

ID	Type	Object Heading	Object Text	Rationale	Notes
Crtlrm-Lx-1	Definition	Underground control room definition	Underground control room shall serve as a central place from which various functions of the far detector facility shall be monitored and controlled.	We need to define all function of this space before construction since expansion of this space is difficult in the future. The control room space may be subdivided further to serve each individual need as specified below.	This space must be adequate for 4 single phase detectors since this is considered the worst case in terms of space.
crtlrm-lx-2	requirement	control room cable trays and services	Control room shall have adequate space for all entering and existing cables, and services.	The cables include data cables from the detector cavern, control cables, power cables for cotrol room equipment, communication cables, safety related services, any special purpose services such as gas, water.	This list must be made and maintained.

ctrlrm-lx-3	requirement	control room DAQ electronics racks	Control Room shall have space for electronics racks for the DAQ system	Number of racks are to be specified according to the DAQ model adapted
ctrlrm-lx-4	requirement	DAQ computer systems and local data storage, network services	The control room shall accommodate DAQ computer systems, data storage and network services Control room shall accommodate electronics racks for cryogenic system controls.	Computer systems, power requirement, and environmental requirements for long term operation are to be specified.
ctrlrm-lx-5	requirement	Cryogenic control electronics racks	Control room shall have a control station with monitors and keyboards, etc for cryogenic equipment.	
ctrlrm-lx-6	requirement	cryogenics controls station		

ctrlrm-lx-7	requirement	central location for information through bulletin boards, online systems, monitors	Control shall have adequate provisions for bulletin boards, monitoring displays, and other systems for information exchange.
ctrlrm-lx-8	requirement	central location for informal gathering	The control room shall accommodate the need for informal small meetings of the staff during operations.
ctrlrm-lx-9	requirement	central location for daily meetings during installation	The control room shall contain the provision for daily meetings of the staff during installation and commissioning
ctrlrm-lx-10	requirement	DAQ control stations	The control room shall have adequate number of control stations with monitors, keyboards, etc. to control the DAQ.

ctrlrm-lx-11	requirement	Fire life safety equipment racks	Control Room shall contain racks to house the control equipment and monitoring devices for fire and life safety related to the cryogenics and Far Detector only.	This is part of SURF. Do we need space for this in our control room. Ask Tracy + Josh.
ctrlrm-lx-12	requirement	Fire and life safety control station	Control room shall contain a control station with monitors and keyboards, etc for fire and life safety	This is part of LBNF and SURF. Ask Tracy and Josh.
ctrlrm-lx-13	requirement	common work spaces for visitors	Control room shall contain adequate number of common work spaces with network, phone, and power with appropriate environment in terms of temperature, ventilation, and noise.	Lets have space for 15 people. Specified by the FDCCI group.
ctrlrm-lx-14	requirement	Logbook storage	Control room shall have adequate shelf space for paper logbooks, manuals, stationary, etc	1 large bookcase needed.

ctrlrm-lx-15

requirement

Calibration and  
testing equipment  
space

Control room shall  
have adequate shelf  
space for storage of  
appropriate amount of  
calibration equipment  
and tools only for FD  
calibration tasks

The space on top  
of detector will  
be used for this  
equipment. No  
space needed in  
the control room.





