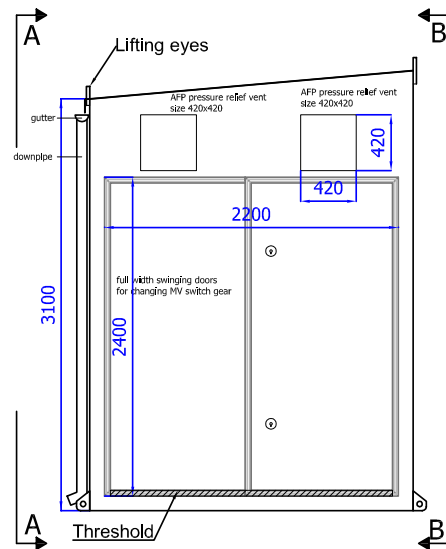
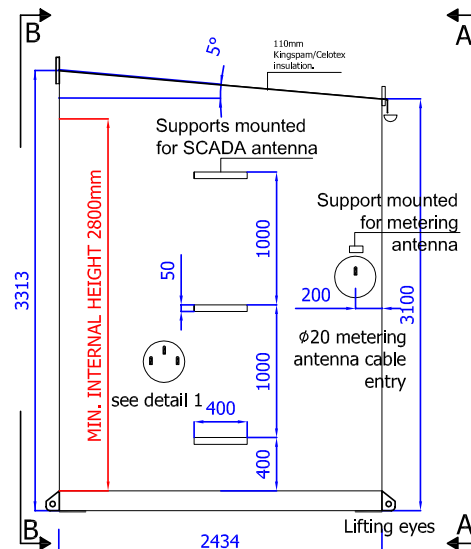


