



LIGO Laboratory / LIGO Scientific Collaboration

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LIGO

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Viewport Production Plan

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LIGO Scientific Collaboration

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Abstract

This document describes the plan for acquisition of Viewports.

1 Introduction

This document describes the plan for acquisition of Viewports.

1.1 Scope

The cost of the production plan is limited to the hardware acquisition costs of Viewports. It does not include labor for procurement, assembly, pre-alignment, test, and installation.

2 Production Plan

2.1 Catalog Viewports

The following viewports are standard catalog items with specifications guaranteed by the manufacturer:

2.7 DIA, MDC450004-AR635

5.4 DIA VP800/450009

5.4 DIA VP800-AR1064

5.4 DIA VP800-AR532

7.8 DIA, ISI 9722012-AR635

They require special AR coatings, which will be specified at the time of order placement.

2.2 Custom Viewports

The 6.0 in-AR800-900 and 6.0 in-AR1064/532 viewports are custom viewports that will be purchased from a commercial vendor to the following specification: [6.0 inch Vacuum Viewport Specification](#)

3 Viewport Cost

Viewport costs are current catalog costs with an engineering estimate for the AR coating.

Viewport Safety Cover cost is engineering estimate.

Item Description	units	qty	rate	contingency %	AR coating	TOTAL
2.7 DIA, MDC450004-AR635	each	7	231.00	1	600.00	5,817.00
5.4 DIA VP800/450009	each	91	671.00	1	-	61,061.00
5.4 DIA VP800-AR1064	each	16	671.00	1	600.00	20,336.00
5.4 DIA VP800-AR532	each	6	671.00	1	600.00	7,626.00

Item Description	units	qty	rate	contingency %	AR coating	TOTAL
7.8 DIA, ISI 9722012-AR635	each	27	3,075.00	1	600.00	99,225.00
6.0 in-AR800-900	each	9	3,250.00	1	600.00	34,650.00
6.0 in-AR1064/532	each	26	3,250.00	1	600.00	100,100.00
SEPTUM VP	each	10	2,125.00	1	600.00	27,250.00
Viewport Safety Cover	each	225	685	1	-	154,192.50

Total Viewport Cost **\$510,258**

3.1 Comparison with Cost Book

The 8/26/10 AOS cost revision is detailed in the Advanced LIGO [Change Request No. ACR-100016](#).

Total Viewport Cost **\$510,258**

Total ACR-100016 AOS Budget & Schedule Revision 8/26/10 **\$583,444**

4 Procurement Plan

RFQ to Procure April 11, 2011

Assemble May 23, 2011

SMI Lots 1 &2

BSC 6 & BSC8

Viewports Lot 2

Viewports

TOTAL **\$510,258**