qut 55/025 and Quiet Qut 55/025 H

Alternate Floor Mat Materials* — (Optional) - Floor mat material nom 3/8 in. thick loose laid over the subfloor. Floor topping thickness shall be a minimum of 1 in

KEENE BUILDING PRODUCTS CO INC — Type Quiet Qut 60/080 and Quiet Qut 60/080 H

Alternate Floor Mat Materials* - (Optional) - Floor mat material nom 3/4 in. thick loose laid over the subfloor. Floor topping thickness shall be a minimum of 1-1/2 in.

KEENE BUILDING PRODUCTS CO INC — Type Quiet Qut 65/075, Quiet Qut 65/075 H

Alternate Floor Mat Materials* - (Optional) - Floor mat material nom 3/8 in. thick loose laid over the subfloor. Floor topping thickness shall be a minimum of 3/4 in.

KEENE BUILDING PRODUCTS CO INC — Type Quiet Qut 52/013 and Quiet Qut 52/013 H

Alternate Floor Mat Materials* - (Optional) - Floor mat material nom 1/4 in. entangled net core with a compressible fabric attached to the bottom layer laid over the subfloor. Floor topping thickness shall be a minimum of 1 in.

KEENE BUILDING PRODUCTS CO INC — Quiet Qut 55/025 MT and Quiet Qut 55/025 H MT

System No. 14

Subflooring — Min 15/32 in. thick wood structural panels, min grade "C-D" or "Sheathing". Face grain of plywood or strength axis of panels to be perpendicular to the joists with joists staggered.

Vapor Barrier - (Optional) — Nom 0.010 in. thick commercial resin-sized building paper.

Finish Flooring - Floor Topping Mixture* — Min 3/4 or 1 in. thickness of floor topping mixture for 19/32 or 15/32 in. thick wood structural panels respectively, having a min compressive strength of 1000 psi. Refer to manufacturer's instructions accompanying the material for specific mix design.

DEPENDABLE LLC — 650, MFA, 655, F250, 660, C500 and 666 RH.

Floor Mat Materials* — (Optional) - Nom. 1/4 in. thick loose laid over the subfloor. Floor topping thickness shall be a minimum of 3/4 in.

KEENE BUILDING PRODUCTS CO INC — Type Quiet Qut 55/025 and Quiet Qut 55/025 H

Alternate Floor Mat Materials* — (Optional) - Floor mat material nom 3/8 in. thick loose laid over the subfloor. Floor topping thickness shall be a minimum of 1 in.

KEENE BUILDING PRODUCTS CO INC — Type Quiet Qut 60/080 and Quiet Qut 60/080 H

Alternate Floor Mat Materials* — (Optional) - Floor mat material nom 3/4 in. thick loose laid over the subfloor. Floor topping thickness shall be a minimum of 1-1/2 in.

KEENE BUILDING PRODUCTS CO INC — Type Quiet Qut 65/075, Quiet Qut 65/075 H

Alternate Floor Mat Materials* — (Optional) - Floor mat material nom 3/8 in. thick loose laid over the subfloor. Floor topping thickness shall be a minimum of 3/4 in.

KEENE BUILDING PRODUCTS CO INC — Type Quiet Qut 52/013 and Quiet Qut 52/013 H

Alternate Floor Mat Materials* — (Optional) - Floor mat material nom 1/4 in. entangled net core with a compressible fabric attached to the bottom layer laid over the subfloor. Floor topping thickness shall be a minimum of 1 in.

KEENE BUILDING PRODUCTS CO INC — Quiet Qut 55/025 MT and Quiet Qut 55/025 H MT

System No. 15

Subflooring — Min 15/32 in. thick wood structural panels, min grade "C-D" or "Sheathing". Face grain of plywood or strength axis of panels to be perpendicular to the joists with joists staggered.

Vapor Barrier — (Optional) - Commercial asphalt saturated felt, 0.030 in. thick.

Vapor Barrier — (Optional) - Nom 0.010 in. thick commercial resin-sized building paper.

Finish Flooring — Min 1 by 4 in. T & G lumber fastened perpendicular to joists, or min 19/32 in. wood structural panels, min grade "Underlayment" or "Single Floor". Face grain of plywood or strength axis of panels to be perpendicular to joists with joists staggered.

Floor Mat Materials* — (Optional) - Nom. 1/4 in. thick loose laid over the subfloor. Floor topping thickness shall be a minimum of 3/4 in.

KEENE BUILDING PRODUCTS CO INC — Type Quiet Qut 55/025 and Quiet Qut 55/025 H

Alternate Floor Mat Materials* — (Optional) - Floor mat material nom 3/8 in. thick loose laid over the subfloor. Floor topping thickness shall be a minimum of 1 in.

KEENE BUILDING PRODUCTS CO INC — Type Quiet Qut 60/080 and Quiet Qut 60/080 H

Alternate Floor Mat Materials* — (Optional) - Floor mat material nom 3/4 in. thick loose laid over the subfloor. Floor topping thickness shall be a minimum of 1-1/2 in.

KEENE BUILDING PRODUCTS CO INC — Type Quiet Qut 65/075, Quiet Qut 65/075 H

Alternate Floor Mat Materials* — (Optional) - Floor mat material nom 3/8 in. thick loose laid over the subfloor. Floor topping thickness shall be a minimum of 3/4 in.

KEENE BUILDING PRODUCTS CO INC — Type Quiet Qut 52/013 and Quiet Qut 52/013 H

Alternate Floor Mat Materials* — (Optional) - Floor mat material nom 1/4 in. entangled net core with a compressible fabric attached to the bottom layer laid over the subfloor. Floor topping thickness shall be a minimum of 1 in.

KEENE BUILDING PRODUCTS CO INC — Quiet Qut 55/025 MT and Quiet Qut 55/025 H MT

System No. 16

Subflooring — Building Units* — Nom 3/4 in. thick, tongue and grooved boards. Long dimension of boards to be perpendicular to joists with end joints staggered a min of 4 ft and centered over the joists. Boards secured to joists with 2 in. long self-drilling, self-tapping screws or 2 in. 0.113 in. Ring Shank nails spaced a max of 12 in. OC in the field with screws/nails located 1 in. from long edge, and max 8 in. OC along the end joints with screws/nails located 1/2 in. from end joint.

ECTOR INTERNATIONAL INC — Type Megaboard

Vapor Barrier — Nom 0.010 in. thick commercial resin-sized building paper.

Finish Flooring — Min 1 by 4 in. T & G lumber fastened perpendicular to joists, or min 19/32 in. wood structural panels, min grade "Underlayment" or "Single Floor". Face grain of plywood or strength axis of panels to be perpendicular to joists with joists staggered.

System No. 17

Subflooring — Min 15/32 in. thick wood structural panels or 7/16 in. thick oriented strand board (OSB) wood structural panels, min grade "C-D" or "Sheathing". Face grain of plywood or strength axis of panels to be perpendicular to the joists with joists staggered.

Wall and Partition Facings and Accessories* - Sound Barrier (Optional) — Acoustic Sleeper pads stapled to the top of the bottom of the finish floor, or to 5/16 in. thick by 1-1/2 in. wide wood strips and centered over wood joist. Acoustic Sleeper pads are to be spaced appropriately so that the finish floor panels are fastened through Acoustic Sleeper pads to the joist.

STC ARCHITECTURAL PRODUCTS L L C DBA STC SOUND CONTROL — Acoustic Sleeper

Finish Flooring — Min 19/32 in. wood structural panels, min grade "Underlayment" or "Single Floor". Face grain of plywood or strength axis of panels to be perpendicular to joists with joints staggered. Butt joints of panels have the option of being sealed with any UL Classified caulk or sealant found under FHR, Vented or Cavity Materials* (XHKN).

System No. 18

Subflooring — Min 1 by 6 in. T & G lumber fastened diagonally to joists, or min 15/32 in. thick wood structural panels or 7/16 in. thick oriented strand board (OSB) wood structural panels, min grade "C-D" or "Sheathing". Face grain of plywood or strength axis of panels to be perpendicular to the joists with joists staggered.

Finish Flooring - Floor Topping Mixture* — Min 1 in. thickness of floor topping mixture having a min compressive strength of 4500 psi. Refer to manufacturer's instructions accompanying the material for specific mix design

SIKA DEUTSCHLAND GMBH — Type SCHUCO® AP Rapid Plus

System No. 19

Subflooring — Min 1 by 6 in. T & G lumber fastened diagonally to joists, or min 15/32 in. thick wood structural panels or 7/16 in. thick oriented strand board (OSB) wood structural panels, min grade "C-D" or "Sheathing". Face grain of plywood or strength axis of panels to be perpendicular to the joists with joists staggered.

Vapor Barrier — (Optional) - Commercial asphalt saturated felt, 0.030 in. thick

Vapor Barrier — (Optional) - Nom 0.010 in. thick commercial resin-sized building paper.

Finish Flooring - Floor Topping Mixture* — Min 3/4 in. thickness of any Floor Topping Mixture bearing the UL Classification Marking as to Fire Resistance. See Floor- and Roof-Topping Mixtures (CCZX) category for names of Classified Companies. Refer to the manufacturer's instructions accompanying the material and/or contact the manufacturer's technical support for specific mix designs and minimum thickness recommended for use with eligible floor mat(s).

Floor Mat Materials* — (Optional, Not Shown) - Floor mat material loose laid over the subfloor. Refer to manufacturer's instructions regarding the minimum thickness of floor topping over each floor mat material.

Freudenberg Performance Materials LP — FibaTexture® by Colbond is member of the Low & Bonar group. Types 175, 250, 250 Plus, 490, 490 Plus, 750, and 750 Plus.

Floor Mat Reinforcement — (Optional) - Refer to manufacturer's instructions regarding minimum thickness of floor topping for use with floor mat reinforcement.

Metal Lath — (Optional) Expanded steel diamond mesh, 2.5 lb / sq yd loose laid over floor mat material.

Fiberglass Mesh Reinforcement — (Optional) — Coated non-woven glass fiber mesh grid loose laid over floor mat material.

System No. 20

Subflooring — Min 1 by 6 in. T & G lumber fastened diagonally to joist, or min 15/32 in. thick wood structural panels or 7/16 in. thick oriented strand board (OSB) wood structural panels, min grade "C-D" or "Sheathing". Face grain of plywood or strength axis of panels to be perpendicular to the joists with joints staggered.

Finish Flooring - Floor Topping Mixture* — Min 3/4 in. thickness of floor topping mixture having a min compressive strength of 1800 psi. Refer to manufacturer's instructions accompanying the material for specific mix design

ALPHAGYP, LLC — Type AlphaGyp

System No. 21

Subflooring — Min 1 by 6 in. T & G lumber fastened diagonally to joists, or min 15/32 in. thick wood structural panels or 7/16 in. thick oriented strand board (OSB) wood structural panels, min grade "C-D" or "Sheathing". Face grain of plywood or strength axis of panels to be perpendicular to the joists with joists staggered.

Finish Flooring - Floor Topping Mixture* — Min 1 in. thickness of floor topping mixture having a min compressive strength of 2500 psi. Refer to manufacturer's instructions accompanying the material for specific mix design

Apex Minerals LLC — Type Apex Multi Underlayment.

2. **Wood Joists** — Min 2 by 10, spaced 16 in. OC and effectively fireblocked in accordance with local codes.

3. **Cross Bridging** — Min 1 by 3 in. or min 2 by 10 solid blocking.

4. **Resilient Channels** — Resilient channels, formed from No. 25 MSG galv steel and shaped as shown, spaced 24 in. OC perpendicular to joists. Channels overlapped 1 1/2 in. at splices and secured to each joist with one flat common nail. Nails and clearance of channels to staff to be 3/4 in. Additional pieces, 60 in. long, placed immediately adjacent to continuous channels at end joints of second layer of gypsum board (Item 5) and similarly secured. Additional channels shall extend 8 in. beyond each side edge of board.

4A. **Steel Framing Members** — As an alternate to Item 4, furring channels and **Steel Framing Members*** as described below

a. **Furring Channels** — Furring channels, formed of No. 25 MSG galv steel, 2-5/16 in. on 2-2/3 in. wide by 7/8 in. deep, spaced 24 in. OC perpendicular to joists. Channels secured to joists as described in Item b. Ends of adjoining channels overlapped 6 in. and tied together with double strands of No. 18 SWG galv steel wire near each end of overlap.

b. **Steel Framing Members*** — Used to attach furring channels (Item a) to joists (Item 2). Clips spaced 48 in. OC., and secured to alternating joists with No. 8 x 2-1/2 in. coarse drywall screw through the center grommet. Furring channels are friction fitted into clips. RSIC-1 clip for use with 2-9/16 in. wide furring channels. RSIC-1 (F,75) clip for use with 2-7/8 in. wide furring channels. Adjoining channels are overlapped as described in Item a. As an alternate, ends of adjoining channels may be overlapped 6 in. and secured together with two self-tapping #6 framing screws, min 7/16 in. long at the midpoint of the overlap, with one screw on each flange of the channel. Additional clips required to hold furring channel that supports the wallboard butt joints, as described in Item 5.

PAC INTERNATIONAL L L C — Types RSIC-1, RSIC-1 (F,75)

4B. **Steel Framing Members*** — (Not Shown) - As an alternate to Items 4, furring channels and Steel Framing Members as described below.

a. **Furring Channels** — Formed of No. 25 MSG galv steel, 2 1/8 in. wide by 7/8 in deep, spaced 24 in OC, perpendicular to joists. Channels secured to joists as described in Item b. Ends of adjoining channels overlapped 6 in. and tied together with double strand of No. 18 SWG galv steel wire near each end of overlap.

b. **Steel Framing Members*** — Used to attach furring channels (Item a) to the wood joists (Item 2). Clips spaced 48 in. OC., and secured to alternating joists with No. 8 x 2-1/2 in. coarse drywall screw through the center grommet. Furring channels are friction fitted into clips. Adjoining channels are overlapped as described in Item a. As an alternate, ends of adjoining channels may be overlapped 6 in. and secured together with two self-tapping #6 framing screws, min 7/16 in. long at the midpoint of the overlap, with one screw on each flange of the channel. Additional clips required to hold furring channel that supports the gypsum board butt joints, as described in Item 5.

PRITEX INC — Type Genie Clip

4C. **Alternate Steel Framing Members*** — (Not Shown) - As an alternate to Item 4, furring channels and Steel Framing Members as described below.

a. **Furring Channels** — Formed of No. 25 MSG galv steel, 2-5/8 in. wide by 7/8 in deep, spaced 24 in OC, perpendicular to joists. Channels secured to joists as described in Item b.

b. **Steel Framing Members*** — Used to attach furring channels (Item a) to the wood joists (Item 2). Clips spaced at 48 in. OC and secured to the bottom of the joists with one 2 in. Coarse Drywall Screw with 1 in. diam washer through the center hole. Furring channels are then friction fitted into clips. Ends of channels are overlapped 8" and tied together with double strand of No. 18 AWG galvanized steel wire. Additional clips are required to hold the Gypsum Butt joints as described in Item 5.

STUDCO BUILDING SYSTEMS — RESILMOUNT Sound Isolation Clips - Type A2378

4D. **Alternate Steel Framing Members*** — (Not Shown) - As an alternate to Item 4, furring channels and Steel Framing Members as described below.

a. **Furring Channels** — Formed of No. 25 MSG galv steel, 2-1/2 in. wide by 7/8 in deep, spaced 24 in OC, perpendicular to joists. Channels secured to joists as described in Item b

b. **Steel Framing Members*** — Used to attach furring channels (Item a) to the wood joists (Item 2). Clips spaced at 48 in. OC and secured to the bottom of the joists with one 2-1/2 in. Coarse Drywall Screw with 1 in. diam washer through the center hole. Furring channels are then friction fitted into clips. Ends of channels are overlapped 8" and tied together with double strand of No. 18 AWG galvanized steel wire. Additional clips are required to hold the Gypsum Butt joints as described in Item 5.

