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	<p><b>TYPICAL PLAN ON DOOR OPENING (NTS)</b></p>											
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## 1. General

- Doors shall be equipped with lockable, outward opening leaves with lock/finger opening facilities. Materials used shall not be susceptible to rusting, rotting, shrinking, warping, etc.
- Doors shall be capable of being removed and replaced by the use of conventional tools without 'wet working' i.e. without the need for resins, glues, etc.

- Doors shall be equipped with anti-pirv meeting covers.

- Frames must have weather strips to three sides.

- If louvers are specified, conventional louvers must be robust, anti-pirv type with internal fins. Punched louvers to be integral with the door skin. Louvers must be approved to be in line with manufacturers IPS1175 security rating when required.

## 1.6. Alternative construction methods and designs will be considered provided that the manufacturer can provide sufficient evidence, including certification, that the alternative will achieve equal strength or enhance the requirements.

## 2. Locking

- The active leaf shall have a heavy duty single point locking mechanism capable of being operated with a rim cylinder complete security certification as required.

- Locking mechanism must accept NPG suited locks, Yale 1109 (VEDL area) & Union 1X1 (NEDL area) rim cylinders. Doors to be supplied to site with temporary cylinders for use during construction. Door manufacturer or authorised contractor to provide return visit to install permanent NPG approved locking cylinders, upon completion of works. Warranties & guarantees must remain valid after changing temporary cylinders to operational NPG cylinders.

- Externally cylinder to be protected from drilling, cutting pulling etc. with cylinder guard rated to the relevant LPS1175 security rating.

- Externally accessed doors to have a manual deadlock operation. Emergency escape only doors to have automatic deadlock operation.

- Locks to have anti-thrust feature preventing tampering of bolt in locked state.

- All doors must provide single action escape at all times.

- Locking devices and panic bar escapes to be of stainless steel construction, with a minimum 10 year manufacturer's warranty.

- Locks and emergency escape bars must comply with the relevant LPS 1175 security rating.

- When specified an external anti-tamper locking cover will be provided, secured with a NPGs issued high security padlock, Squire S505 or similar (main body of padlock to be fully obscured by cover). The locking cover is not to extend over adjacent door leaf or frame so as to allow emergency escape at all times. Cover is to be side hung to allow ease of access.

## 3. Ironmongery

- Doors shall open outwards to an angle of 90° to 110°, with heavy duty automatic engagement device(s) to secure the door in the open position. The operator shall be required to physically release the device to allow the door to close. Door manufacturer to consider a more robust engagement device if the specific door location is in an area exposed to strong winds.
- On double doors the passive leaf is to be held in a closed position by heavy duty tower bolts top and bottom. Bolting of the door shall be designed for ease of one-man operation from floor level.

## 4. Security

- For all security doors supplied a Loss Prevention Certification Board LPS 1175 Issue 7 Certificates must be available on request. Doors will not be accepted without a relevant certificate.

- Standard security doors to have Security Rating Classification 1 to Loss Prevention Certification Board LPS 1175 (SR1).

- Enhanced security doors to have Security Rating Classification 2 to Loss Prevention Certification Board LPS 1175 (SR2).

- High Security doors to have Security Rating Classification 3 to Loss Prevention Certification Board LPS 1175 (SR3).

## 5. Earthing

- Steel doors to have 10mm earth bonding lug 50mm above finished floor level on the internal face of each vertical frame section and door leaf.

- Doors to be supplied to site with a bonded flexible earth connection between the door leaves & frames.

## 6. Finish

- Doors shall be finished with a powder coat, zinc rich marine grade, textured, colour: BS 4800, ref 14-C-39 'Holly Bush Green'.

## 7. Operation

- Single action escape must be provided on any door at all times.

- Active leaves to all doors to have minimum 750mm clear opening, including any protruding ironmongery.

## 8. Fabrication

- All structural openings to be measured on site prior to manufacture.

- Fabrication drawings & LPS certification to be provided for acceptance prior to manufacture.

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Manufacture Details				STANDARD SUBSTATION DRAWINGS NEW BUILD PRIMARY & GRID SUBSTATIONS DOOR DETAILS			
Sheet No.	1/1	Scale	1:20	Document Details	STANDARDS	CONSTRUCTION	
Prepared By		Grid Reference	N/A	Drawing No.	C1016982	Issue No.	102655361
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