



**EP Earthing System AS/NZS3003: 2018**

- **Large ICU, showing EPJ and NODE relationship.**
- An example of cardiac-protected electrical areas serviced by a single medical electrical system and / or the 5m rule requirement where socket-outlets may be connected to multiple EP areas due to the 5m cross-over, refer clause 4.4.2.2.
- ▲ EP Test Point must be below 2m and readily accessible / EPJs and EP NODES may be directly located with their EP test points or positioned above the ceiling.
- In this design it is not mandatory to have a test point connected to the EPJs as the EPJs are not located in the patient area, but it is good practice to do so to enable reference testing.
- All EP cables shown must be sized to suit 0.01Ω or less cable resistance i.e., EPJ to NODE or NODE to TEST POINT, the resistance of these cables is therefore negligible when measuring between e.g., a socket-outlet and the test point to achieve the required reading of 0.1Ω or less.
- Return earths to switchboards are sized as per AS3000 requirements, < 0.5Ω.
- Labelling of the EP earthing system is important, refer additional information.
- EP junctions can contact structural metal / EP nodes must be isolated from structural metal / EP test points if remote from the junction or node must be isolated from structural metal.