REGUPOL AMERICA — Type SonicClip

5. **Gypsum Board*** — Two layers 5/8 in. thick gypsum board. When resilient channels (Item 4) are used, first layer installed with long dimension perpendicular to joists, and end joints of boards located at the joists. Nailed to joists with screwed fifteen nails, spaced 7 in. OC. All nails located 1/2 in. min distance from the edges and ends of the board. Second layer installed with long dimension perpendicular to resilient channels, and center line of boards located under a joint and staggered that the end joint of this layer is not in alignment with the end joint of the first layer. Secured to resilient channels with 1 in. long gypsum board screws 12 in. OC with additional screws 3 in. from side joints. End joints secured to both resilient channels as shown in end joint detail. All screws located 1 in. min distance from edges of boards. If gypsum board is other than 48 in. wide, length of additional channel may be modified as required to allow full extension along joints, as well as attachment to joists at each end. Joint treatment not required for this rating, except for tapered, rounded-edge gypsum board where edge joints are covered with paper tape and joint compound. As an alternate, nom 3/32 in. thick gypsum veneer plaster may be applied to the entire surface of Classified veneer baseboard. Joints reinforced.

When **Steel Framing Members** (Item 4B or 4D) are used, sheets installed with long dimensions parallel with joist. First layer attached to the furring channels using 1 in. long Type S bugle-head steel screws spaced 8 in. OC along batted end joints and 12 in. OC in the field of the board. Butted end joints shall be staggered min 2 ft. within the assembly, and occur midway between the continuous furring channels. Each end of each gypsum board shall be supported by a single length of furring channel equal to the width of the gypsum board plus 6 in. or more. The two furring channels shall be spaced approximately 3-1/2 in. OC, and be attached to underside of the joist with one #8SC 1 in. Low Gene clip at each end of the channel. Butted face layer end joints to be offset a min of 24 in. in adjacent courses. Outer layer attached to the furring channels using 1-5/8 in. long Type S bugle head steel screws spaced 8 in. OC at butted joints and 12 in. OC in the field. Butted end joints to be offset a min of 8 in. from base layer end joints. Butted side joints of outer layer to be offset min 18 in. from butted side joints of base layer.

When **Steel Framing Members** (Item 4C) are used, base layer of nom 5/8 in. thick, 4 ft wide gypsum board is installed with long dimension perpendicular to furring channels. Gypsum board secured to furring channels with nom 1 in. long Type S bugle-head steel screws spaced 8 in. OC in the field of the board. Gypsum board butted end joints shall be staggered minimum 48 in. and centered over main furring channels. At the gypsum board butted joints, an additional single length of furring channel shall be installed and be secured approximately 3 in. from the butt joint (6 in. from the continuous furring channel to support the floating end of the gypsum board. Each of these stories sections of furring channel shall extend one foot beyond the width of the gypsum panel and be attached to the adjacent joists with one SonicClip at every joist involved with the butt joint.

AMERICAN GYPSUM CO — Type AG-C.

CABOT MANUFACTURING ULC — 5/8 in. Type C.

CERTAINTEED GYPSUM INC — Type C, Type GEIC CAA.

GEORGIA-PACIFIC GYPSUM L L C — Types 5, C, DAPC, GTS1, 1G-C.

NATIONAL GYPSUM CO — Types FSC-C, FSW-C, FSW-C, PSW-C.

PABCO BUILDING PRODUCTS L L C, DBA PABCO GYPSUM — Type C, PG-1 or PG-C

TRAI GYPSUM PRODUCTS PCL — Type C

6. **Screw, Gypsum Board** — 1 in. long, with 0.129 in., self-drilling and self-tapping shank, and Phillips-type 0.355 in. diam head. Screws shall be driven no farther than slightly indented (not deeper than 1/64 in.) into the exposed surface of the gypsum board.

7. **Finishing System - (Not Shown) —** Vinyl, dry or premixed joint compound, applied in two coats to joints and screw-heads. Nom 2 in. wide paper tape embedded in first layer of compound over all joints. As an alternate, nom 3/32 in. thick veneer plaster may be applied to the entire surface of gypsum board.

*** Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.**

Last Updated on 2025-06-30

The appearance of a company's name or product in this database does not in itself assure that products so identified have been manufactured under UL Solutions'

EXIT REQUIREMENTS:
NUMBER AND ARRANGEMENTS OF EXITS

FLOOR, ROOM OR SPACE DESIGNATION	MINIMUM[2] NO. OF EXITS		TRAVEL DISTANCE		ARRANGEMENT MEANS OF EGRESS [1,3] (SECTION 1016–1021)	
	REQ'D.	SHOWN ON PLANS	ALLOWABLE TRAVEL DISTANCE (TABLE 1017.2)	ACTUAL TRAVEL DISTANCE SHOWN ON PLANS	REQUIRED DISTANCE BETWEEN EXIT DOORS	ACTUAL DISTANCE SHOWN ON PLANS
B	1	1	100'	90'–0"	N/A	N/A

1. CORRIDOR DEAD ENDS (SECTION 1020.4)
2. BUILDINGS W/SINGLE EXITS (TABLE 1006.3.2(2)), SPACES W/ONE EXIT OR EXIT ACCESS DOORWAY (TABLE 1006.2.1)
3. COMMON PATH OF TRAVEL (SECTION 1029.8)
4. REAR EXIT IS NON ADA COMPLIANT

EXIT WIDTH

USE GROUP OR SPACE DESCRIPTION	(a)	(b)		(c)		EXIT WIDTH (In)			
	AREA[1] SQ. FT.	AREA[1] PER OCCUPANT (TABLE 1004.1.2)	CALCULATED OCCUPANT LOAD (a/b)	EGRESS WIDTH PER OCCUPANT (TABLE 1005.1)		REQUIRED WIDTH (SECTION 1005.1) (a/b) x c		ACTUAL WIDTH SHOWN ON PLANS	
				STAIR	LEVEL	STAIR	LEVEL	STAIR	LEVEL
RESTAURANT	950	SEATING	25	N/A	.2	N/A	5.0"	N/A	36"
KITCHEN	600	200	3	N/A	.2	N/A	0.9"	N/A	61"
TOTAL	1,550		28						

1. SEE TABLE 1004.1.2 TO DETERMINE WHETHER NET OR GROSS AREA IS APPLICABLE SEE DEFINITION "AREA, GROSS" AND "AREA, NET" (SECTION 1002, DEFINED IN CHAPTER 2)
2. MINIMUM STAIRWAY WIDTH (SECTION 1011.2); MIN. CORRIDOR WIDTH (SECTION 1020.2); MIN. DOOR WIDTH (SECTION 1010.1.1)
3. MINIMUM WIDTH OF EXIT PASSAGEWAY (SECTION 1024)
4. SEE SECTION 1005.6 FOR CONVERGING EXITS.
5. THE LOSS OF ONE MEANS OF EGRESS SHALL NOT REDUCE THE AVAILABLE CAPACITY TO LESS THAN 50% OF THE TOTAL REQUIRED (SECTION 1005.5)
6. ASSEMBLY OCCUPANCIES (SECTION 1029)

LIFE SAFETY PLAN REQUIREMENTS:

- ☒ FIRE AND/OR SMOKE RATED WALL LOCATIONS (CHAPTER 7) – SEE NOTE 1
- ☒ ASSUMED AND REAL PROPERTY LINE LOCATIONS – SEE NOTE 2
- ☒ EXTERIOR WALL OPENING AREA WITH RESPECT TO DISTANCE TO ASSUMED PROPERTY LINES (705.8) – SEE NOTE 3
- ☒ OCCUPANCY TYPES FOR EACH AREA AS IT RELATES TO OCCUPANT LOAD CALCULATION (TABLE 1004.1.2)
- ☒ OCCUPANT LOADS FOR EACH AREA
- ☒ EXIT ACCESS TRAVEL DISTANCES (1017)
- ☒ COMMON PATH OF TRAVEL DISTANCES (1006.2.1 & 1006.3.2(1))
- ☒ DEAD END LENGTHS (1020.4) – SEE NOTE 4
- ☒ CLEAR EXIT WIDTHS FOR EACH EXIT DOOR
- ☒ MAXIMUM CALCULATED OCCUPANT LOAD CAPACITY EACH EXIT DOOR CAN ACCOMMODATE BASED ON EGRESS WIDTH (1005.3)
- ☒ ACTUAL OCCUPANT LOAD FOR EACH EXIT DOOR
- ☒ A SEPARATE SCHEMATIC PLAN INDICATING WHERE FIRE RATED FLOOR/CEILING AND/OR ROOF STRUCTURE IS PROVIDED FOR PURPOSES OF OCCUPANCY SEPARATION. SEE NOTE 5
- ☒ LOCATION OF DOORS WITH PANIC HARDWARE (1010.1.10) – SEE NOTE 6
- ☒ LOCATION OF DOORS WITH DELAYED EGRESS LOCKS AND AND THE AMOUNT OF DELAY (1010.1.9.7) – SEE NOTE 7
- ☒ LOCATION OF DOORS WITH ELECTROMAGNETIC EGRESS LOCKS (1010.1.9.9) – SEE NOTE 7
- ☒ LOCATION OF DOORS EQUIPPED WITH HOLD–OPEN DEVICES – SEE NOTE 7
- ☒ LOCATION OF EMERGENCY ESCAPE WINDOWS (1030) – SEE NOTE 7
- ☒ THE SQUARE FOOTAGE OF EACH FIRE AREA (202) – SEE NOTE 8
- ☒ THE SQUARE FOOTAGE OF EACH SMOKE COMPARTMENT (407.5) – SEE NOTE 9
- ☐ NOTE ANY CODE EXCEPTIONS OR TABLE NOTES THAT MAY HAVE BEEN UTILIZED REGARDING THE ITEMS ABOVE

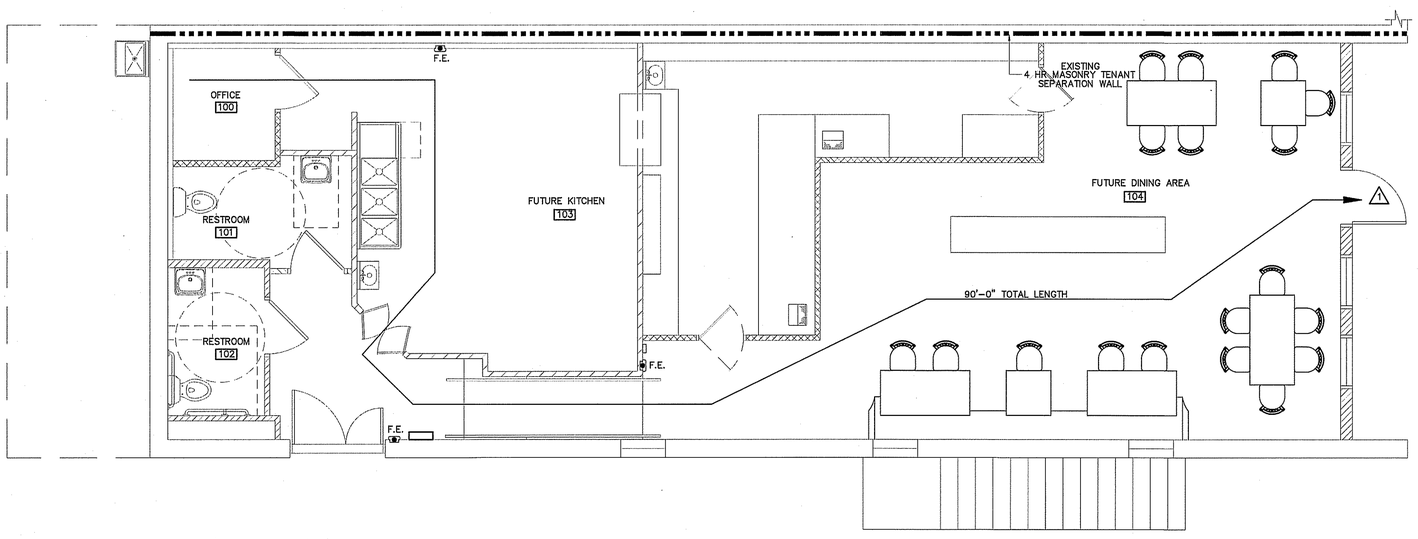
LIFE SAFETY PLAN NOTES:

1. SEE RATED WALL LEGEND
2. ALL ASSUMED PROPERTY LINES =0'–0"
3. ASSUMED PROPERTY LINE SEPARATION DISTANCE = 0'–0"; ALLOWED WALL OPENING:–NOT ALLOWED
4. NO DEAD ENDS > 20'
5. 2 HOUR RATED FLOOR/CEILING, SEE UL DETAIL; L505
6. PANIC HARDWARE NOT REQUIRED.
7. NO DELAYED EGRESS LOCKS, ELECTROMAGNETIC LOCKS, HOLD OPEN DEVICES, OR EMERGENCY ESCAPE WINDOWS REQUIRED
8. FIRE AREAS DO NOT EXCEED CODE ALLOWANCE
9. BUILDING MEETS CODE REQUIREMENTS WITHOUT SUBDIVISION INTO SMOKE COMPARTMENTS; NO SMOKE COMPARTMENTS

MAXIMUM CALCULATED OCCUPANT LOAD CAPACITY EACH EXIT DOOR CAN ACCOMMODATE BASED ON EGRESS WIDTH (1005.1)

1 35" CLEAR WIDTH DIVIDED BY .2" = 210 OCCUPANTS CALCULATED OCCUPANCY PER EXIT = 28 PEOPLE CALCULATED OCCUPANCY DOES NOT EXCEED MAXIMUM CAPACITY OF EXIT.

NOTE:
FIRE STOP ALL PENETRATIONS THROUGH 2 HOUR RATED FLOOR/CEILING.

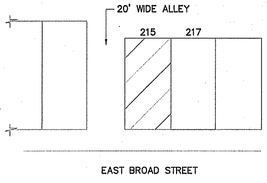


NOTE:
AREA/ROOM/SPACE DESIGNATIONS USED ON LIFE SAFETY PLANS ARE EXCLUSIVE TO LIFE SAFETY PLAN ONLY, AND ARE NOT INDICATIVE OF ANY ACTUAL SPACE DESIGNATIONS USED ELSEWHERE.

LEGEND

- F.E. — FIRE EXTINGUISHER & CABINET CLASS ABC 10 POUNDS
- EXISTING TENANT SEPARATION WALL = 4 HR
- EXISTING WOOD WALL
- NEW METAL STUD WALL

LIFE SAFETY PLAN
SCALE: 1/4" = 1'–0"



KEY PLAN

NORTH CAROLINA PROFESSIONAL SEAL 19909 ENGINEER BARRY A. CRUSE
09/09/25

PROPOSED UP-FIT FOR:
RUMBLE PIZZA
215 EAST BROAD STREET
DUNN, NORTH CAROLINA 28334

REVISIONS	
NO.	

Cruse And Associates, P.A.
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JOB NO. 25–20

SHEET NO.
LS-1 OF 1

ROOM NO.	ROOM NAME	FLOOR: CONCRETE	FLOOR: CARPET®	FLOOR: TILE	FLOOR: VCT	FLOOR: LVT	BASE: WOOD	BASE: CERAMIC TILE	BASE: RUBBER BASE	BASE: NONE	WALLS: NORMAL	WALLS: 1/2" DRYWALL	WALLS: CERAMIC TILE	WALLS: FRP	CEIL. HT.	CLG.: 2X2 CEILING TILE	CLG.: NONE	CLG.: DRYWALL	CLG.: VINYL	REMARKS
100	OFFICE				X				X		X				8'-0"+/-	X				
101	UNISEX RESTROOM				X				X		X				8'-0"+/-	X				
102	UNISEX RESTROOM				X				X		X				8'-0"+/-	X				
103	KITCHEN				X				X		X				VARIES					
104	SERVING AREA				X				X		X				11'-3"+/-					
105	DINING				X				X		X				11'-3"+/-					

OWNER TO VERIFY ALL COLORS AND FINISHES BEFORE ORDERING MATERIALS
PROVIDE VINYL BACKED/WASHABLE CEILING IN FOOD PREP/COOKING AREAS AS REQUIRED.

