



Statement of Work Fabrication of Viewport Guard Assembly C1105144–v1

1.0 Scope

This SOW is for the fabrication and manufacture of the Viewport Guard Assembly, which is used to protect the vacuum system viewports during installation and removal of external components.

2.0 Document Access

Many supplemental documents and specifications are incorporated into and made a part this Statement of Work. Click on the document links to access these documents from the LIGO Document Control Center (DCC) or go on line to the LIGO Public DCC at <https://dcc.ligo.org/> to access the DCC#.

3.0 Commercial Terms and Applicable LIGO Specifications:

Note: The documents listed below are invoked for this Statement of Work and comprise additional requirements which are integral to this Statement of Work.

- [LIGO-C080185-v1](#) LIGO Commercial Items or Services Contract General Provisions
- [LIGO-Q0900001-v5](#) Advanced LIGO Supplier Quality Requirements
- [LIGO-Q1100003-v1](#) Acceptable Quality Level (AQL) for Inspection of LIGO Components

4.0 Quality System:

Referring to the above referenced LIGO Specification Q0900001, Suppliers should include a copy of their current ISO 9001, AS9100, or TS16949 certification in their bid package. Suppliers lacking current certification should send a copy of their Quality Manual with their bid package.

5.0 Parts/Assemblies to be manufactured and required quantities:

Note: refer to Section 8.0 for delivery schedule and location

Drawing #	Revision	Part Description	Total Qty
D080365	v2	VIEWPORT GUARD	264
D080366	v2	Viewport Shield	272
D080391	v1	Clamp, Viewport Guard	816
D0902791	v1	Viewport Guard Dust Cover	272
D1101169	v1	VIEWPORT GUARD	8
D1101170	v1	VIEWPORT GUARD ASSY EXTENSION	8

6.0 Manufacturing:

6.1 Requirements:

Suppliers must refer to the LIGO Specifications referenced in Section 3 for additional, and in some cases, non-industry standard requirements.

6.2 Sub-Contracted Work:

- LIGO expects that at least 2/3 (by dollar value) of the contracted work be performed by the Supplier named on the Purchase Order. The Supplier shall be responsible for all sub-contracted work.
- The Supplier's quote shall state their intent to sub-contract any welding operations performed on components intended for Vacuum use. If E0900048 is invoked in Section 3, then the component will be used in Vacuum.

6.3 Precedence:

The drawings typically represent the finished part as needed for use in service. Suppliers should always contact a LIGO representative to resolve any discrepancies or uncertainties in the documentation or instructions.

6.4 Special Instructions:

- AQL Number = 1.0
- Drawing D080366 – 'AR' means 'Abrasion Resistant'.

6.5 Exclusions:

- None

7.0 End Item Data Package:

Before delivery of the parts, the Supplier shall provide the following data, as a minimum:

- Any as-built modifications (with approval of the LIGO Contracting Officer) as mark-ups to the drawings
- Material certifications
- Inspection reports of all dimensional features for the number of parts specified per the AQL number and referenced in the AQL table LIGO-Q1100003-v1 and any other inspection requirements detailed in Section 6.5 of this SOW
- Certificate of compliance for each part number stating conformance to contract and drawing requirements

8.0 Delivery Requirements:

8.1 Shipping Containers and Packaging:

The contractor is responsible for providing shipping containers and transportation which protects these parts from damage from the transportation environment (weather, handling, accidents, etc.). Mating edges of parts should be especially protected from damage during shipping.

8.2 Shipping Destination(s):

The deliveries are FOB at these destinations, i.e. the Supplier has the responsibility for shipping title and control of goods until they are delivered and the transportation has been completed. The contractor selects the carrier and is responsible for the risk of transportation and for filing claims for loss or damage.

Ship all items to:

California Institute of Technology (CIT)

LIGO Project MS 100-36
391 S. Holliston Ave.
Pasadena, CA 91125

8.3 Delivery Schedule:

- Partial and/or early deliveries are acceptable.
- Ship Date: 8 weeks ARO.
- If this cannot be accommodated, please provide an alternative delivery schedule.