

## DZero Calorimeter Gap Access Rules

# NO ADMITTANCE EXCEPT:

<u>MECHANICAL</u>	<u>OTHER</u>	<u>OTHER</u>
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**YOU NEED PRE-APPROVAL FROM THE TECHNICAL INTEGRATION COORDINATOR (or designee) & Training from Russ Rucinski or George Ginther before you will be added to the list.**

VIOLATORS WILL BE SUBJECT TO DISCIPLINARY ACTION.

Gap Rules (short version):

- Only authorized trained people on list allowed to enter gaps.
- **BEAM PIPE is delicate and radioactive! Do not touch, lean on, or bump it.**
- Wear a pocket dosimeter and record dose daily while working in the gaps.
- Maximize distance from the beam pipe while working in the gap.
- Respect and protect other delicate equipment – adapter cards, cables, waveguides
- **Do not remove any of the black tedlar covers**
- Only do what you need to do in the gaps.
- No hard hats in the gap. Bring minimal tools. Leave nothing behind.
- No more than 3 persons allowed in a gap at a time.
- If you disturb or damaged something, immediately contact the Technical Integration Coordinator.
- Lock the gate when you leave.

## Calorimeter Gap Rules for Authorized Persons

17-June-2009

1. Only people authorized to work in the gaps are allowed in that space, no exceptions. Do not publicize or write down the lock combination.
2. The beam pipe is connected to the beryllium beam pipe and the silicon tracker. Therefore it is extremely important **NOT TO TOUCH OR IMPART ANY FORCES** on the beam pipe. These items are irreplaceable to the experiment. The beam pipe has residual radioactivity. Wear a pocket dosimeter and record dose daily. Maximize distance from the beam pipe during your work in the gap.
3. There are many delicate detectors, cables, wires, connections and waveguides in the gap. Be deliberate about the motion of your body. Do not put yourself in a position that could cause you to stumble or bump into the beam pipe or detector components.
4. Do not remove any of the black Tedlar covers. The tracker covering on the CC side protects cold surfaces from condensation. Removal of any portion of the cover could cause water damage and an emergency warm up of the silicon. Tedlar covers over the EC should be manipulated only by D0 mechanical technicians and only for activities that have been previously approved.
5. All your operations in the gaps should with highest priority lead to **NO** damage to existing installations. Do not rush (but do not linger in the vicinity of the beampipe).
6. Do only tasks which need to be done while in the gaps. All other activities that can be done outside of the gaps area should be done elsewhere.
7. Bring only minimal number of tools/equipment with you, remove **EVERYTHING**, including removed detectors/electronics parts from the gaps after you are done. Do not wear a hard hat in the gap. If you lose track of something that you brought into the gap, stop your work, and find the item in question. If you are unable to find the item, contact the Technical Integration Coordinator (or designee) before proceeding.
8. Minimize the number of people in the gap at the same time. No more than 3 people are allowed in a gap at the same time. Consult the Technical Integration Coordinator (or designee) if you believe an exception is required for a special procedure.
9. Follow all safety rules outlined in D0 Hazard Awareness, Radiation Worker Training, and the applicable collision hall access procedures. When working in the vicinity of the Adapter Cards (or Interface Boards), also be sure to follow procedure D0-OP-SMT-011.
10. If you need assistance - find a qualified person to work with you. Mechanical operations will organize tech help for gaps work.
11. In case any damage is suspected or known to have occurred, or you see any problematic areas, inform the Technical Integration Coordinator (numeric pager 218-3217) immediately. Contact a Run Coordinator if the Technical Integration Coordinator is unavailable.
12. When you leave the gap you must lock the gate(s). Do not assume that somebody will work after you. Turn out the lights to minimize potential impact on scintillators and waveguides.
13. Be careful climbing and descending ladders and steps both in the gaps and on the way to and from the gaps. Make sure hands are free to hold onto ladders when climbing.
14. Be sure to frisk yourself and survey anything carried out from the collision hall.