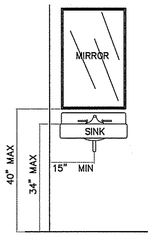
DOOR SCHEDULE

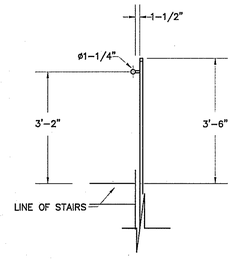
DOOR NO.	DOOR SIZE WIDE	DOOR SIZE HIGH	DOOR SIZE THICK	REMARKS
01	3'-0"	7'-0"	1 5/8"	INTERIOR DOOR
02	3'-0"	7'-0"	1 5/8"	INTERIOR DOOR
03	3'-0"	7'-0"	1 5/8"	INTERIOR DOOR
04	3'-0"	7'-0"	1 3/8"	DOUBLE 1'-6" SWINGING DOORS
05	3'-0"	3'-6"	1 5/8"	HALF-DOOR, VERIFY HEIGHT
06	3'-0"	3'-6"	1 5/8"	HALF-DOOR, VERIFY HEIGHT
07	3'-0"	7'-0"	1 5/8"	EXISTING EXTERIOR DOOR
08	5'-0"	7'-0"	1 5/8"	EXTERIOR EXTERIOR DOUBLE DOORS

VERIFY ALL DOOR SIZES & STYLES WITH OWNER BEFORE ORDERING MATERIAL
ALL HARDWARE TO BE ADA COMPLIANT

KEY NOTES:

1. ADJUST RAMP LENGTH TO FINAL ELEVATION CHANGE.
2. "HALF-WALL" VERIFY HEIGHT WITH OWNER BEFORE BEGINNING CONSTRUCTION.
3. ADA HEIGHT COUNTER-TOP. MAXIMUM HEIGHT IS 34"; OPEN BELOW.
4. EXISTING WINDOW
5. EXISTING DOOR
6. PASS-THROUGH WINDOW & SHELF. VERIFY SIZE & LOCATION WITH OWNER BEFORE COSTRUCTION.
7. WALL SHELF & COUNTER-TOP
8. 12" HANDRAIL EXTENSION





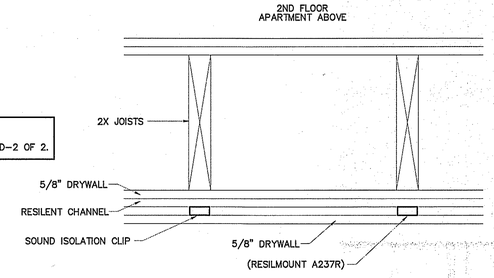
HAND RAIL DETAIL
SCALE: 1/2" = 1'-0"

NOTES:

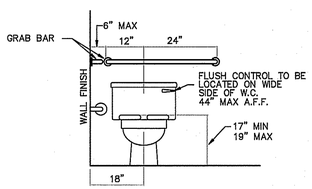
1. ALL FURNISHINGS, FINISHES, CASEWORK, COLORS, AND STYLES SELECTED BY OWNER.
2. SEE LIFE SAFETY PLAN FOR LOCATION OF FIRE EXTINGUISHERS.

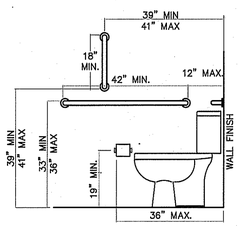
NOTE:

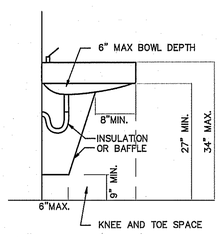
1. INSTALL IAW UL L505 DETAIL, SHEET BD-2 OF 2.

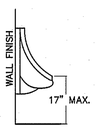


CEILING SOUND ISOLATION DETAIL
SCALE: NTS

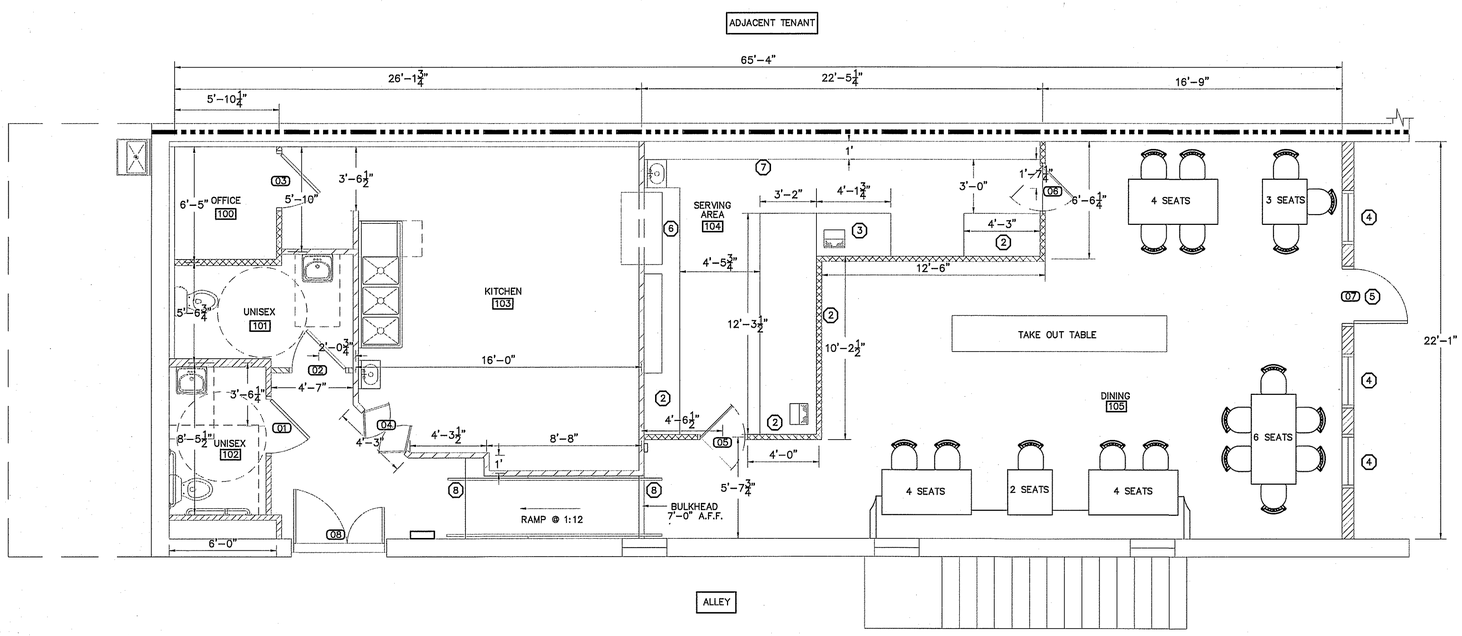




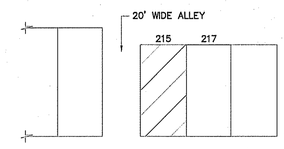




RESTROOM ACCESSIBILITY DETAILS
SCALE: 1/2" = 1'-0"



PROPOSED FLOOR PLAN
SCALE: 1/4" = 1'-0"



KEY PLAN

LEGEND

- EXISTING TENANT SEPARATION WALL = 4 HR
- EXISTING WOOD WALL
- NEW METAL STUD WALL

PROPOSED UP-FIT FOR:
RUMBLE PIZZA
215 EAST BROAD STREET
DUNN, NORTH CAROLINA 28334

REVISIONS

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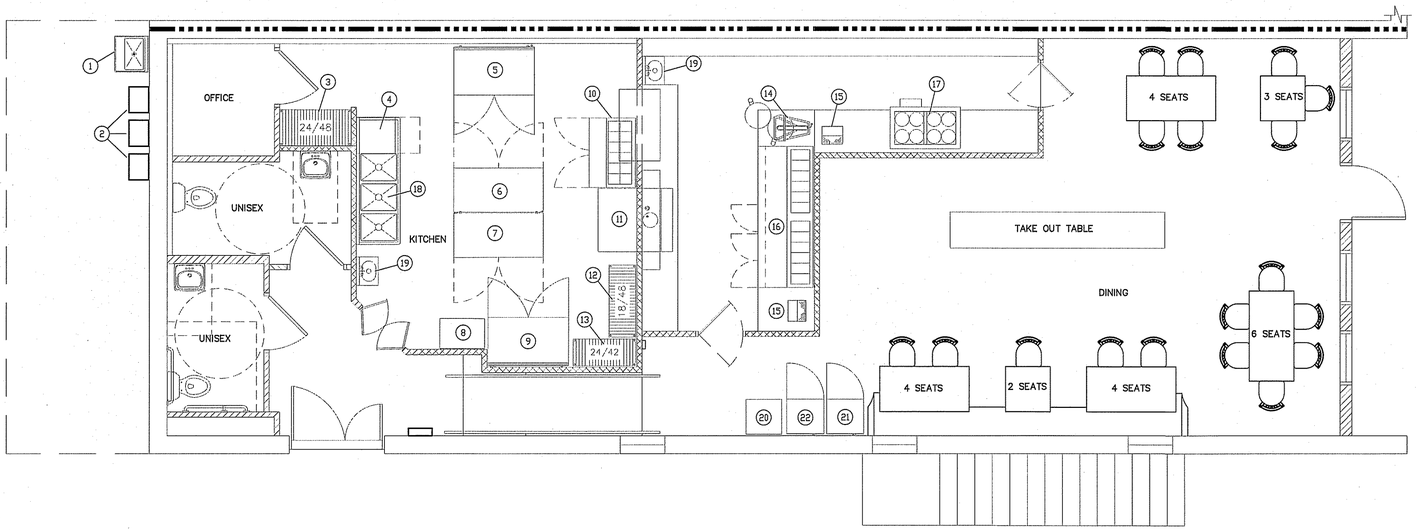
DATE 09/09/2025
DRAWN BY BAM
JOB NO. 25-20

SHEET NO.
F-1 OF 2

EQUIPMENT SCHEDULE			
ITEM	QUAN	DESCRIPTION	REMARKS
1	1	MOP SINK	
2	3	GAS WATER HEATER (199,000 BTU EA.)	
3	1	24X48 WIRE SHELVING	
4	1	NOBLE UH30-E DOOR TYPE DISH MACHINE	
5	1	DOUBLE DOOR REFRIGERATOR	
6	1	PREP TABLE	
7	1	REFRIGERATED PREP TABLE	
8	1	SHELVING	
9	1	DOUBLE DOOR FREEZER	
10	1	PREP TABLE	
11	1	GAS PIZZA OVEN	
12	1	18"X48" WIRE SHELVING	
13	2	24"X42" WIRE SHELVING	
14	1	ENDURANCE XIM DOUGH PRESS	
15	2	POINT OF SALE MACHINE	
16	1	PIZZA PREP	
17	1	ICE CREAM DIPPING STATION	WELL & FAUCET
18	1	3-Compartment SINK W/1 SIDEBOARD	18"x 24" Bowls
19	2	S.S. HAND SINK	
20	1	TRASH CAN	
21	1	SINGLE DOOR REACH IN SODA COOLER	
22	1	SINGLE DOOR REACH IN BEER COOLER	



PROPOSED EQUIPMENT PLAN

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

NORTH CAROLINA PROFESSIONAL SEAL 8909 ENGINEER RANDYL CRUSE
09/09/25

PROPOSED UP-FIT FOR:
RUMBLE PIZZA
215 EAST BROAD STREET
DUNN, NORTH CAROLINA 28334

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JOB NO. 25-20

SHEET NO.
F-2 OF 2

PLUMBING LEGEND

DESCRIPTION	SYMBOL
COLD WATER	CW
HOT WATER	HW
COLD WATER (FILTERED)	
RECIRCULATED WATER	HWR
VENT PIPING	V
WASTE PIPING	DOMESTIC — GREASE — W
CLEAN OUT IN GRADE	C.O.I.G.
FLOOR CLEAN OUT	F.C.O.
NON FREEZE HOSE BIBB	NFHB
FLOOR DRAIN	F.D.
CHECK VALVE	
BALL VALVE	
GATE VALVE	
SHUT-OFF VALVE	
DOUBLE CHECK VALVE	
FIXTURE DESIGNATION	P--
MOUNTING HEIGHT	MH
POINT OF CONNECTION NEW TO EXISTING	
FLOOR SINK	
SHOCK ABSORBER W/BALL VALVE SHUT-OFF	SA SIZE PER MANUF. RECOMMENDATIONS
CHANGE IN PIPE SIZE	

KEY NOTES:

1. CONNECT INSTANTANEOUS WATER HEATERS TO MANIFOLD PER MANUFACTURER'S REQUIREMENTS
2. ADA HEIGHT COUNTER-TOP SECTION
3. COORDINATE SUPPLY & VENT PIPING WITH HVAC RETURN DUCT & GRILLE.

PLUMBING FIXTURE SCHEDULE

MARK	MAKE	MODEL	DESCRIPTION	NOTES
P-1	AMERICAN STANDARD	CADET 2467.016	EL 1.6/PA 16.5"HC ELONGATED WATER CLOSET HC ACCESSIBLE, TANK TYPE	WHITE 5321.110 SEAT
P-2	AMERICAN STANDARD	LUCERNE 0356.041.020	VIRTEOUS CHINA WALL MOUNTED SINK	1340.227 FAUCET. PROVIDE W/BASKET DRAIN
P-3	REGENCY	6053182424RX	(3) 18"W X 24";14" DEEP WITH (1) 24" RIGHT DRAINBOARD & 10" HIGH BACKSPLASH	
P-4	REGENCY	ONE COMPARTMENT FLOOR MOP SINK	29" 16 GAUGE STAINLESS STEEL 1 COMP. FLOOR MOP SINK-24"X24"X12" BOWL	PROVIDE W/ SERVICE FAUCET;HOSE AND HOSE HOLDER; MOP HANGER; AND DURAGUARD WALL GUARDS
P-5		GAS WATER HEATER	199,000 BTU/HOUR	
P-6	JOHN BOOS & CO.	PBHS-14-SS	PRO BOWL HAND SINKS W/SIDE SPLASH	
P-7	AVANTCO	178CPSS47HC	STAINLESS STEEL DELUXE ICE CREAM DIPPING CABINET	
P-8	NOBLE	NOBLE UH30-E	STAINLESS STEEL DISHWASHER	
P-9	WATTS	WD-210	IN FLOOR GREASE INTECEPTOR	MINIMUM OF 200 LB. & 100 G.P.M.
P-10	JOSAM	30003-C	FLOOR DRAIN	PROVIDE W/ NON-CLOG STRAINER & BUCKET, NIKALOY STRAINER, INSIDE CAULK OUTLET & TRAP GUARDS WHERE REQUIRED.
P-11	FLOOR SINK			

* OR EQUAL; VERIFY ALL FIXTURES WITH OWNER BEFORE PURCHASING OR INSTALLING;

