



# SPECIFICATION

## Adv. LIGO - OMC – Flat Mirror Specifications

APPROVALS	DATE	REV	DCN NO.	BY	CHECK	DCC	DATE
AUTHOR: H. Armandula	02-01-07	A	E070028-00				02-13-07
CHECKED:							
APPROVED: P. Fristchel							
DCC RELEASE							

### 1 Material

Fused Silica 7980, Class 0C

### 2 Dimensions

1" dia. +0/- .010"

Thickness: 0.250" ± .010"

Chamfers: 0.010" + 0/- 0.005" @ 45° ±15°

#### Side 2

Wedge: ~30 min

### 3 Surface Roughness / Quality

#### Side 1

Superpolished < 1 Angstrom over central 80 % of diameter with 10-5 scratch-dig; 20-10 scratch-dig outside central 80 % of diameter

#### Side 2

< 5 Angstrom over central 80 % of diameter

Arrow marking thinnest part of the wedge (and optic polarization)

### 4 Surface Figure

#### Side 1 and 2

Flat to 1/10 wave at 632.8 over central 80% (clear aperture)