



**PHENIX
TIME OF FLIGHT WEST (TOF WEST)
PROTOTYPE INSTALLATION PROCEDURE**

procedure name

PHENIX Procedure No. 2.5.5.4-29

Revision: A

Date: 3/22/2007

Hand Processed Changes

<u>HPC No.</u>	<u>Date</u>	<u>Page Nos.</u>	<u>Initials</u>
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Approvals

Don Lynch

PHENIX S E & I Date

Cognizant Scientist/Engineer Date
/Activity Manager

PHENIX QA/Safety Date

RHIC ES&H Date

REVISION CONTROL SHEET

LETTER	DESCRIPTION	DATE	WRITTEN BY	APPROVED BY	CURRENT OVERSIGHT
A	First Issue (Note: issued as procedure for control purposes. Originally prepared as attachments to work permit for Installation.	3/22/2007	D. Lynch	(See appropriate work permits)	D. Lynch
Deactivated	Original installation complete. Re-activate to re-issue or revise installation procedure when necessary	3/22/2007	D. Lynch	D. Lynch, R. Pisani, P. Giannotti	D. Lynch

TOF West (MPRC) Prototype Installation

1. Purpose and Scope

This document describes the method by which the prototype MPRC detectors are to be installed onto the West Carriage. Each of the (2) detector panels weighs approximately 20 kg. Consequently, the panels will be positioned by hand and no lifting or rigging equipment is required.

Summary

The prototype MPRC panels have been designed as 2 individual panels which are to be hung from plastic unistrut channels attached to the aluminum structural members at opposite ends of the West Carriage by screws. 2 unistrut channels will be used, the panels will be positioned by hand and hung from the upper channel and attached with 2 screws. The panels will rest against the lower channel which will act as a standoff to position the panels parallel to the PC3 detector array.

Attached drawing # 105-0511-009, TOF PROTOTYPE INSTALLATION provides the details for the assembly.

2. Responsibilities

Only trained BNL technicians shall perform the tasks described herein, under the supervision of the PHENIX Building 1008 Lead Technician.

3. Prerequisites

- 3.1 The plastic unistrut support channels must be in place, attached to the aluminum frame and aligned to receive the prototype MPRC detector panels.
- 3.2 The panels will have been fitted with attachment angles and unistrut clips.
- 3.3 The West Carriage must be in its retracted position (closest to the west wall).
- 3.4 All personnel performing tasks described herein shall wear proper personal protective equipment, per BNL ES&H standard 1.16.0.

4. Precautions

- 4.1 Insure that the PC2 and PC3 arrays are de-energized prior to commencing installation of the panels.
- 4.2 Take care when installing the panels to avoid contacting the PPC2 and PC3 detector arrays.

5 **Required Equipment**

Appropriate hand tools are the only required equipment to perform this task

6 **Procedure – TOF West (MRPC) prototype installation**

- a. Make sure that PC2 and PC3 detector panels are de-energized.
- b. Check that plastic unistrut support structure is secured to aluminum frames at both ends of carriage; check position and level in accordance with attached assembly drawing
- c. Carefully hang first panel into place, positioned in accordance with attached assembly drawing and secure to the unistrut support.
- d. Carefully hang second panel into place, positioned in accordance with attached assembly drawing and secure to the unistrut support.

7 **References**

7.1 MRPC TOF prototype installation drawing 105-0511-009

7.2 Panel Assembly drawing 105-0511-001

8 **Figures**

None