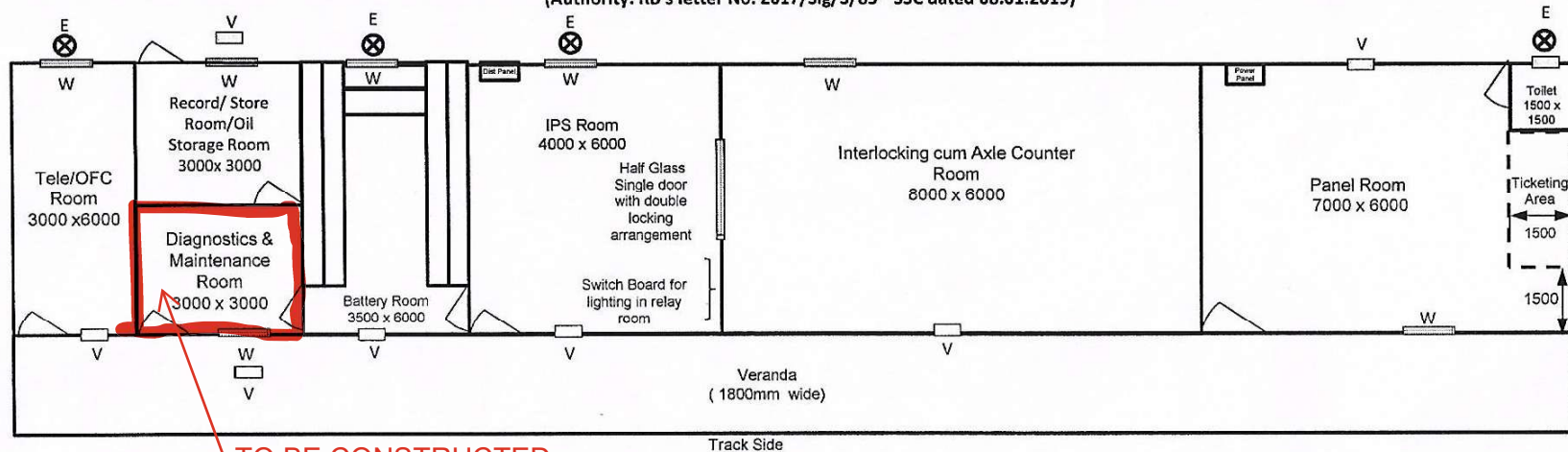


Typical Drawing for S&T Service Building (up to 100 routes with single IPS) With Centralized Interlocking System

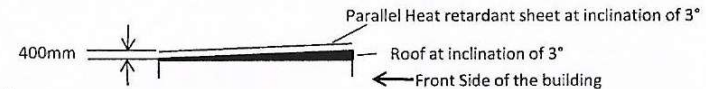
(Authority: RB's letter No. 2017/Sig/3/85th SSC dated 08.01.2019)



TO BE CONSTRUCTED

NOTE:

- 1) All dimensions are in mm.
- 2) The proposed building plan is for the Centralized Electronic Interlocking up to 100 routes. For EI up to 50 routes or distributed EI, size of Interlocking Cum Axle Counter room can be reduced to 7000 x 6000 sq. mm. For other stations with routes more than 100 routes, the building plan shall be issued after approval of PCSTE.
- 3) The location of the building shall be as close to the centre of the yard as possible. The exact location of the building shall be jointly signed by Divisional officers of concerned departments.
- 4) The floor level shall be at least 500mm above the level of the platform of the station.
- 5) Only one window is to be kept in the Interlocking Cum Axle Counter room to minimize dust ingress. This window should normally be on opposite wall from the track side. The windows shall be protected by Iron Grill. The window doors shall be provided such that they are opened outside. The windows shall be covered with detachable Netlan Mesh from inside to avoid entry of insects into the equipment rooms.
- 6) All doors shall have lock facility to open from inside even though they are locked from outside. 2 hour fire rated doors and windows are to be provided for the installation.
- 7) Electrical Fittings: One ceiling fan shall be provided for every 8 square meter subject to minimum one in each room. The lighting shall be provided to achieve 150 lumens/Sq.m. Air conditioning to the interlocking rooms shall be provided such that spill of water shall not affect the functioning of signalling system. The location of electrical fittings shall cater for installation of fire detection system. AT/Generator lighting shall be provided as per the latest guidelines issued by Railway Board. The electrical and signalling wiring shall not be on the same wall.
- 8) The floor shall be provided with anti-skid tiles in all the rooms.
- 9) The floor, shelf and wall (upto 1500 mm) shall be provided with acid proof tiles in the battery room. The shelves in the battery room shall be provided with two tier steps of 450mm width and 450 mm height.
- 10) The interior walls and ceiling shall be coated with premium enamel paint with a glossy, durable and washable finish or they shall be tiled.
- 11) Cable Duct and Entry: Cable duct of 300mm (width) x 300mm (depth) shall be provided along the back wall of Interlocking Cum Axle Counter room and Panel room up to the centre of Panel. Standard opening on the back wall preferably 450 x 450 mm opening at two places shall be provided for cable entry.
- 12) Inter room Opening through Ladder: There shall be inter room opening of 300 x 300 mm below the ceiling for running ladder from Tele/OFC room to panel room through Diagnostics & Maintenance room.
- 13) Roof Design: The height of the roof shall be kept minimum 12 feet. The roof slope shall be a minimum 3 degrees, with the high point being on the front side of the building. RCC roof should be projected 300mm outside the building all around except on the side of veranda, to work as sun/rain guard. Heat retardant inclined roof sheet shall be provided over the roof at a height of minimum 400mm above the roof. Veranda can be dispensed with, in case of space constraint, under exceptional circumstances. The roof of Relay room and Panel Room shall have suitable provisions for fixing 'A' type protection and VHF antenna respectively.



NOTE:

- 15) Relay huts meant for the purpose of Intermediate Relay huts/ Block huts or Cabins or Auto Section shall also be designed based on the above guidelines. Pota cabins shall not be considered for S&T service buildings.
- 16) The S&T service building area shall be notified as restricted area.
- 17) Security fencing for earthing and Diesel Generators: The fencing arrangement shall be provided around the perimeter earthing and Diesel Generators for clear demarcation. The left over land between earth pits shall be filled with Gravel equivalent to M20. The diesel generators shall be located after leaving space for stairs after the Tele/OFC room. Diesel Oil Storage room shall be connected by a proper road for proper loading and unloading of diesel drums. In RE area, the diesel oil storage room is to be converted to Record/Store room and shall be connected to the Diagnostic and Maintenance room and the door shall be closed. Adequate number of shelves are to be provided in the Record/Store room for keeping signalling materials.
- 18) Minimum Space between rack edge to wall is to be kept as 1300mm in Interlocking Cum Axle Counter and IPS rooms. Electric shock proof insulating 3mm thick Linoleum sheet to be provided between relay racks, axle counters and IPS racks in these rooms. The building shall be pillared structure. First floor can be constructed as and when required for replacement of Signalling assets after expiry of their codal life. The foundation shall cater for G+1 design.
- 19) Schedule of Door, Window and Ventilator:
 - Door : 1000 (W) x 2135 (H)
 - Window (W): 1000 (W) x 1500 (H) except ticketing window
 - Ventilator (V) : 600 (W) X 500 (H)- ventilator shall be as per RDSO/TCDO/COP-1

Title: Typical Drawing for S&T Service Building (up to 100 routes with single IPS) With Centralized Interlocking System	Drawing No. SDO/S&T Service building/001 amdt 1
Drawn by: <i>Angela S. 29.01.19</i>	JE/Signal
Checked by: <i>S. S. 09/01/19</i>	ADE/Signal/V
Approved by: <i>Spl. 9/1/19</i>	Director/Signal/V