



East Hall under construction - 1962

Planning East Area : Commissioning without beam

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ENGINEERING
DEPARTMENT



EAST AREA RENOVATION



Introduction

- IST by workpackages (Cf. EARP WBS) :
<https://edms.cern.ch/document/1730966>)
- Prerequisite = What is needed before doing the tests?
- Needs = What is needed during the tests?
- Tests = What does the tests consist in? (Date used in the planning)

- Focus on activities in building 352
- Overview of other ISTs also presented here

Individual System Tests – bldg. 352

Group	Prerequisites	Needs during test	Tests	Done by
BE-BI	Beam instrumentation installed Cabling work completed Apron ready	Electrical power Network available Vacuum	Reception tests without beams	08-05-20
BE-CO	Control HW installed Cabling work completed	Electrical power Air conditioning in barrack Ethernet network	Basic reception tests at the end of the installation	01-04-20
EN-EL Cabling	B. 352 (PS), B.157, B.251 : Cabling installation done	Access to both end of cables	Reception at the end of installation	03-07-20
EN-CV Cooling	Piping, Skid (157), magnets installed (If possible also in primary area)	Electrical power Cooling station operational (B.355)	X-Ray tests done without specific needs Pressure tests	12-06-20
EN-STI Beam stoppers	Beam stoppers installed Cabling work completed Compressed air network installed	Electrical power Network available Vacuum Compressed air	Functional tests (Movements)	01-05-20
EN-EA TE-VSC Vacuum	Control rack equipped Vacuum pipes installed and connected Cabling work completed	Electrical power Network available	Leak tests	01-05-20
TE-EPC TE-MSC DC Circuit tests	PCs installed Cabling work completed in b.251 DC cables installed AC installation completed Magnets connected to power converters	Electrical power Ethernet network Controls infr. available Converters/magnets cooling WIC Magnet access retracted	DC Circuits (Séparation b.352/b.157)	04-11-20

Individual System Tests – non-352

Group	Prerequisites	Needs during test	Tests	Done by
BE-BI	Beam instrumentation installed Cabling work completed Apron ready	Electrical power Network available Vacuum	Reception tests without beams	09-12-20
IT-CS	IT installation completed Cabling work completed	Electrical power Air conditioning in the barrack	Basic reception tests at the end of the installation	07-07-20
BE-CO	Control HW installed Cabling work completed	Electrical power Air conditioning in the barrack Ethernet network	Basic reception tests at the end of the installation	01-04-20
EN-EL Cabling	B.157, B.251 : Cabling installation done	Access to both end of cables	Reception at the end of installation	14-08-20
EN-EL Electrical Infrastructure	Transformers, Switchboard, cabling done	Electrical power	Reception done through the installation (Transformers reception, HV cabling reception, Cabling reception, ...)	14-02-20
EN-CV Cooling	251 : Piping, power converters installed 157 : Piping, magnets installed	Electrical power Cooling station operational (B.355)	X-Ray tests done without specific needs Pressure tests	07-08-20

Individual System Tests – non-352

Group	Prerequisites	Needs during test	Tests	Done by
EN-CV Primary area ventilation	Shielding installed (Air tight envelop installed) Duct and AHU installed	Electrical power Cooling station operational (B.355)	Ventilation system reception Airtightness tests	20-11-20
HSE-RP	Monitors installed Cabling work completed	Electrical power	Reception tests without/with beam	09-12-20
EN-STI Beam stoppers	Beam stoppers installed Cabling work completed Compressed air network installed	Electrical power Network available Vacuum? Compressed air	Functional tests (Movements)	02-12-20
EN-STI Targets	Targets stoppers installed Cabling work completed Compressed air network installed	Electrical power Network available Compressed air	Functional tests (Movements)	02-12-20
EN-EA TE-VSC Vacuum	Control rack equipped Vacuum pipes installed and connected Cabling work completed	Electrical power Network available	Leak tests	02-10-20
TE-EPC TE-MS DC Circuit tests	PCs installed Cabling work completed in b.251 DC cables installed AC installation completed Magnets connected to power converters	Electrical power Ethernet network Controls infr. available Converters/magnets cooling WIC Access retracted near magnets	DC Circuits (Séparation b.352/b.157)	06-01-21

Individual System Tests – non-352

Group	Prerequisites	Needs during test	Tests	Done by
BE-ICS Access	Access system installed (Doors, patrol boxes, racks, PAD/MAD, ...) Beam stoppers installed Power converters installed Cabling work completed	Electrical power Network available Access to EIS and zones	Reception tests DSO tests	20-01-21
EN-EA Collimators	Collimators installed Cabling work completed Control rack equipped	Electrical power Network available	Functional tests (Movements)	27-11-20
EN-EA Gas	Piping completed Gaz area installed ATEX ventilation installed	Electrical power Network available ATEX ventilation working	Leak tests, functional tests, safety reception	08-01-21

Thanks for your attention !



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