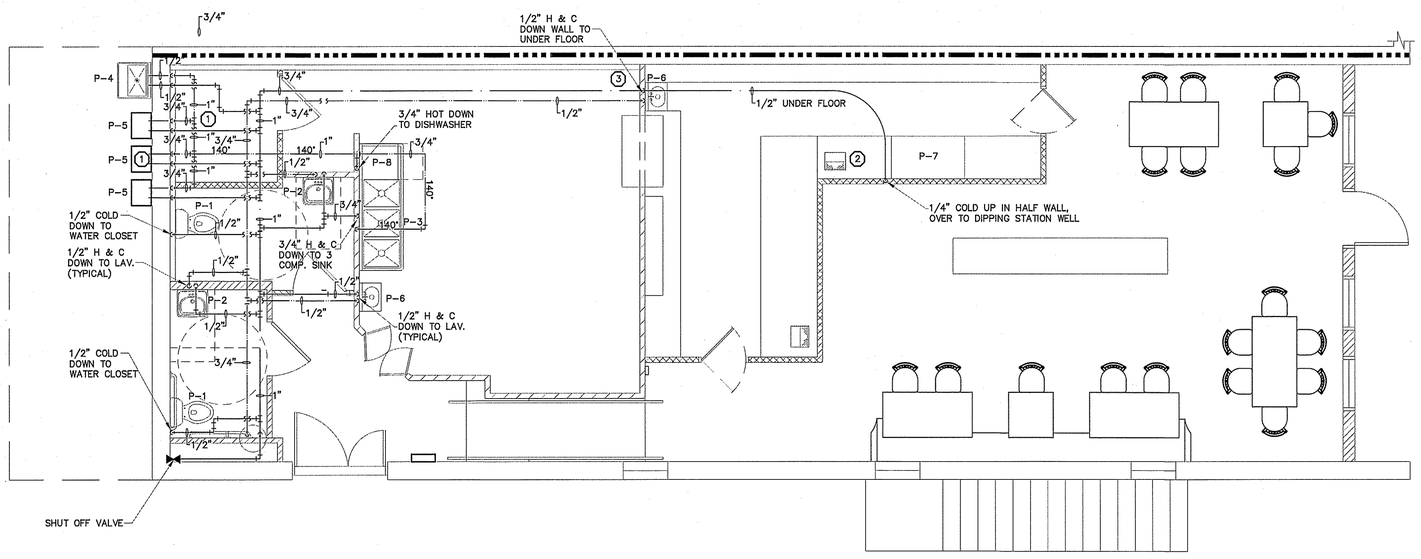
PLUMBING CONNECTION SCHEDULE

FIXTURE	C.W.	H.W.	WASTE	VENT
FLUSH TANK WATER CLOSET	1/2"	–	3"	2"
LAVATORY	1/2"	1/2"	2"	1 1/2"
SERVICE SINK	1/2"	1/2"	2"	1 1/2"
FLOOR DRAIN			3"	2"
KITCHEN SINKS	1/2"	1/2"	3"	2"

PLUMBING CALCULATIONS

ITEM	# OF	FIXTURE UNITS (EACH)			FIXTURE UNITS (TOTAL)			FIXTURE UNITS (WASTE)
		COLD	HOT	TOTAL	COLD	HOT	TOTAL	
FLUSH TANK-H.C. WATER CLOSET	2	5.0	–	5.0	10	–	10	4/8
LAVATORY	5	1.5	1.5	2	7.5	7.5	10.0	1/5
JANITOR'S SINK	1	2.25	2.25	3	2.25	2.25	3.0	1/1
3 COMPARTMENT SINK	1	3	3	4.0	3	3	4.0	3/3
N.F.H.B.	1	3.0	–	3.0	3.0	–	3.0	.5/.5
DISHWASHER	1	–	1.4	1.4	–	1.4	1.4	2/2
TOTAL		14.8	8.15	18.4	25.75	14.15	31.4	19.5

GPM =19.0 @ 60 PSI
WATER SUPPLY PIPE SIZE: 1" MINIMUM



PLUMBING SUPPLY PIPING PLAN

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

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 019908 ENGINEER ANDY L. CRUSE
09/09/25

PROPOSED UP-FIT FOR:
RUMBLE PIZZA
215 EAST BROAD STREET
DUNN, NORTH CAROLINA 28334

REVISIONS

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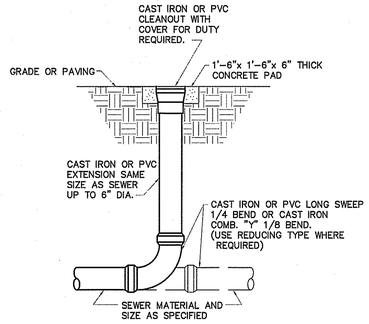
JOB NO. 25-20

SHEET NO.
P-1 OF 2

PLUMBING LEGEND

DESCRIPTION	SYMBOL
COLD WATER	CW
HOT WATER	HW
COLD WATER (FILTERED)	
RECIRCULATED WATER	HWR
VENT PIPING	V
WASTE PIPING	DOMESTIC — GREASE — W
CLEAN OUT IN GRADE	C.O.I.G.
FLOOR CLEAN OUT	F.C.O.
NON FREEZE HOSE BIBB	NFHB
FLOOR DRAIN	F.D.
CHECK VALVE	
BALL VALVE	
GATE VALVE	
SHUT-OFF VALVE	
DOUBLE CHECK VALVE	
FIXTURE DESIGNATION	P--
MOUNTING HEIGHT	MH
POINT OF CONNECTION NEW TO EXISTING	
FLOOR SINK	
SHOCK ABSORBER W/BALL VALVE SHUT-OFF	SA SIZE PER MANUF. RECOMMENDATIONS
CHANGE IN PIPE SIZE	

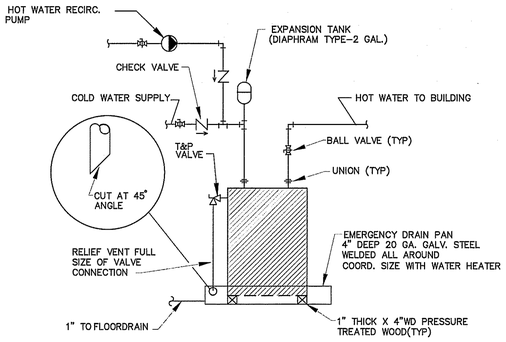


DETAIL–CLEAN OUT AT GRADE
NOT TO SCALE

PLUMBING FIXTURE SCHEDULE

MARK	MAKE	MODEL	DESCRIPTION	NOTES
P-1	AMERICAN STANDARD	CADET 2467.016	EL 1.6/PA 16.5"HC ELONGATED WATER CLOSET HC ACCESSIBLE, TANK TYPE	WHITE 5321.110 SEAT
P-2	AMERICAN STANDARD	LUCERNE 0356.041.020	VIRTEOUS CHINA WALL MOUNTED SINK	1340.227 FAUCET. PROVIDE W/BASKET DRAIN
P-3	REGENCY	6053182424RX	(3) 18"W X 24";14" DEEP WITH (1) 24" RIGHT DRAINBOARD & 10" HIGH BACKSPLASH	
P-4	REGENCY	ONE COMPARTMENT FLOOR MOP SINK	29" 16 GAUGE STAINLESS STEEL 1 COMP. FLOOR MOP SINK-24"X24"X12" BOWL	PROVIDE W/ SERVICE FAUCET;HOSE AND HOSE HOLDER; MOP HANGER; AND DURAGUARD WALL GUARDS
P-5		GAS WATER HEATER	199,000 BTU/HOUR	
P-6	JOHN BOOS & CO.	PBHS-14-SS	PRO BOWL HAND SINKS W/SIDE SPLASH	
P-7	AVANTCO	178CPSS47HC	STAINLESS STEEL DELUXE ICE CREAM DIPPING CABINET	
P-8	NOBLE	NOBLE UH30-E	STAINLESS STEEL DISHWASHER	
P-9	WATTS	WD-210	IN FLOOR GREASE INTECEPTOR	MINIMUM OF 200 LB. & 100 G.P.M.
P-10	JOSAM	30003-C	FLOOR DRAIN	PROVIDE W/ NON-CLOG STRAINER & BUCKET, NIKALOY STRAINER, INSIDE CAULK OUTLET & TRAP GUARDS WHERE REQUIRED.
P-11	FLOOR SINK			

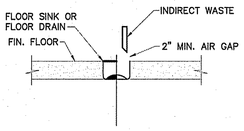
* OR EQUAL; VERIFY ALL FIXTURES WITH OWNER BEFORE PURCHASING OR INSTALLING;



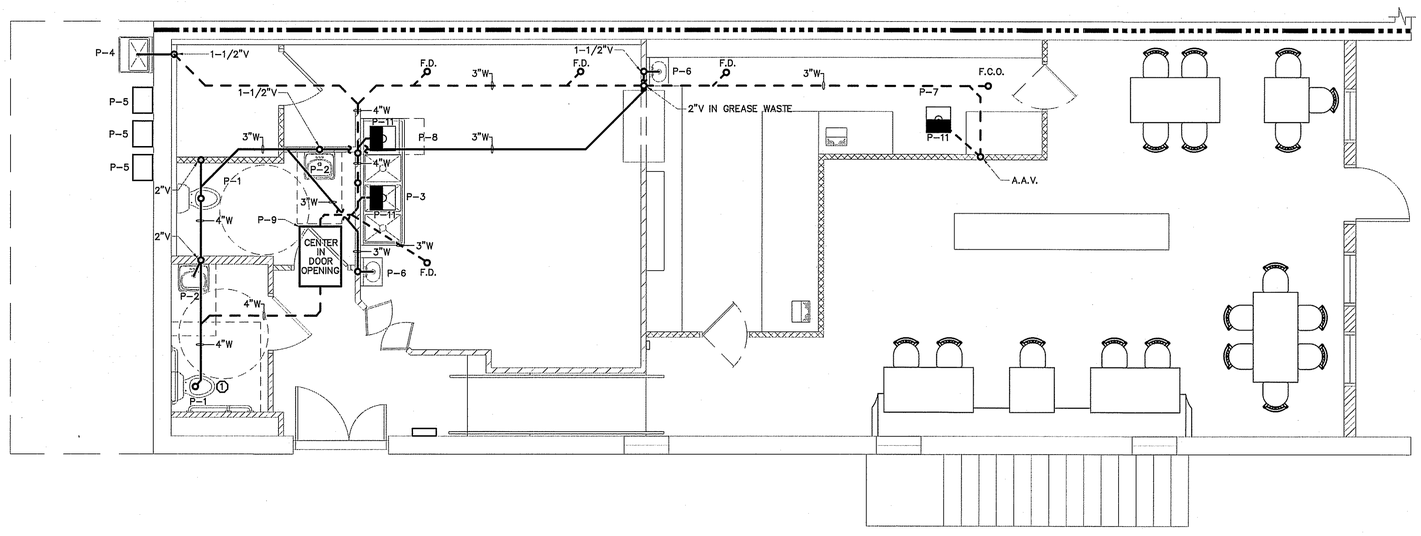
DETAIL–WATER HEATER
NOT TO SCALE

GENERAL PLUMBING NOTES

1. ALL WORK SHALL BE IN COMPLIANCE WITH APPLICABLE LOCAL, STATE, AND NATIONAL CODES.
2. CONTRACTORS SHALL COORDINATE PIPING WITH ALL OTHER TRADES.
3. CONTRACTOR SHALL REFER TO ARCHITECTURAL/STRUCTURAL DRAWINGS FOR DIMENSIONS.
4. CONTRACTOR SHALL FURNISH AND INSTALL DIELECTRIC UNIONS AT ALL CONNECTIONS BETWEEN DISSIMILAR METALS.
5. CONTRACTOR SHALL FURNISH AND INSTALL ESCUTCHEONS AND COVER PLATES AT ALL FINISHED WALLS, CEILINGS AND FLOOR OPENINGS.
6. PIPING SHALL BE DISINFECTED IN ACCORDANCE WITH STATE AND LOCAL CODE. (REFER TO SPECIFICATIONS.)
7. ALL PIPING SHALL BE TESTED FOR LEAKS. IF ANY LEAKS ARE DETECTED THE PIPING SHALL BE REPAIRED, RESOLDERED OR REPLACED AND RETESTED.
8. ALL SOLDER SHALL BE OF THE LEAD FREE TYPE.
9. WATER HEATER SHALL BE SUPPLIED WITH FACTORY INSTALLED T&P VALVES AND SHALL HAVE UNIONS AND ISOLATION VALVES.
10. DOMESTIC WATER SUPPLY PIPING SHALL BE COPPER OR CPVC. PEX IS ALLOWED WHERE PERMITTED BY CODE.
11. WASTE AND VENT PIPING SHALL BE SCH. 40 PVC OR HEAVY DUTY CAST IRON UNDER TRAFFIC AREAS.
12. INSTALL THERMOSTATICALLY CONTROLLED MIXING VALVES AS NEEDED TO ENSURE HOT WATER TEMPERATURE TO ALL HAND WASHING LOCATIONS DOES NOT EXCEED 110°F.
13. ALL FLOOR DRAINS & HUB DRAINS SHALL BE PROVIDED WITH TRAP PRIMER EXCEPT FLOOR DRAINS IN TOILETS WHERE HOSE BIBS ARE PROVIDED.
14. HOT WATER PIPING SHALL BE INSULATED WITH 1" THICK FIBROUS GLASS INSULATION. COLD WATER PIPING SHALL BE INSULATED WITH 1/2" FIBROUS GLASS INSULATION. VAPOR BARRIER SHALL BE APPLIED TO EACH.



INDIRECT/FLOOR SINK DETAIL
NOT TO SCALE



① TIE 4"W INTO EXISTING WASTE LINE

PLUMBING WASTE & VENT PIPING PLAN
SCALE: 1/4" = 1'-0"

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 19909 BRADY L. CRUSE 09/09/25

PROPOSED UP-FIT FOR:
RUMBLE PIZZA
215 EAST BROAD STREET
DUNN, NORTH CAROLINA 28334

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DATE 09/09/2025
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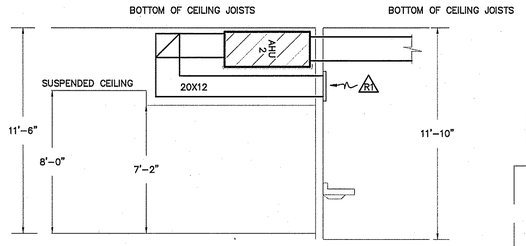
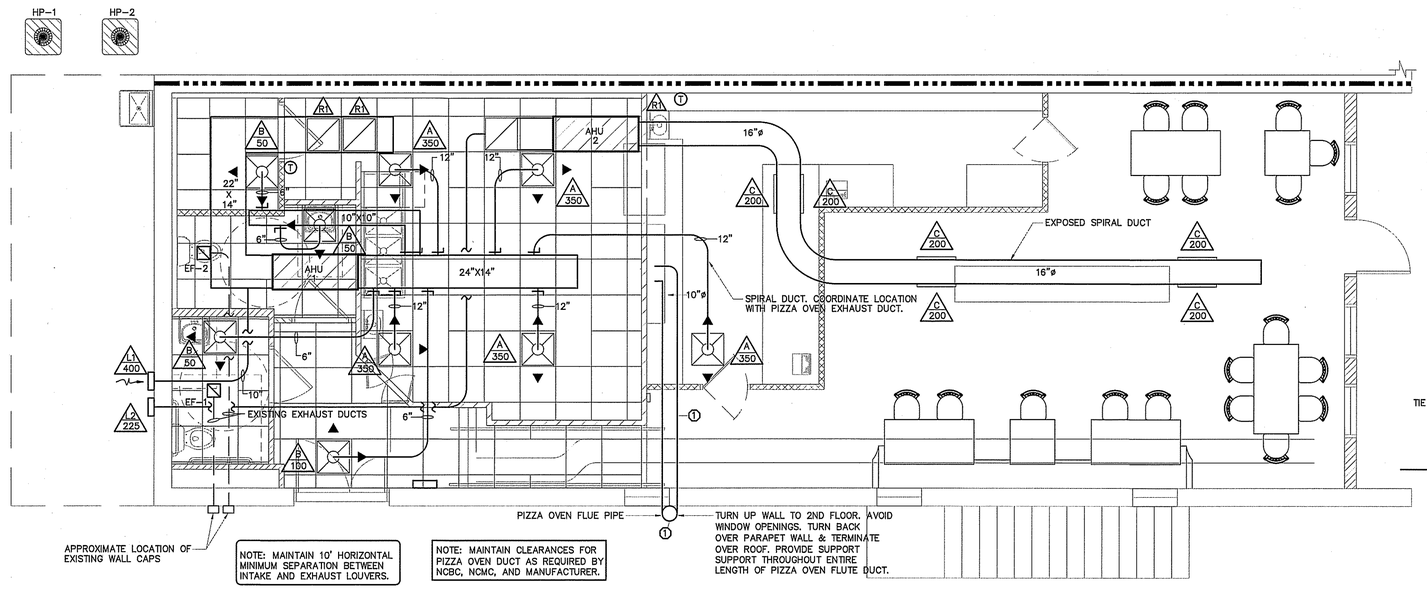
JOB NO. 25-20

SHEET NO.
P-2 OF 2



AHU-2 DETAIL
SCALE: N.T.S.



