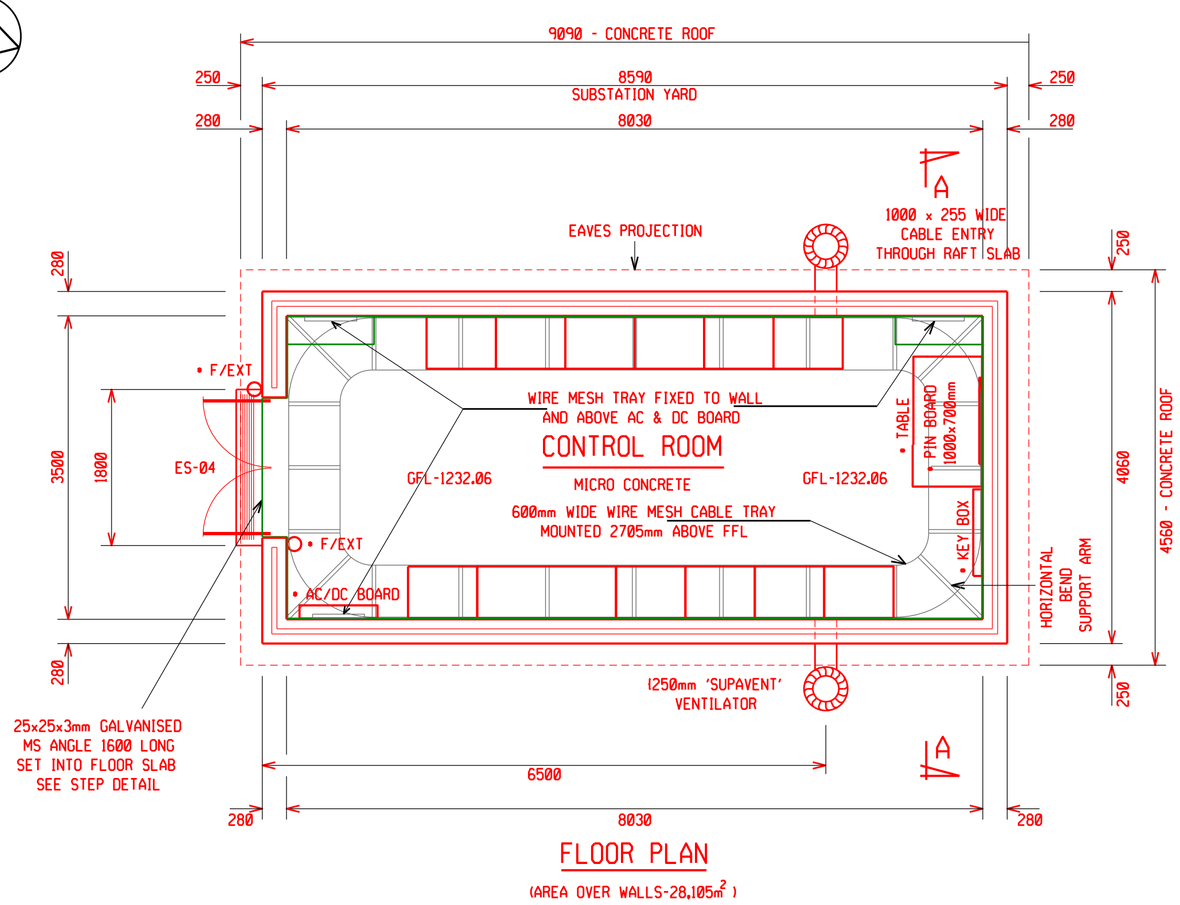
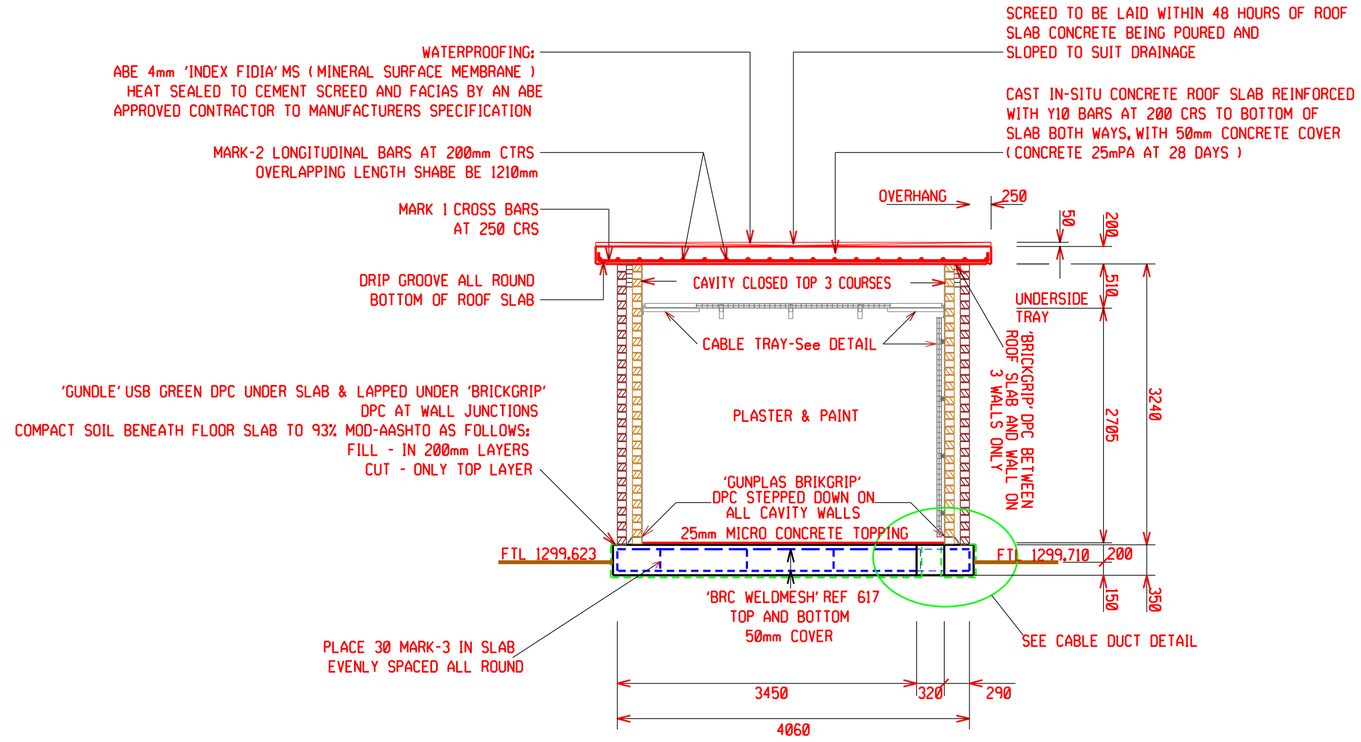


