

Specifications for an air-conditioning unit for the Coude' room of the Echelle Spectrograph of the Vainu Bappu Telescope and work of shifting and re-installing the old air-conditioning unit.

Design of layout, supply, installation and commissioning of floor Mounted, top discharge Precision Air conditioning unit with an adjustable rate of flow.

Capacity: 2TR (Bidder to inspect site and suggest change in capacity with technical justification)

Rate of flow: Adjustable between 0 to 4000m<sup>3</sup>/hr

Humidity control: +/-5%

Temperature control: +/-1deg C

Specification of filter: Filter efficiency should be 95% up to 5 micron

Duty cycle capability: 100%

A 2TR air-conditioning unit (Tata Liebert PEC 108 RA-100) is in use at the Coude' room of the Vainu Bappu telescope at the Vainu Bappu Observatory at Kavalur.

The present unit is a floor mounted one. The new unit should be a floor mounted, top discharge Precision Air conditioning unit.

A platform for mounting the old and new units is to be designed, manufacture and installed at the site by the vendor.

Old unit to be shifted from coude' room to the platform.

A manifold with valves for both units valve is required on the platform, a filter at the roof of the coude room entry and a valve at system end of discharge duct is suggested.

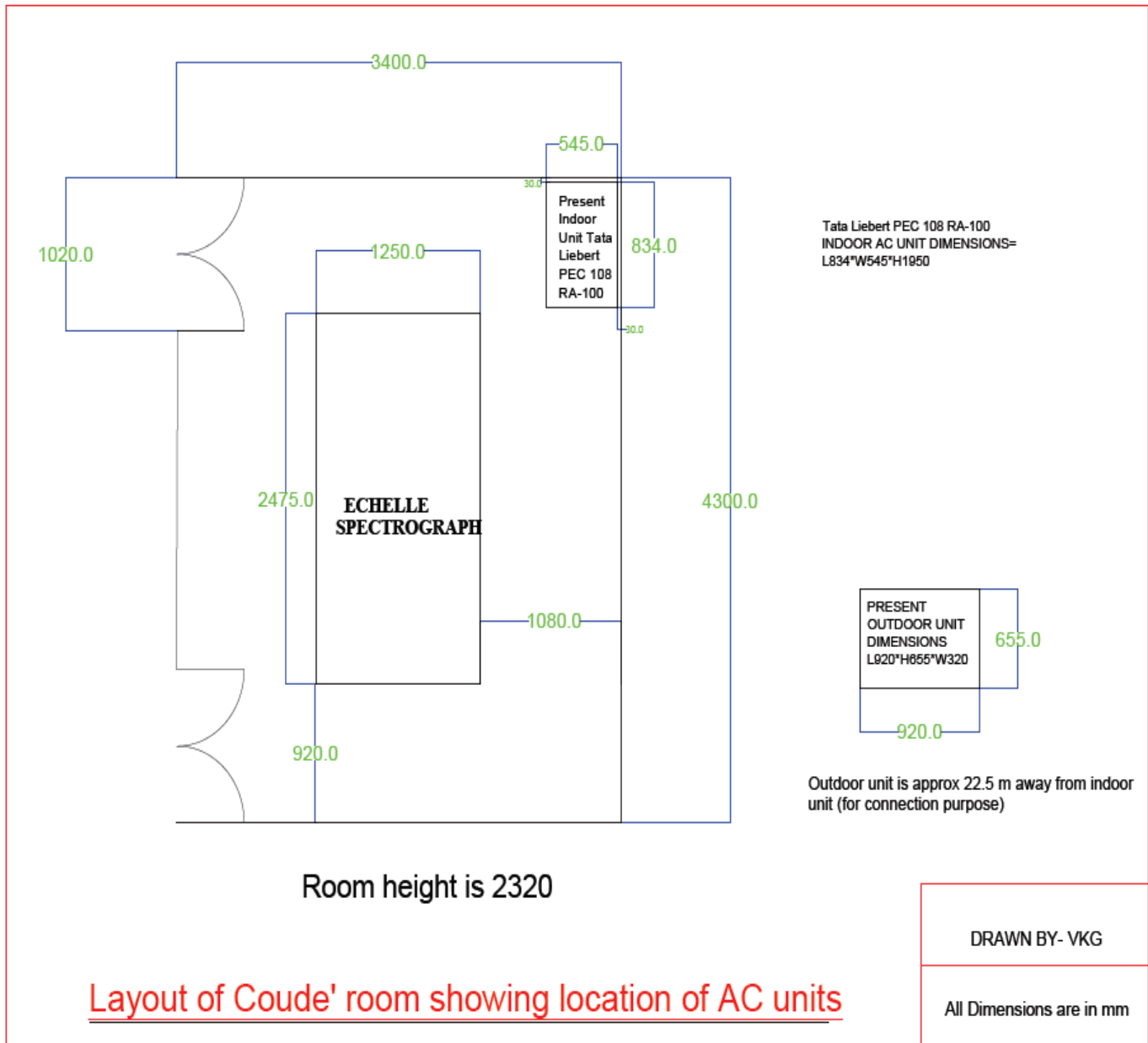
Fire retardant materials to be used.