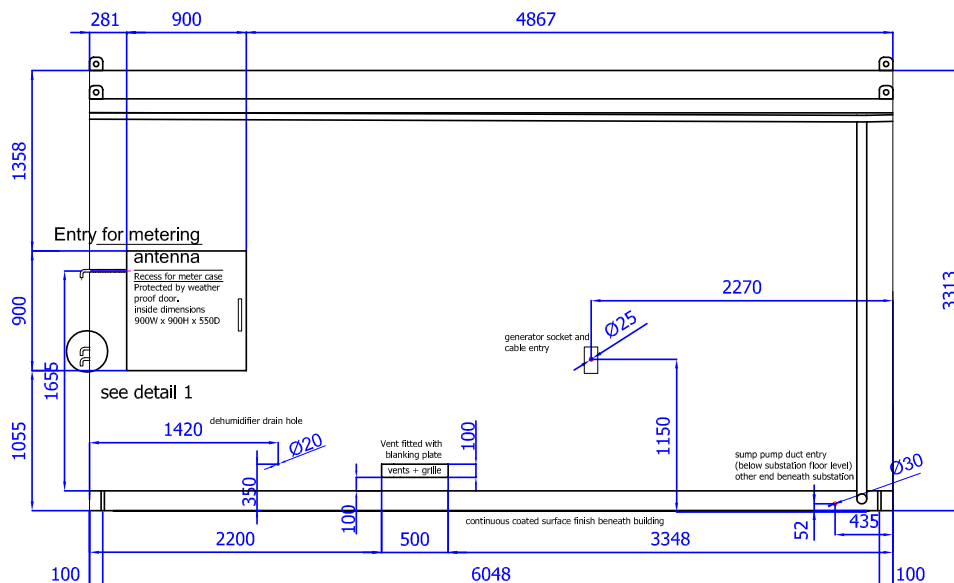
front view



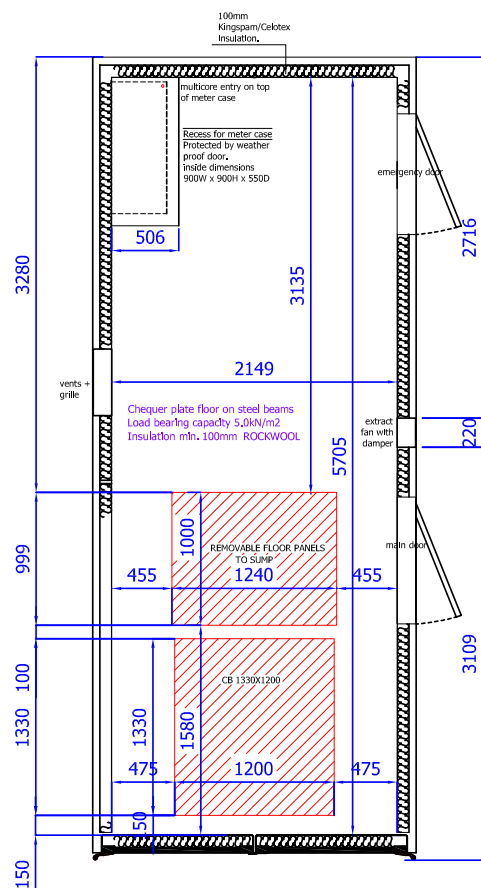
back view



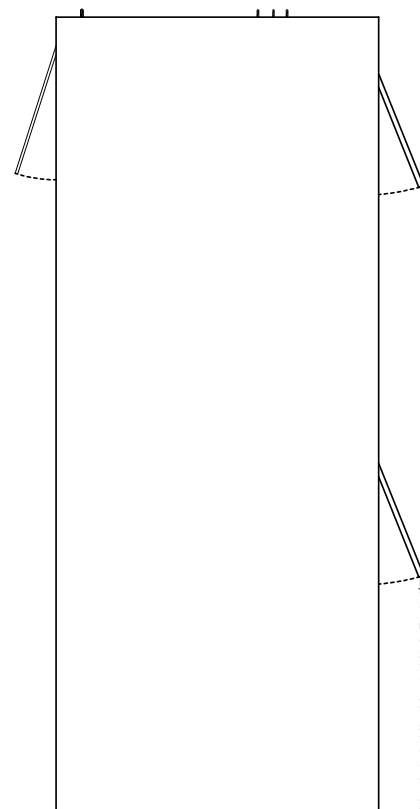
A-A view



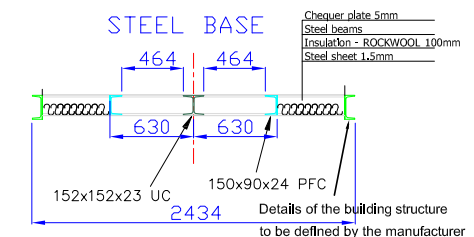
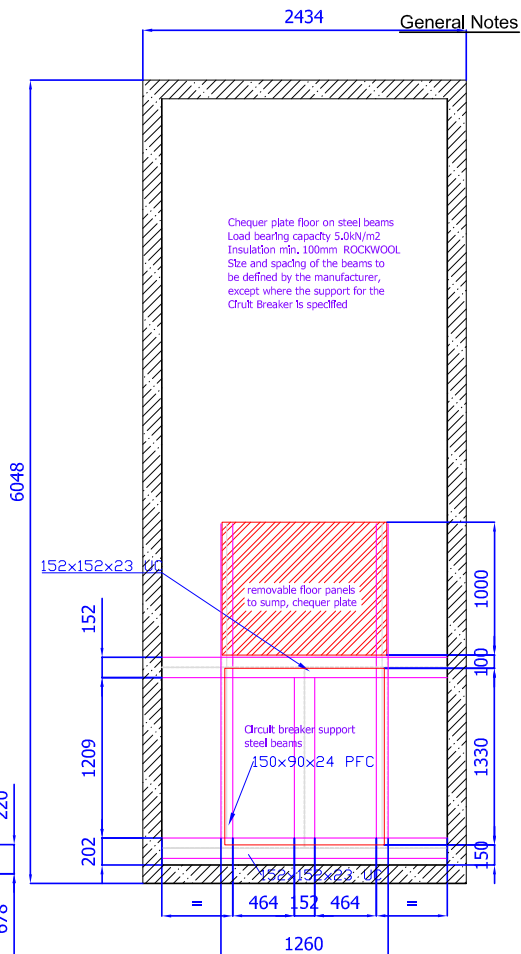
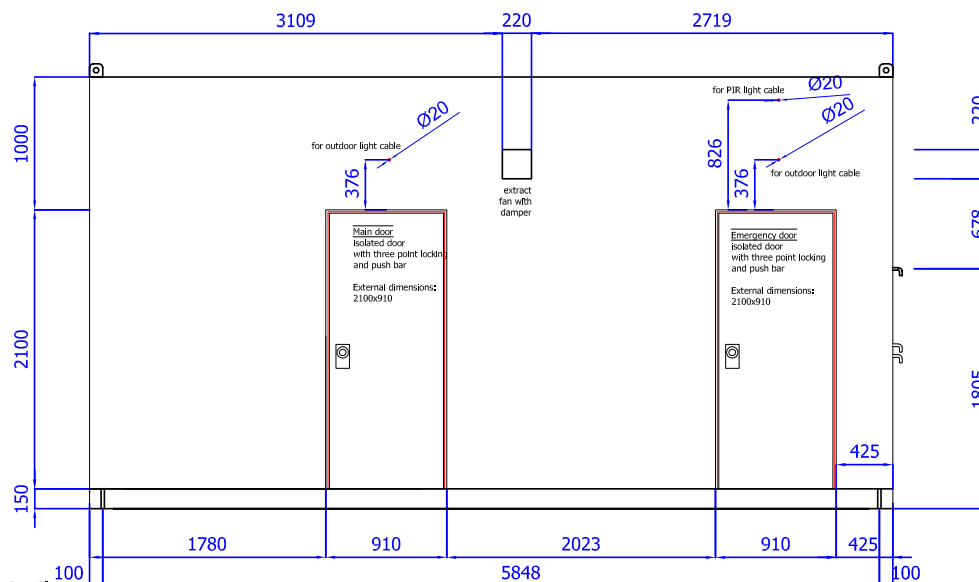
floor view