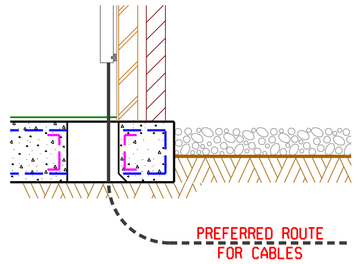
FLOOR PLAN

(AREA OVER WALLS-28,105m²)



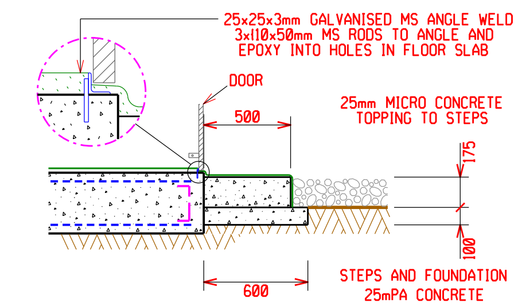
SECTION A-A

SCALE 1:50



CABLE DUCT DETAIL

NTS

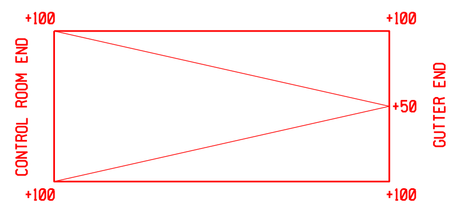


STEP DETAIL

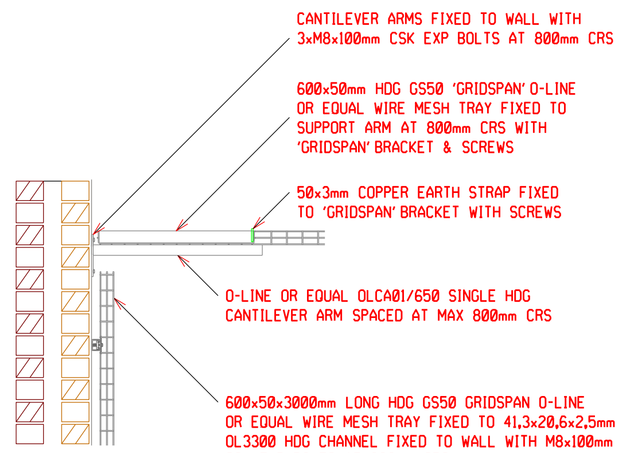
NTS

FLOOR SLAB REINFORCING DETAIL

SCALE 1:50



ROOF SCREED DRAINAGE PLAN



CABLE TRAY DETAIL

NTS

REINFORCEMENT SCHEDULE							
MK	TYPE & SIZE	No REQD	LENGTH m CUT	LENGTH m TOTAL	MASS kg	BENDING AND REMARKS	
1	Y12	46	4,60	211,60	120,56	4460	35
2	Y12	38	5,27	200,26	123,56	5200	34
3	R10	30	1,10	33	20,4	200 200 200 200 200	83
4	R10	37	0,49	18,13	11,19	120 250 120	35