NOTE: MAINTAIN 10' HORIZONTAL MINIMUM SEPARATION BETWEEN INTAKE AND EXHAUST LOUVERS.

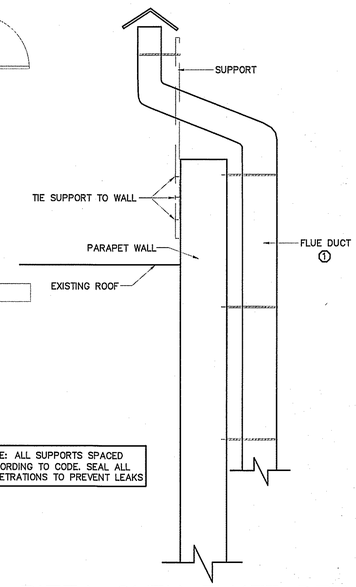
NOTE: MAINTAIN CLEARANCES FOR PIZZA OVEN DUCT AS REQUIRED BY NCBC, NCMC, AND MANUFACTURER.

MECHANICAL HVAC PLAN
SCALE: 1/4" = 1'-0"

① ZERO CLEARANCE GREASE DUCT "SELKIRK" OR EQUAL

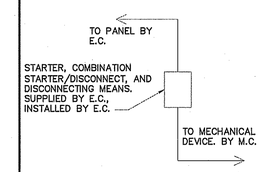
NOTE: ALL SUPPORTS SPACED ACCORDING TO CODE. SEAL ALL PENETRATIONS TO PREVENT LEAKS

NOTE: OVEN HOOD & FLUE PIPING BY OTHERS



PIZZA OVEN FLUTE DETAIL
SCALE: N.T.S.

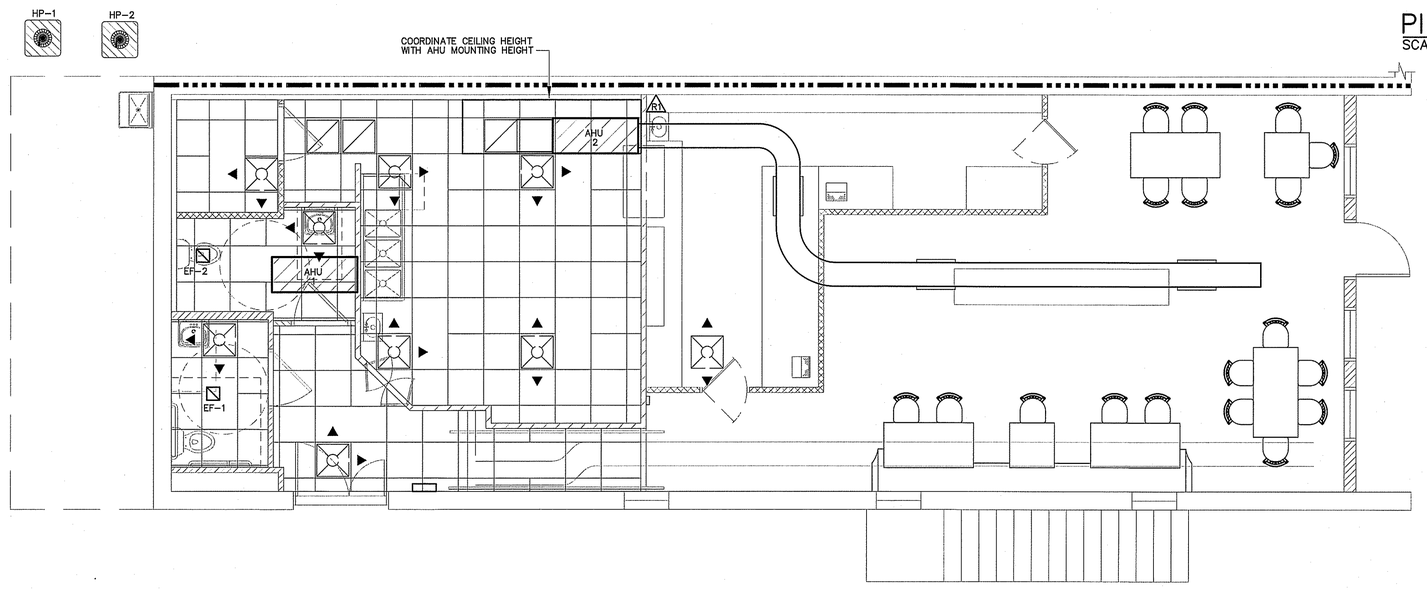
CONNECTION SCHEDULE



ALL STARTERS, COMBINATION STARTER/DISCONNECTS, AND DISCONNECTING MEANS, SUPPLIED BY E.C. FOR MECHANICAL EQUIPMENT AS REQUIRED BY NEC AND MECHANICAL EQUIPMENT MANUFACTURER'S REQUIREMENTS.

MECHANICAL SYMBOL LEGEND

SINGLE LINE	DOUBLE LINE	DESCRIPTION
		TAKE OFF TO SUPPLY AIR REGISTER WITH EXT. INSUL. DUCTWORK
		BRANCH TAKEOFF FROM MAIN TRUNK DUCT W/EXT. INSUL. DUCTWORK
		END CAP
(S) OR (SD)	(S) OR (SD)	DUCT SMOKE DETECTOR
A.D.		ACCESS DOOR — DOOR SIZE / DUCT HEIGHT: 8X8 / 10"; 10X10 / 12"; 12X12 / 14" & LARGER
		VOLUME CONTROL DAMPER (TYP); CEILING DIFFUSER; FLEXIBLE DUCTWORK (14' MAX.)
		ONE SIDED REDUCING TRANSITION
F.D.(1-1/2)		F.D.=FIRE DAMPER (1-1/2)=RATED FOR 1-1/2 HRS.
		RETURN AIR OR EXHAUST GRILLE
(1-WAY) (2-WAY) (3-WAY) (4-WAY)		SUPPLY AIR CEILING DIFFUSER, ARROW INDICATES DIRECTION OF BLOW & ACTIVE DIFFUSER SIDES
CUSHION HEAD		(1)CUSHION HEAD @ BRANCH OR DIFFUSER RUNOUT (2)CUSHION HEAD IS EQUAL TO 1-1/2 WIDTH OF THE BRANCH DUCT OR DIFFUSER RUNOUT
		R.A. OR EXHAUST DUCT TURNS DOWN @ 90 DEGS.
		MANUAL VOLUME CONTROL DAMPER W/ QUADRANT LOCKING DEVICE
		TWO SIDED TRANSITION
		ELECT. DUCT INSERT HEATER WITH CONTROL PANEL
		AHU W/FLEXIBLE CONNECTION AT SUPPLY AND RETURN DUCT
		KEY NOTE
X / XXX		MARK; CFM-DIFFUSER, REGISTER OR GRILLE (SEE SCHEDULE)
①		EXHAUST FAN



MECHANICAL REFLECTIVE CEILING PLAN
SCALE: 1/4" = 1'-0"

NORTH CAROLINA PROFESSIONAL SEAL ENGINEER BRANDY L. CRUSE 09/09/25

PROPOSED UP-FIT FOR:
RUMBLE PIZZA
215 EAST BROAD STREET
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DATE	09/09/2025
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JOB NO.	25-20

SHEET NO.
M-1 OF 3

AIR HANDLER UNIT

AHU NO.	MANUFACTURER	MODEL	VOLTAGE	E.S.P.		CFM	UNIT FLA	REF LINES GAS	REF LINES LIQ.	SEER	HTR KW (240)	COOLING CAPACITY (MBH) TOTAL	COOLING CAPACITY (MBH) SENS.	HEATING CAPACITY (MBH) HIGH	HEATING CAPACITY (MBH) LOW	HSPF	MIN. CIRC. AMPACITY	M.O.C.P.
AHU-1	TRANE	TEM4A0C60S51SAA	240/1/60	.46	N/A	2000	40.0	1-1/8	3/8	15.2	9.6	57.3	42.6	54.9	36.2	8.5	58	60
AHU-2	TRANE	TEM4A0B42S31	240/1/60	.46	N/A	1200	32.0	7/8	3/8	14.8	7.68	38.4	26.8	34.0	22.4	9.0	45	45

** PROVIDE OUTDOOR THERMOSTAT TO LOCK OUT SUPPLEMENTAL ELECTRIC HEAT AT OUTDOOR TEMPERATURES ABOVE 40°F.

SPLIT SYSTEM HEAT PUMP UNITS

MARK	MANUF.	MODEL	VOLTAGE	# COMP.	MIN. CIRC. AMPACITY	M.O.C.P.	UNIT FLA.	ACCESSORIES
HP-1	TRANE	4TWR7060A1000CA	240/1/60	1	41	60	33.4	EXCLUDE 8,18
HP-2	TRANE	4TWR5036N1000	240/1/60	1	18	30	14.8	EXCLUDE 8,18

ACCESSORIES
1 TIME-DELAY RELAY
2 CYCLE PROTECTOR
3 EVAPORATOR FREEZE PROTECTOR
4 ISOLATION RELAY
5 TXV
6 HIGH PRESSURE SWITCH
7 LIQUID SOLENOID VALVE
8 LOW-AMBIENT CONTROLLER
9 FILTER DRIER (LIQUID LINE)
10 OUTDOOR T'STAT TO LOCK OUT AUX. HT. (SET @ 40° F ADJ)
11 LOW PRESSURE CONTROL
12 CRANKCASE HEATER
13 DISCHARGE LINE MUFFLER
14 SUCTION AND LIQUID LINE SHUT OFF VALVES
15 THERMOSTAT (SEE NOTE)
16 SUPPORT FEET
17 COIL GUARDS
18 HUMIDISTAT

COOLING CAPACITY @ 80 DEG. F DB/67 DEG WB AIR ENTERING INDOOR UNIT & 95 DEG. F DB AIR ENTERING OUTDOOR UNIT
HEATING CAPACITY: HIGH TEMP = 70 DEG F DB INDOOR EAT & 47 DEG F DB/43 DEG F WB AIR ENTERING OUTDOOR UNIT
LOW TEMP = 70 DEG F DB INDOOR EAT & 17 DEG F DB/15 DEG F WB ENTERING OUTDOOR UNIT

T-STAT: THE NUMBER OF STAGES OF HEATING/COOLING SHALL MATCH THE NUMBER OF STAGES OF HEAT AVAILABLE IN THE HPIU OR THE NUMBER OF STAGES OF COOLING AVAILABLE IN THE HPOU. PROVIDE WITH T-STAT; 7 DAY PROGRAMMABLE, DIGITAL.

LOUVER SCHEDULE

MARK	DESCRIPTION	SERVES	CFM	APPROXIMATE OUTSIDE DIMENSIONS (W X H)	MODEL
L1	OUTSIDE AIR LOUVER	AHU-1	400	12"X18"	HART & COOLEY 1530ZF 12X18 W/ INSECT SCREEN
L2	OUTSIDE AIR LOUVER	AHU-2	225	12"X12"	HART & COOLEY 1530ZF 12X12 W/ INSECT SCREEN

REGISTER, GRILLE, & DIFFUSER SCHEDULE*

MARK	DESCRIPTION	MAX. NC	NECK	BORDER TYPE	MATERIAL	FINISH	MANUFACTURER	MODEL NUMBER	ACCESSORIES / NOTES
A	DIFFUSER-2-WAY	30	9"X9"	LAY-IN	STEEL	WHITE	TITUS	TDC 9X9 3 26 2	SQ-TO-RND
B	DIFFUSER-2-WAY	30	6"X6"	LAY-IN	STEEL	WHITE	TITUS	TDC 6X6 3 26 2	SQ-TO-RND
C	SIDEWALL DIFFUSER	30	24"X4"	SURACE	STEEL	WHITE	H & C	SVH	WITH AIR SCOOP
R	RETURN GRILLE	30	20"X20"	LAY-IN	STEEL	WHITE	TITUS	23RFL 24X24 3 26	SQ-TO-RND
R1	RETURN GRILLE	30	20"X20"	SURFACE	STEEL	WHITE	TITUS	23RFL 24X24 1 26	SQ-TO-RND

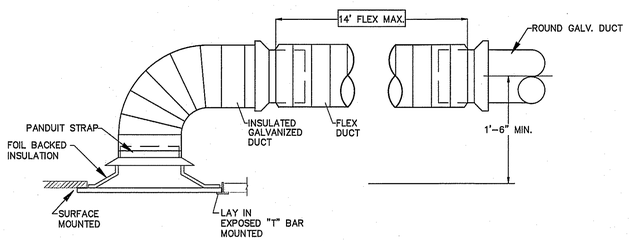
* VERIFY CEILING TYPE BEFORE ORDERING, NARROW TEE REQUIREMENTS, PLASTER FRAMES ETC. TO BE INCLUDED WITH DIFFUSERS AT NO ADDITIONAL COST TO OWNER

MECHANICAL NOTES (GENERAL)

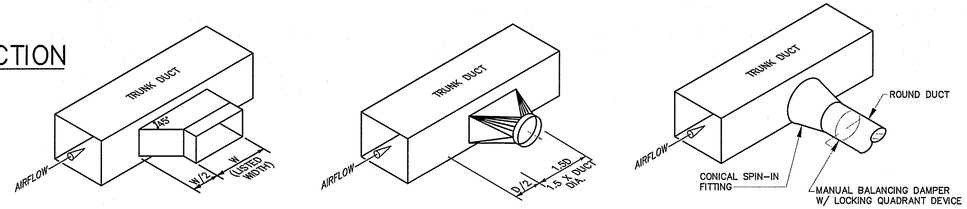
1. DUCTWORK LAYOUTS ARE SCHEMATIC. ALL RISES, DROPS, OFFSETS, AND TRANSITIONS REQUIRED BUT ARE NOT SHOWN SHALL BE PROVIDED AND INSTALLED BY THE CONTRACTOR AT NO ADDITIONAL EXPENSE TO THE OWNER.
2. DUCTWORK SHALL BE GALVANIZED STEEL AND SHALL BE CONSTRUCTED IN COMPLIANCE WITH SMACNA STANDARDS FOR LOW VELOCITY DUCTWORK. DUCT SIZES SHOWN ARE INSIDE CLEAR DIMENSIONS. FLEXIBLE RUNOUTS SHALL NOT EXCEED 15' AND SHALL NOT BE USED TO FORM ELBOWS. CONNECTIONS FROM RECTANGULAR TO ROUND DUCT SHALL BE MADE WITH MANUFACTURED 45 DEG. LATERAL TAPS.
3. ALL DUCTWORK SHALL BE SEALED AIR TIGHT WITH SEALING COMPOUND.
4. ALL ELBOWS IN DUCTWORK SHALL BE RADIUS ELBOWS, UNLESS NOTED OTHERWISE. WHERE SQUARE ELBOWS ARE SHOWN, INSTALL TURNING VANES. DUCT SIZES SHOWN ARE NET INTERIOR DIMENSIONS.
5. THIS CONTRACTOR SHALL COORDINATE HIS WORK WITH THAT OF OTHER TRADES PRIOR TO INSTALLATION OF ANY OF HIS PIPING, DUCTWORK, OR EQUIPMENT.
6. THE MECHANICAL CONTRACTOR SHALL MAKE A COMPLETE REVIEW OF THE MECHANICAL PLANS, SCHEDULES, AND DETAILS PRIOR TO INSTALLATION OF THE MECHANICAL SYSTEMS AND REVIEW ANY CONFLICTS THAT ARE NOTED WITH THE ENGINEER.
7. IT WILL BE THE RESPONSIBILITY OF THE MECHANICAL CONTRACTOR TO ENSURE THAT ITEMS TO BE FURNISHED UNDER HIS CONTRACT WILL FIT THE SPACE AVAILABLE. HE SHALL MAKE NECESSARY FIELD MEASUREMENTS TO ASCERTAIN SPACE REQUIREMENTS, INCLUDING THOSE FOR CONNECTIONS AND SHALL FURNISH AND INSTALL SUCH SIZES AND SHAPES OF EQUIPMENT THAT ARE THE TRUE AND INTENT MEANING OF THE PLANS AND SPECIFICATIONS. HE SHALL PROVIDE THE ENGINEER SCALED DRAWINGS OF ALL MECHANICAL DRAWINGS.
8. ALL EQUIPMENT SHALL BE LOCATED AND INSTALLED TO PROVIDE MAXIMUM SPACE FOR MAINTENANCE AND SERVICE.
9. PROVIDE FACTORY OR FIELD INSTALLED DRAIN PANS UNDER ALL COOLING COIL UNITS. INSTALL DRAIN PAN FLOAT TO SHUT DOWN UNIT FAN IN EVENT THAT CONDENSATE BEGINS TO FILL EMERGENCY DRAIN PAN. RUN ALL CONDENSATE DRAIN LINES TO APPROPRIATE DRAIN.

