

**Subject:** Re: Viton waiver request

**From:** Dennis Coyne <coyne@ligo.caltech.edu>

**Date:** 9/3/2012 9:11 PM

**To:** Peter Fritschel <pf@ligo.mit.edu>

**CC:** Calum Torrie <ctorrie@ligo.caltech.edu>, Bram Slagmolen <bram.slagmolen@anu.edu.au>, Suresh Doravari <doravari@caltech.edu>

Waiver granted.

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On 9/3/2012 6:22 AM, Peter Fritschel wrote:

Dennis, Calum,

Each Tip-Tilt Mirror Mount contains two 3/8" diameter viton o-rings for passive damping of the blade springs. Bram had some time ago procured these o-rings from smallparts.com.au, who source them from Seagull Industries. They have been C&B'd (not sure where), and are at LHO ready to be assembled into mounts. However, it was recently realized that the o-rings did not come with a materials certification, according to our requirements for viton use in vacuum. I am wondering if this requirement can be waived in this case, given the small quantity of viton involved.

The reason I'm bringing this up now is that Suresh has a trip scheduled to go to LHO from 5-14 September to finish assembling the Tip-Tilt Mounts. He didn't know about this issue with the o-rings when he made those plans. Bram and Suresh have looked into getting new o-rings with mat'l certs, and getting these C&B'd at Caltech and sent to LHO in time. Perhaps it can be done (actually, at this point I don't think Bram has found anyone who can supply them from stock w/ the certs), but the timing seems very dicey to me, and is it worth going through this effort for such a small amount of viton? (at most there are 3 TT mounts in HAM6, so 6 o-rings)

I attach the Bram's original o-ring order for info.

Peter