



Certificate of Completion for MV Substation

A formal final inspection of the completed substation building will be made by ESB Networks before acceptance of the building, and before commencing work on the installation of the electrical connection. This inspection requires the substation to be completed in accordance with ESB specification 13320, and will take place after the customer has provided this Certificate of Completion covering the workmanship and materials used in the construction of the substation.

This Certificate of Completion must be completed to the satisfaction of ESB Networks and signed and returned prior to work commencing on providing an electrical connection.

- Working conditions on site must comply with the SHAWW Act and its regulations.
- Scaffolding must not be present over the work area as any excavation nearby for the installation of ducts/cables could undermine it - also there may be a danger in working underneath.
- There must be a clear unobstructed access route in order to safely reach the work-place.

It is critical that these requirements are complied with in order to provide electrical connection on time - delays will be inevitable should ESB Networks be unable to carry out works because of obstructions or unsafe situations on site.

<i>For ESB Networks Use Only</i>	
Substation Name	
Substation Number	
Network Services Area	
C1 Form Received (Y/N)	
Comments	

Substation Location: _____

1. Design of Substation

Tick box as appropriate

Item	Clause		Yes	No
1.1	2.02	Has the substation been designed in accordance with ESB Specification 13320 Rev. 7?		
1.2	2.02	Has risk assessment been carried out to ensure location selected for the substation is low-risk		

2. External Conditions

Item	Clause		Yes	No
2.1	2.01	Is there an unobstructed access route 3m wide x 4m high?		
2.2	2.02	Is access external to the main building where substation is incorporated?		
2.3	2.02	Is the substation located at least 10m from main entrances and exits?		
2.4	2.02	Are substation doors at least 10m away from storage locations of flammable substances?		
2.5	2.02	Are substation doors at least 10m away from any intake/outlet for the building ventilation system?		
2.6	2.06	Has an earth mat been installed in the ground immediately in front of the substation doors?		
2.7	2.08	Is ground level drainage satisfactory?		
2.8	3.02A	Has all excess material been removed?		
2.9	3.02A	Has external ground been re-instated to allow safe access for installation of equipment?		
2.10	3.10.G	Is roof level drainage installed external to building?		

3. Doors

Item	Clause		Yes	No
3.1	3.08.A	Are 3-leaf ESB approved steel galvanised doors from an approved supplier installed?		
3.2	3.08.D	Do the doors open through a full 180 ^o ?		
3.3	3.08.D	Do the doors open and close freely?		
3.4		Information from door name plate: Manufacturer: _____ Serial Number: _____ Year of Manufacture: _____ Please attach delivery docket or invoice from approved door supplier for the substation doors to this certification		

4. Internal Condition

Item	Clause		Yes	No
4.1	1.04	Are the internal dimensions: 3.5m x 4.0m x 2.6m		
4.2	3.02.A	Has all excess material been removed?		
4.3	3.06	Is duct layout and construction in accordance with the specification drawings?		
4.4	3.07	Are the cable ducts 900mm deep x 450mm wide, 200mm from the walls with 40mm x 40mm rebates on either side?		
4.5	3.07.D	Are ESB approved GRP cable duct covers and oil trap cover provided and secured in position, level with floor so as not to constitute a tripping hazard?		
4.6	3.10.B	Are the walls and ceilings neatly finished and painted white?		
4.7	3.06	Is the substation floor 100mm to 200mm above the finished ground level?		
4.8	3.06	Has the floor been neatly finished with a smooth level surface?		
4.9	3.10.B	Has the floor been painted as specified with red or grey single-pack polyurethane paint to give a non-slip finish?		
4.10	3.06.A	Does a bar of the reinforcing mesh span the duct at the point indicated in the specification drawings?		
4.11	3.06	Is reinforcing steel in substation floor isolated from all other structural steelwork?		
4.12	3.10.C	Has the cavity in door reveal been sealed with four hour fire rated material?		

5. Ventilation

Item	Clause		Yes	No
5.1	2.05	Is ventilation through the door leaves/louvres only?		

6. Fire Safety

Item	Clause		Yes	No
6.1	2.04	Have the walls and ceiling a four-hour fire rating?		
6.2	2.09	Are there any pipes, ducts or services - not required by the specification - routed through the substation?		

7. Working Conditions

Item	Clause		Yes	No
7.1	3.02.B	Is a safe working environment assured for ESB staff on site by compliance with the SHAWW Act 1989 (Construction) Regulations SI 138 of 1995 ?		

CERTIFICATION

This Certification must completed and signed by the Chartered Engineer or Architect in charge, and returned to ESB Networks, prior to work commencing on the electrical connection.

I certify that it is my professional opinion that the substation building located at _____ has been constructed in accordance with:

- ESB Specification 13320 Rev. 7
- Any additional conditions given in customer Connection Agreement dated _____ (if applicable)

Name (block capitals) _____

Professional Qualification _____

Name of Company _____

Position in Company _____

Signature _____

Date: _____