PROVISIONAL ELECTRICAL REQUIREMENTS TO BE PROVIDED BY ELECTRICIAN

AIR CONDITIONING INSTALLER SHALL VERIFY AND COORDINATE SPECIFICATIONS AND POSITIONS OF POWER POINTS WITH ELECTRICIAN

	ESSENTIAL				NON-ESSENTIAL						
REF.	VOLTS	FLA	kW	PHASE	QTY	VOLTS	FLA	kW	PHASE	QTY	LOCATION
E1	400	-	1.74	3	1	400	-	16	3	1	SERVICE FLOOR
E2	400	-	1.74	3	1	400	-	16	3	1	SERVICE FLOOR
E3	400	-	1.74	3	1	400	-	12	3	1	SERVICE FLOOR
E4	400	-	2.5	3	1	400	-	16	3	1	SERVICE FLOOR
E5	400	-	1.74	3	1	400	-	12	3	1	SERVICE FLOOR
E6	400	-	1.5	3	1	400	-	12	3	1	SERVICE FLOOR
E7	400	-	1.74	3	1	400	-	16	3	1	SERVICE FLOOR
E8	400	-	3.8	3	1	400	-	24	3	1	SERVICE FLOOR
E9	400	-	3.8	3	1	400	-	12	3	1	SERVICE FLOOR
E10	400	-	1.74	3	1	400	-	12	3	1	SERVICE FLOOR
E11	400	-	4.4	3	1	400	-	16	3	1	SERVICE FLOOR
E12	400	-	4.4	3	1	400	-	12	3	1	SERVICE FLOOR
E13	400	-	17	3	1	-	-	-	-	-	MECH PLANTROOM
E14	-	-	-	-	-	400	-	296	3	1	CHILLER PLANTROOM
E15	-	-	-	-	-	230	-	0.2	-	1	GROUND FLR ADMIN
E16	-	-	-	-	-	400	-	0.57	3	1	SERVICE FLOOR
E17	-	-	-	-	-	400	-	0.2	3	1	SERVICE FLOOR
E18	-	-	-	-	-	400	-	0.57	3	1	SERVICE FLOOR
E19	-	-	-	-	-	230	-	0.3	1	1	SERVICE FLOOR
E20	-	-	-	-	-	400	-	0.2	3	1	1st FLOOR CEILING VOID
E21	-	-	-	-	-	400	-	0.57	3	1	1st FLOOR CEILING VOID
E22	-	-	-	-	-	230	-	0.3	1	1	GRND FLR CEILING VOID
E23	-	-	-	-	-	400	-	0.75	3	1	1st FLOOR CEILING VOID
E24	-	-	-	-	-	400	-	0.55	3	1	1st FLOOR CEILING VOID
E25	-	-	-	-	-	230	-	0.3	1	1	GROUND FLR CEILING VOID
E26	-	-	-	-	-	230	-	0.18	1	1	BASEMENT FLR CEILING
E27	-	-	-	-	-	230	-	0.36	1	1	SERVICE FLOOR
E28	400	-	4.2	3	1	-	-	-	-	-	GRND FLR OPEN YARD
E29	400	-	4.2	3	1	-	-	-	-	-	GRND FLR OPEN YARD
E30	230	16	-	1	1	-	-	-	-	-	1st FLOOR LIFT LOBBY
E31	400	-	5.6	3	1	-	-	-	-	-	1st FLR MAIN FOYER
E32	400	-	0.37	3	1	-	-	-	-	-	SERVICE FLOOR
E33	400	-	0.56	3	1	-	-	-	-	-	1st FLOOR OFFICE
E34	400	-	0.56	3	1	-	-	-	-	-	1st FLOOR OFFICE
E35	400	-	0.56	3	1	-	-	-	-	-	SERVICE FLOOR
E36	400	-	0.56	3	1	-	-	-	-	-	SERVICE FLOOR
E37	400	-	7.5	3	1	-	-	-	-	-	SERVICE FLOOR
E38	400	-	7.5	3	1	-	-	-	-	-	SERVICE FLOOR
E39	400	-	7.5	3	1	-	-	-	-	-	SERVICE FLOOR
E40	400	-	7.5	3	1	-	-	-	-	-	SERVICE FLOOR
E41	230	-	3	1	1	-	-	-	-	-	1ST FLR FEM ABLUTIONS
E42	-	-	-	-	-	230	-	3	1	1	1ST FLR FEM ABLUTIONS
E43	-	-	-	-	-	230	-	7.5	1	1	BASEMENT OFFICE
E44	-	-	-	-	-	230	-	4	-	-	BASEMENT OFFICE
E45	-	-	-	-	-	230	-	0.03	1	2	BASEMENT OFFICE CEILING
E46	-	-	-	-	-	230	-	0.03	1	1	BASEMENT OFFICE CEILING
E47	-	-	-	-	-	230	-	0.14	1	1	BASEMENT STORE
E48	-	-	-	-	-	230	-	0.04	1	2	ACUTE MALE HIGH LEVEL
E49	-	-	-	-	-	230	-	0.6	1	1	SERVICE FLOOR
E50	-	-	-	-	-	230	-	0.06	1	1	GRND FLR CEILING VOID
E51	400	-	16	3	1	-	-	-	-	-	BASEMENT LEVEL
E52	400	-	15	3	1	-	-	-	-	-	BASEMENT LEVEL
E53	400	-	12	3	1	-	-	-	-	-	VACUUM PLANTROOM
E54	230	5	-	1	1	-	-	-	-	-	OXYGEN PLANTROOM
E55	400	30	-	3	1	-	-	-	-	-	LIFT SHAFT HIGH LEVEL
E56	230	-	0.5	1	3	-	-	-	-	-	CEILING VOID

