

# Rapid Prototyping Lab Policies

Effective January 30, 2006

Kyle Talbott, RP Lab Faculty Director

1. RP Lab equipment is operated only by trained technicians during posted hours. Students, Professionals and UWM faculty may arrange access outside of posted hours by contacting the Shop Master, Dennis Manley, at [deman@uwm.edu](mailto:deman@uwm.edu) to make a reservation. Please note that additional fees apply for reservation service (see RP Lab Weekly Schedule for more information.)
2. Laser cutting is strictly limited to materials included in the currently posted *Laser Cutter Settings Table*. Materials vary in thickness, density and quality. Laser power is calibrated to cut most materials listed on the *Table*, but due to material variations, successful cutting is not guaranteed.
3. If output suffers due to equipment malfunction or technician error, the job will be re-processed at no additional charge. However, the RP Lab will not reimburse customers for the cost of basswood, chip board, museum board and other sheet materials. For larger jobs involving many cuts, customers are advised to observe and verify the correctness of cuts as they are completed, in order to minimize loss of materials in the event of a problem.
4. Laser cutter fees are determined by cutting time. Files containing much information and therefore long cutting times can delay the processing of other jobs. Files larger than 2,500 KB and other time-consuming work as identified by the Technician may be set aside for overnight processing. Please anticipate longer turn-around times for large files.
5. During busy times in the RP Lab, such as two weeks before the end of fall and spring terms, customers are placed on a waiting list, and laser cutter jobs are processed in a first come, first served manner. During peak usage, Technicians can become so overwhelmed with incoming jobs that they cannot process jobs already waiting. In order to optimize Lab efficiency during these times, the following procedure will be used. When the number of jobs waiting goes above 10, the Technician may close the Lab for job processing. During this time no new jobs will be accepted. When the number of jobs waiting goes below 5 the Lab will reopen, and new jobs can again be submitted. In order to track the status of jobs waiting, customers can view a dynamically updated waiting list, which is accessible over the SARUP network. For information on how to view the waiting list, please see the RP Lab webpage and download the document *Viewing the Laser Cutter Waiting List*.
6. When parts are printed on the Z-Corp powder-based 3D printer, they can break as the Technician excavates them from the powder vat. Technicians are skilled at excavating parts, and they make every effort to excavate gently. However, occasional breakage is unavoidable. If you are concerned about breakage, please ask the Technician to assess your parts before printing. Technicians can help gauge the probability of breakage based on the size and shape of the parts. In most cases, broken parts can be repaired by the customer without loss of quality. Please ask the Technician for suggested methods of repair. Because occasional breakage is inherent in powder-based printing, The RP Lab will not refund customers for parts broken during excavation.
7. The color of 3D printed parts varies depending on the age of the print head. When the print head is new, parts can be darker than usual. This color variation is inherent in powder-based 3D printing, and the RP Lab will not refund customers for parts that have a darker than usual color. In situations when parts need to have a consistent color, customers should anticipate the need to paint them with a non-water-based paint.