

Advanced Photon Source

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Radiation Enclosure Roof Installations

Changes made in this revision:

- No changes made to this procedure since its last review

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PSC/DALD-Ops

Approved by:

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Radiation Enclosure Roof Installations

1 Policy

The PSC/Deputy ALD-Operations or designee approval is required before installing equipment on the roof of a radiation enclosure.

2 Procedure

Prepare a detailed proposal for the roof installation. For permanent roof installations, submit the proposal to the PSC/Deputy ALD-Operations for approval. For temporary installations associated with a specific APS User experiment—to be removed no later than the end of the run—submit the proposal as part of the ESAF (the proposer must allow time for the review). The proposal should specifically address the following:

Structural Loading:

Provide plan and elevation views of the enclosure showing the proposed location of equipment and supports. The plan view should include the locations of the roof panels.

Include the weight and dimensions of the major equipment to be installed on the roof.

Utilities:

Specify any utilities required to operate equipment installed on the roof, including, for example: electrical power, pressurized air, deionized water, chilled water, ventilation, or liquid nitrogen.

If the equipment is to be connected to a gas exhaust system, describe in detail what gases may be vented.

Access to equipment:

Describe how personnel will reach the equipment.

Specify what fall protection system will be used for personnel on the roof.

Occupancy:

Describe the amount of time personnel will occupy the station roof. Standard shielding specification for enclosure roofs assumes low rate of occupancy.

Following ALARA practice, the installation must be designed to minimize personnel access to the roof during operations.

Access to Building Infrastructure:

Describe potential conflicts with access to the building infrastructure. (Note: Argonne facility maintenance personnel require ready access to the experiment hall ceiling for routine maintenance and repair of utilities. The air space over the sector dividing egress aisles and above elevations of 15' are to be kept clear to access these utilities. Facilities Division's Building Maintenance Group approval is required if the installation will encroach on the airspace between 15 and 21 feet above the Experiment Hall floor.)

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3 Feedback and Improvement

If you are using this procedure and have comments or suggested improvements for it, please go to the [APS Policies and Procedures Comment Form](#) * to submit your input to a Procedure Administrator. If you are reviewing this procedure in workflow, your input must be entered in the comment box when you approve or reject the procedure.

Instructions for execution-time modifications to a policy/procedure can be found in the following document: Field Modification of APS Policy/Procedure ([APS 1408152](#)).

* <https://www.aps.anl.gov/Document-Central/APS-Policies-and-Procedures-Comment-Form>