EXHAUST FAN SCHEDULE

MARK	MAKE	MODEL	TYPE	CFM	EXTERNAL S.P. IN (W.G.)	AMPS	ELECTRICAL VOLT	ELECTRICAL PH	ELECTRICAL HZ	NOTES
EF-1,2	GREENHECK	SP-A90	CEILING FAN	70	.125	.34	115	1ø	60	EXISTING WALL CAP

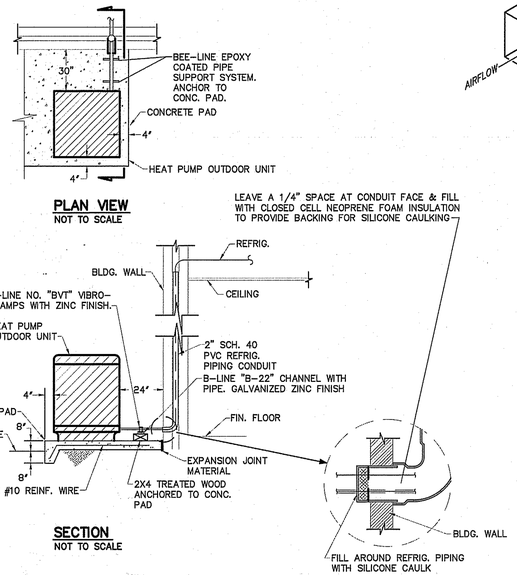


DETAIL-CEILING DIFFUSER CONNECTION
NOT TO SCALE



RECTANGULAR ROUND DIFFUSER

TYPICAL LATERAL TO REGISTER OR BRANCH DUCT
NOT TO SCALE



DETAIL-TYPICAL HEAT PUMP OUTDOOR UNIT
NOT TO SCALE

MECHANICAL SYSTEMS, SERVICE SYSTEMS AND EQUIPMENT
THERMAL ZONE 4A - HARNETT COUNTY, NC

WINTER DRY BULB 16 DEG. F.

SUMMER DRY BULB 93 DEG. F.

INTERIOR DESIGN CONDITIONS

WINTER DRY BULB 59 DEG. F.

SUMMER DRY BULB 78 DEG. F.

RELATIVE HUMIDITY 55%

BUILDING HEATING LOAD 35.8 MBH

BUILDING COOLING LOAD 8 TONS

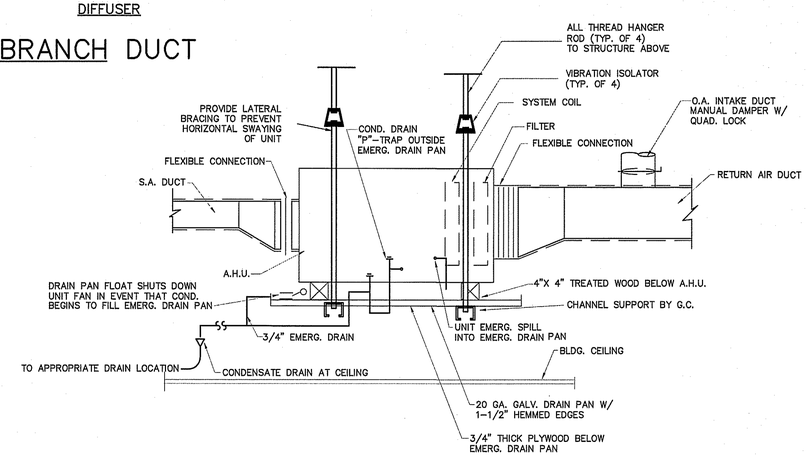
MECHANICAL SPACE CONDITIONING SYSTEM

UNITARY
DESCRIPTION OF UNIT - HEAT PUMP
HEATING EFFICIENCY - 8.5 HSPF
COOLING EFFICIENCY - 15.2 SEER
SIZE CATEGORY OF UNIT - < 65,000 BTUH

BOILER
SIZE CATEGORY. IF OVERSIZED, STATE REASON: N/A

CHILLER
SIZE CATEGORY. IF OVERSIZED, STATE REASON: N/A

LIST EQUIPMENT EFFICIENCIES SEE SCHEDULE



TYPICAL DETAIL AT AIR HANDLING UNITS
NOT TO SCALE

NORTH CAROLINA PROFESSIONAL SEAL 19909 ENGINEER CINDY L. CRUSE 09/09/25

PROPOSED UP-FIT FOR:
RUMBLE PIZZA
215 EAST BROAD STREET
DUNN, NORTH CAROLINA 28334

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DATE 09/09/2025
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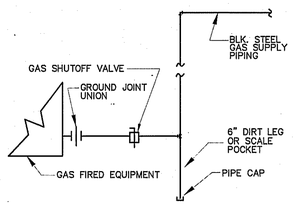
SHEET NO.
M-2 OF 3

GAS PIPING SIZING

OUTLET "A"	199	CFH
OUTLET "B"	199	CFH
OUTLET "C"	199	CFH
OUTLET "D"	80.5	CFH
TOTAL	677.5	CFH

LENGTH OF PIPE FROM THE POINT OF DELIVERY TO MOST REMOTE OUTLET (OUTLET "D") IS 50 FT. PIPE SIZED USING 0.5 IN. W.C. DROP AT 11" W.C. SETTING NATURAL GAS, SCHEDULE 40 METALLIC PIPE – CAPACITIES IN CU. FT./HR. TABLE 402.4(2), 2018 NCSFGC



DETAIL–TYPICAL GAS PIPING CONNECTION TO EQUIPMENT

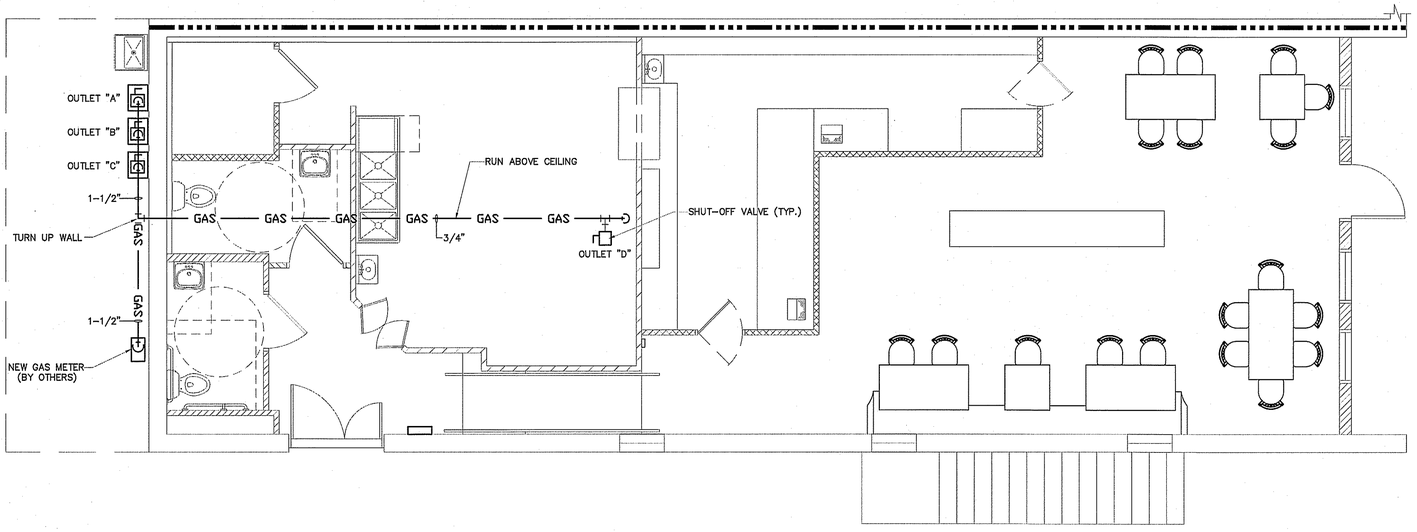
NOT TO SCALE

NOTE

COORDINATE EXACT LOCATION OF WATER HEATERS WITH WALL OPENINGS ON SECOND FLOOR TO MAINTAIN PROPER CLEARANCES.

GAS PIPING NOTES

1. METALLIC GAS PIPING SHALL BE STEEL PIPE COMPLYING WITH ANSI B36.10, ASTM A 53 OR ASTM A 106. COPPER OR BRASS PIPE IN STEEL PIPE SIZES ASSEMBLED WITH THREADED FITTINGS OF THE SAME MATERIALS MAY BE USED WHEN THE GAS DOES NOT CONTAIN MORE THAN AN AVERAGE OF 0.3 GRAINS OF HYDROGEN SULFIDE PER 100 STANDARD CUBIC FEET OF GAS (A TRACE AS DETERMINED UNDER ASTM D 2385 OR ASTM D 2420). COPPER TUBING OR CSST WILL ALSO BE ALLOWED.
2. PIPE JOINTS MAY BE THREADED, FLANGED OR WELDED AND NONFERROUS PIPE MAY ALSO BE BRAZED WITH MATERIALS HAVING A MELTING POINT IN EXCESS OF 1,000 DEGREES F (538 DEGREES C). BRAZING ALLOYS SHALL NOT CONTAIN PHOSPHOROUS.
3. TUBING JOINTS SHALL EITHER BE MADE WITH FLARED GAS TUBING FITTINGS, OR BRAZED WITH A MATERIAL HAVING A MELTING POINT IN EXCESS OF 1,000 DEGREES F (538 DEGREES C). BRAZING ALLOYS SHALL NOT CONTAIN PHOSPHOROUS. METALLIC BALL SLEEVE COMPRESSION TYPE TUBING FITTINGS SHALL NOT BE USED FOR THIS PURPOSE INSIDE OR UNDER BUILDINGS BUT MAY BE USED
4. FITTINGS (EXCEPT STOPCOCKS OR VALVES) SHALL BE MALLEABLE IRON OR STEEL WHEN USED WITH STEEL OR WROUGHT IRON PIPE AND SHALL BE COPPER OR BRASS WHEN USED WITH COPPER OR BRASS PIPE OR TUBING.
5. GAS PIPING AND FITTINGS SHALL BE CLEAR AND FREE FROM CUTTING BURRS AND DEFECTS IN STRUCTURE OR THREADING AND SHALL BE THOROUGHLY BRUSHED AND SCALE BLOWN.
6. ALL GAS PIPING SHALL BE INSTALLED IN ACCORDANCE WITH NCSBC FUEL GAS CODE & NFPA 54.
7. JOINT COMPOUNDS (PIPE DOPE) SHALL BE APPLIED SPARINGLY AND ONLY TO THE MALE THREADS OF METALLIC JOINTS. SUCH COMPOUNDS SHALL BE RESISTANT TO THE ACTION OF LIQUEFIED PETROLEUM GASES.
8. ALL EXPOSED STEEL PIPE/FITTINGS SHALL BE PRIMED AND PAINTED FOR PROTECTION. GRADE ALL GAS PIPING AT 1/4" PER 10' TOWARD LOW POINT.
9. SHUTOFF VALVES (STOP COCKS) SHALL COMPLY WITH ANSI Z21.15, ANSI Z21.21, OR ANSI B16.33 OR ANSI/UL 842. ALL VALVES SHALL BE MANUAL. HOUSE VALVE SHALL BE EQUIPPED WITH LOCKING LUGS FOR SECURITY.



GAS PIPING PLAN

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

NORTH CAROLINA PROFESSIONAL SEAL 19909 ENGINEER MOYL CRUSE 09/09/25

PROPOSED UP-FIT FOR:
RUMBLE PIZZA
215 EAST BROAD STREET
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DATE	09/09/2025
DRAWN BY	BAM
JOB NO.	25–20

SHEET NO.
M-3 OF 3

LIGHTING DATA FOR ENERGY CODE

AREA USE	AREA FT^2	WATTS PER FT^2 ALLOWED	TOTAL WATTS ALLOWED	TOTAL WATTS USED	TOTAL WATTS LEFT OVER
RESTAURANT	1550	1.5	2325	1163	1162
TOTAL	1550		2325	1163	1162

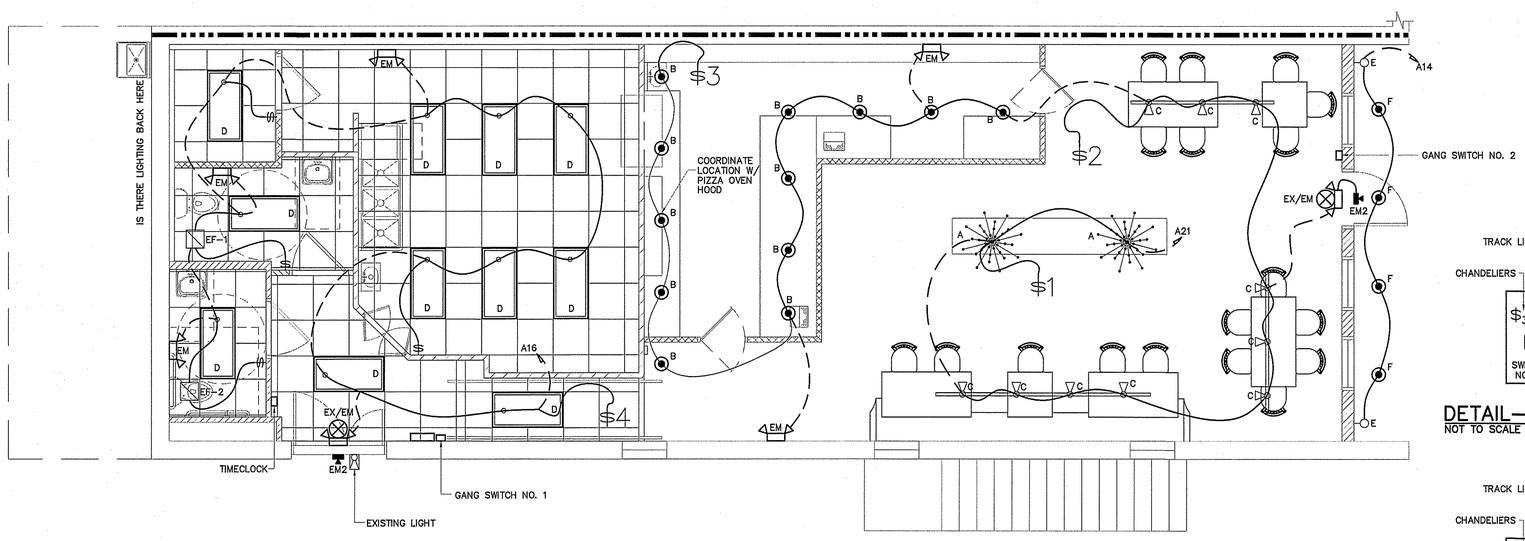
ELECTRICAL LEGEND

MARK	DESCRIPTION
WP	'GFI' DUPLEX WITH WEATHERPROOF COVER
GFI	GROUND FAULT INTERUPTING RECEPTACLE
IG	208V OR 240 V RECEPTACLE
	TELEPHONE/DATA OUTLET
J	JUNCTION BOX
	FUSED DISCONNECT SWITCH
FB	"STEEL CITY" FLOOR BOX WITH CAT 5E CABLE FOR DATA
	SWITCHED BRANCH CIRCUIT
	UNSWITCHED BRANCH CIRCUIT
	120/208 VOLT CIRCUIT
	CEILING OR ATTIC MOUNTED DUPLEX RECEPTACLE
	LIGHT FIXTURE (WALL/CEIL.)
	FLUORESCENT FIXTURE
N/L	UNSWITCHED FIXTURE
	'EXIT' LIGHT FIXTURE, TYPE 'EX'
	BATTERY OPERATED EMERG. LT. (2-HEAD, WALL MTD.)
$	SINGLE-POLE SWITCH
$3(4)	3-WAY SWITCH (4-WAY SWITCH)
	DUPLEX RECEPTACLE
	CEILING MOUNTED RECEPTACLE
	EMERGENCY LIGHT REMOTE WEATHERHEAD(S)
$o	WALL MOUNTED OCCUPANCY SENSOR WITH SWITCH
	CEILING MOUNTED OCCUPANCY SENSOR

