ELECTRICAL LEGEND

- RACEWAY CONCEALED IN CEILING CAVITY, SLAB, OR WALL.
- RACEWAY HOMERUN TO PANEL, ONE ARROWHEAD PER CIRCUIT.
- RACEWAY WITH 3 WIRES #12 AWG IN CONDUIT AND #12 AWG GROUNDING CONDUCTOR. NOTE: NUMBER OF CROSS HATCHES INDICATES NUMBER OF #12 AWG CONDUCTORS SHORT CROSS HATCH = PHASE CONDUCTOR. LONG CROSS HATCH NEUTRAL CONDUCTOR. DOT INDICATES GROUNDING CONDUCTOR AND SMALL HATCHES AFTER NEUTRAL CONDUCTOR REPRESENT SWITCHED CONDUCTORS. NO CROSS HATCHES INDICATES 2 #12 AWG AND #12 AWG GROUNDING CONDUCTOR.
- $ WALL SWITCH, SINGLE POLE, SINGLE THROW. MOUNT 48" AFF.
- $3 WALL SWITCH, 3-WAY, SINGLE POLE, DOUBLE THROW. MOUNT 48" AFF.
- WALL VACANCY SENSOR SWITCH, SINGLE POLE, MOUNT 48" AFF.
- DISCONNECT SWITCH, SIZE/POLES/FUSE/ENCLOSURE TYPE IF OTHER THAN NEMA 3R. MOUNT 48" AFF. "NF" INDICATES NON-FUSED TYPE (30/3/20/3R).
- DUPLEX RECEPTACLE
- DUPLEX RECEPTACLE - BOTTOM HALF SWITCHED
- DUPLEX RECEPTACLE - FLOOR MOUNTED
- RECEPTACLE - 220V
- DUPLEX RECEPTACLE - GROUND FAULT INTERRUPT
- DUPLEX RECEPTACLE - WEATHER PROOF AND GROUND FAULT INTERRUPT
- SD SMOKE DETECTOR - WIRED IN SERIES
- CO CARBON MONOXIDE DETECTOR
- SCO COMBINATION SMOKE AND CARBON MONOXIDE DETECTOR.
- EXHAUST FAN MOTOR
- EXHAUST FAN MOTOR WITH LIGHT
- J JUNCTION BOX, ABOVE CEILING.
- JH JUNCTION BOX, WALL-MOUNTED.
- PANELBOARD, SURFACE-MOUNTED MOUNT AT 6'-0" TO TOP.
- UTILITY SERVICE METER
- DOOR BELL PUSH BUTTON.
- DB DOOR BELL.
- CEILING FAN 1 PHASE, 120 VOLT, SINGLE POLE, 60HZ.

GENERAL

A. ALL ELECTRICAL WORK SHALL CONFORM TO NEC 2017 AND VIRGINIA RULES AND REGULATION.
B. ALL EQUIPMENT SHALL BE NEMA AND U.L. APPROVED.
C. ELECTRICAL DRAWINGS ARE DIAGRAMMATIC. SIZE AND LOCATION OF EQUIPMENT AND WIRING ARE SHOWN TO SCALE WHERE POSSIBLE, BUT MAY BE DISTORTED FOR CLARITY ON THE DRAWINGS. FINAL LOCATIONS OF OUTLETS AND EQUIPMENT SHALL BE SHOWN IN ENLARGED DETAILS OR AS APPROVED BY THE ARCHITECT OR HIS REPRESENTATIVE.
D. IT IS NOT WITHIN THE SCOPE OF DRAWINGS TO SHOW ALL THE NECESSARY BENDS, OFFSETS, PULLBOXES AND OBSTRUCTIONS. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO INSTALL HIS WORK TO CONFORM TO THE STRUCTURE, MAINTAIN HEAD-ROOM AND KEEP OPENINGS AND PASSAGEWAYS CLEAR. REFER TO THE ARCHITECTURAL DRAWINGS FOR DIMENSIONS.
E. THE CONTRACTOR SHALL CAREFULLY EXAMINE THE SITE AND SHALL COMPARE THE DRAWINGS WITH EXISTING ELECTRICAL INSTALLATIONS, AND SHALL THOROUGHLY FAMILIARIZE HIMSELF WITH ALL EXISTING CONDITIONS WITHIN THE SCOPE OF HIS WORK. BY THE ACT OF SUBMITTING A BID, THE CONTRACTOR HILL HAVE DEEMED TO HAVE MADE SUCH EXAMINATION AND TO HAVE ACCEPTED SUCH CONDITIONS AND TO HAVE MADE ALLOWANCE THEREFORE.
F. IN PREPARING HIS BID. CONTRACTOR SHALL BE RESPONSIBLE TO COORDINATE WITH ALL TRADES AND ELECTRICAL REFERENCES ON ARCHITECTURAL DRAWINGS.
G. VERIFY LOCATIONS OF ALL ELECTRICAL EQUIPMENT WITH ARCHITECTURAL DRAWINGS AND INTERIOR DETAILS AND FINISHES. IN CENTERING OUTLETS AND LOCATING BOXES AND OUTLETS, ALLOW FOR OVERHEAD PIPES, DUCTS, AND MECHANICAL EQUIPMENT, VARIATIONS IN FIREPROOFING AND PLASTERING, WINDOW AND DOOR TRIM, PANELING, HUNG CEILINGS AND THE LIKE, AND CORRECT ANY INACCURACY RESULTING FROM FAILURE TO DO SO WITHOUT EXPENSE TO OWNER.
H. FURNISH AND INSTALL WIRING FOR EQUIPMENT FURNISHED BY OTHERS, AS SHOWN ON DRAWINGS. COORDINATE WITH OTHER TRADES OR DETAILS FOR INSTALLATION. THE TERM "WIRING", AS USED HEREIN, INCLUDES FURNISHING AND INSTALLING CONDUIT, WIRE JUNCTION BOXES, DISCONNECTS AND MAKING CONNECTIONS. BE RESPONSIBLE FOR PROPER WIRING AND NECESSARY ELECTRICAL ADJUSTMENTS TO EQUIPMENT TO CONFORM TO SPECIFIED REQUIREMENTS OF THE EQUIPMENT.
I. SECURE AND PAY ALL PERMITS AND FEES NECESSARY FOR EXECUTION AND COMPLETION OF ELECTRICAL WORK.
J. THE CONTRACTOR SHALL DO ALL CUTTING AND PATCHING OF THE EXISTING CONSTRUCTION WORK WHICH MAY BE REQUIRED FOR THE PROPER INSTALLATION OF THE ELECTRICAL WORK. ALL PATCHING SHALL BE OF THE SAME MATERIALS, WORKMANSHIP, AND FINISH AND SHALL ACCURATELY MATCH ALL SURROUNDING WORK.
K. AFTER COMPLETION OF WORK UNDER THIS SECTION, CLEAN UP RESULTANT DEBRIS FROM THIS WORK AND REMOVE FROM THE SITE.
L. CODE REQUIREMENTS ARE MINIMUM AND SHALL BE COMPLIED WITH AT NO ADDITIONAL COST TO THE OWNER. WHERE REQUIREMENTS OF THESE DRAWINGS EXCEED CODE REQUIREMENTS, WORK SHALL BE FURNISHED AND INSTALLED IN ACCORDANCE WITH THE DRAWINGS.
M. DEVIATION FROM MATERIALS, METHODS AND PROCEDURES SET FORTH HEREIN MUST BE APPROVED IN WRITING. APPROVAL WILL NOT BE GIVEN UNLESS THE PROPOSED SYSTEM IS EQUAL IN PERFORMANCE, DURABILITY LONGEVITY, AND RELIABILITY TO THAT SPECIFIED.