	ELECTRICAL INSTALLATION		
FIRE SIGNAL	SUPPLIED FROM	ESSENTIAL CABLE SIZE and DESCRIPTION	NON - ESSENTIAL CABLE SIZE and DESCRIPTION
YES	E1 ACDB1 - MAIN CONTROL PANEL in PLANT ROOM	2.5mm2 4 - Core PVC SWA PVC ECC CABLE	10.0mm2 4 - Core PVC SWA PVC ECC CABLE
YES	E2 ACDB1 - MAIN CONTROL PANEL in PLANT ROOM	2.5mm2 4 - Core PVC SWA PVC ECC CABLE	10.0mm2 4 - Core PVC SWA PVC ECC CABLE
YES	E3 ACDB1 - MAIN CONTROL PANEL in PLANT ROOM	2.5mm2 4 - Core PVC SWA PVC ECC CABLE	6.0mm2 4 - Core PVC SWA PVC ECC CABLE
YES	E4 ACDB1 - MAIN CONTROL PANEL in PLANT ROOM	4.0mm2 4 - Core PVC SWA PVC ECC CABLE	10.0mm2 4 - Core PVC SWA PVC ECC CABLE
YES	E5 ACDB1 - MAIN CONTROL PANEL in PLANT ROOM	2.5mm2 4 - Core PVC SWA PVC ECC CABLE	6.0mm2 4 - Core PVC SWA PVC ECC CABLE
YES	E6 ACDB1 - MAIN CONTROL PANEL in PLANT ROOM	2.5mm2 4 - Core PVC SWA PVC ECC CABLE	6.0mm2 4 - Core PVC SWA PVC ECC CABLE
YES	E7 ACDB1 - MAIN CONTROL PANEL in PLANT ROOM	2.5mm2 4 - Core PVC SWA PVC ECC CABLE	10.0mm2 4 - Core PVC SWA PVC ECC CABLE
YES	E8 ACDB1 - MAIN CONTROL PANEL in PLANT ROOM	4.0mm2 4 - Core PVC SWA PVC ECC CABLE	16.0mm2 4 - Core PVC SWA PVC ECC CABLE
YES	E9 ACDB1 - MAIN CONTROL PANEL in PLANT ROOM	4.0mm2 4 - Core PVC SWA PVC ECC CABLE	6.0mm2 4 - Core PVC SWA PVC ECC CABLE
YES	E10 ACDB1 - MAIN CONTROL PANEL in PLANT ROOM	2.5mm2 4 - Core PVC SWA PVC ECC CABLE	6.0mm2 4 - Core PVC SWA PVC ECC CABLE
YES	E11 ACDB1 - MAIN CONTROL PANEL in PLANT ROOM	4.0mm2 4 - Core PVC SWA PVC ECC CABLE	10.0mm2 4 - Core PVC SWA PVC ECC CABLE
YES	E12 ACDB1 - MAIN CONTROL PANEL in PLANT ROOM	4.0mm2 4 - Core PVC SWA PVC ECC CABLE	6.0mm2 4 - Core PVC SWA PVC ECC CABLE
NO	E13 DB:CP - SERVICE DB IN CHILLER PLANT ROOM	10.0mm2 4 - Core PVC SWA PVC ECC CABLE	
NO	E14 MAIN LV DB in SWITCH ROOM — PARKING LEVEL		REFER MAINS DIAGRAM DRAWING PE231-MMD
NO	E15 DB:GD SUB DB — GROUND FLOOR	———	2.5mm2 2 - Core PVC SWA PVC ECC CABLE