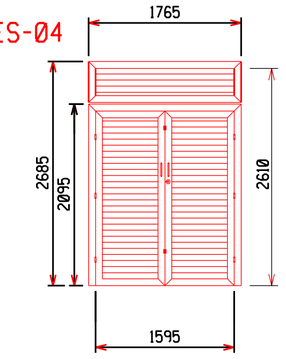
NOTES
CONCRETE STRENGTHS : SURFACE BEDS - 25mPA
REINFORCED FOUNDATIONS - 25mPA
MORTAR MIX : 1 CEMENT + 4 PIT SAND
PLASTER MIX : 1 CEMENT + 4 PLASTER SAND
ROOF SLAB SCREED : 1 CEMENT + 4 RIVER SAND
FLOOR MICRO CONCRETE TOPPING : 6mm STONE - 30mPA

1250mm 'SUPAVENT' FORMULAE		
ROOM VOLUME x 15 / 1155	=	No OF 'SUPAVENT' VENTILATORS

NOTES

- WALLS : INTERNAL
  - 230mm CONCRETE 17mPA MIN BRICKS
  - KEY JOINTS FOR PLASTERING
  - PLASTER 15mm THICK WITH A SMOOTH STEEL FLOAT FINISH
- WALLS : EXTERNAL
  - 280mm CAVITY WALLS, CONCRETE 35mPA MIN BRICKS
  - KEY JOINTS FOR PLASTERING
  - PLASTER 15mm THICK WITH A SMOOTH STEEL FLOAT FINISH
  - RAKE CLEAR EVERY FOURTH PERPEND OF 1st OUTER COURSE ABOVE DPC TO DRAIN CAVITY
  - BAG WASH OUTER FACE OF INNER BRICK SKIN WITH VERTICAL AND HORIZONTAL BRUSH STROKES AND SEAL WITH ABE BRICKSEAL TO MANUFACTURERS INSTRUCTIONS
- DPC - GUNPLAS 'BRIKGRIP' 375 microns STEPPED AT FLOOR LEVEL TOWARDS OUTSIDE WALL IN CAVITY WALLS
- BRICKFORCE - 150mm WIDE GALVANISED IN FIRST 4 COURSES ABOVE FOUNDATIONS TOP 4 COURSES BELOW ROOF SLAB AND EVERY INTERMEDIATE 5TH COURSE, LEVEL ALL ROUND
- PLASTER MIX - 1 CEMENT : 4 SAND
- MORTAR MIX - 1 CEMENT : 4 SAND
- ROOF SCREED MIX - 1 CEMENT : 4 SAND
- WALL TIES - GALVANISED 'BUTTERFLY' TYPE 5 PER SQ M IN WALLS AND AT 300mm CRS AT JAMBS AND AROUND OPENINGS
- LINTELS - OVER DOOR OPENINGS ON INTERNAL AND EXTERNAL WALL SKINS
- CONCRETE STRENGTHS - SURFACE BEDS-25mPA REINFORCED CONCRETE - 25mPA
- ONLY STEEL SHUTTERING CAN BE USED.
- MICRO CONCRETE TOPPING - 25mm THICK WITH 6mm STONE - 30mPA
  THE SWITCH ROOM FLOOR SHALL BE LEVEL TO WITHIN 1mm/sqm
- ES-04-XPANDA 2610x1595mm GALV STEEL DOUBLE CONTROL ROOM DOOR
  PROVIDE ONE M12x30mm EARTH STUD TO EACH DOOR LEAF AND FRAME NEAR LOWER HINGES
  REFER XPANDA DRAWINGS

ES-04



AREA SCHEDULE

- INSIDE CONTROL ROOM - 27,87m²
- OUTSIDE BUILDING - 34,88m²

CONCRETE VOLUMES

- FOUNDATION - 12,65m³
- ROOF SLAB - 6,22m³
- ROOF SLAB SCREED - 4,15m³
- FLOOR MICRO CONCRETE TOPPING - 0,69m³

FOUNDATION REINFORCING

- WELD MESH REF 617 - 34,88m²

VENTILATOR

- 2x 1250mm 'SUPAVENT' VENTILATOR

• = ITEMS SUPPLIED BY ESKOM

REV	DRAWN	CHKD	APPROVED	DATE	REVISION DESCRIPTION
00	SN	TM	PDC	11/02/19	FIRST ISSUE

CHECKED: TM 11/02/19
AUTHORIZED: PDC 11/02/19
DRAWN: S NSELE 22/10/2018
SCALE: 1:50

Eskom Distribution

KLIPSPRUIT SUBSTATION
CONTROL ROOM
FLOOR PLAN, ELEVATIONS SECTIONS & DETAILS

ER00045

SET	SHEET	REVISION
21	02	00

A1