LIGHTING FIXTURES

A. INSTALL LIGHTING FIXTURES AS SHOWN ON THE ELECTRICAL DRAWINGS. VERIFY EXACT LOCATIONS OF FIXTURES WITH ARCHITECTURAL REFLECTED CEILING PLANS. COORDINATE FIXTURE HOUSINGS AND TRIMS WITH CEILING TYPE. PROVIDE REQUIRED ACCESSORIES FOR CEILING TYPES.
B. ALL RECESSED LIGHTING FIXTURES SHALL BE LED.
C. ALL BULBS ARE DIMMABLE LED.
D. NUMBER OF BULBS DETERMINED BY FIXTURE CHOSEN BY CUSTOMER.
E. IC-RATED RECESSED LIGHT FIXTURES SHALL BE SEALED AT HOUSING/INTERIOR FINISH AND LABELED TO INDICATE
F. 2.0 CFM LEAKAGE AT 75% PA. (2018 VA ENERGY CODE) 75% LAMPS IN PERMANENT FIXTURES OR 75% PERMANENT FIXTURES SHALL BE USE HIGH EFFIC LAMPS. (2018 VA ENERGY CODE)

DISTRIBUTION EQUIPMENT

A. ALL PANELBOARDS SHALL BE ENCLOSED TYPE, FLUSH OR SURFACE MOUNTED AS REQUIRED, IN STEEL CABINETS CODE GAUGE, WITH STEEL TRIM CONCEALED HINGES, DOORS AND FLUSH TYPE LOCKS. MANUFACTURER SHALL BE SQUARE D, CUTLER HAMMER, GE, ITE, OR APPROVED EQUIVALENT.
B. ALL BUSSES, INCLUDING NEUTRAL AND GROUND BUS, SHALL BE MINIMUM 98% CONDUCTIVITY, HARD DRAWN COPPER, SILVER OR TIN-PLATED JOINTS, AND SIZED ON THE BASIS OF 1000 AMPERES PER SQUARE INCH CROSS-SECTIONAL AREA. BUSSES SHALL BE ARRANGED FOR SEQUENCING PHASING. EXCEPTION: ALUMINUM BUSSING IS PERMITTED FOR RESIDENTIAL LOAD CENTER PANELBOARDS.
C. PANELBOARDS SHALL BE EQUIPPED WITH PLUG-ON MOLDED CASE CIRCUIT BREAKERS OF THE TYPE, NUMBER OF POLES, TRIP SIZES, AS SHOWN IN DRAWINGS AND INTERRUPTING CAPACITY AS PER BUILDING REQUIREMENTS. EXCEPTION:RESIDENTIAL UNITS SHALL BE EQUIPPED WITH PLUG-IN TYPE MOLDED CASE CIRCUIT BREAKERS F THE TYPE, NUMBER OF POLES, TRIP SIZES, AS SHOWN IN DRAWINGS AND INTERRUPTING CAPACITY AS PER BUILDING REQUIREMENTS. GROUP AND LACE ALL CONDUCTORS WITHIN PANEL ENCLOSURE DO NOT SPLICE CONDUCTORS WITHIN PANEL ENCLOSURE.
D. SEAL EXISTING PANEL KNOCKOUTS NOT RE-USED.
E. DISCONNECT SWITCHES SHALL BE SQUARE-D CLASS 3110 TYPE FUSED OR NON-FUSED, OR APPROVED EQUIVALENT.

DEVICES

DUPLEX RECEPTACLES FOR WALL AND FLOOR CONVENIENCE OUTLETS SHALL BE 2 POLE, 3 WIRE, GROUNDED, 15 AMPERE, NEMA CONFIGURATION 5-20R, COLOR BY ARCHITECT.
ALL RECEPTACLES SHALL BE TAMPER RESISTANT.

DUPLEX GFI RECEPTACLE SHALL BE 2 POLE, 3 WIRE, GROUNDED, 20 AMPERE, NEMA CONFIGURATION 5-20R, COLOR BY ARCHITECT.

SINGLE POLE SWITCHES AND 3-WAY SWITCHES SHALL BE SPECIFICATION GRADE. COLOR BY ARCHITECT. DEVICE SHALL BE MOUNTED UNDER COMMON COVERPLATE WHERE MULTIPLE DEVICES ARE INDICATED.
AC-DC SMOKE AND CARBON MONOXIDE DETECTOR SHOULD BE INSTALLED ACCORDING TO NFPA 72.
AC/BATTERY: THESE SHOULD CONFORM TO THE NFPA 72, SECTION 29.6 ALARMS HAVE TWO POWER SUPPLIES 120- VOLT AC FOR THE PRIMARY SOURCE OF POWER AND BATTERY BACKUP FOR THE SECONDARY SOURCE.

CONDUCTORS

A. ALL BRANCH CIRCUIT CONDUCTOR'S SHALL BE COPPER UNLESS OTHERWISE NOTED. ALL #8 AMG WIRE AND LARGER SHALL BE STRANDED.
B. ALL #10 AMG WIRE AND SMALLER SHALL BE SOLID.
C. VOLTAGE RATING OF INSULATION SHALL BE 600 VOLTS.
D. FACTORY COLOR CODING FOR WIRE AND CABLE SHALL BE AS FOLLOWS: 120/208V - BLACK, RED, BLUE AND WHITE, FOR PHASES A, B AND NEUTRAL,RESPECTIVELY. GROUND WIRES SHALL BE GREEN.
E. LEAVE WIRE SUFFICIENTLY LONG TO PERMIT MAKING FINAL CONNECTIONS.
F. LIGHTING AND POWER WIRING FOR CIRCUITS LESS THAN 100 FEET SHALL BE #12 AMG, UNLESS NOTED. WIRE SIZES SHALL BE #10 FOR CIRCUITS GREATER THAN 100 FEET.

NONMETALLIC CABLE (NM):

A. TYPE NM CABLE SHALL BE PERMITTED PER NFPA-70 ARTICLE 334.10. ALL OTHER LOCATIONS SHALL USE TYPE MC AS A SUBSTITUTE FOR CONDUIT.