top view



B-B view

**Building construction:**

The outside layer of the building is constructed of 1.6mm anti-corrosive steel tilted into cassettes. The outside finish is smooth steel, painted with a two pack paint baked finish. It is insulated by 100mm of non-combustible insulation (Kingspan/ Celotex), attached to the roof, and walls, to meet a U value of max. 0.22 W/m²K as specified in DNO switch room specifications. See relevant drawing for the site for more details. The internal walls are 1.5mm galvanised steel sheet. The building is fire-proof, exceeds 1 hour fire rating, class A1 according to EN 13501-1, and entirely water-proof. The building is constructed with a steel frame, fully vertical steel slides and front wall, steel double doors at the front end and a steel roof. The roof has a 5° pitch. There is a gutter and down pipe fitted to the lower side of building. The whole building is painted in gloss finish to RAL 6003-olive. The floor is made of a galvanised steel chequer plate. There are 3 steel ducts (detail 1) fitted in the end of the building to allow the Scada antenna cables to pass through. There is a removable threshold installed at the double doors to enable switchgear installation.

Metering:

A recessed meter compartment is provided to install metering, accessible only from the outside via a weather proof door with standard triangle lock. There is a cable entry from outside to allow the metering antenna cable to pass through.

Access:

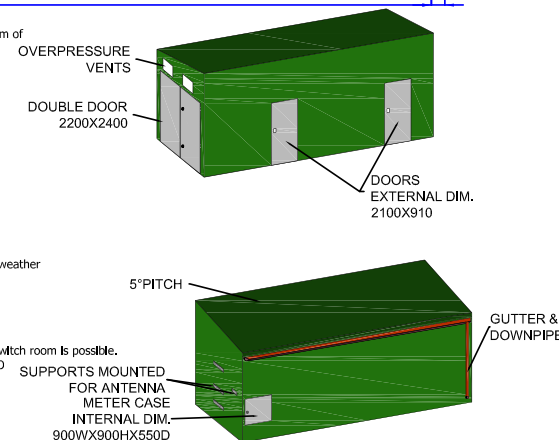
The switch-room is accessible by two side doors (external dimensions: 2100x910) and one double swing door at the front (2400x2200mm). The metering cubicle is accessible by one side door. No direct access between metering cubicle and switch room is possible. The side doors can swing 90° and are fitted with 90° open lock system. Provision is made for the DNO to fit Euro lock barrels as per the switch room specifications. The double front doors can swing 270° with 2 Euro lock mortice type style 5 lever locks. The front doors are insulated with 100mm Kingspan/ Celotex insulation. Each side door opens outwards and is fitted with an internal panel push bar handle.

Openings:

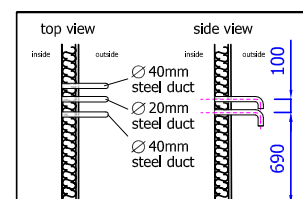
Cable entries are cut in the building floor to allow cables to be terminated in the switch gear. Opening is provided for the trap door in the floor in front of the switchgear in order to access the cable basement. The trap door consists of a removable floor panel with handles (provided).

Ventilation:

Passive ventilation is provided on the side wall: at least 8000mm² as specified in DNO switch room specifications. The opening is protected by a grille to prevent any intrusion. An extract fan with damper is provided as well on the opposite wall to ensure air circulation through the room. AFP pressure relief vents are fitted above the double doors which is at rear of switchgear. A dehumidifier will be fitted as standard equipment.



Detail 1 - SCADA antenna cable entry



3m of hard standing
outside double door
min. 250mm
Type 1 material

Rev.	Modification	Date	Name
Scale	Date	Drawn by: AW	Checked by: CG
1:50 (A3)	08.04.14	Approved by: LM	
Status: Draft	Approved	Construction	
Project Name:			
Substation enclosure plan			
Project No.			
Generic drawing			
Drawing No.			
DNO Consulting Limited 3 Sheep Street Highworth Wiltshire SN6 7AA Tel: 01793 861482 Fax: 01793 250800 e-mail: info@dnoc.co.uk			
This drawing is the property of DNO Consulting Ltd. The drawing is protected by copyright and the information contained therein is confidential. It must not be copied or disclosed to third parties without written permission.			

BARNHAM COURT

2768_09
DNO Substation Details
21/07/2015

THE **Landmark**
PRACTICE