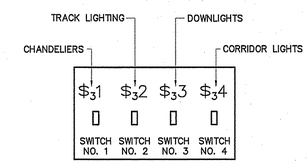
LIGHT FIXTURE SCHEDULE

MARK	DESCRIPTION	MANUFACTURER	CATALOG NUMBER	LAMPS	BALLASTS	WATTAGE	REMARKS
A	LED CHANDELIER SELECTED BY OWNER			LED		100.0	TO BE DIMMABLE
B	IINTERIOR 6" LED DOWN LIGHT			LED		20.5	
C	TRACK LIGHTING			LED		21	BASED ON (1) LED HEAD PER LINEAR FOOT OF TRACK
D	2X4 LED FLAT PANEL SURFACE MOUNTED FIXTURE	LITHONIA	CPANL 2X4 AL06 SWW7 M2 40/50/60LM 35K-40LM	LED		52.0	
E	EXTERIOR WALL SCONCE			LED		25.0	ON TIMECLOCK
F	6" EXTERIOR DOWN LED LIGHT			LED		25.0	ON TIMECLOCK
EM	EMERGENCY LIGHT WITH BATTERY BACKUP	SURE-LITES	CCBMRT2142SM				
EX	LED TYPE EXIT LIGHT WITH BATTERY BACKUP	SURE-LITES	LPX 70 RWH 120/277				
EM2	EMERGENCY LIGHT REMOTE WEATHERHEAD(S)	SURE-LITES	12T-12-WWH OR 12T-12-DWWH OR EQUAL				

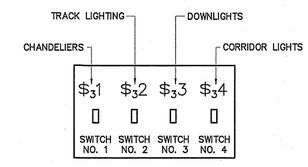
FIXTURES SELECTED BY OWNER AND PURCHASED BY CONTRACTOR
* BEFORE PURCHASING, VERIFY EXTERIOR FIXTURES MEET ZONING ORDINANCE



ELECTRICAL LIGHTING PLAN
SCALE: 1/4" = 1'-0"



DETAIL-GANG SWITCH NO. 1
NOT TO SCALE



DETAIL-GANG SWITCH NO. 2
NOT TO SCALE

NORTH CAROLINA PROFESSIONAL SEAL ENGINEER 19909 BRANDY L. CRUSE 09/09/25

PROPOSED UP-FIT FOR:
RUMBLE PIZZA
215 EAST BROAD STREET
DUNN, NORTH CAROLINA 28334

REVISIONS	
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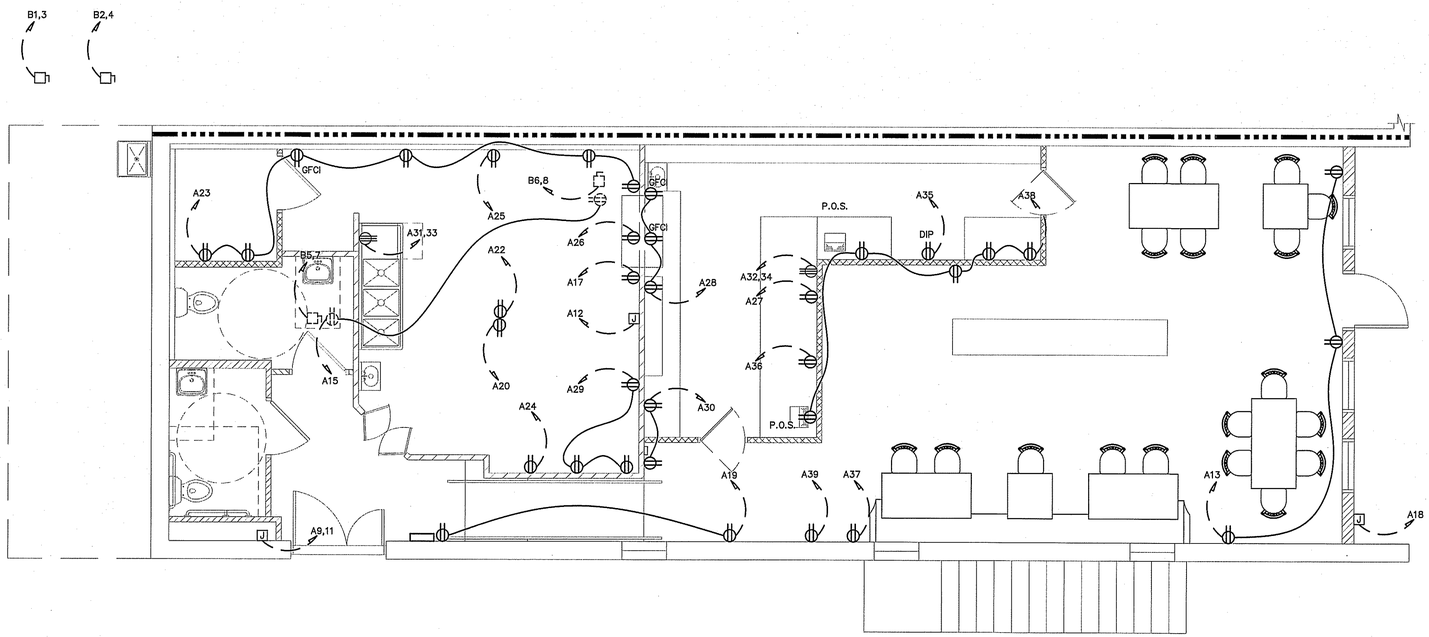
E-1 OF 3

ELECTRICAL LEGEND

MARK	DESCRIPTION
WP	'GFI' DUPLEX WITH WEATHERPROOF COVER
GFI	GROUND FAULT INTERUPTING RECEPTACLE
IG	208V OR 240 V RECEPTACLE
	TELEPHONE/DATA OUTLET
J	JUNCTION BOX
	FUSED DISCONNECT SWITCH
FB	"STEEL CITY" FLOOR BOX WITH CAT 5E CABLE FOR DATA
	SWITCHED BRANCH CIRCUIT
	UNSWITCHED BRANCH CIRCUIT
	120/208 VOLT CIRCUIT
	CEILING OR ATTIC MOUNTED DUPLEX RECEPTACLE
O/O	LIGHT FIXTURE (WALL/CEIL.)
	FLUORESCENT FIXTURE
N/L	UNSWITCHED FIXTURE
	'EXIT' LIGHT FIXTURE, TYPE 'EX'
	BATTERY OPERATED EMERG. LT. (2-HEAD, WALL MTD.)
$	SINGLE-POLE SWITCH
$3(4)	3-WAY SWITCH (4-WAY SWITCH)
	DUPLEX RECEPTACLE
	CEILING MOUNTED RECEPTACLE
	EMERGENCY LIGHT REMOTE WEATHERHEAD(S)
$o	WALL MOUNTED OCCUPANCY SENSOR WITH SWITCH
o	CEILING MOUNTED OCCUPANCY SENSOR



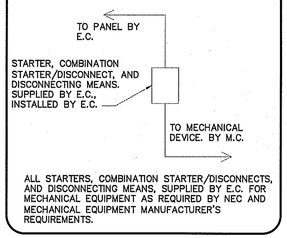
ELECTRICAL LIGHTING PLAN

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

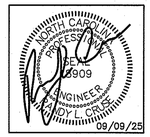
NOTE:
E.C., OWNER, AND G.C. TO VERIFY ALL EQUIPMENT LOCATIONS, SPECIFICATIONS, & REQUIRMENTS BEFORE BEGINNING CONSTRUCTION.

NOTE:
KITCHEN/WET AREA RECEPTACLES TO BE GFCI.
RECEPTACLES IN PUBLIC AREAS TO BE ARC-FAULT PROTECTED AND/OR TAMPER PROOF i.A.W. 210.12 CURRENT VERSION OF NEC.

CONNECTION SCHEDULE



ALL STARTERS, COMBINATION STARTER/DISCONNECTS, AND DISCONNECTING MEANS, SUPPLIED BY E.C. FOR MECHANICAL EQUIPMENT AS REQUIRED BY NEC AND MECHANICAL EQUIPMENT MANUFACTURER'S REQUIREMENTS.



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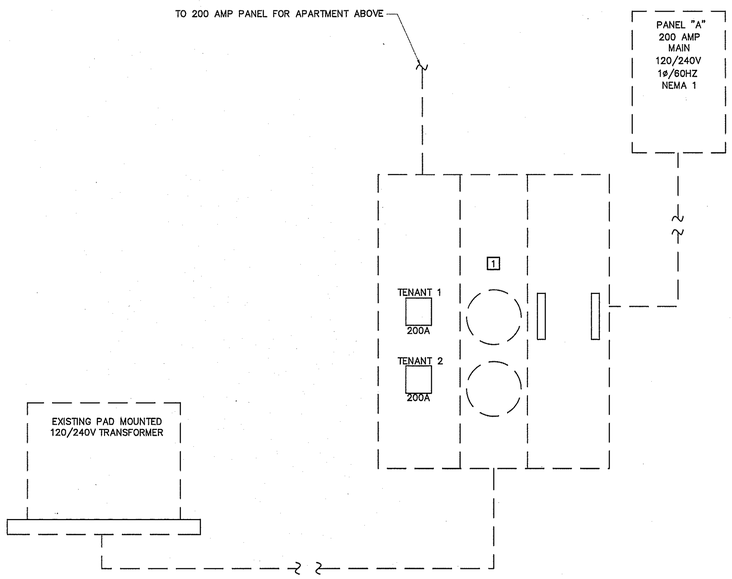
E-2 OF 3



EXISTING ELECTRICAL RISER DIAGRAM

NOT TO SCALE

EXISTING

PANEL: A SCHEDULE: MANUFACTURER: SQ. D NO. OF SPACES 42
VOLTS: 120/240 AMPS: 200 TYPE: "NQOD" MOUNTING: SURFACE
ENCLOSURE: NEMA 1 Ø: 1 SHORT CIRCUIT RATING: 10,000
MAIN: ☒ ☐ TOP FEED: ☐ BOTTOM FEED: ☒ COPPER BUS: ☒ GROUND BAR KIT: ☐ NEUTRAL BAR KIT: ☐

L1	L2	CIRCUIT	POLES	TRIP	ASSIGNMENT	PHASE L1	PHASE L2	ASSIGNMENT	TRIP	POLES	CIRCUIT	L1	L2
X		40	1	20	SPARE	o		SINGLE DOOR SODA COOLER	20	1	39	4.2	
	7.5	38	1	20	FRONT COUNTER CONV. RECS.		o	SINGLE DOOR BEER COOLER	20	1	37		4.2
6.6		36	1	20	3 DOOR REF. PREP TABLE	o		ICE CREAM DIPPING COOLER	20	1	35	5.1	
	6.8	34	2	20	PIZZA DOUGH PRESS		o	DISHWASHER	30	2	33		26.8
6.8		32				o					31	26.8	
	3.0	30	1	20	PIZZA OVEN AREA RECEPTS.		o	REAR OVEN WALL RECEPTS.	20	1	29		4.5
4.5		28	1	20	PIZZA OVEN AREA RECEPTS.	o		CONVENIENCE RECEPTACLE	20	1	27	1.5	
	4.9	26	1	20	2 DOOR SAND. PREP TABLE		o	2 DOOR REFRIGERATOR	20	1	25		6.2
8.5		24	1	20	FREEZER	o		REAR RECEPTACLES	20	1	23	9.0	
	4.5	22	1	20	UNDER COUNTER FREEZER		o	FRONT STORE LIGHTING	20	1	21		5.3
2.6		20	1	20	UNDER COUNTER REFRIGERATOR	o		SIDEWALL RECEPTACLES	20	1	19	3.0	
	5.0	18	1	20	BUILDING SIGN		o	PIZZA OVEN	20	1	17		2.0
4.8		16	1	20	REAR STORE LIGHTING	o		AHU CONV. RECEPTS.	20	1	15	3.0	
	1.0	14	1	20	FRONT EXTERIOR LIGHTS		o	FRONT WALL RECEPTACLES	15	1	13		4.5
5.8		12	1	20	OVEN HOOD EXHAUST	o		WATER HEATER	30	2	11	18.8	
	X	10	1	15	SPARE		o				9		18.8
X		8			SPARE	o		SPARE	60	2	7	X	
	X	6	2	60			o				5		X
X		4	1	15	SPARE	o		SPARE	60	2	3	X	
	X	2	1	15	SPARE		o				1		X

L1 = 111.0 A
L2 = 105.0 A

NOTE:
VERIFY AIC RATING WITH UTILITY COMPANY BEFORE ORDERING PANELS.

