

Cornell expects to continue endplate development.

There are 2 funding proposals that will support this work.

1) FY2008 US LCDRD supplementary funds
approved, expected in about 1 month
70k\$,
~ 1/2 can be used for endplate development

2) FY2009 US LCDRD funds (3 years)
applied, review 04-May
given high priority by ILD
would pay for prototyping and a significant amount of staff salary



current LCTPC LP1 endplate

The FY2008 US LCDRD supplementary funding is specifically to build a 2nd generation LP1 endplate. This is how the project was described in November 2007.

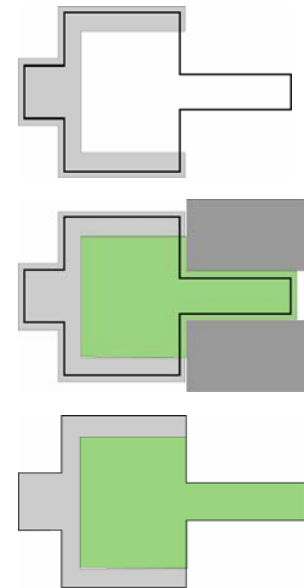
The outline at right shows the current "mullion" multi-stage fabrication...

(top) Start with aluminum shape, oversize, with cut-out.

(middle) Add temporary mold. Fill with fiberglass.

(bottom) Cut to final shape.

The resulting endplate would meet ILD TPC material goals.



The FY2009/10/11 US LCDRD funding is specifically for advanced endplate development.

As discussed at the Chicago meeting, November 2008, we anticipate a space-frame or composite endplate design to meet the material goal.

The FY2009/10 funds would be used for computer modeling, including finite-element-analysis, of space frame designs, inspired by satellite telescopes.

FY2011 funds would be used for construct physical prototypes to test the results of the computer models.

The composite design (previous slide) is a possibility; it was discussed at Chicago. It is part of this study and is funded.

Mechanical tests would be used to evaluate this design.