NO	E16 ACDB1 - MAIN CONTROL PANEL in PLANT ROOM	———	2.5mm2 4 - Core PVC SWA PVC ECC CABLE
NO	E17 ACDB1 - MAIN CONTROL PANEL in PLANT ROOM	———	2.5mm2 2 - Core PVC SWA PVC ECC CABLE
NO	E18 ACDB1 - MAIN CONTROL PANEL in PLANT ROOM	———	2.5mm2 4 - Core PVC SWA PVC ECC CABLE
NO	E19 ACDB1 - MAIN CONTROL PANEL in PLANT ROOM	———	2.5mm2 2 - Core PVC SWA PVC ECC CABLE
NO	E20 ACDB1 - MAIN CONTROL PANEL in PLANT ROOM	———	2.5mm2 2 - Core PVC SWA PVC ECC CABLE
NO	E21 DB:FB SUB DB — First Floor South Corridor	———	2.5mm2 4 - Core PVC SWA PVC ECC CABLE
NO	E22 DB:GD SUB DB — GROUND FLOOR	———	2.5mm2 2 - Core PVC SWA PVC ECC CABLE
NO	E23 DB:F - MAIN FLOOR DB IN LIFT FOYER	———	2.5mm2 4 - Core PVC SWA PVC ECC CABLE
NO	E24 DB:FC - First Floor East Corridor	———	2.5mm2 4 - Core PVC SWA PVC ECC CABLE
NO	E25 DB:GE SUB DB — GROUND FLOOR	———	2.5mm2 2 - Core PVC SWA PVC ECC CABLE
NO	E26 DB:PG SUB DB — BASEMENT LEVEL	———	2.5mm2 2 - Core PVC SWA PVC ECC CABLE
NO	E27 ACDB1 - MAIN CONTROL PANEL in PLANT ROOM	———	2.5mm2 2 - Core PVC SWA PVC ECC FIRE RC CABLE
YES	E28 DB:GB SUB DB — GROUND FLOOR	2.5mm2 4 - Core PVC SWA PVC ECC FIRE RC CABLE	———
YES	E29 DB:GB SUB DB — GROUND FLOOR	2.5mm2 4 - Core PVC SWA PVC ECC FIRE RC CABLE	———
YES	E30 MAIN LV DB in SWITCH ROOM — PARKING LEVEL	2.5mm2 2 - Core PVC SWA PVC ECC FIRE RC CABLE	———
YES	E31 DB:FA - SUB DB in ENTRANCE CORRIDOR	2.5mm2 4 - Core PVC SWA PVC ECC FIRE RC CABLE	———
YES	E32 ACDB1 - MAIN CONTROL PANEL in PLANT ROOM	2.5mm2 4 - Core PVC SWA PVC ECC FIRE RC CABLE	———
YES	E33 ACDB1 - MAIN CONTROL PANEL in PLANT ROOM	2.5mm2 4 - Core PVC SWA PVC ECC FIRE RC CABLE	———
YES	E34 DB:FB SUB DB — First Floor South Corridor	2.5mm2 4 - Core PVC SWA PVC ECC FIRE RC CABLE	———
YES	E35 ACDB1 - MAIN CONTROL PANEL in PLANT ROOM	2.5mm2 4 - Core PVC SWA PVC ECC FIRE RC CABLE	———