OUTLET JUNCTION AND PULL BOXES

A. ALL OUTLET BOXES SHALL BE PLASTIC RATED FOR RESIDENTIAL USE.
B. OUTLET BOXES FOR RECEPTACLES AND SWITCHES IN DRY WALL PARTITION SHALL BE 4" SQUARE, BY 1-1/2" MINIMUM DEPTH AND SHALL BE FITTED WITH DEVICE COVERS AND DEPTH EQUAL TO THE DRY WALL THICKNESS.
C. SECTIONAL BOXES ARE NOT ACCEPTABLE.
D. SET BOXES SQUARE AND TRUE WITH BUILDING FINISH. ERECT WALL AND SWITCH OUTLETS IN ADVANCE OF FURRING AND FIREPROOFING.
E. LOCATIONS INDICATED FOR LOCAL WALL SWITCHES ARE SUBJECT TO MODIFICATIONS. AT OR NEAR DOORS INSTALL SWITCH, IN SIDE OPPOSITE HINGE. VERIFY FINAL DOOR HINGE LOCATION IN FIELD PRIOR TO SWITCH OUTLET INSTALLATION.
F. LOCATION INDICATED FOR LOCAL WALL SWITCHES, CONTROLLERS, EMERGENCY PUSH BUTTONS, RECEPTACLE, ETC. ARE SUBJECT TO MODIFICATIONS.
G. HEIGHTS OF OUTLET FROM FINISHED FLOOR TO CENTERLINE OF OUTLETS, AS PER ELECTRICAL DRAWINGS. EXCEPTIONS: AT JUNCTION OF DIFFERENT WALL MATERIALS, MOLDING OR BREAK IN WALL SURFACE IN VIOLATION OF CODE REQUIREMENTS.

GROUNDING

A. GROUND ALL CONDUITS, CABINETS, MOTORS, PANELS, AND OTHER EXPOSED NON-CURRENT CARRYING METAL PARTS OF ELECTRICAL EQUIPMENT IN ACCORDANCE WITH ALL PROVISIONS OF THE NATIONAL ELECTRICAL CODE, OR LOCAL CODES THAT MAY APPLY.

SLEEVES

A. ALL PENETRATIONS THROUGH FIRE RATED WALLS, FLOORS OR PARTITIONS SHALL BE SEALED TO PREVENT THE SPREAD OF SMOKE AND FIRE THROUGH THEM. THE FIRE RATING OF THE PENETRATION SEAL SHALL BE AT LEAST THAT OF THE FLOOR OR WALL INTO WHICH IT IS INSTALLED BY ARTICLE #300-21 OF THE NATIONAL ELECTRICAL CODE.
B. THE FOAM SEALANT SHALL MEET ALL OF THE FIRE TEST AND HOUSE STREAM TEST REQUIREMENTS OF ASTM E-119-73 AND SHALL BE U.L. CLASSIFIED AS A WALL OPENING PROTECTIVE DEVICE, AS MANUFACTURED BY CHASE TECHNOLOGY CORPORATION, OR APPROVED EQUIVALENT.

HVAC CONTROLS

A. MECHANICAL CONTRACTOR SHALL FURNISH AND INSTALL CONTROL WIRING INCLUDING CONDUITS, RELAYS, TIME CLOCK, CONTROL TRANSFORMERS, ETC., FORALL HVAC EQUIPMENT, UNLESS OTHERWISE NOTED.
B. ELECTRICAL CONTRACTOR SHALL FURNISH AND INSTALL ONLY POWER WIRING WITH DISCONNECTS, AS SHOWN IN ELECTRICAL DRAWINGS.

TEST AND GUARANTEES

A. UPON COMPLETION OF ALL ELECTRICAL WORK, CONTRACTOR SHALL TEST FOR GROUNDS AND SHORTS, TO ENSURE PROPER OPERATION OF ELECTRICAL EQUIPMENT.
B. GUARANTEE FOR TWO YEARS AFTER FINAL ACCEPTANCE BY OWNER OF ALL WORKMANSHIP AND MATERIALS FURNISHED.
C. SMOKE DETECTOR TEST SHOULD BE DONE IN ACCORDANCE WITH NFPA-72.

ELECTRICAL ABBREVIATIONS

AIC	AMPERES INTERUPTING CURRENT
AFF/ARF	ABOVE FINISHED FLOOR/ ABOVE RAISED FLOOR
ARCH	ARCHITECT/ARCHITECTURAL
AT	AMPERE TRIP
AF	AMPERE FRAME
C	CONDUIT
CB	CIRCUIT BREAKER
CKT	CIRCUIT
EC	EMPTY CONDUIT
EMT	ELECTRICAL METALLIC TUBING
EX	EXISTING
F	FUSED
FFL	FINISHED FLOOR
FLR	FLOOR
G	GROUND
GF	GROUND FAULT CIRCUIT INTERUPTER
HID	HIGH INTENSITY DISCHARGE
J, JB	JUNCTION BOX
kcmil	THOUSAND CIRCULAR MILLS
MC	METAL-CLAD CABLE
MCB	MAIN CIRCUIT BREAKER
MH	METAL HALIDE
MLO	MAIN LUG ONLY
NF	NONFUSIBLE
PH	PHASE
PVC	POLYVINYL CHLORIDE CONDUIT
RECP	RECEPTACLE
RGS	RIGID GALVANIZED STEEL
SYM	SYMMETRICAL
TEL	TELEPHONE
V	VOLT
VA	VOLT-AMPERE
W	WIRE OR WATT
WP	WEATHERPROOF
XFMR	TRANSFORMER
CLG	CEILING GROUND FAULT CIRCUIT INTERRUPTER(GFCI).
A-X	A IS THE NAME OF ELECTRICAL PANEL BOARD AND X IS THE NUMBER OF CIRCUIT.