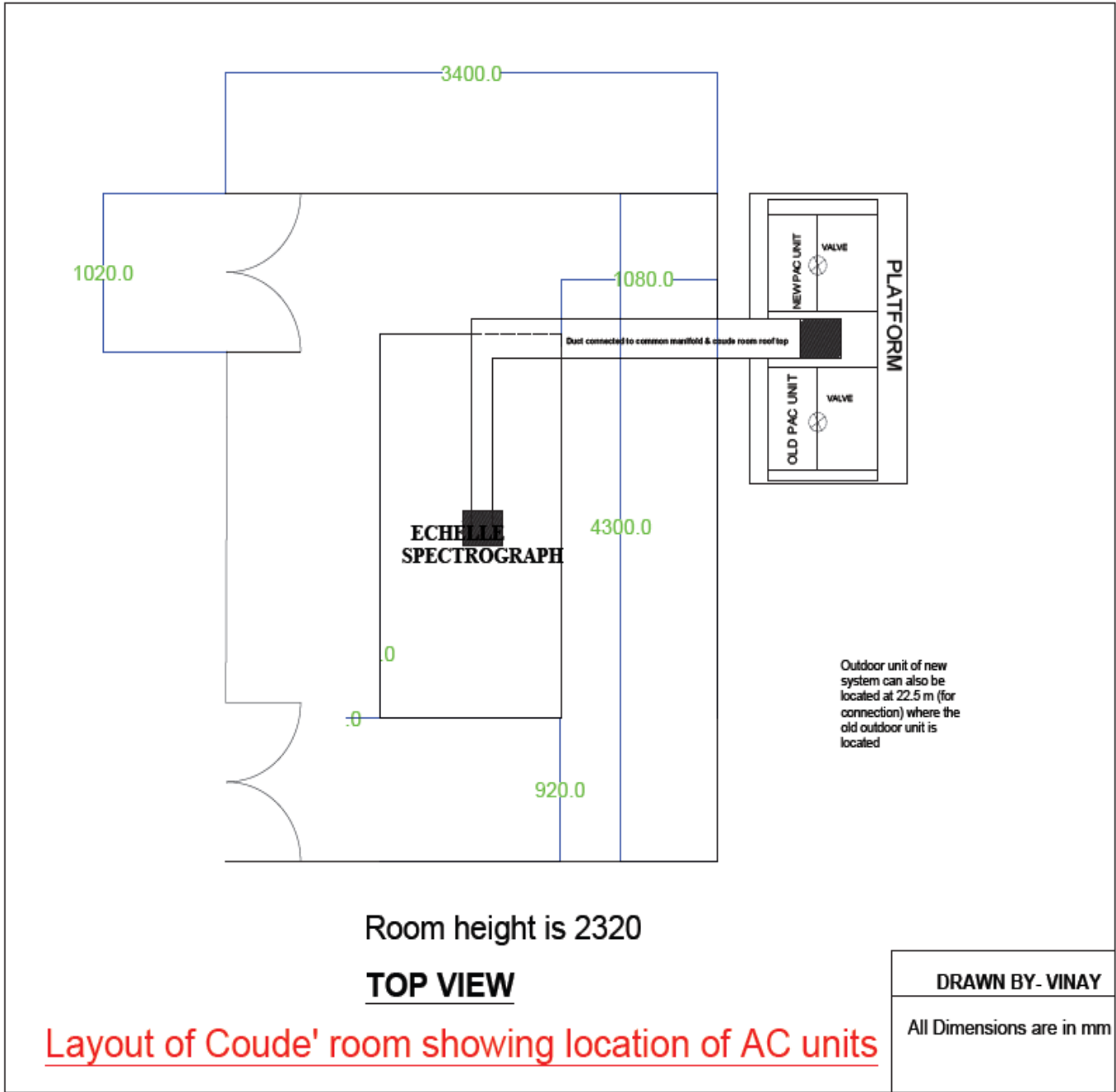
Timer unit (for distributing load between old and new units) to be located on the platform, such that, the duty cycle of the new unit should be 80% and that of the old unit should be 20%.

