Gensler Specification Idaho State University College of Pharmacy

Section 11 23 58 LABORATORY FURNISHINGS & EQUIPMENT

Add to 1.7 Submittals

G. Fume hood manufacturer shall submit factory test results report for each fume hood type on this project. To be acceptable, test methodology shall be ASHRAE 110-2016 with a passing result for all of 4.0 AM 0.05 or better.

H. Contractor shall submit and get approval from Owner’s Representative for fume hood installation and test requirement according to provisions under Part 3=Execution of this specification prior to start of fume hood field acceptance testing.

Add to Part 3- Execution

3.5 Fume Hood Installation and Testing

1. Each fume hood shall have a sticker on the face of the hood with a QR code that links to the user safety videos on FumeHoodSafety.com
2. Each fume hood shall have a Hood Identification Number sticker on its face as supplied by FumeHoodCertified.com or approved equal, no known equal. A cloud based fume hood test result database shall be supplied for each fume hood with all the relevant data filled in from the actual field acceptance test. The cloud database for each fume hood shall include at least 10 fume hood visualization videos of the small and large scale flow visualization tests as per ASHRAE 110-2016 and the FumeHoodCertified.com dynamic test extension to ASHRAE 110.
3. All fume hoods shall be field tested as installed per Part 1 of ASHRAE 110-2016 to determine fume hood face velocity readings. At each required location, 3 velocity readings placed vertically shall be read simultaneously and fed into an automatic data acquisition program. The analysis of the data shall be calculated by a computer program which shall output the answers in a readable report format. Hardware and software shall be provided by fumehoodtesterscatalog.com or Approved Equal, no known equal.
4. All fume hoods shall be field tested as installed per Part 2 of ASHRAE 110-2016. Small scale visualization shall be accomplished with a zero velocity Professional Hazer Machine or Approved Equal, no known equal, from fumehoodtesterscatalog.com The complete small scale visualization shall be put on video and a copy of that video placed on the unique cloud based database for each fume hood. Owner shall also be provided with copies of each video.
5. All fume hoods shall be field tested as installed per Part 2 of ASHRAE 110-2016. Large scale visualization shall be accomplished with a TriColor Laser Testing System or Approved Equal, no known equal, from TriColorLaserTesting.com The complete large scale visualization shall be put on video and a copy of that video placed on the unique cloud based database for each fume hood. Owner shall also be provided with copies of each video. In addition to the static visualizations required in ASHRAE 110-2016, additional tests and videos shall be made according to FumeHoodCertified.com’s dynamic test extension to ASHRAE 110.
6. All fume hoods shall be field tested as installed per Part 3 of ASHRAE 110-2016. The passing test for each fume hood shall be 4.0 AI 0.10. The tracer gas measurement shall be accomplished with a Q200 instrument which has been calibrated by a factory authorized representative within the previous 12 months. The tracer gas ejector shall be equipped with a digital pressure meter to ensure that 4.0 Liters Per Minute is achieved during the test.
7. Qualifications for the chief fume hood tester shall be submitted to Owner’s Representative for acceptance prior to testing. Chief fume hood tester shall have been certified as a fume hood tester by at least one of the following: NEBB, AABC, or FumeHoodCertified.com