PANEL: B SCHEDULE: MANUFACTURER: SQ. D NO. OF SPACES 42
VOLTS: 120/240 AMPS: 200 TYPE: "NQOD" MOUNTING: SURFACE
ENCLOSURE: NEMA 1 Ø: 1 SHORT CIRCUIT RATING: 10,000
MAIN: ☒ ☐ TOP FEED: ☐ BOTTOM FEED: ☒ COPPER BUS: ☒ GROUND BAR KIT: ☐ NEUTRAL BAR KIT: ☐

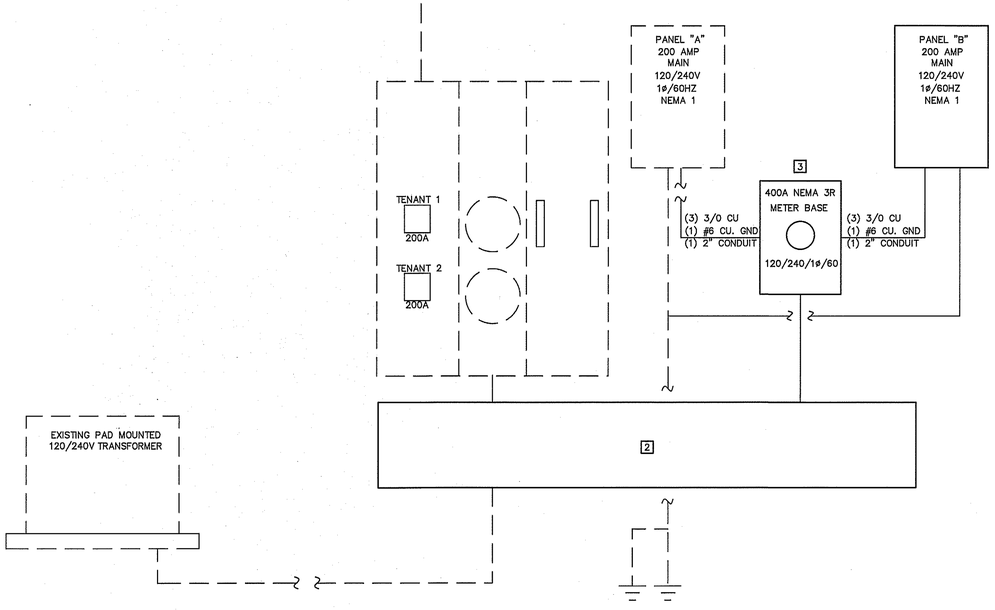
L1	L2	CIRCUIT	POLES	TRIP	ASSIGNMENT	PHASE L1	PHASE L2	ASSIGNMENT	TRIP	POLES	CIRCUIT	L1	L2
33.4		1	2	60	HEAT PUMP UNIT #1	o		HEAT PUMP UNIT #2	30	3	2	14.8	
	33.4	3					o				4		14.8
40.0		5	2	20	AIR HANDLING UNIT #1	o		AIR HANDLER UNIT #2	45	2	6	32.0	
	40.0	7					o				8		32.0
X		9	1	20	SPARE	o		SPARE	20	1	10	X	
	X	11	1	20	SPARE		o	SPARE	20	1	12		X
X		13	1	20	SPARE	o		SPARE	20	1	14	X	
	X	15	1	20	SPARE		o	SPARE	20	1	16		X
X		17	1	20	SPARE	o		SPARE	20	1	18	X	
	X	19	1	20	SPARE		o	SPARE	20	1	20		X
X		21	1	20	SPARE	o		SPARE	20	1	22	X	
	X	23	1	20	SPARE		o	SPARE	20	1	24		X
X		25	1	20	SPARE	o		SPARE	20	1	26	X	
	X	27	1	20	SPARE		o	SPARE	20	1	28		X
X		29	1	20	SPARE	o		SPARE	20	1	30	X	
	X	31	1	20	SPARE		o	SPARE	20	1	32		X
X		33	1	20	SPARE	o		SPARE	20	1	34	X	
	X	35	1	20	SPARE		o	SPARE	20	1	36		X
X		37	1	20	SPARE	o		SPARE	20	1	38	X	
	X	39	1	20	SPARE		o	SPARE	20	1	40		X
X		41	1	20	SPARE	o		SPARE	20	1	42	X	

L1 = 120.2 A
L2 = 120.2 A

TO 200 AMP PANEL FOR APARTMENT ABOVE

KEYNOTES:

1. EXISTING METER PACK. DISCONNECT 200A METER LOAD FROM METER PACK FOR DOWNSTAIRS TENANT.
2. INSTALL NEW TROUGH. REFEED UPSTAIRS TENANT METER BASE FROM TROUGH. FEED NEW 400A METER BASE FROM TROUGH.
3. NEW 400 AMP METER BASE TO FEED EXISTING 200A PANEL "A" AND NEW 200A PANEL "B". RECONNECT ALL BRANCH CIRCUITS AS REQUIRED.



NEW ELECTRICAL POWER PLAN

NOT TO SCALE

ELECTRICAL SYSTEM AND EQUIPMENT METHOD OF COMPLIANCE:

ENERGY CODE: PRESCRIPTIVE ☒ PERFORMANCE ☐
ASHRAE 90.1: PRESCRIPTIVE ☐ PERFORMANCE ☐

REFER TO DRAWINGS FOR RISER DIAGRAM AND PANEL SCHEDULES

LIGHTING SCHEDULE

LAMP TYPE REQUIRED IN FIXTURE: SEE SCHEDULE
NUMBER OF LAMPS IN FIXTURE:
BALLASTS TYPE USED IN FIXTURE:
NUMBER OF BALLASTS IN FIXTURE:
TOTAL WATTAGE PER FIXTURE:
TOTAL INTERIOR WATTAGE SPECIFIED VS. ALLOWED:
TOTAL EXTERIOR WATTAGE SPECIFIED VS. ALLOWED:

ADDITIONAL PRESCRIPTIVE COMPLIANCE

506.2.1 MORE EFFICIENT MECHANICAL EQUIPMENT ☐
506.2.2 REDUCED LIGHTING POWER DENSITY ☒
506.2.3 ENERGY RECOVERY VENTILATION SYSTEMS ☐
506.2.4 HIGHER EFFICENCY SERVICE WATER HEATING ☐
506.2.5 ON-SITE SUPPLY OF RENEWABLE ENERGY ☐
506.2.6 AUTOMATIC DAYLIGHTING CONTROL SYSTEMS ☐

FEEDER SCHEDULE

UNIT	FEEDERS	FUSED DISCONNECT	CONDUIT
AHU-2	(2)#8CU,(1)#10CU GND	60	3/4"
HP-2	(2)#12CU,(1)#12CU GND	30	3/4"
DISHWASHER	(2)#10CU,1#10CU GND	30	3/4"
WATER HEATER	(2)#10CU,1#10CU GND	30	3/4"

ELECTRICAL LOAD CALCULATIONS

1550 SQUARE FEET VA.

NONCONTINUOUS LOADS:

25 RECEPTACLES @ 180 VA EA. 4500
1ST 10000 4500
REMAINDER @ 50% 0
TOTAL 4500

CONTINUOUS LOADS:

GENERAL LIGHTING LOAD VA/SQ. FT.
1550 SQ. FT. 1.5 2325
2325 X 1.25 2906

AIR HANDLING UNIT 17280

HEAT PUMP UNITS 11568

EQUIPMENT: 19728

25% OF LARGEST MOTOR 822

GRAND TOTAL 56804

237 AMPS @ 120/240V, 1ø, 60HZ

ELECTRICAL NOTES (GENERAL)

1. THE ELECTRICAL INSTALLATION, EQUIPMENT, MATERIALS, AND WORKMANSHIP SHALL, AS A MINIMUM, BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE NATIONAL ELECTRICAL CODE (NEC), OCCUPATIONAL SAFETY AND HEALTH ACT (OSHA), ALL APPLICABLE FEDERAL, STATE, COUNTY, AND LOCAL CODES, LAWS, AND ORDINANCES, AND RULINGS OF THE INSPECTION AUTHORITIES HAVING JURISDICTION. ALL FEES, PERMITS, ETC., ASSOCIATED WITH THE ELECTRICAL WORK SHALL BE THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR.

2. THE DRAWINGS GENERALLY INDICATE THE WORK TO BE INSTALLED, BUT DO NOT SHOW ALL BENDS, BOXES, FITTINGS, AND SPECIALTIES WHICH MAY BE REQUIRED FOR A COMPLETE INSTALLATION. ALL SUCH ITEMS REQUIRED TO COMPLETE THE INSTALLATION ACCORDING TO INDUSTRY ACCEPTED PRACTICES SHALL BE INCLUDED IN THE BID.

3. ALL EQUIPMENT AND MATERIALS SHALL BE NEW AND LISTED AND LABELED BY UNDERWRITERS LABORATORIES, INC.

4. ALL PENETRATIONS OF FIRE WALLS SHALL BE SEALED WITH APPROVED SEALING MATERIALS TO MAINTAIN THE FIRE RATING OF THE WALLS.

5. THE CONTRACTOR SHALL VERIFY WIRE AND FUSE/CIRCUIT BREAKER SIZING FOR ALL MECHANICAL EQUIPMENT PRIOR TO PURCHASING MATERIALS AND INSTALLING BRANCH CIRCUITS.

6. THE ELECTRICAL CONTRACTOR SHALL COORDINATE ALL WORK WITH OTHER TRADES TO AVOID INTERFERENCES AND CONFLICTS. APPARENT INTERFERENCES OR CONFLICTS SHALL BE REPORTED TO THE PRIME CONTRACTOR AND RESOLVED PRIOR TO PROCEEDING WITH THE WORK IN QUESTION.

7. THE ELECTRICAL CONTRACTOR SHALL CONNECT BRANCH CIRCUITS TO THE MAIN LINE TERMINALS OF EQUIPMENT FURNISHED BY OTHER CONTRACTORS. THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING AND INSTALLING ANY NECESSARY SWITCHES, DISCONNECTS, OR OVERCURRENT PROTECTION AHEAD OF SUCH EQUIPMENT.

8. RACEWAYS ARE SHOWN SCHEMATICALLY AND MAY BE REROUTED IN THE FIELD. THEY SHALL BE INSTALLED AT RIGHT ANGLES TO OR PARALLEL WITH BUILDING LINES. THEY SHALL BE RUN CONCEALED WITHIN WALLS OR BUILDING STRUCTURES WHEREVER POSSIBLE.

9. ALL RACEWAYS, EQUIPMENT, ETC., ABOVE A SUSPENDED CEILING SHALL BE MOUNTED A MINIMUM OF 18" ABOVE THE CEILING SO AS NOT TO BLOCK ANY TILE OR FIXTURE ACCESS.

10. THE MINIMUM ALLOWABLE SIZE FOR ANY CONDUIT, IMC, OR EMT SHALL BE 1/2" AND MAY BE USED FOR 2#12 WIRE SWITCHLEGS ONLY. A SWITCHLEG SHALL BE DEFINED AS THE RUN OF CONDUIT FROM THE SWITCH OUTLET BOX TO THE FIRST OUTLET BEING SWITCHED.

11. FULL WEIGHT GALVANIZED RIGID STEEL CONDUIT SHALL BE USED IN THE FOLLOWING AREAS:

A. ON THE EXTERIOR OF THE BUILDING OR ROOF,

B. VERTICAL DROPS WHERE THE CONDUIT CANNOT BE ANCHORED TO WALLS OR OTHER SUPPORT STRUCTURES,

C. WHERE SUBJECT TO MECHANICAL DAMAGE.

12. ALL WIRE AND CABLE SHALL BE COPPER AND HAVE 600 VOLT THHN-THWN INSULATION. ALUMINUM WIRING SHALL NOT BE PERMITTED.

13. THE MINIMUM WIRE SIZE SHALL BE #12 AWG EXCEPT FOR CONTROL WIRING, WHICH MAY BE #14 AWG. CONTROL WIRING SHALL USE STRANDED CONDUCTORS UNLESS OTHERWISE NOTED.

14. ALL METAL RACEWAY SYSTEMS SHALL BE MADE ELECTRICALLY CONTINUOUS. THE RACEWAY SYSTEM SHALL NOT BE THE SOLE GROUNDING METHOD. AN INSULATED COPPER GROUNDING CONDUCTOR SHALL BE INSTALLED FOR ALL FEEDERS AND BRANCH CIRCUITS. AT RECEPTACLES, A GREEN GROUND CONDUCTOR SHALL BE CONNECTED TO THE GROUND TERMINAL OF THE RECEPTACLE.

15. THE ELECTRICAL CONTRACTOR SHALL COORDINATE FUSE AND DISCONNECT SWITCH SIZES WITH THE MECHANICAL EQUIPMENT SUPPLIER PRIOR TO PURCHASE AND INSTALLATION OF BRANCH CIRCUIT EQUIPMENT. IF EQUIPMENT SIZING CHANGES FROM DESIGN SIZES, CIRCUITS SHALL BE RESIZED ACCORDINGLY.

16. LIGHT FIXTURES FOR INSTALLATION IN A SUSPENDED CEILING SHALL BE SECURELY FASTENED TO THE CEILING SUSPENSION SYSTEM IN A MANNER TO PREVENT FIXTURES FROM FALLING. IN ADDITION, 16 GAGE WIRE HANGERS SHALL BE FASTENED TO THE FOUR CORNERS OF THE FIXTURES.

17. CONNECTIONS TO FIXTURES INSTALLED IN SUSPENDED CEILINGS SHALL BE MADE WITH FLEXIBLE METAL CONDUIT TO ALLOW THE FIXTURE TO BE LIFTED OUT OF THE GRID AND MOVED TO AN ADJACENT GRID LOCATION.

18. BREAKERS SUPPLYING HVAC OR REFRIGERATION EQUIPMENT SHALL BE HACR TYPE.

19. 3/4" CONDUIT IS MINIMUM ALLOWABLE SIZE EXCEPT AS INDICATED IN #10. CONDUIT FILL NOT TO EXCEED 40% AS PERMITTED BY THE NATIONAL ELECTRIC CODE.

20. ALL CONDUCTORS TO BE INSTALLED IN CONDUIT (EXCEPT WHERE ROMEX IS INSTALLED). EMT FITTINGS TO BE COMPRESSION TYPE, INSULATED THROAT.

21. NOT USED

22. DATA, SECURITY, THEATRICAL, AND VIDEO SYSTEMS TO BE PROVIDED BY OWNER. ROUGH-IN OF OUTLETS AND CONDUIT WILL BE BY CONTRACTOR AS SHOWN ON DRAWINGS.

23. NOT USED

24. NO. 10 AWG CONDUCTORS SHALL BE USED FOR 20 AMP BRANCH CIRCUIT HOME RUNS EXCEEDING 50 FT. TO THE JUNCTION POINT. 20 AMP BRANCH CIRCUIT WIRING SHALL BE NO. 10 AWG THROUGHOUT IF THE CIRCUIT IS LONGER THAN 100 FEET TOTAL LENGTH.

25. CONDUCTORS SHALL BE CONTINUOUS FROM OUTLET TO OUTLET. SPLICES WILL NOT BE MADE EXCEPT WITHIN ACCESSIBLE OUTLET OR JUNCTION BOXES, TROUGHS, OR GUTTERS.

26. MAKE CONDUCTOR LENGTHS FOR PARALLEL CIRCUITS EQUAL.

27. INSTALL TELEPHONE OUTLETS WITH 3/4" EMPTY CONDUIT AND PULL CORD. STUB OUT ABOVE CEILING. PHONE SYSTEM INSTALLED BY OWNER.

28. ALL CONDUIT WITHOUT CONDUCTORS SHALL HAVE NYLON PULLCORDS INSTALLED.

29. THE CONTRACTOR SHALL MAKE A COMPLETE REVIEW OF THE PLANS, SCHEDULES, AND DETAILS PRIOR TO INSTALLATION, AND REVIEW ANY CONFLICTS THAT ARE NOTED WITH THE ENGINEER.

30. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL FEES FOR PERMITS AND INSPECTIONS. THE CONTRACTOR WILL ALSO BE RESPONSIBLE FOR ELECTRIC UTILITY CONNECTION FEES AND LINE EXTENSION FEES.

31. ELECTRICAL CONNECTIONS TO EQUIPMENT SUBJECT TO VIBRATION WHICH DEVELOPS OBJECTIONABLE NOISES SHALL BE MADE FROM THE CONDUIT SYSTEM WITH SHORT LENGTHS OF FLEXIBLE "LIQUID-TITE" CONDUIT.

32. ALL WIRE TERMINATIONS AND EQUIPMENT TO BE RATED FOR 75° C MINIMUM.

33. ELECTRICAL CONTRACTOR TO MAINTAIN 2' OF SEPARATION ON RECEPTACLES ON OPPOSITE SIDES OF ANY FIRE RATED WALL PER 2020 N.E.C. 300.21.

34. WIRING TO DISCONNECT SWITCH AND DISCONNECT SWITCH SHALL BE FURNISHED BY THE ELECTRICAL CONTRACTOR. WIRING FROM THE DISCONNECT TO THE EQUIPMENT SHALL BE BY THE MECHANICAL CONTRACTOR.

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 019909 ENGINEER BRIAN M. CRUSE 09/09/25

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