

## Copy of Glue Table

[illegible]

|                              |                                                 |                                                |                                       |                                                                          |                                                                                  |  |  |           |                                                                        |                                                                                                                                         |                                                |  |
|------------------------------|-------------------------------------------------|------------------------------------------------|---------------------------------------|--------------------------------------------------------------------------|----------------------------------------------------------------------------------|--|--|-----------|------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------|--|
| Stycast                      | 2850FT                                          | 64k (for Catalyst 9) and 23k (for catalyst LV) | 1.25 for Catalyst 9<br>1.02 for 23 LV |                                                                          | lhcb tested up to 10 N                                                           |  |  |           | tested up to fluence of 6 to $8 \times 10^{15}$ MeVneq/cm <sup>2</sup> | <a href="https://lartpc-docdb.fnal.gov/0000/000059/001/stycas2850.pdf">https://lartpc-docdb.fnal.gov/0000/000059/001/stycas2850.pdf</a> | Adhesive tested by LHCb                        |  |
| Huntsman                     | Araldite 2011                                   | 30-45k cp                                      | 0.22 W/m*K @23C                       | 7-10 hrs room temp                                                       | Avg lap shear strength: 1) 17-25 MPa (metal-metal)<br>2) 10-20 (plastic-plastic) |  |  |           | tested up to fluence of 6 to $8 \times 10^{15}$ MeVneq/cm <sup>2</sup> |                                                                                                                                         | Adhesive tested by LHCb                        |  |
| Huntsman                     | Araldite 2020                                   | 150 cp                                         |                                       | 16 hrs @23C, 3 hrs @ 40C                                                 | Avg lap shear strength: 1) 13-25 MPa (metal-metal)<br>2) 2-7 (plastic-plastic)   |  |  |           |                                                                        |                                                                                                                                         |                                                |  |
| 3M (goes to space with NASA) | Scotch-Weld Epoxy Adhesive (2216)               | 80000                                          | 0.0326 W/mK                           | 90 min @ 24 C                                                            | Overlap Shear: 464 E 3 psi @ 24 C<br><br>3200 N/mm <sup>2</sup>                  |  |  |           |                                                                        | Glue (epoxy)                                                                                                                            |                                                |  |
| 3M                           | VHB Tape 5909                                   | -                                              |                                       | Temperature Resistance:<br><br>Short Term: 121 C<br><br>Long Term : 82 C | Peel Adhesion:<br><br>N/100mm                                                    |  |  | 720 kg/m3 |                                                                        | Tape                                                                                                                                    | <a href="#">3M VHB Tape 5909</a>               |  |
| 3M                           | High Temperature Acrylic Adhesive 100 (9461P)   |                                                |                                       |                                                                          | Peel Adhesion:<br><br>LHC-b tested up to 10N                                     |  |  |           | tested up to fluence of 6 to $8 \times 10^{15}$ MeVneq/cm <sup>2</sup> | Epoxy                                                                                                                                   | <a href="#">3M 9461P</a>                       |  |
| AMEC Thermasol               | MPC 25 Thermal Insulator, Phase Change Material |                                                | 4 W/mK                                | Temperature Resistance: 4                                                |                                                                                  |  |  |           |                                                                        | Wax                                                                                                                                     | <a href="#">AMEC Thermasol MPC25 Datasheet</a> |  |
| AMEC Thermasol               | MPC 801                                         |                                                |                                       | Temperature Resistance: 8.0                                              |                                                                                  |  |  |           |                                                                        | Wax                                                                                                                                     |                                                |  |
| AMEC Thermasol               | MPC 315                                         |                                                |                                       | Temperature Resistance: 5.0                                              |                                                                                  |  |  |           |                                                                        | Elastomer                                                                                                                               |                                                |  |