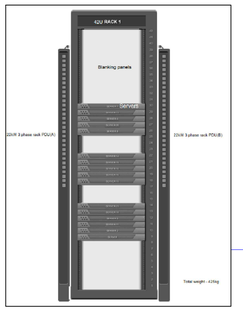
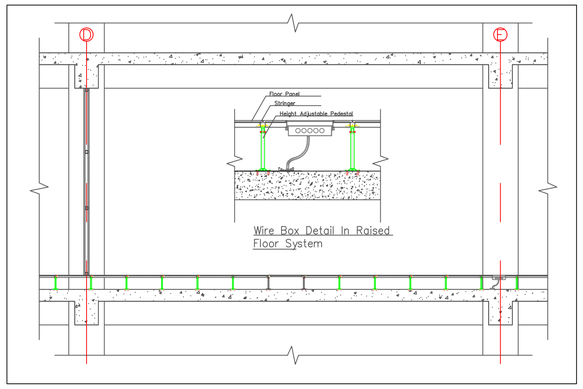


TYPICAL 42U RACK

BLOCKS SYMBOL DESCRIPTIONS

- 42U RACK
- OCU - CRAC UNIT
- 42U RACK SPARES
- OCU - CRAC UNIT SPARE



TYPICAL RAISED FLOOR POWER RETICUALTION INSIDE SERVER ROOM:

Electrical Notes:

(P1) Server Cabinets

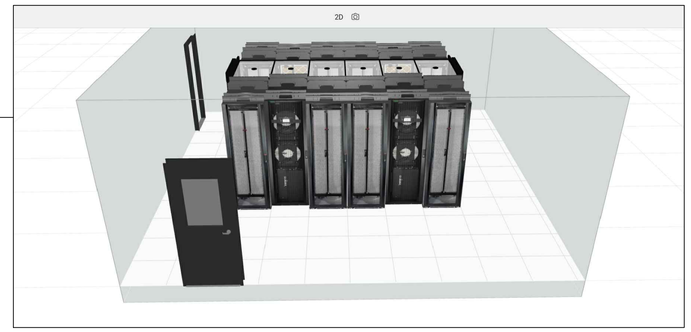
(1) Electrical cable tray in raised floor void, supply power to server cabinets

(2) 1-Phase Industrial Socket

(3) Dedicated SSO mounted inside raised floor void.

(4) Drop-down cable ladder from DB to cable tray inside raised flooring.

(5) Installation to utilise exisitng cable wireways and risers



TYPICAL SERVER ROOM ARRANGEMENT

GENERAL NOTES:

A) THIS DRAWING TO BE USED FOR SECURITY, ACCESS CONTROL, FIRE DETECTION, INTERCOM, BGM (P.A.), TELEPHONE AND DATA/ COMMS PURPOSES ONLY.

B) DO NOT SCALE THIS DRAWING.

C) REFER TO ARCHITECTS AND STRUCTURAL ENGINEERS DRAWINGS FOR ALL BUILDING DIMENSIONS, LATEST BUILDING REVISSIONS AND SERVICES.

D) THIS DRAWING IS TO BE READ IN CONJUNCTION WITH THE SECURITY, ACCESS CONTROL, FIRE DETECTION, INTERCOM, BGM (P.A.), TELEPHONE AND DATA/COMMS SPECIFICATION.

E) ALL WORK TO COMPLY WITH RELEVANT STANDARD CODES OF PRACTICE, SPECIFICATIONS AND REGULATIONS.

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FOR CONSTRUCTION

REVISIONS

NO.	DATE	DESCRIPTION	REV BY:
1.	22.10.2025	Issued for Construction	BM

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ALL WORK TO BE CARRIED OUT IN ACCORDANCE WITH SANS CODE 10400, N.B.R & LOCAL AUTHORITY BYLAWS.

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FOR THE PURPOSE OF COORDINATION, ALL RELEVANT PARTIES MUST CHECK THIS INFORMATION PRIOR TO IMPLEMENTATION AND REPORT ANY DISCREPANCIES TO THE ARCHITECT.

Engineer: M. Kola — Signature:
Pr Eng: 20150196 — Date: 22.01.2025

DBSA

Client: Government Printing Works
Signature: Date:

government printing
Department: Government Printing Works
REPUBLIC OF SOUTH AFRICA

PROJECT:
THE UPGRADE AND REPAIR AT THE GOVERNMENT PRINTING WORKS ADMINISTRATIVE HEADQUARTERS
ADDRESS:
ERF 3265, 379 Sophie de Bruyn St
Pretoria Central, 0002, RSA.