LIGHTING FIXTURE SCHEDULE

SYMBOL	FIXTURE DESCRIPTION	MOUNTING	VOLTS	INPUT WATTS	MANUFACTURER	PART #	ITEM #	REMARK
L	5.5" LED DOWNLIGHT, WHITE PAINTED FLANGE, 0-10V DIMMING, 65 DEG BEAM SPREAD	RECESS CEILING	120	12.5	PROGRESS LIGHTING FIXTURES	--	P810007-028-30K	OR EQUIVALENT APPROVED BY OWNER
K	KEYLESS CEILING MOUNTED EXPOSED LED BULB	SURFACE CEILING	120	17	SPECIFIED BY OWNER FIXTURE ALLOWANCE	--	--	OR EQUIVALENT APPROVED BY OWNER
	EXTERIOR WALL MOUNT LED BULB	SURFACE WALL	120	17	PROGRESS LIGHTING FIXTURES	L0434623	P5674-31	OR EQUIVALENT APPROVED BY OWNER
	CLOSE TO CEILING, BOWL GLASS, LED LAMPS	SURFACE WALL	120	30	PROGRESS LIGHTING FIXTURES	L0478474	P300160-009	OR EQUIVALENT APPROVED BY OWNER
P	PENDANT FIXTURE, LED LAMPS	SURFACE CEILING	120	100	PROGRESS LIGHTING FIXTURES	L478483	P500125-009	OR EQUIVALENT APPROVED BY OWNER
F	LIGHT FIXTURE - UNDER CABINET LED LIGHT	SURFACE CEILING	120	7	PROGRESS LIGHTING FIXTURES	L0364834	P7100000-028-30	OR EQUIVALENT APPROVED BY OWNER

1. ALL BULBS DIMMABLE LED. LUMINARIES SHALL BE SUPPORTED IN ACCORDANCE WITH NEC ARTICLE 410.
2. SPECIFIED LIGHT FIXTURES SHALL BE USED AS A BASIS OF DESIGN. ARCHITECT/OWNER SHALL APPROVE EXACT LIGHTING FIXTURE PACKAGE PRIOR TO BID SUBMITTAL.
3. RECESSED FIXTURES INSTALLED WITHIN FIRE RATED CEILINGS SHALL BE A UL RATED FIRE RATED HOUSING OR PROVIDED WITH FIRE RATED TENTING ASSEMBLY AROUND PERIMETER OF HOUSING. COORDINATE WITH ARCHITECTURAL FOR RATED CEILING AREAS.
4. ALL NEW LED LUMINARIES SHALL BE EQUIPPED WITH ENERGY SAVING DRIVERS.

ELECTRICAL DRAWING LIST

DRAWING	TITLE
E000	ELECTRICAL GENERAL NOTES, SYMBOLS, & ABBREVIATIONS
E100	ELECTRICAL BASEMENT FLOOR PLAN
E101	ELECTRICAL FIRST FLOOR PLAN
E102	ELECTRICAL SECOND FLOOR PLAN
E300	ELECTRICAL GROUNDING DETAILS
E600	ELECTRICAL PANEL SCHEDULE

SITE SPECIFIC HAZARDS

IN ACCORDANCE WITH THE REQUIREMENTS OF THE CDM REGULATIONS 2007 THE FOLLOWING SIGNIFICANT RESIDUAL HAZARDS HAVE NOT BEEN DESIGNED OUT OF THIS PROJECT AND MUST BE TAKEN INTO CONSIDERATION BY CONTRACTORS PLANNING TO UNDERTAKE THE WORKS SHOWN ON THIS DRAWING:

Rev.	Description	Date	By

Key Plan:

Note:

N

Project: Kitchen & Bar

Client: Daka Daka

Drawing No.: E-0

Drawing's Name: General Note of Electrical Plan

Date:	Paper Size:	Scale on A3:	Author:	Checker:
01/01/2025	A3	1:100	MP	AT

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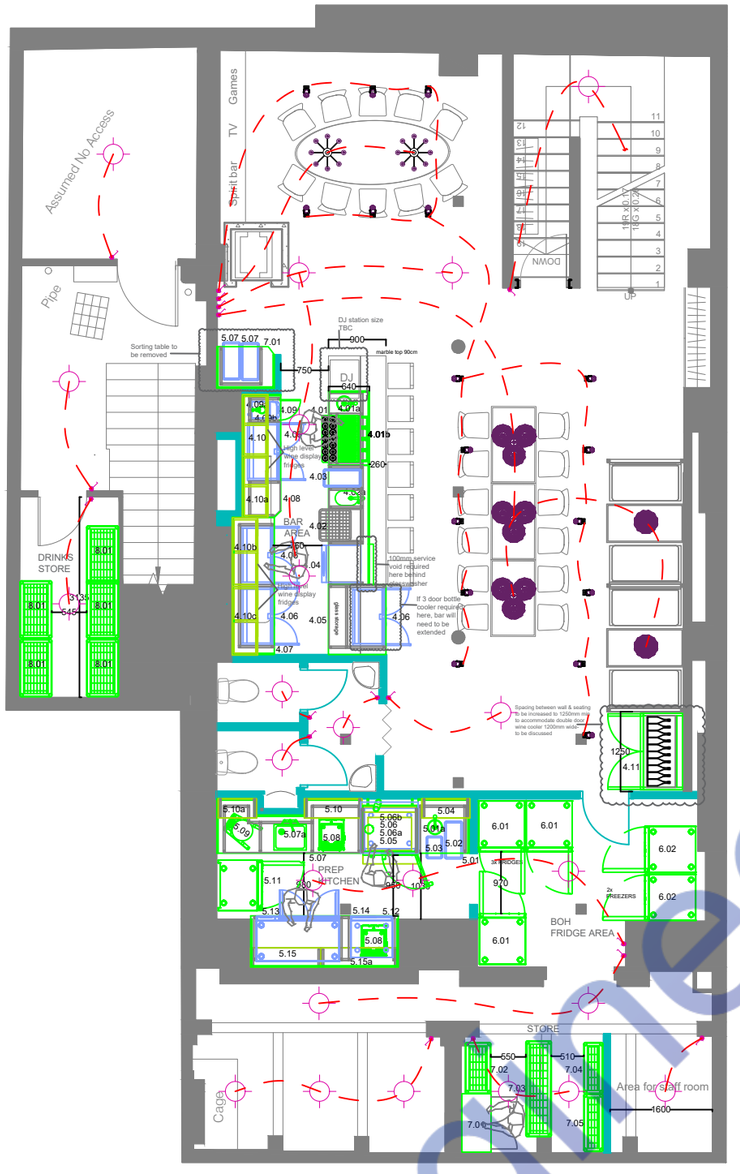
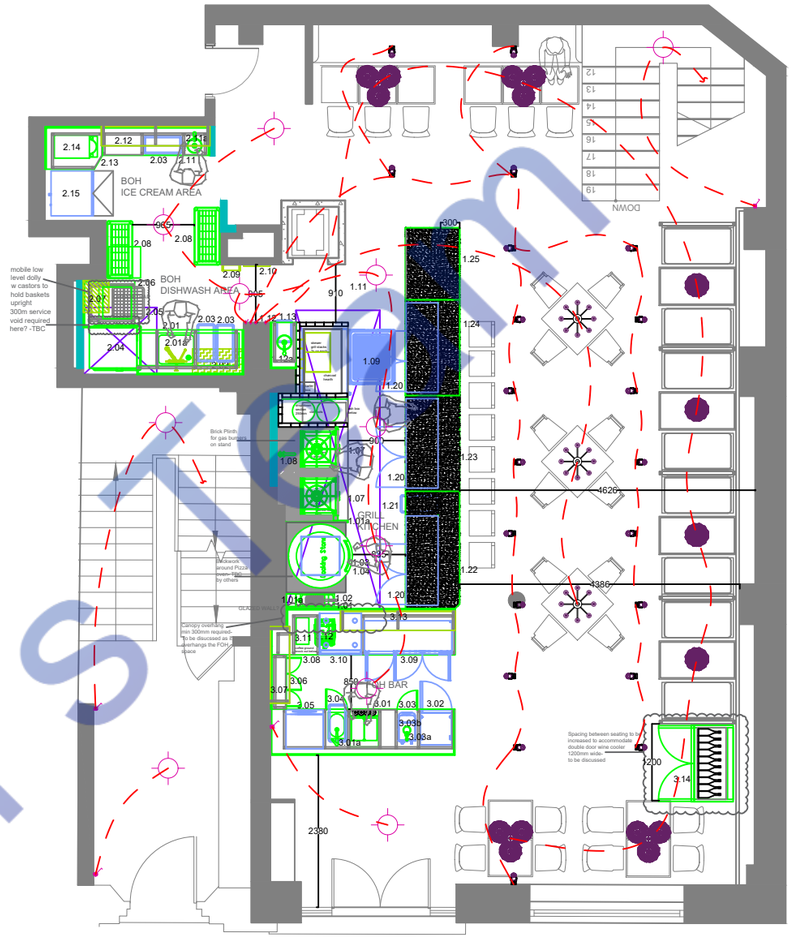
BASEMENT