YES	E36 ACDB1 - MAIN CONTROL PANEL in PLANT ROOM	2.5mm2 4 - Core PVC SWA PVC ECC FIRE RC CABLE	———
YES	E37 ACDB1 - MAIN CONTROL PANEL in PLANT ROOM	4.0mm2 4 - Core PVC SWA PVC ECC FIRE RC CABLE	———
YES	E38 ACDB1 - MAIN CONTROL PANEL in PLANT ROOM	4.0mm2 4 - Core PVC SWA PVC ECC FIRE RC CABLE	———
YES	E39 ACDB1 - MAIN CONTROL PANEL in PLANT ROOM	4.0mm2 4 - Core PVC SWA PVC ECC FIRE RC CABLE	———
YES	E40 ACDB1 - MAIN CONTROL PANEL in PLANT ROOM	4.0mm2 4 - Core PVC SWA PVC ECC FIRE RC CABLE	———
YES	E41 DB:F - MAIN FLOOR DB IN LIFT FOYER	2.5mm2 2 - Core PVC SWA PVC ECC FIRE RC CABLE	———
NO	E42 DB:F - MAIN FLOOR DB IN LIFT FOYER	———	2.5mm2 2 - Core PVC SWA PVC ECC CABLE
NO	E43 DB:PG SUB DB — BASEMENT LEVEL	———	2.5mm2 2 - Core PVC SWA PVC ECC CABLE
NO	E44 DB:PG SUB DB — BASEMENT LEVEL	———	2.5mm2 2 - Core PVC SWA PVC ECC CABLE
YES	E45 DB:PG SUB DB — BASEMENT LEVEL	———	2.5mm2 2 - Core PVC SWA PVC ECC FIRE RC CABLE
NO	E46 DB:PG SUB DB — BASEMENT LEVEL	———	2.5mm2 2 - Core PVC SWA PVC ECC CABLE
NO	E47 DB:PG SUB DB — BASEMENT LEVEL	———	2.5mm2 2 - Core PVC SWA PVC ECC CABLE
NO	E48 DB:GB SUB DB — GROUND FLOOR	———	2.5mm2 2 - Core PVC SWA PVC ECC CABLE
NO	E49 ACDB1 - MAIN CONTROL PANEL in PLANT ROOM	———	2.5mm2 2 - Core PVC SWA PVC ECC CABLE
NO	E50 DB:GD SUB DB in GROUND FLOOR	———	2.5mm2 2 - Core PVC SWA PVC ECC CABLE
NO	E51 MAIN LV DB in SWITCH ROOM — PARKING LEVEL	16.0mm2 4 - Core PVC SWA PVC ECC FIRE RC CABLE	———
NO	E52 MAIN LV DB in SWITCH ROOM — PARKING LEVEL	16.0mm2 4 - Core PVC SWA PVC ECC FIRE RC CABLE	———
NO	E53 MAIN LV DB in SWITCH ROOM — PARKING LEVEL	16.0mm2 4 - Core PVC SWA PVC ECC FIRE RC CABLE	———
YES	E54 DB:GD SUB DB in OXYGEN PLANT ROOM	2.5mm2 2 - Core PVC SWA PVC ECC FIRE RC CABLE	———
NO	E55 MAIN LV DB in SWITCH ROOM — PARKING LEVEL	35.0mm2 4 - Core PVC SWA PVC ECC FIRE RC CABLE	———
NO	E56 MAIN LV DB in SWITCH ROOM — PARKING LEVEL	2.5mm2 2 - Core PVC SWA PVC ECC FIRE RC CABLE	———