DRAWING TITLE:
FIRST FLOOR PLAN SERVER POWER LAYOUT

Building Classification:	Climatic Zone:
G1_Offices	Zone 2:
Paper Size: A0	Scale: AS SHOWN
Drawn: B.M / Checked: M.K	Date: 22/10/2025
PROJECT No.: GPW/HQ/2017/02	REVISION: 1
DRAWING No.: EE -3005 -C	

ISSUED FOR CONSTRUCTION

Colour Coding of Socket Outlets:

Normal Switched Socket Outlet	Cover Plate Cover: White Switch Colour: White
Essential Switched Socket Outlet	Cover Plate Cover: White Switch Colour: Red
UPS Switched Socket Outlet	Cover Plate Cover: White Switch Colour: Blue
Dedicated Switched Socket Outlet	Cover Plate Cover: Red Switch Colour: Red

Colour Coding of Isolators

Normal Isolator	Cover Plate Cover: White Switch Colour: White
Essential Isolator	Cover Plate Cover: White Switch Colour: Red
UPS Isolator Socket Outlet	Cover Plate Cover: White Switch Colour: Blue

NOTES: (1) - Contractor to ensure max distance between draw boxes 20 metres notwithstanding anything to contrary. (2) - Draw boxes required after every second 90 deg. bend or 180 deg. total of slow bends. (3) - All unwired conduits to be provided with draw wires. These will be withdrawn and checked at random. (4) - Cast in conduits to be spaced 35mm. minimum.

- S 100x100 CONDUIT BOX.
- S 100x100 CONDUIT BOX AT 500AFFL.
- S 100x100 CONDUIT BOX AT 1200AFFL
- 100x50 CONDUIT BOX
- L 100x50 CONDUIT BOX AT 500AFFL.
- L 100x50 CONDUIT BOX AT 1200AFFL.
- ROUND CONDUIT BOX.
- C CLUSTER BOX (SIZE AS NOTED).
- ROUND DRAW BOX
- S 100x100 DRAW BOX
- P 100x50 BOX BEHIND POWER SKIRTING
- CONDUIT TURNED UP ("D" FOR DOWN)
- DOWN CONDUCTOR TO EARTH OR EARTH TIE.
- DM CAM etc. ROUND CONDUIT BOX FOR:
  - DM - DOOR MONITOR
  - CAM - CAMERA
  - AA - ACCESS ALARM
  - AC - ACCESS CONTROL
  - CR - CARD READER
  - COM - COMMUNICATION/INTERCOM
  - BGM - BACK GROUND MUSIC
  - EL - ELECTRIC LOCK/STRIKE
- 20mm. DIA. CONDUIT.
- 25mm. DIA. CONDUIT.
- 32mm. DIA. CONDUIT.
- 50mm. DIA. CONDUIT.
- SECTION OF CONDUIT OMMITED FOR CLARITY.
- S SURFIX
- U TWIN AND EARTH
- CABLE ROUTE
- OC OVERHEAD CAST-IN
- OS OVERHEAD ON SURFACE OR LAID ON CEILING.
- FC FLOOR SLAB CAST-IN.
- FS FLOOR SURFACE (IN FLOOR VOID).
- POWER SKIRTING
- TRUNKING
- CABLE SLEEVE.
- CABLE TRAY/LADDER
- 150 SQUARE GALV. STEEL DRAW TRAY SIZE AS SHOWN.
- TELEPHONE JUNCTION BOX.
- INTERCOM JUNCTION BOX.
- DATA/COMMS JUNCTION BOX.
- SECURITY, ETC. JUNCTION BOX
- DISTRIBUTION BOARD POSITION.
- DB-1 BOARD DESIGNATION NUMBER.
- 16A SANS 164-1 SWITCHED SOCKET OUTLET (SSO).
- 16A SANS 164-1 DOUBLE SSO.
- 16A SANS 164-1 SSO ON PEDESTAL.
- 16A SANS 164-2 3 PIN SSO.
- 16A SANS 164-1 & 164-2 COMBINATION SSO.
- 16A SANS 164-4 RED SSO (0° SHAVED EARTH PIN)
- 16A SANS 164-4 RED SSO ON PEDISTAL
- 3 PHASE C-FORM SSO.
- 2 POLE ISOLATOR
- 3 POLE ISOLATOR
- 4 POLE ISOLATOR
- 6A SANS 164-3 U/S SOCKET OUTLET.
- SINGLE LEVER ONE WAY LIGHT SWITCH.
- INTERMEDIATE LIGHT SWITCH
- TWO WAY LIGHT SWITCH
- MOTION SENSOR
- LIGHT SWITCH WITH MOTION SENSOR
- LINEAR LUMINAIRE
- BULKHEAD/DOWNLIGHTER, ETC.
- WALL MOUNTED LUMINAIRES
- POLE MOUNTED LUMINAIRE.
- TELEPHONE POINT.
- TELEPHONE POINT ON PEDESTAL.
- DIRECT OUTSIDE LINE TELEPHONE POINT (CALL BOX).
- TV OUTLET.
- DATA/COMMS OUTLET.
- BELL PUSH.
- BELL OUTLET.
- SIGN POINT.
- CLOCK OUTLET.
- PHOTOCELL
- REFERENCE TO QUANTITY i.e. 3No.
- 2 REFERENCE TO A DETAIL i.e. DETAIL 2.
- 4 REFERENCE TO AN ELECTRICAL NOTE i.e. NOTE 4.
- #34 REFERENCE TO A STANDARD DRAWING i.e. STANDARD DRAWING No.34
- 6 CABLE NUMBER - REFER CABLE SCHEDULE FOR DETAILS.
- HB LUMINAIRE TYPE "B" - REFER LUMINAIRE SCHEDULE.