GF Option 1



Color Coding Heights:

- Ceiling
- 1600mm
- 1200mm
- 750mm
- 450mm

- 30W CEILING MOUNT SANDAL LIGHT
- 10W CEILING MOUNT SANDAL LIGHT
- 40W CEILING MOUNT SANDAL LIGHT
- 10W SPOT LIGHT

Rev	Description	Date	By

Key Plan:

Note:

N

Project: Kitchen & Bar

Client: Daka Daka

Drawing No.: E-1

Drawing's Name: Electrical Lighting Plan

Date:	Paper Size:	Scale on A3:	Author:	Checker:
01/01/2025	A3	1:100	MP	AT

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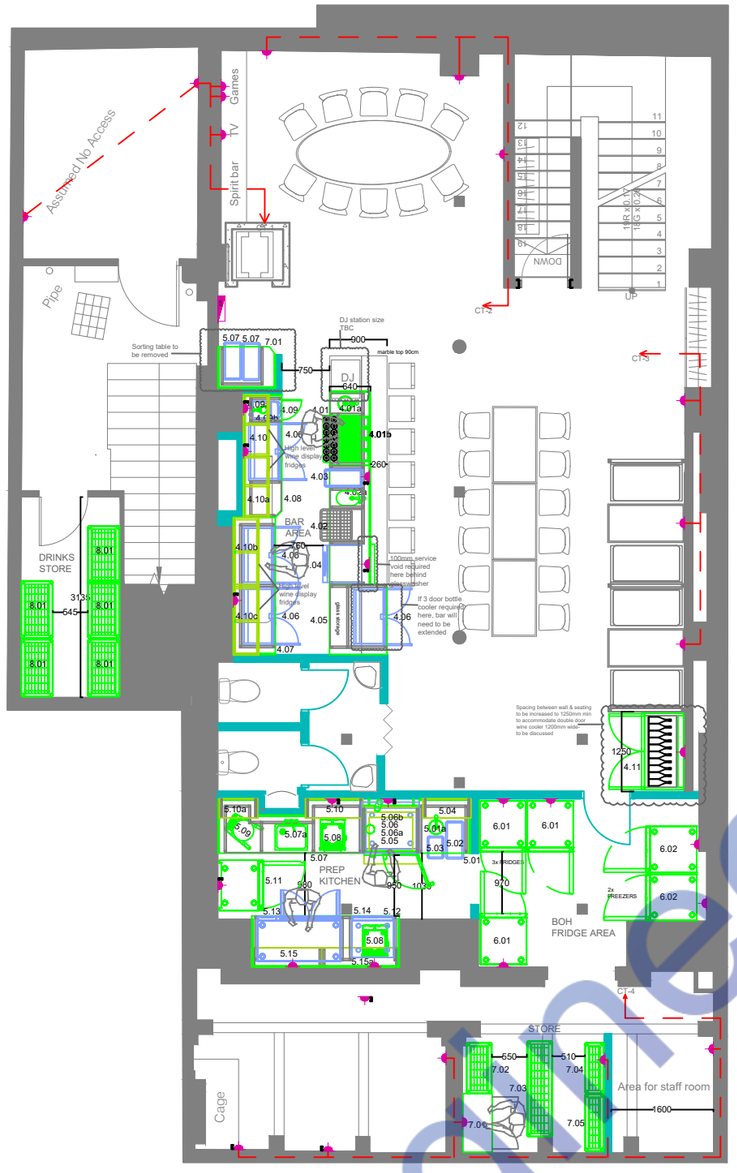
BASEMENT



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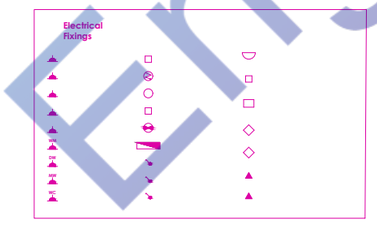

Color Coding Heights:

- Ceiling
- 1600mm
- 1200mm
- 750mm
- 450mm

SITE SPECIFIC HAZARDS

IN ACCORDANCE WITH THE REQUIREMENTS OF THE CDM REGULATIONS 2007 THE FOLLOWING SIGNIFICANT RESIDUAL HAZARDS HAVE NOT BEEN DESIGNED OUT OF THIS PROJECT AND MUST BE TAKEN INTO CONSIDERATION BY CONTRACTORS PLANNING TO UNDERTAKE THE WORKS SHOWN ON THIS DRAWING:

Rev	Description	Date	By

Key Plan:

Note:

N

Project: Kitchen & Bar

Client: Daka Daka

Drawing No.: E-2

Drawing's Name: Electrical Power Plan

Date:	Paper Size:	Scale on A3:	Author:	Checker:
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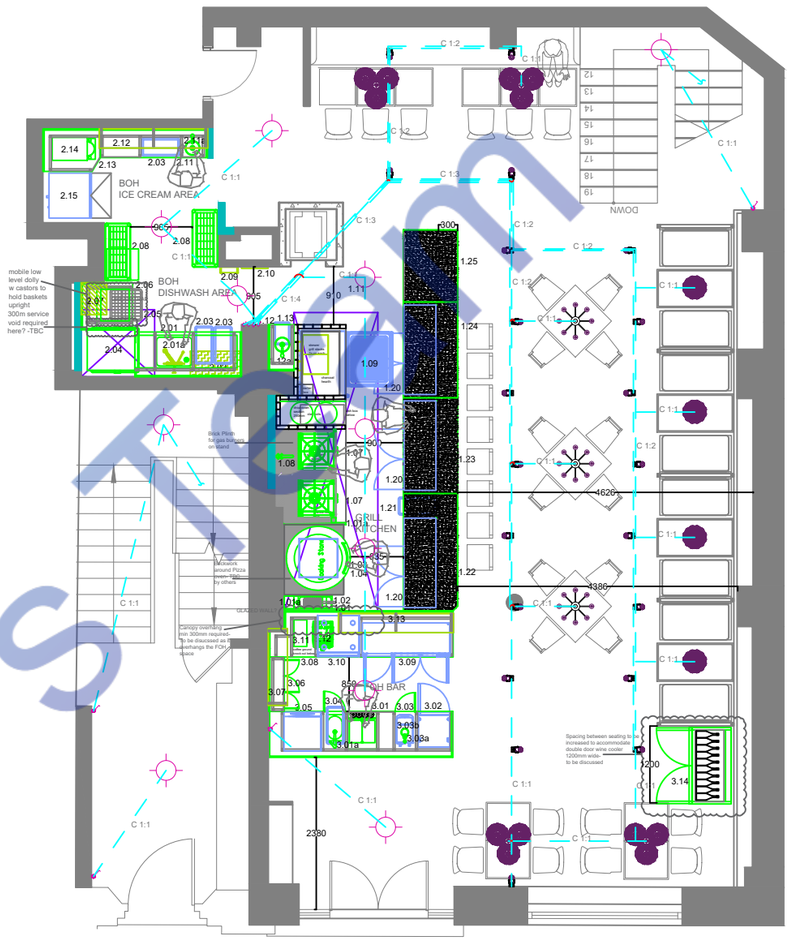
BASEMENT

GF Option 1



Electrical Fixings

Color Coding Heights:

- Ceiling
- 1600mm
- 1200mm
- 750mm
- 450mm

SITE SPECIFIC HAZARDS

IN ACCORDANCE WITH THE REQUIREMENTS OF THE CDM REGULATIONS 2007 THE FOLLOWING SIGNIFICANT RESIDUAL HAZARDS HAVE NOT BEEN DESIGNED OUT OF THIS PROJECT AND MUST BE TAKEN INTO CONSIDERATION BY CONTRACTORS PLANNING TO UNDERTAKE THE WORKS SHOWN ON THIS DRAWING:

Rev	Description	Date	By

Key Plan:

Note:

N

Project: Kitchen & Bar

Client: Daka Daka

Drawing No.: E-3

Drawing Name: Electrical Conduit Plan

Date:	Paper Size:	Scale on A3:	Author:	Checker:
01/01/2025	A3	1:100	MP	AT

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BASEMENT DISTRIBUTION BOARD

Panel Location-																				
Voltage (Phase-Ground/Phase-Phase) 230		415	Source of Supply-From Service Disconnect/Meter																	
Phase- 3			Wire- 5																	
Rated Amps- 36			AIC- 10k																	
MCCB 3-Phase 100 Amps MCCB			Mounting- Wall Surface																	
Circuit	Description	New/ Existing	Load Type	Breaker Size	Poles	Wire Size	A		B		C		Wire Size	Poles	Breaker Size	Load Type	New/ Existing	Description	Circuit
1	LIGHTING LOAD	N		15	1	#14	790	6300											2
3	Blast Chiller (5.05)	N		20	1	#12			930	6300			#10	3	30		N	Combi Oven (5.06)	4
5	Prover Cabinet (5.11)	N		20	1	#12					670	6300							6
7	Planetary Mixer (5.09)	N		20	1	#12	450	740					#12	1	20		N	2xVacuum Packager (5.08)	8
9	3xGN Fridges (6.01)	N		20	1	#12			600	1300			#12	1	20		N	2xGN Freezers (6.02)	10
11	CT-1	N		20	1	#12					500	300	#12	1	20		N	CT-2	12
13	CT-3	N		20	1	#12	300	600					#12	1	20		N	CT-4	14
15	SPARE	--		--	--	--			0	0			--	--	--		--	SPARE	16
17	SPARE	--		--	--	--					0	0	--	--	--		--	SPARE	18
19	SPARE	--		--	--	--	0	0					--	--	--		--	SPARE	20
							A		B		C		Total						
Connected Load (W)							9180		9130		7770		26080						
Divided by 3-phase multiplayer (1.732) and line to line voltage 415 V							36												
Connected Amps							36												
Main Type and Amps Rating							3-Phase 100 Amps MCCB												

Demand Load Calcultion

Load Classification	Connected Load	Demand Factor	Estimated Demand
Lighting - Dwelling Unit	790	125%	987.5
Water Heater - Dwelling Unit	930	100%	930
Receptacle	6050	65%	3932.5
Cooling	930	100%	930
Pump	0	125%	0
Other	0	100%	0
Demand Load	8700		6780
Demand Amps			19