LIST OF POWER FITTINGS

SYMBOL	TYPE DESCRIPTION
	DISTRIBUTION BOARD
	CONTROL PANEL
	CONDUIT RUNS
	DRAW BOX
	15A 3-PIN SWITCHED SOCKET OUTLET
	15A 3-PIN SWITCHED SOCKET OUTLET ESSENTIAL POWER SUPPLY
	15A 3-PIN SWITCHED SOCKET OUTLET ENCLOSED WEATHERPROOF
	60A 3-PH & N plus E SWITCHED SOCKET OUTLET
	60A TRIPLE POLE ISOLATOR in SURFACE ENCLOSURE
	30A DOUBLE POLE ISOLATOR in SURFACE ENCLOSURE
	300mm Wide Cable Ladder suspended from Ceiling Slab (See Spec)
	200mm Wide Cable Ladder suspended from Ceiling Slab (See Spec)
	Circuit indication ie. Distribution Board and Circuit Type/Number eg. Essential Lighting and/or Switch Socket Outlet etc.
N/L	NIGHT LIGHT LIGHT FITTING wired direct from live supply from light switch
	40W LED HIGH OUTPUT SURFACE MOUNTED LIGHT FITTING
	LIGHT SWITCH
	UNISTRUT RUN P1000 series
FIRE RC	FIRE RATED CABLE (Refer to Specification)

HEALTH DEPARTMENT SIGNATURES

FACULTY STAMP

FACULTY MANAGER

INFRASTRUCTURE MANAGER

GENERAL MANAGER

CHECKED BY PROFESSIONAL CONSULTANT

Name Tilman Nel

TJNel — Signature

30 September 2023 — Date

CONSULTING ENGINEERS TJ

T J NEL

CONSULTING ELECTRICAL ENGINEERS

P O BOX 169

PORT EDWARD

4295

CELL: 083 - 2659623

public works

Department: Public Works

PROVINCE OF KWAZULU-NATAL

SOUTHERN REGION

Project

WIMS NO: 044044 SOUTHERN REGION
PORT SHEPSTONE DEPARTMENT OF HEALTH
PORT SHEPSTONE PROVINCIAL HOSPITAL
NEW PSYCHIATRIC WARD

Drawing Description

MECHANICAL / ELECTRICAL SERVICES INSTALLATIONS

FIRST FLOOR POWER LAYOUT DRAWING

Drawn:TJN — Date: 12 November 2023

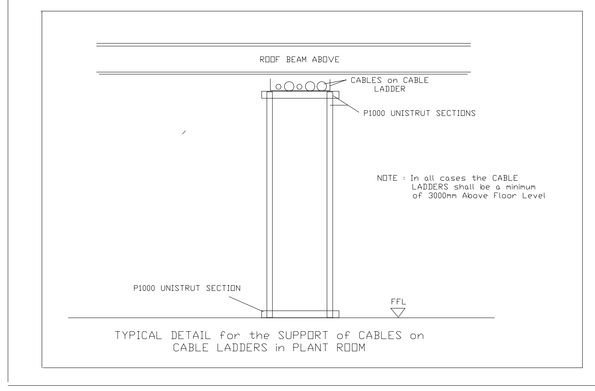
Scale/s: 5000 — Revision:

Consultants Drawing number

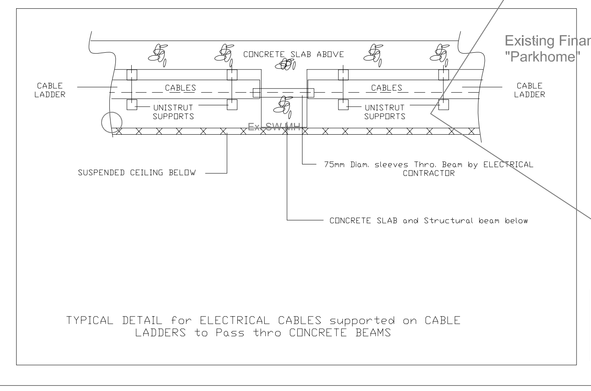
SL 231 - EPM

DOPW Drawing number

Stamped by Plans Approval Committee



TYPICAL DETAIL for the SUPPORT of CABLES on CABLE LADDERS in PLANT ROOM



TYPICAL DETAIL for ELECTRICAL CABLES supported on CABLE LADDERS to Pass thro CONCRETE BEAMS

ELECTRICAL INSTALLATION