Inlet to coude' room should be in the centre of the roof and outlet from a location on the wall (adjacent to the platform) and close to the floor of the coude' room.

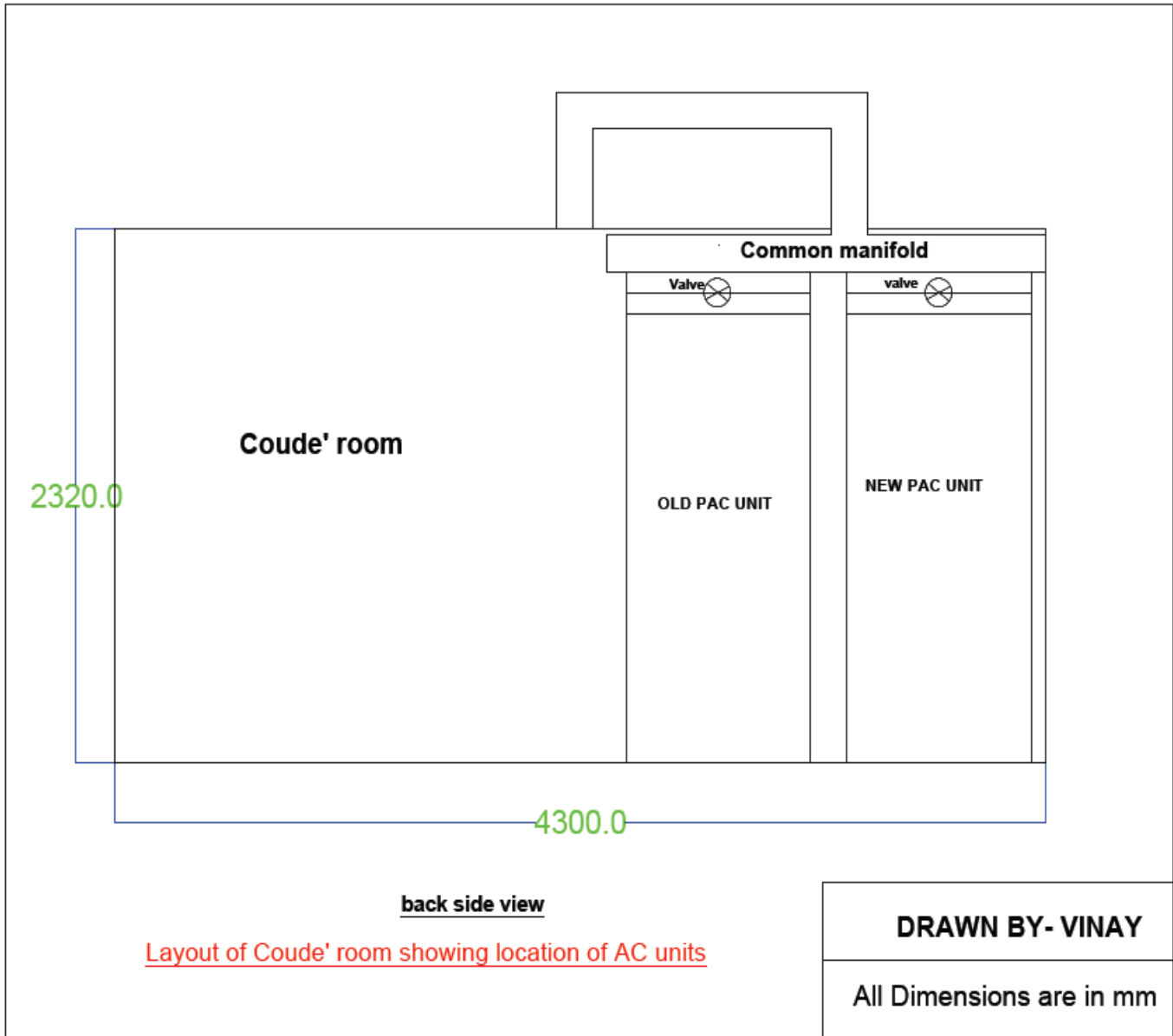
A layout of the present and planned systems are shown below, however, bidders are urged to visit the site before quoting.

**A two part bid is required viz. technical bid and commercial bid separately.**





Outdoor unit of new system can also be located at 22.5 m (for connection) where the old outdoor unit is located



Bidders should provide layout design suggested by them in the technical quote alongwith the company's profile and details of experience.