GROUND FLOOR DISTRIBUTION BOARD

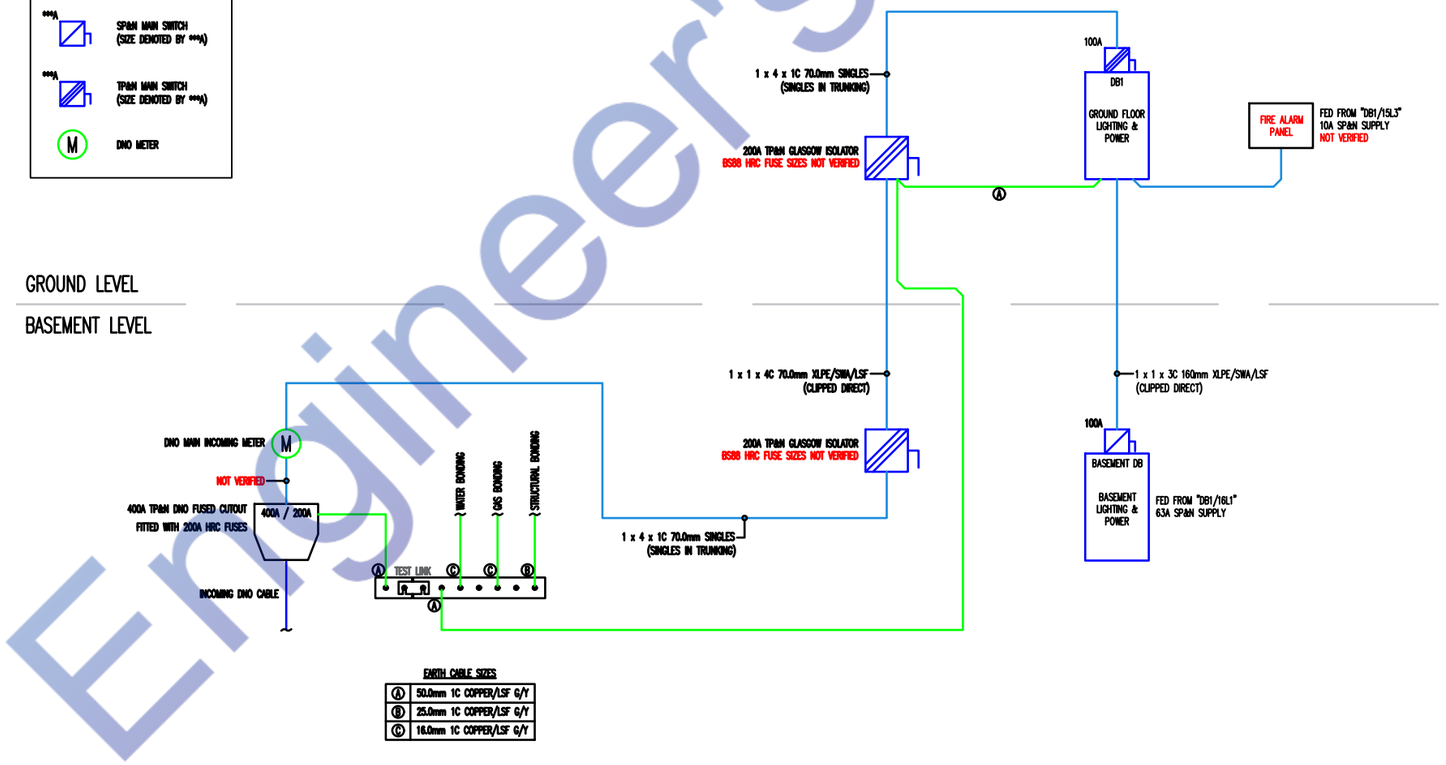
Panel Location-																				
Voltage (Phase-Ground/Phase-Phase) 230		415	Source of Supply-From Service Disconnect/Meter																	
Phase- 3			Wire- 5																	
Rated Amps- 72			AIC- 10k																	
MCCB 3-Phase 100 Amps MCCB			Mounting- Wall Surface																	
Circuit	Description	New/ Existing	Load Type	Breaker Size	Poles	Wire Size	A		B		C		Wire Size	Poles	Breaker Size	Load Type	New/ Existing	Description	Circuit
1	LIGHTING LOAD	N		15	1	#14	670	3935											2
3	WATER HEATER	N		20	1	#12			2000	3935			#12	3	20		N	Electric Turbo Fryer (1.02)	4
5	Refrigerated Counter (1.20)	N		20	1	#12					1440	3935							6
7	Refrigerated Counter (1.20)	N		20	1	#12	1440	6500					#8	1	35		N	Pass Through Dishwasher (2.04)	8
9	Refrigerated Counter (1.20)	N		20	1	#12			1440	2200			#12	1	20		N	Countertop Batch Freezer (2.14)	10
11	Bottle Cooler (3.02)	N		20	1	#12					1000	870	#12	1	20		N	Ice Maker (2.15)	12
13	Coffee Machine (3.14)	N		25	1	#10	4700	3120					#12	1	20		N	Wine Cooler (3.16)	14
15	Under Counter Dishwasher (3.06)	N		35	1	#08			6500	6500			#08	1	35		N	Under Counter Glasswasher (4.04)	16
17	4xBack Bar Cabinets (4.06)	N		20	1	#12					800	500	#12	1	20		N	CT-5	18
19	SPARE	--		--	--	--	0	0					--	--	--		--	SPARE	20
							A		B		C		Total						
Connected Load (W)							20365		22575		8545		51485						
Divided by 3-phase multiplayer (1.732) and line to line voltage 415 V							72												
Connected Amps							72												
Main Type and Amps Rating							3-Phase 100 Amps MCCB												

Demand Load Calcultion

Load Classification	Connected Load	Demand Factor	Estimated Demand
Lighting - Dwelling Unit	670	125%	837.5
Water Heater - Dwelling Unit	2000	100%	2000
Receptacle	5875	65%	3818.75
Cooling	0	100%	0
Pump	0	125%	0
Other	0	100%	0
Demand Load	8545		6656.25
Demand Amps			18

LEGEND KEY

- ***A — SP&N MAIN SWITCH (SIZE DENOTED BY ***A)
- ***A — TP&N MAIN SWITCH (SIZE DENOTED BY ***A)
- M — DNO METER



EARTH CABLE SIZES

A	50.0mm 1C COPPER/LSF G/Y
B	25.0mm 1C COPPER/LSF G/Y
C	16.0mm 1C COPPER/LSF G/Y

Rev	Description	Date	By

Key Plan:

Note:

N

Project: Kitchen & Bar			Drawing No. E-4	
Client: Daka Daka			Drawing's Name: Electrical Load Schedule Plan and SLD	
Date: 01/01/2025	Paper Size: A3	Scale on A3: 1:100	Author: MP	Checker: AT

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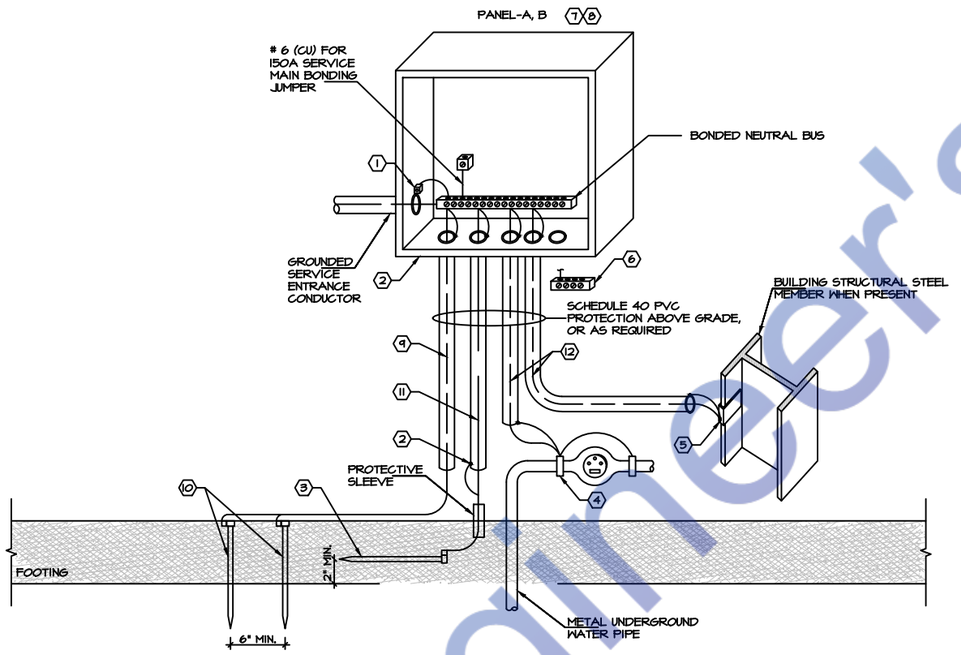
GENERAL NOTES:

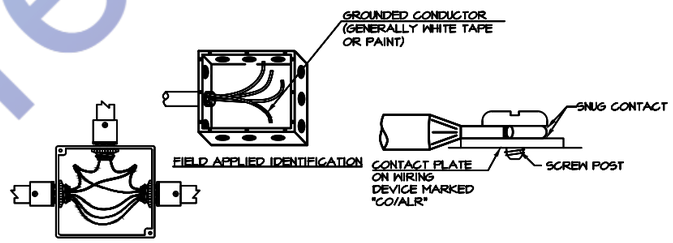
1. A LISTED INTERSYSTEM BONDING TERMINATION PROVIDING THE REQUIRED NUMBER OF TERMINALS (MINIMUM OF THREE) FOR CONNECTING OTHER BUILDING SYSTEMS TO THE GROUNDING SYSTEM OF THE ELECTRICAL POWER SUPPLY (NEC250.94).

KEY NOTES: (#)

1. ALL METAL CONDUITS ENCLOSING ANY SERVICE SHALL BE FITTED WITH A "BONDING BUSHING".
2. ALL METAL CONDUITS ENCLOSING ANY GROUNDING ELECTRODE CONDUCTOR SHALL BE FITTED WITH A "BONDING BUSHING" AT EACH END.
3. PROVIDE GROUNDING ELECTRODE PER NEC. ELECTRODE SHALL BE IN THE FORM OF A 20'-0" x 1/2" COPPER CLAD GROUND ROD LAID AT LEAST 2" OFF THE BOTTOM OF A CONCRETE FOOTING. SECURE THE GROUND ROD TO THE REBAR WITH STEEL TIE WRAPS. IF THE REBAR BEING USED IN THE FOOTING IS SMALLER THAN 1/2" (#4), THEN USE 20' OF BARE SOLID #4 COPPER WIRE IN PLACE OF THE GROUND ROD. IN REMODEL PROJECTS THAT WILL NOT HAVE NEW FOOTINGS INSTALLED, THIS SUPPLEMENTAL ELECTRODE SHALL BE PER NOTE #4 BELOW OR OTHER ELECTRODE PER NEC 250.52.
4. FOR CONNECTION TO COLD WATER MAIN. CONNECT WITHIN 5 FT. OF CONTACT OF EARTH.
5. IF STRUCTURAL STEEL MEMBER OR REBARS ARE AVAILABLE, BOND IT TO THE SERVICE USING A UL LISTED IRREVERSIBLE CLAMP OR WELDING LUG.
6. PROVIDE A INTERSYSTEM BONDING TERMINATION PER NEC 250.94.
   INTERSYSTEM BONDING TERMINATION SHALL:
   6.1. BE ACCESSIBLE FOR CONNECTION AND INSPECTION.
   6.2. CONSIST OF A SET OF TERMINALS (LISTED AS GROUNDING AND BONDING EQUIPMENT) WITH THE CAPACITY OF NOT LESS THAN THREE INTERSYSTEM BONDING CONDUCTORS.
   6.3. BE SECURELY MOUNTED AND ELECTRICALLY CONNECTED TO SERVICE EQUIPMENT, METER ENCLOSURE, OR EXPOSED NON METALLIC SERVICE RACEWAY, OR BE MOUNTED ON ONE OF THESE ENCLOSURES AND BE CONNECTED TO THE ENCLOSURE OR GROUNDING ELECTRODE CONDUCTOR WITH A MINIMUM #6 CU CONDUCTOR.
   6.4. BE SECURELY MOUNTED TO THE BUILDING'S DISCONNECTING MEANS, OR BE MOUNTED AT THE DISCONNECTING MEANS AND BE CONNECTED TO THE METALLIC ENCLOSURE OR GROUNDING ELECTRODE CONDUCTOR WITH A MINIMUM #6 CU CONDUCTOR.
7. ALL BRANCH CIRCUIT AND FEEDER CONDUITS ARE TO HAVE AN INSULATED EQUIPMENT GROUNDING CONDUCTOR REGARDLESS OF THE CONDUIT MATERIAL.
8. WHEN THE SERVICE CONSISTS OF MULTIPLE DISCONNECTING MEANS IN SEPARATE ENCLOSURES, CONNECT A TAP CONDUCTOR FROM THE MAIN GROUNDING ELECTRODE CONDUCTOR TO EACH DISCONNECTING MEANS. SIZE THIS TAP BASED ON THE LARGEST SERVICE CONDUCTOR IN THAT SERVICE DISCONNECT ENCLOSURE.
9. #6 COPPER GROUNDING ELECTRODE CONDUCTOR.
10. INSTALL #6 CU TO TWO 5/8"x 8' MIN. GROUND RODS AS SHOWN.
11. #4 COPPER GROUNDING ELECTRODE CONDUCTOR.
12. COPPER GROUNDING ELECTRODE CONDUCTOR. PROVIDE #6 COPPER.

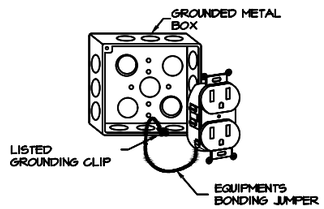


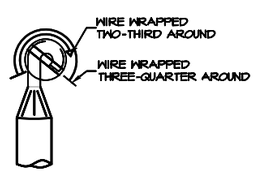
1 ESQ GROUNDING ELECTRODE SYSTEM DIAGRAM
SCALE: NOT TO SCALE



TYPICAL CONNECTION OF WIRES IN JUNCTION BOX

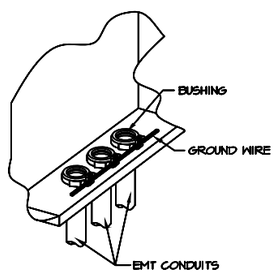
TIGHTEN SCREW TO FULL CONTACT

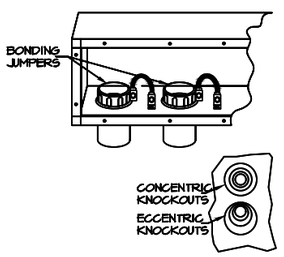




OUTLET BACK BOX & JUNCTION BOX

STRIP INSULATION AND WRAP WIRE





BONDING THE KNOCKOUTS

GROUNDING INSULATION THE BUSHING

2 ESQ BOUNDING DETAILS
SCALE: NOT TO SCALE

Rev	Description	Date	By

Key Plan:

Note:

N

Project: Kitchen & Bar

Client: Daka Daka

Drawing No.: E-5

Drawing Name: Electrical Installation

Date:	Paper Size:	Scale on A3:	Author:	Checker:
01/01/2025	A3	1:100	MP	AT

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